Department of Commerce, Division of Industrial Compliance, Bureau of Building Code Compliance, State of Ohio
Electronic Plan Approval Sheet

CPA Number: 2023021965
Approval Type: ☐ **Final** ☑ **Partial No.** 1
Building Use Groups: F-2
Construction Type: IIB
Plan Approval Date: OCTOBER 11, 2023
Name of County: MARION

- **Plan Approval Status Expiration Notice:**

☑ This plan approval status will expire if the construction work has not commenced within 12 months of the approval date or during the course of construction, the work is delayed or suspended for more than 6 months. Extensions can be granted upon receiving a written request along with $100 fee from the owner at least 10 days prior to the expiration date in accordance with section 105 OBC.

- **Contractor License Notice:**

☑ All electrical, plumbing, hydronics, HVAC, and refrigeration contractors working on this project must be licensed by the State of Ohio in accordance with 4740 ORC.

- **This plan approval is subject to the following additional code requirements:**

☑ Ohio Building Code, Chapter 29, minimum plumbing requirements. Please contact the Building Code Compliance, Plumbing Section or Local Health Department.
☐ Ohio Elevator Code, Ohio Fire Code, Ohio Boiler and Unfired Vessels Rules
☑ All other requirements of the Ohio Revised Code, Local Zoning and Other Regulations.

- **Disclaimer:**

☑ The structural elements of these drawings have been examined to the extent necessary to determine conformity of such plans with other requirements of OBC. The sufficiency of these elements to meet all code requirements is the responsibility of the registered architects or professional engineers who certified the drawings.

☑ All electrical work shall be installed in accordance with National Electrical Code.

☐ The design and calculations for the sprinkler system in these plans, if applicable, have been examined to the extent necessary to determine conformity of such plans with other requirements of OBC. The sufficiency of the design and calculations to meet all code requirements is the responsibility of author of these plans who certified the drawings. The installed sprinkler system will be inspected by DIC field inspectors to determine compliance with approved plans, and the operation of the system will be verified by local fire authority or a third party inspection agency.

- **For Partial Plan Approval:**
  The following scope of work is approved under tis partial plan approval

☑ Footing/Foundation ☑ Slab ☑ Building Shell ☐ Interior Finishes
☑ Electrical ☑ Mechanical ☐ Sprinkler ☐ Fire Alarm

- **List of available construction inspections for request when the scope of work is checked below. For building general, see the partial approval items above.**

☑ **Building General (Structural)**
- ❖ Structural Footing/Foundation
- ❖ Structural Floor Slab
- ❖ Structural Framing
- ❖ Structural Above Ceiling
- ❖ Structural Kitchen Exhaust Hood
- ❖ Structural Site Consultation
- ❖ Structural Investigation
- ❖ Structural Interior Finishes
- ❖ Structural Final Inspection

☑ **Mechanical**
- ❖ Mechanical Above Ceiling
- ❖ Mechanical Rough-In
- ❖ Mechanical Site Consultation
- ❖ Mechanical Final Inspection

☐ **Sprinkler System**
- ❖ Sprinkler/Fire Standpipe
- ❖ Sprinkler Limited Area
- ❖ Exhaust Hood Suppression
- ❖ Sprinkler Site Consultation
- ❖ Sprinkler Final

☑ **Electrical**
- ❖ Electrical Temporary Service/Pole
- ❖ Electrical Service
- ❖ Electrical Underground
- ❖ Electrical Under Slab
- ❖ Electrical Wire Rough-In
- ❖ Electrical Site Consultation
- ❖ Electrical Investigation
- ❖ Electrical Above Ceiling
- ❖ Electrical Final Inspection

☐ **Fire Alarm System**
- ❖ Fire Alarm Site Consultation
- ❖ Fire Alarm Rough-In
- ❖ Fire Alarm Final Inspection

☐ **Industrialized Unit**
- ❖ Industrialized Unit Site Consultation
- ❖ Industrialized Unit Final

☐ **Re-Roofing**
- ❖ Re-Roofing Rough-In
- ❖ Re-Roofing Final

Site Inspection Sign-Off Log

Special Note: This inspection log must be kept on site with the approved plans at all times. Additional inspection fees will be charged when the actual number of inspections exceeds the number of allowed inspections for each scope of work. Please make additional blank copies of this sheet before using it if needed.

Certificate of Plan Approval (CPA) No.:		**Scope of work:** **Building General (ST) / IU's (IU)** **Mechanical (MH) / Sprinkler (SP)**	**Total Number of Inspections Allowed:**	22

No.	ST	MH	IU	SP	Date	Inspection results	Inspected by	Next inspection required
1								
2								
3								
4								
5								
6								
7								
8								

Site Inspection Sign-Off Log

Special Note: This inspection log must be kept on site with the approved plans at all times. Additional inspection fees will be charged when the actual number of inspections exceeds the number of allowed inspections for each scope of work. Please make additional blank copies of this sheet before using it if needed.

Certificate of Plan Approval (CAP) No.		**Scope of work:** **Electrical (EL) / Fire Alarm (FA)**	**Total Number of Inspections Allowed:**	11

No.	EL	FA	Date	Inspection results	Inspected by	Next inspection required
1						
2						
3						
4						
5						
6						
7						
8						

Ohio Department of Commerce
Division of Industrial Compliance

Mike DeWine
Governor

Sheryl Maxfield
Director

Stephen Risser
Chief Building Official

Certificate of Plan Approval
Partial No. 1

Plan Number:	Property Address:	County:
2023021965	1632 CASCADE DR MARION OH 43302	MARION
Date of Approval:	**Type of Project:**	**Governing Building Code:**
10/11/2023	Alteration - Addition	**0**
Building / Business Name: Rialto Manufacturing	**Description of the Project:** Storage addition to sheet steel cutting and welding operation	
Property Owner: JOSH OBENOUR 1632 CASCADE DR MARION OH 43302	**Submitter:** OMNESS DESIGN INC PAUL OMNESS 140 FAIRFAX RD MARION OH 43302	**Design Professional:** OMNESS DESIGN INC PAUL OMNESS 140 FAIRFAX RD MARION OH 43302
Approved Scope of Project: General Building Trade Mechanical Electrical	**Authorized No. of Inspections:** 11 11 11	**Use Occupancy Groups:** F-2 **Construction Type:** Type II B **Building Floor Area (s.f.):** 38000.0 **Number of Stories:** **Building Occupant Load:**

Proper inspections shall be requested prior to pouring concrete footings and/or installation of interior finishes per section 108 OBC. This certificate shall remain posted in a conspicuous and safe place on the job site until the work is completed. Failure to meet these requirements may result in the refusal of service and/or the issuance of an adjudication order. The building/structure shall pass final inspection and a State of Ohio Certificate of Use and Occupancy shall be issued before the building/structure can be legally occupied. The owner is responsible for obtaining all local zoning and sewage permits. In order to schedule an inspection, contact the numbers listed on the bottom of this certificate between the hours of 8:15 am and 2:30 pm.

Structural / Electrical / Plumbing	State Fire Marshal	All Other Inquiries
1-800-822-3208 8:00 am to 5:00 pm	614-728-5460	1-800-523-3581 8:00 am to 5:00 pm

State Inspector's Signature for Occupancy:

Final Structural Approval: _____ **Date:** _____
Final Electrical Approval _____ **Date:** _____
Final Plumbing Approval _____ **Date:** _____
Final Medical Gas Approval: _____ **Date:** _____
Final Fire Approval: _____ **Date:** _____

Building Official Signature

Ohio Department of Commerce
Division of Industrial Compliance
6606 Tussing Road
Reynoldsburg, Ohio 43068-9009
(614) 644-2622 Fax: (614) 644-3145

Department of Commerce

Division of Industrial Compliance

Mike DeWine, **Governor**
Sheryl Maxfield, Director

10/11/2023

JOSH OBENOUR
1632 CASCADE DR
MARION OH 43302

ADDENDUM NO. 1 TO PARTIAL PLAN APPROVAL

Project Number: 2023021965
Plan Approval Date: 10/11/2023

Rialto Manufacturing
1632 CASCADE DR
MARION OH 43302

NOTICE: PLEASE BE PREPARED TO FURNISH THE OCILB CONTRACTOR LICENSE NUMBER WHEN CALLING FOR ELECTRICAL, HVAC, HYDRONICS, PLUMBING AND REFRIGERATION INSPECTIONS.

This is a PARTIAL PLAN APPROVAL in accordance with the provisions of Section 105 of the Ohio Building Code. The various stages of construction shall proceed in their normal sequence.

This addendum shall be attached to the Certificate of Plan Approval and shall become part of the approved plans. All items listed below will be performed and incorporated into the structure.

PLAN APPROVAL STATUS EXPIRATION NOTICE:
Please be aware that this plan approval will expire if during the course of construction, the work is delayed or suspended for more than six (6) months. Two extensions may be granted for six months each upon receiving a written request and a $100 fee for each extension request from the owner at least 10 days prior to the expiration date. (Section 105.3 & 105.4 OBC)"

1. This PARTIAL PLAN APPROVAL includes the following:

a) FOOTING / FOUNDATION / ANCHOR BOLTS

b) SLAB

c) PRE-ENGINEERED BUILDING COMPONENTS

d) BUILDING SHELL

e) MECHANICAL PARTIAL

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f) ELECTRICAL PARTIAL

THIS PARTIAL PLAN APPROVAL does NOT include the following:

g) ITEMS IN CORRECTION LETTER

h) FIRE ALARM SHOP DRWGS FOR BBS CONDITIONAL VARIANCE

This PARTIAL plan approval is contingent upon the following:

2. PHASED APPROVAL

This is a PHASED CONSTRUCTION APPROVAL per 105.1.4 OBC. The holder of this approval may proceed at the holder's own risk with the building operation and without assurance that an approval for the entire structure will be granted. Phased approvals are given in the sequence of construction. The holder of this approval may proceed only to the point for which approval has been given.

3. PRE-CONSTRUCTION MEETING

For the purpose of clarifying the responsibilities between State Inspectors and Special Inspectors as required by Section 1704 OBC, a mandatory pre-construction meeting shall be scheduled by the owner or the agent of the owner for this project prior to the commencement of the construction. This meeting will allow the contractors, designers, owner, Special Inspectors, and State Inspectors to coordinate the responsibilities and requirements of the Special Inspection a and regular inspections. The owner or the agent of the owner shall notify the Chief of Building Code Compliance at (614) 644-2622 of the date, time, and place of the pre-construction meeting. Failure to comply with this requirement may result in the delay of construction and potential problems with subsequent construction inspections.

4. OTHER LAWS:

The provisions of this code shall not be deemed to nullify any provisions of state or federal law. Municipal corporations may make further and additional regulations, not in conflict with Chapters 3781 and 3791 of the Revised Code or with the rules of the board of building standards. However approval by the board of building standards of any fixture, device, material, system, assembly or product of a manufacturing process, or method or manner of construction or installation shall constitute approval for their use anywhere in Ohio; Section 102.2 OBC.

5. APPROVED CONSTRUCTION DOCUMENTS:

Department
of Commerce

Division of Industrial Compliance

Mike DeWine, **Governor**
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An approved set of plans be kept at the site and shall be available for reference by the building official at all times during working hours while such work is in progress; Section 107.7 OBC.

6. INSPECTION PROCESS:

The owner or contractor shall call for inspections and the building department perform those inspections before any work is covered up by other construction, including, but not limited to all reinforcing , framing, plumbing, mechanical and electrical work; Section 108 OBC. The maximum number of inspections for each scope of work covered under the initial application fees are listed in the approved construction documents. If the number of inspections requested exceeds the maximum allowable number for each scope of work, an additional inspection fee of $150.00 will be charged for each inspection; Section 115.3.1 OBC.

7. AMENDED CONSTRUCTION DOCUMENTS:

If substantive changes to the building are contemplated after first document submission, or during construction, those changes must be submitted to the building official for review and approval prior to those changes being executed. The building official may waive this requirement in the instance of an emergency repair, or similar instance; Section 106.3 OBC. Additional fees for processing the amended construction documents will be charged in accordance with Section 115.2 OBC.

8. CONTRACTOR LICENSE NOTICE:

All electrical, plumbing, hydronics, HVAC, and refrigeration contractors working on this project must be licensed by the State of Ohio; Section 4740 Ohio Revised Code.

9. These addendum items are not necessarily the only, nor all of the provisions with which compliance is required. Omission of reference to any provisions will not nullify any requirement, nor exempt any structure from such requirement of the Ohio Building Code. The OWNER and the ARCHITECT/PROFESSIONAL ENGINEER/FIRE PPOTECTION DESIGNER as identified on the plans will be responsible for the structure, design, safety and all OBC requirements.

The holder of a PARTIAL PLAN APPROVAL may proceed only to the point for which approval has been given, at his own risk and without assurance that approval for the entire building will be granted.

Further, the holder agrees to make any and all changes, alterations, additions or deletions required by the Division of Industrial Compliance to be in compliance with the final approved plans and the Ohio Building Code.
Further, commencement of work on this project constitutes acceptance of this agreement and all items listed herein.

Bureau of Building Code Compliance
6606 Tussing Road
PO Box 4009
Reynoldsburg, OH 43068-9009 U.S.A.

614 | 644 - 2622
Fax 614 | 644 - 3145
TTY/TDD 800 | 750 - 0750
com.ohio.gov

Department of Commerce

Division of Industrial Compliance

Mike DeWine**, Governor**
Sheryl Maxfield, Director

Your plan examiner is: William Phillips.

Bureau of Building Code Compliance
6606 Tussing Road
PO Box 4009
Reynoldsburg, OH 43068-9009 U.S.A.

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Sheryl Maxfield, Director

10/11/2023

JOSH OBENOUR
1632 CASCADE DR
MARION OH 43302

CORRECTION LETTER NO. 1

Project Number: **2023021965**
Response Deadline: **04/08/2024**

The plans for the project referenced below have been reviewed and were found to be incomplete and/or to contain violations of the Ohio Building Code (OBC). As a result, your plans cannot be approved at this time.

This notice serves as a Correction Letter to inform you of what information is needed to get your plans approved. Pursuant to OBC section 110, you have the right to appeal any of the items listed below. You may contact the Chief Building Official to obtain a formal Adjudication Order that will provide the procedures to request an appeal hearing. In accordance with OBC section 107.6, if corrected documents have not been submitted within 6 months of the date of this letter, or the owner has not exercised the right to appeal, an adjudication order will be issued in accordance with section 109 OBC.

The plans affected by this notice are known or described as:

1632 CASCADE DR
MARION OH 43302

Your plans cannot be approved until all of the information specified below is submitted and reviewed:

1. OBC 107.4.1 ADDITIONAL INFORMATION REQUIRED
Because the construction documents do not have enough information for a complete plan review, this letter is a request for missing information and contains a review only of the items submitted. A complete review will be performed upon receipt of the required information. This may result in additional items not contained in this letter; Section 107.4.1 OBC.

2. OBC 907-1-1 FIRE ALARM SHOP DRAWINGS

Construction documents for fire alarm systems shall be submitted for review and approval prior to system installation. Construction documents shall include, but not be limited to, the items listed in 907.1.1 OBC.

3. OBC 1017.2 EXIT ACCESS TRAVEL DISTANCE-Limitations.
Exit access travel distance shall not exceed the values given in Table 1017.2.

(Plans shall show compliance to this code requirement; Please revise & resubmit 107.6)

4. OBC 1014.6 Handrail extensions.
Handrails shall return to a wall, guard or the walking surface or shall be continuous to the handrail of an adjacent flight of stairs or ramp run. Where handrails are not continuous between flights, the
handrails shall extend horizontally not less than 12 inches (305 mm) beyond the top riser and continue to slope for the depth of one tread beyond the bottom riser.

(Reference sheet A3.2; Please revise & resubmit)

5. OBC 1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1 as amended in section 1112 of this chapter. Any references to ICC A117.1 throughout this code shall be applied with the amendments indicated in section 1112 of this chapter.

6. OBC 1105.1ACCESSIBLE ENTRANCES Public entrances.
In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.7, at least 60 percent of all public entrances shall be accessible.

(Please clarify compliance to this code requirement; Please revise & resubmit)

7. OMC 301.6 FUEL GAS PIPING, APPLIANCES, AND EQUIPMENT

The design and installation of fuel gas distribution piping and equipment, fuel gas-fired appliances and fuel gas-fired appliance venting systems shall be in accordance with the 'International Fuel Gas Code'. Provide details including pipe sizes, lengths, materials, shutoffs, connectors, dirt legs, combustion air provisions and venting to show compliance with IFGC, per 301.6 OMC.

8. OBC 2902.1 PLUMBING FIXTURES

Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1 OBC.

(Plans shall show a plumbing analysis for the combined occupant load of the existing building plus the addition. Please revise & resubmit)

9. OBC 1704.2.1 SPECIAL INSPECTOR QUALIFICATIONS

Prior to the start of the construction, the special inspectors shall provide written documentation to the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and testing during construction per 1704.2.1 OBC.

(Please submit resumes to the plans examiner for review & approval)

10. OBC 2701.1 ELECTRICAL

Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of NFPA 70(2017 NEC) listed in Chapter 35, per 2701.1 OBC.

11. NEC 110.24 Available Fault Current.
(A) Field Marking. Service equipment shall be legibly marked in the field with the maximum available fault current.

12. NEC 670.1Industrial Machinery Scope.
This article covers the definition of, the nameplate data for, and the size and overcurrent protection of
supply conductors to industrial machinery.

(Reference 670.3 (a) Permanent name plate; 670.3(b) Overcurrent protection: 670.4(a) Supply conductors & overcurrent protection; 670.4(b) Disconnecting means; 670.4(c) overcurrent protection: Please revise & resubmit)

In order to minimize the time it takes to review revised plans, circle the area of changes on the revised drawings with a red pencil. Mark the item number referenced above adjacent to the circled area. This needs only to be done on one set of the revised plans. Three identical sets of

revised plans (five sets when drawings include plumbing) must be submitted. Submit revised plans to the address specified above. However, if the plans were submitted electronically through our website the first time, any subsequent submission of revised plans and/or response letters should also be submitted electronically through our website. Please log onto our website for further instructions.

If there are any questions, you may call your Plan Examiner by phone (614) 644-2622 to discuss or to make an appointment to meet with your Plan Examiner. If you wish to appeal any of the items contained in this letter, please contact Stephen Risser, Chief Building Official at 614-644-2622 and a formal Adjudication order will be issued immediately. The Adjudication Order will provide the procedures you will need to request a hearing with the Board of Building Appeals.

Sincerely,

William Phillips,

Plans Examiner

BEFORE THE BOARD OF BUILDING APPEALS
STATE OF OHIO

Rialto Manufacturing
1632 Cascade Drive
Marion, OH 43302

Appellant

CASE NO. 22-0046

-VS-

FINAL ORDER

Geoffrey D. Eaton, Building Official
Division of Industrial Compliance
Bureau of Building Code Compliance
6606 Tussing Road
Reynoldsburg, OH 43068

Appellee

This matter came up for hearing on Thursday, March 24, 2022 on an appeal from Adjudication Order No. 2022060016, dated March 9, 2022, issued by the Bureau of Building Code Compliance. Said adjudication order involved the premises known as Rialto Manufacturing, 1632 Cascade Drive, Marion, Ohio.

Based on evidence adduced by, and representations of the Appellant and the Appellee, the Appellant appealed Items 1 and 2 of the adjudication order.

The Board having determined that inasmuch as it would not be contrary to the public interest and unnecessary hardship would result if a literal enforcement of the Ohio Building Code and/or the Ohio Fire Code was required, a variance against Items 1 and 2 of the adjudication order is given.

Item 1 of the adjudication order states unlimited area buildings shall be allowed where they are in compliance with Section 507 OBC. Show the 60 ft open area around the building per OBC 507.3.

Item 2 of the adjudication order states buildings erected or altered shall be classified in one of the five construction types defined in OBC 602.2 through 602.5. The IIB and VB construction types require a firewall separation or classification of the entire building as the VB construction. Submit allowable area calculations etc. showing VB construction or provide a firewall building separation.

Variance is conditioned upon the following:

1. An alternate fire alarm system shall be installed and maintained comprising of a remote annunciator at the front entrance; system smoke detectors with integral heat detectors throughout the entire structure, audible/visual alarm notification devices throughout the entire structure; and pull stations at all identified means of egress.

2. The alternate fire alarm system shall be required to be off-premise monitored in a manner approved pursuant to OBC 901.6.

3. The alternate fire alarm system and off-premise monitoring shall be considered required systems and listed as such on the Certificate of Occupancy by the Building Official.

4. The alternate fire alarm system and off-premise monitoring shall be maintained as required systems utilizing the Ohio Fire Code and adopted NFPA standards.

5. A fire apparatus access road shall be provided and maintained utilizing the design and specifications of Section 503 of the Ohio Fire Code and to the satisfaction of the Fire Official.

6. A fire hydrant shall be installed on the south side of the main driveway to the satisfaction of the Fire Official.

7. Knox Boxes shall be installed to the satisfaction of the Fire Official.

8. Portable fire extinguishers shall be installed according to the provisions of OBC 906 and to the satisfaction of the Fire Official and shall be maintained as required by the Ohio Fire Code and adopted NFPA standards.

9. A fire safety, evacuation and emergency operational plan shall be developed and annually maintained utilizing the design guidelines of Ohio Fire Code Chapter 4, approved by the Fire Official and listed as a special condition on the Certificate of Occupancy.

10. This variance is granted based on the use, construction, occupant load, building area and level of activity identified on the approved construction documents including the maintenance of all building systems and any conditions required herein.

Variance is granted noting the no objection of the Building Official.

The Board declares that any conditions required as part of the variance are inseparable and must be complied with in full; variance is dependent upon compliance with all conditions herein stated and lack of compliance with any portion of these conditions shall negate the entire variance. In addition, any conditions to the variance shall be incorporated into final Permit Drawings for examination and any appropriate fees shall be paid.

VOTING RECORD				BY THE MEMBERS OF THE BOARD
YES	NO	ABSTAIN	ABSENT	
X				Karl H. Schneider, Attorney
X				Paul R. Beegan, Architect
X				Russell M. Demagall, Pipefitter
X				Bradley J. Smith, Engineer
X				Porter Welch, Firefighter

Any party desiring to appeal shall file a Notice of Appeal with the Board of Building Appeals, 6606 Tussing Road, Reynoldsburg, Ohio 43068 setting forth the order appealed from and stating that the agency's order is not supported by reliable, probative, and substantial evidence and is not in accordance with law. The notice of appeal may, but need not, set forth the specific grounds of the party's appeal beyond the statement that the agency's order is not supported by reliable, probative, and substantial evidence and is not in accordance with law. The Notice of Appeal shall also be filed by the appellant with the Court of Common Pleas of the county in which he is a resident or in which the premises affected by this order is located. Such notices of appeal shall be filed within fifteen (15) days after the mailing of the notice of the Board of Building Appeals Order as provided in Section 119.12 of the Ohio Revised Code.

CERTIFICATION

The State of Ohio,
County of Franklin, SS

I, the undersigned Executive Secretary for the Board of Building Appeals, hereby certify that the foregoing is a true and exact reproduction of the original Order of the Board of Building Appeals entered on its journal, on the 28th day of March 2022.

BOARD OF BUILDING APPEALS STATE OF OHIO

Susan R. Steer

Susan R. Steer
Executive Secretary

COMcheck Software Version 4.1.5.3

Envelope Compliance Certificate

Project Information

Energy Code:	90.1 (2010) Standard
Project Title:	Rialto Manufacturing, Inc.
Location:	Marion, Ohio
Climate Zone:	5a
Project Type:	Addition
Vertical Glazing / Wall Area:	6%

Construction Site:
1632 Cascade Drive
Marion, OH 43302

Owner/Agent:
Josh Obenour
Rialto Manucacturing, Inc.
1632 Cascade Dr.
Marion, OH 43302

Designer/Contractor:
Paul Omness
ODI
140 Fairfax Rd.
Marion, OH 43302

Building Area	Floor Area
1-Manufacturing Facility : Nonresidential	29250

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof 1: Metal Building, Standing Seam, Double Insulation Layer with Thermal Blocks (c), [Bldg. Use 1 - Manufacturing Facility]	29250	30.0	6.0	0.039	0.055
Exterior Wall 1: Metal Building Wall, Single Layer Mineral Fiber (compressed at girt), [Bldg. Use 1 - Manufacturing Facility]	13506	19.0	0.0	0.084	0.069
Window 1: Metal Frame with Thermal Break, Perf. Type: Energy code default, Double Pane with Low-E, Clear , SHGC 0.68, [Bldg. Use 1 - Manufacturing Facility]	137	—	—	0.900	0.550
Door 1: Insulated Metal, Swinging, [Bldg. Use 1 - Manufacturing Facility]	273	—	—	0.100	0.700
Door 3: Insulated Metal, Non-Swinging, [Bldg. Use 1 - Manufacturing Facility]	468	—	—	0.040	0.500
Floor 1: Slab-On-Grade:Heated, Vertical 2 ft., [Bldg. Use 1 - Manufacturing Facility] (b)	630	—	10.0	0.900	0.860

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.
(c) Thermal spacer block with minimum R-3.5 must be installed above the purlin/batt, and the roof deck secured to the purlins.

Envelope PASSES: Design 7% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2010) Standard requirements in COM*check* Version 4.1.5.3 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

PAUL OMNESS - ARCHITECT | | 8/8/23

Name - Title | Signature | Date

COM*check* Software Version 4.1.5.3

Inspection Checklist

Energy Code: 90.1 (2010) Standard

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2,5.4.3.1.1,5.7 [PR1][1]	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
4.2.2,8.4.1.1,8.4.1.2,8.7 [PR6][2]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.5.3.3 [FO1][2]	Below-grade wall insulation R-value.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.3.5 [FO3][2]	Slab edge insulation R-value.	R-____ ☐ Unheated ☐ Heated	R-____ ☐ Unheated ☐ Heated	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.2 [FO4][2]	Slab edge insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.5 [FO5][2]	Slab edge insulation depth/length.	____ ft	____ ft	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.7.3 [FO7][1]	Insulation in contact with the ground has <=0.3% water absorption rate per ASTM C272.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.1.5 [FO11][3]	Bottom surface of floor structures incorporating radiant heating insulated to >=R-3.5.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.2 [FR1][3]	Factory-built fenestration and doors are labeled as meeting air leakage requirements.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.4.3.4 [FR4][3]	Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are >=7 ft apart.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.4.3a [FR8][1]	Vertical fenestration U-Factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.4.3b [FR9][1]	Skylight fenestration U-Factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.4.4.1 [FR10][1]	Vertical fenestration SHGC value.	SHGC:____	SHGC:____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.4.4.2 [FR11][1]	Skylight SHGC value.	SHGC:____	SHGC:____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.2.1 [FR12][2]	Fenestration products rated in accordance with NFRC.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.2.2 [FR13][1]	Fenestration products are certified as to performance labels or certificates provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.2.3,5.5.3.6 [FR14][2]	U-factor of opaque doors associated with the building thermal envelope meets requirements.	U-____ ☐ Swinging ☐ Nonswinging	U-____ ☐ Swinging ☐ Nonswinging	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.4.3.1 [FR15][1]	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces and in climate zones 1-6.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10][2]	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.1 [IN1][1]	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.1 [IN2][1]	Roof R-value. For some ceiling systems, verification may need to occur during Framing Inspection.	R-____ ☐ Above deck ☐ Metal ☐ Attic	R-____ ☐ Above deck ☐ Metal ☐ Attic	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.2,5.8.1.3 [IN3][1]	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the ceiling slope is <= 3:12.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.2 [IN6][1]	Above-grade wall insulation R-value.	R-____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	R-____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.2 [IN7][1]	Above-grade wall insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.4 [IN8][2]	Floor insulation R-value.	R-____ ☐ Mass ☐ Steel ☐ Wood	R-____ ☐ Mass ☐ Steel ☐ Wood	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.1 [IN10][2]	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.4 [IN11][2]	Eaves are baffled to deflect air to above the insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.5 [IN12][2]	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.6 [IN13][2]	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.8.1.7 [IN14][2]	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.7.1 [IN15][2]	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.7.2 [IN16][2]	Foundation vents do not interfere with insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.8 [IN17][3]	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
5.4.3.3 [FI1][1]	Weatherseals installed on all loading dock cargo doors in Climate Zones 4-8.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

COM*check* Software Version 4.1.5.5

Mechanical Compliance Certificate

Project Information

Energy Code:	90.1 (2010) Standard
Project Title:	Rialto Manufacturing, Inc.
Location:	Marion, Ohio
Climate Zone:	5a
Project Type:	Addition

Construction Site:
1632 Cascade Drive
Marion, OH 43302

Owner/Agent:
Josh Obenour
Rialto Manucacturing, Inc.
1632 Cascade Dr.
Marion, OH 43302

Designer/Contractor:
Paul Omness
ODI
140 Fairfax Rd.
Marion, OH 43302

Mechanical Systems List

Quantity	System Type & Description
1	RH-1 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None
1	RH-2 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None
1	RH-3 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None
1	RH-4 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None
1	RH-5 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None
1	RH-6 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None
1	RH-7 (Single Zone): Heating: 1 each - Radiant Heater, Gas, Capacity = 175 kBtu/h No minimum efficiency requirement applies Fan System: None

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2010) Standard requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DOUG KUHL MECH DES.	Doug Kuhl	8-8-23
Name - Title	Signature	Date

COM*check* Software Version 4.1.5.5

Inspection Checklist

Energy Code: 90.1 (2010) Standard

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2,6.4.4.2.1,6.7.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
4.2.2,8.4.1.1,8.4.1.2,8.7 [PR6][2]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.7.2.4 [PR5][1]	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 ft2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.3.8 [FO9][3]	Freeze protection and snow/ice melting system sensors for future connection to controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.1.4,6.4.1.5 [ME1][2]	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	Efficiency:_____	Efficiency:_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.3.4.1 [ME3][3]	Stair and elevator shaft vents have motorized dampers that automatically close.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.4.2, 6.4.3.4.3 [ME4][3]	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.4.5 [ME39][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.4.4 [ME5][3]	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.9 [ME6][1]	Demand control ventilation provided for spaces >500 ft2 and >40 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.3.10 [ME40][2]	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.4.4.1.1 [ME7][3]	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.1.2 [ME8][2]	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	R-_____	R-_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.1.3 [ME9][2]	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.	_____ in.	_____ in.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.1.4 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.1 [ME10][2]	Ducts and plenums sealed based on static pressure and location.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.2.2 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.5.2.3 [ME19][3]	Dehumidification controls provided to prevent reheating, recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.3.3 [ME42][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
6.5.4.1 [ME25][3]	HVAC pumping systems >10 hp designed for variable fluid flow.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.5.6.1 [ME56][1]	Exhaust air energy recovery on systems meeting Table 6.5.6.1.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.5.7.1.1 [ME32][2]	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.5.7.1.5 [ME49][3]	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.5.7.2 [ME33][1]	Fume hoods exhaust systems >=15,000 cfm have VAV hood exhaust and supply systems, direct make-up air or heat recovery.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.5.8.1 [ME34][2]	Unenclosed spaces that are heated use only radiant heat.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10][2]	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
10.4.1 [EL9][2]	Electric motors meet requirements where applicable.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
6.4.3.1.2 [FI3][3]	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.2 [FI20][3]	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.3.1 [FI21][3]	HVAC systems equipped with at least one automatic shutdown control.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.3.2 [FI22][3]	Setback controls allow automatic restart and temporary operation as required for maintenance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.7 [FI6][3]	When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.7.2.1 [FI7][3]	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.7.2.2 [FI8][3]	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.7.2.3 [FI9][1]	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 ft2 of conditioned area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.7.2.4 [FI10][1]	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
10.4.3 [FI24][2]	Elevators are designed with the proper lighting, ventilation power, and standby mode.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

COMcheck Software Version 4.1.5.4

Interior Lighting Compliance Certificate

Project Information

Energy Code:	90.1 (2010) Standard
Project Title:	Rialto Manufacturing, Inc.
Project Type:	Addition

Construction Site:
1632 Cascade Drive
Marion, OH 43302

Owner/Agent:
Josh Obenour
Rialto Manucacturing, Inc.
1632 Cascade Dr.
Marion, OH 43302

Designer/Contractor:
Paul Omness
ODI
140 Fairfax Rd.
Marion, OH 43302

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Manufacturing (Manufacturing:High Bay (25-50 ft. Floor to Ceiling Height))	29250	1.23	35978
		Total Allowed Watts =	35978

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Manufacturing (Manufacturing:High Bay (25-50 ft. Floor to Ceiling Height))				
LED 1: A: 2X4 Surface Flat Panel: LED Panel 40W:	1	12	40	480
LED 2: B: 4'-0" Strip Light: LED Panel 44W:	1	19	50	950
LED 3: C: 24,000 Lumen High Bay: LED Other Fixture Unit 125W:	1	77	151	11627
LED 3 copy 1: C1: 12,000 Lumen High Bay: LED Other Fixture Unit 125W:	1	7	74	518
			Total Proposed Watts =	13575

Interior Lighting PASSES: Design 62% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 90.1 (2010) Standard requirements in COM*check* Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JACK PAHL - ELEC. DESIGNER — Name - Title

Signature

1/04/2023 — Date

COMcheck Software Version 4.1.5.4

Exterior Lighting Compliance Certificate

Project Information

Energy Code:	90.1 (2010) Standard
Project Title:	Rialto Manufacturing, Inc.
Project Type:	Addition
Exterior Lighting Zone	3 (Other (LZ3))

Construction Site:
1632 Cascade Drive
Marion, OH 43302

Owner/Agent:
Josh Obenour
Rialto Manucacturing, Inc.
1632 Cascade Dr.
Marion, OH 43302

Designer/Contractor:
Paul Omness
ODI
140 Fairfax Rd.
Marion, OH 43302

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Wall Surface (Illuminated length of facade wall or surface)	580 ft	3.75	No	2175
			Total Tradable Watts (a) =	0
			Total Allowed Watts =	2175
			Total Allowed Supplemental Watts (b) =	750

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

(b) A supplemental allowance equal to 750 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Wall Surface (Illuminated length of facade wall or surface 580 ft): Non-tradable Wattage				
LED 1: G: Wall Pack: LED Other Fixture Unit 103W:	1	13	100	1300
			Total Tradable Proposed Watts =	0

Exterior Lighting PASSES: Design 0.0% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2010) Standard requirements in COM*check* Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JACK PAHL-ELEC. DESIGNER — Name - Title

Signature

1/04/2023 — Date

COM*check* Software Version 4.1.5.4

Inspection Checklist

Energy Code: 90.1 (2010) Standard

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2,8.4.1.1,8.4.1.2,8.7 [PR6][2]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
4.2.2,9.4.4,9.7 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.7 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10][2]	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.1 [EL1][2]	Automatic controls to shut off all building lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.2 [EL2][2]	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.3 [EL11][2]	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.4 [EL12][1]	Primary sidelighted areas >=250 ft2 are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.5 [EL13][1]	Enclosed spaces with daylight area under skylights and rooftop monitors >900 ft2 are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.7 [EL3][2]	Automatic lighting controls for exterior lighting installed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.1.6 [EL4][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.2 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.4.3 [EL7][1]	Exterior grounds lighting over 100 W provides >60 lm/W unless on motion sensor or fixture is exempt from scope of code or from external LPD.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.6.2 [EL8][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

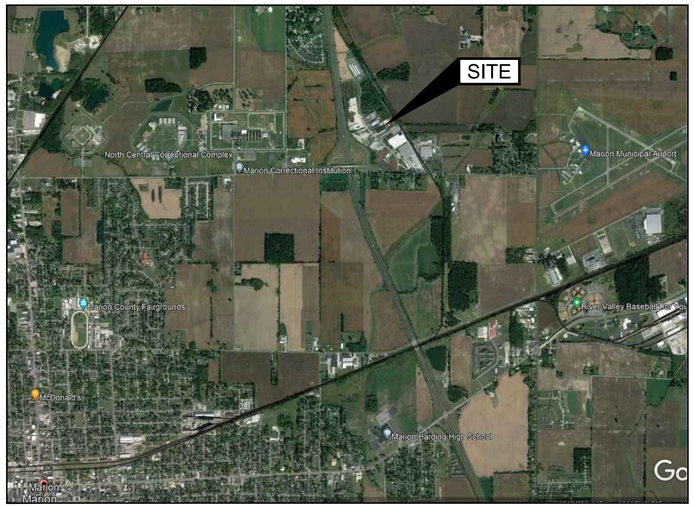
Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
8.7.1 [FI16][3]	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
8.7.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
9.2.2.3 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
9.4.3 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)



LOCATION MAP

LATITUDE: 40° 37' 0885" N
LONGITUDE: 83° 05' 25.91" W

SCALE: NONE

N

Partial Plan Approval
Examiner W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

CONSTRUCTION PLANS FOR:

RIALTO MANUFACTING INC. BUILDING ADDITION 2023

SITUATED IN THE STATE OF OHIO, COUNTY OF MARION, CITY OF MARION AND BEING PART OF MARION TOWNSHIP

OWNER

RIALTO MANUFACTURING INC.
1632 CASCADE DR.
MARION, OHIO 43302
PHONE: (740) 914-4230
FAX: (740) 914-4260

INDEX OF SHEETS

TITLE SHEET	1
GENERAL NOTES	2
EXISTING SITE PLAN	3
PROPOSED LAYOUT PLAN	4
GRADING PLAN	5
DETENTION BASIN	6

I HEREBY STATE THAT THESE PLANS HAVE BEEN PREPARED WITH OUR KNOWLEDGE AND CONCURRENCE AND REPRESENT OUR INTENT AND INTEREST.

OWNER AND DEVELOPER DATE

Ohio Utilities Protection Service
Call 811
before you dig

EASEMENT REFERENCE

City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS

No.	Description	Approval	Date
	AS BUILT		

Plans Prepared By :
Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

DYLAN J. WYATT
E-86763
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

DYLAN J. WYATT
E-86763 Ohio Reg. No.
Date

Signatures below signify only concurrence with the general purpose and general location of the project. All technical details remain the responsibility of the engineer preparing the plans.

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

RIALTO MANUFACTURING, INC.
BUILDING ADDITION 2023
MARION, OHIO

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Original Date : 07/26/2023

Sheet No. : 1 OF 6
S:\2022\091\Staking
Dwg. No. : 2022-091-002E

GENERAL NOTES

WHERE SPECIFIED, THE CURRENT STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (O.D.O.T. NUMBERS) SHALL APPLY EXCEPT AS MODIFIED OR EXPANDED HEREIN OR IN THE TECHNICAL SPECIFICATIONS

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS WERE OBTAINED FROM THE OWNERS OF THE UTILITY. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS APPROXIMATE. THE EXACT LOCATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE EXISTING UTILITIES IN THE PROJECT AREA SHALL BE PROTECTED DURING CONSTRUCTION.

UTILITIES NOTIFICATION

AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING COMPANIES:

1. OHIO UTILITY PROTECTION SERVICE (811)

MAINTAINING TRAFFIC

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND CONTROLLING TRAFFIC ON ALL STREETS AND ROADS AFFECTED BY CONSTRUCTION AND SHALL, PRIOR TO ANY CONSTRUCTION, SUBMIT A CONSTRUCTION SCHEDULE TO THE MARION TOWNSHIP, OHIO FOR APPROVAL INDICATING DATES AND DURATION OF EACH PHASE OF CONSTRUCTION.

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH "OHIO DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," AND O.D.O.T. ITEM 614 - MAINTAINING TRAFFIC. PAYMENT FOR MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

TESTING OF MATERIALS

ANY MATERIALS DELIVERED OR OTHERWISE INCORPORATED INTO THE PROJECT MAY BE SUBJECTED TO TESTING BY THE ENGINEER TO INSURE COMPLIANCE WITH SPECIFICATIONS. TESTS PERFORMED WILL BE PAID FOR BY THE OWNER WITH NO ADDITIONAL COST ASSUMED BY THE CONTRACTOR.

MISCELLANEOUS ITEMS

THE CONTRACTOR SHALL REMOVE ANY MAILBOX, STREET SIGNS, YARD LIGHTS, FENCES, LAWN ORNAMENTS, ETC. WHICH COULD BE DAMAGED DURING THE COURSE OF CONSTRUCTION AND RESET SAME AFTER CONSTRUCTION HAS PASSED THE AREA.

ANY CATCH BASINS, LAWNS, DRIVEWAYS, OR OTHER VARIOUS ITEMS DISTURBED DURING THE CONSTRUCTION OF THE PROJECT SHALL BE REPAIRED TO A LIKE OR BETTER CONDITION. PAYMENT OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

TRENCH PROTECTION

THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, BRACING, TRENCH BOX, ETC., AS REQUIRED TO PROTECT EXISTING STRUCTURES, UTILITIES, WORKMEN, ETC. PAYMENT OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

BACKFILLING SHALL FOLLOW IMMEDIATELY BEHIND CONSTRUCTION AND ONLY THE MINIMUM LENGTH OF TRENCH REQUIRED FOR CONSTRUCTION SHALL BE OPEN AT ANY GIVEN TIME.

CONCRETE

ALL CONCRETE UTILIZED WITHIN THIS PROJECT SHALL BE O.D.O.T. CLASS "QC MISC" UNLESS OTHERWISE STATED. PAYMENT FOR CONCRETE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

CLEARING AND GRUBBING

THIS WORK SHALL CONSIST OF CLEARING, GRUBBING, SCALPING, REMOVAL OF TREES AND STUMPS, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE PROJECT AREA AS DIRECTED BY THE ENGINEER. PAYMENT FOR CLEARING AND GRUBBING SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

AGGREGATE BACKFILL

CONTRACTOR SHALL USE O.D.O.T. ITEM 304 BACKFILL IN ALL UTILITY TRENCHES IN ALL DISTURBED ASPHALT OR PROPOSED ASPHALT AREAS UNLESS OTHERWISE NOTED. PAYMENT FOR AGGREGATE BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

DIVISION OF INDUSTRIAL COMPLIANCE • BUILDING CODE COMPLIANCE • STATE OF OHIO DEPARTMENT OF COMMERCE

Partial Plan Approval
Examiner: W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect;
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

EARTH BACKFILL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING SUITABLE EARTH BACKFILL IN ALL GRASS AREAS. THE TOP 6 INCHES OF THE FILL MATERIAL SHALL BE TOPSOIL. PAYMENT FOR EARTH BACKFILL MATERIAL AND TOPSOIL SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

SEEDING AND MULCHING

ALL GRASS AREAS DISTURBED DURING THE COURSE OF THE CONTRACT SHALL BE PROPERLY SEEDED, MULCHED, AND FERTILIZED ACCORDING TO O.D.O.T. ITEM 659. PAYMENT FOR SEEDING AND MULCHING SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

EXCAVATION

CONTRACTOR SHALL REMOVE ALL TOPSOIL ENCOUNTERED PRIOR TO PLACING PROPOSED FILL MATERIAL AND REPLACE WITH SUITABLE CLAY SOIL TO SUBGRADE ELEVATIONS. IN CUT AREAS, A MINIMUM OF 12" OF 203 MATERIAL SHALL BE REMOVED AND PLACED TO PROPER GRADE AND COMPACTION. PAYMENT FOR EXCAVATION SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

STORM SEWERS

THE CONTRACTOR MAY USE THE FOLLOWING MATERIAL SPECIFICATIONS IN PREPARING THE UNIT PRICE BID FOR THE STORM SEWER CONDUIT.

1. AASHTO M-294 TYPE "S" CORRUGATED POLYETHYLENE PIPE WITH BUILT IN BELL AND SPIGOT (PER ASTM M-249) WITH GASKETS (PER ASTM F-477) FOR SIZES: 6" - 8"

2. ADS N-12 ST IB PIPE (PER ASTM F-2648) WITH BUILT IN BELL AND SPIGOT (PER ASTM F-2648) WITH GASKETS (PER ASTM F-477) FOR SIZES: 6" - 8"

TO INSURE PROPER HORIZONTAL AND VERTICAL ALIGNMENT OF THE STORM SEWERS DURING CONSTRUCTION, THE CONTRACTOR SHALL USE A LASER ALIGNMENT DEVICE CAPABLE OF BOTH HORIZONTAL AND VERTICAL ADJUSTMENT.

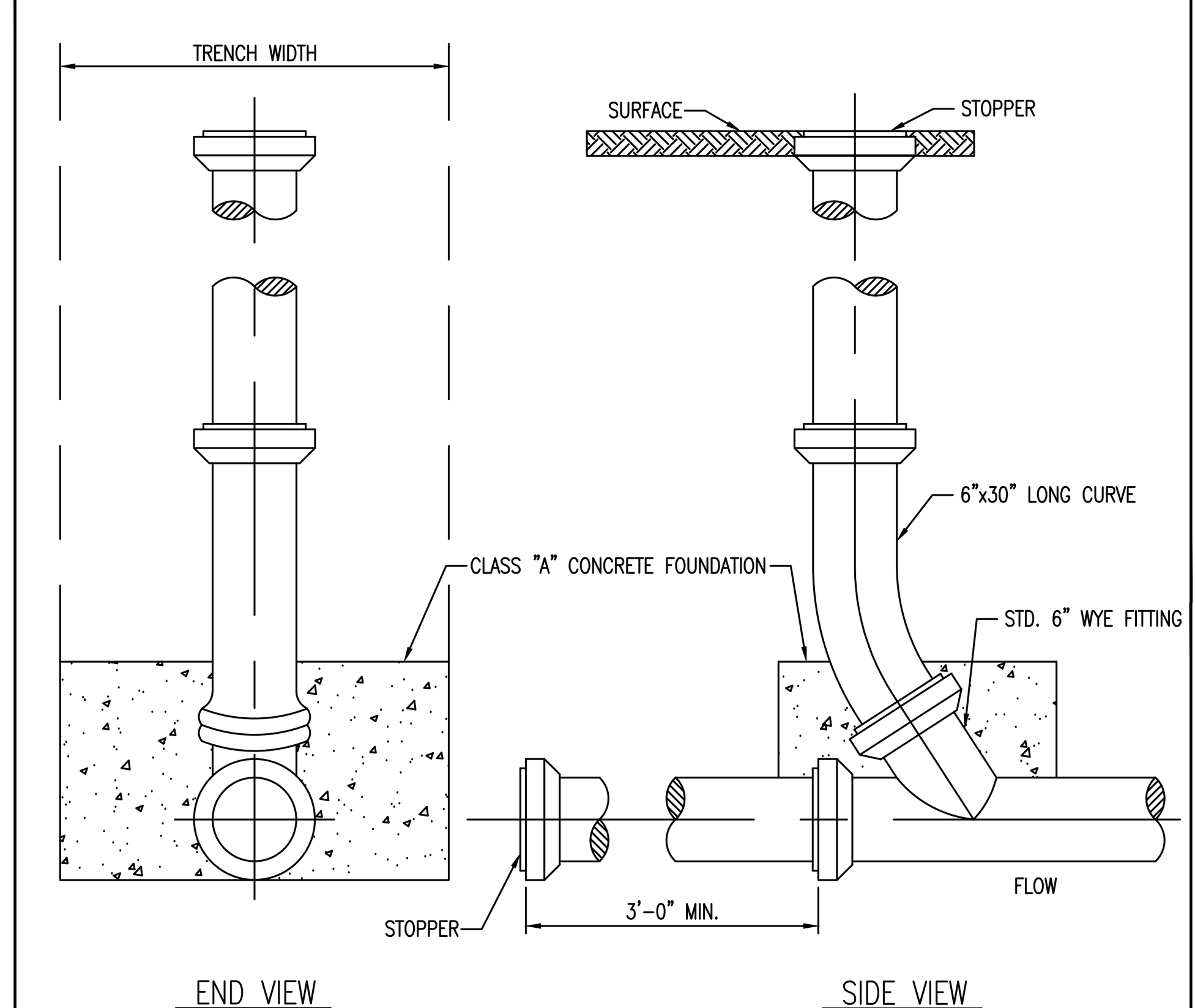
ALL TRENCHES FOR THE STORM SEWER SHALL CONFORM TO STANDARD DRAWING STM-5 BEDDING FOR STORM SEWERS LOCATED IN STANDARD DRAWINGS. PAYMENT FOR STORM SEWER TRENCH AND BEDDING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

WATERLINE

REFERENCE AQUA MULTI-FAMILY, COMMERCIAL, AND INDUSTRIAL METER AND SERVICE STANDARDS FOR ALL WORK RELATED TO THE NEW WATER SERVICE AND FIRE HYDRANT ASSEMBLY.

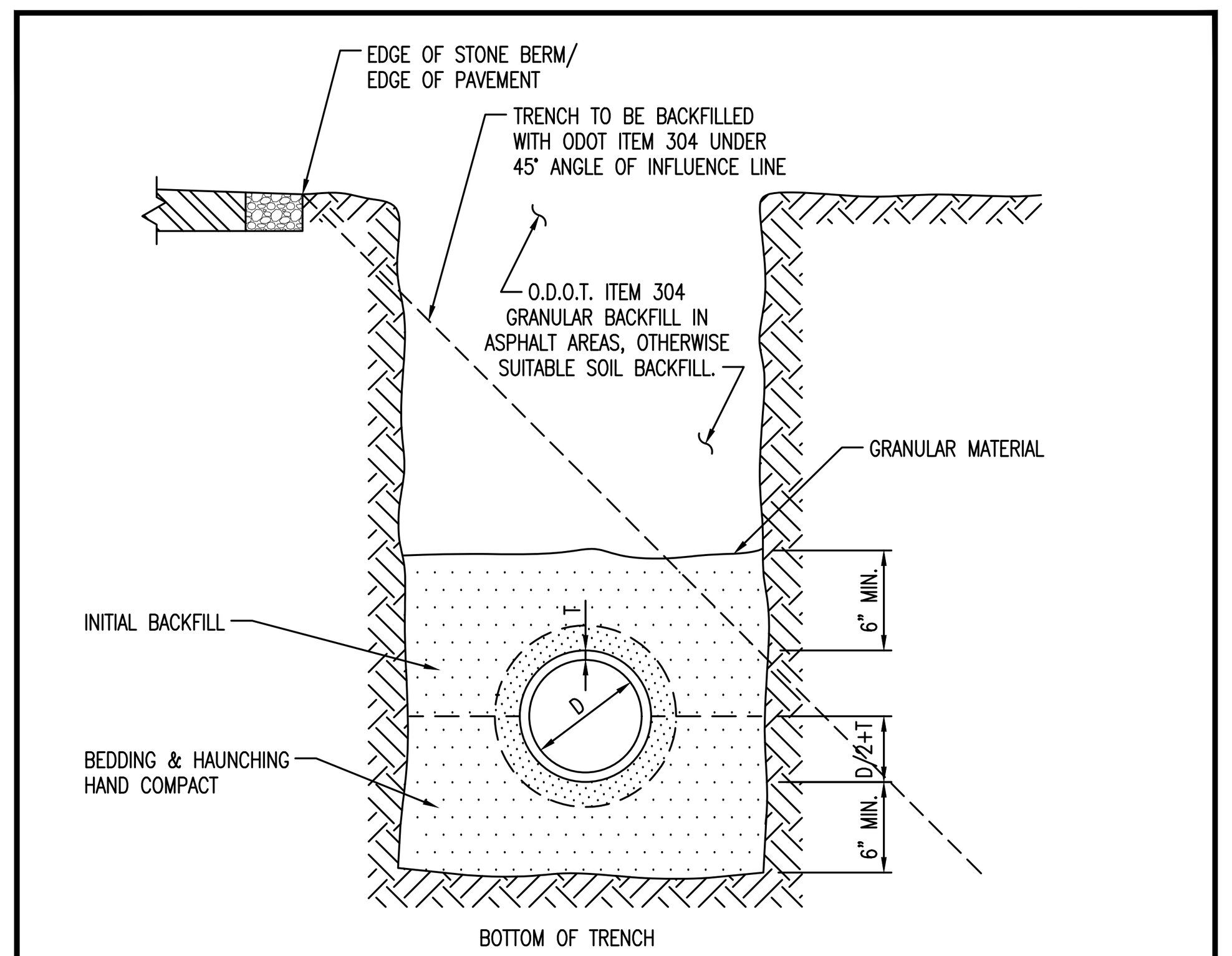
LEGEND

FOUND	SET			
⌀		3/4" IRON PIPE, UNLESS NOTED	⊣	SIGN
○	●	5/8" IRON PIN, UNLESS NOTED	T	TELEPHONE BOX
⬭	⬬	SURVEY NAIL	GM	GAS METER
△	▲	RAIL ROAD SPIKE	⊣G	GAS MARKER
○		MAG SPIKE	⊘	GAS VALVE
⊤		T BAR		TREE
◎		CONCRETE MONUMENT		EVERGREEN TREE
▤		CATCH BASIN		SHRUB
◎		STORM MANHOLE		STUMP
⊛		TILE DROP	—SAN—	SANITARY SEWER
CO		CLEAN OUT	—STM—	STORM SEWER
Ⓢ		SANITARY MANHOLE	—W—	WATER LINE
W		WELL	—E—	ELECTRIC LINE
E		ELECTRIC TRANSFORMER	—T—	TELEPHONE LINE
AC		AIR CONDITIONER UNIT	—CATV—	CABLE TV LINE
⚐		FLAG POLE	—GAS—	GAS LINE
		POWER POLE	—X—X—X—	FENCE
(		GUY WIRE	~~~~	TREE LINE



CLEANOUT

MAKEEVER & ASSOCIATES, INC. ENGINEERS AND SURVEYORS BUCYRUS, OHIO — STANDARD DWG. NO. SAN-6

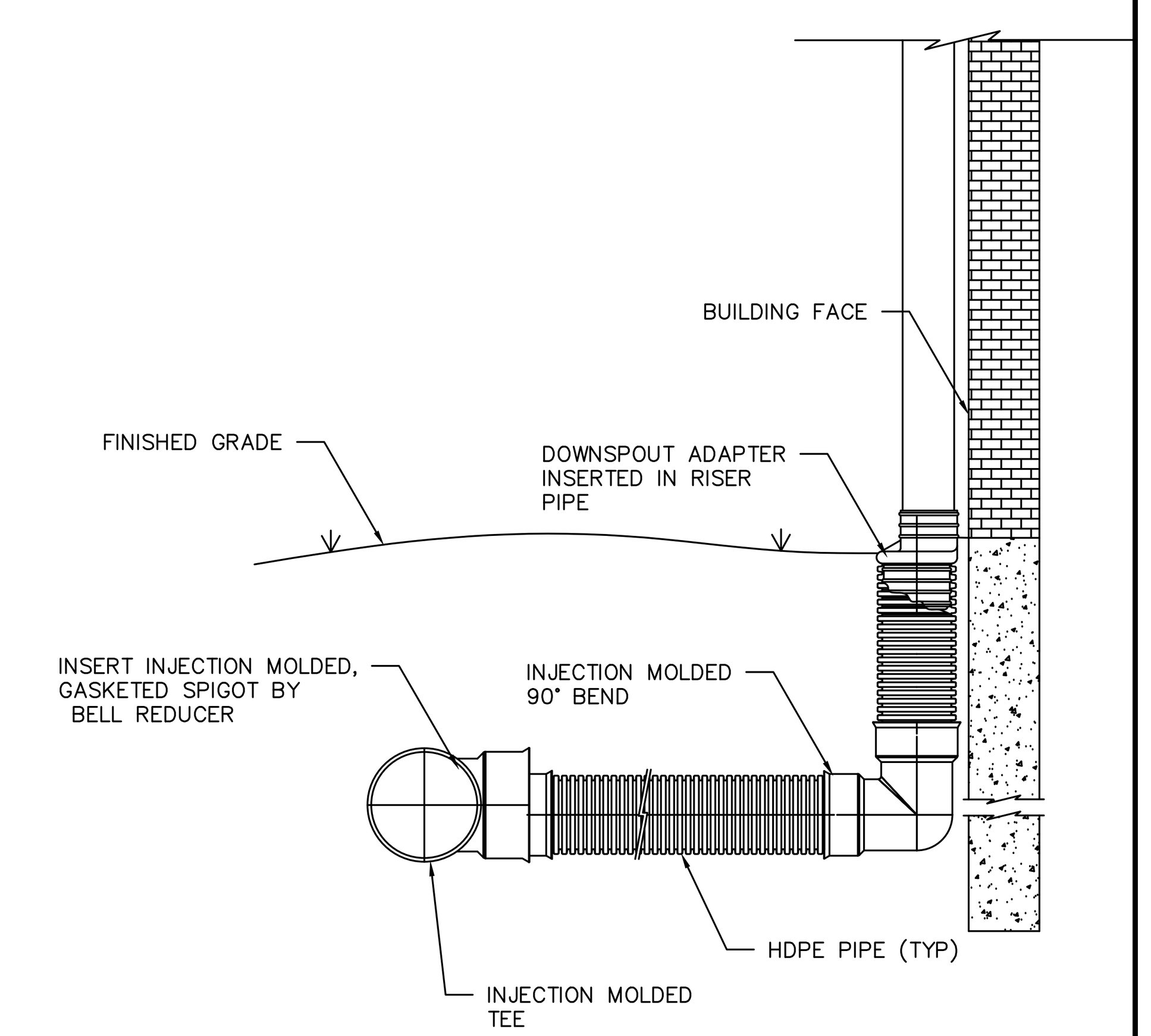


NOTE:
GRANULAR MATERIAL USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL SHALL CONFORM TO A.S.T.M. NO. 57, CRUSHED AGGREGATE.

MAXIMUM TRENCH WIDTH AT TOP OF PIPE SHALL BE AS FOLLOWS.
FOR PIPE 24" ID OR LESS MAXIMUM TRENCH = O.D. OF PIPE + 24"
FOR PIPE GREATER THAN 24" ID MAXIMUM TRENCH = O.D. OF PIPE + 30"

BEDDING FOR STORM SEWERS

MAKEEVER & ASSOCIATES, INC. ENGINEERS AND SURVEYORS BUCYRUS, OHIO — STANDARD DWG. NO. STM-5



ROOF DRAIN CONNECTION

MAKEEVER & ASSOCIATES, INC. ENGINEERS AND SURVEYORS BUCYRUS, OHIO — STANDARD DWG. NO. STM-28

EASEMENT REFERENCE			
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REVISIONS			
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AS BUILT

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST. BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

STATE OF OHIO — DYLAN J. WYATT E-86763 — REGISTERED PROFESSIONAL ENGINEER

DYLAN J. WYATT

E-86763
Ohio Reg. No. Date

GENERAL NOTES

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RIALTO MANUFACTURING, INC.
BUILDING ADDITION 2023
MARION, OHIO

Scale : Horiz. = AS NOTED
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Original Sheet Size = 24"x36"
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Sheet No. : 2 OF 6
S:\2022\091\Staking
Dwg. No. : 2022-091-002E

LEGEND

- REMOVE EXISTING ASPHALT PAVEMENT
- REMOVE EXISTING CONCRETE PAVEMENT
- REMOVE EXISTING SCALE & CONCRETE PAVEMENT

LEGEND

1. REMOVE RAILS TO ACCOMMODATE NEW ADDITION
2. REMOVE 3' TALL CONCRETE POSTS
3. REMOVE 4' TALL CONCRETE POSTS
4. SALVAGE & RELOCATE EXISTING HOOP BUILDINGS
5. REMOVE EXISTING OVERHEAD ELECTRIC WIRING COORDINATE WITH LOCAL POWER COMPANY
6. REMOVE EXISTING UTILITY POLES COORDINATE WITH LOCAL POWER COMPANY
7. REMOVE EXISTING FENCE

DIVISION OF INDUSTRIAL COMPLIANCE
BUILDING CODE COMPLIANCE
STATE OF OHIO

Partial Plan Approval
Examiner W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

BENCHMARKS

BENCHMARK #1: ELEV - 982.067

BENCHMARK #2: ELEV - 985.325

EXISTING STORM INVERTS

CB# 126
T.C. - 978.69
INV. 4" (CPP PIPE) 977.94 (W)

CB# 283
T.C. - 981.43
INV. 3" (PVC PIPE) 978.98 (S)

CB# 311
T.C. - 981.26
INV. 4" (CPP PIPE) 979.91 (W)

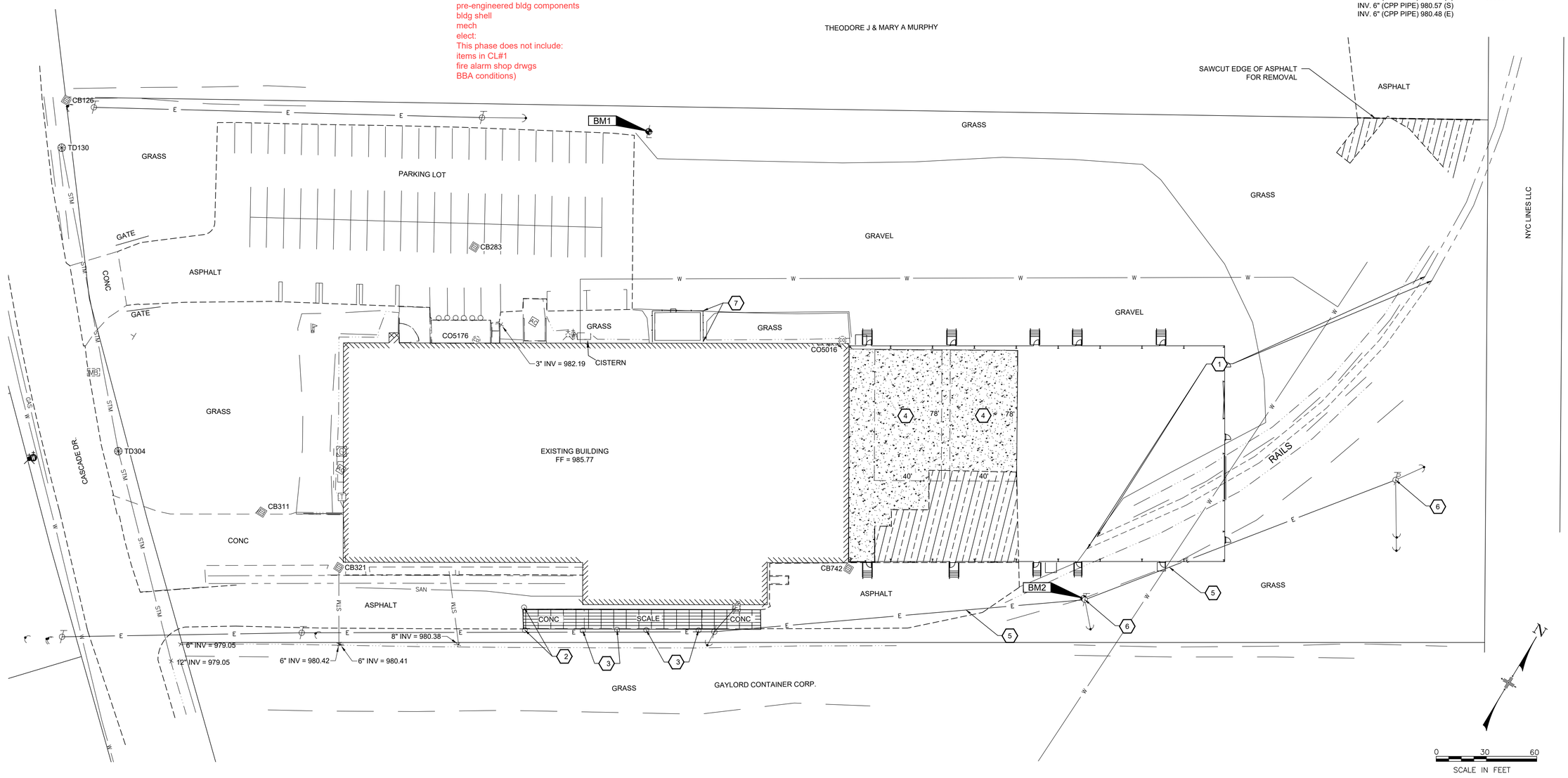
CB# 321
T.C. - 981.29
INV. 6" (CPP PIPE) 980.57 (S)
INV. 6" (CPP PIPE) 980.57 (S)
INV. 6" (CPP PIPE) 980.48 (E)

CB# 742
T.C. - 982.02
INV. 6" (CPP PIPE) 980.87 (E)

TD# 304
T.C. - 976.78
?????

COUT# 5016
T.C. - 985.65
INV. 6" (PVC PIPE) 982.15 (E)

COUT# 5176
T.C. - 982.25
?????



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DYLAN J. WYATT

E-86763
Ohio Reg. No.

Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED PROFESSIONAL ENGINEER

EXISTING SITE PLAN

ENG. FILE NO. _____
IMP. ACCT. NO. _____
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RIALTO MANUFACTURING, INC.

BUILDING ADDITION 2023
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Sheet No. : 3 OF 6
S:\2022\091\Staking
Dwg. No. : 2022-091-002E

EXISTING WATERLINE NOTE

THE EXISTING WATERLINE SIZE AND LOCATION IS BASED ON INFORMATION OF RECORD FROM AQUA OHIO. CONTRACTOR SHOULD FIELD VERIFY ACTUAL LOCATION OF EXISTING WATERLINE AND REMOVE WATERLINE WITHIN THE INFLUENCE OF THE PROPOSED BUILDING.

AQUA OHIO WILL REQUIRE ABANDONMENT OF THE EXISTING WATERLINE (CUTTING, CAPPING AND ABANDONMENT IN PLACE) AT THE NEIGHBORING PROPERTY (INTERNATIONAL PAPER). COORDINATE ALL WORK WITH AQUA OHIO, JAKE LOGAN (614) 882-6586 X50559.

A NEW DOMESTIC SERVICE TAP SHALL BE INSTALLED TO CONNECT TO THE EXISTING WATERLINE AT THE EXISTING BUILDING. COORDINATE ALL WORK WITH AQUA OHIO, JAKE LOGAN (614) 882-6586 X50559.

DIVISION OF INDUSTRIAL COMPLIANCE * BUILDING CODE COMPLIANCE * STATE OF OHIO DEPARTMENT OF COMMERCE

Partial Plan Approval
Examiner: W. Phillips
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(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

PROPOSED WATER SERVICE & HYDRANT NOTE

CONTRACTOR SHALL COORDINATE WITH AQUA OHIO FOR CONNECTION OF THE NEW WATER SERVICE TO THE EXISTING 6" WATER MAIN ON CASCADE DRIVE. CONTRACTOR SHALL FIELD VERIFY SIZE AND MATERIAL OF THE EXISTING WATER SERVICE NEAR THE BUILDING TO DETERMINE NEW WATER SERVICE SIZE.

THE NEW FIRE HYDRANT ASSEMBLY AND NEW WATER SERVICE CONNECTION SHALL BE INSTALLED IN ACCORDANCE WITH AQUA OHIO COMMERCIAL METER AND SERVICE STANDARDS. COORDINATE ALL WORK WITH AQUA OHIO, JAKE LOGAN (614) 882-6586 X50559.

BENCHMARKS

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BENCHMARK #2: ELEV - 985.325

EXISTING STORM INVERTS

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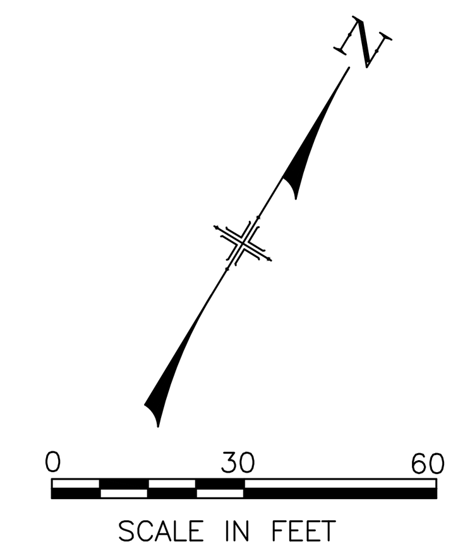
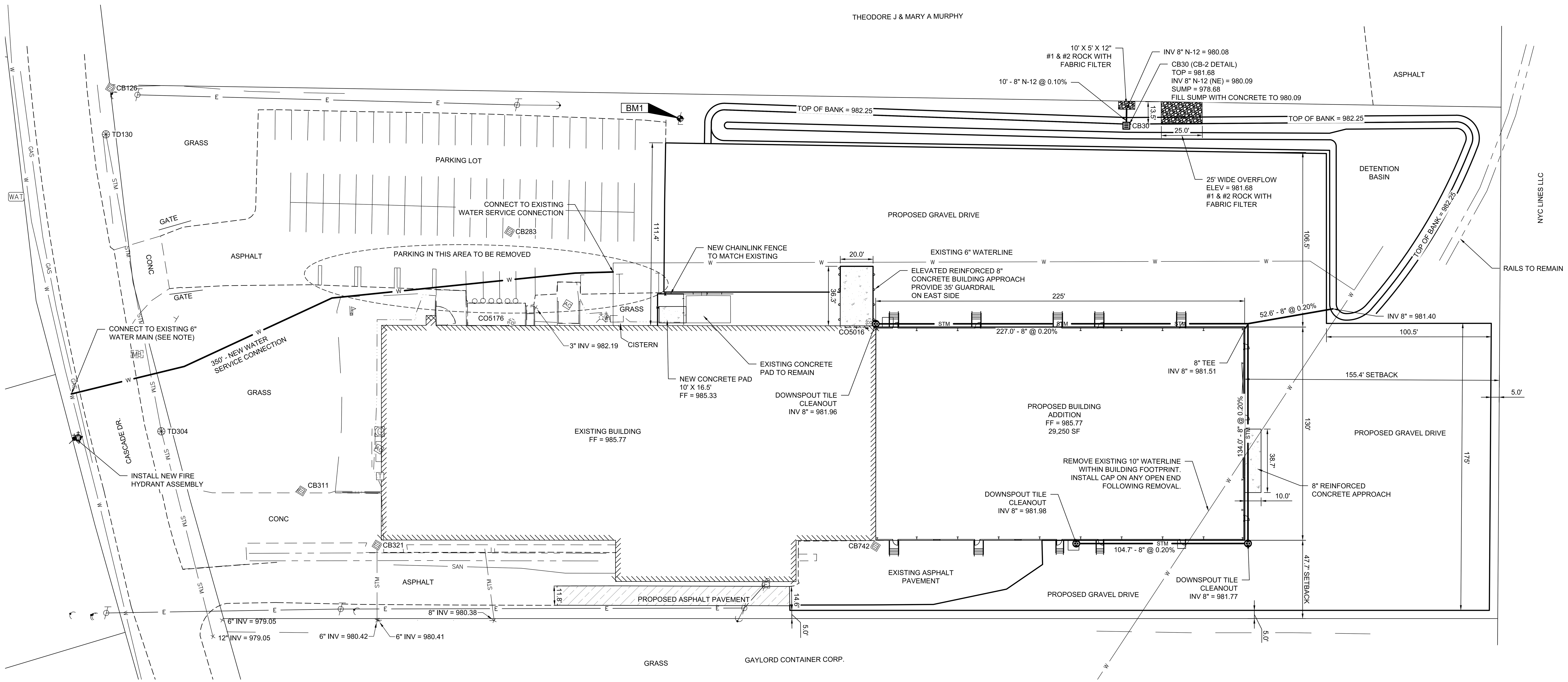


LEGEND

PROPOSED CONCRETE PAVEMENT



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P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

DYLAN J. WYATT

E-86763
Ohio Reg. No. Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

PROPOSED LAYOUT PLAN

ENG. FILE NO.

IMP. ACCT. NO.

CONTRACT NO.

COMPLETION DATE

CONTRACTOR

RIALTO MANUFACTURING, INC.

BUILDING ADDITION 2023
MARION, OHIO

Scale : Horiz. = AS NOTED
Vert. = AS NOTED

Original Sheet Size = 24"x36"

Date : 07/26/2023

Sheet No. : 4 OF 6

S:\2022\091\Staking

Dwg. No. : 2022-091-002E

Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

N

0 30 60
SCALE IN FEET

EXISTING STORM INVERTS

CB# 126
T.C. - 978.69
INV. 4" (CPP PIPE) 977.94 (W)

CB# 283
T.C. - 981.43
INV. 3" (PVC PIPE) 978.98 (S)

CB# 311
T.C. - 981.26
INV. 4" (CPP PIPE) 979.91 (W)

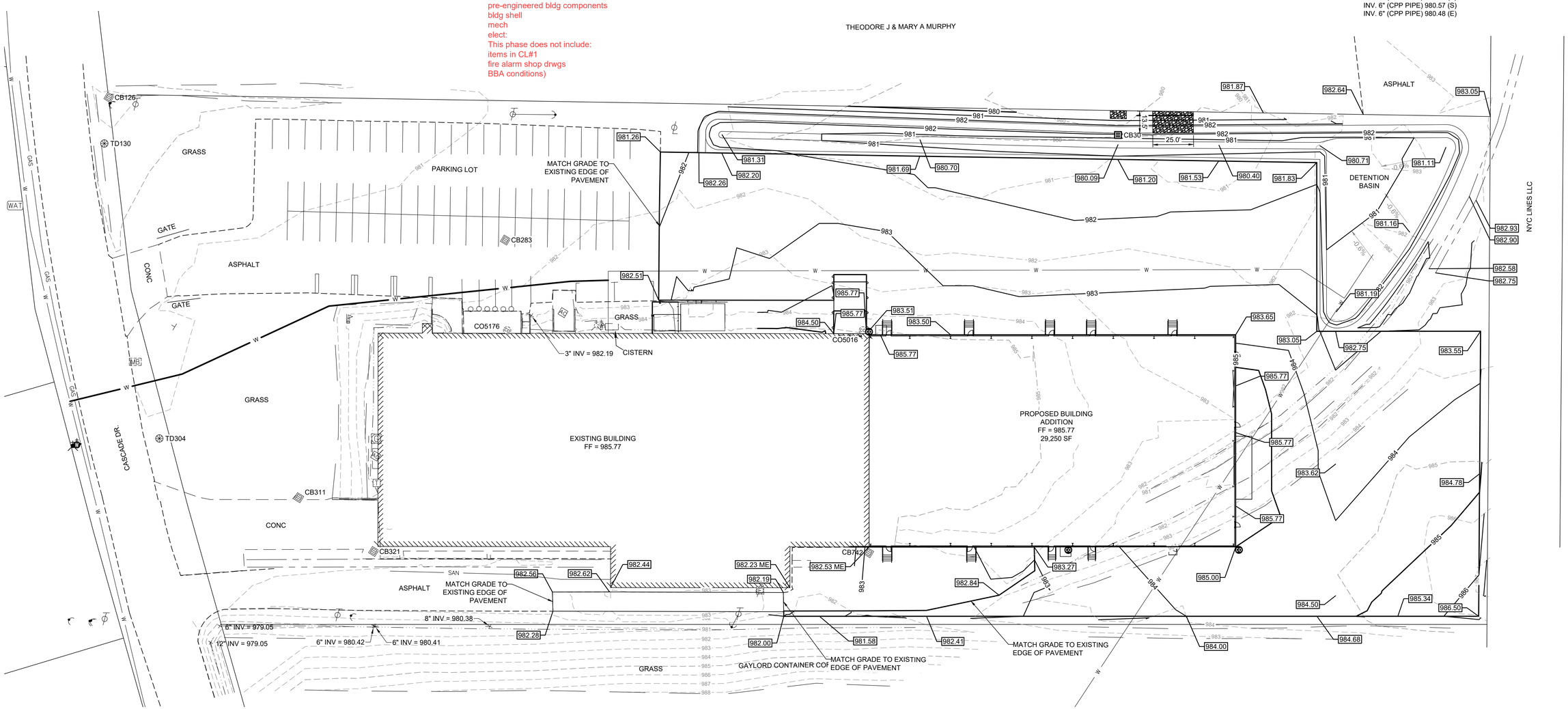
CB# 321
T.C. - 981.29
INV. 6" (CPP PIPE) 980.57 (S)
INV. 6" (CPP PIPE) 980.57 (S)
INV. 6" (CPP PIPE) 980.48 (E)

CB# 742
T.C. - 982.02
INV. 6" (CPP PIPE) 980.87 (E)

TD# 304
T.C. - 976.78
?????

COUT# 5016
T.C. - 985.65
INV. 6" (PVC PIPE) 982.15 (E)

COUT# 5176
T.C. - 982.25
?????



EASEMENT REFERENCE

City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS

No.	Description	Approval	Date

AS BUILT

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

DYLAN J. WYATT

E-86763
Ohio Reg. No.

Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED PROFESSIONAL ENGINEER

GRADING PLAN

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

RIALTO MANUFACTURING, INC.

BUILDING ADDITION 2023
MARION, OHIO

Scale : Horiz. = AS NOTED
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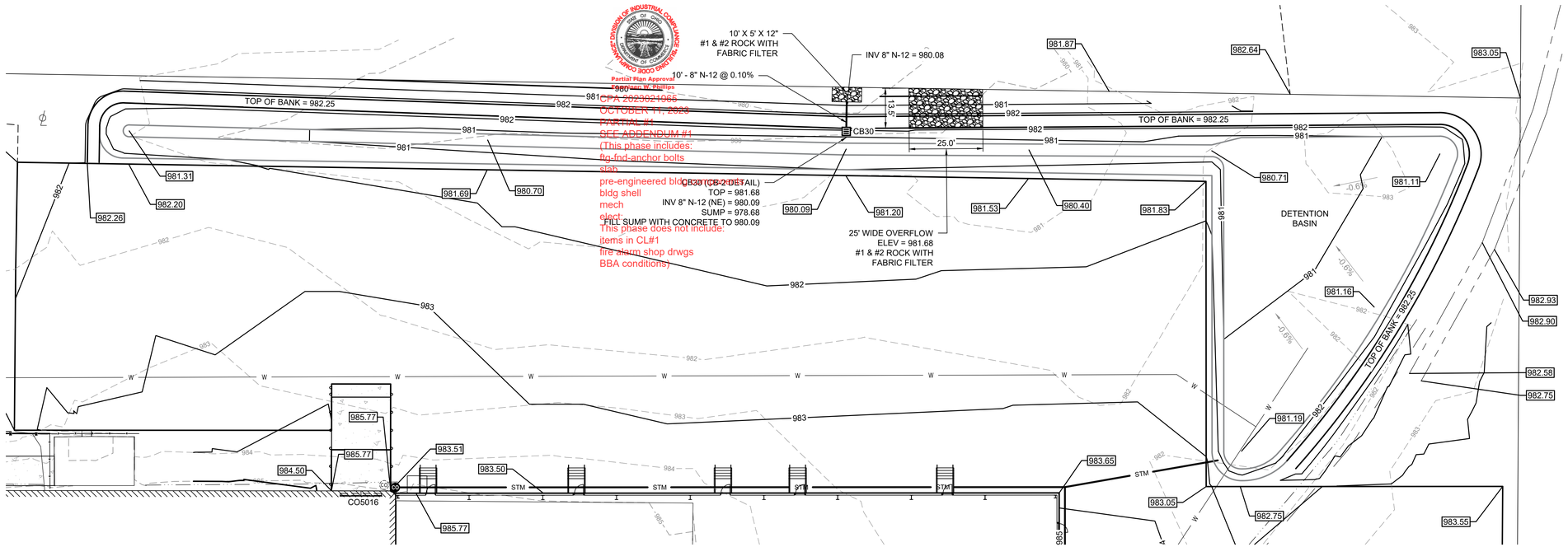
Sheet No. : 5 OF 6
S:\2022\091\Staking
Dwg. No. : 2022-091-002E



DETENTION BASIN
SCALE 1" = 20'

EXISTING STORM INVERTS

CB# 126
T.C. - 978.69
INV. 4" (CPP PIPE) 977.94 (W)

CB# 283
T.C. - 981.43
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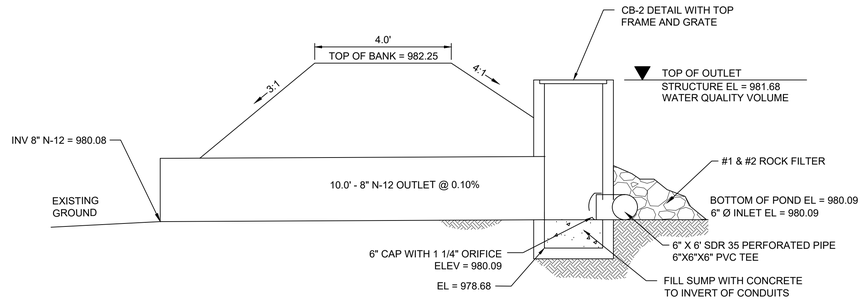

OUTLET STRUCTURE DETAIL
SCALE: NONE

EASEMENT REFERENCE				REVISIONS			
City's No.	County Recorder		Grantor	No.	Description	Approval	Date
	Volume	Page					
					AS BUILT		

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BUILDING ADDITION 2023
MARION, OHIO

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Sheet No. : 6 OF 6
S:\2022\091\Staking
Dwg. No. : 2022-091-002E

ZONING INFORMATION:
MARION TOWNSHIP
ZONING CLASSIFICATION I-3/R-1B
PER ZONING CODE 15.032 - NO SIDE OR REAR YARD SETBACK IS REQUIRED
REQUIRED PARKING PER 17.022 - 1 SPACE PER 1200 S.F. = 60 SPACES < 72 ACTUAL SPACES

CODE EVALUATION NOTES:

APPLICABLE CODES:

BUILDING CODE	OHIO BUILDING CODE 2017
MECHANICAL CODE	OHIO MECHANICAL CODE 2017
PLUMBING CODE	OHIO PLUMBING CODE 2017
ELECTRICAL CODE	NEC 2017
ACCESSIBLITY	ICC A-117.1 2009

BOARD OF APPEALS CASE #22-046
CPA#2022060016

DESCRIPTION:
ADDITION OF WAREHOUSING AREA

EXISTING OCCUPANCY CLASSIFICATIONS	F-2,S-2, B
PROPOSED OCCUPANCY CLASSIFICATIONS	F-2, S-2, B
UNSEPARATED MIXED USE	
PREVIOUS CPA #'S	N/A
CONSTRUCTION CLASS	IIB
HEIGHT	1 STORY, 30 FEET

EXISTING FLOOR AREAS	
EXISTING B	4,807 SF
EXISTING F-2/S-2	36,943 SF
NEW ADDITION	29,250 SF
TOTAL AREA	71,000 SF > MAX. ALLOWABLE AREA = 23,000 SF
AREA OF ALTERATION	2,254 SF
FRONTAGE INCREASE (100% OPEN PERIMETER)	I_f = [1 - 0.25] $\frac{60}{100}$ = [0.75 * 0.86] = 0.65
AREA INCREASE	23,000 + (23,000 * 0.65) = 23,000 + 14,950 = 37,950 SF
PROPOSED AREA EXCEEDS ALLOWABLE AREA PER FRONTAGE INCREASE FOR UNSPRINKLERED BUILDING	

OCCUPANT LOAD	475; ACTUAL 50
EGRESS WIDTH	95.0" REQ'D < 360" ACTUAL

SPRINKLER SYSTEM	N/A
FIRE ALARM SYSTEM	NFPA 72 - PROPOSED
SMOKE DETECTION SYSTEM	NFPA 72 - PROPOSED

PLUMBING FIXTURES FEMALE OCCUPANT LOAD-238 MALE OCCUPANT LOAD-238

FIXTURE TYPE	REQ'D	ACTUAL
FEMALE WC'S	2.38	3
FEMALE LAV'S	2.38	3
MALE WC'S	2.38	2
MALE UR		2
MALE LAVS	2.38	3
SERVICE SINKS	1	1
DF'S	1	2

Partial Plan Approval
Examiner W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
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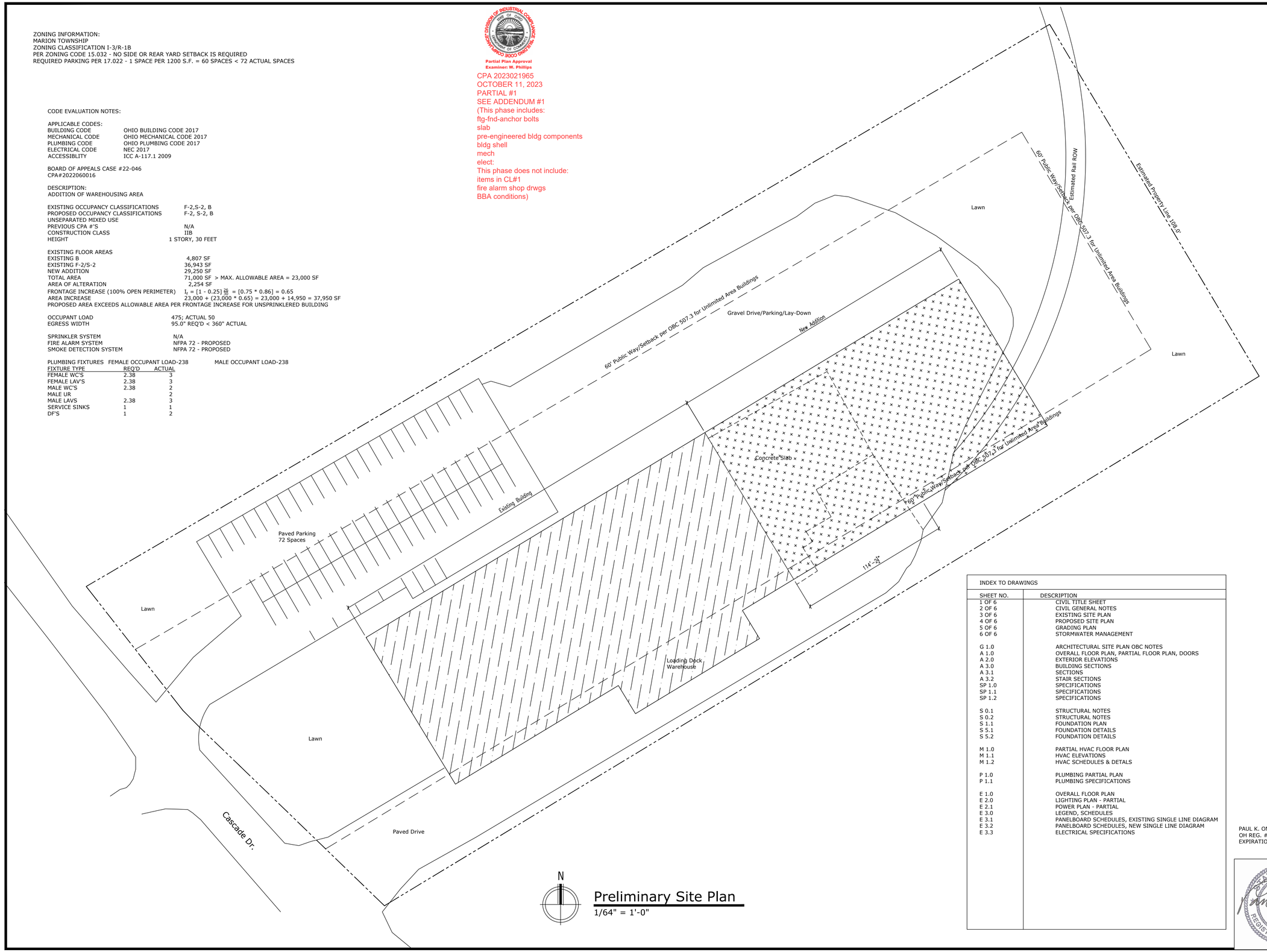


N

Preliminary Site Plan
1/64" = 1'-0"

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1 OF 6	CIVIL TITLE SHEET
2 OF 6	CIVIL GENERAL NOTES
3 OF 6	EXISTING SITE PLAN
4 OF 6	PROPOSED SITE PLAN
5 OF 6	GRADING PLAN
6 OF 6	STORMWATER MANAGEMENT
G 1.0	ARCHITECTURAL SITE PLAN OBC NOTES
A 1.0	OVERALL FLOOR PLAN, PARTIAL FLOOR PLAN, DOORS
A 2.0	EXTERIOR ELEVATIONS
A 3.0	BUILDING SECTIONS
A 3.1	SECTIONS
A 3.2	STAIR SECTIONS
SP 1.0	SPECIFICATIONS
SP 1.1	SPECIFICATIONS
SP 1.2	SPECIFICATIONS
S 0.1	STRUCTURAL NOTES
S 0.2	STRUCTURAL NOTES
S 1.1	FOUNDATION PLAN
S 5.1	FOUNDATION DETAILS
S 5.2	FOUNDATION DETAILS
M 1.0	PARTIAL HVAC FLOOR PLAN
M 1.1	HVAC ELEVATIONS
M 1.2	HVAC SCHEDULES & DETALS
P 1.0	PLUMBING PARTIAL PLAN
P 1.1	PLUMBING SPECIFICATIONS
E 1.0	OVERALL FLOOR PLAN
E 2.0	LIGHTING PLAN - PARTIAL
E 2.1	POWER PLAN - PARTIAL
E 3.0	LEGEND, SCHEDULES
E 3.1	PANELBOARD SCHEDULES, EXISTING SINGLE LINE DIAGRAM
E 3.2	PANELBOARD SCHEDULES, NEW SINGLE LINE DIAGRAM
E 3.3	ELECTRICAL SPECIFICATIONS

PAUL K. OMNESS
OH REG. #13997
EXPIRATION 12/31/23

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE

TITLE SHEET

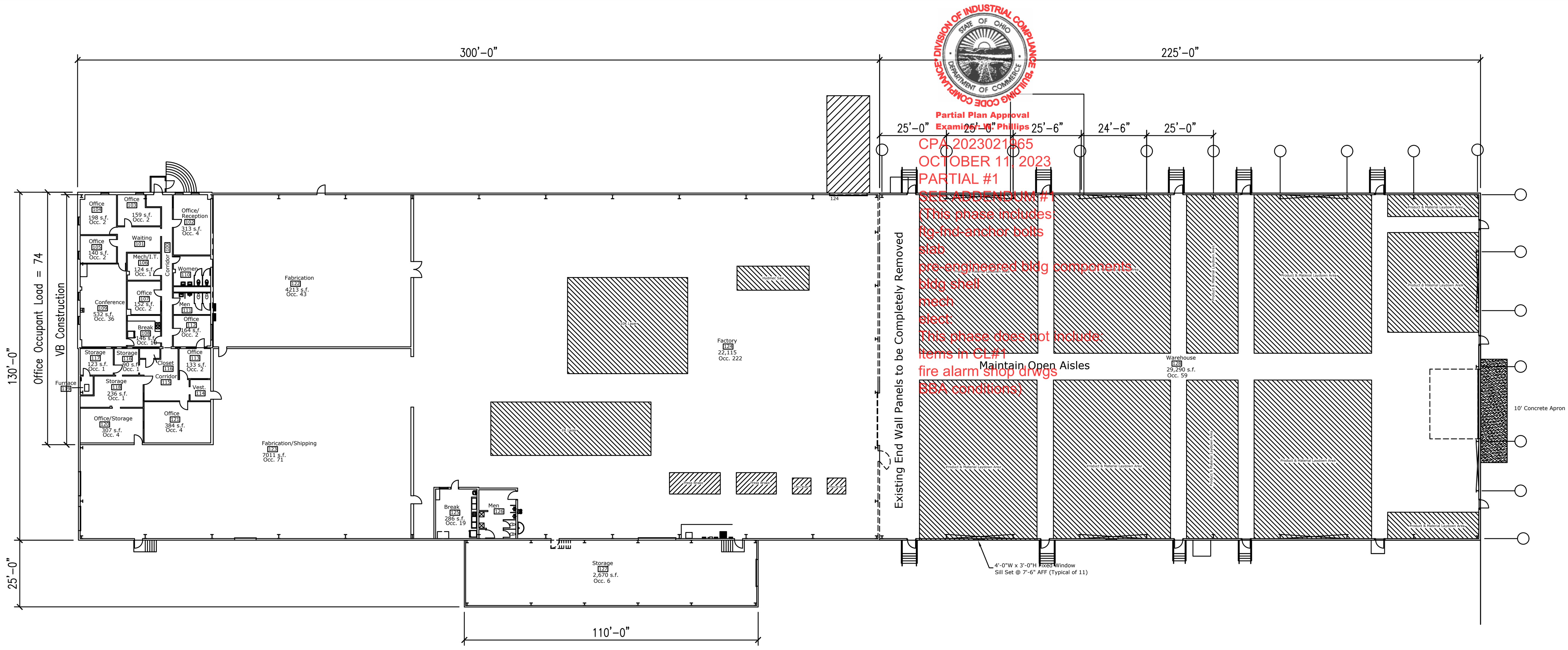
MARK	DATE	DESCRIPTION
SD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

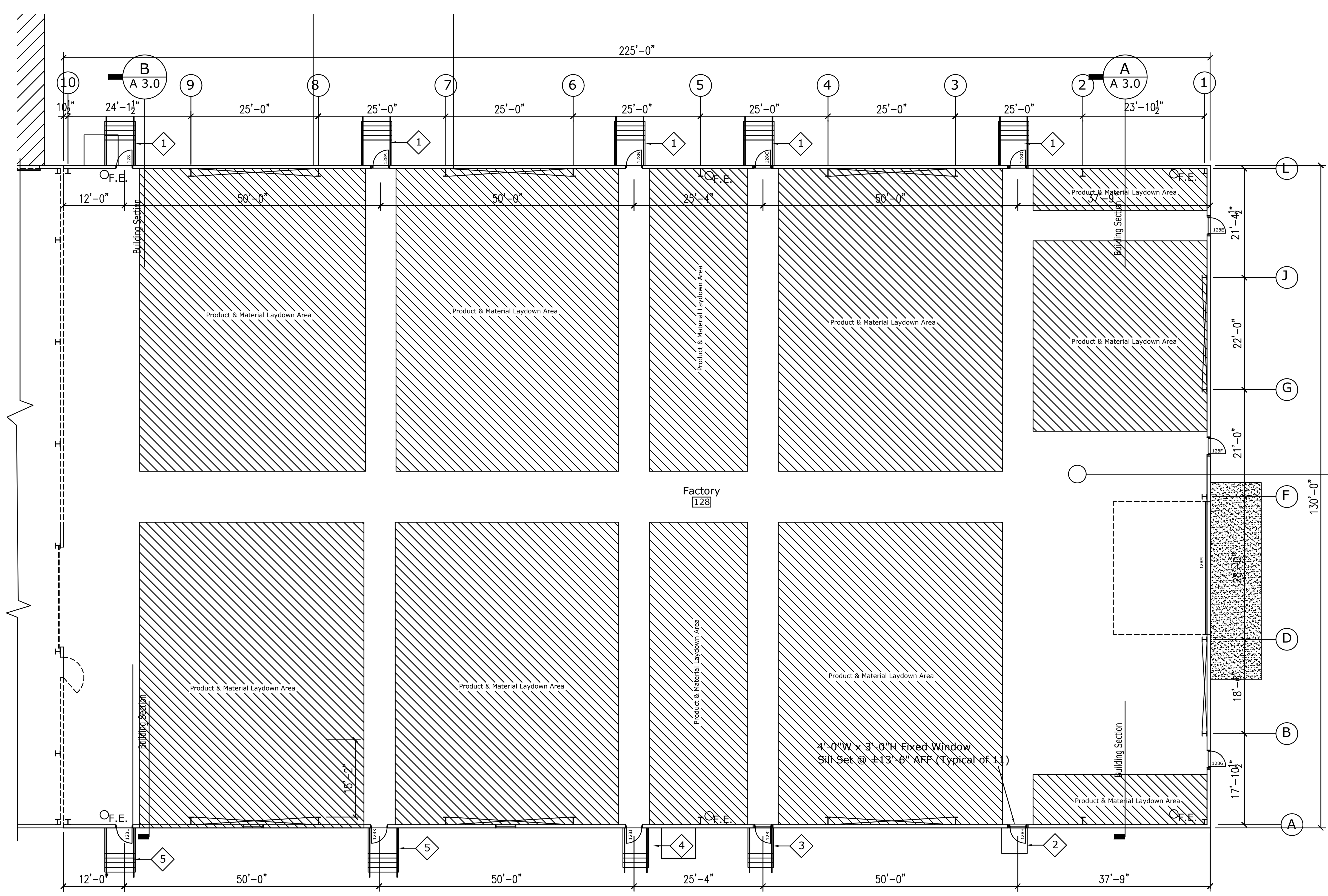
G 1.0

SHEET 1 OF 26



Floor Plan

1/32" = 1'-0"

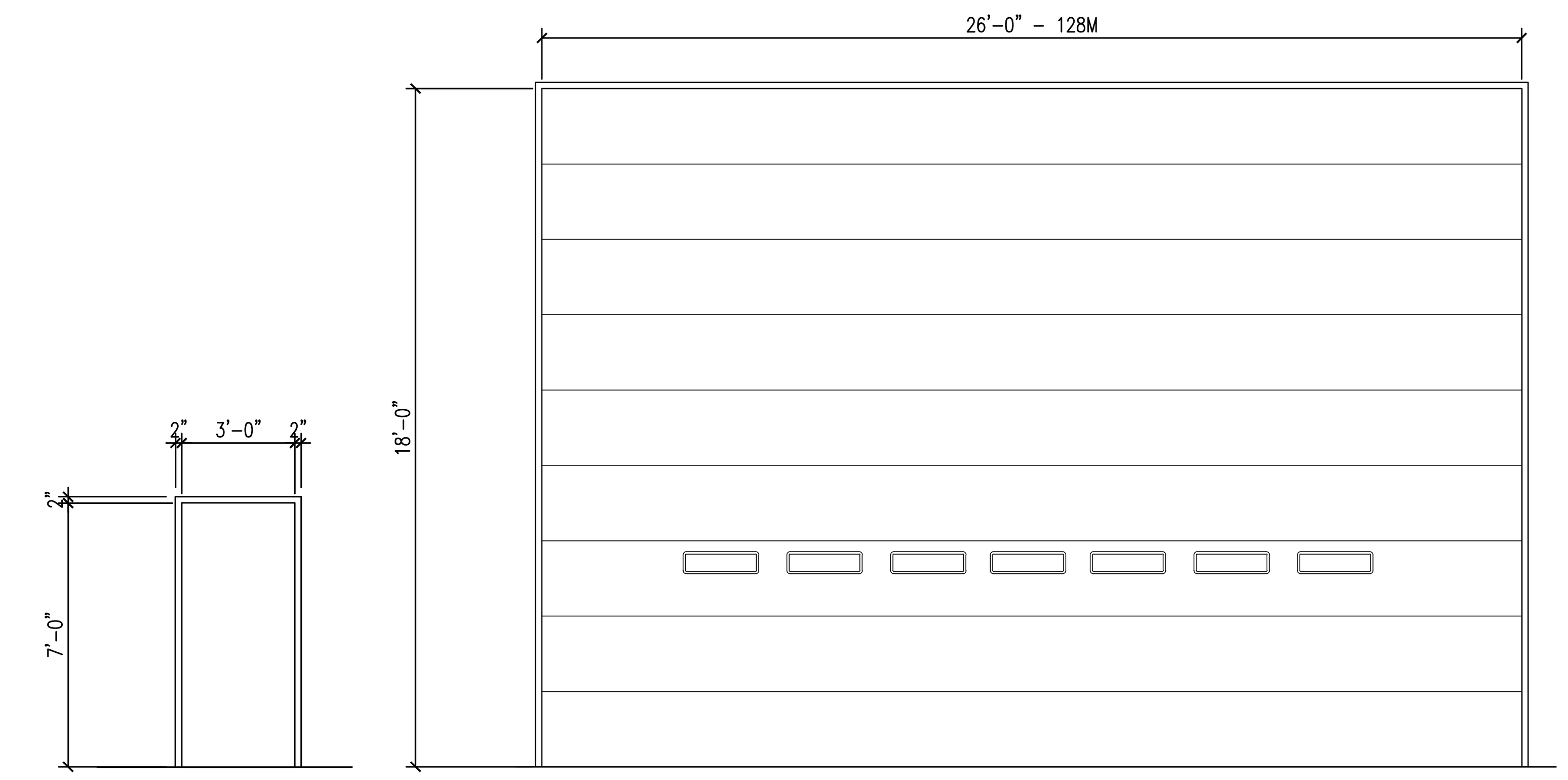


Partial Floor Plan

1/16" = 1'-0"

DOOR SCHEDULE						
MARK	LOCATION	SIZE	DOOR TYPE	LABEL	HARDWARE SET	REMARKS
128	Factory	3'-0" x 7'-0" x 1 3/4"	A		2	
128A	Factory	3'-0" x 7'-0" x 1 3/4"	A		1	
128B	Factory	3'-0" x 7'-0" x 1 3/4"	A		1	
128C	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128D	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128E	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128F	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128G	Factory	3'-0" x 7'-0" x 1 3/4"	A		2	
128H	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128I	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128J	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128K	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128L	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128M	Factory	26'-0" X 18'-0"	B		--	

Hardware Schedule		
Set No.	Doors	Description All Hardware Finishes - 626
1	128A, 128B, 128C, 128E, 128I, 128K, 128J	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Surface Mounted Exit Device No Exterior Trim 1 A.D.A.-Compliant Threshold 1 Set Weatherstripping 1 Door Top Drip Cap
2	128, 128D, 128F 128G, 128H, 128L	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Surface Mounted Exit Device Exterior Lever 1 A.D.A.-Compliant Threshold 1 Set Weatherstripping 1 Door Top Drip Cap



1 3/4" Flush Polyurethane Core with 18 Gauge Face Skin Shop Primed & Field Painted; Face Skin Shop Primed & Field Painted KD HM Frame Factory-Primed 18 Gauge HM Frame

(A)

3" Polystyrene Core, 20 gauge Face Skin with Acrylic Insulated Windows, Jamb & Bottom Weather Seals; Hi-Lift Track; 10,000 Cycle Spring; Electric Motor Operation with Keypad; Manual Chain Hoist; Inside Slide Lock

(B)

Door Types

1/4" = 1'-0"

Room Finishes	
Floor	Smooth, Slip-Resistant Concrete
Base	None
Walls	Prefinished Metal Liner Panel to ±7'-2" A.F.F.
Walls	Vinyl-faced PEMB Insulation
Ceiling	Vinyl-faced PEMB Insulation

◇ Exterior Stair Schedule

1. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.27'.
2. Exterior Concrete Stoop; 4,000 psi Concrete, Broom Finish, Frost Walls to 3'-0" Below Finish Grade; Landing - 5'-0"W x 5'-0"D; Top of Landing @ 985.77', Grade at Base of Landing @ 985.27'.
3. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 5.35" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.76'.
4. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 6.66" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.55'.
5. Exterior Steel Stair: Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6.4" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.10'.

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

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140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

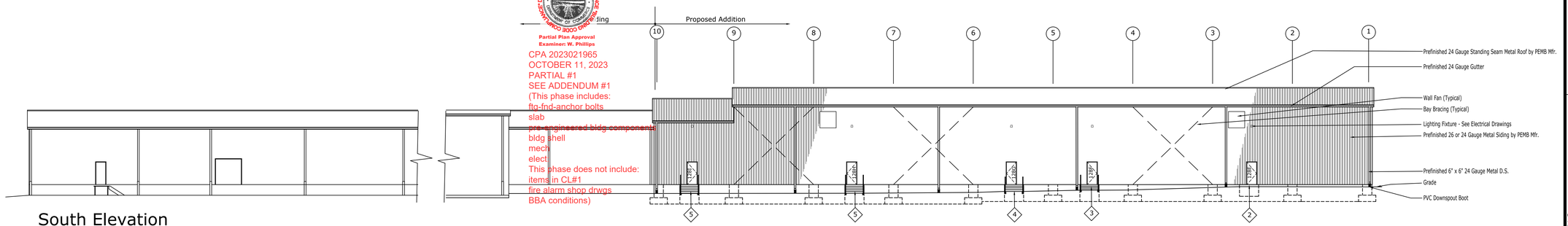
Floor Plan

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

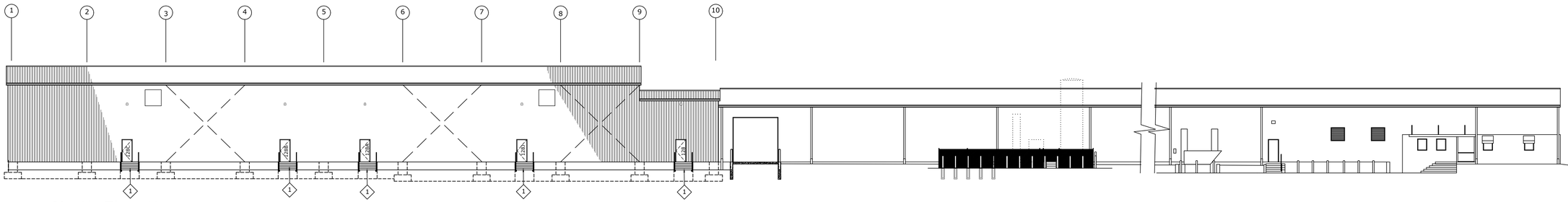
ISSUE: 08-08-23

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

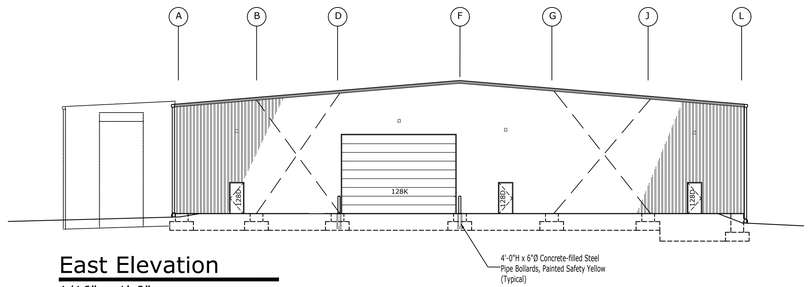
A 1.0



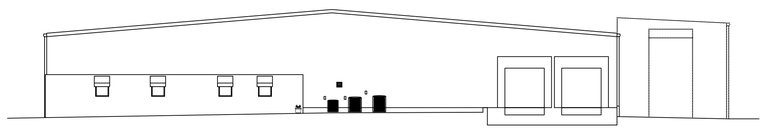
South Elevation
1/16" = 1'-0"



North Elevation
1/16" = 1'-0"



East Elevation
1/16" = 1'-0"



West Elevation
1/16" = 1'-0"

Exterior Stair Schedule

1. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.27'.
2. Exterior Concrete Stoop; 4,000 psi Concrete, Broom Finish, Frost Walls to 3'-0" Below Finish Grade; Landing - 5'-0"W x 5'-0"D; Top of Landing @ 985.77', Grade at Base of Landing @ 985.27'.
3. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 5.35" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.76'.
4. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 6.66" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.55'.
5. Exterior Steel Stair: Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6.4" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.10'.

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SHEET TITLE

Elevations

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

A 2.0

Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
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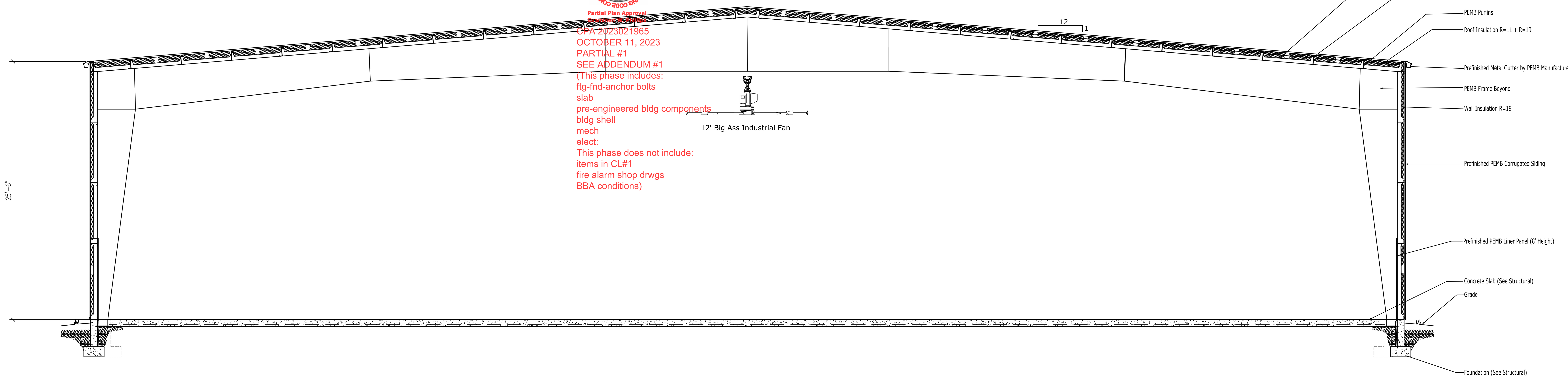
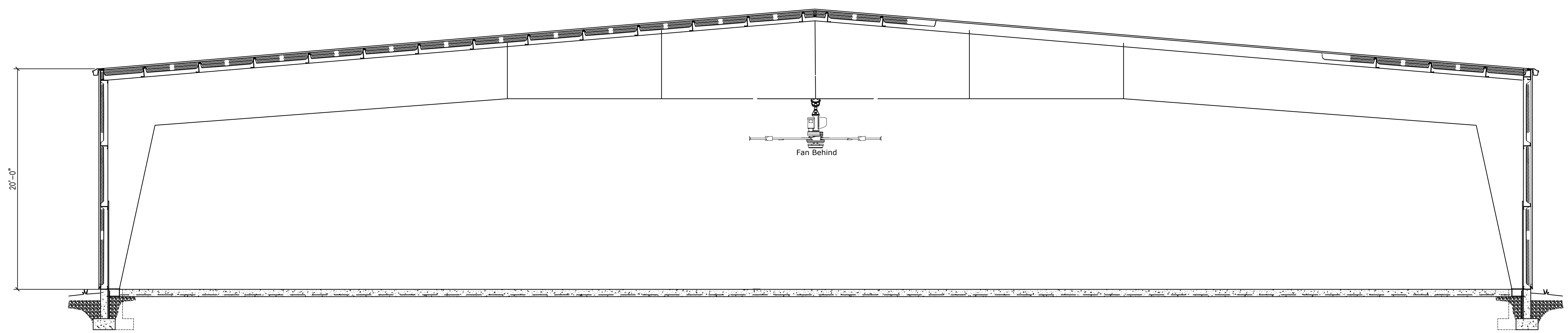
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



Section with Column Line 2 in Background

A / A 3.0

3/16" = 1'-0"



Section with Column Line 10 in Background

B / A 3.0

3/16" = 1'-0"

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1632 Cascade Drive   Marion, OH 43302

SHEET TITLE

Sections

MARK	DATE	DESCRIPTION
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DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

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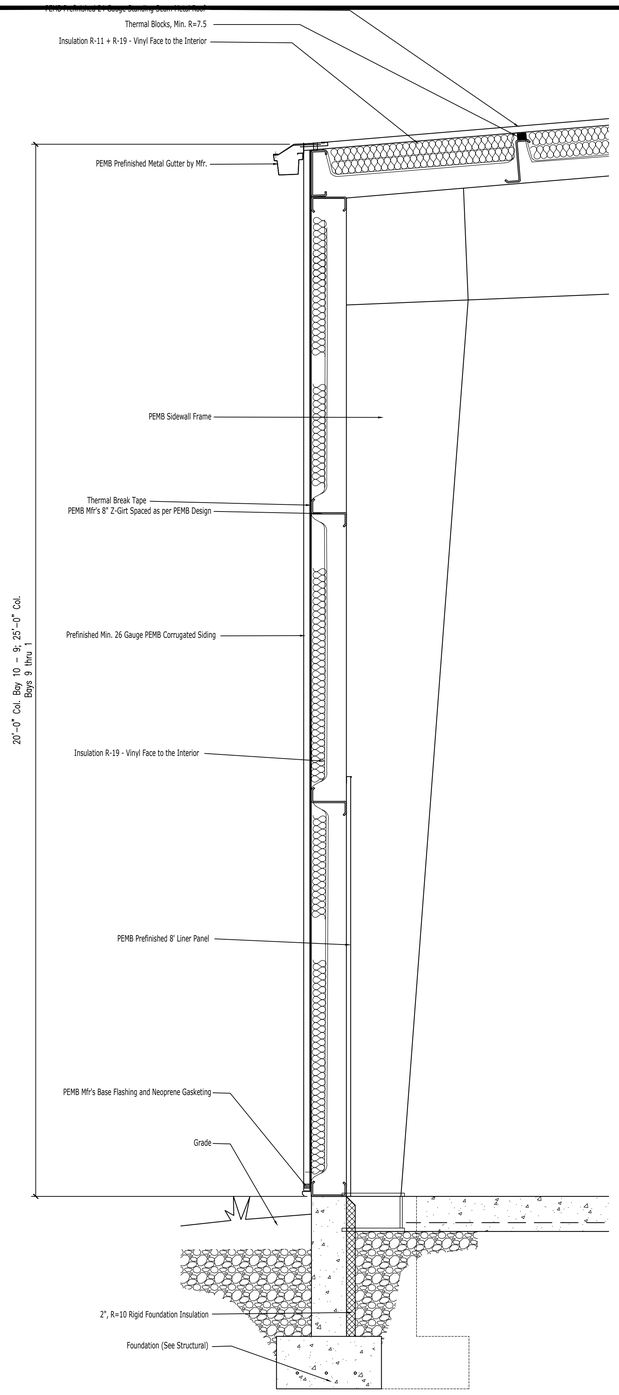
SHEET 4 OF 26



Typical Sidewall Section

3/4" = 1'-0"

DIVISION OF INDUSTRIAL COMPLIANCE
STATE OF OHIO
BUILDING CODE COMPLIANCE

Partial Plan Approval
Examiner W. Phillips

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elect:
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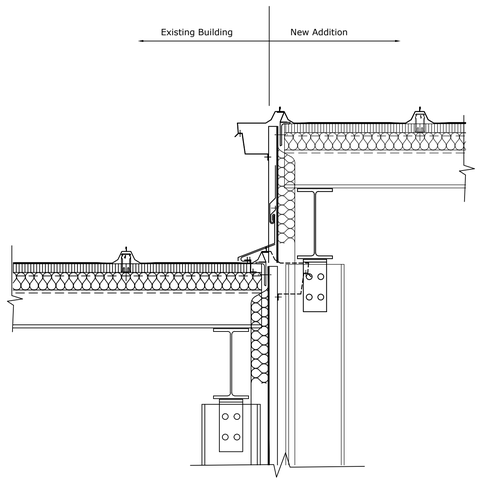
fire alarm shop drwgs
BBA conditions)



Roof Offset Detail

1" = 1'-0"

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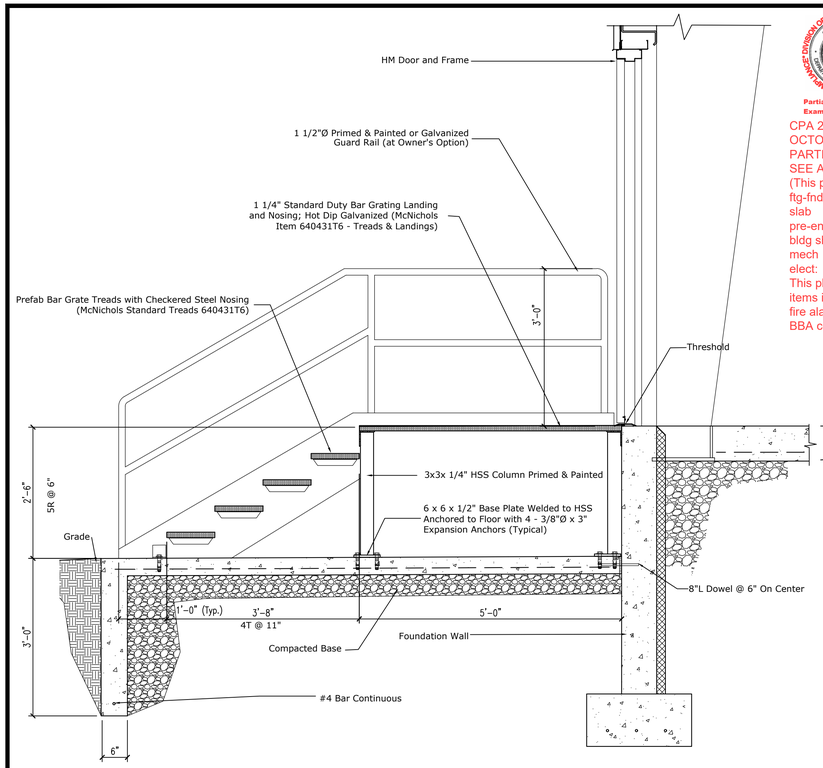
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

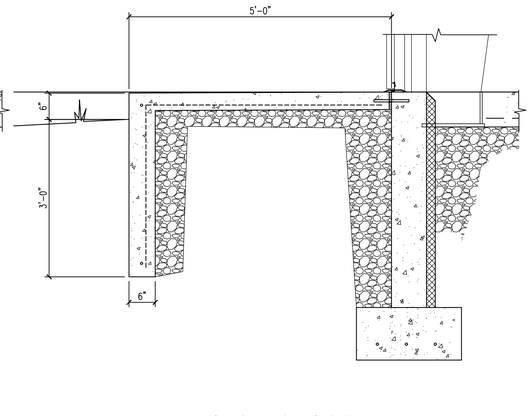
A 3.1

SHEET 5 OF 26



Section - Step 1

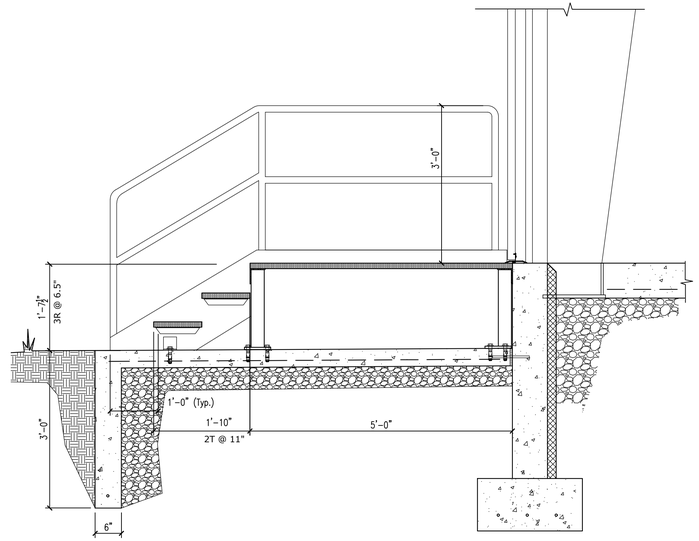
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Stoop 2

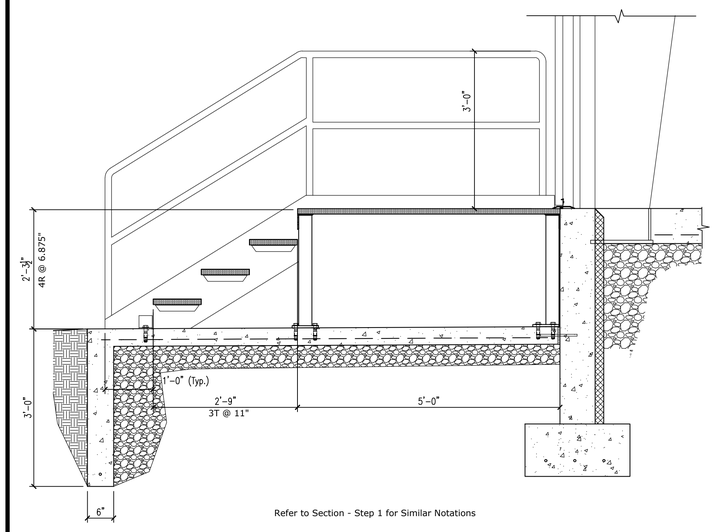
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Step 3

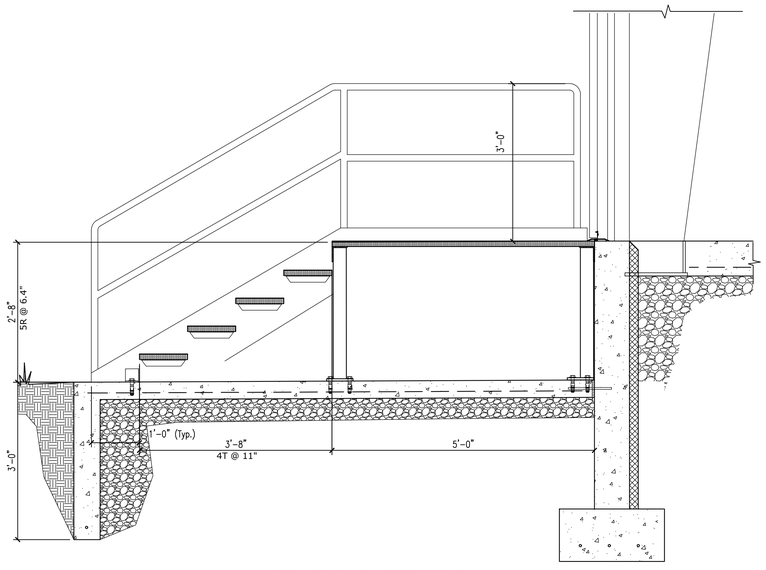
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Step 4

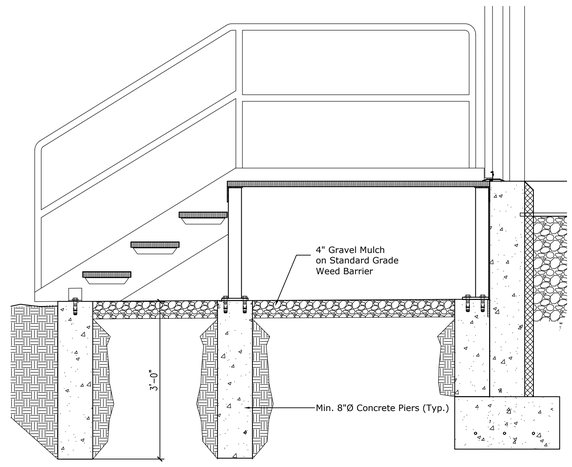
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Step 5

3/4" = 1'-0"



Alternate Typical Step Section

3/4" = 1'-0"

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

Partial Plan Approval
Examinen W. Phillips

PAUL K. OMNESS 13997 REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE

Stair & Step Sections

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

A 3.2

SHEET 6 OF 26

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

B. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements, comply with the most stringent requirement. Refer uncertainties to Architect for a decision.

C. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum. The actual installation may exceed the minimum within reasonable limits. Indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision.

D. Special Tests and Inspections: Owner will engage a qualified testing agency and special inspector to conduct special tests and inspections required by authorities having jurisdiction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

B. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Use Charges: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated.

B. Water and Electric Power: Available from Owner's existing system without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

C. Accessible Temporary Egress: Comply with applicable provisions in ICC A117.1.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Plastic Mesh Fencing: minimum 4 feet high with posts.

2.2 TEMPORARY FACILITIES

A. Provide field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.

C. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

3.2 SUPPORT FACILITIES INSTALLATION

A. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

B. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

C. Furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

E. Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

F. Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.

Install and maintain temporary fire-protection facilities. Comply with NFPA 241.

3.4 MOISTURE AND MOLD CONTROL

A. Before installation of weather barriers, protect materials from water damage and keep porous and organic materials from coming into prolonged contact with concrete.

1. Protect stored and installed material from flowing or standing water.
2. Remove standing water from decks.
3. Keep deck openings covered or dammed.

B. After installation of weather barriers but before full enclosure and conditioning of building, protect as follows:

1. Do not load or install drywall or porous materials into partially enclosed building.
2. Discard water-damaged material.
3. Do not install material that is wet.
4. Discard, replace, or clean stored or installed material that begins to grow mold.
5. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion.

C. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 015000

SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 EXECUTION REQUIREMENTS

A. Cutting and Patching:

1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching.
2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
3. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities.

B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

1.2 CLOSEOUT SUBMITTALS

A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

B. Operation and Maintenance Data: Submit two (2) copies of manual.

C. PDF Electronic File: Assemble manual into a composite electronically indexed file. Submit on digital media.

D. Record Drawings: Submit one set(s) of marked-up record prints.

E. Record Product Data: Submit one paper copy of each submittal.

1.3 SUBSTANTIAL COMPLETION PROCEDURES

A. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.

B. Submittals Prior to Substantial Completion: Before requesting Substantial Completion inspection, complete the following:

1. Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in other sections, including project record documents, operation and maintenance manuals, property surveys, similar final record information, warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
3. Submit maintenance material submittals specified in other sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect.
4. Submit test/adjust/balance records.
5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

C. Procedures Prior to Substantial Completion: Before requesting Substantial Completion inspection, complete the following:

1. Advise Owner of pending insurance changeover requirements.
2. Make final changeover of permanent locks and deliver keys to Owner.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.
5. Advise Owner of changeover in heat and other utilities.
6. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
7. Remove temporary facilities and controls.
8. Complete final cleaning requirements, including touchup painting.
9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will proceed with inspection or advise Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

1.4 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting inspection for determining final completion, complete the following:

1. Submit a final Application for Payment.
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report.

B. Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare final Certificate for Payment after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

PART 2 - PRODUCTS

2.1 MATERIALS

A. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

B. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

2.2 OPERATION AND MAINTENANCE DOCUMENTATION

A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information.

B. Organization: Unless otherwise indicated, organize manual into separate sections for each system and subsystem, and separate sections for each piece of equipment not part of a system.

C. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:

1. Manufacturer's operation and maintenance documentation.
2. Maintenance and service schedules.
3. Maintenance service contracts. Include name and telephone number of service agent.
4. Emergency instructions.
5. Spare parts list and local sources of maintenance materials.
6. Wiring diagrams.
7. Copies of warranties. Include procedures to follow and required notifications for warranty claims

2.3 RECORD DRAWINGS

A. Record Prints: Maintain a set of prints of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued. Mark to show actual installation where installation varies from that shown originally. Accurately record information in an acceptable drawing technique.

1. Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, and other construction affecting the Work.

B. Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance.

1. Verify compatibility with and suitability of substrates.
2. Examine roughing-in for mechanical and electrical systems.
3. Examine walls, floors, and roofs for suitable conditions.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

D. Take field measurements as required to fit the Work properly. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication.

E. Verify space requirements and dimensions of items shown diagrammatically on Drawings.

F. Surface and Substrate Preparation: Comply with manufacturer's written recommendations for preparation of substrates to receive subsequent work.

3.2 INSTALLATION

A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.

B. Comply with manufacturer's written instructions and recommendations.

C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

D. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed.

E. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place. Where size and type of attachments are not indicated, verify size and type required for load conditions.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.

F. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

G. Use products, cleaners, and installation materials that are not considered hazardous.

3.3 CUTTING AND PATCHING

A. Provide temporary support of work to be cut.

B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

C. Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

D. Cutting: Cut in-place construction using methods least likely to damage elements retained or adjoining construction.

1. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

E. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

1. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction in a manner that will minimize evidence of patching and refinishing.
2. Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance.
3. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.

3.4 CLEANING

A. Clean Project site and work areas daily, including common areas. Dispose of materials lawfully.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
3. Remove debris from concealed spaces before enclosing the space.

B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:

1. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
2. Sweep paved areas broom clean. Remove spills, stains, and other foreign deposits.
3. Remove labels that are not permanent.
4. Clean transparent materials, including mirrors. Remove excess glazing compounds.
5. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Sweep concrete floors broom clean.
6. Vacuum carpeted surfaces and wax resilient flooring.
7. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and foreign substances. Clean plumbing fixtures. Clean light fixtures, lamps, globes, and reflectors.
8. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.

3.5 OPERATION AND MAINTENANCE MANUAL PREPARATION

A. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

B. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are unavailable and where the information is necessary for proper operation and maintenance of equipment or systems.

C. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams.

3.6 DEMONSTRATION AND TRAINING

A. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system. Include a detailed review of the following:

1. Include instruction for basis of system design and operational requirements, review of documentation, emergency procedures, operations, adjustments, troubleshooting, maintenance, and repairs.

END OF SECTION 017000

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Specifications

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

SP 1.0

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and color Samples.

B. Environmental Limitations: Do not proceed with installation of joint sealants when ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS

A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions.

B. Sealant for General Exterior Use Where Another Type Is Not Specified:

1. Single-component, neutral-curing silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; for Use NT.

2. Single-component, nonsag urethane sealant, ASTM C 920, Type S; Grade NS; Class 25; and for Use NT.

3. Single-component, nonsag polysulfide sealant, ASTM C 920, Type S; Grade NS; Class 25; for Use NT.

4. Single-component, nonsag urethane sealant, ASTM C 920, Type S; Grade NS; Class 25; for Use T.

C. Sealant for Exterior Traffic-Bearing Joints, Where Slope Allows Use of Pourable Sealant:

1. Single-component, pourable urethane sealant, ASTM C 920, Type S; Grade P; Class 25; for Use T.

D. Sealant for Interior Use at Perimeters of Door and Window Frames:

1. Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

E. Acoustical Sealant:

1. Nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 that effectively reduces airborne sound transmission as demonstrated by testing according to ASTM E 90.

2.2 MISCELLANEOUS MATERIALS

A. Provide sealant backings of materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Cylindrical Sealant Backings: ASTM C 1330, of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

D. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with ASTM C 1193.

B. Install sealant backings to support sealants during application and to produce cross-sectional shapes and depths of installed sealants that allow optimum sealant movement capability.

C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

D. Acoustical Sealant Installation: At sound-rated assemblies and elsewhere as indicated, seal perimeters, control joints, openings, and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions. Comply with ASTM C 919.

END OF SECTION 079200

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and Shop Drawings.

PART 2 - PRODUCTS

2.1 HOLLOW METAL DOORS AND FRAMES

A. Frames: ANSI A250.8; conceal fastenings unless otherwise indicated.

1. Steel Sheet for Interior Frames: 0.042-inch- minimum thickness.
2. Interior Frame Construction: Knocked down.
3. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.
4. Frame Anchors: Not less than 0.042 inch thick.

B. Prepare doors and frames to receive mortised and concealed hardware according to SDI A250.6 and BHMA A156.115.

C. Reinforce doors and frames to receive surface-applied hardware.

D. Prime Finish: Manufacturer's standard, factory-applied coat of lead- and chromate-free primer complying with SDI A250.10 acceptance criteria.

2.2 MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, suitable for exposed applications.

B. Frame Anchors: ASTM A 879/A 879M, A Z coating designation; mill phosphatized.

1. For anchors built into exterior walls, sheet steel complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install hollow metal frames to comply with SDI A250.11.

1. Fire-Rated Frames: Install according to NFPA 80.

B. Install doors to provide clearances between doors and frames as indicated in SDI A250.11.

C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying rust-inhibitive primer.

END OF SECTION 081113

SECTION 081416 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Samples for factory-finished doors.

PART 2 - PRODUCTS

2.1 FLUSH WOOD DOORS

2.2 DOOR CONSTRUCTION, GENERAL

A. Quality Standard: WDMA I.S.1-A.

B. WDMA I.S.1-A Performance Grade:

1. Heavy duty unless otherwise indicated.

C. Particleboard-Core Doors: Provide structural composite lumber cores instead of particleboard cores for doors with protection plates.

2.3 FLUSH WOOD DOORS

A. Veneer-Faced Doors for Transparent Finish:

1. Interior Solid-Core Doors: Premium grade, five-ply, particleboard cores.

a. Faces: Grade A rotary-cut select white birch.
b. Veneer Matching: Book and balance match.
c. Continuous matching for doors with transoms.

2.4 FABRICATION AND FINISHING

A. Factory-fit doors to suit frame-opening sizes indicated and to comply with clearances specified.

B. Factory-machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3.

C. Cut and trim openings to comply with referenced standards.

D. Factory-finish doors indicated for transparent finish with stain and manufacturer's standard finish complying with WDMA TR-6, catalyzed polyurethane for grade specified for doors.

1. Sheen: Satin.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install doors to comply with manufacturer's written instructions and WDMA I.S.1-A, and as indicated.

1. Install fire-rated doors to comply with NFPA 80.
2. Install smoke- and draft-control doors according to NFPA 105.

B. Align and fit doors in frames with uniform clearances and bevels.

C. Clearances: As follows unless otherwise indicated:

1. 1/8 inch at heads, jambs, and between pairs of doors.
2. 1/8 inch from bottom of door to top of decorative floor finish or covering.
3. 1/4 inch from bottom of door to top of threshold.
4. Comply with NFPA 80 for fire-rated doors.

END OF SECTION 081416

SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data, Shop Drawings, and color Samples.

1. For entrance doors, include hardware schedule.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Structural Performance: Design, engineer, fabricate, and install aluminum-framed storefronts to withstand structural loads indicated.

1. Limit deflection of framing members normal to wall plane to 1/175 of clear span or an amount that restricts edge deflection of individual glazing lites to 3/4 inch, whichever is less.

B. Windborne-Debris Resistance: Framing system and doors pass basic-protection testing requirements in ASTM E 1996 for Wind Zone 1 when tested according to ASTM E 1886.

C. Air Infiltration: Limited to 0.06 cfm/sq. ft. of fixed framing and glass area when tested according to ASTM E 283 at a static-air-pressure difference of 6.24 lbf/sq. ft..

D. Water Penetration: Systems do not evidence water leakage when tested according to ASTM E 331 at minimum differential pressure of 20 percent of positive wind-load design pressure but not less than 10 lbf/sq. ft..

E. Thermal Transmittance (U-factor): Fixed glazing and framing areas shall have U-factor of not more than 0.40 Btu/sq. ft. x h x deg F as determined according to NFRC 100.

2.2 ALUMINUM-FRAMED STOREFRONTS

A. Basis of Design: Tubelite T24650 and T14000.

B. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated; ASTM B 209 sheet; ASTM B 221 extrusions.

C. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.

1. Construction: Thermally broken.

D. Doors: 1-3/4-inch-thick glazed doors with minimum 0.125-inch-thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods. Provide snap-on, extruded-aluminum glazing stops and preformed gaskets.

1. Door Design: As indicated; Narrow stile; 2-1/8-inch nominal width.
2. Accessible Doors: Smooth surfaced for width of door in area within 10 inches above floor or ground plane.
3. Exterior Doors: Provide compression weather stripping at fixed stops. At other locations, provide sliding weather stripping retained in adjustable strip mortised into door edge.

E. Glazing: Comply with Section 088000 "Glazing."

F. Glazing Gaskets: Manufacturer's standard sealed-corner pressure-glazing system of black, resilient elastomeric glazing gaskets, setting blocks, and shims or spacers.

G. Fasteners and Accessories: Compatible with adjacent materials, corrosion resistant, nonstaining, and nonbleeding. Use concealed fasteners except for application of door hardware.

H. Fabrication: Fabricate framing in profiles indicated for flush glazing (without projecting stops). Provide subframes and reinforcing of types indicated or, if not indicated, as required for a complete system. Factory-assemble components to greatest extent possible. Disassemble components only as necessary for shipment and installation.

1. Door Framing: Reinforce to support imposed loads. Factory-assemble door and frame units and factory-install hardware to greatest extent possible. Reinforce door and frame units for hardware indicated. Cut, drill, and tap for factory-installed hardware before finishing components.

I. Aluminum Finish: Class I, clear anodic finish; complying with AAMA 611.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Isolate metal surfaces in contact with incompatible materials, including wood, by painting contact surfaces with bituminous coating or primer or by applying sealant or tape recommended by manufacturer.

B. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.

C. Set continuous sill members and flashing in full sealant bed as specified in Section 079200 "Joint Sealants" to produce weathertight installation.

D. Install framing components true in alignment with established lines and grades to the following tolerances:

1. Variation from Plane: Limit to 1/8 inch in 12 feet; 1/4 inch over total length.
2. Alignment: For surfaces abutting in line, limit offset to 1/16 inch. For surfaces meeting at corners, limit offset to 1/32 inch.
3. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch.

E. Install doors without warp or rack. Adjust doors and hardware to provide tight fit at contact points and smooth operation.

END OF SECTION 084113

SECTION 088000 - GLAZING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and Samples.

PART 2 - PRODUCTS

2.1 GLASS, GENERAL

A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below unless more stringent requirements are indicated. See these publications for glazing terms not otherwise defined in this Section or in referenced standards.

B. Safety Glazing: Where safety glazing is indicated, provide glazing that complies with 16 CFR 1201, Category II.

C. Safety Glazing Labeling: Where safety glazing is indicated, permanently mark glazing with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction or manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.

D. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.

E. Windborne-Debris-Impact Resistance: Exterior glazing shall comply with basic-protection testing requirements in ASTM E 1996 for Wind Zone 1 when tested according to ASTM E 1886. Test specimens shall be no smaller in width and length than glazing indicated for use on Project and shall be installed in same manner as glazing indicated for use on Project.

2.2 GLASS PRODUCTS

A. Fully Tempered Float Glass: ASTM C 1048, Kind FT; Type I; Quality-Q3.

B. Heat-Strengthened Float Glass: ASTM C 1048, Kind HS; Type I; Quality-Q3.

C. Reflective-Coated Glass: ASTM C 1376, coated by pyrolytic or vacuum deposition (sputter-coating) process.

D. Insulating-Glass Units: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM E 2190.

2.3 GLAZING SEALANTS

A. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 25, Use NT.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with combined recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are contained in GANA's "Glazing Manual."

B. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

C. Remove nonpermanent labels, and clean surfaces immediately after installation.

3.2 INSULATING-GLASS TYPES

A. Glass Type C: Tinted insulating glass.

1. Overall Unit Thickness: 1 inch.
2. Thickness of Each Glass Lite: ¼".
3. Outdoor Lite: Heat-strengthened float glass.
4. Omitted
5. Interspace Content: Air.
6. Indoor Lite: Heat-strengthened float glass.
7. Solar Heat-Gain Coefficient: 0.14 maximum.

B. Glass Type b: Reflective-coated, tinted insulating glass.

1. Overall Unit Thickness: 1 inch.
2. Thickness of Each Glass Lite: ¼".
3. Outdoor Lite: Tinted fully tempered float glass.
4. Omitted.
5. Interspace Content: Air.
6. Indoor Lite: Clear fully tempered float glass.
7. Coating Location: Second surface.
8. Coating Color: Gray.
9. Solar Heat-Gain Coefficient: 0.14 maximum.
10. Safety glazing required.

C. Glass Type a: Reflective-coated, tinted insulating spandrel glass.

1. Overall Unit Thickness: 1 inch.
2. Thickness of Each Glass Lite: ¼".
3. Outdoor Lite: Tinted fully tempered float glass.
4. Omitted
5. Interspace Content: Air.
6. Indoor Lite: Clear fully tempered float glass.
7. Coating Location: Second surface.
8. Coating Color: Omitted

END OF SECTION 088000

SECTION 092216 - NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data.

STATE OF OHIO
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13997
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OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

Specifications

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

SP 1.1

PART 2 - PRODUCTS

2.1 METAL FRAMING AND SUPPORTS

A. Steel Framing Members, General: ASTM C 754.

1. Steel Sheet Components: ASTM C 645. Thickness specified is minimum uncoated base-metal thickness.
2. Protective Coating: Coating with equivalent corrosion resistance of ASTM A 653/A 653M, G40 zinc coating.

B. Framing Systems:

1. Studs and Runners: In depth indicated and 0.018 inch thick unless otherwise indicated.
2. Flat Strap and Backing: 0.018 inch thick.
3. Hat-Shaped, Rigid Furring Channels: In depth indicated and 0.018 inch thick.
4. Z-Furring: In depth required by insulation, 1-1/4-inch face flange, 7/8-inch wall-attachment flange, and 0.018 inch thick.

2.2 ACCESSORIES

A. General: Comply with referenced installation standards.

1. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

B. Isolation Strip at Exterior Walls: Asphalt felt or foam gasket.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install steel framing to comply with ASTM C 754."
1. Gypsum Board Assemblies: Also comply with ASTM C 840.

B. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.

C. Isolate steel framing from building structure, except at floor, to prevent transfer of loading imposed by structural movement.

1. Where studs are installed directly against exterior walls, install isolation strip between studs and wall.

D. Fire-Resistance-Rated Assemblies: Comply with requirements of listed assemblies.

END OF SECTION 092216

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

B. STC-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 90 and classified per ASTM E 413 by a qualified independent testing and inspecting agency.

2.2 PANEL PRODUCTS

A. Provide in maximum lengths available to minimize end-to-end butt joints.

B. Interior Gypsum Board: ASTM C 1396/C 1396M, in thickness indicated, with manufacturer's standard edges. Type as required for specific fire-resistance-rated assemblies.

C. Glass-Mat, Water-Resistant Gypsum Backing Board: ASTM C 1178/C 1178M, of thickness indicated. Regular type unless otherwise indicated and Type X where required for fire-resistance-rated assemblies and where indicated.

2.3 ACCESSORIES

A. Trim Accessories: ASTM C 1047, formed from galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet. For exterior trim, use accessories formed from hot-dip galvanized-steel sheet, plastic, or rolled zinc.

1. Provide cornerbead at outside corners unless otherwise indicated.
2. Provide LC-bead (J-bead) at exposed panel edges.
3. Provide control joints where indicated.

B. Joint-Treatment Materials: ASTM C 475/C 475M.

1. Joint Tape: Paper unless otherwise recommended by panel manufacturer.
2. Joint Compounds: Setting-type taping compound and drying-type, ready-mixed, compounds for topping.

C. Sound-Attenuation Blankets: ASTM C 665, Type I (unfaced).

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install gypsum board to comply with ASTM C 840.

1. Isolate gypsum board assemblies from abutting structural and masonry work. Provide edge trim and acoustical sealant.
2. Single-Layer Fastening Methods: Fasten gypsum panels to supports with screws.
3. Multilayer Fastening Methods: Fasten base layers with screws, and face layers to base layers with adhesive and supplementary fasteners.

B. Fire-Resistance-Rated Assemblies: Comply with requirements of listed assemblies.

C. Finishing Gypsum Board: ASTM C 840.

1. At concealed areas, unless a higher level of finish is required for fire-resistance-rated assemblies, provide Level 1 finish: Embed tape at joints.
2. At substrates for tile, provide Level 2 finish: Embed tape and apply separate first coat of joint compound to tape, fasteners, and trim flanges.
3. Unless otherwise indicated, provide Level 4 finish: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges.

D. Glass-Mat, Water-Resistant Backing Panels: Finish according to manufacturer's written instructions.

END OF SECTION 092900

DIVISION OF INDUSTRIAL COMPLIANCE • BUILDING CODE COMPLIANCE • STATE OF OHIO • DEPARTMENT OF COMMERCE
Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect;
This phase does not include:
items in CL#1
fire alarm shop dwgs
BBA conditions)

SECTION 095113 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and Samples.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

2.2 ACOUSTICAL PANELS

A. Basis of Design: Armstrong, Mesa 681.

B. Classification: As follows, per ASTM E 1264:

1. Pattern: CE (perforated, small holes and lightly textured).
2. LRC: Not less than 0.85.
3. NRC: Not less than 0.60.
4. CAC: Not less than 35.
5. Surface-Burning Characteristics: Class A.

C. Color: White.

D. Edge Detail: Reveal sized-to-fit exposed flange of suspension system.

E. Thickness: 9/16 inch.

F. Modular Size: 24 by 48 inches.

2.3 CEILING SUSPENSION SYSTEM

A. Ceiling Suspension System: Wide-face, direct-hung system; ASTM C 635, intermediate-duty structural classification.

1. Face Design: Flat, flush.
2. Face Finish: Painted white.

B. Attachment Devices: Sized for 5 times the design load indicated in ASTM C 635, Table 1, Direct Hung, unless otherwise indicated.

C. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper.

1. Size: Provide yield strength at least 3 times the hanger design load (ASTM C 635, Table 1, Direct Hung), but not less than 0.106-inch- diameter wire.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install acoustical ceilings to comply with ASTM C 636/C 636M and seismic design requirements indicated, according to manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

C. Arrange directionally patterned acoustical units as indicated on Drawings.

END OF SECTION 095113

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product data and Samples.

B. Extra Materials: Deliver to Owner at least 10 linear feet of each type and color of resilient wall base installed.

PART 2 - PRODUCTS

2.1 RESILIENT BASE

A. Vinyl Base: ASTM F 1861, Type TV (vinyl, thermoplastic), Group I (solid, homogeneous).

B. Style: Cove (base with toe).

C. Minimum Thickness: 0.125 inch.

D. Height: 4 inches.

E. Lengths: Cut lengths 48 inches long or coils in manufacturer's standard lengths.

F. Outside Corners: Job formed or preformed.

G. Inside Corners: Job formed or preformed.

2.2 RESILIENT MOLDING ACCESSORY

A. Rubber Molding Accessories.

B. Vinyl Molding Accessories.

C. Description: Nosing for resilient flooring; Transition strips.

2.3 INSTALLATION ACCESSORIES

A. Adhesives: Water-resistant type recommended by manufacturer to suit floor covering and substrate conditions indicated.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Prepare horizontal surfaces according to ASTM F 710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.

B. Adhesively install resilient wall base and accessories.

C. Install wall base in maximum lengths possible. Apply to walls, columns, pilasters, casework, and other permanent fixtures in rooms or areas where base is required.

D. Install reducer strips at edges of floor coverings that would otherwise be exposed.

END OF SECTION 096513

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals:
1. Samples.

B. Extra Materials: Deliver to Owner 1 gal. of each color and type of finish-coat paint used on Project, in containers, properly labeled and sealed.

PART 2 - PRODUCTS

2.1 PAINT

A. Material Compatibility: Provide materials that are compatible with one another and with substrates.

1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Colors: As selected.

PART 3 - EXECUTION

3.1 PREPARATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Remove hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.

C. Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

3.2 APPLICATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Paint exposed surfaces, new, unless otherwise indicated.

1. Do not paint prefinished items, items with an integral finish, operating parts, and labels unless otherwise indicated.

C. Apply paints according to manufacturer's written instructions.

1. Use brushes only where the use of other applicators is not practical.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

1. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

3.3 EXTERIOR PAINT APPLICATION SCHEDULE

A. Steel:

1. Semigloss Water-Based, Light-Industrial Coating: Two coats over alkyd anticorrosive primer.

END OF SECTION 099113

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals:

1. Samples.

B. Extra Materials: Deliver to Owner 1 gal. of each color and type of finish-coat paint used on Project, in containers, properly labeled and sealed.

PART 2 - PRODUCTS

2.1 PAINT

A. Material Compatibility: Provide materials that are compatible with one another and with substrates.

1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Low-Emitting Materials: Comply with Section 018113.13 - Sustainable Design Requirements - LEED 2009 for New Construction and Major Renovations.

C. Colors: As selected.

PART 3 - EXECUTION

3.1 PREPARATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Remove hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.

C. Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

3.2 APPLICATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Paint exposed surfaces, new and existing, unless otherwise indicated.

1. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces.
2. Paint surfaces behind permanently fixed equipment or furniture with prime coat only.
3. Paint the back side of access panels.
4. Color-code mechanical piping in accessible ceiling spaces.
5. Do not paint prefinished items, items with an integral finish, operating parts, and labels unless otherwise indicated.

C. Apply paints according to manufacturer's written instructions.

1. Use brushes only where the use of other applicators is not practical.
2. Use rollers for finish coat on interior walls and ceilings.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

1. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

3.3 INTERIOR PAINT APPLICATION SCHEDULE

A. Steel:
1. Semigloss, Quick-Dry Enamel: Two coats over quick-drying alkyd metal primer: MPI INT 5.1A.

B. Gypsum Board:

1. Eggshell Latex: Two coats over latex primer/sealer: MPI INT 9.2A.
2. Eggshell Institutional Low-Odor/VOC Latex: Two coats over low-odor/VOC primer/sealer: MPI INT 9.2M.

END OF SECTION 099123

STATE OF OHIO • PAUL K. OMNESS 13997 • REGISTERED ARCHITECT

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Addition to
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1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Specifications

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

SP 1.2

GOVERNING CODE: 2017 OHIO BUILDING CODE

1. DEAD LOADS
   BUILDING ROOF
   A. BUILDING SELF WEIGHT = BY PEMB SUPPLIER
   B. COLLATERAL = 5.0 PSF
   C. TOTAL DEAD LOAD = 5.0 PSF + SELF WEIGHT

2. ROOF LIVE LOADS:
   A. MINIMUM ROOF LIVE LOAD = 20 PSF

3. ROOF SNOW DESIGN PARAMETERS
   A. GROUND SNOW LOAD Pg = 20.0 PSF
   B. FLAT ROOF SNOW LOAD Pf = 14.0 PSF
   C. MINIMUM UNIFORM DESIGN SNOW LOAD = 20.0 PSF
   D. UNIFORM SNOW LOAD WITH UNBALANCED / DRIFTING = 14.0 PSF
   E. SNOW EXPOSURE FACTOR Ce = 1.0
   F. SNOW LOAD IMPORTANCE FACTOR I = 1.0
   G. THERMAL FACTOR Ct = 1.0
   H. DRIFTING SNOW AND UNBALANCED SNOW PER ASCE 7-10.

4. WIND DESIGN PARAMETERS
   A. ULTIMATE DESIGN WIND SPEED Vult = 115 MPH
   B. NOMINAL DESIGN WIND SPEED Vasd = 89 MPH
   C. RISK CATEGORY= II
   D. WIND EXPOSURE CATEGORY = C
   E. INTERNAL PRESSURE COEFFICIENT = +/-0.18
   F. WIND DESIGN PRESSURES FOR COMPONENTS AND CLADDING:

COMPONENT AND CLADDING WIND PRESSURES
(BASED UPON WIND VELOCITY Vasd SERVICE LEVEL LOAD)
REFER TO ASCE7-10 TABLE 30.7-2 FOR COMPONENT AND CLADDING ZONES, a = 6.2'

	ZONE	EFFECTIVE WIND AREA (SF)	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)
ROOF	1	10	10.0	-19.3
		50	10.0	-18.1
		100	10.0	-17.6
	2	10	10.0	-32.3
		50	10.0	-24.3
		100	10.0	-20.9
	3	10	10.0	-48.6
		50	10.0	-29.2
		100	10.0	-20.9
OVERHANGS	2	10	10.0	-27.7
		50	10.0	-26.6
		100	10.0	-26.1
	3	10	10.0	-45.7
		50	10.0	-22.9
		100	10.0	-13.1
WALLS	4	10	17.6	-19.1
		50	15.8	-17.3
		100	15.0	-16.5
	5	10	17.6	-23.5
		50	15.8	-19.9
		100	15.0	-18.3

5. SEISMIC DESIGN PARAMETERS
   A. SEISMIC IMPORTANCE FACTOR = 1.0
   B. SEISMIC OCCUPANCY CATEGORY = II
   C. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 0.2 SECOND PERIOD, SS = 13.0%g
   D. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 1.0 SECOND PERIOD, S1 = 6.0%g
   E. SITE CLASS = D
   F. SDS = 0.137g
   G. SD1 = 0.095g
   H. SEISMIC DESIGN CATEGORY = D
   I. BUILDING SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
   J. SEISMIC RESISTING SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
   J. RESPONSE MODIFICATION FACTOR, R: 3.0
   K. DESIGN BASE SHEAR: 0.046

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE CONSTRUCTION
Partial Plan Approval
Examiner W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

SCHEDULE OF SPECIAL INSPECTIONS

ITEM	REQ'D	INSPECTION TYPE CONT.	INSPECTION TYPE PER.	REFERENCED STANDARD	OBC REFERENCE
FABRICATORS: (1705.2 OBC)	X				
INSPECTION AND NDE PER QUALITY ASSURANCE REQUIREMENTS OF AISC 360			X		
STRUCTURAL LOAD BEARING MEMBERS			X		
STRUCTURAL LOAD BEARING ASSEMBLIES			X		
STEEL CONSTRUCTION: (1705.2 OBC)	X				
INSPECTION AND NDE PER QUALITY ASSURANCE REQUIREMENTS OF AISC 360			X		
HIGH STRENGTH BOLTS			X		
STRUCTURAL STEEL MATERIALS			X		
STRUCTURAL STEEL WELDING			X		
STRUCTURAL STEEL FRAME JOINT DETAILS			X		
CONCRETE CONSTRUCTION	X				
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS INCLUDING PLACEMENT VERIFICATION			X	ACI 318: 25.2, 25.3, 26.5.1.-26.5.3	1908.4
REINFORCING BAR WELDING			X	AWS D1.4 AND ACI 318: 26.5.4	
VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A-706			X	AWS D1.4 AND ACI 318: 26.5.4	
INSPECT SINGLE-PASS FILLET WELDS			X	AWS D1.4 AND ACI 318: 26.5.4	
INSPECT ALL OTHER WELDS		X		AWS D1.4 AND ACI 318: 26.5.4	
INSPECT ANCHORS CAST IN CONCRETE			X	ACI 318: 17.8.2	
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS					
ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS					
MECHANICAL ANCHORS AND ADHESIVE ANCHORS OTHER THAN THOSE DEFINED ABOVE					
VERIFY USE OF REQUIRED DESIGN MIX			X	ACI 318: CHAPTER 19 AND 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS AND DETERMINE THE TEMPERATURE OF CONCRETE		X		ASTM C 172, ASTM C 31, ACI 318: 26.4.5, 26.12	1908.10
INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES		X		ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES			X	ACI 318: 26.4.7 - 26.4.9	1908.9
INSPECT ERECTION OF PRECAST CONCRETE MEMBERS			X	ACI 318: CHAPTER 26.8	
SOILS	X				
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY			X		
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL			X		
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS			X		
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.		X			
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.			X		

STATE OF OHIO
MATTHEW D. DERWACTER
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REGISTERED PROFESSIONAL ENGINEER
08-07-2023

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Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
STRUCTURAL GENERAL NOTES

MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE

PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S0.1

GENERAL NOTES:

1. ANY CHANGES MADE TO THE DESIGN IDENTIFIED ON THESE DRAWINGS AND/OR ASSOCIATED SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO MAKING ANY MODIFICATIONS TO THE PROJECT. ANY LIABILITY AS A RESULT OF DESIGN MODIFICATIONS, AS WELL AS ANY COSTS ASSOCIATED WITH SUCH MODIFICATIONS, MADE WITHOUT THE WRITTEN APPROVAL OF ENGINEER OF RECORD SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY FOR SAFETY PROCEDURES.
3. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE ENGINEER IS NOT ENGAGED IN, AND DOES NOT SUPERVISE CONSTRUCTION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

USE OF THESE DOCUMENTS:

1. THESE DOCUMENTS SHALL NOT BE REPRODUCED IN ANY MANNER FOR THE PRODUCTION OF FABRICATION OR ERECTION SUBMITTALS. REPRODUCTION OF THESE DOCUMENTS IN THAT MANNER CONSTITUTES COPYRIGHT INFRINGEMENT. ANY DOCUMENTS SUBMITTED FOR REVIEW THAT CONTAIN ANY IMAGE, SKETCH, DETAIL, ETC. FROM THESE DOCUMENTS WILL BE REJECTED.
2. ELECTRONIC VERSIONS OF THESE DOCUMENTS ARE THE PROPERTY OF DERWACTER & ASSOCIATES, LLC. ELECTRONIC OR CAD FILES WILL NOT BE MADE AVAILABLE FOR CONSTRUCTION PURPOSES.

REINFORCED MASONRY:

1. REINFORCED MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH, f'm, OF 1500 PSI. MASONRY UNITS SHALL BE NORMAL WEIGHT BLOCK CONFORMING TO ASTM C90, AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2150 PSI. MORTAR SHALL CONFORM TO ASTM C270, TYPE S. MINIMUM GROUT COMPRESSIVE STRENGTH SHALL EQUAL OR EXCEED f'm, BUT NOT BE LESS THAN 2000 PSI.
2. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
3. CONTINUOUS WIRE REINFORCING (JOINT REINFORCING) SHALL BE HOT DIPPED GALVANIZED, LADDER TYPE FORMED FROM 9 GAUGE COLD - DRAWN STEEL WIRE COMPLYING WITH ASTM A82. JOINT REINFORCING SHALL BE SPACED AT 16" O.C. VERTICALLY IN ALL MASONRY WALLS AND PIERS, U.N.O.
4. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF VERTICAL CONTROL JOINTS. HORIZONTAL BOND BEAM AND LINTEL REINFORCING SHALL BE CONTINUOUS ACROSS VERTICAL CONTROL JOINTS. JOINT REINFORCING SHALL BE STOPPED EACH SIDE OF VERTICAL CONTROL JOINTS.
5. ALL REINFORCED CELLS, ALL CELLS BELOW GRADE AND ALL CELLS BELOW FINISH FLOOR SHALL BE GROUTED SOLID.
6. AT VERTICAL REINFORCING LOCATIONS, PROVIDE DOWEL FROM FOOTING TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING. DOWELS SHALL BE EMBEDDED INTO THE FOOTING MINIMUM 9" INCHES AND SHALL HAVE A 90 DEGREE STANDARD HOOK.
7. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOCK CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN 6 VERTICAL. DOWELS MAY BE GROUTED INTO A CELL IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.
8. REINFORCING STEEL SHALL BE SECURED IN PLACE BEFORE GROUTING STARTS.
9. ALL REINFORCING LAP SPLICES SHALL BE IN ACCORDANCE WITH THE MASONRY REINFORCING LAP SPLICE LENGTH SCHEDULE, U.N.O. SPLICE VERTICAL SHALL BE WIRED TOGETHER. LAP SPLICES BETWEEN ADJACENT BARS SHALL BE STAGGERED A MINIMUM OF 24 BAR DIAMETERS.
10. VERTICAL BARS SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 96 DIAMETERS OF THE REINFORCING BAR WITH REBAR POSITIONERS. BARS SHALL BE ANCHORED IN PLACE PRIOR TO GROUTING.
11. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4 OF AN INCH FROM THE MASONRY AND NOT LESS THAN ONE BAR DIAMETER BETWEEN BARS.
12. VERTICAL CELLS THAT WILL BE GROUTED SHALL HAVE A VERTICAL ALIGNMENT TO MAINTAIN A CONTINUOUS UNOBSTRUCTED CELL AREA NOT LESS THAN 3"x4".
13. GROUT SHALL BE PLACED IN LIFTS NOT TO EXCEED 5 FEET. THE TOTAL HEIGHT OF 8-INCH (NOMINAL) OR LARGER MASONRY TO BE GROUTED PRIOR TO THE ERECTION OF ADDITIONAL MASONRY SHALL NOT EXCEED 24 FEET.
14. GROUTING SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A COURSE SO AS TO FORM A KEY AT THE POUR JOINT.
15. GROUTING OF MASONRY BEAMS OVER OPENINGS SHALL BE DONE IN ONE CONTINUOUS OPERATION.
16. ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS, SHALL BE GROUTED SOLID INTO POSITION. CELLS AT ANCHOR LOCATIONS SHALL BE GROUTED TO MINIMUM 6" ABOVE AND 6" BELOW THE CENTERLINE OF THE ANCHOR.

MASONRY REINFORCING LAP SPLICE LENGTH (IN.)

BAR SIZE	NUMBER OF REINFORCING LAYERS					
	ONE LAYER			TWO LAYERS		
	NOMINAL WALL THICKNESS			NOMINAL WALL THICKNESS		
	8"	10"	12"	8"	10"	12"
#4	25	25	25	31	31	31
#5	31	31	31	48	48	48
#6	57	52	52	98	98	98
#7	79	61	61	177	121	121
#8	112	86	74	-	149	149

STRUCTURAL STEEL:

1. MATERIALS:
   A. STRUCTURAL STEEL WIDE FLANGE SHAPES: ASTM A992, Fy = 50 KSI
   B. STRUCTURAL STEEL CHANNELS, ANGLES AND PLATES: ASTM A36, Fy = 36 KSI
   C. STRUCTURAL TUBING (INCLUDES SQUARE, RECTANGULAR AND ROUND SECTIONS): ASTM A500, GRADE C, Fy = 50 KSI
   D. HIGH STRENGTH BOLTS: ASTM A325 UNLESS NOTED OTHERWISE
   E. ANCHOR RODS: ASTM F1554, GRADE 36, UNLESS NOTED OTHER WISE. GALVANIZE IN EXTERIOR WALLS AND EXTERIOR LOCATIONS.
   F. SHEAR STUDS: ASTM A108, Fy = 60 KSI
   G. DEFORMED BAR ACNHORS: ASTM A496, Fy = 70 KSI
   H. ELECTRODES: SERIES E70
   I. ALL STRUCTURAL STEEL SHALL BE DOMESTICALLY PRODUCED AND COMPLY WITH ALL FEDERAL AND STATE REQUIREMENTS.
2. SPECIFICATIONS
   A. WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1. UNLESS SPECIFICALLY SHOWN OTHERWISE, THE DESIGN FABRICATION AND ERECTION IS TO BE GOVERNED BY THE LATEST REVISION OF:
      i. AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS
      ii. AISC CODE OF STANDARD PRACTICE
      iii. STRUCTURAL WELDING CODE, AWS D1.1 OF THE AMERICAN WELDING SOCIETY
      iv. SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS
3. SUBMITTALS
   A. SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL WHICH INCLUDE ERECTION PLANS, CONNECTIONS, HOLES, THREADED FASTENER TYPES AND FINISHES
   B. SUBMITTALS MUST BE THE ORIGINAL WORK OF THE FABRICATOR OR DETAILER. ELECTRONIC REPRODUCTIONS OF THESE DOCUMENTS WILL NOT BE REVIEWED. ANY DELAY CREATED BY THE FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
   C. THE SUBMITTAL MUST INCLUDE ALL REQUIRED FIELD VERIFICATION OF DETAILS AND DIMENSIONS.
   D. INDICATE MATERIAL SPECIFICATIONS, STRENGTHS AND FINISHES. INDICATE COMPLIANCE WITH ALL STATE AND FEDERAL REQUIREMENTS FOR DOMESTICALLY PRODUCED STEEL. RETAIN MILL CERTIFICATIONS AND DOMESTICALLY PRODUCED STEEL CERTIFICATIONS FOR ALL STRUCTURAL SHAPES FOR THE DURATION OF THE WARRANTY PERIOD OF THE STRUCTURE.
4. CONNECTIONS:
   A. FIELD CONNECTIONS ARE TO BE BOLTED, EXCEPT AS INDICATED OTHERWISE. SHOP CONNECTIONS MAY BE EITHER WELDED OR BOLTED.
   B. CONNECTIONS ARE TO BE DESIGNED BY THE FABRICATOR TO DEVELOP EITHER 100% OF THE FULL UNIFORM LOAD CAPACITY OF THE MEMBER OR THE FORCES SHOWN ON THE PLANS. THE MINIMUM CONNECTION CAPACITY SHALL BE 5.0 KIPS. DETAILS ARE PROVIDED SHOWING THE GENERAL ARRANGEMENT OF CONNECTIONS.
5. COATINGS:
   A. DO NOT PAINT STEEL OR ANCHOR RODS WHICH WILL BE ENCASED IN 3" MINIMUM OF CONCRETE OR ANY STEEL WHICH IS TO RECEIVE SPRAY-APPLIED OR INTUMESCENT FIREPROOFING.
   B. PAINT ALL INTERIOR STEEL WITH TWO COATS OF RED-OXIDE PRIMER.
   C. HOT-DIP GALVANIZE ALL EXTERIOR STEEL INCLUDING LINTELS AND SHELF ANGLES.
   D. PROVIDE A FIELD-APPLIED COAT OF ASPHALTIC MASTIC FOR ANY BELOW GRADE STEEL, NOT COVER BY 3" OF CONCRETE OR MASONRY GROUT, INCLUDING BASE PLATES AND ANCHOR RODS.

EPOXY ANCHORS:

1. EPOXY ANCHORING SHALL NOT BE USED EXCEPT WHERE SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS, OR WHEN APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
2. WHERE PERMITTED, EPOXY ANCHORING SHALL BE COMPLETED USING ONE OF THE FOLLOWING PRODUCTS:
   FOR USE IN CONCRETE:
      A. HIT HY-200 ADHESIVE ANCHOR, BY HILTI, INC. (ICC-ES REPORT #3187)
   FOR USE IN SOLID GROUTED MASONRY:
      A. HIT-70 WITH HAS ROD ANCHOR SYSTEM BY HILTI, INC. (ICC-ES REPORT #2682)
      B. HIT-70 WITH TZ ROD ANCHOR SYSTEM BY HILTI, INC. (ICC-ES REPORT #2682)
      C. SET-ADHESIVE SYSTEMS BY SIMPSON STRONG-TIE (ICC-ES REPORT #1772)
      D. CIA-GEL 7000 EPOXY BY USP STRUCTURAL CONNECTORS, INC. (ICC-ES REPORT #1702)
3. ANCHOR RODS USED FOR EPOXY ANCHORING SHALL BE THE TYPE SPECIFIED IN THE REFERENCED ICC-ES REPORT. THE ANCHOR SIZE SHALL BE AS INDICATED ON THE PLANS. THE ANCHOR ROD EMBEDMENT SHALL BE AS INDICATED ON THE PLANS, OR APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE EPOXY MANUFACTURER'S RECOMMENDATIONS AND THE CURRENT ICC-ES REPORT.
5. DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH INSTRUCTOR'S ACCOMPANYING ADHESIVE CARTRIDGES AND APPLICABLE ICC-ESR (ALTERNATE METHODS OF DRILLING ARE PROHIBITED UNLESS APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.)

FOUNDATIONS - GENERAL:

1. THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT (GCI PROJECT #22-6-26622) PREPARED BY GEOTECHNICAL CONSULTANTS, INC., DATED JULY 6, 2022.
   FOOTINGS SHALL BEAR ON SOILS CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 3.0 KSF UNDER SERVICE LIVE AND DEAD LOAD. ISOLATED SPREAD FOOTINGS SHALL BEAR ON SOIL CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 3.0 KSF UNDER SERVICE LIVE AND DEAD LOAD. ALL FOOTINGS SHOULD BEAR ON STABLE, NATURAL NON-ORGANIC SOILS (EXTENDED THROUGH ANY EXISTING STONE LEFT IN PLACE) OR ON NEW, CONTROLLED FILL PLACED DIRECTLY OVER STABLE, NATURAL NON-ORGANIC
   SOILS (IF EXISTING STONE IS REMOVED).
2. FOOTINGS MAY BE POURED INTO AN EARTH-FORMED TRENCH IF SOIL CONDITIONS PERMIT.
3. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIAL. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.
4. BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR 36" TO 42" BELOW FINAL GRADE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST BOTTOM OF FOOTING ELEVATIONS SHOWN IN THE DOCUMENTS AS REQUIRED TO ENSURE MINIMUM FOOTING EMBEDMENT AND TO REACH THE REQUIRED BEARING ELEVATION AS SHOWN IN THE GEOTECHNICAL ENGINEERING REPORT.
5. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE AND CURED.
6. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
7. FOUNDATION CONCRETE SHALL HAVE REACHED A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI BEFORE BEING LOADED. STRENGTHS SHALL BE VERIFIED BY TEST.

REINFORCED CONCRETE:

1. MATERIALS:
   A. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".

CAST-IN PLACE CONCRETE

LOCATION	CLASS	f'c (PSI)	MIN. CEMENT (LBS)	MIN. AIR CONTENT	MAX. W/C RATIO	NOTES
FOOTINGS	I	3,000	517	ENTRAPPED	.50	
PERIMETER WALL / PIERS / RETAINING WALLS	III	4,500	564	5% +/- 1%	.45	
INTERIOR SLAB ON GRADE	III	3,500	540	ENTRAPPED	.45	
EXTERIOR SLAB ON GRADE	IV	4,500	564	6% +/- 1%	.45	

   B. SUBMIT CONCRETE MIX DESIGN FOR APPROVAL IN ACCORDANCE TO ACI 301. MIX DESIGNS SHALL INCLUDE ALL BACKUP DATA MATERIAL WITH COMPRESSIVE STRENGTH BREAKS BASED ON EXPERIENCE OR TRIAL MIX PER ACI 301. SUBMIT THREE (3) SETS FOR REVIEW. THE MIX DESIGNS MUST INCLUDE THE BATCH IDENTIFICATION NUMBER AND THE CLASS IDENTIFICATION FROM THE TABLE ABOVE. FAILURE TO INCLUDE BOTH OF THESE ITEMS WILL RESULT IN THE RETURN OF THE MIX DESIGNS WITHOUT REVIEW.
2. FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3. CONTINGENCIES: PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING. SUCH SUPPORTS ARE TO BE REFLECTED IN THE BID. THE USE OF CLAY BRICK IS NOT ACCEPTABLE.
4. FOOTINGS:
   A. DOWELS IN FOOTINGS TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING.
   B. PROVIDE CONTROLLED LOW-STRENGTH MATERIAL (CLSM) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
5. CONSTRUCTION JOINTS:
   A. PROVIDE CONSTRUCTION JOINTS AT ALL POUR STOP LOCATIONS. ALL CONSTRUCTION JOINTS ARE TO BE DOWELED, USE 3/4" SMOOTH DOWELS 1'-0" LONG EMBEDDED 6" EACH SIDE GREASE ONE END OR PROVIDE SLEEVE, UNLESS WHERE NOTED OTHERWISE ON DRAWINGS.

REINFORCING FOR CONCRETE:

1. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 OR ASTM A706, UNLESS NOTED OTHERWISE. ALL WELDED REINFORCING BARS SHALL CONFORM TO ASTM A706.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (SHEETS FORM, NOT ROLLED)
3. MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE:
   A. UNFORMED SURFACE IN CONTACT WITH THE GROUND: 3 IN.
   B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
      #6 BARS AND LARGER 2 IN.
      #5 BARS AND SMALLER 1 1/2 IN.
   C. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER:
      BEAMS, GIRDERS, AND COLUMNS 1 1/2 IN.
      SLABS, WALLS, AND JOISTS
      #11 BARS AND SMALLER 3/4 IN.
      #14 AND #18 BARS 1 1/2 IN.
4. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE.

BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)	BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)
#3	22	12	#8	72	30
#4	29	15	#9	81	34
#5	36	19	#10	89	38
#6	43	23	#11	98	42
#7	63	27			

5. COMPRESSION DOWEL EMBEDMENT: 22 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
6. BASE PLATES, ANCHOR RODS, SUPPORT ANGLES, ETC., BELOW GRADE SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.

STRUCTURAL LUMBER:

1. SPECIFICATIONS AND STANDARDS: DESIGN AND DETAILING OF WOOD FRAMING AND CONNECTIONS SHALL CONFORM TO THE CURRENT EDITION OF THE OHIO BUILDING CODE AND THE EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" ISSUED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION REFERENCED THERE-IN.
2. MATERIALS: THE MATERIALS USED FOR THE WORK OF THIS PROJECT ARE TO COMPLY WITH THE MINIMUM STANDARDS OF QUALITY LISTED BELOW; UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.

MINIMUM STRUCTURAL PROPERTIES FOR DIMENSIONAL LUMBER

		STRUCTURAL PROPERTIES		
LOCATION	SIZE	Fb (psi)	Fv (psi)	E (ksi)
JOISTS	2X4	875	135	1400
	2X6	875	135	1400
	2X8	1200	175	1600
	2X10	1050	175	1600
	2X12	975	175	1600

3. ALL STRUCTURAL LUMBER SHALL BE KILN DRIED TO A MAXIMUM MOISTURE CONTENT OF 15%.
4. ALL WOOD MEMBERS EXPOSED TO THE ELEMENTS SHALL BE PRESERVATIVE PRESSURE TREATED. ALL WOOD MEMBERS SECURED TO OR PLACED AGAINST CONCRETE, MASONRY, AND/OR EARTH ARE TO BE PRESERVATIVE PRESSURE TREATED FOR GROUND CONTACT.
5. STRUCTURAL WOOD MEMBERS ARE NOT TO BE CUT, COPED, OR MODIFIED, OTHER THAN CUTTING TO LENGTH OR MAKING PROVISIONS FOR FASTENERS. MAKE ALL CUTS TRUE AND SQUARE FOR FULL BEARING AT STRUCTURAL JOINTS.
6. CONNECT ALL WOOD FRAMING SECURELY TOGETHER WITH NAILS, SPIKES, OR FRAMING ANGLES, IN ACCORDANCE WITH TABLE 2304.9.1 OF THE OHIO BUILDING CODE. FASTENERS USED TO CONNECT PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE OF STAINLESS STEEL OR HOT DIPPED GALVANIZED STEEL. PROVIDE PLYWOOD NAILING AS RECOMMENDED BY THE AMERICAN PLYWOOD ASSOC.
7. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA TO THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION INDICATING COMPLIANCE WITH THIS SECTION.

DELEGATED DESIGN (PEMB):

1. ALL STRUCTURAL STEEL BUILDING ELEMENTS FROM THE COLUMN BASE PLATES UP, SHALL BE DESIGNED BY AN ENGINEER FAMILIAR WITH THE REQUIREMENTS OF THE CURRENT OHIO BUILDING CODE AND THE STANDARDS SET FORTH BY THE METAL BUILDING MANUFACTURER'S ASSOCIATION. ALL LOADS SHOWN ON THESE PLANS SHALL BE INTERPRETED AS MINIMUM STANDARDS. IF, THE DELEGATED ENGINEER'S CALCULATED LOADS DIFFER FROM WHAT IS SHOWN, THE HIGHER OF THE TWO SHALL GOVERN.
2. THE DELEGATED ENGINEER SHALL SUBMIT FABRICATION AND INSTALLATION DRAWINGS BEARING THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER. THE SUBMITTAL SHALL INCLUDE THE FOLLOWING INFORMATION:
   A. DIMENSIONED PLAN LAYOUT
   B. SEQUENCING SCHEDULE
   C. STRUCTURAL CALCULATIONS
   D. ERECTION DRAWINGS
   E. BUILDING REACTIONS
3. THE MANUFACTURER SHALL IAS ACCREDITED FOR METAL BUILDING SYSTEMS AC 472.
4. THE PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED FOR THE FOLLOWING DEFLECTION AND DRIFT LIMITATIONS:
   - VERTICAL FRAME DEFLECTION: L/240 UNDER DESIGN SNOW LOAD OR ROOF LIVE LOAD, WHICHEVER IS MORE STRINGENT.
   - HORIZONTAL FRAME DRIFT: H/100 UNDER 10 YEAR MRI WIND LOAD.
   - PURLIN/OPEN WEB STEEL JOISTS VERTICAL DEFLECTION: L/240 UNDER DESIGN SNOW LOAD OR ROOF LIVE LOAD, WHICHEVER IS MORE STRINGENT.
   - GIRT AND WIND POST HORIZONTAL DEFLECTION: L/240 UNDER WIND LOAD.

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED PROFESSIONAL ENGINEER
08-07-2023

OMNESS DESIGN, INC
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.
Zanesville, OH 43701

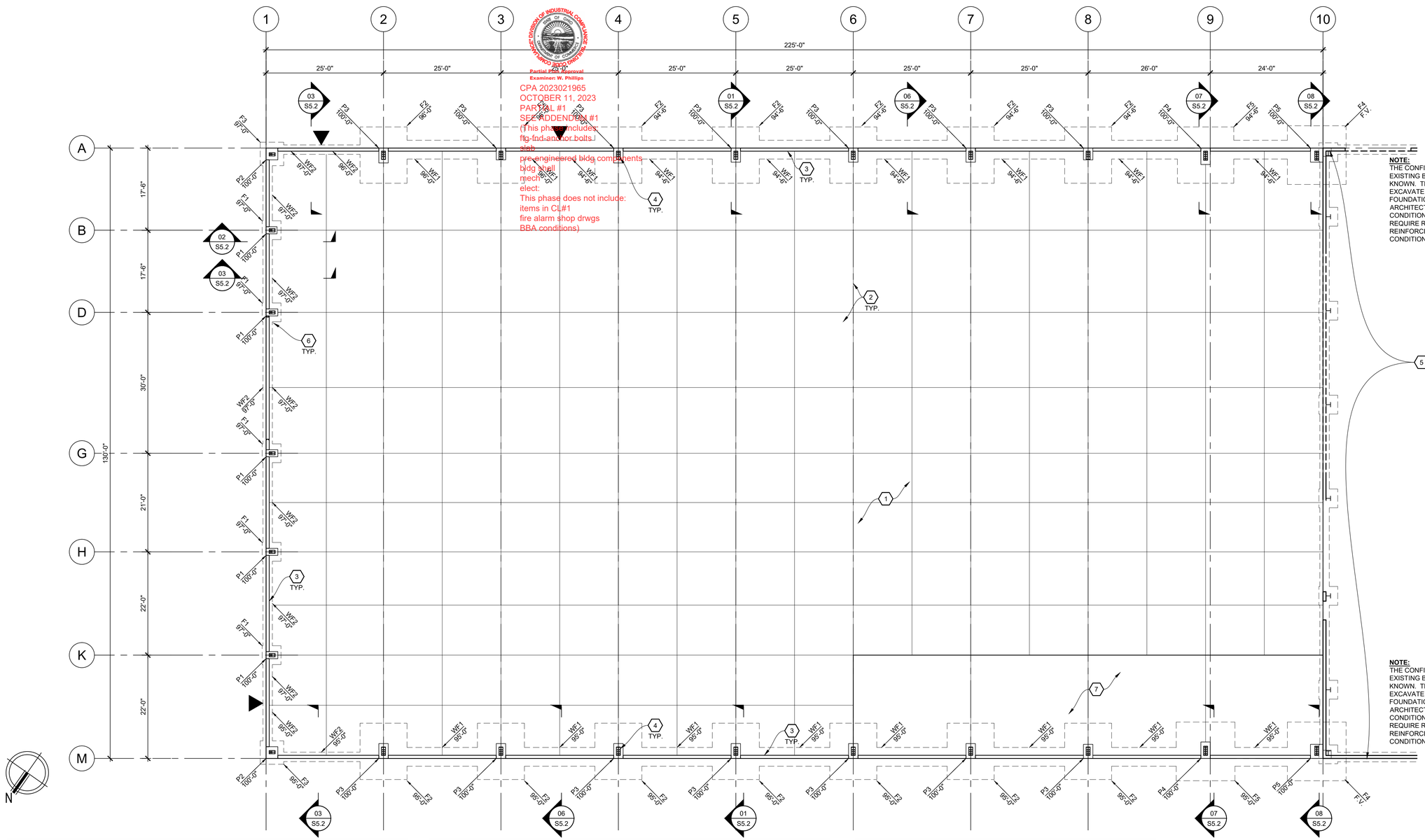
Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
STRUCTURAL GENERAL NOTES

MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
		ISSUE

PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S0.2



Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

NOTE:
THE CONFIGURATION AND ELEVATION OF THE EXISTING BUILDING FOUNDATIONS IS NOT KNOWN. THE GENERAL CONTRACTOR SHALL EXCAVATE IN THIS AREA TO EXPOSE THE FOUNDATION. PROVIDE A SKETCH TO THE ARCHITECT DEPICTING THE EXISTING CONDITIONS. FOUNDATIONS IN THIS AREA MAY REQUIRE REVISIONS. DO NOT FABRICATE REINFORCING STEEL UNTIL THE EXISTING CONDITIONS HAVE BEEN EVALUATED.

NOTE:
THE CONFIGURATION AND ELEVATION OF THE EXISTING BUILDING FOUNDATIONS IS NOT KNOWN. THE GENERAL CONTRACTOR SHALL EXCAVATE IN THIS AREA TO EXPOSE THE FOUNDATION. PROVIDE A SKETCH TO THE ARCHITECT DEPICTING THE EXISTING CONDITIONS. FOUNDATIONS IN THIS AREA MAY REQUIRE REVISIONS. DO NOT FABRICATE REINFORCING STEEL UNTIL THE EXISTING CONDITIONS HAVE BEEN EVALUATED.

FOUNDATION PLAN NOTES

A	SEE SHEETS **S0.1** AND **S0.2** FOR GENERAL NOTES.
B	ALL ELEVATIONS ARE RELATIVE TO A FINISH FLOOR SLAB ELEVATION OF 100'-0" (REFERENCE ONLY). NEW FINISHED FLOOR TO MATCH THE FINISHED FLOOR ELEVATION OF THE ADJACENT STRUCTURE.
C	COORDINATE DOOR OPENINGS WITH ARCHITECTURAL DRAWINGS.
D	SEE DETAIL **S5.1-01** FOR TYPICAL REINFORCING DETAILING.
E	STEPS IN FOOTING AS REQUIRED TO MAINTAIN FROST DEPTH AND EMBEDMENT TO REQUIRED BEARING ELEVATION. SEE **S5.1-03** FOR TYPICAL DETAIL.
F	SEE DETAIL **S5.1-05** FOR RE-ENTRANT SLAB REINFORCING, TYP. AT SLAB PENETRATIONS, DOOR OPENINGS, ETC.
G	SEE DETAIL **S5.1-07** FOR TYPICAL PIPE PENETRATIONS THROUGH FOUNDATIONS.
H	SEE DETAIL **S5.1-02** FOR REINFORCING AT INTERSECTING FOOTINGS.
I	SEE P.E.M.B. DRAWINGS FOR ANCHOR ROD DIAMETER AND PROJECTION, SEE **S5.1-09** FOR ANCHOR ROD MATERIAL AND EMBEDMENT.

KEYED NOTES

⟨00⟩	
1	8" CONCRETE SLAB, REINF. w/WWR - 4x4-W4xW4 ON 15MIL. VAPOR BARRIER OVER A 6" MIN. COMPACTED COARSE AGGREGATE BASE. TOP OF SLAB AT 100'-0".
2	SLAB CONTRACTION OR CONSTRUCTION JOINT, SEE **S5.1-04**.
3	8" CAST-IN-PLACE CONCRETE FOUNDATION WALL, REINF. WITH #5 AT 12"O.C., VERTICAL AND HORIZONTAL.
4	RIGID FRAME P.E.M.B. COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR BOLT INFORMATION SEE DETAIL **S5.1-09**.
5	EXISTING BUILDING TO REMAIN. FIELD VERIFY EXISTING CONDITIONS
6	P.E.M.B. END WALL COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR BOLT INFORMATION SEE DETAIL **S5.1-09**.
7	12" CONCRETE SLAB, REINF. w/#5 AT 12" O.C. DISCONTINUOUS BETWEEN JOINTS ON 15MIL. VAPOR BARRIER OVER A 6" MIN. COMPACTED COARSE AGGREGATE BASE. TOP OF SLAB AT 100'-0". DOWEL SLAB AT CONTROL JOINTS SIMILAR TO SLAB CONSTRUCTION JOINT DETAIL IN **S5.1-04**.

CONTINUOUS WALL FOOTING SCHEDULE

MARK	SIZE	REINFORCING	
		LONGITUDINAL	TRANSVERSE
WF1	4'-0" x CONT. x 1'-4"	(4) #5 CONT., TOP & BOT.	#5 BARS @ 12" O.C., TOP & BOT.
WF2	2'-0" x CONT. x 1'-4"	(3) #5 CONT., BOT.	N/A

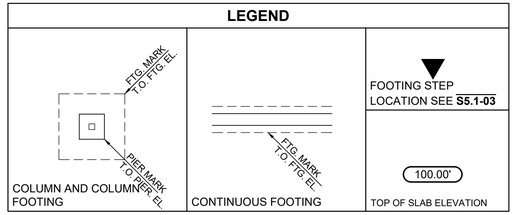
COLUMN FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F1	4'-0" x 4'-0" x 1'-4"	(5) #5 BARS E.W. BOTTOM
F2	10'-0" x 12'-0" x 1'-4"	(14) #6 TRANS. BARS T&B & (12) #6 BARS LONG. T&B
F3	5'-0" x 5'-0" x 1'-4"	(6) #5 BARS E.W. BOTTOM
F4*	12'-6" x 12'-6" x 1'-4"	(14) #8 BARS E.W. T&B
F5	12'-6" x 12'-6" x 1'-4"	(14) #8 BARS E.W. T&B
*FIELD VERIFY PER PLAN NOTES		

PIER SCHEDULE

MARK	SIZE	DETAIL	REINFORCING
P1	1'-6" x 2'-6"	**S5.1-08**	(6) #8 VERTICAL BARS w/ #4 TIES
P2	2'-6" x 2'-6"	**S5.1-08**	(8) #8 VERTICAL BARS w/ #4 TIES
P3	2'-0" x 3'-6"	**S5.1-08**	(12) #8 VERTICAL BARS w/ #4 TIES
P4	2'-0" x 3'-0"	**S5.1-08**	(16) #8 VERTICAL BARS w/ #4 TIES
P5*	2'-8" x 3'-0"	**S5.1-08**	(12) #8 VERTICAL BARS w/ #4 TIES
*FIELD VERIFY PER PLAN NOTES			

LEGEND



01 FOUNDATION PLAN

SCALE: 3/32" = 1'-0"

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED
PROFESSIONAL ENGINEER
08-07-2023

OMNESS DESIGN, INC
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.
Zanesville, OH 43701

Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
FOUNDATION PLAN

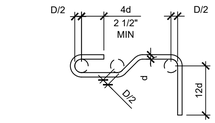
MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD	05/17/2023	CONSTRUCTION DOCUMENTS
		FOUNDATION ELEVATION

ISSUE

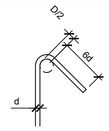
PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S1.1

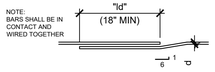
SHEET 3 OF 8



A. HOOKS AND BENDS

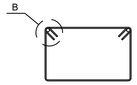


B. 135 DEGREE STIRRUP AND TIE HOOK



C. LAP SPLICE

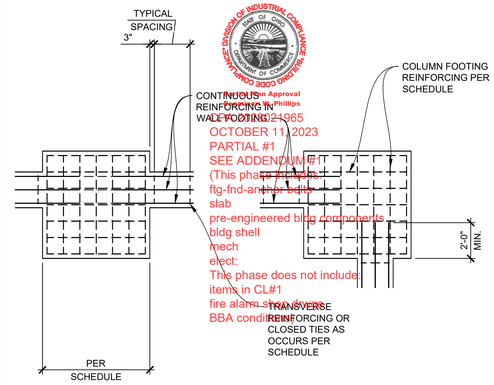
SEE REINFORCING STEEL NOTES ON S5.1 FOR LAP LENGTHS



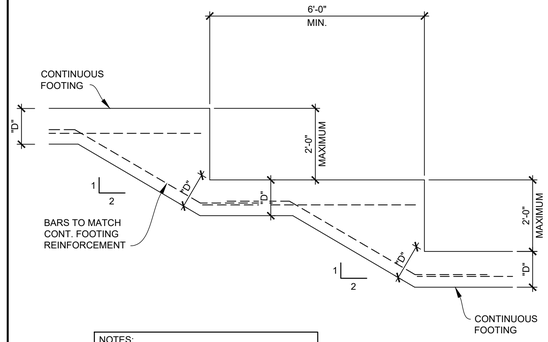
D. GRADE BEAM STIRRUP

BEND DIAMETER SCHEDULE		
BAR SIZE	STANDARD BEND DIAMETER	REDUCED BEND DIAMATER FOR TIES AND STIRRUPS
#3 THROUGH #5	D = 6*d	D = 4*d
#6 THROUGH #8	D = 6*d	NA
#9 THROUGH #11	D = 8*d	NA
#14 AND #18	D = 10*d	NA

01 TYPICAL REINFORCEMENT DETAILS
SCALE: N/A = 1'-0"

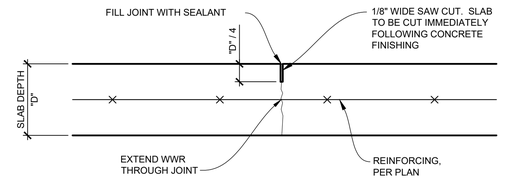


02 PLAN DETAIL AT INTERSECTING FOOTINGS
SCALE: N/A

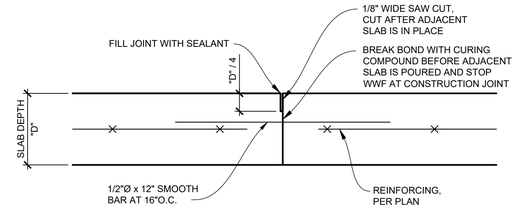


NOTES:
1. "D" INDICATES FOOTING DEPTH.
2. SEE FOUNDATION PLAN AND CIVIL PLANS FOR STEP LOCATIONS REQ'D.

03 TYPICAL FOUNDATION STEP
SCALE: N/A

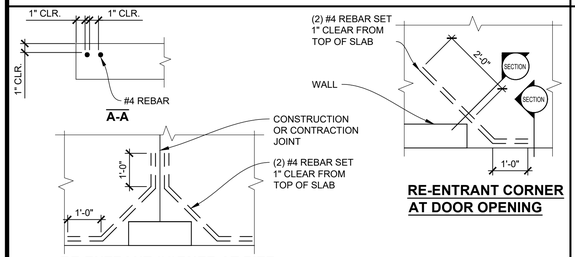


SLAB CONTRACTION JOINT
SAW CUT JOINT WITHIN 2 HOURS OF CONCRETE SETTING UP



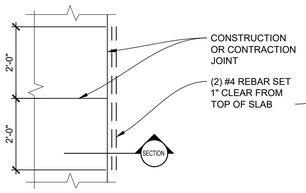
SLAB CONSTRUCTION JOINT
USE BETWEEN CONCRETE POURS AS REQUIRED

04 SLAB CONTRACTION AND CONSTRUCTION JOINT
SCALE: N/A

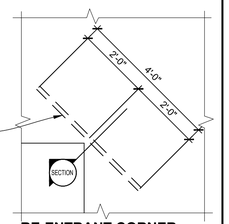


RE-ENTRANT CORNER AT PIER

RE-ENTRANT CORNER AT DOOR OPENING

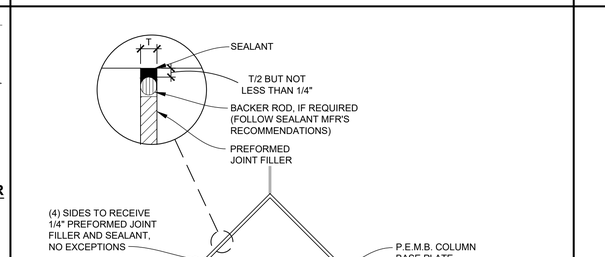


DISCONTINUOUS JOINT



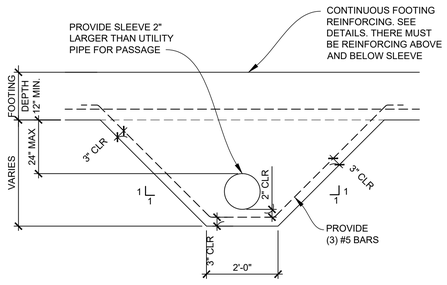
RE-ENTRANT CORNER

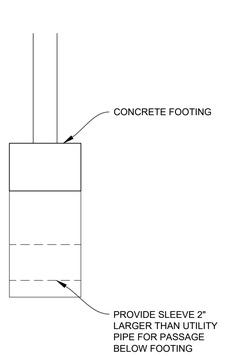
05 SLAB REINFORCEMENT
SCALE: N/A

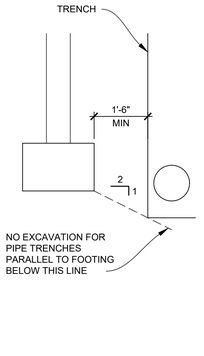


06 COLUMN ISOLATION JOINT
SCALE: N/A

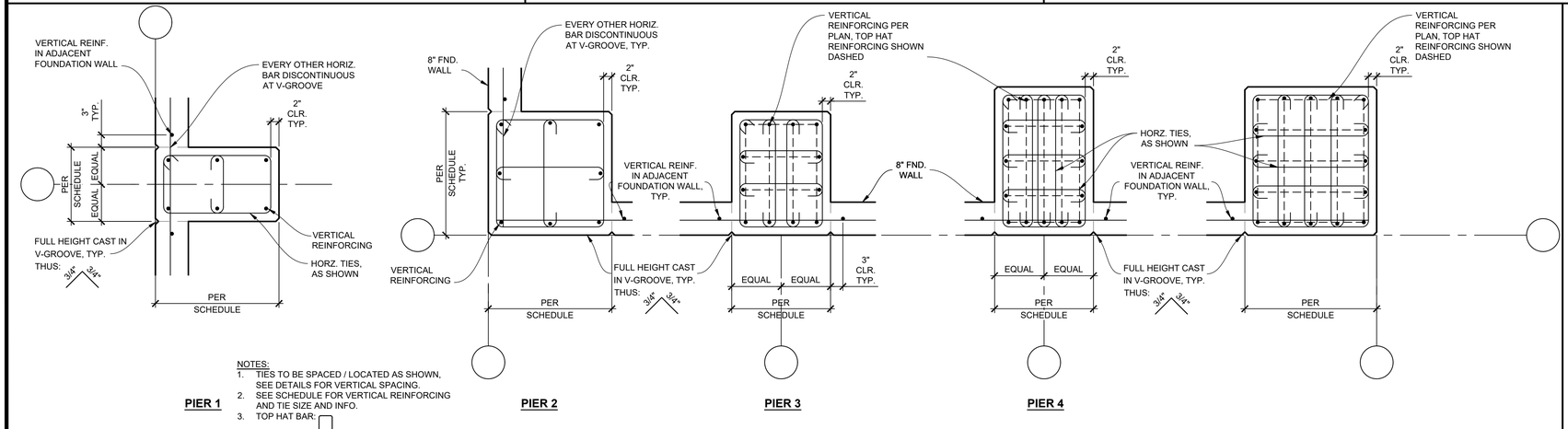
NOTE:
WHEN TOP OF UTILITY PIPE IS MORE THAN 2'-0" BELOW FOOTING, CONCRETE ENCASEMENT IS NOT REQUIRED







07 FOUNDATION SECTION AT PIPE PENETRATION
SCALE: N/A



NOTES:
1. TIES TO BE SPACED / LOCATED AS SHOWN, SEE DETAILS FOR VERTICAL SPACING.
2. SEE SCHEDULE FOR VERTICAL REINFORCING AND TIE SIZE AND INFO.
3. TOP HAT BAR:

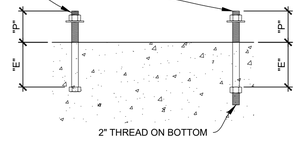
PIER 1 **PIER 2** **PIER 3** **PIER 4**

08 PIER DETAILS AT PIERS
SCALE: 3/4 = 1'-0"

ASTM F1554, GRADE 55 HEADED ANCHOR ROD OR ANCHOR ROD WITH THREADED END. PROVIDE STANDARD A563 HEX NUT & F436 WASHER ABOVE BASE PLATE. PROVIDE HEX NUT AT THE BOTTOM OF THREADED END, AS SHOWN.

NOTE:
DO NOT WET SET ANCHOR RODS.

NOTE:
THREADED PROJECTION ("P") IS TO BE PER THE METAL BUILDING SYSTEM DRAWINGS



HEADED BOLT THREADED ROD

ANCHOR ROD DIMENSIONS	
BOLT DIAMETER	EMBEDMENT "E"
3/4"	19"
1 1/4"	25"

09 ANCHOR ROD DETAILS
SCALE: N/A

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED PROFESSIONAL ENGINEER
08-07-2023

OMNESS DESIGN, INC
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MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
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Zanesville, OH 43701

Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

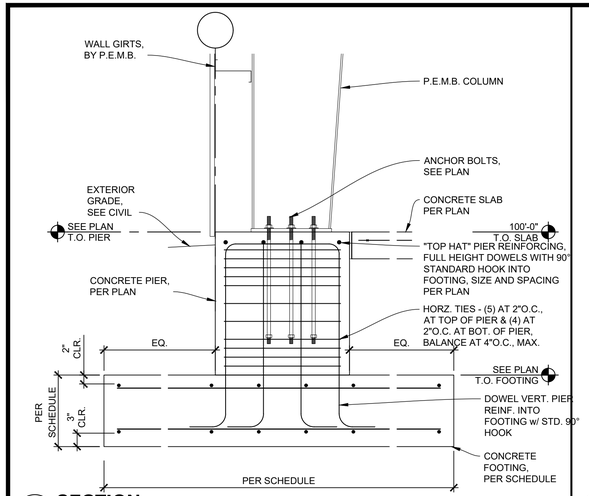
SHEET TITLE
FOUNDATION DETAILS

MARK	DATE	DESCRIPTION
SD	10/04/2023	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
		ISSUE

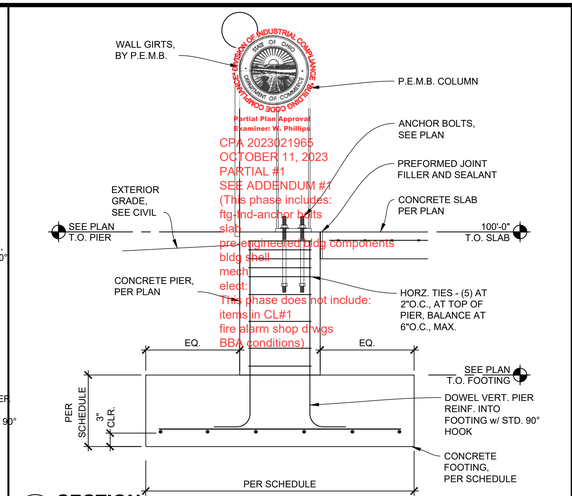
PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S5.1

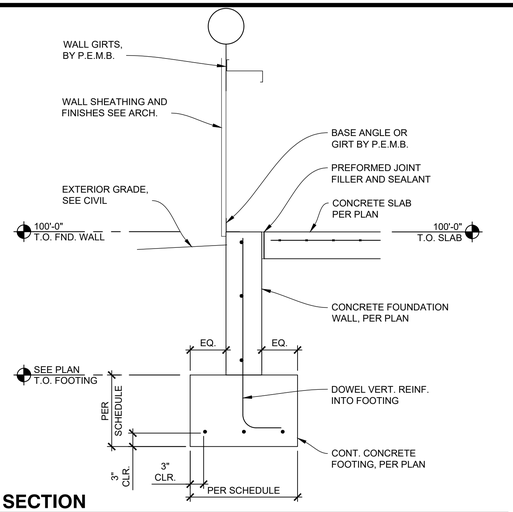
SHEET 5 OF 8



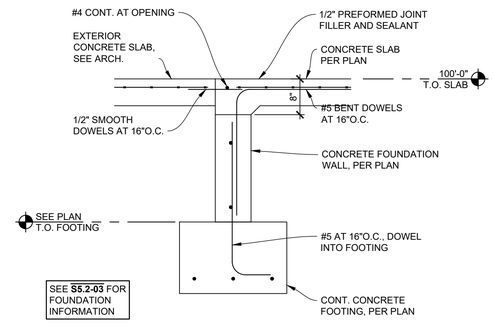
01 **SECTION**
SCALE: 3/4 = 1'-0"



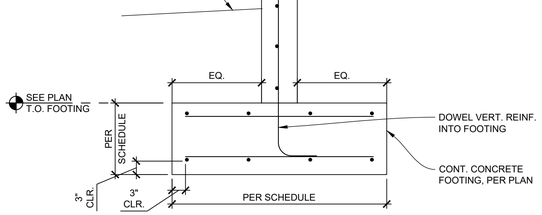
02 **SECTION**
SCALE: 3/4 = 1'-0"



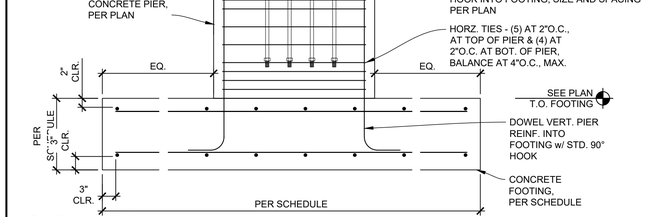
03 **SECTION**
SCALE: 3/4 = 1'-0"



04 **SECTION**
SCALE: 3/4 = 1'-0"

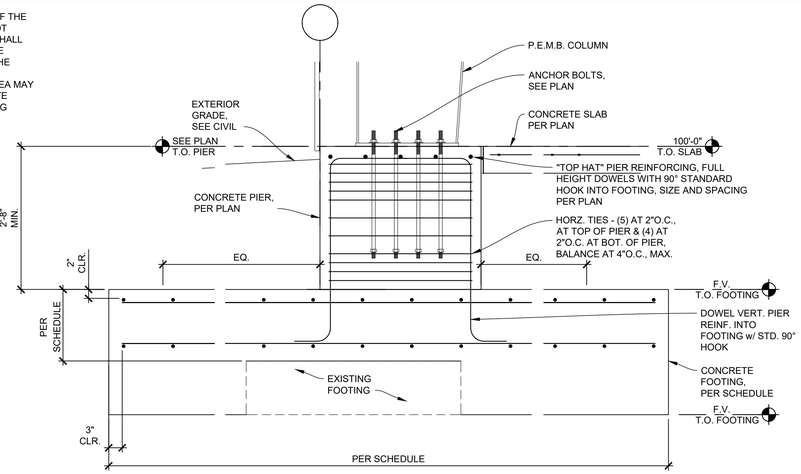


06 **SECTION**
SCALE: 3/4 = 1'-0"



07 **SECTION**
SCALE: 3/4 = 1'-0"

NOTE:
THE CONFIGURATION AND ELEVATION OF THE EXISTING BUILDING FOUNDATIONS IS NOT KNOWN. THE GENERAL CONTRACTOR SHALL EXCAVATE IN THIS AREA TO EXPOSE THE FOUNDATION. PROVIDE A SKETCH TO THE ARCHITECT DEPICTING THE EXISTING CONDITIONS. FOUNDATIONS IN THIS AREA MAY REQUIRE REVISIONS. DO NOT FABRICATE REINFORCING STEEL UNTIL THE EXISTING CONDITIONS HAVE BEEN EVALUATED.



08 **SECTION**
SCALE: 3/4 = 1'-0"

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED PROFESSIONAL ENGINEER
08-07-2023

OMNESS DESIGN, INC
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.
Zanesville, OH 43701

Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
FOUNDATION DETAILS

MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

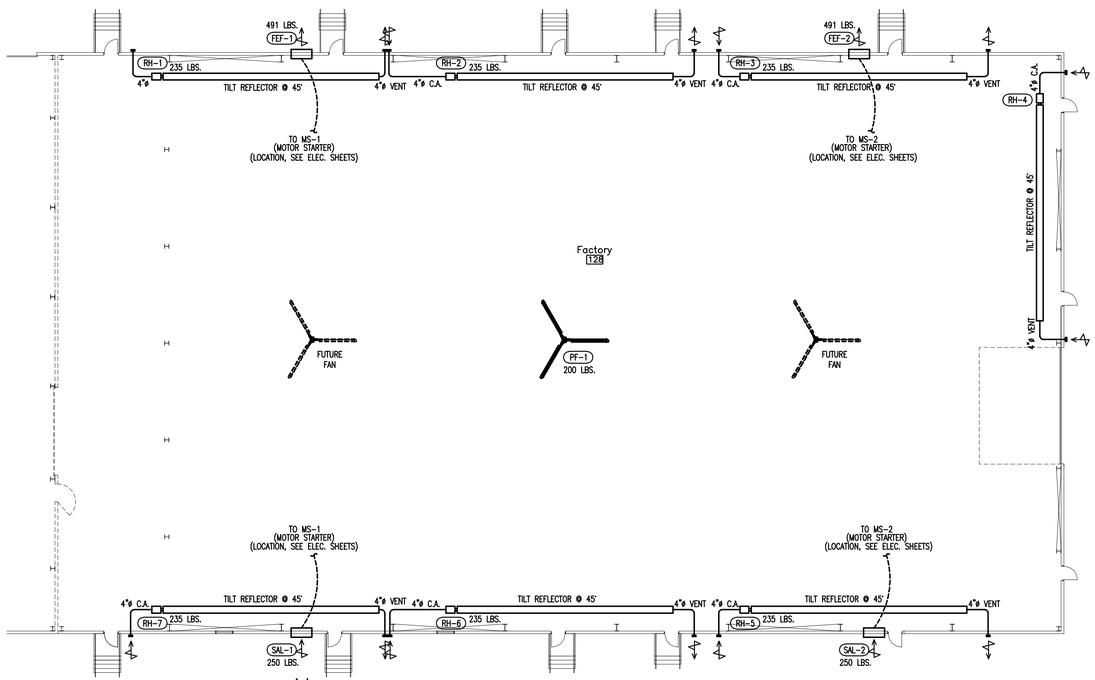
ISSUE

PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S5.2

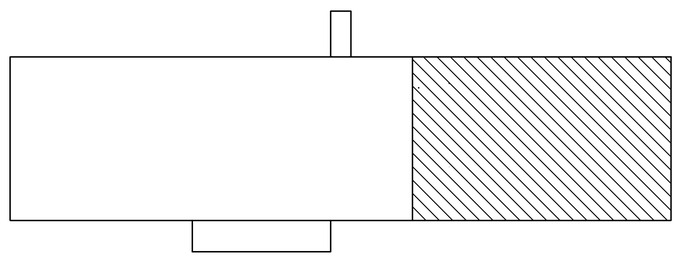
Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



Partial Floor Plan – HVAC

1/16" = 1'-0"



N

Key Plan

NO SCALE

STATE OF OHIO
JONATHAN BRYAN BORON
REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
CONSULTANTS
140 FAIRFAX RD
MARION, OHIO
43302

Addition to:
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
PARTIAL HVAC FLOOR PLAN

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE 8-7-23

PROJECT NO22-128
CAD DWG FILE21-128 Rialto Phase 1
DRAWN BY:PD
CHECKED BY:PD

M 1.0

MECHANICAL SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE
1. For purposes of clearness and legibility, Drawings are diagrammtic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
2. Drawings and Specifications to be considered cooperative, and anything appearing in the Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE
1. Codes and Permits – Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS
1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS
1. Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering and workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

D. MATERIALS
1. Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
2. All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necesary for properoepration, and in compliance with effective State or Local Code requirements.

GAS FIRED FURNACE

A. SUBMITTALS
1. Submit detailed Shop Drawings clearly indicating make, model, type, size, and location.

B. Furnish and install, where shown on Drawings, gas fired furnace as manufactured by York. Furnace shall be vertical model with DX cooling coil, single speed blower, tubular aluminized steel primary heat exchanger with stainless steel tube/aluminum fin secondary heat exchanger, and rotatable inducer. Furnace shall be design certified by A.G.A. Laboratories.

C. Cabinet shall be constructed of heavy gauge, cold rolled steel with insulated vestibule and back panels. Safety interlock switch, located in control box, automatically turns power off to unit when blower compartment door is removed.

D. The controls shall have factory installed blower cooling relay, fan and limit controls, factory wired 24 volt control transformer, and controller.

E. Gas burner shall have automatic gas controls, including the following:
1. 100% safety shut-off.
2. Automatic safety pilot valve.
3. Automatic electric valve and gas pressure regulator.
4. Solid state electronic direct spark ignitor.

F. Gas fired furnace as manufactured by Carrier or Comfortmaker will be acceptable providing construction, capacity, and operating characteristics are equal to the specified equipment. The cost for any modifications to the building structure, the duct system, the natural gas piping system, the power wiring system, or the temperature control system (including interface points and interlock wiring) which is necessitated by the substitution of the other listed manufacturers, shall be borne by the Mechanical Contractor making the substitution.

G. Equipment manufacturer shall warrant parts and workmanship for one year from the date of substantial completion as determined by the Architect and/or Engineer.

H. Unit shall be completely tested by the manufacturer before shipment.

I. Every effort shall be made to minimize vibration, noise, and drafts through careful fabrication and erection.

AIR COOLED CONDENSING UNIT

A. SUBMITTALS
1. Submit detailed Shop Drawings clearly indicating make, model, type, size, location, capacity at the operating suction and liquid temps, voltage, and required fuse size.

B. Furnish and install, where shown on Drawings, air cooled condensing unit as manufactured by York. Unit shall use refrigerant R-410A, be completely assembled and factory assembled. Unit shall be complete with single or multiple hermetic compressors, condensing coils, condenser fan, fan motors, fan guards, refrigerant reservoir, charging valves, valves, crankcase heater (if required), high and low pressure safety switches, liquid line sight glass, filter drier, strainers, contactors, and overload protection for all motors and all controls to provide proper operation with pump down control. Unit shall have part winding and starters. The entire unit shall be housed in a fully weather proof casing of outdoor installation. Manufacturer shall furnish unit complete to provide oepration down to 40 degrees F outdoor temperature.

C. Air cooled condensing unit as manufactured by Carrier or Comfortmaker will be acceptable providing construction, capacity and operating characteristics are equal to the specified equipment. The cost for for any modifications to the building structure, the power wiring system, or the temperature control system (including interface points and interlock wiring) which is necessitated by the substitution of the other listed manufacturers, shall be borne by the Mechanical Contractor making the substitution.

D. REFRIGERANT PIPING AND ACCESSORIES
1. All piping shall be Type "ACR" Hard Drawn Copper Tubing. All fittings shall be Wrought or Forged Brass Type approved for refrigerant piping and all elbows shall be long turn pattern. All pipe and fittings shall be assembled with Silfos or Easyflow Silver Solder with approximate 1000 degrees F.
2. Refrigerant piping shall be sized as shown on Drawings. Mechanical Contractor shall confirm pipe sizing with selected unit manufacturer before proceeding with installation.
3. Assembly and Workmanship: All tubing and fittings shall be carefully and thoroughly cleaned and polished with steel wool. Prior to heating, coat all polished surfaces with a thin coat of flux. Heat fittings and tubing with oxyacetylene torch. Provide continual flow of inert gas (nitrogen) through tubing while brazing joints. Any overheated unsafe joints must be replaced before project is accepted.
4. Testing: Test all refrigerant piping as follows:
   a. Evacute entire system to 28 inch vacuum and hold said vacuum for 24 hours without leakage.
   b. Charge piping with inert gas to a pressure of not more than 300 psi and no less than 200 psi and hold pressure for 24 hours without leakage.
   c. During above test, remove or bypass any valves, gauges, etc., subject to damage by pressure exerted during test.
   d. Triple evacuate entire system and purge each time with approriate refrigerant. Insert refrigerant dryer with valves bypass arrangement for moisture removal during triple purge and evacuation process.
   e. Test all joints, after charging system with an alcohol fired or prestolite halide lead detector.
   f. Contractor shall include the fee for inspection as required by the Ohio Board of Building Standards Chapter BB-201 of Ohio Pressure Piping System Rules.
5. Refrigerant and Oil Charge: Charge entire system with accurate quantities of refrigerant (R-410A) and provide necessary oil for compressor and system requirements.
6. Specialties: Expansion valves, liquid line solenoid valves, liquid sight glass, strainers, hand valves, etc. are to be furnished by this Contractor in compliance with manufacturer's recommendation.
7. Miscellanous: Flexible pipe connections shall be furnished and installed where shown or required to permit free movement of piping and to prevent undue stress and vibrations at the compressor and air cooled condenser.
8. This Contractor shall make provisions to ensure oil return to compressor as required.

E. Equipment manufacturer shall provide one year parts and labor warranty, and four year extended compressor warranty. Contractor shall submit terms of parts and labor contract with equipment supplier for approval.

F. Equipment manufacturer shall provide start-up, test, and submit report to Engineer.

G. Every effort shall be made to minimize vibration and noise.

H. Condensing unit must be installed level!

AIR DISTRIBUTION

A. EXHAUST FANS
1. Submittals
   a. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
2. Furnish and install, where show on Drawings, exhaust fans as manufactured by Greenheck.
3. Exhaust fans as manufactured by Loren Cook, Penn, or Carnes will be acceptable providing construction, capacity and operating characteristics are equal.

B. LOW PRESSURE DUCTWORK
1. Ductwork shall be constructed of the following gauges, where velocity does not exceed 2500 FPM and static pressure does not exceedd 2.0 WG. All is in accordance with ASHRAE and SMACNA Standards:
   a. Rectangular Ducts:

Largest Dimension	U.S. Gauge Galvanized Steel
To 12"	26
13" to 30"	24

   b. Round Ducts:

Duct Diameter	U.S. Gauge Galvanized Steel
To 13"	26
14" to 28"	24

2. All ductwork shall be constructed of galvanized steel complying with ASTM A527-71, lockforming quality. All toilet and shower room exhaust ducts shall be aluminum construction, and all joints welded or sealed with 3M Company #EC-1792 sealant. Sheetmetal must be fabricated so that the gauge of material being used is visible externally.
3. Duct fasteners shall comply with SMACNA MF-1.
4. Provide hot dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of ductwork.
5. Provide turning vanes in all mitered elbows and where otherwise indicated. Vanes shall be 2" galvanized steel for up to and including 18" ducts and 4-1/2" for ducts over 18". Construction of vanes shall be double wall, fixed blade type for 90 degree elbows.
6. All joints and seams shall be sealed to SMACNA Class B Standards (100% sealing) with Duro-Dyne SAS-UL-C siliconized acrylic water based duct sealer.

C. GRILLES AND DIFFUSERS
1. Submittals
   a. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
   b. Furnish and install, where shown on Drawings, grilles and diffusers as manufactured by Price.
   c. Grilles and diffusers as manufactured by Titus, Krueger, or Carnes will be acceptable providing construction, capacity, and operating characteristics are equal.
2. All grilles and diffusers shall have a factory applied off-white finish unless otherwise noted on Plans.
3. Ceiling Supply Diffusers: Fully adjustable air pattern, round or square with full flow damper. Diffusers shall be surface mount or lay-in frame to fit ceiling construction being used.
4. Egg Crate Return Grilles: Aluminum frame with aluminum core grid. Egg crate grilles shall be surface mount, lay-in, or panel mounted to fit ceiling construction being used.
5. Refer to Architectural Reflected Ceiling Plan for exact location of ceiling diffusers and ceiling construction being used.

D. FILTERS
1. Furrnish filters as manufactured by Koch, model Multi-Pleat XL8. Media shall be reinforced glass fiber supported by galvanized steel grids formed to the configuration of the pleats. The media pack shall be sealed into a galvanized frame. Filter shall have a rated average atmospheric dust spot efficiency of not less than 35 to 40% and an average synthetic arrestance of 95% when tested in accordance with ASHRAE Standards 52-76. The filter shall be capable of operating with variable face velocities up to 600 FPM without impairing performance. It shall have an initial resistance not to exceed the value selected from the capacity table and shall be classified by Underwriter Laboratories as Class II.
2. Spare Filters: One original and two sets of spare filters shall be supplied. One set is for use during the construction phase and a set shall be installed for testing and balancing. One complete set of unused filters shall be turned over to the Owner at completion of the project.
3. Filters as manufactured by Cambridge, Continental or American Air Filter will be acceptable providing construction, capacity, and operating characteristics are equal.

DUCTWORK AND ACCESSORIES

A. Provide all sheetmetal work, as shown on the Drawings, in accordance with the latest edition of the ASHRAE guide and data book, SMACNA Standards and this Specification, the most demanding of which shall be the minimum standard.

B. Install ductwork indicated on Drawings making all neccesary changes in cross sections and offsets, whether or not specifically indicated.

C. All changes in cross section shall be made without reducing the design area of the duct.

D. Cap all open ends of ductwork until connected to grilles, diffusers, and equipment to prevent entrance of debris, dust, etc.

E. Make changes in direction of ductwork, unless otherwise specified with square elbows and double thickness turning vanes; full radius elbows having inside radius equal to width of duct measured in plane of turn; or one-third radius elbows with inside radius equal to one-third duct width and a single vane radius of two-thirds duct width.

F. No pipe or other obstructions shall pass through air ducts.

G. Ducts shall not be hung from other ducts, pipe or conduit.

H. Duct dimensions are gross except of lined ducts where dimensions are for net free area.

I. All joints and seams in ducts shall be air-tight; poorly made joints, splits, visible holes at corners, etc. shall be reworked or new pieces of ductwork installed. Where excessive pulsating of ductwork or plenum housing is found, additional stiffeners shall be added. Any cracking, in the coating around seams or joints, or in any other part of the formed duct that is apparent upon inspection, shall be sufficient to warrant rejection.

J. Round duct joints in diameter through 60" shall be assembled and sealed as follows:
1. Approved sealer is applied to the male end of the couplings and fittings. After the joint is slipped together, sheetmetal screws are placed 1/2" from the joint bead for mechanical strength. Sealer is applied to the outside of the joint extending 1" on each side of the joint bead and covering the screw heads. Plastic backed tape is immediately applied over the wet sealer.
2. The duct sealer must be specifically formulated for the job of sealing the field joints for low-medium pressure systems. The sealer shall be compatible with plastic backed duct type so the two shall cure and bond together.

K. Install additional balancing dampers, where required by the Air Balance Contractor, to properly adjust the systems air volumes.

INSULATION

A. SUBMITTALS
1. Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.
2. All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM E84, NFPA 255 and UL 723, not exceeding a flame spread for 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above, No polyethylene insulation is acceptable.
3. Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Refrigerant Liquid & Suction	II	ALL	1/2"	A.P.F.
Exposed Ductwork	III	ALL	1"	A.S.J.
Concealed Ductwork	IV	ALL	2"	F.S.K.

TYPES OF COVERING
A.S.J. All Service Jacket
F.S.K. Foil Scrim Kraft
A.P.F. J.M. Aerotube or Armstrong ArmaFlex AP

TYPES OF INSULATION

TYPE II
A.P.F. Armstrong ArmaFlex AP Pipe Insulation
K = .27, Density = 6.0#/ft3

TYPE III
J.M.S. Johns-Manville Rigid "Spin-Glas" Duct Insulation
Density = 4.25#/ft3 with A.S.J. Facing.
O.V.S. Owens-Corning Rigid Vapor Seal Duct Insulation
Density = 6.0#/ft3 with A.S.J. Facing.
K.F.G. Knauf Insulation Board
Density = 3.0#/ft3 with A.S.J. Facing.

TYPE IV
J.M.M. Johns-Manville "Microlite" Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft3 with F.S.K. Facing.
O.F.F. Owens-Corning Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft with F.S.K. Facing.
K.F.G. Knauf Commercial Duct Wrapped Insulation
Density = 3/4#/ft with A.S.J. Facing.

RADIANT HEATER SCHEDULE

SYM.	MFR.	MODEL NO.	INPUT	VOLTAGE	REMARKS
RH-1	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-2	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-3	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-4	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-5	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-6	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-7	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION

NOTE: INSTALL HEATERS PER MANUFACTURERS INSTRUCTIONS W/ REQUIRED CLEARANCE TO COMBUSTIBLES.

PROPELLER FAN SCHEDULE

SYM.	MFR.	MODEL NO.	CAPACITY RPM	CAPACITY S.P.	MOTOR HP	MOTOR AMPS	MOTOR VOLTAGE	REMARKS
PF-1	BIG ASS FANS	PF8-10	148	0.25"	1.0	15 BRKR	120/1/60	HANG FROM STRUCTURE WITH PROPER ACCESSORIES AND INCLUDE WALL CONTROL. 10'-0"ø

FACTORY EXHAUST FAN SCHEDULE

SYM.	MFR.	MODEL NO.	CAPACITY CFM	CAPACITY S.P.	MOTOR HP	MOTOR FLA	MOTOR VOLTAGE	REMARKS
FEF-1	GREENHECK	SBE-21,48	21730	0.25	3	4.8	460-3-60	WALL MOUNTED EXHAUST FAN W/ WALL HOUSING, WEATHER HOOD, BACKDRAFT DAMPER, BIRDSCREEN, MOTOR STARTER & VARIABLE FREQUENCY DRIVE.
FEF-2	GREENHECK	SBE-21,48	21730	0.25	3	4.8	460-3-60	WALL MOUNTED EXHAUST FAN W/ WALL HOUSING, WEATHER HOOD, BACKDRAFT DAMPER, BIRDSCREEN, MOTOR STARTER & VARIABLE FREQUENCY DRIVE.

NOTE: EXHAUST FANS & LOUVERS SIZED AT 1.5 CFM/SQFT WHICH EXCEEDS REQUIRED VENTILATION CFM.

SUPPLY AIR LOUVER SCHEDULE

SYM.	MFR.	MODEL NO.	CFM	SIZE	REMARKS
SAL-1	RUSKIN	ELC63750X	21730	60x60	WITH RUSKIN MOTOR-OPERATED DAMPER.
SAL-2	RUSKIN	ELC63750X	21730	60x60	WITH RUSKIN MOTOR-OPERATED DAMPER.

VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

AIR HANDLING UNIT TAG NUMBER	OCCUPANCY CATEGORY NUMBER	OCCUPANCY CATEGORY	PEOPLE OUTDOOR AIR RATE	AREA OUTDOOR AIR RATE	ZONE FLOOR AREA	NORMAL OCC.	PEAK OCC.	INTERM. USAGE	CORR. OCC.	CALC. OCC.	DEFAULT OCC.	DESIGN OCC.	PEOPLE OUTDOOR AIR	AREA OUTDOOR AIR	BREATHING ZONE OUTDOOR AIRFLOW	AIR DISTRIBUTION CONFIG. NUMBER	ZONE AIR DISTRIBUTION EFFECTIVENESS	ZONE OUTDOOR AIRFLOW	REQUIRED OUTDOOR AIR INTAKE FLOW
			CFM/PERSON	CFM/SQ.FT.	SQ.FT.	PEOPLE	PEOPLE	FT.	PEOPLE	PEOPLE	PEOPLE	PEOPLE	CFM	CFM	CFM	---	---	CFM	CFM
FEF-1&2	4.3	FACTORY	10.0	0.18	28975	0	0	0	0	0	202.8	203	2030	5216	7246	3	0.8	9057	9057

OUTDOOR DESIGN TEMP. – SUMMER (DEG. F)(ASHRAE 1.0%): 95.0
OUTDOOR DESIGN TEMP. – WINTER (DEG. F)(ASHRAE 99.6%): -4.0
INDOOR DESIGN TEMP. – SUMMER (DEG. F): 75.0
OUTDOOR DESIGN TEMP. – WINTER (DEG. F): 70.0
RESTROOM EXHAUST FANS WILL EXHAUST PROPER CFM PER CODE VALUES

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX RD.
COLUMBUS, OH
43213

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
HVAC SCH'S AND DETAILS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
ISSUE	8-7-23	

PROJECT NO22-128
CAD DWG FILE21-128 Rialto Phase 1
DRAWN BY:PD
CHECKED BY:PD

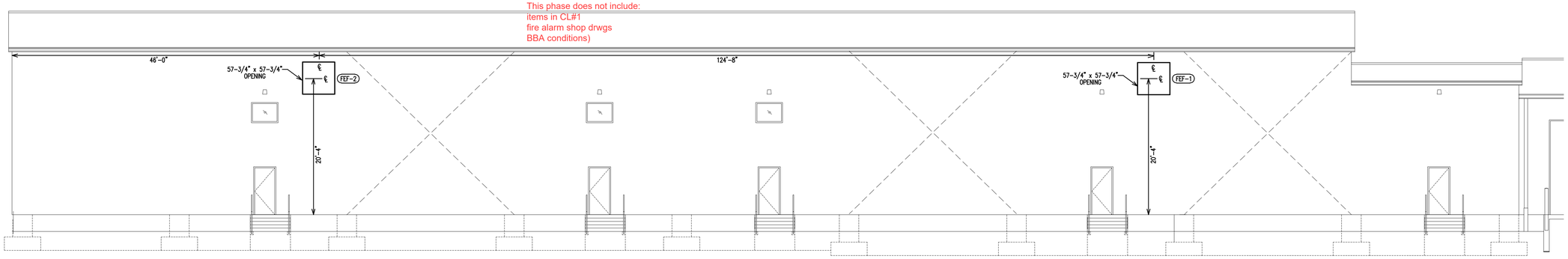
M 1.1

SHEET 17 OF 26

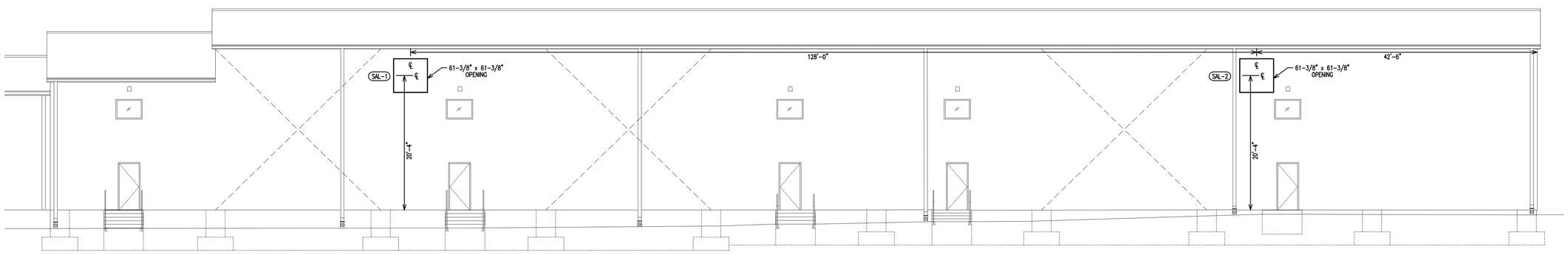
STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



North Elevation – Exhaust Fans
1/8" = 1'-0"



South Elevation – Supply Air Louvers
1/8" = 1'-0"

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN INC
140 FAIRFAX ROAD
CONSULTANTS
MARION, OH
43302

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
HVAC ELEVATIONS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 8-7-23

PROJECT NO22-113
CAD DWG FILE21-113 Rialto
DRAWN BY:PD
CHECKED BY:PD

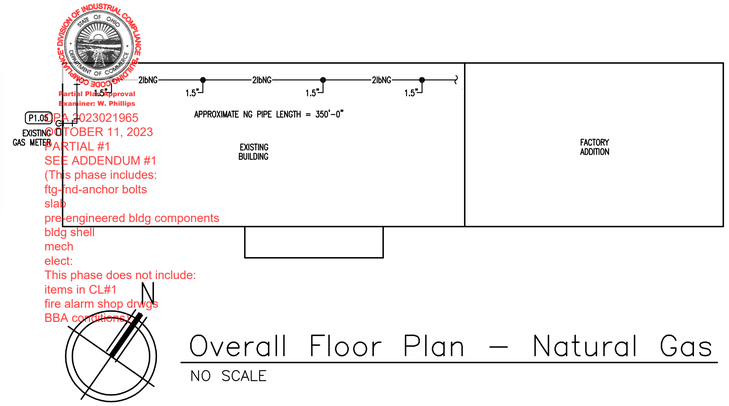
M 1.2

SHEET 16 OF 26

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

NATURAL GAS NOTE:

PLUMBING CONTRACTOR SHALL RECONFIGURE OUTLET SIDE OF GAS METER PIPING TO PROVIDE A 1.5" DEDICATED 2lb PIPE TO BE RUN FOR ALL NEW NG FIRED HVAC EQUIPMENT ASSOCIATED W/ THE NEW ADDITION. IN ADDITION TO THE DEDICATED 2lb PIPE, THE PLUMBING CONTRACTOR SHALL RECONNECT EXISTING LOW PRESSURE PIPE ASSOCIATED W/ THE EXISTING NG CONDITIONS. PLUMBING CONTRACTOR SHALL COORDINATE W/ THE GAS COMPANY TO PROVIDE A NEW GAS METER CAPABLE OF PROVIDING ADEQUATE NG TO FEED THE EXISTING AND NEW CONDITIONS.



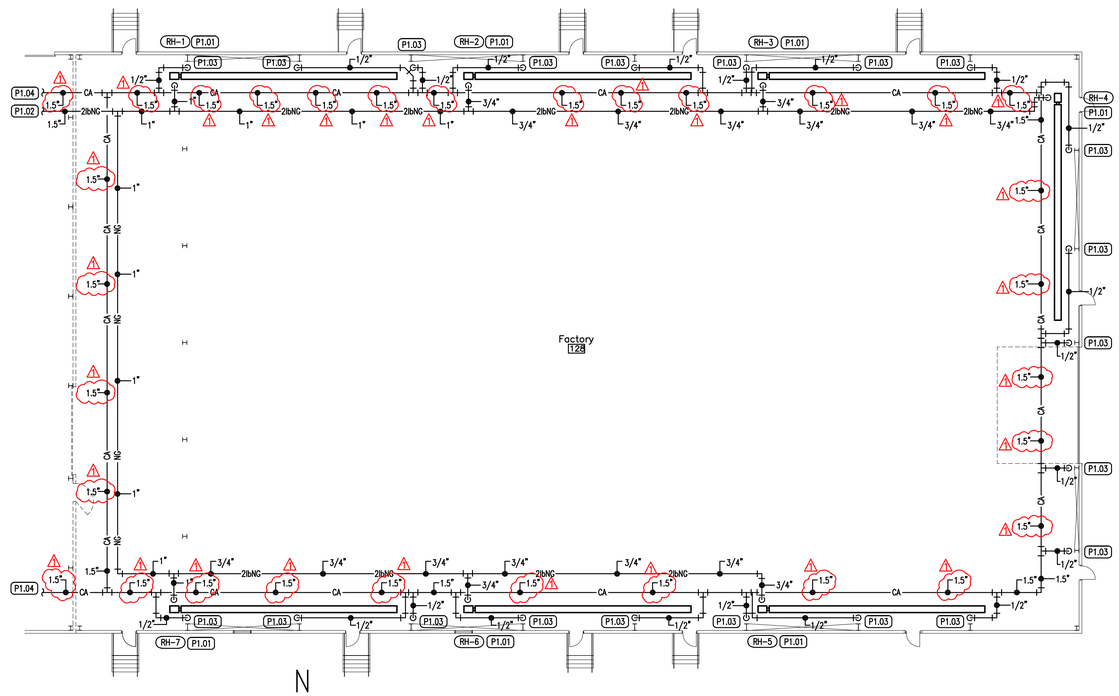
Overall Floor Plan – Natural Gas

NO SCALE

NATURAL GAS CODED NOTES

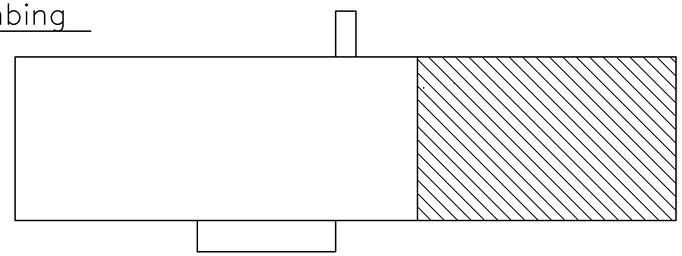
P1.01	3/4" 2lb NATURAL GAS FROM CEILING SPACE DOWN TO RADIANT HEATER W/ GAS COCK, UNION, 6" DRIP LEG & REGULATOR AS REQUIRED.
P1.02	SEE OVERALL FLOOR PLAN – NATURAL GAS FOR CONTINUATION OF 1.5" 2lb NATURAL GAS LINE.
P1.03	1/2" COMPRESSED AIR DROP W/ QUICK CONNECT FITTING AS REQUIRED.
P1.04	MAKE 1.5" COMPRESSED AIR CONNECTION TO EXISTING LINE AS REQUIRED.
P1.05	1.5" 2lb NATURAL GAS DOWN ON WALL AND MAKE CONNECTION AT EXISTING NATURAL GAS METER. SEE NATURAL GAS NOTE FOR MORE INFORMATION.

STATE OF OHIO DIVISION OF INDUSTRIAL COMPLIANCE
APPROVED
Partial Plan Approval
Examiner W. Phillips
PA 20230219 65
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



Partial Floor Plan – Plumbing

1/16" = 1'-0"



Key Plan

NO SCALE

STATE OF OHIO
JONATHAN W. BORON
REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

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MARION, OH 43302

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Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE

PARTIAL PLBG. FLOOR PLAN

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD	2-21-23	CONSTRUCTION DOCUMENTS
1		REVISED CA LOOP
		SIZE PER OWNER

ISSUE: 8-7-23

PROJECT NO22-128
CAD DWG FILE21-128 Rialto Phase 1
DRAWN BY:PD
CHECKED BY:PD

P 1.0

SHEET 18 OF 26

Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
~~pre-engineered bldg components~~
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

PLUMBING SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE

1. For purposes of clearness and legibility, Drawings are essentially diagrammatic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
2. Drawings and Specifications to be considered cooperative, and anything appearing in Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE

1. Codes and Permits – Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS

1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS

1. Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering under workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

E. MATERIALS

1. Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
2. All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necessary for proper operation, and in compliance with effective State or Local Code requirements.
3. Where piping passes through floor, ceiling or wall, close space between pipe and construction with fire stop putty.

PIPE AND PIPE FITTINGS

A. QUALITY ASSURANCE

1. Welding Materials and Procedures: Conform to ASME Code, 1980 Standards of the American Welding Society, OBBC Chapter 4101:8 Ohio Pressure Piping System Rules.
2. All piping systems in compliance with the Ohio Pressure Pressure System Rules must be performed by certified welders. Provide copies of welding certificate and mark all joints with certificate ID.

B. PRODUCTS

1. PIPE AND TUBE
   a. Steel Pipe: ASTM A53; Schedule 40 black.
   b. Ductile Iron Water Pipe: ANSI A21.51.
   c. Copper Water Tube: ASTM B88; type and temper as scheduled; seamless.
   d. PVC Plastic Pipe: ASTM D2665, Schedule 40.
2. PIPE AND TUBE JOINTS AND FITTINGS
   a. Malleable Iron Threaded Fittings: ASME B16.3.
   b. Malleable Iron Threaded Unions: Class 150.
   c. Ductile Iron Fittings: ANSI A21.10.
   d. Wrought Copper/Bronze Solder Joint Fittings: ASME B16.22 (pressure fittings).
   e. Solder: ASTM B32, Grade 95TA.
   f. PVC Pipe Fittings: ASTM D2665 for Schedule 40.
   g. Solvent for PVC Jointing: ASTM D2564.

C. INSTALLATION

1. General: Install pipe, tube and fittings in accordance with recognized industry practices which will achieve permanently–leakproof piping systems, capable of performing each indicated service without piping failure. Install each run with a minimum of joints and couplings, but with adequate and accessible unions for disassembly and maintenance/replacement of valves and equipment. Reduce sizes (where indicated) by use of reduced fittings. Align piping accurately at connections, with 1/16" misalignment tolerance.
2. Locate piping runs, except as otherwise indicated, vertically and horizontally (pitched to drain) and avoid diagonal runs wherever possible. Orient horizontal runs parallel with walls and column lines. Locate runs as shown or described by diagrams, details and notations or if not otherwise indicated, run piping in the shortest route which does not obstruct usable space or block access for servicing the building and its equipment. Hold piping close to walls, overhead construction, columns and other structural members. Wherever possible in finished and and occupied spaces, conceal piping from view.
3. Electrical Equipment Spaces: Do not run piping through transformer vaults and other electrical or electronic equipment spaces and enclosures.
4. Piping System Joints: Provide joints of the type indicated in each piping system.
   a. Thread pipe and fittings shall have cut threads full and clean using sharp dies. Ream threaded ends to remove burns and restore full inside diameter. Apply pipe joint compound, or pipe joint tape (Teflon) where recommended by pipe/fitting manufacturer, on male threads at each joint and tighten joint to leave not more than three threads exposed.
   b. Solder copper tube and fitting joints where indicated, in accordance with recognized industry practice. Cut tube ends squarely, ream to full inside diameter, and clean outside of tube ends and inside of fittings. Apply solder flux to joint areas of both tubes and fittings. Insert tube full depth into fitting, and solder in a manner which will draw solder full depth and circumference of joint. Wipe excess solder from joint before it hardens.
   c. Plastic Pipe/Tube Joints: Comply with manufacturer's instructions and recommendations and with applicable industry standards. Make solvent cemented joints ASTM D2865 and F402.
5. Insulating (Dielectric) Unions: Comply with manufacturer's instructions for installing unions. Install unions in a manner which will prevent galvanic action and stop corrosion where the "joining of ferrous and non–ferrous piping" is indicated.

D. CLEANING, FLUSHING, INSPECTION

1. General: Clean exterior surfaces of installed piping systems of superfluous materials and prepare for application of specified coatings (if any). Flush out piping systems with clean water before proceeding with required tests. Inspect each run of each system for completion of joints, supports and accessory items.

E. PIPING TEST

1. Test pressure piping in accordance with ANSI B31.
2. Repair piping systems sections which fail the required piping test, by disassembly and re–installation, using new materials to the extent required to overcome leakage. Do not use chemicals, stop–leak compounds, mastics or other temporary repair methods.
3. Drain test water from piping systems after testing and repair work has been completed.

F. SCHEDULE OF PIPE MATERIALS, JOINTS AND FITTINGS

1. Pipe and fittings for all services shall be as indicated on the following schedule:

SCHEDULE OF PIPE MATERIALS, JOINTS AND FITTINGS

Service	Above Grade	Below Grade	Pipe	Joints & Fittings
Natural Gas	X		Black Steel Schedule 40	Malleable Iron Class 150
Sanitary and Vent	X	X	PVC ASTM D2665 Schedule 40	ASTM D2665 With Solvent Weld (ASTM D2564) Cement) PVC Fittings
Domestic Water	X		Copper, Hard Type L	Soldered (Grade 95TA)
Domestic Water 3" & Larger		X	Ductile Iron Water Pipe	Push On Joints
Domestic Water 2.5" & Smaller		X	Copper, Soft Type K	Soldered (Grade 95TA)

PIPE HANGERS

A. PRODUCTS

1. PIPE HANGERS
   a. Hangers: Pipe sizes 1/2" to 1 1/2", adjustable wrought steel ring.
   b. Hangers: Pipe sizes 2" to 4", adjustable wrought steel clevis.
   c. Mutiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
2. HANGER RODS
   a. Provide steel hanger rods, threaded both ends, threaded one end, or continuous threaded.

B. INSTALLATION

1. Use side beam brackets for suspending hangers from wood trusses.

C. SPACING REQUIREMENTS

1. Support horizontal steel and copper piping as follows:

Nominal Pipe Size (inch)	Distance Between Support (feet)	Hanger Rod Diameter (inch)
1/2	6	3/8
3/4 to 1 1/2	6	3/8
2 and 2 1/2	10	3/8
3 and 4	12	5/8

2. Install hangers to provide minimum 1/2" clear space between finished covering and adjacent work.
3. Install a hanger within one foot of each horizontal elbow.
4. Use hangers which are vertically adjustable 1 1/2" minimum after piping is erected.
5. Where several pipes can be installed in parallel and at same elevation, provide multiple or trapeze hangers.

PLUMBING

A. SUBMITTALS

1. Furnish Shop Drawings for all water heaters, plumbing fixtures, floor drains, and cleanouts.
2. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.

B. DOMESTIC WATER HEATER

1. Provide water heaters shown on Drawings:
   a. Factory insulated and steel jacketed storage tank with baked on finish.
   b. Temperature/Pressure relief valve, ASME rated.
   c. Glass lined storage tank with anode rod.
   d. 150 psi working pressure.
   e. 100% automatic shutoff upon pilot failure.
   f. Copper immersion heating elements, factory wired with fused contactors.
   g. Adjustable immersion stat and high temperature cutout.
   h. U.L. approved.
2. Water Heater to be Bradford White as described on Drawings. A.O. Smith, Lochinvar, or Rheem hot water heaters of equal size are acceptable.
3. Warranty:
   a. Water heater shall be covered by a 5–year limited warranty against tank failure due to corrosion or due to metal failure or overheating caused by buildup of sand, sediment, or sludge.

C. SANITARY DRAINAGE SYSTEMS

1. Run all drainage and vent piping as direct as possible. Actual location of drains, soil and waste piping shall meet the various building conditions. Do any work necessary to conceal piping.
2. Slope branch soil and waste pipes at an incline of at least 1/4" per foot of run. Make changes in direction of drainage piping by means of "Y" branches and 1/4, 1/8, or 1/16 bends except that sanitary "T's" and crosses may be used in vertical stacks.
3. Provide cleanouts at base of all stacks, at changes of direction and as shown on Drawings. Cleanouts on undergroundlines shall extend up flush with finished floor or grade. Provide cleanouts not over 50 ft. o.c. along straight runs. Cleanouts shall be size of pipe to which it is installed up to 4" in diameter. Pipe over 4" in diameter shall have a 4" cleanout.
4. Terminate vent pipes at least 12" above roof. Make each vent terminal water–tight with the roof by using sheet lead (4 psf) with base not less than 24" in all directions from center of pipe and full height of pipe and turned down 2" inside of pipe.
5. Lay all sanitary sewers with full length of each section resting on a solid bed. Lay pipe starting at upgrade with spigot end of pipe pointing in direction of flow. All sanitary sewers shall be collected separately as shown on Drawings

D. DOMESTIC WATER SUPPLY SYSTEMS

1. Install water system as shown on Drawings with hot and cold water being supplied and connected to all fixtures and equipment.
2. Provide unions at all equipment valves, strainer, etc., to facilitate removal for repair or replacement without disturbing adjacent piping.
3. Provide temporary water service to area of construction for use of all trades. Plumbing Contractor shall be responsible for maintaining uninterrupted temporary water service throughout construction.
4. Chlorinate all domestic water systems. Flush out domestic system then hold a solution mixture of 50 ppm of chlorine in the system for a period of 24 hours. Drain and flush system until chlorine residual of .5 ppm. Chlorination shall be repeated if necessary and conform to AWWA Specifications C601–54 and be accepted by Local Health Dept.

E. NATURAL GAS PIPING SYSTEM

1. Connect to all building equipment requiring natural gas. Install drip leg and shut–off cock at each connection.

F. PLUMBING FIXTURES AND EQUIPMENT

1. Provide plumbing fixtures shown on Drawings and listed in Fixture Schedule. Fixtures as manufactured by Mansfield, Kohler, or Eljer are approved equal.
2. All countertop sinks to be individually valved under sinks using Wolverine Ball Valves.
3. Faucets and Flush Valves to have renewable seats and discs and chrome plated trim. Delany and Watrous flush valves and Delta Faucets are acceptable on Base Bid.
4 All fixtures to be supported as indicated on Fixture Schedule.
5. After installation, all connecting piping to be flushed and valves properly adjusted. Labels, plaster, stains and other foreign material to be removed from all fixtures so they are acceptable in and operation. Caulk all Fixtures at wall and floors.
6. Fixtures set to height as shown in schedule and in location shown on Drawings, plumb, level and substantially supported. Immediately after the setting of any fixture, fitting or piping, protect it adequately without extra cost to the Owner. At all stages of the installation, pipe openings must be protected against the entrance of foreign material.
7. Exposed piping to plumbing fixtures shall be chromium plated, iron pipe size, brass pipe and chromium plated stop valves where exposed and brass where concealed.
8. All fixtures shall be furnished and installed according to schedules on the Drawings. However, the Plumbing Contractor shall ascertain the correct amount of fixtures required by the plans as he will be held strictly responsible for furnishing and installing all items shown.
9. Contractor shall inform himself fully regarding peculiarities and limitations of space available for installation of all material and equipment to be installed under this Contract, and see that all equipment to be reached periodically for operation and maintenance is made easily accessible.

G. TESTS

1. Sanitary, Waste, and Vent Piping: All sanitary, storm, and water piping shall be tested per State Plumbing Code and/or requirements of Local Authority.

INSULATION

A. SUBMITTALS

1. Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.
2. All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM–E–84, NFPA 255 and UL 723, not exceeding a flame spread of 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above. No polyethylene insulation acceptable.
3. Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Domestic Hot Water	I II	2" and under	1" 1 1/2"	VB A.S.J. VB A.S.J.
Domestic Cold Water	I II	ALL	1"	VB A.S.J.

TYPES OF COVERING

ASJ – All Service Jacket
VB – Vapor Barrier

TYPES OF INSULATION

TYPE I

OFG – Owens–Corning One Piece Fiberglass Pipe Insulation, K = .23, Density = 4.0#/ft³.

JFG – Johns–Manville "Micro–Lok" Fiberglass Pipe Insulation, K = .23, Density = 4.0#/ft³.

KFG – Knauf Fiberglass Pipe Insulation, K = .23, Heavy Density.

TYPE II

APF – Armstrong Armaflex AP Pipe Insulation, K = .27 (1/2" on Domestic Hot and Cold Water Piping).

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC
CONSULTANTS
140 FAIRFAX RD.
MARION, OHIO 43302

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

SHEET TITLE

PLBG. SPEC's

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DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 8-7-23

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CHECKED BY: PO

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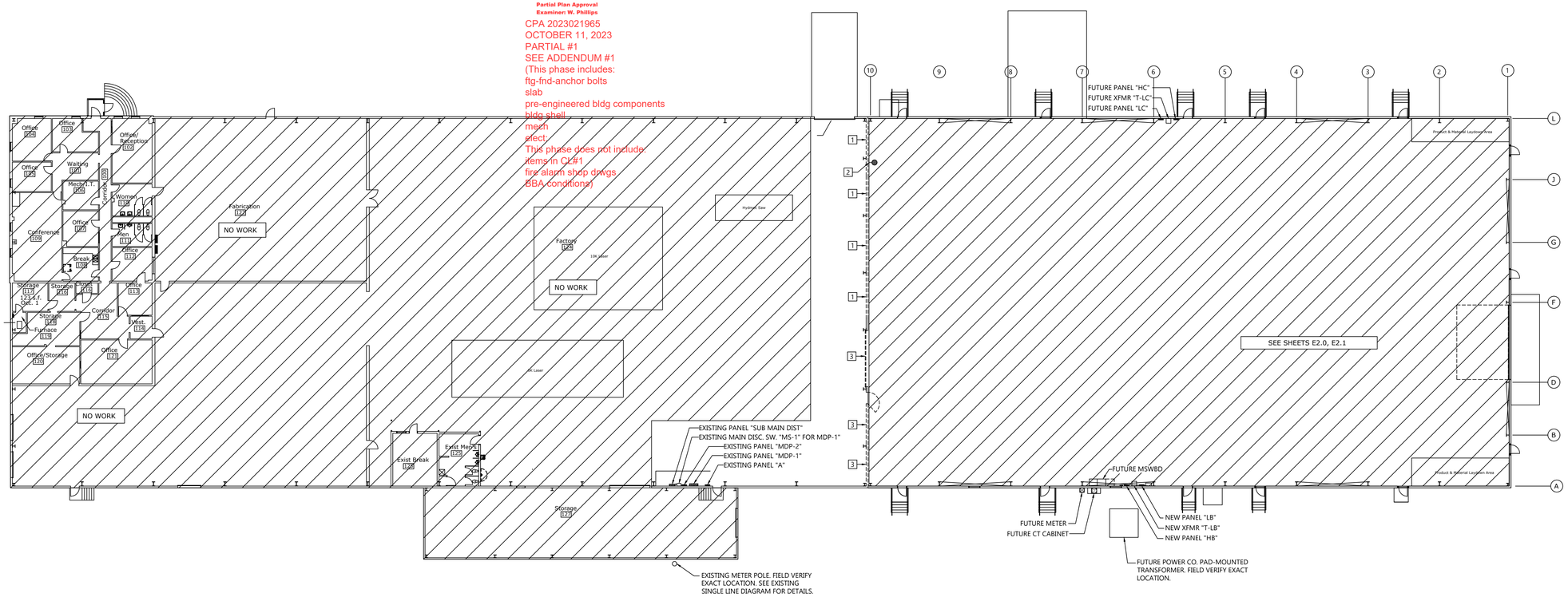
SHEET 19 OF 26



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Overall Floor Plan

1" = 20'-0"

	DEMOLITION NOTES	
1	EXISTING WALL TO BE REMOVED BY OTHERS. EC TO REMOVE ALL AFFECTED ELECTRICAL ITEMS AND ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE. EC TO RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO ABOVE DEMOLITION.	
2	DISCONNECT AND REMOVE EXISTING WALL PACK. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE. EC TO RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO ABOVE DEMOLITION.	
3	EXISTING OVERHEAD DOOR TO BE REMOVED BY OTHERS. EC TO REMOVE ALL AFFECTED ELECTRICAL ITEMS AND ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE. EC TO RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO ABOVE DEMOLITION.	

DEMOLITION GENERAL NOTES

A. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL EXISTING ELECTRICAL ITEMS AS REQUIRED PRIOR TO CONSTRUCTION.

B. ELECTRICAL CONTRACTOR TO COORDINATE ALL PHASING WITH GC PRIOR TO DEMOLITION. MAINTAIN ALL EXISTING ELECTRICAL, TELEPHONE, TELEVISION, FIRE ALARM, ETC. UNTIL THE NEW SERVICE SERVICE IS COMPLETELY INSTALLED OR RELOCATED.

C. RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO DEMOLITION WORK.

D. REMOVE ALL NON-ACTIVE EXPOSED CABLES.

E. PROVIDE BLANK COVERPLATES OVER ALL UNUSED BOXES.

F. PATCH ALL OPENINGS LEFT BY REMOVAL OF ELECTRICAL ITEMS TO MATCH EXISTING CONDITIONS AS DIRECTED BY ARCHITECT UNLESS OTHERWISE NOTED.

G. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. BRING ANY DISCREPANCIES TO ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION.

H. SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN. IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN.

Partial Plan Approval
Examinen W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

STATE OF OHIO
TIMOTHY J. BERON
REGISTERED PROFESSIONAL ENGINEER

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Overall
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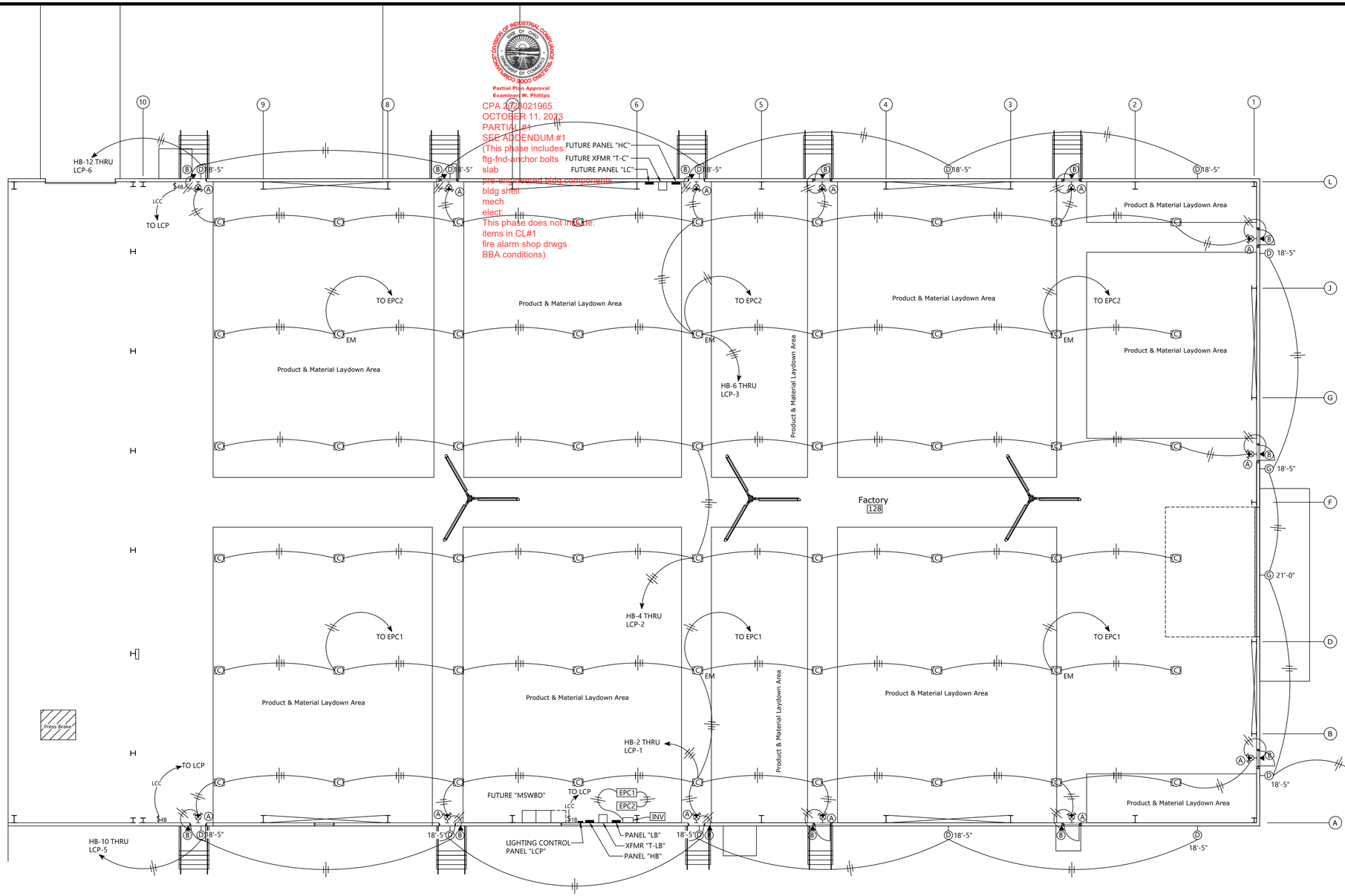

CPA 21-8021965
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This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

Partial Plan Approval
Examiner W. Phillips

GENERAL NOTES

1. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
3. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL VERIFY THIS INFORMATION AT THE BUILDING SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
7. ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
8. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
18. EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
20. ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
21. ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
22. ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
23. ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.
24. SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN, IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN.
25. SEE SHEET E3.0 FOR LOCATION OF LIGHTING CONTROL PANEL "LCP" & INVERTER.

N

Lighting - Partial Floor Plan

3/32" = 1'-0"

STATE OF OHIO
TIMOTHY J. OSMUN
REGISTERED PROFESSIONAL ENGINEER

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140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
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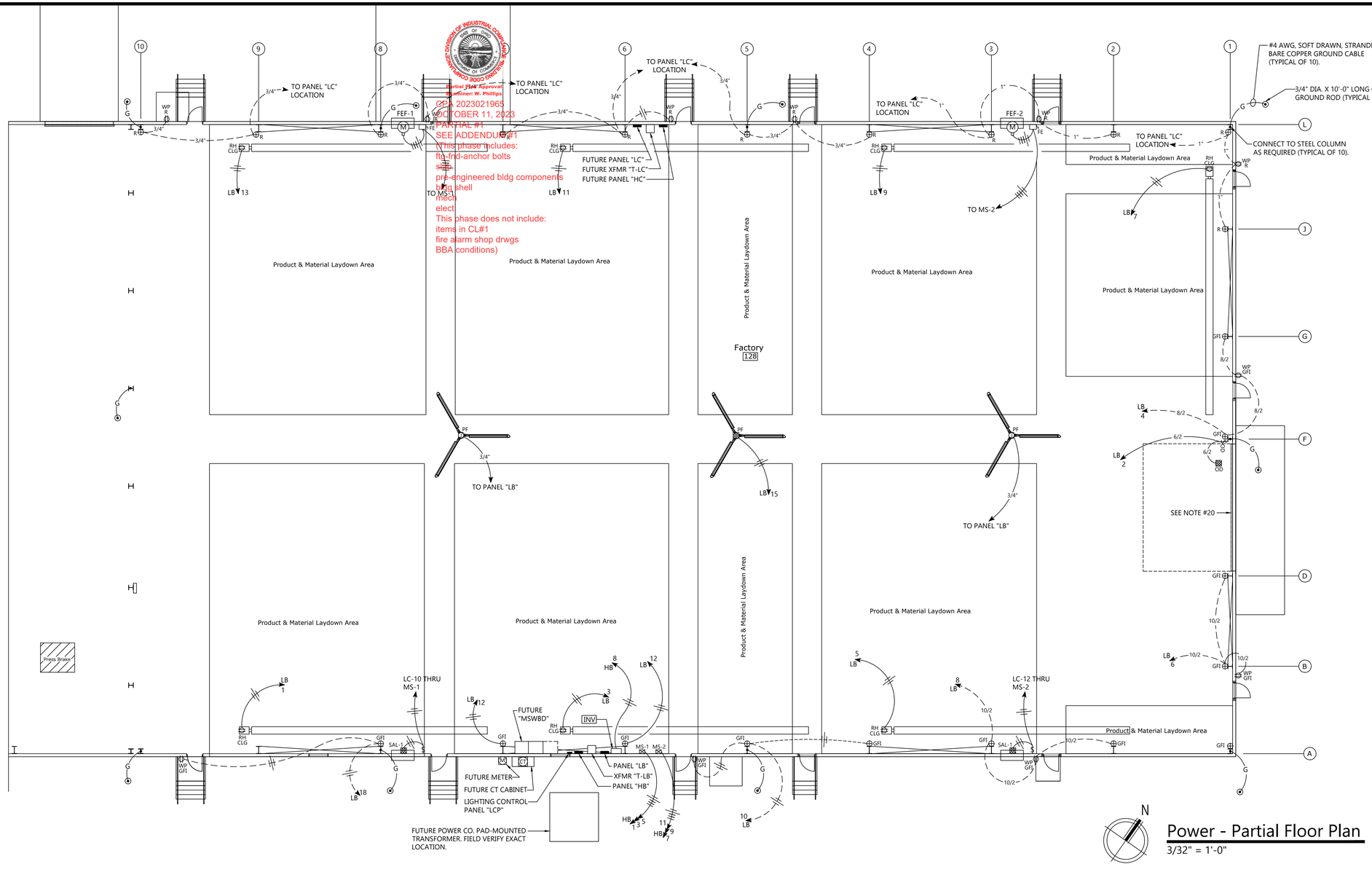

Power - Partial Floor Plan

3/32" = 1'-0"

GENERAL NOTES

1. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
3. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL VERIFY THIS INFORMATION AT THE BUILDING SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
7. ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
8. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
18. EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
20. EC TO PROVIDE 1/2EMT CONDUIT FOR ALL OVERHEAD DOOR'S LOW VOLTAGE DEVICES AS DIRECTED BY OVERHEAD DOOR SUPPLIER. EC TO PROVIDE 1/2EMT EACH OVERHEAD DOOR LOW VOLTAGE DEVICE TO 10'-0"AFF AS DIRECTED BY OVERHEAD DOOR SUPPLIER. TERMINATE EACH END WITH PLASTIC BUSHINGS.
21. ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
22. ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
23. ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
24. ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.
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STATE OF OHIO
Timothy Edron Bolz
REGISTERED PROFESSIONAL ENGINEER

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CONSULTANTS

Addition to
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1632 Cascade Drive
Marion, OH 43302

SHEET TITLE
Power
Partial Floor Plan

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SHEET 22 OF 26

Partial Plan Approval
Examinen W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

LEGEND

SYMBOL	DESCRIPTION
HX	COMBINATION EXIT SIGN/EMERGENCY LIGHT
$	SINGLE POLE SWITCH WITH STAINLESS STEEL COVERPLATE. MOUNT AT 48"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
$3	3-WAY, 4-WAY SINGLE POLE SWITCH WITH STAINLESS STEEL COVERPLATE. MOUNT AT 48"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
$4B	NEXTLIGHT OPTIMA #CRC3014 OR EQUIVALENT 4-BUTTON LOW VOLTAGE WALL SWITCH WITH STAINLESS STEEL COVERPLATE. MOUNT T 48"AFF TO CENTERLINE UNLESS NOTED OTHERWISE. VERIFY COLOR WITH OWNER PRIOR TO ORDERING. PROGRAM AND LABEL SWITCH AS DIRECTED BY OWNER AND SWITCH SUPPLIER.
$1B	NEXTLIGHT OPTIMA #CRC3011 OR EQUIVALENT 1-BUTTON LOW VOLTAGE WALL SWITCH WITH STAINLESS STEEL COVERPLATE FOR MANUAL OVERRIDE. MOUNT T 48"AFF TO CENTERLINE UNLESS NOTED OTHERWISE. VERIFY COLOR WITH OWNER PRIOR TO ORDERING. PROGRAM AND LABEL SWITCH AS DIRECTED BY OWNER & LUMINAIRE SUPPLIER
$OD	30A, 125V SINGLE POLE SWITCH WITH STAINLESS STEEL COVERPLATE FOR OVERHEAD DOOR. MOUNT NEXT TO OVERHEAD DOOR MOTOR AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
EPC1,2	LVS INC. #EPC-A-1 OR EQUIVALENT EMERGENCY POWER CONTROL DEVICE SURFACE MOUNT EMERGENCY POWER CONTROL DEVICE AS DIRECTED BY EMERGENCY POWER CONTROL DEVICE SUPPLIER. PROVIDE ALL CONNECTIONS AS DIRECTED BY EMERGENCY POWER CONTROL DEVICE SUPPLIER AND AS REQUIRED FOR A COMPLETE WORKING SYSTEM. SEE EMERGENCY POWER CONTROL DEVICE WIRING DIAGRAM FOR ADDITIONAL INFORMATION.
INV	LVS INC. #CEPS-A-1000-277-3 OR EQUIVALENT 1000 WATT, 277V INVERTER WITH THREE (3) 20A/1P CIRCUIT BREAKERS. SURFACE MOUNT INVERTER AS DIRECTED BY INVERTER SUPPLIER. PROVIDE ALL CONNECTIONS AS DIRECTED BY INVERTER SUPPLIER AND AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
	20A, 125V, DUPLEX RECEPTACLE WITH STAINLESS STEEL COVERPLATE. MOUNT AT 18"AFF TO CENTERLINE UNLESS OTHERWISE NOTED. **GFI** - GROUND FAULT INTERRUPTING **WP** - WEATHERPROOF COVER **RH/CLG** - CEILING MOUNT NEXT TO RADIANT HEATER (1.7FLA, 120V, 1PH) AS DIRECTED BY MC. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN. **WP/R** - ROUGH-IN BOX FOR A "GFI" TYPE DUPLEX RECEPTACLE. PROVIDE A BLANK WEATHERPROOF COVER
GFI	TWO (2) 20A, 125V, DUPLEX RECEPTACLES MOUNTED IN THE SAME BOX WITH COMMON STAINLESS STEEL COVERPLATE. MOUNT AT 24"AFF TO CENTERLINE UNLESS OTHERWISE NOTED. (GFI - INDICATES BOTH DUPLEX RECEPTACLES TO BE "GFI" TYPE RECEPTACLES.)
R	ROUGH-IN BOX FOR A DOUBLE DUPLEX RECEPTACLE. PROVIDE A BLANK STAINLESS STEEL COVERPLATE. MOUNT AT 24"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
FEF-1,2	FACTORY EXHAUST FAN EF-1,2 (3HP, 480V, 3PH). CONNECT AS DIRECTED BY MC.
	POINT OF CONNECTION TO ELECTRICAL EQUIPMENT. VERIFY EXACT LOCATION WITH RESPECTIVE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
PF	POINT OF CONNECTION TO PROPELLER FAN (750W, 120V, 1PH). CONNECT AS DIRECTED BY FAN SUPPLIER.
OD	POINT OF CONNECTION TO OVERHEAD DOOR POWER (1HP, 120V, 1PH). CONNECT THRU DOOR CONTROLLER AND CONNECT TO MOTOR AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
SAL-1,2	POINT OF CONNECTION TO SUPPLY AIR LOUVER SAL-1,2 (1FLA, 120V, 1PH). CONNECT AS DIRECTED BY MC. INTERLOCK WITH RESPECTIVE EXHAUST FAN MOTOR STARTER AS DIRECTED BY MC.
	DISCONNECT SWITCH. FRAME SIZE/# OF POLES/# OF FUSES/VOLTAGE RATING/ ENCLOSURE TYPE.
FE	30A/3P/NF/250V/NEMA 1 DISCONNECT SWITCH FOR FACTORY EXHAUST FAN. INSTALL AT LOCATION AS DIRECTED BY MC.
MS-1,2	MOTOR STARTER MS-1,2 FURNISHED BY MC AND INSTALLED AND WIRED BY EC AS DIRECTED BY MC.
J	JUNCTION BOX
PF	ROUGH IN JUNCTION BOX FOR FUTURE PROPELLER FAN. CEILING MOUNT AT LOCATION AS DIRECTED BY MC. FIELD VERIFY LOCATION WITH MC PRIOR TO ROUGH-IN.
	POWER PANEL
	CONDUIT CONCEALED
	INSTALL CONDUIT AT 30" BELOW CONCRETE SLAB TO TOP OF CONDUIT.
A3	CONDUIT HOME RUN WITH CIRCUIT NUMBER
	HOT, NEUTRAL, GROUND
LCC	NEXLIGHT 2-WIRE DATA BUS - BELDEN 6200UE or equal, 1/2°C FOR LIGHTING CONTROL
10/2	2-#10CU, 1-#10CU GND, 3/4"C.
8/2	2-#8CU, 1-#10CU GND, 1"C
6/2	2-#6CU, 1-#6CU GND, 1"C
3/4"	3/4" CONDUIT WITH PULL WIRE
1"	1" CONDUIT WITH PULL WIRE
BFG	BELOW FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFC	BELOW FINISHED CEILING
EC	ELECTRICAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
GC	GENERAL CONTRACTOR

LUMINAIRE SCHEDULE

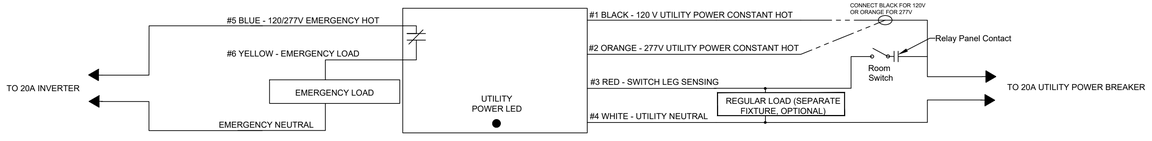
TYPE	MFG	CAT NO.	VOLT	AMPS	MTG
A	CHLORIDE OR EQUIVALENT - COMBINATION LED EXIT SIGN/ EMERGENCY LIGHT WITH REMOTE CAPABILITY & 90 MINUTE BATTERY BACK-UP	VLTCR3R	120/277	INTEGRAL	UNIVERSAL
B	CHLORIDE OR EQUIVALENT - LED REMOTE EMERGENCY LIGHT WITH TWIN HEADS	VLL2RGO	120/277	INTEGRAL	WALL SURFACE ABOVE DOOR
C	DAYBRITE - 24,000 LUMEN LED INDUSTRIAL HIGH BAY LUMINAIRE	FBZ-24L-840-UNV-LFA-WC6/5 [HARD WIRED]	UNV	(1) 151.0W LED, 4000K	CEILING SUSPEND AT 20'-0" TO BOTTOM OF LUMINAIRE AS DIRECTED BY LUMINAIRE SUPPLIER.
C/EM	DAYBRITE - 24,000 LUMEN LED INDUSTRIAL HIGH BAY LUMINAIRE CONNECTED TO INVERTER THROUGH EMERGENCY POWER CONTROL DEVICE TO ACT AS AN EMERGENCY LIGHT.	FBZ-24L-840-UNV-LFA-WC6/5 [HARD WIRED]	UNV	(1) 151.0W LED, 4000K	CEILING SUSPEND AT 20'-0" TO BOTTOM OF LUMINAIRE AS DIRECTED BY LUMINAIRE SUPPLIER.
D	STONCO - WALL PACK	LPW32-90-NW-G3-3-UNV-XX-BAC	UNV	(1) 90.0W LED/4000K	WALL SURFACE AT HEIGHT TO CENTER OF LUMINAIRE AS SHOWN ON DRAWINGS.

NOTES:
1. SUBSCRIPT "NL" INDICATES LUMINAIRE TO BE CONNECTED AHEAD OF SWITCH TO ACT AS A "NIGHT LIGHT".
2. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
3. VERIFY LED LAMP COLORS OF ALL LUMINAIRE WITH OWNER & ARCHITECT PRIOR TO ORDERING.
4. EQUIVALENT LUMINAIRES AS MANUFACTURED BY LITHONIA & COOPER. EQUIVALENT MANUFACTURER SHALL PROVIDE LIGHTING CALCULATION FOR EACH SPACE.

LIGHTING CONTROL PANEL "LCP" SCHEDULE

RELAY NUMBER	LOCATION OF RELAY CIRCUIT	PANEL "HB" CKT. NO.
1	FACTORY 128 TYPE "C" & "C1" LUMINAIRES	2
2	FACTORY 128 TYPE "C" & "C1" LUMINAIRES	4
3	FACTORY 128 TYPE "C" LUMINAIRES	6
4	SOUTH BUILDING TYPE "D" LUMINAIRES	10
5	NORTH BUILDING TYPE "D" LUMINAIRES	12
6	EAST BUILDING TYPE "D" LUMINAIRES	14
7	SPARE	-
8-16	SPARE	-

NOTES:
1. EC TO PROVIDE AN EXTRA HOT WIRE FOR RELAY NUMBERS 1,2,3, BYPASSING LIGHTING CONTROL PANEL, TO FEED THE COMBINATION EXIT SIGNS/EMERGENCY LIGHTS AND EMERGENCY LIGHTS CONNECTED TO THE INVERTER AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
2. LIGHTING CONTROL PANEL "LCP" TO BE A NEXLIGHT #NXL-R16s 16-RELAY PANEL WITH TIME CLOCK, NO DIMMING, AND NEMA 1 SURFACE MOUNTED CABINET.
3. EC TO PROGRAM LIGHTING CONTROL PANEL AS DIRECTED BY OWNER AND LIGHTING CONTROL SYSTEM SUPPLIER. PROVIDE A COMPLETE WORKING SYSTEM.
4. EC TO PROVIDE FOUR (4) HOURS OF TRAINING TO THE OWNER.
5. COORDINATE ALL WORK WITH BOB HENNINGE OF BRIGHT FOCUS SALES AT (216) 233-8809 OR (216) 751-8384 EXT. 209



EMERGENCY POWER CONTROL DEVICE WIRING DIAGRAM

N.T.S.

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Legend Schedules

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
ISSUE	8-7-23	

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

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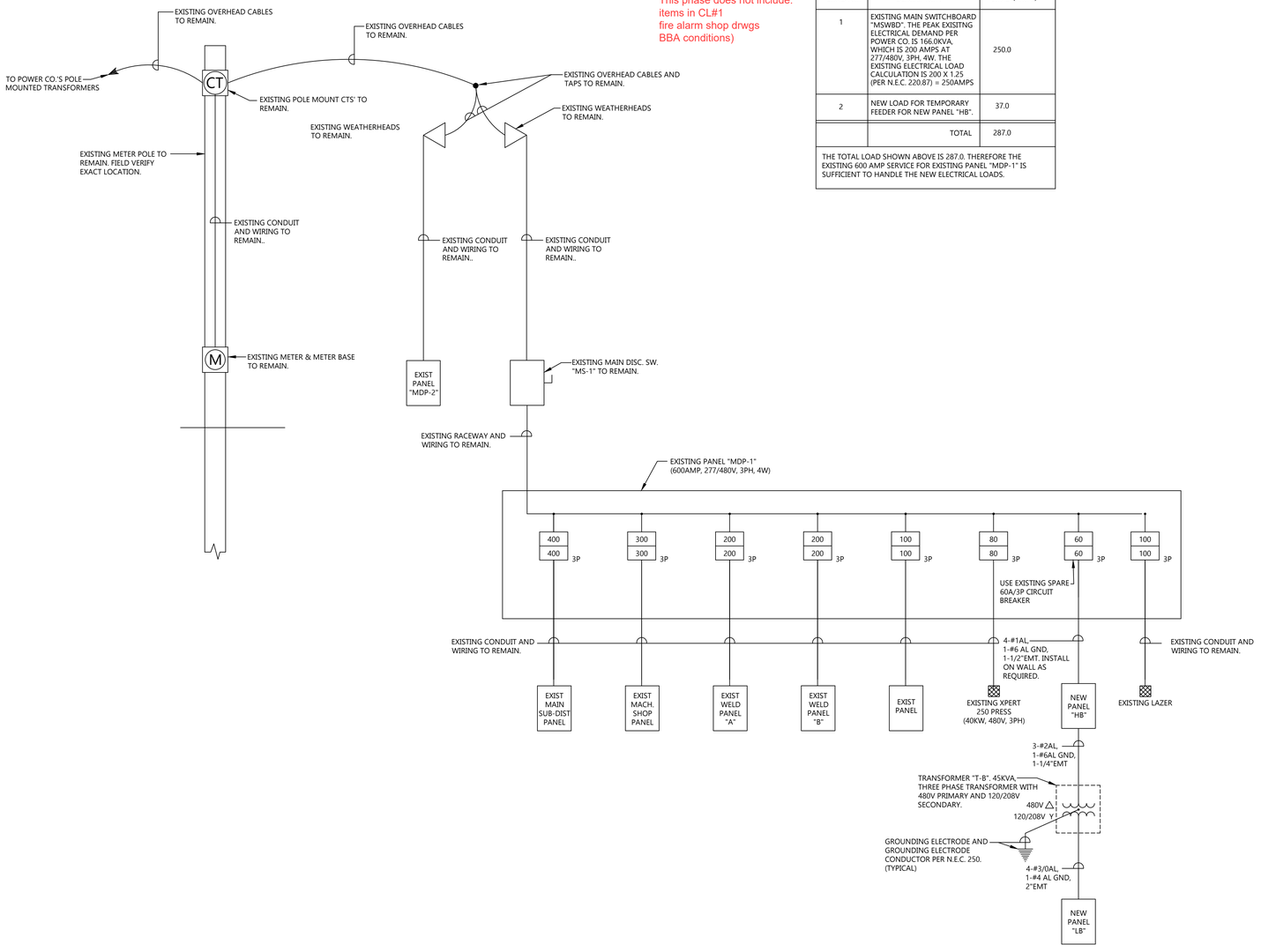

EXISTING SINGLE LINE DIAGRAM

N T S

ELECTRICAL LOAD SCHEDULE FOR TEMPORARY ELECTRICAL FEEDER FOR EXISTING PANEL "MDP-1" (600A, 277/480V, 3PH, 4W)

LOAD NO.	DESCRIPTION	LOAD (AMPS)
1	EXISTING MAIN SWITCHBOARD "MSWBD". THE PEAK EXISITNG ELECTRICAL DEMAND PER POWER CO. IS 166.0KVA, WHICH IS 200 AMPS AT 277/480V, 3PH, 4W. THE EXISTING ELECTRICAL LOAD CALCULATION IS 200 X 1.25 (PER N.E.C. 220.87) = 250AMPS	250.0
2	NEW LOAD FOR TEMPORARY FEEDER FOR NEW PANEL "HB".	37.0
	TOTAL	287.0

THE TOTAL LOAD SHOWN ABOVE IS 287.0. THEREFORE THE EXISTING 600 AMP SERVICE FOR EXISTING PANEL "MDP-1" IS SUFFICIENT TO HANDLE THE NEW ELECTRICAL LOADS.

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "HB" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN LUGS ONLY

SERVICE: 400 AMPS 277/480 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

LOAD		WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
1328	KEF-1, 128	12	20/3	1		2	20/1	12	LTG., 128	2564
1328	KEF-1, 128	12	20/3	3		4	20/1	12	LTG., 128	2564
1328	KEF-1, 128	12	20/3	5		6	20/1	12	LTG., 128	2564
1328	KEF-2, 128	12	20/3	7		8	20/1	12	INVERTER	1000
1328	KEF-2, 128	12	20/3	9		10	20/1	12	LTG., SOUTH BLDG.	690
1328	KEF-2, 128	12	20/3	11		12	20/1	12	LTG., NORTH BLDG.	690
3432	XFMR "T-B"	4	80/3	13		14	20/1	12	LGT., EAST BLDG.	552
2958	XFMR "T-B"	4	80/3	15		16	65/3	-	SPARE	-
2568	XFMR "T-B"	4	80/3	17		18	65/3	-	SPARE	-
-	SPARE	-	80/3	19		20	65/3	-	SPARE	-
-	SPARE	-	80/3	21		22	65/3	-	SPARE	-
-	SPARE	-	80/3	23		24	65/3	-	SPARE	-
-	SPARE	-	50/3	25		26	65/3	-	SPARE	-
-	SPARE	-	50/3	27		28	20/1	-	SPARE	-
-	SPARE	-	50/3	29		30	20/1	-	SPARE	-
-	SPARE	-	20/1	31		32	20/1	-	SPARE	-
-	SPARE	-	20/1	33		34	20/1	-	SPARE	-
-	SPARE	-	20/1	35		36	20/1	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = 10,204W B = 8,868W C = 8,478W

TOTAL LOAD: 3 X PHA = 30,612W

= 37 AMPS @ 277/480 VOLTS, 3PH, 4W

NOTES:
1.

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "LB" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN CIRCUIT BREAKER

SERVICE: 150 AMPS 120/208 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

LOAD		WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
204	RH, 128	12	20/1	1		2	30/1	6	OD, 128	1920
204	RH, 128	12	15/1	3		4	20/1	8	REC., 128	900
204	RH, 128	12	15/1	5		6	20/1	10	REC., 128	900
204	RH, 128	12	20/1	7		8	20/1	10	REC., 128	900
204	RH, 128	12	20/1	9		10	20/1	12	REC., 128	900
204	RH, 128	12	20/1	11		12	20/1	12	REC., 128	720
204	RH, 128	12	20/1	13		14	20/1	-	SPARE	-
750	PF, 128	12	15/1	15		16	20/1	-	SPARE	-
-	SPARE	-	15/1	17		18	20/1	12	REC., 128	540
-	SPARE	-	15/1	19		20	20/1	-	SPARE	-
-	SPARE	-	20/1	21		22	20/1	-	SPARE	-
-	SPARE	-	20/1	23		24	20/1	-	SPARE	-
-	SPARE	-	20/1	25		26	20/1	-	SPARE	-
-	SPARE	-	20/1	27		28	20/1	-	SPARE	-
-	SPARE	-	20/1	29		30	30/1	-	SPARE	-
-	SPARE	-	20/1	31		32	20/1	-	SPARE	-
-	SPARE	-	20/1	33		34	20/1	-	SPARE	-
-	SPARE	-	20/1	35		36	20/1	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = 3,432W B = 2,958W C = 2,568W

TOTAL LOAD: 3 X PHA = 10,296W

= 29 AMPS @ 120/208 VOLTS, 3PH, 4W

NOTES:
1.

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Addition to
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1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

Panelboard Sched.
Existing Single
Line Diagram

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
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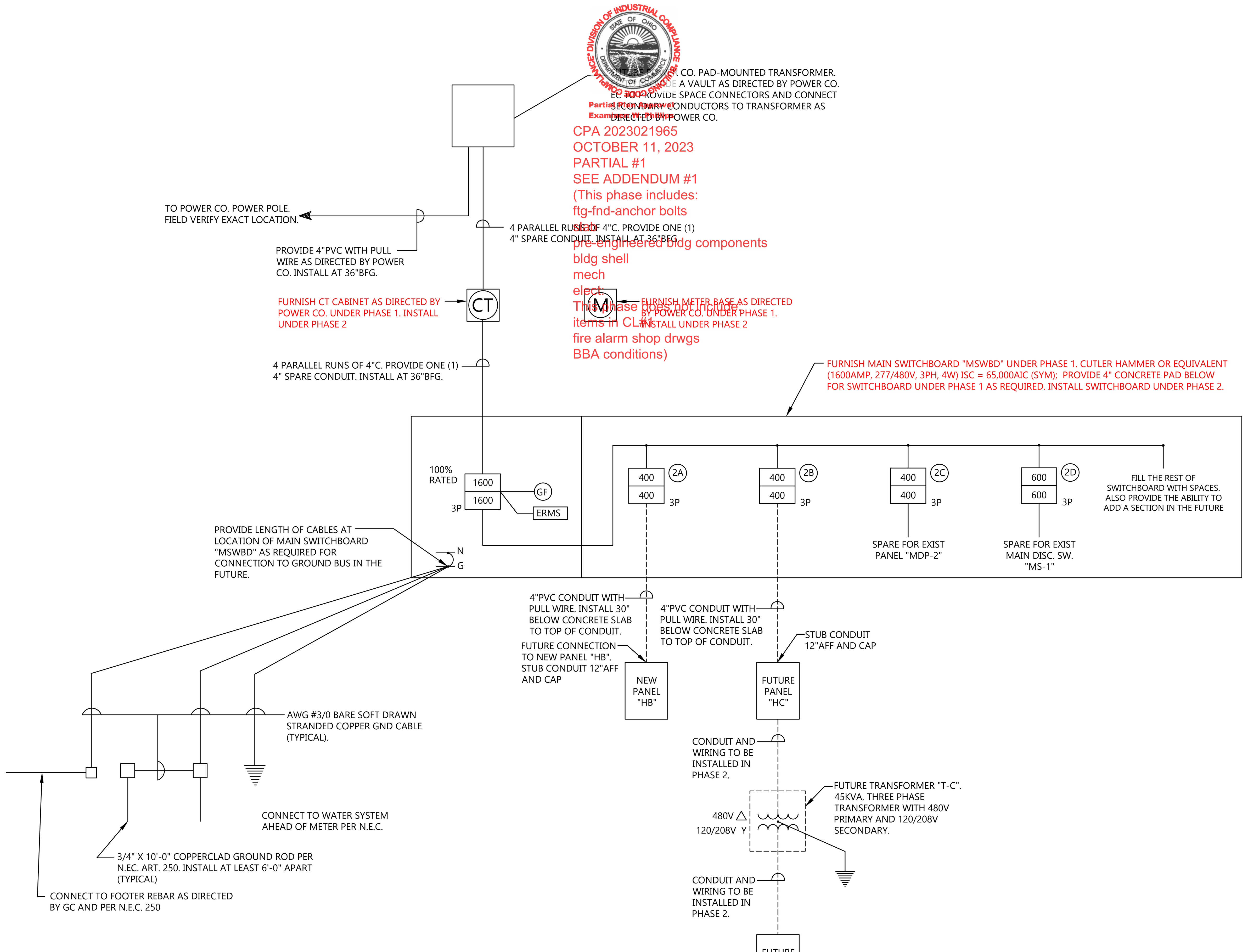
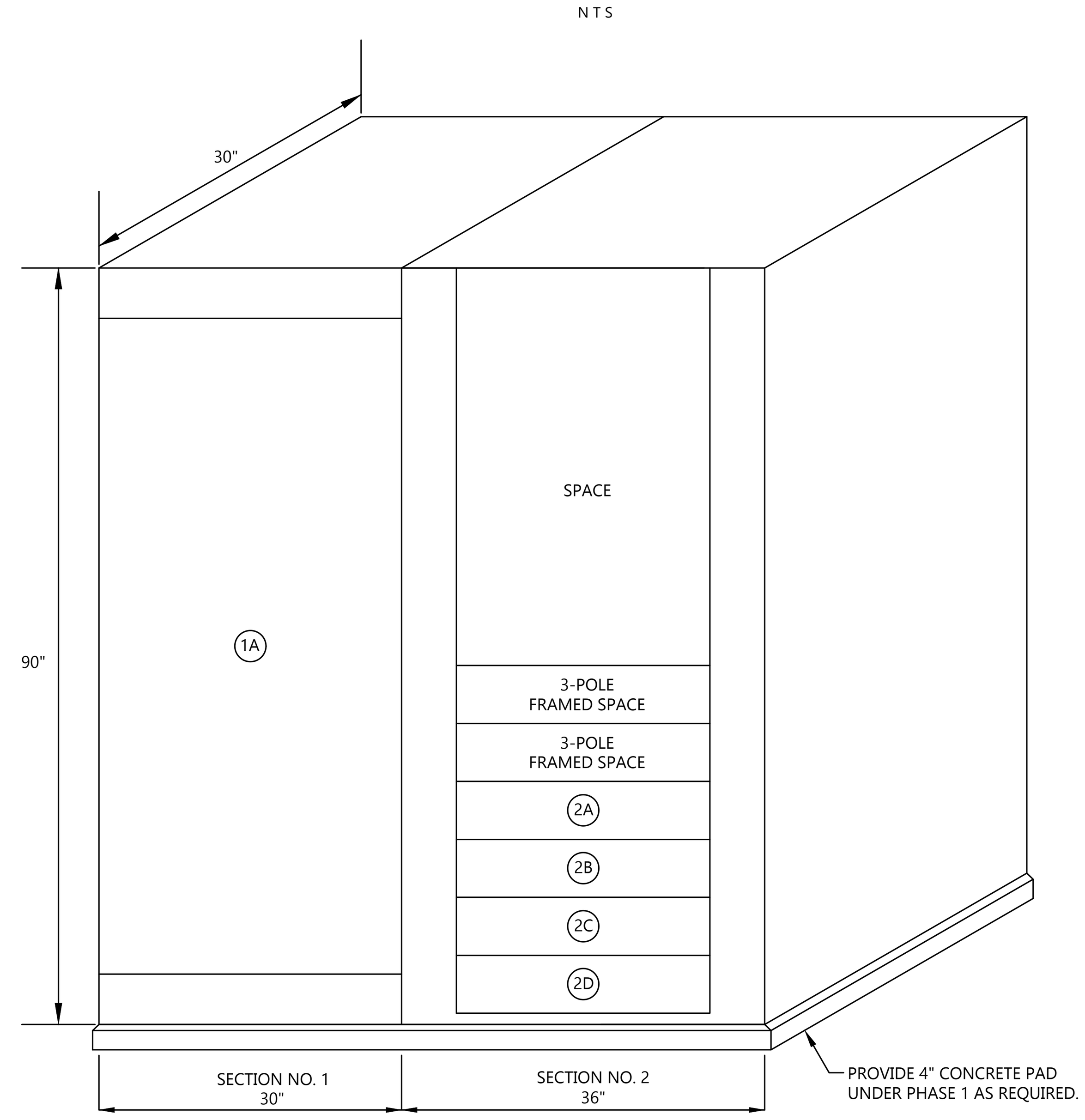


NEW SINGLE LINE DIAGRAM

NTS



FUTURE MAIN SWITCHBOARD "MSWBD" DETAIL

N.T.S.

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "HC" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN LUGS ONLY

SERVICE: 400 AMPS 277/480 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

	LOAD	WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
-	SPARE	-	20/3	1		2	80/3	4	XFMR "T-C"	15,000
-	SPARE	-	20/3	3		4	80/3	4	XFMR "T-C"	15,000
-	SPARE	-	20/3	5		6	80/3	4	XFMR "T-C"	15,000
-	SPARE	-	20/3	7		8	80/3	-	SPARE	-
-	SPARE	-	20/3	9		10	80/3	-	SPARE	-
-	SPARE	-	20/3	11		12	80/3	-	SPARE	-
-	SPARE	-	20/3	13		14	40/3	-	SPARE	-
-	SPARE	-	20/3	15		16	40/3	-	SPARE	-
-	SPARE	-	20/3	17		18	40/3	-	SPARE	-
-	SPARE	-	20/3	19		20	25/3	-	SPARE	-
-	SPARE	-	20/3	21		22	25/3	-	SPARE	-
-	SPARE	-	20/3	23		24	25/3	-	SPARE	-
-	SPARE	-	50/3	25		26	60/3	-	SPARE	-
-	SPARE	-	50/3	27		28	60/3	-	SPARE	-
-	SPARE	-	50/3	29		30	60/3	-	SPARE	-
-	SPARE	-	30/3	31		32	60/3	-	SPARE	-
-	SPARE	-	30/3	33		34	60/3	-	SPARE	-
-	SPARE	-	30/3	35		36	60/3	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = -W B = -W C = -W

TOTAL LOAD: 3 X PH- = -W
= 64 AMPS @ 277/480 VOLTS, 3PH, 4W

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "LC" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN CIRCUIT BREAKER

SERVICE: 150 AMPS 120/208 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

	LOAD	WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
-	SPARE	10	20/1	1		2	20/1	-	SPARE	-
-	SPARE	10	20/1	3		4	20/1	-	SPARE	-
-	SPARE	12	20/1	5		6	20/1	-	SPARE	-
-	SPARE	12	20/1	7		8	20/1	-	SPARE	-
-	SPARE	12	20/1	9		10	20/1	-	SPARE	-
-	SPARE	12	20/1	11		12	20/1	-	SPARE	-
-	SPARE	-	20/1	13		14	20/1	-	SPARE	-
-	SPARE	-	20/1	15		16	20/1	-	SPARE	-
-	SPARE	-	20/1	17		18	20/1	-	SPARE	-
-	SPARE	-	20/1	19		20	20/1	-	SPARE	-
-	SPARE	-	20/1	21		22	20/1	-	SPARE	-
-	SPARE	-	20/1	23		24	20/1	-	SPARE	-
-	SPARE	-	20/1	25		26	20/1	-	SPARE	-
-	SPARE	-	20/1	27		28	20/1	-	SPARE	-
-	SPARE	-	20/1	29		30	30/1	-	SPARE	-
-	SPARE	-	20/1	31		32	20/1	-	SPARE	-
-	SPARE	-	20/1	33		34	20/1	-	SPARE	-
-	SPARE	-	20/1	35		36	20/1	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = 3,924W B = 1,764W C = 2,124W

TOTAL LOAD: 3 X PHA = 11,772W
= 33 AMPS @ 120/208 VOLTS, 3PH, 4W

NOTES:
1.

FURNISH PANELS UNDER PHASE 1 AND INSTALL THEM UNDER PHASE 2.

STATE OF OHIO
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Panelboard Sched. New Single Line Diagram

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ISSUE: 8-7-23

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CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

E 3.2

Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

SPECIFICATIONS

1. **WORK INCLUDED:** WORK INCLUDED IS SUBJECT TO THE GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS OF THE ENTIRE OPERATION. THE CONTRACTORS AND/OR SUBCONTRACTORS FOR THIS PORTION OF THE WORK ARE REQUIRED TO REFER ESPECIALLY THERETO.

1.a. THE WORK COVERED UNDER THIS SPECIFICATION SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR, OR INCIDENTAL TO PROPER INSTALLATION AND COMPLETION OF ELECTRICAL WORK AS INDICATED ON THE DRAWINGS OR HEREIN SPECIFIED, OR BOTH.

1.b. THE CONTRACT DOCUMENTS ARE COMPLIMENTARY AND WHAT IS CALLED FOR BY ONE SHALL BE AS BINDING AS IF CALL FOR BY ALL. IF THE DRAWINGS AND SPECIFICATIONS ARE IN CONFLICT, THE MOST COMPREHENSIVE SCOPE OF WORK AND BETTER QUALITY MATERIAL AS CALLED FOR IN ONE DOCUMENT SHALL BE USED FOR BIDDING PURPOSED. CONFLICT IN THE DRAWINGS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT-ENGINEER FOR CLARIFICATION. MISUNDERSTANDING OF DRAWINGS AND SPECIFICATIONS SHALL BE CLARIFIED BY THE ARCHITECT/ENGINEER WHOSE DECISION SHALL BE FINAL.

1.c. ALL PORTIONS OF OTHER SECTIONS OF SPECIFICATIONS AND DRAWINGS WHICH CAN BE MADE TO APPLY SHALL BE CONSIDERED A PART OF THE SPECIFICATIONS. THE ELECTRICAL CONTRACTOR SHALL REVIEW OTHER SECTIONS OF THE SPECIFICATIONS AND DRAWINGS AND INCLUDE IN HIS BID ALL ELECTRICAL WORK REQUIRED TO COMPLETE ALL WORK.

1.d. WHERE THE LETTER "EC" IS USED IN THESE SPECIFICATIONS IT IS RELATIVE TO THE ELECTRICAL CONTRACTOR.

1.e. ANY APPARATUS, APPLIANCE, MATERIAL, OR WORK NOT SHOWN ON THE DRAWINGS, BUT MENTIONED IN THE SPECIFICATIONS, OR VICE-VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND PERFECT ON ALL RESPECTS AND REDO FOR OPERATION EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE FURNISHED, DELIVERED AND INSTALLED BY THE EC WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

1.f. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION, SHALL BE INCLUDED IN THE EC'S ESTIMATE, THE SAME AS IF HEREIN SPECIFIED OR SHOWN.

1.g. WITH SUBMISSION OF BID, THE EC SHALL GIVE WRITTEN NOTICE TO THE ARCHITECT OF ANY MATERIALS OR APPARATUS BELIEVED INADEQUATE OR UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES, AND ANY NECESSARY ITEMS OR WORK OMITTED. IN THE ABSENCE OF SUCH WRITTEN NOTICE, IT IS MUTUALLY AGREED THAT THE EC HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS PROPOSAL, AND THAT HE WILL BE RESPONSIBLE FOR THE APPROVED SATISFACTORY FUNCTIONING OF OF THE ENTIRE SYSTEM WITHOUT EXTRA COMPENSATION.

2. **ELECTRICAL DRAWINGS:** THE DRAWINGS CONSTITUTE AN INTEGRAL PART OF THESE SPECIFICATIONS. THE DRAWINGS INDICATE THE GENERAL LAYOUT OF EQUIPMENT AND ALL DIMENSIONS AND CLEARANCES SHOULD BE VERIFIED IN THE FIELD. ALL DISCREPANCIES OF DIMENSIONS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT-ENGINEER FOR DISPOSITION.

3. **ELECTRICAL DRAWINGS:** THE ARCHITECT/ENGINEER SHALL RESERVE THE RIGHT TO MAKE MINOR ADJUSTMENTS IN LOCATIONS OF OUTLETS, SWITCHES, FIXTURES, CONDUIT, ETC., AND EQUIPMENT WHERE HE CONSIDERS SUCH ADJUSTMENTS DESIRABLE IN THE INTEREST OF CONCEALING WORK OR PRESENTING A BETTER APPEARANCE WHERE EXPOSED. ANY SUCH CHANGES SHALL BE ANTICIPATED AND REQUESTED SUFFICIENTLY IN ADVANCE AS TO NOT CAUSE EXTRA WORK ON THE PART OF THE CONTRACTOR, OR UNDULY DELAY THE WORK. COORDINATE WORK IN ADVANCE WITH ALL OTHER TRADES AND REPORT IMMEDIATELY AND ANY DIFFICULTIES WHICH CAN BE ANTICIPATED.

4. **ADDENDA:** THE DRAWINGS MAY BE SUPERSEDED BY LATER REVISED OR DETAILED DRAWINGS OR SPECIFICATION ADDENDA. REFER TO GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS.

5. **SHOP DRAWINGS:** BEFORE WORK IS DONE ON ANY ITEM OF EQUIPMENT, SUBMIT SIX (6) COPIES OF EACH OF THE FOLLOWING: SHOP DRAWINGS, CATALOG CUTS, MANUFACTURER'S CATALOG NUMBERS AND FULL AND COMPLETE INFORMATION FOR REVIEW. SUBMIT SHOP DRAWINGS CONTAINING OR MARKED WITH IDENTIFICATION AND INFORMATION DESCRIBED BELOW. ANY SHOP DRAWINGS NOT IN COMPLIANCE WITH THESE REQUIREMENTS WILL BE RETURNED, WITHOUT REVIEW, FOR CORRECTION AND RESUBMITTAL. ASSEMBLE AND SUBMIT IN LOGICALLY ARRANGED FOLDERS, ALL INSTRUCTION BULLETINS, LUBRICATION SCHEDULES, OPERATION INSTRUCTIONS, PARTS LISTS, PAMPHLETS FOR ELECTRICAL EQUIPMENT AND APPARATUS FURNISHED.

5.a. SHOP DRAWING IDENTIFICATION: INCLUDE PROJECT NAME AND ARCHITECT-ENGINEER'S JOB NUMBER, AND BY NAME, NUMBER AND INTENDED USE AS DESIGNATED BY THE CONTRACT DRAWINGS AND SPECIFICATION, SUCH AS "LIGHTING PANEL "LP-6".

5.b. SHOP DRAWING INFORMATION: INCLUDE FOLLOWING DATA: MANUFACTURER'S MODEL NUMBER OR CATALOG NUMBER, SIZE AND PERFORMANCE CURVES AND DATA. INDICATE OPERATING POINT ON CURVES AND TABULAR DATA FOR EACH PIECE OF EQUIPMENT THAT CURVES OR DATA REPRESENT. INDICATION OF ALL PERFORMANCE DATA, CONSTRUCTION MATERIAL FINISHES AND MODIFICATIONS TO MANUFACTURER'S STANDARD DESIGN SPECIFIED. ROUGHING-IN, FOUNDATION, AND SUPPORT POINTS DIMENSIONS IF APPLICABLE.

6. **OPERATING MANUALS AND PARTS LISTS:** IN ADDITION TO REQUIREMENTS OF GENERAL CONDITIONS, INCLUDE THE FOLLOWING: NAME, ADDRESS, AND TELEPHONE NUMBER OF LOCAL SUPPLIER OR MANUFACTURER'S REPRESENTATIVE FOR EACH PIECE OF EQUIPMENT. ASSEMBLE MANUALS IN SEPARATE BINDER OR BINDERS FOR EACH SYSTEM. INCLUDE CHARTS OR DIAGRAMS SHOWING ESSENTIAL FEATURES OF THE SYSTEM, AND INCLUDE A BRIEF DESCRIPTION OF THE SYSTEM. SUBMIT TWO (2) COPIES OF ABOVE BEFORE BINDING IN OPERATING MANUAL TO THE ARCHITECT-ENGINEER FOR APPROVAL.

7. **RECORD DRAWINGS:** RECEIVE FROM THE ARCHITECT-ENGINEER A COMPLETE SET OF DRAWINGS. NOTE IN RED PENCIL ON THIS SET ANY DEVIATIONS OF INSTALLATION. SUBMIT MARKED SET OF DRAWINGS TO THE ARCHITECT-ENGINEER.

8. **COORDINATION AND SCHEDULING:** ALL PHASES AND SCHEDULING OF WORK TO BE CLOSELY COORDINATED WITH THE OWNER AND AUTHORIZED IN WRITING BY THE OWNER AT LEAST ONE WEEK PRIOR TO THE EXECUTION OF ANY WORK.

9. **SUPERVISION:** THE CONTRACTOR SHALL HAVE AN EXPERIENCED SUPERINTENDENT CONSTANTLY ON THE SITE TO SUPERVISE ALL WORK OF ELECTRICAL CONTRACT.

10. **TEMPORARY ELECTRICAL SERVICE:** TEMPORARY ELECTRIC SERVICE SHALL BE PROVIDED AS REQUIRED.

11. **ALTERATIONS AND REHABILITATION OF EXISTING INSTALLATIONS:**

11.a. REMOVE EXISTING ELECTRICAL EQUIPMENT, DEVICES, OUTLETS, CONDUIT AND WIRING AS INDICATED OR REQUIRED.

11.b. CAP CONDUIT ENDS, PROVIDE COVERS FOR OPENINGS LEFT IN PANELBOARDS, OUTLETS, AND RACEWAYS TO PROVIDE A FINISHED FLUSH-APPEARANCE WHERE WORK HAS BEEN REMOVED.

11.c. WHERE WALLS ARE REMOVED, CUT OFF CONDUITS WHICH PROJECT FROM THE FLOOR INTO THE WALL BEING REMOVED, AS CLOSE TO THE FLOOR AS PRACTICABLE.

11.d. TAKE POSSESSION OF WIRING, CONDUIT AND MISCELLANEOUS ELECTRICAL EQUIPMENT REMOVE AND NOT REUSED. PROMPTLY REMOVE THESE MATERIALS FROM JOB SITE UNLESS OTHERWISE DIRECTED BY THE ARCHITECT/ENGINEER.

11.e. REMOVE FEEDERS OR CIRCUITS TO EQUIPMENT BEING REMOVED BACK TO THE SOURCE OF SUPPLY. IF OTHER EQUIPMENT, OUTLETS OR RECEPTACLES (TO REMAIN) ARE SUPPLIED BY THE SAME FEEDER OR CIRCUIT, PROVIDE WIRING TO MAINTAIN THE EQUIPMENT, OUTLETS OR RECEPTACLES IN SERVICE AND REMOVE UNUSED PORTIONS OF FEEDERS OR CIRCUITS TO NEAREST JUNCTION BOX AND TAPE ENDS OF CONDUCTORS.

11.f. DISCONNECT AND REMOVE OR RELOCATE ELECTRICAL ITEMS AFFECTED BY DEMOLITION WORK AND WHERE INTERFERENCE EXISTS AT FACILITIES TO BE EXTENDED.

11.g. WHEN SPECIFIC TYPES OF EQUIPMENT, METHODS OF CONNECTION, DISCONNECTION OR RELOCATION ARE NOT INDICATED, PROVIDE EQUIPMENT, DEVICES, WIRING AND WORKMANSHIP COMPATIBLE WITH THE EXISTING SYSTEM AND SATISFACTORY TO THE SYSTEM MANUFACTURER AND THE OWNER.

11.h. CERTAIN WORK UNDER THIS CONTRACT SHALL BE INSTALLED IN THE EXISTING BUILDING, THE LAYOUT BEING SUBSTANTIALLY CHANGED. COOPERATE WITH THE GENERAL CONTRACTOR THROUGHOUT IN THE REMOVAL OF OLD WORK.

12. **MATERIALS:** PROVIDE MATERIALS AND EQUIPMENT BEARING CERTIFICATION OF UL WHERE SUCH LABELS OR STAMPS ARE CUSTOMARY, REQUIRED, OR SPECIFIED.

13. **LICENSES AND PERMITS:** OBTAIN ALL REQUIRED LICENSES AND PERMITS AND, AT COMPLETION OF WORK, CERTIFICATES OF FINAL INSPECTION BY AUTHORITIES HAVING LOCAL JURISDICTION. PAY ALL CHARGES AND EXPENSES IN CONNECTION THEREWITH. DELIVER INSPECTION CERTIFICATES AS DIRECTED.

14. **CABLE TEST**: MAKE MEGGER TESTS ON CABLES BETWEEN EACH CONDUCTOR AND GROUND WITH OTHER CONDUCTORS IN A CABLE OR CONDUIT TIED TO GROUND. PERFORM OPERATIONAL TESTS ONLY ON ALL LIGHTING AND 120 VOLT RECEPTACLE CIRCUITS. PERFORM CONTINUITY TESTS ON ALL POWER AND CONTROL CIRCUITS. TEST CABLES FOR 208 VOLT SERVICE WITH A 500 VOLT MEGGER BETWEEN EACH PHASE AND GROUND, WITH TEST MAINTAINED UNTIL READINGS ARE STEADY FOR 3 MINUTES.

15. **GROUND TEST:** INSPECT ALL GROUND CONNECTIONS FOR CONTINUITY AND TIGHT ELECTRICAL AND MECHANICAL CONNECTIONS. TEST RESISTANCE AT VARIOUS POINTS USING BIDDLE GROUND OHMER, OR OTHER STANDARD METHOD. MAXIMUM PERMISSIBLE GROUND RESISTANCE IS 5 OHMS. CONNECT SYSTEM GROUND TO WATER METER AHEAD OF MAIN.

16. **GUARANTEE:** THIS CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND MATERIALS INCLUDING: INSTALLATION, PIPING, EQUIPMENT, MOTORS, WIRING AND CONTROLS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT COMPLETION. SHOULD DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THIS CONTRACTOR SHALL, UPON NOTICE OF SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHING CAUSED BY THE DEFECTS OR THE WORK CORRECTING SAME REPAIRED AND/OR REPLACED AT HIS EXPENSE, TO THE CONDITION BEFORE SUCH DAMAGE. THE DATE OF FINAL ACCEPTANCE IS DEFINED AS THE DATE OF SIGNATURE OF THE OWNER ON THE FINAL PAYMENT OF THIS CONTRACT.

17. **RACEWAY AND FITTINGS:** USE ELECTRIC METALLIC TUBING (EMT) CONDUIT EXCEPT AS OTHERWISE INDICATED.

18. **CONDUIT SIZE:** MINIMUM CONDUIT SIZE 1/2 INCH, EXCEPT WHERE OTHER SIZES ARE SPECIFICALLY INDICATED.

19. **MOUNTING HEIGHTS:** UNLESS OTHERWISE INDICATED, THE FOLLOWING OUTLET HEIGHTS APPLY.

OUTLET ELEVATION	
LIGHTING SWITCHES	4'-0" ABOVE FINISHED FLOOR TO CENTERLINE
RECEPTACLE OUTLETS IN OFFICES AND FINISHED AREAS	2'-0" ABOVE FLOOR TO CENTERLINE. COORDINATE MOUNTED HEIGHTS WITH OWNER PRIOR TO ROUGH-IN.
LIGHTING PANELBOARDS	6'-8" FROM TOP OF PANEL TO ABOVE FINISHED FLOOR.
FIRE ALARM PULL STATION	4'-0" ABOVE FINISHED FLOOR TO CENTERLINE
FIRE ALARM HORN/STROBE OR STROBE ONLY DEVICES	6'-8" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING TO CENTERLINE.
EMERGENCY LIGHT OUTLETS	8'-0" ABOVE FINISHED FLOOR TO CENTERLINE
EXIT LIGHT OUTLETS	0'-9" BELOW FINISHED CEILING TO CENTERLINE
BRACKET AND SPECIAL OUTLETS	AS INDICATED ON DRAWINGS

20. **CONDUCTOR TYPES**: TYPE THHN - 75 DEGREES "C" RATING, FOR LIGHTING, POWER AND CONTROL, NO. 8 AWG AND SMALLER. USE STRANDED WIRE FOR NO. 10 AWG AND LARGER.

21. **GROUNDING:** GROUND RODS-COPPERWELD STEEL COMPANY. CONNECT-ORS-BURNDY, THOMAS & BETTS OR O.Z. THERMITE WELDING-CADWELD OR THERMOWELD. GROUND THE FOLLOWING: RECEPTACLES, SWITCH BOXES, LUMINARIES AND OTHER ELECTRICAL DEVICES AS REQUIRED BY NEC.

22. **POWER DISTRIBUTION PANELBOARDS:** MANUFACTURERS SHALL BE G.E., SIEMENS/I-T-E, SQUARE D OR CUTLER HAMMER. COMPLETELY FACTORY BUILT AND TESTED, TOTALLY ENCLOSED, DEAD FRONT TYPE PANELBOARDS. NEATLY TYPED DIRECTORY, WITH A CLEAR PLASTIC COVER, IN FRAME INSIDE EACH PANELBOARD DOOR. FULL-CAPACITY INSULATED SOLID NEUTRAL. SEPARATE GROUND BUS WITH LUGS AS REQUIRED IN ADDITION TO NEUTRAL BUS.

23. **CIRCUIT BREAKER PANELBAORD:** MANUFACTURERS SHALL BE GE, SIEMENS/ITE, SQUARE D OR CUTLER HAMMER. MOLDED CASE CIRCUIT BREAKERS, THERMAL MAGNETIC, QUICK-MAKE, QUICK-BREAK, AMBIENT COMPENSATED OR FACTORY-CALIBRATED FOR PANELBOARD INSTALLATION. HANDLES ARRANGED FOR PADLOCKING IN OFF POSITION. ALL MULTIPOLE BREAKERS TO BE COMMON TRIP. HANDLE TIES WILL NOT BE ACCEPTED. SPACES TO BE COMPLETE WITH BUSES AND HARDWARE READY FOR CIRCUIT BREAKER

24. **SAFETY AND DISCONNECT SWITCHES:** SAFETY AND DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, SQUARE D, SIEMENS/ITE OR CUTLER HAMMER. FRONT-OPERATED, TYPE HD, SINGLE THROW, QUICK-MAKE, QUICK-BREAK , HP RATED, VISIBLE BLADE, SWITCHING UNIT. FUSIBLE TYPE TO BE PROVIDED WITH FUSE TERMINALS TO ACCOMMODATE TYPE OF FUSES INDICATED.

25. **FUSES:** PROVIDE FUSES AS FOLLOWS: FUSES 600 VOLTS AND LOWER. FOR MOTOR CIRCUITS, UL CLASS K-5, DUAL ELEMENT, 200,000 AIC SYMMETRICAL BUSS FRS FUSETRON, 600 VOLT RATING, BUS FRN FUSETRON, 250 VOLT RATING, OR SHAWMUT EQUIVALENT. FOR PANELBOARD SERVICES, UL CLASS RK-5, 200,000AIC SYMMETRICAL. OR BUSS LPN LOW PEAK, 250 VOLT RATING, OR SHAWMUT EQUIVALENT, AS INDICATED ON THE DRAWINGS. FURNISH ONE SET OF SPARE FUSES FOR EACH SIZE REQUIRED.

26. **WIRING DEVICES:** PROVIDE SPECIFICATION GRADE DEVICES AS INDICATED, OR EQUIVALENT, HUBBELL, PASS AND SEYMOUR, OR GENERAL ELECTRIC. SWITCHES TO BE RATED AT 20 AMPERES, 120 TO 277VOLTS, AC, WITH SHALLOW PLASTIC BODY, SCREW OR PRESSURE TERMINALS SUITABLE FOR NO. 12 AND NO. 10 WIRES, UNLESS OTHERWISE NOTED. ALL WALL SWITCHES AND 20 AMPERE CONVENIENCE RECEPTACLES TO HAVE AN IVORY FINISH. VERIFY COLOR OF ALL DEVICES AND COVERPLATES WITH OWNER PRIOR TO ORDERING. ELECTRICAL CONTRACTOR TO VERIFY THE TYPES AND STYLES OF PARTITIONS TO INSURE PROPER DEVICES BEFORE INSTALLATION. WIRE DEVICES AND COVERPLATES TO BE AS FOLLOWS:

26.a. **WALL SWITCHES:** STANDARD TYPE, PASS & SEYMOUR NO. CS20AC1-W, CS20AC3-W, OR CS20AC4-1 OR EQUIVALENT WHITE QUIET FLUSH TYPE TOGGLE SWITCH. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b. **RECEPTACLES:**

26.b.1. DUPLEX TYPE - PASS & SEYMOUR CR20-W, 20 AMPERES, 125 VOLTS, 3-WIRE, OR EQUIVALENT WHITE GROUNDING TYPE, NEMA CONFIGURATION 5-20R. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b.2. GROUND FAULT INTERRUPTING TYPE - PASS & SEYMOUR 2091-W 20 AMPERES, OR EQUIVALENT 125 VOLTS, 3-WIRE, WHITE, GROUND FAULT INTERRUPTING TYPE, NEMA CONFIGURATION 5-20R. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.c. **COVERPLATES:**

26.c.1. ALL COVERPLATES FOR INDOORS AND SIMILAR FINISHED AREA WIRING DEVICES TO BE #302 STAINLESS STEEL WITH BRUSHED SATIN FINISH AND FACE OPENINGS FOR THE INTENDED DEVICE.

27. ALL **FIRE ALARM SYSTEM** WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.

28. ALL **TELEPHONE/DATA/CATV SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.

29. ALL **SECURITY, CCTV, & ACCESS CONTROL SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.

30. **ALLOWANCES:** ALLOWANCE FOR $10,000 TO BE INCLUDED IN BASE BID FOR SERVICE WORK BEYOND THE SCOPE SHOWN. USE ALLOWANCE TO BE AUTHORIZED OWNER IN WRITING. UNUSED PORTION TO REVERT TO OWNER.

31. **SCOPE OF WORK:** SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN. IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN

STATE OF OHIO REGISTERED PROFESSIONAL ENGINEER

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

Electrical Specification

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 8-7-23

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

E 3.3

GENERAL NOTES:

1. MATERIALS

	ASTM DESCRIPTION
STRUCTURAL STEEL PLATE	AS529 / A572 / A1011
HOT ROLLED MILLS SHAPES	A36 / A529 / A572 / A500
HSS ROUND	A500
HSS RECTANGULAR	A500
COLD FORM SHAPES	A653 / A1011
ROOF AND WALL SHEETING	A653 / A792
BOLTS	A307 / A325 / A490
CABLE	A475
RODS	A529 / A572

2. STRUCTURAL PRIMER NOTE:

SHOP COAT PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING FOR A SHORT PERIOD OF TIME. STORAGE IN EXTREME COLD TEMPERATURES OR WINTER SNOW CONDITIONS, INCLUDING TRANSPORTATION ON SALTED OR CHEMICALLY TREATED ROADS WILL ADVERSELY AFFECT THE DURABILITY AND LONGEVITY OF THE PRIMER. THE COAT OF SHOP PRIMER DOES NOT PROVIDE THE UNIFORMITY OF APPEARANCE, OR THE DURABILITY AND CORROSION RESISTANCE OF A FIELD APPLIED FINISH COAT OF PAINT OVER A SHOP PRIMER. MINOR ABRASIONS TO THE SHOP COAT PRIMER CAUSED BY HANDLING, LOADING, SHIPPING, UNLOADING AND ERECTION ARE UNAVOIDABLE AND ARE NOT THE RESPONSIBILITY OF THE METAL BUILDING MANUFACTURER. METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR THE DETERIORATION OF THE PRIMER OR CORROSION THAT MAY RESULT FROM ATMOSPHERIC AND ENVIRONMENTAL CONDITIONS NOR THE COMPATIBILITY OF THE PRIMER TO ANY FIELD APPLIED COATING.

3. BUILDING ERECTION NOTES:

THE GENERAL CONTRACTOR AND/OR ERECTOR IS RESPONSIBLE TO SAFELY AND PROPERLY ERECT THE METAL BUILDING SYSTEM IN CONFORMANCE WITH THESE DRAWINGS, OSHA REQUIREMENTS, AND EITHER MBMA OR CSA S16 STANDARDS PERTAINING TO PROPER ERECTION. TEMPORARY SUPPORTS SUCH AS GUYS, BRACES, FALSEWORK, CRIBBING, OR OTHER ELEMENTS FOR ERECTION ARE TO BE DETERMINED, FURNISHED, AND INSTALLED BY THE ERECTOR. THESE SUPPORTS MUST SECURE THE STEEL FRAMING, OR PARTLY ASSEMBLED STEEL FRAMING, AGAINST LOADS COMPARABLE IN INTENSITY TO THOSE FOR WHICH THE STRUCTURE WAS DESIGNED IN ADDITION TO LOADS RESULTING FROM THE ERECTION OPERATION. SECONDARY WALL AND ROOF FRAMING (GIRTS, PURLINS, AND/OR JOISTS) ARE NOT DESIGNED TO FUNCTION AS A WORKING PLATFORM OR TO PROVIDE AS AN ANCHORAGE POINT FOR A FALL ARREST / SAFETY TIE OFF.

4. SPECIAL INSPECTION:

SPECIAL INSPECTIONS AND TESTING THAT MAY BE REQUIRED BY GOVERNMENTAL OR OTHER AUTHORITY DURING CONSTRUCTION AND/OR STEEL FABRICATION (COLLECTIVELY, "INSPECTIONS") ARE NOT THE RESPONSIBILITY OF NBG, AND TO THE EXTENT REQUIRED IT SHALL BE THE RESPONSIBILITY OF THE BUILDER AND/OR OWNER. IN THE EVENT INSPECTIONS ARE REQUIRED, THE BUILDER AND/OR OWNER SHALL EMPLOY A THIRD PARTY QUALITY ASSURANCE TESTING AGENCY APPROVED BY THE RELEVANT AUTHORITY. IF SUCH REQUIREMENTS ARE NOT SPECIFICALLY INCLUDED IN NBG SALES DOCUMENTS, NO INSPECTIONS BY NBG OR AT ANY NBG FACILITY SHALL BE MADE. ALL NBG FACILITIES ARE ACCREDITED BY IAS AC472.

5. A325 & A490 BOLT TIGHTENING REQUIREMENTS:

IT IS THE RESPONSIBILITY OF THE ERECTOR TO ENSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPLICABLE REGULATIONS. FOR PROJECTS IN THE UNITED STATES SEE THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS OR FOR PROJECTS IN CANADA, SEE THE CAN/CSA S16 LIMIT STATES DESIGN OF STEEL STRUCTURES FOR MORE INFORMATION.

THE FOLLOWING CRITERIA MAY BE USED TO DETERMINE THE BOLT TIGHTNESS (I.E., "SNUG-TIGHT" OR "FULLY-PRETENSIONED"), UNLESS REQUIRED OTHERWISE BY LOCAL JURISDICTION OR CONTRACT REQUIREMENTS:

A) ALL A490 BOLTS SHALL BE "FULLY-PRETENSIONED".
B) ALL A325 BOLTS IN PRIMARY FRAMING (RIGID FRAMES AND BRACING) MAY BE "SNUG-TIGHT", EXCEPT AS FOLLOWS: "FULLY-PRETENSION" A325 BOLTS IF:
   a) BUILDING SUPPORTS A CRANE SYSTEM WITH A CAPACITY GREATER THAN 5 TONS.
   b) BUILDING SUPPORTS MACHINERY THAT CREATES VIBRATION, IMPACT OR STRESS-REVERSALS ON THE CONNECTIONS. THE ENGINEER-OF-RECORD FOR THE PROJECT SHOULD BE CONSULTED TO EVALUATE FOR THIS CONDITION.
   c) THE PROJECT SITE IS LOCATED IN A HIGH SEISMIC AREA. FOR IBC-BASED CODES, "HIGH SEISMIC AREA" IS DEFINED AS "SEISMIC DESIGN CATEGORY" OF "D", "E", OR "F". SEE THE "BUILDING LOADS" SECTION OF THIS PAGE FOR THE DEFINED SEISMIC DESIGN CATEGORY FOR THIS PROJECT.
   d) ANY CONNECTION DESIGNATED IN THESE DRAWINGS AS "A325-SC" OR "SLIP-CRITICAL (SC)" CONNECTIONS MUST BE FREE OF PAINT, OIL, OR OTHER MATERIALS THAT REDUCE FRICTION AT CONTACT SURFACES. GALVANIZED OR LIGHTLY RUSTED SURFACES ARE ACCEPTABLE.

C) IN CANADA, ALL A325 AND A490 BOLTS SHALL BE "FULLY PRE-TENSIONED", EXCEPT FOR SECONDARY MEMBERS (PURLINS, GIRTS, OPENING FRAMING, ETC.) AND FLANGE BRACES.

SECONDARY MEMBER (PURLIN, GIRT, OPENING FRAMING, ETC.) AND FLANGE BRACE CONNECTIONS MAY ALWAYS BE "SNUG-TIGHT", UNLESS INDICATED OTHERWISE IN THESE DRAWINGS.

6. GENERAL DESIGN NOTES:

1) ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISC 360 "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" OR THE CAN/CSA S16 "LIMIT STATES DESIGN OF STEEL STRUCTURES", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
2) ALL WELDING OF STRUCTURAL STEEL IS BASED ON EITHER AWS D1.1 "STRUCTURAL WELDING CODE – STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
3) ALL COLD FORMED MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISI 100 OR THE CAN/CSA S136 "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
4) ALL WELDING OF COLD FORMED STEEL IS BASED ON AWS D1.3 "STRUCTURAL WELDING CODE – SHEET STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
5) THIS MANUFACTURING FACILITY IS IAS AC-472 ACCREDITED AND CAN/CSA A660 AND W47.1 CERTIFIED (IF APPLICABLE) FOR THE DESIGN AND MANUFACTURING OF METAL BUILDING SYSTEMS.
6) IF JOISTS ARE INCLUDED WITH THIS PROJECT, THEY ARE SUPPLIED AS A PART OF THE SYSTEMS ENGINEERED METAL BUILDING AND ARE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1926.758 OF OSHA SAFETY STANDARDS FOR STEEL ERECTION DATED JANUARY 18, 2001.

THE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER'S SEAL PERTAINS ONLY TO THE REQUIREMENTS LISTED HEREIN FOR THE MATERIALS DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS EMPLOYED OR ENGAGED BY THE METAL BUILDING MANUFACTURER AND DOES NOT SERVE AS OR REPRESENT THE PROJECT ENGINEER OF RECORD AND SHALL NOT BE CONSTRUED AS SUCH.

7. GLOSSARY OF ABBREVIATIONS:

A.B. = ANCHOR RODS	M.B. = MACHINE BOLTS	PL = PLATE
B.U. = BUILT-UP	MAX = MAXIMUM	REQ'D = REQUIRED
BS = BOTH SIDES	MBS = METAL BUILDING SUPPLIER	REV. = REVISION
DIA = DIAMETER	MIN = MINIMUM	SIM = SIMILAR
F.S. = FAR SIDE	N.S. = NEAR SIDE	SL = STEEL LINE
FLG = FLANGE	N/A = NOT APPLICABLE	SLV = SHORT LEG VERTICAL
GA. = GAUGE	NIC = NOT IN CONTRACT	TBD = TO BE DETERMINED
H.S.B. = HIGH STRENGTH BOLTS	O.A.L. = OVERALL LENGTH	TYP = TYPICAL
HT. = HEIGHT	O.C. = ON CENTER	U.N.O. = UNLESS NOTED OTHERWISE
LLV = LONG LEG VERTICAL		

?? = PART MARK TO BE DETERMINED AND WILL BE UPDATED ON CONSTRUCTION DRAWINGS

KIRBY BUILDING SYSTEMS
124 KIRBY DRIVE
PORTLAND, TN 37148
PHONE: 615-325-4165

Partial Plan Approval
Examinen W. Phillips
CPA 202302196
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

CONTENTS

SHEET NUMBER	DESCRIPTION
C1	COVER SHEET(S)
F1	ANCHOR ROD PLAN

PROJECT BUILDING LOADS

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. KIRBY'S CUSTOMER IS TO CONFIRM THAT THESE LOADS COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT. DESIGN LOADS HAVE BEEN APPLIED IN ACCORDANCE WITH THE FOLLOWING.

DESIGN CODE: OHIO 2017 (IBC 2015)

ROOF LIVE LOAD: 20.00 psf REDUCIBLE PER CODE

RISK CATEGORY: II - STANDARD BUILDINGS

GROUND SNOW LOAD: 20.00 psf

SNOW EXP. FACTOR, Ce: 1.00

SNOW IMPORTANCE FACTOR, Is: 1.00

ULTIMATE DESIGN WIND SPEED: 115 mph (Vult)
NOMINAL DESIGN WIND SPEED: 89 mph (Vasd)

WIND EXPOSURE: C

DESIGN SUCTION / PRESSURE FOR WALL COMPONENTS AND CLADDING NOT DESIGNED OR PROVIDED BY KBS: + 30 PSF / - 40 PSF

UL-90 : NO

SEISMIC INFORMATION: Ss: 0.130 S1: 0.060

DESIGN (Sds / Sd1) : 0.139/0.096 SITE CLASS: D

SEISMIC IMP. FACTOR, Ie: 1.00 SEISMIC DESIGN CATEGORY: B

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

BASIC SFRS: NOT DETAILED FOR SEISMIC

STATE: OHIO
COUNTY: MARION

NOTES:

1) COLLATERAL DEAD LOADS, UNLESS OTHERWISE NOTED, ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED. WHEN SUSPENDED SPRINKLER SYSTEMS, LIGHTING, HVAC EQUIPMENT, CEILINGS, ETC., ARE SUSPENDED FROM ROOF MEMBERS, CONSULT THE M.B.S. IF THESE CONCENTRATED LOADS EXCEED 500 POUNDS (USING THE WEB MOUNT DETAIL), OR 200 POUNDS (USING THE FLANGE MOUNT DETAIL), OR IF INDIVIDUAL MEMBERS ARE LOADED SIGNIFICANTLY MORE THAN OTHERS.

2) THE DESIGN OF STRUCTURAL MEMBERS SUPPORTING GRAVITY LOADS IS CONTROLLED BY THE MORE CRITICAL EFFECT OF ROOF LIVE LOAD OR ROOF SNOW LOAD, AS DETERMINED BY THE APPLICABLE CODE.

3) ALL WELDING MUST BE PERFORMED BY AWS QUALIFIED WELDERS FOR THE WELDING PROCESSES AND POSITIONS TO BE USED. ALL WELDING AND WELD PREP MUST BE COMPLETED AND VISUALLY INSPECTED TO AWS ACCEPTANCE CRITERIA (TABLE 6.1) IN ACCORDANCE WITH THE APPLICABLE AWS STANDARD. WELD ELECTRODES USED FOR ALL FIELD WELD PROCESSES MUST BE SELECTED FROM TABLE 3.1 IN AWS D1.1 FOR GROUP II MATERIAL GREATER THAN OR EQUAL TO 0.125" THICK OR TABLE1.2 IN AWS D1.3 FOR MATERIAL LESS THAN 0.125" THICK AND ALL FILLER MATERIAL MUST HAVE A Fu OF 70 KSI.

4) ALL EXTERIOR COMPONENTS (WINDOWS, DOORS, ETC) MUST MEET WIND LOADING REQUIREMENTS FOR THE BUILDING CODE LISTED ABOVE OR MUST BE ADEQUATELY PROTECTED DURING A HIGH WIND EVENT. ALL GLAZING AND OTHER APPLICABLE OPENINGS IN WINDBORNE DEBRIS REGIONS MUST BE IMPACT-RESISTANT OR PROTECTED WITH AN IMPACT-RESISTANT COVERING. IMPACT RESISTANT MATERIALS MUST MEET THE LARGE AND/OR SMALL MISSILE TEST OF ASTM E 1996 AND ASTM E 1886.

BUILDING SPECIFIC LOADING INFORMATION

* DEAD LOAD: NORMAL WEIGHT OF METAL BUILDING COMPONENTS, NOT INCLUDING PRIMARY FRAMING, AS SUPPLIED BY THE MANUFACTURER

** Pm IS BASED ON THE MINIMUM ROOF SNOW LOAD CALCULATED PER BUILDING CODE OR THE CONTRACT-SPECIFIED ROOF SNOW LOAD, WHICHEVER IS GREATER. THIS VALUE, Pm, IS ONLY APPLIED IN COMBINATION WITH DEAD AND COLLATERAL LOADS. ROOF SNOW IN OTHER LOADING CONDITIONS IS DETERMINED PER THE SPECIFIED BUILDING CODE.

	ROOF DEAD	COLLATERAL DEAD		SNOW COEFFICIENT		SNOW LOAD		WIND		SEISMIC		
BLDG.	(psf)*	Pri (psf)	Sec (psf)	Ct	Cs	Ps (psf)	**Pm (psf)	Enclosure	GCpi	R	Cs	V (kips)
A	3.00	5.00	5.00	1.00	1.00	14.00	20.00	Enclosed	+/-0.18	3.00	0.046	14.27
B	3.50	5.00	5.00	1.00	1.00	14.00	20.00	Enclosed	+/-0.18	3.00	0.046	5.84

ENGINEER NOTES:

FOR OCCUPANCY (RISK) CATEGORY I OR II, IBC PROVISIONS INDICATE THAT SINGLE-STORY BUILDINGS SHALL HAVE "NO DRIFT LIMIT" PROVIDED THAT INTERIOR WALLS, PARTITIONS, CEILINGS, AND EXTERIOR WALL SYSTEMS HAVE BEEN DESIGNED TO ACCOMMODATE THE SEISMIC STORY DRIFTS. INTERIOR WALLS, PARTITIONS, CEILINGS, OR EXTERIOR WALL SYSTEMS NOT PROVIDED BY THE METAL BUILDING MANUFACTURER SHALL BE DESIGNED AND DETAILED BY OTHERS TO ACCOMMODATE THE SEISMIC STORY DRIFTS. SEISMIC DRIFT VALUES MAY BE OBTAINED FROM THE METAL BUILDING MANUFACTURER.

FRAMED OPENINGS HAVE BEEN DESIGNED TO SUPPORT WIND LOAD NORMAL TO THE WALL BASED ON THE STANDARD BUILDING CODE CRITERIA. FRAMED OPENINGS HAVE NOT BEEN DESIGNED FOR ANY ADDITIONAL MOMENT OR CATENARY FORCES FROM THE DOOR. ANY CHANGE TO THE INFORMATION SHOWN HERE WILL REQUIRE AN ENGINEERING INVESTIGATION AND POSSIBLE BUILDING REINFORCEMENT.

BUILDING NAME DESIGNATION

A - MAIN ADDITION
B - DRIFT BAY ADDITION

PRIMER

STRUCTURAL FRAMING: GP - GRAY PRIMER
WALL SECONDARY: GP - GRAY PRIMER
ROOF SECONDARY: GP - GRAY PRIMER

ROOF PANELS

TYPE: 24 Ga. STANDING SEAM 360 (SS3) HIGH SYSTEM w/ THERMAL SPACERS
COLOR: GALVALUME PLUS (GM)

WALL PANELS

TYPE: 26 Ga. REVERSE R-PANEL
COLOR: PEARL GRAY, PVDF (PG)

SOFFIT PANELS

TYPE: N/A
COLOR: N/A

LINER PANELS

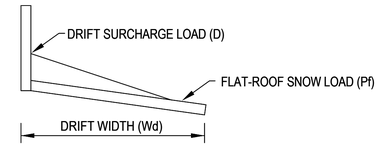
TYPE: 26 Ga. R-PANEL
COLOR: POLAR WHITE, SP (PW)

TRIM COLORS

ROOF LINE TRIM: SLATE GRAY, PVDF (SG)
DOWNSPOUTS: SLATE GRAY, PVDF (SG)
WALL CORNER TRIM: SLATE GRAY, PVDF (SG)
BASE TRIM: SLATE GRAY, PVDF (SG)
FRAMED OPENING TRIM: SLATE GRAY, PVDF (SG)

NOTE: ANY VARIANCE FROM THE PANEL TYPES OR COLORS LISTED HERE WILL BE NOTED ON THE ELEVATION DRAWINGS.

THE BUILDING CODE REQUIRES CONSIDERATION OF SNOW SURCHARGES FOR ANY LOWER ROOF OF A STRUCTURE WITHIN 20 FT OF A HIGHER STRUCTURE. INFORMATION PROVIDED TO THE METAL BUILDING MANUFACTURER INDICATES SNOW SURCHARGES MUST BE CONSIDERED IN THE METAL BUILDING DESIGN AS SHOWN BELOW.



THE CONDITIONS AT THE FOLLOWING LOCATIONS PRODUCE DRIFT SURCHARGE LOADS:

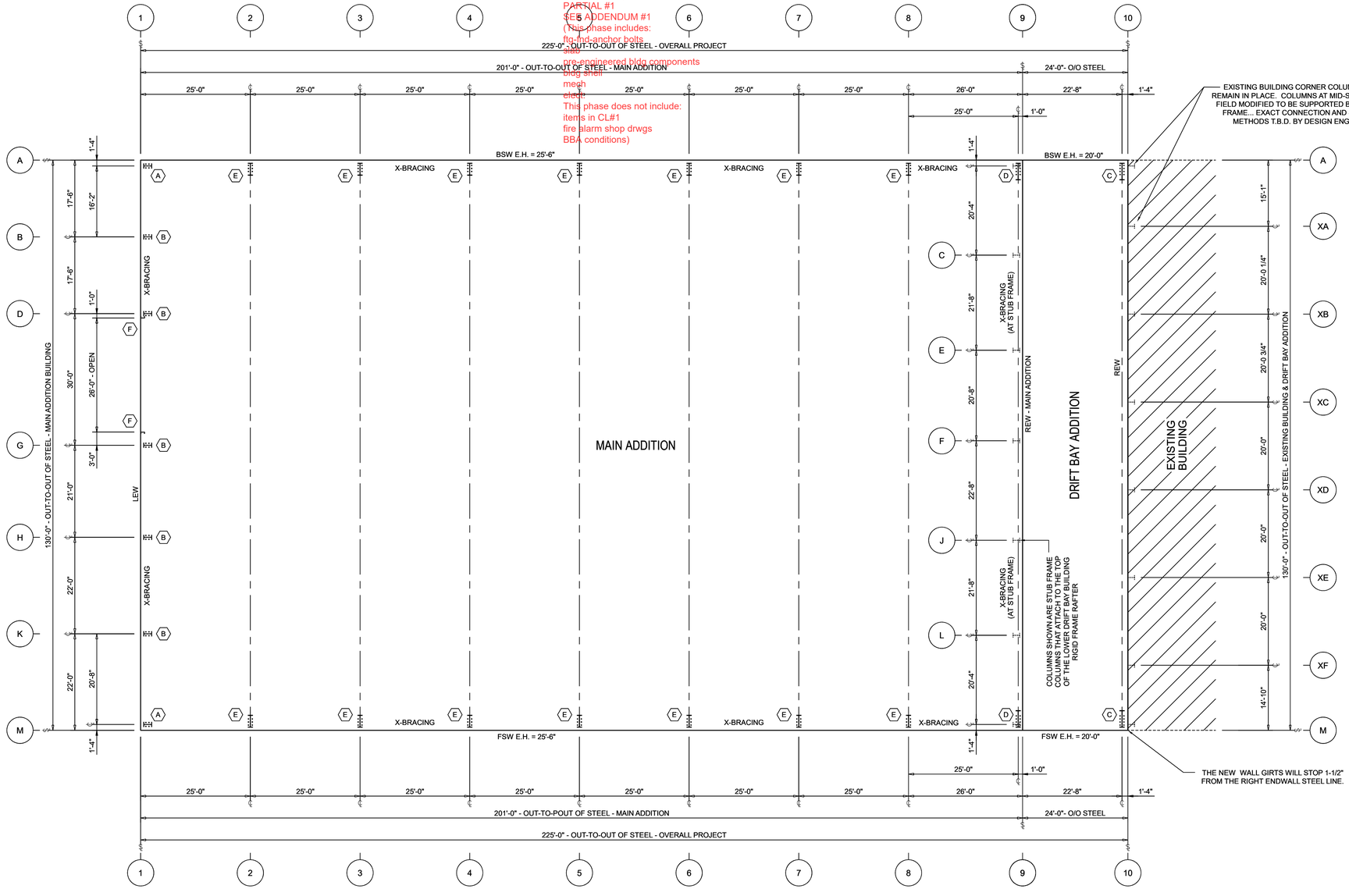
1. LOCATION: MAIN BLDG ONTO DRIFT BAY BLDG D(psf): 72.96 Pf(psf): 14.00 Wd(ft): 17.58
2. LOCATION: DRIFT BAY ONTO EXISTING BLDG D(psf): 19.20 Pf(psf): 14.00 Wd(ft): 9.25

MBMA IAS ACCREDITED

KIRBY BUILDING SYSTEMS ENGINEERING

ADDRESS: MARION, OH 43302
JOB NUMBER: K23G0344A
PROJECT NAME: RIALTO ADDITION - NO CRANES
CUSTOMER NAME: STEVENS CONSTRUCTION CO., INC.
PROPOSED CONSTRUCTION: COMMERCIAL
DRAWING TITLE: COVERSHEET
SHEET: C1

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR ROD	TB / SMB	BEP	9/7/2023

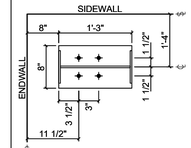


ANCHOR ROD PLAN

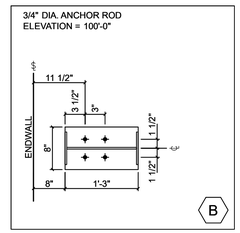
NOTE: ALL BASE PLATES @ 100'-0" (U.N.)
FINISHED FLOOR @ 100'-0"

FINAL BASE PLATE LENGTHS MAY DIFFER +/- 2" FROM LENGTH SHOWN ON DETAILS. ANCHOR ROD LOCATIONS WILL REMAIN CONSISTENT U.N.O.

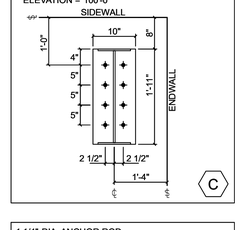
3/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



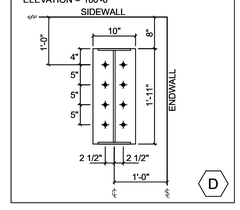
3/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



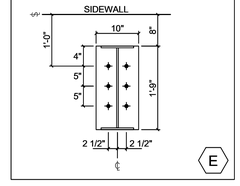
1 1/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



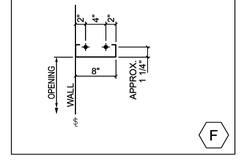
1 1/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



1 1/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



(2) 1/2"Ø ANCHOR RODS (FIELD DRILL FOUNDATION, MASONRY, ETC. AS REQ'D)
ELEVATION = 100'-0"



ANCHOR ROD PLAN GENERAL NOTES:

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY THE METAL BUILDING MANUFACTURER.

AN4: THE ANCHOR ROD LOCATIONS PROVIDED BY THE METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN.

AN5: DRAWINGS ARE NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED. IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY – BEFORE CONCRETE IS PLACED.

AN7: "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.

AN8: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF A CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN9: FINISHED FLOOR ELEVATION = 100'-0" AND BOTTOM OF BASE PLATE = 100'-0" UNLESS NOTED OTHERWISE.

BOTTOM OF BASE PLATE

ANCHOR ROD SHAPE AND EMBEDMENT LENGTH "D" IS TO BE DETERMINED BY THE FOUNDATION ENGINEER.

ANCHOR RODS			
QTY.	DIA.	MATERIAL	PROJECTION (*P)
28	3/4"	F1554 GR 36	3"
	1"	F1554 GR 36	3"
116	1-1/4"	F1554 GR 36	3-1/2"
	1-1/2"	F1554 GR 36	3-1/2"

KIRBY BUILDING SYSTEMS
MBMI
IAS

ADDRESS: MARION, OH 43302
JOB NUMBER: K23G0354A
PROJECT NAME: RIALTO ADDITION - NO CRANES
CUSTOMER: STEVENS CONSTRUCTION CO., INC.
PROJECT DESCRIPTION: NEW CONSTRUCTION
DRAWING TITLE: ANCHOR ROD PLAN
SHEET: F1

#	RELEASE / REVISION	DWN / CHK	ENGR	DATE
0	ANCHOR ROD	TB / SMB	BEP	8/7/2023

DESIGN ENGINEER:
DATE:

KIRBY BUILDING SYSTEMS a NUCOR company
124 Kirby Dr.
Portland, TN 37148
Phone: (615) 325-4165

GENERAL INFORMATION FOR COLUMN BASE PLATE REACTIONS

○ FOR REVIEW ◉ FOR CONSTRUCTION

Project Name: RiAlto Addition - No Cranes
Project Number: K23G0354A
Customer: STEVENS CONSTRUCTION CO INC
Design Engineer: Phelps, Brice (KBS)

Checked: JDJ 8/2/2023

Column base reactions are included in this packet for a building designed by the metal building manufacturer. These reactions result from frame analysis done by a qualified Engineer for this specific job. They reflect all loading to which the building may be subject, per the appropriate building code and loading information provided to the metal building manufacturer at the date of design. Reaction packets marked "FOR REVIEW" are subject to change and are usually provided at the request of the customer, although the Engineer believes he/she is working with undefined, incomplete or assumed information.

Reactions are provided by load case in order to aid the foundation engineer in determining the appropriate load factors and combinations to be used with either Working Stress or Ultimate Strength design methods. Wind load cases are given for each primary wind direction.

For ASCE7-10 based building codes, the unfactored load case reactions due to wind are generated using the ultimate design wind speed (Vult).

Anchor bolt diameter, grade, location and projection is provided on the Anchor Bolt Plan. Anchor bolt embedment lengths and types are not provided by the metal building manufacturer. This information is closely related to the complete foundation design which should be done by a Registered Professional Engineer familiar with the local site conditions and construction practices.

STATE OF OHIO
HAROLD WAYNE GREGORY
38672
REGISTERED
PROFESSIONAL ENGINEER
08/02/2023

Excellence from the ground up

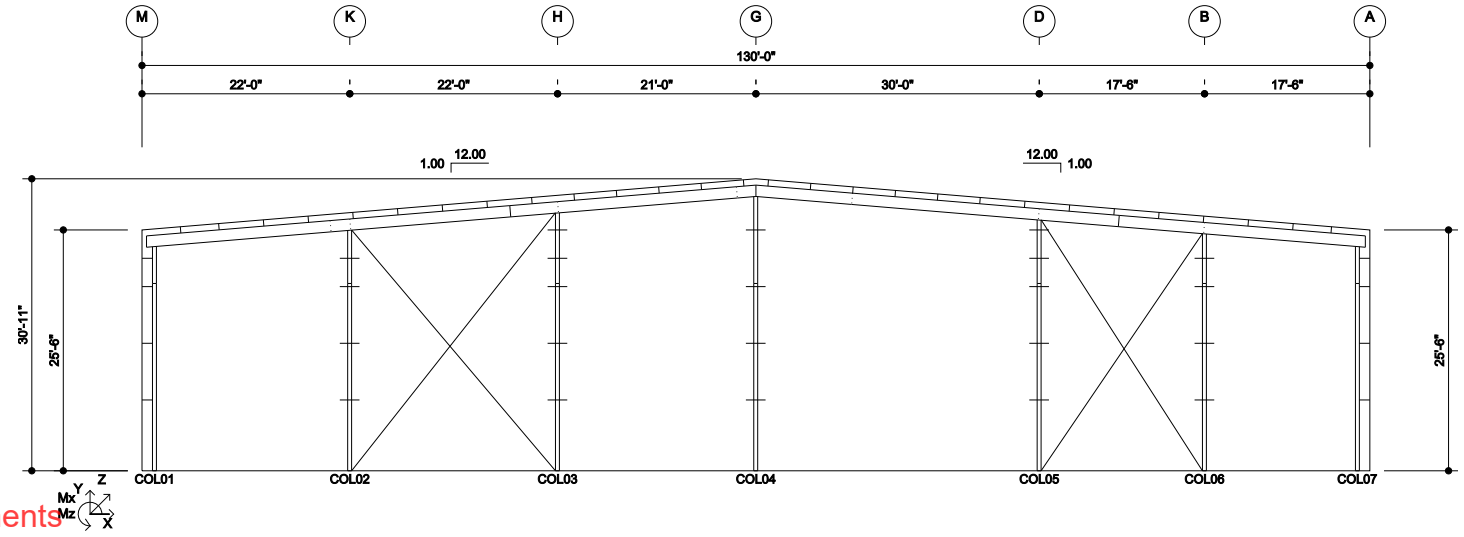
NUCOR BUILDINGS GROUP

Job # : K23G0354A
File : E11-0.nfr
App Version : 1.7.91.0

Job Name : RiAlto Addition - No Cranes
Designer : BEP
Date : 7/28/2023

Frame : FL 1

NBG Reactions By Load Case Report



Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 1 - DEAD						LOAD CASE 2 - COLLATERAL					
COL01	0	1	0	0	0	COL01	0	1	0	0	0
COL02	0	2	0	0	0	COL02	0	2	0	0	0
COL03	0	2	0	0	0	COL03	0	2	0	0	0
COL04	0	2	0	0	0	COL04	0	2	0	0	0
COL05	0	3	0	0	0	COL05	0	3	0	0	0
COL06	0	2	0	0	0	COL06	0	1	0	0	0
COL07	0	1	0	0	0	COL07	0	1	0	0	0
LOAD CASE 3 - ROOF LIVE						LOAD CASE 4 - SNOW					
COL01	0	3	0	0	0	COL01	0	2	0	0	0
COL02	0	7	0	0	0	COL02	0	5	0	0	0
COL03	0	7	0	0	0	COL03	0	5	0	0	0
COL04	0	6	0	0	0	COL04	0	4	0	0	0
COL05	0	9	0	0	0	COL05	0	6	0	0	0
COL06	0	4	0	0	0	COL06	0	3	0	0	0
COL07	0	3	0	0	0	COL07	0	2	0	0	0
LOAD CASE 5 - MINIMUM ROOF SNOW						LOAD CASE 6 - WIND CASE 1 TO RIGHT					
COL01	0	3	0	0	0	COL01	0	-3	0	0	0
COL02	0	7	0	0	0	COL02	-3	-11	0	0	0
COL03	0	7	0	0	0	COL03	0	-6	0	0	0
COL04	0	6	0	0	0	COL04	0	-5	0	0	0
COL05	0	9	0	0	0	COL05	-3	-7	0	0	0
COL06	0	4	0	0	0	COL06	0	2	0	0	0
COL07	0	3	0	0	0	COL07	0	-2	0	0	0
LOAD CASE 7 - WIND CASE 1 TO LEFT						LOAD CASE 8 - WIND CASE 2 TO RIGHT					
COL01	0	-2	0	0	0	COL01	0	-5	0	0	0
COL02	0	-1	0	0	0	COL02	-3	-14	0	0	0
COL03	3	-6	0	0	0	COL03	0	-9	0	0	0
COL04	0	-6	0	0	0	COL04	0	-7	0	0	0
COL05	0	-8	0	0	0	COL05	-3	-11	0	0	0
COL06	2	-8	0	0	0	COL06	0	-1	0	0	0
COL07	0	-3	0	0	0	COL07	0	-3	0	0	0

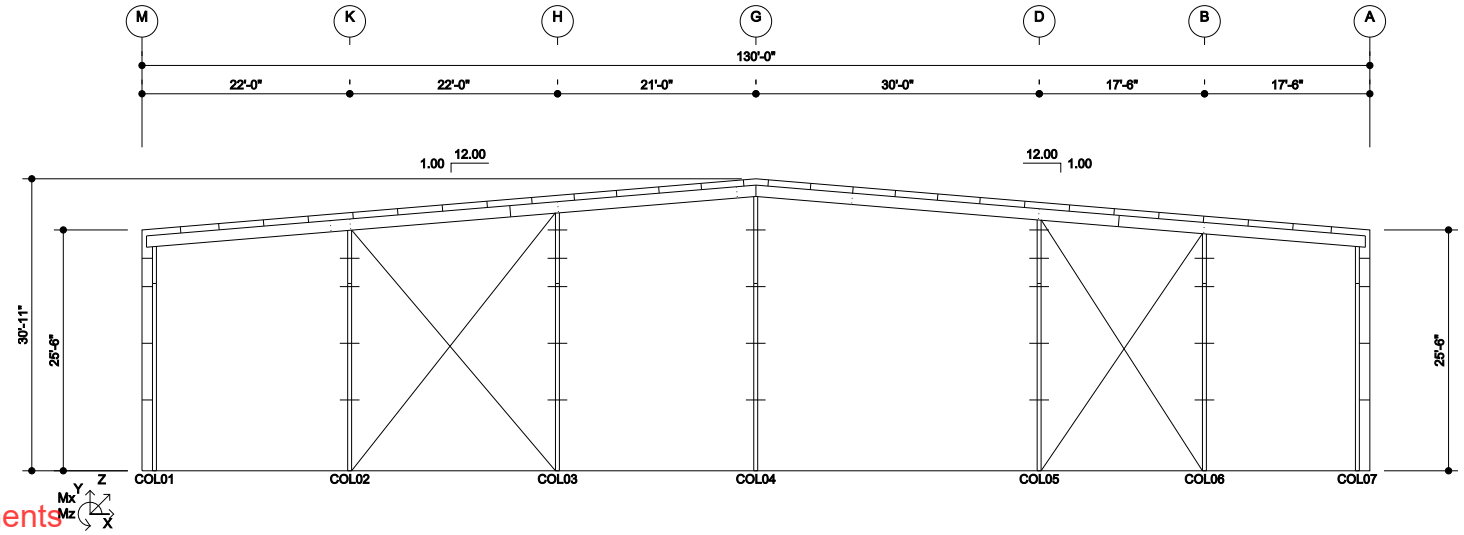
NUCOR BUILDINGS GROUP

Job # : K23G0354A
File : E11-0.nfr
App Version : 1.7.91.0

Job Name : RiAlto Addition - No Cranes
Designer : BEP
Date : 7/28/2023

Frame : FL 1

NBG Reactions By Load Case Report



Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 9 - WIND CASE 2 TO LEFT						LOAD CASE 10 - LONG. WIND 1 TO BACK					
COL01	0	-3	0	0	0	COL01	0	-5	-3	0	0
COL02	0	-4	0	0	0	COL02	0	-12	-5	0	0
COL03	3	-10	0	0	0	COL03	0	-12	-5	0	0
COL04	0	-8	0	0	0	COL04	0	-10	-7	0	0
COL05	0	-12	0	0	0	COL05	0	-15	-6	0	0
COL06	2	-10	0	0	0	COL06	0	-7	-4	0	0
COL07	0	-4	0	0	0	COL07	0	-5	-2	0	0
LOAD CASE 11 - LONG. WIND 1 TO FRONT						LOAD CASE 12 - SEISMIC TO RIGHT					
COL01	0	-5	3	0	0	COL01	0	0	0	0	0
COL02	0	-12	5	0	0	COL02	-1	-1	0	0	0
COL03	0	-12	6	0	0	COL03	0	1	0	0	0
COL04	0	-10	8	0	0	COL04	0	0	0	0	0
COL05	0	-15	6	0	0	COL05	-1	-1	0	0	0
COL06	0	-7	4	0	0	COL06	0	1	0	0	0
COL07	0	-5	3	0	0	COL07	0	0	0	0	0
LOAD CASE 13 - SEISMIC TO LEFT						LOAD CASE 14 - ALTERNATE SNOW 1					
COL01	0	0	0	0	0	COL01	0	2	0	0	0
COL02	0	1	0	0	0	COL02	0	5	0	0	0
COL03	1	-1	0	0	0	COL03	0	8	0	0	0
COL04	0	-1	0	0	0	COL04	0	4	0	0	0
COL05	0	1	0	0	0	COL05	0	2	0	0	0
COL06	1	-1	0	0	0	COL06	0	1	0	0	0
COL07	0	0	0	0	0	COL07	0	1	0	0	0
LOAD CASE 15 - ALTERNATE SNOW 2											
COL01	0	1	0	0	0						
COL02	0	2	0	0	0						
COL03	0	2	0	0	0						
COL04	0	5	0	0	0						
COL05	0	9	0	0	0						
COL06	0	2	0	0	0						
COL07	0	2	0	0	0						

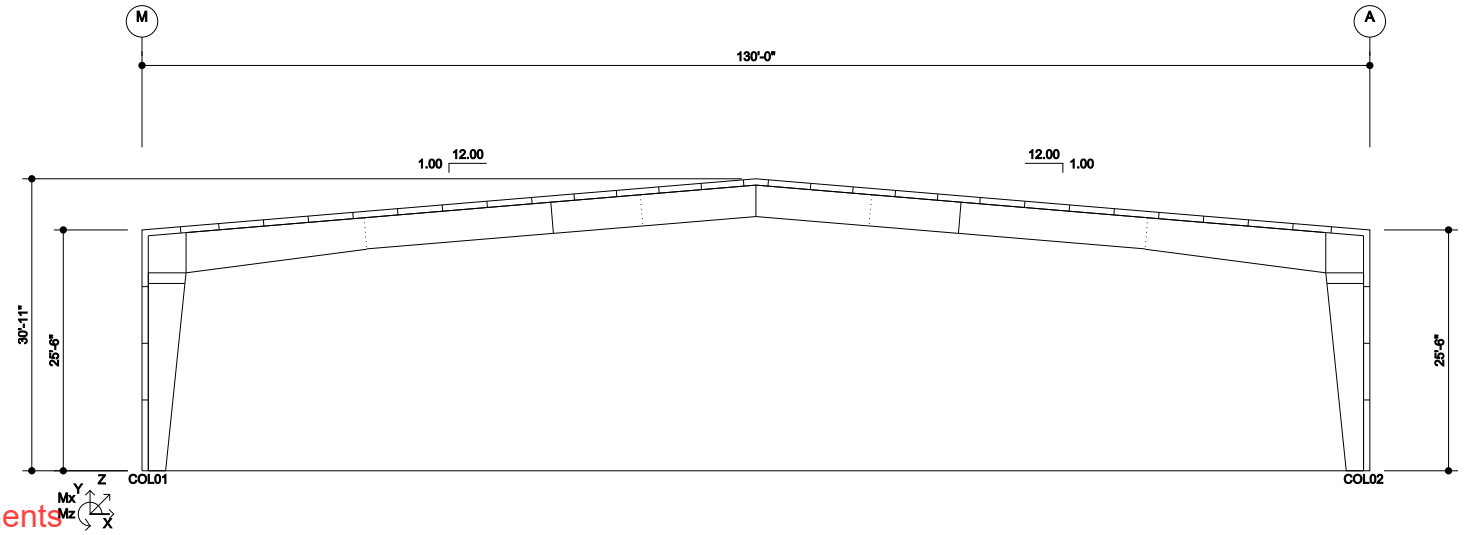
NUCOR BUILDINGS GROUP

Job # : K23G0354A
File : F11-0.nfr
App Version : 1.7.91.0

Job Name : RiAlto Addition - No Cranes
Designer : BEP
Date : 7/28/2023

Frame : FL 2,5

NBG Reactions By Load Case Report



Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 1 - DEAD						LOAD CASE 2 - COLLATERAL					
COL01	8	11	0	0	0	COL01	8	9	0	0	0
COL02	-8	11	0	0	0	COL02	-8	9	0	0	0
LOAD CASE 3 - ROOF LIVE						LOAD CASE 4 - SNOW					
COL01	18	21	0	0	0	COL01	21	24	0	0	0
COL02	-18	21	0	0	0	COL02	-21	24	0	0	0
LOAD CASE 5 - MINIMUM ROOF SNOW						LOAD CASE 6 - WIND CASE 1 TO RIGHT					
COL01	29	35	0	0	0	COL01	-21	-22	0	0	0
COL02	-29	35	0	0	0	COL02	11	-12	0	0	0
LOAD CASE 7 - WIND CASE 1 TO LEFT						LOAD CASE 8 - WIND CASE 2 TO RIGHT					
COL01	-11	-12	0	0	0	COL01	-33	-39	0	0	0
COL02	21	-22	0	0	0	COL02	23	-29	0	0	0
LOAD CASE 9 - WIND CASE 2 TO LEFT						LOAD CASE 10 - LONG. WIND 1 TO BACK					
COL01	-23	-29	0	0	0	COL01	-12	-20	0	0	0
COL02	33	-39	0	0	0	COL02	13	-13	0	0	0
LOAD CASE 11 - LONG. WIND 1 TO FRONT						LOAD CASE 12 - LONG. WIND 2 TO BACK					
COL01	-13	-13	0	0	0	COL01	-24	-37	0	0	0
COL02	12	-20	0	0	0	COL02	25	-30	0	0	0
LOAD CASE 13 - LONG. WIND 2 TO FRONT						LOAD CASE 14 - SEISMIC TO RIGHT					
COL01	-25	-30	0	0	0	COL01	-1	-1	0	0	0
COL02	24	-37	0	0	0	COL02	-1	1	0	0	0
LOAD CASE 15 - SEISMIC TO LEFT						LOAD CASE 16 - ALTERNATE SNOW 1					
COL01	1	1	0	0	0	COL01	18	25	0	0	0
COL02	1	-1	0	0	0	COL02	-18	15	0	0	0
LOAD CASE 17 - ALTERNATE SNOW 2											
COL01	18	15	0	0	0						
COL02	-18	25	0	0	0						

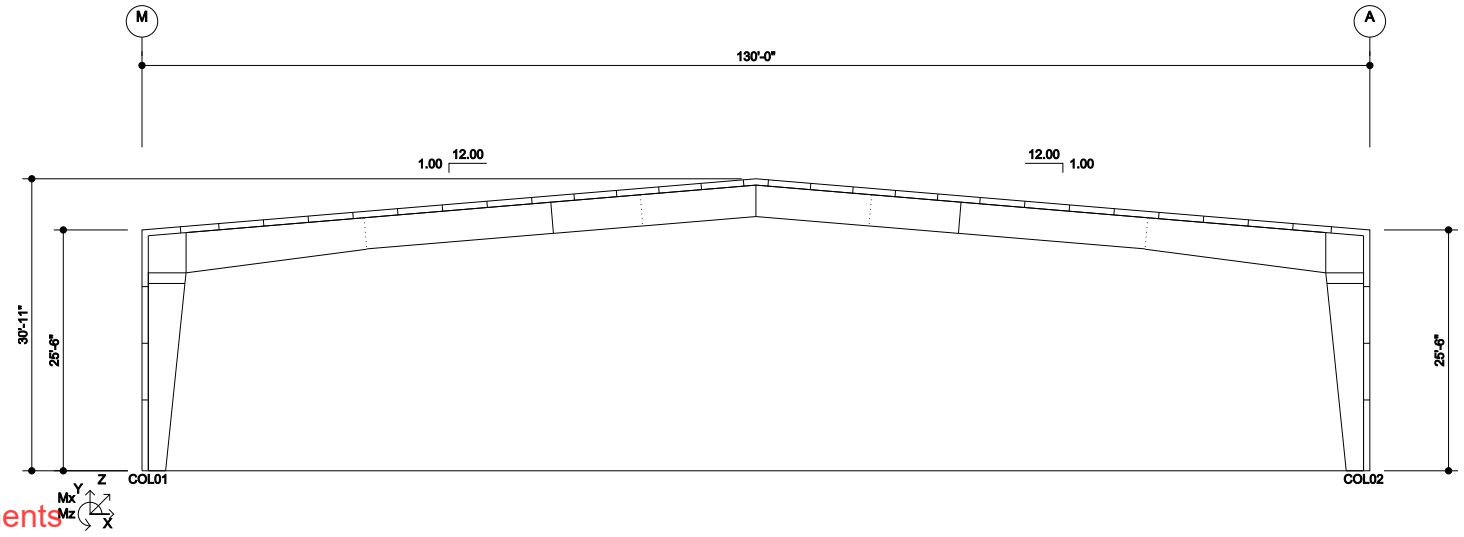
NUCOR BUILDINGS GROUP

Job # : K23G0354A
File : F11-0.nfr
App Version : 1.7.91.0

Job Name : RiAlto Addition - No Cranes
Designer : BEP
Date : 7/28/2023

Frame : FL 3,4,6,7,8

NBG Reactions W/Bracing By Load Case Report

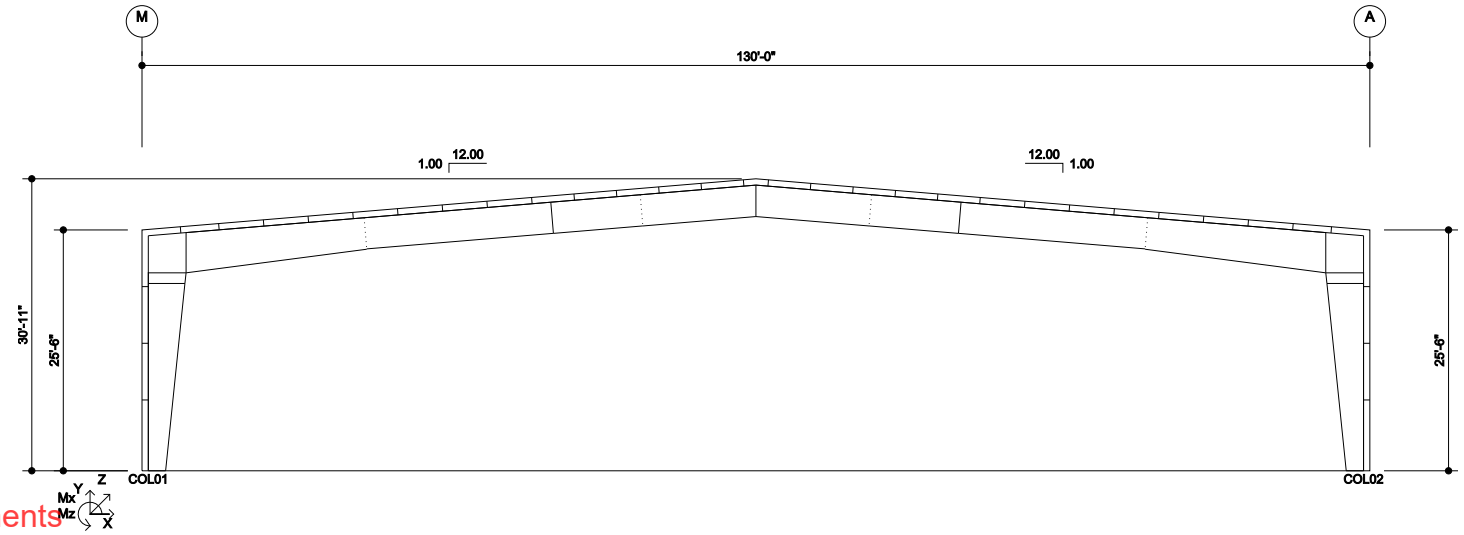


Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 1 - DEAD						LOAD CASE 2 - COLLATERAL					
COL01	8	11	0	0	0	COL01	8	9	0	0	0
COL02	-8	11	0	0	0	COL02	-8	9	0	0	0
LOAD CASE 3 - ROOF LIVE						LOAD CASE 4 - SNOW					
COL01	18	21	0	0	0	COL01	21	24	0	0	0
COL02	-18	21	0	0	0	COL02	-21	24	0	0	0
LOAD CASE 5 - MINIMUM ROOF SNOW						LOAD CASE 6 - WIND CASE 1 TO RIGHT					
COL01	29	35	0	0	0	COL01	-21	-22	0	0	0
COL02	-29	35	0	0	0	COL02	11	-12	0	0	0
LOAD CASE 7 - WIND CASE 1 TO LEFT						LOAD CASE 8 - WIND CASE 2 TO RIGHT					
COL01	-11	-12	0	0	0	COL01	-33	-39	0	0	0
COL02	21	-22	0	0	0	COL02	23	-29	0	0	0
LOAD CASE 9 - WIND CASE 2 TO LEFT						LOAD CASE 10 - LONG. WIND 1 TO BACK					
COL01	-23	-29	0	0	0	COL01	-12	-20	0	0	0
COL02	33	-39	0	0	0	COL02	13	-13	0	0	0
LOAD CASE 11 - LONG. WIND 1 TO FRONT						LOAD CASE 12 - LONG. WIND 2 TO BACK					
COL01	-13	-13	0	0	0	COL01	-24	-37	0	0	0
COL02	12	-20	0	0	0	COL02	25	-30	0	0	0
LOAD CASE 13 - LONG. WIND 2 TO FRONT						LOAD CASE 14 - SEISMIC TO RIGHT					
COL01	-25	-30	0	0	0	COL01	-1	-1	0	0	0
COL02	24	-37	0	0	0	COL02	-1	1	0	0	0
LOAD CASE 15 - SEISMIC TO LEFT						LOAD CASE 16 - ALTERNATE SNOW 1					
COL01	1	1	0	0	0	COL01	18	25	0	0	0
COL02	1	-1	0	0	0	COL02	-18	15	0	0	0
LOAD CASE 17 - ALTERNATE SNOW 2						LOAD CASE 18 - BRACING WIND TO FRONT					
COL01	18	15	0	0	0	COL01	-1	-9	8	0	0
COL02	-18	25	0	0	0	COL02	1	-9	8	0	0

NUCOR BUILDINGS GROUP

Job #	: K23G0354A	Job Name	: RiAlto Addition - No Cranes	Frame	: FL 3,4,6,7,8
File	: F11-0.nfr	Designer	: BEP		
App Version	: 1.7.91.0	Date	: 7/28/2023		

NBG Reactions W/Bracing By Load Case Report



Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 19 - BRACING WIND TO BACK						LOAD CASE 20 - BRACING SEISMIC TO BACK					
COL01	1	9	-8	0	0	COL01	1	7	-7	0	0
COL02	-1	9	-8	0	0	COL02	-1	7	-7	0	0
LOAD CASE 21 - BRACING SEISMIC TO FRONT											
COL01	0	-7	7	0	0						
COL02	0	-7	7	0	0						

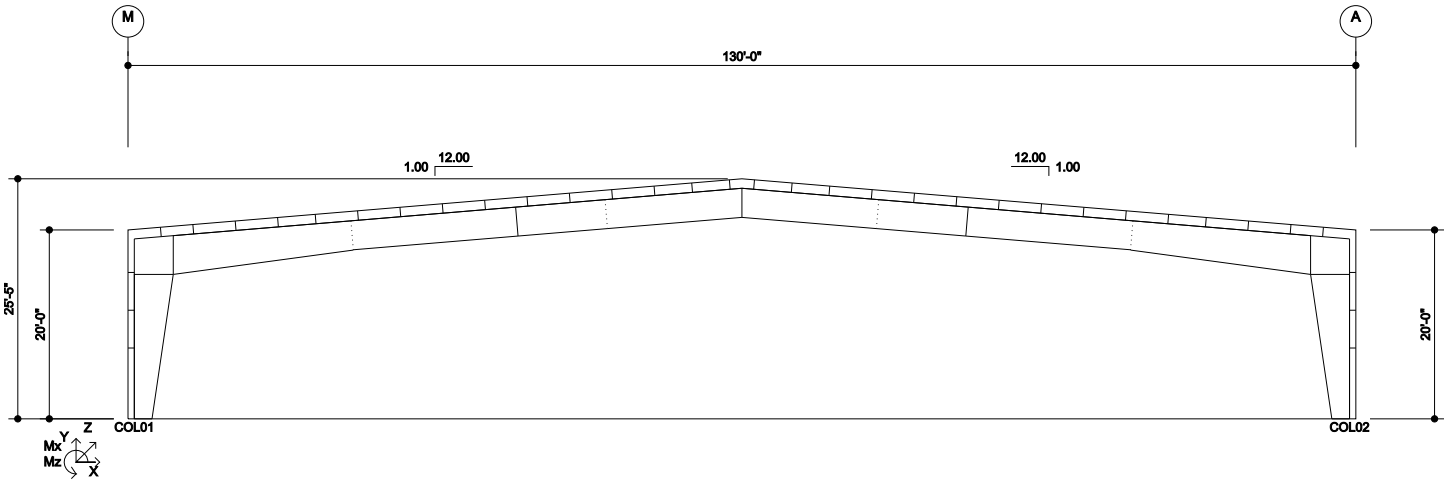
NUCOR BUILDINGS GROUP

Job # : K23G0354A
File : F21-0.nfr
App Version : 1.7.91.0

Job Name : RiAlto Addition - No Cranes
Designer : BEP
Date : 7/30/2023

Frame : FL 9

NBG Reactions W/Bracing By Load Case Report

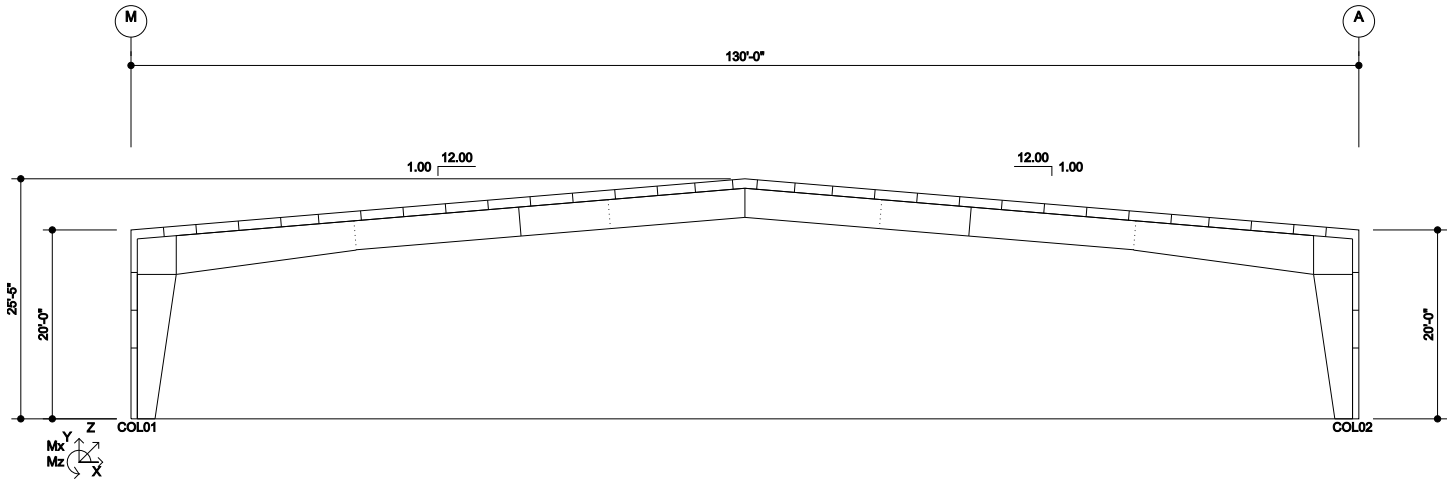


Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 1 - DEAD						LOAD CASE 2 - COLLATERAL					
COL01	16	17	0	0	0	COL01	12	11	0	0	0
COL02	-16	17	0	0	0	COL02	-12	11	0	0	0
LOAD CASE 3 - ROOF LIVE						LOAD CASE 4 - SNOW					
COL01	36	32	0	0	0	COL01	67	59	0	0	0
COL02	-36	32	0	0	0	COL02	-67	59	0	0	0
LOAD CASE 5 - MINIMUM ROOF SNOW						LOAD CASE 6 - WIND CASE 1 TO RIGHT					
COL01	44	38	0	0	0	COL01	-22	-28	0	0	0
COL02	-44	38	0	0	0	COL02	37	-23	0	0	0
LOAD CASE 7 - WIND CASE 1 TO LEFT						LOAD CASE 8 - WIND CASE 2 TO RIGHT					
COL01	-37	-23	0	0	0	COL01	-41	-46	0	0	0
COL02	22	-28	0	0	0	COL02	56	-41	0	0	0
LOAD CASE 9 - WIND CASE 2 TO LEFT						LOAD CASE 10 - LONG. WIND 1 TO BACK					
COL01	-57	-42	0	0	0	COL01	-47	-45	0	0	0
COL02	42	-46	0	0	0	COL02	48	-42	0	0	0
LOAD CASE 11 - LONG. WIND 1 TO FRONT						LOAD CASE 12 - LONG. WIND 2 TO BACK					
COL01	-48	-41	0	0	0	COL01	-54	-52	0	0	0
COL02	47	-45	0	0	0	COL02	55	-49	0	0	0
LOAD CASE 13 - LONG. WIND 2 TO FRONT						LOAD CASE 14 - SEISMIC TO RIGHT					
COL01	-55	-49	0	0	0	COL01	-3	-2	0	0	0
COL02	54	-52	0	0	0	COL02	-2	2	0	0	0
LOAD CASE 15 - SEISMIC TO LEFT						LOAD CASE 16 - ALTERNATE SNOW 1					
COL01	2	2	0	0	0	COL01	27	28	0	0	0
COL02	3	-2	0	0	0	COL02	-27	17	0	0	0
LOAD CASE 17 - ALTERNATE SNOW 2						LOAD CASE 18 - BRACING WIND TO FRONT					
COL01	28	17	0	0	0	COL01	-1	-9	8	0	0
COL02	-28	27	0	0	0	COL02	1	-9	8	0	0

NUCOR BUILDINGS GROUP

Job #	: K23G0354A	Job Name	: RiAlto Addition - No Cranes	Frame	: FL 9
File	: F21-0.nfr	Designer	: BEP		
App Version	: 1.7.91.0	Date	: 7/30/2023		

NBG Reactions W/Bracing By Load Case Report



components

Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 19 - BRACING WIND TO BACK						LOAD CASE 20 - BRACING SEISMIC TO BACK					
COL01	1	9	-8	0	0	COL01	1	7	-7	0	0
COL02	-1	9	-8	0	0	COL02	-1	7	-7	0	0
LOAD CASE 21 - BRACING SEISMIC TO FRONT											
COL01	-1	-7	7	0	0						
COL02	1	-7	7	0	0						

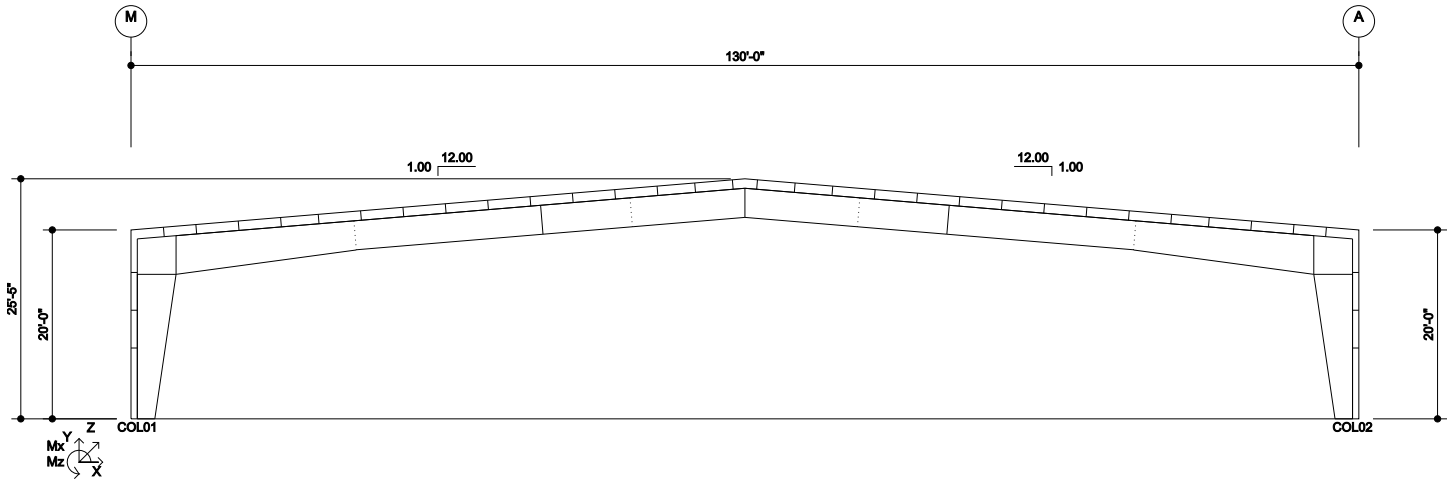
NUCOR BUILDINGS GROUP

Job # : K23G0354A
File : F22-0.nfr
App Version : 1.7.91.0

Job Name : RiAlto Addition - No Cranes
Designer : BEP
Date : 7/28/2023

Frame : FL 10

NBG Reactions By Load Case Report



Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)	Member	X (kips)	Y (kips)	Z (kips)	Mx (kip-ft)	Mz (kip-ft)
LOAD CASE 1 - DEAD						LOAD CASE 2 - COLLATERAL					
COL01	12	13	0	0	0	COL01	11	10	0	0	0
COL02	-12	13	0	0	0	COL02	-11	10	0	0	0
LOAD CASE 3 - ROOF LIVE						LOAD CASE 4 - SNOW					
COL01	24	22	0	0	0	COL01	59	53	0	0	0
COL02	-24	22	0	0	0	COL02	-59	53	0	0	0
LOAD CASE 5 - MINIMUM ROOF SNOW						LOAD CASE 6 - WIND CASE 1 TO RIGHT					
COL01	40	36	0	0	0	COL01	-24	-21	0	0	0
COL02	-40	36	0	0	0	COL02	16	-12	0	0	0
LOAD CASE 7 - WIND CASE 1 TO LEFT						LOAD CASE 8 - WIND CASE 2 TO RIGHT					
COL01	-16	-12	0	0	0	COL01	-41	-38	0	0	0
COL02	24	-21	0	0	0	COL02	32	-29	0	0	0
LOAD CASE 9 - WIND CASE 2 TO LEFT						LOAD CASE 10 - LONG. WIND 1 TO BACK					
COL01	-32	-29	0	0	0	COL01	-17	-20	0	0	0
COL02	41	-38	0	0	0	COL02	18	-13	0	0	0
LOAD CASE 11 - LONG. WIND 1 TO FRONT						LOAD CASE 12 - LONG. WIND 2 TO BACK					
COL01	-18	-13	0	0	0	COL01	-34	-37	0	0	0
COL02	17	-20	0	0	0	COL02	35	-30	0	0	0
LOAD CASE 13 - LONG. WIND 2 TO FRONT						LOAD CASE 14 - SEISMIC TO RIGHT					
COL01	-35	-30	0	0	0	COL01	-2	-1	0	0	0
COL02	34	-37	0	0	0	COL02	-2	1	0	0	0
LOAD CASE 15 - SEISMIC TO LEFT						LOAD CASE 16 - ALTERNATE SNOW 1					
COL01	2	1	0	0	0	COL01	25	26	0	0	0
COL02	2	-1	0	0	0	COL02	-25	16	0	0	0
LOAD CASE 17 - ALTERNATE SNOW 2											
COL01	25	16	0	0	0						
COL02	-25	26	0	0	0						

Letter Of Transmittal

KIRBY BUILDING SYSTEMS
a NUCOR company
P. O. Box 390 · Portland, TN 37148 · P 615-325-4165 · F 800-231-3460

To: **STEVENS CONSTRUCTION CO INC**
2181 INNOVATION DRIVE, SUITE 101
MARION, OH 43302

Date: Wednesday, August 2, 2023
KBS Job No: **K23G0354A**
Project: **RIALTO ADDITION-NO CRANES**

Attn: **BEN STEVENS**
(740) 387-1931

Enclosed are the following items:

	DESCRIPTION	QTY	SIZE	Sheet No.(s)	Seal Qty
X	Anchor Rod Plan	3	24x36	C1, F1	N/A
	Permit Drawings				
	Permit Details				
	Approval Drawings				
	Approval Details				
	Confirmation Drawings				
	Erection Drawings				
	Erection Details				
	Bill Of Materials List				
X	Column Reactions	1		ALL REACTIONS	1
	Design Calculations				
X	Letter of Certification	1		1	1

Ship Via: X UPS Ground ____ US Mail ____ UPS Overnight X EMAIL

Seal Type: X Electronic ____ Wet ____ Digital __ Embossed **Sheets:** LOC & REACTIONS

Your Attention is directed to the following:

X The above prints have been approved for construction
____ Engineering has been completed. The job has been released for fabrication.

____ The above prints are for obtaining the building permit
____ Final detailing and fabrication have been scheduled. Changes or alterations to the building will cause the schedule and price to be subject to change.
____ Final detailing and fabrication **have not been** scheduled. Changes or alterations to the building will cause the price to be subject to change.

____ The above prints are issued for your approval
____ Final detailing and fabrication **have not been** scheduled. Changes or alterations to the building will cause the price to be subject to change. Your price is protected based on the must ship date shown on the order contract.
Please return the approved drawings no later than _____.
If the drawings are not returned by this date, the price will be subject to change.
____ Final detailing and fabrication **have been** scheduled. Changes or alterations to the building will cause the schedule and price to be subject to change. The approved drawings must be returned with no changes, no later than _____.
If the drawings are not returned by this date, the schedule and price will be subject to change.

____ The above documents have been revised. Please destroy previous issues.
Reason for revision:

DETAILER: TB
CHECKER: SRB

Sincerely,
Robert Hodges
robert.hodges@kirbybuildingsystems.com
615-745-6034

KIRBY BUILDING SYSTEMS a NUCOR company
124 Kirby Dr. Phone: (615) 325-4165
Portland, TN 37148

Version: 1.1.126.0

Sunday, July 30, 2023

STEVENS CONSTRUCTION CO INC
2181 INNOVATION DRIVE
MARION, OH 43302
Attn.: BEN STEVENS
Project Location: Marion, OH 43302
Project Number: K23G0354A

Project Name: RiAlto Addition - No Cranes
Buildings: A->130'-0"x201'-0"x25'-6"(RCG, 1:12);
B->130'-0"x24'-0"x20'-0"(RCG, 1:12);

This Letter of Design Certification ensures that the materials furnished by the metal building supplier are designed in accordance with the information specified to the metal building supplier on the order documents and summarized by the loading information listed below. The Project Engineer of Record (not the metal building supplier) is responsible for verifying that the building code and design loads meet any and all applicable local requirements.

The Professional Engineer whose seal appears on this Letter of Certification is employed by the metal building manufacturer, a Member of MBMA, and does not serve as or represent the Engineer of Record for this project and shall not be construed as such.

DESIGN LOAD CRITERIA:

Structural Loads Applied in General Accordance with: Ohio 2017 (IBC 2015)
Risk Category: II - Standard Buildings

PROJECT-WIDE LOADING INFORMATION:

Ground Snow Load: 20.00 psf
Snow Exposure Factor,Ce: 1.00
Snow Imp. Factor,Is: 1.00
Roof Live Load: 20.00 psf
Reducible as per code
Design Wind Velocity: 115 mph
Nominal Design Wind Velocity: 89 mph
***C&C Wind:30psf / -40psf
Is Roof to meet UL 90 Requirements?: No
Wind Exposure: C
Seismic Criteria: Ss:0.130 S1:0.060
*No ground snow included in seismic calculation
Design Sds / Sd1: 0.139 / 0.096
Analysis Procedure: Equivalent Lateral Force Procedure
Seis. Imp. Factor,Ie: 1.00
Long. SFRS: Not Detailed For Seismic
Seis. Design Category: B
Site Class: D
Lat. SFRS: Not Detailed For Seismic

BUILDING-SPECIFIC LOADING INFORAMTION:

Bldg	Roof Dead (psf)*	Collateral Dead Pri (psf)	Collateral Dead Sec (psf)	Snow Coeficient Ct	Snow Coeficient Cs	Snow Load (psf) Ps (psf)	Snow Load (psf) **Pm (psf)	Wind Enclosure	Wind GCpi	Seismic R	Seismic Cs	Seismic V (kips)
A	3.00	5.00	5.00	1.00	1.00	14.00	20.00	Enclosed	±0.18	3.00	0.046	16.1
B	3.50	5.00	5.00	1.00	1.00	14.00	20.00	Enclosed	±0.18	3.00	0.046	6.8

Primary Structural Not Included
***Pm is based on the minimum roof snow load calculated per building code or the contract-specified roof snow load, whichever is greater. This value, Pm, is only applied in combination with Dead and Collateral Loads. Roof Snow in other loading conditions is determined per the specified Building Code.*
****Design wind pressures to be used for wall exterior component and cladding materials not provided by Metal Building Supplier*

Mezzanine Information:

Floor Dead Load: N/A
Floor Collateral Load: N/A
Floor Live Load: N/A

Crane Information:

No cranes on building.

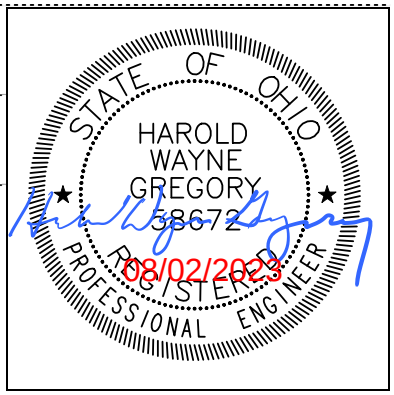
Roof-Top Unit Information:

No roof-top units on building.

The design of structural members supporting roof gravity loads is controlled by the more critical effect of roof live load or roof snow applied in accordance with the governing building code.

DESIGN STANDARDS REFERENCED:

- AISC Specification for Structural Steel Buildings - Steel Construction Manual, 14th Edition, ©2010.
- AISI North-American Spec. for the Design of Cold-Formed Steel Structures, ©2012 Edition.
- IBC codes are designed in accordance with ASCE7-10 Edition.
- MBMA Metal Building Systems Manual, Latest Edition.
- AWS Latest Edition of Structural Welding Code.
- No buyout structural components provided on this project.



Professional Seal

MBMA METAL BUILDING MANUFACTURES ASSOCIATION©

IAS ACCREDITED Metal Building Systems

ZONING INFORMATION:
MARION TOWNSHIP
ZONING CLASSIFICATION I-3/R-1B
PER ZONING CODE 15.032 - NO SIDE OR REAR YARD SETBACK IS REQUIRED
REQUIRED PARKING PER 17.022 - 1 SPACE PER 1200 S.F. = 60 SPACES < 72 ACTUAL SPACES

CODE EVALUATION NOTES:

APPLICABLE CODES:

BUILDING CODE	OHIO BUILDING CODE 2017
MECHANICAL CODE	OHIO MECHANICAL CODE 2017
PLUMBING CODE	OHIO PLUMBING CODE 2017
ELECTRICAL CODE	NEC 2017
ACCESSIBLITY	ICC A-117.1 2009

BOARD OF APPEALS CASE #22-046
CPA#2022060016

DESCRIPTION:
ADDITION OF WAREHOUSING AREA

EXISTING OCCUPANCY CLASSIFICATIONS	F-2,S-2, B
PROPOSED OCCUPANCY CLASSIFICATIONS	F-2, S-2, B
UNSEPARATED MIXED USE	
PREVIOUS CPA #'S	N/A
CONSTRUCTION CLASS	IIB
HEIGHT	1 STORY, 30 FEET

EXISTING FLOOR AREAS	
EXISTING B	4,807 SF
EXISTING F-2/S-2	36,943 SF
NEW ADDITION	29,250 SF
TOTAL AREA	71,000 SF > MAX. ALLOWABLE AREA = 23,000 SF
AREA OF ALTERATION	2,254 SF
FRONTAGE INCREASE (100% OPEN PERIMETER)	I_f = [1 - 0.25] $\frac{60}{100}$ = [0.75 * 0.86] = 0.65
AREA INCREASE	23,000 + (23,000 * 0.65) = 23,000 + 14,950 = 37,950 SF
PROPOSED AREA EXCEEDS ALLOWABLE AREA PER FRONTAGE INCREASE FOR UNSPRINKLERED BUILDING	

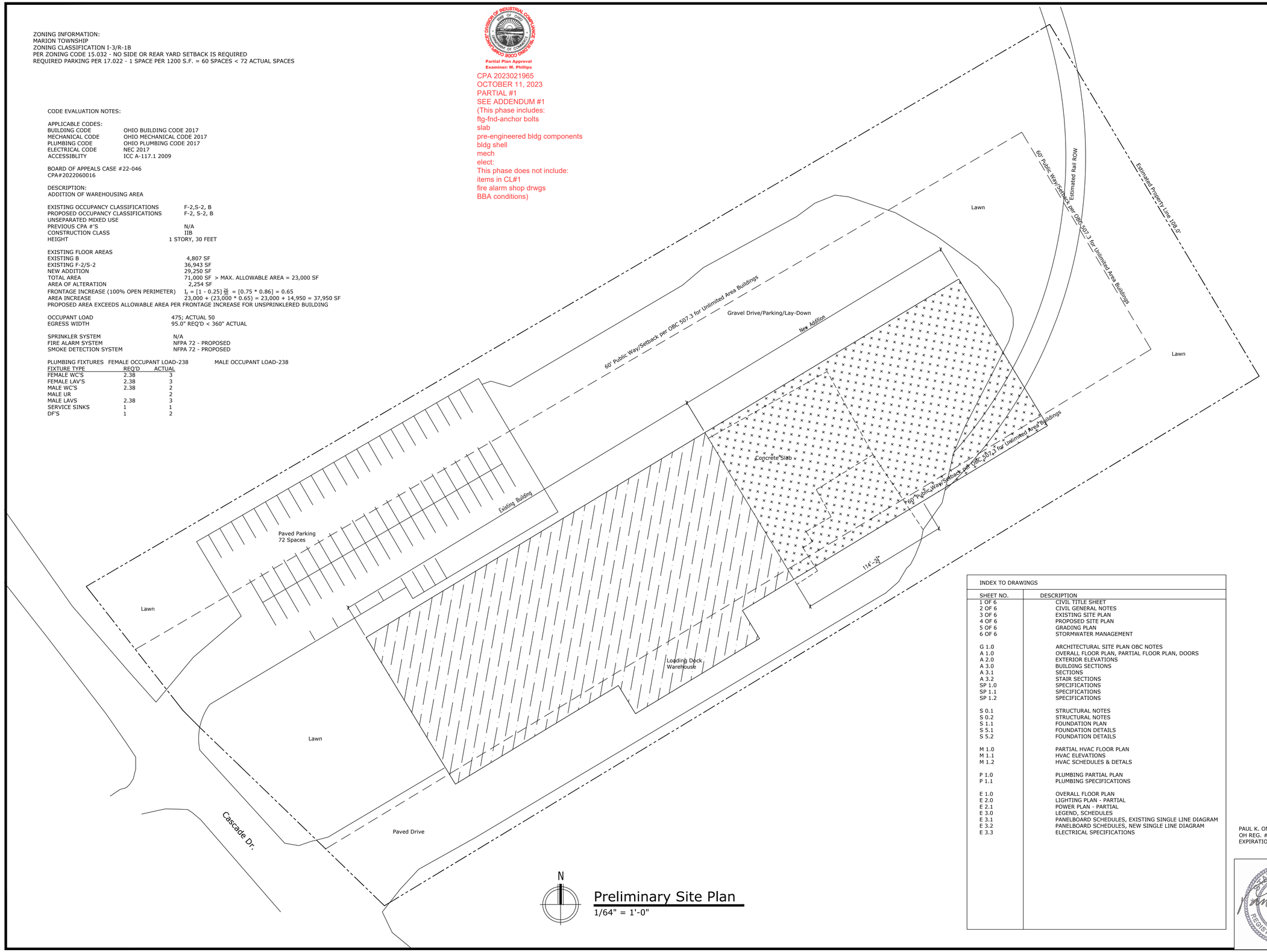
OCCUPANT LOAD	475; ACTUAL 50
EGRESS WIDTH	95.0" REQ'D < 360" ACTUAL

SPRINKLER SYSTEM	N/A
FIRE ALARM SYSTEM	NFPA 72 - PROPOSED
SMOKE DETECTION SYSTEM	NFPA 72 - PROPOSED

PLUMBING FIXTURES FEMALE OCCUPANT LOAD-238 MALE OCCUPANT LOAD-238

FIXTURE TYPE	REQ'D	ACTUAL
FEMALE WC'S	2.38	3
FEMALE LAV'S	2.38	3
MALE WC'S	2.38	2
MALE UR		2
MALE LAVS	2.38	3
SERVICE SINKS	1	1
DF'S	1	2

Partial Plan Approval
Examiner W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



N

Preliminary Site Plan
1/64" = 1'-0"

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1 OF 6	CIVIL TITLE SHEET
2 OF 6	CIVIL GENERAL NOTES
3 OF 6	EXISTING SITE PLAN
4 OF 6	PROPOSED SITE PLAN
5 OF 6	GRADING PLAN
6 OF 6	STORMWATER MANAGEMENT
G 1.0	ARCHITECTURAL SITE PLAN OBC NOTES
A 1.0	OVERALL FLOOR PLAN, PARTIAL FLOOR PLAN, DOORS
A 2.0	EXTERIOR ELEVATIONS
A 3.0	BUILDING SECTIONS
A 3.1	SECTIONS
A 3.2	STAIR SECTIONS
SP 1.0	SPECIFICATIONS
SP 1.1	SPECIFICATIONS
SP 1.2	SPECIFICATIONS
S 0.1	STRUCTURAL NOTES
S 0.2	STRUCTURAL NOTES
S 1.1	FOUNDATION PLAN
S 5.1	FOUNDATION DETAILS
S 5.2	FOUNDATION DETAILS
M 1.0	PARTIAL HVAC FLOOR PLAN
M 1.1	HVAC ELEVATIONS
M 1.2	HVAC SCHEDULES & DETALS
P 1.0	PLUMBING PARTIAL PLAN
P 1.1	PLUMBING SPECIFICATIONS
E 1.0	OVERALL FLOOR PLAN
E 2.0	LIGHTING PLAN - PARTIAL
E 2.1	POWER PLAN - PARTIAL
E 3.0	LEGEND, SCHEDULES
E 3.1	PANELBOARD SCHEDULES, EXISTING SINGLE LINE DIAGRAM
E 3.2	PANELBOARD SCHEDULES, NEW SINGLE LINE DIAGRAM
E 3.3	ELECTRICAL SPECIFICATIONS

PAUL K. OMNESS
OH REG. #13997
EXPIRATION 12/31/23

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE

TITLE SHEET

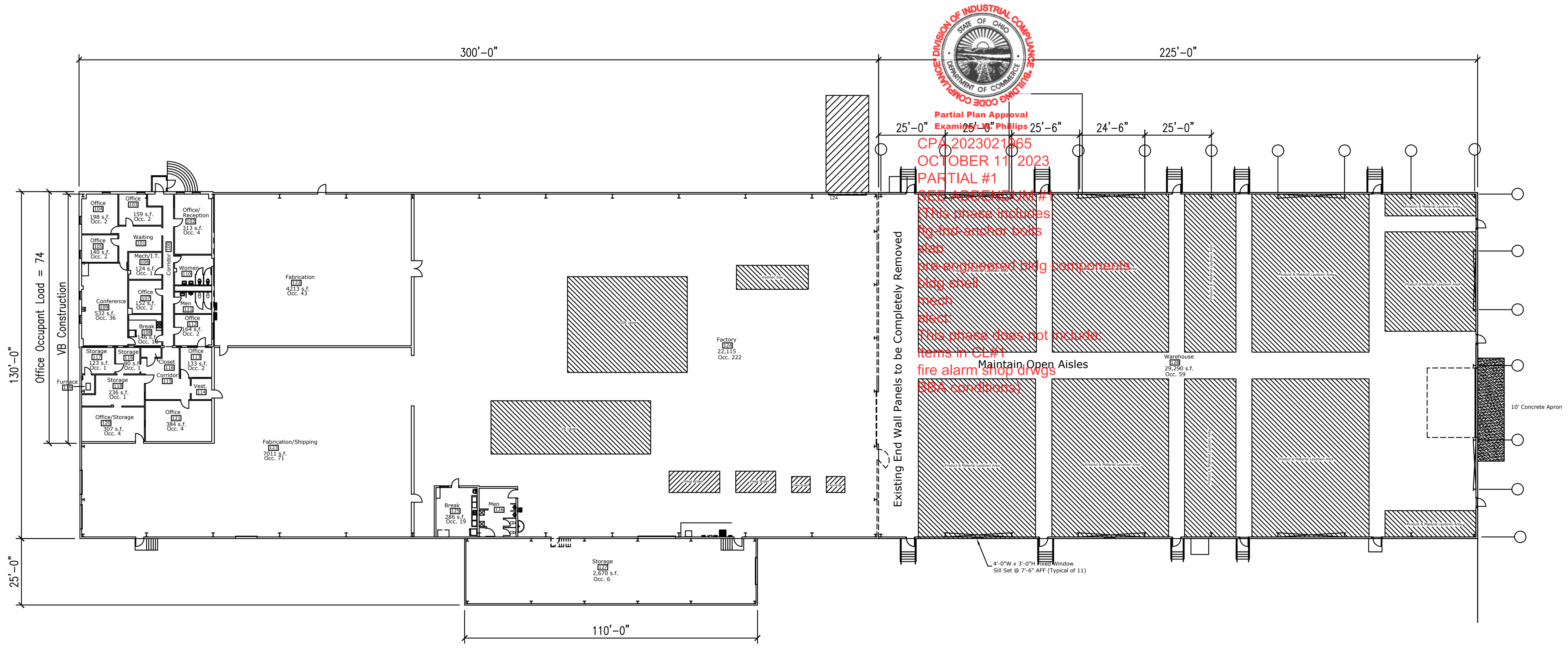
MARK	DATE	DESCRIPTION
SD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

G 1.0

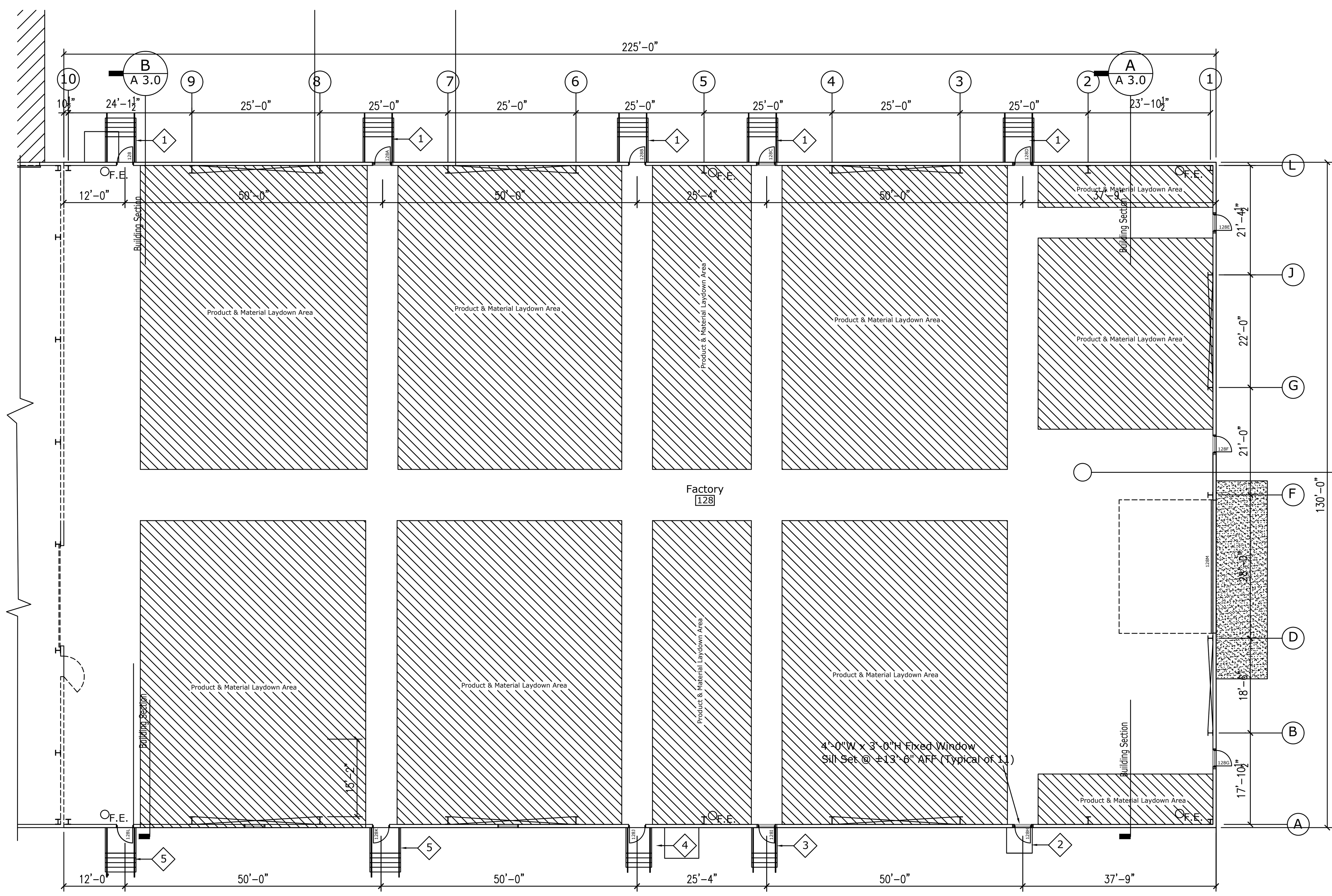
SHEET 1 OF 26



N

Floor Plan

1/32" = 1'-0"



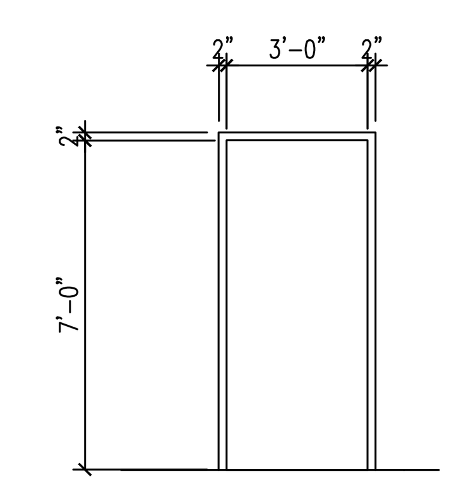
N

Partial Floor Plan

1/16" = 1'-0"

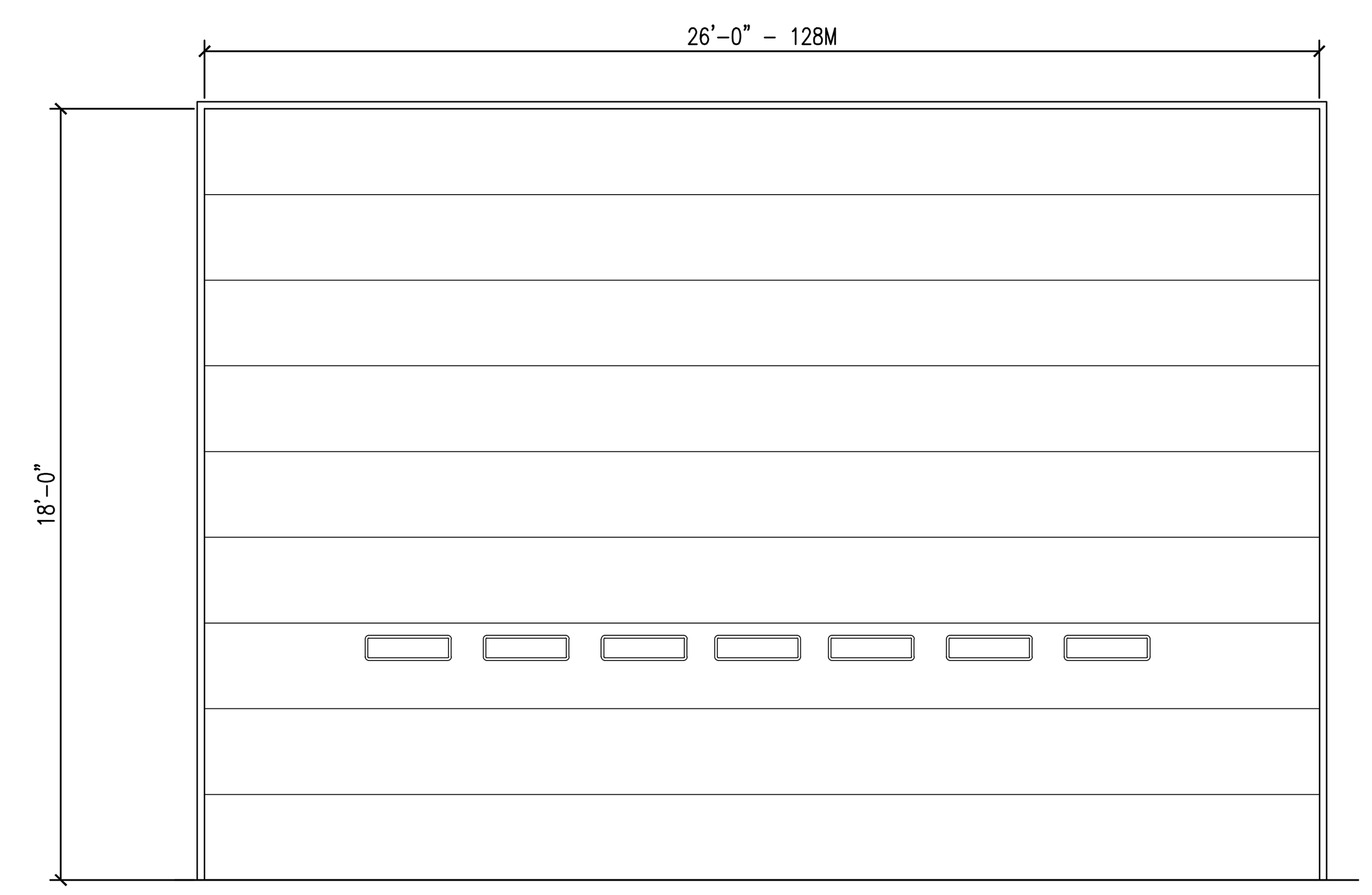
DOOR SCHEDULE						
MARK	LOCATION	SIZE	DOOR TYPE	LABEL	HARDWARE SET	REMARKS
128	Factory	3'-0" x 7'-0" x 1 3/4"	A		2	
128A	Factory	3'-0" x 7'-0" x 1 3/4"	A		1	
128B	Factory	3'-0" x 7'-0" x 1 3/4"	A		1	
128C	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128D	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128E	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128F	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128G	Factory	3'-0" x 7'-0" x 1 3/4"	A		2	
128H	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128I	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128J	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128K	Factory	3'-0" X 7'-0" X 1 3/4"	A		1	
128L	Factory	3'-0" X 7'-0" X 1 3/4"	A		2	
128M	Factory	26'-0" X 18'-0"	B		--	

Hardware Schedule		
Set No.	Doors	Description All Hardware Finishes - 626
1	128A, 128B, 128C, 128E, 128I, 128K, 128J	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Surface Mounted Exit Device No Exterior Trim 1 A.D.A.-Compliant Threshold 1 Set Weatherstripping 1 Door Top Drip Cap
2	128, 128D, 128F 128G, 128H, 128L	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Surface Mounted Exit Device Exterior Lever 1 A.D.A.-Compliant Threshold 1 Set Weatherstripping 1 Door Top Drip Cap



1 3/4" Flush Polyurethane Core with 18 Gauge Face Skin Shop Primed & Field Painted; Face Skin Shop Primed & Field Painted KD HM Frame Factory-Primed 18 Gauge HM Frame

(A)



3" Polystyrene Core, 20 gauge Face Skin with Acrylic Insulated Windows, Jamb & Bottom Weather Seals; Hi-Lift Track; 10,000 Cycle Spring; Electric Motor Operation with Keypad; Manual Chain Hoist; Inside Slide Lock

(B)

Door Types

1/4" = 1'-0"

Room Finishes	
Floor	Smooth, Slip-Resistant Concrete
Base	None
Walls	Prefinished Metal Liner Panel to ±7'-2" A.F.F.
Walls	Vinyl-faced PEMB Insulation
Ceiling	Vinyl-faced PEMB Insulation

◇ Exterior Stair Schedule

1. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.27'.
2. Exterior Concrete Stoop; 4,000 psi Concrete, Broom Finish, Frost Walls to 3'-0" Below Finish Grade; Landing - 5'-0"W x 5'-0"D; Top of Landing @ 985.77', Grade at Base of Landing @ 985.27'.
3. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 5.35" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.76'.
4. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 6.66" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.55'.
5. Exterior Steel Stair: Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6.4" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.10'.

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

Floor Plan

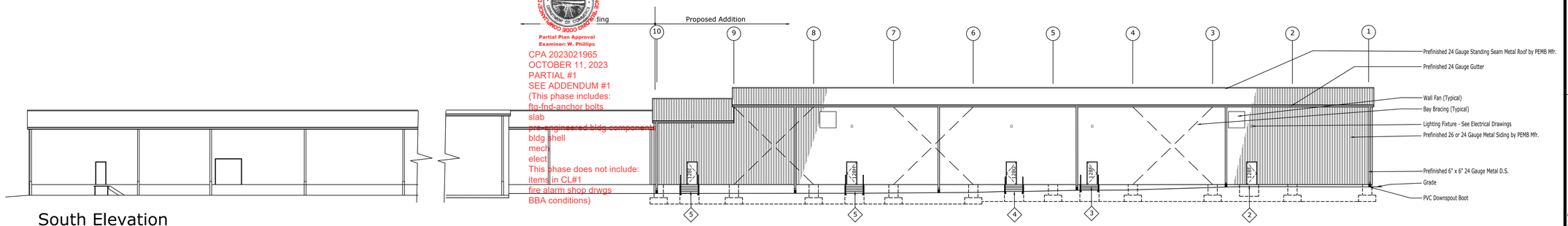
MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

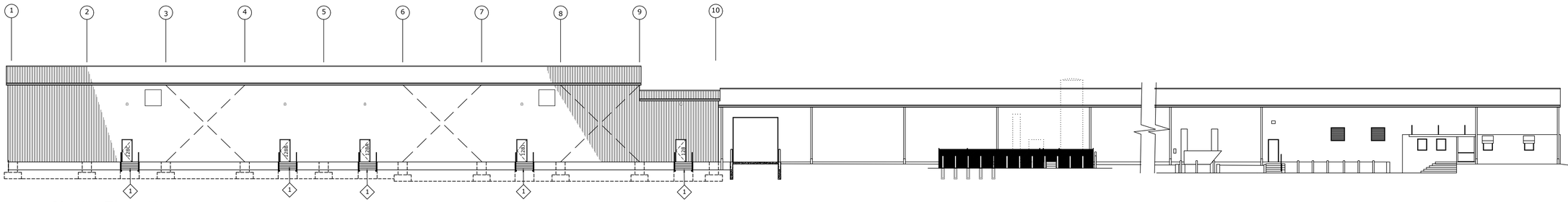
PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

A 1.0

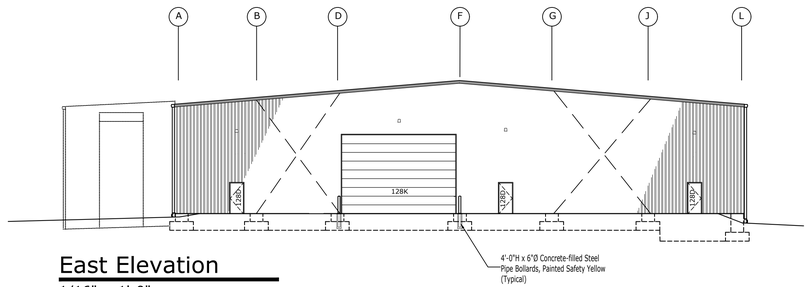
SHEET 2 OF 26



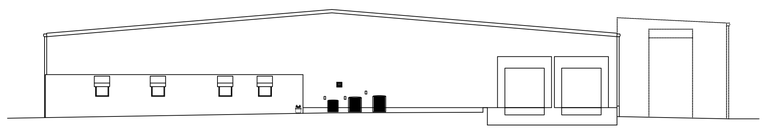
South Elevation
1/16" = 1'-0"



North Elevation
1/16" = 1'-0"



East Elevation
1/16" = 1'-0"



West Elevation
1/16" = 1'-0"

Exterior Stair Schedule

1. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.27'.
2. Exterior Concrete Stoop; 4,000 psi Concrete, Broom Finish, Frost Walls to 3'-0" Below Finish Grade; Landing - 5'-0"W x 5'-0"D; Top of Landing @ 985.77', Grade at Base of Landing @ 985.27'.
3. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 5.35" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.76'.
4. Exterior Steel Stair; Landing - 6'-0"W x 5'-0"D, 3 Treads - 11" each, 4 Risers - 6.66" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.55'.
5. Exterior Steel Stair: Landing - 6'-0"W x 5'-0"D, 4 Treads - 11" each, 5 Risers - 6.4" each; Top of Landing @ 985.77', Grade at Base of Stairs @ 983.10'.

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SHEET TITLE

Elevations

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
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A 2.0

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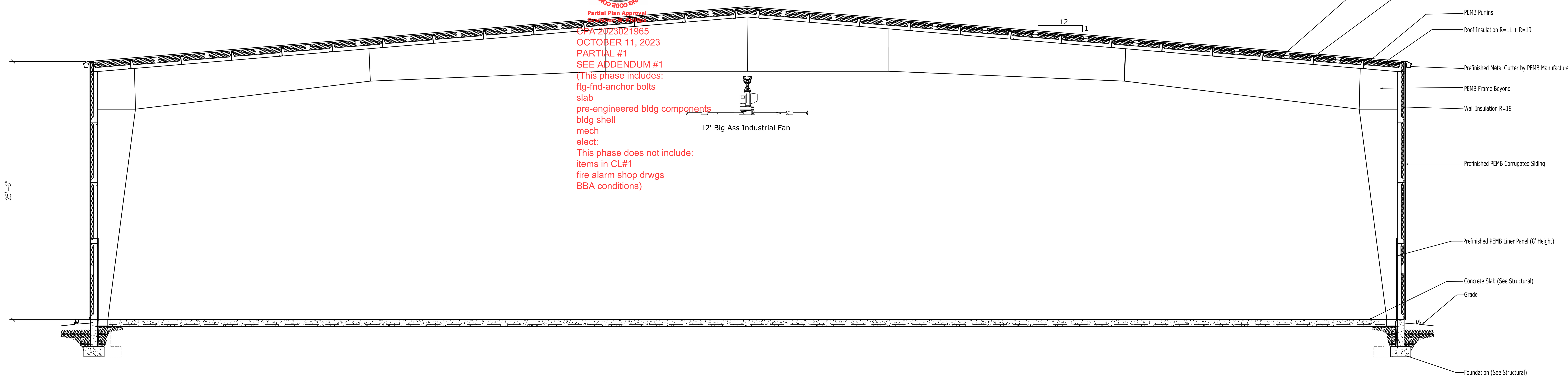
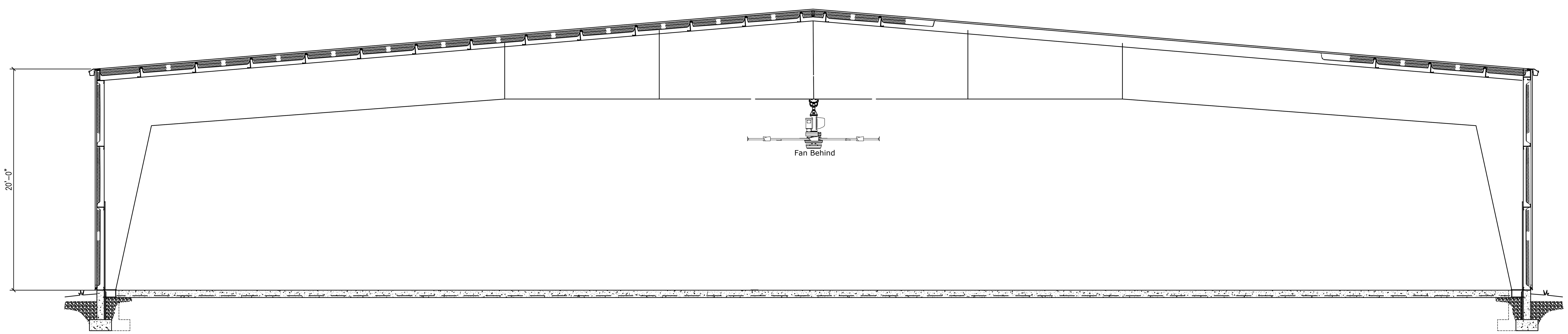
STATE OF OHIO
DEPARTMENT OF COMMERCE
Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



Section with Column Line 2 in Background (A / A 3.0)
3/16" = 1'-0"



Section with Column Line 10 in Background (B / A 3.0)
3/16" = 1'-0"

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OMNESS DESIGN, INC.
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CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE
Sections

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
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ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
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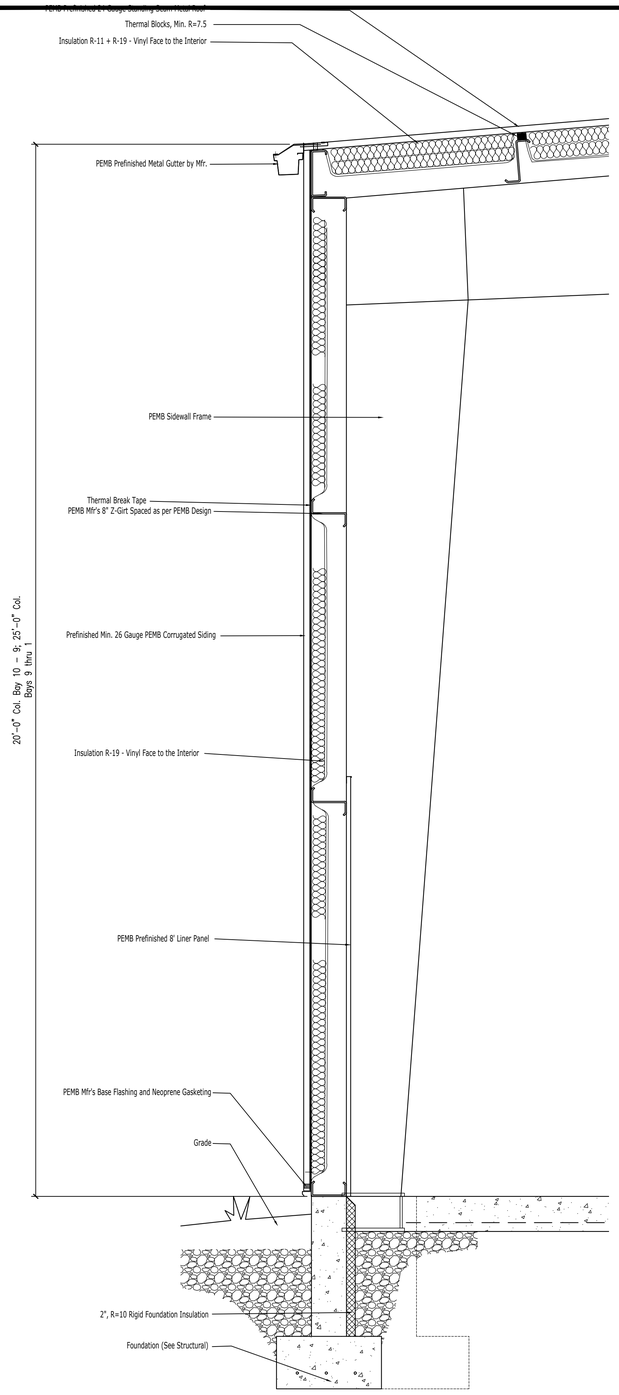
A 3.0

SHEET 4 OF 26



Typical Sidewall Section

3/4" = 1'-0"

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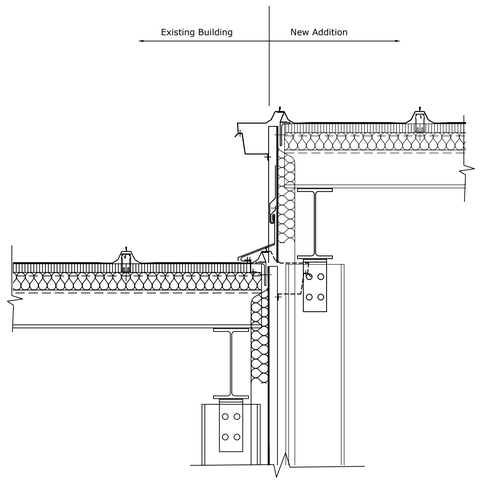
STATE OF OHIO
BUILDING CODE COMPLIANCE

Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



Roof Offset Detail

1" = 1'-0"

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Rialto Manufacturing, Inc.
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SHEET TITLE

Sections

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
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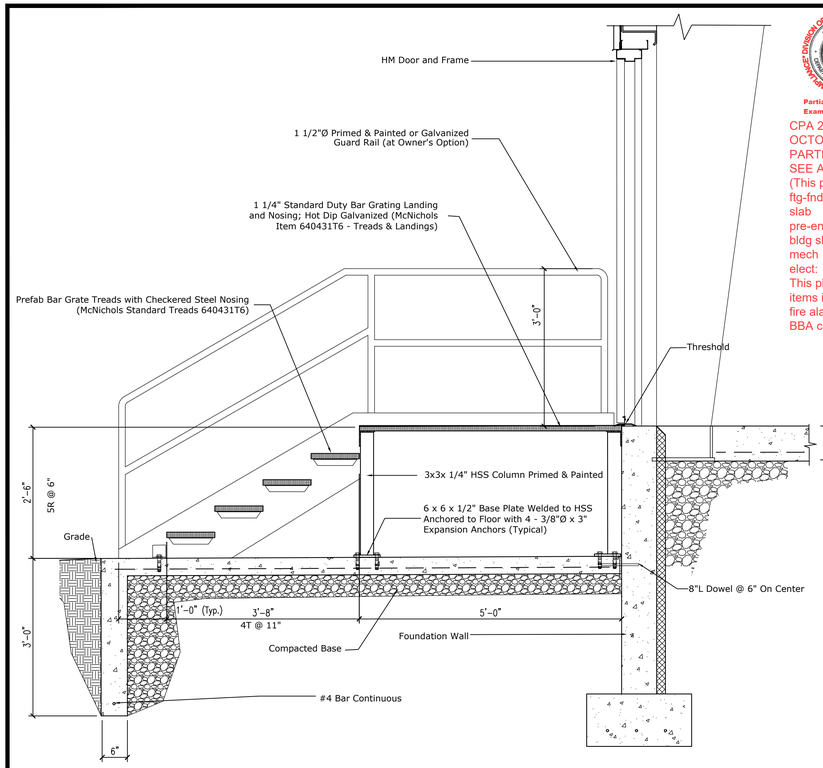
ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

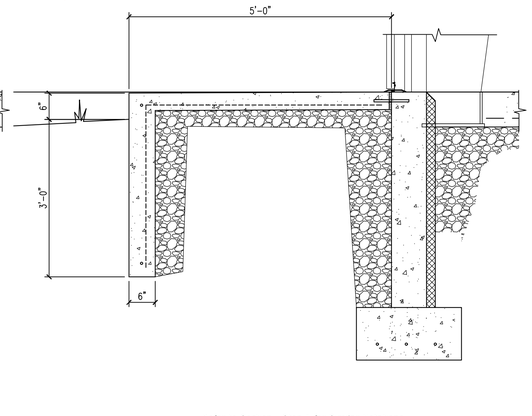
A 3.1

SHEET 5 OF 26



Section - Step 1

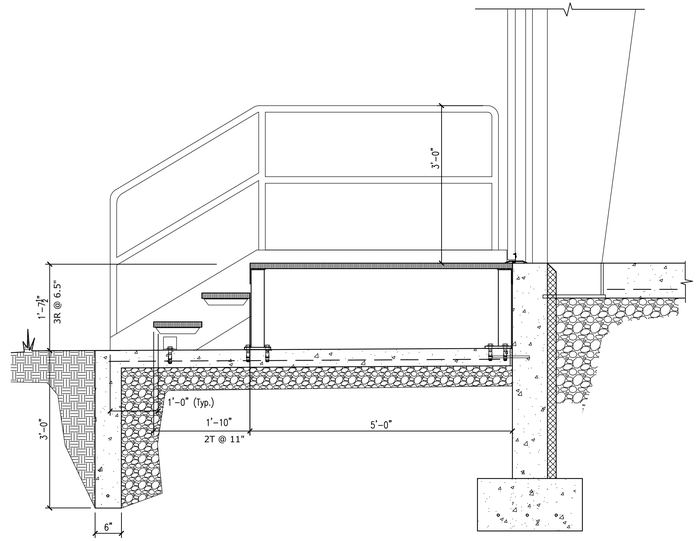
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Stoop 2

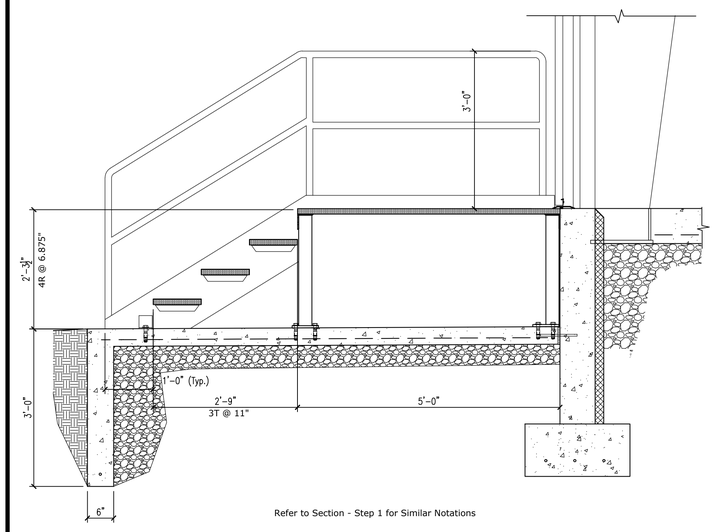
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Step 3

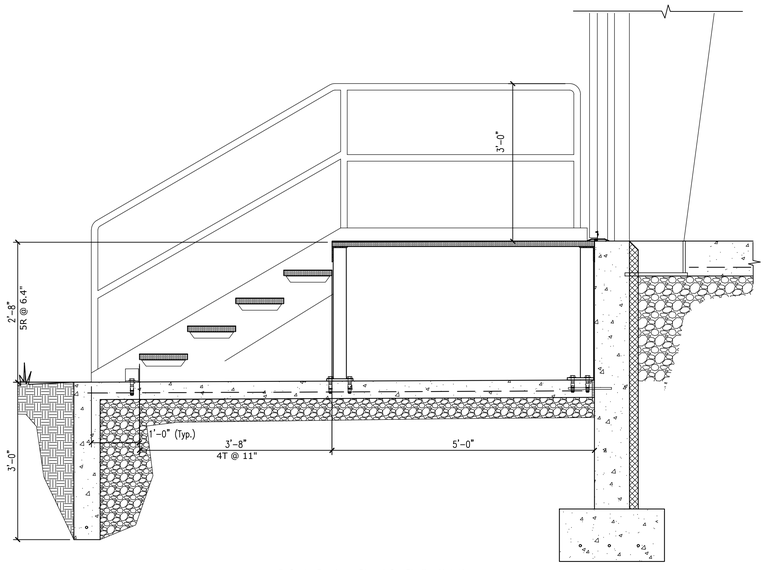
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Step 4

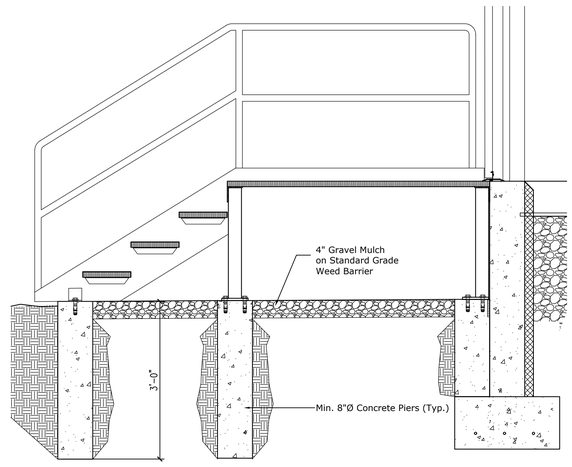
3/4" = 1'-0"



Refer to Section - Step 1 for Similar Notations

Section - Step 5

3/4" = 1'-0"



Alternate Typical Step Section

3/4" = 1'-0"

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

Partial Plan Approval
Examinen W. Phillips

PAUL K. OMNESS 13997 REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
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SHEET TITLE

Stair & Step Sections

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
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ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

A 3.2

SHEET 6 OF 26

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

B. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements, comply with the most stringent requirement. Refer uncertainties to Architect for a decision.

C. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum. The actual installation may exceed the minimum within reasonable limits. Indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision.

D. Special Tests and Inspections: Owner will engage a qualified testing agency and special inspector to conduct special tests and inspections required by authorities having jurisdiction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

B. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Use Charges: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated.

B. Water and Electric Power: Available from Owner's existing system without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

C. Accessible Temporary Egress: Comply with applicable provisions in ICC A117.1.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Plastic Mesh Fencing: minimum 4 feet high with posts.

2.2 TEMPORARY FACILITIES

A. Provide field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.

C. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

3.2 SUPPORT FACILITIES INSTALLATION

A. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

B. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

C. Furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

E. Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

F. Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.

Install and maintain temporary fire-protection facilities. Comply with NFPA 241.

3.4 MOISTURE AND MOLD CONTROL

A. Before installation of weather barriers, protect materials from water damage and keep porous and organic materials from coming into prolonged contact with concrete.

1. Protect stored and installed material from flowing or standing water.
2. Remove standing water from decks.
3. Keep deck openings covered or dammed.

B. After installation of weather barriers but before full enclosure and conditioning of building, protect as follows:

1. Do not load or install drywall or porous materials into partially enclosed building.
2. Discard water-damaged material.
3. Do not install material that is wet.
4. Discard, replace, or clean stored or installed material that begins to grow mold.
5. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion.

C. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 015000

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Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
preengineered bldg components
bldg shell
mech
elect.
This phase does not include:
items in CL#1
fire alarm shop drwgs
RBA conditions)

SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 EXECUTION REQUIREMENTS

A. Cutting and Patching:

1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching.
2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
3. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities.

B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

1.2 CLOSEOUT SUBMITTALS

A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

B. Operation and Maintenance Data: Submit two (2) copies of manual.

C. PDF Electronic File: Assemble manual into a composite electronically indexed file. Submit on digital media.

D. Record Drawings: Submit one set(s) of marked-up record prints.

E. Record Product Data: Submit one paper copy of each submittal.

1.3 SUBSTANTIAL COMPLETION PROCEDURES

A. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.

B. Submittals Prior to Substantial Completion: Before requesting Substantial Completion inspection, complete the following:

1. Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in other sections, including project record documents, operation and maintenance manuals, property surveys, similar final record information, warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
3. Submit maintenance material submittals specified in other sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect.
4. Submit test/adjust/balance records.
5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

C. Procedures Prior to Substantial Completion: Before requesting Substantial Completion inspection, complete the following:

1. Advise Owner of pending insurance changeover requirements.
2. Make final changeover of permanent locks and deliver keys to Owner.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.
5. Advise Owner of changeover in heat and other utilities.
6. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
7. Remove temporary facilities and controls.
8. Complete final cleaning requirements, including touchup painting.
9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will proceed with inspection or advise Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

1.4 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting inspection for determining final completion, complete the following:

1. Submit a final Application for Payment.
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report.

B. Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare final Certificate for Payment after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

PART 2 - PRODUCTS

2.1 MATERIALS

A. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

B. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

2.2 OPERATION AND MAINTENANCE DOCUMENTATION

A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information.

B. Organization: Unless otherwise indicated, organize manual into separate sections for each system and subsystem, and separate sections for each piece of equipment not part of a system.

C. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:

1. Manufacturer's operation and maintenance documentation.
2. Maintenance and service schedules.
3. Maintenance service contracts. Include name and telephone number of service agent.
4. Emergency instructions.
5. Spare parts list and local sources of maintenance materials.
6. Wiring diagrams.
7. Copies of warranties. Include procedures to follow and required notifications for warranty claims

2.3 RECORD DRAWINGS

A. Record Prints: Maintain a set of prints of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued. Mark to show actual installation where installation varies from that shown originally. Accurately record information in an acceptable drawing technique.

1. Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, and other construction affecting the Work.

B. Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance.

1. Verify compatibility with and suitability of substrates.
2. Examine roughing-in for mechanical and electrical systems.
3. Examine walls, floors, and roofs for suitable conditions.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

D. Take field measurements as required to fit the Work properly. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication.

E. Verify space requirements and dimensions of items shown diagrammatically on Drawings.

F. Surface and Substrate Preparation: Comply with manufacturer's written recommendations for preparation of substrates to receive subsequent work.

3.2 INSTALLATION

A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.

B. Comply with manufacturer's written instructions and recommendations.

C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

D. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed.

E. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place. Where size and type of attachments are not indicated, verify size and type required for load conditions.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.

F. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

G. Use products, cleaners, and installation materials that are not considered hazardous.

3.3 CUTTING AND PATCHING

A. Provide temporary support of work to be cut.

B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

C. Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

D. Cutting: Cut in-place construction using methods least likely to damage elements retained or adjoining construction.

1. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

E. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

1. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction in a manner that will minimize evidence of patching and refinishing.
2. Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance.
3. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.

3.4 CLEANING

A. Clean Project site and work areas daily, including common areas. Dispose of materials lawfully.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
3. Remove debris from concealed spaces before enclosing the space.

B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:

1. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
2. Sweep paved areas broom clean. Remove spills, stains, and other foreign deposits.
3. Remove labels that are not permanent.
4. Clean transparent materials, including mirrors. Remove excess glazing compounds.
5. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Sweep concrete floors broom clean.
6. Vacuum carpeted surfaces and wax resilient flooring.
7. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and foreign substances. Clean plumbing fixtures. Clean light fixtures, lamps, globes, and reflectors.
8. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.

3.5 OPERATION AND MAINTENANCE MANUAL PREPARATION

A. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

B. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are unavailable and where the information is necessary for proper operation and maintenance of equipment or systems.

C. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams.

3.6 DEMONSTRATION AND TRAINING

A. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system. Include a detailed review of the following:

1. Include instruction for basis of system design and operational requirements, review of documentation, emergency procedures, operations, adjustments, troubleshooting, maintenance, and repairs.

END OF SECTION 017000

STATE OF OHIO
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REGISTERED ARCHITECT

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CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Specifications

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DD		DESIGN DEVELOPMENT
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ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
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SP 1.0

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and color Samples.

B. Environmental Limitations: Do not proceed with installation of joint sealants when ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS

A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions.

B. Sealant for General Exterior Use Where Another Type Is Not Specified:

1. Single-component, neutral-curing silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; for Use NT.

2. Single-component, nonsag urethane sealant, ASTM C 920, Type S; Grade NS; Class 25; and for Use NT.

3. Single-component, nonsag polysulfide sealant, ASTM C 920, Type S; Grade NS; Class 25; for Use NT.

4. Single-component, nonsag urethane sealant, ASTM C 920, Type S; Grade NS; Class 25; for Use T.

C. Sealant for Exterior Traffic-Bearing Joints, Where Slope Allows Use of Pourable Sealant:

1. Single-component, pourable urethane sealant, ASTM C 920, Type S; Grade P; Class 25; for Use T.

D. Sealant for Interior Use at Perimeters of Door and Window Frames:

1. Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

E. Acoustical Sealant:

1. Nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 that effectively reduces airborne sound transmission as demonstrated by testing according to ASTM E 90.

2.2 MISCELLANEOUS MATERIALS

A. Provide sealant backings of materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Cylindrical Sealant Backings: ASTM C 1330, of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

D. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with ASTM C 1193.

B. Install sealant backings to support sealants during application and to produce cross-sectional shapes and depths of installed sealants that allow optimum sealant movement capability.

C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

D. Acoustical Sealant Installation: At sound-rated assemblies and elsewhere as indicated, seal perimeters, control joints, openings, and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions. Comply with ASTM C 919.

END OF SECTION 079200

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and Shop Drawings.

PART 2 - PRODUCTS

2.1 HOLLOW METAL DOORS AND FRAMES

A. Frames: ANSI A250.8; conceal fastenings unless otherwise indicated.

1. Steel Sheet for Interior Frames: 0.042-inch- minimum thickness.
2. Interior Frame Construction: Knocked down.
3. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.
4. Frame Anchors: Not less than 0.042 inch thick.

B. Prepare doors and frames to receive mortised and concealed hardware according to SDI A250.6 and BHMA A156.115.

C. Reinforce doors and frames to receive surface-applied hardware.

D. Prime Finish: Manufacturer's standard, factory-applied coat of lead- and chromate-free primer complying with SDI A250.10 acceptance criteria.

2.2 MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, suitable for exposed applications.

B. Frame Anchors: ASTM A 879/A 879M, A Z coating designation; mill phosphatized.

1. For anchors built into exterior walls, sheet steel complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install hollow metal frames to comply with SDI A250.11.

1. Fire-Rated Frames: Install according to NFPA 80.

B. Install doors to provide clearances between doors and frames as indicated in SDI A250.11.

C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying rust-inhibitive primer.

END OF SECTION 081113

SECTION 081416 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Samples for factory-finished doors.

PART 2 - PRODUCTS

2.1 FLUSH WOOD DOORS

2.2 DOOR CONSTRUCTION, GENERAL

A. Quality Standard: WDMA I.S.1-A.

B. WDMA I.S.1-A Performance Grade:

1. Heavy duty unless otherwise indicated.

C. Particleboard-Core Doors: Provide structural composite lumber cores instead of particleboard cores for doors with protection plates.

2.3 FLUSH WOOD DOORS

A. Veneer-Faced Doors for Transparent Finish:

1. Interior Solid-Core Doors: Premium grade, five-ply, particleboard cores.

a. Faces: Grade A rotary-cut select white birch.
b. Veneer Matching: Book and balance match.
c. Continuous matching for doors with transoms.

2.4 FABRICATION AND FINISHING

A. Factory-fit doors to suit frame-opening sizes indicated and to comply with clearances specified.

B. Factory-machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3.

C. Cut and trim openings to comply with referenced standards.

D. Factory-finish doors indicated for transparent finish with stain and manufacturer's standard finish complying with WDMA TR-6, catalyzed polyurethane for grade specified for doors.

1. Sheen: Satin.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install doors to comply with manufacturer's written instructions and WDMA I.S.1-A, and as indicated.

1. Install fire-rated doors to comply with NFPA 80.
2. Install smoke- and draft-control doors according to NFPA 105.

B. Align and fit doors in frames with uniform clearances and bevels.

C. Clearances: As follows unless otherwise indicated:

1. 1/8 inch at heads, jambs, and between pairs of doors.
2. 1/8 inch from bottom of door to top of decorative floor finish or covering.
3. 1/4 inch from bottom of door to top of threshold.
4. Comply with NFPA 80 for fire-rated doors.

END OF SECTION 081416

SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data, Shop Drawings, and color Samples.

1. For entrance doors, include hardware schedule.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Structural Performance: Design, engineer, fabricate, and install aluminum-framed storefronts to withstand structural loads indicated.

1. Limit deflection of framing members normal to wall plane to 1/175 of clear span or an amount that restricts edge deflection of individual glazing lites to 3/4 inch, whichever is less.

B. Windborne-Debris Resistance: Framing system and doors pass basic-protection testing requirements in ASTM E 1996 for Wind Zone 1 when tested according to ASTM E 1886.

C. Air Infiltration: Limited to 0.06 cfm/sq. ft. of fixed framing and glass area when tested according to ASTM E 283 at a static-air-pressure difference of 6.24 lbf/sq. ft..

D. Water Penetration: Systems do not evidence water leakage when tested according to ASTM E 331 at minimum differential pressure of 20 percent of positive wind-load design pressure but not less than 10 lbf/sq. ft..

E. Thermal Transmittance (U-factor): Fixed glazing and framing areas shall have U-factor of not more than 0.40 Btu/sq. ft. x h x deg F as determined according to NFRC 100.

2.2 ALUMINUM-FRAMED STOREFRONTS

A. Basis of Design: Tubelite T24650 and T14000.

B. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated; ASTM B 209 sheet; ASTM B 221 extrusions.

C. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.

1. Construction: Thermally broken.

D. Doors: 1-3/4-inch-thick glazed doors with minimum 0.125-inch-thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods. Provide snap-on, extruded-aluminum glazing stops and preformed gaskets.

1. Door Design: As indicated; Narrow stile; 2-1/8-inch nominal width.
2. Accessible Doors: Smooth surfaced for width of door in area within 10 inches above floor or ground plane.
3. Exterior Doors: Provide compression weather stripping at fixed stops. At other locations, provide sliding weather stripping retained in adjustable strip mortised into door edge.

E. Glazing: Comply with Section 088000 "Glazing."

F. Glazing Gaskets: Manufacturer's standard sealed-corner pressure-glazing system of black, resilient elastomeric glazing gaskets, setting blocks, and shims or spacers.

G. Fasteners and Accessories: Compatible with adjacent materials, corrosion resistant, nonstaining, and nonbleeding. Use concealed fasteners except for application of door hardware.

H. Fabrication: Fabricate framing in profiles indicated for flush glazing (without projecting stops). Provide subframes and reinforcing of types indicated or, if not indicated, as required for a complete system. Factory-assemble components to greatest extent possible. Disassemble components only as necessary for shipment and installation.

1. Door Framing: Reinforce to support imposed loads. Factory-assemble door and frame units and factory-install hardware to greatest extent possible. Reinforce door and frame units for hardware indicated. Cut, drill, and tap for factory-installed hardware before finishing components.

I. Aluminum Finish: Class I, clear anodic finish; complying with AAMA 611.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Isolate metal surfaces in contact with incompatible materials, including wood, by painting contact surfaces with bituminous coating or primer or by applying sealant or tape recommended by manufacturer.

B. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.

C. Set continuous sill members and flashing in full sealant bed as specified in Section 079200 "Joint Sealants" to produce weathertight installation.

D. Install framing components true in alignment with established lines and grades to the following tolerances:

1. Variation from Plane: Limit to 1/8 inch in 12 feet; 1/4 inch over total length.
2. Alignment: For surfaces abutting in line, limit offset to 1/16 inch. For surfaces meeting at corners, limit offset to 1/32 inch.
3. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch.

E. Install doors without warp or rack. Adjust doors and hardware to provide tight fit at contact points and smooth operation.

END OF SECTION 084113

SECTION 088000 - GLAZING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and Samples.

PART 2 - PRODUCTS

2.1 GLASS, GENERAL

A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below unless more stringent requirements are indicated. See these publications for glazing terms not otherwise defined in this Section or in referenced standards.

B. Safety Glazing: Where safety glazing is indicated, provide glazing that complies with 16 CFR 1201, Category II.

C. Safety Glazing Labeling: Where safety glazing is indicated, permanently mark glazing with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction or manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.

D. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.

E. Windborne-Debris-Impact Resistance: Exterior glazing shall comply with basic-protection testing requirements in ASTM E 1996 for Wind Zone 1 when tested according to ASTM E 1886. Test specimens shall be no smaller in width and length than glazing indicated for use on Project and shall be installed in same manner as glazing indicated for use on Project.

2.2 GLASS PRODUCTS

A. Fully Tempered Float Glass: ASTM C 1048, Kind FT; Type I; Quality-Q3.

B. Heat-Strengthened Float Glass: ASTM C 1048, Kind HS; Type I; Quality-Q3.

C. Reflective-Coated Glass: ASTM C 1376, coated by pyrolytic or vacuum deposition (sputter-coating) process.

D. Insulating-Glass Units: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM E 2190.

2.3 GLAZING SEALANTS

A. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 25, Use NT.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with combined recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are contained in GANA's "Glazing Manual."

B. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

C. Remove nonpermanent labels, and clean surfaces immediately after installation.

3.2 INSULATING-GLASS TYPES

A. Glass Type C: Tinted insulating glass.

1. Overall Unit Thickness: 1 inch.
2. Thickness of Each Glass Lite: ¼".
3. Outdoor Lite: Heat-strengthened float glass.
4. Omitted
5. Interspace Content: Air.
6. Indoor Lite: Heat-strengthened float glass.
7. Solar Heat-Gain Coefficient: 0.14 maximum.

B. Glass Type b: Reflective-coated, tinted insulating glass.

1. Overall Unit Thickness: 1 inch.
2. Thickness of Each Glass Lite: ¼".
3. Outdoor Lite: Tinted fully tempered float glass.
4. Omitted.
5. Interspace Content: Air.
6. Indoor Lite: Clear fully tempered float glass.
7. Coating Location: Second surface.
8. Coating Color: Gray.
9. Solar Heat-Gain Coefficient: 0.14 maximum.
10. Safety glazing required.

C. Glass Type a: Reflective-coated, tinted insulating spandrel glass.

1. Overall Unit Thickness: 1 inch.
2. Thickness of Each Glass Lite: ¼".
3. Outdoor Lite: Tinted fully tempered float glass.
4. Omitted
5. Interspace Content: Air.
6. Indoor Lite: Clear fully tempered float glass.
7. Coating Location: Second surface.
8. Coating Color: Omitted

END OF SECTION 088000

SECTION 092216 - NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data.

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ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
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SP 1.1

PART 2 - PRODUCTS

2.1 METAL FRAMING AND SUPPORTS

A. Steel Framing Members, General: ASTM C 754.

1. Steel Sheet Components: ASTM C 645. Thickness specified is minimum uncoated base-metal thickness.
2. Protective Coating: Coating with equivalent corrosion resistance of ASTM A 653/A 653M, G40 zinc coating.

B. Framing Systems:

1. Studs and Runners: In depth indicated and 0.018 inch thick unless otherwise indicated.
2. Flat Strap and Backing: 0.018 inch thick.
3. Hat-Shaped, Rigid Furring Channels: In depth indicated and 0.018 inch thick.
4. Z-Furring: In depth required by insulation, 1-1/4-inch face flange, 7/8-inch wall-attachment flange, and 0.018 inch thick.

2.2 ACCESSORIES

A. General: Comply with referenced installation standards.

1. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

B. Isolation Strip at Exterior Walls: Asphalt felt or foam gasket.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install steel framing to comply with ASTM C 754."
1. Gypsum Board Assemblies: Also comply with ASTM C 840.

B. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.

C. Isolate steel framing from building structure, except at floor, to prevent transfer of loading imposed by structural movement.

1. Where studs are installed directly against exterior walls, install isolation strip between studs and wall.

D. Fire-Resistance-Rated Assemblies: Comply with requirements of listed assemblies.

END OF SECTION 092216

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

B. STC-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 90 and classified per ASTM E 413 by a qualified independent testing and inspecting agency.

2.2 PANEL PRODUCTS

A. Provide in maximum lengths available to minimize end-to-end butt joints.

B. Interior Gypsum Board: ASTM C 1396/C 1396M, in thickness indicated, with manufacturer's standard edges. Type as required for specific fire-resistance-rated assemblies.

C. Glass-Mat, Water-Resistant Gypsum Backing Board: ASTM C 1178/C 1178M, of thickness indicated. Regular type unless otherwise indicated and Type X where required for fire-resistance-rated assemblies and where indicated.

2.3 ACCESSORIES

A. Trim Accessories: ASTM C 1047, formed from galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet. For exterior trim, use accessories formed from hot-dip galvanized-steel sheet, plastic, or rolled zinc.

1. Provide cornerbead at outside corners unless otherwise indicated.
2. Provide LC-bead (J-bead) at exposed panel edges.
3. Provide control joints where indicated.

B. Joint-Treatment Materials: ASTM C 475/C 475M.

1. Joint Tape: Paper unless otherwise recommended by panel manufacturer.
2. Joint Compounds: Setting-type taping compound and drying-type, ready-mixed, compounds for topping.

C. Sound-Attenuation Blankets: ASTM C 665, Type I (unfaced).

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Partial Plan Approval
Examiner: W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install gypsum board to comply with ASTM C 840.

1. Isolate gypsum board assemblies from abutting structural and masonry work. Provide edge trim and acoustical sealant.
2. Single-Layer Fastening Methods: Fasten gypsum panels to supports with screws.
3. Multilayer Fastening Methods: Fasten base layers with screws, and face layers to base layers with adhesive and supplementary fasteners.

B. Fire-Resistance-Rated Assemblies: Comply with requirements of listed assemblies.

C. Finishing Gypsum Board: ASTM C 840.

1. At concealed areas, unless a higher level of finish is required for fire-resistance-rated assemblies, provide Level 1 finish: Embed tape at joints.
2. At substrates for tile, provide Level 2 finish: Embed tape and apply separate first coat of joint compound to tape, fasteners, and trim flanges.
3. Unless otherwise indicated, provide Level 4 finish: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges.

D. Glass-Mat, Water-Resistant Backing Panels: Finish according to manufacturer's written instructions.

END OF SECTION 092900

SECTION 095113 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data and Samples.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

2.2 ACOUSTICAL PANELS

A. Basis of Design: Armstrong, Mesa 681.

B. Classification: As follows, per ASTM E 1264:

1. Pattern: CE (perforated, small holes and lightly textured).
2. LRC: Not less than 0.85.
3. NRC: Not less than 0.60.
4. CAC: Not less than 35.
5. Surface-Burning Characteristics: Class A.

C. Color: White.

D. Edge Detail: Reveal sized-to-fit exposed flange of suspension system.

E. Thickness: 9/16 inch.

F. Modular Size: 24 by 48 inches.

2.3 CEILING SUSPENSION SYSTEM

A. Ceiling Suspension System: Wide-face, direct-hung system; ASTM C 635, intermediate-duty structural classification.

1. Face Design: Flat, flush.
2. Face Finish: Painted white.

B. Attachment Devices: Sized for 5 times the design load indicated in ASTM C 635, Table 1, Direct Hung, unless otherwise indicated.

C. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper.

1. Size: Provide yield strength at least 3 times the hanger design load (ASTM C 635, Table 1, Direct Hung), but not less than 0.106-inch- diameter wire.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install acoustical ceilings to comply with ASTM C 636/C 636M and seismic design requirements indicated, according to manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

C. Arrange directionally patterned acoustical units as indicated on Drawings.

END OF SECTION 095113

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product data and Samples.

B. Extra Materials: Deliver to Owner at least 10 linear feet of each type and color of resilient wall base installed.

PART 2 - PRODUCTS

2.1 RESILIENT BASE

A. Vinyl Base: ASTM F 1861, Type TV (vinyl, thermoplastic), Group I (solid, homogeneous).

B. Style: Cove (base with toe).

C. Minimum Thickness: 0.125 inch.

D. Height: 4 inches.

E. Lengths: Cut lengths 48 inches long or coils in manufacturer's standard lengths.

F. Outside Corners: Job formed or preformed.

G. Inside Corners: Job formed or preformed.

2.2 RESILIENT MOLDING ACCESSORY

A. Rubber Molding Accessories.

B. Vinyl Molding Accessories.

C. Description: Nosing for resilient flooring; Transition strips.

2.3 INSTALLATION ACCESSORIES

A. Adhesives: Water-resistant type recommended by manufacturer to suit floor covering and substrate conditions indicated.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Prepare horizontal surfaces according to ASTM F 710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.

B. Adhesively install resilient wall base and accessories.

C. Install wall base in maximum lengths possible. Apply to walls, columns, pilasters, casework, and other permanent fixtures in rooms or areas where base is required.

D. Install reducer strips at edges of floor coverings that would otherwise be exposed.

END OF SECTION 096513

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals:
1. Samples.

B. Extra Materials: Deliver to Owner 1 gal. of each color and type of finish-coat paint used on Project, in containers, properly labeled and sealed.

PART 2 - PRODUCTS

2.1 PAINT

A. Material Compatibility: Provide materials that are compatible with one another and with substrates.

1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Colors: As selected.

PART 3 - EXECUTION

3.1 PREPARATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Remove hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.

C. Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

3.2 APPLICATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Paint exposed surfaces, new, unless otherwise indicated.

1. Do not paint prefinished items, items with an integral finish, operating parts, and labels unless otherwise indicated.

C. Apply paints according to manufacturer's written instructions.

1. Use brushes only where the use of other applicators is not practical.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

1. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

3.3 EXTERIOR PAINT APPLICATION SCHEDULE

A. Steel:

1. Semigloss Water-Based, Light-Industrial Coating: Two coats over alkyd anticorrosive primer.

END OF SECTION 099113

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals:

1. Samples.

B. Extra Materials: Deliver to Owner 1 gal. of each color and type of finish-coat paint used on Project, in containers, properly labeled and sealed.

PART 2 - PRODUCTS

2.1 PAINT

A. Material Compatibility: Provide materials that are compatible with one another and with substrates.

1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Low-Emitting Materials: Comply with Section 018113.13 - Sustainable Design Requirements - LEED 2009 for New Construction and Major Renovations.

C. Colors: As selected.

PART 3 - EXECUTION

3.1 PREPARATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Remove hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.

C. Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

3.2 APPLICATION

A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Paint exposed surfaces, new and existing, unless otherwise indicated.

1. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces.
2. Paint surfaces behind permanently fixed equipment or furniture with prime coat only.
3. Paint the back side of access panels.
4. Color-code mechanical piping in accessible ceiling spaces.
5. Do not paint prefinished items, items with an integral finish, operating parts, and labels unless otherwise indicated.

C. Apply paints according to manufacturer's written instructions.

1. Use brushes only where the use of other applicators is not practical.
2. Use rollers for finish coat on interior walls and ceilings.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

1. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

3.3 INTERIOR PAINT APPLICATION SCHEDULE

A. Steel:
1. Semigloss, Quick-Dry Enamel: Two coats over quick-drying alkyd metal primer: MPI INT 5.1A.

B. Gypsum Board:

1. Eggshell Latex: Two coats over latex primer/sealer: MPI INT 9.2A.
2. Eggshell Institutional Low-Odor/VOC Latex: Two coats over low-odor/VOC primer/sealer: MPI INT 9.2M.

END OF SECTION 099123

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Specifications

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 08-08-23

PROJECT NO: 22-128
CAD DWG FILE: 22-128 Rialto
DRAWN BY: PO
CHECKED BY: PO

SP 1.2

GOVERNING CODE: 2017 OHIO BUILDING CODE

1. DEAD LOADS
   BUILDING ROOF
   A. BUILDING SELF WEIGHT = BY PEMB SUPPLIER
   B. COLLATERAL = 5.0 PSF
   C. TOTAL DEAD LOAD = 5.0 PSF + SELF WEIGHT

2. ROOF LIVE LOADS:
   A. MINIMUM ROOF LIVE LOAD = 20 PSF

3. ROOF SNOW DESIGN PARAMETERS
   A. GROUND SNOW LOAD Pg = 20.0 PSF
   B. FLAT ROOF SNOW LOAD Pf = 14.0 PSF
   C. MINIMUM UNIFORM DESIGN SNOW LOAD = 20.0 PSF
   D. UNIFORM SNOW LOAD WITH UNBALANCED / DRIFTING = 14.0 PSF
   E. SNOW EXPOSURE FACTOR Ce = 1.0
   F. SNOW LOAD IMPORTANCE FACTOR I = 1.0
   G. THERMAL FACTOR Ct = 1.0
   H. DRIFTING SNOW AND UNBALANCED SNOW PER ASCE 7-10.

4. WIND DESIGN PARAMETERS
   A. ULTIMATE DESIGN WIND SPEED Vult = 115 MPH
   B. NOMINAL DESIGN WIND SPEED Vasd = 89 MPH
   C. RISK CATEGORY= II
   D. WIND EXPOSURE CATEGORY = C
   E. INTERNAL PRESSURE COEFFICIENT = +/-0.18
   F. WIND DESIGN PRESSURES FOR COMPONENTS AND CLADDING:

COMPONENT AND CLADDING WIND PRESSURES
(BASED UPON WIND VELOCITY Vasd SERVICE LEVEL LOAD)
REFER TO ASCE7-10 TABLE 30.7-2 FOR COMPONENT AND CLADDING ZONES, a = 6.2'

	ZONE	EFFECTIVE WIND AREA (SF)	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)
ROOF	1	10	10.0	-19.3
		50	10.0	-18.1
		100	10.0	-17.6
	2	10	10.0	-32.3
		50	10.0	-24.3
		100	10.0	-20.9
	3	10	10.0	-48.6
		50	10.0	-29.2
		100	10.0	-20.9
OVERHANGS	2	10	10.0	-27.7
		50	10.0	-26.6
		100	10.0	-26.1
	3	10	10.0	-45.7
		50	10.0	-22.9
		100	10.0	-13.1
WALLS	4	10	17.6	-19.1
		50	15.8	-17.3
		100	15.0	-16.5
	5	10	17.6	-23.5
		50	15.8	-19.9
		100	15.0	-18.3

5. SEISMIC DESIGN PARAMETERS
   A. SEISMIC IMPORTANCE FACTOR = 1.0
   B. SEISMIC OCCUPANCY CATEGORY = II
   C. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 0.2 SECOND PERIOD, SS = 13.0%g
   D. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 1.0 SECOND PERIOD, S1 = 6.0%g
   E. SITE CLASS = D
   F. SDS = 0.137g
   G. SD1 = 0.095g
   H. SEISMIC DESIGN CATEGORY = D
   I. BUILDING SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
   J. SEISMIC RESISTING SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
   J. RESPONSE MODIFICATION FACTOR, R: 3.0
   K. DESIGN BASE SHEAR: 0.046

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE CONSTRUCTION
Partial Plan Approval
Examiner W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

SCHEDULE OF SPECIAL INSPECTIONS

ITEM	REQ'D	INSPECTION TYPE CONT.	INSPECTION TYPE PER.	REFERENCED STANDARD	OBC REFERENCE
FABRICATORS: (1705.2 OBC)	X				
INSPECTION AND NDE PER QUALITY ASSURANCE REQUIREMENTS OF AISC 360			X		
STRUCTURAL LOAD BEARING MEMBERS			X		
STRUCTURAL LOAD BEARING ASSEMBLIES			X		
STEEL CONSTRUCTION: (1705.2 OBC)	X				
INSPECTION AND NDE PER QUALITY ASSURANCE REQUIREMENTS OF AISC 360			X		
HIGH STRENGTH BOLTS			X		
STRUCTURAL STEEL MATERIALS			X		
STRUCTURAL STEEL WELDING			X		
STRUCTURAL STEEL FRAME JOINT DETAILS			X		
CONCRETE CONSTRUCTION	X				
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS INCLUDING PLACEMENT VERIFICATION			X	ACI 318: 25.2, 25.3, 26.5.1.-26.5.3	1908.4
REINFORCING BAR WELDING			X	AWS D1.4 AND ACI 318: 26.5.4	
VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A-706			X	AWS D1.4 AND ACI 318: 26.5.4	
INSPECT SINGLE-PASS FILLET WELDS			X	AWS D1.4 AND ACI 318: 26.5.4	
INSPECT ALL OTHER WELDS		X		AWS D1.4 AND ACI 318: 26.5.4	
INSPECT ANCHORS CAST IN CONCRETE			X	ACI 318: 17.8.2	
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS					
ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS					
MECHANICAL ANCHORS AND ADHESIVE ANCHORS OTHER THAN THOSE DEFINED ABOVE					
VERIFY USE OF REQUIRED DESIGN MIX			X	ACI 318: CHAPTER 19 AND 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS AND DETERMINE THE TEMPERATURE OF CONCRETE		X		ASTM C 172, ASTM C 31, ACI 318: 26.4.5, 26.12	1908.10
INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES		X		ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES			X	ACI 318: 26.4.7 - 26.4.9	1908.9
INSPECT ERECTION OF PRECAST CONCRETE MEMBERS			X	ACI 318: CHAPTER 26.8	
SOILS	X				
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY			X		
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL			X		
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS			X		
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.		X			
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.			X		

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED PROFESSIONAL ENGINEER
08-07-2023

OMNESS DESIGN, INC
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.
Zanesville, OH 43701

Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
STRUCTURAL GENERAL NOTES

MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE

PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S0.1

GENERAL NOTES:

1. ANY CHANGES MADE TO THE DESIGN IDENTIFIED ON THESE DRAWINGS AND/OR ASSOCIATED SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO MAKING ANY MODIFICATIONS TO THE PROJECT. ANY LIABILITY AS A RESULT OF DESIGN MODIFICATIONS, AS WELL AS ANY COSTS ASSOCIATED WITH SUCH MODIFICATIONS, MADE WITHOUT THE WRITTEN APPROVAL OF ENGINEER OF RECORD SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY FOR SAFETY PROCEDURES.
3. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE ENGINEER IS NOT ENGAGED IN, AND DOES NOT SUPERVISE CONSTRUCTION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

USE OF THESE DOCUMENTS:

1. THESE DOCUMENTS SHALL NOT BE REPRODUCED IN ANY MANNER FOR THE PRODUCTION OF FABRICATION OR ERECTION SUBMITTALS. REPRODUCTION OF THESE DOCUMENTS IN THAT MANNER CONSTITUTES COPYRIGHT INFRINGEMENT. ANY DOCUMENTS SUBMITTED FOR REVIEW THAT CONTAIN ANY IMAGE, SKETCH, DETAIL, ETC. FROM THESE DOCUMENTS WILL BE REJECTED.
2. ELECTRONIC VERSIONS OF THESE DOCUMENTS ARE THE PROPERTY OF DERWACTER & ASSOCIATES, LLC. ELECTRONIC OR CAD FILES WILL NOT BE MADE AVAILABLE FOR CONSTRUCTION PURPOSES.

REINFORCED MASONRY:

1. REINFORCED MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH, f'm, OF 1500 PSI. MASONRY UNITS SHALL BE NORMAL WEIGHT BLOCK CONFORMING TO ASTM C90, AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2150 PSI. MORTAR SHALL CONFORM TO ASTM C270, TYPE S. MINIMUM GROUT COMPRESSIVE STRENGTH SHALL EQUAL OR EXCEED f'm, BUT NOT BE LESS THAN 2000 PSI.
2. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
3. CONTINUOUS WIRE REINFORCING (JOINT REINFORCING) SHALL BE HOT DIPPED GALVANIZED, LADDER TYPE FORMED FROM 9 GAUGE COLD - DRAWN STEEL WIRE COMPLYING WITH ASTM A82. JOINT REINFORCING SHALL BE SPACED AT 16" O.C. VERTICALLY IN ALL MASONRY WALLS AND PIERS, U.N.O.
4. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF VERTICAL CONTROL JOINTS. HORIZONTAL BOND BEAM AND LINTEL REINFORCING SHALL BE CONTINUOUS ACROSS VERTICAL CONTROL JOINTS. JOINT REINFORCING SHALL BE STOPPED EACH SIDE OF VERTICAL CONTROL JOINTS.
5. ALL REINFORCED CELLS, ALL CELLS BELOW GRADE AND ALL CELLS BELOW FINISH FLOOR SHALL BE GROUTED SOLID.
6. AT VERTICAL REINFORCING LOCATIONS, PROVIDE DOWEL FROM FOOTING TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING. DOWELS SHALL BE EMBEDDED INTO THE FOOTING MINIMUM 9" INCHES AND SHALL HAVE A 90 DEGREE STANDARD HOOK.
7. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOCK CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN 6 VERTICAL. DOWELS MAY BE GROUTED INTO A CELL IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.
8. REINFORCING STEEL SHALL BE SECURED IN PLACE BEFORE GROUTING STARTS.
9. ALL REINFORCING LAP SPLICES SHALL BE IN ACCORDANCE WITH THE MASONRY REINFORCING LAP SPLICE LENGTH SCHEDULE, U.N.O. SPLICE VERTICAL SHALL BE WIRED TOGETHER. LAP SPLICES BETWEEN ADJACENT BARS SHALL BE STAGGERED A MINIMUM OF 24 BAR DIAMETERS.
10. VERTICAL BARS SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 96 DIAMETERS OF THE REINFORCING BAR WITH REBAR POSITIONERS. BARS SHALL BE ANCHORED IN PLACE PRIOR TO GROUTING.
11. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4 OF AN INCH FROM THE MASONRY AND NOT LESS THAN ONE BAR DIAMETER BETWEEN BARS.
12. VERTICAL CELLS THAT WILL BE GROUTED SHALL HAVE A VERTICAL ALIGNMENT TO MAINTAIN A CONTINUOUS UNOBSTRUCTED CELL AREA NOT LESS THAN 3"x4".
13. GROUT SHALL BE PLACED IN LIFTS NOT TO EXCEED 5 FEET. THE TOTAL HEIGHT OF 8-INCH (NOMINAL) OR LARGER MASONRY TO BE GROUTED PRIOR TO THE ERECTION OF ADDITIONAL MASONRY SHALL NOT EXCEED 24 FEET.
14. GROUTING SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A COURSE SO AS TO FORM A KEY AT THE POUR JOINT.
15. GROUTING OF MASONRY BEAMS OVER OPENINGS SHALL BE DONE IN ONE CONTINUOUS OPERATION.
16. ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS, SHALL BE GROUTED SOLID INTO POSITION. CELLS AT ANCHOR LOCATIONS SHALL BE GROUTED TO MINIMUM 6" ABOVE AND 6" BELOW THE CENTERLINE OF THE ANCHOR.

MASONRY REINFORCING LAP SPLICE LENGTH (IN.)

BAR SIZE	NUMBER OF REINFORCING LAYERS					
	ONE LAYER			TWO LAYERS		
	NOMINAL WALL THICKNESS			NOMINAL WALL THICKNESS		
	8"	10"	12"	8"	10"	12"
#4	25	25	25	31	31	31
#5	31	31	31	48	48	48
#6	57	52	52	98	98	98
#7	79	61	61	177	121	121
#8	112	86	74	-	149	149

STRUCTURAL STEEL:

1. MATERIALS:
   A. STRUCTURAL STEEL WIDE FLANGE SHAPES: ASTM A992, Fy = 50 KSI
   B. STRUCTURAL STEEL CHANNELS, ANGLES AND PLATES: ASTM A36, Fy = 36 KSI
   C. STRUCTURAL TUBING (INCLUDES SQUARE, RECTANGULAR AND ROUND SECTIONS): ASTM A500, GRADE C, Fy = 50 KSI
   D. HIGH STRENGTH BOLTS: ASTM A325 UNLESS NOTED OTHERWISE
   E. ANCHOR RODS: ASTM F1554, GRADE 36, UNLESS NOTED OTHER WISE. GALVANIZE IN EXTERIOR WALLS AND EXTERIOR LOCATIONS.
   F. SHEAR STUDS: ASTM A108, Fy = 60 KSI
   G. DEFORMED BAR ACNHORS: ASTM A496, Fy = 70 KSI
   H. ELECTRODES: SERIES E70
   I. ALL STRUCTURAL STEEL SHALL BE DOMESTICALLY PRODUCED AND COMPLY WITH ALL FEDERAL AND STATE REQUIREMENTS.
2. SPECIFICATIONS
   A. WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1. UNLESS SPECIFICALLY SHOWN OTHERWISE, THE DESIGN FABRICATION AND ERECTION IS TO BE GOVERNED BY THE LATEST REVISION OF:
      i. AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS
      ii. AISC CODE OF STANDARD PRACTICE
      iii. STRUCTURAL WELDING CODE, AWS D1.1 OF THE AMERICAN WELDING SOCIETY
      iv. SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS
3. SUBMITTALS
   A. SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL WHICH INCLUDE ERECTION PLANS, CONNECTIONS, HOLES, THREADED FASTENER TYPES AND FINISHES
   B. SUBMITTALS MUST BE THE ORIGINAL WORK OF THE FABRICATOR OR DETAILER. ELECTRONIC REPRODUCTIONS OF THESE DOCUMENTS WILL NOT BE REVIEWED. ANY DELAY CREATED BY THE FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
   C. THE SUBMITTAL MUST INCLUDE ALL REQUIRED FIELD VERIFICATION OF DETAILS AND DIMENSIONS.
   D. INDICATE MATERIAL SPECIFICATIONS, STRENGTHS AND FINISHES. INDICATE COMPLIANCE WITH ALL STATE AND FEDERAL REQUIREMENTS FOR DOMESTICALLY PRODUCED STEEL. RETAIN MILL CERTIFICATIONS AND DOMESTICALLY PRODUCED STEEL CERTIFICATIONS FOR ALL STRUCTURAL SHAPES FOR THE DURATION OF THE WARRANTY PERIOD OF THE STRUCTURE.
4. CONNECTIONS:
   A. FIELD CONNECTIONS ARE TO BE BOLTED, EXCEPT AS INDICATED OTHERWISE. SHOP CONNECTIONS MAY BE EITHER WELDED OR BOLTED.
   B. CONNECTIONS ARE TO BE DESIGNED BY THE FABRICATOR TO DEVELOP EITHER 100% OF THE FULL UNIFORM LOAD CAPACITY OF THE MEMBER OR THE FORCES SHOWN ON THE PLANS. THE MINIMUM CONNECTION CAPACITY SHALL BE 5.0 KIPS. DETAILS ARE PROVIDED SHOWING THE GENERAL ARRANGEMENT OF CONNECTIONS.
5. COATINGS:
   A. DO NOT PAINT STEEL OR ANCHOR RODS WHICH WILL BE ENCASED IN 3" MINIMUM OF CONCRETE OR ANY STEEL WHICH IS TO RECEIVE SPRAY-APPLIED OR INTUMESCENT FIREPROOFING.
   B. PAINT ALL INTERIOR STEEL WITH TWO COATS OF RED-OXIDE PRIMER.
   C. HOT-DIP GALVANIZE ALL EXTERIOR STEEL INCLUDING LINTELS AND SHELF ANGLES.
   D. PROVIDE A FIELD-APPLIED COAT OF ASPHALTIC MASTIC FOR ANY BELOW GRADE STEEL, NOT COVER BY 3" OF CONCRETE OR MASONRY GROUT, INCLUDING BASE PLATES AND ANCHOR RODS.

EPOXY ANCHORS:

1. EPOXY ANCHORING SHALL NOT BE USED EXCEPT WHERE SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS, OR WHEN APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
2. WHERE PERMITTED, EPOXY ANCHORING SHALL BE COMPLETED USING ONE OF THE FOLLOWING PRODUCTS:
   FOR USE IN CONCRETE:
      A. HIT HY-200 ADHESIVE ANCHOR, BY HILTI, INC. (ICC-ES REPORT #3187)
   FOR USE IN SOLID GROUTED MASONRY:
      A. HIT-70 WITH HAS ROD ANCHOR SYSTEM BY HILTI, INC. (ICC-ES REPORT #2682)
      B. HIT-70 WITH TZ ROD ANCHOR SYSTEM BY HILTI, INC. (ICC-ES REPORT #2682)
      C. SET-ADHESIVE SYSTEMS BY SIMPSON STRONG-TIE (ICC-ES REPORT #1772)
      D. CIA-GEL 7000 EPOXY BY USP STRUCTURAL CONNECTORS, INC. (ICC-ES REPORT #1702)
3. ANCHOR RODS USED FOR EPOXY ANCHORING SHALL BE THE TYPE SPECIFIED IN THE REFERENCED ICC-ES REPORT. THE ANCHOR SIZE SHALL BE AS INDICATED ON THE PLANS. THE ANCHOR ROD EMBEDMENT SHALL BE AS INDICATED ON THE PLANS, OR APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE EPOXY MANUFACTURER'S RECOMMENDATIONS AND THE CURRENT ICC-ES REPORT.
5. DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH INSTRUCTOR'S ACCOMPANYING ADHESIVE CARTRIDGES AND APPLICABLE ICC-ESR (ALTERNATE METHODS OF DRILLING ARE PROHIBITED UNLESS APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.)

FOUNDATIONS - GENERAL:

1. THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT (GCI PROJECT #22-6-26622) PREPARED BY GEOTECHNICAL CONSULTANTS, INC., DATED JULY 6, 2022.
   FOOTINGS SHALL BEAR ON SOILS CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 3.0 KSF UNDER SERVICE LIVE AND DEAD LOAD. ISOLATED SPREAD FOOTINGS SHALL BEAR ON SOIL CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 3.0 KSF UNDER SERVICE LIVE AND DEAD LOAD. ALL FOOTINGS SHOULD BEAR ON STABLE, NATURAL NON-ORGANIC SOILS (EXTENDED THROUGH ANY EXISTING STONE LEFT IN PLACE) OR ON NEW, CONTROLLED FILL PLACED DIRECTLY OVER STABLE, NATURAL NON-ORGANIC
   SOILS (IF EXISTING STONE IS REMOVED).
2. FOOTINGS MAY BE POURED INTO AN EARTH-FORMED TRENCH IF SOIL CONDITIONS PERMIT.
3. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIAL. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.
4. BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR 36" TO 42" BELOW FINAL GRADE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST BOTTOM OF FOOTING ELEVATIONS SHOWN IN THE DOCUMENTS AS REQUIRED TO ENSURE MINIMUM FOOTING EMBEDMENT AND TO REACH THE REQUIRED BEARING ELEVATION AS SHOWN IN THE GEOTECHNICAL ENGINEERING REPORT.
5. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE AND CURED.
6. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
7. FOUNDATION CONCRETE SHALL HAVE REACHED A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI BEFORE BEING LOADED. STRENGTHS SHALL BE VERIFIED BY TEST.

REINFORCED CONCRETE:

1. MATERIALS:
   A. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".

CAST-IN PLACE CONCRETE

LOCATION	CLASS	f'c (PSI)	MIN. CEMENT (LBS)	MIN. AIR CONTENT	MAX. W/C RATIO	NOTES
FOOTINGS	I	3,000	517	ENTRAPPED	.50	
PERIMETER WALL / PIERS / RETAINING WALLS	III	4,500	564	5% +/- 1%	.45	
INTERIOR SLAB ON GRADE	III	3,500	540	ENTRAPPED	.45	
EXTERIOR SLAB ON GRADE	IV	4,500	564	6% +/- 1%	.45	

   B. SUBMIT CONCRETE MIX DESIGN FOR APPROVAL IN ACCORDANCE TO ACI 301. MIX DESIGNS SHALL INCLUDE ALL BACKUP DATA MATERIAL WITH COMPRESSIVE STRENGTH BREAKS BASED ON EXPERIENCE OR TRIAL MIX PER ACI 301. SUBMIT THREE (3) SETS FOR REVIEW. THE MIX DESIGNS MUST INCLUDE THE BATCH IDENTIFICATION NUMBER AND THE CLASS IDENTIFICATION FROM THE TABLE ABOVE. FAILURE TO INCLUDE BOTH OF THESE ITEMS WILL RESULT IN THE RETURN OF THE MIX DESIGNS WITHOUT REVIEW.
2. FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3. CONTINGENCIES: PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING. SUCH SUPPORTS ARE TO BE REFLECTED IN THE BID. THE USE OF CLAY BRICK IS NOT ACCEPTABLE.
4. FOOTINGS:
   A. DOWELS IN FOOTINGS TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING.
   B. PROVIDE CONTROLLED LOW-STRENGTH MATERIAL (CLSM) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
5. CONSTRUCTION JOINTS:
   A. PROVIDE CONSTRUCTION JOINTS AT ALL POUR STOP LOCATIONS. ALL CONSTRUCTION JOINTS ARE TO BE DOWELED, USE 3/4" SMOOTH DOWELS 1'-0" LONG EMBEDDED 6" EACH SIDE GREASE ONE END OR PROVIDE SLEEVE, UNLESS WHERE NOTED OTHERWISE ON DRAWINGS.

REINFORCING FOR CONCRETE:

1. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 OR ASTM A706, UNLESS NOTED OTHERWISE. ALL WELDED REINFORCING BARS SHALL CONFORM TO ASTM A706.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (SHEETS FORM, NOT ROLLED)
3. MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE:
   A. UNFORMED SURFACE IN CONTACT WITH THE GROUND: 3 IN.
   B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
      #6 BARS AND LARGER 2 IN.
      #5 BARS AND SMALLER 1 1/2 IN.
   C. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER:
      BEAMS, GIRDERS, AND COLUMNS 1 1/2 IN.
      SLABS, WALLS, AND JOISTS
      #11 BARS AND SMALLER 3/4 IN.
      #14 AND #18 BARS 1 1/2 IN.
4. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE.

BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)	BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)
#3	22	12	#8	72	30
#4	29	15	#9	81	34
#5	36	19	#10	89	38
#6	43	23	#11	98	42
#7	63	27			

5. COMPRESSION DOWEL EMBEDMENT: 22 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
6. BASE PLATES, ANCHOR RODS, SUPPORT ANGLES, ETC., BELOW GRADE SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.

STRUCTURAL LUMBER:

1. SPECIFICATIONS AND STANDARDS: DESIGN AND DETAILING OF WOOD FRAMING AND CONNECTIONS SHALL CONFORM TO THE CURRENT EDITION OF THE OHIO BUILDING CODE AND THE EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" ISSUED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION REFERENCED THERE-IN.
2. MATERIALS: THE MATERIALS USED FOR THE WORK OF THIS PROJECT ARE TO COMPLY WITH THE MINIMUM STANDARDS OF QUALITY LISTED BELOW; UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.

MINIMUM STRUCTURAL PROPERTIES FOR DIMENSIONAL LUMBER

		STRUCTURAL PROPERTIES		
LOCATION	SIZE	Fb (psi)	Fv (psi)	E (ksi)
JOISTS	2X4	875	135	1400
	2X6	875	135	1400
	2X8	1200	175	1600
	2X10	1050	175	1600
	2X12	975	175	1600

3. ALL STRUCTURAL LUMBER SHALL BE KILN DRIED TO A MAXIMUM MOISTURE CONTENT OF 15%.
4. ALL WOOD MEMBERS EXPOSED TO THE ELEMENTS SHALL BE PRESERVATIVE PRESSURE TREATED. ALL WOOD MEMBERS SECURED TO OR PLACED AGAINST CONCRETE, MASONRY, AND/OR EARTH ARE TO BE PRESERVATIVE PRESSURE TREATED FOR GROUND CONTACT.
5. STRUCTURAL WOOD MEMBERS ARE NOT TO BE CUT, COPED, OR MODIFIED, OTHER THAN CUTTING TO LENGTH OR MAKING PROVISIONS FOR FASTENERS. MAKE ALL CUTS TRUE AND SQUARE FOR FULL BEARING AT STRUCTURAL JOINTS.
6. CONNECT ALL WOOD FRAMING SECURELY TOGETHER WITH NAILS, SPIKES, OR FRAMING ANGLES, IN ACCORDANCE WITH TABLE 2304.9.1 OF THE OHIO BUILDING CODE. FASTENERS USED TO CONNECT PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE OF STAINLESS STEEL OR HOT DIPPED GALVANIZED STEEL. PROVIDE PLYWOOD NAILING AS RECOMMENDED BY THE AMERICAN PLYWOOD ASSOC.
7. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA TO THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION INDICATING COMPLIANCE WITH THIS SECTION.

DELEGATED DESIGN (PEMB):

1. ALL STRUCTURAL STEEL BUILDING ELEMENTS FROM THE COLUMN BASE PLATES UP, SHALL BE DESIGNED BY AN ENGINEER FAMILIAR WITH THE REQUIREMENTS OF THE CURRENT OHIO BUILDING CODE AND THE STANDARDS SET FORTH BY THE METAL BUILDING MANUFACTURER'S ASSOCIATION. ALL LOADS SHOWN ON THESE PLANS SHALL BE INTERPRETED AS MINIMUM STANDARDS. IF, THE DELEGATED ENGINEER'S CALCULATED LOADS DIFFER FROM WHAT IS SHOWN, THE HIGHER OF THE TWO SHALL GOVERN.
2. THE DELEGATED ENGINEER SHALL SUBMIT FABRICATION AND INSTALLATION DRAWINGS BEARING THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER. THE SUBMITTAL SHALL INCLUDE THE FOLLOWING INFORMATION:
   A. DIMENSIONED PLAN LAYOUT
   B. SEQUENCING SCHEDULE
   C. STRUCTURAL CALCULATIONS
   D. ERECTION DRAWINGS
   E. BUILDING REACTIONS
3. THE MANUFACTURER SHALL IAS ACCREDITED FOR METAL BUILDING SYSTEMS AC 472.
4. THE PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED FOR THE FOLLOWING DEFLECTION AND DRIFT LIMITATIONS:
   - VERTICAL FRAME DEFLECTION: L/240 UNDER DESIGN SNOW LOAD OR ROOF LIVE LOAD, WHICHEVER IS MORE STRINGENT.
   - HORIZONTAL FRAME DRIFT: H/100 UNDER 10 YEAR MRI WIND LOAD.
   - PURLIN/OPEN WEB STEEL JOISTS VERTICAL DEFLECTION: L/240 UNDER DESIGN SNOW LOAD OR ROOF LIVE LOAD, WHICHEVER IS MORE STRINGENT.
   - GIRT AND WIND POST HORIZONTAL DEFLECTION: L/240 UNDER WIND LOAD.

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED PROFESSIONAL ENGINEER
08-07-2023

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CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.
Zanesville, OH 43701

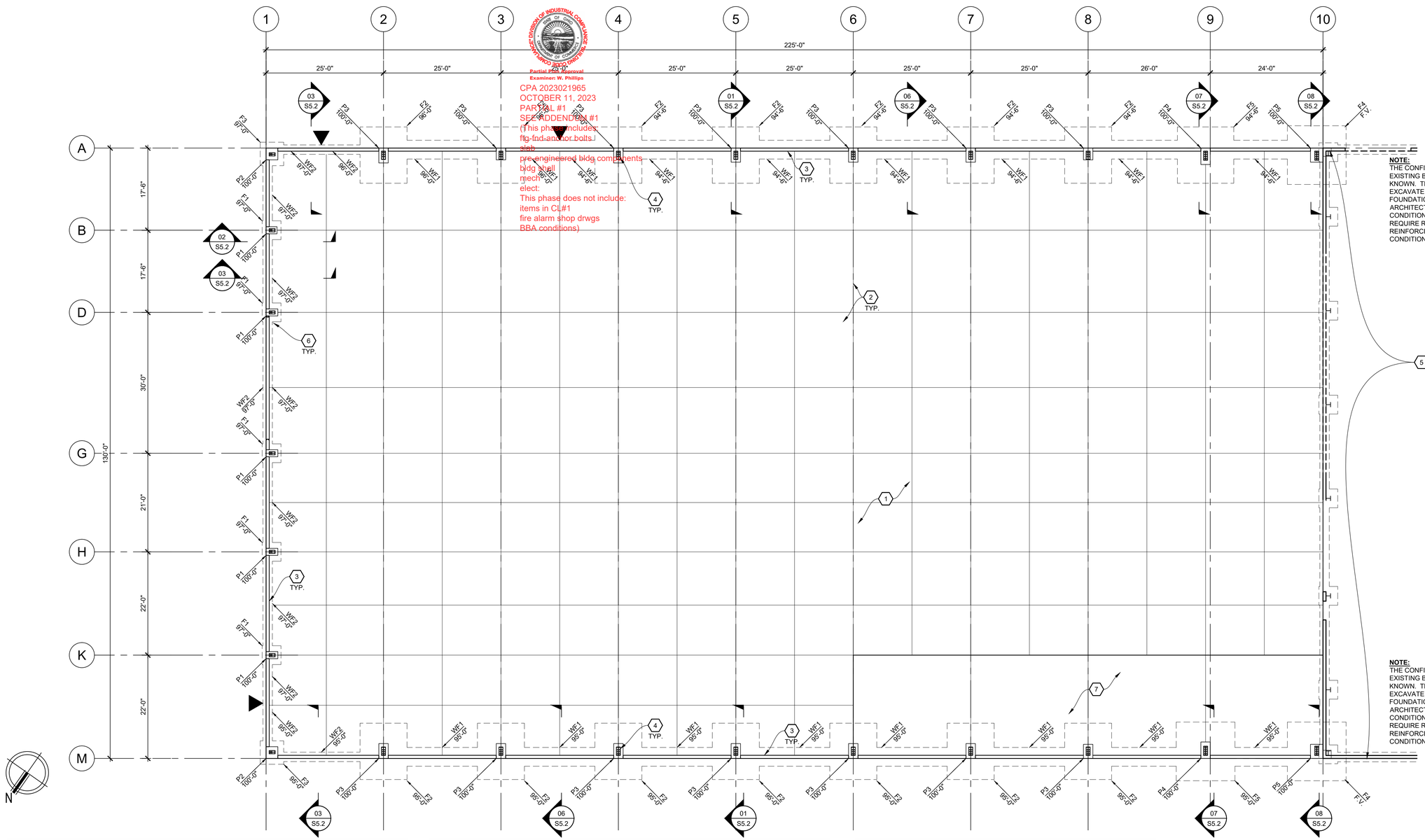
Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
STRUCTURAL GENERAL NOTES

MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
		ISSUE

PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S0.2



Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

NOTE:
THE CONFIGURATION AND ELEVATION OF THE EXISTING BUILDING FOUNDATIONS IS NOT KNOWN. THE GENERAL CONTRACTOR SHALL EXCAVATE IN THIS AREA TO EXPOSE THE FOUNDATION. PROVIDE A SKETCH TO THE ARCHITECT DEPICTING THE EXISTING CONDITIONS. FOUNDATIONS IN THIS AREA MAY REQUIRE REVISIONS. DO NOT FABRICATE REINFORCING STEEL UNTIL THE EXISTING CONDITIONS HAVE BEEN EVALUATED.

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FOUNDATION PLAN NOTES

A	SEE SHEETS **S0.1** AND **S0.2** FOR GENERAL NOTES.
B	ALL ELEVATIONS ARE RELATIVE TO A FINISH FLOOR SLAB ELEVATION OF 100'-0" (REFERENCE ONLY). NEW FINISHED FLOOR TO MATCH THE FINISHED FLOOR ELEVATION OF THE ADJACENT STRUCTURE.
C	COORDINATE DOOR OPENINGS WITH ARCHITECTURAL DRAWINGS.
D	SEE DETAIL **S5.1-01** FOR TYPICAL REINFORCING DETAILING.
E	STEPS IN FOOTING AS REQUIRED TO MAINTAIN FROST DEPTH AND EMBEDMENT TO REQUIRED BEARING ELEVATION. SEE **S5.1-03** FOR TYPICAL DETAIL.
F	SEE DETAIL **S5.1-05** FOR RE-ENTRANT SLAB REINFORCING, TYP. AT SLAB PENETRATIONS, DOOR OPENINGS, ETC.
G	SEE DETAIL **S5.1-07** FOR TYPICAL PIPE PENETRATIONS THROUGH FOUNDATIONS.
H	SEE DETAIL **S5.1-02** FOR REINFORCING AT INTERSECTING FOOTINGS.
I	SEE P.E.M.B. DRAWINGS FOR ANCHOR ROD DIAMETER AND PROJECTION, SEE **S5.1-09** FOR ANCHOR ROD MATERIAL AND EMBEDMENT.

KEYED NOTES

⟨00⟩	
1	8" CONCRETE SLAB, REINF. w/WWR - 4x4-W4xW4 ON 15MIL. VAPOR BARRIER OVER A 6" MIN. COMPACTED COARSE AGGREGATE BASE. TOP OF SLAB AT 100'-0".
2	SLAB CONTRACTION OR CONSTRUCTION JOINT, SEE **S5.1-04**.
3	8" CAST-IN-PLACE CONCRETE FOUNDATION WALL, REINF. WITH #5 AT 12"O.C., VERTICAL AND HORIZONTAL.
4	RIGID FRAME P.E.M.B. COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR BOLT INFORMATION SEE DETAIL **S5.1-09**.
5	EXISTING BUILDING TO REMAIN. FIELD VERIFY EXISTING CONDITIONS
6	P.E.M.B. END WALL COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR BOLT INFORMATION SEE DETAIL **S5.1-09**.
7	12" CONCRETE SLAB, REINF. w/#5 AT 12" O.C. DISCONTINUOUS BETWEEN JOINTS ON 15MIL. VAPOR BARRIER OVER A 6" MIN. COMPACTED COARSE AGGREGATE BASE. TOP OF SLAB AT 100'-0". DOWEL SLAB AT CONTROL JOINTS SIMILAR TO SLAB CONSTRUCTION JOINT DETAIL IN **S5.1-04**.

CONTINUOUS WALL FOOTING SCHEDULE

MARK	SIZE	REINFORCING	
		LONGITUDINAL	TRANSVERSE
WF1	4'-0" x CONT. x 1'-4"	(4) #5 CONT., TOP & BOT.	#5 BARS @ 12" O.C., TOP & BOT.
WF2	2'-0" x CONT. x 1'-4"	(3) #5 CONT., BOT.	N/A

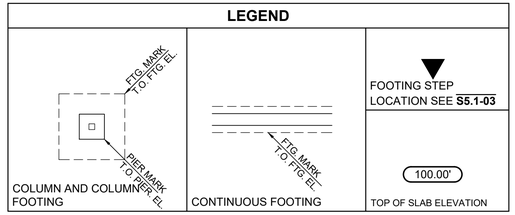
COLUMN FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F1	4'-0" x 4'-0" x 1'-4"	(5) #5 BARS E.W. BOTTOM
F2	10'-0" x 12'-0" x 1'-4"	(14) #6 TRANS. BARS T&B & (12) #6 BARS LONG. T&B
F3	5'-0" x 5'-0" x 1'-4"	(6) #5 BARS E.W. BOTTOM
F4*	12'-6" x 12'-6" x 1'-4"	(14) #8 BARS E.W. T&B
F5	12'-6" x 12'-6" x 1'-4"	(14) #8 BARS E.W. T&B
*FIELD VERIFY PER PLAN NOTES		

PIER SCHEDULE

MARK	SIZE	DETAIL	REINFORCING
P1	1'-6" x 2'-6"	**S5.1-08**	(6) #8 VERTICAL BARS w/ #4 TIES
P2	2'-6" x 2'-6"	**S5.1-08**	(8) #8 VERTICAL BARS w/ #4 TIES
P3	2'-0" x 3'-6"	**S5.1-08**	(12) #8 VERTICAL BARS w/ #4 TIES
P4	2'-0" x 3'-0"	**S5.1-08**	(16) #8 VERTICAL BARS w/ #4 TIES
P5*	2'-8" x 3'-0"	**S5.1-08**	(12) #8 VERTICAL BARS w/ #4 TIES
*FIELD VERIFY PER PLAN NOTES			

LEGEND



01 FOUNDATION PLAN

SCALE: 3/32" = 1'-0"

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED
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SHEET TITLE
FOUNDATION PLAN

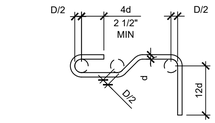
MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD	05/17/2023	CONSTRUCTION DOCUMENTS
		FOUNDATION ELEVATION

ISSUE

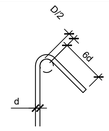
PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S1.1

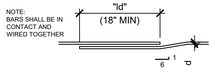
SHEET 3 OF 8



A. HOOKS AND BENDS

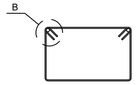


B. 135 DEGREE STIRRUP AND TIE HOOK



C. LAP SPLICE

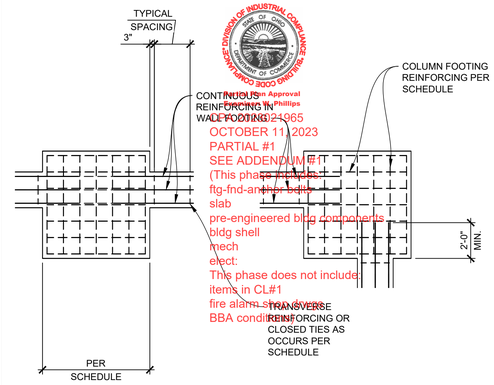
SEE REINFORCING STEEL NOTES ON S5.1 FOR LAP LENGTHS



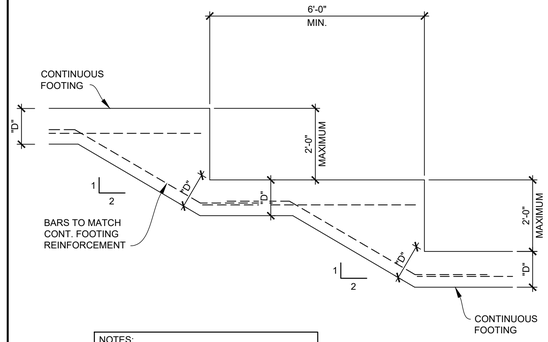
D. GRADE BEAM STIRRUP

BEND DIAMETER SCHEDULE		
BAR SIZE	STANDARD BEND DIAMETER	REDUCED BEND DIAMATER FOR TIES AND STIRRUPS
#3 THROUGH #5	D = 6*d	D = 4*d
#6 THROUGH #8	D = 6*d	NA
#9 THROUGH #11	D = 8*d	NA
#14 AND #18	D = 10*d	NA

01 TYPICAL REINFORCEMENT DETAILS
SCALE: N/A = 1'-0"

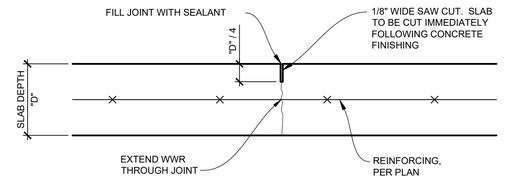


02 PLAN DETAIL AT INTERSECTING FOOTINGS
SCALE: N/A

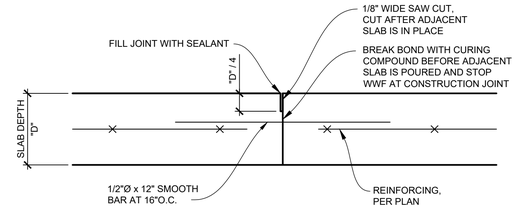


NOTES:
1. "D" INDICATES FOOTING DEPTH.
2. SEE FOUNDATION PLAN AND CIVIL PLANS FOR STEP LOCATIONS REQ'D.

03 TYPICAL FOUNDATION STEP
SCALE: N/A

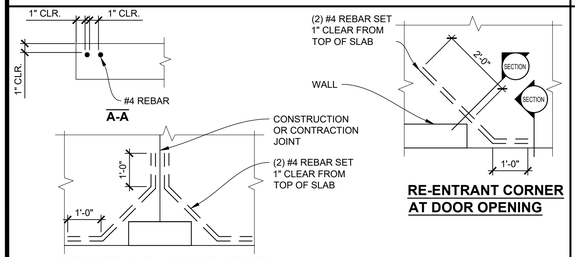


SLAB CONTRACTION JOINT
SAW CUT JOINT WITHIN 2 HOURS OF CONCRETE SETTING UP



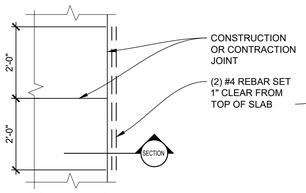
SLAB CONSTRUCTION JOINT
USE BETWEEN CONCRETE POURS AS REQUIRED

04 SLAB CONTRACTION AND CONSTRUCTION JOINT
SCALE: N/A

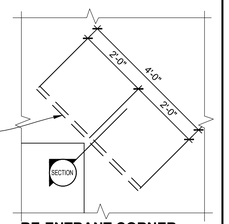


RE-ENTRANT CORNER AT PIER

RE-ENTRANT CORNER AT DOOR OPENING

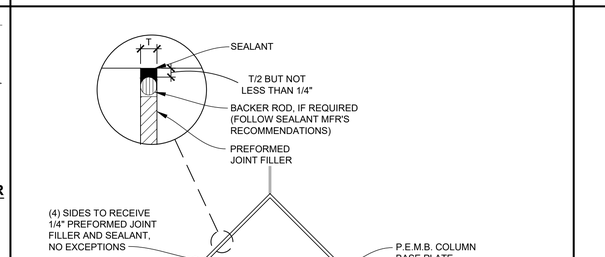


DISCONTINUOUS JOINT



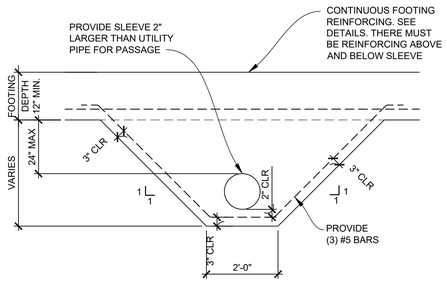
RE-ENTRANT CORNER

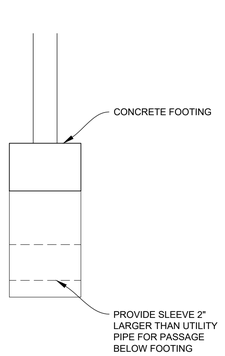
05 SLAB REINFORCEMENT
SCALE: N/A

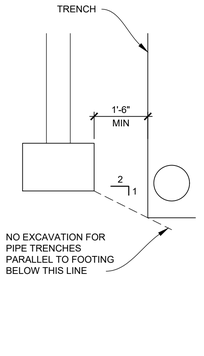


06 COLUMN ISOLATION JOINT
SCALE: N/A

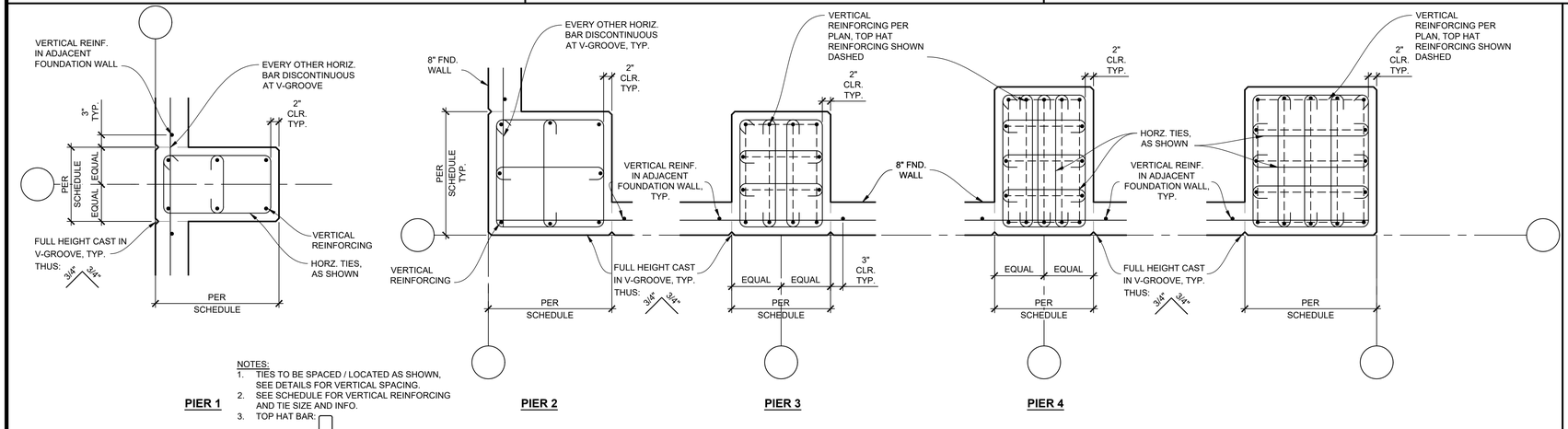
NOTE:
WHEN TOP OF UTILITY PIPE IS MORE THAN 2'-0" BELOW FOOTING, CONCRETE ENCASEMENT IS NOT REQUIRED







07 FOUNDATION SECTION AT PIPE PENETRATION
SCALE: N/A



NOTES:
1. TIES TO BE SPACED / LOCATED AS SHOWN, SEE DETAILS FOR VERTICAL SPACING.
2. SEE SCHEDULE FOR VERTICAL REINFORCING AND TIE SIZE AND INFO.
3. TOP HAT BAR:

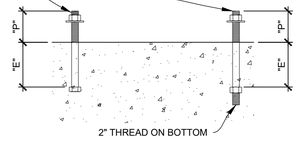
PIER 1 **PIER 2** **PIER 3** **PIER 4**

08 PIER DETAILS AT PIERS
SCALE: 3/4 = 1'-0"

ASTM F1554, GRADE 55 HEADED ANCHOR ROD OR ANCHOR ROD WITH THREADED END. PROVIDE STANDARD A563 HEX NUT & F436 WASHER ABOVE BASE PLATE. PROVIDE HEX NUT AT THE BOTTOM OF THREADED END, AS SHOWN.

NOTE:
DO NOT WET SET ANCHOR RODS.

NOTE:
THREADED PROJECTION ("P") IS TO BE PER THE METAL BUILDING SYSTEM DRAWINGS



HEADED BOLT THREADED ROD

ANCHOR ROD DIMENSIONS	
BOLT DIAMETER	EMBEDMENT "E"
3/4"	19"
1 1/4"	25"

09 ANCHOR ROD DETAILS
SCALE: N/A

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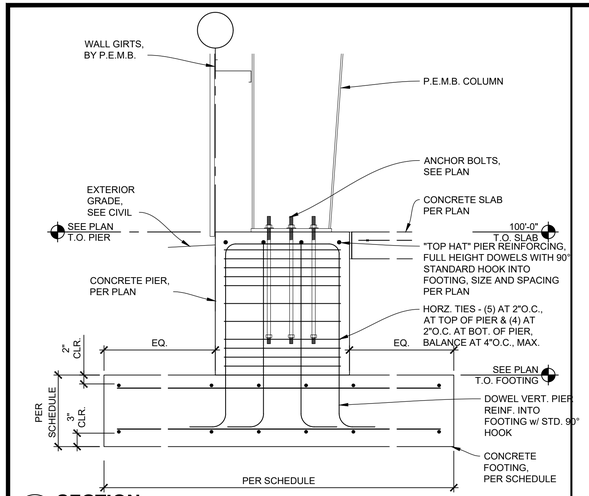
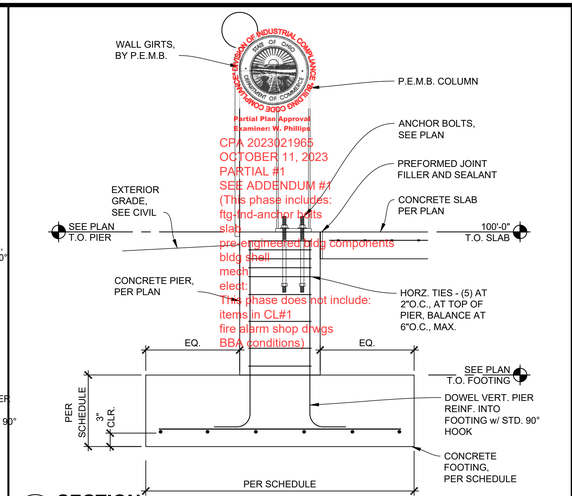
S5.1

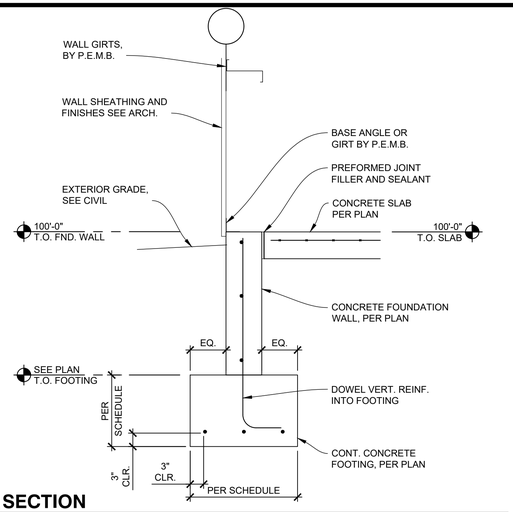
SHEET 5 OF 8



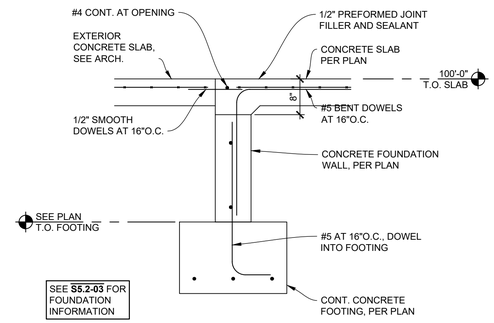
01 **SECTION**
SCALE: 3/4 = 1'-0"



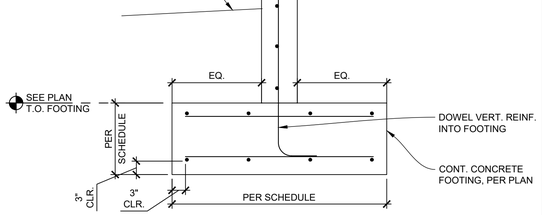
02 **SECTION**
SCALE: 3/4 = 1'-0"



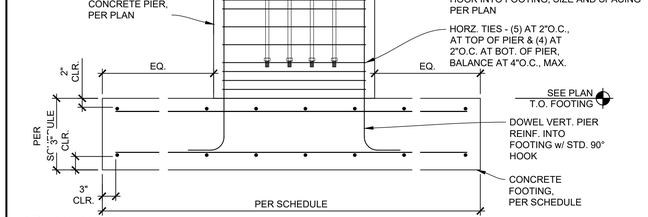
03 **SECTION**
SCALE: 3/4 = 1'-0"



04 **SECTION**
SCALE: 3/4 = 1'-0"

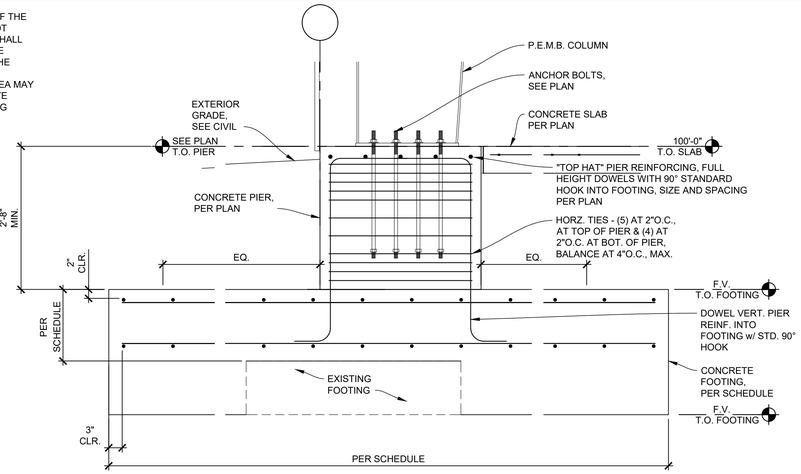


06 **SECTION**
SCALE: 3/4 = 1'-0"



07 **SECTION**
SCALE: 3/4 = 1'-0"

NOTE:
THE CONFIGURATION AND ELEVATION OF THE EXISTING BUILDING FOUNDATIONS IS NOT KNOWN. THE GENERAL CONTRACTOR SHALL EXCAVATE IN THIS AREA TO EXPOSE THE FOUNDATION. PROVIDE A SKETCH TO THE ARCHITECT DEPICTING THE EXISTING CONDITIONS. FOUNDATIONS IN THIS AREA MAY REQUIRE REVISIONS. DO NOT FABRICATE REINFORCING STEEL UNTIL THE EXISTING CONDITIONS HAVE BEEN EVALUATED.



08 **SECTION**
SCALE: 3/4 = 1'-0"

STATE OF OHIO
MATTHEW D. DERWACTER
E-68641
REGISTERED PROFESSIONAL ENGINEER
08-07-2023

OMNESS DESIGN, INC
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.
Zanesville, OH 43701

Addition to
RIALTO MANUFACTURING, INC
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
FOUNDATION DETAILS

MARK	DATE	DESCRIPTION
SD	10/04/2022	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE

PROJECT NO: 22-113
CAD DWG FILE:
DRAWN BY: ACH
CHECKED BY: MDD

S5.2

GENERAL NOTES:

1. MATERIALS

	ASTM DESCRIPTION
STRUCTURAL STEEL PLATE	AS529 / A572 / A1011
HOT ROLLED MILLS SHAPES	A36 / A529 / A572 / A500
HSS ROUND	A500
HSS RECTANGULAR	A500
COLD FORM SHAPES	A653 / A1011
ROOF AND WALL SHEETING	A653 / A792
BOLTS	A307 / A325 / A490
CABLE	A475
RODS	A529 / A572

2. STRUCTURAL PRIMER NOTE:

SHOP COAT PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING FOR A SHORT PERIOD OF TIME. STORAGE IN EXTREME COLD TEMPERATURES OR WINTER SNOW CONDITIONS, INCLUDING TRANSPORTATION ON SALTED OR CHEMICALLY TREATED ROADS WILL ADVERSELY AFFECT THE DURABILITY AND LONGEVITY OF THE PRIMER. THE COAT OF SHOP PRIMER DOES NOT PROVIDE THE UNIFORMITY OF APPEARANCE, OR THE DURABILITY AND CORROSION RESISTANCE OF A FIELD APPLIED FINISH COAT OF PAINT OVER A SHOP PRIMER. MINOR ABRASIONS TO THE SHOP COAT PRIMER CAUSED BY HANDLING, LOADING, SHIPPING, UNLOADING AND ERECTION ARE UNAVOIDABLE AND ARE NOT THE RESPONSIBILITY OF THE METAL BUILDING MANUFACTURER. METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR THE DETERIORATION OF THE PRIMER OR CORROSION THAT MAY RESULT FROM ATMOSPHERIC AND ENVIRONMENTAL CONDITIONS NOR THE COMPATIBILITY OF THE PRIMER TO ANY FIELD APPLIED COATING.

3. BUILDING ERECTION NOTES:

THE GENERAL CONTRACTOR AND/OR ERECTOR IS RESPONSIBLE TO SAFELY AND PROPERLY ERECT THE METAL BUILDING SYSTEM IN CONFORMANCE WITH THESE DRAWINGS, OSHA REQUIREMENTS, AND EITHER MBMA OR CSA S16 STANDARDS PERTAINING TO PROPER ERECTION. TEMPORARY SUPPORTS SUCH AS GUYS, BRACES, FALSEWORK, CRIBBING, OR OTHER ELEMENTS FOR ERECTION ARE TO BE DETERMINED, FURNISHED, AND INSTALLED BY THE ERECTOR. THESE SUPPORTS MUST SECURE THE STEEL FRAMING, OR PARTLY ASSEMBLED STEEL FRAMING, AGAINST LOADS COMPARABLE IN INTENSITY TO THOSE FOR WHICH THE STRUCTURE WAS DESIGNED IN ADDITION TO LOADS RESULTING FROM THE ERECTION OPERATION. SECONDARY WALL AND ROOF FRAMING (GIRTS, PURLINS, AND/OR JOISTS) ARE NOT DESIGNED TO FUNCTION AS A WORKING PLATFORM OR TO PROVIDE AS AN ANCHORAGE POINT FOR A FALL ARREST / SAFETY TIE OFF.

4. SPECIAL INSPECTION:

SPECIAL INSPECTIONS AND TESTING THAT MAY BE REQUIRED BY GOVERNMENTAL OR OTHER AUTHORITY DURING CONSTRUCTION AND/OR STEEL FABRICATION (COLLECTIVELY, "INSPECTIONS") ARE NOT THE RESPONSIBILITY OF NBG, AND TO THE EXTENT REQUIRED IT SHALL BE THE RESPONSIBILITY OF THE BUILDER AND/OR OWNER. IN THE EVENT INSPECTIONS ARE REQUIRED, THE BUILDER AND/OR OWNER SHALL EMPLOY A THIRD PARTY QUALITY ASSURANCE TESTING AGENCY APPROVED BY THE RELEVANT AUTHORITY. IF SUCH REQUIREMENTS ARE NOT SPECIFICALLY INCLUDED IN NBG SALES DOCUMENTS, NO INSPECTIONS BY NBG OR AT ANY NBG FACILITY SHALL BE MADE. ALL NBG FACILITIES ARE ACCREDITED BY IAS AC472.

5. A325 & A490 BOLT TIGHTENING REQUIREMENTS:

IT IS THE RESPONSIBILITY OF THE ERECTOR TO ENSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPLICABLE REGULATIONS. FOR PROJECTS IN THE UNITED STATES SEE THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS OR FOR PROJECTS IN CANADA, SEE THE CAN/CSA S16 LIMIT STATES DESIGN OF STEEL STRUCTURES FOR MORE INFORMATION.

THE FOLLOWING CRITERIA MAY BE USED TO DETERMINE THE BOLT TIGHTNESS (I.E., "SNUG-TIGHT" OR "FULLY-PRETENSIONED"), UNLESS REQUIRED OTHERWISE BY LOCAL JURISDICTION OR CONTRACT REQUIREMENTS:

A) ALL A490 BOLTS SHALL BE "FULLY-PRETENSIONED".
B) ALL A325 BOLTS IN PRIMARY FRAMING (RIGID FRAMES AND BRACING) MAY BE "SNUG-TIGHT", EXCEPT AS FOLLOWS: "FULLY-PRETENSION" A325 BOLTS IF:
   a) BUILDING SUPPORTS A CRANE SYSTEM WITH A CAPACITY GREATER THAN 5 TONS.
   b) BUILDING SUPPORTS MACHINERY THAT CREATES VIBRATION, IMPACT OR STRESS-REVERSALS ON THE CONNECTIONS. THE ENGINEER-OF-RECORD FOR THE PROJECT SHOULD BE CONSULTED TO EVALUATE FOR THIS CONDITION.
   c) THE PROJECT SITE IS LOCATED IN A HIGH SEISMIC AREA. FOR IBC-BASED CODES, "HIGH SEISMIC AREA" IS DEFINED AS "SEISMIC DESIGN CATEGORY" OF "D", "E", OR "F". SEE THE "BUILDING LOADS" SECTION OF THIS PAGE FOR THE DEFINED SEISMIC DESIGN CATEGORY FOR THIS PROJECT.
   d) ANY CONNECTION DESIGNATED IN THESE DRAWINGS AS "A325-SC" OR "SLIP-CRITICAL (SC)" CONNECTIONS MUST BE FREE OF PAINT, OIL, OR OTHER MATERIALS THAT REDUCE FRICTION AT CONTACT SURFACES. GALVANIZED OR LIGHTLY RUSTED SURFACES ARE ACCEPTABLE.

C) IN CANADA, ALL A325 AND A490 BOLTS SHALL BE "FULLY PRE-TENSIONED", EXCEPT FOR SECONDARY MEMBERS (PURLINS, GIRTS, OPENING FRAMING, ETC.) AND FLANGE BRACES.

SECONDARY MEMBER (PURLIN, GIRT, OPENING FRAMING, ETC.) AND FLANGE BRACE CONNECTIONS MAY ALWAYS BE "SNUG-TIGHT", UNLESS INDICATED OTHERWISE IN THESE DRAWINGS.

6. GENERAL DESIGN NOTES:

1) ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISC 360 "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" OR THE CAN/CSA S16 "LIMIT STATES DESIGN OF STEEL STRUCTURES", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
2) ALL WELDING OF STRUCTURAL STEEL IS BASED ON EITHER AWS D1.1 "STRUCTURAL WELDING CODE – STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
3) ALL COLD FORMED MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISI 100 OR THE CAN/CSA S136 "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
4) ALL WELDING OF COLD FORMED STEEL IS BASED ON AWS D1.3 "STRUCTURAL WELDING CODE – SHEET STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
5) THIS MANUFACTURING FACILITY IS IAS AC-472 ACCREDITED AND CAN/CSA A660 AND W47.1 CERTIFIED (IF APPLICABLE) FOR THE DESIGN AND MANUFACTURING OF METAL BUILDING SYSTEMS.
6) IF JOISTS ARE INCLUDED WITH THIS PROJECT, THEY ARE SUPPLIED AS A PART OF THE SYSTEMS ENGINEERED METAL BUILDING AND ARE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1926.758 OF OSHA SAFETY STANDARDS FOR STEEL ERECTION DATED JANUARY 18, 2001.

THE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER'S SEAL PERTAINS ONLY TO THE REQUIREMENTS LISTED HEREIN FOR THE MATERIALS DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS EMPLOYED OR ENGAGED BY THE METAL BUILDING MANUFACTURER AND DOES NOT SERVE AS OR REPRESENT THE PROJECT ENGINEER OF RECORD AND SHALL NOT BE CONSTRUED AS SUCH.

7. GLOSSARY OF ABBREVIATIONS:

A.B. = ANCHOR RODS	M.B. = MACHINE BOLTS	PL = PLATE
B.U. = BUILT-UP	MAX = MAXIMUM	REQ'D = REQUIRED
BS = BOTH SIDES	MBS = METAL BUILDING SUPPLIER	REV. = REVISION
DIA = DIAMETER	MIN = MINIMUM	SIM = SIMILAR
F.S. = FAR SIDE	N.S. = NEAR SIDE	SL = STEEL LINE
FLG = FLANGE	N/A = NOT APPLICABLE	SLV = SHORT LEG VERTICAL
GA. = GAUGE	NIC = NOT IN CONTRACT	TBD = TO BE DETERMINED
H.S.B. = HIGH STRENGTH BOLTS	O.A.L. = OVERALL LENGTH	TYP = TYPICAL
HT. = HEIGHT	O.C. = ON CENTER	U.N.O. = UNLESS NOTED OTHERWISE
LLV = LONG LEG VERTICAL		

?? = PART MARK TO BE DETERMINED AND WILL BE UPDATED ON CONSTRUCTION DRAWINGS

KIRBY BUILDING SYSTEMS
124 KIRBY DRIVE
PORTLAND, TN 37148
PHONE: 615-325-4165

Partial Plan Approval
Examinen W. Phillips
CPA 2023021960
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

CONTENTS

SHEET NUMBER	DESCRIPTION
C1	COVER SHEET(S)
F1	ANCHOR ROD PLAN

PROJECT BUILDING LOADS

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. KIRBY'S CUSTOMER IS TO CONFIRM THAT THESE LOADS COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT. DESIGN LOADS HAVE BEEN APPLIED IN ACCORDANCE WITH THE FOLLOWING.

DESIGN CODE: OHIO 2017 (IBC 2015)

ROOF LIVE LOAD: 20.00 psf REDUCIBLE PER CODE

RISK CATEGORY: II - STANDARD BUILDINGS

GROUND SNOW LOAD: 20.00 psf

SNOW EXP. FACTOR, Ce: 1.00

SNOW IMPORTANCE FACTOR, Is: 1.00

ULTIMATE DESIGN WIND SPEED: 115 mph (Vult)
NOMINAL DESIGN WIND SPEED: 89 mph (Vasd)

WIND EXPOSURE: C

DESIGN SUCTION / PRESSURE FOR WALL COMPONENTS AND CLADDING NOT DESIGNED OR PROVIDED BY KBS: + 30 PSF / - 40 PSF

UL-90 : NO

SEISMIC INFORMATION: Ss: 0.130 S1: 0.060

DESIGN (Sds / Sd1) : 0.139/0.096 SITE CLASS: D

SEISMIC IMP. FACTOR, Ie: 1.00 SEISMIC DESIGN CATEGORY: B

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

BASIC SFRS: NOT DETAILED FOR SEISMIC

STATE: OHIO
COUNTY: MARION

NOTES:

1) COLLATERAL DEAD LOADS, UNLESS OTHERWISE NOTED, ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED. WHEN SUSPENDED SPRINKLER SYSTEMS, LIGHTING, HVAC EQUIPMENT, CEILINGS, ETC., ARE SUSPENDED FROM ROOF MEMBERS, CONSULT THE M.B.S. IF THESE CONCENTRATED LOADS EXCEED 500 POUNDS (USING THE WEB MOUNT DETAIL), OR 200 POUNDS (USING THE FLANGE MOUNT DETAIL), OR IF INDIVIDUAL MEMBERS ARE LOADED SIGNIFICANTLY MORE THAN OTHERS.

2) THE DESIGN OF STRUCTURAL MEMBERS SUPPORTING GRAVITY LOADS IS CONTROLLED BY THE MORE CRITICAL EFFECT OF ROOF LIVE LOAD OR ROOF SNOW LOAD, AS DETERMINED BY THE APPLICABLE CODE.

3) ALL WELDING MUST BE PERFORMED BY AWS QUALIFIED WELDERS FOR THE WELDING PROCESSES AND POSITIONS TO BE USED. ALL WELDING AND WELD PREP MUST BE COMPLETED AND VISUALLY INSPECTED TO AWS ACCEPTANCE CRITERIA (TABLE 6.1) IN ACCORDANCE WITH THE APPLICABLE AWS STANDARD. WELD ELECTRODES USED FOR ALL FIELD WELD PROCESSES MUST BE SELECTED FROM TABLE 3.1 IN AWS D1.1 FOR GROUP II MATERIAL GREATER THAN OR EQUAL TO 0.125" THICK OR TABLE1.2 IN AWS D1.3 FOR MATERIAL LESS THAN 0.125" THICK AND ALL FILLER MATERIAL MUST HAVE A Fu OF 70 KSI.

4) ALL EXTERIOR COMPONENTS (WINDOWS, DOORS, ETC) MUST MEET WIND LOADING REQUIREMENTS FOR THE BUILDING CODE LISTED ABOVE OR MUST BE ADEQUATELY PROTECTED DURING A HIGH WIND EVENT. ALL GLAZING AND OTHER APPLICABLE OPENINGS IN WINDBORNE DEBRIS REGIONS MUST BE IMPACT-RESISTANT OR PROTECTED WITH AN IMPACT-RESISTANT COVERING. IMPACT RESISTANT MATERIALS MUST MEET THE LARGE AND/OR SMALL MISSILE TEST OF ASTM E 1996 AND ASTM E 1886.

BUILDING SPECIFIC LOADING INFORMATION

* DEAD LOAD: NORMAL WEIGHT OF METAL BUILDING COMPONENTS, NOT INCLUDING PRIMARY FRAMING, AS SUPPLIED BY THE MANUFACTURER

** Pm IS BASED ON THE MINIMUM ROOF SNOW LOAD CALCULATED PER BUILDING CODE OR THE CONTRACT-SPECIFIED ROOF SNOW LOAD, WHICHEVER IS GREATER. THIS VALUE, Pm, IS ONLY APPLIED IN COMBINATION WITH DEAD AND COLLATERAL LOADS. ROOF SNOW IN OTHER LOADING CONDITIONS IS DETERMINED PER THE SPECIFIED BUILDING CODE.

BLDG.	ROOF DEAD (psf)*	COLLATERAL DEAD Pri (psf)	COLLATERAL DEAD Sec (psf)	SNOW COEFFICIENT Ct	SNOW COEFFICIENT Cs	SNOW LOAD Ps (psf)	SNOW LOAD **Pm (psf)	WIND Enclosure	WIND GCpi	SEISMIC R	SEISMIC Cs	SEISMIC V (kips)
A	3.00	5.00	5.00	1.00	1.00	14.00	20.00	Enclosed	+/-0.18	3.00	0.046	14.27
B	3.50	5.00	5.00	1.00	1.00	14.00	20.00	Enclosed	+/-0.18	3.00	0.046	5.84

ENGINEER NOTES:

FOR OCCUPANCY (RISK) CATEGORY I OR II, IBC PROVISIONS INDICATE THAT SINGLE-STORY BUILDINGS SHALL HAVE "NO DRIFT LIMIT" PROVIDED THAT INTERIOR WALLS, PARTITIONS, CEILINGS, AND EXTERIOR WALL SYSTEMS HAVE BEEN DESIGNED TO ACCOMMODATE THE SEISMIC STORY DRIFTS. INTERIOR WALLS, PARTITIONS, CEILINGS, OR EXTERIOR WALL SYSTEMS NOT PROVIDED BY THE METAL BUILDING MANUFACTURER SHALL BE DESIGNED AND DETAILED BY OTHERS TO ACCOMMODATE THE SEISMIC STORY DRIFTS. SEISMIC DRIFT VALUES MAY BE OBTAINED FROM THE METAL BUILDING MANUFACTURER.

FRAMED OPENINGS HAVE BEEN DESIGNED TO SUPPORT WIND LOAD NORMAL TO THE WALL BASED ON THE STANDARD BUILDING CODE CRITERIA. FRAMED OPENINGS HAVE NOT BEEN DESIGNED FOR ANY ADDITIONAL MOMENT OR CATENARY FORCES FROM THE DOOR. ANY CHANGE TO THE INFORMATION SHOWN HERE WILL REQUIRE AN ENGINEERING INVESTIGATION AND POSSIBLE BUILDING REINFORCEMENT.

BUILDING NAME DESIGNATION

A - MAIN ADDITION
B - DRIFT BAY ADDITION

PRIMER

STRUCTURAL FRAMING: GP - GRAY PRIMER
WALL SECONDARY: GP - GRAY PRIMER
ROOF SECONDARY: GP - GRAY PRIMER

ROOF PANELS

TYPE: 24 Ga. STANDING SEAM 360 (SS3) HIGH SYSTEM w/ THERMAL SPACERS
COLOR: GALVALUME PLUS (GM)

WALL PANELS

TYPE: 26 Ga. REVERSE R-PANEL
COLOR: PEARL GRAY, PVDF (PG)

SOFFIT PANELS

TYPE: N/A
COLOR: N/A

LINER PANELS

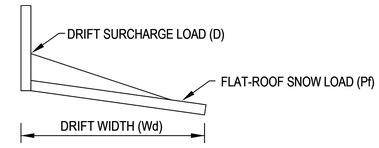
TYPE: 26 Ga. R-PANEL
COLOR: POLAR WHITE, SP (PW)

TRIM COLORS

ROOF LINE TRIM: SLATE GRAY, PVDF (SG)
DOWNSPOUTS: SLATE GRAY, PVDF (SG)
WALL CORNER TRIM: SLATE GRAY, PVDF (SG)
BASE TRIM: SLATE GRAY, PVDF (SG)
FRAMED OPENING TRIM: SLATE GRAY, PVDF (SG)

NOTE: ANY VARIANCE FROM THE PANEL TYPES OR COLORS LISTED HERE WILL BE NOTED ON THE ELEVATION DRAWINGS.

THE BUILDING CODE REQUIRES CONSIDERATION OF SNOW SURCHARGES FOR ANY LOWER ROOF OF A STRUCTURE WITHIN 20 FT OF A HIGHER STRUCTURE. INFORMATION PROVIDED TO THE METAL BUILDING MANUFACTURER INDICATES SNOW SURCHARGES MUST BE CONSIDERED IN THE METAL BUILDING DESIGN AS SHOWN BELOW.



THE CONDITIONS AT THE FOLLOWING LOCATIONS PRODUCE DRIFT SURCHARGE LOADS:

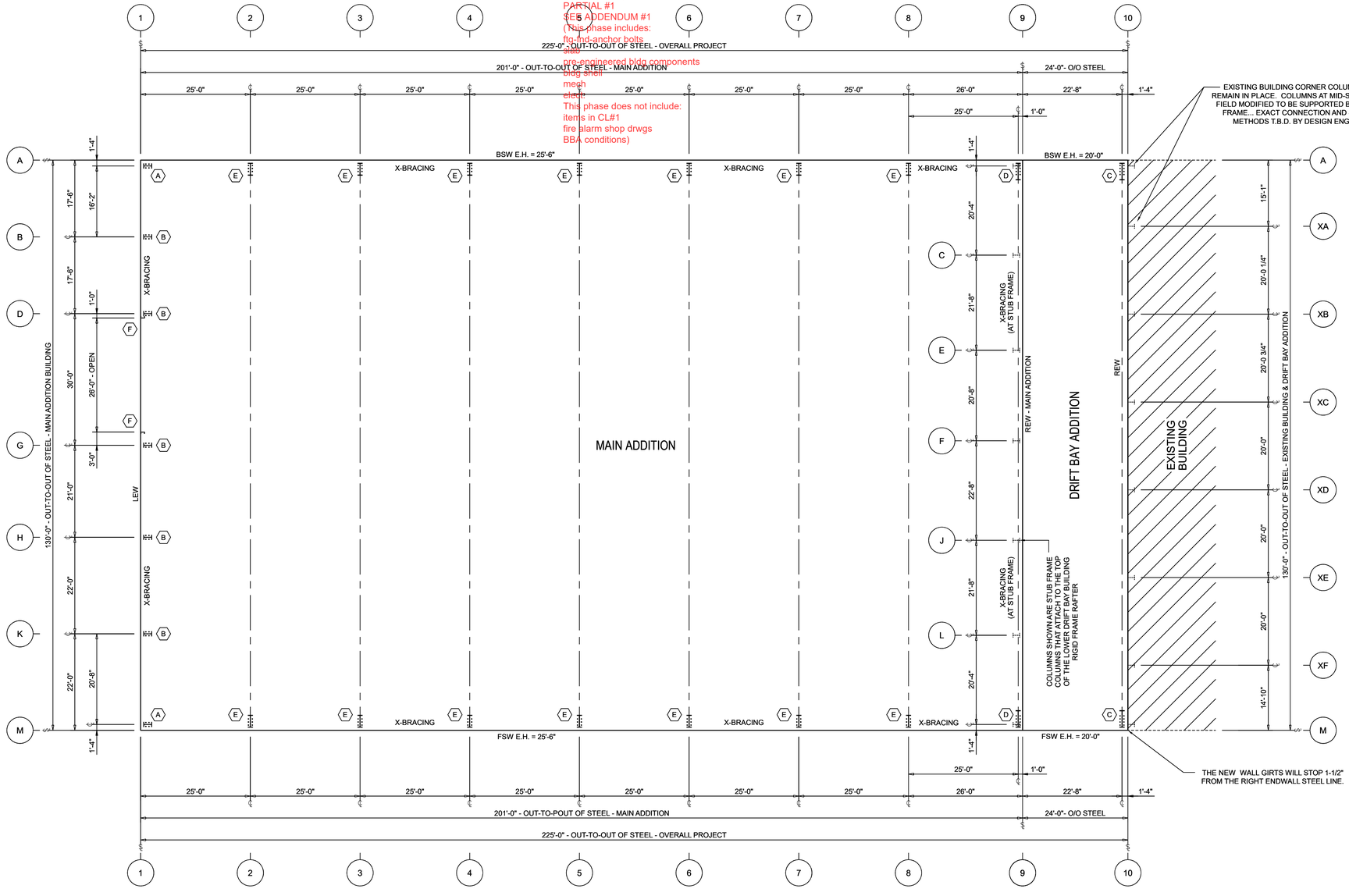
1. LOCATION: MAIN BLDG ONTO DRIFT BAY BLDG D(psf): 72.96 Pf(psf): 14.00 Wd(ft): 17.58
2. LOCATION: DRIFT BAY ONTO EXISTING BLDG D(psf): 19.20 Pf(psf): 14.00 Wd(ft): 9.25

MBMA IAS ACCREDITED

KIRBY BUILDING SYSTEMS ENGINEERING

ADDRESS: MARION, OH 43302
JOB NUMBER: K23G0354A
PROJECT NAME: RIALTO ADDITION - NO CRANES
CUSTOMER NAME: STEVENS CONSTRUCTION CO., INC.
PROPOSED CONSTRUCTION: COMMERCIAL
DRAWING TITLE: COVERSHEET
SHEET: C1

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR ROD	TB / SMB	BEP	9/7/2023

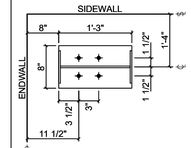


ANCHOR ROD PLAN

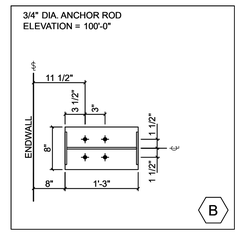
NOTE: ALL BASE PLATES @ 100'-0" (U.N.)
FINISHED FLOOR @ 100'-0"

FINAL BASE PLATE LENGTHS MAY DIFFER +/- 2" FROM LENGTH SHOWN ON DETAILS. ANCHOR ROD LOCATIONS WILL REMAIN CONSISTENT U.N.O.

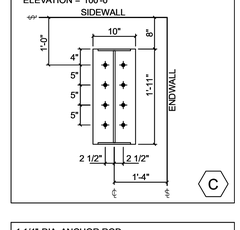
3/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



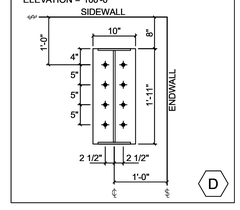
3/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



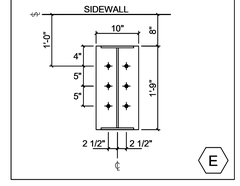
1 1/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



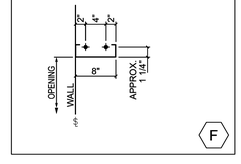
1 1/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



1 1/4" DIA. ANCHOR ROD
ELEVATION = 100'-0"



(2) 1/2"Ø ANCHOR RODS (FIELD DRILL FOUNDATION, MASONRY, ETC. AS REQ'D)
ELEVATION = 100'-0"



ANCHOR ROD PLAN GENERAL NOTES:

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY THE METAL BUILDING MANUFACTURER.

AN4: THE ANCHOR ROD LOCATIONS PROVIDED BY THE METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN.

AN5: DRAWINGS ARE NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED. IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY – BEFORE CONCRETE IS PLACED.

AN7: "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.

AN8: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF A CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN9: FINISHED FLOOR ELEVATION = 100'-0" AND BOTTOM OF BASE PLATE = 100'-0" UNLESS NOTED OTHERWISE.

BOTTOM OF BASE PLATE

ANCHOR ROD SHAPE AND EMBEDMENT LENGTH "D" IS TO BE DETERMINED BY THE FOUNDATION ENGINEER.

ANCHOR RODS			
QTY.	DIA.	MATERIAL	PROJECTION (*P)
28	3/4"	F1554 GR 36	3"
	1"	F1554 GR 36	3"
116	1-1/4"	F1554 GR 36	3-1/2"
	1-1/2"	F1554 GR 36	3-1/2"

KIRBY BUILDING SYSTEMS
MBMI
IAS

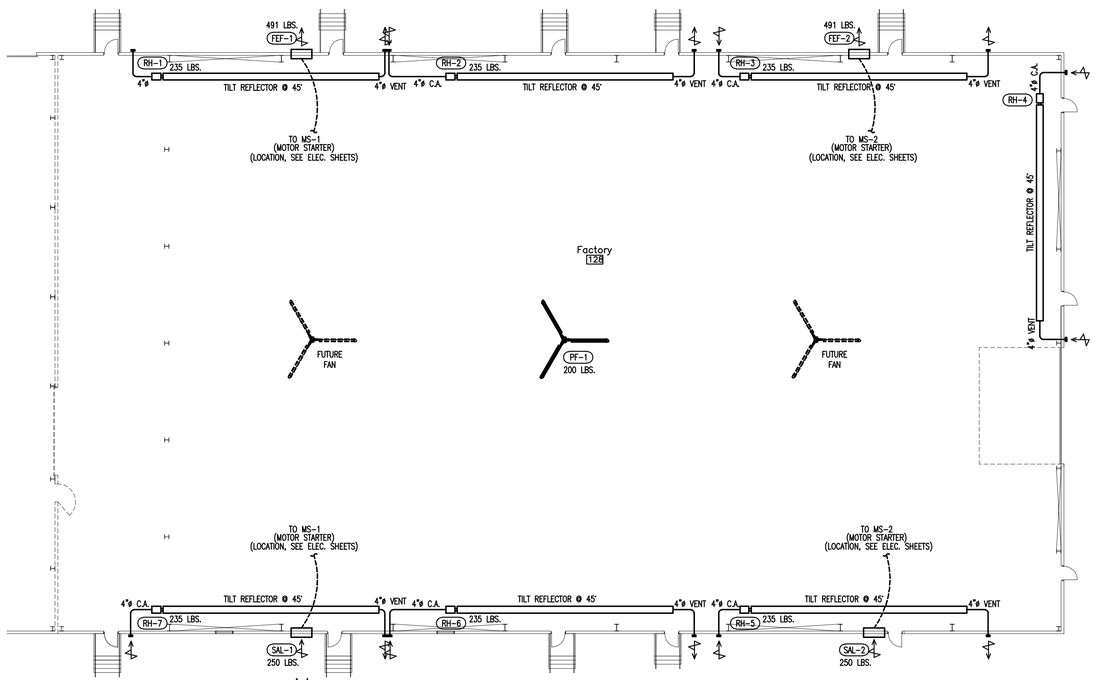
ADDRESS: MARION, OH 43302
JOB NUMBER: K23G0354A
PROJECT NAME: RIALTO ADDITION - NO CRANES
CUSTOMER: STEVENS CONSTRUCTION CO., INC.
PROJECT DESCRIPTION: NEW CONSTRUCTION
DRAWING TITLE: ANCHOR ROD PLAN
SHEET: F1

#	RELEASE / REVISION	DWN / CHK	ENGR	DATE
0	ANCHOR ROD	TB / SMB	BEP	8/7/2023

DESIGN ENGINEER:
DATE:

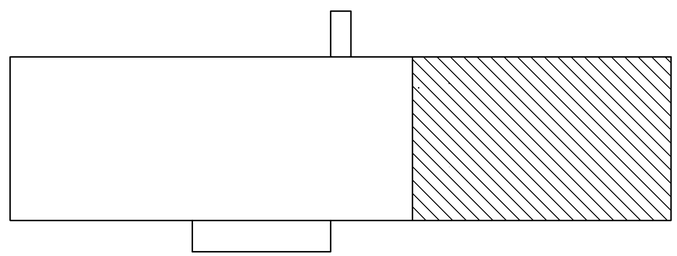
Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



Partial Floor Plan – HVAC

1/16" = 1'-0"



N

Key Plan

NO SCALE

STATE OF OHIO
JONATHAN BRYAN BORON
REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
CONSULTANTS
140 FAIRFAX RD
MARION, OHIO
43302

Addition to:
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
PARTIAL HVAC FLOOR PLAN

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE 8-7-23

PROJECT NO22-128
CAD DWG FILE21-128 Rialto Phase 1
DRAWN BY:PD
CHECKED BY:PD

M 1.0

MECHANICAL SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE
1. For purposes of clearness and legibility, Drawings are diagrammtic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
2. Drawings and Specifications to be considered cooperative, and anything appearing in the Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE
1. Codes and Permits – Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS
1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS
1. Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering and workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

D. MATERIALS
1. Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
2. All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necesary for properoepration, and in compliance with effective State or Local Code requirements.

GAS FIRED FURNACE

A. SUBMITTALS
1. Submit detailed Shop Drawings clearly indicating make, model, type, size, and location.

B. Furnish and install, where shown on Drawings, gas fired furnace as manufactured by York. Furnace shall be vertical model with DX cooling coil, single speed blower, tubular aluminized steel primary heat exchanger with stainless steel tube/aluminum fin secondary heat exchanger, and rotatable inducer. Furnace shall be design certified by A.G.A. Laboratories.

C. Cabinet shall be constructed of heavy gauge, cold rolled steel with insulated vestibule and back panels. Safety interlock switch, located in control box, automatically turns power off to unit when blower compartment door is removed.

D. The controls shall have factory installed blower cooling relay, fan and limit controls, factory wired 24 volt control transformer, and controller.

E. Gas burner shall have automatic gas controls, including the following:
1. 100% safety shut-off.
2. Automatic safety pilot valve.
3. Automatic electric valve and gas pressure regulator.
4. Solid state electronic direct spark ignitor.

F. Gas fired furnace as manufactured by Carrier or Comfortmaker will be acceptable providing construction, capacity, and operating characteristics are equal to the specified equipment. The cost for any modifications to the building structure, the duct system, the natural gas piping system, the power wiring system, or the temperature control system (including interface points and interlock wiring) which is necessitated by the substitution of the other listed manufacturers, shall be borne by the Mechanical Contractor making the substitution.

G. Equipment manufacturer shall warrant parts and workmanship for one year from the date of substantial completion as determined by the Architect and/or Engineer.

H. Unit shall be completely tested by the manufacturer before shipment.

I. Every effort shall be made to minimize vibration, noise, and drafts through careful fabrication and erection.

AIR COOLED CONDENSING UNIT

A. SUBMITTALS
1. Submit detailed Shop Drawings clearly indicating make, model, type, size, location, capacity at the operating suction and liquid temps, voltage, and required fuse size.

B. Furnish and install, where shown on Drawings, air cooled condensing unit as manufactured by York. Unit shall use refrigerant R-410A, be completely assembled and factory assembled. Unit shall be complete with single or multiple hermetic compressors, condensing coils, condenser fan, fan motors, fan guards, refrigerant reservoir, charging valves, valves, crankcase heater (if required), high and low pressure safety switches, liquid line sight glass, filter drier, strainers, contactors, and overload protection for all motors and all controls to provide proper operation with pump down control. Unit shall have part winding and starters. The entire unit shall be housed in a fully weather proof casing of outdoor installation. Manufacturer shall furnish unit complete to provide oepration down to 40 degrees F outdoor temperature.

C. Air cooled condensing unit as manufactured by Carrier or Comfortmaker will be acceptable providing construction, capacity and operating characteristics are equal to the specified equipment. The cost for for any modifications to the building structure, the power wiring system, or the temperature control system (including interface points and interlock wiring) which is necessitated by the substitution of the other listed manufacturers, shall be borne by the Mechanical Contractor making the substitution.

D. REFRIGERANT PIPING AND ACCESSORIES
1. All piping shall be Type "ACR" Hard Drawn Copper Tubing. All fittings shall be Wrought or Forged Brass Type approved for refrigerant piping and all elbows shall be long turn pattern. All pipe and fittings shall be assembled with Silfos or Easyflow Silver Solder with approximate 1000 degrees F.
2. Refrigerant piping shall be sized as shown on Drawings. Mechanical Contractor shall confirm pipe sizing with selected unit manufacturer before proceeding with installation.
3. Assembly and Workmanship: All tubing and fittings shall be carefully and thoroughly cleaned and polished with steel wool. Prior to heating, coat all polished surfaces with a thin coat of flux. Heat fittings and tubing with oxyacetylene torch. Provide continual flow of inert gas (nitrogen) through tubing while brazing joints. Any overheated unsafe joints must be replaced before project is accepted.
4. Testing: Test all refrigerant piping as follows:
   a. Evacute entire system to 28 inch vacuum and hold said vacuum for 24 hours without leakage.
   b. Charge piping with inert gas to a pressure of not more than 300 psi and no less than 200 psi and hold pressure for 24 hours without leakage.
   c. During above test, remove or bypass any valves, gauges, etc., subject to damage by pressure exerted during test.
   d. Triple evacuate entire system and purge each time with approriate refrigerant. Insert refrigerant dryer with valves bypass arrangement for moisture removal during triple purge and evacuation process.
   e. Test all joints, after charging system with an alcohol fired or prestolite halide lead detector.
   f. Contractor shall include the fee for inspection as required by the Ohio Board of Building Standards Chapter BB-201 of Ohio Pressure Piping System Rules.
5. Refrigerant and Oil Charge: Charge entire system with accurate quantities of refrigerant (R-410A) and provide necessary oil for compressor and system requirements.
6. Specialties: Expansion valves, liquid line solenoid valves, liquid sight glass, strainers, hand valves, etc. are to be furnished by this Contractor in compliance with manufacturer's recommendation.
7. Miscellanous: Flexible pipe connections shall be furnished and installed where shown or required to permit free movement of piping and to prevent undue stress and vibrations at the compressor and air cooled condenser.
8. This Contractor shall make provisions to ensure oil return to compressor as required.

E. Equipment manufacturer shall provide one year parts and labor warranty, and four year extended compressor warranty. Contractor shall submit terms of parts and labor contract with equipment supplier for approval.

F. Equipment manufacturer shall provide start-up, test, and submit report to Engineer.

G. Every effort shall be made to minimize vibration and noise.

H. Condensing unit must be installed level!

AIR DISTRIBUTION

A. EXHAUST FANS
1. Submittals
   a. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
2. Furnish and install, where show on Drawings, exhaust fans as manufactured by Greenheck.
3. Exhaust fans as manufactured by Loren Cook, Penn, or Carnes will be acceptable providing construction, capacity and operating characteristics are equal.

B. LOW PRESSURE DUCTWORK
1. Ductwork shall be constructed of the following gauges, where velocity does not exceed 2500 FPM and static pressure does not exceedd 2.0 WG. All is in accordance with ASHRAE and SMACNA Standards:
   a. Rectangular Ducts:

Largest Dimension	U.S. Gauge Galvanized Steel
To 12"	26
13" to 30"	24

   b. Round Ducts:

Duct Diameter	U.S. Gauge Galvanized Steel
To 13"	26
14" to 28"	24

2. All ductwork shall be constructed of galvanized steel complying with ASTM A527-71, lockforming quality. All toilet and shower room exhaust ducts shall be aluminum construction, and all joints welded or sealed with 3M Company #EC-1792 sealant. Sheetmetal must be fabricated so that the gauge of material being used is visible externally.
3. Duct fasteners shall comply with SMACNA MF-1.
4. Provide hot dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of ductwork.
5. Provide turning vanes in all mitered elbows and where otherwise indicated. Vanes shall be 2" galvanized steel for up to and including 18" ducts and 4-1/2" for ducts over 18". Construction of vanes shall be double wall, fixed blade type for 90 degree elbows.
6. All joints and seams shall be sealed to SMACNA Class B Standards (100% sealing) with Duro-Dyne SAS-UL-C siliconized acrylic water based duct sealer.

C. GRILLES AND DIFFUSERS
1. Submittals
   a. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
   b. Furnish and install, where shown on Drawings, grilles and diffusers as manufactured by Price.
   c. Grilles and diffusers as manufactured by Titus, Krueger, or Carnes will be acceptable providing construction, capacity, and operating characteristics are equal.
2. All grilles and diffusers shall have a factory applied off-white finish unless otherwise noted on Plans.
3. Ceiling Supply Diffusers: Fully adjustable air pattern, round or square with full flow damper. Diffusers shall be surface mount or lay-in frame to fit ceiling construction being used.
4. Egg Crate Return Grilles: Aluminum frame with aluminum core grid. Egg crate grilles shall be surface mount, lay-in, or panel mounted to fit ceiling construction being used.
5. Refer to Architectural Reflected Ceiling Plan for exact location of ceiling diffusers and ceiling construction being used.

D. FILTERS
1. Furrnish filters as manufactured by Koch, model Multi-Pleat XL8. Media shall be reinforced glass fiber supported by galvanized steel grids formed to the configuration of the pleats. The media pack shall be sealed into a galvanized frame. Filter shall have a rated average atmospheric dust spot efficiency of not less than 35 to 40% and an average synthetic arrestance of 95% when tested in accordance with ASHRAE Standards 52-76. The filter shall be capable of operating with variable face velocities up to 600 FPM without impairing performance. It shall have an initial resistance not to exceed the value selected from the capacity table and shall be classified by Underwriter Laboratories as Class II.
2. Spare Filters: One original and two sets of spare filters shall be supplied. One set is for use during the construction phase and a set shall be installed for testing and balancing. One complete set of unused filters shall be turned over to the Owner at completion of the project.
3. Filters as manufactured by Cambridge, Continental or American Air Filter will be acceptable providing construction, capacity, and operating characteristics are equal.

DUCTWORK AND ACCESSORIES

A. Provide all sheetmetal work, as shown on the Drawings, in accordance with the latest edition of the ASHRAE guide and data book, SMACNA Standards and this Specification, the most demanding of which shall be the minimum standard.

B. Install ductwork indicated on Drawings making all neccesary changes in cross sections and offsets, whether or not specifically indicated.

C. All changes in cross section shall be made without reducing the design area of the duct.

D. Cap all open ends of ductwork until connected to grilles, diffusers, and equipment to prevent entrance of debris, dust, etc.

E. Make changes in direction of ductwork, unless otherwise specified with square elbows and double thickness turning vanes; full radius elbows having inside radius equal to width of duct measured in plane of turn; or one-third radius elbows with inside radius equal to one-third duct width and a single vane radius of two-thirds duct width.

F. No pipe or other obstructions shall pass through air ducts.

G. Ducts shall not be hung from other ducts, pipe or conduit.

H. Duct dimensions are gross except of lined ducts where dimensions are for net free area.

I. All joints and seams in ducts shall be air-tight; poorly made joints, splits, visible holes at corners, etc. shall be reworked or new pieces of ductwork installed. Where excessive pulsating of ductwork or plenum housing is found, additional stiffeners shall be added. Any cracking, in the coating around seams or joints, or in any other part of the formed duct that is apparent upon inspection, shall be sufficient to warrant rejection.

J. Round duct joints in diameter through 60" shall be assembled and sealed as follows:
1. Approved sealer is applied to the male end of the couplings and fittings. After the joint is slipped together, sheetmetal screws are placed 1/2" from the joint bead for mechanical strength. Sealer is applied to the outside of the joint extending 1" on each side of the joint bead and covering the screw heads. Plastic backed tape is immediately applied over the wet sealer.
2. The duct sealer must be specifically formulated for the job of sealing the field joints for low-medium pressure systems. The sealer shall be compatible with plastic backed duct type so the two shall cure and bond together.

K. Install additional balancing dampers, where required by the Air Balance Contractor, to properly adjust the systems air volumes.

INSULATION

A. SUBMITTALS
1. Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.
2. All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM E84, NFPA 255 and UL 723, not exceeding a flame spread for 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above, No polyethylene insulation is acceptable.
3. Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Refrigerant Liquid & Suction	II	ALL	1/2"	A.P.F.
Exposed Ductwork	III	ALL	1"	A.S.J.
Concealed Ductwork	IV	ALL	2"	F.S.K.

TYPES OF COVERING
A.S.J. All Service Jacket
F.S.K. Foil Scrim Kraft
A.P.F. J.M. Aerotube or Armstrong ArmaFlex AP

TYPES OF INSULATION

TYPE II
A.P.F. Armstrong ArmaFlex AP Pipe Insulation
K = .27, Density = 6.0#/ft3

TYPE III
J.M.S. Johns-Manville Rigid "Spin-Glas" Duct Insulation
Density = 4.25#/ft3 with A.S.J. Facing.
O.V.S. Owens-Corning Rigid Vapor Seal Duct Insulation
Density = 6.0#/ft3 with A.S.J. Facing.
K.F.G. Knauf Insulation Board
Density = 3.0#/ft3 with A.S.J. Facing.

TYPE IV
J.M.M. Johns-Manville "Microlite" Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft3 with F.S.K. Facing.
O.F.F. Owens-Corning Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft with F.S.K. Facing.
K.F.G. Knauf Commercial Duct Wrapped Insulation
Density = 3/4#/ft with A.S.J. Facing.

RADIANT HEATER SCHEDULE

SYM.	MFR.	MODEL NO.	INPUT	VOLTAGE	REMARKS
RH-1	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-2	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-3	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-4	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-5	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-6	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION
RH-7	RE-VERBER-RAY	DES3-50-200	175,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS AT 45°, TUBE HANGERS, REFLECTOR CENTER SUPPORTS, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR , 1.7 AMPS ❶ IGNITION

NOTE: INSTALL HEATERS PER MANUFACTURERS INSTRUCTIONS W/ REQUIRED CLEARANCE TO COMBUSTIBLES.

PROPELLER FAN SCHEDULE

SYM.	MFR.	MODEL NO.	CAPACITY RPM	CAPACITY S.P.	MOTOR HP	MOTOR AMPS	MOTOR VOLTAGE	REMARKS
PF-1	BIG ASS FANS	PF8-10	148	0.25"	1.0	15 BRKR	120/1/60	HANG FROM STRUCTURE WITH PROPER ACCESSORIES AND INCLUDE WALL CONTROL. 10'-0"ø

FACTORY EXHAUST FAN SCHEDULE

SYM.	MFR.	MODEL NO.	CAPACITY CFM	CAPACITY S.P.	MOTOR HP	MOTOR FLA	MOTOR VOLTAGE	REMARKS
FEF-1	GREENHECK	SBE-21,48	21730	0.25	3	4.8	460-3-60	WALL MOUNTED EXHAUST FAN W/ WALL HOUSING, WEATHER HOOD, BACKDRAFT DAMPER, BIRDSCREEN, MOTOR STARTER & VARIABLE FREQUENCY DRIVE.
FEF-2	GREENHECK	SBE-21,48	21730	0.25	3	4.8	460-3-60	WALL MOUNTED EXHAUST FAN W/ WALL HOUSING, WEATHER HOOD, BACKDRAFT DAMPER, BIRDSCREEN, MOTOR STARTER & VARIABLE FREQUENCY DRIVE.

NOTE: EXHAUST FANS & LOUVERS SIZED AT 1.5 CFM/SQFT WHICH EXCEEDS REQUIRED VENTILATION CFM.

SUPPLY AIR LOUVER SCHEDULE

SYM.	MFR.	MODEL NO.	CFM	SIZE	REMARKS
SAL-1	RUSKIN	ELC63750X	21730	60x60	WITH RUSKIN MOTOR-OPERATED DAMPER.
SAL-2	RUSKIN	ELC63750X	21730	60x60	WITH RUSKIN MOTOR-OPERATED DAMPER.

VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

AIR HANDLING UNIT TAG NUMBER	OCCUPANCY CATEGORY NUMBER	OCCUPANCY CATEGORY	PEOPLE OUTDOOR AIR RATE	AREA OUTDOOR AIR RATE	ZONE FLOOR AREA	NORMAL OCC.	PEAK OCC.	INTERM. USAGE	CORR. OCC.	CALC. OCC.	DEFAULT OCC.	DESIGN OCC.	PEOPLE OUTDOOR AIR	AREA OUTDOOR AIR	BREATHING ZONE OUTDOOR AIRFLOW	AIR DISTRIBUTION CONFIG. NUMBER	ZONE AIR DISTRIBUTION EFFECTIVENESS	ZONE OUTDOOR AIRFLOW	REQUIRED OUTDOOR AIR INTAKE FLOW
			CFM/PERSON	CFM/SQ.FT.	SQ.FT.	PEOPLE	PEOPLE	FT.	PEOPLE	PEOPLE	PEOPLE	PEOPLE	CFM	CFM	CFM	---	---	CFM	CFM
FEF-1&2	4.3	FACTORY	10.0	0.18	28975	0	0	0	0	0	202.8	203	2030	5216	7246	3	0.8	9057	9057

OUTDOOR DESIGN TEMP. – SUMMER (DEG. F)(ASHRAE 1.0%): 95.0
OUTDOOR DESIGN TEMP. – WINTER (DEG. F)(ASHRAE 99.6%): -4.0
INDOOR DESIGN TEMP. – SUMMER (DEG. F): 75.0
OUTDOOR DESIGN TEMP. – WINTER (DEG. F): 70.0
RESTROOM EXHAUST FANS WILL EXHAUST PROPER CFM PER CODE VALUES

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX RD.
COLUMBUS, OH
43213

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
HVAC SCH'S AND DETAILS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
ISSUE	8-7-23	

PROJECT NO22-128
CAD DWG FILE21-128 Rialto Phase 1
DRAWN BY:PD
CHECKED BY:PD

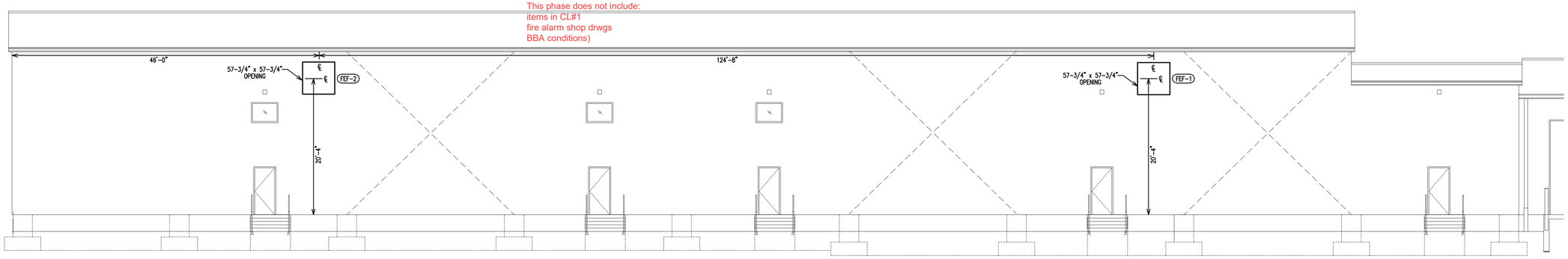
M 1.1

SHEET 17 OF 26

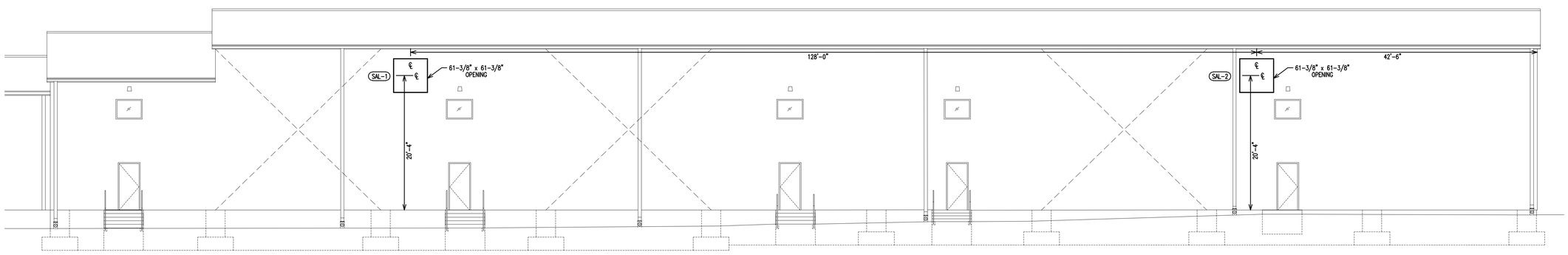
STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

Partial Plan Approval
Examiner W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)



North Elevation – Exhaust Fans
1/8" = 1'-0"



South Elevation – Supply Air Louvers
1/8" = 1'-0"

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN INC
140 FAIRFAX ROAD
CONSULTANTS
MARION, OH
43302

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
HVAC ELEVATIONS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 8-7-23

PROJECT NO22-113
CAD DWG FILE21-113 Rialto
DRAWN BY:PD
CHECKED BY:PD

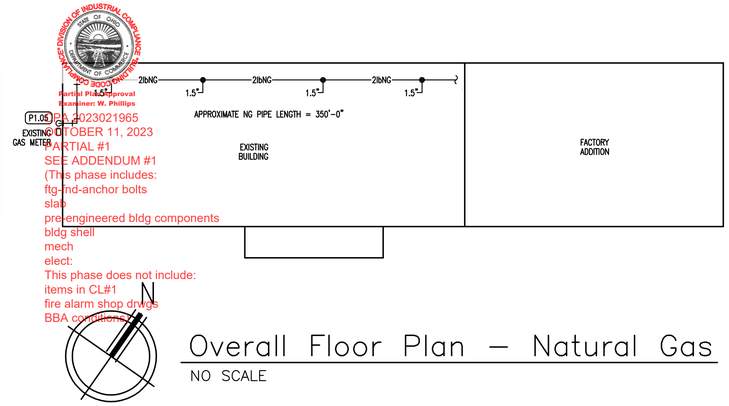
M 1.2

SHEET 16 OF 26

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

NATURAL GAS NOTE:

PLUMBING CONTRACTOR SHALL RECONFIGURE OUTLET SIDE OF GAS METER PIPING TO PROVIDE A 1.5" DEDICATED 2lb PIPE TO BE RUN FOR ALL NEW NG FIRED HVAC EQUIPMENT ASSOCIATED W/ THE NEW ADDITION. IN ADDITION TO THE DEDICATED 2lb PIPE, THE PLUMBING CONTRACTOR SHALL RECONNECT EXISTING LOW PRESSURE PIPE ASSOCIATED W/ THE EXISTING NG CONDITIONS. PLUMBING CONTRACTOR SHALL COORDINATE W/ THE GAS COMPANY TO PROVIDE A NEW GAS METER CAPABLE OF PROVIDING ADEQUATE NG TO FEED THE EXISTING AND NEW CONDITIONS.



Overall Floor Plan – Natural Gas

NO SCALE

NATURAL GAS CODED NOTES

P1.01	3/4" 2lb NATURAL GAS FROM CEILING SPACE DOWN TO RADIANT HEATER W/ GAS COCK, UNION, 6" DRIP LEG & REGULATOR AS REQUIRED.
P1.02	SEE OVERALL FLOOR PLAN – NATURAL GAS FOR CONTINUATION OF 1.5" 2lb NATURAL GAS LINE.
P1.03	1/2" COMPRESSED AIR DROP W/ QUICK CONNECT FITTING AS REQUIRED.
P1.04	MAKE 1.5" COMPRESSED AIR CONNECTION TO EXISTING LINE AS REQUIRED.
P1.05	1.5" 2lb NATURAL GAS DOWN ON WALL AND MAKE CONNECTION AT EXISTING NATURAL GAS METER. SEE NATURAL GAS NOTE FOR MORE INFORMATION.

STATE OF OHIO DIVISION OF INDUSTRIAL COMPLIANCE
APPROVED
Partial Plan Approval
Examiner W. Phillips
PA 20230219 65
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
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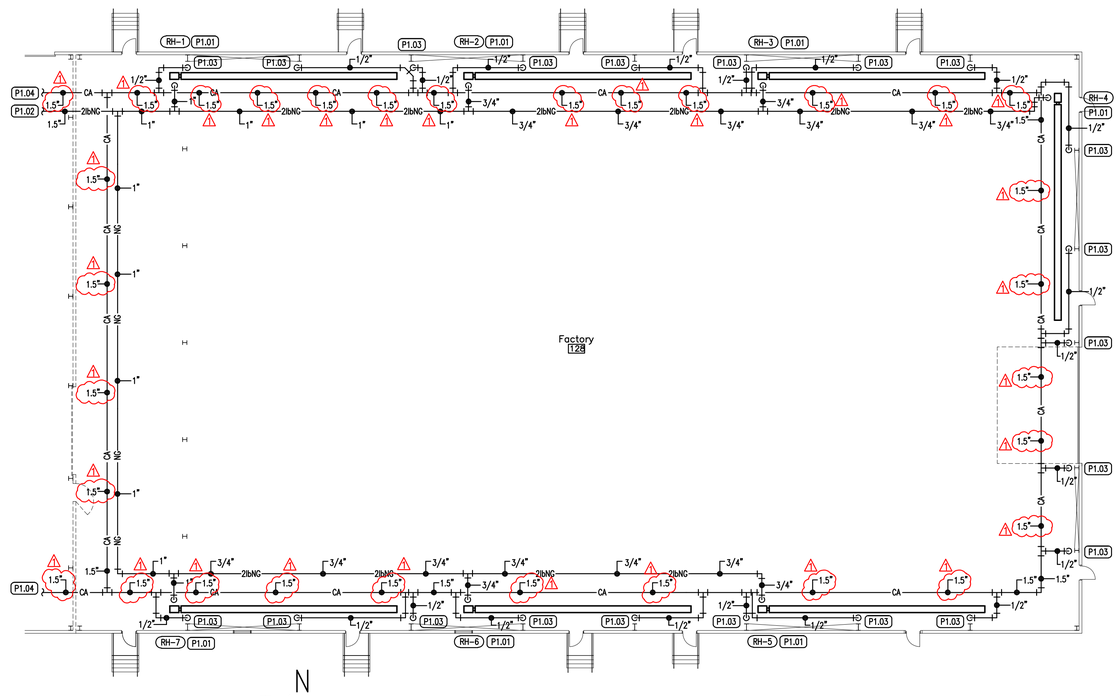
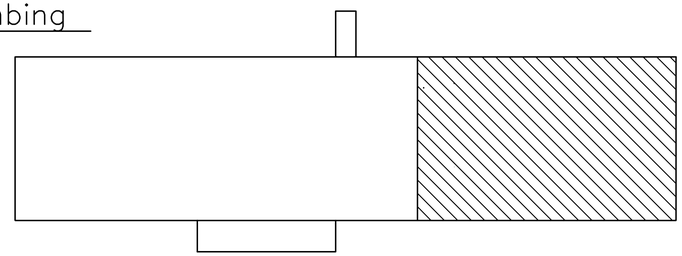


Partial Floor Plan – Plumbing

1/16" = 1'-0"



Key Plan

NO SCALE

STATE OF OHIO
JONATHAN W. BORON
REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN INC
140 FAIRFAX RD
CONSULTANTS
MARION, OH 43302

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE

PARTIAL PLBG. FLOOR PLAN

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD	2-21-23	CONSTRUCTION DOCUMENTS
1		REVISED CA LOOP
		SIZE PER OWNER

ISSUE: 8-7-23

PROJECT NO22-128
CAD DWG FILE21-128 Rialto Phase 1
DRAWN BY:PD
CHECKED BY:PD

P 1.0

SHEET 18 OF 26

PLUMBING SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE

1. For purposes of clearness and legibility, Drawings are essentially diagrammatic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
2. Drawings and Specifications to be considered cooperative, and anything appearing in Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE

1. Codes and Permits – Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS

1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS

1. Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering under workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

E. MATERIALS

1. Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
2. All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necessary for proper operation, and in compliance with effective State or Local Code requirements.
3. Where piping passes through floor, ceiling or wall, close space between pipe and construction with fire stop putty.

PIPE AND PIPE FITTINGS

A. QUALITY ASSURANCE

1. Welding Materials and Procedures: Conform to ASME Code, 1980 Standards of the American Welding Society, OBBC Chapter 4101:8 Ohio Pressure Piping System Rules.
2. All piping systems in compliance with the Ohio Pressure Pressure System Rules must be performed by certified welders. Provide copies of welding certificate and mark all joints with certificate ID.

B. PRODUCTS

1. PIPE AND TUBE
   a. Steel Pipe: ASTM A53; Schedule 40 black.
   b. Ductile Iron Water Pipe: ANSI A21.51.
   c. Copper Water Tube: ASTM B88; type and temper as scheduled; seamless.
   d. PVC Plastic Pipe: ASTM D2665, Schedule 40.
2. PIPE AND TUBE JOINTS AND FITTINGS
   a. Malleable Iron Threaded Fittings: ASME B16.3.
   b. Malleable Iron Threaded Unions: Class 150.
   c. Ductile Iron Fittings: ANSI A21.10.
   d. Wrought Copper/Bronze Solder Joint Fittings: ASME B16.22 (pressure fittings).
   e. Solder: ASTM B32, Grade 95TA.
   f. PVC Pipe Fittings: ASTM D2665 for Schedule 40.
   g. Solvent for PVC Jointing: ASTM D2564.

C. INSTALLATION

1. General: Install pipe, tube and fittings in accordance with recognized industry practices which will achieve permanently–leakproof piping systems, capable of performing each indicated service without piping failure. Install each run with a minimum of joints and couplings, but with adequate and accessible unions for disassembly and maintenance/replacement of valves and equipment. Reduce sizes (where indicated) by use of reduced fittings. Align piping accurately at connections, with 1/16" misalignment tolerance.
2. Locate piping runs, except as otherwise indicated, vertically and horizontally (pitched to drain) and avoid diagonal runs wherever possible. Orient horizontal runs parallel with walls and column lines. Locate runs as shown or described by diagrams, details and notations or if not otherwise indicated, run piping in the shortest route which does not obstruct usable space or block access for servicing the building and its equipment. Hold piping close to walls, overhead construction, columns and other structural members. Wherever possible in finished and and occupied spaces, conceal piping from view.
3. Electrical Equipment Spaces: Do not run piping through transformer vaults and other electrical or electronic equipment spaces and enclosures.
4. Piping System Joints: Provide joints of the type indicated in each piping system.
   a. Thread pipe and fittings shall have cut threads full and clean using sharp dies. Ream threaded ends to remove burns and restore full inside diameter. Apply pipe joint compound, or pipe joint tape (Teflon) where recommended by pipe/fitting manufacturer, on male threads at each joint and tighten joint to leave not more than three threads exposed.
   b. Solder copper tube and fitting joints where indicated, in accordance with recognized industry practice. Cut tube ends squarely, ream to full inside diameter, and clean outside of tube ends and inside of fittings. Apply solder flux to joint areas of both tubes and fittings. Insert tube full depth into fitting, and solder in a manner which will draw solder full depth and circumference of joint. Wipe excess solder from joint before it hardens.
   c. Plastic Pipe/Tube Joints: Comply with manufacturer's instructions and recommendations and with applicable industry standards. Make solvent cemented joints ASTM D2865 and F402.
5. Insulating (Dielectric) Unions: Comply with manufacturer's instructions for installing unions. Install unions in a manner which will prevent galvanic action and stop corrosion where the "joining of ferrous and non–ferrous piping" is indicated.

D. CLEANING, FLUSHING, INSPECTION

1. General: Clean exterior surfaces of installed piping systems of superfluous materials and prepare for application of specified coatings (if any). Flush out piping systems with clean water before proceeding with required tests. Inspect each run of each system for completion of joints, supports and accessory items.

E. PIPING TEST

1. Test pressure piping in accordance with ANSI B31.
2. Repair piping systems sections which fail the required piping test, by disassembly and re–installation, using new materials to the extent required to overcome leakage. Do not use chemicals, stop–leak compounds, mastics or other temporary repair methods.
3. Drain test water from piping systems after testing and repair work has been completed.

F. SCHEDULE OF PIPE MATERIALS, JOINTS AND FITTINGS

1. Pipe and fittings for all services shall be as indicated on the following schedule:

SCHEDULE OF PIPE MATERIALS, JOINTS AND FITTINGS

Service	Above Grade	Below Grade	Pipe	Joints & Fittings
Natural Gas	X		Black Steel Schedule 40	Malleable Iron Class 150
Sanitary and Vent	X	X	PVC ASTM D2665 Schedule 40	ASTM D2665 With Solvent Weld (ASTM D2564) Cement) PVC Fittings
Domestic Water	X		Copper, Hard Type L	Soldered (Grade 95TA)
Domestic Water 3" & Larger		X	Ductile Iron Water Pipe	Push On Joints
Domestic Water 2.5" & Smaller		X	Copper, Soft Type K	Soldered (Grade 95TA)

PIPE HANGERS

A. PRODUCTS

1. PIPE HANGERS
   a. Hangers: Pipe sizes 1/2" to 1 1/2", adjustable wrought steel ring.
   b. Hangers: Pipe sizes 2" to 4", adjustable wrought steel clevis.
   c. Mutiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
2. HANGER RODS
   a. Provide steel hanger rods, threaded both ends, threaded one end, or continuous threaded.

B. INSTALLATION

1. Use side beam brackets for suspending hangers from wood trusses.

C. SPACING REQUIREMENTS

1. Support horizontal steel and copper piping as follows:

Nominal Pipe Size (inch)	Distance Between Support (feet)	Hanger Rod Diameter (inch)
1/2	6	3/8
3/4 to 1 1/2	6	3/8
2 and 2 1/2	10	3/8
3 and 4	12	5/8

2. Install hangers to provide minimum 1/2" clear space between finished covering and adjacent work.
3. Install a hanger within one foot of each horizontal elbow.
4. Use hangers which are vertically adjustable 1 1/2" minimum after piping is erected.
5. Where several pipes can be installed in parallel and at same elevation, provide multiple or trapeze hangers.

PLUMBING

A. SUBMITTALS

1. Furnish Shop Drawings for all water heaters, plumbing fixtures, floor drains, and cleanouts.
2. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.

B. DOMESTIC WATER HEATER

1. Provide water heaters shown on Drawings:
   a. Factory insulated and steel jacketed storage tank with baked on finish.
   b. Temperature/Pressure relief valve, ASME rated.
   c. Glass lined storage tank with anode rod.
   d. 150 psi working pressure.
   e. 100% automatic shutoff upon pilot failure.
   f. Copper immersion heating elements, factory wired with fused contactors.
   g. Adjustable immersion stat and high temperature cutout.
   h. U.L. approved.
2. Water Heater to be Bradford White as described on Drawings. A.O. Smith, Lochinvar, or Rheem hot water heaters of equal size are acceptable.
3. Warranty:
   a. Water heater shall be covered by a 5–year limited warranty against tank failure due to corrosion or due to metal failure or overheating caused by buildup of sand, sediment, or sludge.

C. SANITARY DRAINAGE SYSTEMS

1. Run all drainage and vent piping as direct as possible. Actual location of drains, soil and waste piping shall meet the various building conditions. Do any work necessary to conceal piping.
2. Slope branch soil and waste pipes at an incline of at least 1/4" per foot of run. Make changes in direction of drainage piping by means of "Y" branches and 1/4, 1/8, or 1/16 bends except that sanitary "T's" and crosses may be used in vertical stacks.
3. Provide cleanouts at base of all stacks, at changes of direction and as shown on Drawings. Cleanouts on undergroundlines shall extend up flush with finished floor or grade. Provide cleanouts not over 50 ft. o.c. along straight runs. Cleanouts shall be size of pipe to which it is installed up to 4" in diameter. Pipe over 4" in diameter shall have a 4" cleanout.
4. Terminate vent pipes at least 12" above roof. Make each vent terminal water–tight with the roof by using sheet lead (4 psf) with base not less than 24" in all directions from center of pipe and full height of pipe and turned down 2" inside of pipe.
5. Lay all sanitary sewers with full length of each section resting on a solid bed. Lay pipe starting at upgrade with spigot end of pipe pointing in direction of flow. All sanitary sewers shall be collected separately as shown on Drawings

D. DOMESTIC WATER SUPPLY SYSTEMS

1. Install water system as shown on Drawings with hot and cold water being supplied and connected to all fixtures and equipment.
2. Provide unions at all equipment valves, strainer, etc., to facilitate removal for repair or replacement without disturbing adjacent piping.
3. Provide temporary water service to area of construction for use of all trades. Plumbing Contractor shall be responsible for maintaining uninterrupted temporary water service throughout construction.
4. Chlorinate all domestic water systems. Flush out domestic system then hold a solution mixture of 50 ppm of chlorine in the system for a period of 24 hours. Drain and flush system until chlorine residual of .5 ppm. Chlorination shall be repeated if necessary and conform to AWWA Specifications C601–54 and be accepted by Local Health Dept.

E. NATURAL GAS PIPING SYSTEM

1. Connect to all building equipment requiring natural gas. Install drip leg and shut–off cock at each connection.

F. PLUMBING FIXTURES AND EQUIPMENT

1. Provide plumbing fixtures shown on Drawings and listed in Fixture Schedule. Fixtures as manufactured by Mansfield, Kohler, or Eljer are approved equal.
2. All countertop sinks to be individually valved under sinks using Wolverine Ball Valves.
3. Faucets and Flush Valves to have renewable seats and discs and chrome plated trim. Delany and Watrous flush valves and Delta Faucets are acceptable on Base Bid.
4 All fixtures to be supported as indicated on Fixture Schedule.
5. After installation, all connecting piping to be flushed and valves properly adjusted. Labels, plaster, stains and other foreign material to be removed from all fixtures so they are acceptable in and operation. Caulk all Fixtures at wall and floors.
6. Fixtures set to height as shown in schedule and in location shown on Drawings, plumb, level and substantially supported. Immediately after the setting of any fixture, fitting or piping, protect it adequately without extra cost to the Owner. At all stages of the installation, pipe openings must be protected against the entrance of foreign material.
7. Exposed piping to plumbing fixtures shall be chromium plated, iron pipe size, brass pipe and chromium plated stop valves where exposed and brass where concealed.
8. All fixtures shall be furnished and installed according to schedules on the Drawings. However, the Plumbing Contractor shall ascertain the correct amount of fixtures required by the plans as he will be held strictly responsible for furnishing and installing all items shown.
9. Contractor shall inform himself fully regarding peculiarities and limitations of space available for installation of all material and equipment to be installed under this Contract, and see that all equipment to be reached periodically for operation and maintenance is made easily accessible.

G. TESTS

1. Sanitary, Waste, and Vent Piping: All sanitary, storm, and water piping shall be tested per State Plumbing Code and/or requirements of Local Authority.

INSULATION

A. SUBMITTALS

1. Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.
2. All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM–E–84, NFPA 255 and UL 723, not exceeding a flame spread of 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above. No polyethylene insulation acceptable.
3. Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Domestic Hot Water	I II	2" and under	1" 1 1/2"	VB A.S.J. VB A.S.J.
Domestic Cold Water	I II	ALL	1"	VB A.S.J.

TYPES OF COVERING

ASJ – All Service Jacket
VB – Vapor Barrier

TYPES OF INSULATION

TYPE I

OFG – Owens–Corning One Piece Fiberglass Pipe Insulation, K = .23, Density = 4.0#/ft³.

JFG – Johns–Manville "Micro–Lok" Fiberglass Pipe Insulation, K = .23, Density = 4.0#/ft³.

KFG – Knauf Fiberglass Pipe Insulation, K = .23, Heavy Density.

TYPE II

APF – Armstrong Armaflex AP Pipe Insulation, K = .27 (1/2" on Domestic Hot and Cold Water Piping).

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

OMNESS DESIGN, INC.
140 FAIRFAX RD.
CONSULTANTS
MARION, OHIO 43302

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
PLBG. SPEC's

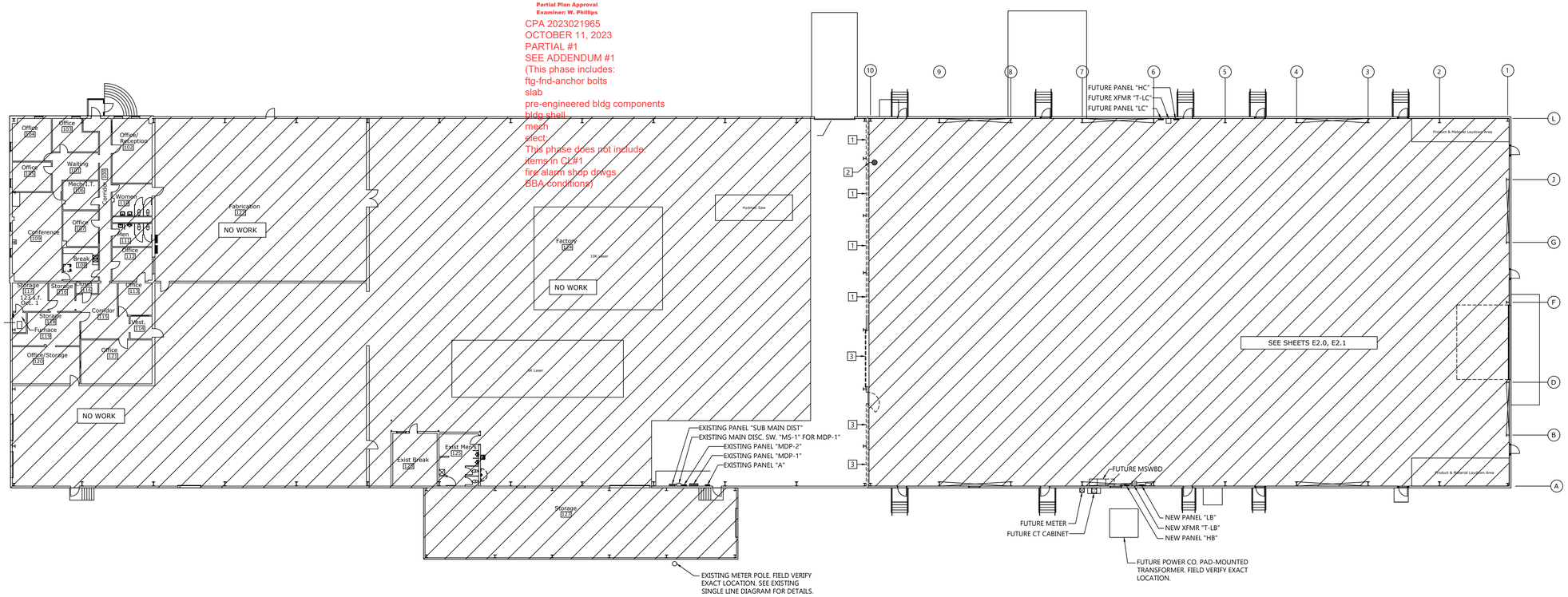
MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 8–7–23

PROJECT NO22–113
CAD DWG FILE21–113 Rialto
DRAWN BY:PO
CHECKED BY:PO

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

P 1.1



N

Overall Floor Plan

1" = 20'-0"

	DEMOLITION NOTES	
1	EXISTING WALL TO BE REMOVED BY OTHERS. EC TO REMOVE ALL AFFECTED ELECTRICAL ITEMS AND ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE. EC TO RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO ABOVE DEMOLITION.	
2	DISCONNECT AND REMOVE EXISTING WALL PACK. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE. EC TO RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO ABOVE DEMOLITION.	
3	EXISTING OVERHEAD DOOR TO BE REMOVED BY OTHERS. EC TO REMOVE ALL AFFECTED ELECTRICAL ITEMS AND ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE. EC TO RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO ABOVE DEMOLITION.	

DEMOLITION GENERAL NOTES

A. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL EXISTING ELECTRICAL ITEMS AS REQUIRED PRIOR TO CONSTRUCTION.

B. ELECTRICAL CONTRACTOR TO COORDINATE ALL PHASING WITH GC PRIOR TO DEMOLITION. MAINTAIN ALL EXISTING ELECTRICAL, TELEPHONE, TELEVISION, FIRE ALARM, ETC. UNTIL THE NEW SERVICE SERVICE IS COMPLETELY INSTALLED OR RELOCATED.

C. RECONNECT ANY REMAINING ACTIVE ELECTRICAL ITEMS WHOSE POWER WAS DISCONNECTED DUE TO DEMOLITION WORK.

D. REMOVE ALL NON-ACTIVE EXPOSED CABLES.

E. PROVIDE BLANK COVERPLATES OVER ALL UNUSED BOXES.

F. PATCH ALL OPENINGS LEFT BY REMOVAL OF ELECTRICAL ITEMS TO MATCH EXISTING CONDITIONS AS DIRECTED BY ARCHITECT UNLESS OTHERWISE NOTED.

G. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. BRING ANY DISCREPANCIES TO ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION.

H. SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN. IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN.

Partial Plan Approval
Examinen W. Phillips
CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

STATE OF OHIO
TIMOTHY J. BERON
REGISTERED PROFESSIONAL ENGINEER

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140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
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SHEET TITLE
Overall
Floor Plan

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
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ISSUE 8-7-23

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
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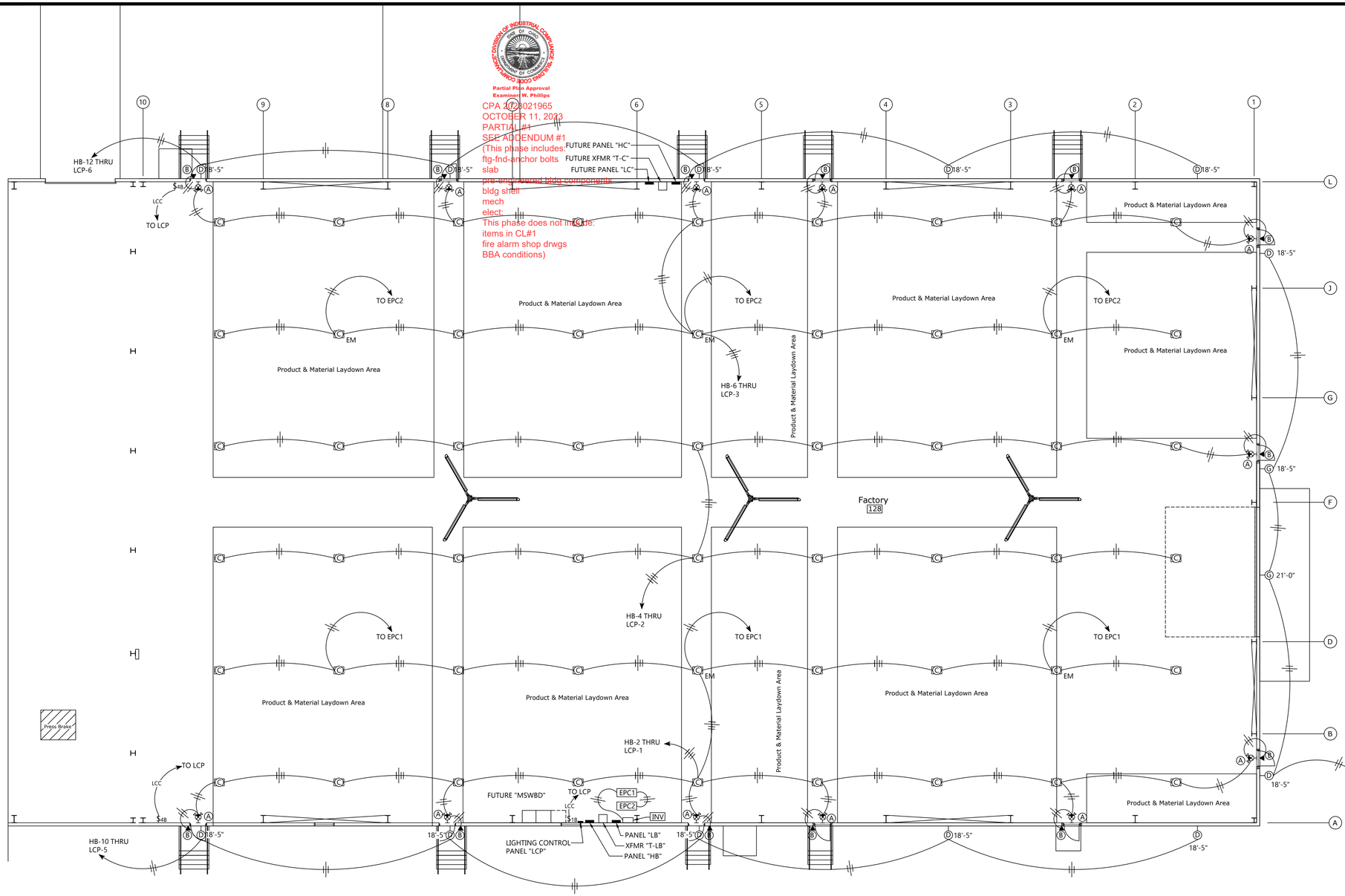

CPA 21-8021965
OCTOBER 11, 2023
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Partial Plan Approval
Examiner W. Phillips

GENERAL NOTES

1. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
3. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL VERIFY THIS INFORMATION AT THE BUILDING SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
7. ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
8. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
18. EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
20. ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
21. ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
22. ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
23. ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.
24. SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN, IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN.
25. SEE SHEET E3.0 FOR LOCATION OF LIGHTING CONTROL PANEL "LCP" & INVERTER.

N

Lighting - Partial Floor Plan

3/32" = 1'-0"

STATE OF OHIO
TIMOTHY J. OSMUN
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PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

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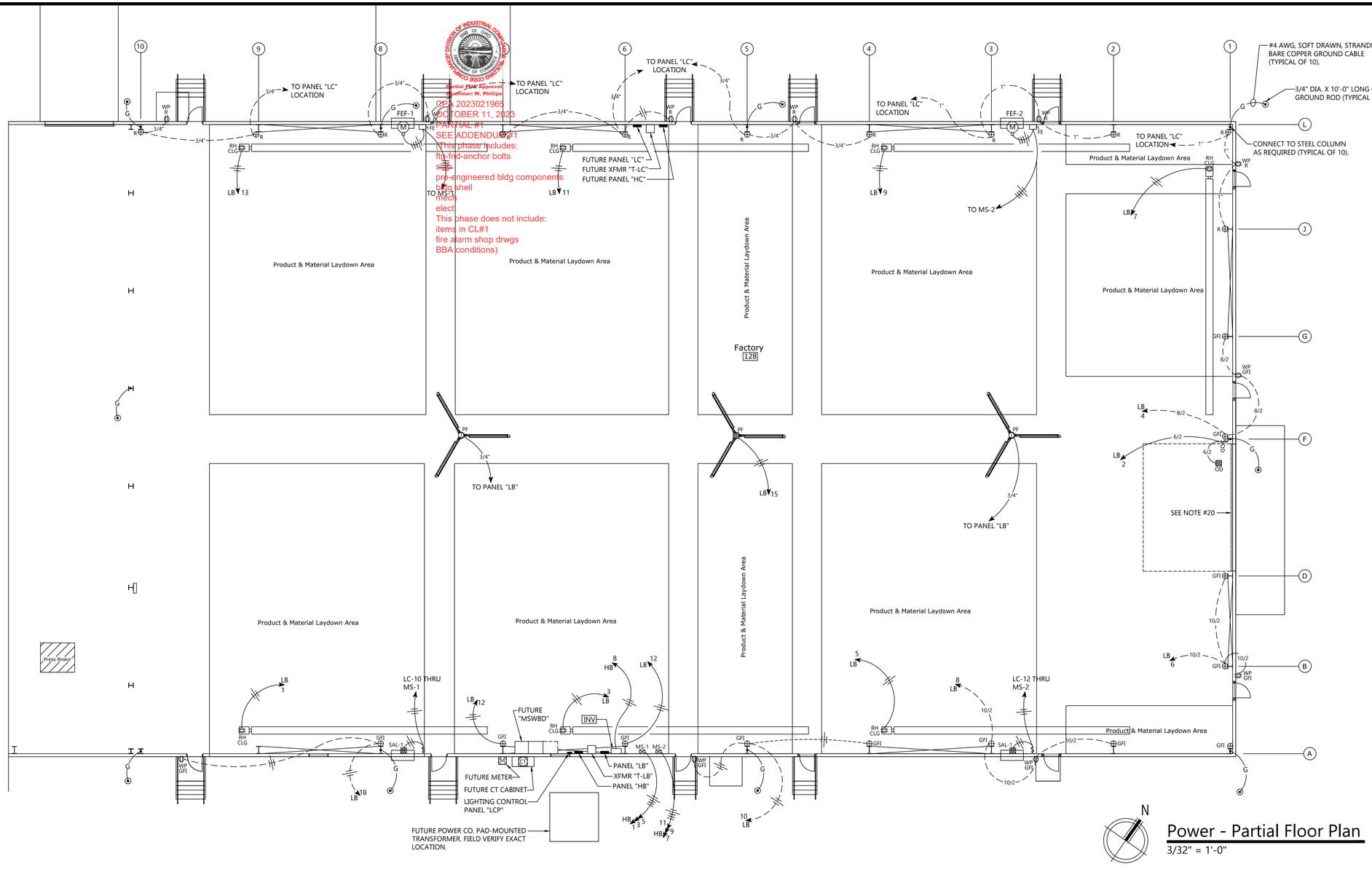

Power - Partial Floor Plan

3/32" = 1'-0"

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2. CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
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4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
7. ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
8. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
18. EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
20. EC TO PROVIDE 1/2EMT CONDUIT FOR ALL OVERHEAD DOOR'S LOW VOLTAGE DEVICES AS DIRECTED BY OVERHEAD DOOR SUPPLIER. EC TO PROVIDE 1/2EMT EACH OVERHEAD DOOR LOW VOLTAGE DEVICE TO 10'-0"AFF AS DIRECTED BY OVERHEAD DOOR SUPPLIER. TERMINATE EACH END WITH PLASTIC BUSHINGS.
21. ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
22. ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
23. ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
24. ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.
25. SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN. IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN.

STATE OF OHIO
Timothy Edron Bolz
REGISTERED PROFESSIONAL ENGINEER

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE
Power
Partial Floor Plan

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
ISSUE	8-7-23	

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

E 2.1

SHEET 22 OF 26

Partial Plan Approval
Examinen W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

LEGEND

SYMBOL	DESCRIPTION
HX	COMBINATION EXIT SIGN/EMERGENCY LIGHT
$	SINGLE POLE SWITCH WITH STAINLESS STEEL COVERPLATE. MOUNT AT 48"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
$3	3-WAY, 4-WAY SINGLE POLE SWITCH WITH STAINLESS STEEL COVERPLATE. MOUNT AT 48"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
$4B	NEXTLIGHT OPTIMA #CRC3014 OR EQUIVALENT 4-BUTTON LOW VOLTAGE WALL SWITCH WITH STAINLESS STEEL COVERPLATE. MOUNT T 48"AFF TO CENTERLINE UNLESS NOTED OTHERWISE. VERIFY COLOR WITH OWNER PRIOR TO ORDERING. PROGRAM AND LABEL SWITCH AS DIRECTED BY OWNER AND SWITCH SUPPLIER.
$1B	NEXTLIGHT OPTIMA #CRC3011 OR EQUIVALENT 1-BUTTON LOW VOLTAGE WALL SWITCH WITH STAINLESS STEEL COVERPLATE FOR MANUAL OVERRIDE. MOUNT T 48"AFF TO CENTERLINE UNLESS NOTED OTHERWISE. VERIFY COLOR WITH OWNER PRIOR TO ORDERING. PROGRAM AND LABEL SWITCH AS DIRECTED BY OWNER & LUMINAIRE SUPPLIER
$OD	30A, 125V SINGLE POLE SWITCH WITH STAINLESS STEEL COVERPLATE FOR OVERHEAD DOOR. MOUNT NEXT TO OVERHEAD DOOR MOTOR AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
EPC1,2	LVS INC. #EPC-A-1 OR EQUIVALENT EMERGENCY POWER CONTROL DEVICE SURFACE MOUNT EMERGENCY POWER CONTROL DEVICE AS DIRECTED BY EMERGENCY POWER CONTROL DEVICE SUPPLIER. PROVIDE ALL CONNECTIONS AS DIRECTED BY EMERGENCY POWER CONTROL DEVICE SUPPLIER AND AS REQUIRED FOR A COMPLETE WORKING SYSTEM. SEE EMERGENCY POWER CONTROL DEVICE WIRING DIAGRAM FOR ADDITIONAL INFORMATION.
INV	LVS INC. #CEPS-A-1000-277-3 OR EQUIVALENT 1000 WATT, 277V INVERTER WITH THREE (3) 20A/1P CIRCUIT BREAKERS. SURFACE MOUNT INVERTER AS DIRECTED BY INVERTER SUPPLIER. PROVIDE ALL CONNECTIONS AS DIRECTED BY INVERTER SUPPLIER AND AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
	20A, 125V, DUPLEX RECEPTACLE WITH STAINLESS STEEL COVERPLATE. MOUNT AT 18"AFF TO CENTERLINE UNLESS OTHERWISE NOTED. **GFI** - GROUND FAULT INTERRUPTING **WP** - WEATHERPROOF COVER **RH/CLG** - CEILING MOUNT NEXT TO RADIANT HEATER (1.7FLA, 120V, 1PH) AS DIRECTED BY MC. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN. **WP/R** - ROUGH-IN BOX FOR A "GFI" TYPE DUPLEX RECEPTACLE. PROVIDE A BLANK WEATHERPROOF COVER
GFI	TWO (2) 20A, 125V, DUPLEX RECEPTACLES MOUNTED IN THE SAME BOX WITH COMMON STAINLESS STEEL COVERPLATE. MOUNT AT 24"AFF TO CENTERLINE UNLESS OTHERWISE NOTED. (GFI - INDICATES BOTH DUPLEX RECEPTACLES TO BE "GFI" TYPE RECEPTACLES.)
R	ROUGH-IN BOX FOR A DOUBLE DUPLEX RECEPTACLE. PROVIDE A BLANK STAINLESS STEEL COVERPLATE. MOUNT AT 24"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
FEF-1,2	FACTORY EXHAUST FAN EF-1,2 (3HP, 480V, 3PH). CONNECT AS DIRECTED BY MC.
	POINT OF CONNECTION TO ELECTRICAL EQUIPMENT. VERIFY EXACT LOCATION WITH RESPECTIVE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
PF	POINT OF CONNECTION TO PROPELLER FAN (750W, 120V, 1PH). CONNECT AS DIRECTED BY FAN SUPPLIER.
OD	POINT OF CONNECTION TO OVERHEAD DOOR POWER (1HP, 120V, 1PH). CONNECT THRU DOOR CONTROLLER AND CONNECT TO MOTOR AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
SAL-1,2	POINT OF CONNECTION TO SUPPLY AIR LOUVER SAL-1,2 (1FLA, 120V, 1PH). CONNECT AS DIRECTED BY MC. INTERLOCK WITH RESPECTIVE EXHAUST FAN MOTOR STARTER AS DIRECTED BY MC.
	DISCONNECT SWITCH. FRAME SIZE/# OF POLES/# OF FUSES/VOLTAGE RATING/ ENCLOSURE TYPE.
FE	30A/3P/NF/250V/NEMA 1 DISCONNECT SWITCH FOR FACTORY EXHAUST FAN. INSTALL AT LOCATION AS DIRECTED BY MC.
MS-1,2	MOTOR STARTER MS-1,2 FURNISHED BY MC AND INSTALLED AND WIRED BY EC AS DIRECTED BY MC.
J	JUNCTION BOX
PF	ROUGH IN JUNCTION BOX FOR FUTURE PROPELLER FAN. CEILING MOUNT AT LOCATION AS DIRECTED BY MC. FIELD VERIFY LOCATION WITH MC PRIOR TO ROUGH-IN.
	POWER PANEL
	CONDUIT CONCEALED
	INSTALL CONDUIT AT 30" BELOW CONCRETE SLAB TO TOP OF CONDUIT.
A3	CONDUIT HOME RUN WITH CIRCUIT NUMBER
	HOT, NEUTRAL, GROUND
LCC	NEXLIGHT 2-WIRE DATA BUS - BELDEN 6200UE or equal, 1/2°C FOR LIGHTING CONTROL
10/2	2-#10CU, 1-#10CU GND, 3/4"C.
8/2	2-#8CU, 1-#10CU GND, 1"C
6/2	2-#6CU, 1-#6CU GND, 1"C
3/4"	3/4" CONDUIT WITH PULL WIRE
1"	1" CONDUIT WITH PULL WIRE
BFG	BELOW FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFC	BELOW FINISHED CEILING
EC	ELECTRICAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
GC	GENERAL CONTRACTOR

LUMINAIRE SCHEDULE

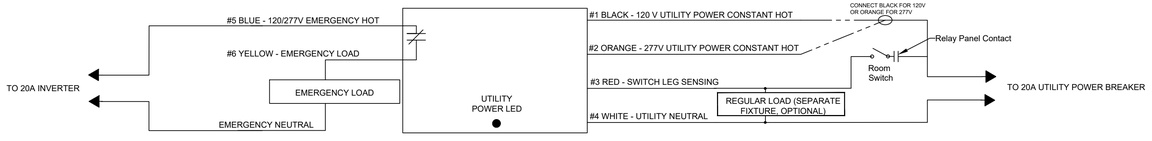
TYPE	MFG	CAT NO.	VOLT	AMPS	MTG
A	CHLORIDE OR EQUIVALENT - COMBINATION LED EXIT SIGN/ EMERGENCY LIGHT WITH REMOTE CAPABILITY & 90 MINUTE BATTERY BACK-UP	VLTCR3R	120/277	INTEGRAL	UNIVERSAL
B	CHLORIDE OR EQUIVALENT - LED REMOTE EMERGENCY LIGHT WITH TWIN HEADS	VLL2RGO	120/277	INTEGRAL	WALL SURFACE ABOVE DOOR
C	DAYBRITE - 24,000 LUMEN LED INDUSTRIAL HIGH BAY LUMINAIRE	FBZ-24L-840-UNV-LFA-WC6/5 [HARD WIRED]	UNV	(1) 151.0W LED, 4000K	CEILING SUSPEND AT 20'-0" TO BOTTOM OF LUMINAIRE AS DIRECTED BY LUMINAIRE SUPPLIER.
C/EM	DAYBRITE - 24,000 LUMEN LED INDUSTRIAL HIGH BAY LUMINAIRE CONNECTED TO INVERTER THROUGH EMERGENCY POWER CONTROL DEVICE TO ACT AS AN EMERGENCY LIGHT.	FBZ-24L-840-UNV-LFA-WC6/5 [HARD WIRED]	UNV	(1) 151.0W LED, 4000K	CEILING SUSPEND AT 20'-0" TO BOTTOM OF LUMINAIRE AS DIRECTED BY LUMINAIRE SUPPLIER.
D	STONCO - WALL PACK	LPW32-90-NW-G3-3-UNV-XX-BAC	UNV	(1) 90.0W LED/4000K	WALL SURFACE AT HEIGHT TO CENTER OF LUMINAIRE AS SHOWN ON DRAWINGS.

NOTES:
1. SUBSCRIPT "NL" INDICATES LUMINAIRE TO BE CONNECTED AHEAD OF SWITCH TO ACT AS A "NIGHT LIGHT".
2. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
3. VERIFY LED LAMP COLORS OF ALL LUMINAIRE WITH OWNER & ARCHITECT PRIOR TO ORDERING.
4. EQUIVALENT LUMINAIRES AS MANUFACTURED BY LITHONIA & COOPER. EQUIVALENT MANUFACTURER SHALL PROVIDE LIGHTING CALCULATION FOR EACH SPACE.

LIGHTING CONTROL PANEL "LCP" SCHEDULE

RELAY NUMBER	LOCATION OF RELAY CIRCUIT	PANEL "HB" CKT. NO.
1	FACTORY 128 TYPE "C" & "C1" LUMINAIRES	2
2	FACTORY 128 TYPE "C" & "C1" LUMINAIRES	4
3	FACTORY 128 TYPE "C" LUMINAIRES	6
4	SOUTH BUILDING TYPE "D" LUMINAIRES	10
5	NORTH BUILDING TYPE "D" LUMINAIRES	12
6	EAST BUILDING TYPE "D" LUMINAIRES	14
7	SPARE	-
8-16	SPARE	-

NOTES:
1. EC TO PROVIDE AN EXTRA HOT WIRE FOR RELAY NUMBERS 1,2,3, BYPASSING LIGHTING CONTROL PANEL, TO FEED THE COMBINATION EXIT SIGNS/EMERGENCY LIGHTS AND EMERGENCY LIGHTS CONNECTED TO THE INVERTER AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
2. LIGHTING CONTROL PANEL "LCP" TO BE A NEXLIGHT #NXL-R16s 16-RELAY PANEL WITH TIME CLOCK, NO DIMMING, AND NEMA 1 SURFACE MOUNTED CABINET.
3. EC TO PROGRAM LIGHTING CONTROL PANEL AS DIRECTED BY OWNER AND LIGHTING CONTROL SYSTEM SUPPLIER. PROVIDE A COMPLETE WORKING SYSTEM.
4. EC TO PROVIDE FOUR (4) HOURS OF TRAINING TO THE OWNER.
5. COORDINATE ALL WORK WITH BOB HENNINGE OF BRIGHT FOCUS SALES AT (216) 233-8809 OR (216) 751-8384 EXT. 209



EMERGENCY POWER CONTROL DEVICE WIRING DIAGRAM

N.T.S.

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive Marion, OH 43302

SHEET TITLE
Legend Schedules

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS
ISSUE	8-7-23	

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
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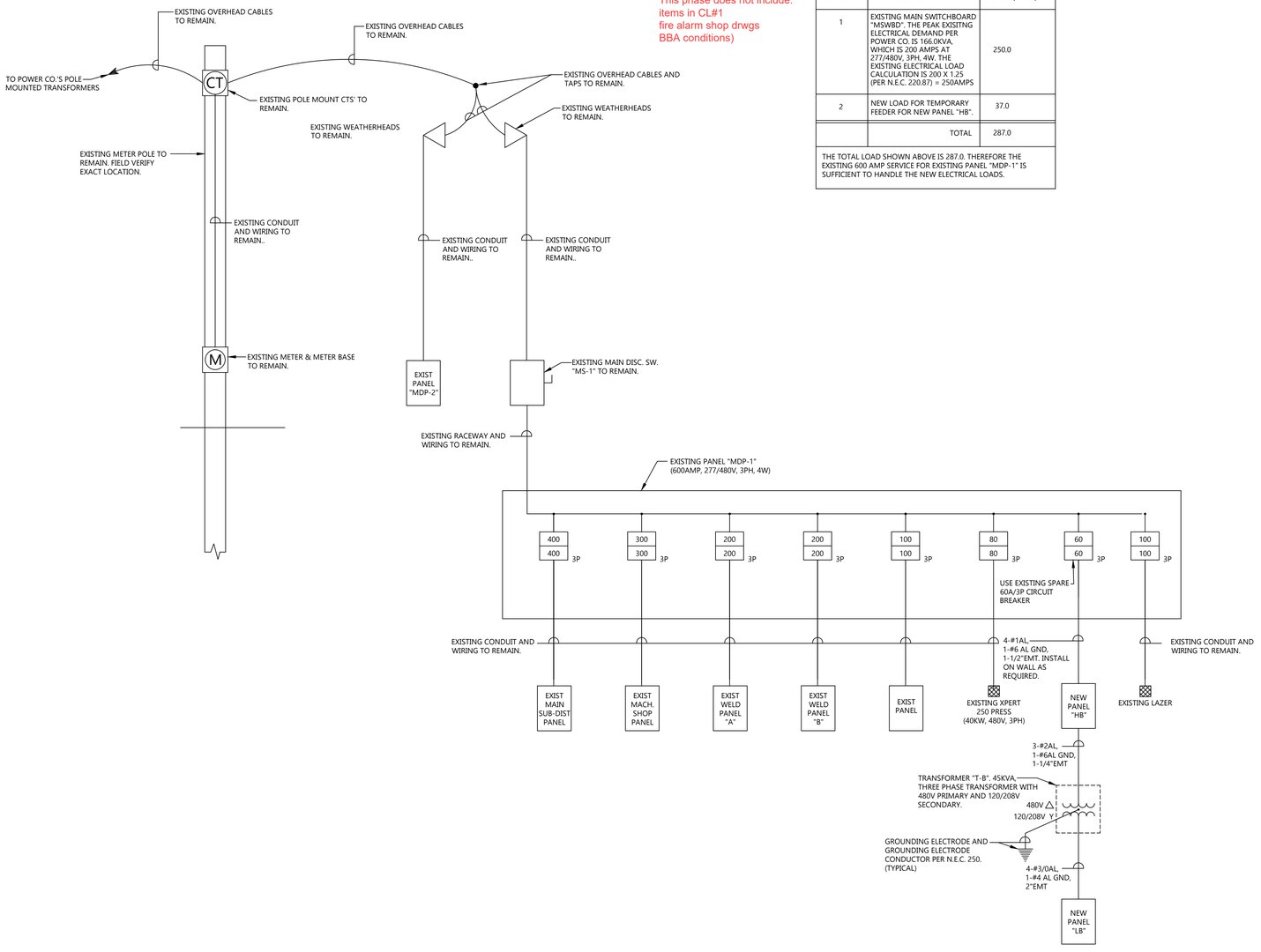

EXISTING SINGLE LINE DIAGRAM

N T S

ELECTRICAL LOAD SCHEDULE FOR TEMPORARY ELECTRICAL FEEDER FOR EXISTING PANEL "MDP-1" (600A, 277/480V, 3PH, 4W)

LOAD NO.	DESCRIPTION	LOAD (AMPS)
1	EXISTING MAIN SWITCHBOARD "MSWBD". THE PEAK EXISITNG ELECTRICAL DEMAND PER POWER CO. IS 166.0KVA, WHICH IS 200 AMPS AT 277/480V, 3PH, 4W. THE EXISTING ELECTRICAL LOAD CALCULATION IS 200 X 1.25 (PER N.E.C. 220.87) = 250AMPS	250.0
2	NEW LOAD FOR TEMPORARY FEEDER FOR NEW PANEL "HB".	37.0
	TOTAL	287.0

THE TOTAL LOAD SHOWN ABOVE IS 287.0. THEREFORE THE EXISTING 600 AMP SERVICE FOR EXISTING PANEL "MDP-1" IS SUFFICIENT TO HANDLE THE NEW ELECTRICAL LOADS.

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "HB" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN LUGS ONLY

SERVICE: 400 AMPS 277/480 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

LOAD		WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
1328	KEF-1, 128	12	20/3	1		2	20/1	12	LTG., 128	2564
1328	KEF-1, 128	12	20/3	3		4	20/1	12	LTG., 128	2564
1328	KEF-1, 128	12	20/3	5		6	20/1	12	LTG., 128	2564
1328	KEF-2, 128	12	20/3	7		8	20/1	12	INVERTER	1000
1328	KEF-2, 128	12	20/3	9		10	20/1	12	LTG., SOUTH BLDG.	690
1328	KEF-2, 128	12	20/3	11		12	20/1	12	LTG., NORTH BLDG.	690
3432	XFMR "T-B"	4	80/3	13		14	20/1	12	LGT., EAST BLDG.	552
2958	XFMR "T-B"	4	80/3	15		16	65/3	-	SPARE	-
2568	XFMR "T-B"	4	80/3	17		18	65/3	-	SPARE	-
-	SPARE	-	80/3	19		20	65/3	-	SPARE	-
-	SPARE	-	80/3	21		22	65/3	-	SPARE	-
-	SPARE	-	80/3	23		24	65/3	-	SPARE	-
-	SPARE	-	50/3	25		26	65/3	-	SPARE	-
-	SPARE	-	50/3	27		28	20/1	-	SPARE	-
-	SPARE	-	50/3	29		30	20/1	-	SPARE	-
-	SPARE	-	20/1	31		32	20/1	-	SPARE	-
-	SPARE	-	20/1	33		34	20/1	-	SPARE	-
-	SPARE	-	20/1	35		36	20/1	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = 10,204W B = 8,868W C = 8,478W

TOTAL LOAD: 3 X PHA = 30,612W

= 37 AMPS @ 277/480 VOLTS, 3PH, 4W

NOTES:
1.

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "LB" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN CIRCUIT BREAKER

SERVICE: 150 AMPS 120/208 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

LOAD		WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
204	RH, 128	12	20/1	1		2	30/1	6	OD, 128	1920
204	RH, 128	12	15/1	3		4	20/1	8	REC., 128	900
204	RH, 128	12	15/1	5		6	20/1	10	REC., 128	900
204	RH, 128	12	20/1	7		8	20/1	10	REC., 128	900
204	RH, 128	12	20/1	9		10	20/1	12	REC., 128	900
204	RH, 128	12	20/1	11		12	20/1	12	REC., 128	720
204	RH, 128	12	20/1	13		14	20/1	-	SPARE	-
750	PF, 128	12	15/1	15		16	20/1	-	SPARE	-
-	SPARE	-	15/1	17		18	20/1	12	REC., 128	540
-	SPARE	-	15/1	19		20	20/1	-	SPARE	-
-	SPARE	-	20/1	21		22	20/1	-	SPARE	-
-	SPARE	-	20/1	23		24	20/1	-	SPARE	-
-	SPARE	-	20/1	25		26	20/1	-	SPARE	-
-	SPARE	-	20/1	27		28	20/1	-	SPARE	-
-	SPARE	-	20/1	29		30	30/1	-	SPARE	-
-	SPARE	-	20/1	31		32	20/1	-	SPARE	-
-	SPARE	-	20/1	33		34	20/1	-	SPARE	-
-	SPARE	-	20/1	35		36	20/1	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = 3,432W B = 2,958W C = 2,568W

TOTAL LOAD: 3 X PHA = 10,296W

= 29 AMPS @ 120/208 VOLTS, 3PH, 4W

NOTES:
1.

STATE OF OHIO
TIMOTHY BROWN
REGISTERED PROFESSIONAL ENGINEER
OMNESS DESIGN, INC.
140 FAIRFAX ROAD
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1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

Panelboard Sched.
Existing Single
Line Diagram

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
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ISSUE	8-7-23	

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
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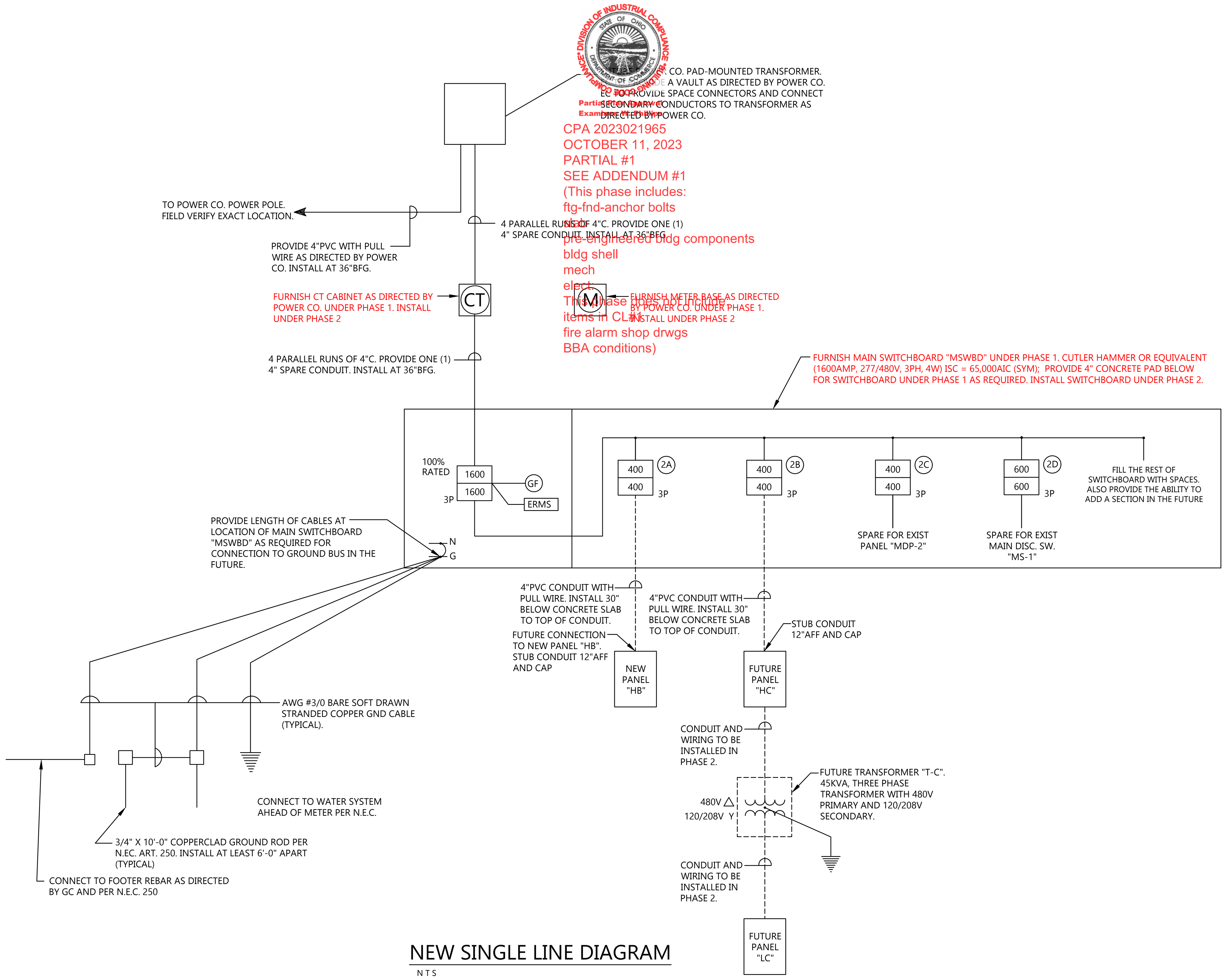
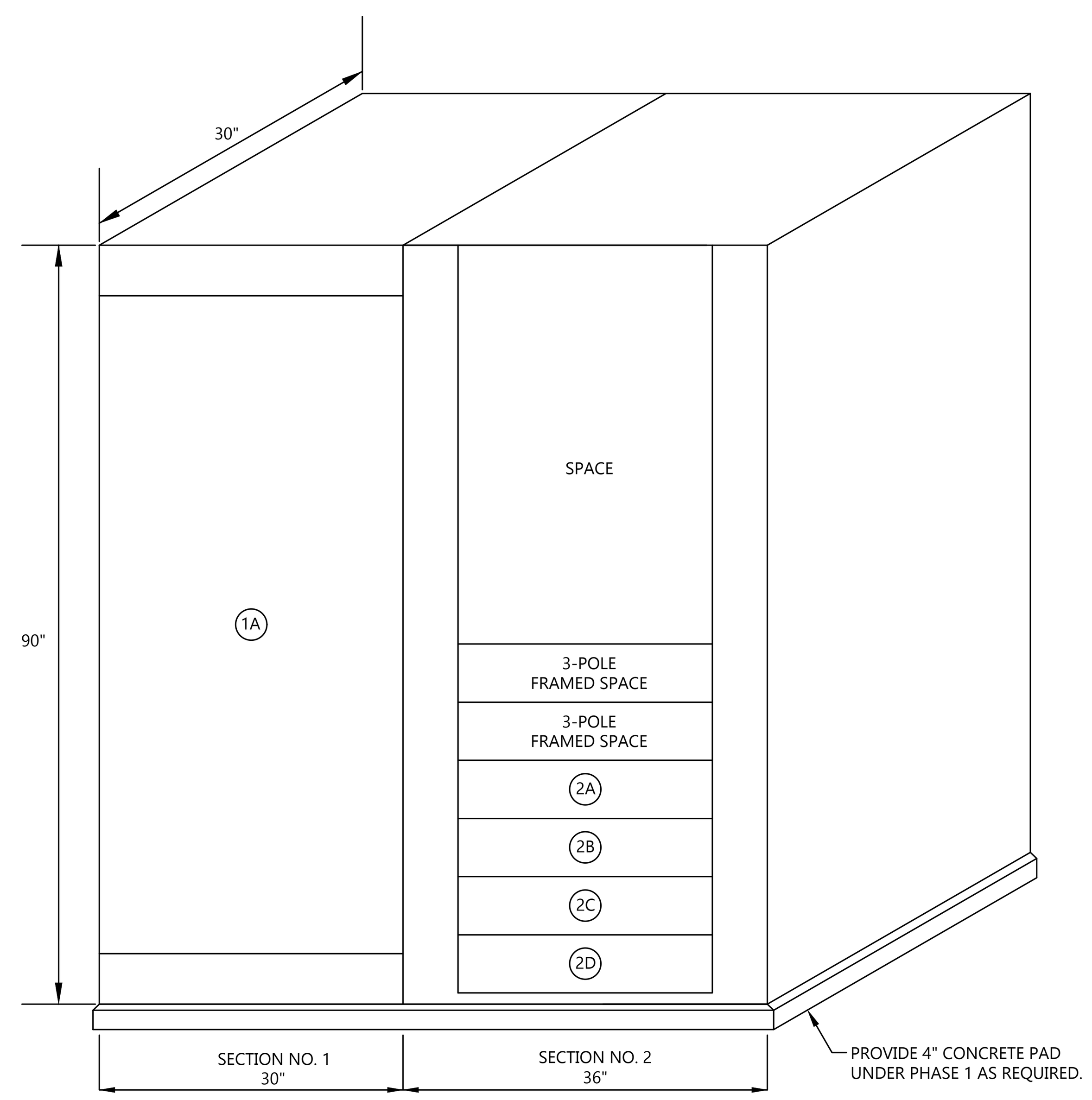


NEW SINGLE LINE DIAGRAM

N.T.S.



FUTURE MAIN SWITCHBOARD "MSWBD" DETAIL

N.T.S.

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "HC" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN LUGS ONLY

SERVICE: 400 AMPS 277/480 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

	LOAD	WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
-	SPARE	-	20/3	1		2	80/3	4	XFMR "T-C"	15,000
-	SPARE	-	20/3	3		4	80/3	4	XFMR "T-C"	15,000
-	SPARE	-	20/3	5		6	80/3	4	XFMR "T-C"	15,000
-	SPARE	-	20/3	7		8	80/3	-	SPARE	-
-	SPARE	-	20/3	9		10	80/3	-	SPARE	-
-	SPARE	-	20/3	11		12	80/3	-	SPARE	-
-	SPARE	-	20/3	13		14	40/3	-	SPARE	-
-	SPARE	-	20/3	15		16	40/3	-	SPARE	-
-	SPARE	-	20/3	17		18	40/3	-	SPARE	-
-	SPARE	-	20/3	19		20	25/3	-	SPARE	-
-	SPARE	-	20/3	21		22	25/3	-	SPARE	-
-	SPARE	-	20/3	23		24	25/3	-	SPARE	-
-	SPARE	-	50/3	25		26	60/3	-	SPARE	-
-	SPARE	-	50/3	27		28	60/3	-	SPARE	-
-	SPARE	-	50/3	29		30	60/3	-	SPARE	-
-	SPARE	-	30/3	31		32	60/3	-	SPARE	-
-	SPARE	-	30/3	33		34	60/3	-	SPARE	-
-	SPARE	-	30/3	35		36	60/3	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = -W B = -W C = -W

TOTAL LOAD: 3 X PH- = -W
= 64 AMPS @ 277/480 VOLTS, 3PH, 4W

DISTRIBUTION PANEL SCHEDULE

PANEL: NEW PANEL "LC" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN CIRCUIT BREAKER

SERVICE: 150 AMPS 120/208 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

	LOAD	WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD	
-	SPARE	10	20/1	1		2	20/1	-	SPARE	-
-	SPARE	10	20/1	3		4	20/1	-	SPARE	-
-	SPARE	12	20/1	5		6	20/1	-	SPARE	-
-	SPARE	12	20/1	7		8	20/1	-	SPARE	-
-	SPARE	12	20/1	9		10	20/1	-	SPARE	-
-	SPARE	12	20/1	11		12	20/1	-	SPARE	-
-	SPARE	-	20/1	13		14	20/1	-	SPARE	-
-	SPARE	-	20/1	15		16	20/1	-	SPARE	-
-	SPARE	-	20/1	17		18	20/1	-	SPARE	-
-	SPARE	-	20/1	19		20	20/1	-	SPARE	-
-	SPARE	-	20/1	21		22	20/1	-	SPARE	-
-	SPARE	-	20/1	23		24	20/1	-	SPARE	-
-	SPARE	-	20/1	25		26	20/1	-	SPARE	-
-	SPARE	-	20/1	27		28	20/1	-	SPARE	-
-	SPARE	-	20/1	29		30	30/1	-	SPARE	-
-	SPARE	-	20/1	31		32	20/1	-	SPARE	-
-	SPARE	-	20/1	33		34	20/1	-	SPARE	-
-	SPARE	-	20/1	35		36	20/1	-	SPARE	-
-	SPARE	-	20/1	37		38	20/1	-	SPARE	-
-	SPARE	-	20/1	39		40	20/1	-	SPARE	-
-	SPARE	-	20/1	41		42	20/1	-	SPARE	-

LOADS: A = 3,924W B = 1,764W C = 2,124W

TOTAL LOAD: 3 X PHA = 11,772W
= 33 AMPS @ 120/208 VOLTS, 3PH, 4W

NOTES:
1.

FURNISH PANELS UNDER PHASE 1 AND INSTALL THEM UNDER PHASE 2.

STATE OF OHIO
TIMOTHY AARON MOORE
E-70520
REGISTERED PROFESSIONAL ENGINEER

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302
CONSULTANTS

Addition to
Rialto Manufacturing, Inc.
1632 Cascade Drive
Marion, OH 43302

SHEET TITLE

Panelboard Sched.
New Single
Line Diagram

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

ISSUE: 8-7-23

PROJECT NO: 22-113
CAD DWG FILE: 22-113 Rialto
DRAWN BY: PO
CHECKED BY: PO

E 3.2

Division of Industrial Compliance * Building Code Compliance — State of Ohio, Department of Commerce

Partial Plan Approval
Examiner: W. Phillips

CPA 2023021965
OCTOBER 11, 2023
PARTIAL #1
SEE ADDENDUM #1
(This phase includes:
ftg-fnd-anchor bolts
slab
pre-engineered bldg components
bldg shell
mech
elect:
This phase does not include:
items in CL#1
fire alarm shop drwgs
BBA conditions)

SPECIFICATIONS

1. **WORK INCLUDED:** WORK INCLUDED IS SUBJECT TO THE GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS OF THE ENTIRE OPERATION. THE CONTRACTORS AND/OR SUBCONTRACTORS FOR THIS PORTION OF THE WORK ARE REQUIRED TO REFER ESPECIALLY THERETO.

1.a. THE WORK COVERED UNDER THIS SPECIFICATION SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR, OR INCIDENTAL TO PROPER INSTALLATION AND COMPLETION OF ELECTRICAL WORK AS INDICATED ON THE DRAWINGS OR HEREIN SPECIFIED, OR BOTH.

1.b. THE CONTRACT DOCUMENTS ARE COMPLIMENTARY AND WHAT IS CALLED FOR BY ONE SHALL BE AS BINDING AS IF CALL FOR BY ALL. IF THE DRAWINGS AND SPECIFICATIONS ARE IN CONFLICT, THE MOST COMPREHENSIVE SCOPE OF WORK AND BETTER QUALITY MATERIAL AS CALLED FOR IN ONE DOCUMENT SHALL BE USED FOR BIDDING PURPOSED. CONFLICT IN THE DRAWINGS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT-ENGINEER FOR CLARIFICATION. MISUNDERSTANDING OF DRAWINGS AND SPECIFICATIONS SHALL BE CLARIFIED BY THE ARCHITECT/ENGINEER WHOSE DECISION SHALL BE FINAL.

1.c. ALL PORTIONS OF OTHER SECTIONS OF SPECIFICATIONS AND DRAWINGS WHICH CAN BE MADE TO APPLY SHALL BE CONSIDERED A PART OF THE SPECIFICATIONS. THE ELECTRICAL CONTRACTOR SHALL REVIEW OTHER SECTIONS OF THE SPECIFICATIONS AND DRAWINGS AND INCLUDE IN HIS BID ALL ELECTRICAL WORK REQUIRED TO COMPLETE ALL WORK.

1.d. WHERE THE LETTER "EC" IS USED IN THESE SPECIFICATIONS IT IS RELATIVE TO THE ELECTRICAL CONTRACTOR.

1.e. ANY APPARATUS, APPLIANCE, MATERIAL, OR WORK NOT SHOWN ON THE DRAWINGS, BUT MENTIONED IN THE SPECIFICATIONS, OR VICE-VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND PERFECT ON ALL RESPECTS AND REDO FOR OPERATION EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE FURNISHED, DELIVERED AND INSTALLED BY THE EC WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

1.f. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION, SHALL BE INCLUDED IN THE EC'S ESTIMATE, THE SAME AS IF HEREIN SPECIFIED OR SHOWN.

1.g. WITH SUBMISSION OF BID, THE EC SHALL GIVE WRITTEN NOTICE TO THE ARCHITECT OF ANY MATERIALS OR APPARATUS BELIEVED INADEQUATE OR UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES, AND ANY NECESSARY ITEMS OR WORK OMITTED. IN THE ABSENCE OF SUCH WRITTEN NOTICE, IT IS MUTUALLY AGREED THAT THE EC HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS PROPOSAL, AND THAT HE WILL BE RESPONSIBLE FOR THE APPROVED SATISFACTORY FUNCTIONING OF OF THE ENTIRE SYSTEM WITHOUT EXTRA COMPENSATION.

2. **ELECTRICAL DRAWINGS:** THE DRAWINGS CONSTITUTE AN INTEGRAL PART OF THESE SPECIFICATIONS. THE DRAWINGS INDICATE THE GENERAL LAYOUT OF EQUIPMENT AND ALL DIMENSIONS AND CLEARANCES SHOULD BE VERIFIED IN THE FIELD. ALL DISCREPANCIES OF DIMENSIONS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT-ENGINEER FOR DISPOSITION.

3. **ELECTRICAL DRAWINGS:** THE ARCHITECT/ENGINEER SHALL RESERVE THE RIGHT TO MAKE MINOR ADJUSTMENTS IN LOCATIONS OF OUTLETS, SWITCHES, FIXTURES, CONDUIT, ETC., AND EQUIPMENT WHERE HE CONSIDERS SUCH ADJUSTMENTS DESIRABLE IN THE INTEREST OF CONCEALING WORK OR PRESENTING A BETTER APPEARANCE WHERE EXPOSED. ANY SUCH CHANGES SHALL BE ANTICIPATED AND REQUESTED SUFFICIENTLY IN ADVANCE AS TO NOT CAUSE EXTRA WORK ON THE PART OF THE CONTRACTOR, OR UNDULY DELAY THE WORK. COORDINATE WORK IN ADVANCE WITH ALL OTHER TRADES AND REPORT IMMEDIATELY AND ANY DIFFICULTIES WHICH CAN BE ANTICIPATED.

4. **ADDENDA:** THE DRAWINGS MAY BE SUPERSEDED BY LATER REVISED OR DETAILED DRAWINGS OR SPECIFICATION ADDENDA. REFER TO GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS.

5. **SHOP DRAWINGS:** BEFORE WORK IS DONE ON ANY ITEM OF EQUIPMENT, SUBMIT SIX (6) COPIES OF EACH OF THE FOLLOWING: SHOP DRAWINGS, CATALOG CUTS, MANUFACTURER'S CATALOG NUMBERS AND FULL AND COMPLETE INFORMATION FOR REVIEW. SUBMIT SHOP DRAWINGS CONTAINING OR MARKED WITH IDENTIFICATION AND INFORMATION DESCRIBED BELOW. ANY SHOP DRAWINGS NOT IN COMPLIANCE WITH THESE REQUIREMENTS WILL BE RETURNED, WITHOUT REVIEW, FOR CORRECTION AND RESUBMITTAL. ASSEMBLE AND SUBMIT IN LOGICALLY ARRANGED FOLDERS, ALL INSTRUCTION BULLETINS, LUBRICATION SCHEDULES, OPERATION INSTRUCTIONS, PARTS LISTS, PAMPHLETS FOR ELECTRICAL EQUIPMENT AND APPARATUS FURNISHED.

5.a. SHOP DRAWING IDENTIFICATION: INCLUDE PROJECT NAME AND ARCHITECT-ENGINEER'S JOB NUMBER, AND BY NAME, NUMBER AND INTENDED USE AS DESIGNATED BY THE CONTRACT DRAWINGS AND SPECIFICATION, SUCH AS "LIGHTING PANEL "LP-6".

5.b. SHOP DRAWING INFORMATION: INCLUDE FOLLOWING DATA: MANUFACTURER'S MODEL NUMBER OR CATALOG NUMBER, SIZE AND PERFORMANCE CURVES AND DATA. INDICATE OPERATING POINT ON CURVES AND TABULAR DATA FOR EACH PIECE OF EQUIPMENT THAT CURVES OR DATA REPRESENT. INDICATION OF ALL PERFORMANCE DATA, CONSTRUCTION MATERIAL FINISHES AND MODIFICATIONS TO MANUFACTURER'S STANDARD DESIGN SPECIFIED. ROUGHING-IN, FOUNDATION, AND SUPPORT POINTS DIMENSIONS IF APPLICABLE.

6. **OPERATING MANUALS AND PARTS LISTS:** IN ADDITION TO REQUIREMENTS OF GENERAL CONDITIONS, INCLUDE THE FOLLOWING: NAME, ADDRESS, AND TELEPHONE NUMBER OF LOCAL SUPPLIER OR MANUFACTURER'S REPRESENTATIVE FOR EACH PIECE OF EQUIPMENT. ASSEMBLE MANUALS IN SEPARATE BINDER OR BINDERS FOR EACH SYSTEM. INCLUDE CHARTS OR DIAGRAMS SHOWING ESSENTIAL FEATURES OF THE SYSTEM, AND INCLUDE A BRIEF DESCRIPTION OF THE SYSTEM. SUBMIT TWO (2) COPIES OF ABOVE BEFORE BINDING IN OPERATING MANUAL TO THE ARCHITECT-ENGINEER FOR APPROVAL.

7. **RECORD DRAWINGS:** RECEIVE FROM THE ARCHITECT-ENGINEER A COMPLETE SET OF DRAWINGS. NOTE IN RED PENCIL ON THIS SET ANY DEVIATIONS OF INSTALLATION. SUBMIT MARKED SET OF DRAWINGS TO THE ARCHITECT-ENGINEER.

8. **COORDINATION AND SCHEDULING:** ALL PHASES AND SCHEDULING OF WORK TO BE CLOSELY COORDINATED WITH THE OWNER AND AUTHORIZED IN WRITING BY THE OWNER AT LEAST ONE WEEK PRIOR TO THE EXECUTION OF ANY WORK.

9. **SUPERVISION:** THE CONTRACTOR SHALL HAVE AN EXPERIENCED SUPERINTENDENT CONSTANTLY ON THE SITE TO SUPERVISE ALL WORK OF ELECTRICAL CONTRACT.

10. **TEMPORARY ELECTRICAL SERVICE:** TEMPORARY ELECTRIC SERVICE SHALL BE PROVIDED AS REQUIRED.

11. **ALTERATIONS AND REHABILITATION OF EXISTING INSTALLATIONS:**

11.a. REMOVE EXISTING ELECTRICAL EQUIPMENT, DEVICES, OUTLETS, CONDUIT AND WIRING AS INDICATED OR REQUIRED.

11.b. CAP CONDUIT ENDS, PROVIDE COVERS FOR OPENINGS LEFT IN PANELBOARDS, OUTLETS, AND RACEWAYS TO PROVIDE A FINISHED FLUSH-APPEARANCE WHERE WORK HAS BEEN REMOVED.

11.c. WHERE WALLS ARE REMOVED, CUT OFF CONDUITS WHICH PROJECT FROM THE FLOOR INTO THE WALL BEING REMOVED, AS CLOSE TO THE FLOOR AS PRACTICABLE.

11.d. TAKE POSSESSION OF WIRING, CONDUIT AND MISCELLANEOUS ELECTRICAL EQUIPMENT REMOVE AND NOT REUSED. PROMPTLY REMOVE THESE MATERIALS FROM JOB SITE UNLESS OTHERWISE DIRECTED BY THE ARCHITECT/ENGINEER.

11.e. REMOVE FEEDERS OR CIRCUITS TO EQUIPMENT BEING REMOVED BACK TO THE SOURCE OF SUPPLY. IF OTHER EQUIPMENT, OUTLETS OR RECEPTACLES (TO REMAIN) ARE SUPPLIED BY THE SAME FEEDER OR CIRCUIT, PROVIDE WIRING TO MAINTAIN THE EQUIPMENT, OUTLETS OR RECEPTACLES IN SERVICE AND REMOVE UNUSED PORTIONS OF FEEDERS OR CIRCUITS TO NEAREST JUNCTION BOX AND TAPE ENDS OF CONDUCTORS.

11.f. DISCONNECT AND REMOVE OR RELOCATE ELECTRICAL ITEMS AFFECTED BY DEMOLITION WORK AND WHERE INTERFERENCE EXISTS AT FACILITIES TO BE EXTENDED.

11.g. WHEN SPECIFIC TYPES OF EQUIPMENT, METHODS OF CONNECTION, DISCONNECTION OR RELOCATION ARE NOT INDICATED, PROVIDE EQUIPMENT, DEVICES, WIRING AND WORKMANSHIP COMPATIBLE WITH THE EXISTING SYSTEM AND SATISFACTORY TO THE SYSTEM MANUFACTURER AND THE OWNER.

11.h. CERTAIN WORK UNDER THIS CONTRACT SHALL BE INSTALLED IN THE EXISTING BUILDING, THE LAYOUT BEING SUBSTANTIALLY CHANGED. COOPERATE WITH THE GENERAL CONTRACTOR THROUGHOUT IN THE REMOVAL OF OLD WORK.

12. **MATERIALS:** PROVIDE MATERIALS AND EQUIPMENT BEARING CERTIFICATION OF UL WHERE SUCH LABELS OR STAMPS ARE CUSTOMARY, REQUIRED, OR SPECIFIED.

13. **LICENSES AND PERMITS:** OBTAIN ALL REQUIRED LICENSES AND PERMITS AND, AT COMPLETION OF WORK, CERTIFICATES OF FINAL INSPECTION BY AUTHORITIES HAVING LOCAL JURISDICTION. PAY ALL CHARGES AND EXPENSES IN CONNECTION THEREWITH. DELIVER INSPECTION CERTIFICATES AS DIRECTED.

14. **CABLE TEST**: MAKE MEGGER TESTS ON CABLES BETWEEN EACH CONDUCTOR AND GROUND WITH OTHER CONDUCTORS IN A CABLE OR CONDUIT TIED TO GROUND. PERFORM OPERATIONAL TESTS ONLY ON ALL LIGHTING AND 120 VOLT RECEPTACLE CIRCUITS. PERFORM CONTINUITY TESTS ON ALL POWER AND CONTROL CIRCUITS. TEST CABLES FOR 208 VOLT SERVICE WITH A 500 VOLT MEGGER BETWEEN EACH PHASE AND GROUND, WITH TEST MAINTAINED UNTIL READINGS ARE STEADY FOR 3 MINUTES.

15. **GROUND TEST:** INSPECT ALL GROUND CONNECTIONS FOR CONTINUITY AND TIGHT ELECTRICAL AND MECHANICAL CONNECTIONS. TEST RESISTANCE AT VARIOUS POINTS USING BIDDLE GROUND OHMER, OR OTHER STANDARD METHOD. MAXIMUM PERMISSIBLE GROUND RESISTANCE IS 5 OHMS. CONNECT SYSTEM GROUND TO WATER METER AHEAD OF MAIN.

16. **GUARANTEE:** THIS CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND MATERIALS INCLUDING: INSTALLATION, PIPING, EQUIPMENT, MOTORS, WIRING AND CONTROLS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT COMPLETION. SHOULD DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THIS CONTRACTOR SHALL, UPON NOTICE OF SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHING CAUSED BY THE DEFECTS OR THE WORK CORRECTING SAME REPAIRED AND/OR REPLACED AT HIS EXPENSE, TO THE CONDITION BEFORE SUCH DAMAGE. THE DATE OF FINAL ACCEPTANCE IS DEFINED AS THE DATE OF SIGNATURE OF THE OWNER ON THE FINAL PAYMENT OF THIS CONTRACT.

17. **RACEWAY AND FITTINGS:** USE ELECTRIC METALLIC TUBING (EMT) CONDUIT EXCEPT AS OTHERWISE INDICATED.

18. **CONDUIT SIZE:** MINIMUM CONDUIT SIZE 1/2 INCH, EXCEPT WHERE OTHER SIZES ARE SPECIFICALLY INDICATED.

19. **MOUNTING HEIGHTS:** UNLESS OTHERWISE INDICATED, THE FOLLOWING OUTLET HEIGHTS APPLY.

OUTLET ELEVATION	
LIGHTING SWITCHES	4'-0" ABOVE FINISHED FLOOR TO CENTERLINE
RECEPTACLE OUTLETS IN OFFICES AND FINISHED AREAS	2'-0" ABOVE FLOOR TO CENTERLINE. COORDINATE MOUNTED HEIGHTS WITH OWNER PRIOR TO ROUGH-IN.
LIGHTING PANELBOARDS	6'-8" FROM TOP OF PANEL TO ABOVE FINISHED FLOOR.
FIRE ALARM PULL STATION	4'-0" ABOVE FINISHED FLOOR TO CENTERLINE
FIRE ALARM HORN/STROBE OR STROBE ONLY DEVICES	6'-8" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING TO CENTERLINE.
EMERGENCY LIGHT OUTLETS	8'-0" ABOVE FINISHED FLOOR TO CENTERLINE
EXIT LIGHT OUTLETS	0'-9" BELOW FINISHED CEILING TO CENTERLINE
BRACKET AND SPECIAL OUTLETS	AS INDICATED ON DRAWINGS

20. **CONDUCTOR TYPES**: TYPE THHN - 75 DEGREES "C" RATING, FOR LIGHTING, POWER AND CONTROL, NO. 8 AWG AND SMALLER. USE STRANDED WIRE FOR NO. 10 AWG AND LARGER.

21. **GROUNDING:** GROUND RODS-COPPERWELD STEEL COMPANY. CONNECT-ORS-BURNDY, THOMAS & BETTS OR O.Z. THERMITE WELDING-CADWELD OR THERMOWELD. GROUND THE FOLLOWING: RECEPTACLES, SWITCH BOXES, LUMINARIES AND OTHER ELECTRICAL DEVICES AS REQUIRED BY NEC.

22. **POWER DISTRIBUTION PANELBOARDS:** MANUFACTURERS SHALL BE G.E., SIEMENS/I-T-E, SQUARE D OR CUTLER HAMMER. COMPLETELY FACTORY BUILT AND TESTED, TOTALLY ENCLOSED, DEAD FRONT TYPE PANELBOARDS. NEATLY TYPED DIRECTORY, WITH A CLEAR PLASTIC COVER, IN FRAME INSIDE EACH PANELBOARD DOOR. FULL-CAPACITY INSULATED SOLID NEUTRAL. SEPARATE GROUND BUS WITH LUGS AS REQUIRED IN ADDITION TO NEUTRAL BUS.

23. **CIRCUIT BREAKER PANELBAORD:** MANUFACTURERS SHALL BE GE, SIEMENS/ITE, SQUARE D OR CUTLER HAMMER. MOLDED CASE CIRCUIT BREAKERS, THERMAL MAGNETIC, QUICK-MAKE, QUICK-BREAK, AMBIENT COMPENSATED OR FACTORY-CALIBRATED FOR PANELBOARD INSTALLATION. HANDLES ARRANGED FOR PADLOCKING IN OFF POSITION. ALL MULTIPOLE BREAKERS TO BE COMMON TRIP. HANDLE TIES WILL NOT BE ACCEPTED. SPACES TO BE COMPLETE WITH BUSES AND HARDWARE READY FOR CIRCUIT BREAKER

24. **SAFETY AND DISCONNECT SWITCHES:** SAFETY AND DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, SQUARE D, SIEMENS/ITE OR CUTLER HAMMER. FRONT-OPERATED, TYPE HD, SINGLE THROW, QUICK-MAKE, QUICK-BREAK , HP RATED, VISIBLE BLADE, SWITCHING UNIT. FUSIBLE TYPE TO BE PROVIDED WITH FUSE TERMINALS TO ACCOMMODATE TYPE OF FUSES INDICATED.

25. **FUSES:** PROVIDE FUSES AS FOLLOWS: FUSES 600 VOLTS AND LOWER. FOR MOTOR CIRCUITS, UL CLASS K-5, DUAL ELEMENT, 200,000 AIC SYMMETRICAL BUSS FRS FUSETRON, 600 VOLT RATING, BUS FRN FUSETRON, 250 VOLT RATING, OR SHAWMUT EQUIVALENT. FOR PANELBOARD SERVICES, UL CLASS RK-5, 200,000AIC SYMMETRICAL. OR BUSS LPN LOW PEAK, 250 VOLT RATING, OR SHAWMUT EQUIVALENT, AS INDICATED ON THE DRAWINGS. FURNISH ONE SET OF SPARE FUSES FOR EACH SIZE REQUIRED.

26. **WIRING DEVICES:** PROVIDE SPECIFICATION GRADE DEVICES AS INDICATED, OR EQUIVALENT, HUBBELL, PASS AND SEYMOUR, OR GENERAL ELECTRIC. SWITCHES TO BE RATED AT 20 AMPERES, 120 TO 277VOLTS, AC, WITH SHALLOW PLASTIC BODY, SCREW OR PRESSURE TERMINALS SUITABLE FOR NO. 12 AND NO. 10 WIRES, UNLESS OTHERWISE NOTED. ALL WALL SWITCHES AND 20 AMPERE CONVENIENCE RECEPTACLES TO HAVE AN IVORY FINISH. VERIFY COLOR OF ALL DEVICES AND COVERPLATES WITH OWNER PRIOR TO ORDERING. ELECTRICAL CONTRACTOR TO VERIFY THE TYPES AND STYLES OF PARTITIONS TO INSURE PROPER DEVICES BEFORE INSTALLATION. WIRE DEVICES AND COVERPLATES TO BE AS FOLLOWS:

26.a. **WALL SWITCHES:** STANDARD TYPE, PASS & SEYMOUR NO. CS20AC1-W, CS20AC3-W, OR CS20AC4-1 OR EQUIVALENT WHITE QUIET FLUSH TYPE TOGGLE SWITCH. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b. **RECEPTACLES:**

26.b.1. DUPLEX TYPE - PASS & SEYMOUR CR20-W, 20 AMPERES, 125 VOLTS, 3-WIRE, OR EQUIVALENT WHITE GROUNDING TYPE, NEMA CONFIGURATION 5-20R. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b.2. GROUND FAULT INTERRUPTING TYPE - PASS & SEYMOUR 2091-W 20 AMPERES, OR EQUIVALENT 125 VOLTS, 3-WIRE, WHITE, GROUND FAULT INTERRUPTING TYPE, NEMA CONFIGURATION 5-20R. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.c. **COVERPLATES:**

26.c.1. ALL COVERPLATES FOR INDOORS AND SIMILAR FINISHED AREA WIRING DEVICES TO BE #302 STAINLESS STEEL WITH BRUSHED SATIN FINISH AND FACE OPENINGS FOR THE INTENDED DEVICE.

27. ALL **FIRE ALARM SYSTEM** WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.

28. ALL **TELEPHONE/DATA/CATV SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.

29. ALL **SECURITY, CCTV, & ACCESS CONTROL SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.

30. **ALLOWANCES:** ALLOWANCE FOR $10,000 TO BE INCLUDED IN BASE BID FOR SERVICE WORK BEYOND THE SCOPE SHOWN. USE ALLOWANCE TO BE AUTHORIZED OWNER IN WRITING. UNUSED PORTION TO REVERT TO OWNER.

31. **SCOPE OF WORK:** SCOPE OF WORK ONLY INCLUDES THE AREAS AND ITEMS OF WORK AS SHOWN. IT SPECIFICALLY EXCLUDES ANY CODE VIOLATIONS OUTSIDE THE SCOPE OF WORK. ELECTRICAL CONTRACTOR SHALL BRING ANY CODE VIOLATIONS OR SERIOUS HAZARDOUS CONDITIONS, WHICH ARE FOUND, TO THE ATTENTION OF THE OWNER & ENGINEER SO THAT CORRECTIVE ACTION CAN BE TAKEN

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SHEET TITLE

Electrical Specification

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
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