

# **Landmark Commission**

**City Building** 

222 Meigs Street Sandusky, Ohio 44870

## October 17<sup>th</sup>, 2018 1ST FLOOR CONFERENCE ROOM 4:30 P.M.

## **AGENDA**

- 1. Meeting called to order Roll Call
- 2. Approval of the minutes
- 3. Bob Hare has submitted an application for repair details for 125 E. Water Street- Biemiller Building.
- 4. Other Business
- 5. Adjournment

## Landmark Commission September 26<sup>th</sup>, 2018 "DRAFT" Meeting Minutes

The Chairman called the meeting to order at 4:00PM. The following members were present: Mr. Jon Lawrence, Chairman Michael Zuilhof, Mr. Joe Galea, Mr. Griffith, and Ms. Nikki Llyod. Mr. Greg Voltz and Ms. Angela Byington represented the Planning Department; Mr. Trevor Hayberger represented the Law Department; and Casey Sparks, Clerk There were 5 voting members present.

Mr. Griffith moved to accept the minutes from September 26<sup>th</sup>, 2018, Mr. Lawrence second the motion.

Mr. Zuilhof stated that the applicant, Briana Metzger, on behalf of the City of Sandusky, has submitted an application for exterior signage for City Hall at 240 Columbus Ave.

Ms. Byington stated that she will give a staff presentation then Chuck Tackett from Marous Brothers is present to answer any questions and Briana Metzger from RLR Associates is available over the phone line for any technical questions.

Ms. Byington presented that the City is requesting approval for a Certificate of Appropriateness for exterior signage for city hall. This would be including a large city hall identification sign, numerous informational and addressing signs. This evening the commission will review the city hall signage that will be constructed of channel letters and is approximately 12 square feet. The letters are painted black aluminum, the front letter is opaque and there is a letter cut out behind this. The LED lighting is placed on the front letter and is shining onto the back letter. The two cut outs are enclosed, what is translucent is the back letter and a very narrow portion of the sign which is connecting the front to the back. The applicant has provided a rendering of what the full sign could look like illuminated at night. The property is within the historic district and staff has reviewed it based on the Secretary of Interior Standards and is recommending approval. Ms. Byington discussed the sections of the Secretary of Interior Standards used when reviewing the application; such as the sign has simple graphics, simple color, and is an externally lit sign. One important factor to keep in mind is that it is city owned and can be dimmed down if needed. Another important factor to keep in mind is there has already been other back lit signs that have been approved. Staff also provided a letter from Sharon Trsek which reviewed the historic guidelines for signage from the Secretary of Interior Standards and discussed how the sign met these standards. Ms. Trsek stated that the graphics are very easy to read and stylistically appropriate. The sign is being placed on the marguee which works architecturally and symbolically. The sign fits the scale of the building, the placement is historically accurate, and the lighting does not over power the design.

Ms. Byington stated that staff does believe that this sign meets the Secretary of Interior Standards.

Mr. Griffith stated that she would like to hear the description of the sign from Ms. Metzger. Mr. Zuilhof asked if the sign will be opaque on the front and back and translucent on the side. Brianna Metzger, RLR Associates, stated the back of the front letters will be an acrylic opaque white. The illuminating white acrylic back would be 1/2 inch thick, and would be 1/2 inch off set around aluminum channel.

Mr. Zuilhof ask if the back would be opaque as well.

Ms. Metzger stated that the front and the back of the front letter are both opaque and back letter is translucent white.

Mr. Lawrence asked the color of the sides.

Ms. Metzger stated they are white as well, what you will see from the front face of the sign will be a nice halo with an edge effect.

Chuck Tackett, Marous Brothers, explained the side elevation stating that it will be mostly opaque on the sides and translucent on the back.

Ms. Lloyd ask about the Section detail, asking if the right or left side is facing out.

Ms. Byington explained the left side is facing out and the lights will be shinning off the front onto the back. The LED lights will be shinning back onto the translucent white on the back. Mr. Griffith stated that the intent is to set the dark letters off in relief to the lit translucent back ground.

Ms. Lloyd stated that the example given within the packet appears to be much thicker than what is being proposed.

Ms. Byington stated that this is correct and stated the Commission may want to condition the approval to state that the majority of the sign is opaque for review of future applications. Mr. Zuilhof stated that this could be argued that it is an internally lit letter but not to the spirit of the regulations. This is more of a backlit letter and we are solid ground and not setting a precedence.

Mr. Griffith stated that the key to this application is that it is off set from the building, it is on an offset awning, rather than on the building. This is the critical issue that makes this acceptable. Mr. Galea moved to approve the applicant for a Certificate of Appropriateness for the proposed sign; Mr. Griffith seconded the motion.

With no further discussion the motion passed with a vote of 5/0.

Ms. Lloyd motioned to adjourn the meeting; Mr. Lawrence seconded the motion.	The meeting
was adjourned at 4:17pm	

	,
Casey Sparks, Clerk	Michael Zuilhof, Chairman

## CITY OF SANDUSKY, OHIO DEPARTMENT OF DEVELOPMENT DIVISION OF PLANNING

# LANDMARK COMMISSION

## REPORT

# APPLICATION FOR COMPREHENSIVE EXTERIOR POST STORM RENOVATIONS TO 125 E WATER STREET

Reference Number: LC-09-18

Date of Report: October 15, 2018

Report Author: Greg Voltz, Planner



# City of Sandusky, Ohio Landmark Commission Report

## BACKGROUND INFORMATION

Robert W. Hare has submitted an application, on behalf of Renaissance Too LLC, for exterior renovations to the Biemiller Building located at 125 E Water Street. The following information is relevant to this application:

Applicant: Renaissance Too LLC

PO Box 1070

Sandusky, Ohio 44871-1070

Project: Comprehensive Exterior Renovations

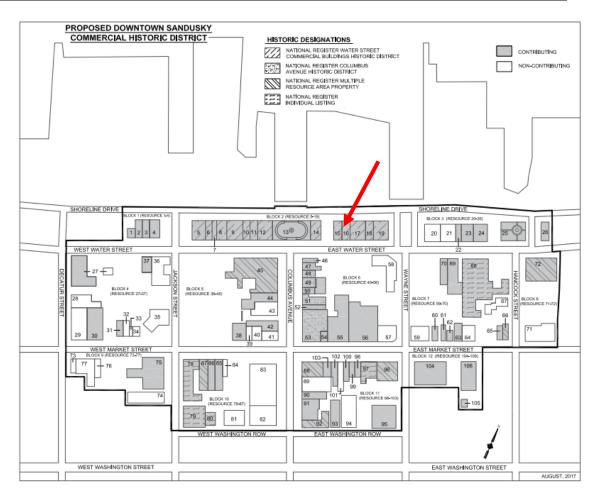
Site Location: 125 E Water Street

Zoning: "DBD"/Downtown Business District

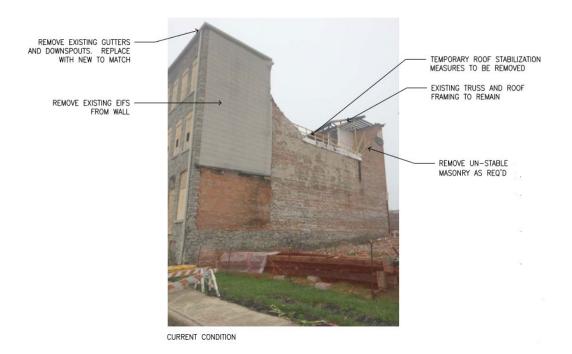
Existing Uses: Vacant

Proposed Uses: Office/Residential

## SITE DESCRIPTION



125 E Water Street





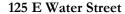
CURRENT CONDITION - EAST ELEVATION INTERIOR VIEW



PRE STORM DAMAGE CONDITION



POST STORM DAMAGE CONDITION





#### **DIVISION OF PLANNING COMMENTS**

The property located at 125 E Water Street is located within the Downtown Sandusky Commercial Historic District. Per Chapter 1161 Landmark Preservation any property that is on the National Register or located within a national historic district is required to seek a Certificate of Appropriateness from the Landmarks Commission for any renovations or additions. The property was recently awarded Ohio Historic Preservation Tax Credits through the Ohio Development Services Agency (ODSA). However, the state is currently reviewing the new plan and should soon determine if the revised project meets historic guidelines.

The applicant, Robert Hare, has provided an application to do extensive restoration work on the Biemiller Building after it was severely damaged during a storm July 26th, 2018.

The building previously received a Certificate of Appropriateness for renovations on July 18th, 2018 which included a complete restoration of the exterior of the property. This application is meant as an update, and as a request for a Certificate of Appropriateness to perform exterior renovations to rebuild the structure and complete the original project.

The applicant intends to remove additional brick on both the east and west sides of the building, to the point where a common stable brick line is established. At that point, a bond beam would be installed and the wall would be rebuilt with concrete block wall and reinforced with rebar. Once completed a new roof structure, deck, insulation, and membrane will be installed atop the masonry walls.

Staff has concern with the amount of the walls that are being rebuilt with concreted and EIFS versus brick. The applicant has submitted his architect's architectural narrative providing the reasoning for the materials.

A point of note is that windows that previously existed on the east and west walls were blown out during the storm and irreparably damaged. With that, current fire and building code prohibits replacing the windows.

In addition there will be new structural steel ties placed into the southeast corner of the façade to reduce the amount of separation that has occurred between the façade and the rest of the structure.

The center of the roof will be completely rebuilt between the existing north and south trusses that have been saved. The new section of roof will not be noticeable from the public way, but will have a different pitch than what was previously constructed. As before any utilities on the rooftop will not be noticeable from the public way.

The front doors were more severely damaged that previously described due to the storm, but they will be saved and restored.

#### CONCLUSION/RECOMMENDATION

Staff recognizes that the applicant is taking great care to follow guidelines set forth by the Secretary of Interior Standards in relation to the damage done by the July storm. In regards to the exterior of the structure the Secretary of the Interior Standards state that it is desired that original components are identified, retrained and preserved. However if necessary components are able to be repaired and replaced. The applicant tends to properly rebuild and save the structure, when able, repairing when possible, and cleaning and repairing exterior wood, metal, and other components.

In conclusions, staff recommends a discussion occur at Landmark Commission in regard to the project specifically to the new building materials. The applicant has asked that Landmarks Commission approve the project contingent on the States approval and conditions. Staff believes further discussion is needed in order to consider this request and that discussion can occur at the meeting.

## **REPAIR NARRATIVE**

## **125 E. WATER ST., SANDUSKY, OH 44870**

## **Background**

On July 26, 2018 a strong thunderstorm caused damage to the subject building, as well as several others. Damage included collapse of the roof, and portions of the east and west brick support walls to be dislodged and fall outward. No damage to the third-floor structure of the subject building resulted. After the storm damage, it was discovered that the west brick wall was not constructed consistently with three wythes of brick. The northern and southern extents of the west wall are three wythes of brick and the center portion of the wall is two wythes of brick. This presents a challenge in how the west wall can be repaired. In addition, it has become apparent that the brick exposed on the west wall after the adjacent building wall was demolished exposed the brick to conditions that it was neither intended, nor able to withstand over time. A memorandum by the architect, and a narrative by the structural engineer explaining the technical basis for the design is provided to support the need for the repair approach provided below. The detailed repair drawings are also provided.

## **Description of Repairs**

Both the east and west walls will require removal of additional brick to points where sold brick and mortar are present. Once this is done, a bond beam will be installed between the north and south extremes of the lowest common stable brick course that is established. The location of the bond beam relative to the brick wythes at the west wall must be based on the location of the controlling two wythe brick portion. At the west wall, this will result in the new block wall being located on top of the two available wythes of brick at the center portion of the wall. At the east party wall, which is a consistent three wythes of brick, the block wall will be installed at the outside two wythes to provide structural support for the adjoining building's roof repairs. Once the base bond beams are in place, a reinforced concrete block wall will be installed on top of the bond beam. The ends of the block wall will be tied into the existing brick wall with rebar reinforcing. At the west wall there will be an intermediate bond beam, then a top course bond beam. On the east wall there will be a lower and top bond beam since the east wall damage did not propagate as far down into the existing brick wall. Once the new reinforced block walls are in place a new roof structure, deck, insulation, and membrane will be installed atop the masonry walls. Note that windows that previously existed within the east and west walls were destroyed in the storm. Current building code (fire separation) prohibits replacing these windows. The exterior of the east wall above the adjacent building will be finished with an Exterior Insulation Finishing System (EIFS) as existed prior to the storm damage except it will be colored to match the brick color that was present. The exterior of the west wall will be finished with an EIFS application that is also colored to match the existing brick.

During inspection by the structural engineer procured to design the repairs, it was noted that the front façade is beginning to "pull away" at the storefront cornice. This is evidenced by several cracks in brick at the southwest corner of the west wall. A "shear wall" structure will be constructed within the ceiling structure on the first floor to prevent any further movement of the front façade and the cracks in the brick will be pointed.

In addition, the party wall and the building front wall are not "toothed" together at the southeast corner as would be done when a party wall is not used. The result is that the brick above the storefront and below the roofline of the adjacent building were simply "butted" together with no apparent mechanism tying the two walls together. The repairs will include installing structural steel ties at the southeast corner of the building to prevent the front wall from moving away from the adjoining party wall.

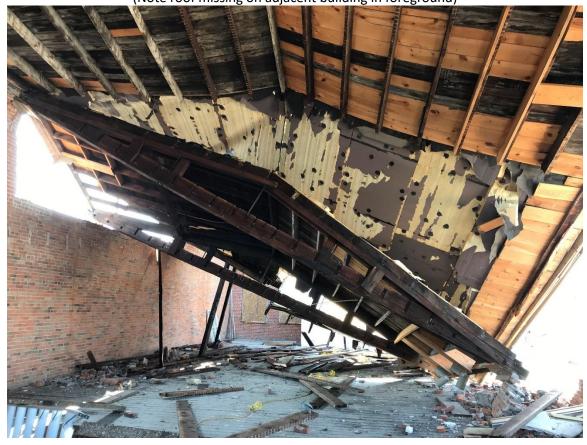
The new roof structure will reuse the existing front and rear truss/hip structures (with reinforcing framing and structural ties to the masonry walls) and the space between the two existing trusses will be filled with new manufactured girder trusses with tapered insulation on top. The difference in roof structures will not be evident from the public way. The resulting roof structure will be covered with ¾" OSB decking followed by minimum 4-1/2" rigid board roof insulation (to code) and a welded seam membrane roof. New commercial gutters will be installed on three sides of the roof facia (east, west, north) and tied to new matching downspouts on the north wall of the building (all as existing prior to the damage).

Several of the front doors were blown open by the storm causing the hinges to be ripped from the jambs and glass shattered. Only one of the 6 doors has glass that was not damaged. The original plan was to repair the doors. The storm damage did not require a change in that plan. Only more extensive repairs will be needed.

All other exterior work previously approved remains as planned.

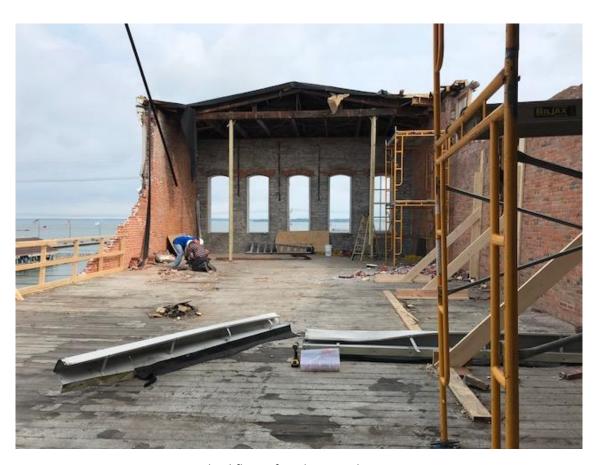


East Wall Storm Damage (before cleanup)
(Note roof missing on adjacent building in foreground)



Roof Structure resting on third floor (before cleanup)

Note east wall damage with truss ends resting on remaining wall

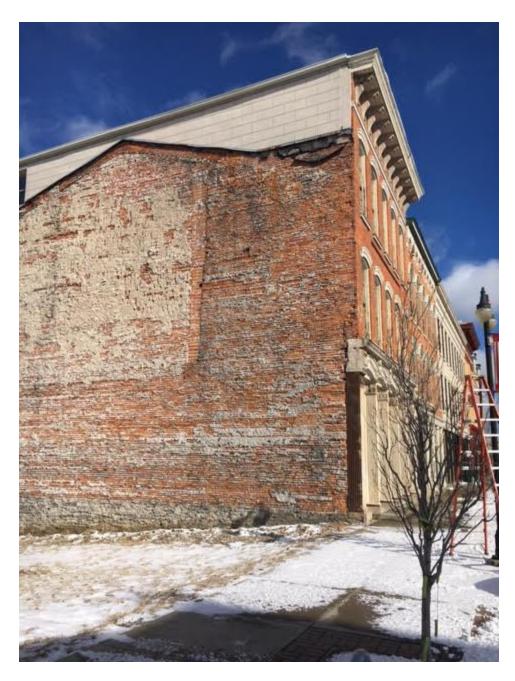


Third floor after damage cleanup

Note extent of damage to west wall compared to east wall



Building view 2014 after demolition of adjacent building Note significant masonry wall present at west wall



West wall exposed after adjacent building wall demolished Note variation in brick



October 10, 2018

Mr. Robert Hare Renaissance Too LLC PO Box 1070 Sandusky, OH 44870

Re: The Biemiller Building -Storm Damage Repair Work at Exterior Walls

Dear Ms. Rody,

This letter is a summary of the exterior repair work proposed for the east and west elevations of the Biemiller Building, 125 East Market Street, Sandusky, Ohio. The work is required as a result of significant catastrophic storm damage that occurred to the building. I list below a comparison between the pre-damaged condition and the post repair condition, as well as an overall assessment of the existing conditions and technical need for the recommended repairs. This document is meant to be considered in conjunction with the structural engineering assessment my Matt Oravec, PE, which is also attached.

The elevations in question are the east and west, non-primary elevations. When constructed and up until several years ago, the east wall served as party walls with adjoining buildings and the west wall was entirely covered by an adjoining building. The north and south (primary) elevations have always been the visible faces of the building and are not visually impacted by any of the current work and will be addressed per the previously approved Part 2 submission.

In recent years, the building to the west was demolished due to neglect, thus exposing what was never intended to be, and is not capable of being a wall exposed to the elements. The wall was constructed with bricks that do not have a severe or moderate (SW or MW) facing, making them excessively porous for single or double wythe construction. By leaving these exposed, the interior of the building becomes susceptible to the negative effects of moisture infiltration as well as freeze thaw conditions. With the wall not having any insulating properties and the wall varying between 2 and 3 wythe's of thickness, it does not have enough mass to allow for the dew point to land outside the interior space, thus creating a condensation issue within the building.

As noted above, the existing west wall is also not consistent in its thickess and dimension. The thickness varies from 2 to 3 wythes thick along its length. Thus the repairs are limited to a width dimension of 2 brick wythes or 8" nominally, to accommodate the necessary reinforcing and anchoring. This thickness does not allow for the exterior application of a veneer brick face.

From a life safety perspective, the walls between adjacent buildings are required to be constructed of a fire rated assembly with a 2 hour rating. Brick masonry, 2 wythe's thick does not meet this requirement, thus 8" min. CMU is the only solution. The remaining walls not

Biemiller Building – Architectural Narrative to SHPO Page 2

included in the re-construction are pre-existing conditions which are not applicable to the current code requirements.

The entire surface area of the west facing walls is 4,000 sf. Prior to the storm damage, there was 872 sf of EIFS on this wall (22%), 383 sf of limestone (10%) with the balance being the exposed brick listed above. The storm damage resulted in the loss of 900 sf of this wall (22%.) With the proposed repairs, the exposed limestone will remain and the balance will be covered with EIFS. The color of the EIFS will be similar to the overall color of the brick and have a moderately textured finish. This will create a compatible color scheme to the pre-storm damage condition.

The east wall of the building continues to serve as a party wall condition. The total surface area of this wall is 4,000 sf with 594 sf of wall extends above the adjoining building, which is not visible from the ground level primary elevation. This was entirely covered with an EIFS system pre-storm damage. The storm damage resulted in a loss of 240 sf (6%) of the entire east wall. The proposed new condition is consistent with this pre-damage condition, with the exception that the color of the replacement EIFS system will be more compatible with the brick colors.

In summary, there is a total of 11,503 sf of exterior wall on all of the elevations combined. The total surface of EIFS on the building, pre-storm damage was 18% of the total wall area. The proposed new conditions result in EIFS on 36% of the total wall surface area, with the increase resulting from an increase in previously un-exposed surface area.

Please note that every effort is being made to make the EIFS surfaces compatible with the historic elements of the building while addressing the water infiltration and insulating properties of the building envelope. By taking the added steps of re-purposing the face brick from the collapsed walls on the interior where possible, in a non-structural application, the true visual impact of this material is preserved and can be experienced by the building users.

I will gladly address any other questions you may have and I trust that this addresses your primary concerns.

Sincerely,

Jeffery D. Foster, AIA, LEED AP Project Manager / Architect Payto Architects, Inc.

C:\User Files\Bob Hare\Letter to SHPO.doc



PROFESSIONAL ENGINEERING & GENERAL CONTRACTING SERVICES

October 10, 2018

Mr. Robert Hare

#### 125 E Water Street, Sandusky, Ohio - Exterior Wall Construction

Dear Mr. Hare:

Per your request we met on site Friday September 14, 2018 to evaluate the existing framing integrity of the building located at the address referenced above.

Due to a severe storm, there was extensive damage to the building. The roof and portions of the third floor perimeter walls were completely torn off of the building in addition to other damage noticed to the existing structural steel anchor brackets.

The existing framing consisted of timber trusses clear spanning the building for the roof system and a multi-wythe brick wall for the existing exterior wall system.

The proposed repairs to the building include a prefabricated wood truss system to clear span the existing building, these trusses will bear on a new exterior masonry wall. The new masonry wall will be keyed into the existing multi-wythe brick wall in a stair step fashion. The CMU will be anchored to the existing structurally sound multi-wythe wall with reinforcing bars that will be doweled and epoxied into the brick.

Due to the project's location, adjacent to Lake Erie, structural reinforcing should be installed into the new walls to ensure adequate wind pressure resistance. The proposed reinforcing bars will provide lateral and tensile strength to the walls to withstand horizontal wind pressure and wind uplift at the roof. The most economical way of reinforcing an exterior wall is to utilize CMU units with hollow cores that can be grouted solid at the reinforcing locations.

Replacing the failed existing masonry with a similar multi-wythe brick construction will cost more in materials, labor, time, and will not provide the integrity needed for this project's location. A multi-wythe construction relies solely on the bond between the mortar and the brick for lateral and tensile force resistance which requires an experienced mason in this type of construction to provide the right mortar mixes and proper installation techniques.

The brick that fell off the 3<sup>rd</sup> floor was in a varied state of structural condition based on our cursory walk through of the neighbor's property where the bricks were still laying. A large portion of the bricks were cracked and not usable while a majority of the bricks still had mortar adhered to the surface. To clean and salvage the existing failed wall is not realistic due to the time and man power required to perform this task. There is no quick way to test the bricks integrity to ensure that they can stand up to the loads prescribed by the Ohio Building Code since the bricks fell from 30 plus feet above. Microcracks and breaks not visible to the naked eye could cause integrity issues down the road under repeated wind and snow loading. A third party testing agency would be required to review and approve the bricks to be used in rebuilding the walls.

It is in our professional opinion that the proposed repair solution, using prefabricated wood trusses and CMU reinforced with rebar, is the most economical and practical approach to repair the existing structure.

ORAVEC DESIGN BUILD, LLC 9329 Ravenna Road, Suite E • OH 44067 matt@oravecdesignbuild.com • 330-552-8211

Page 1 of 2



PROFESSIONAL ENGINEERING & GENERAL CONTRACTING SERVICES

ODB's visual examination was a cursory review; only the areas in question were investigated. The visual examination was limited to the structure that was exposed at the time of the site visit, no destructive testing was performed while on site. Oravec Design Build LLC assumes no liability for concealed conditions that may affect this analysis nor any defects in construction, whether observed or not, since this office was not involved in the original design and construction of this building. The opinions, conclusions, and recommendations contained in this letter are based on this writer's judgment and experience as a practicing Structural Engineer.

Please feel free to contact ODB's office with any questions or comments regarding this evaluation.

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Best regards,

Matthew M. Oravec, P.E.

President

Oravec Design Build, LLC

ORAVEC DESIGN BUILD, LLC 9329 Ravenna Road, Suite E • OH 44067 matt@oravecdesignbuild.com • 330-552-8211

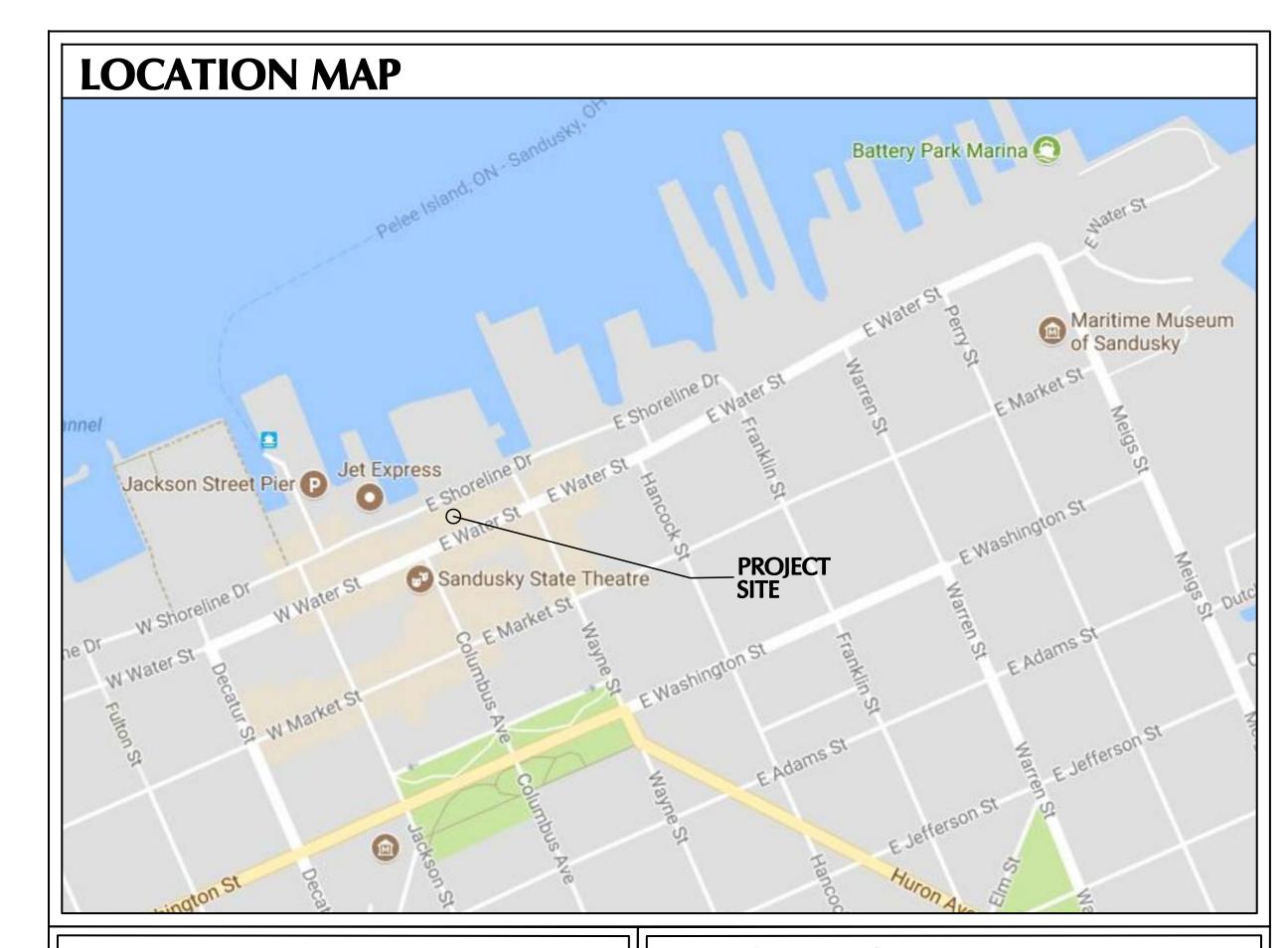
Page 2 of 2

# BIDDING & CONSTRUCTION DOCUMENTS FOR:

# THE BIEMILLER BUILDING WALLAND ROOF STORM DAMAGE REPAIRS 125 EAST WATER STREET SANDUSKY, OH 44870

# **OWNER:**

RENAISSANCE TOO LLC PO BOX 1070 SANDUSKY, OH 44870



# **GENERAL NOTES**

- 1. CONTRACTOR(S) SHALL CHECK AND VERIFY ALL DIMENSIONS, CONDITIONS AND NOTES AT THE SITE AND NOTIFY THE ARCHITECT OF ANY AND ALL IRREGULARITIES, CONFLICTS, OR DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY FABRICATION OR CONSTRUCTION.
- 2. SHOULD THERE BE ANY CONFLICT OR DISCREPANCY BETWEEN THE CONSTRUCTION NOTES SHOWN ON THESE DRAWINGS AND THE TECHNICAL SPECIFICATIONS CONTAINED IN THE PROJECT MANUAL, THE MORE RESTRICTIVE CONDITION OF THE TWO SHALL APPLY
- 3. DO NOT SCALE DRAWINGS. ALL WRITTEN DIMENSIONS SHALL GOVERN. ALL INSTALLATIONS SHALL BE ACCURATELY FIELD MEASURED PRIOR TO FABRICATION
- 4. ALL DIMENSIONS ARE FACE OF PARTITION UNLESS NOTED OTHERWISE.
- ALL MATERIALS AND PRODUCTS ARE TO BE FABRICATED AND INSTALLED PER THE MANUFACTURERS RECOMMENDATIONS AND DIRECTION. ALL RELATED MATERIALS (FASTENERS, ADHESIVES, ACCESSORIES, ETC.) SHALL BE APPROVED BY THE MANUFACTURER. ANY FIELD ENGINEERING SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR IF REQUIRED BY THE MANUFACTURER.
- INSTALLATION OF ALL MATERIALS SHALL PROVIDE FOR NECESSARY EXPANSION AND CONTRACTION PER THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS BASED ON THE PARTICULAR INSTALLATION SITUATION AND

# **DRAWING INDEX**

# TITLE SHEET

TS100 TITLE SHEET, LOCATOR MAP DRAWING INDEX, CODE DATA

# **ARCHITECTURAL**

100 ROOF PLAN, DETAIL SECTION AND NOTES

A200 EXTERIOR ELEVATIONS

SOO STRUCTURAL NOTES AND DETAILS

# **CODE INFORMATION**

THIS PROJECT IS DESIGNED UNDER AND COMPLIES WITH THE 2017 OHIO BUILDING CODE (OBC) CURRENT RELEASE, INCLUDING ALL REFERENCED STANDARDS.

THE SCOPE OF WORK CONSISTS OF REPAIRS TO THE WALLS AND ROOF THAT WERE DAMAGED DURING A STORM EVENT. WORK INCLUDES MASONRY, ROOF FRAMING, ROOF REPLACEMENT AND MISC. OTHER STRUCTURAL REPAIRS.

## ALL SECTION REFERENCE (PER ###) OBC CODE SECTIONS.

LDING ROOF AREA: N/A

EXIST. USE GROUP (PER 304): B-USE GROUP / 2-FAMILY RESIDENTIAL

PROPOSED USE GROUP (PER 304): NO CHANGE

TYPE OF CONSTRUCTION (PER TABLE 503): 3-B CONSTRUCTION TYPE

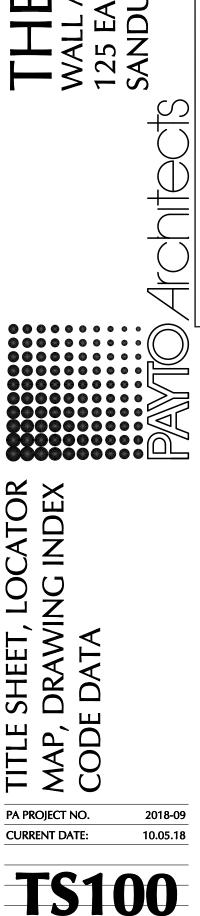
BIDDING & CONSTRUCTION DOCUMENTS:
OCTOBER 5, 2018



STRUCTURAL ENGINEER:

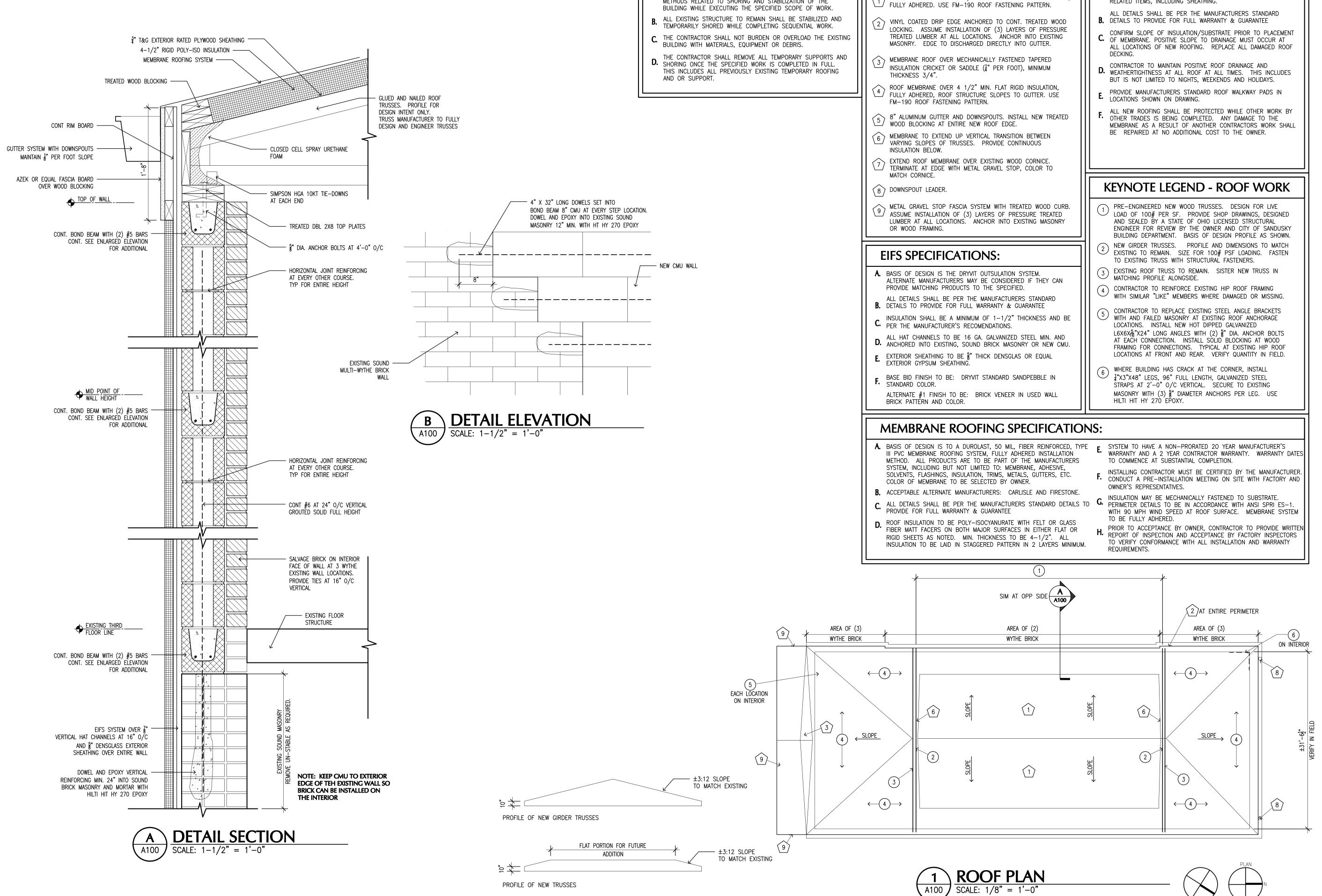
405 Bradley Building 1220 West Sixth Street Cleveland, Ohio 44113 (216)241-6800 WWW.PAYTOARCHITECTS.COM

OREVEC DESIGN BUILD 9329 RAVENNA RD. SUITE E TWINSBURG, OH 44087 (330) 552-8211



BIDDING & CONSTRUCTION DOCUMENTS

**EXPIRATION DATE: 12/31/19** 



**SHORING AND STABILIZATION:** 

A. THE CONTRACTOR IS ENTIRELY RESPONSIBLE FOR ALL MEANS AND

METHODS RELATED TO SHORING AND STABILIZATION OF THE

KEYNOTE LEGEND - ROOF PLAN

ROOF MEMBRANE OVER 4 1/2" MIN. TAPERED RIGID INSULATION,

**GENERAL ROOFING NOTES:** 

A. REMOVE ANY REMAINING ROOF MEMBRANES, FLASHINGS OR ROOF RELATED ITEMS, INCLUDING SHEATHING.

 $m \cap \leq$ 

ISSUE DATE:

PAYT0

4793

**JERRY PAYTO, LICENSE 4793** 

**EXPIRATION DATE: 12/31/19** 

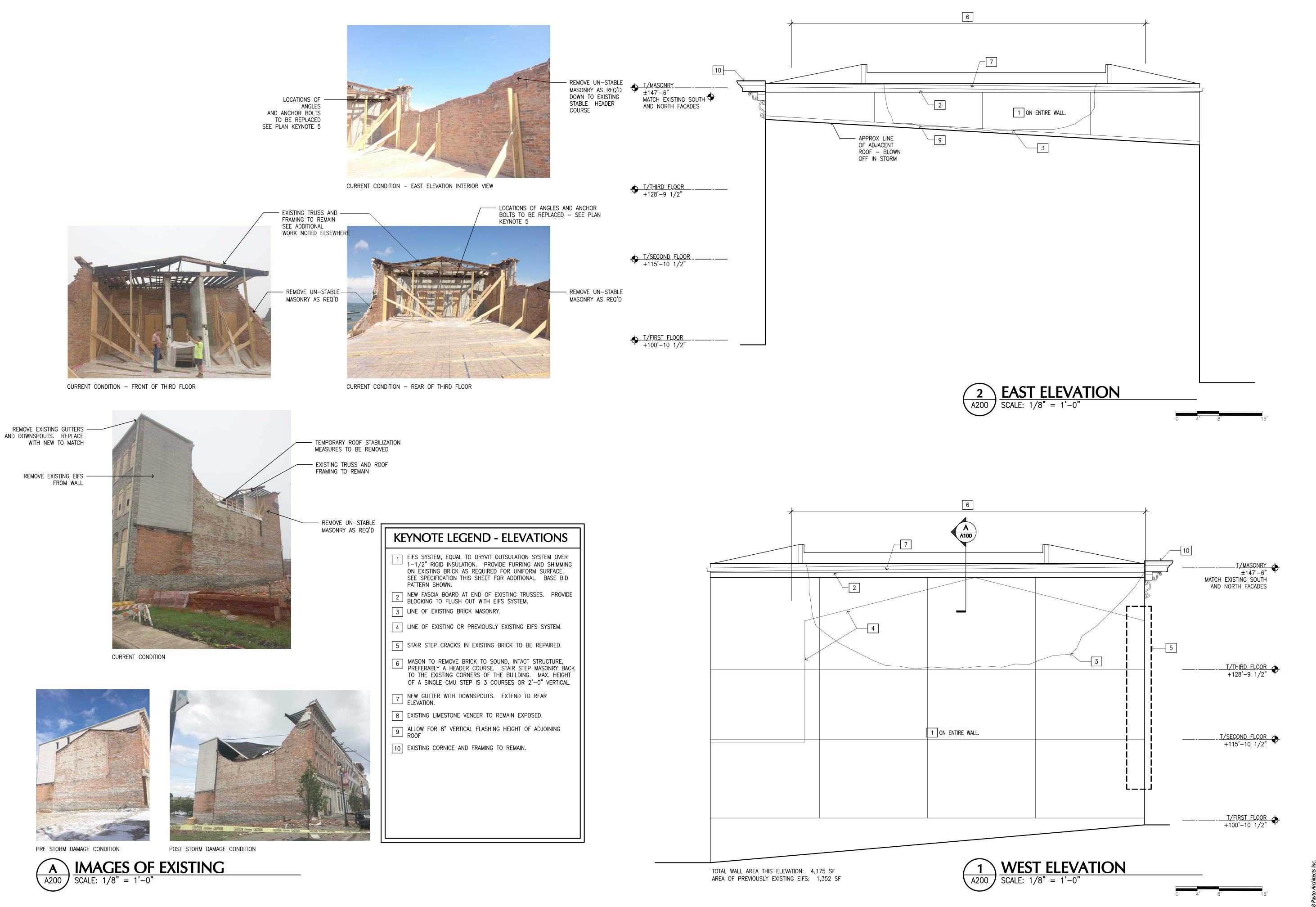
10.05.18

ROOF PLAN, DE SECTION AND NOTES

PA PROJECT NO. 2018-09 **CURRENT DATE:** 10.05.18

**BIDDING & CONSTRUCTION** 

**DOCUMENTS** 



ISSUE DATE: 10.05.18 PAYT0 4793 JERRY PAYTO, LICENSE 4793 EXPIRATION DATE: 12/31/19 

PA PROJECT NO.

**CURRENT DATE:** 

BIDDING & CONSTRUCTION DOCUMENTS

2018-09

10.05.18

## **GENERAL CONDITIONS**

- IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF
- THE CONTRACTOR SHALL SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE EXISTING BUILDING DURING CONSTRUCTION. FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS WHICH AFFECT THE NEW
- IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
- ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL CONFORM TO THOSE
- GOVERNING CODE: OHIO BUILDING CODE, CURRENT EDITION

SHOWN ON THE ARCHITECTURAL DRAWINGS

FLOOR DESIGN LIVE LOADS

MAIN FLOOR	50 PSF
SECOND FLOOR	50 PSF
THIRD FLOOR	40 PSF
CORRIDORS	80 PSF
STAIRS	100 PSF

ROOF LIVE LOAD:

MINIMUM LIVE	60 PS
SNOW	20 PS
Pg	20 PS
Ce	1.0
Ct	1.0

8. WIND LOAD:

BASIC WIND SPEED (3 SEC GUST)	115 MPH
EXPOSURE CATEGORY IW GCpi INTERNAL PRESSURE COEFFICIENTS (GCpi) COMPONENTS AND CLADDING PRESSURES	D 1.0 0.18± PER SECTION 6.5.11 OF ASCE 7-05 PER SECTION 6.5.12.4 OF ASCE 7-05

- ANY CHANGES TO THE STRUCTURAL SYSTEMS SHALL BE REDESIGNED BY A PROFESSIONAL ENGINEER AT NO COST TO THE OWNER OR THE A/E AND SUBMITTED TO THE A/E FOR REVIEW. SUBMITTAL SHALL BE ACKNOWLEDGED IN WRITING BEFORE BEGINNING CONSTRUCTION. IF CHANGES ARE MADE WITHOUT WRITTEN APPROVAL SUCH CHANGES SHALL BE THE LEGAL AND FINANCIAL RESPONSIBILITY OF THE PARTY MAKING THE CHANGE TO REPLACE OR REPAIR THE CONDITION AS DIRECTED BY THE A/E.
- 10. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LIVE LOADS. SHORING AND RE-SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 11. COORDINATE WITH ALL DRAWINGS FOR PERTINENT INFORMATION RELATED TO STRUCTURAL WORK. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE INVOLVED TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS TO BE BORNE BY THE APPROPRIATE CONTRACTOR.
- 12. CONTRACTOR IS RESPONSIBLE TO UNCOVER AND VISUALLY FIELD VERIFY THE EXISTING CONSTRUCTION PRIOR TO THE START OF ANY WORK AFFECTING THE EXISTING STRUCTURE. CONTRACTOR IS TO REPORT ANY CHANGES OR DISCREPANCIES FROM THOSE SHOWN TO THE A/E.

- MASONRY WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE REFERENCES AND STANDARDS LISTED BELOW, EXCEPT A MODIFIED HEREIN, IN ADDITION TO ALL OTHER REQUIREMENTS OF THE CONTRACT DOCUMENTS AND STANDARD PRACTICES.
- A. NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)
- B. BRICK INSTITUTE OF AMERICA (BIA)
- C. AMERICAN CONCRETE INSTITUTE, ACI-ASCE COMMITTEE 530. (ACI)
- 2. CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS WITH A DRY NET WEIGHT OF NOT MORE THAN 115 PCF.
- HOLLOW AND SOLID CONCRETE MASONRY UNITS SHALL CONFORM WITH ASTM C90, TYPE I WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI, EACH UNIT, NET CROSS-SECTIONAL AREA.
- 4. MORTAR FOR LOAD-BEARING WALLS, EXTERIOR WALLS, SHEAR WALLS, AND VERTICALLY REINFORCED MASONRY WALLS SHALL BE
- MORTAR FOR PARTITIONS AND NON-BEARING WALLS SHALL BE ASTM C270 TYPE N, WITH A MINIMUM COMPRESSIVE STRENGTH OF 750 PSI IN 28 DAYS
- GROUT TO FILL CORES SHALL CONFORM WITH ASTM C476, WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
- MAXIMUM HEIGHT OF GROUT POUR SHALL BE 4'-0" UNLESS CLEAN OUT OPENINGS ARE PROVIDED AT THE BOTTOM OF ALL CELLS

## 8. REINFORCED MASONRY

- A. VERTICAL BARS: 1 - #5 CENTER OF GROUT AT CENTER OF WALL, CONTINUOUS FULL HEIGHT OF WALL, AT ALL CORNERS,
- INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINT, AND AT INTERVALS NOT TO EXCEED
- O.C. UNLESS OTHERWISE NOTED. TIE AT 8'-0" VERTICALLY, WITH SINGLE WIRE LOOP TIE. LAP SPLICES SHALL BE 48 BAR
- DIAMETERS FOR GRADE 60 BARS. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH VERTICAL

## REINFORCING.

CONTINUOUS THROUGH

2 - #5's IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT ROOF LINE. 1 - #5 IN MINIMUM 8" DEEP DEEP CONTINUOUS BOND BEAM AT TOP OF PARAPET OR TOP OF FREESTANDING WALL. PLACE THESE BARS

CONTROL JOINTS PER TYPICAL DETAIL. PROVIDE BENT BARS PER TYPICAL DETAIL TO MATCH HORIZONTAL BOND BEAM REINFORCING AT CORNERS AND WALL INTERSECTIONS TO MAINTAIN BOND BEAM CONTINUITY. LAP SPLICES SHALL BE 48

- DIAMETERS FOR GRADE 60 BARS. STAGGER SPLICES A MINIMUM OF 40 BAR DIAMETERS. ALL UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HEAD, BED (FACE SHELLS), WEBS, AND COLLAR JOINTS, UNLESS
- OTHERWISE NOTED. 10. ALL MASONRY WALLS SHALL HAVE VERTICAL CONTROL JOINTS A MAXIMUM SPACING OF 25'-0" TYPICAL UNLESS NOTED.
- COORDINATE ALL LOCATIONS OF CONTROL JOINTS WITH THE ARCHITECTURAL DRAWINGS.
- 11. DO NOT USE CALCIUM CHLORIDE OR ANY ADDITIVE THAT CONTAINS CALCIUM CHLORIDE IN THE MORTAR OR GROUT.
- A. BOND BEAM AS DETAILED ON THE DRAWINGS UNDER WALL BEARING STEEL JOISTS. BOND BEAM SHALL BE FILLED WITH 3000 PSI

12. WALL CONSTRUCTION UNDER MASONRY BEARING STRUCTURAL MEMBERS SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:

- B. SOLID MASONRY OR MASONRY GROUTED SOLID, 32" LONG AND 24" HIGH, CENTERED UNDER EACH WALL BEARING STEEL
- C. CONTINUOUS SOLID MASONRY OR MASONRY GROUTED SOLID, 8" HIGH, UNDER WALL BEARING PRECAST OR CAST-IN-PLACE
- ALL MASONRY WALLS SHALL HAVE GALVANIZED HORIZONTAL JOINT REINFORCING OF LADDER TYPE, 3/16" SIDE RODS AND 3/16" CROSS RODS, SHEAR WALLS, AND VERTICALLY REINFORCED OR GROUTED WALLS, SPACED 16" ON CENTER VERTICALLY AND FOR PARAPETS 8" O.C. VERTICALLY.
- CONVENTIONAL REINFORCING BARS, HORIZONTAL AND VERTICAL, SHALL BE A615 GRADE 60.
- 15. PROTECT MASONRY FROM FREEZING WHEN THE TEMPERATURE IS 40 DEG FAHRENHEIT OR LESS.
- DO NOT USE FROZEN MATERIALS OR MATERIALS MIXED OR COATED WITH ICE OR FROST.
- 17. DO NOT BUILD ON FROZEN WORK. REMOVE AND REPLACE MASONRY WORK DAMAGED BY FROST OR FREEZING.
- 18. TEMPORARILY BRACE ALL MASONRY WALLS TO PROVIDE STABILITY DURING CONSTRUCTION UNTIL THE DESIGNED STRUCTURE IS COMPLETE AND CAN STABILIZE THE WALLS.
- 19. NO PREMIXED MASONRY CEMENT MORTARS SHALL BE PERMITTED

## STEEL LINTELS FOR MASONRY OPENINGS

- THE FABRICATOR SHALL SUPPLY LOOSE LINTEL ANGELS OVER ALL MASONRY OPENINGS AND RECESSES UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL AND HVAC DRAWINGS FOR LOCATION, NUMBER AND SIZES OF OPENINGS. LINTELS NOT SCHEDULED ON DRAWINGS SHALL CONSIST OF A SINGLE ANGLE WITH A 3 ½" LEG HORIZONTAL FOR EACH 4" OF WALL
- ALL LINTELS SHALL HAVE A BEARING AT EACH END OF ONE INCH PER FOOT OF OPENING WITH A MINIMUM OF 8".
- ALL ANGLE LINTELS SHALL HAVE 8" OF SOLID MASONRY BELOW BEARING END, UNLESS NOTED OTHERWISE.

4. ALL BEAM LINTELS SHALL HAVE 16" OF SOLID MASONRY BELOW BEARING END, UNLESS NOTED OTHERWISE.

- BOTTOM PLATES ON BEAMS SHALL BE 1/2" LESS IN WIDTH THAN THE WALL THICKNESS AND EXTEND FOR THE FULL LENGTH OF THE BEAM INCLUDING THE BEARING ENDS, UNLESS NOTED OTHERWISE.
- BOTTOM PLATES SHALL BE WELDED TO BEAM WITH A  $\frac{1}{4}$ " FILLET WELD 3" LONG ON BOTH SIDES AT 9" ON CENTER. STAGGER
- PROVIDE LINTELS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE FOR ALL OPENINGS IN MASONRY WALLS, U.N.O.:

OPENING SIZE	<u> </u>	LINTEL SIZE
LESS THAN 4'-	.0"	L 3-1/2 x 3-1/2 x 5/16
FROM 4'-0" TO	) LESS THAN 5'-0" L 4 >	x 3-1/2 x 5/16 LLV
FROM 5'-0" TO	) LESS THAN 6'-0" L 5 >	x 3-1/2 x 5/16 LLV
FROM 6'-0" TO	LESS THAN 7'-0" L 6 >	x 3-1/2 x 5/16 LLV
FROM 7'-0" TO	) LESS THAN 12'-0"	W8 x 13 + 5/16 BOTTOM PLATE

USE ONE ANGLE FOR EACH 4" WIDTH OF MASONRY.

PLACEMENT OF WELDS FROM SIDE TO SIDE.

9. ALL STEEL LINTELS IN EXTERIOR WALLS ARE TO BE HOT-DIPPED GALVANIZED.

- DETAIL, FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION (ALLOWABLE STRENGTH DESIGN), AWS D1.1, AND OTHER CODES, STANDARDS, AND SPECIFICATIONS EXCEPT AS EXPLICITLY MODIFIED HEREIN.
- CONTRACTOR RESPONSIBLE FOR ALL MISCELLANEOUS/ORNAMENTAL STEEL NOT SHOWN ON STRUCTURAL
- STRUCTURAL STEEL: ASTM A992, GRADE 50; STRUCTURAL STEEL WIDE FLANGES AND CHANNELS ASTM A36; OTHER STEEL PLATES, SHAPES, BARS, AND RODS ASTM A500, GRADE B; HSS/TS SECTIONS (Fy = 46KSI) U.N.O. ASTM A53, TYPE E OR S, GRADE B; STEEL PIPE
- 3/4" DIAMETER MINIMUM, UNLESS NOTED OTHERWISE. ASTM A325 BEARING TYPE FOR ALL BEAM, COLUMN, AND JOIST CONNECTIONS ASTM F1554, GRADE 36 FOR ALL ANCHOR BOLTS
- WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1 AND SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH THE AMERICAN
- WELDING ELECTRODES SHALL BE E-70XX OR BETTER. FOR WELDING SYMBOLS WITH NO LENGTH DIMENSION

COORDINATE STRUCTURAL DRAWINGS WITH ALL DRAWINGS FOR CLEARANCES, ATTACHMENTS, ETC.

- GIVEN, THE WELDING SHALL BE CONTINUOUS BETWEEN ABRUPT CHANGES IN DIRECTION.
- ALL STRUCTURAL STEEL THAT IS NOT HOT DIPPED GALVANIZED SHALL RECEIVE ONE SHOP COAT OF PRIMER
- PAINT SSPC-PAINT 15 RED IRON OXIDE. ALL STRUCTURAL STEEL MEMBERS EXPOSED TO THE EXTERIOR SHALL BE HOT DIP GALVANIZED. THIS INCLUDES, BUT IS NOT LIMITED TO, MASONRY LINTELS AND SHELF ANGLES AND ANY OTHER ITEM INDICATED
- 10. PROVIDE ANGLE WALL ANCHORS, PER PART 4, AISC MANUAL OF STEEL CONSTRUCTION, FOR BEAMS BEARING ON MASONRY WALLS. ANGLE ANCHORS SHALL BE WELDED TO BEAMS.
- STEEL BEAMS SHALL BEAR A MINIMUM OF 8" ON MASONRY, UNLESS NOTED OTHERWISE.
- CONNECTIONS: WELD OR BOLT CONNECTIONS, AS INDICATED:

ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS.

- A. CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL CONFORM TO THE REQUIREMENTS OF THE CITED AISC SPECIFICATION.
- B. WHERE THE REACTION VALUES OF BEAMS ARE NOT SHOWN ON THE DRAWINGS, EACH END CONNECTION SHALL BE DESIGNED TO SUPPORT 60% OF THE TOTAL UNIFORM LOAD CAPACITY DERIVED FROM THE ASD VALUE OF THE TABLES
- AND FORMULA OF THE MAXIMUM TOTAL UNIFORM LOAD IN PART 3, THIRTEENTH EDITION, OF THE AISC MANUAL OF STEEL CONSTRUCTION FOR THE GIVEN MEMBER SIZE, SPAN, AND YIELD STRENGTH.
- C. THE MINIMUM LENGTH OF CONNECTION ANGLES SHALL BE EQUAL TO ONE-HALF THE DEPTH OF THE MEMBER TO BE SUPPORTED.
- D. THE MINIMUM NUMBER OF BOLTS IN BOLTED CONNECTIONS SHALL BE TWO (2) BOLTS.
- E. MINIMUM ¼" FILLET WELD SHALL APPLY UNLESS NOTED OTHERWISE.
- F. MINIMUM SIZE OF CLIP ANGLE SHALL BE 3x3x5/16" UNLESS NOTED OTHERWISE. 14. ALL COLUMNS SHALL HAVE A MINIMUM OF FOUR (4) ANCHOR BOLTS.
- BEAMS SHALL BE ERECTED STRAIGHT. SWEEPS SHALL BE A MAXIMUM OF 1" MEASURED AT MID SPAN OF
- THE FRAMING SHALL BE CARRIED UP TRUE AND PLUMB AND TEMPORARY BRACING SHALL BE INSTALLED AND SHALL REMAIN IN PLACE UNTIL CONNECTIONS OF ALL MEMBERS ARE FINAL AND ALL DECK IS COMPLETELY **ERECTED AND WELDED IN PLACE**
- NON-METALLIC, NON-SHRINK GROUT UNDER ALL COLUMN PLATES AND BEAM BEARINGS SHALL COMPLY WITH ALL REQUIREMENTS OF ASTM C 1107.
- ALL STRUCTURAL STEEL MEMBERS ADJACENT TO OR BUILT INTO MASONRY CONSTRUCTION SHALL BE PROVIDED WITH 12 GAGE GALVANIZED WELD-ON CHANNEL SLOTS AND 3/16 X 1-1/4 GALVANIZED ANCHORS.
- COLUMN BASES SHALL BE MILLED FOR ALL BEARING SURFACES INCLUDING AT THE BASE PLATE CONNECTION. COLUMN BASE PLATES 2" OR LESS IN THICKNESS MAY BE USED WITHOUT MILLING. COLUMN BASE PLATES GREATER THAN 2" SHALL BE MILLED FOR ALL BEARING SURFACES.

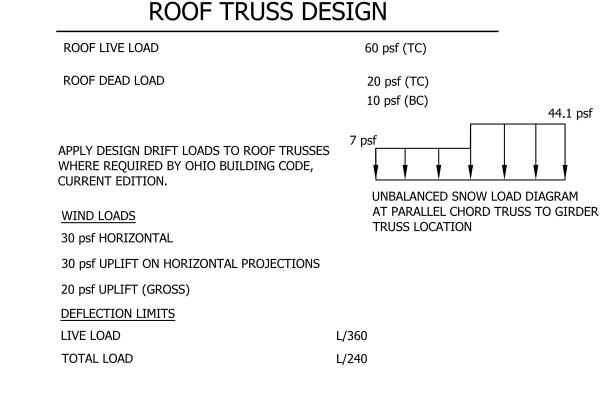
WRAP WOOD BEAM w/ **BUILDING PAPER TO PROTECT** 

6" O.C.

FROM MOISTURE—

3/4" T&G DECKING

NAILED TO JSTS @



## PREFABRICATED WOOD TRUSSES:

- 1. DETAIL, FABRICATE AND ERECT STRUCTURAL WOOD IN ACCORDANCE WITH THE TPI STANDARDS AND THE GOVERNING
- TRUSS DESIGN DOCUMENTS SHALL BEAR THE STAMP OF AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
- 3. DESIGN DEAD, LIVE AND WIND LOADS SHALL BE DEVELOPED FROM THE CRITERIA SHOWN ON THE CONTRACT DOCUMENTS AND SHALL NOT BE LESS THAN: TOP CHORD= 30 PSF LIVE LOAD + SNOW DRIFT LOADS
  - 10 PSF DEAD LOAD BOTTOM CHORD= 10 PSF DEAD LOAD THE TRUSS DESIGNER SHALL COMBINE LOADS PER O.B.C. REQUIREMENTS.
- 4. THE ROOF DECK IS DESIGNED TO TRANSFER HORIZONTAL WIND LOAD TO SHEAR WALLS.
- PROVIDE MINIMUM TRUSS BRACING AS FOLLOWS:
- BOTTOM CHORD HORIZONTAL LATERAL BRACES USING CONTINUOUS 2x4 PERPENDICULAR TO BOTTOM CHORD AT 10'-0" O.C.(MAX) ADJACENT TO WEB MEMBER, WEB MEMBER VERTICAL BRACES USING 2x4 AT 45^ TO WEB MEMBER EXTENDING FROM TOP CHORD TO BOTTOM CHORD, SPACED APART TWO TIMES LENGTH OF 'X' BRACE AND AT ENDS OF BUILDING, LOCATED ACROSS TRUSS BOTTOM CHORD LATERAL BRACES AND 8' MAXIMUM APART ON FLOORS, 12' MAXIMUM APART ON ROOFS AND ALL LATERALLY BRACED MEMBERS.
- ALL TRUSSES SHALL BE FRAMED WITH SIMPSON STRONG-TIE HANGERS AND HOLDDOWNS.
- 7. TRUSS MANUFACTURER TO SIZE REQUIRED CONNECTORS FOR REVIEW BY ENGINEER.

## SHOP DRAWINGS

- 1. SHOP DRAWINGS SHALL BE REVIEWED BY CONTRACTOR TO VERIFY THAT SUBMITTAL IS COMPLETE PRIOR TO SUBMITTING TO ARCHITECT/ENGINEER.
- 2. DRAWINGS CREATED BY ORAVEC DESIGN BUILD CANNOT BE REPRODUCED AND/OR USED AS A SHOP DRAWING SUBMITTAL.
- 3. SHOP DRAWING SUBMITTALS SHALL INCLUDE THE FOLLOWING:
- A. STRUCTURAL STEEL AND CALCULATIONS B. TRUSSES AND CALCULATIONS

- 1. ALL DIMENSIONS ON STRUCTURAL DRAWINGS TO BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS BY THE GENERAL CONTRACTOR AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.
- 2. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY, UNRELIEVED BY REVIEW OF SHOP DRAWINGS OR PERIODIC OBSERVATION OF CONSTRUCTION, FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, FOR FABRICATION PROCESSES AND CONSTRUCTION TECHNIQUES. AND FOR SAFE CONDITIONS ON THE JOB SITE
- 3. DO NOT SCALE THE DRAWINGS.

# INSPECTION:

2" @ JOISTS, 4" @ BEAMS

-INFILL MASONRY AFTER

-PROVIDE SOLID OR GROUTED

SETTING BEAM

— EX. MASONRY

WALL

- ROUTINE INSPECTION AND TESTING SERVICES SHALL BE PROVIDED BY AN INDEPENDENT TESTING LABORATORY PER ASTM E329 AND LATEST OHIO BUILDING CODE. REPORTS SHALL BE SENT DIRECTLY TO THE OWNER, A ARCHITECT, STRUCTURAL ENGINEER AND CONTRACTOR. CONCRETE TEST REPORTS SHALL ALSO BE SENT TO THE READY MIX SUPPLIER. THESE SERVICES SHALL INCLUDE THE FOLLOWING:
- 2. SOILS: VERIFY DESIGN BEARING CAPACITY, VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL DESIGN MIX DATA, DAILY POUR REPORTS, CYLINDER TESTS.
- CONCRETE: DESIGN MIX DATA, DAILY POUR REPORTS, CYLINDER TESTS.
- 4. REINFORCEMENT: PLACEMENT.
- STRUCTURAL STEEL: PLACEMENT AND CONNECTION.
- SIZE AND LOCATION OF SPECIAL PIERS, USE OF PROPER MASONRY UNITS, BEARING S SURFACES, REINFORCING STEEL AND GROUTING.

## —EX. BULGING MASONRY WALL -CONTRACTOR TO TUCK POINT DETERIORATED MORTAR AS REQ'D AND REPLACE EXISTING FAILED MASONRY AS REQ'D. - SIMPSON CS16 COIL STRAP FASTENED TO EX. JOISTS AND SOLID BLOCKING TOP AND BOTTOM EX. FRAMING RUNNING PARALLEL TO BULGING WALL MASONRY 16" WIDE & DEEP (MIN) -5/8" DIAMETER —MIN. (4) BAYS FULL HEIGHT HOT DIP SOLID BLOCKING @ 4'-0" O.C. GALVANIZED ROD SECURED TO HOLD DOWN AND - SIMPSON HDU2-SDS2.5 @ 4'-0" O.C. EXTERIOR ENSURE MIN (2) SOLID BLOCKING INSTALLED 1/2" x 14" x 14" @ ANCHORAGE LOCATIONS - STEEL PLATE HOT DIP GALVANIZED

TYPICAL SECTION AT BULGING WALL

## **ROOF TRUSS NOTES**

WOOD TRUSS SHOP DRAWINGS SHALL SHOW THE FOLLOWING INFO:

- 1.) INFORMATION WHICH THE RESPONSIBLE BUILDING DESIGN PROFESSIONAL WILL CHECK FOR COMPLIANCE WITH CONTRACT DOCUMENTS.
- a. ERECTION PLAN: SHOWING DIMENSIONED LOCATIONS AND TRUSS IDENTIFICATION. b. BEARING DETAILS: SHOWING BEARING LENGTH, WIDTH, AND DEPTH INDICATING CONFORMANCE TO DESIGN CALCULATIONS.
- c. DESIGN LOADS: ALL DEAD AND LIVE LOADS SHALL BE SHOWN ON THE FRAMING PLAN OR TRUSS ELEVATION INDICATING CONFORMANCE TO TRUSS CALCULATIONS.
- d. ALL PERMANENT BRACING: SHOW TOP CHORD, BOTTOM CHORD, & WEB MEMBER BRACING ON FRAMING PLAN AND TRUSS ELEVATION, SUPPLIER AND INSTALLER OF THIS BRACING SHALL ALSO BE INDICATED.
- e. TRUSS DIMENSIONS: SHOW DEPTH, SPAN BEARING, HEIGHT, AND SLOPES AT ALL CRITICAL
- 2.) INFORMATION THAT SHALL BE THE RESPONSIBILITY OF THE FABRICATOR AND TRUSS DESIGNER AND SHALL BE PROVIDED FOR INFORMATION WITH THE SHOP DRAWING SUBMITTAL.
- a. MEMBER DESIGN: INCLUDING WEB CONFIGURATION, MEMBER SIZE, GRADE OF LUMBER, FABRICATED SPLICES, AND MEMBER BRACING REQUIRED BY TRUSS DESIGN.
- b. INTERIOR CONNECTION: DESIGN AND SHOW DETAIL OF WEB AND CHORD CONNECTIONS. CONNECTOR PLATES AND PLATE CAPACITIES. ERECTION PLAN: SHOW SPACING AND LAYOUT OF
- ANY TEMPORARY BRACING REQUIRED FOR d. STRUCTURAL DESIGN OF TRUSSES: SUBMIT COMPLETE TRUSS CALCULATIONS AND OBTAIN ALL APPROVALS NECESSARY FOR CONFORMANCE TO BUILDING CODE. VERIFY SUBMITTAL AND APPROVAL BY SENDING COPY TO
- e. CONTRACTOR: FURNISH INSTALLER WITH ALL DATA NECESSARY FOR PROPER INSTALLATION.

BUILDING DESIGN PROFESSIONAL.

PROVIDE BUILDING OFFICIAL w/ WRITTEN, GRAPHIC AND PICTORIAL DEPICTION OF EACH TRUSS FOR APPROVAL PRIOR TO INSTALLATION.

# TRUSS BRACING NOTES

- 1.) ALL BRACING SHOWN OR DESCRIBED SHALL BE MINIMUM 2x4 WITH (2) - 16d IN EVERY TRUSS IT CROSSES.
- 2.) ALL TRUSS TOP CHORDS SHALL BE CONTINUOUSLY BRACED BY THE ROOF DECKING.
- 3.) ALL TRUSS WEB MEMBERS SHALL BE BRACED @ 4'-0" O.C. UNLESS CALCULATIONS SHOW OTHERWISE.
- 4.) ALL HORIZONTAL BRACING SHALL BE STIFFENED @ 20'-0" O.C. WITH EITHER: a. DIAGONAL BRACING EXTENDED TO A SHEAR WALL
- DETAILS 6/S5 FIG. 1(a) 1 (d). b. A 1/2" PLYWOOD SHEET EXTENDED TO ROOF DECK

PARALLEL TO THE ORIGINAL BRACING. SEE BRACING

5.) ALL TRUSS BOTTOM CHORDS SHALL BE BRACED @ 6'-0" O.C. UNLESS CALCULATIONS SHOW OTHERWISE. CONTINUOUS SHEATING APPLIED TO BOTTOM CHORD WILL SATISFY THIS BRACING REQUIREMENT.

## **ROOF FRAMING PLAN NOTES:**

INSTRUCTIONS.

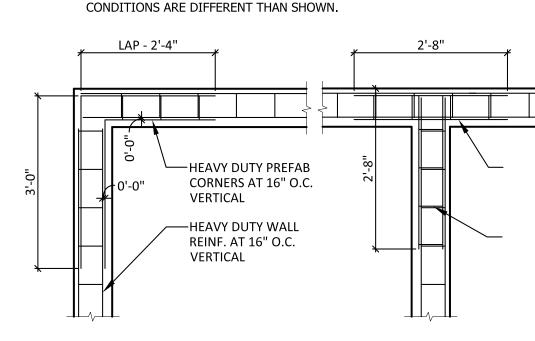
- HANGERS AND ANCHORS FOR ALL TRUSSES BY TRUSS MANUFACTURER. FRAMING MEMBERS: EXTERIOR WALLS: MULTI-WYTHE MASONRY -or- CMU
  - HEADERS: SEE SCHEDULE
- 4. SEE S1 FOR GENERAL NOTES. 5. WHERE BUILT-UP SECTIONS OF DIMENSIONAL LUMBER ARE INDICATED,

FASTENING SHALL BE IN ACCORDANCE WITH NDS 15.3.3. MULTI-PLY LVL

SECTIONS SHALL BE FASTENED IN ACCORDANCE WITH MANUFACTURERS

3. TYPICAL TRUSS SPACING = 2'-0" EXCEPT WHERE SPECIFICALLY NOTED

- PROVIDE 2-2x6 BLOCKING UNDER ROOF TOP UNIT CURBS AND AROUND OPENINGS THROUGH ROOF DECK. PROVIDE 2x4 TRUSS STIFFENERS WHERE BLOCKING DOES NOT ALIGN WITH TRUSS TOP CHORD PANEL POINT. VERIFY LOCATIONS, SIZES AND WEIGHTS WITH MECHANICAL ENGINEER.
- INFORMATION CONCERNING EXISTING CONDITIONS SHALL BE FIELD-VERIFIED PRIOR TO CONSTRUCTION. CONTACT ENGINEER/ARCHITECT IF EXISTING



HORIZONTAL MASONRY WALL REINFORCEMENT

PAYT0 4793 JERRY PAYTO, LICENSE 4793 EXPIRATION DATE: 12/31/19

ISSUE DATE:

10.05.18

••••••• **9000000000** 

PA PROJECT NO. 2018-09 **CURRENT DATE:** 10.05.18

**BIDDING & CONSTRUCTION DOCUMENTS** 

HEADERS AND BEAMS SCALE: 3/4" = 1"-0"

<u>3-PLY</u>

- 2 **-** 1/2"ø

@ 12" o.c.

THROUGH-BOLTS

MULTIPLE MEMBER CONNECTIONS AT

> 2 - 16d NAILS

@ 12" o.c., EACH SIDE OF BEAM

SCALE: N.T.S.

\*NOTE: ALTERNATE TO BEAM POCKET

GROUT SOLID AS SHOWN IN DETAIL.

IS TO INSTALL A SIMPSON WMU HANGER.

BLOCK ENDS OF BEAM

OR JOISTS (TYP)—

BEAM BRG AT MASONRY

SCALE: NTS

SCALE: N.T.S.