

**Bloomington Historic Preservation Commission Showers City Hall
McCloskey Room, Thursday April 9th, 2020, 5:00 P.M. AGENDA**

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. APPROVAL OF MINUTES**
 - A. March 6, 2020 Minutes (Special Meeting)
 - B. March 12, 2020 Minutes
- IV. CERTIFICATES OF APPROPRIATENESS**
 - Commission Review**
 - A. COA 20-18**
 - 1017 W. 6th Street (Near West Side Conservation District)
 - Petitioner Mary Balle
 - Demolish detached garage..*
 - B. COA 20-17 (Appeal)**
 - 703 E. 7th Street (University Courts Historic District)
 - Petitioner: Avi Grossbaum
 - Appealing staff decision. Requesting new door opening on north elevation.*
- V. DEMOLITION DELAY**
- VI. NEW BUSINESS**
 - A. Section 106 Invitation to Consult: Graham Hotel
- VII. OLD BUSINESS**
- VIII. COMMISSIONER COMMENTS**
- IX. PUBLIC COMMENTS**
- X. ANNOUNCEMENTS**
- XII. ADJOURNMENT**

*Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call
812-349-3429 or email, human.rights@bloomington.in.gov.*

Next meeting date is April 23rd, 2020 at 5:00 P.M. in the McCloskey Room. **Posted:** 4/3/2020

**Bloomington Historic Preservation Commission
Hooker Room, Friday March 6, 2020
SPECIAL MEETING MINUTES**

I. CALL TO ORDER

Meeting was called to order by **John Saunders**, @ 11:30

II. ROLL CALL

Commissioners

John Saunders
Jeff Goldin – 11:31
Chris Sturbaum
Sam DeSollar
Lee Sandweiss
Susan Dyer

Advisory

Duncan Campbell

Absent

Deb Hutton
Derek Richey
Ernesto Casteneda
Doug Bruce
Jenny Southern

Staff

Conor Herterich, HAND
Eddie Wright, HAND
Philippa Guthrie, Legal
Doris Sims, HAND

III. APPROVAL OF MINUTES

IV. CERTIFICATES OF APPROPRIATENESS

V. DEMOLITION DELAY

VI. NEW BUSINESS

A. Discussion of 414 E. 9th Street

John Saunders opened the meeting with a brief explanation as to why the meeting was called and what is needed to put the structure under interim protection.

Philippa Guthrie explained the petitioner could challenge a historic designation to the structure due to the 90 day demo delay period expiring prior to designation. **Conor**

Herterich clarified that the Commission could vote to place a structure in the city under protection at any time. **Philippa Guthrie** clarified that it would still be subject to challenge because it was so messy.

Jeff Goldin made a motion to begin the designation process, **Susan Dyer** seconded. However **Conor Herterich** clarified that motions to designate could not be made at this meeting for the reason that there needs to be a hearing with the owner first before the Commission votes, and that requires a ten-day notice to the owner and adjacent property owners. This is just a discussion meeting.

Sam DeSollar expressed his concerns that if the commission pushes forward it might push the petitioner to demolish the structure. **Chris Sturbaum** stated that he supports not reopening this matter, he would like to see what happens as Doug Bruce is working with the petitioner. **Jeff Goldin** hopes something will happen within the 10 day time frame but would like to keep their options open. **Conor** asked if the Commissioners are wanting him to send a variance support letter. The Commissioners stated they do not want a protection letter sent at this time. **Sam DeSollar** suggested sending a simple letter advising the petitioner of his options. **Chris** stated the commission is in a weak position in this matter. **Jeff** stated they could speak with the petitioner to encourage him to make a positive decision. **Conor** stated that he was surprised when the motion to designate was made at the Feb. 27th meeting as the Commission had not indicated at its previous meetings that it was going to recommend designation. If so they should have done it at the February 13th meeting. So staff was not prepared for this. **Susan Dyer** stated that she was surprised to hear that the property was recommended for designation at the Feb. 27th meeting. **Lee Sandweiss** said she was as well. **Duncan Campbell** stated that the commission will see more properties like this one due to the new UDO. But commissions have been shying away from designating with a heavy hand. They may need to review each case to not appear heavy handed. Look at each structure at the beginning of the demo delay process to determine its historical significance. **Chris** stated that in the new UDO they can't protect all properties and they need to determine which properties need to be protected, maybe by convening a committee to designate those structures before they might otherwise come before the Commission. **Sam** suggested determining historic district neighborhoods proactively. **Chris** gave a brief history of the demo delay process, and stated that they need to look at the demo delay process going forward. **Duncan** explained that the commission might need to look at these properties a little more rigidly in the future. For example, strictly follow the rule that if it is 50 years or older. If the rules for demolition are going to be more rigid then the commission needs to be more rigid in review. **Chris** stated they need to work with neighborhoods to educate them concerning historic designation. **Lee Sandweiss** stated that this property may not be lost, as Doug Bruce is working with the petitioner to save the structure. **John** stated that with the new setbacks on a new structure it might be advantageous to retain the old structure. The Commissioners asked **Conor** to work with Chris Sturbaum on a variance support letter to the owner.

VII. OLD BUSINESS

VIII. COMMISSIONER COMMENTS

IX. PUBLIC COMMENTS

X. ANNOUNCEMENTS

XI. ADJOURNMENT

Meeting was adjourned by **John Saunders** @ 11:59

END OF MINUTES

Bloomington Historic Preservation Commission
McCloskey Room, Thursday March 12, 2020
MINUTES

I. CALL TO ORDER

Meeting was called to order by **John Saunders**, @ 5:00 pm.

II. ROLL CALL

Commissioners

John Saunders
Jeff Goldin
Chris Sturbaum
Sam DeSollar
Susan Dyer
Deb Hutton

Advisory

Jenny Southern
Ernesto Casteneda

Absent

Doug Bruce
Duncan Campbell
Lee Sandweiss
Derek Richey

Staff

Conor Herterich, HAND
Eddie Wright, HAND
Philippa Guthrie, Legal
Doris Sims, HAND
Eric Sader, HAND
Keegan Gulick, Planning

Guests

James Hall, CBU
Vic Kelson, CBU
Brian O'Quinn, 410 W Smith
Lucas Brown, Kiln Collective
Don Weiler, Kiln Collective
Mike Trotzkie, Kiln Collective
Bill Corcoran, 1301 W 8th

III. APPROVAL OF MINUTES

A. February 27, 2020 Minutes

Sam DeSollar made a motion to approve February 27, 2020 Minutes, **Chris Sturbaum** seconded.

Motion carried 4-0-2 (Yes-No-Abstain)

IV. CERTIFICATES OF APPROPRIATENESS

Staff Review

A. COA 20-14

830 W. 4th Street (Greater Prospect Hill Historic District)

Petitioner: Jessica Roman

Installation of a backyard and garden fence.

Conor Herterich gave presentation. See packet for details.

B. COA 20-15

1105 W 3rd Street (Greater Prospect Hill Historic District)

Petitioner: Chuck Heintzelman

Use fixed aluminum windows instead of glass block for replacing damaged glass block on entrance.

Conor Herterich gave his presentation. He stated that the petitioner has found glass block and **Conor** will now move this to staff approval.

John Saunders asked about reclaiming the glass block. **Sam DeSollar** asked for clarification on the size of the glass block. **Jenny Southern** asked about what is underneath the windows on the building. She also asked about what is behind the plywood covering a portion of the building. **Sam** asked about the design on the glass blocks. He suggested salvaging from one side of the building to restore the other side. **Jeff Goldin** agreed that salvaging would not change historic nature of the building. **Deb Hutton** asked about reusing block from the door in another location on the building. **Conor Herterich** stated that because this was the only area of the building that featured glass block, it is not appropriate to put glass block in places where it never existed before. **John Saunders** asked for a motion to approve. **Conor Herterich** stated that the Commission won't be making a motion to approve or deny as the petitioner is not present, he was letting the Commission know that this will be a staff level approval and wanted feedback from the Commission before the permit was given. **Sam DeSollar** wanted to make sure the glass blocks were roughly 4x8'. **Chris Sturbaum** complimented staff for sticking up for the glass block. **Jenny** also mentioned that if they remove the steps and grade the area up to the door it makes the structure look more like a garage.

Commission Review

A. COA 20-9

410 W. Smith Avenue (Greater Prospect Hill Historic District)

Petitioner: Brian O'Quinn

Continuation from previous meeting. Rebuild ADU.

Conor Herterich gave presentation. See packet for details.

Discussion ensued

Chris Sturbaum suggested muntins in the windows. **Sam DeSollar** asked about the slope of the roof. **Jenny Southern** asked if there had ever been muntins in the windows. **Jenny** suggested they not make it look like a 1930's cottage, she also asked about the front door. The petitioner has not decided on a style of front door just yet. **Chris Sturbaum** suggested just horizontal muntins but no vertical. **Jenny** asked if the windows would open, petitioner stated they would crank open.

Chris Sturbaum stated they were going for compatibility. **Deb Hutton** and **Jeff Goldin** commended the petitioner on responding to the Commission's suggestions. **Sam** stated they might be missing some information but they should use caution when placing the beams. **Sam** asked if the Commission wants the Petitioner to come back for the approval on the porch. Petitioner stated he would omit the porch. **Jenny** asked about dropping the front down to step down onto the porch. She understands why they would want a porch. Petitioner stated he would omit the porch and resubmit later. **Jenny** also asked about the style of door. Petitioner mentioned using a two or five panel door with no glass.

Sam DeSollar made a motion to approve **COA 20-9**, with the omission of the porch, which will be approved at the staff level, **Chris Sturbaum** added a friendly amendment that asked petitioner to use double hung with muntins which will be staff approved. Jenny mentioned staff approval of windows, doors, and porch. Seconded by Jeff Goldin.

Motion carried 6-0-0

F. COA 20-13

642 N. Madison Street (Showers Furniture Factory Historic District)

Petitioner: Lucas Brown and Don Weiler

Continuation from previous meeting. Adaptive reuse of Kiln building. Includes substantial additions and alterations.

Conor Herterich gave presentation. See packet for details.

Discussion ensued

Conor Herterich reminded the HPC that the 30 day window for action is up next

week on March 20th, and the HPC needs to take action today either approving or denying the COA. The HPC can also ask the petitioner for an extension but the petitioner must agree to that. **Lucas Brown** gave a brief presentation stating that they have taken the Commissions comments and improved the design of the Kiln building. He explained how those suggestions have been applied to the design of the building.

Chris Sturbaum asked about how the windows work. He stated that they are hard to see on some of the drawings. **Deb Hutton** asked what the image is on the front of the building in one of the drawings. **Deb** stated that she likes how she can see the full side of the west wall but would like to see the windows cut down a little. **Sam DeSollar** asked about the operation of the upper bay windows. He also asked about the grid on the railing, the second floor set back and roof drainage. **Sam** asked about ash being used as soffit material. **Jenny Southern** suggested to downlight the sculpture as well as the parking lot, she also warned about the effects of heavy window tinting. **Jenny** likes that they have removed the awning off the front of the building. **John Saunders** asked about the dimensions of the store front doors.

Chris Sturbaum asked if they would consider staining the ash soffit grey color, so it would weather better. He likes how they have applied the suggestions of the Commission in the design changes. **Ernesto Casteneda** stated he likes the design of the building, **Deb Hutton** and **Jeff Goldin** agreed. **Sam DeSollar** has enjoyed the discussion of the design of the building, he suggested adding muntins on the outside of the glass. **Jenny Southern** is excited for the design of the building, **Susan Dyer** and **John Saunders** agreed with the members.

Jeff Goldin made a motion to approve **COA 20-13**, **Deb Hutton** seconded.
Motion carried 6-0-0

v. DEMOLITION DELAY

Commission Review

A. Demo Delay 20-9

1301 W. 3rd Street
Petitioner: William Corcoran
Full demolition

Conor Herterich gave presentation. See packet for details.

Discussion ensued

Commission agreed with staff recommendation.

Jeff Goldin made a motion to waive the demo delay period for **DD 20-9**, **Sam DeSollar** seconded.

Motion carried 6-0-0

B. Demo Delay 20-11

3501 N. Dunn Street
Petitioner: COB Utilities
Full demolition

Conor Herterich gave presentation. See packet for details.

Discussion ensued

Vic Kelson gave a brief presentation on why they are asking for full demolition and he explained what would be saved from the building. However, there are limits as to what can be saved due to PCB contamination.

Chris Sturbaum asked about demolishing the building but saving the bricks. **Sam DeSollar** asked about how much contamination would remain after demolition of the building. **Jenny Southern** stated that it is sad to lose this building, but she has seen kids playing in the building and she has concerns for public safety. She is happy that materials will be salvaged as they can be, she also asked for a clarification as to the meaning of IDEM.

Jeff Goldin made a motion to waive the demo delay period for **DD 20-11**, **Sam DeSollar** seconded.

Motion carried 6-0-0

VI. NEW BUSINESS

VII. OLD BUSINESS

A. 2020 Preserving Historic Places Conference, South Bend, IN.

Conor Herterich stated that he will be attending the 2020 Preserving Historic Places Conference, South Bend, IN. He reminded the Commission of educational requirements.

B. Restaurant Row Design Guidelines Discussion

Conor Herterich stated he has been working with **Sam DeSollar** on the guidelines, but he has gotten no other suggestions from the Commission. **Chris Sturbaum** and **Deb Hutton** agreed to join the Restaurant Row design guidelines committee.

VIII. COMMISSIONER COMMENTS

IX. PUBLIC COMMENTS

X. ANNOUNCEMENTS

Conor Herterich asked for **Philippa Guthrie** to explain the recent press release from the city in reference to upcoming meetings. **Jeff Goldin** asked about on-line meetings, **Philippa** stated that by law they would have to have to be meetings at a physical location accessible to the public .There must be a quorum at that location but additional members can call in. **Philippa** suggested the Commission could limit public comments and that they are not required to have public comments at all. She stated that non-essential meetings should be postponed or canceled and with meetings that must be held, including HPC meetings where deadlines require it, they should try to avoid large public gatherings and take measures to enforce social distancing. **Sam DeSollar** suggested keeping the public in the hallway then call them into the meeting as needed. **Deb Hutton** suggested moving the HPC meetings to the City Council chambers to allow more room between the attendees.

XII. ADJOURNMENT

Meeting was adjourned by **John Saunders** @ 6:16 pm.

END OF MINUTES

COA: 20-18

Address: 1017 W. 6th Street

Petitioner: Mary Balle

Parcel #: 53-05-32-410-052.000-005

Rating: Non-Contributing

Primary Structure; Gabled Ell c. 1890



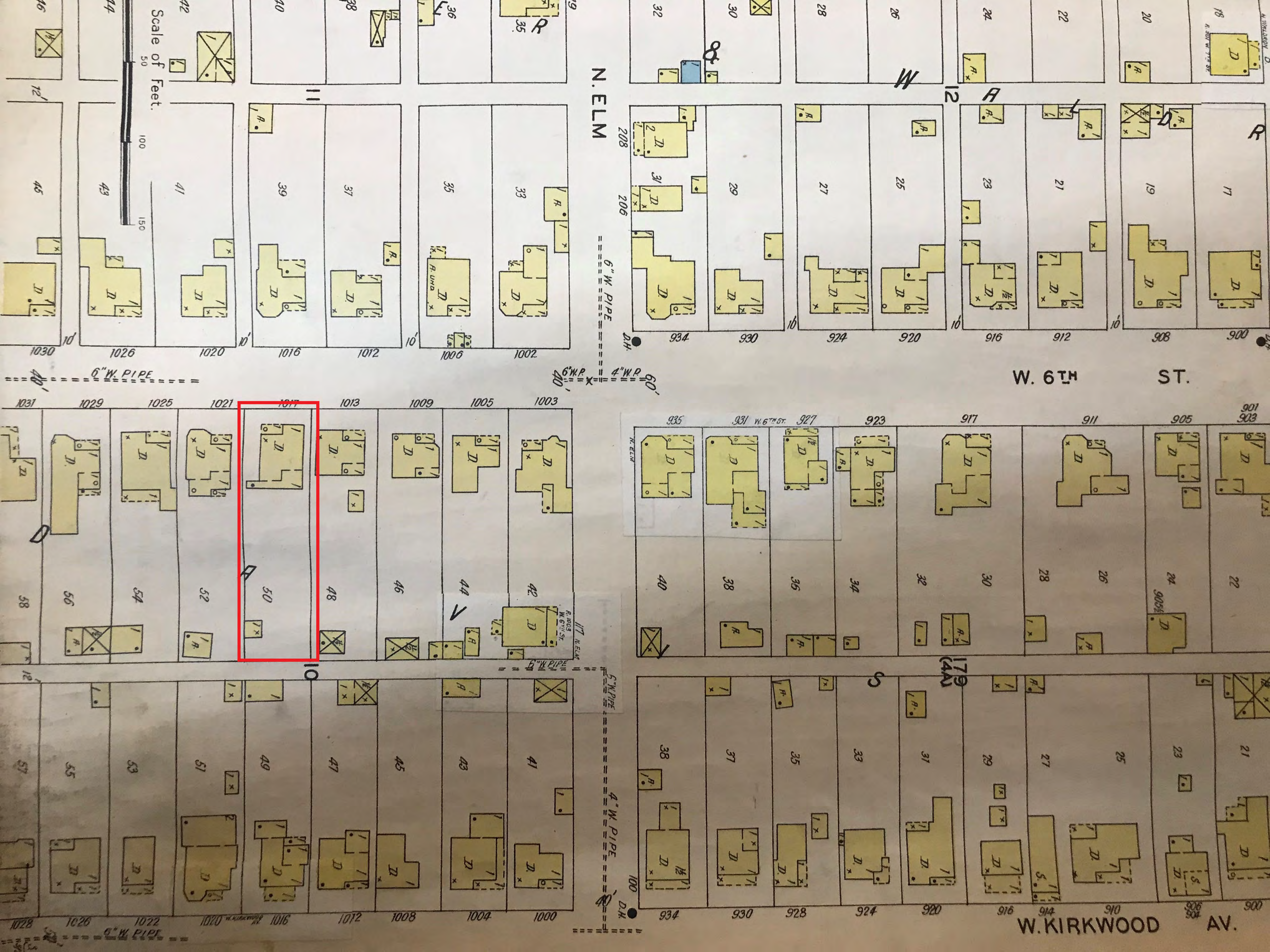
Background: While the house is rated non-contributing because of a large gable roof addition., the garage is the structure in question. Staff believes it is circa 1940s.

Request: Demolition of detached garage.

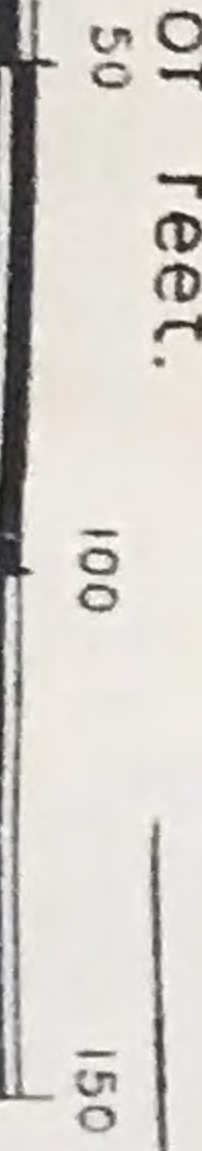
Guidelines: Near West Side Conservation District Design Guidelines are under construction.

Recommendation: Staff recommends **APPROVAL of COA 20-8** with the following comments:

1. The garage is not visible from 6th street, and is only visible from the alley in between Kirkwood and 6th.
2. There is a large tree that has grown into the NE corner of the structure and has begun to uproot the northern wall.
3. This is a non-original accessory building to a non-contributing primary structure.



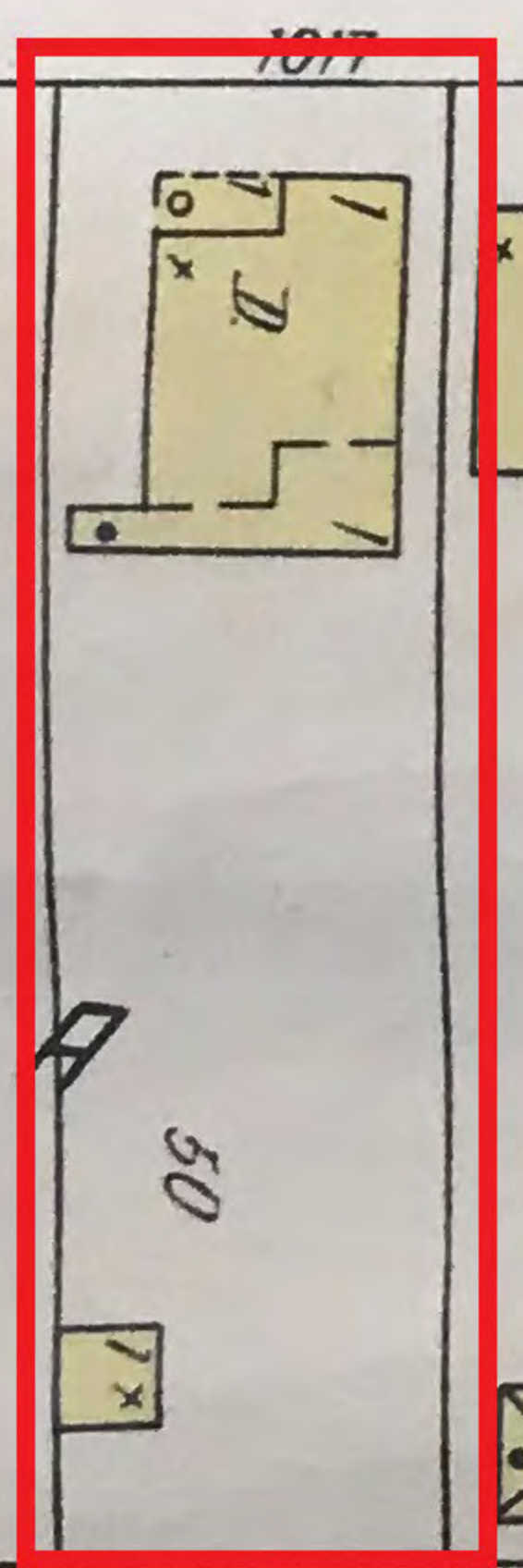
Scale of Feet.



N. ELM

W. 6TH ST.

W. KIRKWOOD AV.



6" W.P. 4" W.P.

6" W.P. 4" W.P.

4" W.P. PIPE

4" W.P. PIPE

4" W.P. PIPE

117 N. ELM
R. 1003
W. 6TH ST.

D.H.

D.H.

D.H.

1030 1026 1020 1016 1012 1006 1002

1031 1029 1025 1021 1017 1013 1009 1005 1003

1028 1026 1022 1020 1016 1012 1008 1004 1000

208 206 934 930 924 920 916 912 908 900

935 931 W. 6TH ST. 927 923 917 911 905 901 903

934 930 928 924 920 916 914 910 906 900

18 20 22 24 26 28 30 32 35 36 38 40 42 44 46 48 50 52 54 56 58

17 19 21 23 25 27 29 31 33 35 37 39 41 43 45

22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58

21 23 25 27 29 31 33 35 37 38 41 43 45 47 49 51 53 55 57

**APPLICATION FORM
CERTIFICATE OF APPROPRIATENESS**

Case Number: 20-18
Date Filed: 3-27-2000
Scheduled for Hearing: 4-9-2000

1017 W 6th St

Address of Historic Property: _____
Mary Balle/ Jeremy Voyles

Petitioner's Name: _____
1017 w 6th St

Petitioner's Address: _____
(812)391-4867/ mbballe@gmail.com

Phone Number/e-mail: _____
Mary Balle/ Jeremy Voyles

Owner's Name: _____
1017 w 6th St

Owner's Address: _____
(812)391-4867/ mbballe@gmail.com

Phone Number/e-mail: _____

Instructions to Petitioners

The petitioner must attend a preliminary meeting with staff of the Department of Housing and Neighborhood Development during which the petitioner will be advised as to the appropriateness of the request and the process of obtaining a Certificate of Appropriateness. The petitioner must file a "complete application" with Housing and Neighborhood Department Staff no later than seven days before a scheduled regular meeting. The Historic Preservation Commission meets the second Thursday of each month at 5:00 P.M. in the McCloskey Room. The petitioner or his designee must attend the scheduled meeting in order to answer any questions or supply supporting material. You will be notified of the Commission's decision and a Certificate of Appropriateness will be issued to you. Copies of the Certificate must accompany any building permit application subsequently filed for the work described. If you feel uncertain of the merits of your petition, you also have the right to attend a preliminary hearing, which will allow you to discuss the proposal with the Commission before the hearing during which action is taken. Action on a filing must occur within thirty days of the filing date, unless a preliminary hearing is requested.

Please respond to the following questions and attach additional pages for photographs, drawings, surveys as requested.

A **“Complete Application”** consists of the following:

1. A legal description of the lot. 013-42670-00 Davis lot 50

2. A description of the nature of the proposed modifications or new construction:
We would like to demolish and remove the existing limestone garage in attempt to build a new one. The current gararge has a tree growing into the side of it.

3. A description of the materials used.
The garage is limestone and wood. We would take it down and dumpster anything that we are are unable to reuse. We will keep the limestone for future projects.

4. Attach a drawing or provide a picture of the proposed modifications. You may use manufacturer’s brochures if appropriate.

5. Include a scaled drawing, survey or geographic information system map showing the footprint of the existing structure and adjacent thoroughfares, Geographic Information System maps may be provided by staff if requested. Show this document to Planning Department Staff in order to ascertain whether variances or zoning actions are required.

6. Affix at least three photographs showing the existing full facade at each street frontage and the area of modification. If this petition is a proposal for construction of an entirely new structure or accessory building, include photographs of adjacent properties taken from the street exposure.

If this application is part of a further submittal to the Board of Zoning Appeals for a Conditional Use or development standard variance, please describe the use proposed and modification to the property which will result.











**COA: 20-17
(APPEAL)**

Address: 703 E. 7th Street

Petitioner: Avi Grossbaum/Todd Surinak

Parcel #: 53-08-05-102-039.000-009

Rating: Contributing

Structure; Craftsman Bungalow c. 1915



Background: This building is being converted from student offices to a Jewish Center. Occupancy class is changing from B to A-3, which increases the occupancy load above 250 people. Per the Indiana Building Code, two exits are required when occupancy exceeds 49 people. The existing “second” egress door is not currently acceptable as the only way through is the kitchen or storeroom., which, is not allowed in the building code. Zoned IN (Institutional)

Request: Creation of new egress door opening on the NE corner bumpout.

Guidelines: University Courts Historic District Design Guidelines, pg. 26, 30, 36.

1. Inappropriate treatments of windows and doors, particularly in the primary facades, include: a) creation of new window or door openings. b) changes in the scale or proportion of existing openings.

Recommendation: Staff defers to the HPC with the following comments:

1. Staff finds that the new opening is on the rear of the building, which is where alterations are most preferable.
2. The glazing pattern on the door would mimic the pair of windows that are on the NW bump out. This would enhance the balance and symmetry of the fenestration pattern.
3. A second egress door is required for the building’s new use. The path to this door cannot be through a kitchen or storeroom. The petitioner could rearrange the interior to make the current rear exit meet code requirements.

Appeal Form for a Staff Level Decision

Petitioner Name:

Avi Grossbaum

Property Address:

703 E. 7th Street, Bloomington, IN 47408

COA # being appealed:

20-17

Date: 3/27/2020

Specify the grounds for appeal:

A second egress door is required due to the following:

- 1 - Occupancy class is changing from B to A-3, which increases the occupancy load above 250 people. Per the 2014 Indiana Building Code 1015.1, two exits are required when class A-3 occupancy exceeds 49 people.
- 2 - The existing "second" egress door at the rear of the residence is not acceptable, as the only access to this door is via the kitchen or via the storeroom. Per the 2014 Indiana Building Code 1014.2 (4) "*Egress shall not pass through kitchens, storage rooms...*"

(Optional) Specify any changes to prior COA, or any new information that the HPC should consider:

The North elevation has similar bump outs at the NW and NE corner. At most elevations the upper windows are balanced by fenestration at the lower elevation. However, at the NE corner bumpout, on the North elevation, there is no fenestration below the upper window. We propose relocating the egress door to this location to provide a balance to the fenestration that is seen at the rest of the elevations. See photos. A smooth limestone header clock will be installed similar to all the other fenestration headers. The door will be white and have an upper window pane that is split horizontally in half to replicate the style of the windows in this corner. The code width required is 36", which is similar to the window directly above.

Copy horizontally split pane style (upper half of door)



Copy header style



New Door Location





GENERAL INFORMATION

THIS PROJECT HAS BEEN DESIGNED UNDER THE 2014 INDIANA BUILDING CODE. THE CONTRACTOR(S) SHALL VERIFY THAT ALL WORK IS IN CONFORMANCE WITH THE APPLICABLE CODES AND REGULATIONS. IF ANY UNSOLVABLE MISUNDERSTANDINGS ARISE AS TO THE INTENT OF THESE DESIGNS OR CONSTRUCTION, IT IS HEREBY AGREED BY ALL PARTIES THAT THE RULES OF THE AMERICAN ARBITRATION ASSOCIATION SHALL PREVAIL. IN THE EVENT OF DEVIATION BETWEEN THE DRAWINGS AND PROVISIONS OF THE CODES AND REGULATIONS, THE CODE AND REGULATION REQUIREMENTS SHALL APPLY.

THIS PROJECT SHALL MEET THE AMERICANS WITH DISABILITIES ACT OF 1990. CONTRACTOR(S) SHALL VERIFY THAT ALL WORK IS IN CONFORMANCE WITH THE ACT.

ALL BUILDING CONSTRUCTION WORK, ALTERATIONS, AND REPAIRS SHALL COMPLY WITH ALL THE INDIANA STATE CODES.

DRAWINGS ARE DIAGRAMMATIC AND SCHEMATIC AND INDICATE THE GENERAL ARRANGEMENT ONLY. EACH CONTRACTOR SHALL MAKE HIS WORK COMPLETE AND PERFECT IN ALL RESPECTS AND READY FOR OPERATION. ALL REQUIRED WORK, EVEN IF PARTICULARLY NOT SPECIFIED, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER. A.I.A. DOCUMENT A201 GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION SHALL BECOME PART OF THESE CONSTRUCTION DOCUMENTS.

ALL EXISTING AND PENDING STRUCTURES, INCLUDING UNDERGROUND PIPES AND UTILITIES SHALL BE PROPERLY PROTECTED AT ALL TIMES BY THE CONTRACTOR. EXISTING FEATURES SHALL BE LOCATED BY THE CONTRACTOR AND VERIFIED INFORMATION AND LOCATIONS ARE TO BE GIVEN TO THE OWNER.

PROPERTY DESCRIPTION BASED ON INFORMATION AS SUPPLIED BY CLIENT. RELOCATION OF EXISTING INCOMING SERVICES SHALL BE IN ACCORDANCE WITH LOCAL UTILITY'S SPECIFICATIONS.

MISCELLANEOUS

DESIGN PROFESSIONAL SHALL NOT BE HELD LIABLE FOR ANY PERSONAL INJURY OR LOSS ON OR ABOUT THE PROPERTY, BY ANY ENTITY, HIS AGENTS, INVITES, OR CONCESSIONAIRES OR ANY OTHER PERSON ENTERING THE PROJECT PROPERTY. DESIGN PROFESSIONAL SHALL NOT BE HELD LIABLE FOR LOSS OR PERSONAL INJURY THAT MAY BE CAUSED BY ACTS OR OMISSIONS IN THESE DRAWINGS AND THE SPECIFICATIONS



**Know what's below.
Call before you dig.**

**BUILDING OWNER
RABBI AVI GROSSBAUM**

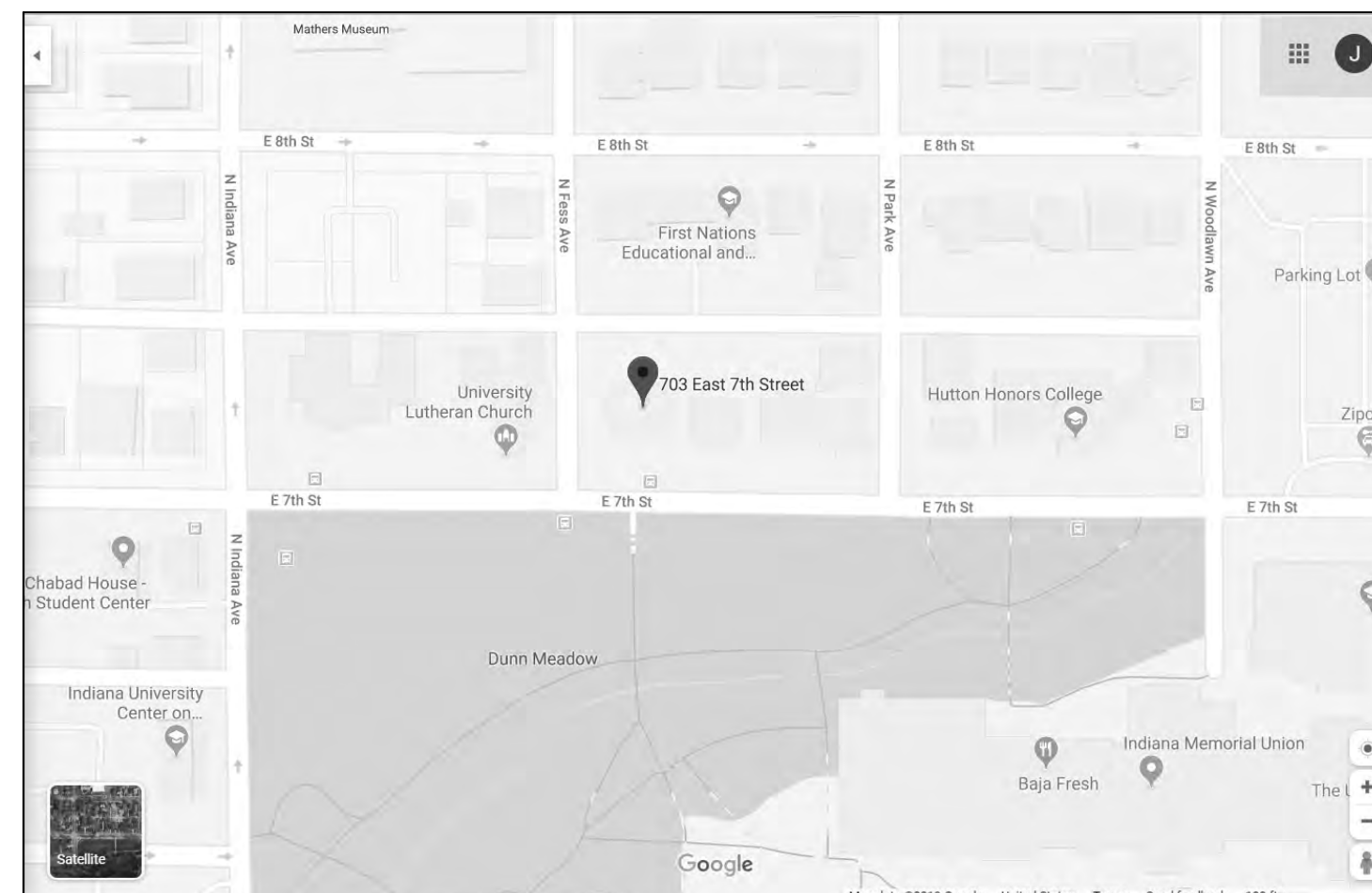
SHEET INDEX

- 000 COVER SHEET
- A000 SITE PLAN
- A001 FIRE AND LIFE SAFETY PLAN
- A002 ACCESSIBILITY PLAN
- A100 EXISTING FLOOR PLAN AND ELEVATION
- A101 DEMO PLAN
- A102 NEW PLANS AND ELEVATION
- A103 ENLARGE PLANS
- A200 SECTION
- A500 TYP. DETAILS
- E100 ELECTRICAL PLAN
- P100 PLUMBING PLAN
- S001 STRUCTURAL GENERAL NOTES
- S100 STRUCTURAL FRAMING AND FOUNDATION PLAN
- S200 STRUCTURAL SECTIONS AND DETAILS

CHABAD CENTER FOR JEWISH LIFE

703 E 7TH STREET
BLOOMINGTON, IN 47408

AREA MAP



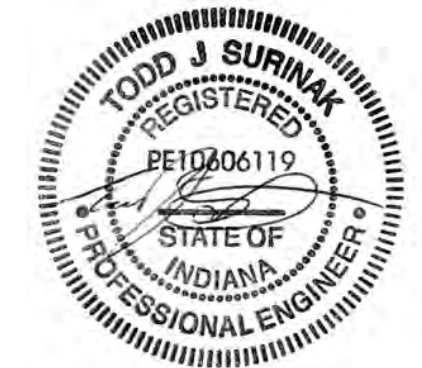
VICINITY MAP



BUILDING CODE SUMMARY:

- CONSTRUCTION TYPE: IIB
- FIRST FLOOR: OCCUPANCY A-3, 2550 FT2
- SECOND FLOOR: OCCUPANCY A-3, 1940 FT2
- THIRD FLOOR: OCCUPANCY A-3, 1360 FT2
- EXISTING: OCCUPANCY B. CONVERTING ALL FLOORS TO OCCUPANCY A-3 IN COMPLIANCE WITH CH34

**SURINAK
ENGINEERING**
LLC
www.SurinakEngineering.com



STRUCTURAL ENGINEERING BY:
SURINAK ENGINEERING LLC
3819 N. DELAWARE ST.
INDIANAPOLIS, IN 46205
317.500.3159
WWW.SURINAKENGINEERING.COM

CLIENT:
RABBI AVI GROSSBAUM
CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

NOTES:

NO.	DESCRIPTION	DATE

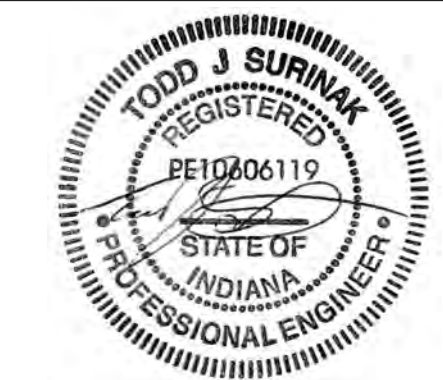
CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

COVER SHEET

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

000

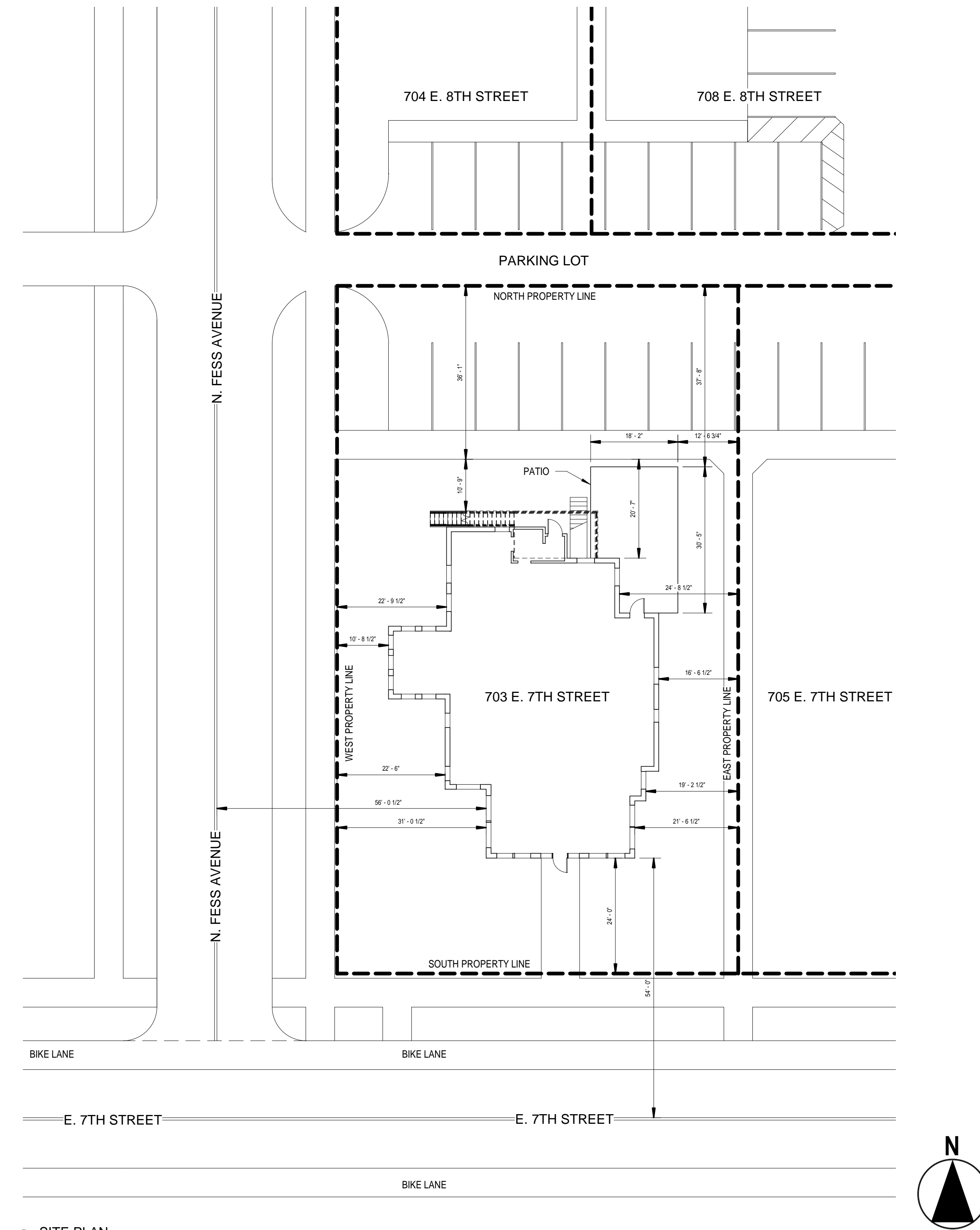
SCALE: AS NOTED



STRUCTURAL ENGINEERING BY:
SURINAK ENGINEERING LLC
3819 N. DELAWARE ST.
INDIANAPOLIS, IN 46205
317.500.3159
WWW.SURINAKENGINEERING.COM

CLIENT:
RABBI AVI GROSSBAUM
CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

NOTES:



① SITE PLAN
1/16" = 1'-0"

NO.	DESCRIPTION	DATE

CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

SITE PLAN

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JJR
CHECKED BY: TJS

A000

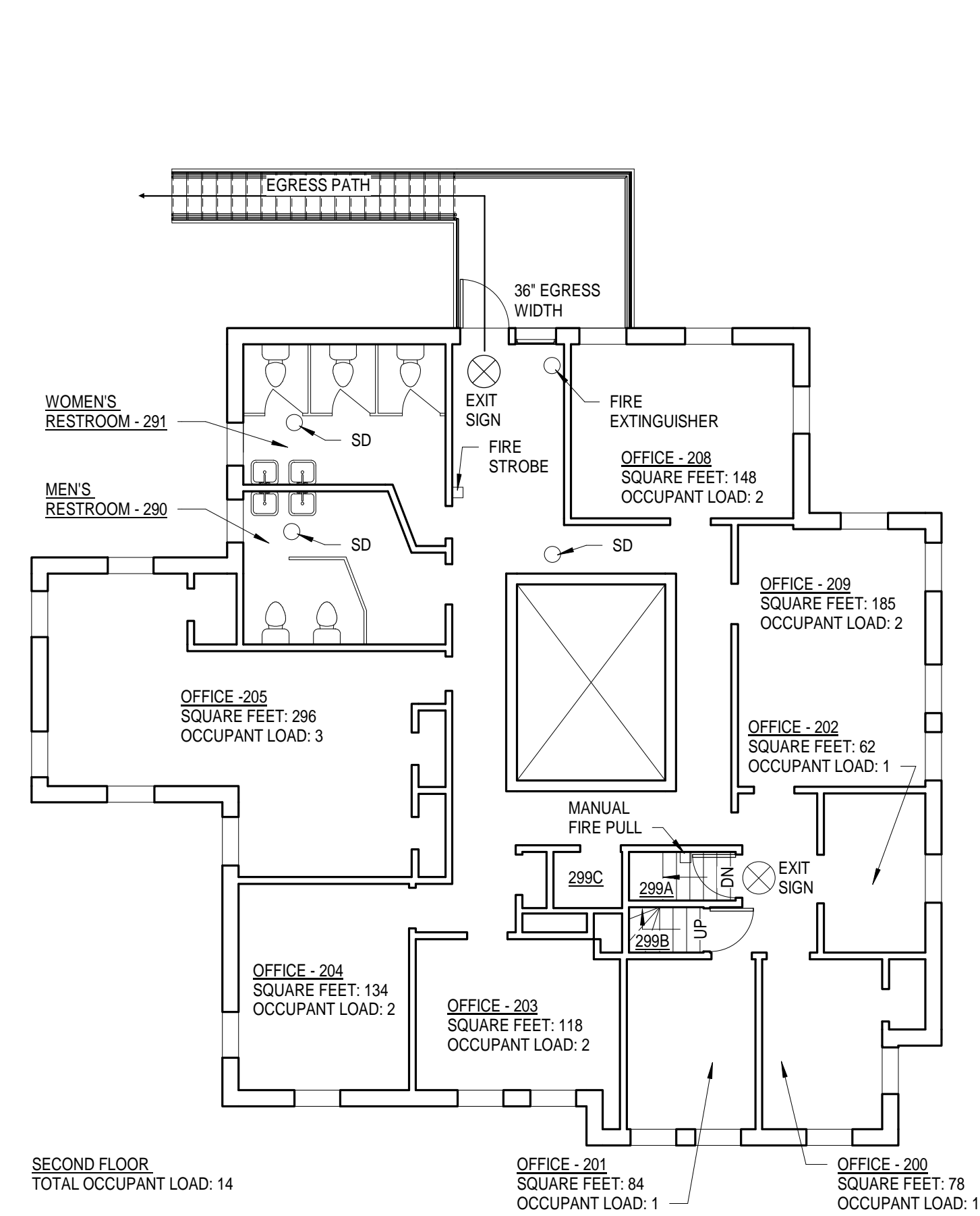
SCALE: AS NOTED



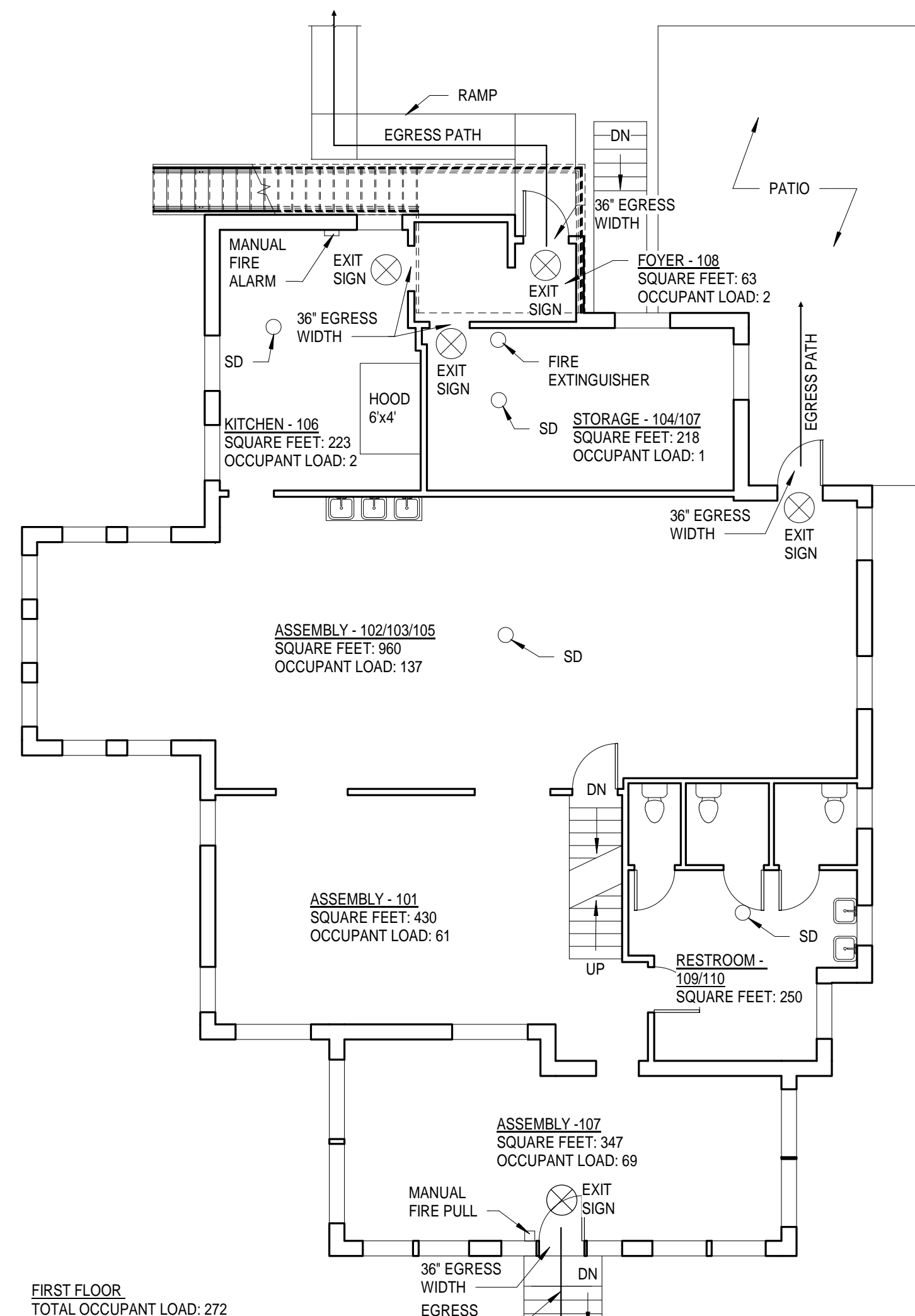
STRUCTURAL ENGINEERING BY:
SURINAK ENGINEERING LLC
3819 N. DELAWARE ST.
INDIANAPOLIS, IN 46205
317.500.3159
WWW.SURINAKENGINEERING.COM

CLIENT:
RABBI AVI GROSSBAUM
CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

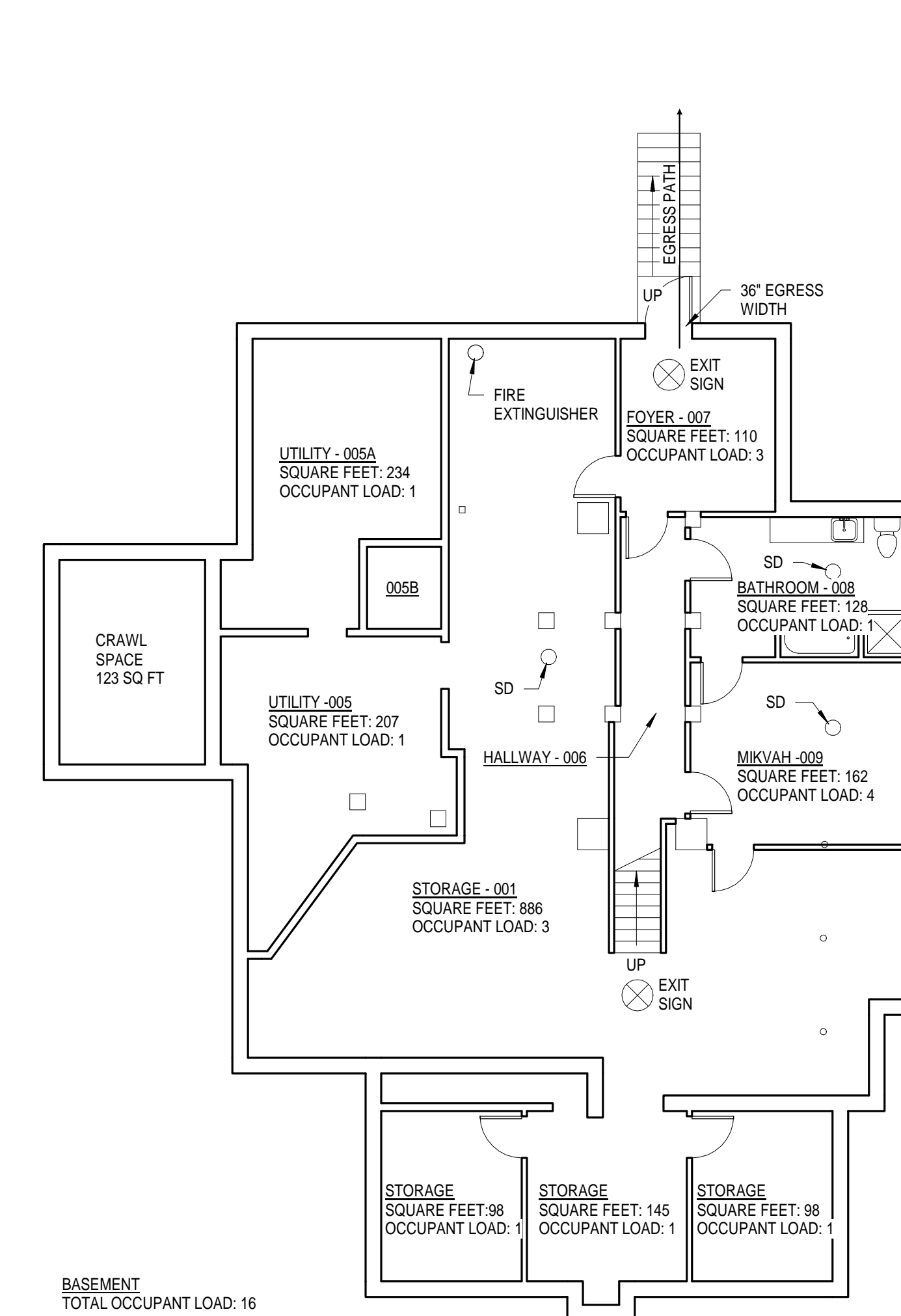
NOTES:
1. ALL EXIT SIGNS TO HAVE LIT FACE WITH >90 MINUTES OF EMERGENCY POWER



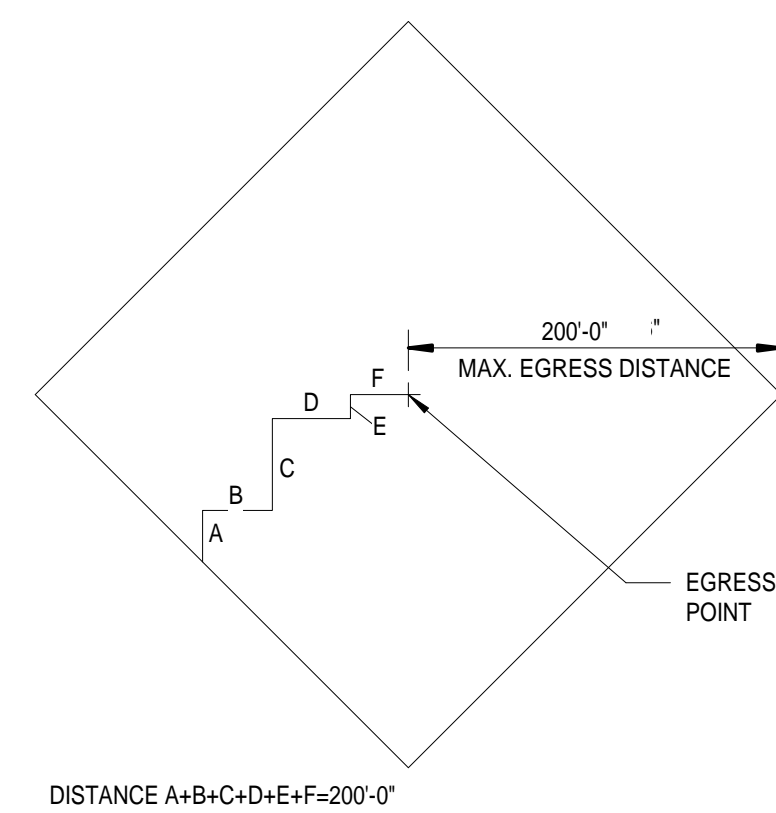
3 SECOND FLOOR LIFE SAFETY
1/8" = 1'-0"



2 FIRST FLOOR LIFE SAFETY
1/8" = 1'-0"



1 BASEMENT LIFE SAFETY
1/8" = 1'-0"



EGRESS DIAMOND SYMBOL

PLAN REVIEWER: IT WOULD BE MORE ACCURATE TO USE THIS SYMBOL TO VERIFY THE COMPLIANCE TO THE EGRESS DISTANCE OF A BUILDING

PLACING THIS DIAMOND SYMBOL AT EACH EGRESS DOOR CENTER WOULD GUARANTEE THE EGRESS DISTANCE WOULD ALWAYS BE ACCURATE NO MATTER WHAT THE LOCATIONS OF FURNISHINGS OR STORAGE SHELVEING

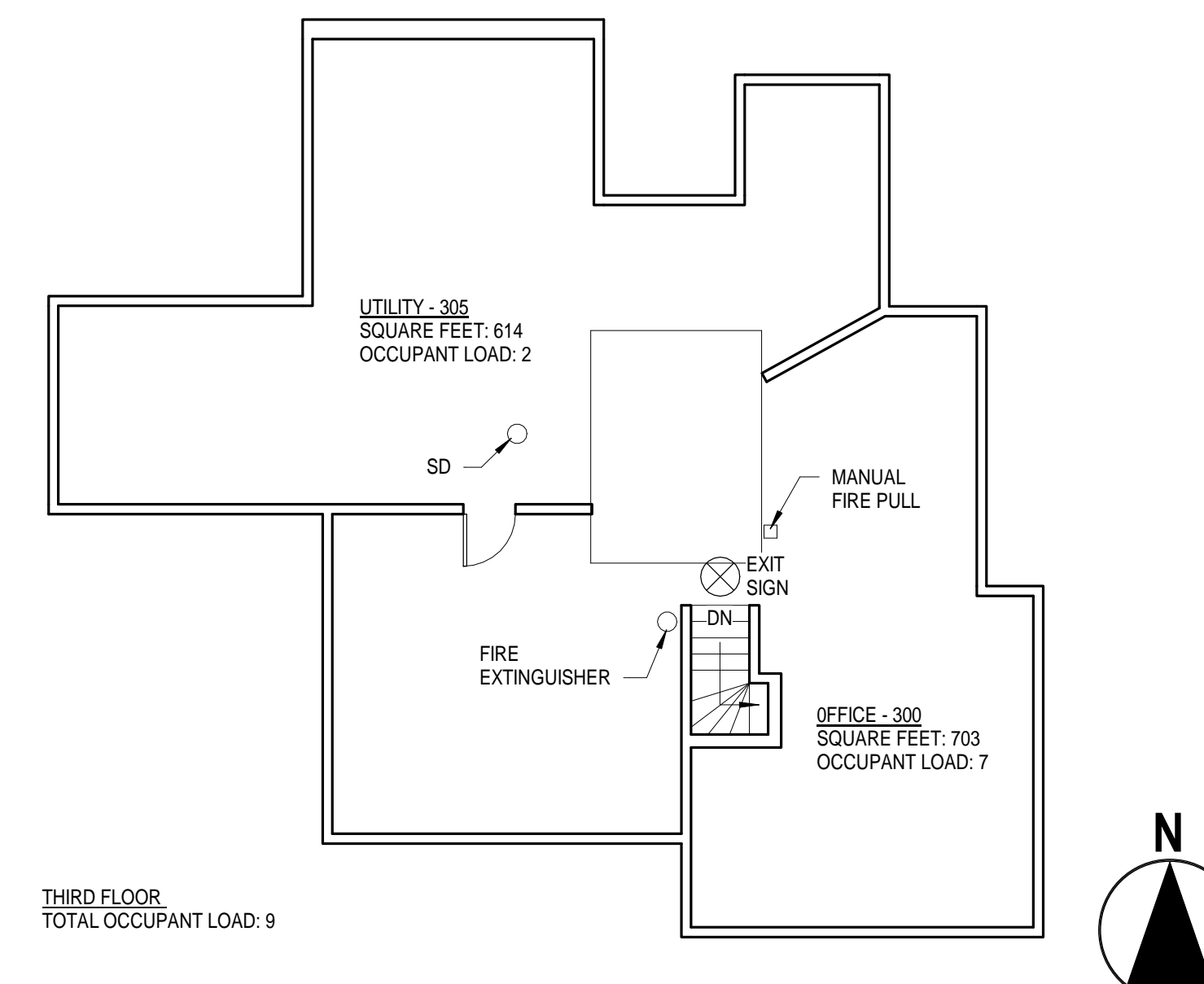
DIAMOND OUTLINE MUST OVERLAP SO THERE ARE NO VOIDS IN ASSURING THE EGRESS DISTANCE FOR THE BUILDING WILL COMPLY WITH EGRESS DISTANCE

PLAN REVIEWER:

MEASURING A EGRESS TRAVEL LINE FROM THE FURTHER MOST POINT IN THE BUILDING TO THE CENTER OF THE EGRESS DOOR OPENING IS NOT AN ACCURATE DEPICTION OF THE TRAVEL/THERE ARE USUALLY FURNITURE OR STORAGE SHELVEING TO ALTER THE ROUTE OF TRAVEL/SEE EGRESS DIAMOND SYMBOL THIS SHEET FOR THE MOST ACCURATE WAY IN DETERMINING THE TRAVEL DISTANCE

NOTE - ENTIRE PROPERTY IS WITHIN THE 200' EGRESS DIAMOND

75'-0" RADIUS



4 THIRD FLOOR LIFE SAFETY
1/8" = 1'-0"

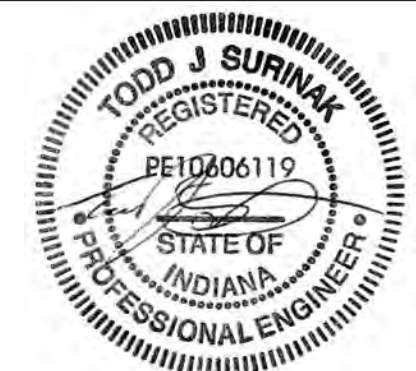
NO.	DESCRIPTION	DATE

CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

FIRE AND LIFE SAFETY PLAN

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

A001
SCALE: AS NOTED

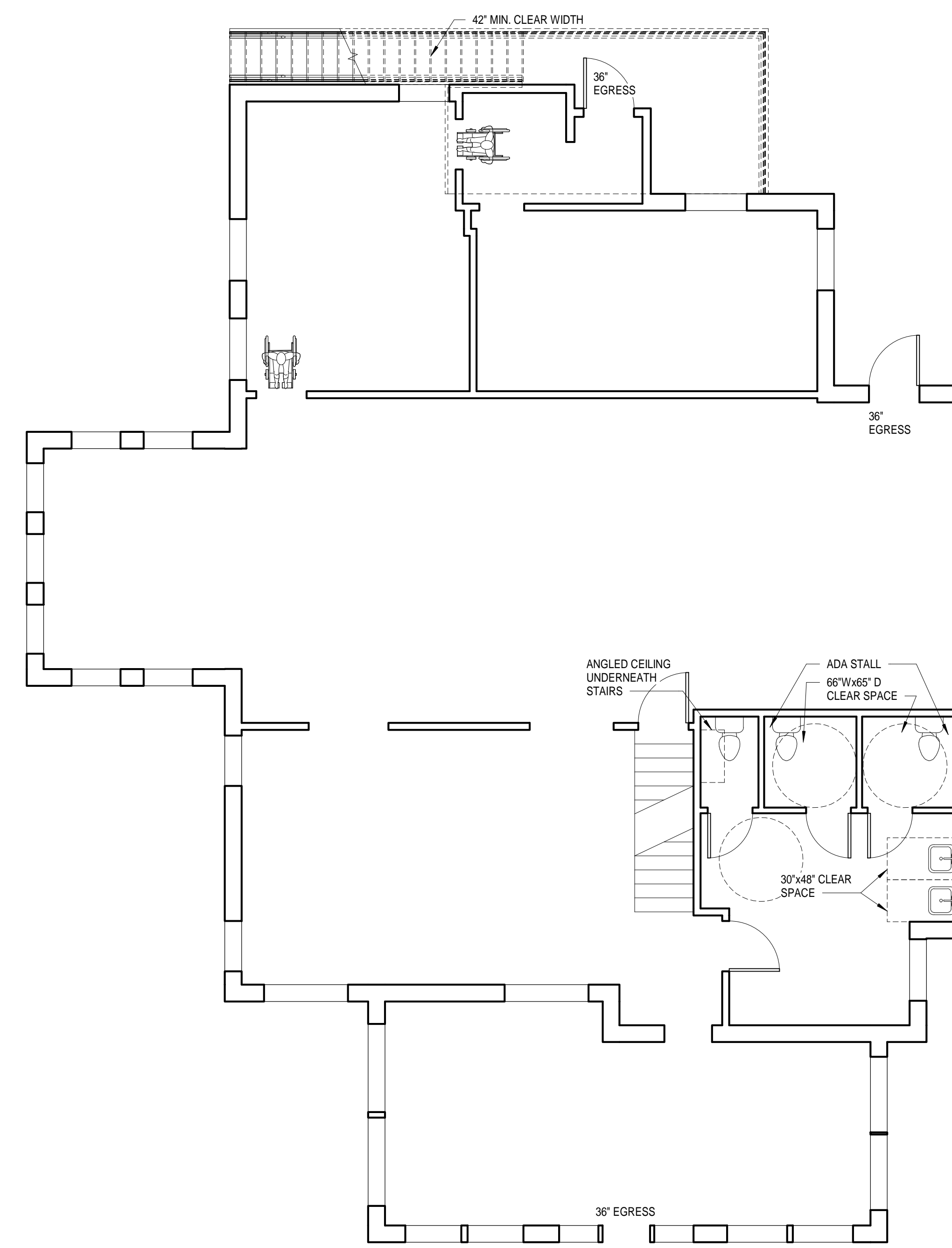


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INDIANAPOLIS, IN 46205
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CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

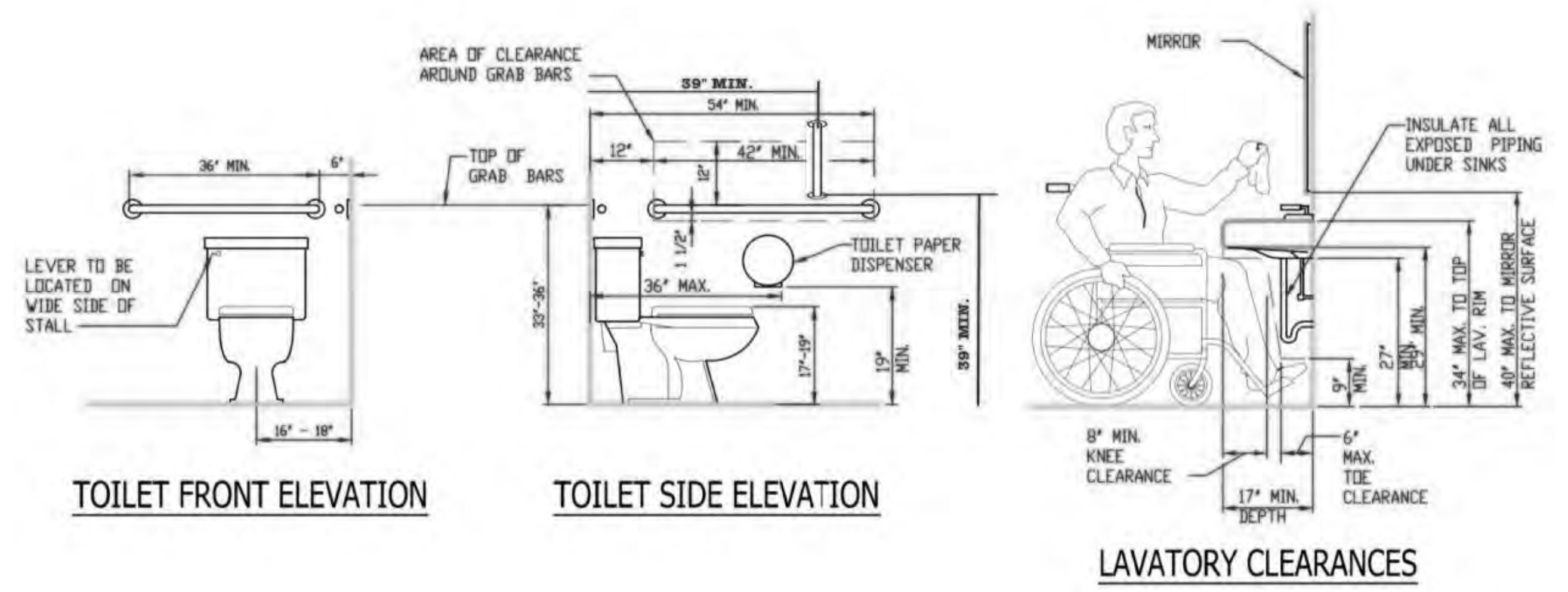
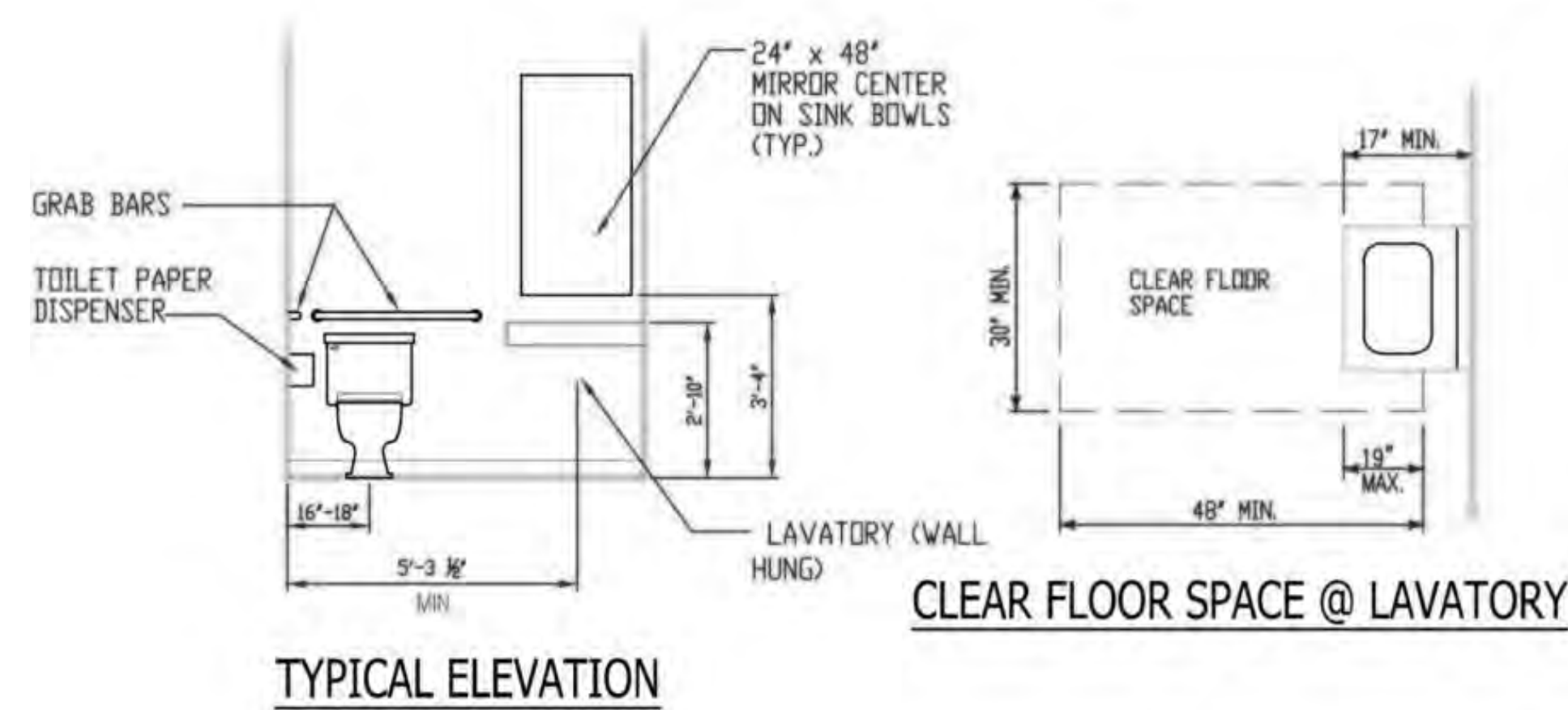
NOTES:

TOILET ROOM SIGNAGE
A PLACE "ADA" TOILET ROOM SIGNAGE ON WALL ADJACENT TO THE LATCH SIDE. MOUNTING HEIGHT SHALL BE 60" ABOVE FINISH FLOOR TO THE CENTERLINE OF THE SIGN. MOUNTING LOCATION FOR SUCH SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3 IN. OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.



① FIRST FLOOR ACCESSIBILITY
3/16" = 1'-0"

NOTE:
ALL ACCESSORIES TO BE MOUNTED WHERE POINT OF DISPENSING AND/OR ANY OPERATING HEIGHT IS A MAXIMUM OF 40" A.F.F.



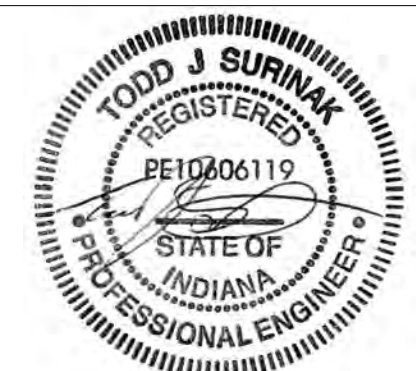
NO.	DESCRIPTION	DATE

CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

ACCESSIBILITY PLAN

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

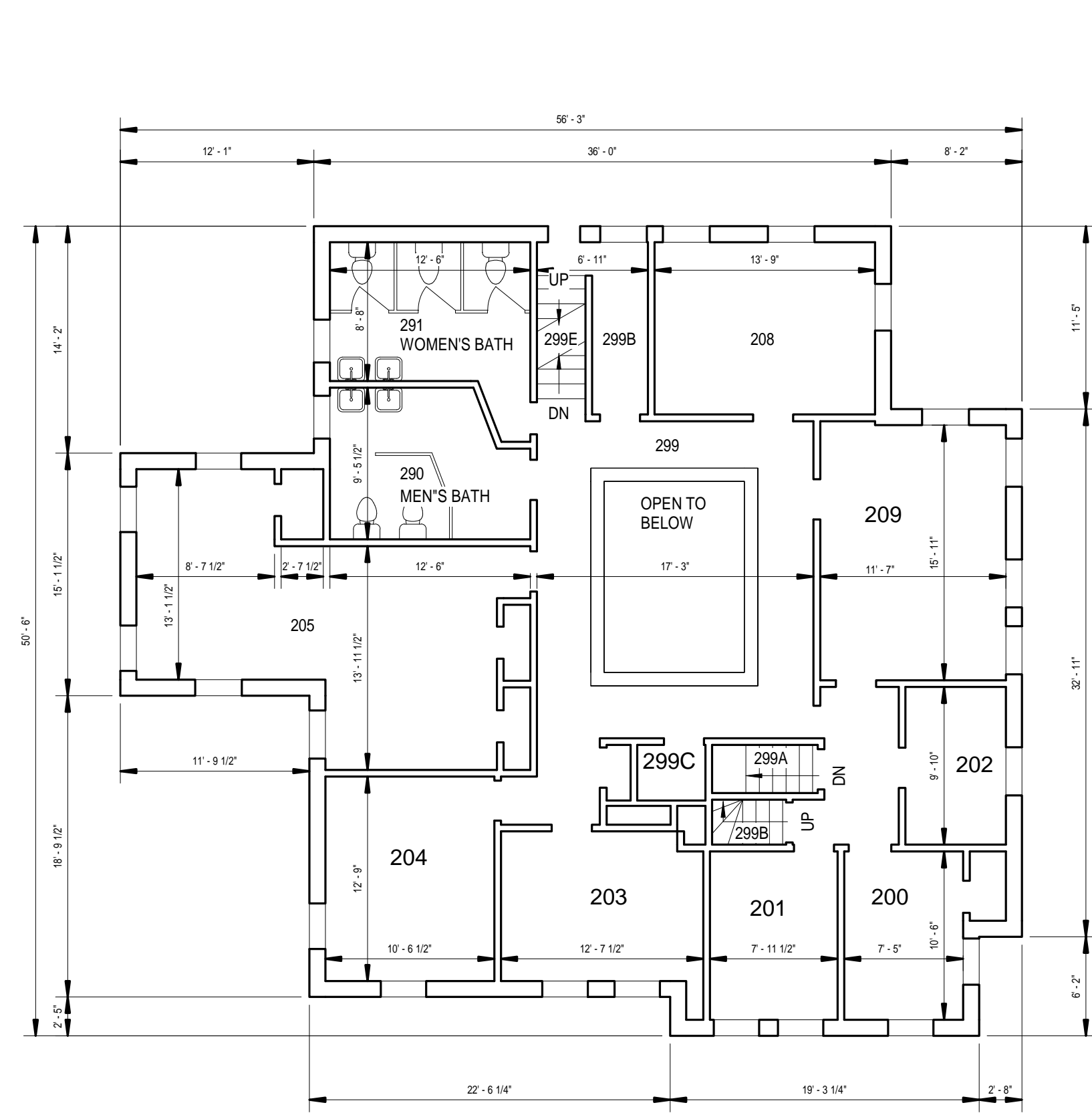
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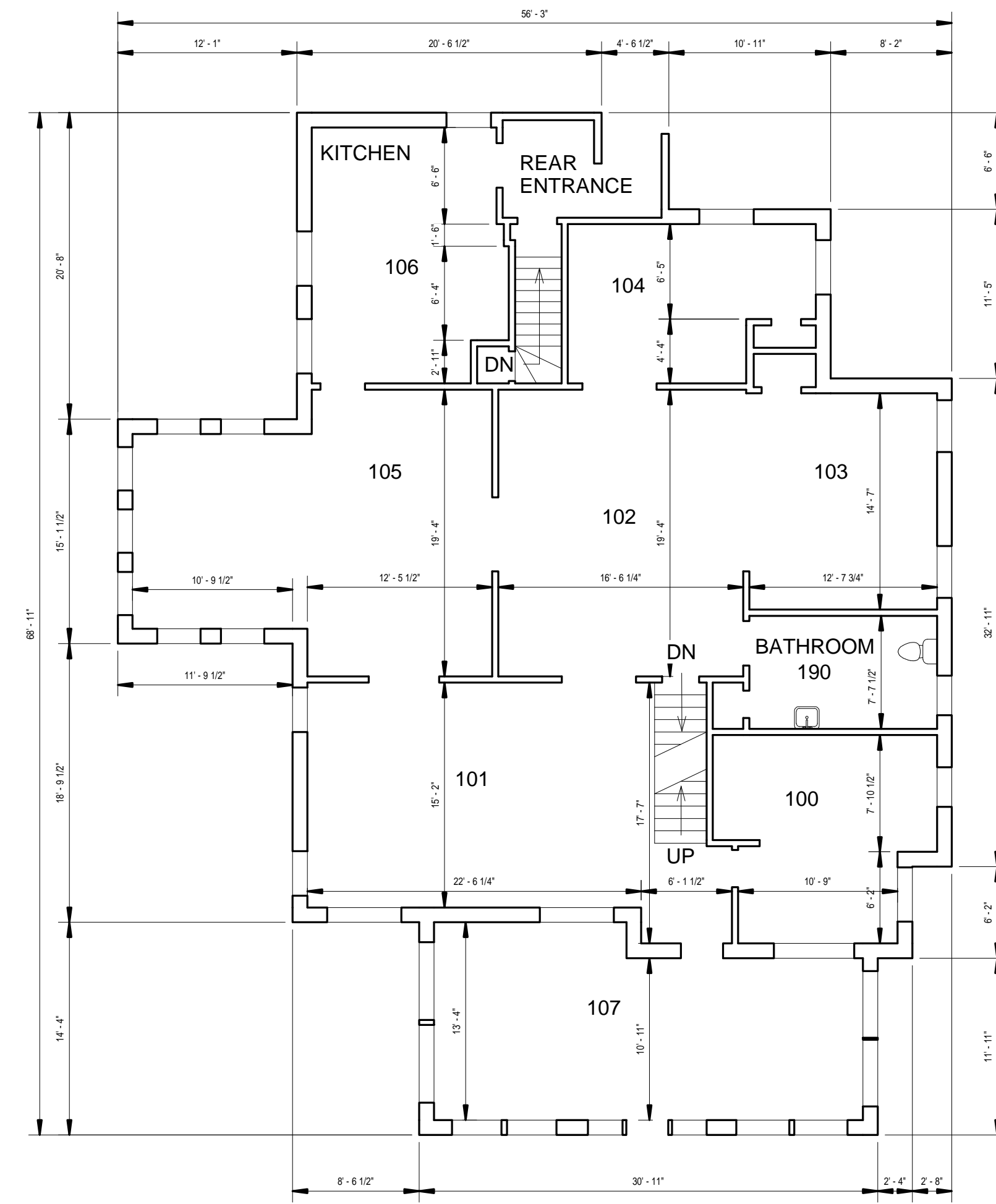
STRUCTURAL ENGINEERING BY:
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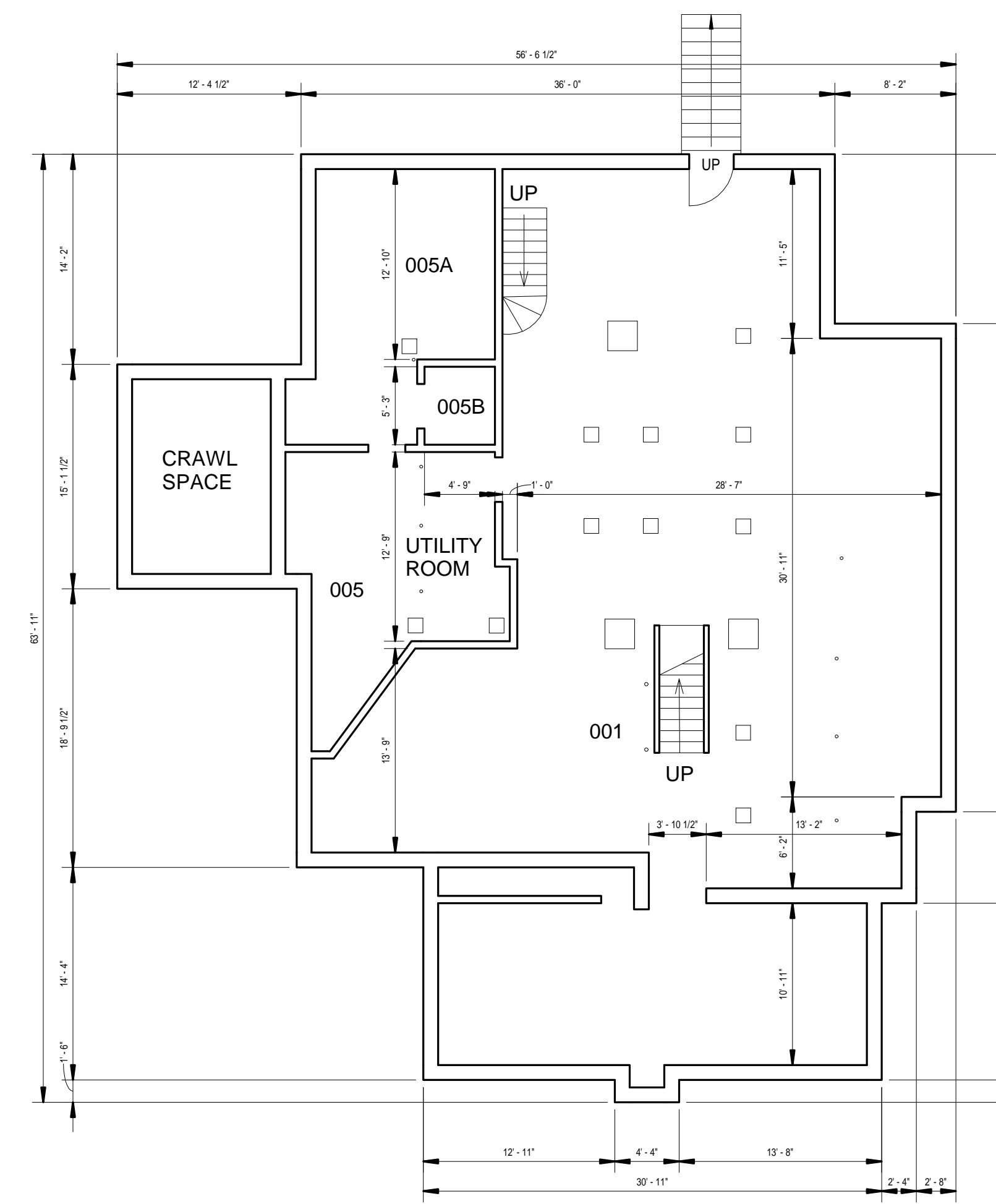
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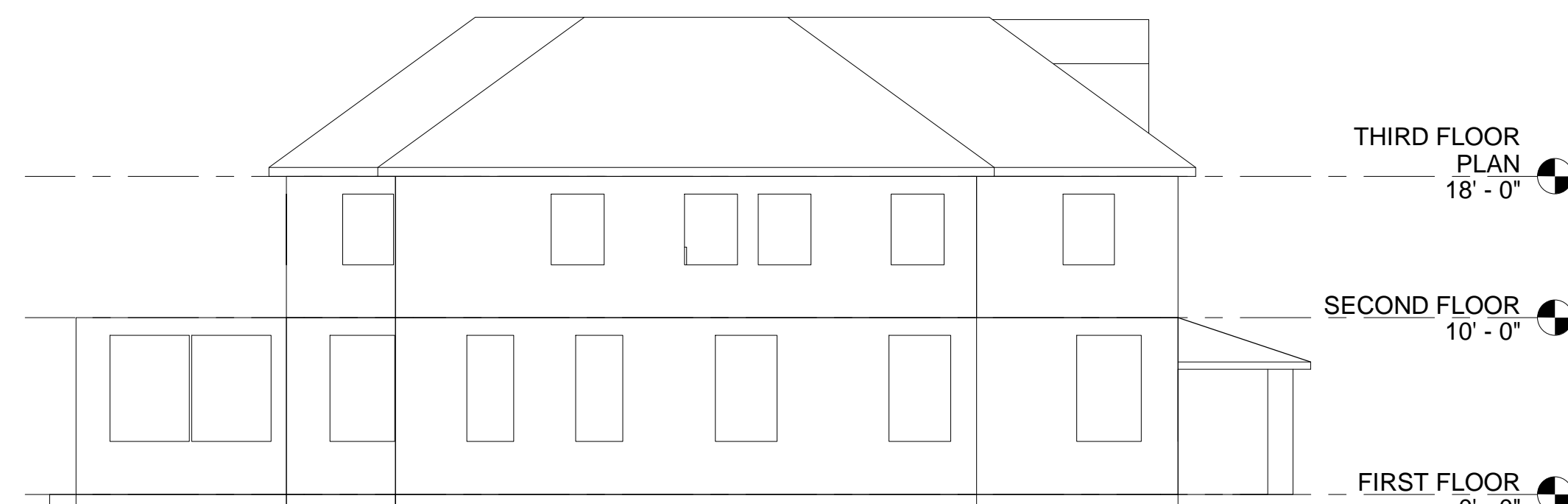
3 EXISTING SECOND FLOOR
 1/8" = 1'-0"



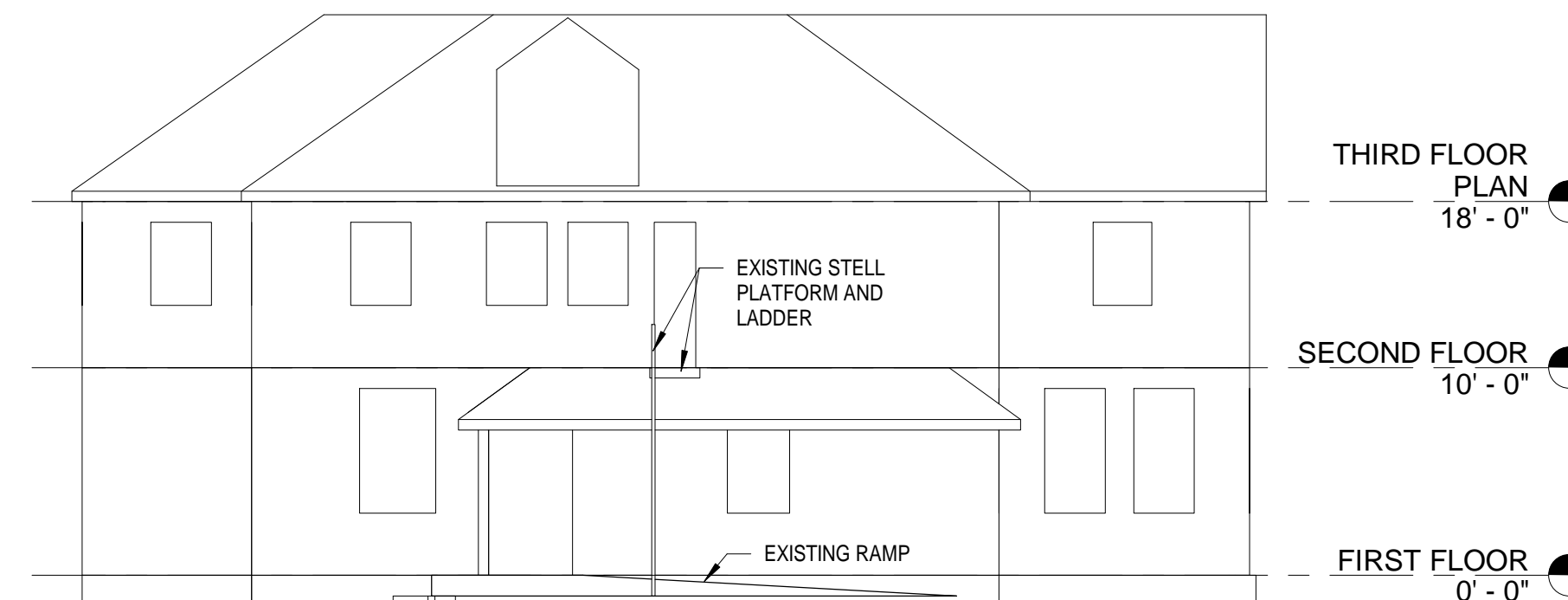
2 EXISTING FIRST FLOOR PLAN
 1/8" = 1'-0"



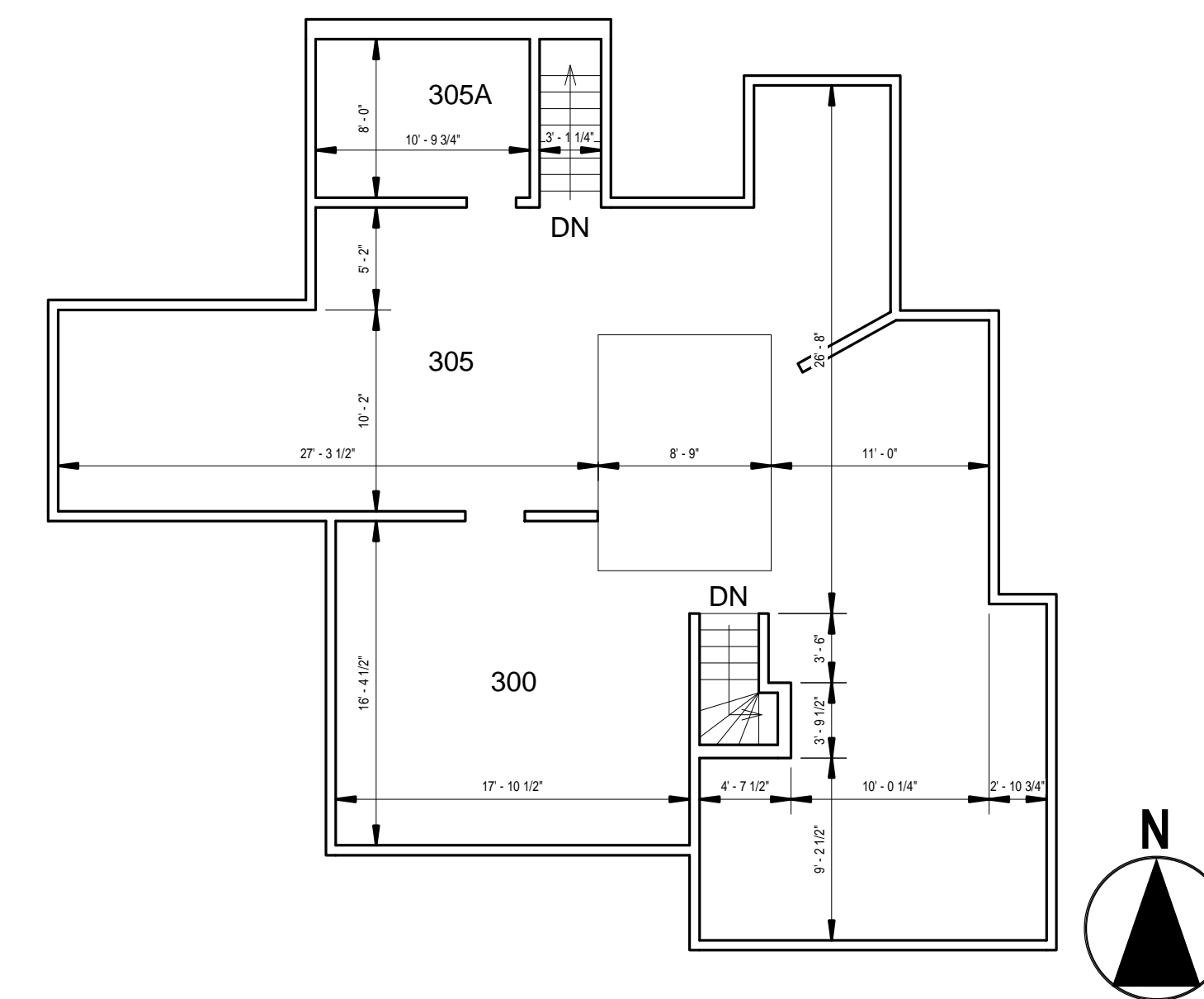
1 EXISTING BASEMENT
 1/8" = 1'-0"



6 EXISTING EAST ELEVATION
 1/8" = 1'-0"



5 EXISTING NORTH ELEVATION
 1/8" = 1'-0"



4 EXISTING THRID FLOOR PLAN
 1/8" = 1'-0"

NO.	DESCRIPTION	DATE

CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

EXISTING FLOOR PLAN AND ELEVATION

PROJECT NUMBER:	774
DATE:	3-26-2020
DRAWN BY:	JAR
CHECKED BY:	TJS

A100

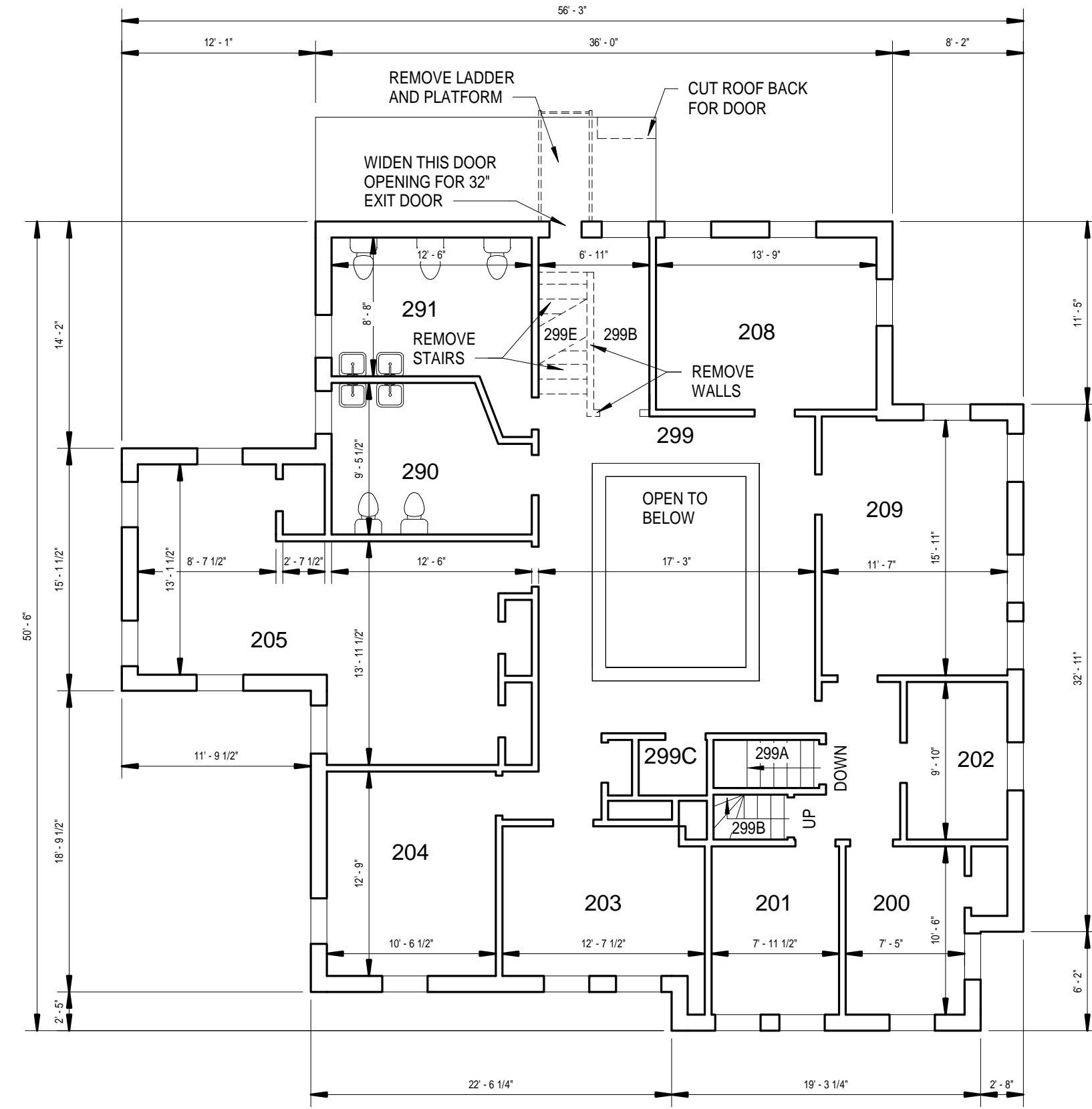
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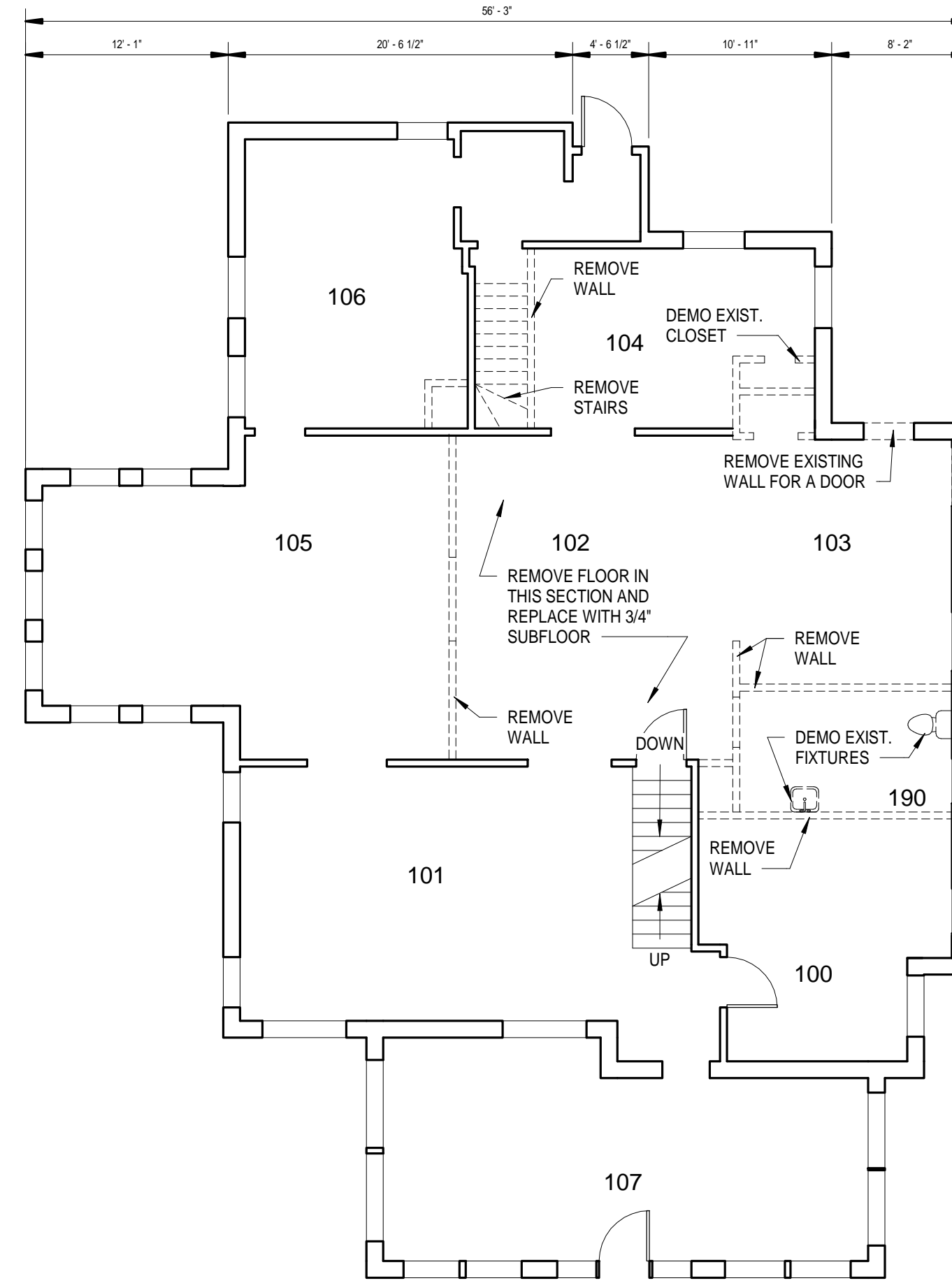
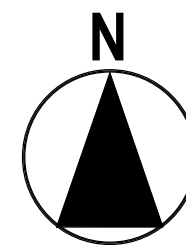
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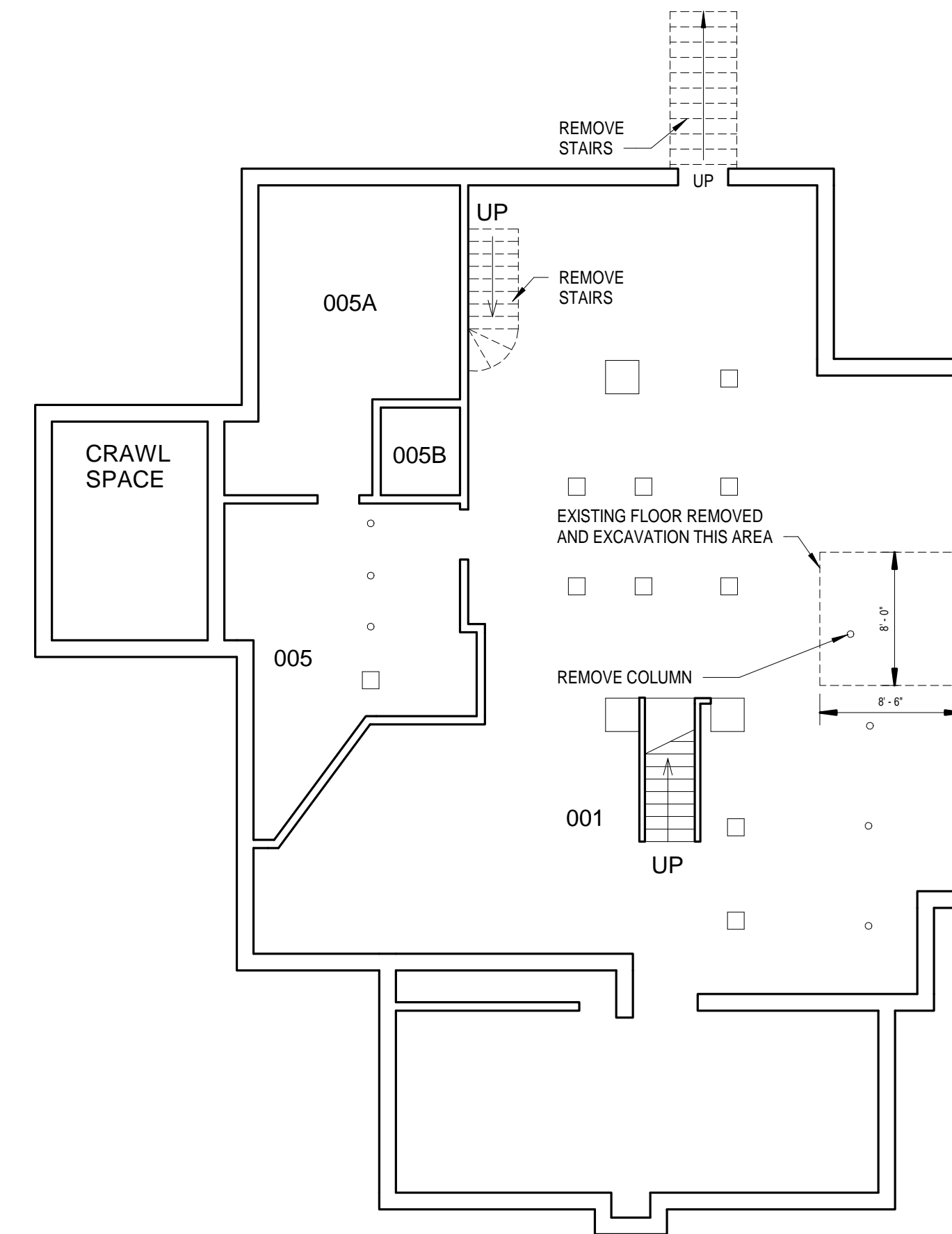
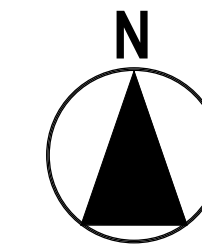
- NOTES:
- CONTRACTOR RESPONSIBLE FOR SHORING ALL STRUCTURAL DEMOLITION AS REQUIRED. CONTRACTOR TO CONSULT WITH STRUCTURAL ENGINEER TO DESIGN SHORING.



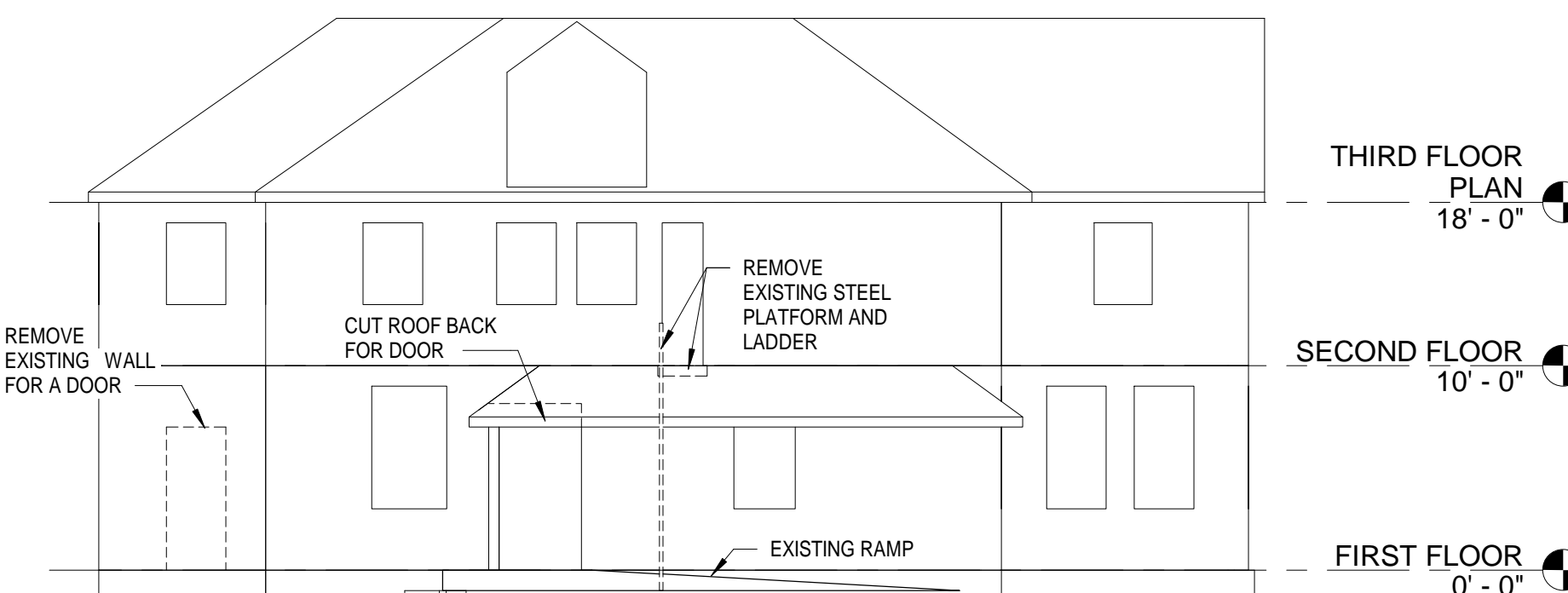
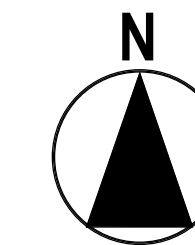
3 SECOND FLOOR DEMO PLAN
 1/8" = 1'-0"



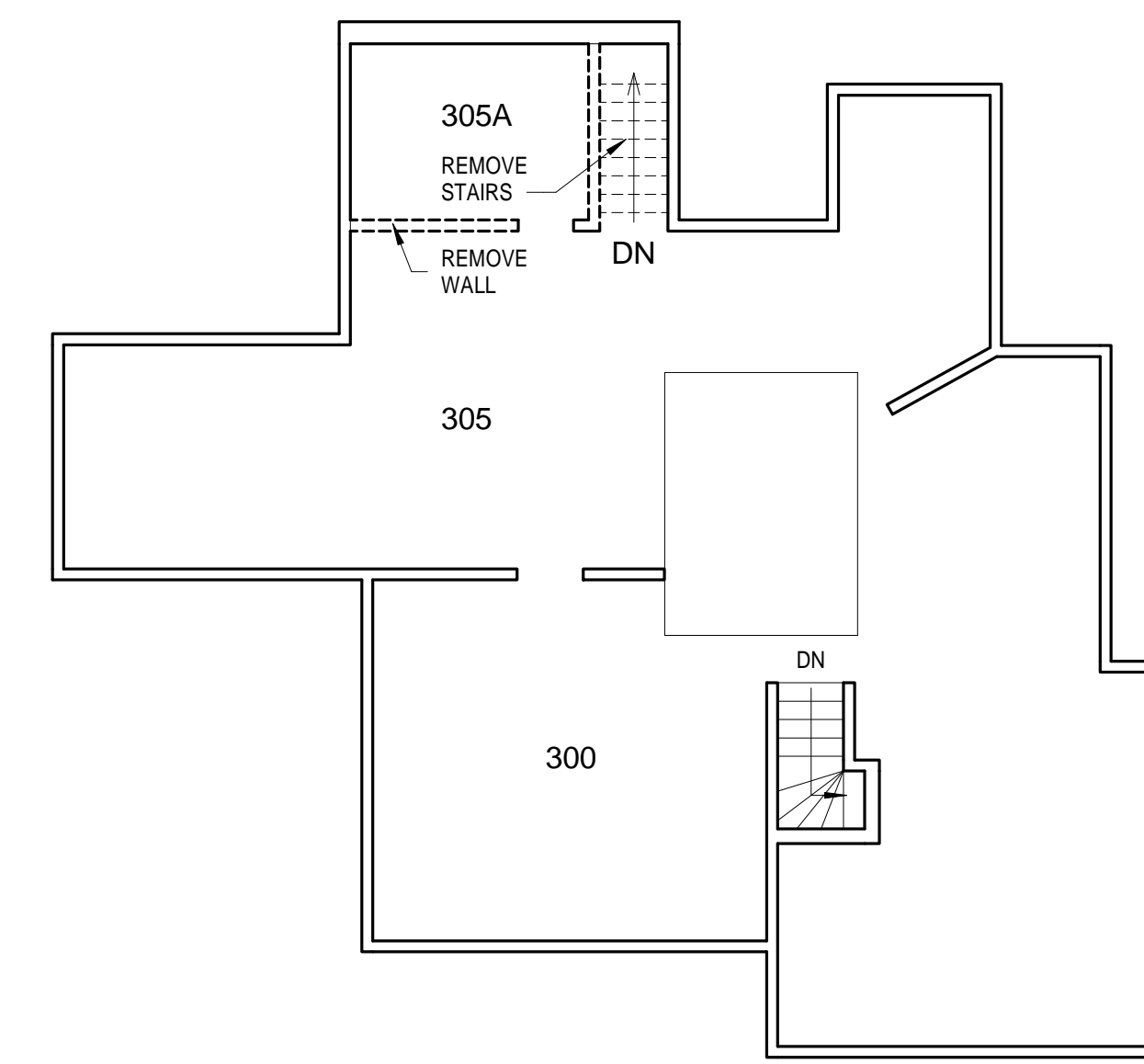
2 FIRST FLOOR DEMO PLAN
 1/8" = 1'-0"



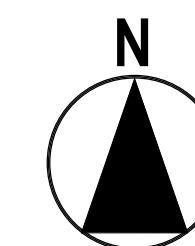
1 BASEMENT DEMO PLAN
 1/8" = 1'-0"



5 DEMO NORTH ELEVATION
 1/8" = 1'-0"



4 THRID FLOOR DEMO PLAN
 1/8" = 1'-0"



NO.	DESCRIPTION	DATE

CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

DEMO PLAN

PROJECT NUMBER: 774
 DATE: 3-26-2020
 DRAWN BY: JAR
 CHECKED BY: TJS

A101

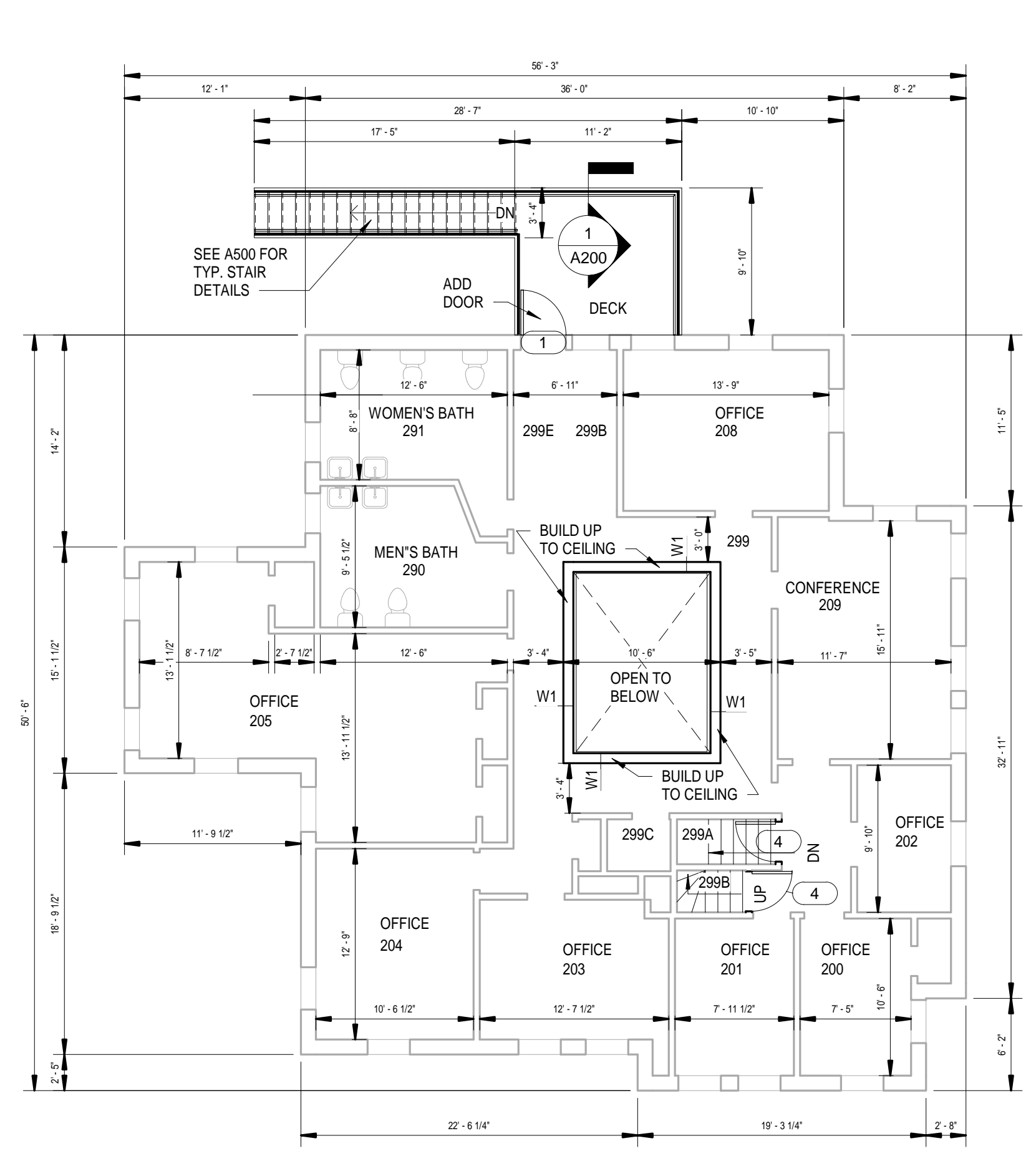
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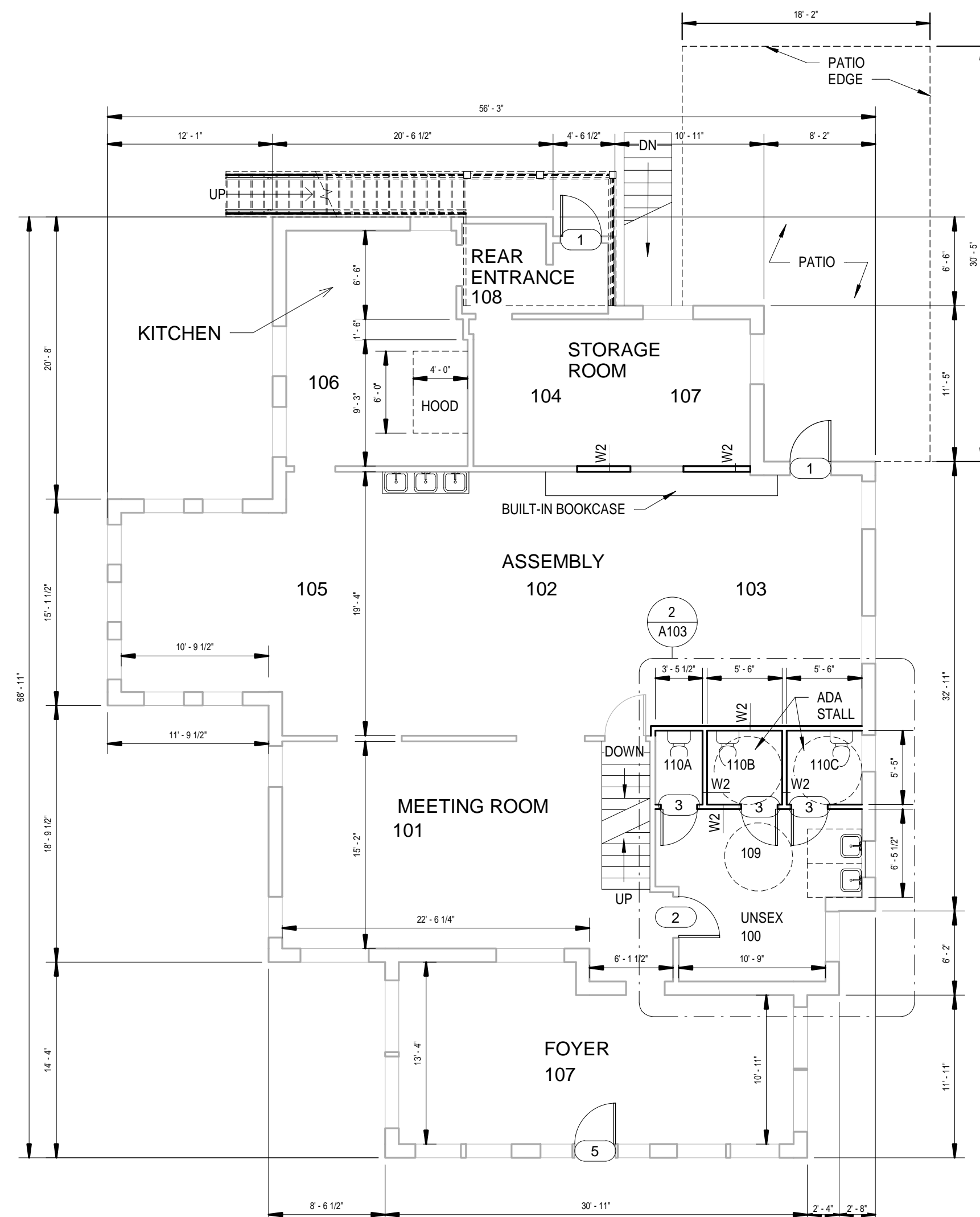
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CLIENT:
 RABBI AVI GROSSBAUM
 CHABAD CENTER FOR JEWISH LIFE
 BLOOMINGTON, IN

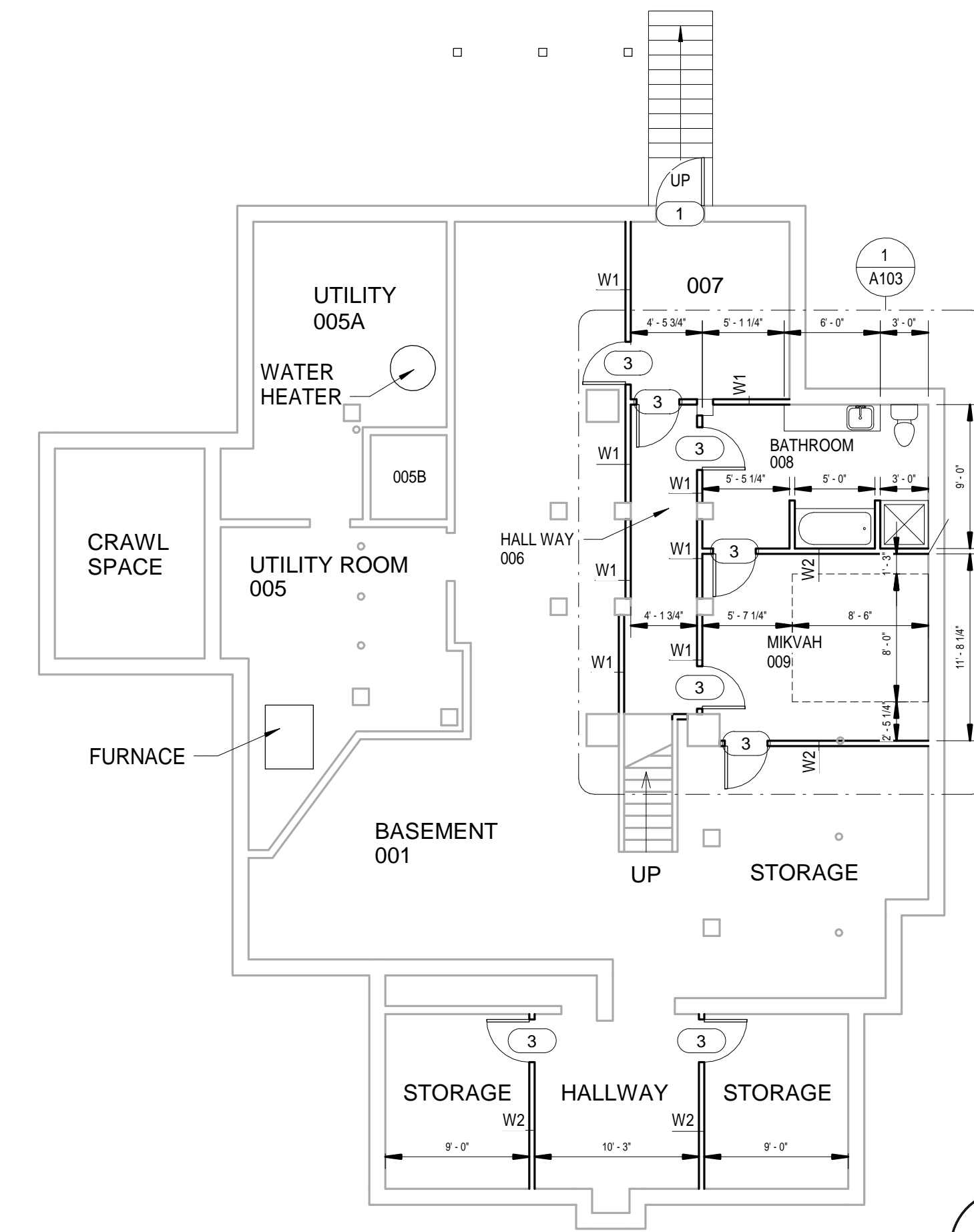
NOTES:



3 SECOND FLOOR
 1/8" = 1'-0"



2 FIRST FLOOR PLAN
 1/8" = 1'-0"



1 BASEMENT
 1/8" = 1'-0"

INSULATION NOTES

ALL SOURCES OF AIR LEAKAGE IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED, CAULKED, GASKETED, WEATHER STRIPPED, OR WRAPPED WITH MOISTURE VAPOR-PERMEABLE WRAPPING MATERIAL TO MINIMIZE AIR LEAKAGE.

FENESTRATION PRODUCTS SHALL BE CERTIFIED AS TO PERFORMANCE LABELS OR CERTIFICATES PROVIDED.

INSULATION IN CONTACT WITH GROUND SHALL HAVE <0.3% WATER ABSORPTION RATE PER ASTM C272.

EAVES SHALL BE BAFFLED TO DEFLECT AIR TO ABOVE THE INSULATION.

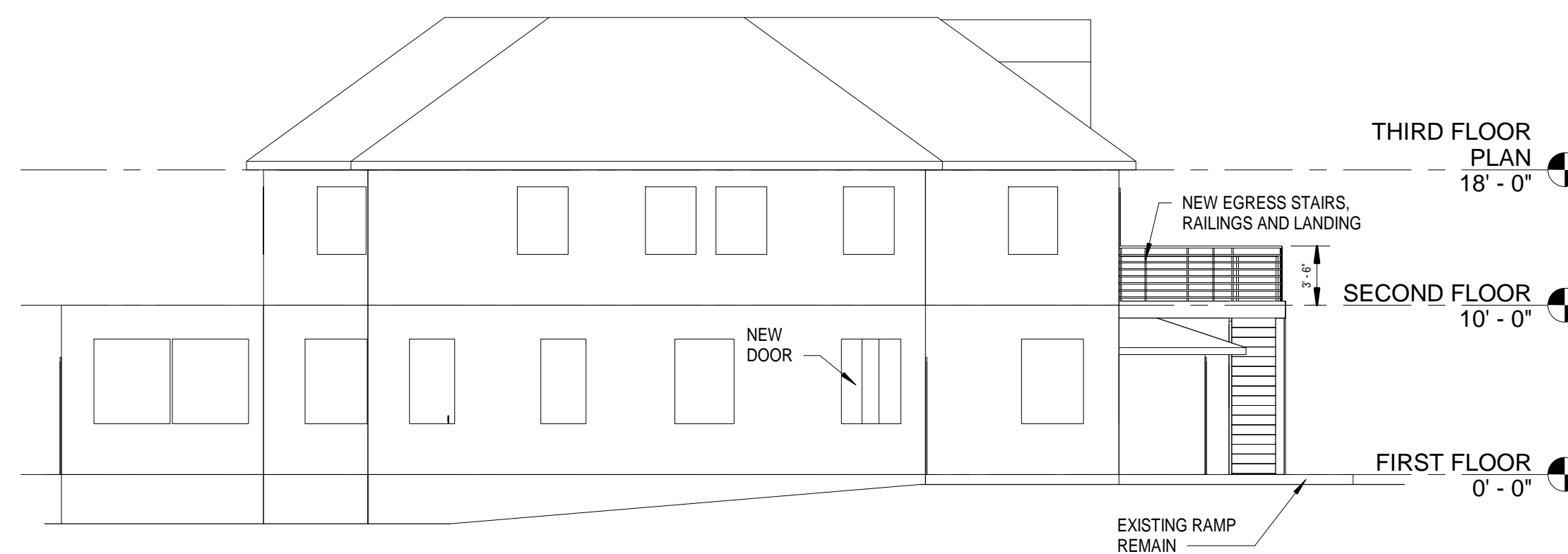
INSULATION SHALL BE INSTALLED IN SUBSTANTIAL CONTACT WITH THE INSIDE SURFACE SEPARATING CONDITIONED SPACE FROM UNCONDITIONAL SPACE.

EXTERIOR INSULATION SHALL BE PROTECTED FROM DAMAGE WITH A PROTECTIVE MATERIAL. VERIFICATION FOR EXPOSED FOUNDATION INSULATION MAY NEED TO OCCUR DURING FOUNDATION INSPECTION.

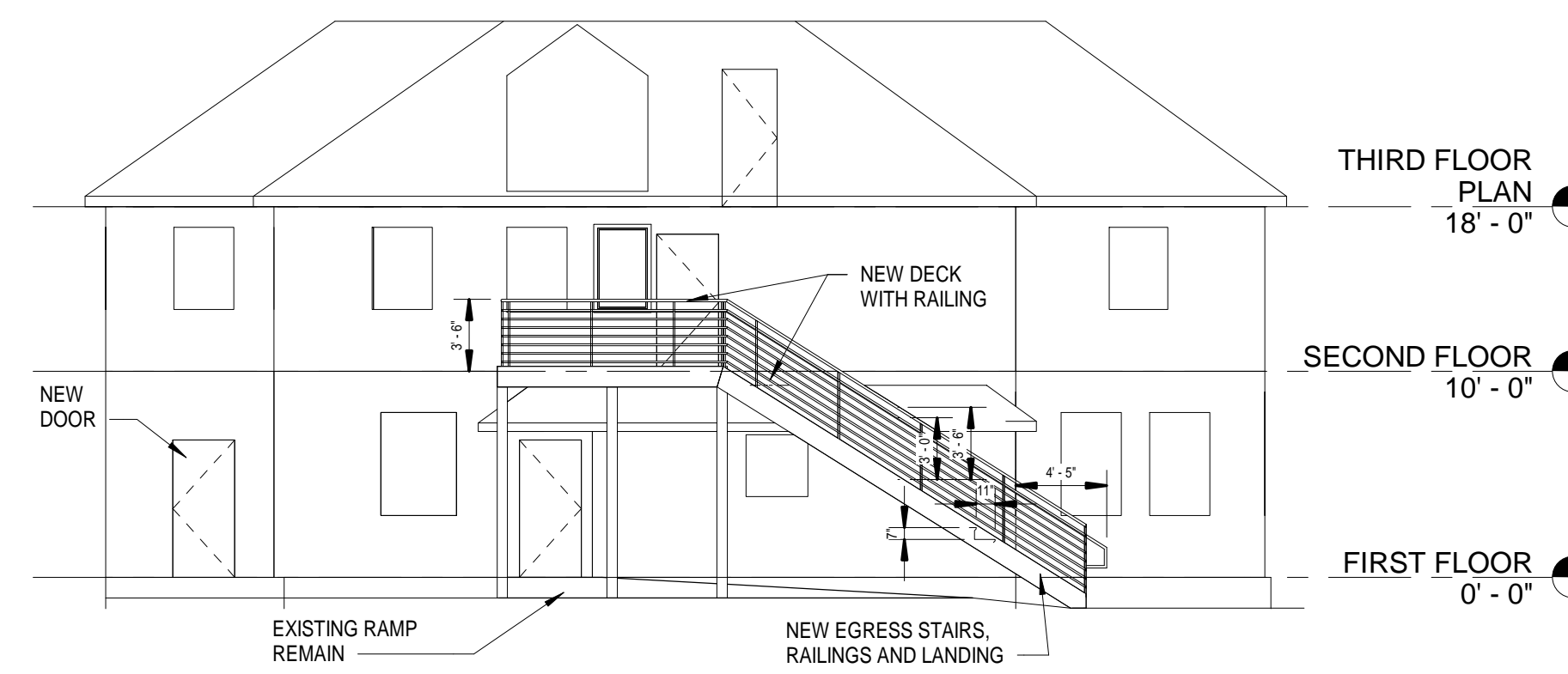
WALL LEGEND	
W1 1 HOUR RATING	W2 NO RATING
TYPE X 5/8" DRYWALL	5/8" DRYWALL
TYPE X 5/8" DRYWALL 2x4 STUD @24" O.C.	5/8" DRYWALL 2x4 STUD @24" O.C.
EXISTING WALL NO TAG	

FINISH SCHEDULE					
ROOM NO.	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH
007	FOYER	FINISH CONCRETE	4" IMPERVIOUS BASEBOARD	PAINT ON DRYWALL	PAINT ON DRYWALL
006	HALLWAY	FINISH CONCRETE	4" IMPERVIOUS BASEBOARD	PAINT ON DRYWALL	PAINT ON DRYWALL
008	BATHROOM	VINYL	4" IMPERVIOUS BASEBOARD	IMPERVIOUS WALL COVERING ON DRYWALL UP TO 4'-0" ABOVE FLOOR	PAINT ON DRYWALL
009	MIKVAH	VINYL	4" IMPERVIOUS BASEBOARD	IMPERVIOUS WALL COVERING ON DRYWALL UP TO 4'-0" ABOVE FLOOR	PAINT ON DRYWALL
102	ASSEMBLY	HARDWOOD	4" IMPERVIOUS BASEBOARD	IMPERVIOUS WALL COVERING ON DRYWALL UP TO 4'-0" ABOVE FLOOR AND 2'-0" ON EACH SIDE OF THE SINK, PAINT ON DRYWALL	PAINT ON DRYWALL
106	KITCHEN	VINYL	4" IMPERVIOUS BASEBOARD	IMPERVIOUS WALL COVERING ON DRYWALL UP TO 4'-0" ABOVE FLOOR	PAINT ON DRYWALL
109	RESTROOM	VINYL	4" IMPERVIOUS BASEBOARD	IMPERVIOUS WALL COVERING ON DRYWALL UP TO 4'-0" ABOVE FLOOR	PAINT ON DRYWALL
110	RESTROOM	VINYL	4" IMPERVIOUS BASEBOARD	IMPERVIOUS WALL COVERING ON DRYWALL UP TO 4'-0" ABOVE FLOOR	PAINT ON DRYWALL

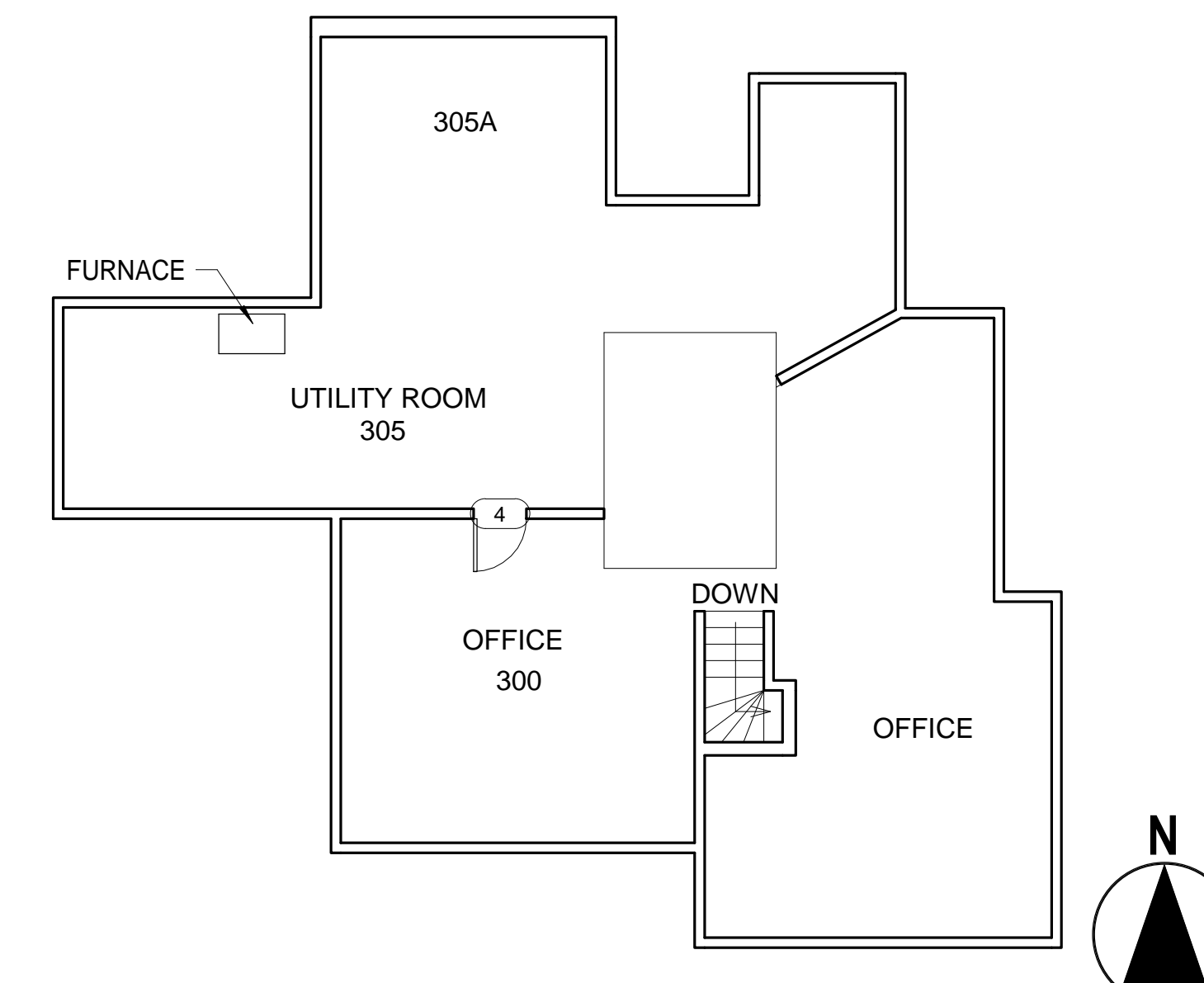
DOOR SCHEDULE						
MARK	TYPE	WIDTH	HEIGHT	TYPE OF DOOR	HARDWARE	INSULATION
1	36" x 80"	3'-0"	6'-8"			
2	36" x 80"	3'-0"	6'-8"		PRIVACY LOCK	
3	32" x 80"	2'-8"	6'-8"		PRIVACY LOCK	
4	32" x 80"	2'-8"	6'-8"	WOOD	NO LOCKSET	
5	36" x 80"	3'-0"	6'-8"	EXISTING DOOR		



6 EAST ELEVATION
 1/8" = 1'-0"



5 NORTH ELEVATION
 1/8" = 1'-0"



4 THIRD FLOOR PLAN
 1/8" = 1'-0"

NO.	DESCRIPTION	DATE

CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

NEW PLANS AND ELEVATION

PROJECT NUMBER: 774
 DATE: 3-26-2020
 DRAWN BY: JAR
 CHECKED BY: TJS

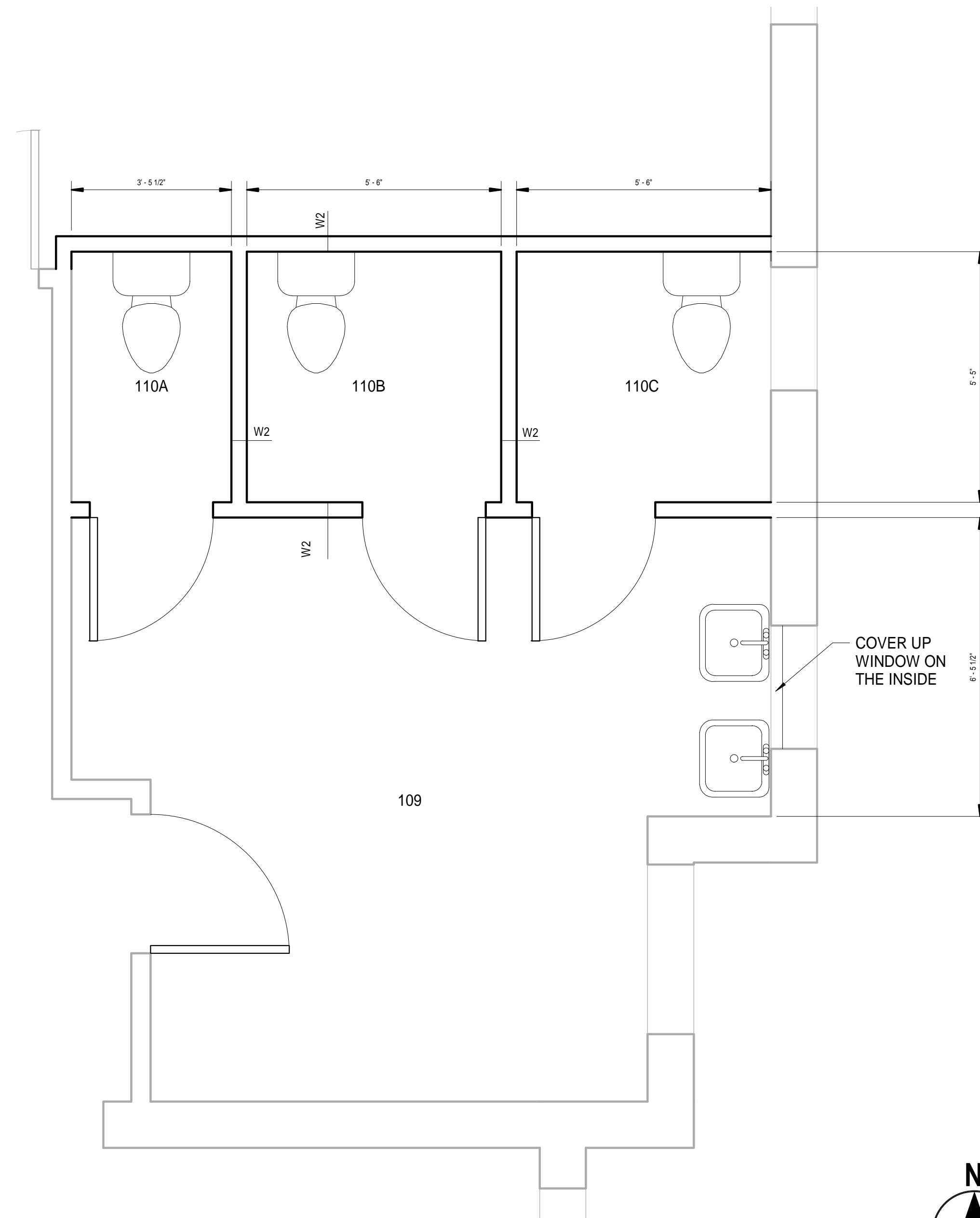
A102
 SCALE: AS NOTED



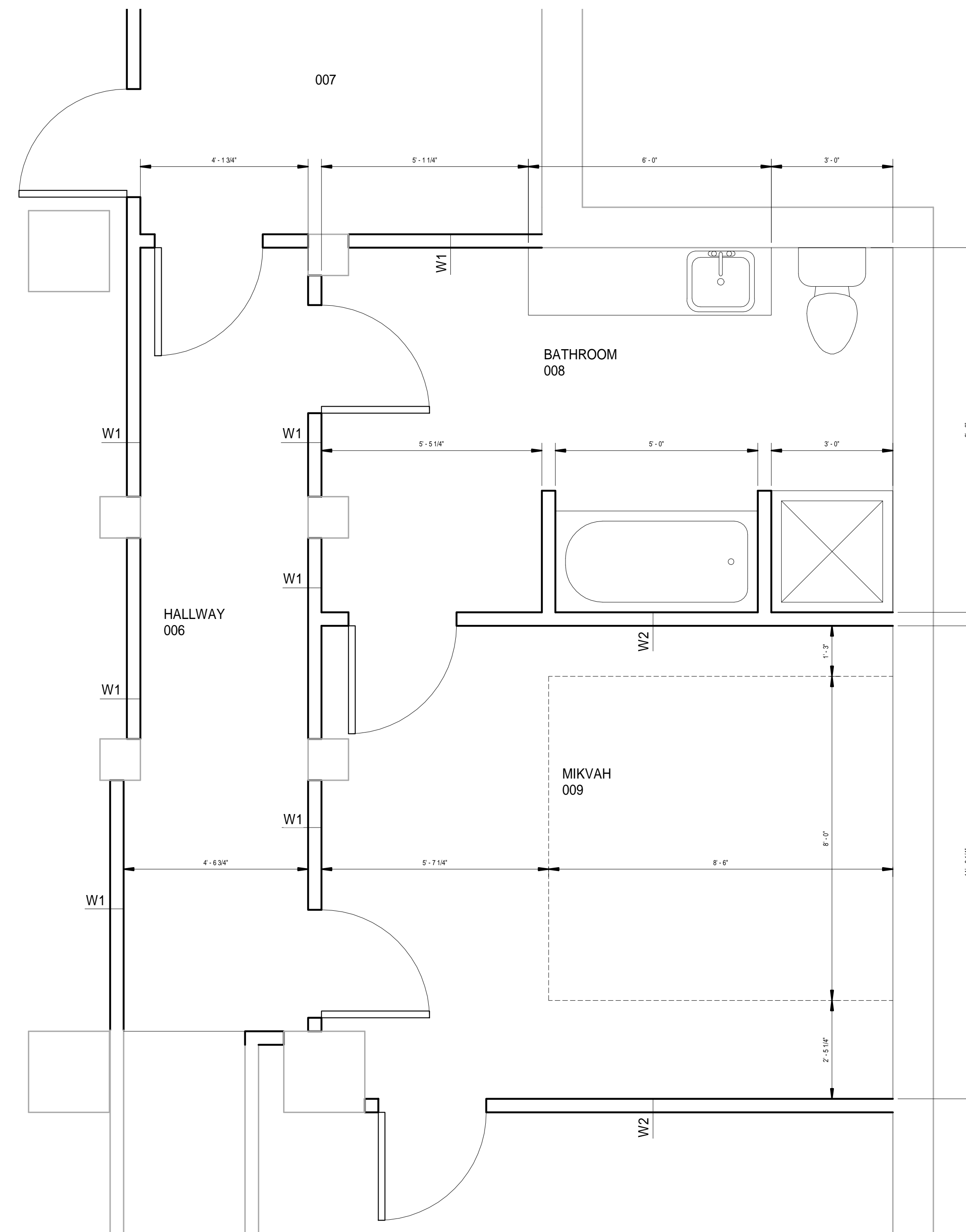
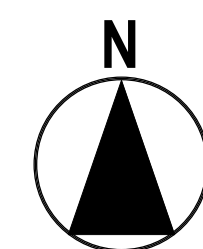
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CLIENT:
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CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

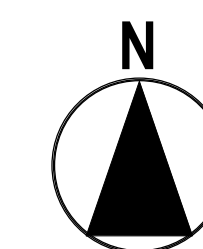
NOTES:



② FIRST RESTROOM ENLARGE PLAN
1/2" = 1'-0"



① BASEMENT ENLARGE PLAN
1/2" = 1'-0"



NO.	DESCRIPTION	DATE

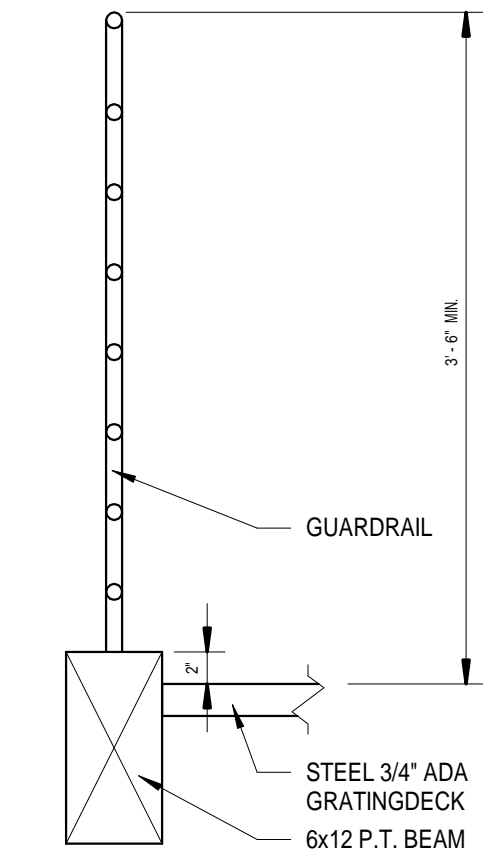
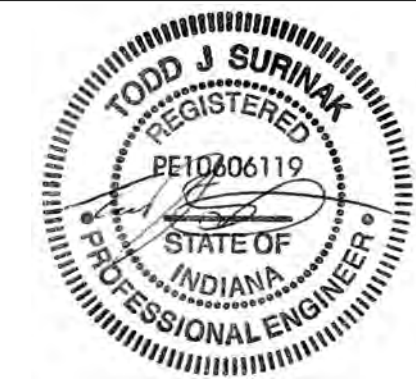
CHABAD CENTER
703 E. 7TH ST.
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ENLARGE PLANS

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

A103

SCALE: AS NOTED



① RAILING DETAIL
1" = 1'-0"

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CLIENT:
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CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

NOTES:

NO.	DESCRIPTION	DATE

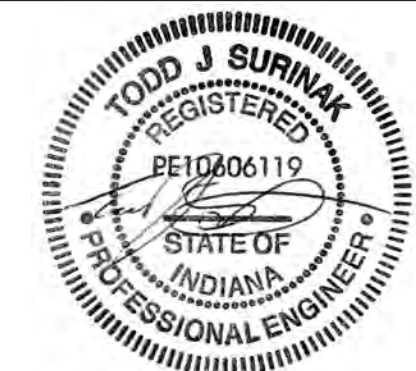
CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

SECTION

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

A200

SCALE: AS NOTED



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3819 N. DELAWARE ST.
INDIANAPOLIS, IN 46205
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CLIENT:
RABBI AVI GROSSBAUM
CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

NOTES:

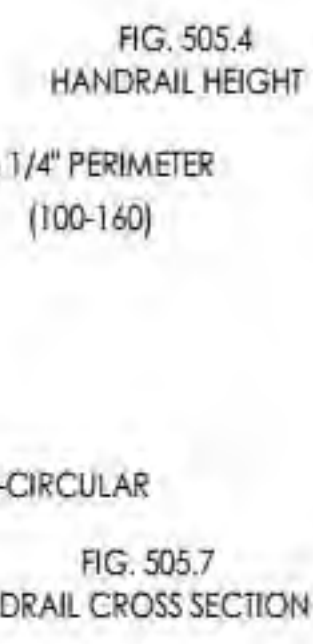
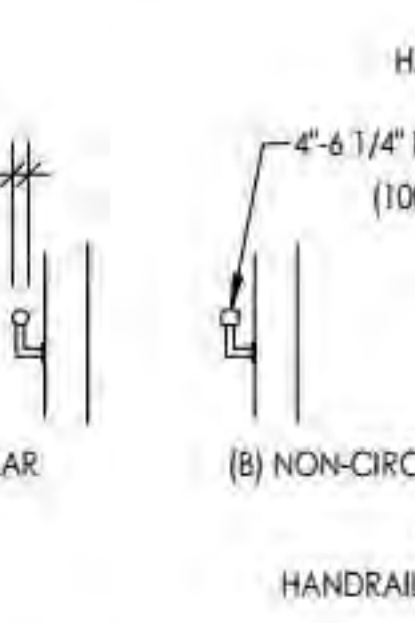
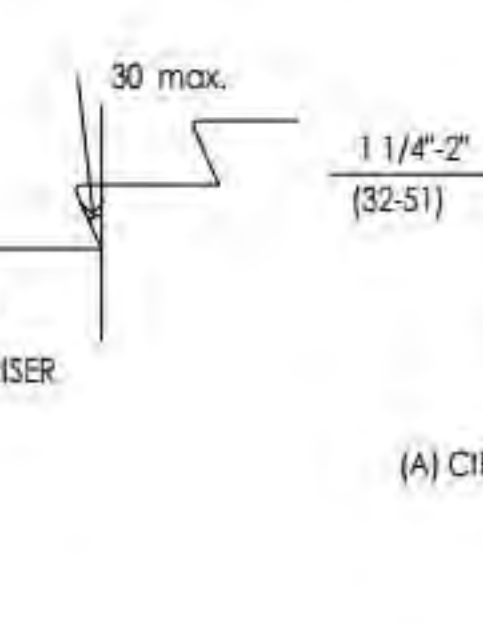
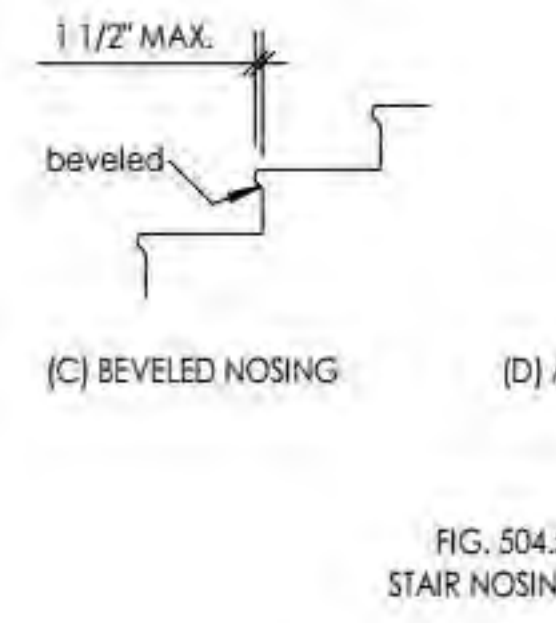
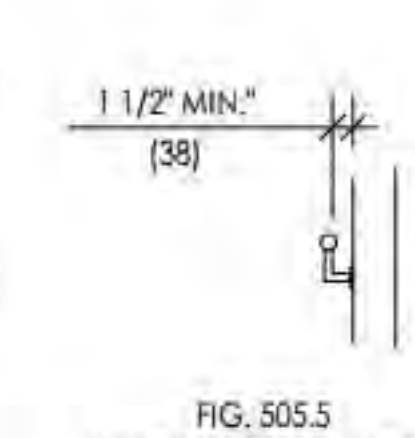
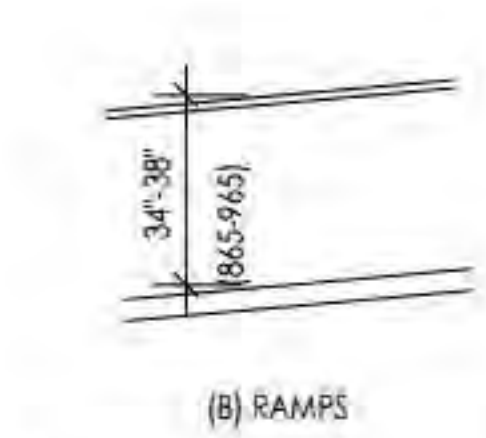
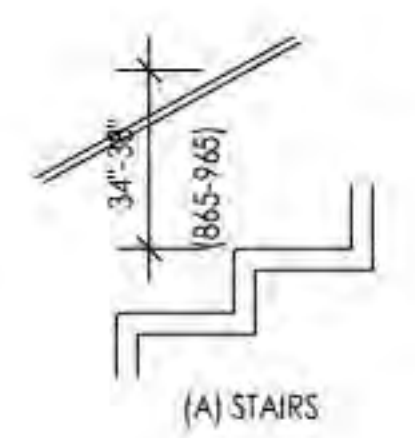
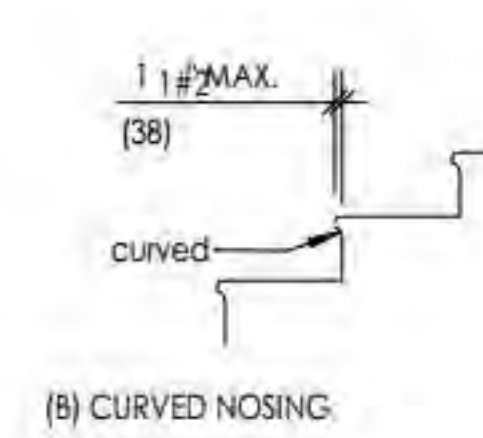
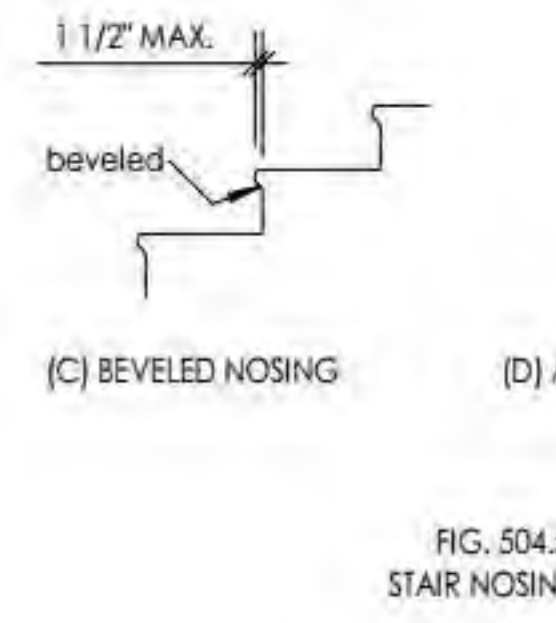
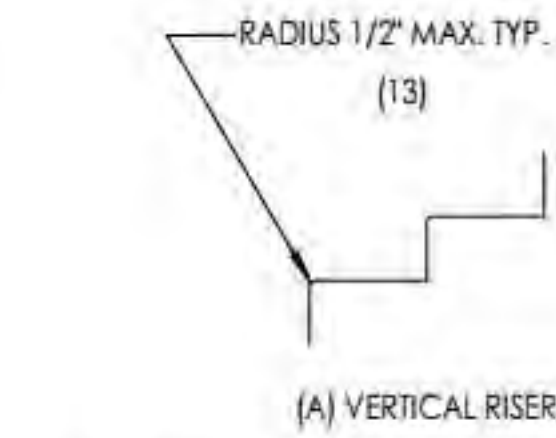
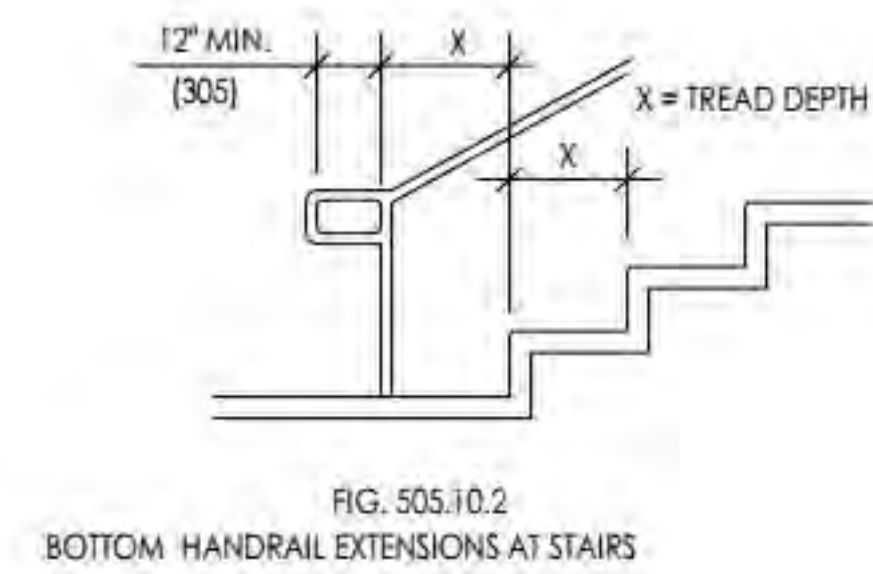
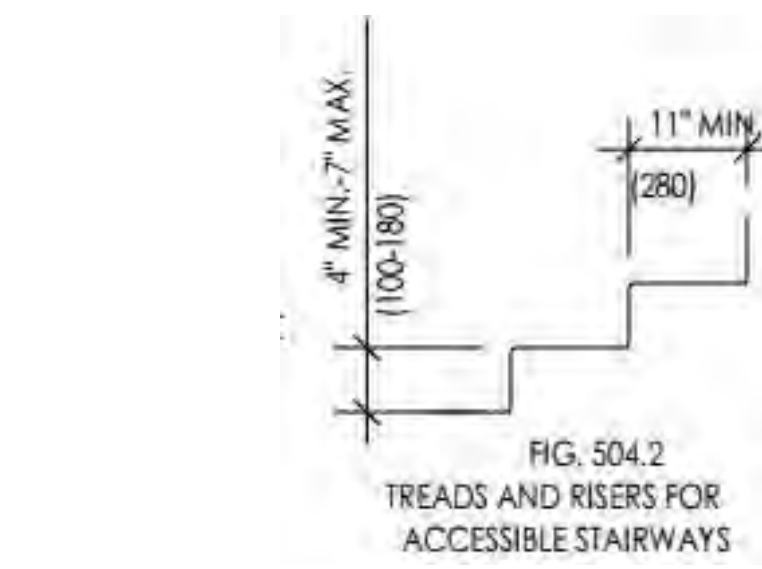
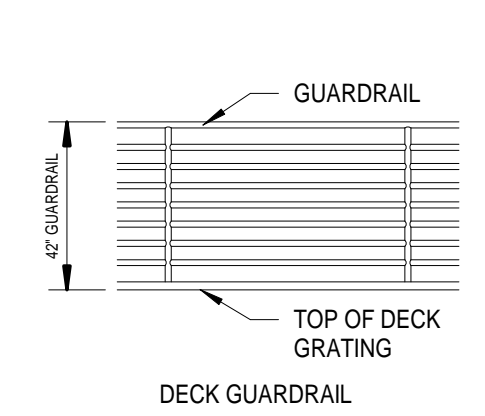
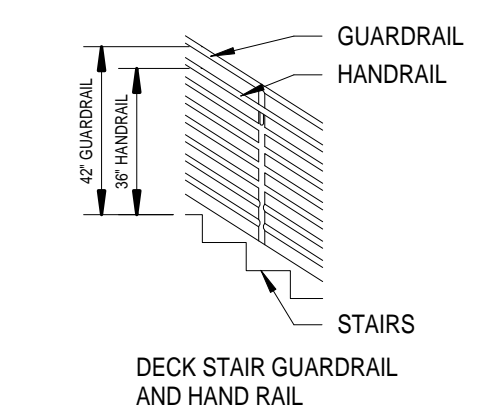


FIG. 505.7 HANDRAIL CROSS SECTION



NO.	DESCRIPTION	DATE

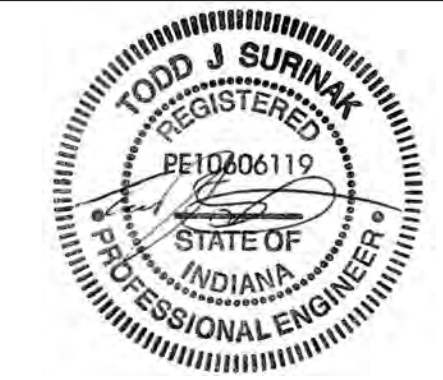
CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

TYP. DETAILS

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

A500

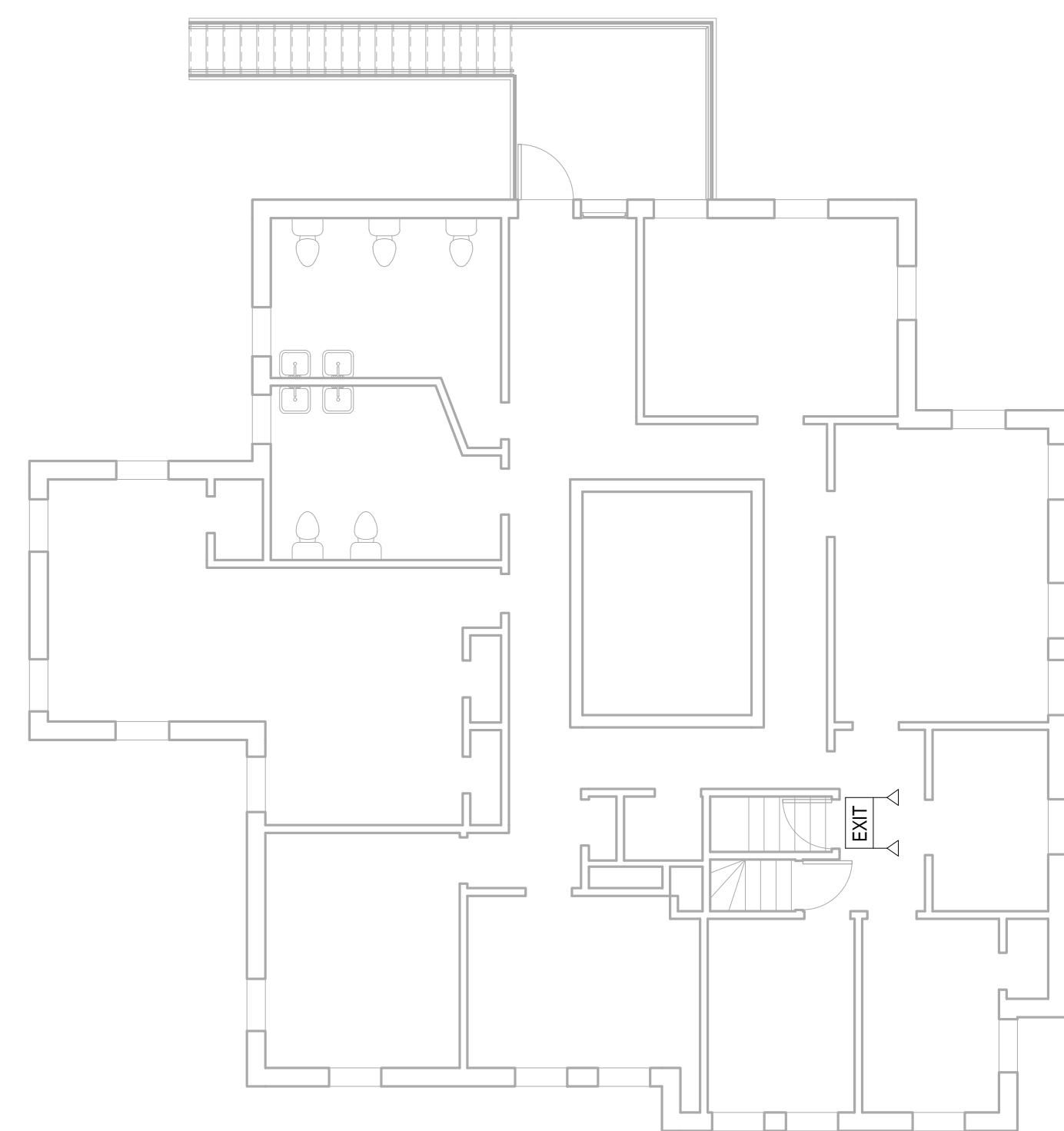
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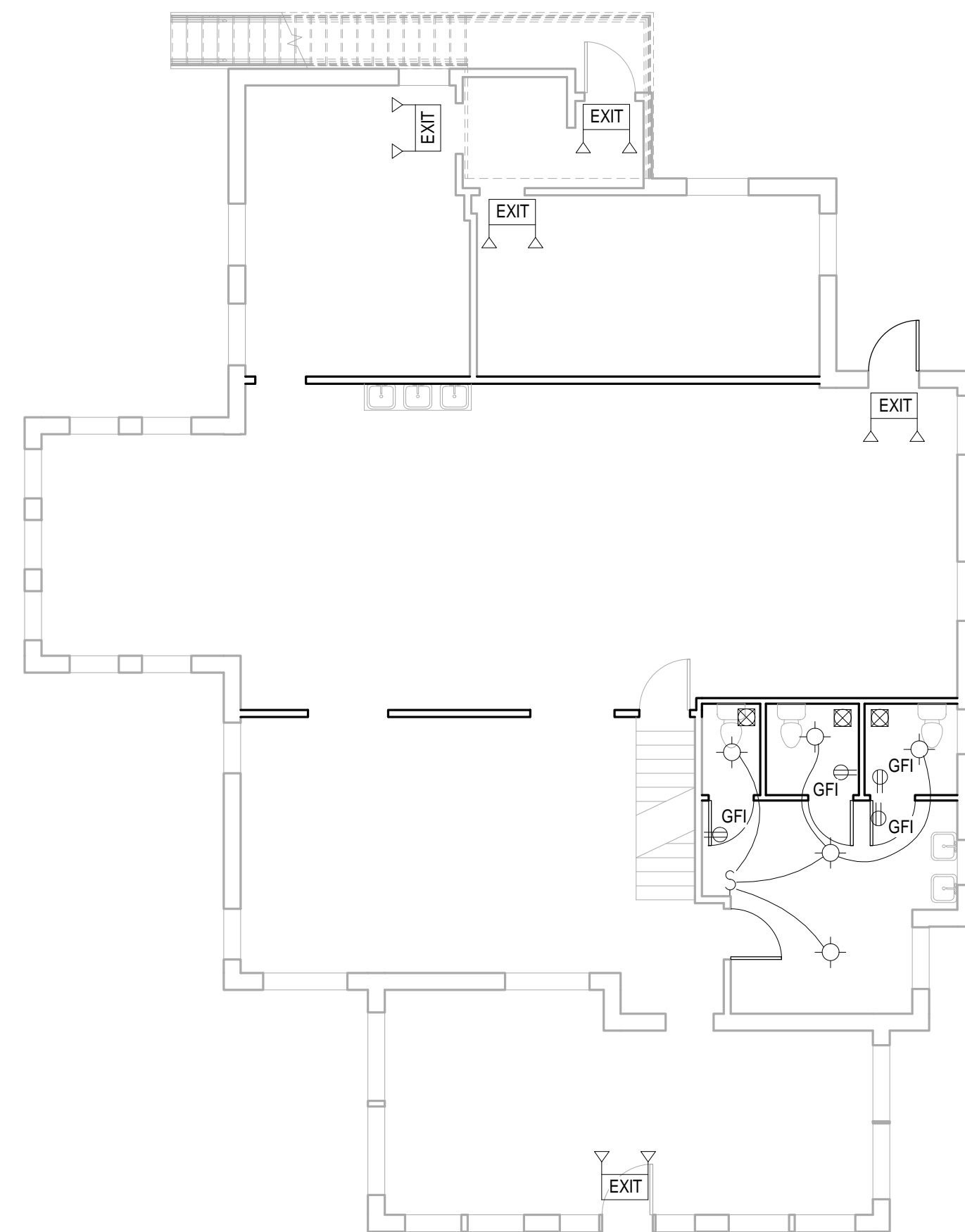
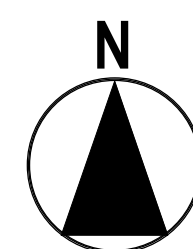
STRUCTURAL ENGINEERING BY:
 SURINAK ENGINEERING LLC
 3819 N. DELAWARE ST.
 INDIANAPOLIS, IN 46205
 317.500.3159
 WWW.SURINAKENGINEERING.COM

CLIENT:
 RABBI AVI GROSSBAUM
 CHABAD CENTER FOR JEWISH LIFE
 BLOOMINGTON, IN

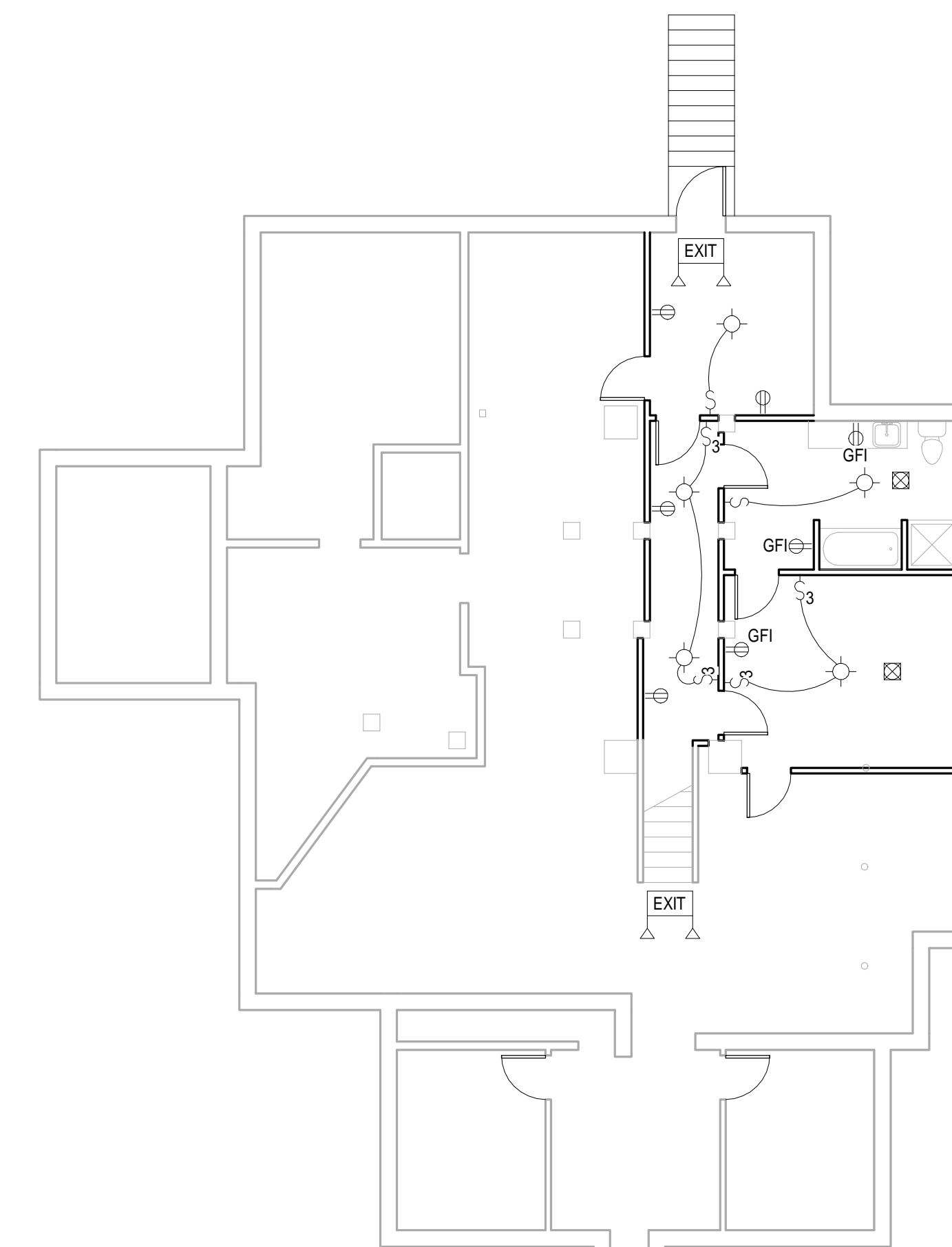
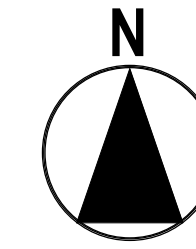
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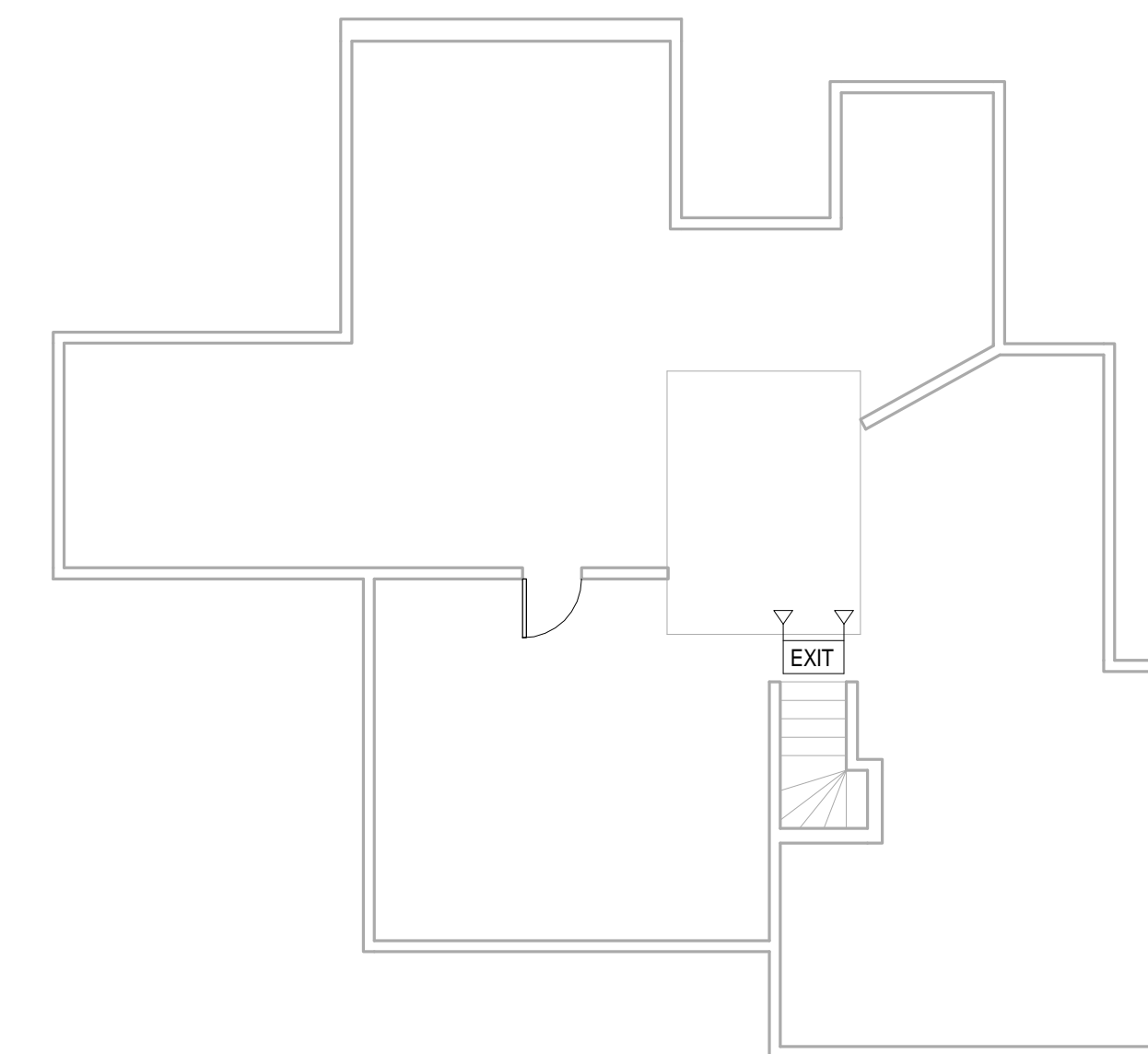
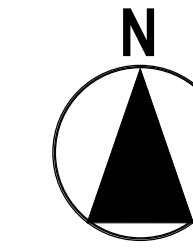
3 SECOND FLOOR ELECTRIC PLAN
 1/8" = 1'-0"



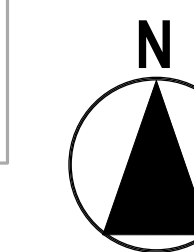
2 FIRST FLOOR ELECTRIC PLAN
 1/8" = 1'-0"



1 BASEMENT ELECTRIC PLAN
 1/8" = 1'-0"



4 THIRD FLOOR ELECTRIC PLAN
 1/8" = 1'-0"



ELECTRICAL NOTES

ELECTRICAL CONTRACTOR (E.C.) IS RESPONSIBLE FOR ALL CIRCUITING AS PER THE N.E.C. (NATIONAL ELECTRICAL CODE- LATEST EDITION) AND ALL LOCAL ORDINANCES

VERIFY ELECTRICAL SUPPLY REQUIREMENTS A.E.P./ OR LOCAL POWER COMPANY PRIOR TO BIDDING- ANY ADDITIONAL TRANSFORMER REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR

ALL FEES FOR PERMANENT AND/OR TEMPORARY ELECTRICAL SERVICE SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR

ELECTRICAL CONTRACTOR SHALL FURNISH ALL PERMITS AND FEES

ELECTRICAL CONTRACTOR SHALL REVIEW AND COORDINATE WITH THE HVAC CONTRACTOR AND VERIFY ALL ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT - ALL HOOK UPS SHALL BE THE E.C. RESPONSIBILITY

ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL DISCONNECTS AT ALL HVAC UNITS - DISCONNECTS SHALL BE NON-FUSIBLE TYPE AS PER N.E.C.

SYSTEM GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250-80 THRU 84 OF THE NATIONAL ELECTRICAL CODE

CONDUIT AND WIRE SIZE SHALL BE OF SIZE AND TYPE PERMITTED BY THE N.E.C. - MINIMUM WIRE SIZE #12 A.W.G. COPPER

ALL WIRING THAT IS IN WET AND/OR HAZARDOUS AREAS SHALL BE IN CONDUIT AND SIZED PER CODE

ALL DUPLEX OUTLETS AND SWITCHES SHALL BE G.F.I.C. TYPE WHERE WITHIN 6' 0" OF AN OPEN WATER SOURCE

EXIT LIGHTING SHALL BE WIRED AHEAD OF MAIN PANEL UNLESS LIGHTING IS SELF-CONTAINED BATTERY POWER SUPPLY WITH CHARGER AS A STAND-BY POWER SOURCE

PROVIDE EMERGENCY LIGHTS EQUIPPED WITH SELF-CONTAINED BATTERY POWER SUPPLY AND CHARGER WHERE REQUIRED BY LIFE SAFETY CODE AND/OR RELATED CODES - WIRING SHALL BE IN ACCORDANCE WITH ARTICLE 700- N.E.C.

MAIN SERVICE TO BUILDING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR / VERIFY SERVICE REQUIREMENTS WITH LOCAL ELECTRICAL UTILITY COMPANY

ALL WIRING AND CONDUITS SHALL BE RUN PARALLEL TO STRUCTURAL FRAMING MEMBERS / DIAGONAL RUNS WILL NOT BE ALLOWED UNLESS APPROVED

E. C. IS REQUIRED TO BECOME FAMILIAR WITH OTHER TRADES AND COORDINATE THE WORK TO PREVENT POSSIBLE CONFLICTS

IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO COMPLY WITH ALL STATE AND LOCAL CODES EVEN IF THE DRAWINGS INDICATE OTHERWISE

IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO GROUND THE METAL BUILDING STRUCTURAL FRAME AS PER THE NATIONAL ELEC. CODE

TELEPHONE AND DATA JACKS, JBOXES, & WIRING BY OWNER VENDORS AND INSTALLERS

AUTOMATIC LIGHTING SHUT OFF CONTROLS MUST BE ADDED FOR NEW LIGHT CIRCUIT

INDEPENDENT LIGHTING CONTROLS MUST BE INSTALLED PER THIS PLAN AND ALL MANUAL CONTROLS MUST BE READILY ACCESSIBLE AND VISIBLE TO OCCUPANTS

SEPARATE LIGHTING CONTROL DEVICES FOR SPECIFIC USES MUST BE INSTALLED PER THIS PLAN

OCCUPANCY SENSORS MUST BE INSTALLED FOR ANY NEW LIGHTING. OCCUPANCY SENSOR MUST BE ABLE TO BE DEACTIVATED IN OBSERVANCE OF RELIGIOUS HOLIDAYS - TIMER BASED ALTERNATE IS ACCEPTABLE








EXIT SIGNS ARE NOT TO EXCEED 5 WATTS PER FACE

ADDITIONAL INTERIOR LIGHTING POWER IS ALLOWED FOR SPECIAL FUNCTIONS PER THIS PLAN IF THEY ARE AUTOMATICALLY CONTROLLED AND SEPARATED FROM GENERAL LIGHTING

E. C. TO FURNISH AS-BUILT DRAWINGS AND O&M INSTRUCTIONS WITHIN 30 DAYS OF SYSTEM ACCEPTANCE

E.C. IS RESPONSIBLE FOR TESTING ALL CONTROLS PRIOR TO ACCEPTANCE

ELECTRICAL SYMBOLS

-  OUTLET
-  GFI OUTLET
-  LIGHT SWITCH
-  THREE-WAY LIGHT SWITCH
-  CEILING LIGHT
-  CEILING EXHAUST FAN VENT THROUGH ROFF, 75 CFM MIN 1'x1'
-  EMERGENCY EXIT SIGN WITH >90 MIN. BACKUP

NOTE
 SWITCHES ARE CLOCK, NOT OCCUPANCY SENSOR

NO.	DESCRIPTION	DATE

CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

ELECTRICAL PLAN

PROJECT NUMBER:	774
DATE:	3-26-2020
DRAWN BY:	JAR
CHECKED BY:	TJS

E100

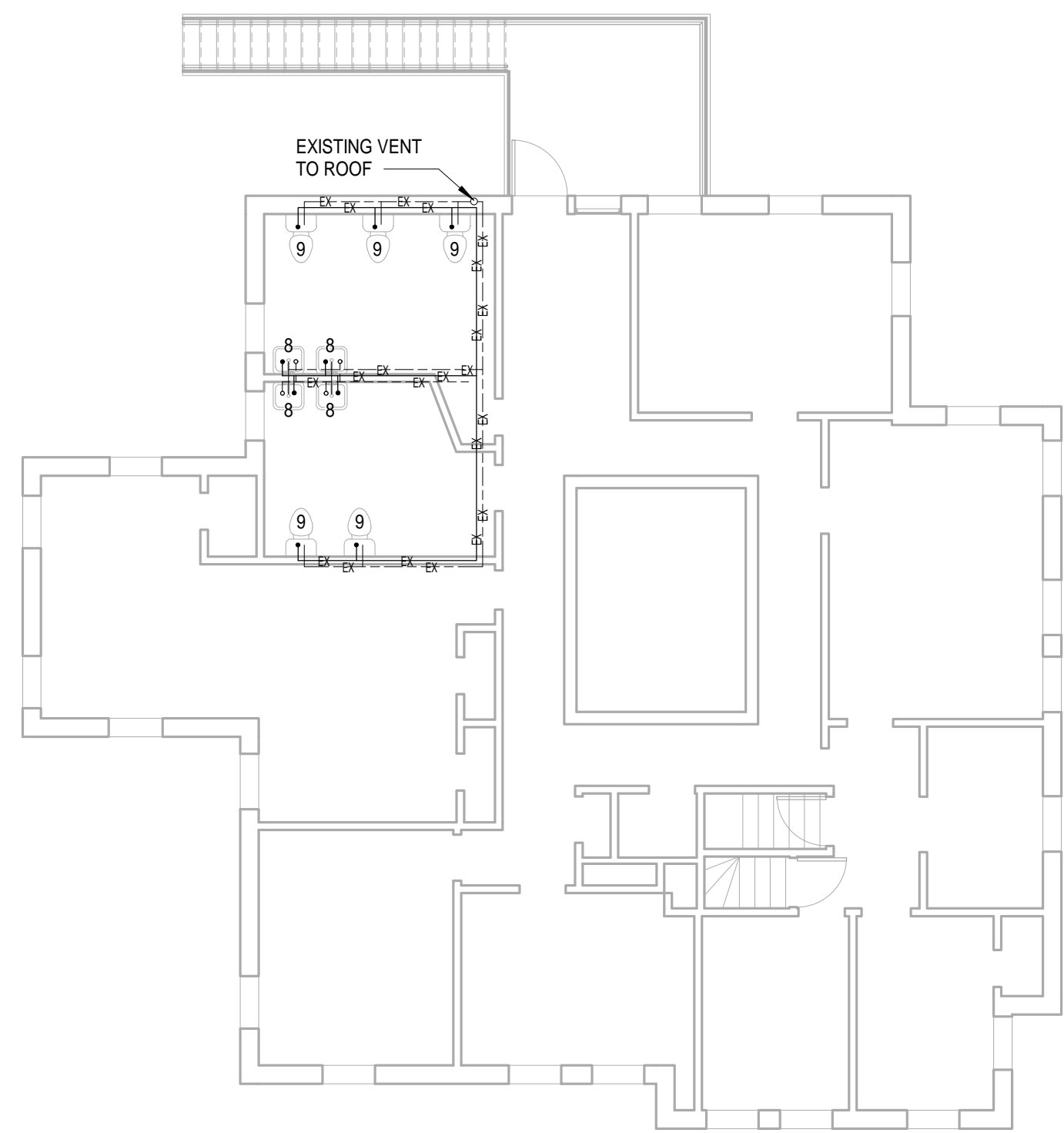
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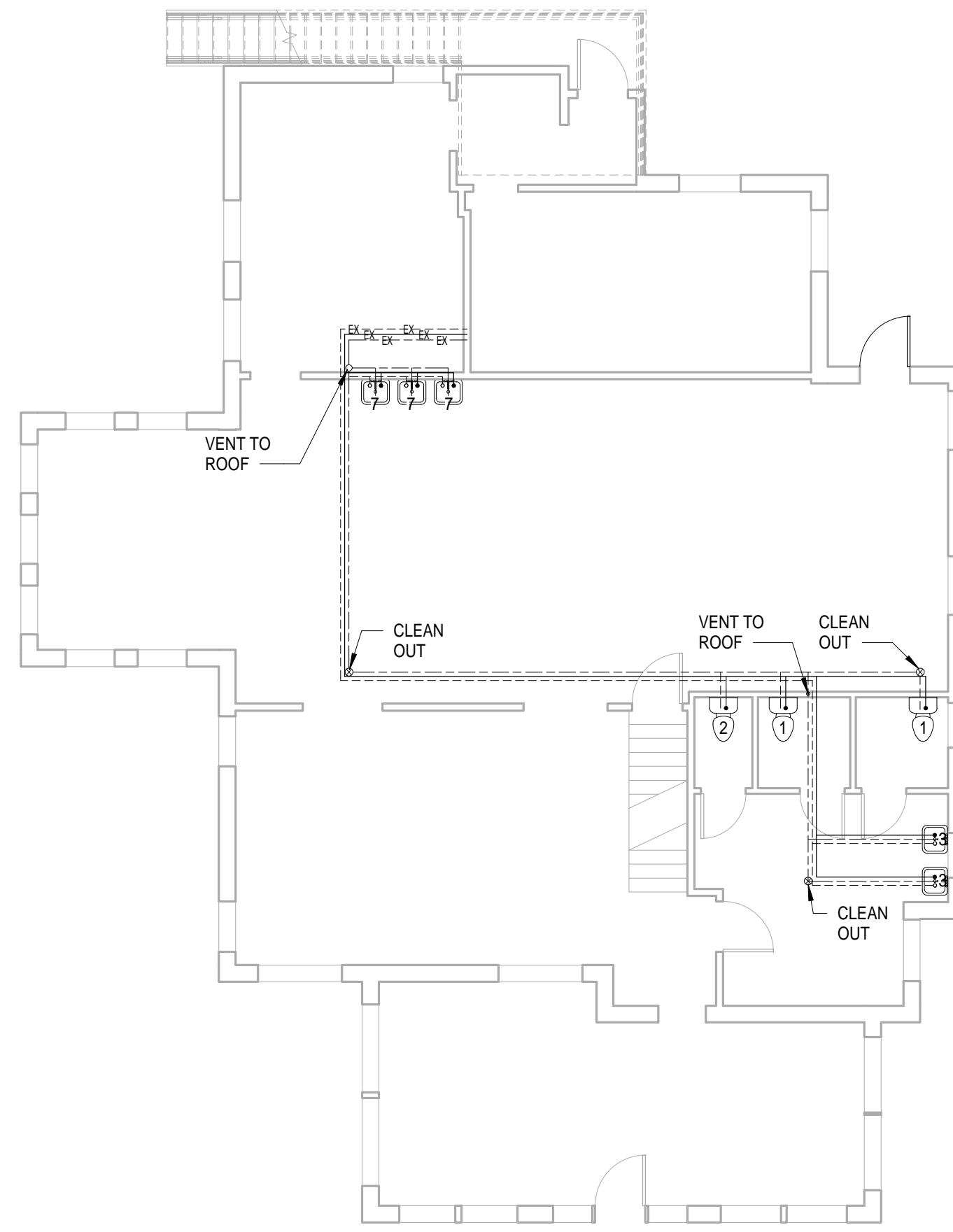
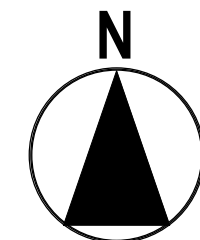
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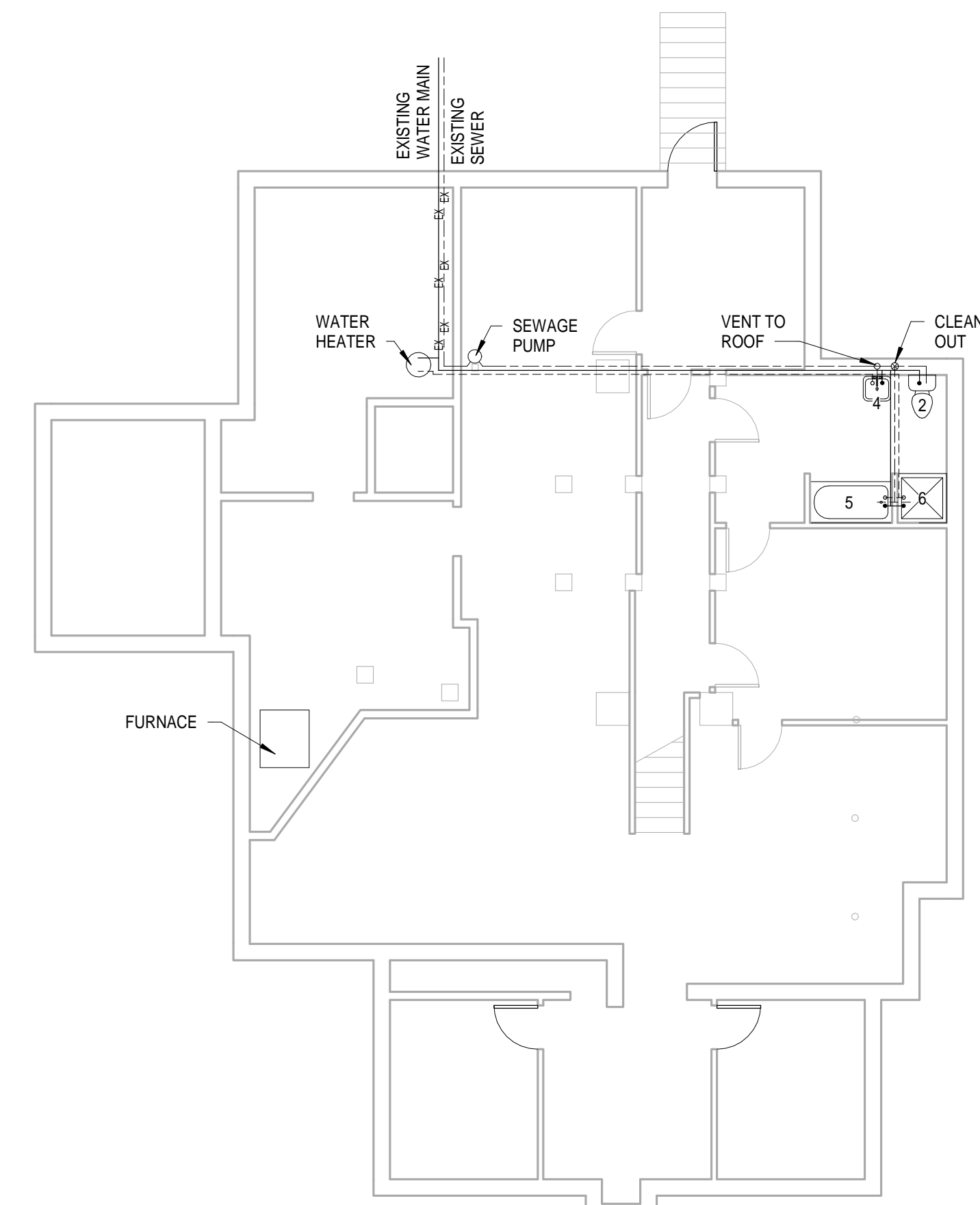
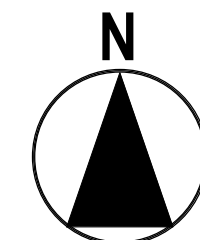
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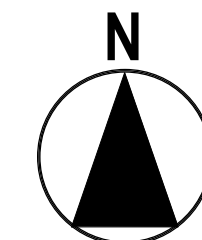
3 SECOND FLOOR PLUMBING PLAN
 1/8" = 1'-0"



2 FIRST FLOOR PLUMBING PLAN
 1/8" = 1'-0"



1 BASEMENT PLUMBING PLAN
 1/8" = 1'-0"



PLUMBING NOTES

PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PORTIONS OF THE WORK RELATED TO PLUMBING SCOPE. MEANS, METHODS, AND INSTALLATIONS SHALL MEET OR EXCEED MINIMUM REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK. COORDINATE WORK WITH OTHER TRADES PRIOR TO PLACING LINES & EQUIPMENT.

PERFORM ALL WORK IN FIRST CLASS MANNER, OF THE HIGHEST QUALITY TRUE TO LINE AND GRADE, USING NEW MATERIALS, AND IN ACCORDANCE WITH ALL APPLICABLE CODES & ORDINANCES.

PROVIDE FIRST QUALITY, COMMERCIAL GRADE FIXTURES, FAUCETS & TRIM, AS MANUFACTURED BY CRANE, AMERICAN STANDARD OR APPROVED EQUAL, MEETING REQUIREMENTS OF A.D.A.. WATER SAVING STANDARDS, & APPLICABLE PLUMBING CODES.

PROVIDE SUBMITTALS ON FAUCETS, FIXTURES, TRIM AND EQUIPMENT FOR APPROVAL BY OWNER.

WATER CLOSETS SHALL HAVE AN ELONGATED RIM AND SPLIT FRONT SEAT. URINALS SHALL HAVE ELONGATED RIM.

LAVATORIES SHALL BE ADA APPROVED, SINGLE BOWL TYPE, WALL HUNG OR SELF-RIMMING (RE: ARCH. DWGS.) W/ LEVER HANDLE FAUCET.

ALL SUPPLY PIPING LARGER THAN 1" NOMINAL DIAMETER SHALL BE "ZURNPEX" TUBING OR APPROVED EQUAL / ALL PIPING 1" OR SMALLER SHALL BE PEX TUBING WITH MECHANICAL CONNECTIONS AS RECOMMENDED BY TUBING MANUFACTURER. COLOR CODE TUBING: BLUE FOR COLD WATER / RED FOR HOT WATER

PROVIDE IN-LINE GATE VALVES TO ISOLATE EACH MAJOR SUPPLY BRANCH. PROVIDE STOPS FOR EACH FIXTURE AND INSULATION VALVES FOR EACH PIECE OF EQUIPMENT. INSULATE ALL LINES

WASTE & VENT LINES & CONNECTIONS SHALL BE SCHEDULE 40 PVC DWV ABOVE AND BELOW GRADE, EXCEPT WHERE NOT ALLOWED BY CODE.

VERIFY UTILITY CONNECTION POINTS W/OWNER & LOCAL UTILITY PRIOR TO BEGINNING WORK.

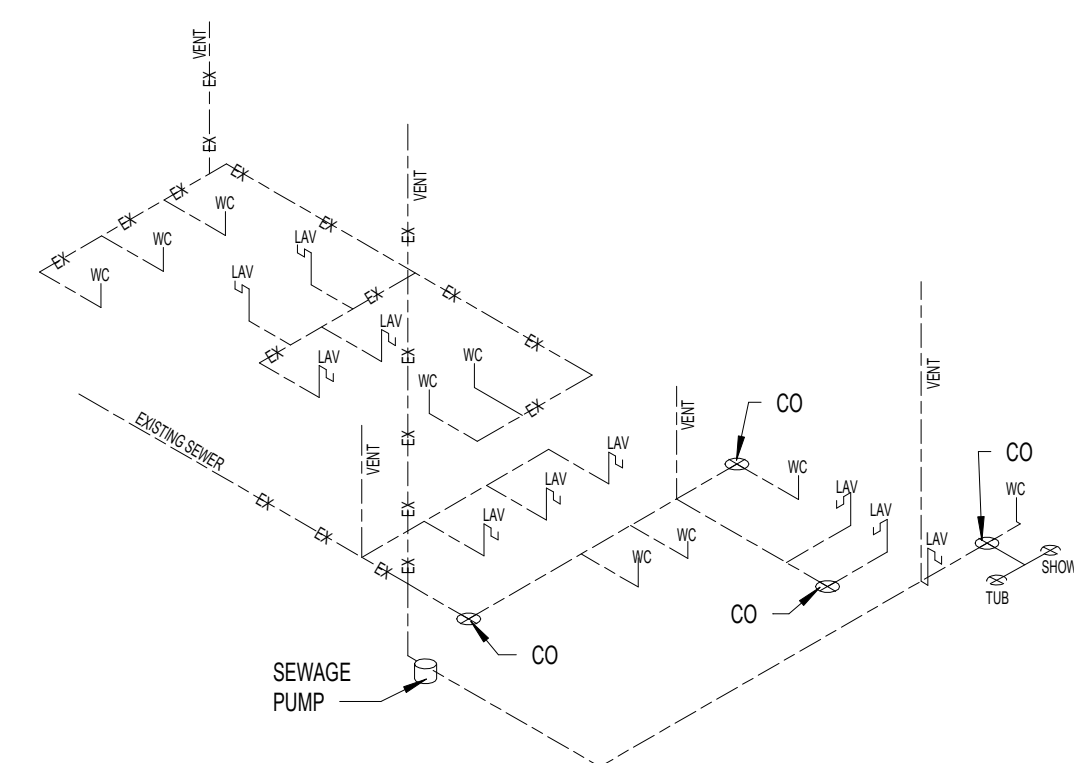
SANITIZE SYSTEM BEFORE FINAL OCCUPANCY BY OWNER. FLUSH SYSTEM TO REMOVE SANITIZING AGENTS.

PROVIDE O & M MANUALS, AS-BUILTS DWGS., SPARE PARTS LIST, AND MINIMUM 1YEAR WARRANTY ON ALL LABOR & MATERIALS INSTALLED.

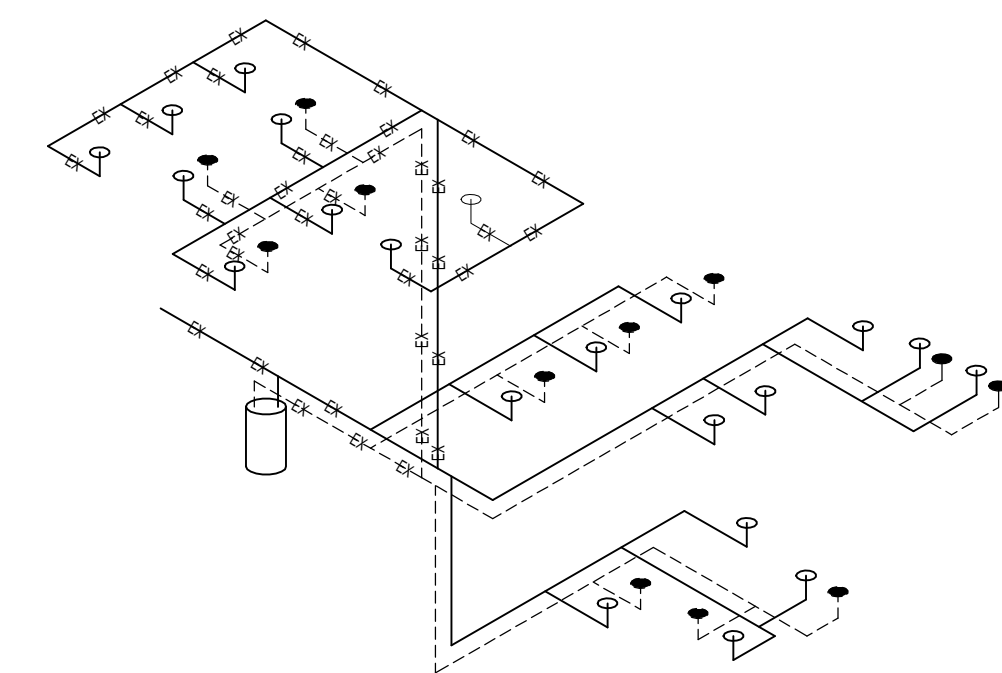
OWNER TO PROVIDE WATER FREE OF CHARGE TO THE PUBLIC PER 675IAC13-2.6-29(h) - IN LIEU OF DRINKING FOUNTAIN

LEGEND	
---	EXISTING WASTE PIPING
---	EXISTING COLD WATER
---	EXISTING HOT WATER
---	WASTE PIPING
---	COLD WATER
---	HOT WATER

FIXTURE SCHEDULE		
MARK	FIXTURE	STYLE
1	WATER CLOSET	ADA - FILL TANK - MANUAL FLUSH
2	WATER CLOSET	FILL TANK - MANUAL FLUSH
3	LAVATORY	ADA - CUSTOMER SELECTED
4	LAVATORY	CUSTOMER SELECTED
5	TUB	CUSTOMER SELECTED
6	SHOWER	CUSTOMER SELECTED
7	SINK	CUSTOMER SELECTED
8	LAVATORY	EXISTING
9	WATER CLOSET	EXISTING



5 WASTE PIPING DIAGRAM
 1/4" = 1'-0"



4 WATER SUPPLY DIAGRAM
 1/4" = 1'-0"

NO.	DESCRIPTION	DATE

CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

PLUMBING PLAN

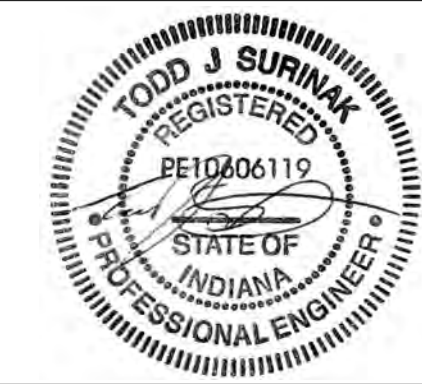
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NOTES:

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE 2014 EDITION OF THE INDIANA RESIDENTIAL CODE AND TO ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE SER WILL NOT ADVISE ON, NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
- THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION DESIGN, SAFETY, ADEQUACY, AND INSPECTION OF THE BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE SER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL OF THE SER.
- ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS.
- LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD-CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE "DESIGN DATA" NOTES. DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS PROPERLY CONNECTED TOGETHER AND UNTIL ALL PERMANENT BRACING IS IN PLACE.
- ALL ASTM AND OTHER REFERENCED STANDARDS AND CODES ARE FOR THE LATEST EDITIONS OF THESE PUBLICATIONS, UNLESS NOTED OTHERWISE.
- SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE SER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR BEFORE SUBMITTAL. THE SER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS.
- IN NO CASE SHALL REPRODUCTIONS OF THE CONTRACT DOCUMENTS BE USED AS SHOP DRAWINGS. AS A MINIMUM, SUBMIT THE FOLLOWING ITEMS FOR REVIEW.
 - CONCRETE MIX DESIGNS
 - REINFORCING STEEL SHOP DRAWINGS
- RESUBMITTED SHOP DRAWINGS: RESUBMITTED SHOP DRAWINGS ARE REVIEWED ONLY FOR RESPONSES TO COMMENTS MADE IN THE PREVIOUS SUBMITTAL.
- WHEN CALCULATIONS ARE INCLUDED IN THE SUBMITTALS FOR COMPONENTS OF WORK DESIGNED AND CERTIFIED BY A SPECIALTY STRUCTURAL ENGINEER (SSE), THE REVIEW BY THE STRUCTURAL ENGINEER OF RECORD (SER) SHALL BE FOR CONFORMANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE SER'S REVIEW DOES NOT RELIEVE THE SPECIALTY STRUCTURAL ENGINEER FROM RESPONSIBILITY FOR THE DESIGN OF THE SYSTEMS AND THE COORDINATION WITH THE ELEMENTS OF THE STRUCTURE UNDER THE CERTIFICATION OF THE STRUCTURAL ENGINEER OF RECORD, OR OTHER SPECIALTY STRUCTURAL ENGINEER. THE SER'S REVIEW DOES NOT CONSTITUTE A WARRANTY OF THE ACCURACY OR COMPLETENESS OF THE SPECIALTY STRUCTURAL ENGINEER'S DESIGN.
- CONTRACTORS SHALL VISIT THE SITE PRIOR TO BID TO ASCERTAIN CONDITIONS WHICH MAY ADVERSELY AFFECT THE WORK OR COST THEREOF.
- NO STRUCTURAL MEMBER MAY BE CUT, NOTCHED, OR OTHERWISE REDUCED IN STRENGTH WITHOUT WRITTEN DIRECTION FROM THE SER.
- WHEN MODIFICATIONS ARE PROPOSED TO STRUCTURAL ELEMENTS UNDER THE DESIGN AND CERTIFICATION OF A SPECIALTY STRUCTURAL ENGINEER, WRITTEN AUTHORIZATION BY THE SPECIALTY STRUCTURAL ENGINEER MUST BE OBTAINED AND SUBMITTED TO THE SER FOR REVIEW, PRIOR TO PERFORMING THE PROPOSED MODIFICATIONS.

CONCRETE REINFORCING

- REINFORCEMENT, OTHER THAN COLD DRAWN WIRE FOR SPIRALS AND WELDED WIRE FABRIC, SHALL HAVE DEFORMED SURFACES IN ACCORDANCE WITH ASTM A305.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, UNLESS NOTED.
- WHERE HOOKS ARE INDICATED, PROVIDE STANDARD HOOKS PER ACI AND CRSI FOR ALL BARS UNLESS OTHER HOOK DIMENSIONS ARE SHOWN ON THE PLANS OR DETAILS.
- REINFORCEMENT IN FOOTINGS, WALLS AND BEAMS SHALL BE CONTINUOUS. LAP BARS A MINIMUM OF 36 DIAMETERS, UNLESS NOTED OTHERWISE.
- REINFORCEMENT SHALL BE SUPPORTED AND SECURED AGAINST DISPLACEMENT IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTES' MANUAL OF STANDARD PRACTICE.
- DETAILS OF REINFORCING STEEL FABRICATION AND PLACEMENT SHALL CONFORM TO ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI 318R "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES", UNLESS OTHERWISE INDICATED.
- SPREAD REINFORCING STEEL AROUND SMALL OPENINGS AND SLEEVES IN SLABS AND WALLS, WHERE POSSIBLE, AND WHERE BAR SPACING WILL NOT EXCEED 15 TIMES THE NORMAL SPACING, DISCONTINUE BARS AT ALL LARGE OPENINGS WHERE NECESSARY, AND PROVIDE AN AREA OF REINFORCEMENT, EQUAL TO THE INTERRUPTED REINFORCEMENT, IN FULL LENGTH BARS, DISTRIBUTING ONE-HALF EACH SIDE OF THE OPENING. WHERE SHRINKAGE AND TEMPERATURE REINFORCEMENT IS INTERRUPTED, ADD (2) #5X OPENING DIMENSION + 4" ON EACH SIDE OF THE OPENING. PROVIDE #5X4" DIAGONAL BARS IN BOTH FACES, AT EACH CORNER OF OPENINGS LARGER THAN 12" IN ANY DIRECTION.
- PROVIDE STANDEES FOR THE SUPPORT OF TOP REINFORCEMENT FOR FOOTINGS, PILE CAPS, AND MAT FOUNDATIONS.
- PROVIDE INDIVIDUAL HIGH CHAIRS, WITH SUPPORT BARS, AS REQUIRED FOR THE SUPPORT OF TOP REINFORCEMENT FOR SUPPORTED SLABS.
- WHERE WALLS SIT ON COLUMN FOOTINGS, PROVIDE DOWELS FOR THE WALL. DOWELS SHALL BE THE SAME SIZE AND SPACING AS THE VERTICAL WALL REINFORCEMENT, UNLESS NOTED OTHERWISE. WITH LAP SPLICES AS SHOWN ON THE APPLICATION SECTIONS, INSTALL DOWELS IN THE FOOTING FOR MS BEFORE CONCRETE IS PLACED. DO NOT STICK DOWELS INTO FOOTINGS AFTER CONCRETE IS PLACED.
- MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE AS SPECIFIED ON THIS SHEET UNLESS NOTED OTHERWISE ON PLAN.

CONCRETE

- THE MIXING, HANDLING, PLACING, AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH THE ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318).
- ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301, ACI 318 AND ACI 306. DO NOT PLACE DURING RAIN, SLEET, OR SNOW WITHOUT ADEQUATE PROTECTION. HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.
- WALL FOOTINGS AND SPREAD FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AND SLABS ON GRADE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.
- CONTRACTOR SHALL FURNISH A MIX DESIGN FOR EACH CLASS OF CONCRETE SPECIFIED.
- SLAB ON GRADE CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION (ACI 302.1R).
- DO NOT FINISH SURFACE UNTIL CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE WATER. DO NOT SPRINKLE CEMENT ON SLAB SURFACE.
- COMPRESSIVE STRENGTH TEST SHALL CONFORM TO THE REQUIREMENTS OF ASTM C39.
- AIR ENTRAINMENT 4%-6% IN ALL EXPOSED CONCRETE.
- SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL AND MIX DESIGNS FOR REVIEW PRIOR TO PLACING ANY CONCRETE.

MINIMUM COVER FOR REINFORCEMENT

FORMED CONCRETE SURFACES EXPOSED TO EARTH, WATER, OR WEATHER, AND OVER OR IN CONTACT WITH SEWAGE AND FOR BOTTOMS BEARING ON:
 BARS: 3"

DESIGN DATA

LIVE LOAD	
ROOF LOAD	20 PSF
ASSEMBLY AREA	100 PSF
BUSINESS AREA	50 PSF
REAR DECK	50 PSF
GROUND SNOW LOAD	20 PSF
ROOF LOAD	20 PSF

EXISTING STRUCTURE THAT IS REMAINING SAME OCCUPANCY HAS NOT BEEN STRUCTURALLY EVALUATED

FOUNDATIONS

- PROOFROLL SLAB ON GRADE AREAS WITH A MEDIUM-WEIGHT ROLLER OR OTHER SUITABLE EQUIPMENT TO CHECK FOR POCKETS OF SOFT MATERIAL HIDDEN BENEATH A THIN CRUST OF BETTER SOIL. ANY UNSUITABLE MATERIALS THIS EXPOSED SHOULD BE REMOVED AND REPLACED WITH COMPACTED, ENGINEERED FILL AS OUTLINED IN THE SPECIFICATIONS. PROOF ROLLING OPERATIONS SHALL BE MONITORED BY THE GEOTECHNICAL TESTING AGENCY.
- ALL ENGINEERED FILL BENEATH SLABS AND OVER FOOTINGS SHOULD BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557). ALL FILL WHICH SHALL BE STRESSED BY FOUNDATION LOADS SHALL BE APPROVED GRANULAR MATERIALS COMPACTED TO A DRY DENSITY OF AT LEAST 95% (ASTM D 1557). COORDINATE ALL FILL AND COMPACTION OPERATIONS WITH THE SPECIFICATIONS AND THE SUBSURFACE INVESTIGATION.
- COMPACTION SHALL BE ACCOMPLISHED BY PLACING FILL IN APPROX. 6" LIFTS AND MECHANICALLY COMPACTING EACH LIFT TO AT LEAST THE SPECIFIED MINIMUM DRY DENSITY. FOR LARGE AREAS OF FILL, FIELD DENSITY TESTS SHALL BE PERFORMED FOR EACH 3,000 SQUARE FEET OF BUILDING AREA FOR EACH LIFT AS NECESSARY TO INSURE ADEQUATE COMPACTION IS BEING ACHIEVED.
- COLUMN FOOTINGS AND WALL FOOTINGS TO BEAR ON FIRM NATURAL SOILS OR WELL COMPACTED ENGINEERED FILL WITH ALLOWABLE BEARING PRESSURE OF 1,500 PSF. IT IS ESSENTIAL THAT THE FOUNDATIONS BE INSPECTED TO ENSURE THAT ALL LOOSE, SOFT OR OTHERWISE UNDESIRABLE MATERIAL (SUCH AS ORGANICS, EXISTING FILL, ETC.) IS REMOVED AND THAT THE FOUNDATION WILL BEAR ON SATISFACTORY MATERIAL. THE GEOTECHNICAL TESTING AGENCY SHALL INSPECT THE SUBGRADE AND PERFORM ANY NECESSARY TESTS TO ENSURE THAT THE ACTUAL BEARING CAPACITIES MEET OR EXCEED THE DESIGN CAPACITIES. THE TESTING AGENCY SHALL VERIFY THE BEARING CAPACITY AT EACH SPREAD COLUMN FOOTING AND EVERY 10 FEET ON CENTER FOR STRIP FOOTINGS PRIOR TO PLACEMENT OF CONCRETE.
- PLACE FOOTINGS THE SAME DAY THE EXCAVATION IS PERFORMED. IF THIS IS NOT POSSIBLE, THE FOOTINGS SHALL BE ADEQUATELY PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS FROM DISTURBANCE, RAIN AND FREEZING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND EACH SUB-CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND SERVICES SHOWN, OR NOT SHOWN, AND ESTABLISH SAFE WORKING CONDITIONS BEFORE COMMENCING WORK.
- THE CONTRACTOR SHALL LAYOUT THE ENTIRE BUILDING AND FIELD VERIFY ALL DIMENSIONS PRIOR TO EXCAVATION.
- INTERIOR FOOTINGS SHALL HAVE MIN 6" COVER OVER TOE, U.N.O.

MASONRY

- MASONRY HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 531/ASCE 5-11) AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-11), EXCEPT WHERE MODIFIED BY THESE GENERAL NOTES AND SPECIFICATIONS.
- MORTAR FOR NEW BRICK SHALL CONFORM TO ASTM C270, TYPE M OR S. MORTAR FOR OLD BRICK TO BE OF LESSER STRENGTH THAN THE OLD BRICK. ALL PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE 1. LIME SHALL CONFORM TO ASTM C207 AND MASONRY CEMENT SHALL CONFORM TO ASTM C91.
- GROUT SHALL CONFORM TO ASTM C476 AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- CONCRETE BLOCK UNITS SHALL BE SOLID AND HOLLOW LOAD BEARING UNITS PER ASTM C90, TYPE N-1, AS REQUIRED TO PROVIDE 28 DAY COMPRESSIVE STRENGTH, 1m AS NOTED BELOW.
- MINIMUM 28-DAY COMPRESSIVE STRENGTH OF MASONRY, 1m SHALL BE 1,500 PSI, UNLESS NOTED OTHERWISE.
- VERTICAL REINFORCEMENT: PROVIDE A MINIMUM OF #5 @48" IN 10" CMU WALLS U.N.O. SECURE REINFORCEMENT WITH VERTICAL BAR POSITIONERS, SINGLE OR DOUBLE REBAR POSITIONERS. LAP BARS A MINIMUM OF 32". PROVIDE #5 @ 24" FOR ALL MASONRY SHAFT WALLS.
- HORIZONTAL REINFORCEMENT: PROVIDE 3 GAUGE LADDER TYPE JOINT REINFORCEMENT FORMED FROM GALVANIZED CARBON STEEL WIRE, ASTM A185, CLASS B-2, FOR BOTH INTERIOR AND EXTERIOR WALLS. SPACE REINFORCEMENT 16" O.C. (6" LAP MINIMUM), CUT OR INTERRUPT REINFORCING AT CONTROL JOINTS.
- ADDITIONAL REINFORCEMENT: PROVIDE A MINIMUM OF (1) #5 AT CORNERS, WITHIN 16" OF EACH SIDE OF OPENINGS, WITHIN 8" OF EACH SIDE OF CONTROL JOINTS AND WITHIN 8" OF THE ENDS OF WALLS. BOND BEAMS SHALL HAVE (2) #5'S CONTINUOUS AND REINFORCEMENT SHALL BE TURNED AND LAPPED AT ALL CORNERS AND INTERSECTIONS.
- BOND BEAMS SHALL BE PROVIDED AT EACH FRAMING LEVEL.
- FILL ALL CELLS IN TOP TWO COURSES BELOW FINISHED FLOOR, CMU LINTELS, BOND BEAMS, AND BEAM BEARINGS AND CELLS WITH REINFORCEMENT FULL HEIGHT SOLID WITH GROUT.
- HOLLOW CONCRETE UNITS BELOW GRADE AND SLAB ON GRADE SHALL BE NORMAL WEIGHT AND HAVE ALL CELLS GROUTED SOLID.
- PROVIDE AND INSTALL TEMPORARY BRACING REQUIRED INSURING STABILITY OF ALL WALLS DURING CONSTRUCTION AND UNTIL ERECTION OF ATTACHED STRUCTURAL FRAMING IS COMPLETED.
- ALLOW GROUT IN REINFORCED CMU WALLS TO CURE A MINIMUM OF 48 HOURS BEFORE IMPOSING CONCENTRATED OR OTHER LOADS FROM ABOVE.
- ALL PERS AND PARTITIONS SHALL BE BONDED OR ANCHORED TO ADJACENT MASONRY WALLS. PROVIDE TIES TO ADJACENT FLOOR AND ROOF CONSTRUCTION IN ACCORDANCE WITH DETAILS ON DRAWINGS.
- THE TESTING AND INSPECTION AGENCY SHALL MONITOR PROPORTIONING, MIXING, AND CONSISTENCY OF MORTAR AND GROUT; THE PLACEMENT OF THE MASONRY UNITS, AND MATERIALS, AND THE PLACEMENT OF REINFORCING STEEL.

WOOD

- ALL WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN WOOD COUNCILS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION," CURRENT EDITION.
- ALL JOIST, RAFTER & MISC. FRAMING SHALL BE NO. 1 GRADE, SOUTHERN PINE, U.N.O. PROVIDE FULL-DEPTH (OR METAL) BRIDGING AT MIDSPAN AND AT MAXIMUM SPACING OF 8'-0" O.C. IN BETWEEN.
- ALL FRAMING EXPOSED TO THE WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION SPECIFICATIONS. WHERE POSSIBLE, ALL CUTS AND HOLES SHOULD BE COMPLETED BEFORE TREATMENT. CUTS AND HOLES DUE TO ON-SITE FABRICATION SHALL BE BRUSHED WITH 2 COATS OF COPPER NAPHTHENE SOLUTION CONTAINING A MINIMUM OF 2% METALLIC COPPER IN SOLUTIONS (PER AWWA STD. M4).
- THE CONTRACTOR SHALL CAREFULLY SELECT LUMBER TO BE USED IN LOAD BEARING APPLICATIONS. THE LENGTH OF SPLIT ON THE WIDE FACE OF 2" NOMINAL LOADING BEARING FRAMING SHALL BE LIMITED TO LESS THAN 1/4 OF THE WIDE FACE DIMENSION. THE LENGTH OF SPLIT ON THE WIDE FACE OF 3" (NOMINAL) AND THICKER LUMBER SHALL BE LIMITED TO 1/4 OF THE NARROW FACE DIMENSION.
- STRUCTURAL STEEL PLATE CONNECTORS SHALL CONFORM TO ASTM A-36 SPECIFICATIONS AND BE 1/2" THICK UNLESS OTHERWISE INDICATED. BOLTS CONNECTING WOOD MEMBERS SHALL BE PER ASTM A-307 AND BE 1/2" DIAMETER UNLESS OTHERWISE INDICATED. PROVIDE WASHERS FOR ALL BOLT HEADS AND NUTS IN CONTACT WITH WOOD SURFACES. PROVIDE HOT DIP GALVANIZED LUMBER (LVL) BEAMS AND HEADERS TO HAVE A MIN. F_b OF 2,800 PSI AND E_{min} OF 2,000,000 PSI.
- BOLT HOLES SHALL BE CAREFULLY CENTERED AND DRILLED NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. BOLTED CONNECTIONS SHALL BE SNUGGED TIGHT BUT NOT THE EXTENT OF CRUSHING WOOD UNDER WASHERS.
- ALL NAILING AND BRACING NOT OTHERWISE INDICATED SHALL BE IN ACCORDANCE WITH THE 2014 INDIANA BUILDING CODE.
- PREFABRICATED METAL JOIST HANGERS, HURRICANE CLIPS, HOLD-DOWN ANCHORS AND OTHER ACCESSORIES SHALL BE AS MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY," OR APPROVED EQUAL. INSTALL ALL ACCESSORIES PER THE MANUFACTURER'S REQUIREMENTS. ALL STEEL SHALL HAVE A MINIMUM THICKNESS OF 0.04 INCHES (PER ASTM A446, GRADE A) AND BE GALVANIZED (COATING G60).
- HOLES AND NOTCHES DRILLED OR CUT INTO WOOD FRAMING SHALL NOT EXCEED THE REQUIREMENTS OF THE CURRENT EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
- SILL PLATES SHALL BE ANCHORED WITH 5/8" Ø ANCHORS WITH 7" EMBEDDMENT MAXIMUM 32" O.C. AND MAXIMUM 8" FROM WALL ENDS.
- ALL FLOOR SHEATHING/SUBFLOOR SHALL BE 3/4" NOMINAL (23/32" ACTUAL) ADVANTECH BY HUBER ENGINEERED WOODS, LLC WITH TONGUE AND GROOVE EDGES, UNLESS OTHERWISE NOTED. REFER TO PLANS AND MANUFACTURER'S RECOMMENDATIONS FOR FASTENING REQUIREMENTS.

NO.	DESCRIPTION	DATE

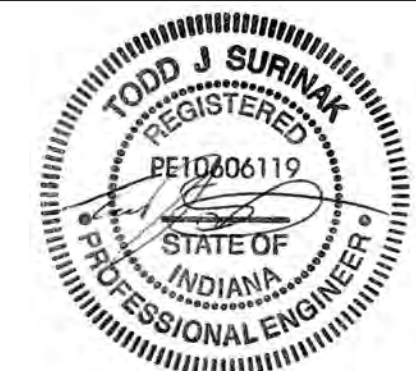
CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

STRUCTURAL GENERAL NOTES

PROJECT NUMBER:	774
DATE:	3-26-2020
DRAWN BY:	JAR
CHECKED BY:	TJS

S001

SCALE: AS NOTED

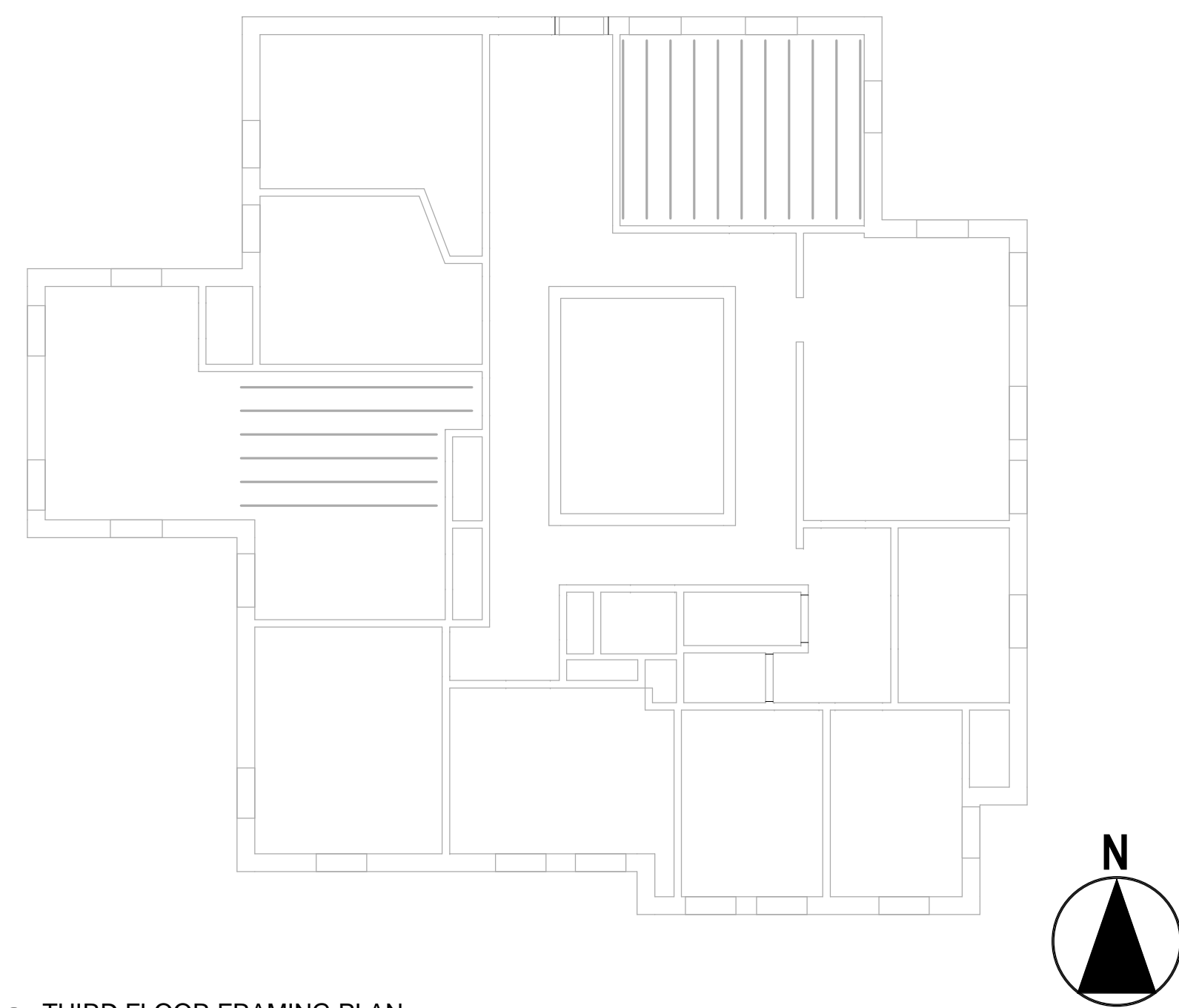


STRUCTURAL ENGINEERING BY:
 SURINAK ENGINEERING LLC
 3819 N. DELAWARE ST.
 INDIANAPOLIS, IN 46205
 317.500.3159
 WWW.SURINAKENGINEERING.COM

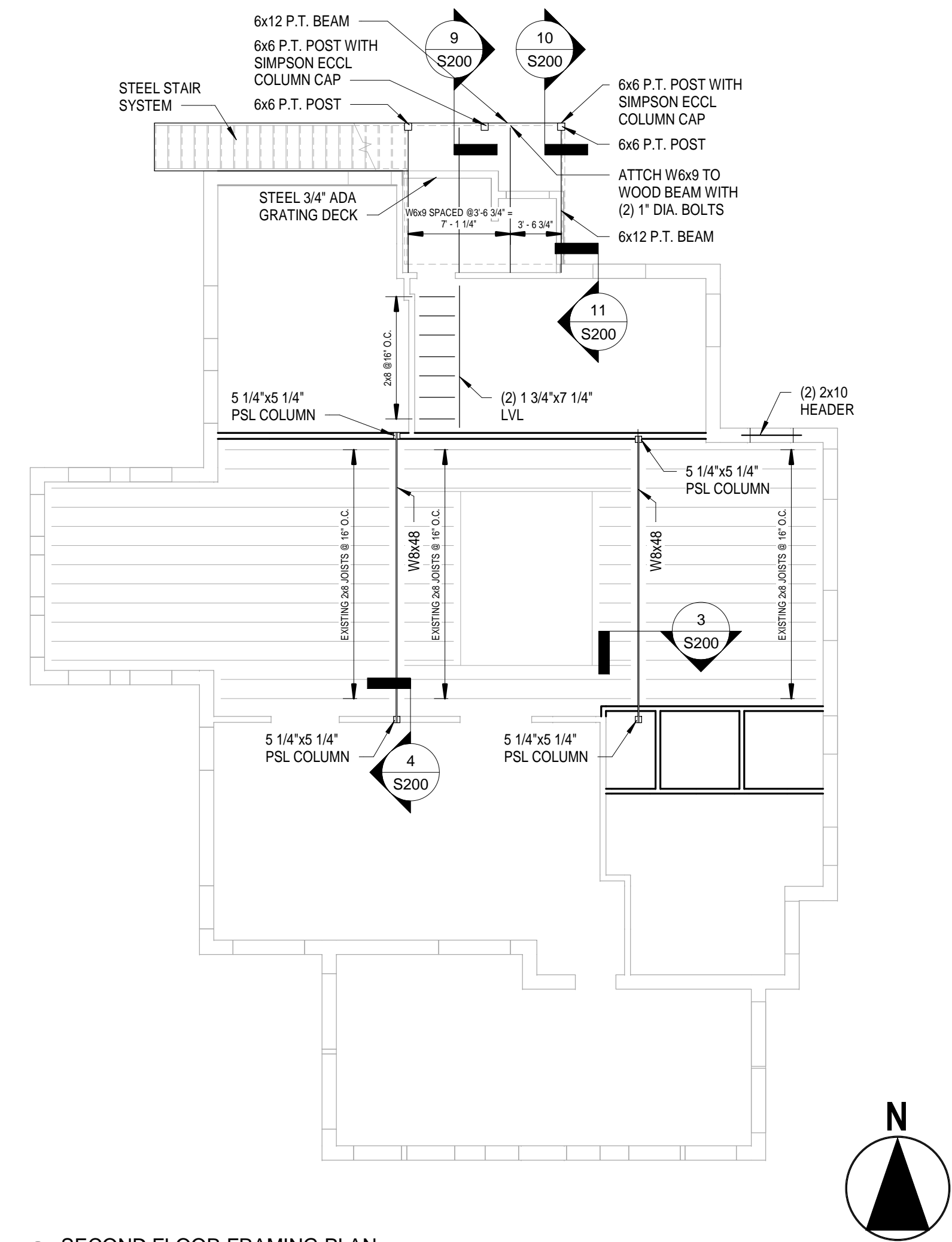
CLIENT:
 RABBI AVI GROSSBAUM
 CHABAD CENTER FOR JEWISH LIFE
 BLOOMINGTON, IN

NOTES:

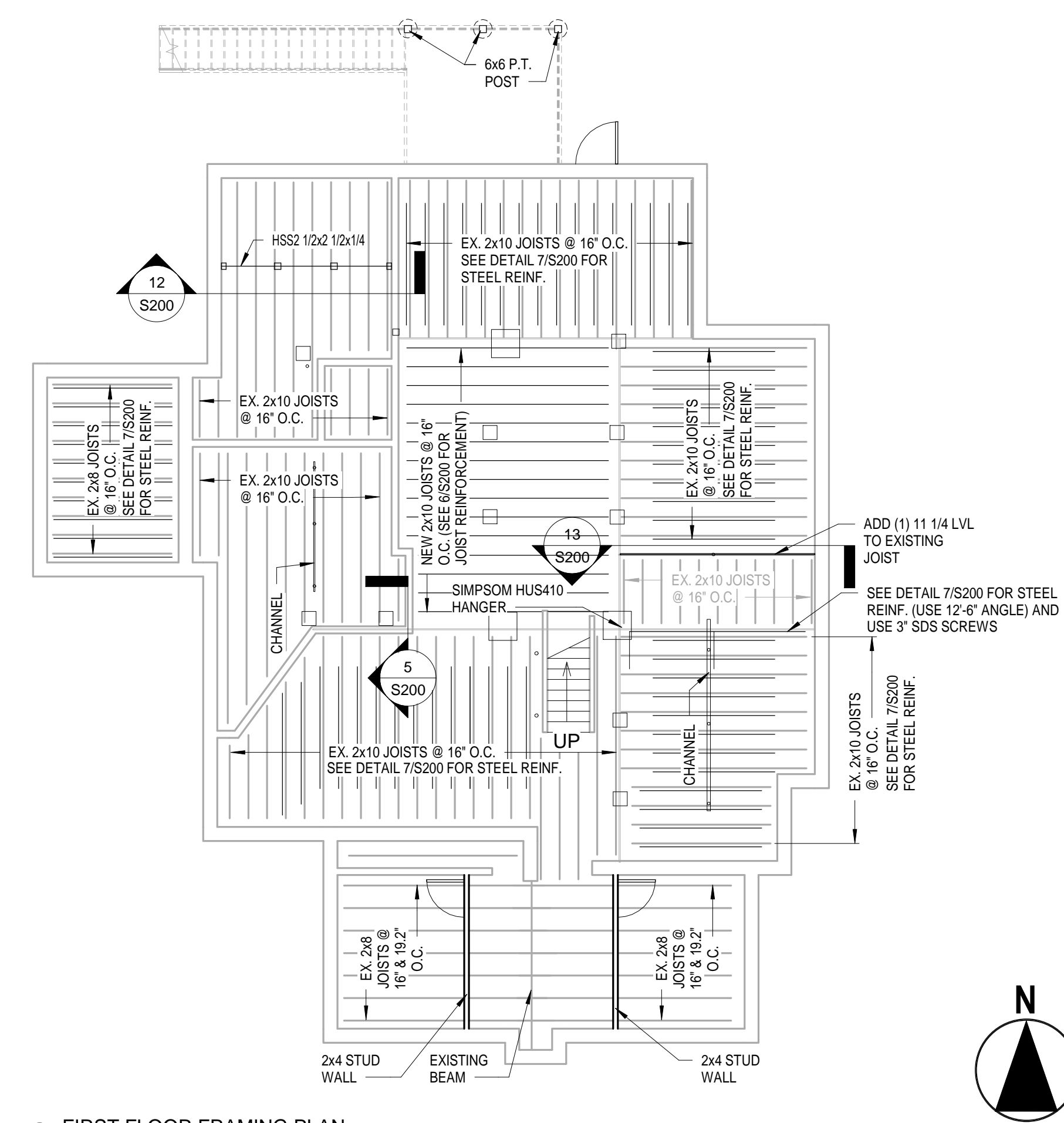
③ THIRD FLOOR FRAMING PLAN
 1/8" = 1'-0"



② SECOND FLOOR FRAMING PLAN
 1/8" = 1'-0"



① FIRST FLOOR FRAMING PLAN
 1/8" = 1'-0"

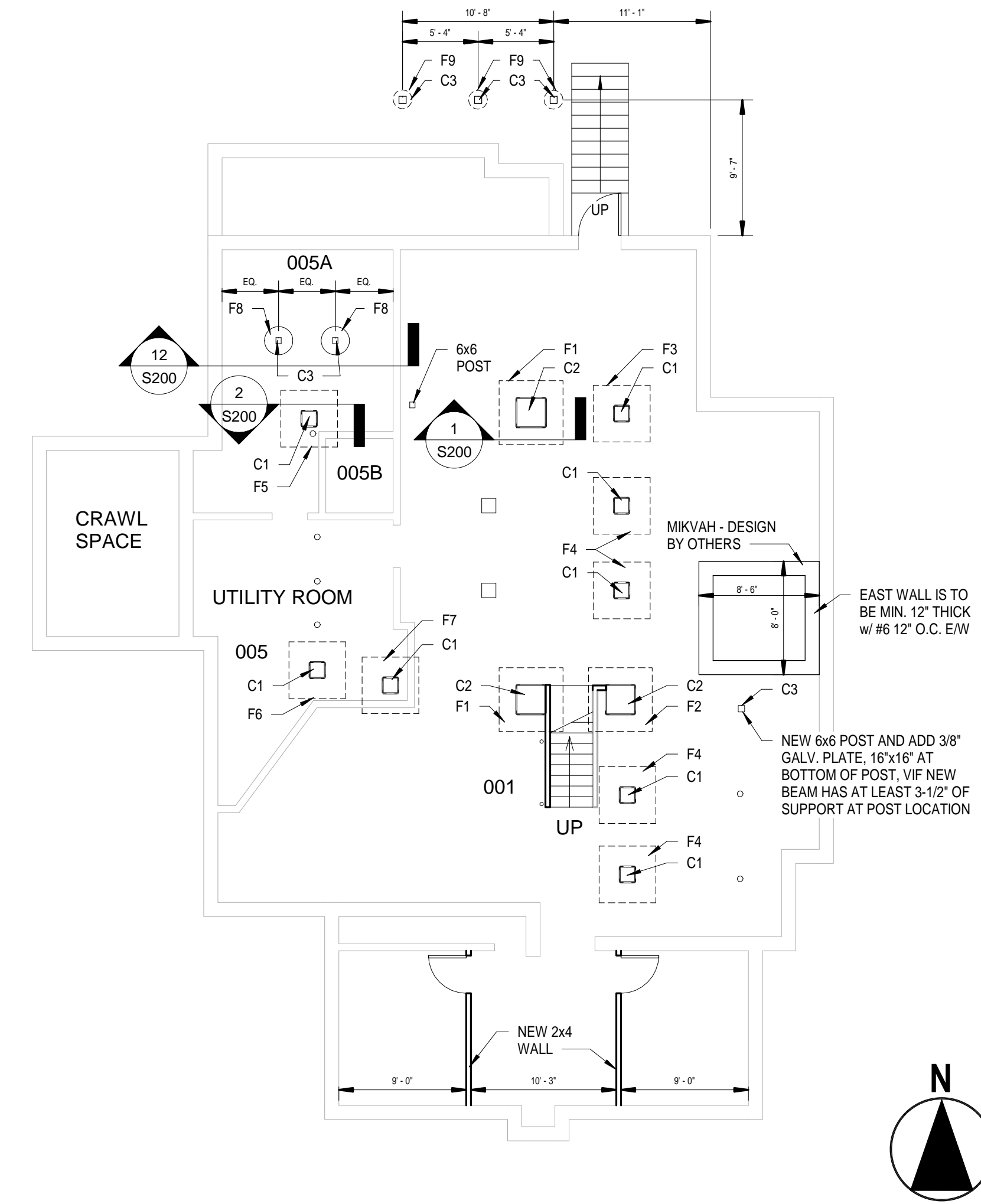


COLUMN SCHEDULE		
MARK	SIZE	NOTE
C1	1'-0"x1'-0"	PIER COLUMN
C2	2'-0"x2'-0"	PIER COLUMN
C3	6x6	SP#2 OR BETTER

FOOTING SCHEDULE			
MARK	SIZE	DEPTH	REINFORCEMENT
F1	4'-6"x4'-0"	6" MIN.	#4 REBAR
F2	4'-6"x4'-6"	8" MIN.	#4 REBAR
F3	4'-0"x4'-0"	8" MIN.	#4 REBAR
F4	4'-0"x4'-0"	7 1/2" MIN.	#4 REBAR
F5	SEE NOTE	7 1/2" MIN.	#4 REBAR
F6	SEE NOTE	7 1/2" MIN.	#4 REBAR
F7	SEE NOTE	7 1/2" MIN.	#4 REBAR
F8	24" DIA.	2 1/2"	
F9	16" DIA.	30"	

NOTE
 AT LOCATIONS F5, F6, AND F7 - OFFSET FOOTINGS ACCEPTABLE. CONSULT WITH EOR FOR FIELD VERIFICATION

④ BASEMENT REINFORCEMENT FOR COLUMNS
 1/8" = 1'-0"



NO.	DESCRIPTION	DATE

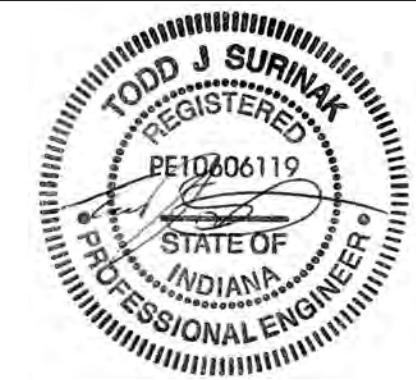
CHABAD CENTER
 703 E. 7TH ST.
 BLOOMINGTON, IN

STRUCTURAL FRAMING & FOUNDATION PLAN

PROJECT NUMBER: 774
 DATE: 3-26-2020
 DRAWN BY: JAR
 CHECKED BY: TJS

S100

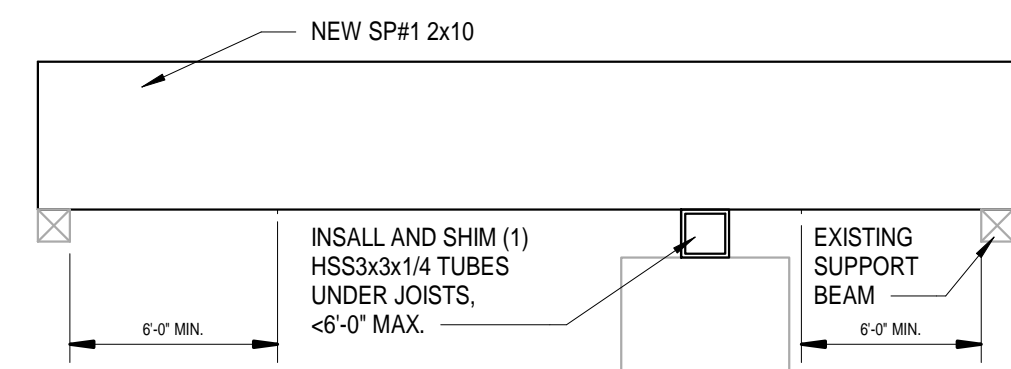
SCALE: AS NOTED



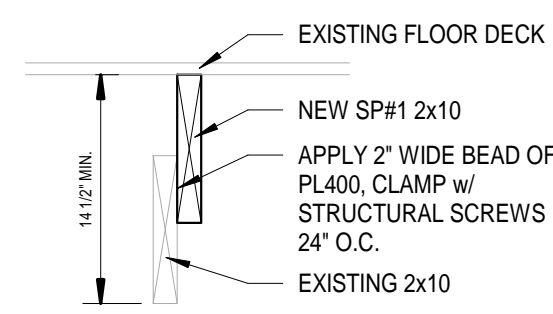
STRUCTURAL ENGINEERING BY:
SURINAK ENGINEERING LLC
3819 N. DELAWARE ST.
INDIANAPOLIS, IN 46205
317.500.3159
WWW.SURINAKENGINEERING.COM

CLIENT:
RABBI AVI GROSSBAUM
CHABAD CENTER FOR JEWISH LIFE
BLOOMINGTON, IN

NOTES:

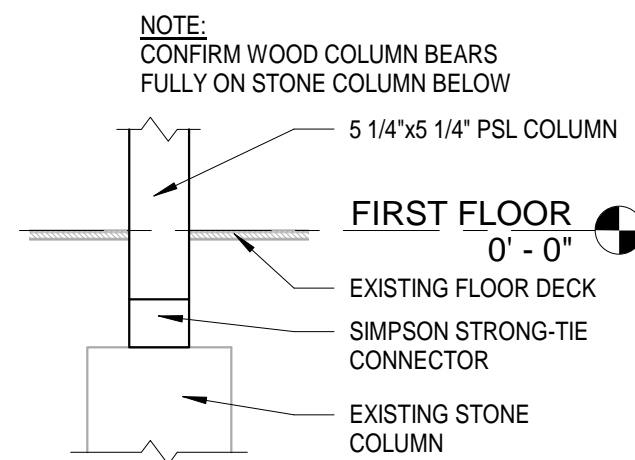


OPTION A

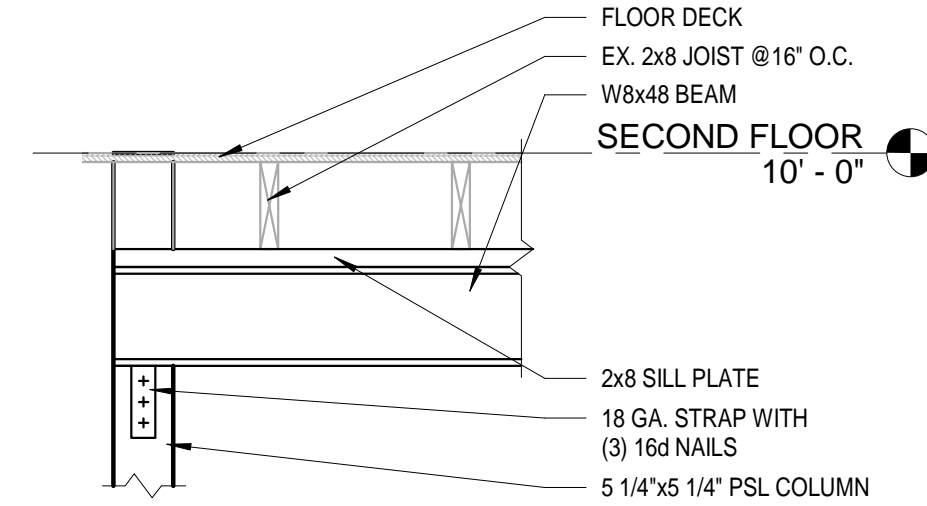


OPTION B

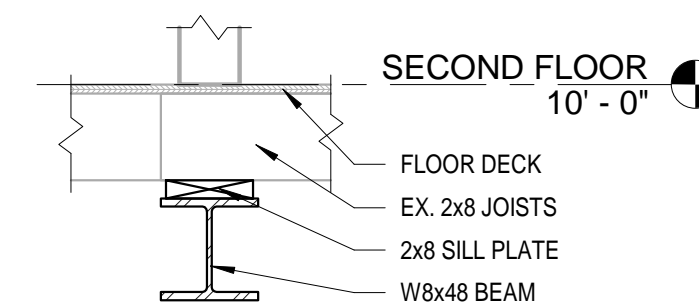
6 JOIST REINFORCEMENT DETAILS
1" = 1'-0"



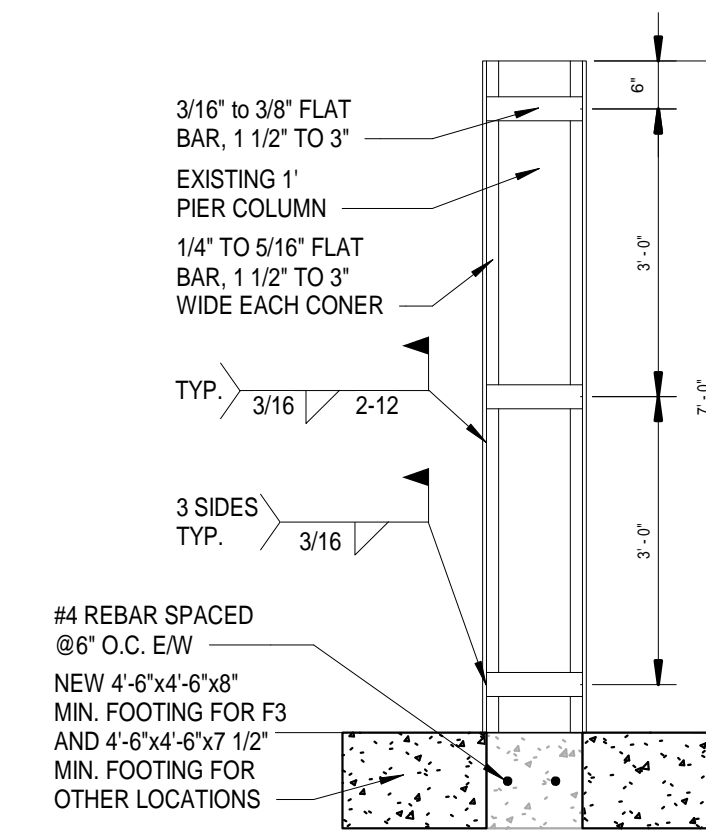
5 WOOD COLUMN MOUNTING TO STONE COLUMN DETAIL
3/4" = 1'-0"



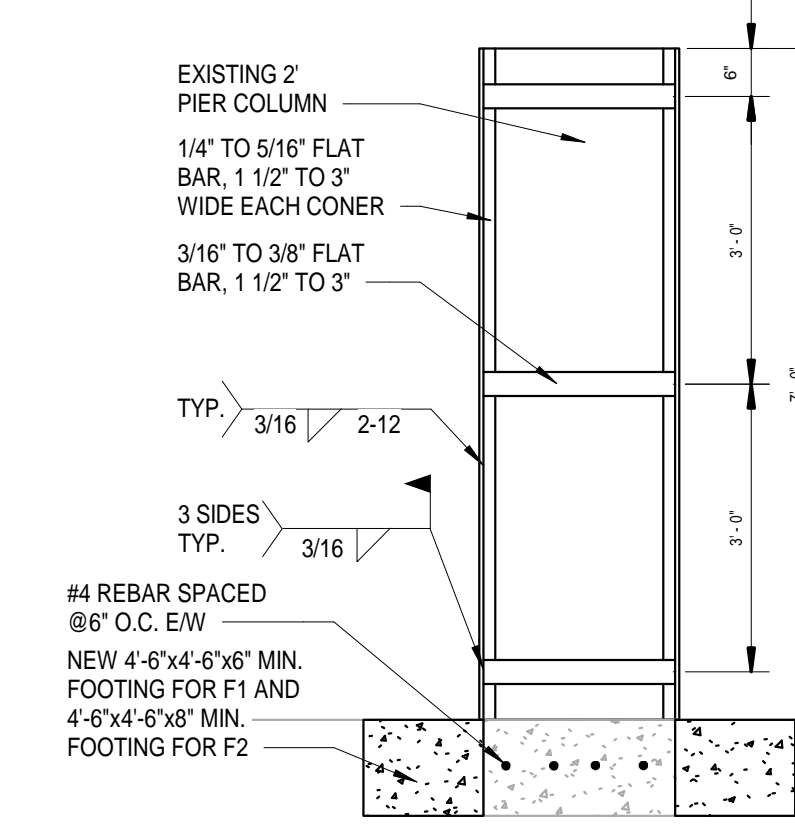
4 BEAM TO COLUMN CONNECTION DETAIL
3/4" = 1'-0"



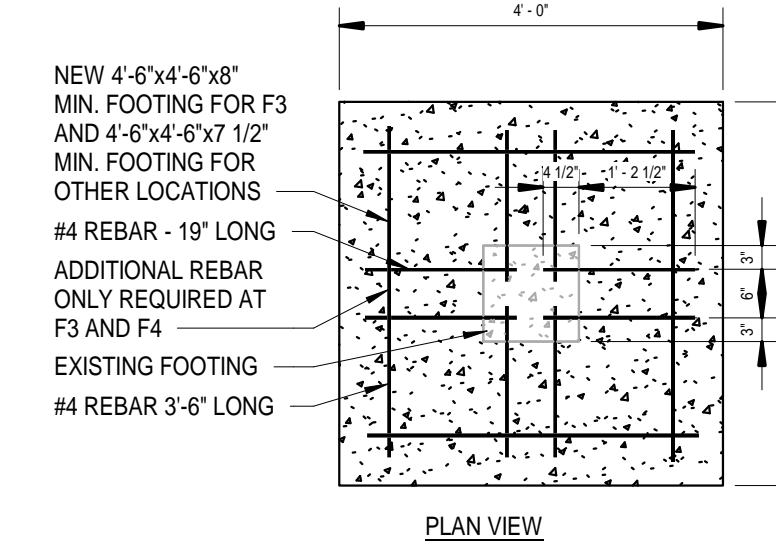
3 BEAM DETAIL
3/4" = 1'-0"



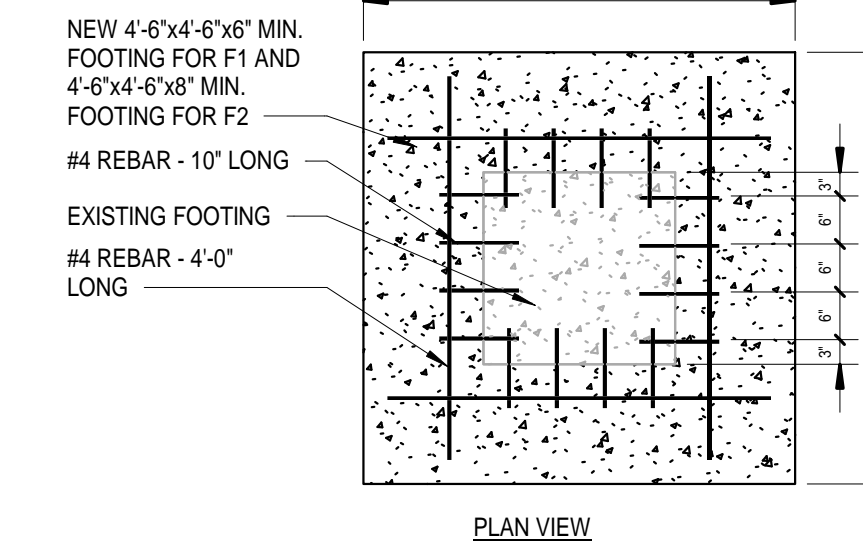
2 1' PIER COLUMN REINFORCEMENT
1/2" = 1'-0"



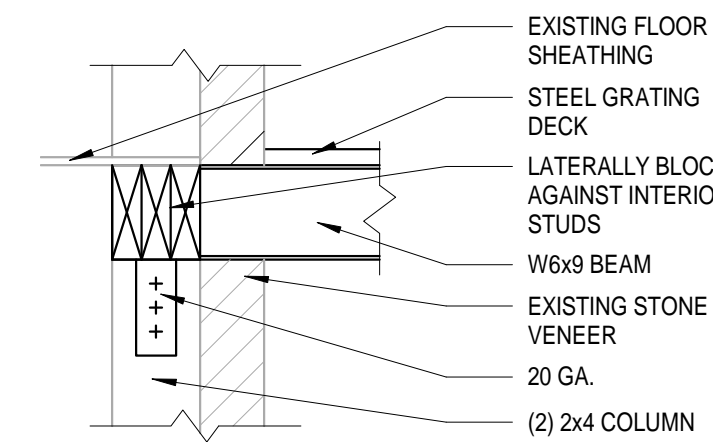
2 2' PIER COLUMN REINFORCEMENT
1/2" = 1'-0"



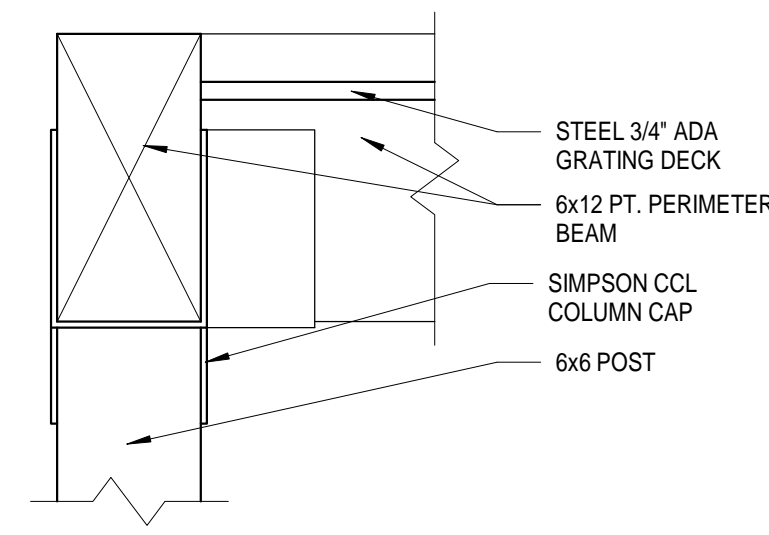
2 1' PIER COLUMN REINFORCEMENT
1/2" = 1'-0"



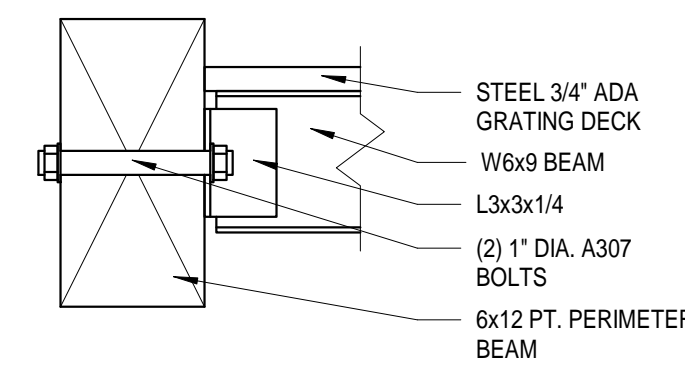
2 2' PIER COLUMN REINFORCEMENT
1/2" = 1'-0"



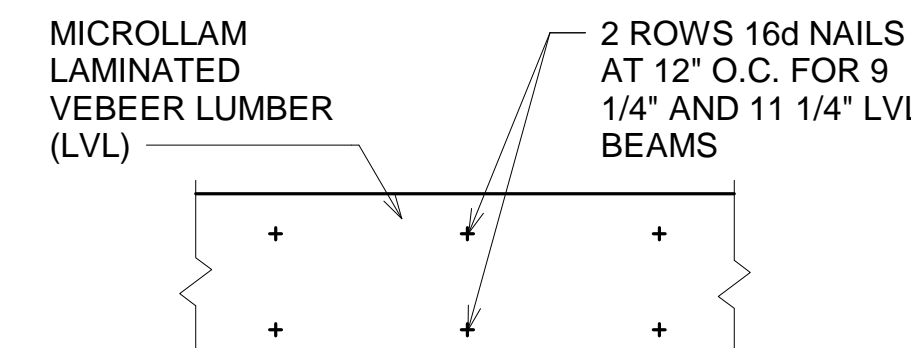
11 W6x9 BEAM CONNECTION TO BUILDING WALL
1" = 1'-0"



10 6x12 PT. PERIMETER BEAM CONNECTING TO 6x6 POST
1 1/2" = 1'-0"

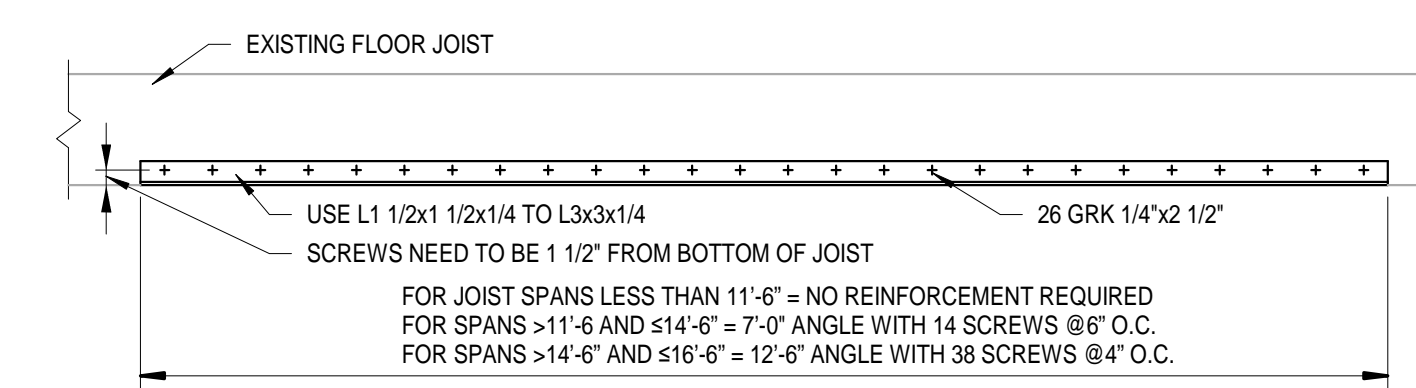


9 W6x9 CONNECTING TO 6x12 PT. PERIMETER BEAM
1 1/2" = 1'-0"

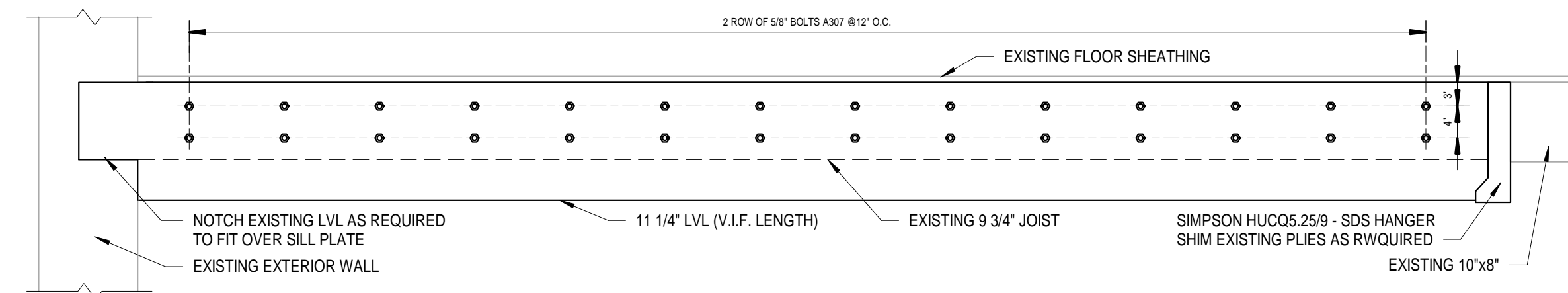


NOTES:
1. MINIMUM OF 3 ROWS 16d (3 1/2") NAILS AT 12" O.C. FOR 14", 16" AND 18" LVL BEAMS
2. FOR BOLTS, USE 1/2" DIAMETER BOLTS WITH WASHERS BOTH FACES STAGGERED AT 12" O.C. WITH A 3" MIN. EDGE DISTANCE

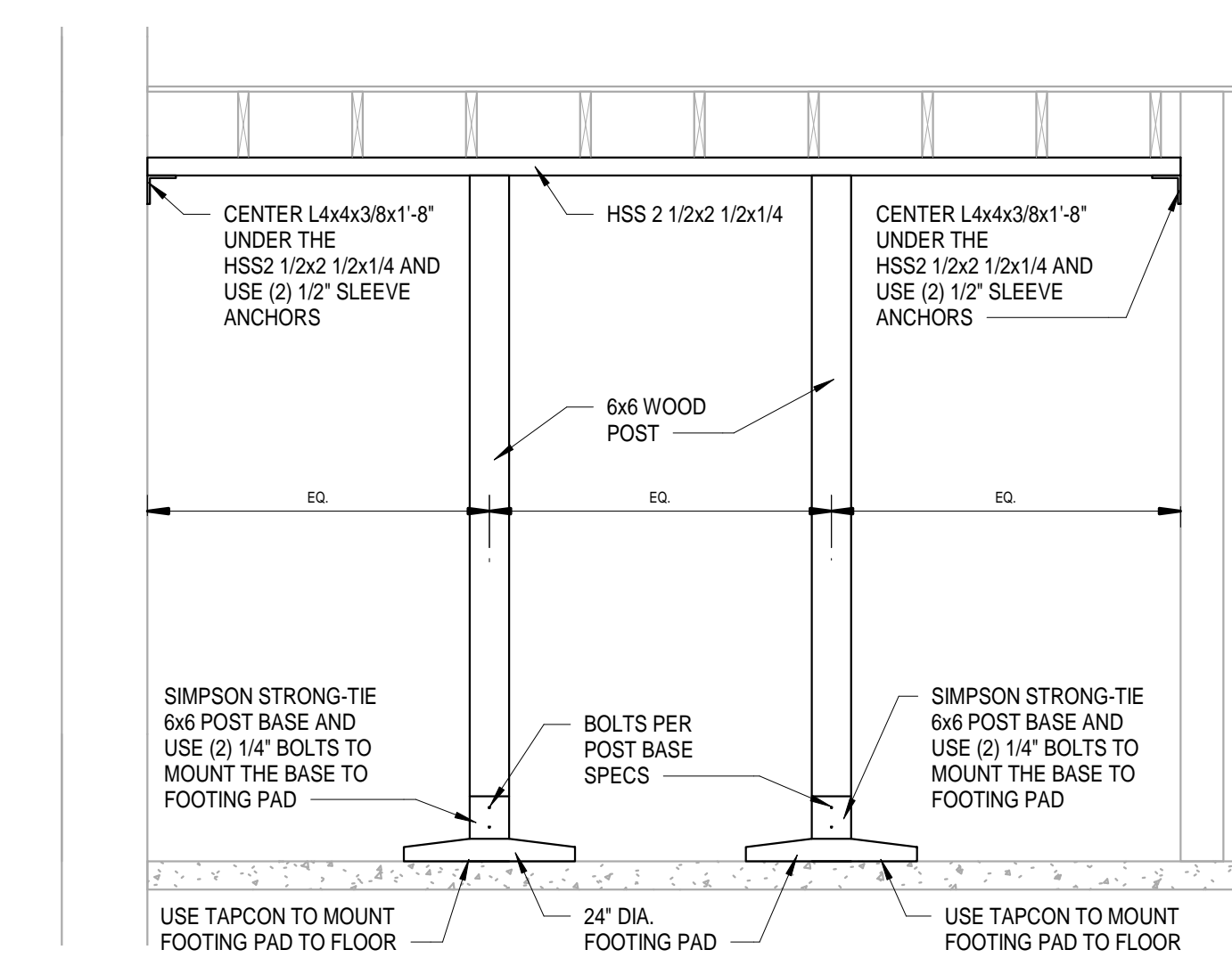
8 TYPICAL MULTI-PLY LVL
1" = 1'-0"



7 STEEL REINFORCEMENT DETAIL FOR JOISTS
3/4" = 1'-0"



13 FLOOR REINFORCEMENT
3/4" = 1'-0"



12 FIRST FLOOR REINFORCEMENT
1/2" = 1'-0"

NO.	DESCRIPTION	DATE

CHABAD CENTER
703 E. 7TH ST.
BLOOMINGTON, IN

STRUCTURAL SECTIONS & DETAILS

PROJECT NUMBER: 774
DATE: 3-26-2020
DRAWN BY: JAR
CHECKED BY: TJS

S200

SCALE: AS NOTED



ENVIRONMENTAL • ARCHITECTURE • ENGINEERING

10845 Olive Boulevard, Suite 260, Saint Louis, Missouri 63141 - 314.997.6111 - www.trileaf.com

March 17, 2020

City of Bloomington
Housing and Neighborhood Development
Attn: Mr. Conor Herterich
Program Manager Historic Preservation
P.O. Box 100
Bloomington, Indiana 47402
Phone: 812-349-3507
Email: ellensor@bloomington.in.gov

RE: **T-Mobile – Graham Plaza / Site # MW02502B – Trileaf Project #661070**
205 N. College Avenue, Bloomington, IN 47404
Monroe County, Bloomington Quadrangle (USGS)
Latitude: 39° 10' 4.06" N, Longitude: 86° 32' 6.58" W

Dear Mr. Herterich,

Trileaf Corporation is in the process of completing a Section 106 review at the referenced property. Our client proposed to collocate antennas at a top height of 110 feet on an existing building. Associated equipment will be located on the building rooftop. No new ground disturbance is required. The antenna will be licensed by the Federal Communications Commission (FCC).

Our investigation includes determining if the site is contained in, on or within the viewshed of a building, site, district, structure or object, significant in American history, architecture, archaeology, engineering or culture, that is listed, or eligible for listing on the State or National Registers of Historic Places, or located in or on an Indian Religious Site.

Trileaf is requesting information regarding this tower's potential effect on Historic Properties. All information received will be forwarded to the State Historic Preservation Office (SHPO) as part of the Section 106 review process. *Additionally, this invitation to comment is separate from any local planning/zoning process that may apply to this project.*

If you wish to comment or be considered a consulting party, please respond within thirty (30) days of the date of this letter. If a response is not received within thirty (30) days, it will be assumed that you have no objections to this undertaking. A site topography map and aerial photograph are enclosed for your reference.

Please call me at (314) 997-6111 or email a.hassler@trileaf.com if you need additional information or have any questions. Thank you for your assistance in this regard.

Sincerely,

Alisia Hassler
Project Scientist

Bloomington, Indiana (2019)

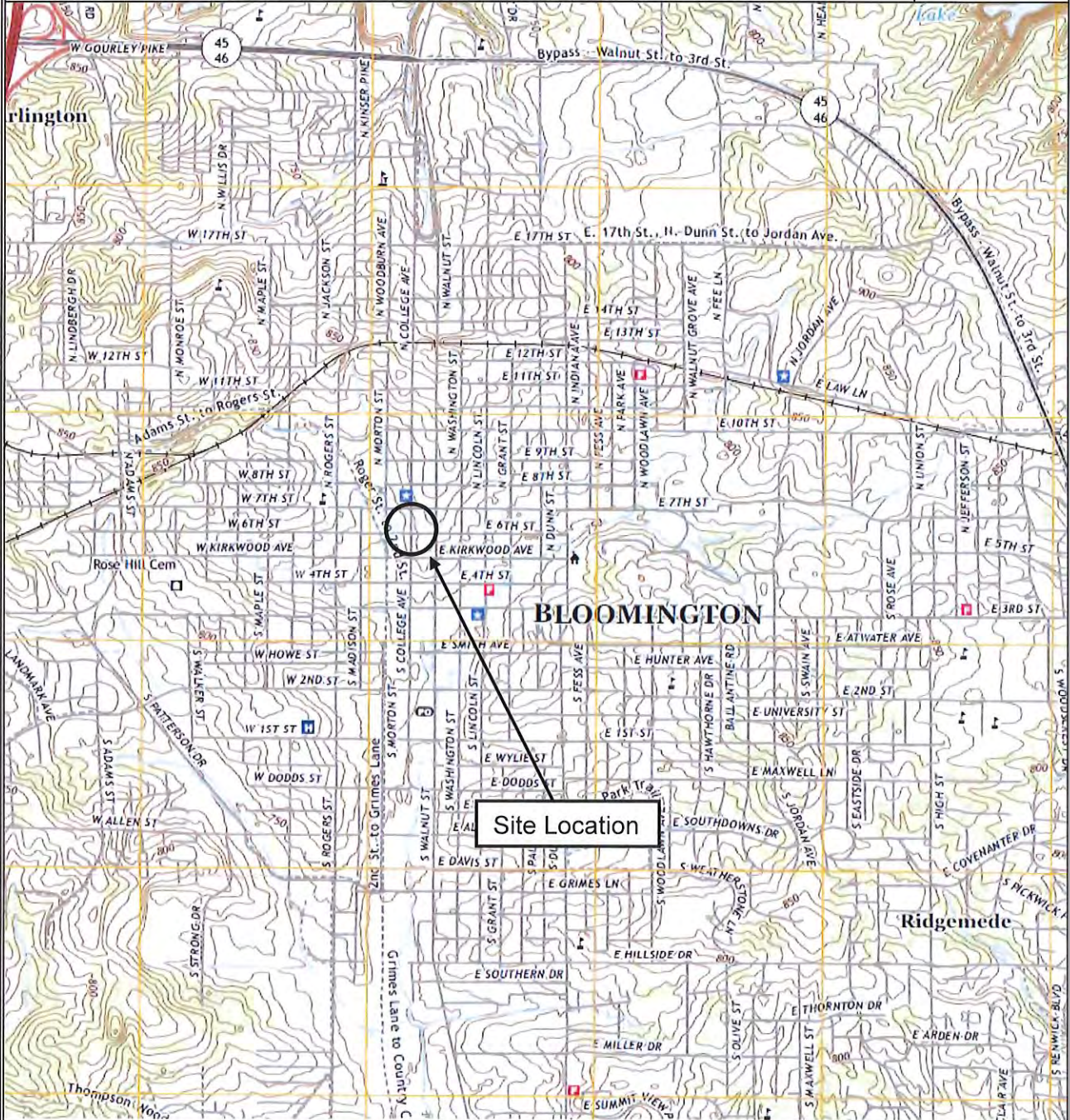
Contour Interval = 10 Feet

Scale 1 Inch = ~2,000 Feet

Latitude: 39° 10' 4.06" N Longitude: 86° 32' 6.58" W



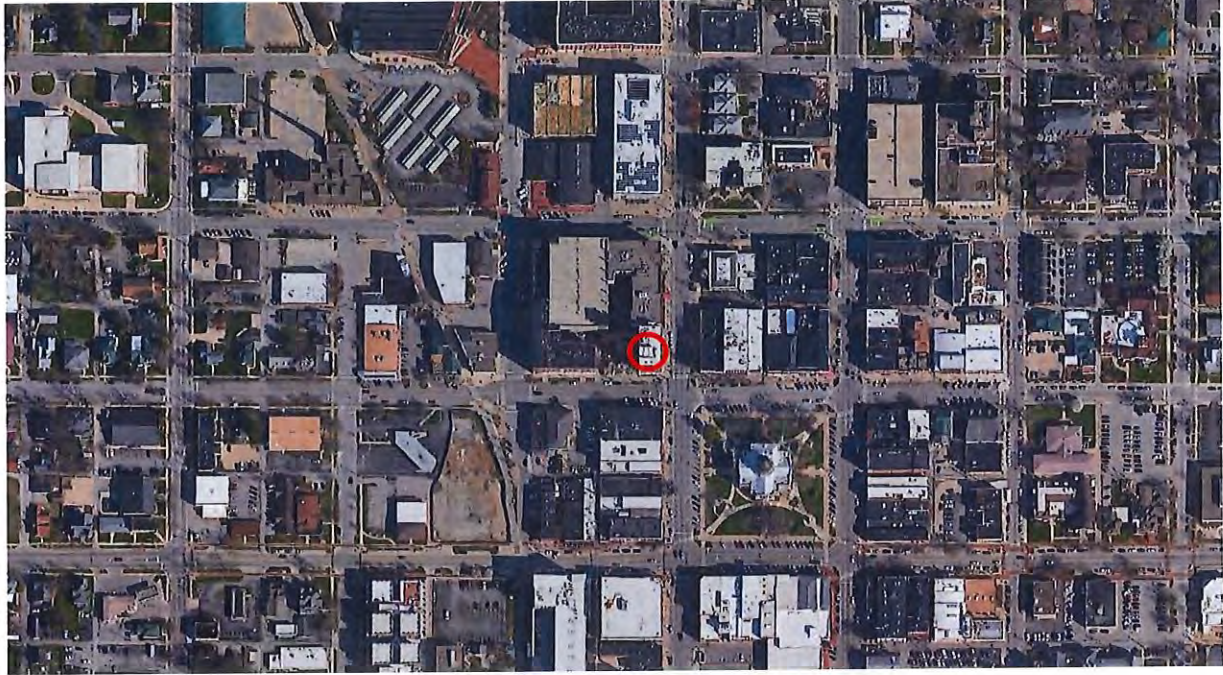
North



Site Vicinity Map

T-Mobile – Graham Plaza
205 N. College Avenue
Bloomington, IN 47404





Site Location & Surrounding Properties



Site Location

Aerial Photographs (2016)

T-Mobile – Graham Plaza
205 N. College Avenue
Bloomington, IN 47404

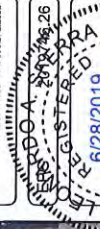




SITE NAME: 120 BROADVIEW/GRAHAM PLAZA
SITE NUMBER: MW02502B
STRUCTURE TYPE: ROOFTOP
MARKET: INDIANAPOLIS
PROJECT: L600



520 South Main Street, Suite 251
 335.572.100 Fax: 335.572.102



THE INFORMATION CONTAINED
 HEREIN IS PROPRIETARY TO T-MOBILE
 AND IS NOT TO BE REPRODUCED OR
 TRANSMITTED IN ANY FORM OR BY
 ANY MEANS, ELECTRONIC OR MECHANICAL,
 INCLUDING PHOTOCOPYING, RECORDING,
 OR BY ANY INFORMATION STORAGE AND
 RETRIEVAL SYSTEM, WITHOUT THE
 EXPRESS WRITTEN PERMISSION OF T-MOBILE
 U.S. STRICTLY PROHIBITED

120 BROADVIEW/GRAHAM PLAZA
 MW02502B

NO.	REVISION/ISSUE	DATE
0	FINAL CDS	06/28/19

TITLE: **TITLE PAGE**

SHEET: **T-1**

LOCAL MAP



VICINITY MAP



SHEET INDEX

TITLE PAGE	NO.
COMPOUND & EQUIPMENT PLANS	T-1
PENTHOUSE ELEVATION	C-1
ANTENNA LAYOUTS	C-2
ANTENNA MOUNTING DETAIL	C-3
RF CONFIGURATION	RF-1
EQUIPMENT SPECS	RF-2
ELECTRICAL PLAN & DETAILS	E-1
DC POWER DETAILS	E-2
GROUNDING DETAILS	E-3
GENERAL NOTES	N-1
GENERAL NOTES	N-2
GENERAL NOTES	N-3

APPROVALS

DATE	DATE
T-MOBILE REPRESENTATIVE	
T-MOBILE RF ENGINEERING	
SITE OWNER	
SITE ACQUISITION MANAGER	
CONSTRUCTION MANAGER	

SCOPE OF WORK

1. THE WIRELESS COMMUNICATIONS FACILITY IS NOT INTENDED FOR HUMAN OCCUPANCY.
2. THIS FACILITY DOES NOT REQUIRE POTABLE WATER AND WILL NOT PRODUCE ANY SEWAGE.
3. THE SCOPE OF WORK CONSISTS OF MODIFYING THE EXISTING WIRELESS INSTALLATION:
 - A. REMOVAL OF (0) ANTENNAS (ANTENNA LEVEL)
 - B. REMOVAL OF (0) ANTENNAS (ANTENNA LEVEL)
 - C. REMOVAL OF (1) EXISTING MEDIUM PURCELL SSC (EQUIPMENT LEVEL)
 - D. REMOVAL OF (1) EXISTING MEDIUM PURCELL SSC (EQUIPMENT LEVEL)
 - E. INSTALLATION OF (0) NEW RRU'S (ANTENNA LEVEL)
 - F. INSTALLATION OF (2) NEW AMOB CHASSIS'S ON NEW H-FRAME MOUNT (EQUIPMENT LEVEL)
 - G. INSTALLATION OF (2) NEW AMOB CHASSIS'S ON NEW H-FRAME MOUNT (EQUIPMENT LEVEL)
 - H. INSTALLATION OF NEW HP LARGE DELTA SSC (EQUIPMENT LEVEL)

APPLICABLE CODES

ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE ACCEPTED EDITION OF THE FOLLOWING:
 - 2014 INDIANA BUILDING CODE (IBC 2012) OR LATEST EDITION
 - 2008 NATIONAL ELECTRIC CODE (NECA 70) OR LATEST EDITION
 - TIA/EIA-222-REVISION G
 - ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES, MOST RECENT EDITIONS

SITE INFORMATION

SITE NAME:	120 BROADVIEW/GRAHAM PLAZA
SITE NUMBER:	MW02502B
SITE ADDRESS:	205 N. COLLEGE AVENUE
CITY:	BLOOMINGTON, IN 47404
COUNTY:	MONROE COUNTY
OWNER SITE NAME:	N/A
OWNER SITE NUMBER:	N/A
JURISDICTION:	MONROE COUNTY
PARCEL ID:	53-05-33-310-536.000-005
LATITUDE:	38° 10' 04.06" N (35.157793°)
LONGITUDE:	86° 32' 06.58" W (-86.535162°)

ARCHITECT/ENGINEER
 300 SOUTH MAIN STREET
 SUITE 251
 INDIANAPOLIS, IN 46202
 (317) 372-2100

TOWER OWNER
 CTS, INC.
 300 SOUTH MAIN STREET
 BLOOMINGTON, IN 47402
 (812) 333-0653

APPLICANT
 T-MOBILE
 6515 N. COLLEGE AVENUE
 BLOOMINGTON, IN 47404
 (317) 347-7071

SITE ADDRESS
 205 N. COLLEGE AVENUE
 BLOOMINGTON, IN 47404
 MONROE COUNTY



800-382-5544 or 811

T-Mobile
 6215 MORENCI TRAIL
 INDIANAPOLIS, IN 46268
 (317) 347-7071



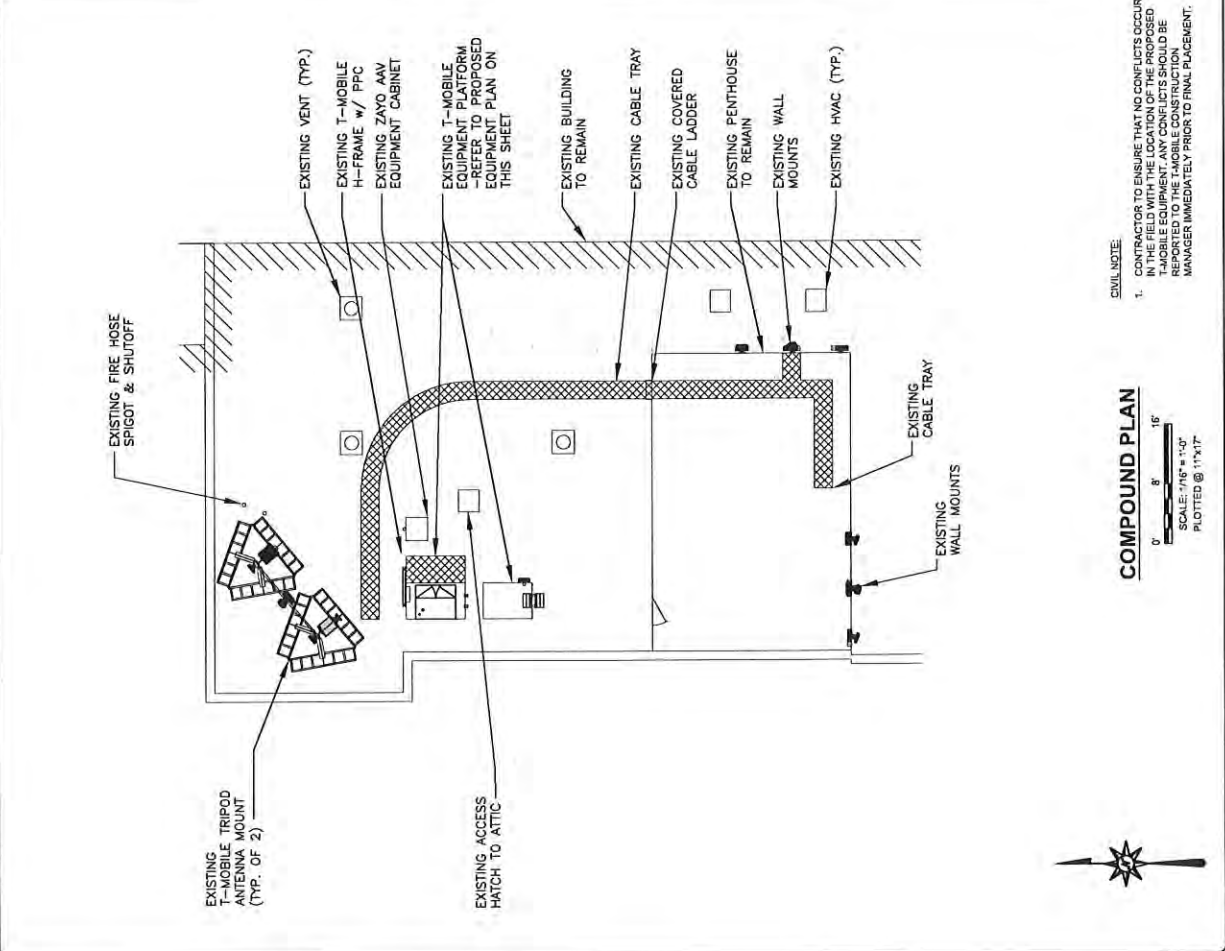
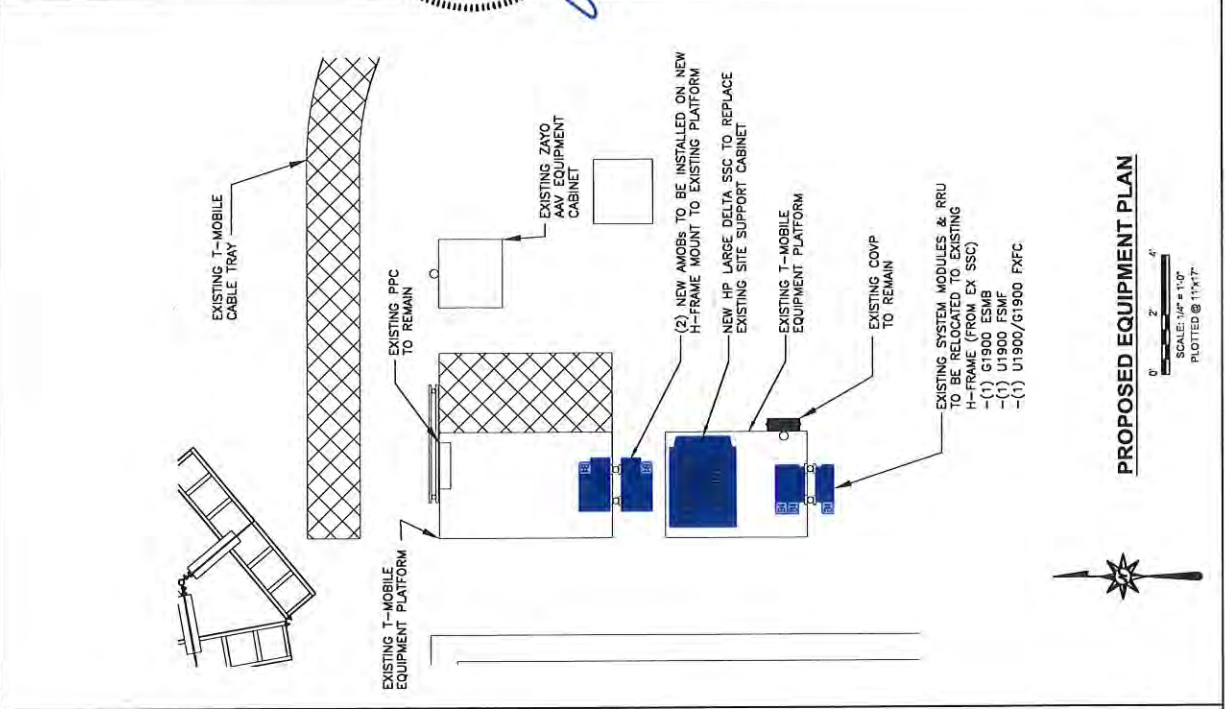
REGISTERED PROFESSIONAL ENGINEER
 STATE OF INDIANA
 No. 11600134
 6/28/2019
 20190626

THE INFORMATION CONTAINED
 IN THIS SET OF DOCUMENTS
 IS PROPRIETARY BY NATURE,
 AND IS TO BE KEPT IN STRICT
 CONFIDENCE. NO PART OF THIS
 OTHER THAN THAT WHICH
 RELATES TO CLIENT NAME
 IS STRICTLY PROHIBITED

120 BROADVIEW/GRAHAM PLAZA
MW02502B

NO.	REVISION/ISSUE	DATE
0	FINAL CDS	06/28/19

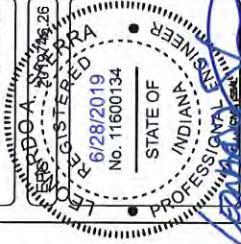
TITLE: **COMPOUND & EQUIPMENT PLANS**
 SHEET: **C-1**



SEAL NOTE:
 1. CONTRACTOR TO ENSURE THAT NO CONFLICTS OCCUR IN THE FIELD WITH THE LOCATION OF THE PROPOSED T-MOBILE EQUIPMENT. ANY CONFLICTS SHOULD BE REPORTED TO THE T-MOBILE CONSTRUCTION MANAGER IMMEDIATELY PRIOR TO FINAL PLACEMENT.

T-Mobile
 6215 MORENCI TRAIL
 INDIANAPOLIS, IN 46268
 (317) 347-7071

GPD GROUP, INC.
 520 South Main Street, Suite 251
 Indianapolis, IN 46202
 317.572.2100 Fax: 317.572.2102



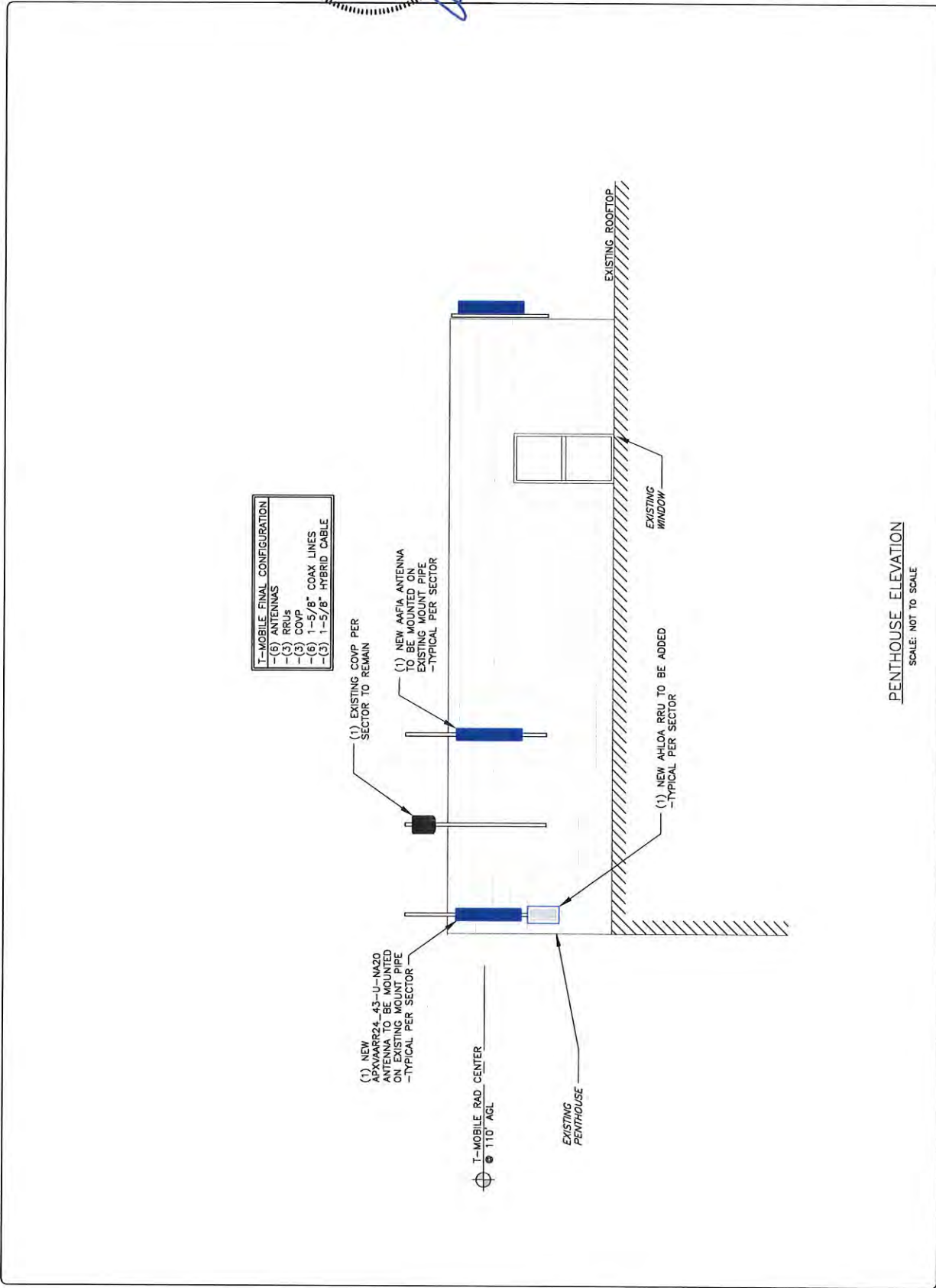
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TITLE: **PENTHOUSE ELEVATION**

SHEET: **C-2**



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Mesa, OH 46033
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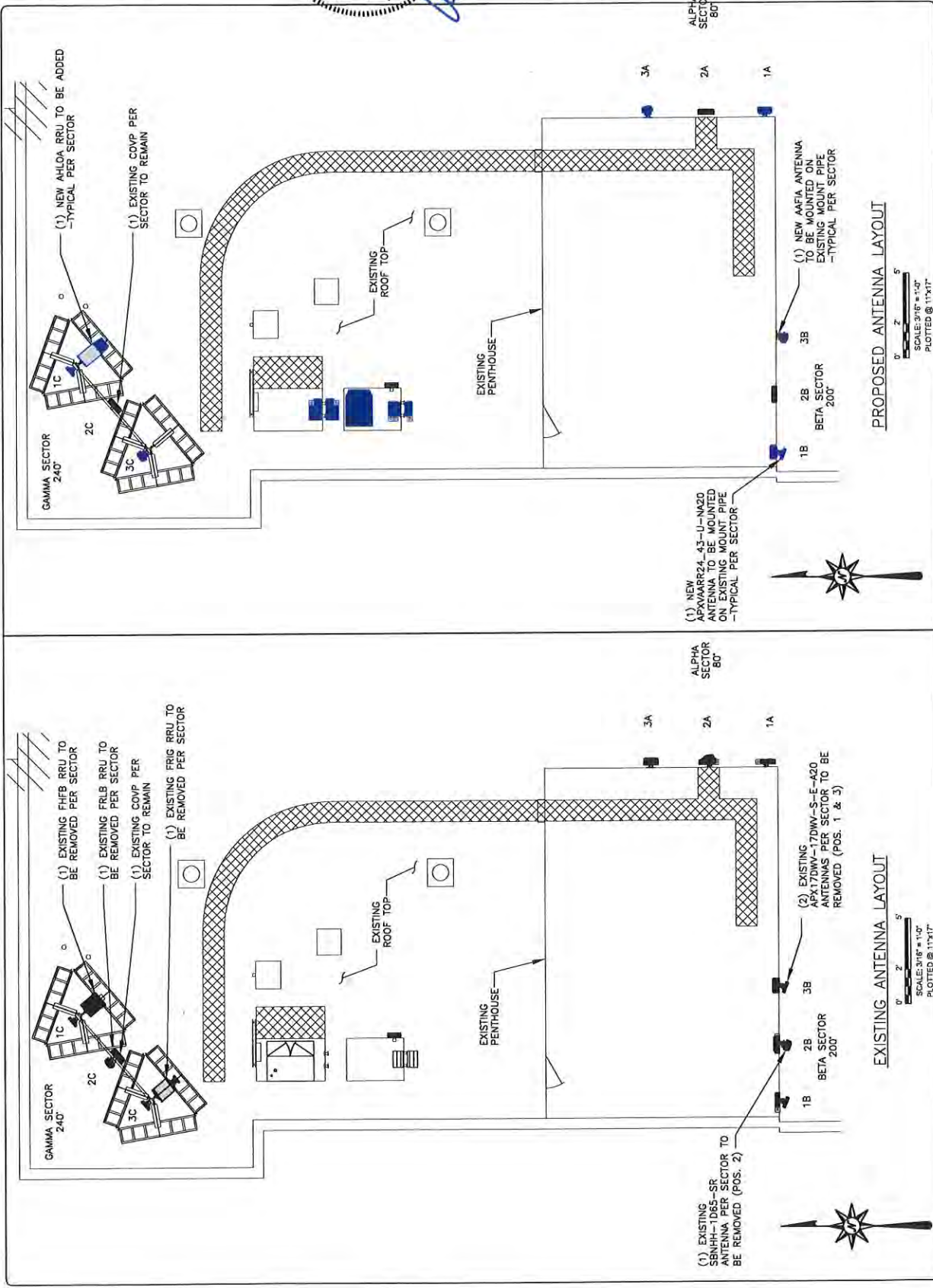
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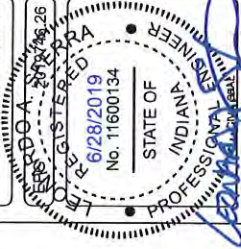
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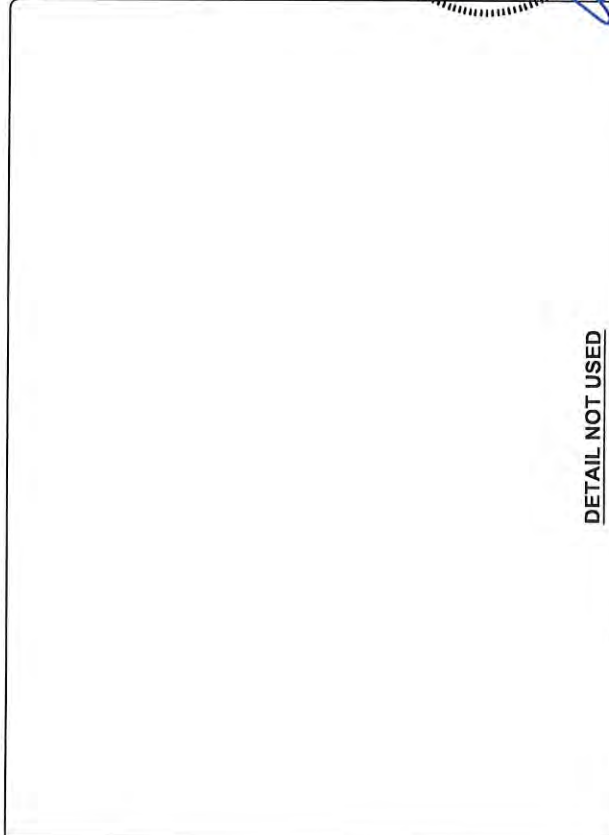
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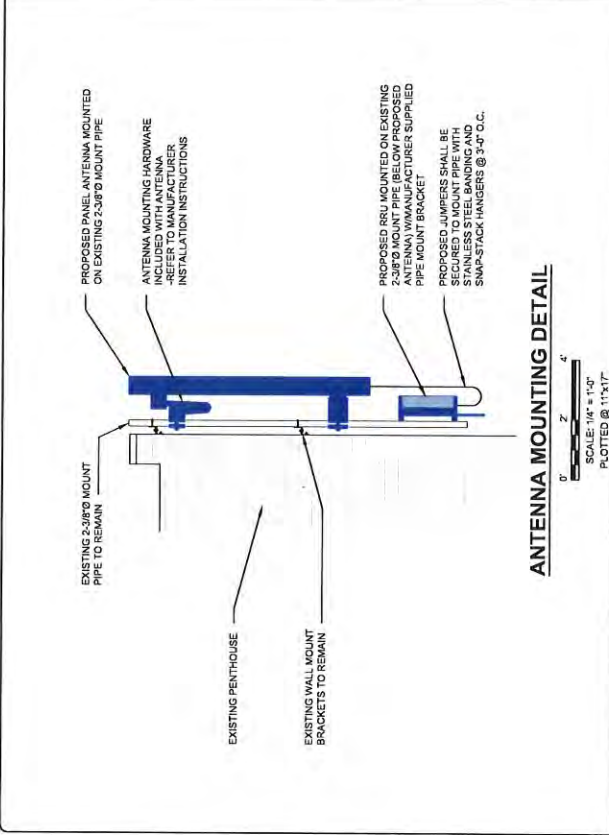
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TITLE:
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 DETAIL**

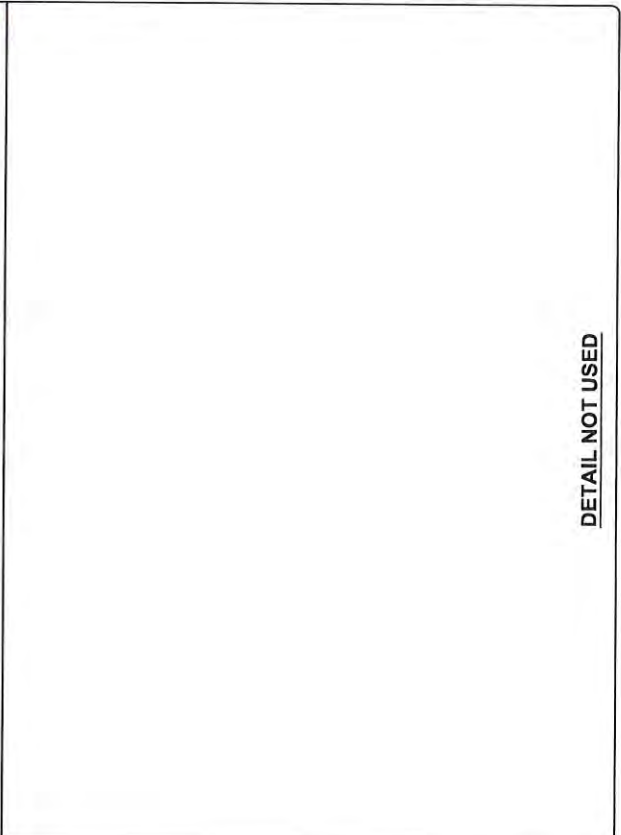
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C-3



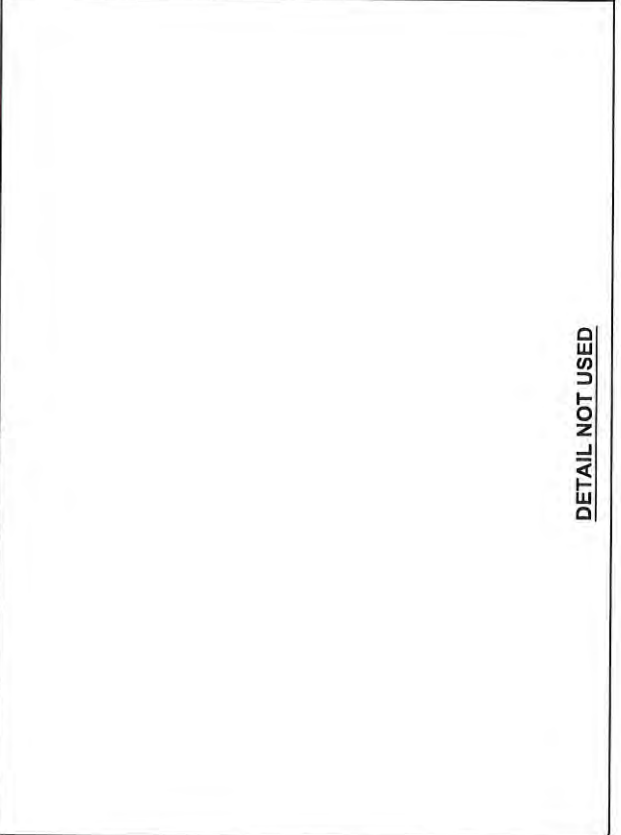
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DETAIL NOT USED



DETAIL NOT USED



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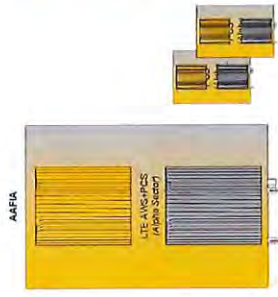
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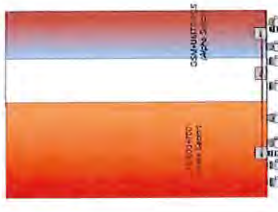
TITLE:
RF CONFIGURATION

SHEET:
RF-1

NOTE:
 REFER TO THE MOST CURRENT
 RFS SHEET FOR FINAL ANTENNA
 CONFIGURATIONS AND AZIMUTH
 DETAILS. COORDINATE WITH
 T-MOBILE PERSONNEL.

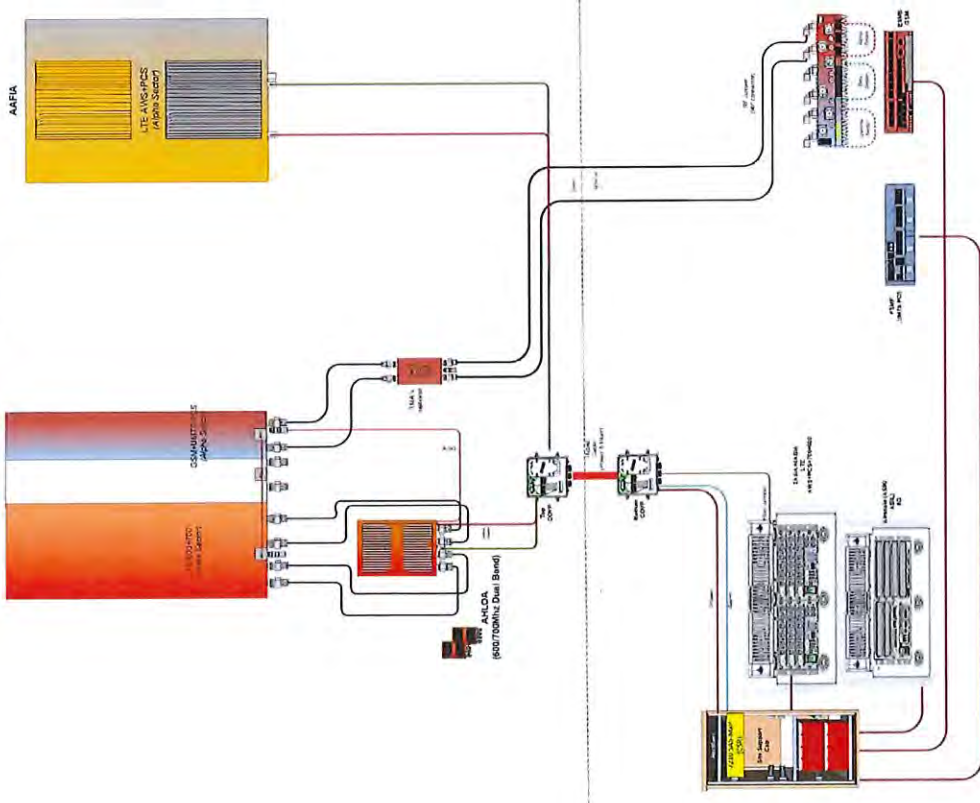


5771A_R4
 LTE-A Pro PCS 400-700
 UNITS PCS-GSM PCS
 (Only Alpha Sector shown here)



SECTOR POSITION	ANTENNA MODEL	RAZIMUTH	RAD CENTER	TMA MODEL #	ADDITIONAL EQUIPMENT
A 1A	RFS-APXVARS24-43-U-NM20	80°	110'		DL RVCAP (3) TMA MESH AAFA (3 TOTAL)
A 2A	AAFA	80°	110'		
A 3A	AAFA	80°	110'		
B 1B	RFS-APXVARS24-43-U-NM20	200°	110'		
B 2B	AAFA	200°	110'		
B 3B	AAFA	200°	110'		
C 1C	RFS-APXVARS24-43-U-NM20	320°	110'		
C 2C	AAFA	320°	110'		
C 3C	AAFA	320°	110'		

NOTE: PLUMBING DIAGRAM SHOWN IS VIEWED FROM BACK SIDE OF ANTENNAS.



RF CONFIGURATION
 SCALE: NOT TO SCALE

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TITLE:
EQUIPMENT SPECS

SHEET:
RF-2

MANUFACTURER: NOKIA
MODEL: AHLOA
HEIGHT: 22.0" (560 mm)
DEPTH: 7.4" (188 mm)
WEIGHT: 83.8 lbs (38 kg)
OPERATING TEMP: -40°F - 122°F (-40°C - 50°C)

POLE, WALL OR BOOM MOUNTING
REFER TO USER MANUAL FOR
INSTALLATION INSTRUCTIONS



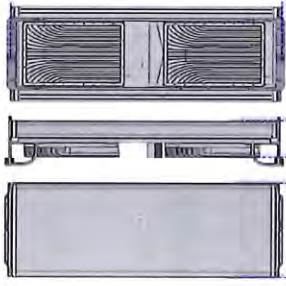
AHLOA RRU DETAIL
 SCALE: NOT TO SCALE

MANUFACTURER: RFS
MODEL: APXVARR2-43
HEIGHT: 9" (243.8 mm)
WIDTH: 13.7" (350 mm)
DEPTH: 6.5" (165 mm)
WEIGHT: 89.3 lbs (40.5 kg)
SURVIVAL WIND SPEED: 241 kph

DIECAST ALUMINUM AND GALVANIZED STEEL



ANTENNA DETAIL
 SCALE: NOT TO SCALE



MANUFACTURER: AAFIA
MODEL: AIRSCALE
HEIGHT: 71.65" (1820 mm)
WIDTH: 25.6" (650 mm)
DEPTH: 11.81" (300 mm)
WEIGHT: 253.53 LBS (115 KG)

WALL, POLE

AIRSCALE DETAIL
 SCALE: NOT TO SCALE

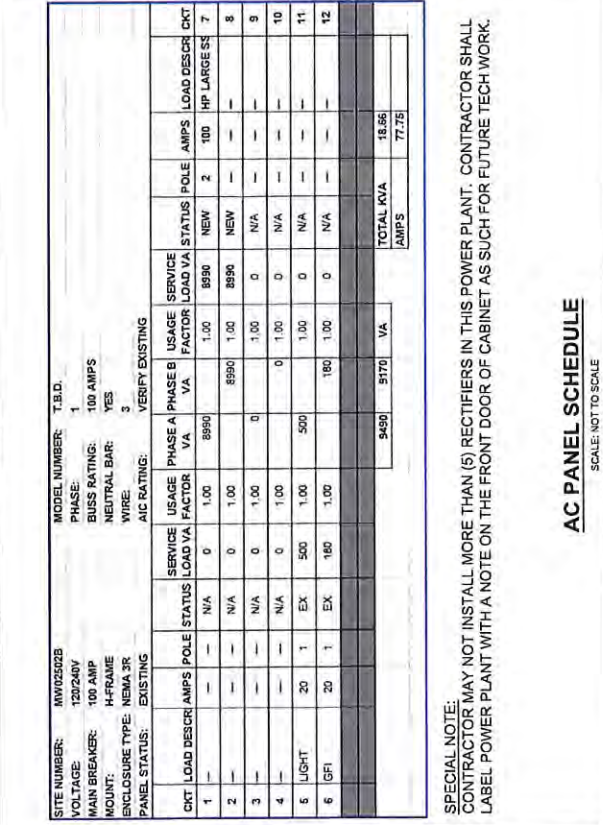
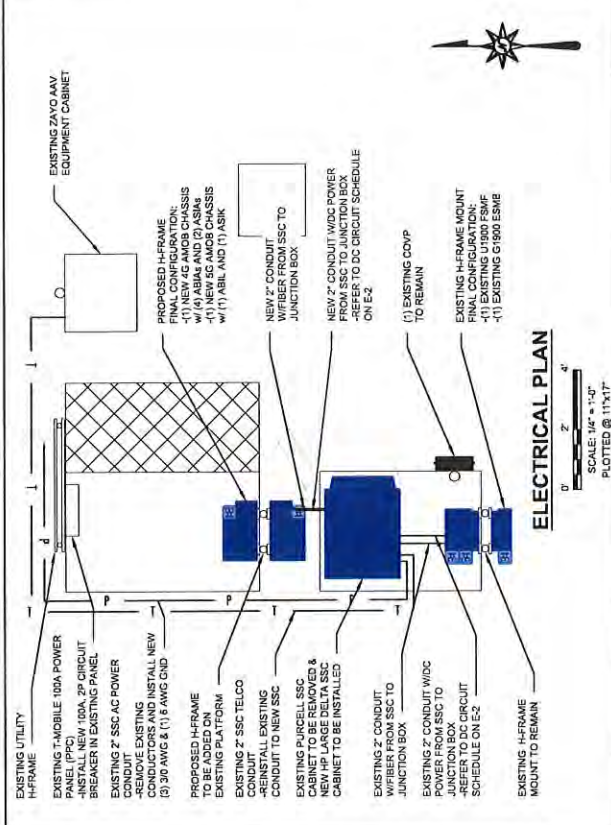
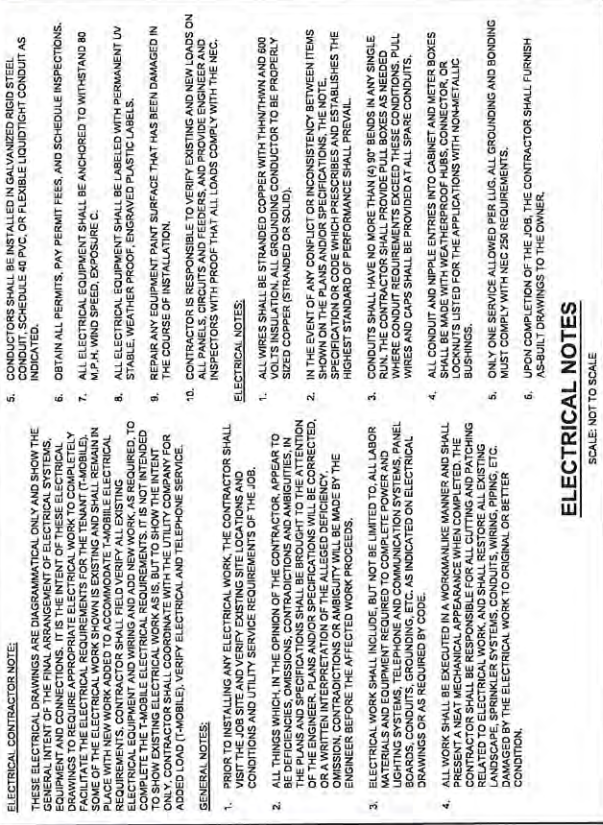
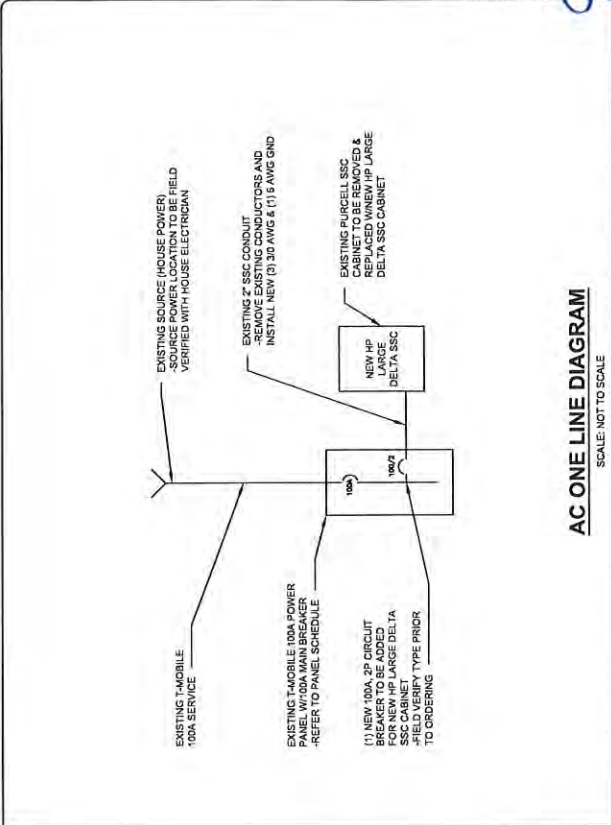
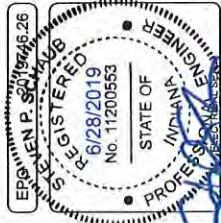
DETAIL NOT USED

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NO.	REVISION/ISSUE	DATE
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TITLE: **ELECTRICAL PLAN & DETAILS**
 SHEET: **E-1**

SPECIAL NOTE:
 CONTRACTOR MAY NOT INSTALL MORE THAN (5) RECTIFIERS IN THIS POWER PLANT. CONTRACTOR SHALL LABEL POWER PLANT WITH A NOTE ON THE FRONT DOOR OF CABINET AS SUCH FOR FUTURE TECH WORK.

ELECTRICAL CONTRACTOR NOTES:
 1. CONDUCTORS SHALL BE INSTALLED IN GALVANIZED RIGID STEEL CONDUIT, SCHEDULE 40 PVC, OR FLEXIBLE LIQUIDTIGHT CONDUIT AS INDICATED.
 2. OBTAIN ALL PERMITS, PAY PERMIT FEES, AND SCHEDULE INSPECTIONS.
 3. ALL ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO WITHSTAND 80 M.P.H. WIND SPEED, EXPOSURE C.
 4. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT LV STABLE WEATHER PROOF ENGRAVED PLASTIC LABELS.
 5. REPAIR ANY EQUIPMENT PAINT SURFACE THAT HAS BEEN DAMAGED IN THE COURSE OF INSTALLATION.
 6. CONTRACTOR IS RESPONSIBLE TO VERIFY EXISTING AND NEW LOADS ON ALL PANELS, CIRCUITS AND FEEDERS, AND PROVIDE ENGINEER AND INSPECTORS WITH PROOF THAT ALL LOADS COMPLY WITH THE NEC.
ELECTRICAL NOTES:
 1. ALL WIRES SHALL BE STRANDED COPPER WITH THINWALL AND 600 SEED COPPER (STRANDED OR SOLID).
 2. IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SPECIFIED ON THIS DRAWING AND THE NATIONAL ELECTRICAL CODE, THE HIGHEST STANDARD OF PERFORMANCE SHALL PREVAIL.
 3. CONDUITS SHALL HAVE NO MORE THAN (90) DEGREES IN ANY SINGLE JOINTS. CONDUITS SHALL BE SECURED TO STRUCTURE OR SUPPORT AT 10 FT ON BAYS WHERE CONDUIT REQUIREMENTS EXCEED THESE CONDITIONS. PULL WIRES AND CAPS SHALL BE PROVIDED AT ALL SPARE CONDUITS.
 4. ALL CONDUIT AND NIPPLE ENTRES INTO CABINET AND METERS BOXES SHALL BE MADE WITH WEATHERPROOF HUBS, CONNECTOR, OR LOCKNUTS LISTED FOR THE APPLICATIONS WITH NONMETALLIC BUSHINGS.
 5. ONLY ONE SERVICE ALLOWED PER LIU. ALL GROUNDING AND BONDING MUST COMPLY WITH NEC 250 REQUIREMENTS.
 6. UPON COMPLETION OF THE JOB, THE CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE OWNER.

ELECTRICAL NOTES
 SCALE: NOT TO SCALE

ELECTRICAL CONTRACTOR NOTE:
 THESE ELECTRICAL DRAWINGS ARE DIAGNOSTICAL ONLY AND BRING THE EQUIPMENT AND CONNECTIONS. IT IS THE INTENT OF THESE ELECTRICAL DRAWINGS TO REQUIRE APPROPRIATE ELECTRICAL WORK TO COMPLETELY FACILITATE THE ELECTRICAL REQUIREMENTS FOR THE T-MOBILE BENCH IN PLACE WITH NEW WORK ADDED TO ACCOMMODATE T-MOBILE ELECTRICAL REQUIREMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELECTRICAL EQUIPMENT AND WIRING AND IDENTIFY ANY NEW WORK REQUIRED TO SHOW EXISTING ELECTRICAL WORK AS IS. BUT TO SHOW THE INTENT ONLY. CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY FOR ADDED LOAD (T-MOBILES), VERIFY ELECTRICAL AND TELEPHONE SERVICE.

GENERAL NOTES:
 1. PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VERIFY ALL EXISTING ELECTRICAL SYSTEMS AND VERIFY ALL CODES, CONDITIONS AND UTILITY SERVICE REQUIREMENTS OF THE JOB.
 2. ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE UNUSUAL OR UNEXPECTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING TO THE ATTENTION OF THE ENGINEER. PLANS AND/OR SPECIFICATIONS SHALL BE CORRECTED, OR A WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, AND/OR REVISIONS MADE BY THE ENGINEER BEFORE THE AFFECTED WORK PROCEEDS.
 3. ELECTRICAL WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: ALL LABOR INCLUDING, BUT NOT LIMITED TO: CAPPING, GROUNDING, PANEL, LIGHTING SYSTEMS, TELEPHONE AND COMMUNICATION SYSTEMS, PANEL DRABINGS, CONDUITS, GROUNDING, ETC. AS INDICATED ON ELECTRICAL DRAWINGS OR AS REQUIRED BY CODE.
 4. ALL WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, PARTITIONS, CEILING, FLOORING, SPINKER SYSTEMS, WIRING, PIPING, ETC. DAMAGED BY THE ELECTRICAL WORK TO ORIGINAL OR BETTER CONDITION.

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REGISTERED PROFESSIONAL ENGINEER
 STATE OF INDIANA
 No. 11200553
 6/28/2019
 STEPHEN P. SCHMITT

NO.	REVISION/ISSUE	DATE
0	FINAL CDS	06/28/19

DC Power Consumption Calculation

Type	Module	Description	Module Quant.	Wire Q	Wire Size	Max Power Consumption (W)	Total Power Consumption (W)
AirScale	ABIA	4G Card	4	---	Factory Wired	158	632
AirScale	ABIC	Card	1	---	Factory Wired	212	212
AirScale	AMDB	Outdoor Modular Frame	2	3	16 AWG (41 STD) RHH	225	450
AirScale	ASIA	4G Common	2	---	Factory Wired	129	258
AirScale	ASIK	5G Common	1	---	Factory Wired	180	180
COVP	COVP	COVP	4	3	2 AWG (41 STD) RHH	0	0
RRU	AAFA	RRU	3	3	16 AWG (41 STD) RHH	2400	7200
RRU	AHLOA	RRU	3	3	16 AWG (41 STD) RHH	900	2700
RRU	FXFC	RRU	1	3	16 AWG (41 STD) RHH	1040	1040
SSC	Cabinet	Cabinet (Macro)	1	---	Factory Wired	600	600
SSC	SAS	Router	1	3	12 AWG (41 STD) RHH	150	150
System	ESV9	System Module	1	3	16 AWG (41 STD) RHH	68	68
System	FSWF	System Module	1	3	16 AWG (41 STD) RHH	180	180
Grand Total							13665

Note: COVP doesn't draw power. COVP just distributes power to the RRUs, so use RRU's to determine power consumption

NOTE:
 DC POWER LOAD SUMMARY IS BASED ON EQUIPMENT OUTLINED IN RFDS PROVIDED BY T-MOBILE. CONTRACTOR SHALL ENSURE LATEST RFDS
 MATCHES EQUIPMENT SUMMARY ABOVE. ANY DISCREPANCIES IN PROPOSED EQUIPMENT SHALL BE REPORTED TO T-MOBILE IMMEDIATELY TO CHECK
 POWER PLANT SUFFICIENCY.

DC POWER LOAD SUMMARY

SCALE: NOT TO SCALE

PROPOSED DC CIRCUIT SCHEDULE

MODULE	PAC	TECHNOLOGY	POLE	SIZE	WIRE TYPE	WIRE QTY	CONDUCTOR COLOR	JANEL
AMDB	P-1	4G	1	30A	6 AWG (41 STD) RHH	3	BLUE	BLACK
AMDB	P-2	5G	1	30A	6 AWG (41 STD) RHH	3	BLUE	BLACK

NOTE:
 CIRCUITS IN SCHEDULE ABOVE ARE NEW CIRCUITS REQUIRED FOR PROPOSED CONFIGURATION.
 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DC BREAKERS.

DC CIRCUIT SCHEDULE

SCALE: NOT TO SCALE

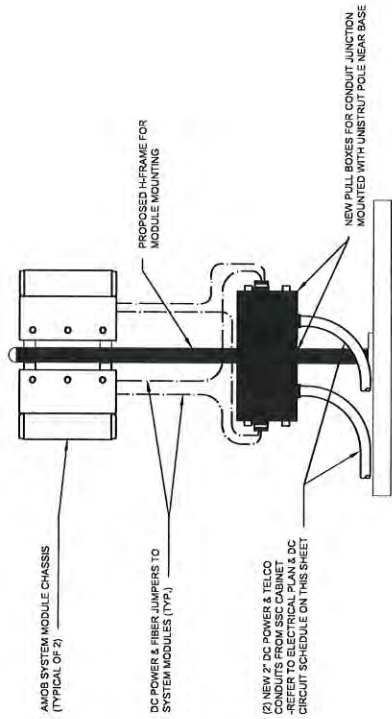
DC Power Plant Configuration

Existing Manufacturer: PURCELL SYSTEMS INC		Existing Configuration		Proposed Configuration	
Rectifier Slots Total	Available Rectifier Slots	Rectifier Model	Rectifier Output (W)	Rectifier Model	Rectifier Output (W)
5	4	1 Alpha_0100003_001_Cordex HP 2.4kw Rectifier for	2400	3 DELTA_ESR-48749C F-A_LP Small RECTIFIER	2900
Proposed Manufacturer: DELTA GREENTECH CORPORATION					
Proposed Model: DELTA_ESDA400-CCU01_HP Large SSC Cabinet: 400Amp					
8	5				
Notes: -Contractor shall remove existing SSC cabinet and install new Delta HP Large SSC cabinet -Existing Power Plant Configuration based on Power Survey Information provided by T-Mobile. -Contractor shall field verify existing condition and report any discrepancies to T-Mobile Construction Manager prior to proceed					

SPECIAL NOTE:
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DC POWER PLANT CONFIGURATION

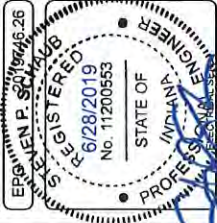
SCALE: NOT TO SCALE



AMDB MOUNT DETAIL

SCALE: NOT TO SCALE

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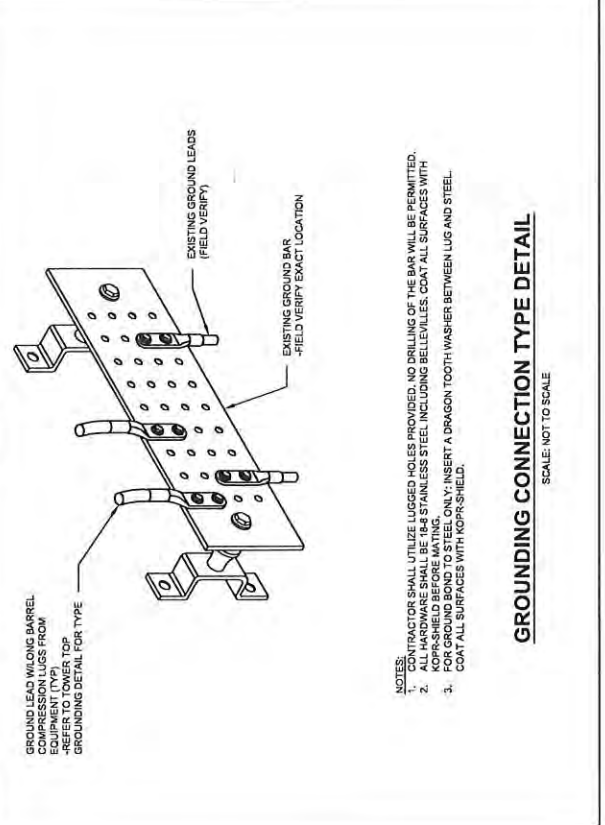
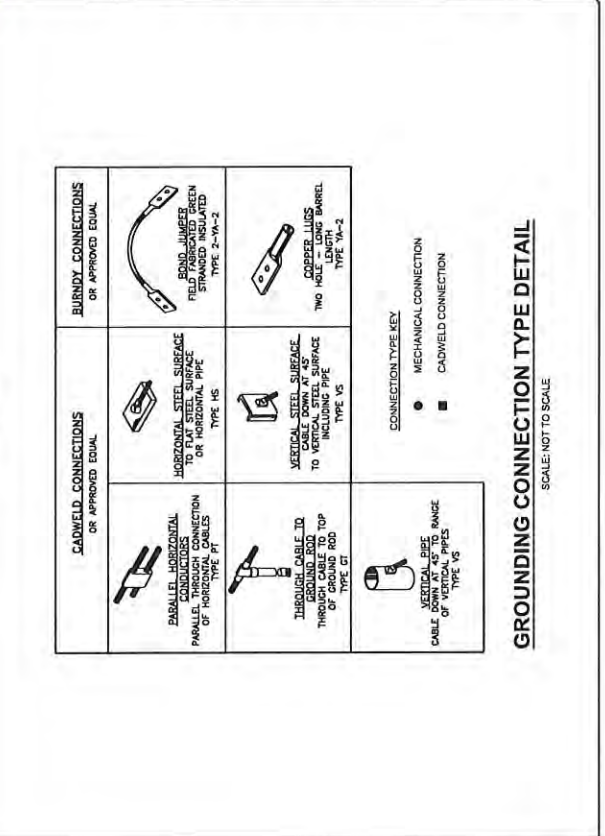
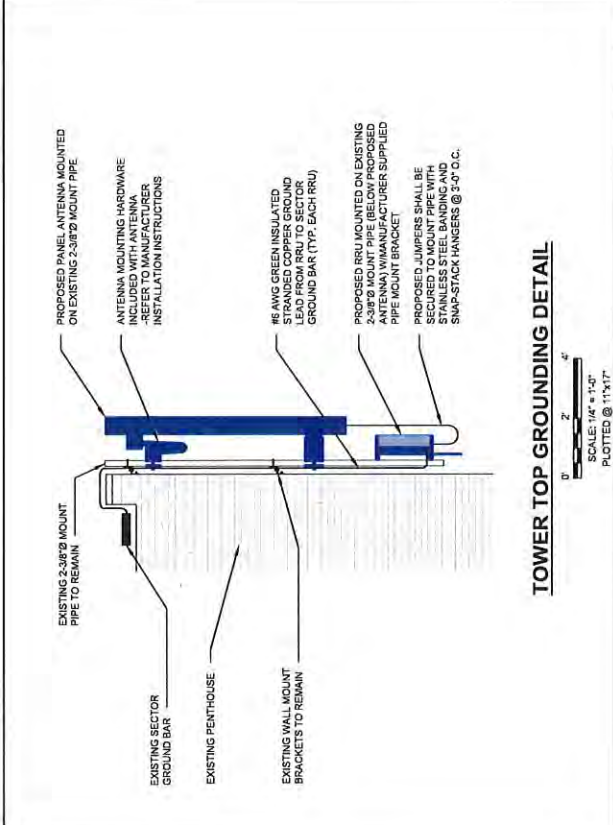
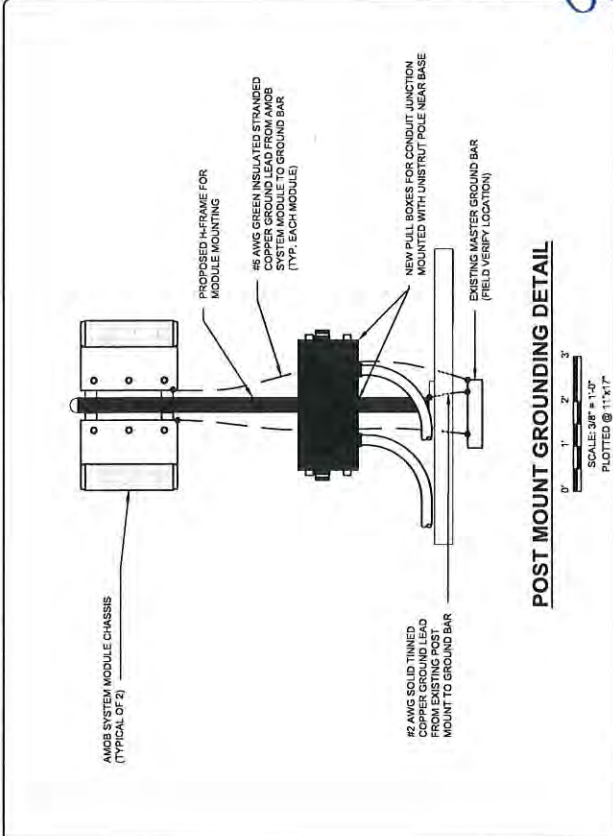
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TITLE: **GROUNDING DETAILS**

SHEET: **E-3**



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TITLE: **GENERAL NOTES**

SHEET: **N-2**

3.6 TRENCH BACK FILL

- PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS, DRAWINGS AND THE UTILITY REQUIREMENTS.
- CONDUCT UTILITY LOCATION SURVEYS 24 HOURS IN ADVANCE OF BACK FILLING AND CONDUCT UTILITY CHECK TESTS BEFORE BACK FILLING BACK FILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
- PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH SPACES AROUND THE CONDUITS.
- PROTECT CONDUIT FROM LATERAL MOVEMENT, DAMAGE FROM IMPACT OR UNBALANCED LOADING OF CONDUIT EMBEDMENT ZONE. PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 6-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
- COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE UNDISTURBED NATURAL SOILS TO A MINIMUM OF 98% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D1557.

END OF SPECIFICATION

4.1 WORK SITE SAFETY

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL WORKERS AND THE PUBLIC. CONSTRUCTION WORK PRESENTS UNUSUAL RISKS TO HEALTH AND SAFETY. THE CONTRACTOR IS RESPONSIBLE TO EDUCATE THEIR WORK FORCE OF THESE DANGERS AND LIMIT THEIR EXPOSURE TO HAZARDS. THIS EDUCATION SHALL INCLUDE BUT NOT BE LIMITED TO:
 - IDENTIFICATION OF HAZARDS AND CERTIFICATIONS. PROPER PERSONAL PROTECTIVE EQUIPMENT USAGE AS GOVERNED BY THE OSHA REGULATIONS.
 - PROPER USE OF SAFETY TOOLS WHICH MAY BE REASONABLY EXPECTED. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND ANY PROPERTY OCCUPANTS WHO MAY BE AFFECTED BY THE WORK UNDER CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL WORKERS AND THE PUBLIC. ALL SAFETY STANDARDS AND AT ALL TIMES SHALL CONFORM TO THE MOST RESTRICTIVE OF THESE STANDARDS TO ENSURE A SAFE WORKPLACE.
- LOWER WORK PRESENTS ADDITIONAL THREATS TO HEALTH AND SAFETY. ALL WORKERS SHALL BE TRAINED AND MUST BE TRAINED AS REQUIRED TO ENSURE THAT SAFE WORK PRACTICES ARE LEARNED AND FOLLOWED. AS REQUIRED BY OSHA, WHEN WORKING ON EXISTING COMMUNICATION TOWERS, EMPLOYEES MUST BE PROVIDED WITH APPROPRIATE FALL PROTECTION. TRAINED TO USE THIS FALL PROTECTION AND ENFORCED BY THE CONTRACTOR. PROTECTION MUST BE CONSISTENTLY SUPERVISED AND ENFORCED BY THE CONTRACTOR.
- ALL SAFETY EQUIPMENT SHALL BE INSPECTED ACCORDING TO ALL OSHA AND INDUSTRY SCHEDULED INTERVALS AND ALL INSPECTIONS SHALL BE DOCUMENTED PER APPLICABLE CODES AND STANDARDS.

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TITLE:
GENERAL NOTES

SHEET:
N-3

3.4 SAFETY IS OF PARAMOUNT CONCERN TO BOTH SITE WORKERS AND THE PUBLIC.

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END OF ELECTRICAL SPECIFICATIONS

PROJECT SPECIFICATION 16020 - (GROUNDING)

PART I: GENERAL

1.1 SCOPE

A. THIS SPECIFICATION PRESCRIBES THE REQUIREMENTS FOR FURNISHING, INSTALLATION AND CONNECTION OF UNDERGROUND CABLE, CONNECTIONS AND ASSOCIATED COMPONENTS AS INDICATED ON THE DRAWINGS. BONDING CABLE, CONNECTIONS AND ASSOCIATED COMPONENTS AS INDICATED ON THE DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

- ELECTRICAL POWER SYSTEMS
- GROUNDING ELECTRODES
- GROUND BUS BAR
- ENCLOSURES
- MONOPOL/LATTICE TOWER
- ICE BRIDGE

1.2 REFERENCES: THE PUBLICATIONS LISTED BELOW FORM PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION, UNLESS NOTED OTHERWISE. EXCEPT AS MODIFIED BY THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THESE PUBLICATIONS.

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- OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
- UL (UNDERWRITERS LABORATORIES)
- APPLICABLE LOCAL CODES AND ORDINANCES

PART II: PRODUCTS

2.1 GENERAL: ITEMS SHALL BE NEW AND SHALL BE INSTALLED ONLY IN FIRST-CLASS CONDITION.

B. SUBSTITUTIONS FOR MATERIAL WILL BE PERMITTED ONLY BY WRITTEN APPROVAL OF THE T-MOBILE CONSTRUCTION SUPERVISOR.

2.2 MATERIALS: THE CONTRACTOR SHALL PROVIDE ALL MATERIAL EXCEPT AS SPECIFIED IN THE CONTRACT DOCUMENTS. ALL MATERIAL SHALL BE APPROVED AND LISTED BY OR BEAR THE U.L. LABEL AND WILL COMPLY WITH ANSI, IEEE AND NEMA STANDARDS WHERE APPLICABLE.

- CONDUIT: UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, SIZED AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- ALL EXTERIOR ABOVEGROUND CONDUIT SHALL BE PER LOCAL CODE REQUIREMENTS.
- CONDUITS IN CONDUIT IN DR ADJACENT TO HIGH-HEAT SOURCE SHALL BE TYPE XHHW (EXTRINSICALLY HEAT RESISTANT) AND SHALL BE SIZED TO ACCOMMODATE ALL WIRING.
- WHERE FLEXIBLE METALIC CONDUIT SHALL BE USED FOR OUTDOOR LOCATIONS WHERE FLEXIBLE CONNECTION IS REQUIRED.
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- WHERE FLEXIBLE METALIC CONDUIT SHALL BE USED FOR OUTDOOR LOCATIONS WHERE FLEXIBLE CONNECTION IS REQUIRED.

2.3 CABLES: CONDUCTORS FOR GENERAL WIRING SHALL BE NED STANDARD ANNEALED COPPER WIRE WITH NEG 60 VOLT INSULATION, TYPE, THIN OR THIN.

- CONDUCTORS IN CONDUIT IN DR ADJACENT TO HIGH-HEAT SOURCE SHALL BE TYPE XHHW (EXTRINSICALLY HEAT RESISTANT) AND SHALL BE SIZED TO ACCOMMODATE ALL WIRING.
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2.4 COAXIAL CABLE SUPPORTS:

- ALL WAVE GUIDE SUPPORTS SHALL BE MANUFACTURED TO MEET ALL COAX MINIMUM REQUIREMENTS FOR WAVE GUIDES, AND 9150R FOR 6 WAVE GUIDES. SUPPORTS SHALL BE PROVIDED 2'-0" ON CENTERS.

PART III: EXECUTION

3.1 PREPARE: SURFACES TO WHICH GROUND CONNECTIONS WILL BE MADE SHALL BE FREE OF PAINT, GALVANIZING AND OTHER SURFACE COATINGS.

B. ALL METAL SURFACES EXPOSED ON GROUNDING SHALL BE EITHER COLD GALVANIZED, OR PAINTED TO MATCH ORIGINAL SURFACE.

3.2 EXAMINATION:

- EXAMINE AREAS AND CONDITIONS UNDER WHICH ELECTRICAL GROUNDING AND BONDING CONNECTIONS ARE TO BE MADE AND NOTIFY T-MOBILE CONSTRUCTION SUPERVISOR IN WRITING OF UNSATISFACTORY CONDITIONS.
- THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR 24 HOURS PRIOR TO THE TRENCH BACK FILL ALL WORK DONE BELOW FINISHED GRADE SHALL BE INSPECTED BY THE AERIAL CONSTRUCTION SUPERVISOR DURING THAT PERIOD OR THE CONTRACTOR SHALL PROCEED.

3.3 GROUND TESTING:

- THE CONTRACTOR SHALL TEST THE GROUND ELECTRODE ROD RESISTANCE IN ACCORDANCE WITH TEST INSTRUMENTS SHALL OPERATE AT A FREQUENCY OTHER THAN 60 HERTZ AND SHALL CONTAIN STRAY CURRENT AND DC FILTERS, FAULT CURRENT PROTECTION AND HAVE SENSITIVITY TO OPERATE A LOW SIGNAL STRENGTH.
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- TEST RESULTS SHALL BE FORWARDED TO THE T-MOBILE CONSTRUCTION SUPERVISOR FOR APPROVAL.

END OF GROUNDING SPECIFICATIONS

CLOSE-OUT DOCUMENTATION CONTAINING THE FOLLOWING:

- SWEEP TEST RESULTS
- PHOTO DOCUMENTATION OF:
 - UNDERGROUND CONDUITS AND GROUND RING
 - ANTENNA, COAXIAL, JUMPER ATTACHMENTS AND GROUND KIT ATTACHMENTS
 - RETURN OF ACCESS AND/OR ACCESS AUTHORIZATION
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