



State of Michigan Current Codes in Effect - (Statewide)

- 2015 Michigan Building Code, MBC 2015
- 2015 Michigan Mechanical Code, MMC 2015
- 2015 Michigan Plumbing Code, MPC 2015
- 2014 National Electrical Code with State amendments, NEC 2014
- 2015 International Fuel Gas Code, IFGC 2015
- Accessibility: Michigan Barrier Free Design Law, P.A. 1966 amended and the 2009 ICC/ANSI A 117.1 standard as referenced from Chapter 11 of the 2015 Michigan Building Code

APPLICABLE CODES APPLIED TO THIS PROGRAM:

- Building Code: State of Michigan Building code 2015
- Mechanical Code (HV/AC): State of Michigan Mechanical code 2015
- Plumbing code: State of Michigan Plumbing Code 2015
- Accessibility: Michigan Barrier Free Design Law, P.A. 1966 as amended and the 2009 ICC/ANSI A117.1 Standards as referenced from Chapter 11 of the State of Michigan Building code 2015.
- Rehabilitation Requirements: State of Michigan 2015 Rehabilitation Code
- Electrical Code Requirements: National Electrical Code (NEC) 2014 with state of Michigan amendments
- Gas Code Requirements: International Fuel Gas Code IFGC 2015
- Fire Safety Requirements: IFC 2013; NFPA 72-2013; NFPA 03-2013; NFPA 33-2013; NFPA 10-2013; NFPA 01-2013; NFPA 13-2013; NFPA 101-2013; NFPA 30-2013
- Energy conversation: State of Michigan Uniform Energy Code 2014, ASI/ASHRE/IES Standard 90.1-2013 (supersedes ANSI/ASHREA/IES Standard 90.1-2010) Included ANSI/ASHREA/IES Addenda listed in Appendix F of Energy Standards for building structures, except Low Rise Residential Building Facilities (L-P Edition)

Statement of Special Inspections

Construction Operation	Code Section	Are Special Inspections Required		Pre qualified Inspection Agencies	Date of Approved Quality Control Procedures (Code Officials Use)
		Yes	No		
Inspection of Fabricators	1705.2	X	-	Mc Dowell and Associates	
Steel Construction	1705.2	X	-	21355 Hatcher Avenue	
Concrete Construction	1705.3	X	-	Ferndale, Michigan 48220	
Masonry Construction	1705.4	X	-		
Wood Construction	1705.5	-	X	62 Consulting Group	
Soils	1705.6	X	-	1866 Woodside Street	
Pile Foundations	1705.7	-	X	Troy, Michigan 48063	
Driven Deep Foundations	1705.7	-	X		
Cast-in-Place Deep Foundations	1705.8	-	X	Soil and Materials Engineers, Inc	
Helical Pile Foundations	1705.9	-	X	43980 Plymouth Oaks Blvd	
Wind Resistance	1705.10	-	X	Plymouth, Michigan 48170	
Seismic Resistance	1705.11	-	X		
Testing and Qualification for seismic Resistance	1705.12	-	X		
Sprayed Fire Resistance Materials	1705.13	-	X		
Mastic and Intumescent Fire Resistance Coatings	1705.14	-	X		
Exterior Insulation and Finish Materials	1705.15	-	X		
Fire Resistance Penetrations and Joints	1705.16	-	X		
Smoke Control	1705.17	-	X		

STATEMENT OF SPECIAL INSPECTIONS:

General: Where special inspections or testing is required by Section 1704 of the MBC 2015 Code and Ypsilanti Township, Michigan Requirements, the registered design professional in responsible charge and the General Contractor of Record, shall prepare a statement of special inspections in accordance with Section 1705 for submittal by the applicant to the local Building Department for their review and consideration.

DISCLOSURE and LIMITATION of REVIEWS

This review and recommendation by Ypsilanti Township, Michigan Building Department for approval of a Building Permit does not relieve the Owner or their Representatives from complying with other codes, ordinances and other Federal, State and County reviews, approvals, permits and inspections.

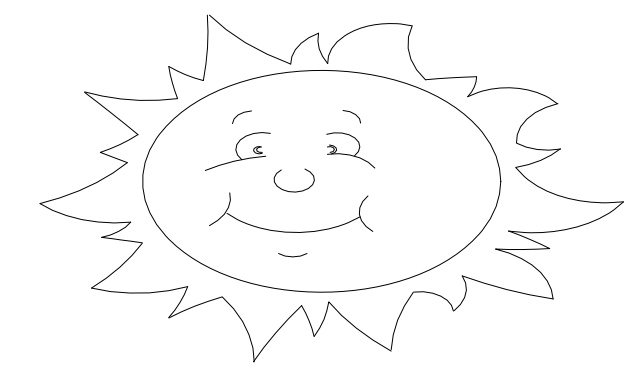
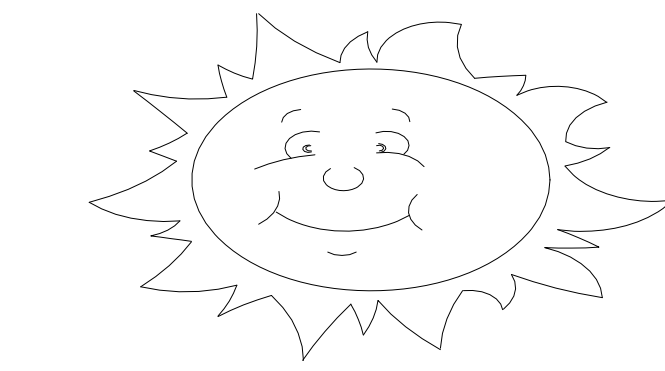
Hazardous Impact Statement

There is no potential impact assessment from use, processing or movement of any type of hazardous materials or harmful chemicals in the operation of this facility.

ARCHITECT'S STATEMENT :

These Construction Documents were prepared for compliance with the Michigan Construction Codes 2015 in effect at the time of permit submittal. All engineers, contractors, suppliers involved with this Project shall comply with the same codes, issued and approved code modifications of Ypsilanti Township Planning Commission and Ypsilanti Township Building Department rulings and whenever required, shall provide Shop Drawings and Submittals clearly describing compliance to the Registered Design Professional in Responsible Charge for review and approval.

Site & Building Development
tita Tortillas
 Lot #11
 Washtenaw Business Park
 Ypsilanti Township, Michigan



- USE OR OCCUPANCY CLASSIFICATION** - Single Story Building - F Group Food Processing
 - F-1 Use Group - Moderate Hazard - Food Processing
- PROPOSED NEW PROGRAM:** * New Single Story Building
- OCCUPANT LOAD OF BUILDING**
 - " ALL USE-GROUP AREAS" = First Floor - Foot Print - 6,000 Square Feet.

TOTAL PERSON OCCUPANCY-ALL AREAS - New Facilities 15 persons
- CONSTRUCTION TYPE THIS PROGRAM:** 2B Construction (Michigan Building Code 2015; Table 601) Pre-Engineered Metal Building
 - All items zero hour rating required
 - All buildings in excess of 24,000 square feet require fire suppression system. HAVE 6,000 sq.ft.
 - 2B Construction Allowed: Use Group "F-1/ S-1" - Single floor max allowed 62,000 sq.ft. - HAVE 6,000 sq.ft.
- FIRE SUPPRESSION - NEW BUILDING:** Alarm System and Portable Fire Extinguishers
- PLUMBING FIXTURE TABULATION**
 - Complete Building: 15 PERSONS - (10 Male/25 Female)

FIXTURE	REQUIRED	PROVIDED
Water Closet * 1/25	1 - male	1 - fixtures
	1 - female	1 - fixtures
Lavatories * 1/40	1 - male	1 - fixtures
	1 - female	1 - fixtures
Urinals - * NR	NR	NR
Drinking Fountain 1/100	1 - unit	1 - unit
Service Sink	1 - total	1 - unit
Kitchen Sinks	NR	1 - unit
Hand Sinks	NR	5 - units
Utility Food Processing Sinks	NR	2 - units

GENERAL PROJECT INFORMATION:

- * Owner: TiTa Tortillas
3763 Commerce Court
Wayne, Michigan 48184
Martha Jaramillo
Francisco Alvarza
1-734-756-7646
- * Architect: Studio Design-ST L.L.C
37466 Ann Arbor Trail
Livonia, Michigan 48150
Mr. Stanley Tkacz, ALA, IIDA
architect
1-734-744-9190
1-734-812-3566

SHEET INDEX

- T - Title Sheet
- DI-1 Design Intent
- 1 - Site Survey
- 2 - Site Plan Master
- 3 - Site Plan Grading
- 4 - Site Plan Utilities
- 5 - Site Plan Landscaping
- 6 - Construction Floor Plan
- 7 - Ceiling Plan and Details
- 8 - Exterior Elevations
- 9 - Building Sections #1
- 10 - Building Sections #2
- 11 - Egress Travel Floor Plan
- 12 - Toilet Rooms and Stairs

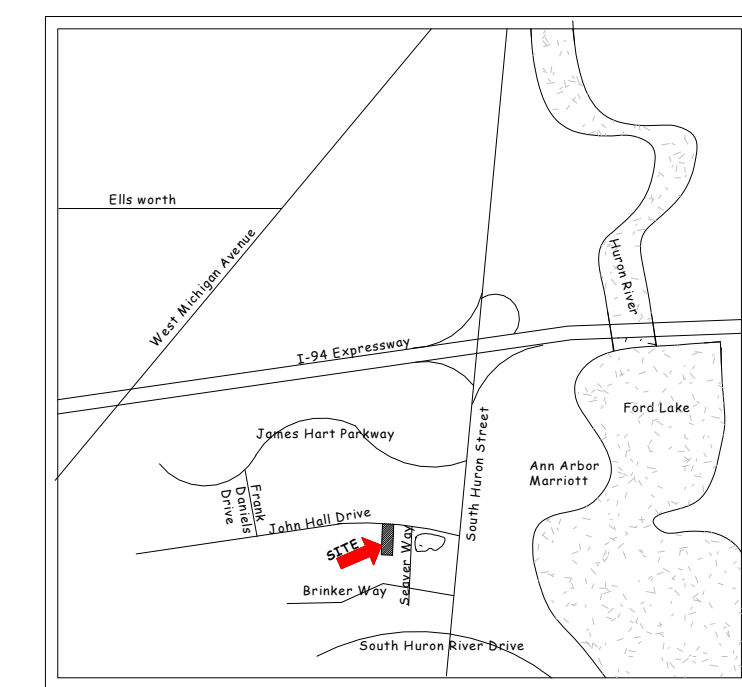
- S-1: Foundation Plan
- S-2: Mezzanine Framing Plan

- M-1: HV/AC Floor Plan
- M-2: HV/AC Details
- M-3: Plumbing Floor Plans
- M-4: Plumbing Details

- E-1: Electrical Lighting Floor Plans
- E-2: Electrical Power/ Data Floor Plans
- E-3: Electrical Details

YPSILANTI TOWNSHIP - (WASHTENAW COUNTY) - BUILDING DEPARTMENT SPECIAL NOTES:

- * **ELECTRICAL NOTES:**
 - Provide "Exit Signs" in all areas and as indicated on the Electrical Construction Documents.
 - Submit Fire Alarm Shop Drawings for review and consideration by the Ypsilanti Township Fire Marshal which will require a Special Permit for installation and alterations.
 - GFI electrical power receptacles are required within 25' - 0" of each roof top HV/AV equipment. Article 210-6B and 210. CB.
 - Connect all "Exit and Emergency" light fixtures per NEC Article 700-12.
 - Provide "Emergency" Illumination in all areas per NEC Article 700-16.
 - Service Department Electrical power receptacles shall comply with NEC Article 511.2; NEC 2014/2016.
- * **PLUMBING NOTES:**
 - Venting of all and Toilet Rooms MUST comply with Section 901.1.1; Michigan Plumbing Code 2015, and be a direct exhaust to the exterior of the building structure.
 - All piping material shall be State Approved in accordance with the State of Michigan Plumbing code 2015.
- * **MECHANICAL NOTES:**
 - Provide a full and complete "Air Balance Report" and or schedule of all areas and spaces prior to or at the time of "Final Inspection" per Section 403-1 of the State of Michigan Mechanical HV/AC Code 2015.
 - Provide a full and complete "Gas Piping Diagram", indicating lengths of runs, pipe sizes, and gas consumption prior to obtaining a Mechanical permit per State of Michigan Mechanical HV/AC Code 2015.
- * **BUILDING NOTES:**
 - Insulation shall comply with flame spread rulings per State of Michigan Construction Code 2015. All insulation must comply with flame spread requirements for building of TYPE 2B construction (Listed as 25 or less)
 - Kitchens and kitchenettes shall be accessible in accordance with all standards of ICC/ANSI A117.1 - 98. All top of counters shall have a maximum height of 34" (2' - 10") at sink area and a minimum width of 30" (2' - 6") work space.
 - Service counters for sales or distribution of goods and product services to the public shall have a portion of counter area 36" (3' - 0") wide at a maximum height of 34" (2' - 10") above finish floor line. All Retail and Cashier counters shall comply per stated Chapter 11; Section 904.3 of the ICC/ANSI A117.1 - 98 code.
 - Provide barrier free access to this facility: East Side Main Entry; as marked and illustrated.
 - Provide "Exit and Emergency Lighting" this building structure within PHASE #1 area in strict accordance with Chapter 10, State of Michigan Construction Code 2015 and NEC 2014. "Emergency Lighting" shall be arranged and placed to provide illumination of at least ONE (1) Foot candle (11-Lux) and a minimum measured at any point of 0.1 (Lux) along the path of egress at floor level. Provide any and all additional "Emergency Lighting" for egress in all Vestibules and Corridors per code Section 1008.3.2 State of Michigan construction Code 2015.
 - Provide any and all as necessary screening of all roof top HV/AC equipment in accordance with the Ypsilanti Township ordinances and regulations.

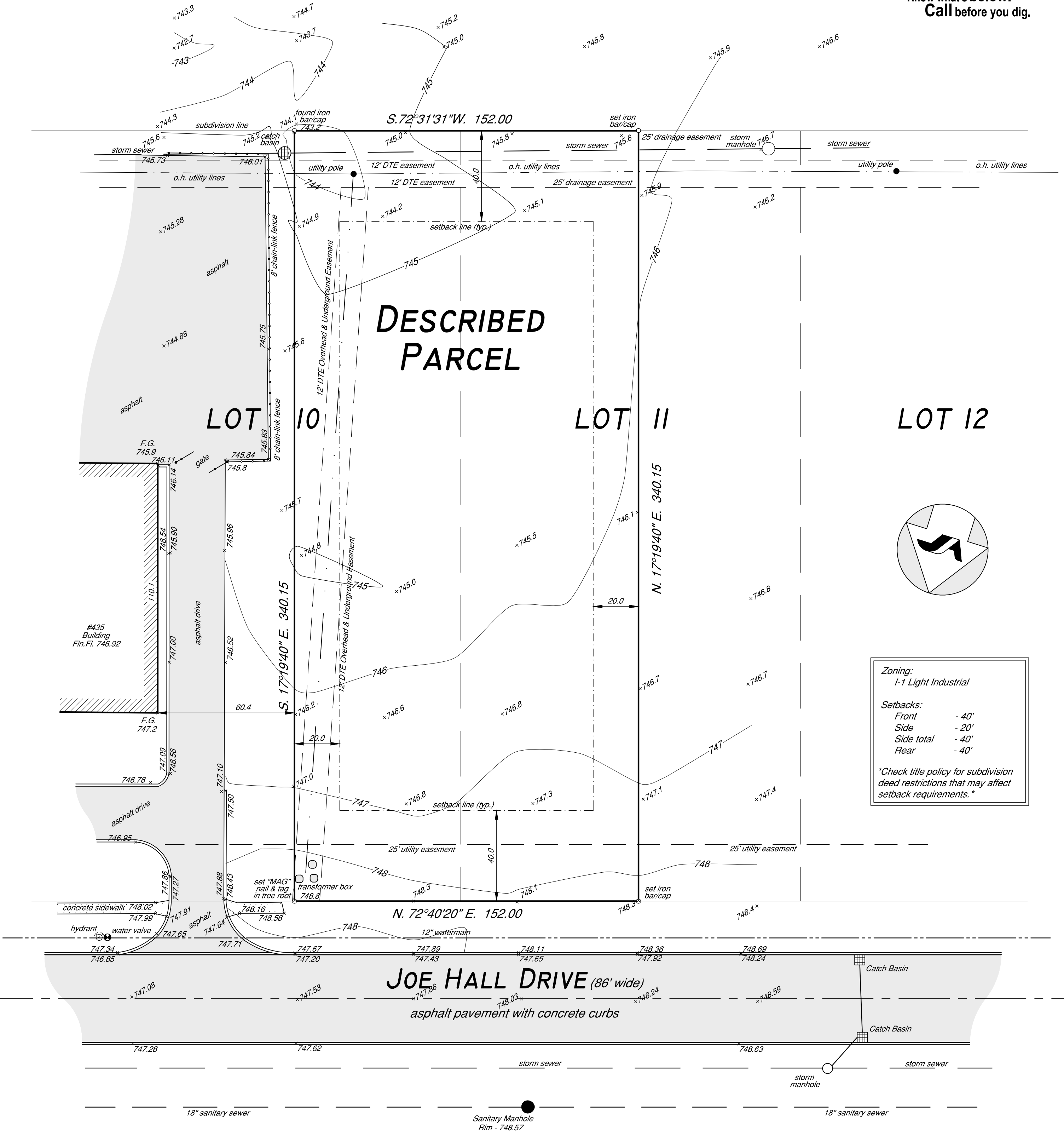


Location Map - Not to Scale

Main Facilities
 Tita Tortillas
 Lot #11 - Washtenaw Business Park
 Ypsilanti Township, Michigan
 project
 17 March 2021
 revisions
 Studio Design-ST L.L.C.
 37466 Ann Arbor Trail
 Livonia, Michigan 48150
 PH: 734-744-9190 FAX: 734-744-9077
 web: studiodesign.com email: studiodesign@studiodesign.com
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 Studio Design-ST L.L.C.
 All Rights Reserved
 date
 29 March 2021
 ST
 drawn by
 sheet of
 2020-06
 project number
 T
 sheet number



Know what's below.
Call before you dig.



Zoning:
I-1 Light Industrial

Setbacks:
Front - 40'
Side - 20'
Side total - 40'
Rear - 40'

Check title policy for subdivision deed restrictions that may affect setback requirements.

LEGAL DESCRIPTION

THE EAST 78.50 FEET OF LOT 11, ALSO THE WEST 73.50 FEET OF LOT 10 OF "WASHTENAW BUSINESS PARK", TOWN 3 SOUTH, RANGE 7 EAST, YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN. PART OF FRENCH CLAIMS 680 & 681.

TOPOGRAPHIC SURVEY

Prepared For: Martha Jaramillo
3763 Commerce Ct.
Wayne, MI 48184
(734) 756-7646

Jekabson & Associates, P.C.
Professional Land Surveyors
1320 Goldsmith, Plymouth, MI 48170
(734) 414-7200 (734) 414-7272 fax

by: *[Signature]*

Date	7 JAN 2022
Job No.	21-03-008
Scale	1" = 30'
Drawn	AAH
Checked	JGE
Sheet	1 OF 1



Site Information:

* Address: 680 Joe Hall Drive
 * Parcel:
 * Legal Description:
 The West 73.50 ft. of Lot #10 and the East of 66.5 ft. of Lot 11, (140.00ft. by 340.15 ft of said land part of "Washtenaw Business Park", Town 3, South, Range 7 East, Ypsilanti Township, Washtenaw County, State of Michigan, Part of French claims 680 & 681
 * 140.00 ft. x 340.15 ft. = 51,703 square feet (1.187 Acres)

*** Site Development:**

- * Zoning: I-1 Light Industrial
- * Front Yard Set Back: 40'-0"
- * Rear Yard Set Back: 40'-0"
- * Side Yard Set Back: 20'-0"
- * Building Height: 40'-0"
- * Maximum Lot Coverage: No Restriction
- * Minimum Floor Area Requirements: No Restriction

*** Parking Requirements:**

- * Industrial or Research Establishments and related accessory offices:
- * Five spaces
 +
 One space per largest working shift or one space for each 500 square feet of usable floor area.

*** Parking Provided:**

- 1 - ADA Acceptable Space
- 16- Standard Spaces
- TOTAL: 17 parking Spaces**

Site Plan
 Scale: 1" = 20'-0"

SITE CONSTRUCTION NOTES
YPSILANTI TOWNSHIP, MICHIGAN

- All construction of site development, building an site structures shall conform to the current standards and specifications of Washtenaw County Office of Public Service, State of Michigan and the Charter Township of Ypsilanti Planning and Engineering Consultants.
- The Site Contractor shall call and notify "MISS DIG" for site inspection and location at least three (3) working days, prior to start of any on site or off site construction related to the this site, program and adjacent properties.
- The Site Contractor shall notify the Ypsilanti Township Engineering Consultants, Ypsilanti Office of Public Service, Washtenaw County Office of Public Service, at least forty-eight (48) hours prior to the start of any on-off site construction, requiring review and inspections by these agencies.
- All handicapped parking spaces, handicapped walk areas and entry directions, shall be identified with the international symbol for "Handicapped Access" and area use. All handicapped parking spaces shall have in place One (1), six foot (6'-0") steel post, with handicapped metal identity sign for reserved handicapped parking space.
- Access to the building structure, shall be provided for physically impaired, as indicated within the State of Michigan Construction Code, Section 4: Act 230: 25 May 1995, as modified.
- On site parking shall be provided for all construction personnel during the completion of this building and site program.
- As built drawings, a set of reproducible mylars, shall be submitted to the office of the Architect, so they may be presented to the Charter Township of Ypsilanti Engineering Consultant, prior to issuance of an Occupancy permit or release of Contractors' bond.
- All permits for this program shall be obtained by the proper contractors as required for their work, but is not limited to:
 - A. Charter Township of Ypsilanti: Planning Department
Engineering Department
General Construction
Electrical Trades
HV/AC Trades
Plumbing Trades
 - B. Washtenaw County Office of Public Service: Storm Sewer Drainage Design Connection
 - C. Washtenaw County Health Department Well system for Landscape sprinkler system
 - D. Washtenaw County Department of Environmental Services - Soil Erosion Permit
 - E. State of Michigan Department of Transportation (MDOT) Approach Permit-IF REQUIRED
- The estimate number of new employees scheduled for this facility listed as full time is 5 persons with the possibility of a mxax shift of 7 persons.
- All site and parking lighting shall be both pole and building mounted as indicated on the site details and building electrical drawings, with all exterior lighting shielded and contained within the property and bounty lines of this site.
- All trash shall be contained upon the site within a trash bin area as detailed on the site construction documents.
- NOTE !! No signs - building or ground** are submitted with this site plan design for review and consideration. ALL exterior signage and graphics, both building and site shall be submitted for review and consideration BY OTHERS, at a later date. All sign permits required by this program development shall be obtained by the sign contractor.
- All soil erosion and sedimentation control items at property line perimeter shall be in place before start any on site construction elements.
- All catch basin filter shall be in place and in use at all catch basin as they are constructed and shall remain in place until site if completed and accepted.
- No hazard materials will be storage or allowed at this site location or building structure.
- The owner of this site and buildings shall maintain all on site pavement surfaces and walkways in good repair, cleaning, snow removal and provide replacement as required for public safety.

Site Information:

* Address: 680 Joe Hall Drive

* Parcel:

* Legal Discription:

The West 73.50 ft. of Lot #10 and the East of 66.5 ft. of Lot 11, (152.00 ft. by 340.15 ft of said land part of "Washtenaw Business Park", Town 3, South, Range 7 East, Ypsilanti Township, Washtenaw County, State of Michigan, Part of French claims 680 & 681

* 152 ft. x 340.15 ft. = 51,832 square feet (1.19 Acres)

* Site Development:

* Zoning: I-1 Light Industrial

* Front Yard Set Back: 40'-0"

* Rear Yard Set Back: 40'-0"

* Side Yard Set Back: 20'-0"

* Building Height: 40'-0"

* Maximum Lot Coverage: No Restriction

* Minimum Floor Area Requirements: No Restriction

* Parking Requirments:

* Industrial or Research Establishments and related accessory offices:

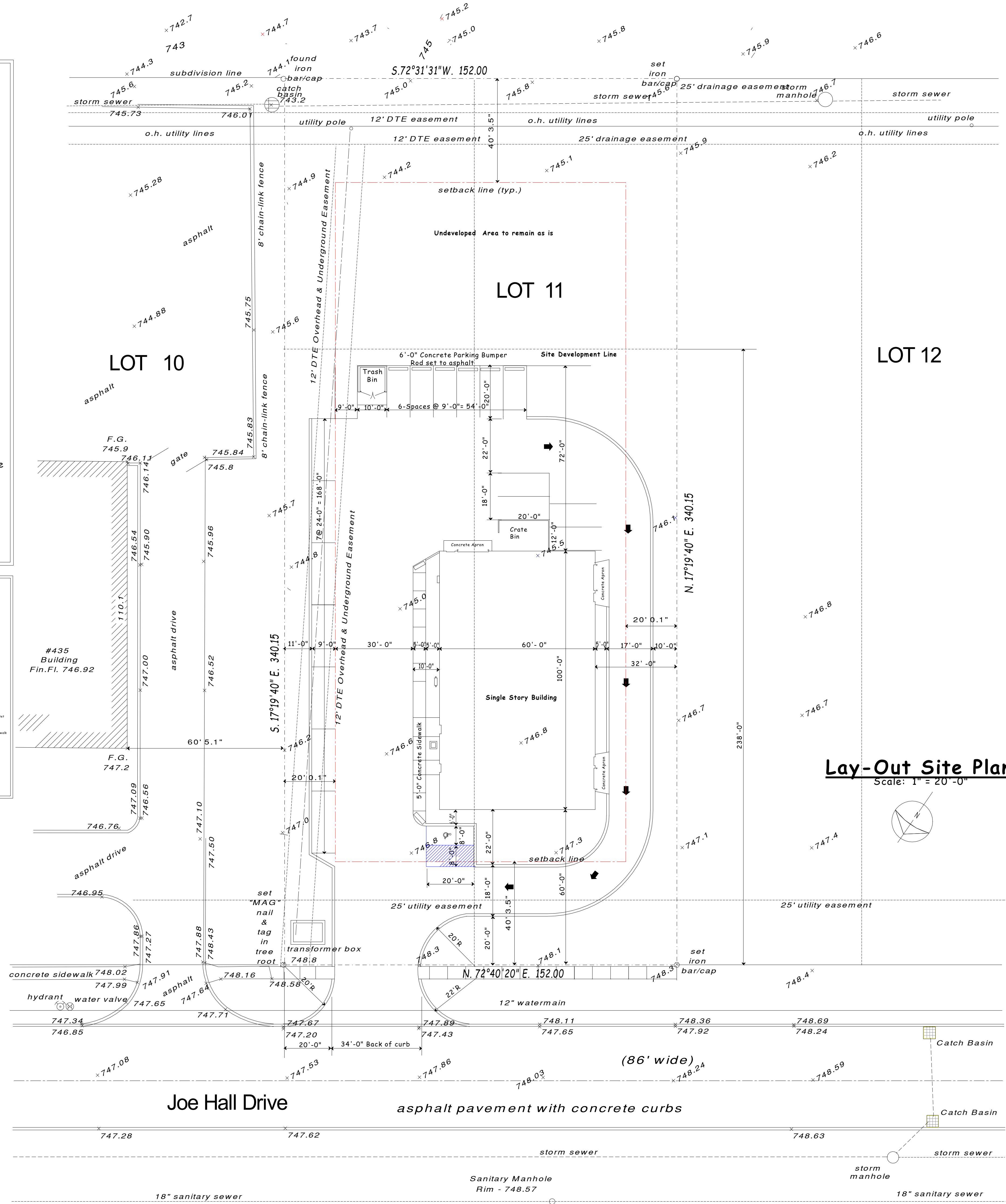
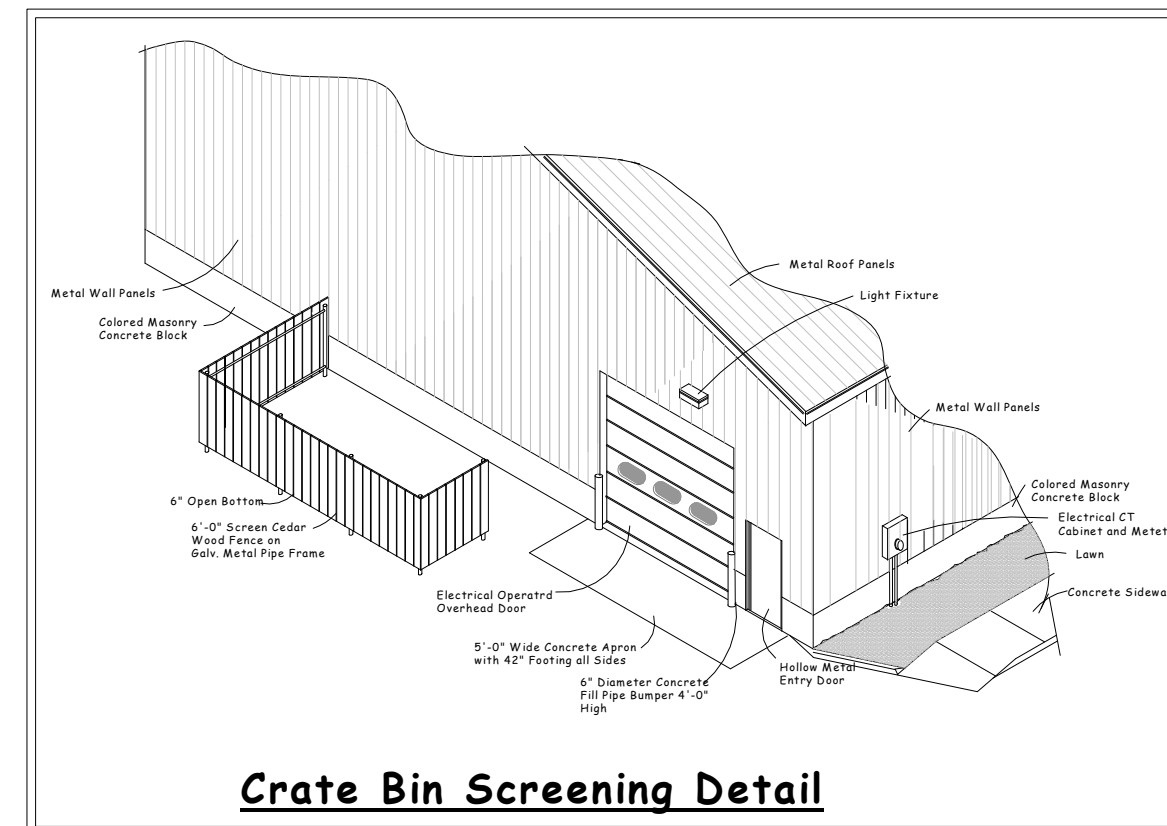
* Five spaces

One space per largest working shift or one space for each 500 square feet of usable floor area.

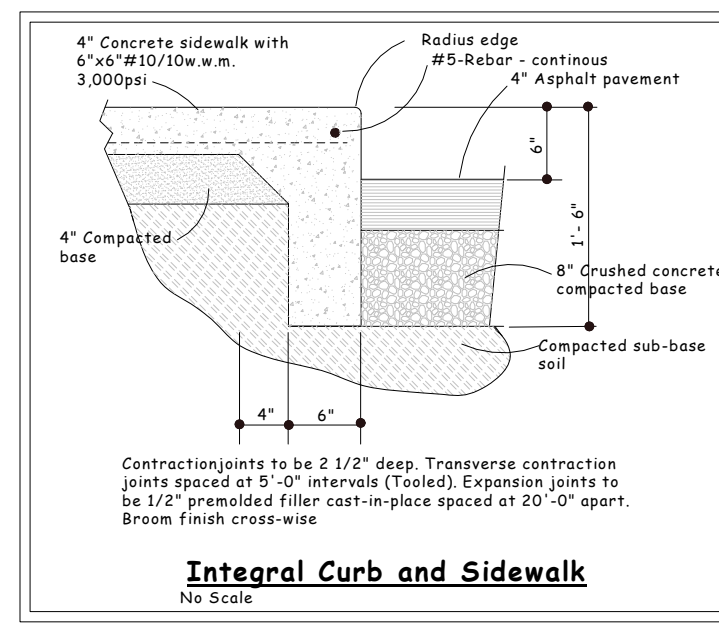
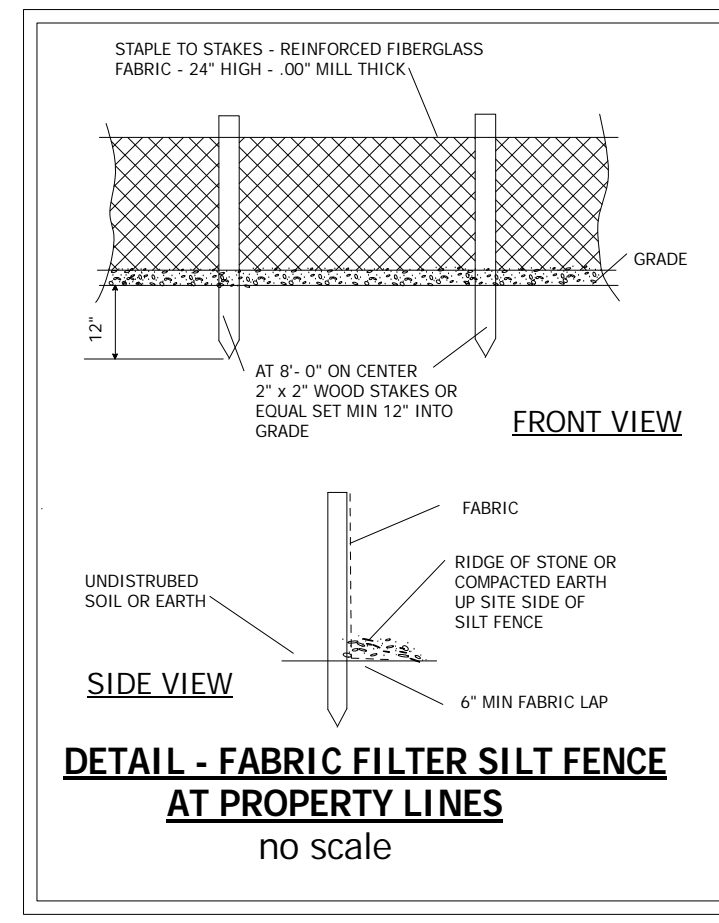
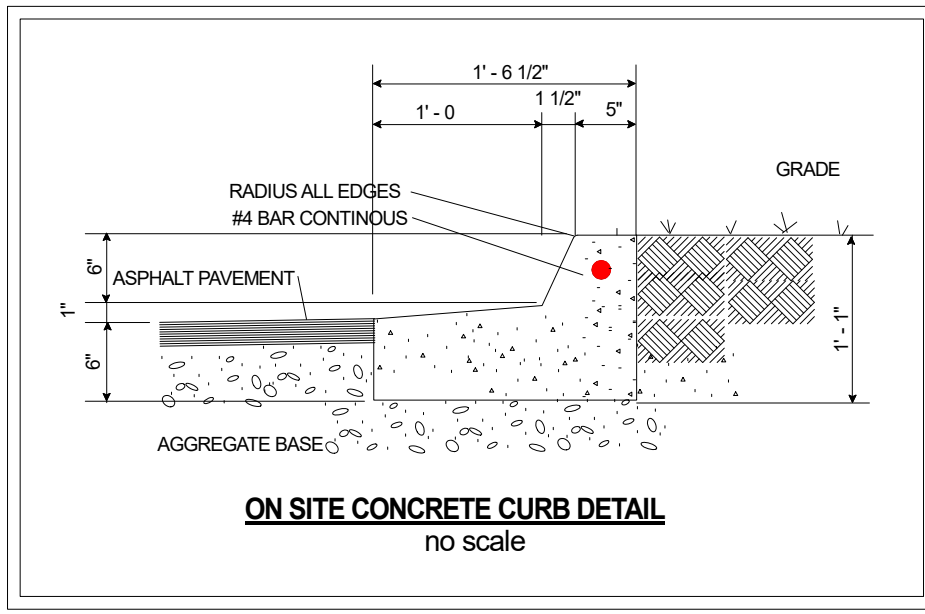
* Parking Provided:

1 - ADA Acceptable Space
18 - Standard Spaces

TOTAL: 19 parking Spaces



Lay-Out Site Plan
Scale: 1" = 20'-0"

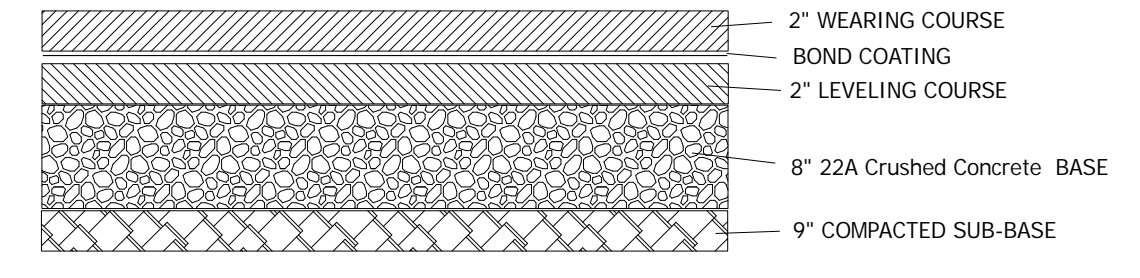


PAVEMENT NOTES :

- Pavement shall be type, thickness and cross section as herein indicated and illustrated on the construction documents :

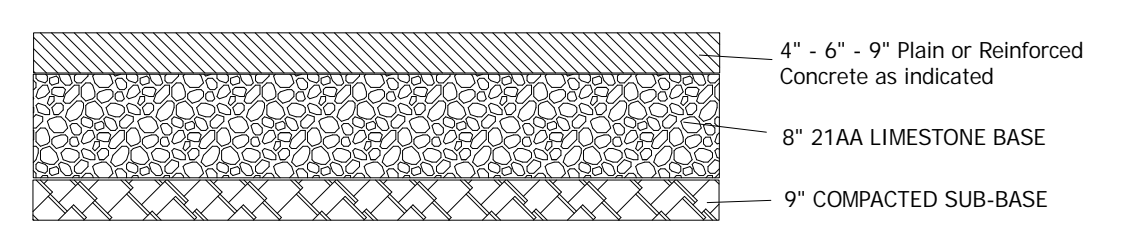
A. Composition of Bituminous Pavement Mixture :
State of Michigan Department of Transportation Specification Mixture Designation 1300

- * Subbase - compacted to 95% of max unit weight to a depth of 9"
- * Aggregate Base - 8" - 22A Crushed Concrete Base compacted to 95% of max unit weight at full depth.
- * Leveling Course - 2" bituminous MDOT Mixture 20AA/1300
- * Bond Coat - 0.10 gallon per square yard
- * Wearing Course - 2" bituminous MDOT Mixture 21AA/1300



B. Concrete Pavement : Non-Reinforced

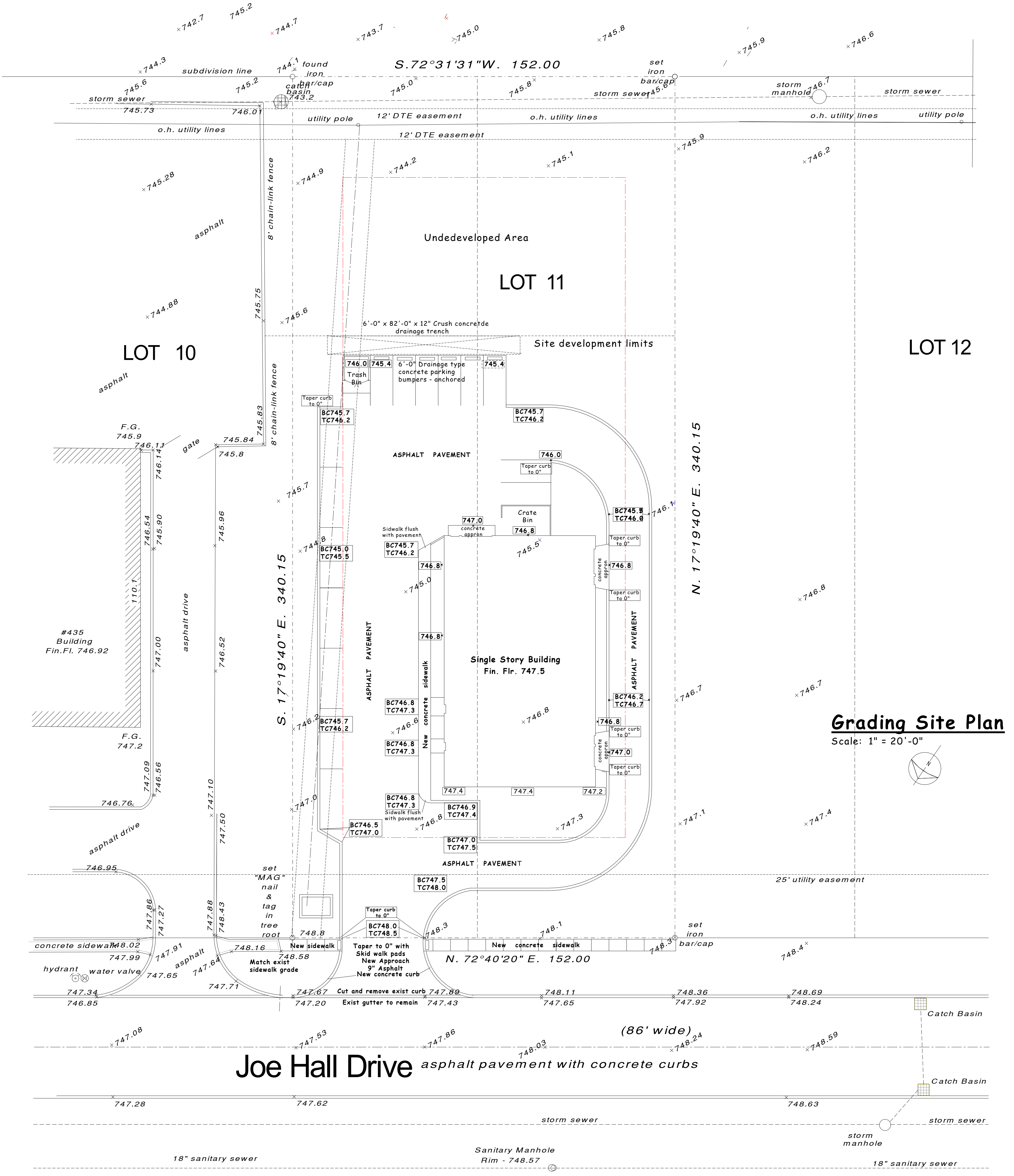
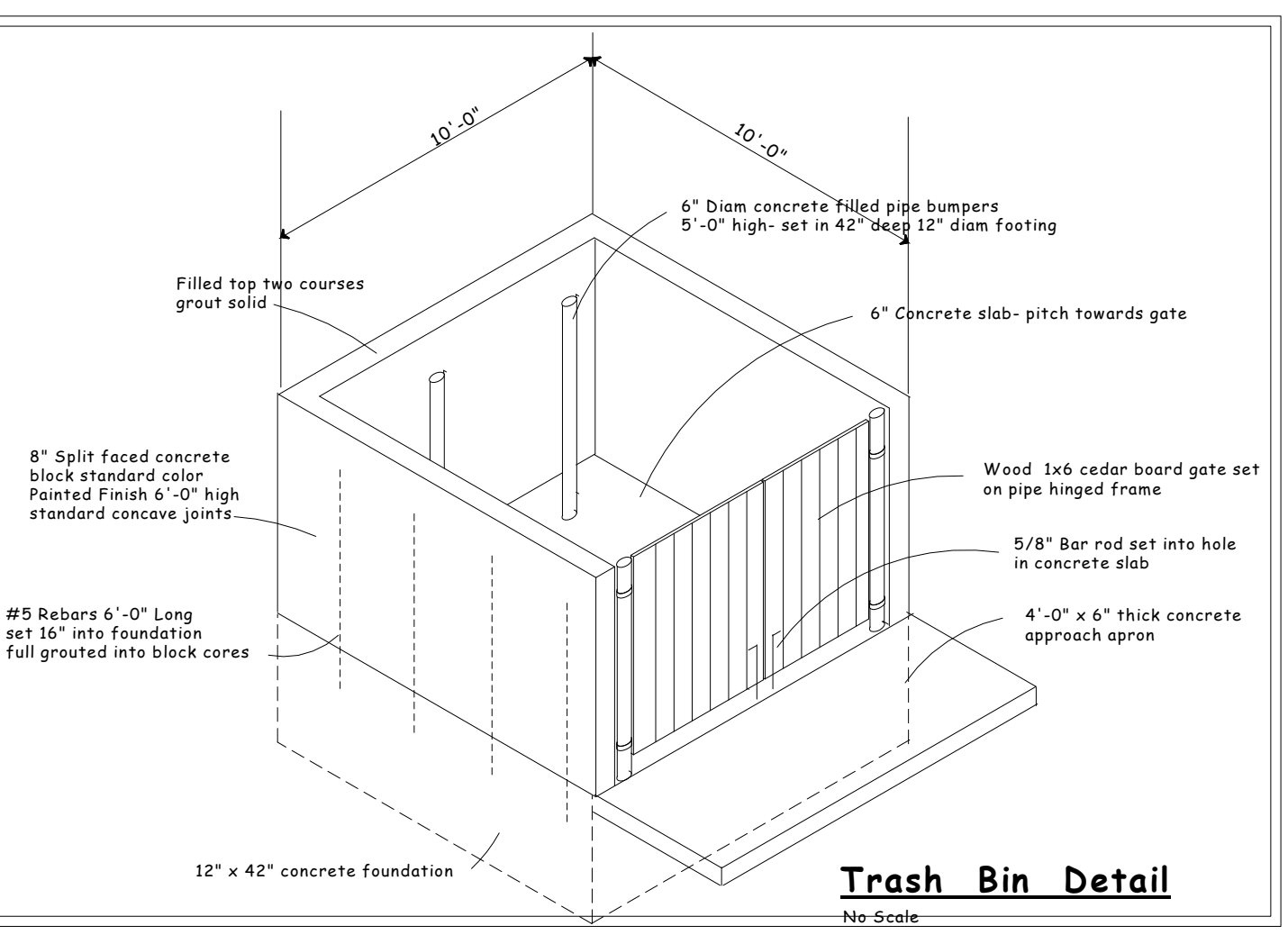
- * Concrete-Portland Cement (air-entraining) with a minimum cement content of six (6) bag sack per cubic yard, minimum 28 day compressive strength of 3,500 psi and a slump factor of 1 1/2" to 3" max. All exterior finish shall be a light broom brush stroke.



C. Drive approaches shall be constructed in accordance with State of Michigan Department of Transportation Standard Plan and Details 11-29E Dated 6 June 98.

D. All site structures (manholes, catch basins, gate wells, hydrants, etc.) shall be adjusted to meet finish grades.

E. Install and construct sidewalks, ramps and approaches as required and/or indicated, per details and sections indicate.



Main Facilities
TITA Totillas
Lot #11 - Washtenaw Business Park
Ypsilanti Township, Michigan

project

revisions

Studio Design - ST L.L.C.
architecture
37466 Ann Arbor Trail Livonia, Michigan #8150
PH: 734-744-9190 FAX: 734-744-9077
web: studiodesignst.com email: st.studiodesign@studiodesignst.com

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29 March 2021
date

ST
drawn by

sheet of

2020-06
project number

3
sheet number

General Conditions:

- General Conditions of the A.I.A. and A.L.A. construction documents, the latest edition, shall govern all work of all trades, contractors, subcontractors and material personnel, as related to the construction of the site and building program.
- Insurance:** Each Contractor shall be responsible for liability and comprehensive insurance and also for work related by damaged by improper workmanship. Certificates of insurance shall be filled out with Owner and Architect for each of the parties respective beneficiaries.
Insurance shall be: * Personal Liability + \$1,000,000.00/person AND \$1,000,000.00/accident * Property Damage + \$1,000,000.00/accident

3. Field Conditions: The General Contractor/Construction Manager and each subcontractor shall be responsible for field checking and verification of all existing working conditions, fitting to and within the building program, whether the work is new or existing work conditions. Notice must be immediately given to the Architect where there is inconsistent or conflicting information within the construction documents, and/or where there is a conflict in the work of the individual trades, and/or where there is conflict between work shown on the construction documents and conditions found in the field or the program site. Each contractor assumes full responsibility for his/her work where he/she failed to check such conditions and/or fails to give notice to the Owner or Architect of such discrepancies thereof.

4. Insurance #2: The Owner shall pay for and maintain extended coverage insurance on all work, which insures the Owner's beneficiaries. Each Contractor and Sub-Contractor shall insure their personal individual materials and equipment brought to this job site, for the purpose of executing their work contract. The Owner shall maintain general comprehensive fire and extended coverage insurance on the project site and building. The Owner shall issue certificates with and for the protection of the General Contractor and Architect.

5. Damage: Each Contractor shall be responsible for damage or injury of persons and materials, and shall protect the Owner and Architect for improper workmanship or working conditions on the jobs site and shall repair, replace or pay for/repair any/all replacement of any necessary repair/replacement to correct the work of other trades or materials damaged by said contractor. When stated damage is not proper corrected, wen ordered or directed the Architect and General Contractor may direct others to perform repair/replace work and have the reasonable cost of such work back charged against the said contractor of the offending party.

6. Temporary Electrical Service: Electrical Service DOES NOT exist at this site location. The Electrical Contractor shall install TEMPORARY ELECTRICAL SERVICE to be used by all subcontractors for the construction of this site and building facilities. The Electrical Contractor shall include within their program costs for installation, materials, hook-up and removal of temporary electrical lighting, plugs and service equipment required during the length of the construction program. The Electrical billing shall be paid by the OWNER as a direct Billing Cost, ONLY if not over-abused by the trades personnel working on/at the site and building program.

7. Temporary Water: There is NO WATER SERVICE at site location. All trade must make arrangements with the General Contractor/Construction Manager as directed by the Owner, for use of temporary water supply for the full length of the construction program. The General Contractor shall make all necessary arrangements to provide water and related equipment for water use as directed. CARE SHALL BE TAKEN to insure the NON-ABUSE of this service by all trades.

8. Temporary Heat: There are TEMPORARY NO HEATING elements related to this building construction location, that may be used as TEMPORARY HEATING during the construction period. The General Contractor/Construction Manager shall make all necessary arrangements as required for temporary heating elements during the construction period. The use of new heating elements and equipment may be used for temporary heating provided that all such equipment has been installed properly and by code and inspected for such use. All of this equipment shall be cleaned and washed and or replaced as new before acceptance by the Owner or Architect as in-compliance with the new construction of this building.

9. Toilet Facilities: There are NO TOILET facilities at this site location for use by all trades during and related to this construction program. The General Contractor/Construction Manager shall take and make all necessary arrangements to have adequate temporary "PORT-A-TOILET" facilities on site for use by all workers and trades keeping these facilities clean and in healthy conditions, taking all required and necessary safety measures.

10. Clean-Up and Temporary Protection: EACH individual SUBCONTRACTOR shall be responsible for CLEAN-UP and TEMPORARY PROTECTION of all work they have new contracted for on the building and site. If such work is necessary and needed to be performed by others, after warning of necessary clean-up demands, then the individual trade or trade shall be charged for such clean-up services. THIS WILL BE STRONGLY ENFORCED.

Special Conditions:

- The General Contractor/Construction Manager, each individual Subcontractor and Materials persons agree to save and hold harmless the Owner and Architect as a result of any injuries or damages that may occur to and any individuals or persons during the full length of the building and site construction program as a result of acts or omissions by said Contractors, Construction managers, Subcontractors and/or Materials personnel in the performance of the related work.
- All erection and construction procedures shall be executed in a safe manner such as to full protect the structure, property, person, personnel and all other trades working on and at this building and site location program, including the surrounding areas on and off site, of the site for any and all hazardous condition or related - unrelated items during the full length of this project program.
- All work related to this building and site shall proceed with full compliance and adherence to the latest edition of local, county, state, and federal codes, ordinances and regulations imposed by the local building inspectors having jurisdiction over this site and building program, with special attention being paid to all federally recognized standards of and working conditions related to the construction industry.
- It shall be the responsibility of each contractor to provide certification of Workman's Compensation and Public Liability Insurance naming the Owner as Beneficiary under said certificates, and that the filling of said certificates shall be a condition precedent to acceptance of any work performed on this building or site project.
- The General Contractor/Construction Manager will require all Subcontractors to comply with all MIOSHA present day standards and conditions. Job site safety will be fully enforced. All subcontractor's employees will be expected to comply with safety standards such as (Hard Hats, Work Boots, Safety Glasses, and have all required licenses and certificates for special equipment operation, ETC. All contractors must have their own safety program in written form, and will be required to be submitted in written form, a full and complete copy to the General Contractor/Construction Manager for their files within this program portfolio.

Shop Drawings:

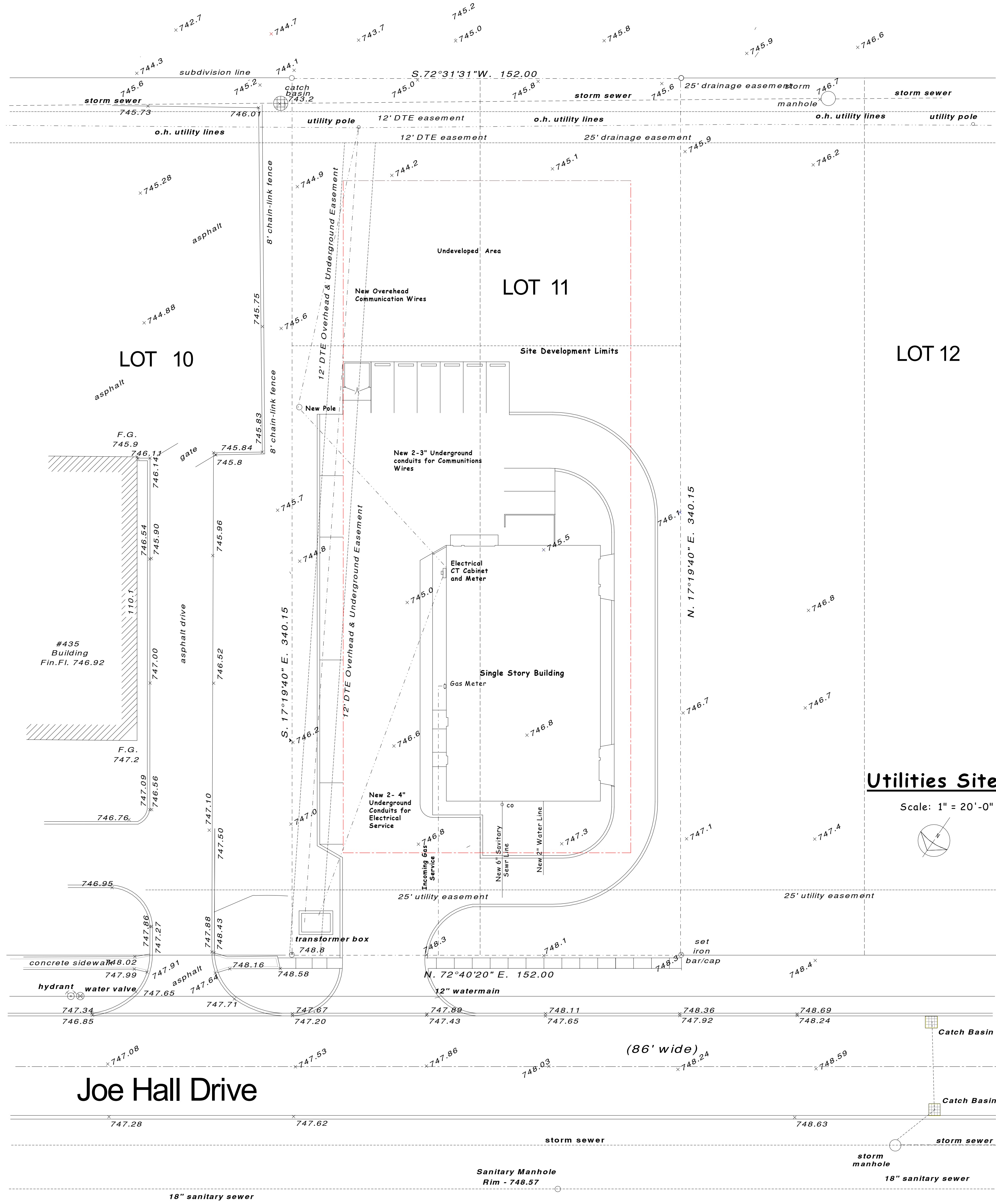
Shop Drawings shall be submitted to the Architect and General Contractor/Construction Manager for approval of all structural, HVAC equipment, plumbing elements, and electrical items, as well as all other materials as specified within these construction documents. Shop Drawings shall show the general and specific arrangements and details for all work related to the installation of proposed product elements. Additionally, Shop Drawings shall detail and specifications for all appliances and fixtures and equipment specified and/or intended to be used in this project. Requirements for submission and approval of shop drawings and/or waiver of requirements for said submission shall be at the Architect's discretion, HOWEVER, failure by the Architect to submit reviewed shop drawings back to the General Contractor/Construction Manager shall not be considered to be a waiver of any requirements or conditions otherwise required for complete compliance and performance of work designated under the program contracts.

Site Construction - General Notes:

- The building layout and site conditions shall be staked out by a licensed Land Surveyor prior to execution of the site execution. The General Contractor/Construction Manager shall obtain and pay for a registered land surveyor who shall be responsible for setting building, sidewalk and all site locations as indicated on the site plan construction documents, with all related finish floor and grade elevations as indicated for finished site conditions. All sidewalks shall be parallel and/or perpendicular to the property lines as indicated on the site documents. Special sidewalk patterns and runs shall be located and placed as indicated with special attention to their relationship to the building structure and other site proposed conditions.
- All building construction and any public or private site development utility construction and any work required to complete this project shall be in accordance with applicable codes, ordinances, rules and regulations of all local, county, state, and federal agencies governing this site and building, along with all utilities companies of Gas, Water and electrical Services that may affect this site location.
- Concrete sidewalks as shown and indicated on the site construction documents shall be 4" thick concrete with 6"x6" #10/10w.m. on a minimum of 4" compacted sand base. Provide saw cut control joints as indicated and a 1/2" cast-in-place expansion joints at a maximum spacing of 20'-0" apart. Walks along asphalt pavement surfaces shall be formed with an integral concrete curb as detailed within the site documents. Provide a 1/2" thick expansion joint material at all areas where concrete sidewalks abut the building structure. All public and private sidewalks shall be ramped as required by the State of Michigan Barrier-Free Design Standards and ADA requirements. All sidewalks shall have a light BROOK finish running cross-wise to the length of the sidewalk. Provide at ramp all ramp areas NON-SKIP texture walking pads, fill width of sidewalk.
- All new approach driveways, access and pavement with the road right-of-way, shall conform to the approved set of step plan construction documents, specifications and permit issued by the local governing agency, meeting all present day codes, standards, ordinances and regulations affecting the work within this area.
- Each contractor shall be responsible for any and all damage to existing utilities caused by their operations, whether shown or not shown on the construction site documents and as indicated within the site specifications. The location and depth of all utilities have been indicated and illustrated on the Site Survey by the Land Surveyor and transposed to the site construction documents for reference in accordance with the best known information provided to and available to the Architect, BUT the Architect CAN NOT guarantee as to completeness or accuracy of this information. FIELD VERIFY all utilities before beginning any site construction activities for this site and building program. ALL trades and contractors working on this site program shall become acquainted with all related site and field conditions and items. FAILURE to do so will be the TOTAL responsibility of the site construction contractor.
- All building sanitary sewer and domestic water lines that are to service this new building are connected to existing public sanitary sewer and water lines as indicated. Any/all adjustments necessary and required to provide these services to the building shall be in strict accordance with the local Health Department, Public Service Department and DPW rules and regulations. The Excavation Contractor shall obtain all necessary permits for this site work and related elements and shall be responsible for all field and final inspections on any/all site work and installations.
- The building and site to be cleared and leveled to proper grade elevations as indicated. The soils presumed capacity of 2,000 P.S.F. bearing at 4'-0" depth and 4,000 P.S.F. bearing at 8'-0" depth. NO COMPLETE soil test borings or reports have been taken on this site for specific soil conditions. The soil is considered to have moderate to light ground water conditions, with clay loam materials. All excavated materials are to remain on site to provide for proper grade elevations. Remove all debris of roots, removed trees and trash form site, DO NOT BURN OR BURY DEBRIS OF TRASH ON SITE.

Compacted Fill Materials:

- Fill material shall consist of sand, crushed limestone and crushed concrete materials which must be free from vegetable matter and other deleterious substance and shall not contain large rocks or lumps having a diameter greater or more than 1 1/2" in size.
- Fill shall be placed in layers which when compacted shall not exceed 8". Each layer shall be spread evenly and shall be roughly bland mixed to insure uniformity. All traces of organic or loose materials shall be removed from the filling areas prior to commencing with operations.
- Each layer of not more than 8" shall be compacted with approved compactor equipment, acceptable to the Owner and Architect, and a sufficient number of passes of the fill area must be maintained or near the optimum moisture content determined in a test sample of 95% comp action strength.
- No fill material shall be placed, spread or compacted while it is frozen, thawing, or during unfavorable weather conditions. When the work is interrupted by heavy rain, filling operations shall not be resumed until moisture content and density of previously placed fill materials have adjusted to dry conditions and are capable of obtaining the required compaction strength.



Utilities Site Plan

Scale: 1" = 20'-0"

Main Facilities
TITA Totillas
Lot #11 - Washtenaw Business Park
Ypsilanti Township, Michigan

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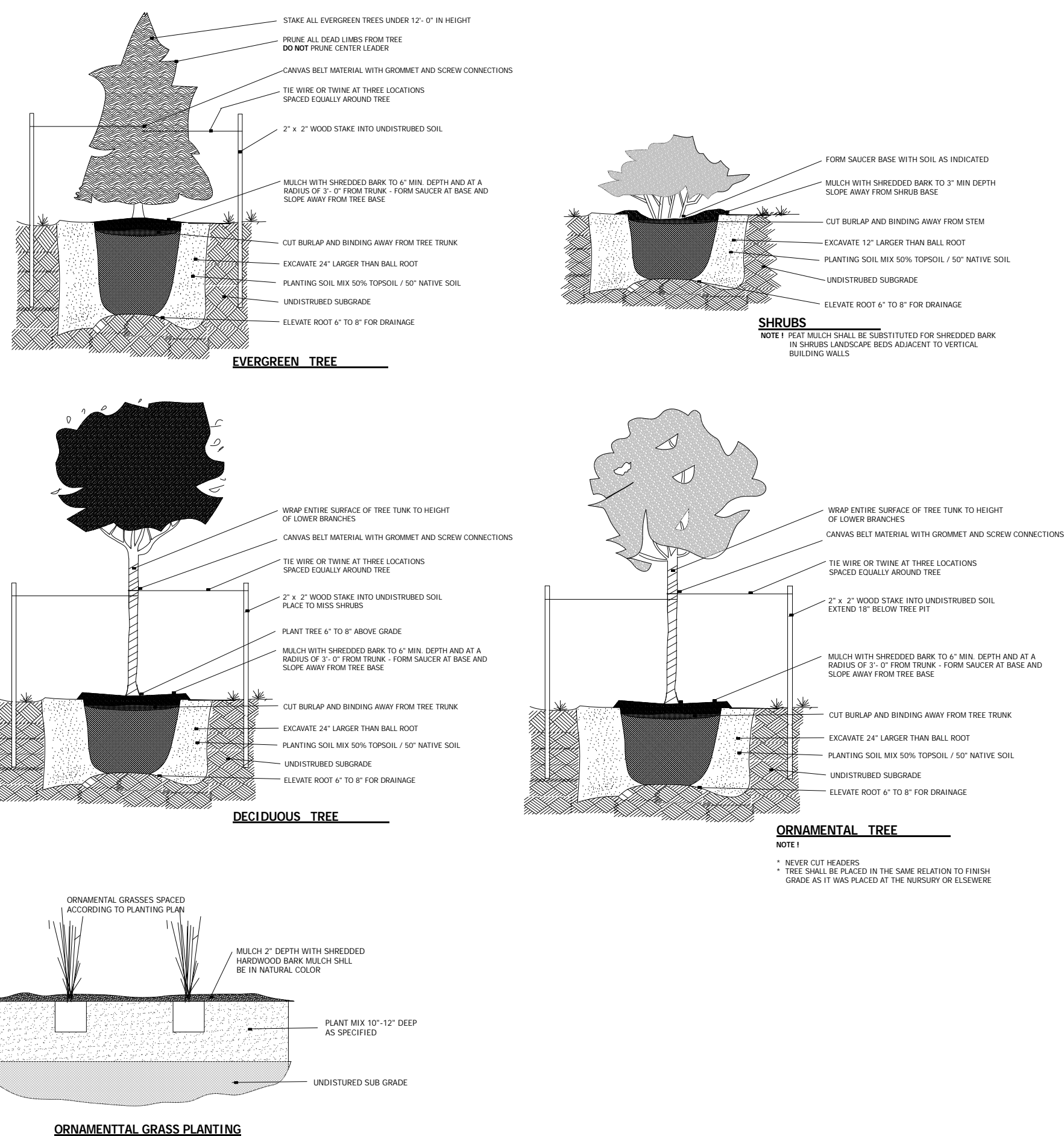
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Landscape Requirements

- General Landscaping:**
 - Mixture of Evergreen/Deciduous Trees: One/1,000 s.f. of Lawn Area PLUS
 - One Shrub/500 s.f. Lawn Area
- Street Yard Landscaping:**
 - One Large Tree/40 L.F. of Frontage
 - One Ornamental Tree/100 L.F. of Frontage
 - One Shrub/10 L.F. of Frontage
- HAVE AREAS:**
 - Site Developed Area = 36,176 sq.ft. = 230'-0" x 152'-0"
 - Lawn Area: 12,147 sq.ft.
 - Paved Area (Parking and sidewalks): 18,029 sq.ft.
 - Building Area: 6,000 sq.ft.
- Landscape Required:**
 - General Landscaping: 12,147 sq.ft./1,000sq.ft. = 13 Trees
12,147 sq.ft./500 sq.ft. = 25 Shrubs
 - Street Yard Landscaping: 152'-0"/40 = 4 Trees
152'-0"/100 = 16 Shrubs
152'-0"/100 = 2 Ornamental Trees

General Landscape Notes:

- The Landscape Contractor shall visit the site inspecting existing conditions and review proposed planting and related work. In case of discrepancy between plan and plant listing, the Plan shall govern quantities. Contract the Architect or Owner with consent.
- The Landscape Contractor shall verify location of all on site Utilities prior to beginning construction on his/hers phase of work. Any damage or interruption of services shall be the responsibility of the Landscape contractor.
- The Landscape Contractor shall coordinate all related activities with the General contractor and other Trades and shall report any unacceptable site conditions to the Architect or Owner prior to commencement of work.
- All plant material shall be full well-branched and in healthy vigorous growing condition.
- All plant material shall be watered before and after planting is complete.
- All trees must be staked, fertilized and mulched and shall be quarantined to exhibit a normal growth cycle for at least one(1) year following planting.
- All plant material shall conform to the guidelines established in the most recent edition of the "American Standards for Nursery Stock".
- Landscape Contractor will supply finished grade and excavate as necessary to supply plant mix depth in all planting beds as indicated in planting details and a depth of 4" in all lawn areas.
- Provide clean back fill soil, using materials stockpiled on site, soil shall be screened and free of debris, foreign matter and stone.
- Slow release fertilizer shall be added to plant pits before being back-filled. Application shall be at the manufacturers recommended rates.
- Amended plant mix (prepared topsoil) shall consist of 1/3 screened topsoil, 1/3 sand, and 1/3 "Dairy Doe" compost, mixed well and spread to a depth as indicated in planting materials details.
- All planting materials shall be mulched with shredded hardwood bark, spread to a depth of 3" for all trees and shrubs and 2" on annuals, perennials and foreign material and pieces in inconsistent size.
- No substitutions or changes of locations or plant types shall be made without the approval of the Architect or Owner with the approval of the Local Planning Department.
- The Architect or Owner shall be notified of any discrepancies between the plans and field conditions prior to installation.
- The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- The Architect or Owner shall have the right to reject any work or materials that do not meet the requirements of the plans and/or specifications.
- The Landscape Contractor shall seed and mulch on sod (As Indicated on the Plans) all area designated as such on the plans throughout the contract limits. Further, the Landscape Contractor shall be responsible for restoring areas disturbed during construction, not in the contract limits, to equal or greater conditions.
- All landscape areas shall have proper drainage that prevent excessive water from ponding on lawn areas or around trees and shrubs.
- All areas shall be irrigated with and automatic underground sprinkler system.

General Seeding Note:

All lawn areas designated to be seeded shall be Hydro-Seeded with specified blends and stabilized with wood cellulose fiber mulch (2,000 lbs. per acre). In areas subject to erosion, seed lawn shall be further stabilized where necessary with biodegradable erosion blank and staked until established. All seed shall be applied over a minimum 3" prepared topsoil, and shall be kept moist and watered daily until established.

Seeding Installation shall occur only: Spring - April 1 to June 1
Fall - August 15 to October 15

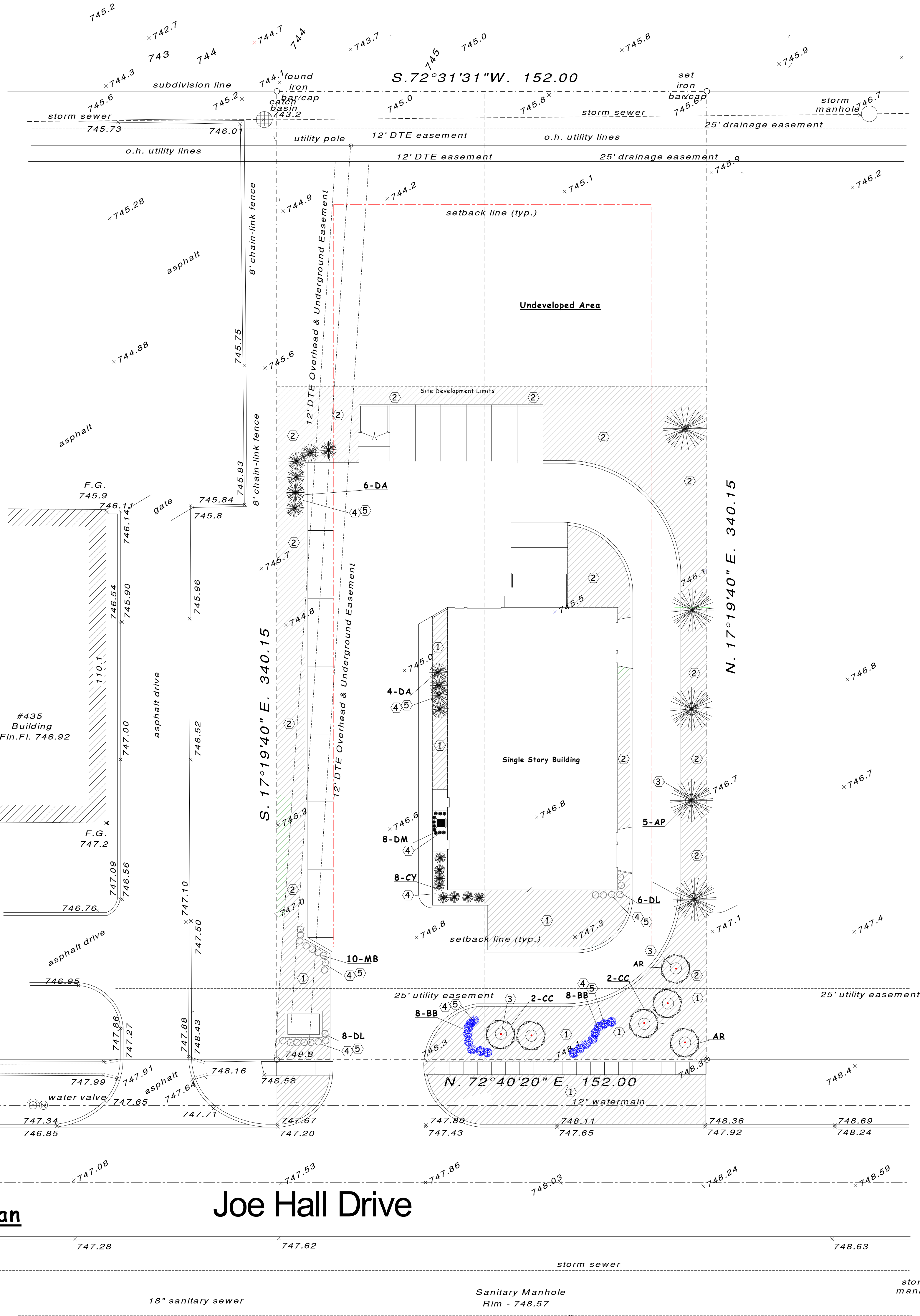
General Sod Notes:

All lawn areas designated to be sodded, shall be sodded with a blended durable BLUEGRASS sod typically grown in the region. All turf shall be placed on a minimum 3" prepared topsoil base and watered daily until established. In areas subject to erosion, sodded lawn shall be stabilized with when necessary, and sod perpendicular to slopes.

Sod Installation shall occur only: Spring - April 1 to June 1
Fall - August 15 to October 15

Ground Cover Key:

- Typical Sod Lawn Areas, Sown on 3" Topsoil
- New lawn areas with Hydroseed and mulch.
- 4'-0" Diameter spade cut edge with 3" shredded bark mulch
- 3" Deep double shredded hardwood bark mulch
- Poly landscape edging



LANDSCAPE PLANT AND MATERIALS SCHEDULE

MRK	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
AR	2	Redpointe Red Maple	Acer rubrum 'Frank Jr.'	3" cal.	B&B	Full Matched Heads
CC	4	American Hornbeam	Carpinus caroliniana	3" cal.	B&B	Full Matched Heads
AP	5	Austrian Pine	Pinus Nigar	5'-0"/6'-0"	B&B	Trimmed and shaped
DM	8	Little Miss Dwarf Maiden Grass	Miscanthus sinensis 'Little Miss'		Cont..	
DA	10	Dwarf Alberta Spruce	Picea glauca 'Conica'	4'-0"/5'-0"	B&B	
DL	16	Michigan Sunset Bush Honeysuckle	Dievilla Ionicea 'Michigan Sunset'	5 gal.	Cont.	24" on center
BB	16	Dwarf Burning Bush	Enonymus Alatus	24" high	B&B	4' spaced on center
MB	10	Mr. Bowling Ball Arborvite	Thuja occidentali 'Bobazam'	5 gal.	Cont.	4'-0" on center
CY	8	Color Guard Yucca	Yucca filamentosa 'Color Guard'	5 gal.	Cont.	36" on center
LE		Landscape Edging	Oly-Ola Jack Ploy Edging	6"		Maximum Lengths

Main Facilities
TITA Tottilas
Lot #11 - Washtenaw Business Park
Ypsilanti Township, Michigan

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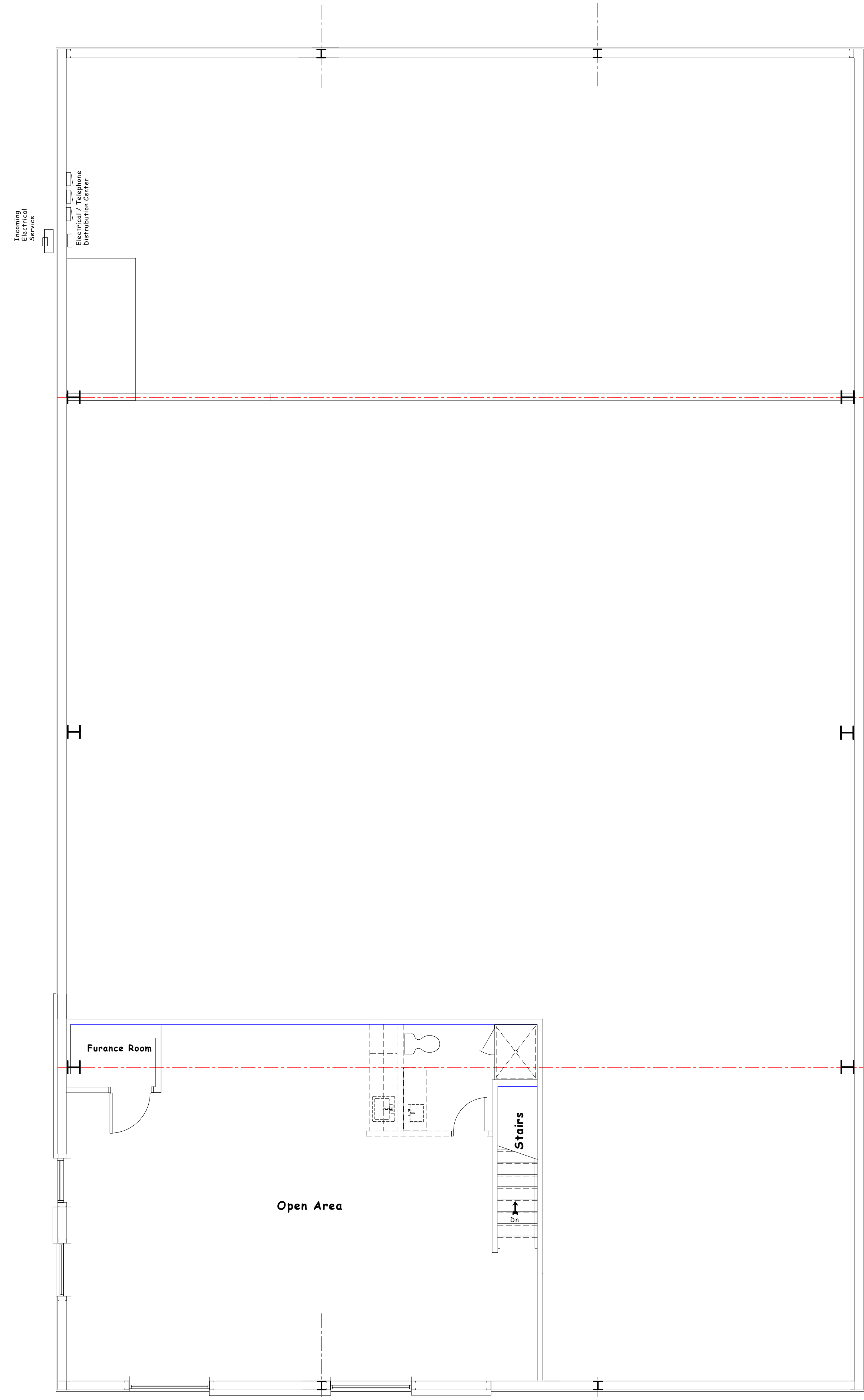
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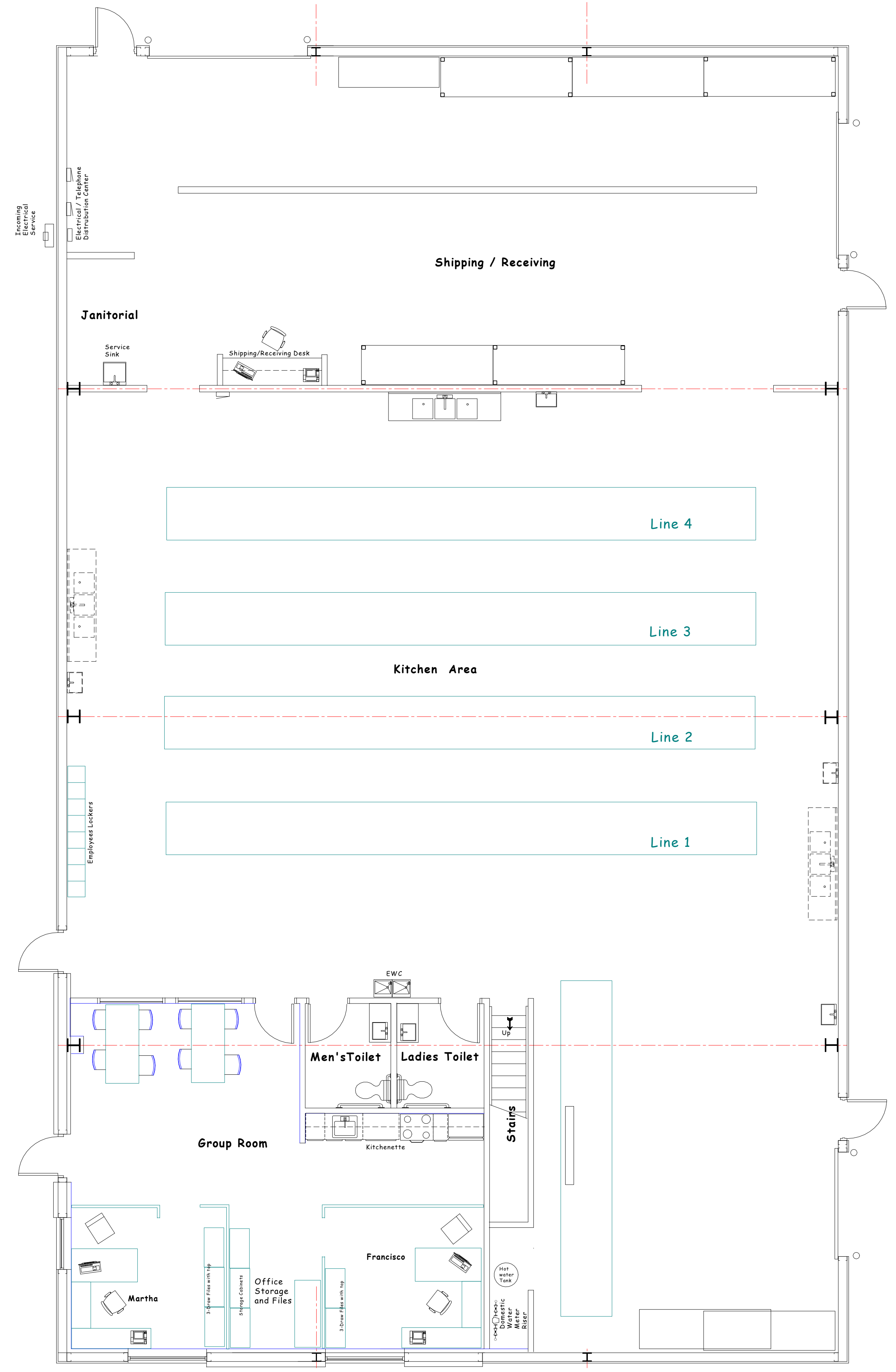
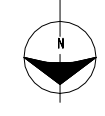
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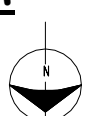
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Design Intent Mezz Floor Plan
Scale: 3/16" = 1'-0"



Design Intent First Floor Plan
Scale: 3/16" = 1'-0"



Main Facilities
TITA Tottilas
Lot #11 - Washtenaw Business Park
Ypsilanti Township, Michigan

project

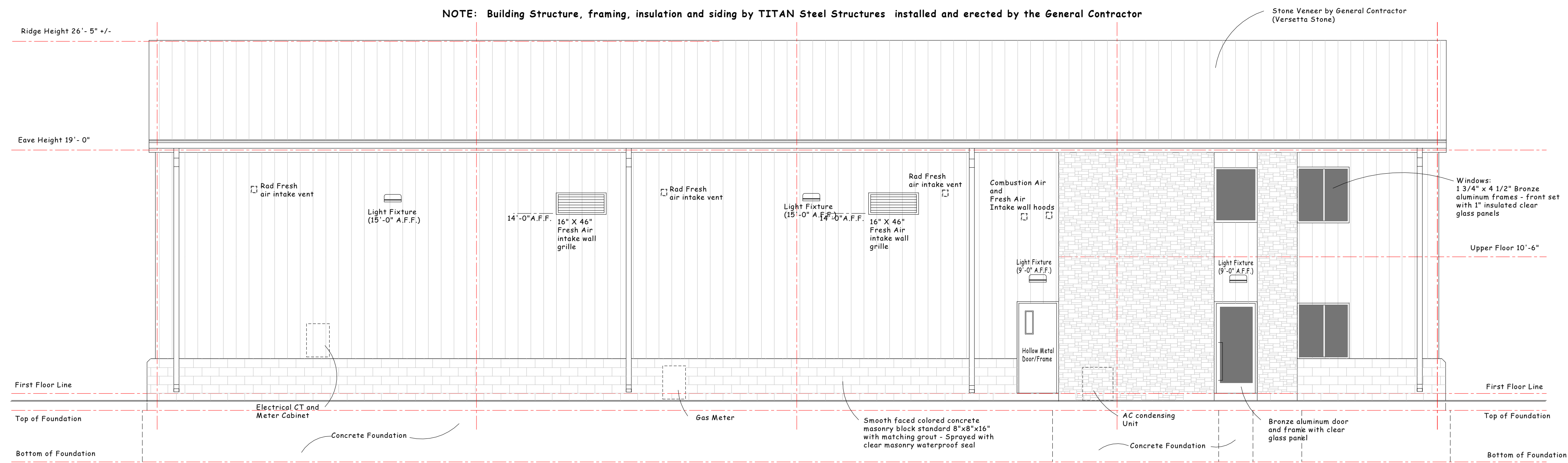
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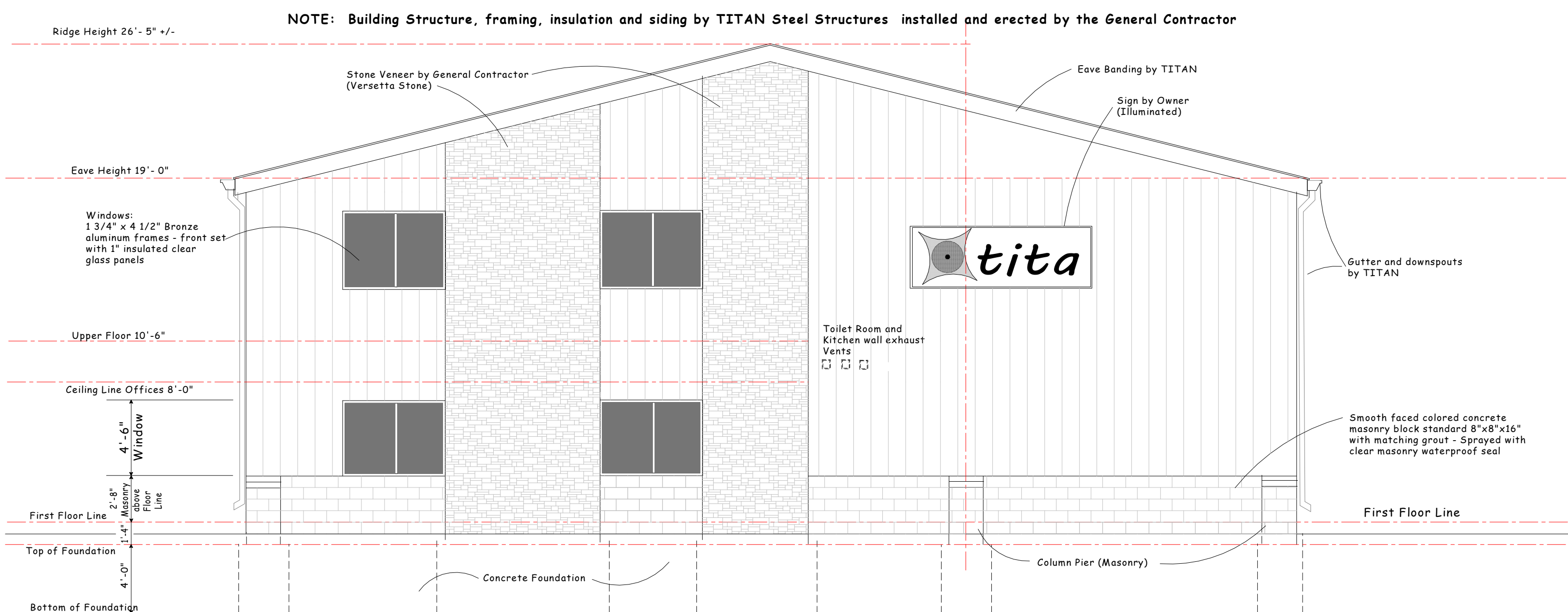
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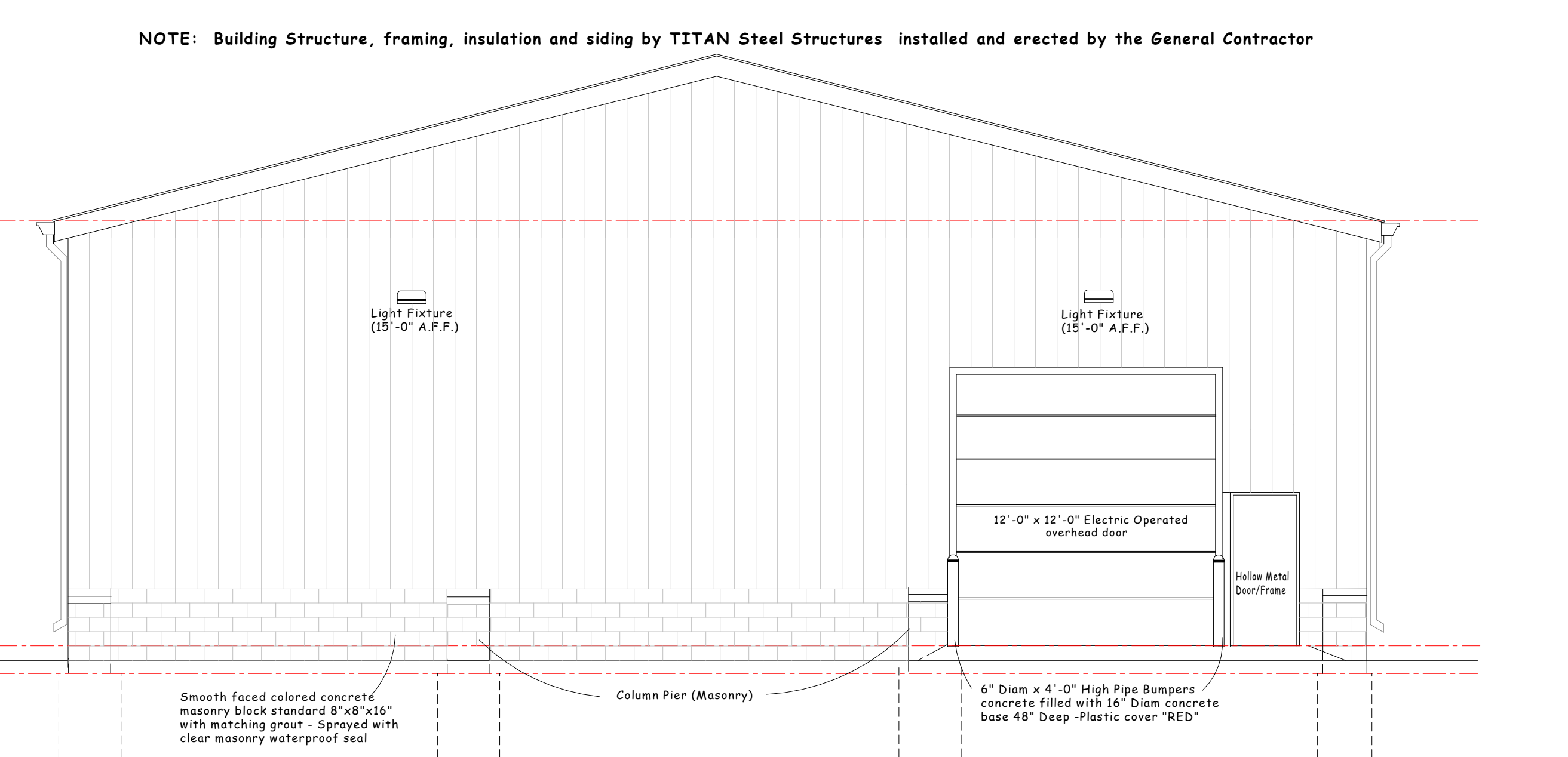
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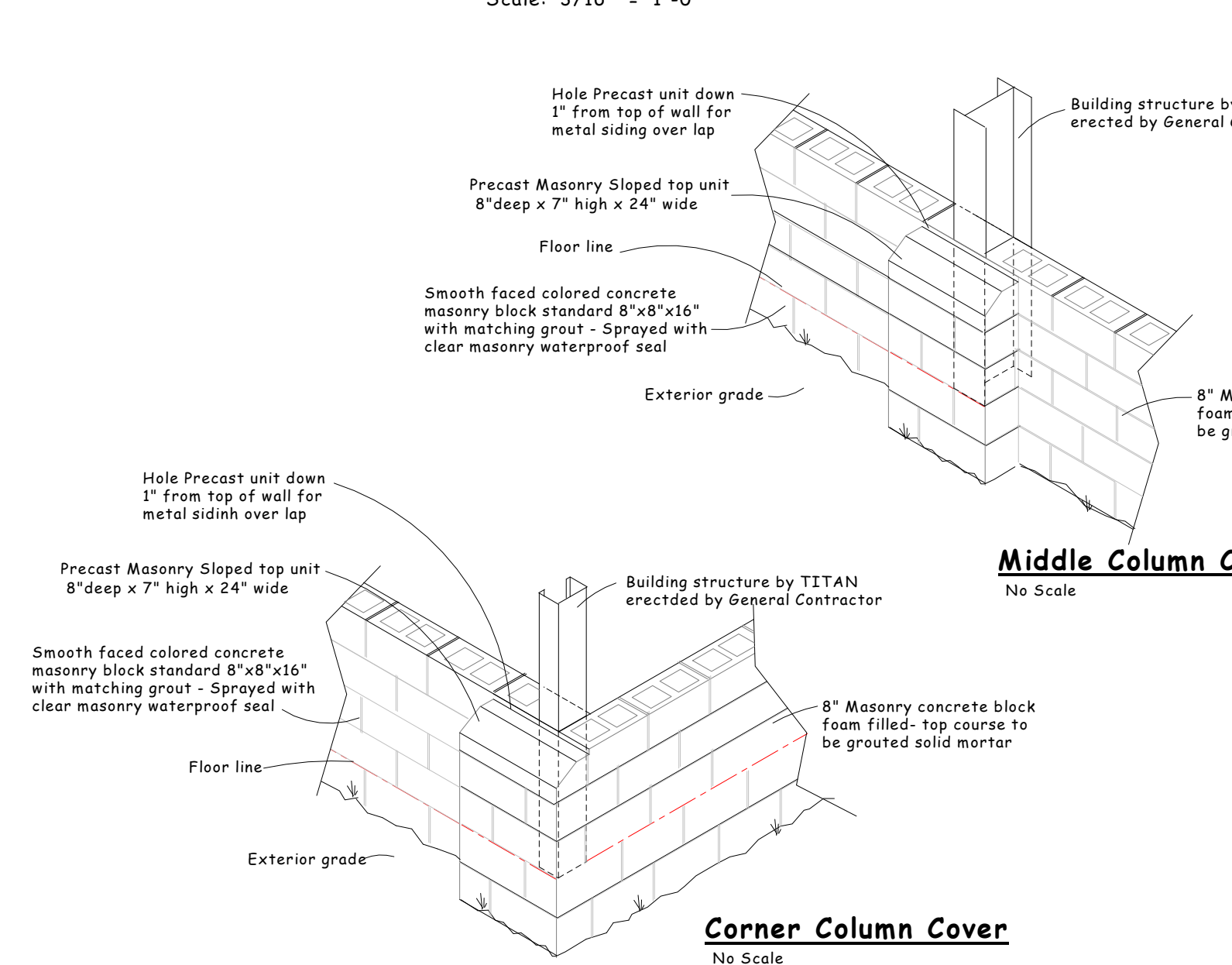
East Elevation (Parking Lot Side)
Scale: 3/16" = 1'-0"



North Elevation (Street View)
Scale: 3/16" = 1'-0"

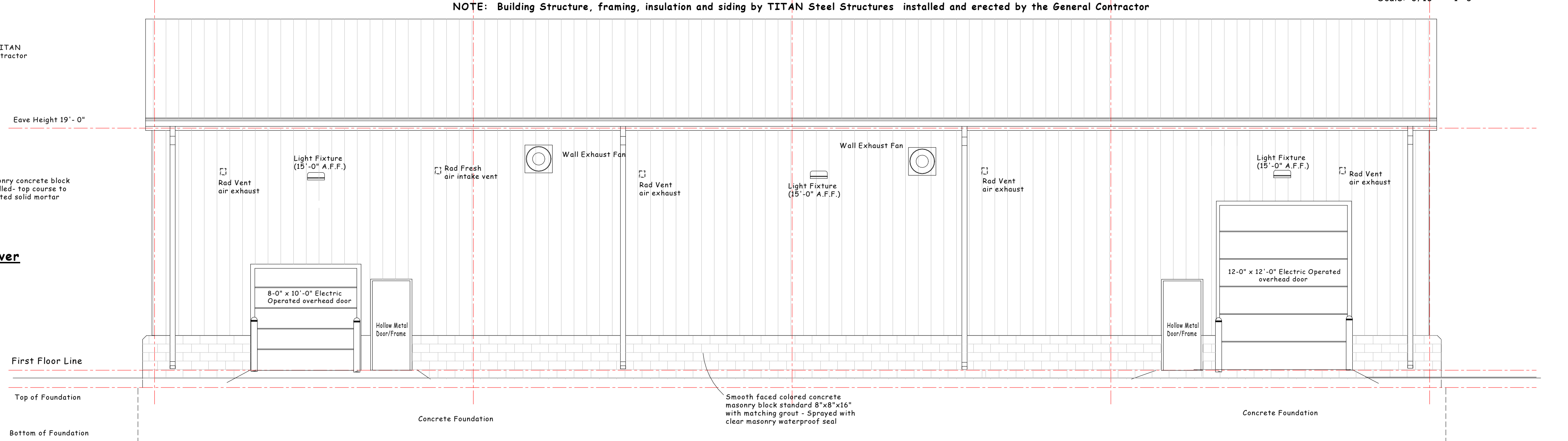


South Elevation (Rear)
Scale: 3/16" = 1'-0"



Middle Column Cover
No Scale

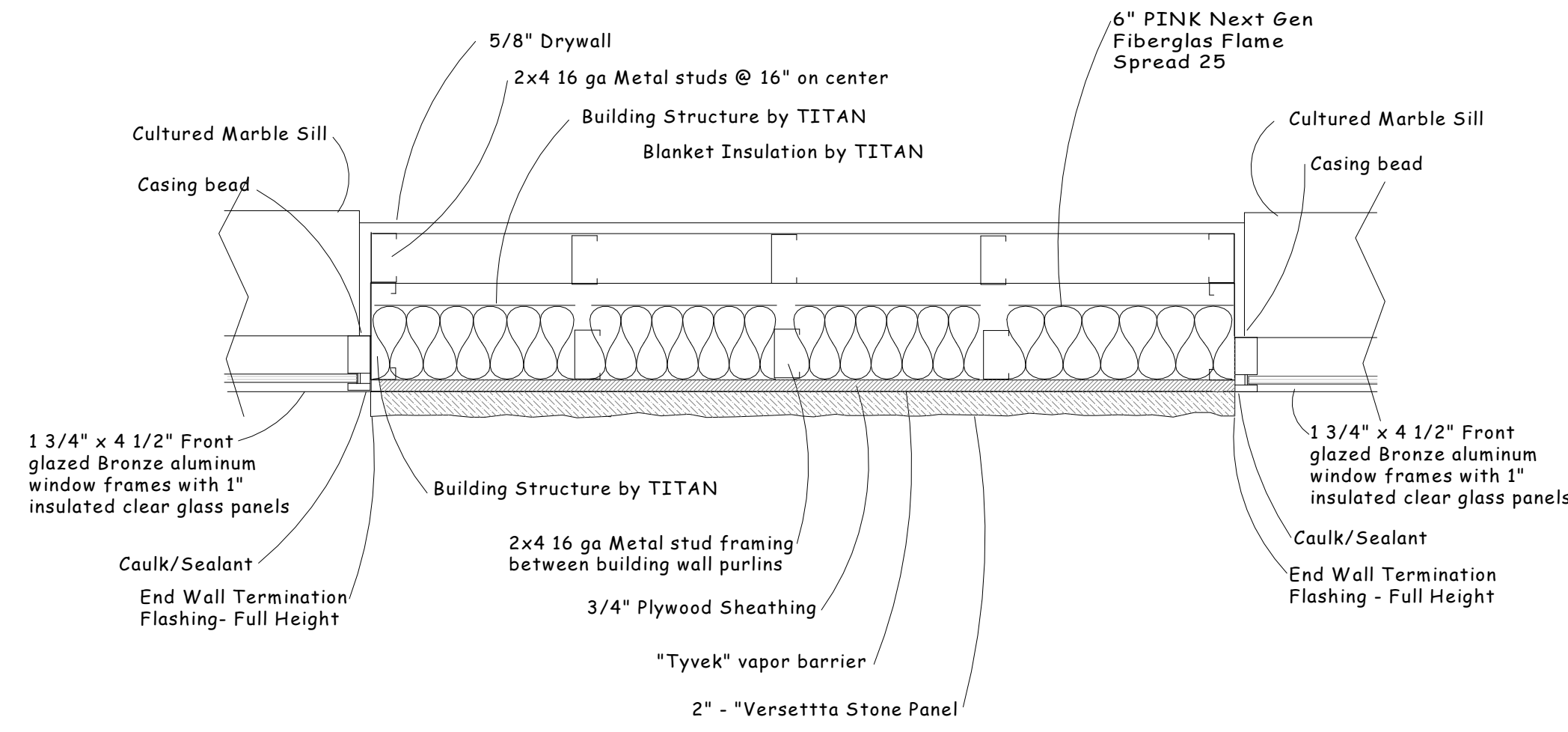
Corner Column Cover
No Scale



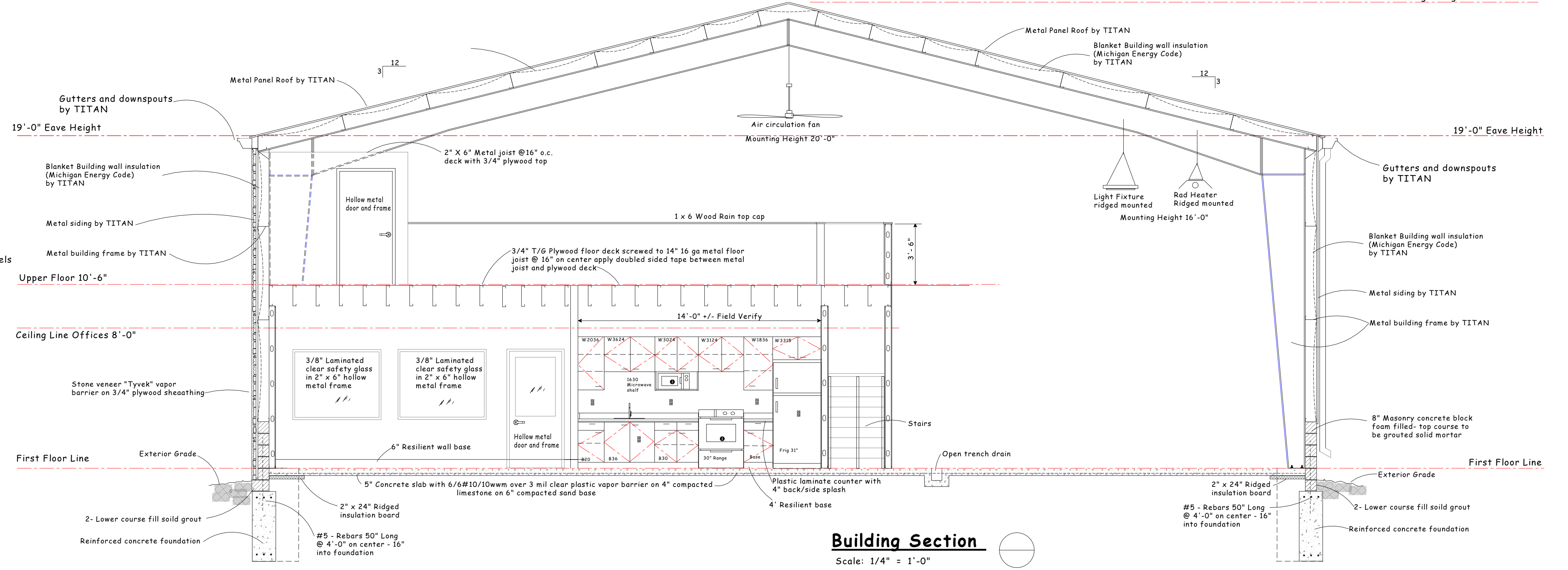
West Elevation (Driveway Side)
Scale: 3/16" = 1'-0"

NOTE: Building Structure, framing, insulation and siding by TITAN Steel Structures installed and erected by the General Contractor

Ridge Height 26'-6" +/-



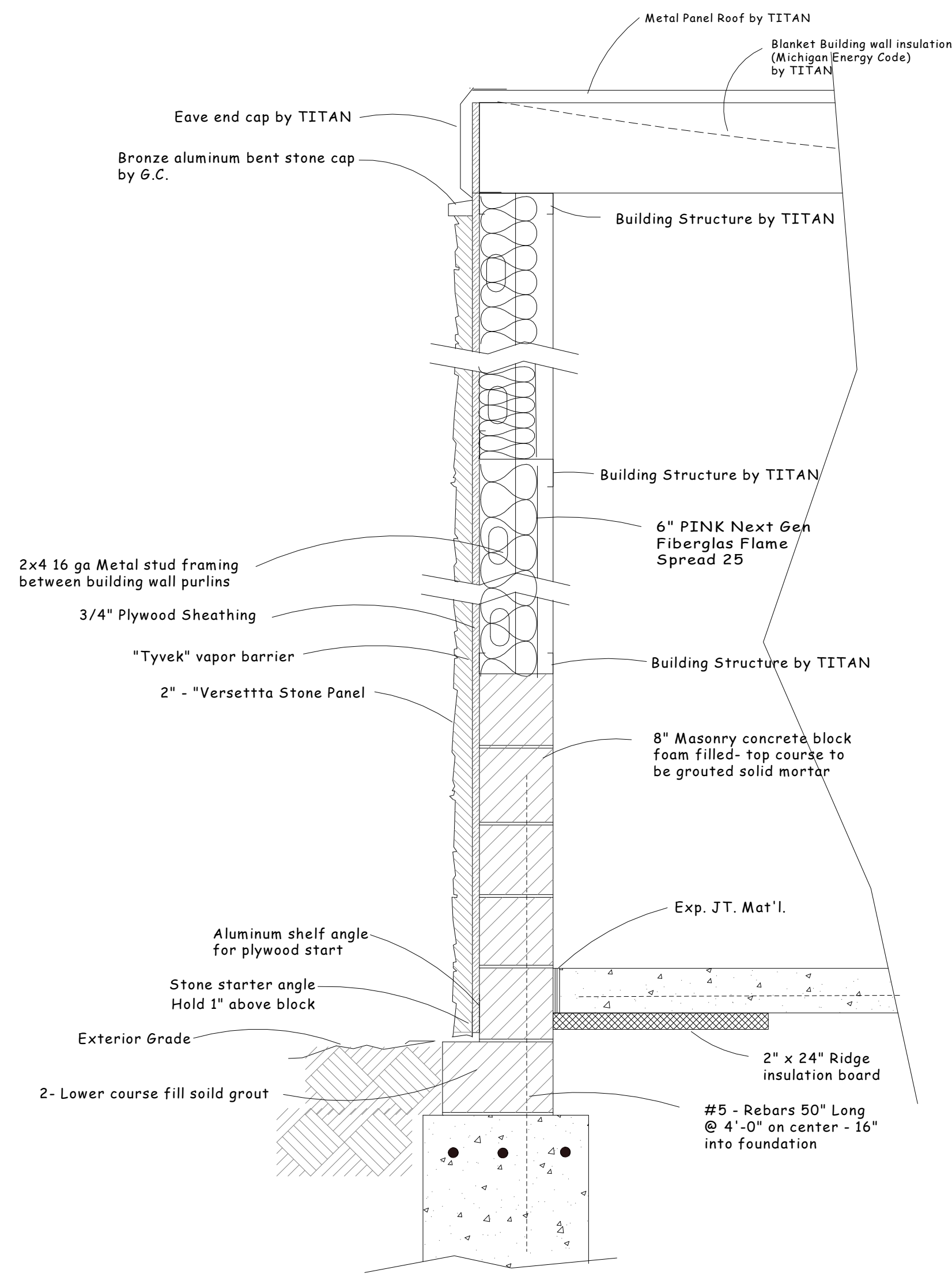
Section
Scale:



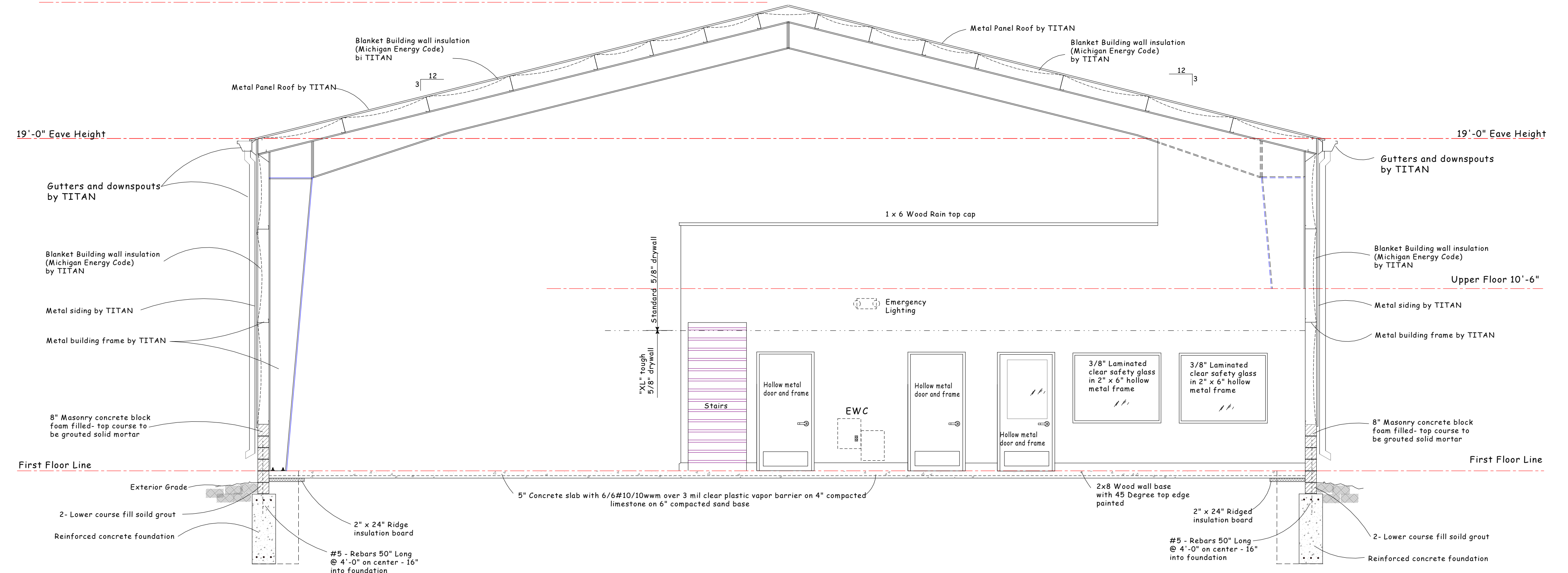
Building Section
Scale: 1/4" = 1'-0"

NOTE: Building Structure, framing, insulation and siding by TITAN Steel Structures installed and erected by the General Contractor

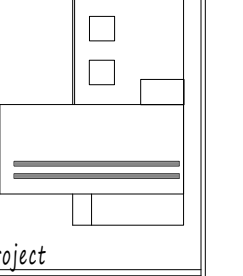
Ridge Height 26'-6" +/-



Section
Scale:

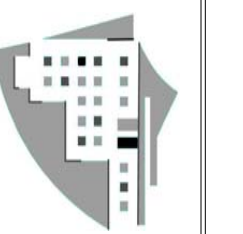


Building Section
Scale: 1/4" = 1'-0"



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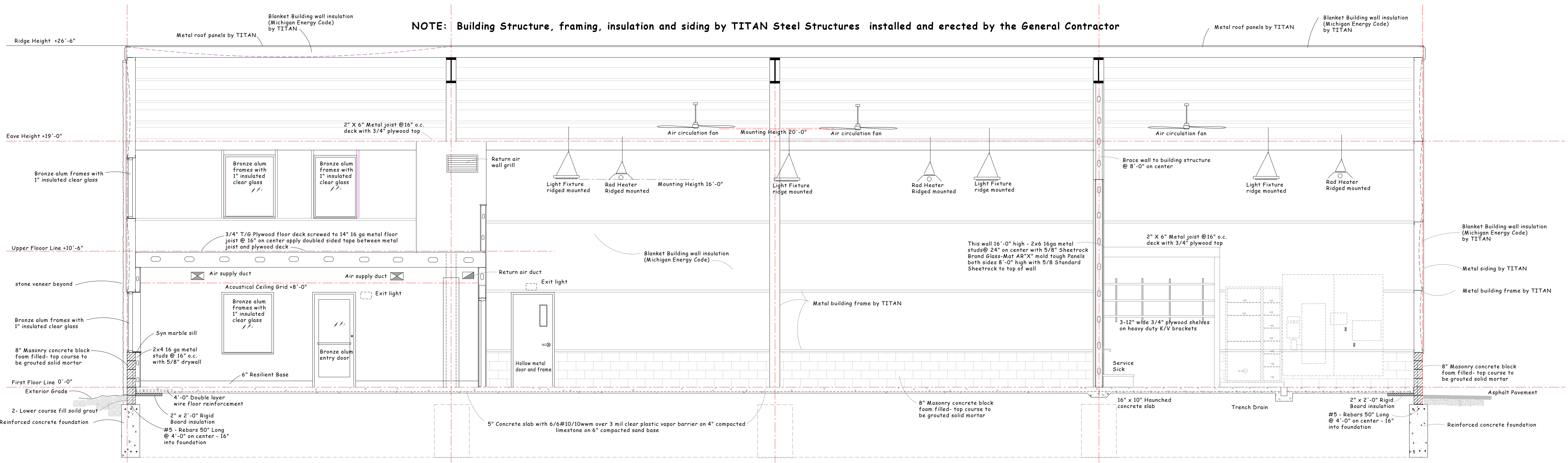
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NOTE: Building Structure, framing, insulation and siding by TITAN Steel Structures installed and erected by the General Contractor

Building Section
Scale: 1/4" = 1'-0"

SPECIFICATIONS:

BUILDING STRUCTURE:
Building Structure materials of Building Framing System, Metal Siding Panel Metal Roofing Panels, Building Blanket Insulation, Metal Gutters and Downspouts shall be provide by and delivered to the site by TITAN METAL STRUCTURES.

Installation and erection of these items shall be arranged by the GENERAL CONTRACTOR. CAREFUL review of TITAN's shop installations and shop drawings is required by all concern.

GENERAL CONDITIONS:

- General Conditions of the A.I.A. construction documents, the latest edition, shall govern all work of all trades, contractors, subcontractors and materials personnel, as related to the construction of this site and building program.
- Insurance:** Each contractor shall be responsible for liability and comprehensive insurance, and also for work damaged by improper workmanship. Certificates of insurance shall be filled out with the Owner and Architect for each of the parties respective beneficiaries.
- Insurance shall be:
*Personal Liability = \$ 1,000,000.00 / person and \$ 1,000,000.00 / accident
*Property Damage = \$ 1,000,000.00 / accident
- Field Conditions:** The General Contractor Construction Manager and each subcontractor shall be responsible for field checking and verification of all existing working conditions, fitting to and within this building program, whether the work is new or existing work conditions. Notice must be immediately given to the architect where there is inconsistent or conflicting information within the construction documents, and where there is a conflict in the work of the individual trades, and/or where there is conflict between work shown on the construction documents and conditions found in the field at the program site. Each contractor assumes full responsibility for his/her work where he/she failed to check such conditions, and/or fails to give notice to the architect of such discrepancies thereof.
- Insurance #2:** The owner shall pay for and maintain extended coverage insurance on all work, which insures the Owners as beneficiaries. Each contractor and subcontractor shall insure their personal individual materials and equipment brought to this job site, for the purpose of executing their work contract. The owner shall maintain general comprehensive fire and extended coverage insurance on this project site and building. The Owner shall issue certificates, with and for, the protection of the General Contractor and Architect.
- Damage:** Each Contractor shall be responsible for damage or injury of persons and materials, and shall protect the Owner and Architect from improper workmanship or working conditions on the job site, and shall repair, replace, or pay for/repair any or replacement of any necessary repair/replacement to correct the work of other trades or materials damaged by said contractor. When stated damage is not properly corrected within the program, the contractor shall be responsible for the cost of the work. The contractor shall be responsible for the cost of the work. The contractor shall be responsible for the cost of the work. The contractor shall be responsible for the cost of the work.
- Temporary Water:** There is NO water service at this site. All trades must make arrangements with the General Contractor/Construction Manager, as directed by the Owner, for use of this water for the full length of the construction program. The Owner shall pay the cost for water as a direct expense billing cost. Care shall be taken by all trades not to ABUSE this water program. The General Contractor shall make all necessary arrangements to provide water and related equipment for water use for this project as directed under the A.I.A. General Conditions.
- Temporary Heat:** There are NO heating elements related to this building construction location, that may be used for temporary heat during the construction period. The General Contractor- Construction Manager, shall make all necessary arrangements for all necessary and required temporary heating elements during the complete length of the construction period. The use of the new HVAC equipment system and interior heating elements may be used for temporary heating program as directed under the General Conditions and Services provided. That all new equipment has been installed properly, inspected and approved by the local HVAC inspector, and are kept in top working and clear order during the remaining construction period. The HVAC Contractor shall, at the end of the construction period BEFORE final inspection, clean all heating and cooling equipment used for temporary heating, replace or wash filters clean, clean duct work of all duct and foreign materials, placing all HVAC heating and cooling equipment in like-new condition for the owner's acceptance of their new facilities.
- Clean-Up and Temporary Protection:** EACH individual SUBCONTRACTOR shall be responsible for CLEAN-UP AND TEMPORARY PROTECTION of all work they have been contracted for on this building and site. If such work is necessary and needed to be performed by others after warning of necessary clean-up demands, then the individual trades shall be charged for such cleanup services. THIS WILL BE STRONGLY ENFORCED.
- Toilet Facilities:** There are NO toilet facilities at this building and site location for use by all trades related to this construction program. The General Contractor/Construction Manager shall take and make all necessary arrangements to have adequate temporary "PORT-A-JOHN" facilities on site, for use by all workers and trades, keeping these facilities clean and in healthy conditions, taking all required and necessary safety measures.

SPECIAL CONDITIONS:

The General Contractor - Construction Manager, each individual Subcontractor and Material persons, agree to save and hold harmless the Owner and Architect as a result of any injuries or damages that may occur to any individual or property during the full length of the building and site construction for this program, as a result of acts or omissions by said Contractors, Construction Managers, Subcontractors and/or Material personnel in the performance of their work.

All erection and construction procedures shall be executed in a safe manner such as to fully protect the structure, property persons, personnel and all other trades working on this building and site program, including the surrounding area, onsite and off, of the site for any and all hazardous conditions or related-unrelated items during the full length of the project.

All work related to this building and site program shall proceed with full compliance and adherence to all latest editions of local, county, state and federal codes ordinances and regulations imposed by the local building inspectors having jurisdiction over this building and site program, with special attention being paid to all federally recognized standards of and working conditions related to the construction industry.

It shall be the responsibility of each contractor to provide certifications of Workman's Compensation and Public Liability Insurance, naming the Owner as beneficiary under said certificates, and that the filing of said certificates shall be a condition precedent to acceptance of any work performed on this building and site project.

MASONRY

All labor, materials, equipment and services necessary for or incidental to, the TOTAL completion of all masonry work RELATED TO and part of this building structure and specifications, including furnishing and installing, reinforcement, equipment and structural building components:

MASONRY MATERIALS:

Item A: FOUNDATION and BACK-UP BLOCK
Standard smooth-faced 12" wide and 8" wide concrete block, 16"x8" face, two-core units, 3,000 psi standard gray in color. All foundation block shall be reinforced with concrete for a solid wall or pier as indicated. All joints struck flush.

Item B: EXTERIOR BLOCK WALLS - OPEN COURSING
Standard smooth faced 8"x16" face, and 8" wide, two-core, COLORED concrete block, 3,000 psi, standard Concrete or grout-filled with both vertical and horizontal rod and wire reinforced.

Item C: JAMB BLOCK
Concrete jamb masonry block units, smooth faced shall be provided for all overhead door, pass doors and all jamb conditions as indicated in the construction documents. All jamb blocks shall be re-bar reinforced and fully grouted solid, full height.

ALL MORTAR SHALL BE:
Both below and above grade TYPE "M" standard colored to match concrete block, 2,500 psi, materials.

Masonry contractor shall set and place all hollow metal frames and special steel items related to masonry placement, true, plumb, and straight with all necessary anchors, shims and accessories to provide for a finished and completed opening within the masonry program. All caulking of such items shall be by others, as indicated within the caulking specifications.

The site and building structure shall be kept safe, clean and neat during masonry construction. Upon completion, all tools, equipment, and debris, etc. related to masonry construction work, shall be removed, coordinating all masonry activities with the general contractor and related structural elements that are part of, and to be placed within the masonry program.

MASONRY GENERAL:

Wall reinforcing in horizontal block joints shall be standard truss type, similar to or equal to "Wire Bond", welded steel construction. Width of reinforcement shall be as required for wall thickness shown on the construction documents. Reinforcement to be placed at 24" on center vertical coursing, no more than 3 vertical courses. At corners, cut inside rod and bend to proper angle. All installation to be per manufacturer's specifications. Do not extend truss type reinforcement through control joints.

Point holes in all joints at completion of work. Clean all block, with commercial block cleaner, Sure Klean Vanatrol™, a detergent-type cleaner. ACID SHALL NOT BE USED. Clean all block surfaces per manufacturer's specifications.

All exterior masonry concrete block units shall have a water proof seal coating similar to "RADONSEAL"; Flat; single coat.

MASONRY WALL INSULATION SYSTEM:

Masonry contractor shall insulate all cores of block walls as indicated on the construction documents with foam fill core insulation similar to "Tech Form" foam filling core insulation. Pressure pump apply into all block cores of exterior wall full height. Fill cores at a height, with insulation after each days work, or before beginning the next days work. All work holes shall be filled and struck flush with the interior masonry block surface to match masonry surface before block filling and painting.

Masonry wall insulation values: 8" Wide Concrete Block with Foam = 10.0 R
All exterior block work shall be sealed o under the painting contractor's program. VERIFY LOCATION OF FINISH BLOCK *SEE EXTERIOR DRAWINGS SPECIFICATIONS AND PAINT SCHEDULE.

STONE VENEER:

Provide and install as indicated within the construction documents a STONE veneer of "VERSETTA STONE SIDING", including all required and necessary accessories such as started ledging, trim edging, flashings, etc. Panels shall be mounted and install in strict accordance with manufacturer's specification.

Selected Design Color and material is: LEDGESTONE™ PLUM CREEK™. This must be verified with the owner's wishes.

ALUMINUM FRAMES GLASS AND GLAZING

Provide and install all aluminum frames with glass and glazing materials as indicated on the construction drawings and as herein specified.

ITEM A: ALL EXTERIOR WINDOW FRAMES:

Kawneer Series Trifab 400 Framing system 1-3/4" x 4" vertical and horizontal sections Anodized aluminum - BRONZE finish - #11 anodized Front glazing set.

FULL thermal break

ITEM B: INTERIOR GLASS PANELS:
1/2" LAMINATED STATION GLASS PARTITION PANELS CLEAR set in hollow metal frames and door

ITEM C: EXTERIOR GLASS PANELS -

1" Insulated Clear Glass Panels: PPG - Double-Glazed, Low E™ Enhanced Performance Solarban 70XL "STARPHIRE" Glass Clear Glass panels of: 1" insulated glass panels 1/4" clear outer panel 1/2" air space 1/4" clear inner panel

GENERAL NOTES:

- Provide written proof of all glass selections and installations, for review by the architect, with samples.
- Provide as necessary sections of tempered clear glass panels, both exterior and interior, in those areas required by code and/or as directed by the local building inspector official.

Provide wire glass panels as indicated on the construction documents in door lights and sidelight panels of hollow metal frames.

Exterior Aluminum Person Doors and frames shall be: Kawneer

- Style #250 - Narrow Style ADA Approved bottom rail height, standard door with single piece 1" glass
- Hardware as: Pull / Push Bars - Exterior Pull Bar-Rockwood #RM2120, 84" long. Interior Push Bar-Rockwood #RM2122, 36" long. Finish Both units-"Saton Stainless Steel"
- Flush bolts top and bottom at dead leaf.
- Closer: Overhead concealed for offset - parallel arm set
- Aluminum Threshold
- Continuous Gear Hinge
- Lock: Active Leaf ADA Exit Lever Adams - Rite #4590
- Full edge weather stripping with full rubber bottom threshold sweep.

Main Facilities
Tita Totillas
Lot #11 - Washenaw Business Park
Ypsilanti Township, Michigan

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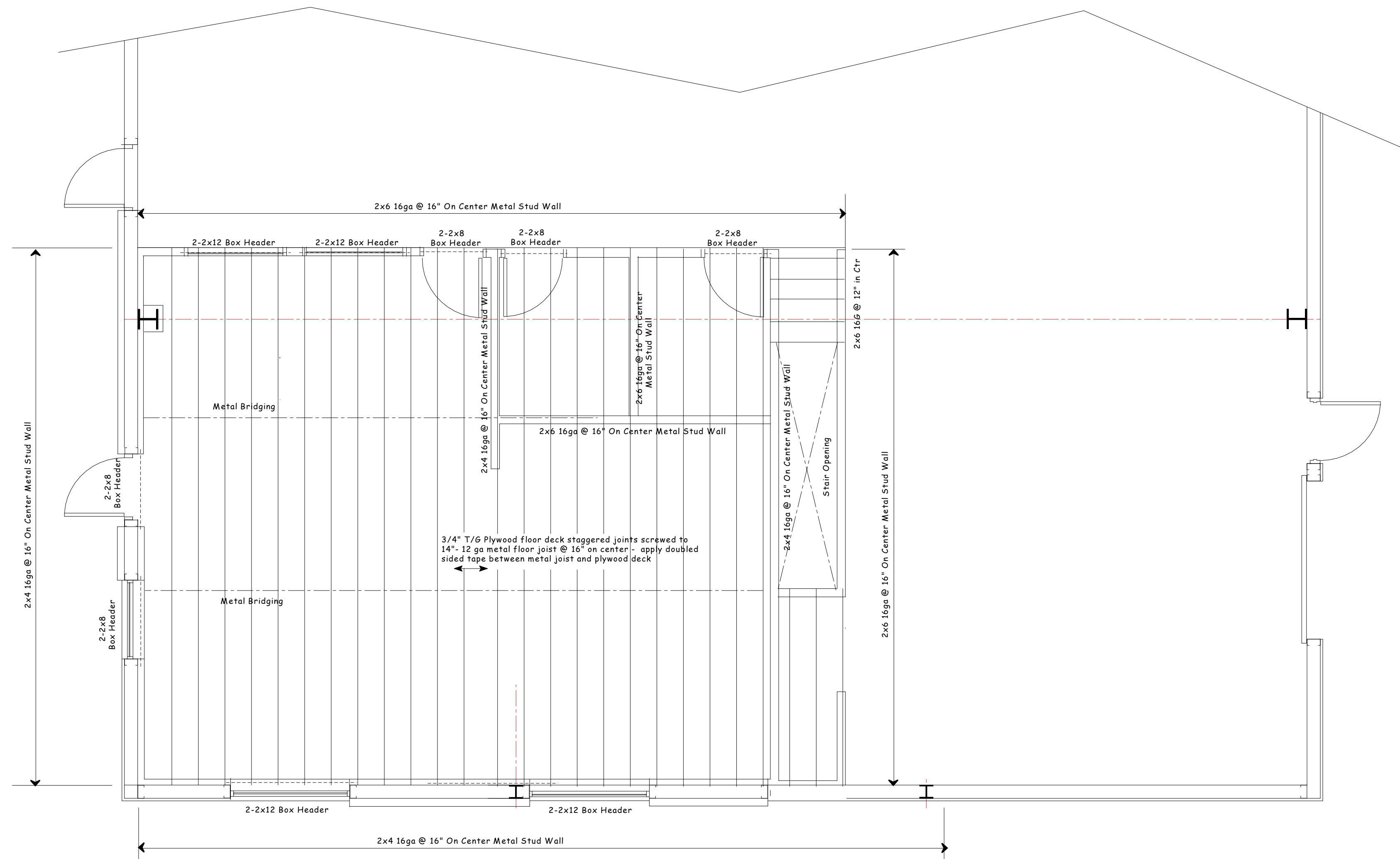
LIGHT GAUGE STEEL NOTES:

Contractors and all sub-trades are responsible for reviewing and complying with all applicable specifications contained herein. Where discrepancies occur between design drawings and these notes, design drawing specification are to supersede.

- A. Light gauge framing members are to be supplied by a member of the Steel Stud Manufacturers Association (SSMA) and designed and installed accordance with both the manufacturers specifications and the latest requirements of the American Iron and Steel Institute (AISI), including any clips, stiffeners and bracing.
- B. U.N.O. All light gauge menders attachments to structural steel shall have Vertical slip connections to allow for normal vertical deflections of structural steel elements.
- C. All connections to light gauge steel indicated on the structural drawings are to be #10 self drilling screws, including all structural sheathing indicated.
- D. All light gauge steel 16 gauge and heavier indicated on structural drawings shall be 54/97 k.s.i. steel or greater.
- E. All top and bottom light gauge track sections shall be the same gauge material as the typical stud framing into them. Fasten to studs NON-BEARING partitions with (1) #10-16 screw to flange one side, top and bottom. Fasten to stud BEARING partitions with (1) #10-16 screw to each flange BOTH SIDES, top and bottom.
- F. All built-up vertical members indicated shall have webs fastened together at 12" on center staggered. All built-up horizontal members shall have all pieces fastened together with (2) rows at 12" on center.

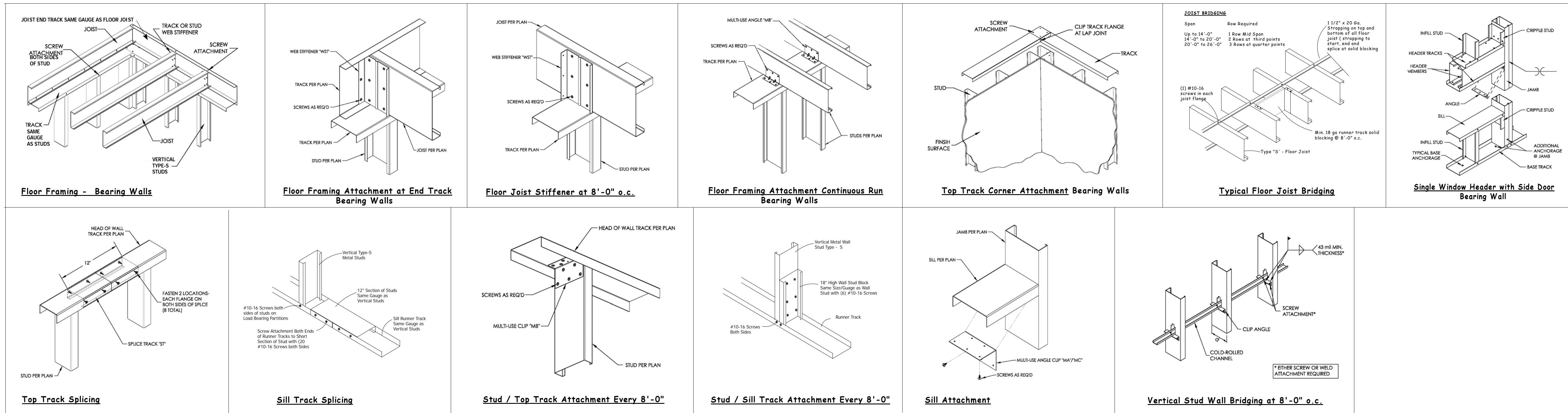
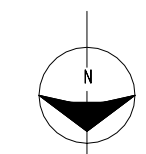
Structural Framing Notes:

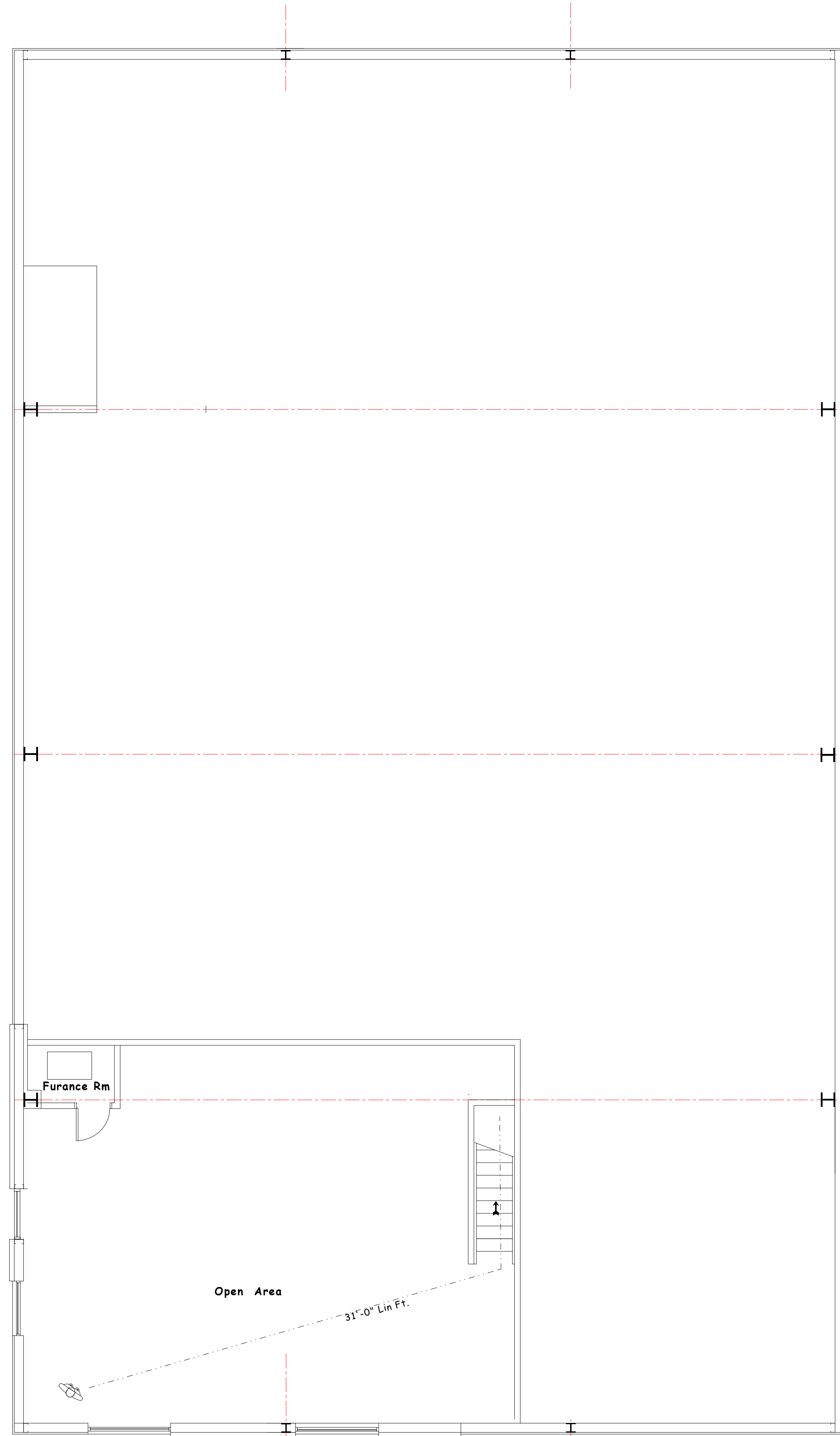
- 1. All floor joist and vertical metal studs shall be "Type-J" in gauge and size indicated, as based upon Marino Ware Cold Formed Steel Framing System
- 2. All Upper Floor Design Loads are set at:
 - * 100#/sq.ft. Live load
 - * Total Load 149#/sq.ft
- 3. Floor Joist: 14J12 (1400S200-97) 2"x 14" with 1 1/2" x 4" Knock out holes.
- 4. Wall Studs: 4CJ16(4006200-54) 2"x 4" with 1 1/2" x 4" Knock out holes
- 5. All complete system shall be provided with and for use all necessary and required TRACK: JOIST ENDS; HEAD AND SILL CONDITIONS; BOCKING AND BRIDGING.



Upper Framing Floor Plan

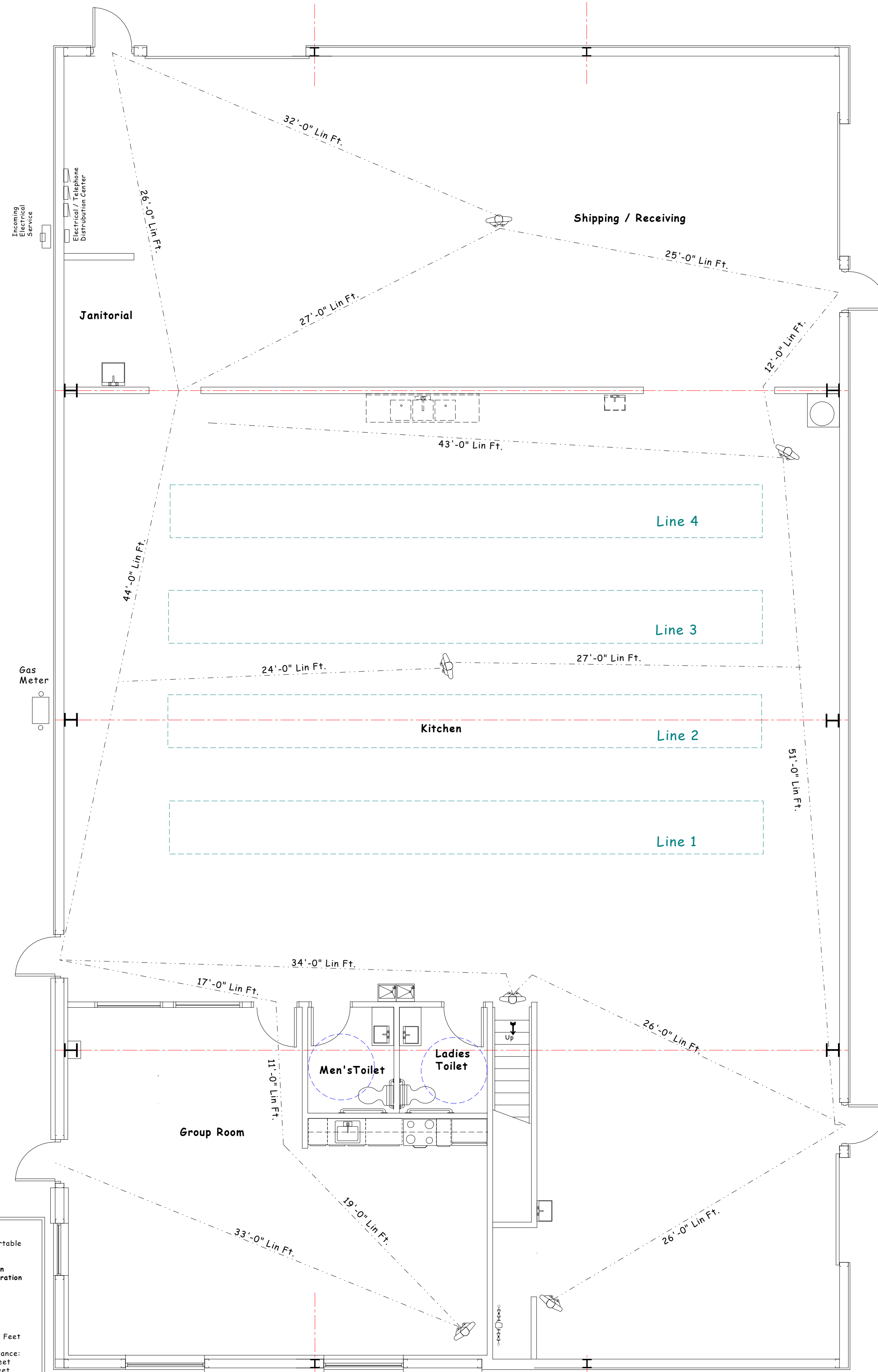
Scale: 3/16" = 1'-0"





Travel and Egress Upper Floor Plan

Scale: 3/16" = 1'-0"

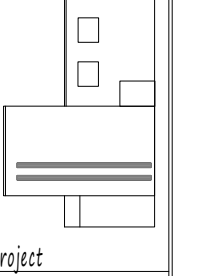


Travel and Egress First Floor Plan

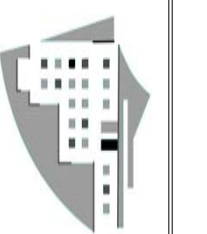
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- Travel - Egress Notes:**
- This Building Structure to be protected by Portable Fire Extinguishers and Alarm System.
FIRE EXTINGUISHER location is indicated on Construction Floor Plan for review and consideration by the local Fire Marshal.
 - Exit Access Max Travel Distance Allowed (MBC 2015) with NO Fire Sprinklers System.
 * Occupancy "F-1/S-1" Use Group = 200 Lineal Feet
 * This Building Structure Area Maximum Distance:
 * First Floor: 90'-0" Lineal Feet
 * Upper Floor: 84'-0" Lineal Feet
 - Required Number of Exits Required per Story (MBC 2015)
 Occupancy Load Per Story 1- 500 person:
 2 Exits per story
 * First Floor Occupancy: 20 persons (with visitors)
 Have: 5 - 36" Wide doors = 180' width
 * Upper Floor Occupancy: 2 persons
 Have: 1 - 40" NO door = 40' width stairs



17 March 2021



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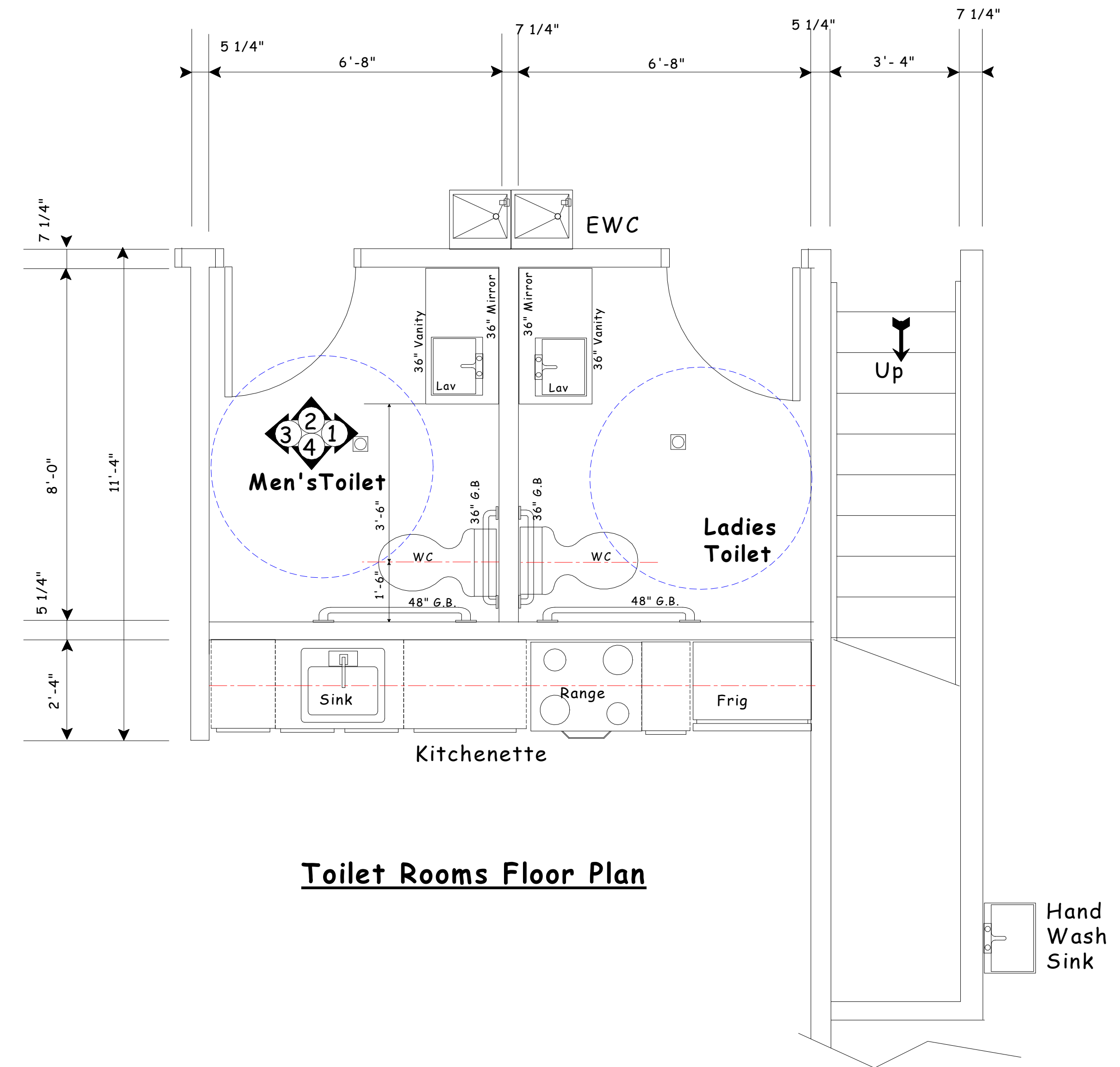
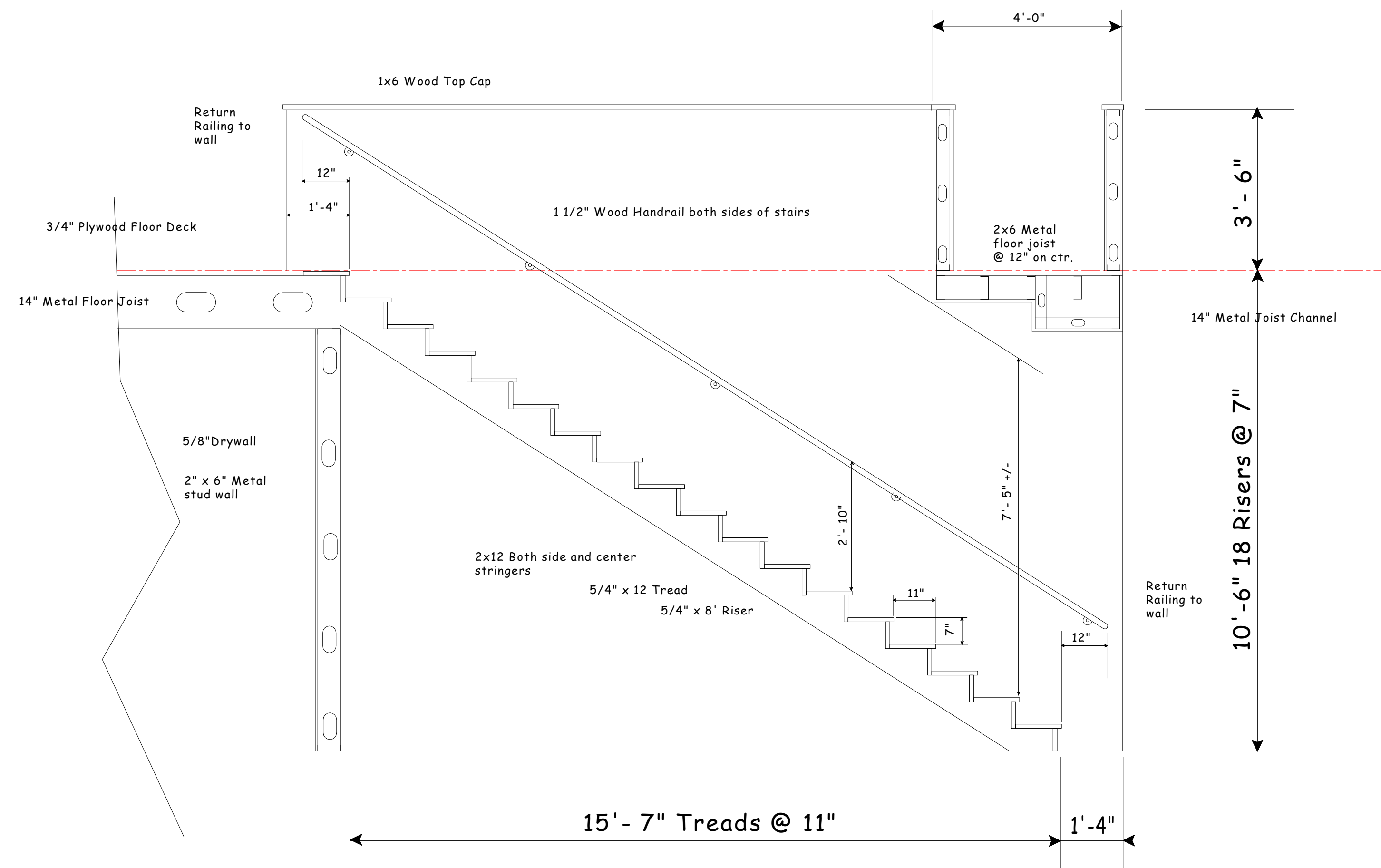
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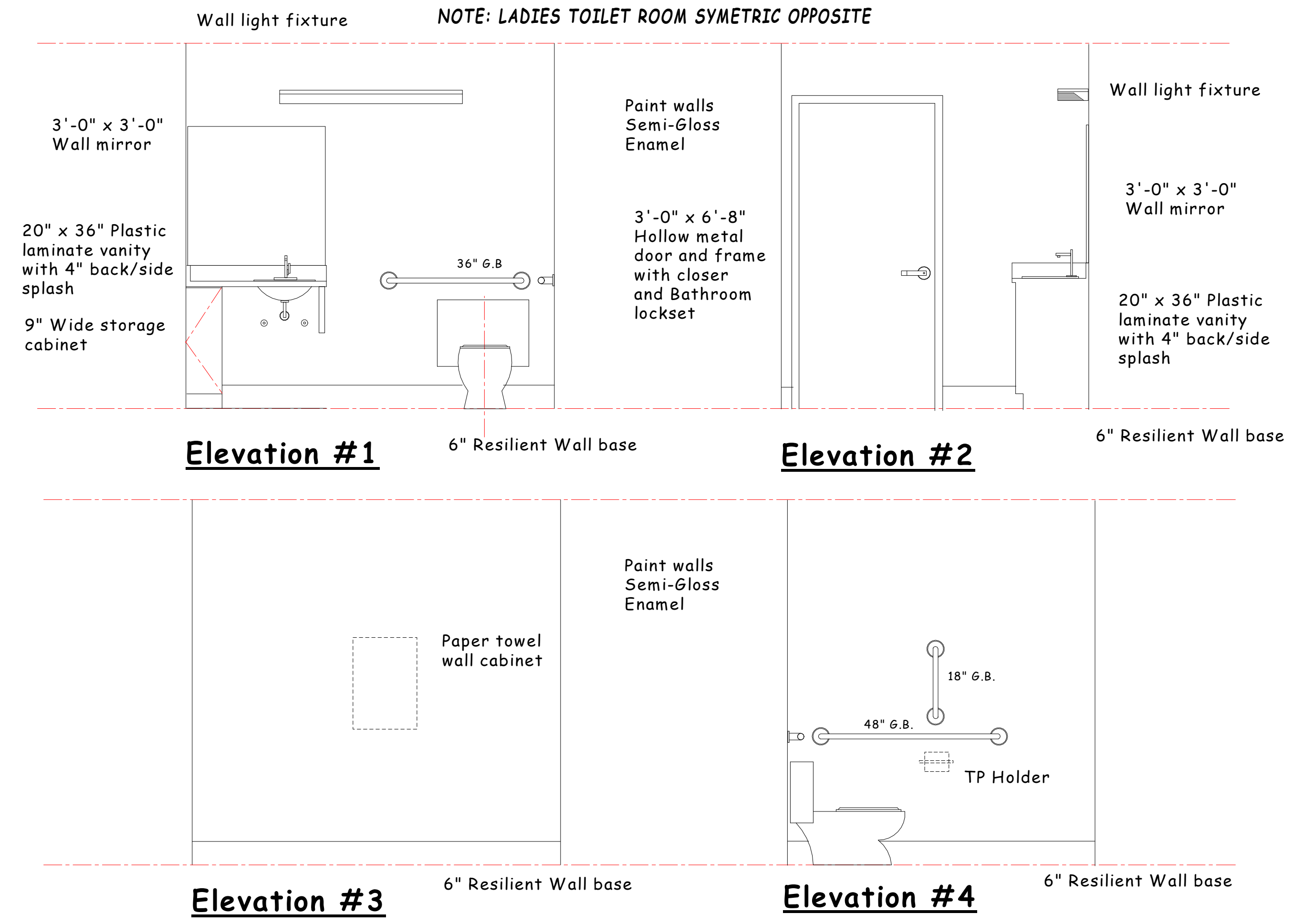
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Toilet Rooms Floor Plan



Elevation #1

Elevation #2

Elevation #3

Elevation #4

Main Facilities
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TOILET ROOM EXHAUST FAN SCHEDULE						
ROOM	PLUMBING FEATURE	QUANTITY	REQUIRED CFM PER UNIT	TOTAL REQUIRED CFM	CFM PROVIDED	REMARKS
LADIES TOILET ROOM	WATER CLOSETS	1	75	75	80 CFM	54 SQUARE FEET
	URINALS	0	75	0		
	LAVATORIES	1	0	0		
	ROOM SIZE					
MENS TOILET ROOM	WATER CLOSETS	1	75	75	80 CFM	54 SQUARE FEET
	URINALS	0	75	0		
	LAVATORIES	1	0	0		
	ROOM SIZE					

EXHAUST FAN SCHEDULE						
Tag	Area Served	Location	Manufacturer Model Number	CFM	HP	Electrical Phase FLA
EF-1	Men's Toilet	Ceiling	Braan/Nutone EZ80N	80		120 0.3
EF-2	Ladies Toilet	Ceiling	Braan/Nutone EZ80N	80		120 0.3
EF-3	Kitchenette	Ceiling	Braan/Nutone QTN130E	130		120 0.7

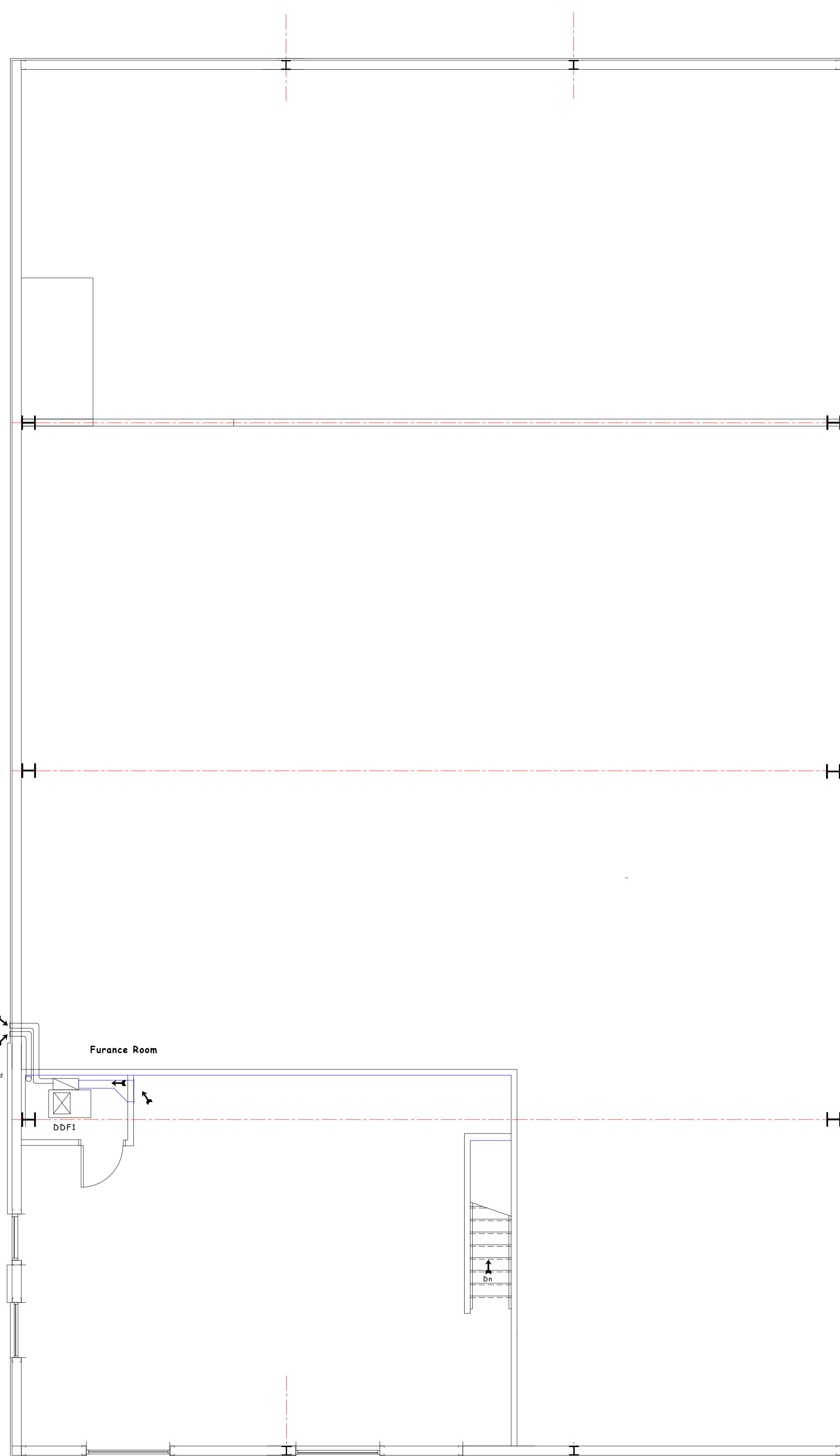
GRILLE, REGISTER and DIFFUSER SCHEDULE				
Tag	Service	Manufacturer Model Number	Overall Size	Mounting Style
S-1	Supply Air	AirMate Rezzin Square	12" x 12" 4-Way with Damper	Lay-In T-Bar Backer Plate
S-2	Return Air	1/2" x 1/2" x 1/2" Plastic grille	Fit T-Bar grid size	Lay-In T-Bar Grid

- HV/AC GENERAL NOTES:**
- Return air smoke detectors shall be supplied and installed by the HV/AC contractor.
 - All duct work of air supply; air return; Toilet Room exhaust duct shall be insulated.
 - The HV/AC contractor shall be responsible for installation, leveling and anchoring of all mechanical equipment, fan, furnaces, duct work and related elements of HV/AC system.
 - The HV/AC contractor shall be responsible for the complete fresh air intake system and duct work.
 - The HV/AC contractor shall supply and install all contractors, starters, dampers, louvers, vents, transformers, pressure reducers and any/all other necessary devices required for final connection to, and of all equipment.
 - The HV/AC contractor shall be responsible for venting of all gas equipment and appliances.
 - Line voltage stats are to be supplied by the HV/AC contractor and installed by the electrical contractor.
 - THE HV/AC CONTRACTOR SHALL NOTE THAT THESE HV/AC CONSTRUCTION DRAWINGS ARE SCHEMATIC IN LAYOUT ONLY. BOTH TO LOCATION AND HV/AC ELEMENTS SELECTED. THE HV/AC CONTRACTOR SHALL CONSTRUCT, INSTALL AND PROVIDE ALL HV/AC ELEMENTS AS REQUIRED BY, AND IN COMPLIANCE WITH THE STATE OF MICHIGAN MECHANICAL CODE 505, AND THE LOCAL BUILDING DEPARTMENT ADJUSTMENTS AND REQUIREMENTS AS BASED UPON THE SELECTION OF ALL HV/AC EQUIPMENT AND APPLIANCES.**
 - The HV/AC contractor shall provide a full and complete air balance report for the City of Troy, Michigan to be reviewed and placed for consideration, and for the Owner's files for this building structure.
 - Based upon the HV/AC equipment selected by the HV/AC contractor to be used in the construction of this building structure, said contractor shall prepare and submit for review and approval full and complete shop drawings reflecting duct work lay-out, duct sizes, bends, turns, connections, grilles, registers, dampers and control locations, with all required and necessary elements for a complete and operational system.
 - This HV/AC system shall be designed in compliance with the State of Michigan 2015 HV/AC code, along with all Federal and local codes, ordinances and specialized elements as required for a full and complete operational system.

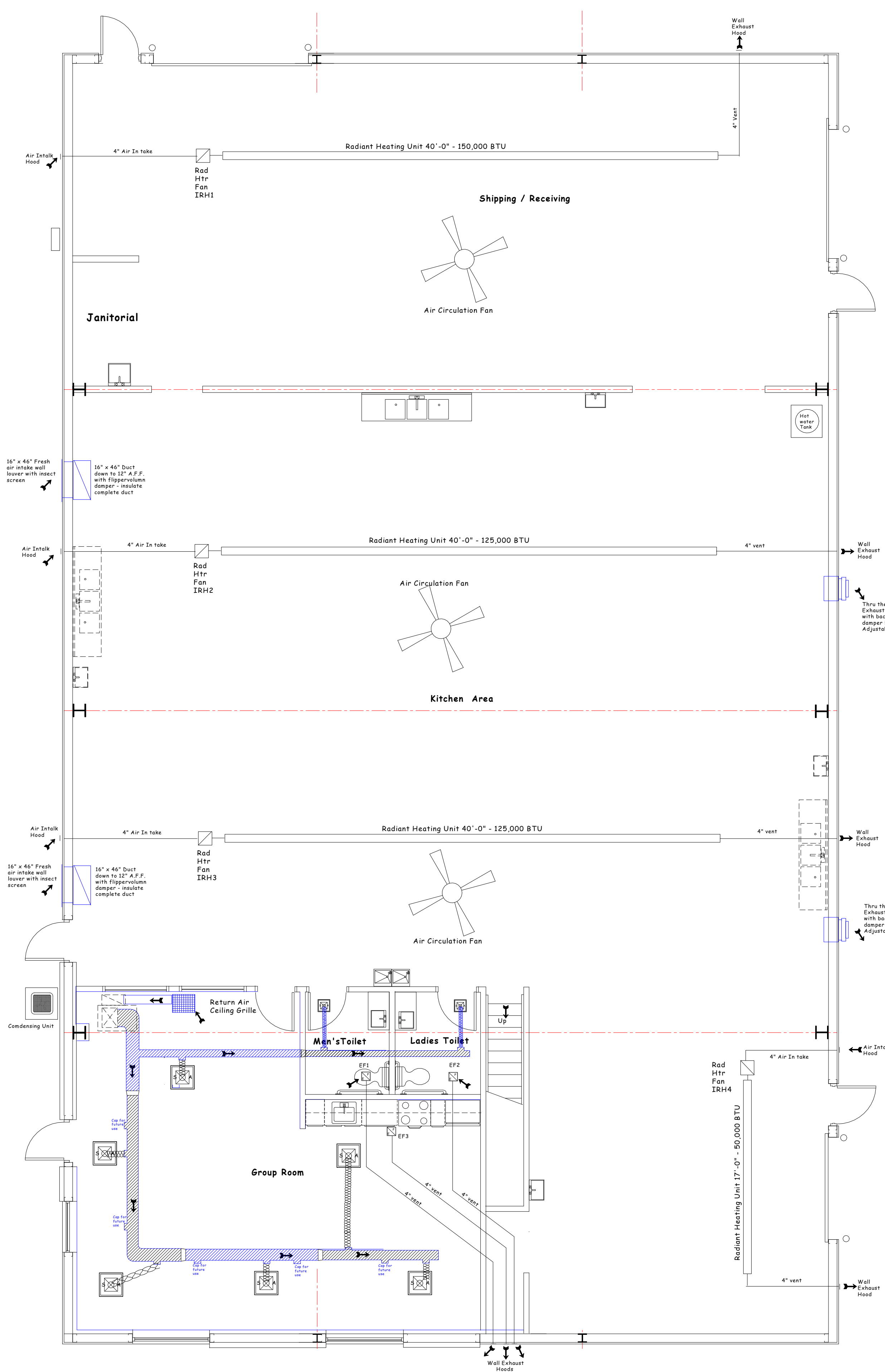
AIR VENTILATION VOLUMES	
* KITCHEN AREA	
* 3,000 square feet - Kitchen Area	20' 0" area height
60,000 Cubic Feet	
-Per Table 403.3 Michigan Mechanical Code - 2015 (MMC) Chapter 4 Table 403.3.1.1 Minimum Ventilation Air Rates	
* Kitchen Area Exhaust Air Flow Requirements:	
* 0.7 cfm per cubic foot/m required	
* Kitchen Area: 0.7 x 60,000 cu ft./m = 4,200 cfm required	
* Air Ventilation Provided:	
* 1 cfm = 8.0 square inches	
* Kitchen Area: 4,200/8.0 = 525 square inches	
* Duct Resistance: = 1.08 per square inch	
* Kitchen Area: 525 x 1.08 = 567 square inches	
* Wall Louver Intake Grille:	
* Wall Louver Resistance 30%	
* Kitchen Area: 525 x 30% = 157	
567 + 157 = 724 square inches required	
* Fresh Air Intake Wall Louver:	
16" x 46" square inches	

- AIR CIRCULATION FAN SPECIFICATION:**
- Fans are for air circulation movement of heated air at roof height to lower floor levels in winter months while providing air circulation during hotter months.
 - Fans shall be similar to:
 - Skyblade Fan Company - "TurboProp Series 8'-0" diameter
 - 8-Blade - aluminum
 - Mil Finish
 - 1.3 HP motor
 - 120-460 VAC 50/60Hz
 - Variable speed
 - 5.2 FLA Motor
 - Weight: 119#
 - Fan control:
 - Touch Screen Control Station
 - One Station for control of all fans
 - Provide full shop drawings and catalog cuts for review and consideration.

HV / AC UNIT SCHEDULE												
Tag	Area Served	Location	Manufacturer Model Number	Volts	Phase	MOCP	MCA	Heating Input MBH	Cooling Tonnage	S.A. Fan Total CFM	Unit Weight	Remarks/Notes
DDF1	Offices	Mezz - Furnace Room	Similar To: BRYANT 40090221	115				88,000	3. Ten 35,000 BTU	1,600/ 2,330	4"	1/2" Natural Gas
IRH1	Shipping Receiving	Shipping Receiving	Re-Verber-Ray DX3-40-150	120			4.8	150,000			4"	235# Length 41'-1" 1/2" Natural Gas
IRH2	Kitchen	Bay #3	Re-Verber-Ray DX3-40-125	120			4.8	125,000			4"	235# Length 41'-1" 1/2" Natural Gas
IRH3	Kitchen	Bay #2	Re-Verber-Ray DX3-40-125	120			4.8	125,000			4"	235# Length 41'-1" 1/2" Natural Gas
IRH4	Kitchen	Northwest Corner	Re-Verber-Ray LD-15-50	120			4.8	50,000			3"	85# Length 16'-10" 1/2" Natural Gas



HV/AC Mezz Floor Plan
Scale: 3/16" = 1'-0"



HV/AC First Floor Plan
Scale: 3/16" = 1'-0"

Main Facilities
Tita Tottilas
Lot #11 - Washtenaw Business Park
Ypsilanti Township, Michigan

17 March 2021

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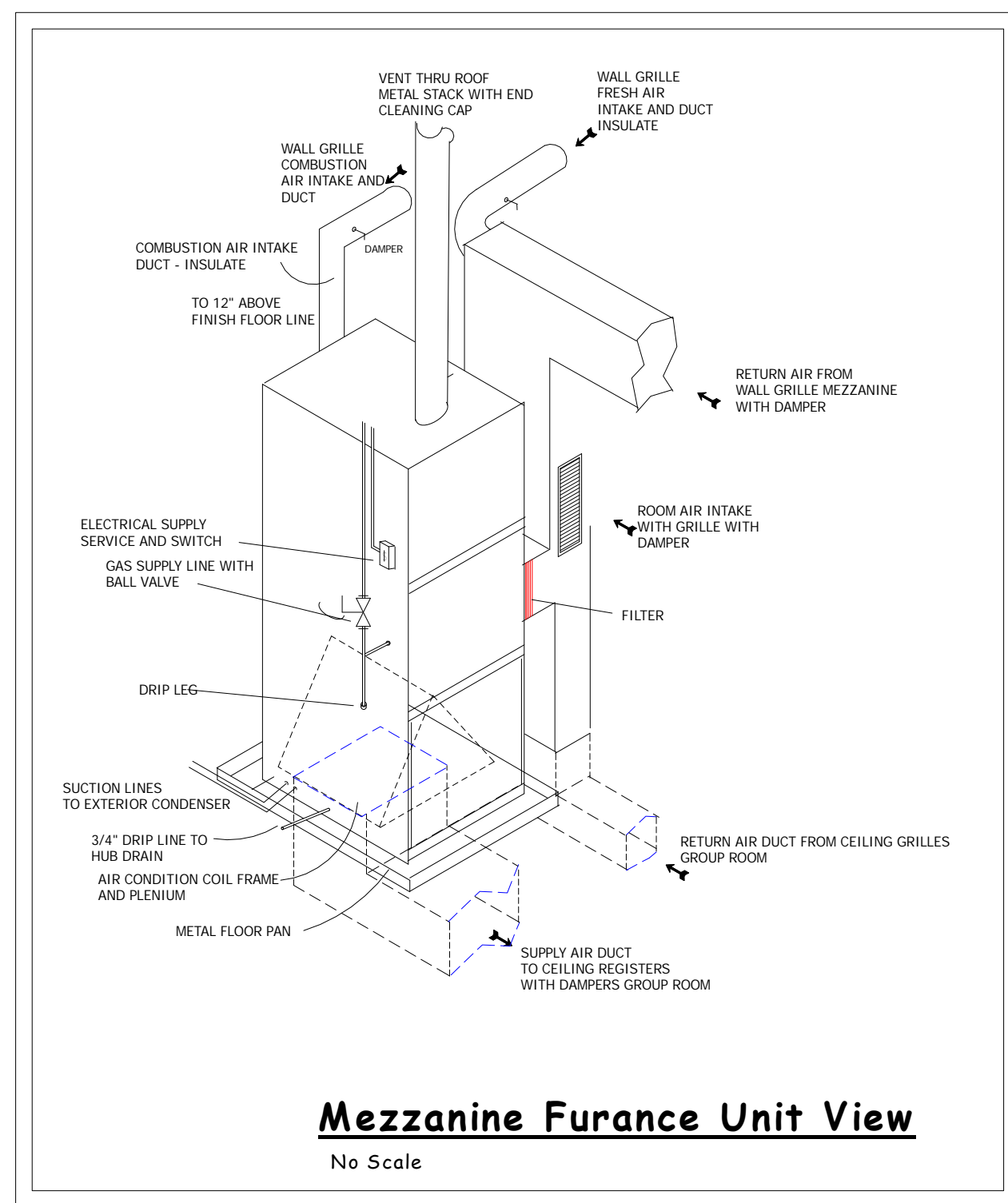
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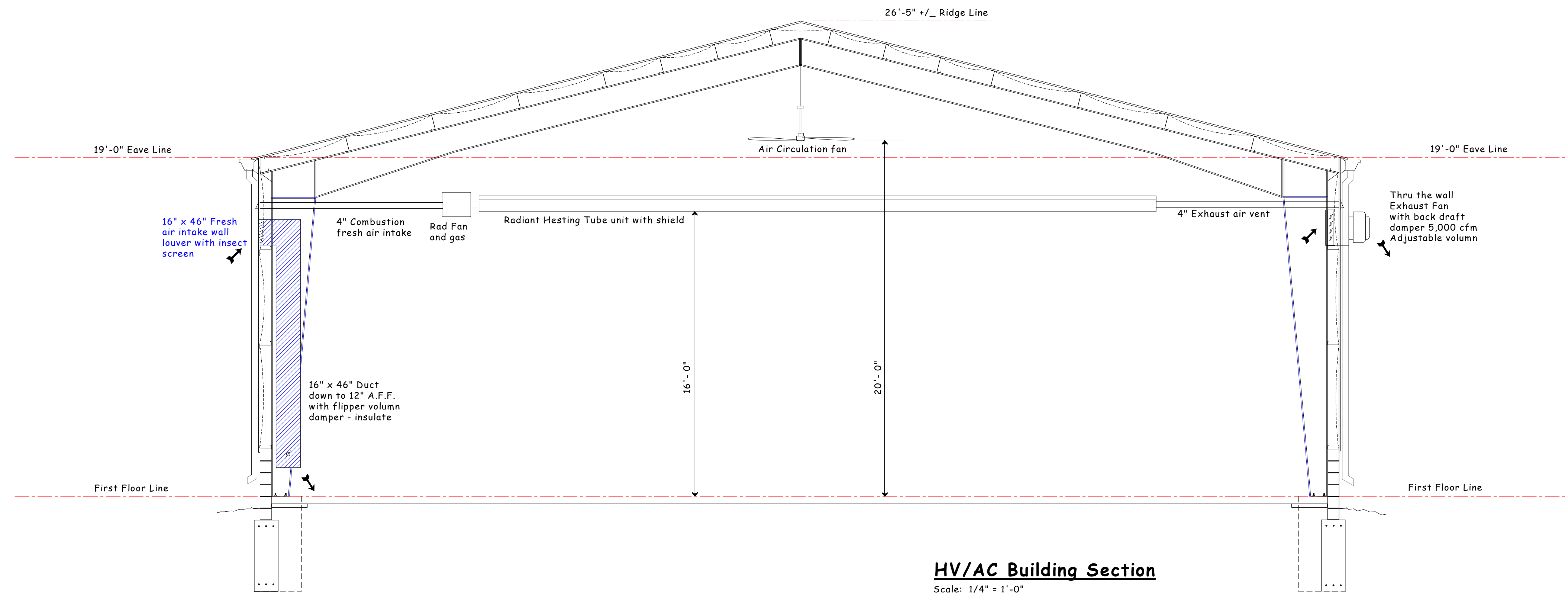
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Mezzanine Furnace Unit View

No Scale



HV/AC Building Section

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

Main Facilities
Tita Tottilas

Lot #11 - Washtenaw Business Park
Ypsilanti Township, Michigan



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17 March 2021
Revisions



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PLUMBING DOMESTIC FIXTURE COUNT

PLUMBING FIXTURE COUNT - NEW

- * Water Closet = 2 Units
- * Lavatories = 2 Units
- * Urinals = 0 Units
- * Electrical Water Coolers = 1 Units
- * Kitchen Sinks = 1 Units
- * Service Sinks = 1 Unit
- * Hand Sinks = 5 Units
- * 3-Compartment Sinks = 4 Units

WASTE WATER FLOW RATE -

	Number of Units	GPD	Totals	Remarks
People Count	15 persons	35	525	
Hand Sinks	5	7	35	
Kitchen Sinks	1	5	5	
Water Closet	2	8	16	
Service Sinks	1	15	15	
Electrical Water Coolers	1	1	1	
Floor Drains	4	1	4	
3-Compartment Sinks	4	5	20	
TOTALS			621 GPD	Average Work Day

PLUMBING FIXTURE SCHEDULE

ITEM	PRODUCT	WASTE	COLD WATER	HOT WATER	REMARKS
P-1	"Kohler" Water Closet - "Highline Classic" - #K-3493 Comfort Height - 17 1/8" - Elongated Bowl Open front seat - With cover - Color: "White"	3"	1/2"		Provide all necessary stops, taps and accessories
P-2	"Kohler" Counter Lavatory - "Farmington" Drop-In - #K-2905-1; Color: "White" 19" x 16" with Power Faucet #K-13463	1 1/4"	1/2"	1/2"	Lavatory to be set in plastic laminate surface counter top
P-3	Floor Drain - "Zurn" #Z-415-SZ1 5"x5" Square with top primer	3"			Polished Nickel Bronze top grate
P-4	Floor Sink Drain - "Zurn" #Z-1901; A.R.E. 12"x 12" Square Sani-Flo Receptor with 8" Sump depth; with top primer	3"			Cast Iron Body with White A.R.E. interior
P-5	Water Cooler - Electrical - (5 amps) 115V/60Hz "Elkay" Two Station #EZ5TL68LC	1 1/4"	1/2"		Light Gray Cabinet cover - "Green" spec. listed
P-6	Service Sink - "Flat Showers Floor Mounted 36" X 24"; #Msb 3624; Color: "White" Fit tight to wall - Install RFD Panels on all walls	2"	1/2"	1/2"	#830A Faucet; #E-88AA24 Bumper RFD panels 60" high
P-7	Hot Water Tank - 29 Gallon "Lochinvar" #JEA030KD - 31" High x 22" Diameter; Electrical 4500 Watts - 240V	3/4" OVER FLOW	3/4"	3/4"	Wall mounted 8'-0" A.F.F. 115 # Weight
P-8	EXISTING 100 Gallon - Relocated from existing facilities- Field Verify existing conditions of unit and required hook up	3/4" OVER FLOW	1"	3/4"	Floor Mounted 18" A.F.F. on metal floor stand
P-9	Hand Sink - Stainless Steel - Single Bowl "Elkay" #EHC-18-SSX; 18" x 14" x 11 size with Dual Side Splashes and faucet	1 1/2"	1/2"	1/2"	
P-10	Kitchen Sink - Stainless Steel - Single Hole - Single Bowl "Elkay" #D12522 - Drop-In 25" x 22" x 6 1/8" size Electronic Faucet #LKB721C	1 1/2"	1/2"	1/2"	Garbage Disposal 1/3hp Badger Food Waste Disposal
P-11	3-Compartment Sink; "Advance Tabco" #FC-3-2424-188L; 18" bowl depth 14" 24" x 24" Compartment sink with double drain boards	1 1/2"	1/2"	1/2"	KaTom #009-FC322424188L #K-11 Splash mount faucet
P-12	Floor Drain - "Zurn" #Z-609 9" x 9" Square with top primer	3"			Polished Nickel Bronze top grate

GENERAL NOTES - PLUMBING:

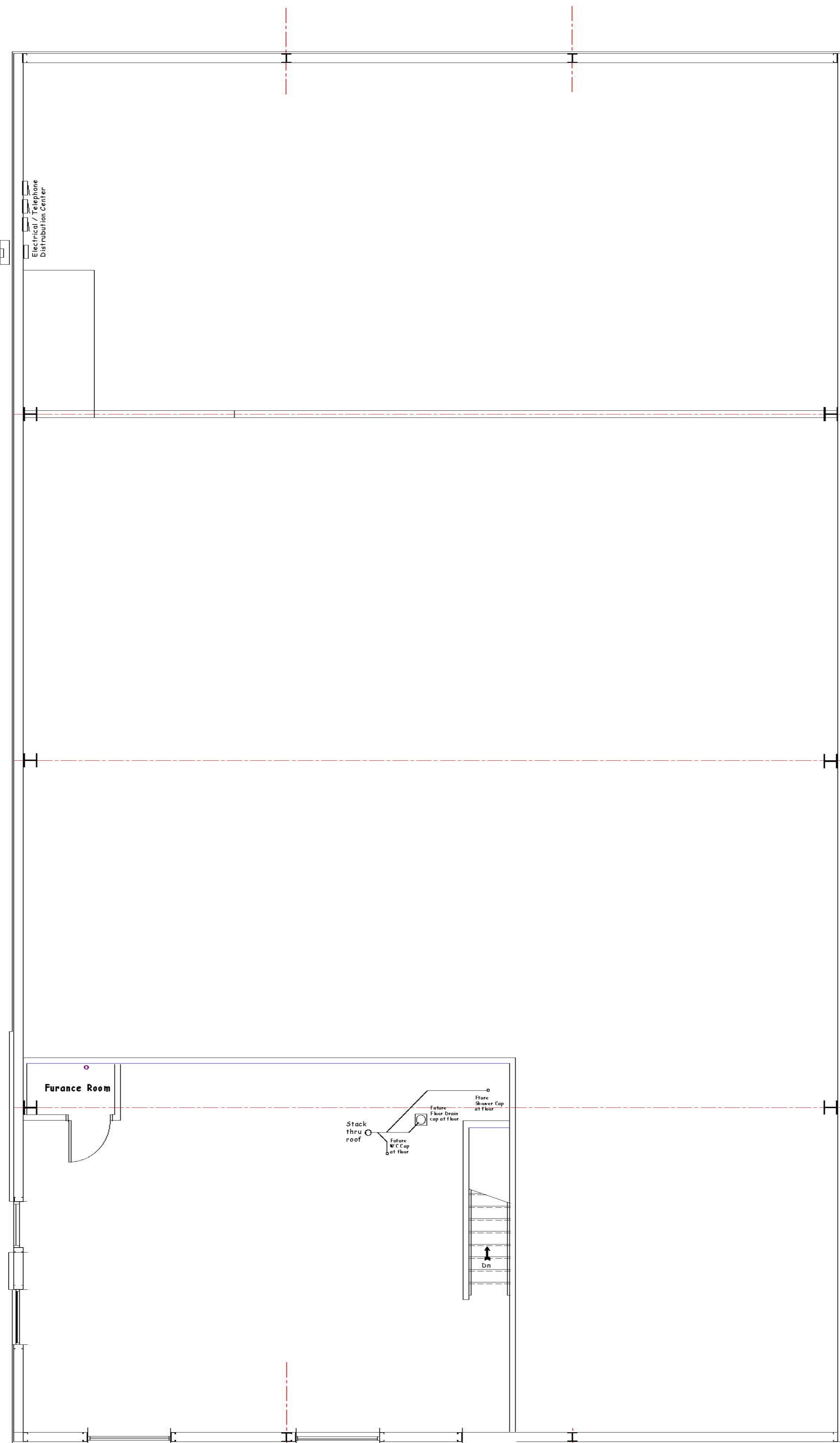
- The Plumbing Contractor shall provide and install the complete gas line piping system for new equipment and shall be responsible for connection of said gas lines to all gas equipment and appliances.
- The Plumbing Contractor shall be responsible for all required footing sleeving as required for new work.
- The Plumbing Contractor shall be responsible for all sanitary sewer and storm lines to five feet (5'-0") outside of building.
- All Storm water discharge from this building is new by roof gutters.
- THE PLUMBING CONTRACTOR SHALL USE THESE PLUMBING DOCUMENTS AS A SCHEMATIC LAYOUT ONLY BOTH TO LOCATION AND PIPE SIZING INDICATIONS. THE PLUMBING CONTRACTOR SHALL PROVIDE AND SET ALL PLUMBING ELEMENTS AS REQUIRED BY THE STATE OF MICHIGAN PLUMBING CODE 2015 AND THE LOCAL BUILDING DEPARTMENTS ADJUSTED PLUMBING CODES AND REQUIREMENTS AS RELATED TO BUILDING STRUCTURE.
- ALL INTERIOR WATER RELATED PIPING, SUCH AS:
 - * COLD AND HOT WATER DOMESTIC LINES ABOVE FIRST FLOOR SURFACE
 - * WASTE WATER LINES ABOVE CEILING
 SHALL BE EXTERIOR WRAPPED AND INSULATED, FULLY TAPED AND SECURED FOR PROPER ENERGY, CONDENSATION AND NOISE CONTROL.
- All cold and hot domestic water piping shall be COPPER.

SPECIAL NOTES - PLUMBING:

- All Hot Water tanks for domestic water service shall be in strict accordance with 2015 Michigan Plumbing Code Section 501.1
- This program shall be in strict compliance with the 2015 Michigan Plumbing Code, Section 312, for all TESTS AND INSPECTIONS AS REQUIRED FOR THIS PROGRAM.
- This program shall be in strict compliance with the 2015 Michigan Plumbing Code, Section 1002.0 for all trap requirements.

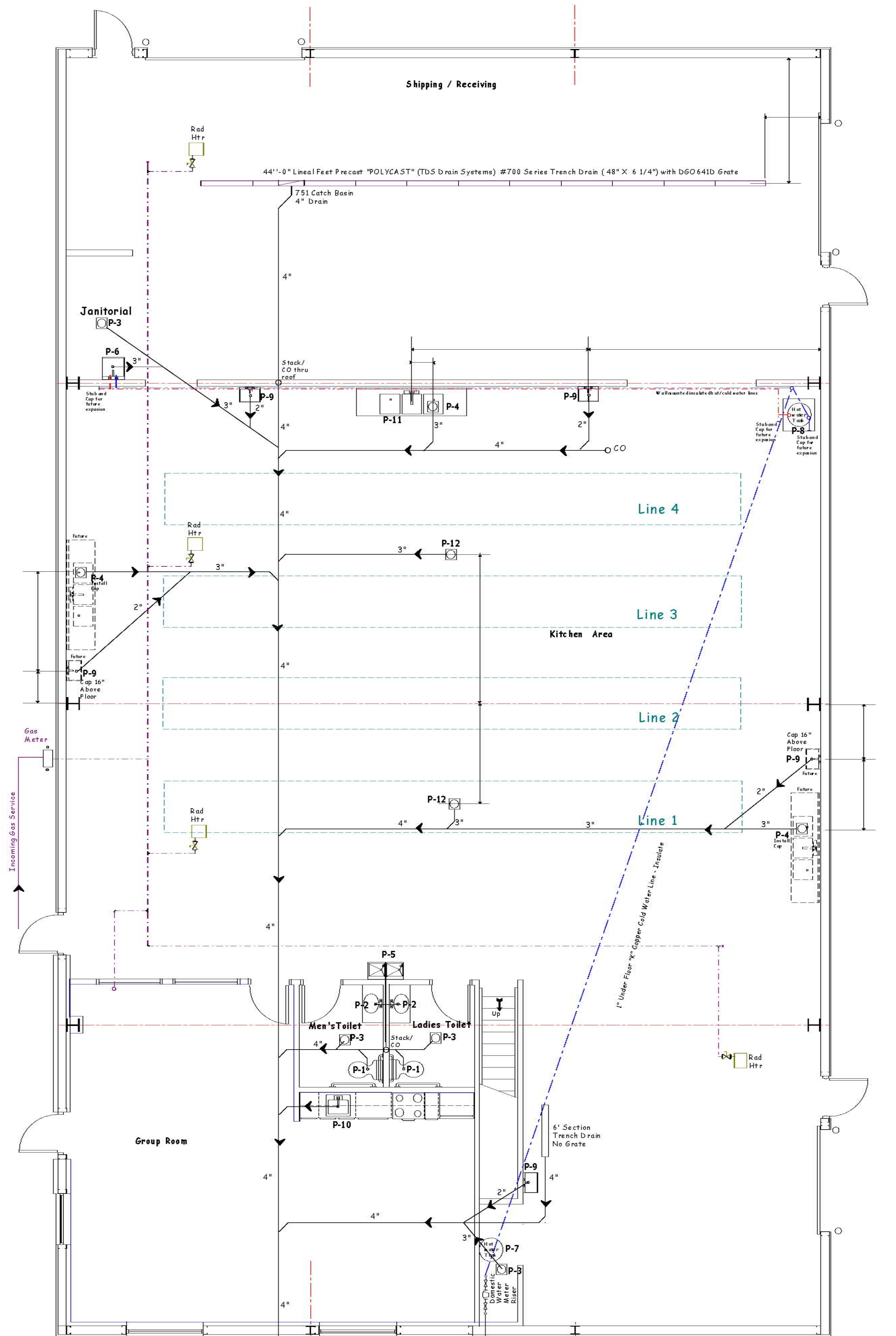
FIRE SPRINKLER SYSTEM:

This BUILDING is NOT equipped with a Fire Sprinkler System, BUJT shall be protected by well placed Fire Extinguishers and Alarm System.



Plumbing - Mezz Floor Plan

Scale: 3/16" = 1'-0"



Plumbing - First Floor Plan

Scale: 3/16" = 1'-0"

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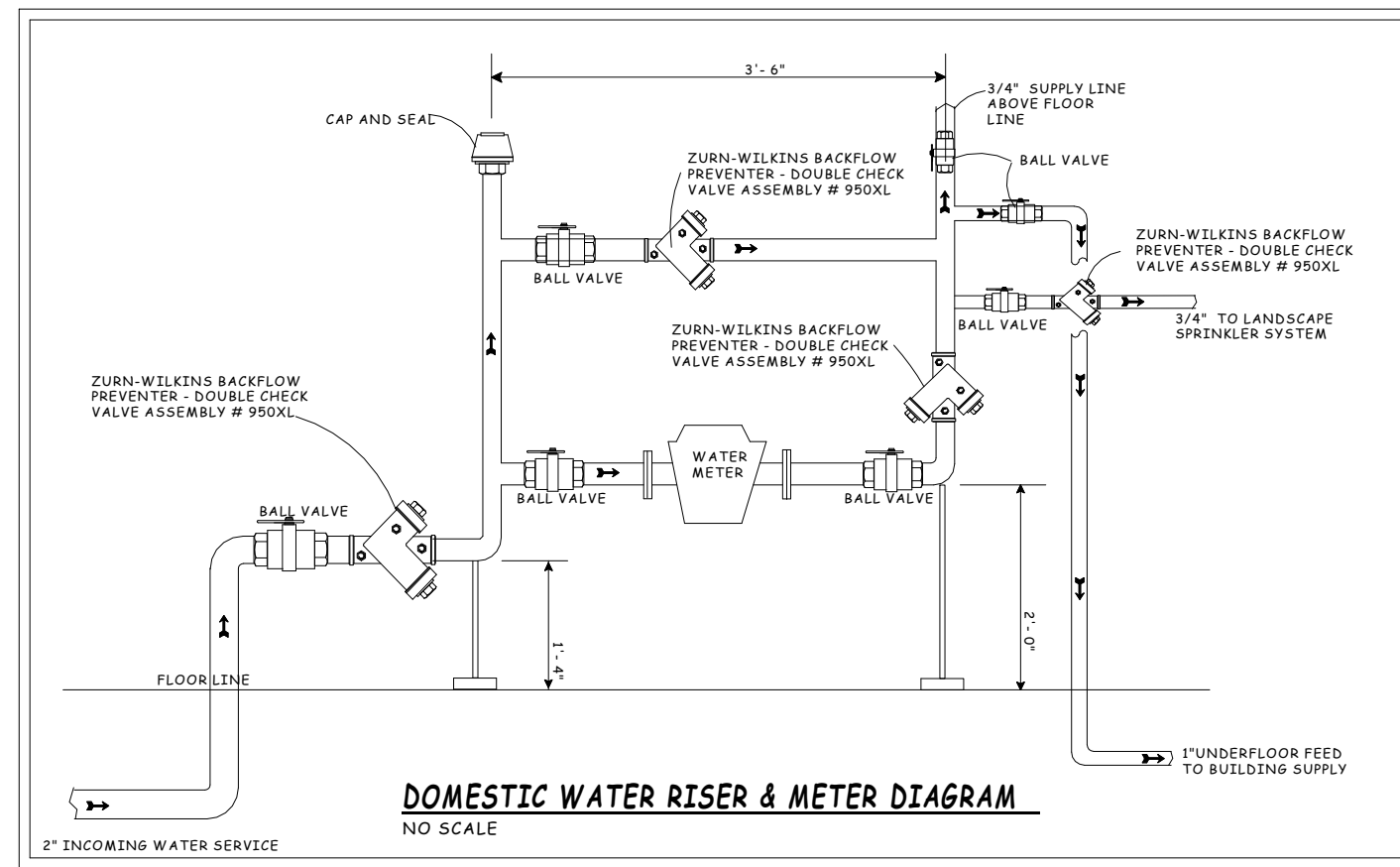
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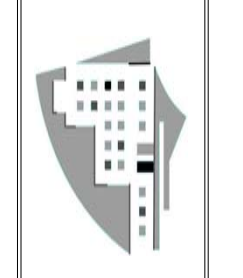
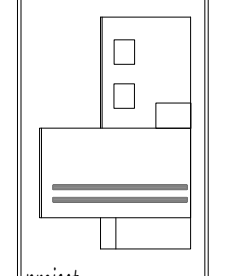
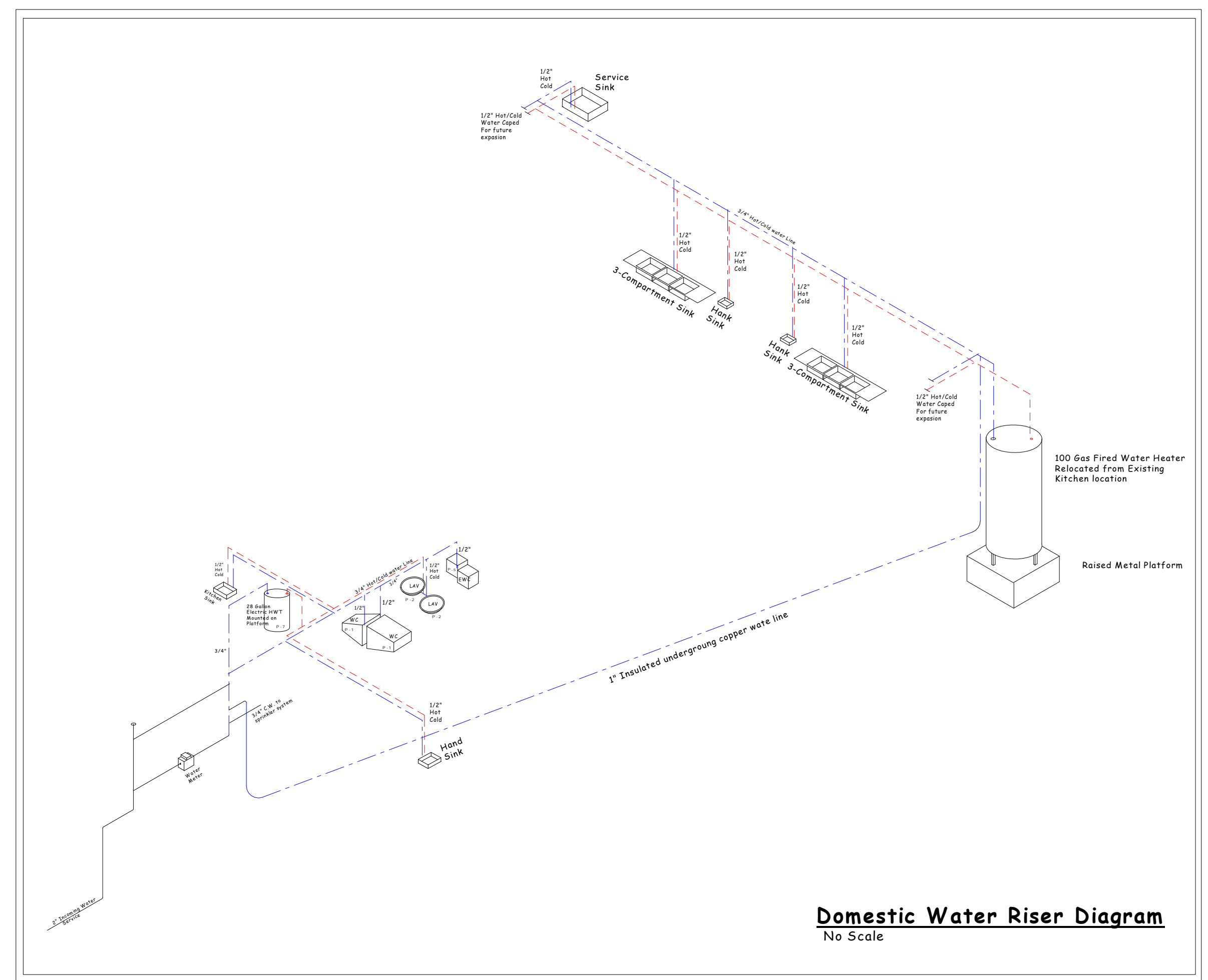
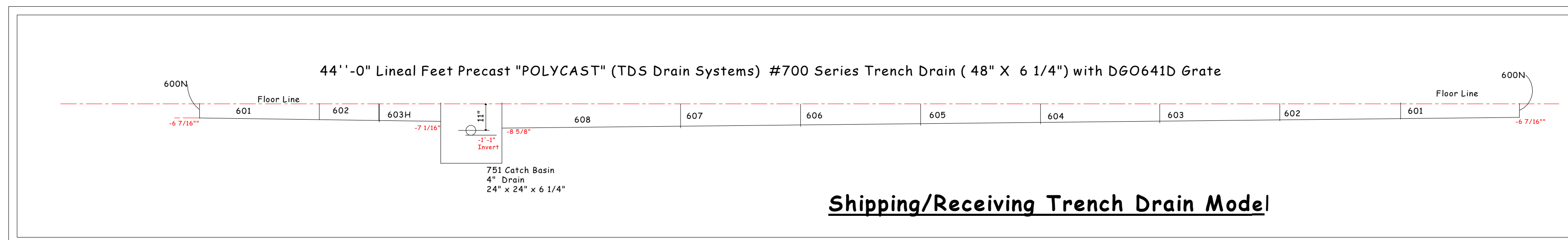
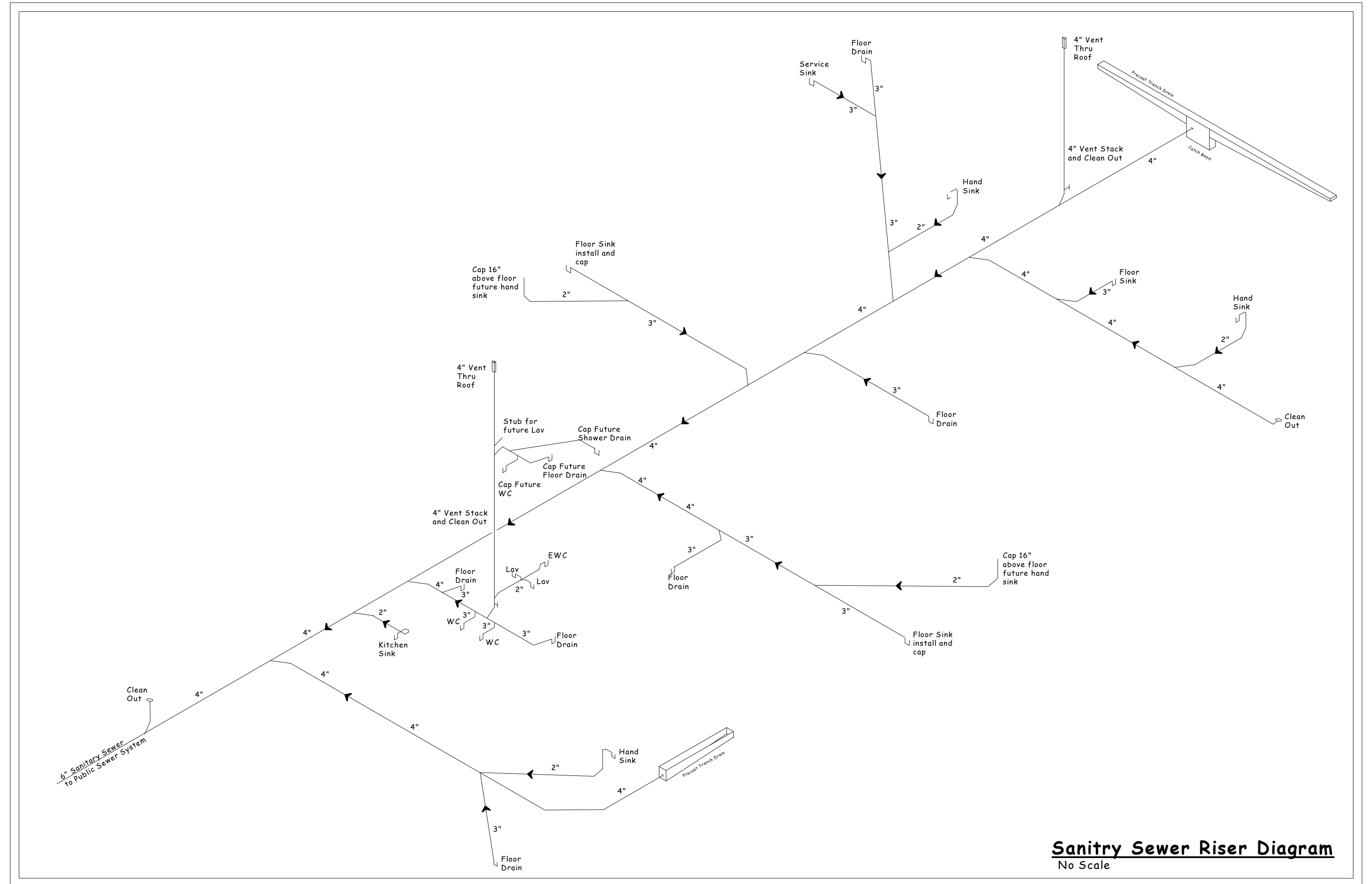
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M-3

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NOTE:
 All interior domestic water lines and piping such as:
 * Cold and hot domestic water lines, above and below First Floor Line Surface
 * Waste water lines above ceilings
 - shall be exterior wrapped and fully insulated, taped and secured for proper energy, condensation and noise control.



MARK	MANUFACTURER	CATALOG NUMBER	LAMPS	LUMENS	WATTS	MOUNTING	LENS	SPECIALS	REMARKS	QTY
A	Lithonia	ZTL-LED-48L-FW-A19-WVOLT-LP840-EL14L	LED	4885	40	Lay-In	Acrylic			12
B	Lithonia	WP-2-28 T5-120V-DO-MB	T5	1980	28	Wall	RL Acrylic			2
C	Lithonia	ZL1D-148-SR-3000LM-FST-MVOLT-40K-90 CRI	LED	3000	30	Surface	Acrylic			7
D	Lithonia	I8E-L48-18-0000LM-A7C-MD-Mvoh-40K	LED	4000	136	Ridged Hung				18
E	Lithonia	WDG2LED-P4-40K-80CRI-VF-Mvoh-SRM-PBBW-BDLXD	LED	4500	10	Wall				2
F	Lithonia	WDG4LED-P2-40K-70CRI-BFT-Mvoh-SRM-PBBW	LED	16000	106	Wall				6
G	Lithonia	FMSCNL14-298-4000K	LED	1535	23	Wall Ceiling				
X	Lithonia	LHQK-LED-8-6-40-	LED	4.3		Wall and Ceiling	Green	Battery Pack with Flood Lighting	Provide Direction Arrows as Indicated	7
REM	Lithonia	ERE-66-WP-ISO-Remote Lamp-B-WP	LED	0.75		Exterior Wall		Remote Flood Lighting Black Color Finish		5
X2	Lithonia	ELMKL-6640L-400L-WHITE-NECAD-USPOW	LED	640	6.6	Wall		Battery Pack with Flood Lighting		5

GENERAL LIGHTING NOTES:

- Coordinate lighting layout with architectural reflective ceiling plans, mechanical floor plans and mechanical duct work layout prior to rough-in.
- Electrical trades contractor shall provide all junction boxes, C-channels and supporting methods for surface mounted, pendant and recessed light fixtures.
- All LED lay-in light fixtures shall be furnished with safety clips and mechanically attached to ceiling grid system, supported independently from the building structural steel system.
- All exit and emergency light fixtures shall be connected to room light fixtures circuit ahead of all and any local controls.
- The Electrical Contractor shall furnish and install all lamps for all types of lighting fixtures.
- Installation of lighting, equipment and branch circuit wiring, etc. in any wet areas shall be in accordance with Article 511 of the latest N.E.C. requirements along with seal-off fittings for all circuits that terminate in or pass through the 18" barrier above finish floor per Article 511 of the N.E.C. for commercial garages, repair and service facilities and/or vehicle storage buildings.

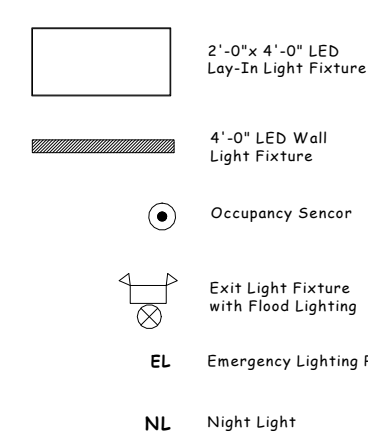
GENERAL NOTES - ELECTRICAL

- The Electrical Contractor shall provide and install all line voltage power, disconnects, and make all final power connections to all equipment and appliances, such as, BUT NOT LIMITED TO: Fans, furnace and condensing units, line voltage thermostats, etc.
- The telephone and computer wiring may be run within the same conduit piping, and the same termination junction boxes.
- NOTE:** All telephone, computer and other low voltage wiring or cable MUST meet all use and fire standards, with approved ratings for open plenum use. Written documentation will be required to the General Contractor for proof of use.
- A special alarm contractor shall be used by the owner and be responsible for adjustment to the complete Heat, Smoke and Security Detection Alarm System. **VERIFY ALARM PROGRAM WITH OWNER AND GENERAL CONTRACTOR TO INSURE CONNECTION OF ALL ELEMENTS.**
- All Toilet Room and Locker Room Light fixtures shall have motion sensors switch on upon entry and switch off when no activity. A time sensor shall be set at 20 minutes.
- The Electrical Contractor and All other trades SHALL NOTE that these electrical drawings and layout are **SCHEMATIC LAYOUT ONLY**, both to location and circuit indications. **FULL REVIEW OF ALL architectural, furniture, equipment and mechanical drawings by the Electrical Contractor shall be undertaken to insure proper installation of all electrical elements and devices.**
- The Electrical Contractor and associate trades SHALL circuit, power, wire, switch and control all electrical elements as per the latest N.E.C. requirements, State of Michigan and local codes, ordinances and regulations.
Provide field adjusted "AS BUILT" circuit drawings for all new and adjusted electrical items, light fixtures and devices.
- All data, communication cable and instruments shall be by the Owner's special in-house personnel. Full cooperation shall be given to this person for full coordination of these elements.
- The Electrical Contractor shall field inspect and investigate the existing electrical Main Distribution Center and all electrical breaker panels to understand and be aware of the changes required for the new addition, alteration and adjustment required for this program. All panels shall be **REMARKED AND RE-LABELLED AS TO USE AND CIRCUITS.**
- All Wiring shall be in conduit, no exposed wiring will be allowed.
- All wiring shall be copper. Aluminum wiring shall not be allowed.
- All duplex electrical outlet shall be "White" in color with natural aluminum cover plates if Group Room and Toilets, Kitchen and Shipping/Receiving to be standard galvanized.
- All electrical switches shall be Standard Toggle type color "White" with natural aluminum cover plates in Group Room and Toilets, Kitchen and Shipping Receiving standard galvanized, plates.

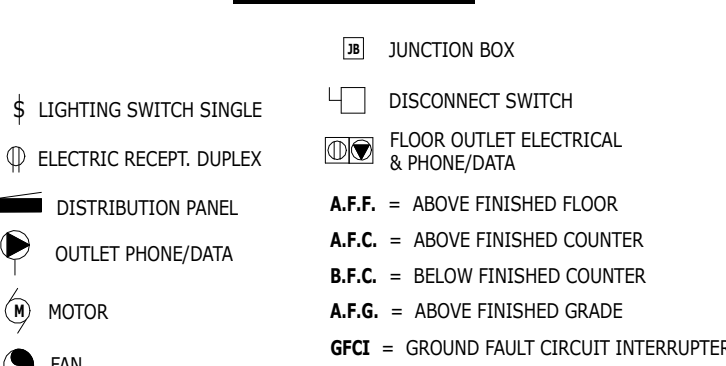
ELECTRICAL NOTES - PER NEC 2014 with Part 8 State Amendments:

- Obtain a Electrical Permit and call for electrical inspections as required.
- Connect ALL Exit and Emergency lights and lighting per NEC Article 700-12 (F).
- Provide and verify all Emergency Illumination per NEC Article 700-16.
- Support all electrical equipment and wiring (including low voltage) in accordance with NEC Article 300-11 and Articles 725 through 830.
- Prepare and install multi-wire branch circuits per NEC Article 210.4B
- Verify all existing service grounding. Adjust, repair and/or replace as per NEC 2014 -IF Non-Compliant.
- Insure compliance with ASHREA 90.1, 2013.

Electrical Lighting Symbol Legend

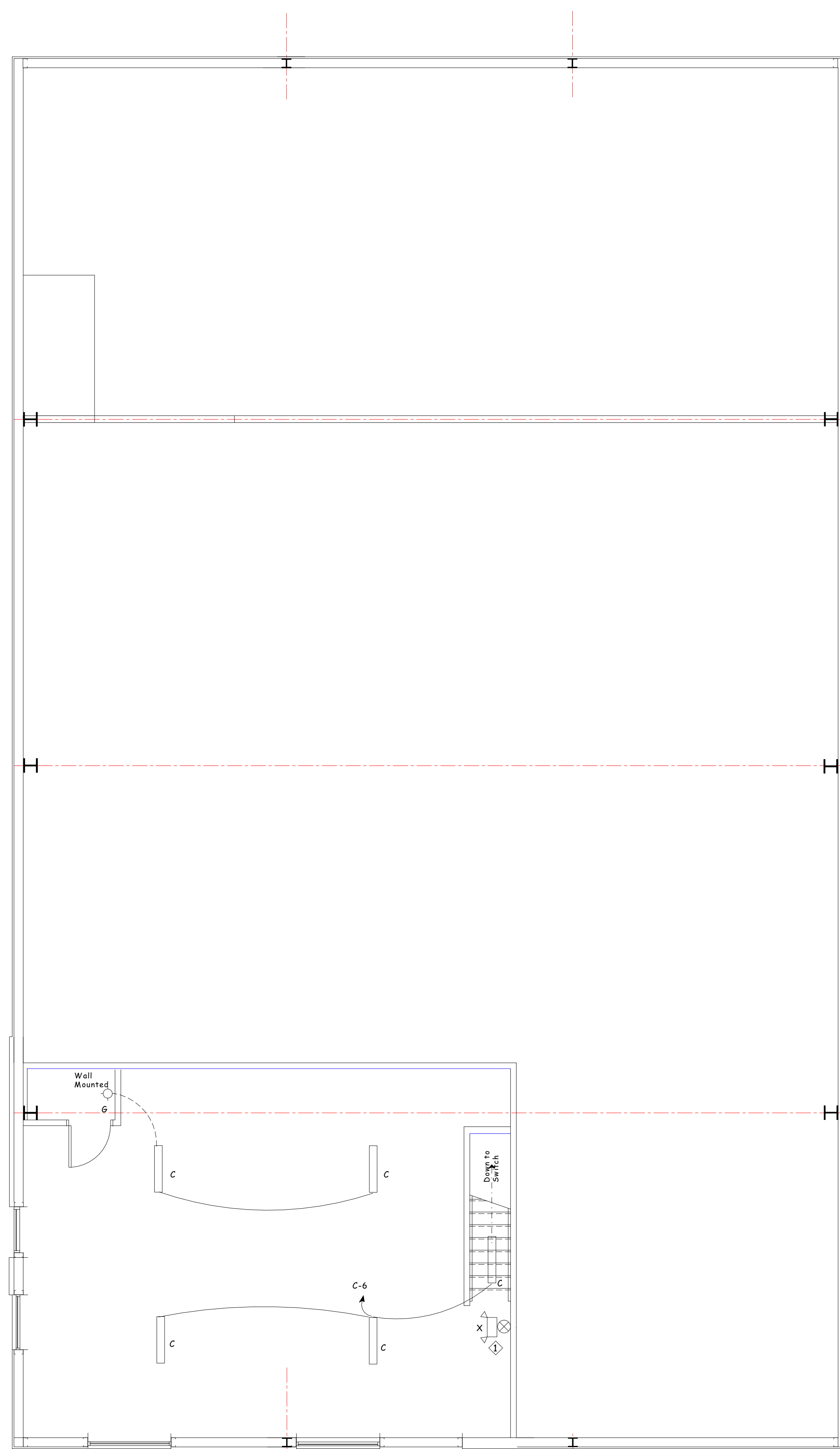


ELECTRICAL KEY:



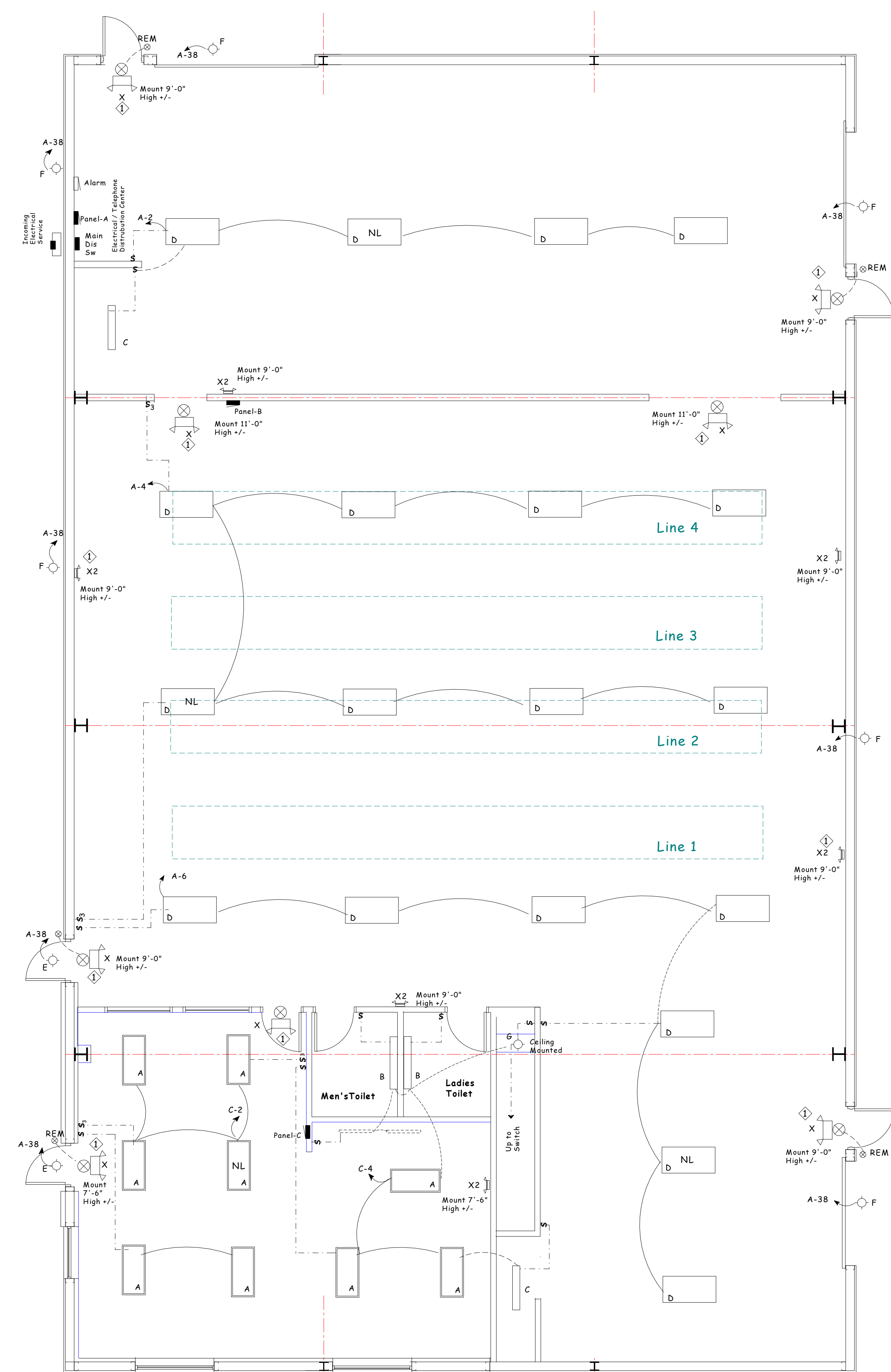
ELECTRICAL REFERENCE NOTES:

- CONNECT TO THE HOT (NON-SWITCHED) SIDE OF THE LIGHTING CIRCUITE INDICATED
- CONNECT THE E.M. BATTERY PACK - ONLY TO THE HOT (NON-SWITCHED) SIDE OF THE LIGHTING CIRCUIT INDICATED.
- SIMILAR TO 1, EXCEPT FOR 50% OF THE LIGHT FIXTURE ONLY.
- APPROXIMATE LOCATION OF LOW VOLT LIGHTING CONTROL, ON-OFF STATION.
- SIMILAR TO 4 WITH THE FOLLOWING(S)



Electrical Lighting Mezz Floor Plan

Scale: 3/16" = 1'-0"



NOTE! Electrical Contractor MUST VERIFY all Shop Drawing of both Building and Kitchen Equipment to INSURE proper voltage, wattage and amperage at element hook-up and breaker circuit demand

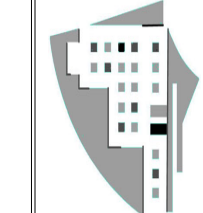
Electrical Lighting First Floor Plan

Scale: 3/16" = 1'-0"

project

17 March 2021

revisions



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29 March 2021

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2020-06

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PANEL SCHEDULES

PANEL: "A"		MOUNTING: SURFACE		MAINS: 200A M.L.O.		
LOCATION: BUILDING		VOLTAGE: 120/208V 3 PHASE 4 WIRE				
USE	LOADS			BKR. NO.	BKR. AMP.	USE
	A	B	C			
1-Double Duplex Plug	720			1	2	5 - Lights
1 - Duplex Plug	720			3	4	8 - Lights
1 - Duplex Plug		720		5	6	7 - Lights
2-Double Duplex Plugs	720			7	8	Spare
2-Duplex Plugs	720			9	10	Spare
1-Double Duplex Plug		720		11	12	Spare
1-Double Duplex Plug	720			13	14	Spare
1-Double Duplex Plug		720		15	16	Infrared Heater #1
3-Double Duplex Plug		720		17	18	Infrared Heater #2
Spare	60			19	20	Infrared Heater #3
O.H. Door South#1	1200			21	22	Infrared Heater #4
O.H. Door West #2		1200		23	24	Spare
O.H. Door West #3	1200			25	26	Spare
Air Circulation Fan#1	746			27	28	746 Wall Exhaust Fan #2
Air Circulation Fan#2		746		29	30	746 Wall Exhaust Fan #1
Air Circulation Fan#3	746			31	32	Spare
Spare				33	34	Spare
Spare				35	36	Spare
Spare				37	38	790 Out Side Light Fixtures
Spare				39	40	Spare
Light Gauge Welder		2500		41	42	Spare
TOTAL CONNECTED LOAD:	21,334W	21,334KVA				59.26 AMPS

PANEL: "B"		MOUNTING: SURFACE		MAINS: 200A M.L.O.		
LOCATION: KITCHEN EQUIPMENT		VOLTAGE: 120/208V 3 PHASE 4 WIRE				
USE	LOADS			BKR. NO.	BKR. AMP.	USE
	A	B	C			
Equipment Line #1				1	2	Equipment Line #3
				3	4	
				5	6	
Equipment Line #2				7	8	Equipment Line #4
				9	10	
				11	12	
Corn Equipment	2400			13	14	Spare
				15	16	Spare
Spare				17	18	Spare
Spare				19	20	Spare
Spare				21	22	Spare
Spare				23	24	Spare
Spare				25	26	Spare
Spare				27	28	Spare
Spare				29	30	Spare
Spare				31	32	Spare
Spare				33	34	Spare
Spare				35	36	Spare
Spare				37	38	Spare
Spare				39	40	Spare
Spare				41	42	Spare
TOTAL CONNECTED LOAD:	13,000W	13,000KVA				36.1 AMPS

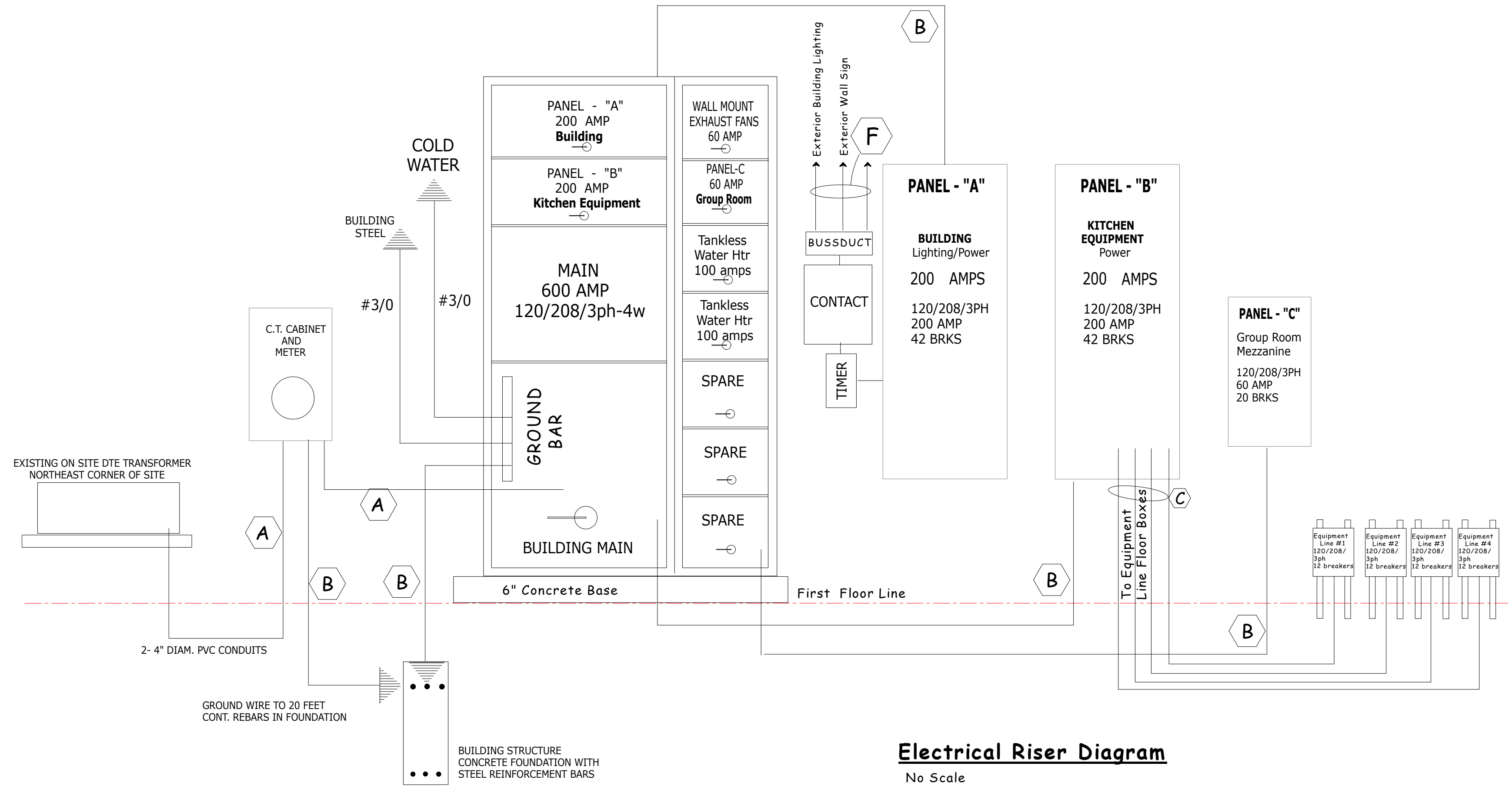
PANEL: "C"		MOUNTING: RECESSED		MAINS: 60A M.L.O.		
LOCATION: Group Room/Mezzanine		VOLTAGE: 120/208V 3 PHASE 4 WIRE				
USE	LOADS			BKR. NO.	BKR. AMP.	USE
	A	B	C			
3 - Duplex Plugs	600			1	2	5 - Light Fixture
5 - Duplex Plugs		1000		3	4	9 - Light Fixture/Fan
6 - Duplex Plugs		1200		5	6	6-Light Fixture Mezzanine
3 - Duplex Plugs	600			7	8	Spare
1 - Microwave		1500		9	10	Spare
Ext. Wall Signage		600		11	12	Spare
Spare				13	14	Mezzanine Furance
Spare				15	16	Spare
Spare				17	18	Spare
Spare				19	20	Spare
TOTAL CONNECTED LOAD:	8,830.5W	8,830KVA				24.53 AMPS

Unit	Equipment	Model	Electrical	Gas BTU	Motor Size	AMP
A	Tortilla Press	MLT40	4500 watts	150,000	1hp; 1/2hp	12.4
B	Grinder	MLP4000	2300 watts	220,000	2hp; 1/4hp	6.4
C	Tortilla Machine	MLR90	1900 watts	240,000	2hp; 1/4hp	5.2
D	Tortilla Machine	MLR180	1900 watts	290,000	2hp; 1/4hp	5.2
E	Mechanical Pan Mixer	MLP500KG	2400 watts	270,000	2hp; 1/4hp	6.6
Totals			13,000 watts	11,700,000		35.8

NOTE! Electrical Contractor MUST VERIFY all Shop Drawing of both Building and Kitchen Equipment to INSURE proper voltage, wattage and amperage at element hook-up and breaker circuit demand

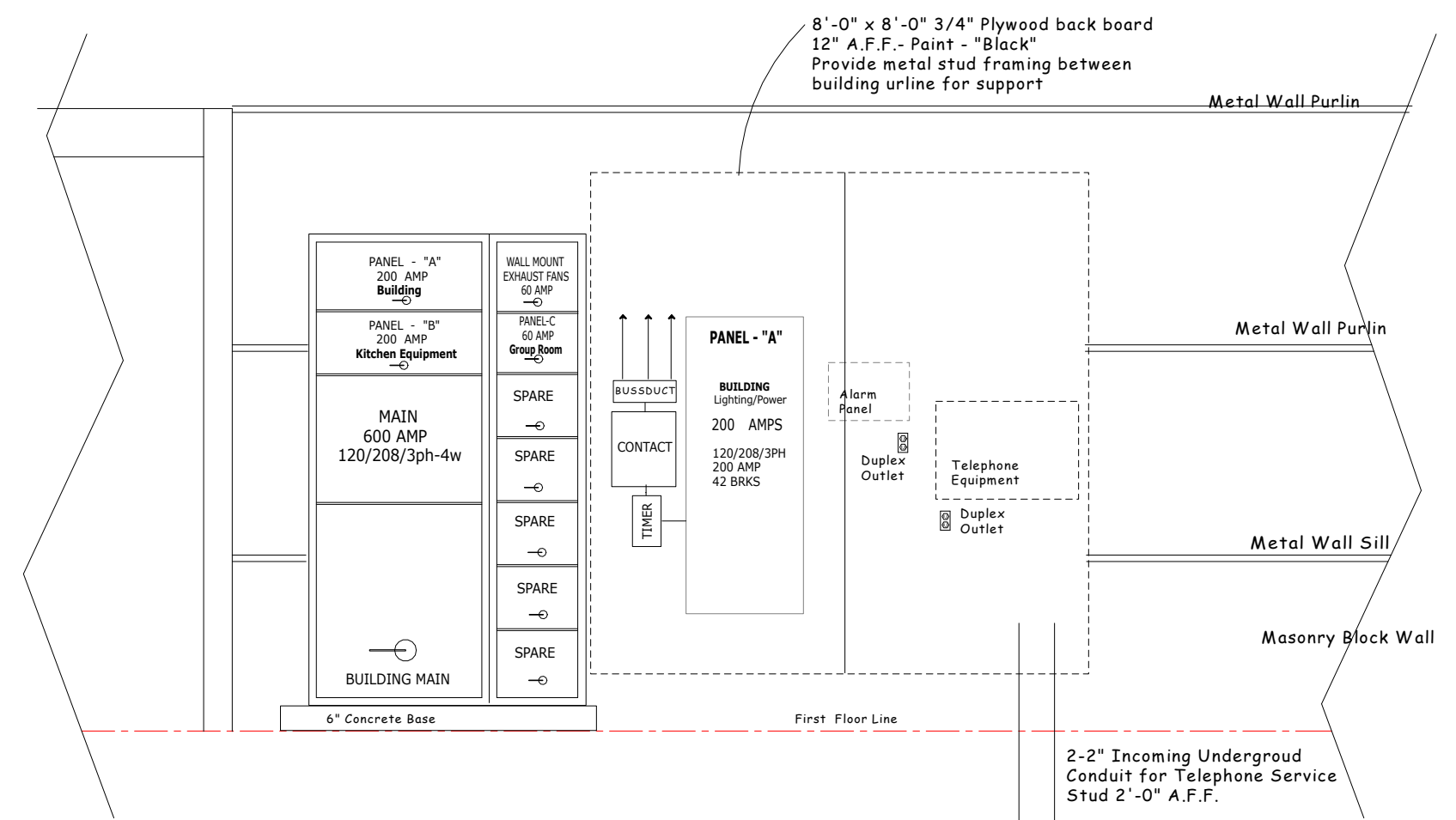
BUILDING ELECTRICAL LOAD ESTIMATE SCHEDULE				
AREA	LIGHTING	DOMESTIC POWER	SPECIAL POWER	REMARKS
Building	4,035			
Building		9,280		
Building			2,500	Welder
Building			3,600	Overhead Doors
Building			2,268	Air Circulation Fans
Building			1,600	Radiant Heating Units
Building			1,492	Wall Exhaust fans
Building	750			Exterior Lighting
Building			600	Exterior Signage
Building			13,000	Kitchen Equipment
Building			90,000	Tankless Water Heaters
Totals	4,785	9,280	115,060	= 128,125W

129,125x 30% = 38,737.5 = 167,862.5 /360 = 466.285 amps
Design Service System for incoming 3-Phase, 600 Amp Service



Electrical Riser Diagram
No Scale

FEEDER SCHEDULE	
A	2 SETS - 4"C WITH 4 #500 KCMIL
B	2"C WITH 4 #3/0 & 1 #6 GND.
C	1"C WITH 3 #6 & 1 #10 GND.
D	3/4"C WITH 3 #8 & 1 #10 GND.
E	3/4"C WITH 3 #10 & 1 #10 GND.
F	3/4"C WITH 3 #12 & 1 #12 GND.



Electrical Distribution Center
No Scale

- ELECTRICAL NOTES:**
(PER NEC 2014 W/PART 8 STATE AMMENDMENTS)
- OBTAIN A PERMIT AND CALL FOR INSPECTIONS.
 - CONNECT EXIT AND EMERGENCY LIGHTS PER NEC ARTICLE 700-12(F).
 - PROVIDE EMERGENCY ILLUMINATION PER NEC ARTICLE 700-16.
 - SUPPORT ALL ELECTRICAL EQUIPMENT AND WIRING (INCLUDING LOW VOLTAGE) IN ACCORDANCE WITH NEC ARTICLE 300-11, AND ARTICLES 725 THROUGH 830.
 - MULTI-WIRE BRANCH CIRCUITS PER ARTICLE 210.4B
 - VERIFY EXISTING SERVICE GROUNDING. REPAIR OR REPLACE PER NEC 2014 IF NON-COMPLIANT.
 - COMPLY WITH ASHRAE 90.1 2013.

ELECTRICAL KEY:	
⚡	ELECTRIC SWITCH SINGLE THREE WAY
⚡	ELECTRIC SWITCH SINGLE
⚡	ELECTRIC RECEPTOR DUPLEX
⚡	DISTRIBUTION PANEL
☎	OUTLET PHONE
⚙	MOTOR
🌀	FAN
⊠	JUNCTION BOX
⊠	DISCONNECT SWITCH
A.F.F.	= ABOVE FINISHED FLOOR
A.F.C.	= ABOVE FINISHED COUNTER
G.F.I.	= GROUND FAULT INTERRUPTER
B.F.C.	= BELOW FINISHED COUNTER
A.F.G.	= ABOVE FINISHED GRADE
Ⓜ	FLOOR OUTLET ELECTRICAL & PHONE

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 17 March 2021
 29 March 2021
 date
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 2020-06
 project number
E-3
 sheet number