File No. EA2023-120

CITY OF RICHLAND
Determination of Non-Significance

Description of Proposal: Construction of a 7000 s.f. single story multi-tenant retail building with a drive through lane. The development will include landscaping, storm water mitigation and parking.

Proponent: David Hipp, Bernardo Wills
153 S. Jefferson
Spokane, WA 99201

Location of Proposal: The development is located on Adjusted Parcel 1 of RS 5834. The parcel is located on the south side of Duportail St between Keene Rd and Queensgate Drive.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

( ) There is no comment for the DNS.

(**X**) This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

( ) This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens
Position/Title: Planning Manager
Address: 625 Swift Blvd., MS #35, Richland, WA 99352
Date: June 19, 2023
Comments Due: July 5, 2023

Signature _____

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal,** even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

A. Background Find help answering background questions

1. **Name of proposed project, if applicable:**

   Duportail St. Retail Building

2. **Name of applicant:**

   David Hipp, Bernardo Wills

3. **Address and phone number of applicant and contact person:**

   153 S. Jefferson
   Spokane, WA 99201
   59-838-4511

4. **Date checklist prepared:**

   March 14, 2023

5. **Agency requesting checklist:**

   City of Richland, Building Department

6. **Proposed timing or schedule (including phasing, if applicable):**

   Construction is anticpated to start June 1 and is expected to be complete by November 1

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

   No

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

   A geotechnical report has been prepared for the site on March 14, 2023

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   Unknown at this time

10. **List any government approvals or permits that will be needed for your proposal, if known.**

    City of Richland Building Permit

12. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The project consists of construction of a 7,000 s.f. single story multi-tenant retail building with a drive through lane. The development will include landscaping, storm water mitigation and parking.

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The development is located on Adjusted Parcel1-RS 5384. The parcel is located on the south side of Duportail St. between Keene Rd and Queensgate Dr.

B. Environmental Elements

1. Earth Find help answering earth questions

a. General description of the site:

The site is generally flat with a slight slop and is covered with sage brush and grasses

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

b. What is the steepest slope on the site (approximate percent slope)?

1% to 2% slope

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Top soil - Poorly graded sand with silt
Alluvium - Poorly graded sand with silt

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The proposed project will disturb approximately 1.75 acres and require approximately 1800 CY of imported structural fill (concrete, crushed rock, paving) from approved sources to construct the proposed improvements. Approximately 1000 CY of topsoil strippings and native soil will need to be exported offsite to reach the grades shown.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Some erosion will likely occur consistent with typical construction activities. Erosion and sediment control measures will be installed throughout construction. Final vegetation will be installed immediately upon construction to stabilize the site.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 80%

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

Erosion and sediment control measures will be installed and maintained during construction. All areas not covered with impervious surfaces will have landscape and vegetation to mitigate erosion upon construction.

2. Air Find help answering air questions

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, exposed soils may cause dust to be present for a limited period. To minimize impacts, dust control measures have been incorporated into the erosion control plans. During construction, vehicles and equipment will generate emissions.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Unknown at this time.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

No specific measure will be taken other than the contractor shall comply with the Erosion and Sediment Control plans for the subject site.

3. Water Find help answering water questions

a. Surface Water: Find help answering surface water questions

1. **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

   There are no known bodies of water on or immediately adjacent to the site. The Yakima river is about 3/4" of a mile to the northeast.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

   No

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

   N/A

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   No

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   No

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No

b. Ground Water: Find help answering ground water questions

1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

No

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

None

c. Water Runoff (including stormwater):

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Storm water runoff will discharge into on-site bio-swales or infiltration galleries located subsurface to the bio-swales will be used to enhance percolation into the subsurface soils. Storm water runoff will be contained on-site.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

No. Storm water will be treated via on-site bio-swales prior to reaching any groundwater. Storm water runoff will be contained on-site.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No, the proposed storm water management system will not affect drainage patterns in the vicinity of the site. Storm water runoff will be contained on-site.

4. **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any.**

The proposed storm water management system will store and dispose runoff on-site and will not impact the existing drainage patterns or groundwater. Erosion and sediment control measures will be installed and maintained throughout construction

4. Plants Find help answering plants questions

a. Check the types of vegetation found on the site:

- ☐ **deciduous tree: alder, maple, aspen, other**
- ☐ **evergreen tree: fir, cedar, pine, other**
- ☒ **shrubs**
- ☒ **grass**
- ☐ **pasture**
- ☐ **crop or grain**
- ☐ **orchards, vineyards, or other permanent crops.**
- ☐ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- ☐ **water plants: water lily, eelgrass, milfoil, other**
- ☐ **other types of vegetation**

b. What kind and amount of vegetation will be removed or altered?

The site has some existing vegetation that includes small shrubs and ground cover that will be removed as part of the site demolition.

c. List threatened and endangered species known to be on or near the site.

None

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

Proposed landscaping will include a combination of deciduous, turf grasses and ornamental shrubs.

e. List all noxious weeds and invasive species known to be on or near the site.

Unknown at this time

5. Animals Find help answering animal questions

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site. Unknown at this time.

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other:**
- **Mammals: deer, bear, elk, beaver, other:**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

b. List any threatened and endangered species known to be on or near the site.

Unknown at this time

c. Is the site part of a migration route? If so, explain.

Yes, Richland is within the Pacific Flyway

d. Proposed measures to preserve or enhance wildlife, if any.

Proposed development will include more trees and vegetation than what is currently on site.

e. List any invasive animal species known to be on or near the site.

Unknown at this time

6. Energy and Natural Resources Find help answering energy and natural resource questions

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric power and Natural Gas power will be used or building power, lighting power and HVAC equipment

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

The building and site will meet Washington State Energy Code and include LED lighting

7. Environmental Health Find help with answering environmental health questions

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

Unknown at this time.

1. Describe any known or possible contamination at the site from present or past uses.

Unknown at this time.

a. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Unknown at this time.

b. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No hazardous or toxic chemicals will be stored, used or produced on site.

c. Describe special emergency services that might be required.

Unknown at this time.

d. Proposed measures to reduce or control environmental health hazards, if any.

No environmental health hazards are anticipated with the proposed project.

b. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

   Traffic noise from adjacent streets

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

   The project would create short term construction noise and long term vehicular traffic noise

3. **Proposed measures to reduce or control noise impacts, if any.**

   Added Trees and vegitation

8. Land and Shoreline Use Find help answering land and shoreline use questions

a. **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

   The site is currently vacant land. The adjacent properties are retail and service in nature and this project will be compatible with the surrounding uses.

b. **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

   Unknown at this time

   1. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

      No

c. **Describe any structures on the site.**

   The site is currently vacant

d. **Will any structures be demolished? If so, what?**

   No

e. **What is the current zoning classification of the site?**

   The property is currently zoned C-1 Commercial

f. **What is the current comprehensive plan designation of the site?**

   Unknown at this time

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

The project could employ 15-20 employees

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any.

N/A

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

The project meets zoning and planning department requirements

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any.

N/A

9. Housing Find help answering housing questions

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any.

N/A

10. Aesthetics Find help answering aesthetics questions

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest portion of the building is 24'-0". The exterior materials consist of pre-finished metal panels brick, large format masonry, and composite wood cladding.

b. What views in the immediate vicinity would be altered or obstructed?

None

c. Proposed measures to reduce or control aesthetic impacts, if any.

Building to meet all zoning and development standards based on a C-2 Zone. Exterior materials will be integraded into various elevations so that large expanses of wall are broken up. Implementation of new trees and vegetation will be used to help break up the facade of the new structure.

11. Light and Glare Find help answering light and glare questions

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The project will produce minimal light glare as the light sources will be indirect, and cut off fixtures will be used. The glare would occur in the evening or at night.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing off-site sources of light or glare may affect your proposal?

Unknown at this time

d. Proposed measures to reduce or control light and glare impacts, if any.

The use of cut-off fixtures and indirect light sources.

12. Recreation Find help answering recreation questions

a. What designated and informal recreational opportunities are in the immediate vicinity?

Unknown at this time

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

N/A

13. Historic and Cultural Preservation Find help answering historic and cultural preservation questions

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

None

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Unknown at this time.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

It is unknown at this time if the site has historical significance, however, if items or indications were discovered, the project would work with local authorities to identify and preserve the items.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

N/A

14. Transportation Find help with answering transportation questions

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The site will be access from a secondary feeder street adjacent on the south side of the site that connects to an access street that intersects with Duportail St. Duportail St. connects to Queensgate Dr. that connects to Interstate 182.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, the site is served by Ben Franklin Transit, Bus routes 123 and 110 use stop 4 located a block to the east on Duportail St.

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The project will require the modification of an existing access road and the construction of a new section of feeder road to allow access on the south east side of the site.

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Weekday Trips: 566 Total Trips
AM Peak Hour: 41 Total Trips
PM Peak Hour: 69 Total Trips
Trucks/Non-Passenger vehicles: 1% to 2%

Peak Volumes will still occur during the PM Peak hour (4:00 – 6:00 PM).

f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

g. Proposed measures to reduce or control transportation impacts, if any.

N/A

15. Public Services Find help answering public service questions

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No. The existing public services cover the area.

b. Proposed measures to reduce or control direct impacts on public services, if any.

N/A

16. Utilities Find help answering utilities questions

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity - Richland Energy Services, Natural Gas - Cascade Natural Gas, Water - City of Richland
Refuse - City of Richland, Sewer - City of Richland, Telephone - Centurylink

C. Signature Find help about who should sign

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

David E Hipp

SEPA Responsible Offical

Type name of signee: David Hipp

Position and agency/organization: Project Architect, Bernardo Wills, Spokane, WA

Date submitted: March 17, 2023

D. Supplemental sheet for nonproject actions Find help for the nonproject actions worksheet

IT IS NOT REQUIRED to use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

    - **Proposed measures to avoid or reduce such increases are:**

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

    - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

3. **How would the proposal be likely to deplete energy or natural resources?**

    - **Proposed measures to protect or conserve energy and natural resources are:**

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

    - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

    - **Proposed measures to avoid or reduce shoreline and land use impacts are:**

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

    - **Proposed measures to reduce or respond to such demand(s) are:**

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

Duportail St. Retail Building

Richland, Washington
22-09-164

THIS IMAGE IS CONCEPTUAL AND MAY NOT ACCURATELY DESCRIBE THE EXTENT OF WORK UNDER CONTRACT

Index of Drawings

GRAPHIC LEGEND

■	ISSUED
□	ISSUED FOR REFERENCE ONLY
	REISSUED WITHOUT REVISION

NOTES:

DRAWING SET:	PERMIT SET
ISSUE DATE:	06/02/2023
MILESTONE 2	
REVISION #	

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E1.3	Lighting Layout - Exteior	■

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WWW.BERNARDOWILLS.COM
509.838.4511 FAX:509.838.4605

4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

3151-3155-3159 Duportail St

Permit Set
6/2/23

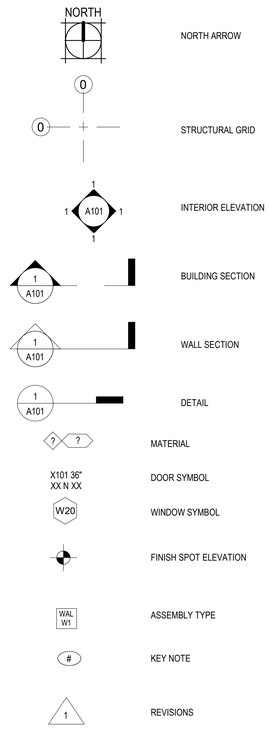
23-01298

Cover Sheet
G0.0

General Abbreviations

&	AND
∠	ANGLE
	AT CENTERLINE
°	DEGREES
Ø	DIAMETER OR ROUND
⊥	PERPENDICULAR
#	POUND OR NUMBER
A.B.	ANCHOR BOLT
ABV.	ABOVE
AC.B.	ACOUSTICAL BOARD
ACOUS.	ACOUSTICAL
A.F.F.	ABOVE FINISH FLOOR
AGGR.	AGGREGATE
ALUM.	ALUMINUM
ANOD.	ANODIZED
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
ASPH.	ASPHALT
ASSY.	ASSEMBLY
BD.	BOARD
BLDG.	BUILDING
BLK.	BLOCK
BLK'G.	BLOCKING
BM.	BEAM
B.U.R.	BUILT UP ROOF
BOT.	BOTTOM
B.O.	BOTTOM OF
CAB.	CABINET
C.B.	CATCH BASIN
CEM	CEMENT
CH.	CHANNEL
C.J.	CONTROL JOINT
CLG.	CEILING
CTR'D.	CENTERED
CL.	CENTER LINE
CLR.	CLEAR
C.O.	CLEAN OUT
COL.	COLUMN
CONC.	CONCRETE
COND.	CONDITION
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUE
C.T.	CERAMIC TILE
CTR.	COUNTER
CT.SK.	COUNTER SUNK
DBL.	DOUBLE
DEPT.	DEPARTMENT
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DR.	DOOR
D.S.	DOWNSPOUT
DWG.	DRAWING
(E)	EXISTING
E	EAST
EA.	EACH
E.I.F.S.	EXT. INSUL. & FINISH SYSTEM
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
ENCL.	ENCLOSURE
E.P.	ELECTRICAL PANEL
EQ.	EQUAL
EQP.	EQUIPMENT
EXIST.	EXISTING
EXPO.	EXPOSED
EXT.	EXTERIOR
F.D.	FLOOR DRAIN
F.E.	FIRE EXTINGUISHER
F.F.	FINISH FLOOR
F.H.	FIRE HYDRANT
FIN.	FINISH
FLASH.	FLASHING
FLR.	FLOOR
FLUOR.	FLUORESCENT
FOUND.	FOUNDATION
FRM'G.	FRAMING
FT.	FOOT OR FEET
FT'G.	FOOTING
FURR.	FURRING
G.A.	GAUGE
G.C.	GENERAL CONSTRUCTION
GL.	GLASS
GND.	GROUND
GP.	GROUP
GR.	GRADE
GV.	GALVANIZED
GYP.	GYPSUM
H.C.	HOLLOW CORE
H.B.	HOSE BIB
HDCP.	HANDICAP
HDWD.	HARDWOOD
HDWR.	HARDWARE
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HR.	HOUR
HT.	HEIGHT
INST.	INSTALLATION
INSUL.	INSULATION
INT.	INTERIOR
JT'S.	JOINTS
LAM.	LAMINATED
LB.	POUND
LOC.	LOCATION
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MFR.	MANUFACTURER
M.H.	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTD.	MOUNTED
MTL.	METAL
N	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O/	OVER
OH.	OPPOSITE HAND
OPP.	OPPOSITE
PNL.	PANEL
PL.	PLATE
PLYWD.	PLYWOOD
P.P.	POWER POLE
P.T.	PRESSURE TREATED
R.	RADIUS OR RISER
R.C.P.	REFLECTED CEILING PLAN
R.D.	ROOF DRAIN
REC.	RECOMMENDED
REF.	REFERENCE
REINF.	REINFORCED
REQ'D.	REQUIRED
RM.	ROOM
S	SOUTH
S.C.	SOLID CORE
SCHED.	SCHEDULE
SHT.	SHEET
S.M.	SHEET METAL
S.M.S.	SHEET METAL SCREWS
SHT'G.	SHEATHING
SIM.	SIMILAR
SPEC.	SPECIFICATION
SQ.	SQUARE
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STR.	STRUCTURAL
SUSP.	SUSPENDED
S & V	STAIN AND VARNISH
SVC.	SERVICE
S.W.	SIDEWALK
SYM.	SYMMETRICAL
T.	TREAD
T.C.	TOP OF CURB
TEL.	TELEPHONE
T & G	TONGUE AND GROOVE
THK.	THICK
T.O.	TOP OF
T.O.P.	TOP OF PLATE
T.P.	TOP OF PAVEMENT
T.W.	TOP OF WALL
TYP.	TYPICAL
U.B.C.	UNIFORM BUILDING CODE
UNF.	UNFINISHED
U.O.N.	UNLESS OTHERWISE NOTED
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WEST
W/	WITH
WD.	WOOD
WDW.	WINDOW
W/O	WITHOUT
W.P.	WATERPROOF
W.R.	WATER RESISTANT
WSCT.	WAINSCOT
WT.	WEIGHT

General Symbols



General Project Information

1. DRAWINGS AND ASSOCIATED CONSTRUCTION DOCUMENTS ARE SUBJECT TO CHANGE PENDING PERMIT REVIEW BY GOVERNING MUNICIPALITY
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR FOR THE DURATION OF CONSTRUCTION TO MAINTAIN THE CONSTRUCTION SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL HEALTH AND SAFETY STANDARDS AT ALL TIMES.
3. ALL DIMENSIONS ARE TO FACE OF FRAMING UNLESS OTHERWISE NOTED
4. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ARCHITECT IS TO BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCY, ERRORS, OR OMISSIONS PRIOR TO THE COMMENCEMENT OF THE EFFECTED WORK.
5. REPETITIVE FEATURE NOT NOTED ON THE DRAWINGS SHALL BE COMPLETELY FURNISHED AND INSTALLED AS IF NOTED IN FULL
6. GRID LINES INDICATE THE CENTER OF PRIMARY COLUMNS OR EXTERIOR FACE OF WALL U.O.N. SEE STRUCTURAL DRAWINGS FOR EXACT LOCATION & SIZE OF INDIVIDUAL COLUMNS
7. MECHANICAL AND ELECTRICAL INFORMATION SHOWN ON ARCHITECTURAL DRAWING IS PROVIDED FOR CLARITY AND/OR GENERAL LOCATIONAL PURPOSES ONLY. SEE MECHANICAL AND ELECTRICAL DRAWINGS
8. PROVIDE WATER RESISTANT GYP. BD. AT ALL WALL AREAS TO RECEIVE CERAMIC TILE.
9. ROOM AND DOOR NUMBERS SHOWN ON DRAWINGS ARE FOR CONSTRUCTION PURPOSES ONLY
10. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESERVATIVE TREATED WOOD
11. ALL WALLS ARE TO INTERSECT AT 45 DEGREES OR 90 DEGREES U.O.N.
12. ALL MATERIALS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURES SPECIFICATIONS
13. FULLY COORDINATE WITH OTHER PARTIES THE INSTALLATION REQUIREMENTS OF ALL ITEMS OR MATERIALS IN FULL ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS OR REQUIREMENTS PRIOR TO INSTALLATION
14. FURNISH AND INSTALL BLOCKING OR BACKING FOR WALL OR CEILING MOUNTED MATERIALS IN FULL ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS OR REQUIREMENTS PRIOR TO INSTALLATION
15. DOOR JAMBS ARE LOCATED 3" OFF OF ADJACENT WALL U.O.N.
16. ANY CONTRACTOR WHOSE WORK REQUIRES PENETRATION OF THE ROOFING SYSTEM WILL CONTRACT WITH THE ROOFING CONTRACTOR TO FLASH & SEAL SUCH WORK AS TO MAINTAIN ROOF WARRANTY

Project Team

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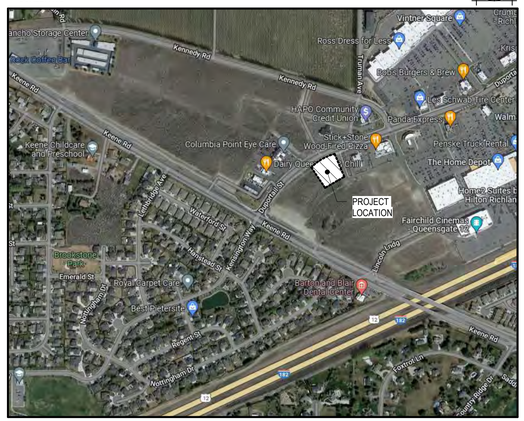
Vicinity Map

SCALE: NTS

NORTH



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4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

Permit Set

6/2/23

Revision Schedule

General Project Information

G0.1

Code Plan Legend

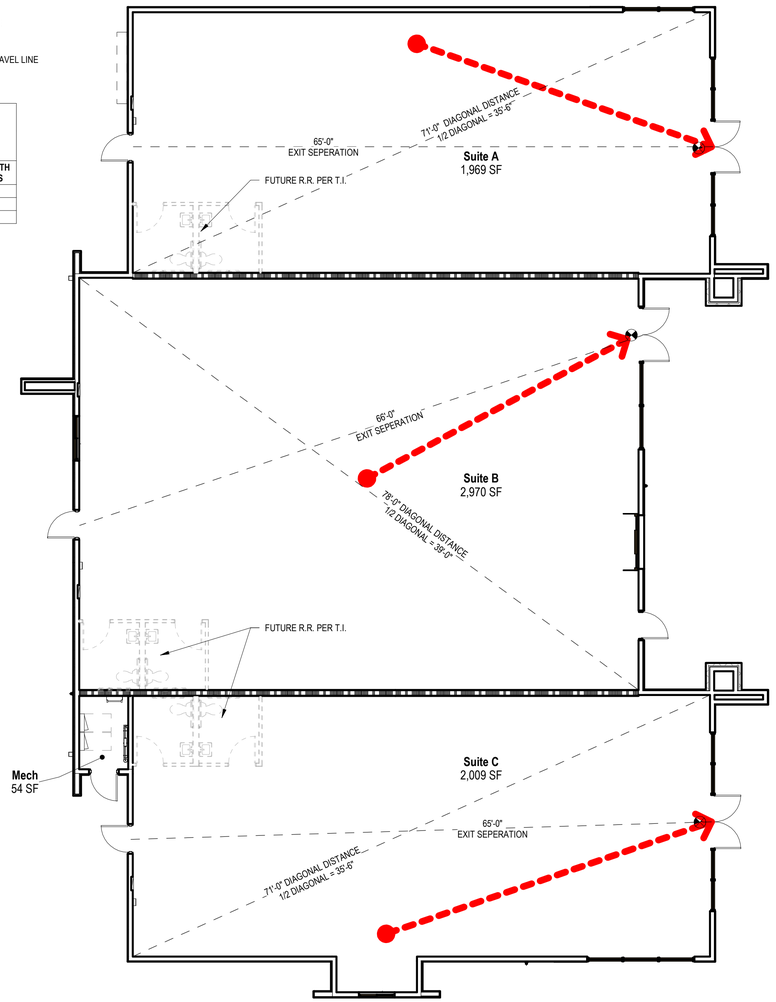
PATH OF TRAVEL LINE

COMMON PATH OF TRAVEL LINE

Exit Path

Max TD = 250' **Max CPE = 125'**

SEGMENT ID	TRAVEL DISTANCE	COMMON PATH OF EGRESS
SUITE A	34' - 11"	0' - 0"
SUITE B	33' - 0"	0' - 0"
SUITE C	38' - 6"	0' - 0"



NORTH

Life Safety Plan - Level 1

GENERAL	
Description	+/- 7,000 sf multi-tenant retail building. Construction includes but not limited to: concrete slab on grade, wood stud exterior walls, wood roof truss and decking system, steel structural framing, interior wood stud framed walls with gyb board finish.
Type of Construction	V-B
Sprinklers	NON-SPRINKLERED
Deferred Submittals 107.3.4.1	Where applicable, it is the responsibility of the Owner/Contractor to furnish to the issuing jurisdiction for review the following Design/Build and deferred information with professional stamp and calculations as may be required: • Fire Protection System • Exterior Tenant and Site Signage • Fabricated Steel or Wood Shop Drawings (Columns, Joist & Deck, Railings & Guards, etc. • Third-Part Energy Code Compliance Review/Concurrence • Security Alarm System, Phone/Cable TV and Data Systems provided by owner.

CHAPTER 1: ADMINISTRATION REQUIREMENTS	
Codes All amendments as currently enacted, or as shall be enacted by the state of Washington, are hereby adopted.	IBC including Appendix J with statewide amendments. ICC/ANSI A117.1-09, Accessible and Usable Buildings and Facilities, with statewide amendments (adopted as part of the IBC) WSEC. [Ord. 20-04; Ord. 17-07; Ord. 11-10 § 1.01; Ord. 18-20 § 1] International Mechanical Code with statewide amendments. IFC with statewide amendments, except as amended by RMC Title 20. IFGC with statewide amendments (adopted as part of the IMC)

CHAPTER 3: USE & OCCUPANCY	
Section 302 Classification	Building Occupancy Type: A-2 (Assembly) M (Mercantile)

CHAPTER 5: GENERAL BUILDING HEIGHTS & AREAS	
Seprated or Non seperated occupancy per Section 508	Seperated occupancies per paragraph 508.4
Max. Allowable Height per zoning code Allowable Height in Feet Above Grade Plane IBC Table 504.3	C-2: 80'-0" A-2 Occupancies, Type V-B construction, no sprinkler system, allowable height = 40'. M Occupancies, Type V-B construction, no sprinkler system, allowable height = 40'. **Actual Building Height: 24'-0"**
Max. Allowable Stories per zoning code Allowable Number of Stories Above Grade Plane IBC Table 504.4	C-2: N/A A-2 Occupancy, Type V-B construction, with sprinkler system, allowable stories = 1 M Occupancy, Type V-B construction, with sprinkler system, allowable stories = 1 **Actual Number of Stories: 1**
Tabular Area Factors per IBC Table 506.2, SF/ Floor NS = One Story Building	Building Type VB: Occ Type: A-2 6,000 s.f. Occ Type: M 9,000 s.f. **Actual Building Area: <u>6,999 s.f.</u>** **A-2: 4,977 s.f. < 6,000 s.f. = o.k.** **M: 2,009 s.f. < 9,000 s.f. = o.k.**

CHAPTER 6 - REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	
Fire-Resistance Ratings of Building Elements	Per IBC Table 601, building elements are of any materials permitted by the code and carry the following ratings: Primary structural frame: 0 hour Exterior bearing walls: 0 hour Interior bearing walls: 0 hour Floor construction: 0 hour Roof construction: 0 hour

CHAPTER 9: FIRE PROTECTION SYSTEMS	
Portable Fire Extinguisher IBC Table 906.3(1)	Minimum rated single extinguisher 2-A Maximum floor area per unit of A: 3000 SF Maximum floor area per extinguisher: 11,250 SF Maximum distance of travel: 75'

CHAPTER 10: EGRESS	
Occupant Load Factors	Assembly w/o Fixed seats (unconcentrated) 15 Net Mechentile 60 Gross See Code Plans for evaluation of occupant loads
Means of Egress Sizing	Minimum width. The occupant load served by the means of egress must be multiplied by 0.3" for stairways per IBC 1005.3.1 and by 0.2" for other egress components per IBC 1005.3.2.
Number of Exits and Exit Access Doorways	Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel exceeds the value in IBC Table 1006.2.1. Three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1,000.
Maximum Occupant Load for Spaces with One Exit or Exit Access Doorway per IBC Table 1006.2.1	Occupancy / Occupant Load Max. / Common Path of Travel A-2 / 49 / 75' M / 49 / 75'
Exit and Exit Access Doorway Separation Section 1007.1.1,	All Suites have two exits seperated as required by section 1007.1.1
Exit Access Travel Distance per Table 1017.2	<u>Occupancy</u> / <u>Exit Access Travel Distance Limit</u> A-2 / 250' - Sprinklered M / 250' - Sprinklered

SPACE	OCC. GROUP	ROOM/SPACE AREAS	OCC. FACTOR	OCC. LOAD (AREA/OCC. FACTOR)	REQ. EXIT WIDTH	EXIT WIDTH PROVIDED	# of Exits Req.
Mech	M	54 SF	60	1	0.2	36	1
Suite A	M	1,969 SF	60	33	6.6	108	1
Suite B	A-2	2,970 SF	15	99 MAX	19.8	144	2
Suite C	A-2	2,009 SF	15	99 MAX	19.8	108	2
Total Building Occupancy:				232			

<u>NOTE:</u>
TENANT IMPROVEMENTS WILL DETERMINE THE FINAL OCCUPANT LOAD, BUT WILL BE LIMITED TO 99 MAXIMUM TO MEET THE REQUIREMENTS OF TABLE 903.1.1.2 AND AND 907.2.1

CHAPTER 29: PLUMBING SYSTEMS	
Table 2902.1	NUMBER AND CONFIGURATION OF PLUMBING FIXTURES WILL BE PART OF A FUTURE TENANT IMPROVEMENT

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Duportail St. Retail Building

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Permit Set

6/2/23

Revision Schedule

Code Summary

G1.0

Air Leakage & Thermal Envelope Requirements

PROVIDE A COMPLETE AND CONTINUOUS AIR BARRIER THROUGHOUT THE BUILDING THERMAL ENVELOPE. THE AIR BARRIERS SHALL BE PERMITTED TO BE LOCATED ON THE INSIDE OR OUTSIDE OF THE BUILDING ENVELOPE, LOCATED WITHIN THE ASSEMBLIES COMPOSING THE ENVELOPE, OR ANY COMBINATION THEREOF.

AIR BARRIER CONSTRUCTION.

THE CONTINUOUS AIR BARRIER SHALL BE CONSTRUCTED TO COMPLY WITH THE FOLLOWING:

1. THE AIR BARRIER SHALL BE CONTINUOUS FOR ALL ASSEMBLIES THAT ARE THE THERMAL ENVELOPE OF THE BUILDING AND ACROSS THE JOINTS AND ASSEMBLIES.
2. AIR BARRIER JOINTS AND SEAMS SHALL BE SEALED, INCLUDING SEALING TRANSITIONS IN PLACES AND CHANGES IN MATERIALS. THE JOINTS AND SEALS SHALL BE SECURELY INSTALLED IN OR ON THE JOINT FOR ITS ENTIRE LENGTH SO AS NOT TO DISLODGE, LOOSEN OR OTHERWISE IMPAIR ITS ABILITY TO RESIST POSITIVE AND NEGATIVE PRESSURE FROM WIND, STACK EFFECT AND MECHANICAL VENTILATION.
3. ALL PENETRATIONS OF THE AIR BARRIER SHALL BE CAULKED, GASKETED OR OTHERWISE SEALED IN A MANNER COMPATIBLE WITH THE CONSTRUCTION MATERIALS AND LOCATION. SEALING SHALL ALLOW FOR EXPANSION, CONTRACTION AND MECHANICAL VIBRATION. JOINTS AND SEAMS ASSOCIATED WITH PENETRATIONS SHALL BE SEALED IN THE SAME MANNER OR TAPED. SEALING MATERIALS SHALL BE SECURELY INSTALLED AROUND PENETRATIONS SO AS NOT TO DISLODGE, LOOSEN OR OTHERWISE IMPAIR THE PENETRATIONS' ABILITY TO RESIST POSITIVE AND NEGATIVE PRESSURE FROM WIND, STACK EFFECT, AND MECHANICAL VENTILATION. SEALING OF CONCEALED FIRE SPRINKLERS, WHERE REQUIRED, SHALL BE IN A MANNER THAT IS RECOMMENDED BY THE MANUFACTURER. CAULKING OR OTHER ADHESIVE SEALANTS SHALL NOT BE USED TO FILL VOIDS BETWEEN FIRE SPRINKLER COVER PLATES AND WALLS OR CEILINGS.
4. RECESSED LIGHTING FIXTURES SHALL COMPLY WITH SECTION C402.5.8. WHERE SIMILAR OBJECTS ARE INSTALLED WHICH PENETRATE THE AIR BARRIER, PROVISIONS SHALL BE MADE TO MAINTAIN THE INTEGRITY OF THE AIR BARRIER.

BUILDING TEST.

UNLESS NOTED OTHERWISE OR, SELECTED AS A PROJECT ADDITIONAL EFFICIENCY OPTION PER SECTION 406, THE FOLLOWING TESTING CRITERIA SHALL APPLY: (SEE TESTING CRITERIA SECTION 406.11 WHEN APPLICABLE.)

THE COMPLETED BUILDING SHALL BE TESTED AND THE AIR LEAKAGE RATE OF THE BUILDING ENVELOPE SHALL NOT EXCEED 0.25 CFM/FT2 AT A PRESSURE DIFFERENTIAL OF 0.3 INCHES WATER GAUGE (2.0 L/S X M2 AT 75 PA) AT THE UPPER 95 PERCENT CONFIDENCE INTERVAL IN ACCORDANCE WITH ASTM E 779 OR AN EQUIVALENT METHOD APPROVED BY THE CODE OFFICIAL. A REPORT THAT INCLUDES THE TESTED SURFACE AREA, FLOOR AREA, AIR BY VOLUME, STORIES ABOVE GRADE, AND LEAKAGE RATES SHALL BE SUBMITTED TO THE BUILDING OWNER AND THE CODE OFFICIAL. IF THE TESTED RATE EXCEEDS THAT DEFINED HERE BY UP TO 0.15 CFM/FT2, A VISUAL INSPECTION OF THE AIR BARRIER SHALL BE CONDUCTED AND ANY LEAKS NOTED SHALL BE SEALED TO THE EXTENT PRACTICABLE. AN ADDITIONAL REPORT IDENTIFYING THE CORRECTIVE ACTIONS TAKEN TO SEAL AIR LEAKS SHALL BE SUBMITTED TO THE BUILDING OWNER AND THE CODE OFFICIAL AND ANY FURTHER REQUIREMENT TO MEET THE LEAKAGE AIR RATE WILL BE WAIVED. IF THE TESTED RATE EXCEEDS 0.40 CFM/FT2, CORRECTIVE ACTIONS MUST BE MADE AND THE TEST COMPLETED AGAIN. A TEST ABOVE 0.40 CFM/FT2 WILL NOT BE ACCEPTED.

1. TEST SHALL BE ACCOMPLISHED USING EITHER (1) BOTH PRESSURIZATION AND DEPRESSURIZATION OR (2) PRESSURIZATION ALONE, BUT NOT DEPRESSURIZATION ALONE. THE TEST RESULTS SHALL BE PLOTTED AGAINST THE CORRECT P FOR PRESSURIZATION IN ACCORDANCE WITH SECTION 9.4 OF ASTM E779.
2. THE TEST PRESSURE RANGE SHALL BE FROM 25 PA TO 80 PA PER SECTION 8.10 OF ASTM E779, BUT THE UPPER LIMIT SHALL NOT BE LESS THAN 50 PA, AND THE DIFFERENCE BETWEEN THE UPPER AND LOWER LIMIT SHALL NOT BE LESS THAN 25 PA.
3. IF THE PRESSURE EXPONENT N IS LESS THAN 0.45 OR GREATER THAN 0.85 PER SECTION 9.6.4 OF ASTM E779, THE TEST SHALL BE RERUN WITH ADDITIONAL READINGS OVER A LONGER TIME INTERVAL.

BUILDING TEST FOR MIXED-USE BUILDINGS.

WHERE A BUILDING IS THREE OR FEWER STORIES ABOVE GRADE PLANE AND CONTAINS BOTH COMMERCIAL AND RESIDENTIAL USES, THE AIR BARRIER OF THE R-2 AND R-3 OCCUPANCY AREAS OF THE BUILDING IS PERMITTED TO BE SEPARATELY TESTED ACCORDING TO SECTION R402.4.1.2. ALTERNATIVELY, IT IS PERMISSIBLE TO TEST THE AIR BARRIER OF THE ENTIRE BUILDING ACCORDING TO SECTION C402.5.1.2, PROVIDED THAT THE TESTED AIR LEAKAGE RATE DOES NOT EXCEED THE RATE SPECIFIED IN SECTION C402.5.1.2.

ROOMS CONTAINING FUEL-BURNING APPLIANCES.

WHERE COMBUSTION AIR IS SUPPLIED THROUGHT OPENINGS IN AN EXTERIOR WALL TO A ROOM OR SPACE CONTAINING A SPACE CONDITIONING FUEL-BURNING APPLIANCE, ONE OF THE FOLLOWING SHALL APPLY:

1. THE ROOM OR SPACE CONTAINING THE APPLIANCE SHALL BE LOCATED OUTSIDE OF THE BUILDING THERMAL ENVELOPE.
2. THE ROOM OR SPACE CONTAINING THE APPLIANCE SHALL BE ENCLOSED AND ISOLATED FROM CONDITIONED SPACES INSIDE THE BUILDING THERMAL ENVELOPE. SUCH ROOMS SHALL COMPLY WITH ALL OF THE FOLLOWING:
   - 2.1. THE WALLS, FLOORS AND CEILING THAT SEPARATE THE ENCLOSED ROOM OR SPACE FROM CONDITIOINED SPACES SHALL BE INSULATED TO BE AT LEAST EQUIVALENT TO THE INSULATION REQUIREMENT OF BELOW GRADE WALLS AS SPECIFIED IN TABLE C402.1.3 OR C402.1.4.
   - 2.2. THE WALLS, FLOORS AND CEILING THAT SEPARATE THE ENCLOSED ROOM OR SPACE FROM CONDITIOINED SPACES SHALL BE SEALED IN ACCORDANCE WITH SECTION C402.5.1.1.
   - 2.3. THE DOORS INTO THE ENCLOSED ROOM OR SPACE SHALL BE FULLY GASKETED.
   - 2.4. WATER LINES AND DUCTS IN THE ENCLOSED ROOM OR SPACE SHALL BE INSULATED IN ACCORDANCE WITH SECTION C403.
   - 2..5. WHERE THE AIR DUCT SUPPLYING COMBUSTION AIR TO THE ENCLOSED ROOM OR SPACE PASSES THROUGH CONDITIONED SPACE, THE DUCT SHALL BE INSULATED TO AN R-VALUE OF NOT LESS THAN R-8.

EXCEPTION:

1. FIREPLACES AND STOVES COMPLYING WITH SECTIONS 901 THROUGH 905 OF THE INTERNATIONAL MECHANICAL CODE, AND SECTION 2111.13 OF THE INTERNATIONAL BUILDING CODE.

DOORS AND ACCESS OPENINGS TO SHAFTS, CHUTES, STAIRWAYS, AND ELEVATOR LOBBIES.

DOORS AND ACCESS OPENINGS FROM CONDITIONED SPACE TO SHAFTS, CHUTES, STAIRWAYS AND ELEVATOR LOBBIES SHALL BE GASKETED, WEATHER-STRIPPED OR SEALED.

EXCEPTIONS:

1. DOOR OPENINGS REQUIRED TO COMPLY WITH SECTION 716 OF THE INTERNATIONAL BUILDING CODE.
2. DOORS AND DOOR OPENINGS REQUIRED TO COMPLY WITH UL 1784 BY THE INTERNATIONAL BUILDING CODE.

AIR INTAKES, EXHAUST OPENINGS, STAIRWAYS AND SHAFTS.

STAIRWAY ENCLOSURES, ELEVATOR SHAFT VENTS AND OTHER OUTDOOR AIR INTAKES AND EXHAUST OPENINGS INTEGRAL TO THE BUILDING ENVELOPE SHALL BE PROVIDED WITH DAMPERS IN ACCORDANCE WITH SECTION C403.7.9

LOADING DOCK WEATHER-SEALS.

WHERE THEY OCCUR, CARGO DOOR OPENINGS AND LOADING DOCK DOOR OPENINGS SHALL BE EQUIPPED WITH WEATHERSEALS THAT RESTRICT INFILTRATION AND PROVIDE DIRECT CONTACT ALONG THE TOP AND SIDES OF VEHICLES THAT ARE PARKED IN THE DOORWAY.

RECESSED LIGHTING.

RECESSED LUMINARIES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE ALL OF THE FOLLOWING:

1. IC RATED, .
2. LABELED AS HAVING AN AIR LEAKAGE RATE OF NOT MORE THAN 2.0 CFM WHEN TESTED IN ACCORDANCE WITH ASTM E 283 AT A 1.57 PSF (75 PA) PRESSURE DIFFERENTIAL.
3. SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND INTERIOR WALL OR CEILING COVERING.

WSEC C406 Package Credits

NOTE: THIS BUILDING IS A RAW SHELL BUILDING ONLY. THE CREDITS LISTED BELOW ARE FOR THE EXTERIOR LIGHTING AND SHELL BUILDING ONLY. THE REMAINDER OF COMPLIANCE WITH WSEC C406 WILL BE COMPLETED WITH FUTURE TEANANT IMPROVMENTS. SEE WSEC COMPLIANCE DOCUMENTATION SUBMITTED SEPERATLY FROM THESE DRAWINGS.

	WSEC C406 PACKAGE OPTIONS	EFFICIENCY CREDITS				SELECTED PROJECT OPTION
		R-2	B	M	ALL OTHERS	
1	MORE EFFICIENT HVAC PERFORMANCE IN ACCORDANCE WITH SECTION C406.2	3.0	3.0	1.0	2.0	X
2	REDUCED LIGHTING POWER: OPTION 1 IN ACCORDANCE WITH SECTION C406.3.1	1.0	2.0	3.0	2.0	
3	REDUCED LIGHTING POWER: OPTION 2 IN ACCORDANCE WITH SECTION C406.3.2[a]	3.0	4.0	6.0	4.0	X
4	ENHANCED LIGHTING CONTROLS IN ACCORDANCE WITH SECTION C406.6.4	N/A	1.0	1.0	1.0	
5	ON-SITE SUPPLY OF RENEWABLE ENERGY IN ACCORDANCE WITH C406.5	3.0	3.0	3.0	3.0	
6	DEDICATED OUTDOOR AIR SYSTEM IN ACCORDANCE WITH SECTION C406.6[b]	4.0	4.0	N/A	4.0	
7	HIGH-PERFORMANCE DEDICATED OUTDOOR AIR SYSTEM IN ACCORDANCE WITH SECTION C406.7	4.0	4.0	4.0	4.0	
8	HIGH-EFFICIENCY SERVICE WATER HEATING IN ACCORDANCE WITH SECTIONS C406.8.1 AND C406.8.2	5.0	N/A	N/A	8.0	
9	HIGH-PERFORMANCE SERVICE WATER HEATING IN MULTIFAMILY BUILDINGS IN ACCORDANCE WITH SECTION C406.9	8.0	N/A	N/A	N/A	
10	ENHANCED ENVELOPE PERFORMANCE IN ACCORDANCE WITH SECTION C406.10[c]	6.0	3.0	3.0	4.0	
11	REDUCED AIR INFILTRATION IN ACCORDANCE WITH SECTION C406.11[c]	2.0	1.0	1.0	1.0	
12	ENHANCED COMMERCIAL KITCHEN EQUIPLENT IN ACCORDANCE WITH SECTION C406.12	N/A	N/A	5.0	5.0 A-2 ONLY	
	TOTAL PROVIDED PROJECT CREDITS (MINIMUM 6 REQUIRED)					6

N/A = Not Allowed.
[a] PROJECTS USING THIS OPTION MAY NOT USE ITEM 2.
[b] THIS OPTION IS NOT AVAILABLE TO BUILDING SUBJECT TO THE PRESCRIOTIVE REQUIREMENTS OF SECTION C403.3.5.
[c] BUILDINGS OR BUILDING AREAS THAT ARE EXEMPT FROM THERMAL ENVELOPE REQUIREMENTS IN ACCORDANCE WITH SECTIONS C402.1.1 AND C402.1.2 DO NOT QUALIFY FOR THIS PACKAGE.

Project Close-out General Notes

1. PREPARE AND PROVIDE THE FOLLOWING DOCUMENTS TO THE OWNER OR OWNER'S AGENT WITHIN 180-DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY:
   - a. RECORD DOCUMENTS. THE CONTRACTOR SHALL UPDATE CONSTRUCTION DOCUMENTS TO CONVEY A RECORD OF THE COMPLETED WORK. SUCH UPDATES SHALL INCLUDE MECHANICAL, ELECTRICAL AND CONTROL DRAWINGS RED-LINED, OR REDRAWN, THAT SHOW ALL CHANGES TO SIZE, TYPE AND LOCATIONS OF COMPONENTS, EQUIPMENT AND ASSEMBLIES.
   - b. OPERATING AND MAINTENANCE MANUALS. PROVIDE OPERATING AND MAINTENANCE MANUAL(S) FOR EACH MECHANICAL, ELECTRICAL AND PLUMBING COMPONENT, DEVICE, EQUIPMENT AND SYSTEM. THE MANUALS SHALL INCLUDE ALL OF THE FOLLOWING:
     - SUBMITTAL DATA INDICATING ALL SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT.
     - MANUFACTURER'S OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH DEVICE, PIECE OF EQUIPMENT, AND SYSTEM REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE ACTIONS, CLEANING AND RECOMMENDED RELAMPING SHALL BE CLEARLY IDENTIFIED.
     - NAME AND ADDRESS OF AT LEAST ONE SERVICE AGENCY.
     - CONTROLS SYSTEM INSPECTION SCHEDULE, MAINTENANCE AND CALIBRATION INFORMATION, WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SETPOINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT CONTROL DEVICES OR, FOR DIGITAL CONTROL SYSTEMS, ON THE GRAPHIC WHERE SETTINGS MAY BE CHANGED.
     - A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.
   - c. COMPLIANCE DOCUMENTATION. ALL ENERGY CODE COMPLIANCE FORMS AND CALCULATIONS SHALL BE DELIVERED IN ONE DOCUMENT TO THE BUILDING OWNER AS PART OF THE PROJECT RECORD DOCUMENTS, MANUALS, OR AS A STANDALONE DOCUMENT. THIS DOCUMENT SHALL INCLUDE THE SPECIFIC ENERGY CODE YEAR UTILIZED FOR COMPLIANCE DETERMINATION FOR EACH SYSTEM, NFRC CERTIFICATES FOR THE INSTALLED WINDOWS, LIST OF TOTAL AREA FOR EACH NFRC CERTIFICATE, THE INTERIOR LIGHTING POWER COMPLIANCE PATH (BUILDING AREA, SPACE-BY-SPACE) USED TO CALCULATE THE LIGHTING POWER ALLOWANCE.

[X] FOR PROJECTS UTILIZING THE PRESCRIPTIVE OR COMPONENT PERFORMANCE METHODS OF COMPLIANCE (WAC 51-11C SECTION, C401.2, ITEM 1) THE DOCUMENTATION SHALL INCLUDE:
- THE ENVELOPE INSULATION COMPLIANCE PATH (PRESCRIPTIVE OR COMPONENT PERFORMANCE).
- ALL COMPLETED CODE COMPLIANCE FORMS, AND ALL COMPLIANCE CALCULATIONS.

[ ] FOR PROJECTS UTILIZING TOTAL BUILDING PERFORMANCE METHOD OF COMPLIANCE (WAC 51-11C SECTION, C401.2, ITEM 2) THE DOCUMENTATION SHALL INCLUDE:
- A LIST OF ALL PROPOSED ENVELOPE COMPONENT TYPES, AREAS AND U-VALUES.
- A LIST OF ALL LIGHTING AREA TYPES WITH AREAS, LIGHTING POWER ALLOWANCE, AND INSTALLED LIGHTING POWER DENSITY.
- A LIST OF EACH HVAC SYSTEM MODELED WITH THE ASSIGNED AND PROPOSED SYSTEM TYPE.
- ELECTRONIC COPIES OF THE BASELINE AND PROPOSED MODEL INPUT AND OUTPUT FILE. THE INPUT FILES SHALL BE IN A FORMAT SUITABLE FOR RERUNNING THE MODEL AND SHALL NOT CONSIST SOLELY OF FORMATTED REPORTS OF THE INPUTS

2. THE CONTRACTOR SHALL COORDINATE AND/OR CAUSE THE TRAINING OF MAINTENANCE STAFF FOR EQUIPMENT INCLUDED IN OPERATING AND MAINTENANCE MANUALS. TRAINING SHALL INCLUDE, AT A MINIMUM:
   - a. REVIEW OF MANUALS AND PERMANENT CERTIFICATE.
   - b. HANDS-ON DEMONSTRATION OF ALL NORMAL MAINTENANCE PROCEDURES, NORMAL OPERATING MODES, AND ALL EMERGENCY SHUTDOWN AND START-UP PROCEDURES.
   - c. TRAINING COMPLETION REPORT.

Energy Efficiency Inspections General Notes

1. INSPECTIONS, INCLUDING INSPECTIONS COMMONLY REFERRED TO AS SPECIAL INSPECTIONS, ARE REQUIRED FOR CERTAIN WORK AND INSTALLATIONS FOR THE PROJECT. STRUCTURAL DRAWINGS MAY LIST ADDITIONAL REQUIRED SPECIAL INSPECTIONS FOR STRUCTURAL COMPONENTS, REFER TO STRUCTURAL DRAWINGS.
2. UNLESS OTHERWISE NOTED, OR EXEMPTED BY STATUTE, WORK SHALL BE INSPECTED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE GOVERNING ENERGY EFFICIENCY CODE(S) OF THE STATE IN WHICH THE PROJECT IS CONSTRUCTED AND OTHER APPLICABLE CODES AND AMENDMENTS ENFORCED BY AUTHORITY HAVING JURISDICTION (AHJ).
3. VERIFY WITH AHJ WHICH INSPECTIONS ARE PERFORMED BY AHJ AND WHICH INSPECTIONS NEED TO BE PERFORMED BY OWNER'S AGENT. ASSIST OWNER IN ENGAGING A QUALIFIED AGENT IF AHJ DOES NOT PERFORM ALL REQUIRED INSPECTIONS. OWNER WILL PAY FOR INSPECTIONS NOT PERFORMED BY AHJ.
4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH APPLICABLE ADMINISTRATION, INSPECTION AND CERTIFICATION REQUIREMENTS ENFORCED BY AHJ WHERE THE PROJECT IS CONSTRUCTED AND COORDINATE WITH AHJ AND/OR OWNER'S AGENT TO: SCHEDULE INSPECTIONS IN A TIMELY MANNER, PROVIDE ACCESS TO WORK, PROVIDE MEANS OF INSPECTION(S) OR REINSPECTION IF NECESSARY, NOTIFY AND SUBMIT SPECIAL INSPECTION REPORTS AND SIMILAR TASKS TO COMPLY WITH REQUIREMENTS.
5. COSTS OF REINSPECTION REQUIRED BECAUSE ORIGINAL WORK WAS NOT APPROVED ARE THE RESPONSIBILITY OF CONTRACTOR.

Commissioning General Notes

1. ASSIST OWNER IN ENGAGING AN INDEPENDENT CERTIFIED COMMISSIONING AUTHORITY (CxA) PURSUANT TO WAC 51-11C C408 (WASHINGTON STATE) OR IEEC C408 (ALL OTHER STATES, U.O.N.) A COMMISSIONING PLAN SHALL BE DEVELOPED BY THE PROJECT'S CxA AND OUTLINE THE ORGANIZATION, SCHEDULE, ALLOCATION OF RESOURCES, AND DOCUMENTATION REQUIREMENTS OF THE COMMISSIONING PROCESS.
2. THE CxA SHALL PREPARE THE FOLLOWING DOCUMENTS AND TESTING CRITERIA AS APPLICABLE. SUCH DOCUMENTS SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS:
   - A. A NARRATIVE DESCRIPTION OF THE ACTIVITIES THAT WILL BE ACCOMPLISHED DURING EACH PHASE OF COMMISSIONING, INCLUDING THE PERSONNEL INTENDED TO ACCOMPLISH EACH OF THE ACTIVITIES.
   - B. ROLES AND RESPONSIBILITIES OF THE COMMISSIONING TEAM, INCLUDING STATEMENT OF QUALIFICATIONS OF THE COMMISSIONING PROFESSIONAL.
   - C. A SCHEDULE OF ACTIVITIES INCLUDING SYSTEMS TESTING AND BALANCING, FUNCTIONAL PERFORMANCE TESTING, AND VERIFICATION OF THE BUILDING DOCUMENTATION REQUIREMENTS.
   - D. WHERE THE PROJECT COMMISSIONING AUTHORITY IS AN EMPLOYEE OF ONE OF THE REGISTERED DESIGN PROFESSIONALS OF RECORD OR AN EMPLOYEE OR SUBCONTRACTOR OF THE PROJECT CONTRACTOR, AN IN-HOUSE COMMISSIONING DISCLOSURE AND CONFLICT MANAGEMENT PLAN SHALL BE SUBMITTED WITH THE COMMISSIONING PLAN. THIS PLAN SHALL DISCLOSE THE CERTIFIED COMMISSIONING PROFESSIONAL'S CONTRACTUAL RELATIONSHIP WITH OTHER TEAM MEMBERS AND PROVIDE A CONFLICT MANAGEMENT PLAN DEMONSTRATING THAT THE CERTIFIED COMMISSIONING PROFESSIONAL IS FREE TO IDENTIFY ANY ISSUES DISCOVERED AND REPORT DIRECTLY TO THE OWNER.
   - E. A LISTING OF THE SPECIFIC EQUIPMENT, APPLIANCES OR SYSTEMS TO BE TESTED AND A DESCRIPTION OF THE TESTS TO BE PERFORMED.
   - F. FUNCTIONS TO BE TESTED.
   - G. CONDITIONS UNDER WHICH THE TEST WILL BE PERFORMED.
   - H. MEASURABLE CRITERIA FOR PERFORMANCE.
3. COST OF REPEAT COMMISSIONING TASKS REQUIRED BECAUSE ORIGINAL WORK DID NOT COMPLY OR WAS NOT OPERATING PROPERLY AND AS INTENDED ARE RESPONSIBILITY OF CONTRACTOR.
4. DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

2018 WASHINGTON STATE ENERGY CODE - COMMERCIAL	
Building Information and Comlinance Paths	Climate Zone: 5 Building Type: Type V-B Commercial - 1 story General Compliance Path: Prescriptive Envelope Compliance Path: Component Performance
Building Thermal Envelope Minimum Requirements (Prescriptive Path) Tables C402.1.3 & C402.1.4	Table C402.1.3 Roof: Insulation Above Deck R Value: R-38 C.I. Wood Framed Wall R-Value: (Intermediate Farming) R-21 int Slab R-Value & Depth: R-10, 2 ft Table C402.1.4 Opaque Swinging Doors: U-0.37
Fenestration Minimum Requirements (Prescriptive Path) Table C402.4 Equation 4-6 for PF	*Fenestration Nonmetal Framing: U-0.30* *Fenestration Metal Framing (Fixed): U-0.38* Fenestration - Entrance Doors: U-0.60 SHGC: Orientation SEWN PF < 0.2 .38 .51 0.2 ≤ PF < 0.5 .46 .56 PF ≥ 0.5 .61 .61
C402.4.1, C402.4.4	Vertical Fenestration Maximum Area: >30% of gross above grade wall area (402.3.1) Not including opaque doors or opaque spandrel panels.
C402.4.2	Required Skylight Fenestration Area: N/A
C402.5.7	Required Vestibules: Note required per exception 8
Air Barrier Testing C402.5.1.2	The completed building shall be tested and the air leakage rate of the building envelope shall not exceed 0.25 cfm/ft² at a pressure differential of 0.3 inches water guage (2.0 L/s * m² at 75 Pa) in accordance with ASTM E 779 or an equivalent method approved by the code official.
Mechanical Ventilation C403.2.6	Per IMC Chapter 4 for spaces larger than 500 sf and with an occupant load greater than 25, demand controlled ventilation required per C403.2.6.2. Provide occupancy sensors where required in accordance with C403.2.6.3.
Duct and plenum insulation and sealing	Per Table C402.1.4.1 (C403.2.8.1) duct, shafts, and plenums conveying outside air shall meet insulation requirements for metal framed walls.
Piping Insulation	Piping shall be insulated in accordance with Section C403.10.3 and Table C403.10.3.
Lighting Controls	Lighting System Controls shall be provided in accordance with C405.2.
Lighting System Commissioning	Commissioning and documentation required in accordance with C408.
Energy Metering (C409)	Not Required. The Building is < 50,000 SF

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4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

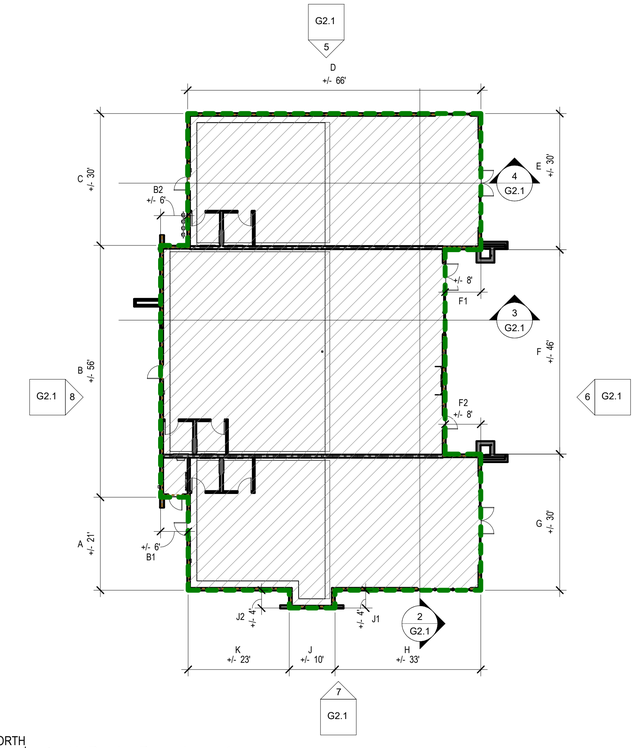
Permit Set

6/2/23

Revision Schedule

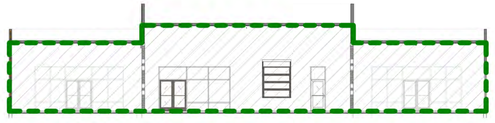
Energy Code Criteria Requirements and Compliance

G2.0

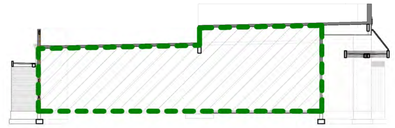


NORTH

1 Air Barrier Plan - Level 1
1/16" = 1'-0"



2 Air Barrier Section
1/16" = 1'-0"

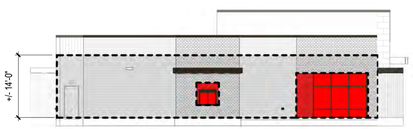


3 Air Barrier Section
1/16" = 1'-0"

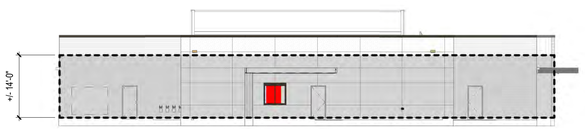
4 Air Barrier Section
1/16" = 1'-0"

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

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



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



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

Air Barrier Boundary Legend

AIR BARRIER SYSTEM

Air Barrier Pressure Boundary

BOUNDARY LOCATION	LENGTH (+/- in feet)	HEIGHT (+/- in feet)	AREA (+/- SF)
WALL A	21'	14'	294 SF
WALL B	56'	14'	784 SF
WALL B1	6'	14'	84 SF
WALL B2	6'	14'	84 SF
WALL C	30'	14'	420 SF
WALL D	66'	15'	990 SF
WALL E	30'	16'	480 SF
WALL F	46'	16'	736 SF
WALL F1	8'	16'	128 SF
WALL F2	8'	16'	128 SF
WALL G	30'	16'	480 SF
WALL H	33'	15'	495 SF
WALL J	10'	15'	150 SF
WALL J1	4'	15'	60 SF
WALL J2	4'	15'	60 SF
WALL K	23'	15'	345 SF
FLOOR			7,000 SF
ROOF			7,000 SF
TOTAL APPROXIMATE PRESSURE BOUNDARY AREA:			+/- 19,700 SF

NOTES:
1. AIR BARRIER DIAGRAM DOES NOT INDICATE LOCATION OF AIR BARRIER INSTALLATION OR PROJECT SPECIFIC SECTIONS. REFER TO OTHER PARTS OF CONSTRUCTION DRAWINGS FOR AIR BARRIER INSTALLATION.
2. AREA INFORMATION PROVIDED ABOVE IS NOT INTENDED TO QUANTIFY CONSTRUCTION AREA.
3. PROVIDED WALL HEIGHTS BASED ON WEIGHTED AVERAGE OF AB ENVELOPE.

Fenestration Schedule

WALL FACADE AREA

FENESTRATION AREA

EXTERIOR DOOR AREA

BUILDING FACE	WALL AREA (+/- SF)	FENESTRATION (+/- in feet)	% FENESTRATION
NORTH	1,100 SF	160 SF	15%
EAST	1,773 SF	720 SF	40%
SOUTH	1,006 SF	185 SF	18%
WEST	1,550 SF	13 SF	8%
TOTAL	**5,429 SF**	**1,078 SF**	**20%**

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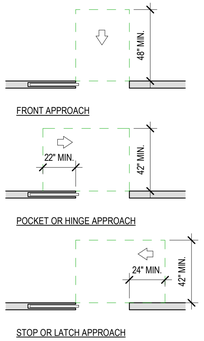
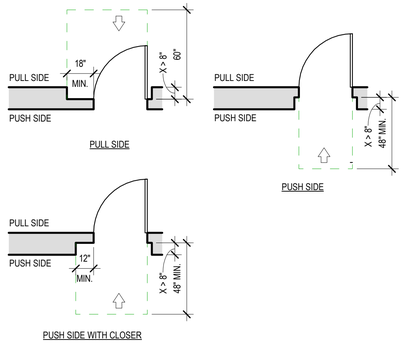
Air Barrier Envelope & Fenestration Schedules

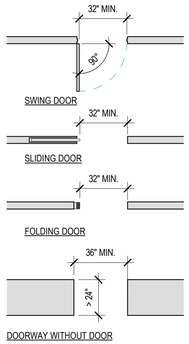
G2.1



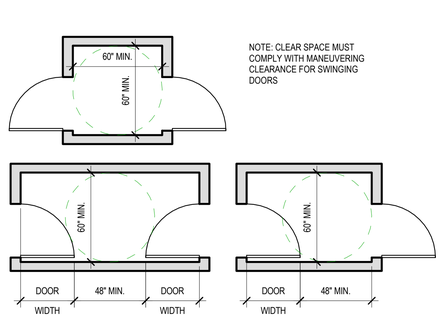
1 Maneuver Clearance At Sliding Doors
1/4" = 1'-0"



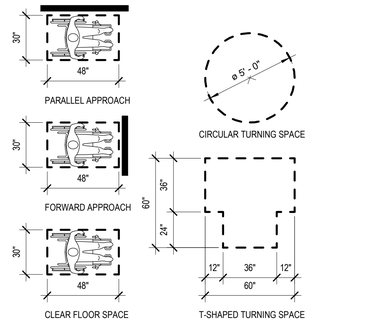
2 Recessed Clearance at Manual Swing Doors
1/4" = 1'-0"



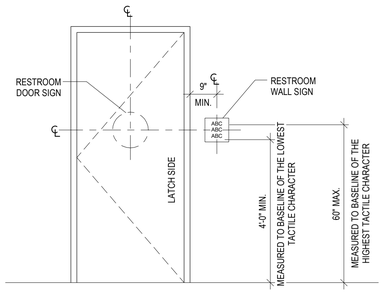
3 Clear Width of Doorways
1/4" = 1'-0"



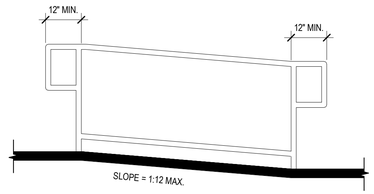
4 Doors In Series Clearance
1/4" = 1'-0"



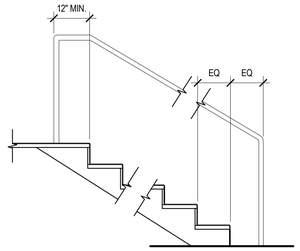
5 Clear Floor And Turning Space
1/4" = 1'-0"



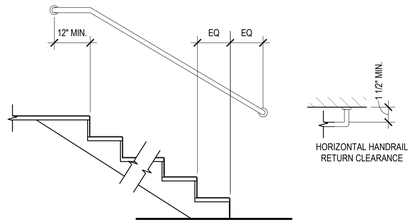
6 Accessible Restroom Door
1/2" = 1'-0"



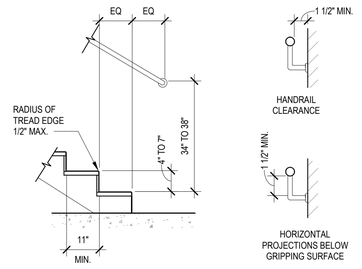
7 Freestanding Rail Ext. at Ramp
1/2" = 1'-0"



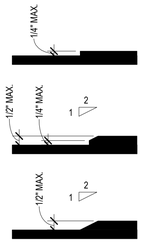
8 Freestanding Rail Ext. at Stair
1/2" = 1'-0"



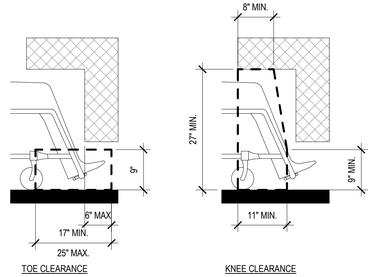
9 Handrail Extension at Stairs
1/2" = 1'-0"



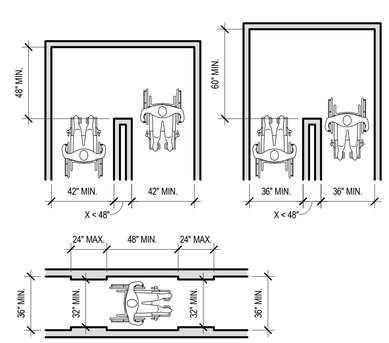
10 Accessible Stair and Handrail
1/2" = 1'-0"



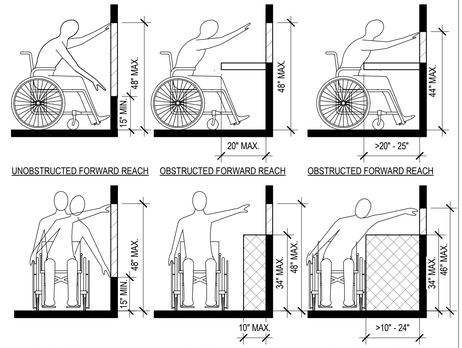
11 Change in Level
3" = 1'-0"



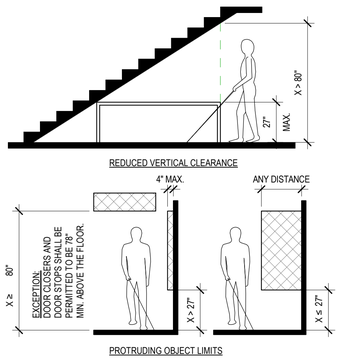
12 Toe And Knee Clearance
3/4" = 1'-0"



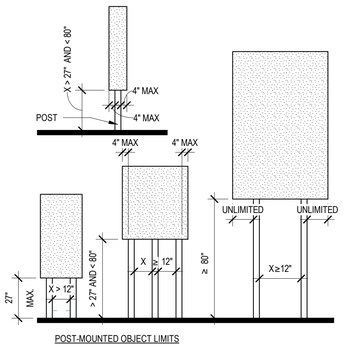
13 Accessible Route Clearances
1/4" = 1'-0"



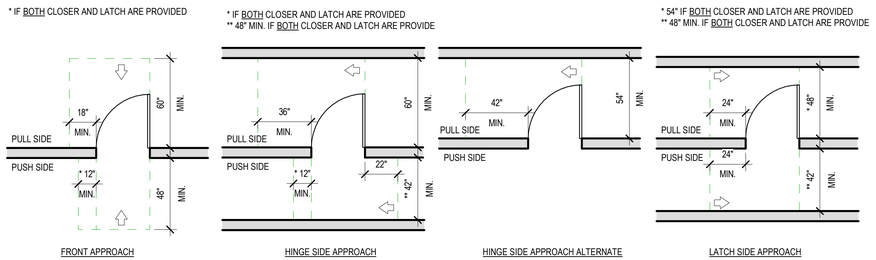
14 Reach Ranges
3/8" = 1'-0"



15 Protruding Objects And Vertical Clearance
1/4" = 1'-0"



16 Maneuvering Clearance At Manual Swing Doors
1/4" = 1'-0"



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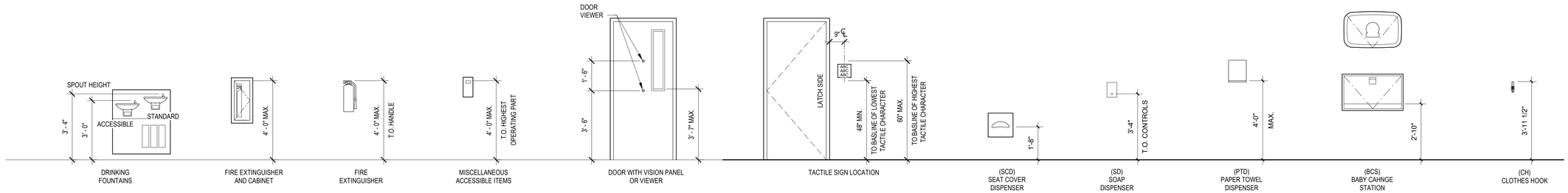
Revision Schedule

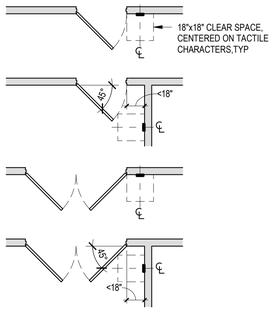
Accessibility Details

G3.0

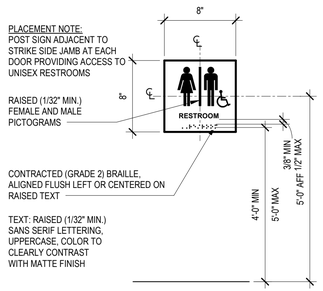


NOTE: ALL DIMENSIONS ARE FROM FACE OF FINISHED WALL OR FINISHED FLOOR.
CONTRACTOR SHALL VERIFY THAT ANSI A117.1 STANDARDS ARE MET.

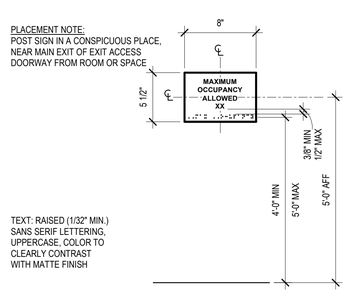
1 Typical Fixture Mounting Heights
3/8" = 1'-0"



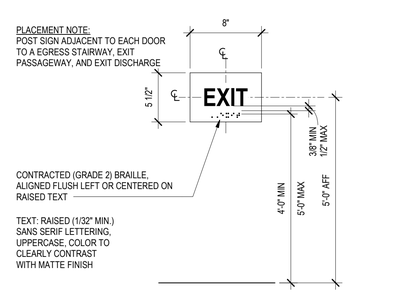
2 Tactile Exit Sign Clearance
1/4" = 1'-0"



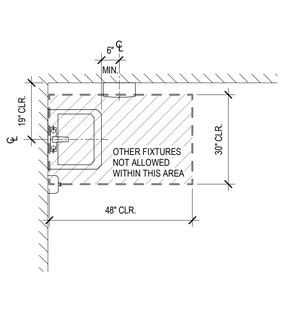
3 Unisex Restroom Sign
1 1/2" = 1'-0"

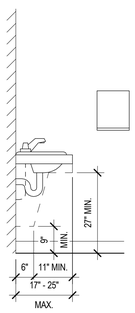


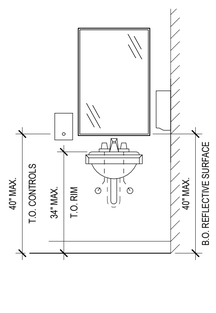
4 Occupant Load Sign
1 1/2" = 1'-0"



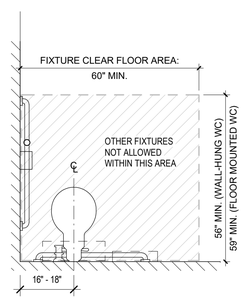
5 Tactile Exit Sign
1 1/2" = 1'-0"

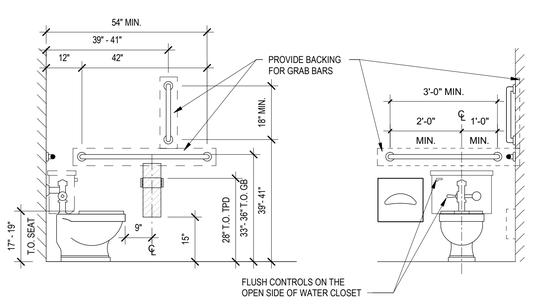






6 Accessible Lavatory
1/2" = 1'-0"





7 Water Clost - Accessible Toilet
1/2" = 1'-0"

Bernardo Wills

153 SOUTH JEFFERSON
SPOKANE WASHINGTON 99201
WWW.BERNARDOWILLS.COM
509.838.4511 FAX:509.838.4505

4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St.
Retail Building

22-09-164

Richland, Washington

Permit Set

6/2/23

Revision Schedule

Accessibility Details

G3.1

DUPORTAIL STREET RETAIL BUILDING

RICHLAND, WA

JUB PROJECT NO. 30-23-009

DEVELOPMENT CONTACTS

ARCHITECT
BERNARDO WILLS ARCHITECTS
153 S JEFFERSON ST.
SPOKANE, WA 99201
DAVID HIPP
(509) 434-6653

DEVELOPER
GRETL CRAWFORD HOMES
4504 W. 26TH AVE.
KENNEWICK, WA 99338
GRETL CRAWFORD
(509) 531-0454

CIVIL ENGINEER
J-U-B ENGINEERS INC,
3611 S ZINTEL WAY
KENNEWICK, WA 99337
DARRAL MOORE
(509) 783-2144

SURVEYOR
STRATTON SURVEYING
313 N. MORAIN ST.
KENNEWICK, WA 99336
(509) 735-7364

UTILITY CONTACTS

POWER
RICHLAND ENERGY SERVICES
625 SWIFT BLVD.
RICHLAND, WA 99352
MIKE PEÑA
(509) 942-7412

COMMUNICATIONS
ZIPLY
4916 W. CLEARWATER AVE.
KENNEWICK, WA 99336
MICHAEL TOVEY
(509) 873-2179

CHARTER COMMUNICATIONS
639 N. KELLOGG ST.
KENNEWICK, WA 99336
JUNIOR CAMPOS
(509) 491-0222

SEWER/STORM/WATER
CITY OF RICHLAND
625 SWIFT BLVD.
RICHLAND, WA 99352

GAS
CASCADE NATURAL GAS
200 N. UNION ST.
KENNEWICK, WA 99336
SARA PINEDA
509-734-4515

SURVEY NOTES

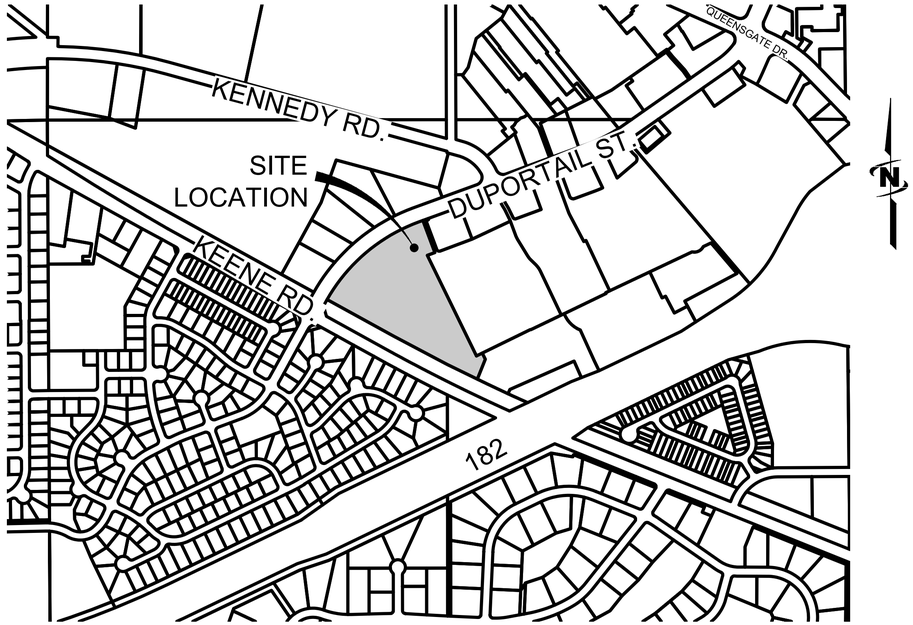
UTILITY NOTE:
ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN PER OBSERVED EVIDENCE AND RECORD PLANS AND MAY NOT REPRESENT ALL SUCH UTILITIES EXISTING ON SITE. LOCATIONS AND SIZES ARE APPROXIMATE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED UNDERGROUND UTILITIES. PRIOR TO ANY EXCAVATION OR DIGGING, CONTACT THE UTILITY NOTIFICATION CENTER FOR ON-SITE LOCATIONS. (800-424-5555) (811) (WA State)

HORIZONTAL CONTROL / BASIS OF BEARING:
WASHINGTON STATE SOUTH ZONE, US SURVEY FEET, NAD 83(2011). PER THE CITY OF RICHLAND GPS CONTROL MAP, GPS TIES WERE MADE TO 1668, 1673, AND 1674 CONTROL POINTS AND PROJECTED TO GROUND AT POINT 1673.

BASIS OF ELEVATION:
CITY OF RICHLAND POINT NO. 1673
NAVD 88 DATUM
ELEVATION = 565.35'

PARCEL DESCRIPTION:
PROPOSED LOT 1
A PORTION OF PARCEL 1 OF THE SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., BENTON COUNTY, WASHINGTON.

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.



VICINITY MAP

SHEET LIST

J-U-B ENGINEERS, INC.

3611 S. Zintel Way, Kennewick, WA 99337
p 509 783 2144 *f* 509 736 0790 *w* www.jub.com

OTHER J-U-B COMPANIES THE LANGDON GROUP GATEWAY MAPPING INC.

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

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
3611 S. Zintel Way
Kennewick, WA 99337
Phone: 509.783.2144
www.jub.com

AGENCY

MASON AARON MENDEL — STATE OF WASHINGTON — 46160 — REGISTERED PROFESSIONAL ENGINEER

REVIEW

NO.	DESCRIPTION	DATE	BY
	REVISION	APR.	

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

COVER SHEET

FILE : 30-23-009_C-001
JUB PROJ. # :30-23-009
DRAWN BY: JGC
DESIGN BY: DSM
CHECKED BY: MAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/28/2023

SHEET NUMBER:
C-001

Plot Date:5/18/2023 4:41 PM, Plotted By: Mason Mendel
Date Created:4/6/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETLCRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\GIDESIGN\CAD\SHEET\30-23-009_C-001.DWG

GENERAL NOTES

1. ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT LOCATIONS PROVIDED BY THE CONTRACTOR. DISPOSAL SITES SHALL BE IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
2. AT COMPLETION OF PROJECT, CONTRACTOR SHALL NOTIFY OWNER AND/OR OWNER'S REPRESENTATIVE FOR FINAL PUNCHLIST WALKTHROUGH. FINAL PUNCHLIST ITEMS SHALL BE COMPLETED NO LATER THAN 3 WEEKS AFTER FINAL PUNCHLIST WALKTHROUGH.
3. PRIOR TO FINAL PROJECT ACCEPTANCE, THE CONTRACTOR SHALL CLEAN ALL UNDERGROUND STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLES, CATCH BASINS, SEWER PIPE AND STORM DRAINAGE. UNDERGROUND STRUCTURES SHALL BE CLEANED TO REMOVE ALL DEBRIS AND/OR SEDIMENT.
4. CONTRACTOR SHALL USE "REQUEST FOR INFORMATION" PROCEDURE FOR REQUESTING INFORMATION. RFI SHALL BE SUBMITTED TO THE OWNER AND/OR OWNER'S REPRESENTATIVE. NO PLAN CHANGES AND/OR CHANGE ORDERS WILL BE ACCEPTED UNLESS THEY ARE CLEARLY DOCUMENTED.
5. CONTRACTOR SHALL SUBMIT SUBMITTALS AND SHOP DRAWINGS TO OWNER AND/OR OWNER'S REPRESENTATIVE FOR APPROVAL OF ALL MATERIALS PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE ADEQUATE TIME TO ALLOW FOR REVIEW/APPROVAL OF SUBMITTALS AND SHOP DRAWINGS.
6. CONTRACTOR SHALL PROVIDE ALL MEANS, METHODS, LABOR AND MATERIALS NECESSARY TO CONSTRUCT THIS PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
7. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING FOR VERTICAL AND HORIZONTAL CONTROL. ALL CONSTRUCTION STAKING SHALL BE COMPLETED UNDER THE SUPERVISION OF A P.L.S. LICENSED IN THE STATE.
8. WHERE SPECIFICATIONS CONFLICT, THE STRICTER SHALL OVERRULE.
9. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE LICENSED BY THE STATE OF WASHINGTON AND BONDED TO DO WORK IN THE PUBLIC RIGHT-OF-WAY.
10. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL HAVE A CURRENT CITY OF RICHLAND BUSINESS LICENSE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CONSTRUCTION DEFICIENCIES FOR A PERIOD OF 1-YEAR FROM THE DATE OF ACCEPTANCE BY THE CITY OF RICHLAND AND THE OWNER.
14. ANY CHANGES OR MODIFICATIONS TO THE PROJECT PLANS SHALL FIRST BE APPROVED BY THE ENGINEER OF RECORD AND CITY ENGINEER OR HIS REPRESENTATIVE.

TESC NOTES

1. THE TEMPORARY EROSION CONTROL SYSTEM SHALL BE INSTALLED PRIOR TO ALL OTHER CONSTRUCTION.
2. ALL CLEARING LIMITS AND/OR EASEMENTS SETBACKS, SENSITIVE/CRITICAL AREAS AND THEIR BUFFERS, SIGNIFICANT TREES AND DRAINAGE COURSES SHALL BE CLEARLY STAKED AND MARKED AS SHOWN ON PLANS.
3. PROPERTIES ADJACENT TO THE PROJECT SITE THAT ARE SUBJECT TO POTENTIAL EROSION CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION THROUGH THE USE OF SILT FENCE, WATTLES, OR OTHER BMP SELECTED BY THE CONTRACTOR.
4. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED WITH TEMPORARY INLET SEDIMENT CONTROL TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM. THE INSERT SHALL BE INSPECTED REGULARLY, CLEANED WHEN NECESSARY, AND REMOVED AT COMPLETION OF CONSTRUCTION.
5. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
7. ALL POLLUTANTS OTHER THAN SEDIMENT THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORM WATER OR THE SITE.
8. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSPECTED, MAINTAINED, AND REPAIRED BY THE CONTRACTOR AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED USE.
9. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO SILT FENCING, SEDIMENT PONDS/TRAPS, DIVERSIONS SWALES, CHECK DAMS, SEDIMENT BARRIERS, FILTER FABRIC, MULCH, AND SEEDING, AS CONDITIONS REQUIRE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PREVENTING SILT-LADEN RUNOFF FROM DISCHARGING FROM THE PROJECT SITE. FAILURE BY THE CONTRACTOR AND/OR OWNER CAN RESULT IN A FINE.
11. AT NO TIME SHALL CONCRETE, CONCRETE BY-PRODUCTS, VEHICLE FLUIDS, PAINT, CHEMICALS, OR OTHER POLLUTING MATTER BE PERMITTED TO DISCHARGE TO THE TEMPORARY OR PERMANENT DRAINAGE SYSTEM, OR TO DISCHARGE FROM THE PROJECT SITE.
12. AT ALL TIMES OF THE YEAR, THE CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS, EQUIPMENT AND LABOR ON-SITE TO STABILIZE AND PREVENT EROSION FROM ALL DENUDED AREAS WITHIN 12-HOURS AS SITE AND WEATHER CONDITIONS DICTATE. CONTRACTOR SHALL PROVIDE DUST CONTROL, AS NECESSARY, TO BE COMPLIANT WITH ALL LOCAL AND STATE CLEAN AIR/DUST CONTROL POLICIES. THE SPRAYING OF WATER ON DRY AREAS SHALL BE USED TO CONTROL DUST. CONTRACTOR SHALL SUPPLY ALL THE NECESSARY WATER FOR DUST CONTROL.
13. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL ADJACENT PROPERTIES TO THEIR ORIGINAL CONDITION DUE TO ANY CONSTRUCTION RELATED ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
14. NONCOMPLIANCE WITH EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND CLEARING LIMITS VIOLATIONS MAY RESULT IN REVOCATION OF PROJECT PERMITS AND PLAN APPROVAL AND BOND FORECLOSURES.
15. PRIOR TO ANY SITE CONSTRUCTION, INCLUDING CLEARING, LOGGING OR GRADING, THE SITE CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR (OR PROJECT ENGINEER) AS REQUIRED BY THESE PLANS.
16. ALL SITE WORK MUST BE PERFORMED IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE.
17. CONTRACTOR IS RESPONSIBLE FOR STORMWATER POLLUTION PREVENTION PLAN (SWPPP). EROSION CONTROL MEASURES SHALL BE INSTALLED AS REQUIRED TO INSURE THAT NO SEDIMENT IS CONVEYED OFF THE SITE TO ADJACENT PROPERTIES.

CLEARING/GRUBBING NOTES

1. CONTRACTOR SHALL PLACE TEMPORARY EROSION AND SEDIMENT CONTROLS PRIOR TO BEGINNING CLEARING AND GRUBBING.
2. VERIFY LIMITS OF SITE CLEARING PRIOR TO START OF WORK.
3. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
4. LOCATE, IDENTIFY, DISCONNECT AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED.
5. DO NOT INTERRUPT EXISTING UTILITY SERVICES UNLESS PERMITTED TO DO SO BY THE GOVERNING JURISDICTION AND/OR UTILITY COMPANY.
6. REMOVE OBSTRUCTIONS, TREES, SHRUBS, GRASS OR OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION.
7. REMOVE UNSUITABLE MATERIALS THAT ARE OBSTRUCTING CONSTRUCTION ACTIVITIES AND HAVE NO GENERAL USE IN CONSTRUCTION ACTIVITIES.
8. IF ANY UNKNOWN SUBSURFACE STRUCTURES ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S ENGINEER PRIOR TO PROCEEDING.
9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES, PUBLIC AND PRIVATE, AT ALL TIMES DURING CONSTRUCTION.
10. FILL DEPRESSIONS CAUSED BY CLEARING/GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIALS AS NOTED IN THE GEOTECHNICAL REPORT AS PREPARED BY GEOPROFESSIONAL INNOVATION, INC. DATED MARCH 13, 2023.
11. STRIP SATISFACTORY TOPSOILS TO WHATEVER DEPTHS ARE ENCOUTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOILS OR OTHER WASTE MATERIALS.
12. STOCKPILE TOPSOILS ON-SITE FOR RE-USE IN LANDSCAPE AREAS. REMOVE EXCESS TOPSOILS FROM SITE IF NOT NEEDED FOR CONSTRUCTION ACTIVITIES.
13. REMOVE SURPLUS SOIL MATERIALS, UNSUITABLE TOPSOIL, OBSTRUCTIONS, AND WASTE MATERIALS AND LEGALLY DISPOSE OF THEM OFF-SITE.
14. UPON COMPLETION OF SITE WORK, CLEAN THE ENTIRE SITE WORK AREA. REMOVE ALL EXCESS EXCAVATED SOIL MATERIALS, ROCKS, BOULDERS, LOGS, TREES, PIPES OR DEBRIS OF ANY TYPE AND DISPOSE FROM THE SITE.

EARTHWORK NOTES

1. PERFORM WORK IN ACCORDANCE WITH ASTM AND AASHTO PROCEDURE STANDARDS.
2. PRIOR TO THE START OF GRADING, ALL EXISTING ORIGINAL MATERIAL, DEBRIS, RUBBLE, ASPHALT PAVEMENT, ETC., SHALL BE REMOVED FROM THE SITE TO THE SATISFACTION OF THE OWNER AND OWNER'S REPRESENTATIVE.
3. IF ANY UNKNOWN SUBSURFACE STRUCTURES ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S ENGINEER PRIOR TO PROCEEDING.
4. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES, PUBLIC AND PRIVATE, AT ALL TIMES DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING AND/OR EXPORTING ALL MATERIAL AS REQUIRED TO PROPERLY GRADE THIS SITE TO THE FINISHED ELEVATIONS SHOWN HEREON IN ACCORDANCE WITH THE APPROVED PLANS AND THE GEOTECHNICAL REPORT RECOMMENDATIONS PREPARED BY GEOPROFESSIONAL INNOVATION, INC. DATED MARCH 13, 2023.
6. ALL FILL SHALL BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD PRIOR TO PLACEMENT.
7. ALL FILL MATERIAL SHALL BE PLACED IN LIFTS AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEERING EVALUATION AS PREPARED BY GEOPROFESSIONAL INNOVATION, INC. DATED MARCH 13, 2023.
8. ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED.
9. THE CONTRACTOR SHALL BE REQUIRED TO CALL 811 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES TO DETERMINE FIELD LOCATIONS OF ALL UNDERGROUND UTILITIES.
10. CONTRACTOR SHALL PROVIDE MATERIAL TESTING AND FREQUENCY OF TESTING IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AS PREPARED BY GEOPROFESSIONAL INNOVATION, INC. DATED MARCH 13, 2023.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OFF-SITE CLEANUP OF ANY DISCHARGE OF CONSTRUCTION RELATED STORMWATER AND SILT LADEN MATERIAL.
12. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY CONSTRUCTION WATER FOR DUST CONTROL AND FOR COMPACTION PURPOSES.
13. ALL DISTURBED AREAS SHALL BE HYDRO-SEEDED WITH A DRYLAND GRASS SEED MIX WITH TACKIFIER. CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH VEGETATION ON ALL DISTURBED AREAS. CONTRACTOR SHALL PROVIDE TEMPORARY WATER AS NECESSARY TO PROVIDE SEED GERMINATION. TACKIFIER SHALL BE IN ACCORDANCE WITH WSDOT STD SPECIFICATION 9-14.4(7).

GENERAL UTILITY NOTES

1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH THE LATEST REVISION OF CITY STANDARDS AND SPECIFICATIONS, WSDOT STANDARD SPECS, AND ALL OTHER GOVERNING AGENCY'S STANDARDS.
2. THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE BEST RECORDS AVAILABLE AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT ENGINEER TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH AND CONTACT ALL OF THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND CONTACT THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
7. ALL SITE UTILITIES SHALL STOP AT 3-5' FROM BUILDING FACE. ALL UTILITIES SHALL BE CAPPED AND MARKED AT SURFACE WITH DEPTH NOTED.
8. WHERE DIRECTED BY THE CITY THE CONTRACTOR SHALL PLACE TRAFFIC CONTROL DEVICES, THE PLACEMENT AND TYPE OF WHICH SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)
9. ALL UTILITIES SHALL BE CONSTRUCTED PRIOR TO SURFACING INCLUDING BUT NOT LIMITED TO SEWER, WATER, TELEPHONE, POWER, AND CABLE TELEVISION.
10. ALL PAVEMENT CUTS TO CONNECT UTILITIES SHALL BE REPAIRED IN CONFORMANCE WITH THE CITY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS.
11. CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL PERMITS AND ASSOCIATED FEES EXCEPT FOR PLAN REVIEW.
12. CONTRACTOR SHALL COORDINATE W/ ALL UTILITIES FOR TRENCHING REQUIREMENTS. UTILITY LOCATIONS SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL COORDINATE ACTUAL LOCATIONS WITH THE UTILITIES AT THE TIME OF CONSTRUCTION. CONTRACTOR AND UTILITIES SHALL COORDINATE LOCATION OF EQUIPMENT TO AVOID CONFLICTS.
13. CONTRACTOR SHALL COORDINATE PRIVATE UTILITY WORK AND CONFORM TO THE REQUIREMENTS OF UTILITY COMPANIES. PROVIDE MIN. 48 HOURS NOTICE TO UTILITY COMPANIES PRIOR TO UTILITY TRENCH EXCAVATION.

TRENCHING/BACKFILL/COMPACTION NOTES

1. BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF RICHLAND STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS AS PREPARED BY GEOPROFESSIONAL INNOVATION, INC. DATED MARCH 13, 2023.
2. ACCEPTABLE MATERIALS EXCAVATED FROM THE TRENCH SHALL BE IN ACCORDANCE WITH SECTION 7-08.3(3) OF THE WSDOT STANDARD SPECIFICATIONS. MATERIAL EXCEEDING THE OPTIMUM MOISTURE CONTENT SHALL BE CONSIDERED AS UNACCEPTABLE FOR BACKFILL WITHIN THE PIPE TRENCH ZONE.
3. CONTRACTOR SHALL IMPORT BACKFILL MATERIAL AS NEEDED TO CONSTRUCT THE IMPROVEMENTS.
4. LAY PIPES TO LINES AND GRADES INDICATED ON THE DRAWINGS. NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES.
5. TRENCH EXCAVATION SHALL BE IN ACCORDANCE WITH SECTION 7-08.3(1)A OF THE WSDOT STANDARD SPECIFICATIONS.
6. SHORING SHALL BE IN ACCORDANCE WITH SECTION 7-08.3.(1)B OF THE WSDOT STANDARD SPECIFICATIONS.
7. SHORING AND TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF WASHINGTON STATE INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW.
5. TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 7-08.3(3) OF THE WSDOT STANDARD SPECIFICATIONS.
6. REMOVE SURPLUS MATERIALS FROM THE SITE.
7. PROTECT OPEN TRENCH TO PREVENT DANGER TO THE PUBLIC.
8. PROVIDE ROCK AND UNSUITABLE EXCAVATION AS NEEDED TO CONSTRUCT UNDERGROUND UTILITY IMPROVEMENTS.

SANITARY SEWER PIPING NOTES

1. INSTALL PIPE, FITTINGS AND ACCESORIES IN ACCORDANCE WITH SECTION 7-08 AND 7-17 OF THE WSDOT STANDARD SPECIFICATIONS AND THE CITY OF RICHLAND STANDARD SPECIFICATIONS. WHERE SPECIFICATIONS CONFLICT; CITY OF RICHLAND STANDARD SPECIFICATIONS SHALL PREVAIL. PERFORM WORK IN ACCORDANCE WITH ASTM, AASHTO AND LOCAL GOVERNING PROCEDURE STANDARDS.
2. SEWER PIPE: PVC PLASTIC PIPE ANSI/ASTM D3034, SDR 35. FITTINGS SHALL BE SAME MATERIAL.
3. BEDDING: GRAVEL BACKFILL FOR PIPE ZONE BEDDING MEETING THE REQUIREMENTS OF SECTION 9-03.12(3) OF THE WSDOT STANDARD SPECIFICATIONS.
4. BACKFILL AND COVER. AS NOTED IN THE TRENCHING/BACKFILL/COMPACTION NOTES.
5. PROVIDE PRESSURE TEST, INFILTRATION TEST AND DEFLECTION TEST IN ACCORDANCE WITH SECTION 7-17 OF THE WSDOT STANDARD SPECIFICATIONS.

STORM DRAINAGE PIPING NOTES

1. INSTALL PIPE, FITTINGS AND ACCESORIES IN ACCORDANCE WITH SECTION 7-08 OF THE WSDOT STANDARD SPECIFICATIONS AND THE CITY OF RICHLAND STANDARD SPECIFICATIONS. WHERE SPECIFICATIONS CONFLICT; CITY OF RICHLAND STANDARD SPECIFICATIONS SHALL PREVAIL. PERFORM WORK IN ACCORDANCE WITH ASTM, AASHTO AND LOCAL GOVERNING PROCEDURE STANDARDS.
2. STORM PIPE: PVC PLASTIC PIPE ANSI/ASTM D3034, SDR 35 OR CPE PER WSDOT STD SPEC 7-01.2. FITTINGS SHALL BE SAME MATERIAL.
3. BEDDING: GRAVEL BACKFILL FOR PIPE ZONE BEDDING MEETING THE REQUIREMENTS OF SECTION 9-03.12(3) OF THE WSDOT STANDARD SPECIFICATIONS.
4. BACKFILL AND COVER. AS NOTED IN THE TRENCHING/BACKFILL/COMPACTION NOTES.

SITE WATER PIPING NOTES

1. INSTALL PIPE, FITTINGS AND ACCESORIES IN ACCORDANCE WITH SECTION 7-09 OF THE WSDOT STANDARD SPECIFICATIONS AND THE CITY OF RICHLAND STANDARD SPECIFICATIONS. WHERE SPECIFICATIONS CONFLICT; CITY OF RICHLAND STANDARD SPECIFICATIONS SHALL PREVAIL. PERFORM WORK IN ACCORDANCE WITH ASTM, AASHTO AND LOCAL GOVERNING PROCEDURE STANDARDS.
2. WATER PIPE: DUCTILE IRON THICKNESS CLASS 50. FITTINGS AND JOINTS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF RICHLAND.
3. GATE VALVES: AWWA C509, RESILENT WEDGE TYPE MEETING THE REQUIREMENTS OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
4. WATER SERVICES: MEETING THE REQUIREMENTS OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
5. FIRE HYDRANT ASSEMBLY: MEETING THE REQUIREMENTS OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
6. THRUST BLOCKS: MEETING THE REQUIREMENTS OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
7. BEDDING AND COVER MATERIALS: MEETING THE REQUIREMENTS OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
8. REDUCED BACKFLOW PRESSURE ASSEMBLY: MEETING THE REQUIREMENTS OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS. PROVIDE ELECTRICAL POWER SOURCE FOR HEATING ELEMENT.
9. POST INDICATOR VALVE: AS SHOWN ON THE DRAWINGS - NOT REQUIRED FOR THIS PROJECT.
10. FIRE DEPARTMENT CONNECTION: AS SHOWN ON THE DRAWINGS - NOT REQUIRED FOR THIS PROJECT
11. PROVIDE TESTING IN ACCORDANCE WITH THE CITY OF RICHLAND STANDARD SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO BACTERLOGICAL TEST, HYDROSTATIC TEST AND BACKFLOW ASSEMBLY TEST.
12. DISINFECT AND FLUSH THE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
13. CONTRACTOR INSTALLING FIRE LINES SHALL BE LICENSED BY THE STATE OF WA WITH A LEVEL 3 OR U LICENSE. CONTRACTOR SHALL PROVIDE LICENSE TO OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

SITE LAYOUT NOTES

1. ALL DIMENSIONS SHOWN ON THESE PLANS AND ANY EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL WARRANT IMMEDIATE ATTENTION OF ENGINEER TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION
2. ALL SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD AND THE STATE SIGN FABRICATION MANUAL.
3. CONCRETE MIX FOR CURBS AND SIDEWALKS SHALL BE IN ACCORDANCE WITH THE CITY OF RICHLAND STANDARD SPECIFICATIONS.
4. PAINT FOR PAVEMENT MARKINGS SHALL BE EITHER LOW VOC SOLVENT BASED OR LOW VOC WATERBORNE MEETING THE REQUIREMENTS OF SECTION 9-34 OF THE WSDOT STANDARD SPECIFICATIONS.

CEMENT CONCRETE NOTES

1. PROVIDE ½" MASTIC EXPANSION JOINT WHEN CONCRETE PAVEMENT MEETS CURB OR FACE OF BUILDING. MASTIC SHALL EXTEND THE FULL DEPTH OF THE CONCRETE PAVEMENT.
2. CONCRETE PAVEMENT AND SIDEWALK SHALL HAVE A SMOOTH LIGHT BROOM FINISH.
3. ALL JOINT PATTERNS SHALL CLOSELY FOLLOW THE PLAN LAYOUT.
4. CEMENT CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE ACI 301 AND WSDOT STANDARD SPECIFICATIONS SECTION 5-05.
5. CONCRETE SHALL HAVE A 2 TO 4-INCH SLUMP BEFORE ADDING HIGH-RANGE WATER REDUCING ADMIXTURE OR PLASTICIZING ADMIXTURE, ±1-INCH
6. 6.5 SACK MINIMUM SACK CONTENT
7. MAXIMUM WATER/CEMENT RATIO: 0.45 (NON-AIR ENTRAINED) 0.35 (AIR ENTRAINED)
8. AIR-ENTRAINED: 5.5%, ±1.5% AT POINT OF DELIVERY FOR 1-1/2 INCH NOMINAL MAX. AGGREGATE SIZE. 6%, ±1.5% AT POINT OF DELIVERY FOR 1 TO ¾" NOMINAL MAX. AGGREGATE SIZE.
9. USE OF ACCELERATING ADMIXTURES IN COLD WEATHER IS NOT ALLOWED UNLESS AUTHORIZED BY ENGINEER IN WRITING.
10. USE OF RETARDING ADMIXTURES IN HOT WEATHER IS NOT ALLOWED UNLESS AUTHORIZED BY ENGINEER IN WRITING.
11. CONTRACTOR SHALL APPLY CURING COMPOUND TO THE ENTIRE SURFACE AREA PER SECTION 5-05.3(13)A OF THE WSDOT STANDARD SPECIFICATIONS.

ASPHALT PAVING NOTES

1. INSTALL WORK IN ACCORDANCE WITH SECTION 5-04 OF THE WSDOT STANDARD SPECIFICATIONS.
2. DO NOT PLACE ASPHALT WHEN AMBIENT AIR OR BASE SURFACE TEMPERATURE IS LESS THAN IN ACCORDANCE WITH SECTION 5-04.3(16) OF THE WSDOT STANDARD SPECIFICATIONS.
3. PAVEMENT SECTION: AS SHOWN ON THE DRAWINGS.
4. VERIFY GRADIENTS AND ELEVATIONS OF BASE ARE CORRECT PRIOR TO PLACEMENT OF HMA.
5. SOIL STERILIZATION (WEED KILLER) SHALL BE APPLIED TO TOP OF ROCK IN AREAS TO BE PAVED THE SAME DAY AS PAVING WORK. KEEP 2-FOOT MIN. CLEAR OF EXISTING AND PROPOSED LANDSCAPE AREAS. APPLY AT MANUFACTURER'S RECOMMENDED RATE TO ASSURE 3-INCH MIN. PENETRATION.
6. COMPACT PAVEMENT BY ROLLING TO THE SPECIFIED DENSITY. HAND COMPACT AREAS INACCESBILE TO ROLLING EQUIPMENT.
7. TACK COAT CEMENT SURFACES THAT WILL BE IN CONTACT WITH PAVEMENT. PROTECT CEMENT SURFACES FROM THE TACK APPLICATION METHOD. CLEAN EXCESS TACK FROM EXPOSED CONCRETE SURFACES. STORM PIPE: PVC PLASTIC PIPE ANSI/ASTM D3034, SDR 35. FITTINGS SHALL BE SAME MATERIAL.

MATERIAL TESTING

1. CONTRACTOR SHALL PROVIDE MATERIAL TESTING BY A CERTIFIED TESTING LABORATORY. MATERIAL TEST REPORTS SHALL INCLUDE CLASSIFICATION IN ACCORDANCE WITH ASTM D2487 OF EACH SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL AND LABORATORY COMPACTION CURVE ACCORDING TO ASTM D1557 FOR EACH SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
2. CONTRACTOR SHALL ADHERE TO THE TESTING AND INSPECTION REQUIREMENTS AS NOTED IN THE CITY PERMIT.
3. CONTRACTOR SHALL PROVIDE COMPACTION TESTING IN ACCORDANCE WITH ASTM D 1557, D2167, D2922 AND D 3017. FREQUENCY OF TESTING SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS AS PREPARED BY GEOPROFESSIONAL INNOVATION, INC. DATED MARCH 13, 2023.
4. WHEN COMPACTION TEST FAILS, CONTRACTOR SHALL REWORK AND RETEST AT NO ADDITIONAL COST TO OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE COMPACTION TESTING REQUIREMENTS.

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AGENCY REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

CONSTRUCTION NOTES

FILE : 30-23-009_C-002
JUB PROJ. # :30-23-009
DRAWN BY: JGC
DESIGN BY: DSM
CHECKED BY: MAM

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 4/10/2023

SHEET NUMBER:
C-002

Plot Date:5/18/2023 4:41 PM Plotted By: Mateon Mendel
Date Created:4/6/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETL\DRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-002.DWG

CITY OF RICHLAND STANDARD NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST REVISION OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS AND DETAILS AND THE CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION. PLEASE CONFIRM THAT YOU HAVE THE LATEST SET OF STANDARD SPECS AND DETAILS BY VISITING THE CITY'S WEB PAGE.

2. ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, UTILITY EASEMENT, OR INVOLVING THE CONSTRUCTION OF PUBLIC INFRASTRUCTURE WILL REQUIRE THE APPLICANT TO OBTAIN A RIGHT-OF-WAY PERMIT PRIOR TO CONSTRUCTION. A PLAN REVIEW AND INSPECTION FEE IN THE AMOUNT EQUAL TO 5% OF THE CONSTRUCTION COSTS OF THE WORK THAT WILL BE ACCEPTED AS PUBLIC INFRASTRUCTURE OR IS WITHIN THE RIGHT-OF-WAY OR EASEMENT WILL BE COLLECTED AT THE TIME THE PERMIT IS ISSUED. A STAMPED, ITEMIZED ENGINEERS ESTIMATE (OPINION OF PROBABLE COST) SHALL BE USED TO CALCULATE THE 5% FEE.

3. ONCE THE PLANS HAVE BEEN ACCEPTED BY THIS DEPARTMENT, A PRE-CONSTRUCTION CONFERENCE WILL BE REQUIRED PRIOR TO THE START OF ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENT. CONTACT THE PUBLIC WORKS ENGINEERING DIVISION AT 942-7500 OR 942-7742 TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE.

4. WHEN THE CONSTRUCTION IS SUBSTANTIALLY COMPLETE A PAPER SET OF "RECORD DRAWINGS" SHALL BE PREPARED BY A LICENSED SURVEYOR AND INCLUDE ALL CHANGES AND DEVIATIONS. PLEASE REFERENCE THE PUBLIC WORKS DOCUMENT "RECORD DRAWING REQUIREMENTS & PROCEDURES" FOR A COMPLETE DESCRIPTION OF THE RECORD DRAWING PROCESS. AFTER REVIEW OF THE PAPER COPY, A FINAL CORRECTED COPY OF THE RECORD DRAWINGS SHALL BE SUBMITTED ALONG WITH A CAD AND PDF COPY OF THEM.

5. NO WORK ON THIS PROJECT SHALL COMMENCE UNTIL A CITY OF RICHLAND RIGHT-OF-WAY CONSTRUCTION PERMIT HAS BEEN ISSUED.

6. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."

7. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE LICENSED BY THE STATE OF WASHINGTON AND BE BONDED TO DO WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL PROVIDE THE CITY A CERTIFICATE OF INSURANCE PRIOR TO ISSUANCE OF THE RIGHT-OF-WAY CONSTRUCTION PERMIT. THE MINIMUM COVERAGES SHALL COMPLY WITH THE CITY'S INSURANCE REQUIREMENTS.

8. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL HAVE A CURRENT CITY OF RICHLAND BUSINESS LICENSE.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CONSTRUCTION DEFICIENCIES FOR A PERIOD OF ONE-YEAR FROM THE DATE OF ACCEPTANCE BY THE CITY OF RICHLAND.

10. THE CONTRACTOR SHALL BE REQUIRED TO CALL 1-800-424-5555 OR "811" A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES TO DETERMINE FIELD LOCATIONS OF ALL UNDERGROUND UTILITIES.

11. ANY CHANGES OR MODIFICATIONS TO THE PROJECT PLANS SHALL FIRST BE APPROVED BY THE CITY ENGINEER OR HIS REPRESENTATIVE.

12. THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

13. THE FACE OF CURB SHALL BE STAMPED AT ALL UTILITY CROSSINGS, MAIN LINES AND SERVICE LINES AS FOLLOWS:
"S" - SANITARY SEWER "I" - IRRIGATION "G" - GAS
"W" - WATER "C" - CONDUITS "D" - STORM DRAIN

14. ALL FIRE HYDRANTS AND GUARD POSTS SHALL BE PAINTED OSHA SAFETY YELLOW, QUICKSET ENAMEL NO. 3472 HYDRANT YELLOW AS MANUFACTURED BY FARWEST PAINT MANUFACTURING COMPANY OR APPROVED EQUAL.

15. FIRE HYDRANTS AND STREET LIGHTS SHALL BE INSTALLED AT 2-FEET BEHIND THE BACK OF SIDEWALK TO THE FACE OF EQUIPMENT WHERE THE SIDEWALK IS ADJACENT TO THE CURB AND 6-FEET BEHIND THE BACK OF CURB WHERE THE SIDEWALK IS NOT ADJACENT TO THE CURB UNLESS OTHERWISE NOTED ON THE PLANS.

16. ANY DAMAGED OR BADLY DETERIORATED CONCRETE CURB, GUTTER AND SIDEWALK WITHIN PUBLIC RIGHT OF WAY SHALL BE REMOVED AND REPLACED. THIS INCLUDES ANY CURB DAMAGED BY CONSTRUCTION EQUIPMENT DURING THE PROJECT.

17. 2-INCHES OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED BENEATH ALL SIDEWALKS PRIOR TO PLACEMENT OF CONCRETE.

18. ALL STORM DRAINAGE MANHOLES WITH A GRATED LID SHALL BE CONSTRUCTED WITH A "SUMP" IN THE BOTTOM OF THEM, AND ALL STORM MANHOLES WITH SOLID LIDS SHALL HAVE CHANNELED BASES, IN ACCORDANCE WITH THE STANDARD DETAILS.

19. IRRIGATION VALVE BOXES OR LIDS WITHIN THE ROADWAY OR PUBLIC RIGHT-OF-WAY NEED TO BE PER CITY OF RICHLAND SPEC: "RICH 931" CAST IRON LID SHALL HAVE "IRR" CAST INTO TOP.

20. A MINIMUM HORIZONTAL SEPARATION OF TEN-FEET SHALL BE MAINTAINED BETWEEN WATER MAINS AND SEWER MAINS AND SERVICE LINES. WATER MAINS SHOULD CROSS OVER THE TOP OF SEWER MAINS WITH A MINIMUM VERTICAL SEPARATION OF 18-INCHES. ANY CROSSING WITH A VERTICAL SEPARATION OF LESS THAN 18" OR ANY CROSSING IN WHICH THE WATER MAIN CROSSES BELOW THE SEWER MAIN SHALL BE IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OF ECOLOGY STANDARDS. PRESSURIZED SEWER MAINS SHALL NOT CROSS OVER POTABLE WATER MAINS IN ANY CASE. IF A MINIMUM VERTICAL SEPARATION OF 12" CANNOT BE MAINTAINED BETWEEN MAINLINE PIPES, CDF OR CONCRETE SHALL BE USED AS BACKFILL IN PLACE OF NATIVE SOILS OR GRAVEL.

21. REMOVED

22. REMOVED

23. THE CONTRACTOR SHALL TAKE ANY NECESSARY MEANS TO KEEP FROM TRACKING MUD AND DEBRIS OUT ONTO THE EXISTING STREETS, AND SHALL ALSO KEEP MUD AND ANY OTHER DEBRIS FROM HIS SITE FROM ENTERING THE EXISTING PUBLIC STORM DRAINAGE SYSTEM.

24. THE CONTRACTOR SHALL SUPPLY A DUST CONTROL PLAN PRIOR TO STARTING WORK IN ACCORDANCE WITH RMC CHAPTER 9.16.046, SECTION J.

25. ALL DISTURBED AREAS SHALL BE HYDRO-SEEDED AT THE COMPLETION OF THE PROJECT.

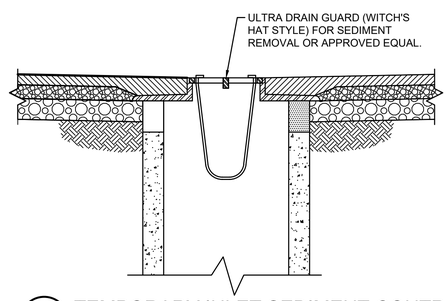
26. THE CONTRACTOR SHALL TAKE CARE TO PREVENT CONSTRUCTION SITE RUNOFF FROM THE ENTERING INTO THE CITY'S STORMWATER SYSTEM, IN ACCORDANCE WITH RMC CHAPTER 16.05. CONSTRUCTION MATERIALS THAT MAY INTRODUCE SEDIMENT INTO THE STORMWATER SYSTEM MAY NOT BE STOCKPILED IN THE STREET. SUCH MATERIALS MAY INCLUDE BUT NOT BE LIMITED TO: CONSTRUCTION MATERIALS, SOIL, SAND, GRAVELS, ETC.

LINE LEGEND

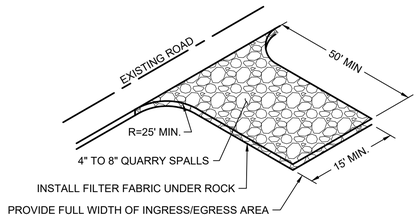
LINE DESCRIPTION	PROPOSED LINE	EXISTING LINE
OVERHEAD POWER	OHP	OHP
UNDERGROUND POWER	UP	UP
OVERHEAD TELEPHONE	OHT	OHT
UNDERGROUND TELEPHONE	UT	UT
NATURAL GAS	G	G
STORM DRAIN	SD	SD
ROOF DRAIN	RD	RD
SANITARY SEWER	SS	SS
INDUSTRIAL SEWER	IS	
WATER	W	W
IRRIGATION	IRR	IRR
PROPERTY LINE	P/L	P/L
RIGHT OF WAY	R/W	R/W
PERMANENT EASEMENT	P/E	P/E
FENCE	X	X
ROAD CENTERLINE		
ROAD ASPHALT	EP	EP
ROAD GRAVEL	EG	EG

SYMBOL LEGEND

SYMBOL DESCRIPTION	EXISTING	PROPOSED	SYMBOL DESCRIPTION	EXISTING	PROPOSED
BOLLARD			VAULT	V	V
FLAGPOLE	F	F	FIRE HYDRANT		
MAIL BOX	M	M	WATER METER		
SIGN			IRRIGATION VALVE BOX	I	I
TREE (SHRUB)			CLEANOUT		
TREE (CONIFEROUS)			CATCH BASIN		
TREE (DECIDUOUS)			ELEC. TRANS.	E	E
TELE. PEDESTAL	T	T	POWER POLE		
GUY WIRE			LUMINAIRE		
MANHOLE			CAP		
VALVE					

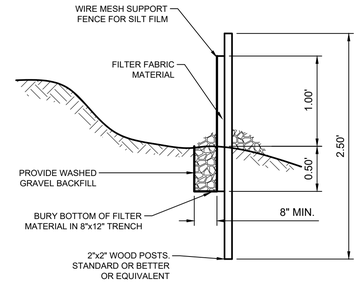


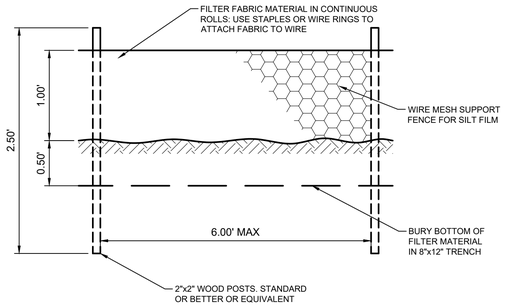
1 TEMPORARY INLET SEDIMENT CONTROL
SCALE: N.T.S.



1. LOCATION OF CONSTRUCTION ENTRANCE TO BE DETERMINED BY CONTRACTOR AND SHALL BE INSTALLED BEFORE START OF CONSTRUCTION
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING AS CONDITIONS REQUIRE AND REPAIR AND/OR CLEAN OUT OF ANY SEDIMENT TRAPS. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY
3. THE TEMPORARY CONSTRUCTION ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. ANY DRAINAGE FACILITIES REQUIRED FOR TRUCK WASHING SHOULD BE CONSTRUCTED ACCORDING TO NOTE #5 IN THIS PLAN. IF WASH RACKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
4. GRAVEL SHALL BE QUARRY SPALLS, 8" TO 12" IN DEPTH AND INSTALLED ACROSS THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50 FEET.
5. IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICLE TIRES BY CONTACT WITH GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER ONTO A PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM THE ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.

2 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.





3 SILT FENCE
SCALE: N.T.S.

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AGENCY REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

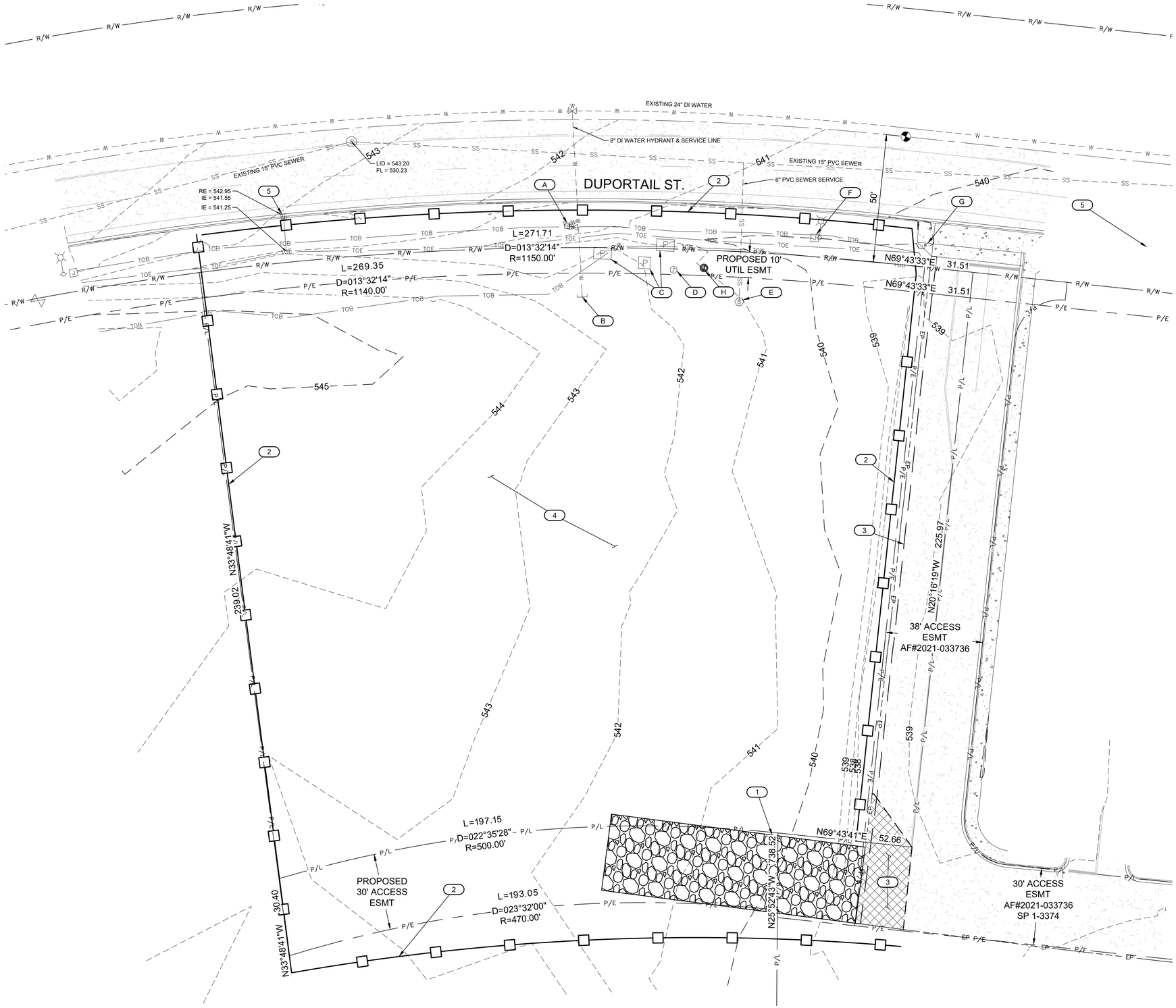
DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

CITY NOTES, LEGEND, TESC DTLS

FILE : 30-23-009_C-002
JUB PROJ. # :30-23-009
DRAWN BY: MAM
DESIGN BY: MAM
CHECKED BY: DSM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/10/2023

SHEET NUMBER:
C-003

Plot Date:5/18/2023 4:41 PM Plotted By: Mason Mendel
Date Created:4/6/2023 \\UB.COM\CENTRAL\CLIENTS\WA\GRETLCRAWFORD\HOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-002.DWG



KEY NOTES

TESC & DEMO NOTES

1. STABILIZED CONSTRUCTION ENTRANCE (2/C-003)
2. SILT FENCE (3/C-003)
3. SAWCUT AND REMOVE EXISTING ASPHALT MINIMUM OF 2FT FROM EDGE OF EXISITING PAVEMENT. PROVIDE NEAT CLEAN EDGE.
4. CLEAR AND GRUB SITE IN ACCORDANCE WITH GEOTECHNICAL REPORT.
5. PROVIDE INLET PROTECTION. DOWNSTREAM INLET TO THE EAST NOT SHOWN IN SURVEY. (1/C-003)

PROTECTION NOTES

- A PRESERVE & PROTECT HYDRANT, VALVE, AND WATER STUB
- B POTHOLE EXISTING WATER STUB PRIOR TO CONSTRUCTION TO VERIFY SIZE, MATERIAL, AND DEPTH
- C PRESERVE & PROTECT EXISTING POWER
- D PRESERVE & PROTECT EXISTING TELEPHONE PEDESTAL & LINES
- E POTHOLE EXISTING SEWER STUB PRIOR TO CONSTRUCTION TO VERIFY SIZE, MATERIAL, AND DEPTH
- F PRESERVE & PROTECT EXISTING LUMINAIRE
- G PRESERVE & PROTECT EXISTING CONCRETE DRIVEWAY
- H PROTECT GAS SERVICE STUB

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

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

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AGENCY REVIEW

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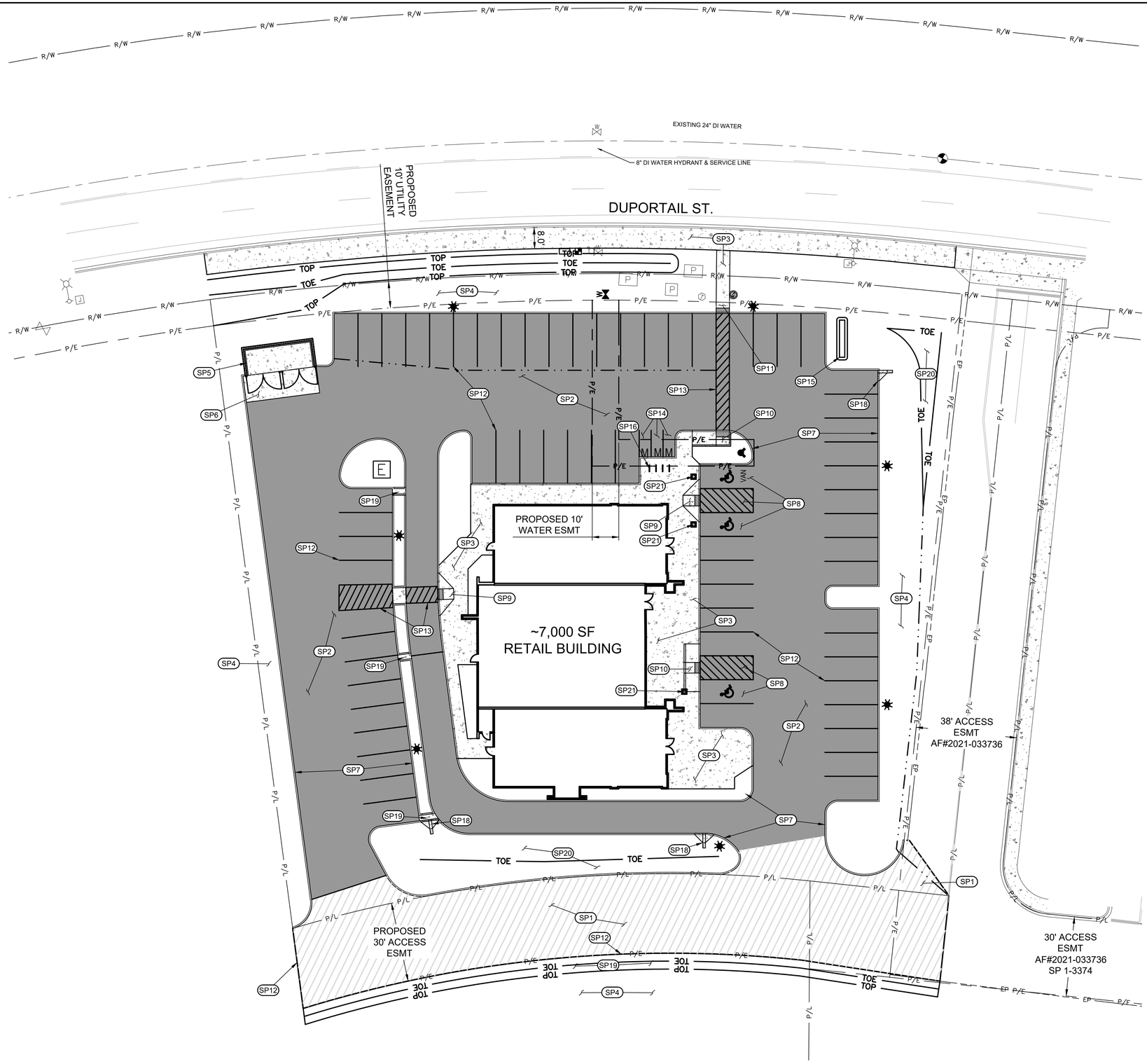
DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

TESC AND DEMO PLAN

FILE :	30-23-009_C-010
JUB PROJ. # :	30-23-009
DRAWN BY:	JGC
DESIGN BY:	DSM
CHECKED BY:	MAM
	ONE INCH
	AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED:	4/27/2023

SHEET NUMBER:
C-010

Plot Date:5/18/2023 4:41 PM Plotted By: Mason Mendel
Date Created:4/27/2023 \\UB.COM\CENTRAL\CLIENTS\WA\GRETL\CRAWFORD\HOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-010.DWG



KEYED NOTES

- SP1 HEAVY DUTY ASPHALT, WITH THICKENED EDGE WHERE NOT ADJACENT TO CURB (1/C500)
- SP2 STANDARD DUTY ASPHALT (1/C500)
- SP3 CONCRETE SIDEWALK PER CITY STD DTL ST-01 AND ST-07
- SP4 LANDSCAPE AREA, TYP. SEE LANDSCAPE PLANS.
- SP5 TRASH ENCLOSURE, SEE ARCHITECTURAL PLANS
- SP6 CONCRETE TRASH ENCLOSURE PAD (2/C500)
- SP7 CONCRETE BARRIER CURB (3/C500)
- SP8 ADA PARKING AND ACCESS AISLE. VAN AISLE TO BE MARKED AS SHOWN. SEE ARCHITECTURAL PLANS FOR SIGNAGE DETAILS. (4/C500)
- SP9 PERPENDICULAR CURB RAMP TYPE A-2 PER CITY STD DTL ST-04
- SP10 PARALLEL CURB RAMP TYPE A PER CITY STD DTL ST-05
- SP11 PERPENDICULAR CURB RAMP TYPE B PER CITY STD DTL ST-06
- SP12 4" SOLID WHITE PARKING STRIPE, TYP.
- SP13 4" SOLID WHITE STRIPE, 2-FT OC @45°
- SP14 MOTORCYCLE PARKING, SEE C101
- SP15 MONUMENT ENTRY SIGN, SEE ARCHITECTURAL PLANS
- SP16 BICYCLE RACKS, SEE ARCHITECTURAL PLANS
- SP17 NOT USED
- SP18 CURB OPENING INLET PER CITY STD DTL S-19
- SP19 CONCRETE DRAINAGE CHANNEL (6/C500)
- SP20 LANDSCAPED SWALE, SEE SHEET C-130 AND LANDSCAPE PLANS
- SP21 BOLLARD, SEE ARCHITECTURAL PLANS FOR DETAIL

SITE INFORMATION

PARCEL ADDRESS:	TO BE DETERMINED VIA PARCEL CREATION
PARCEL NUMBER:	NEW PARCEL NUMBER TO BE DETERMINED VIA PARCEL CREATION. (EXISTING PARCEL NUMBER: #RS 1-4556)
PARCEL AREA:	1.45 ACRES
PARCEL ZONING:	C-2 (COMMERCIAL)

PARKING SUMMARY	
MINIMUM STALLS REQUIRED:	57
STALLS PROVIDED:	66
ADA STALLS REQUIRED:	3
ADA STALLS PROVIDED:	3

AREA SUMMARY	
DISTURBED AREA:	1.74 AC
TOTAL IMPERVIOUS:	1.24 AC
BUILDING ROOF AREA (APPROX):	0.16 AC
PAVING AND CURBING:	1.08 AC
TOTAL PERVIOUS:	0.50 AC
LANDSCAPE & SWALES:	0.41 AC
RESEEDED NATIVE AREAS:	0.09 AC

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

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AGENCY REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

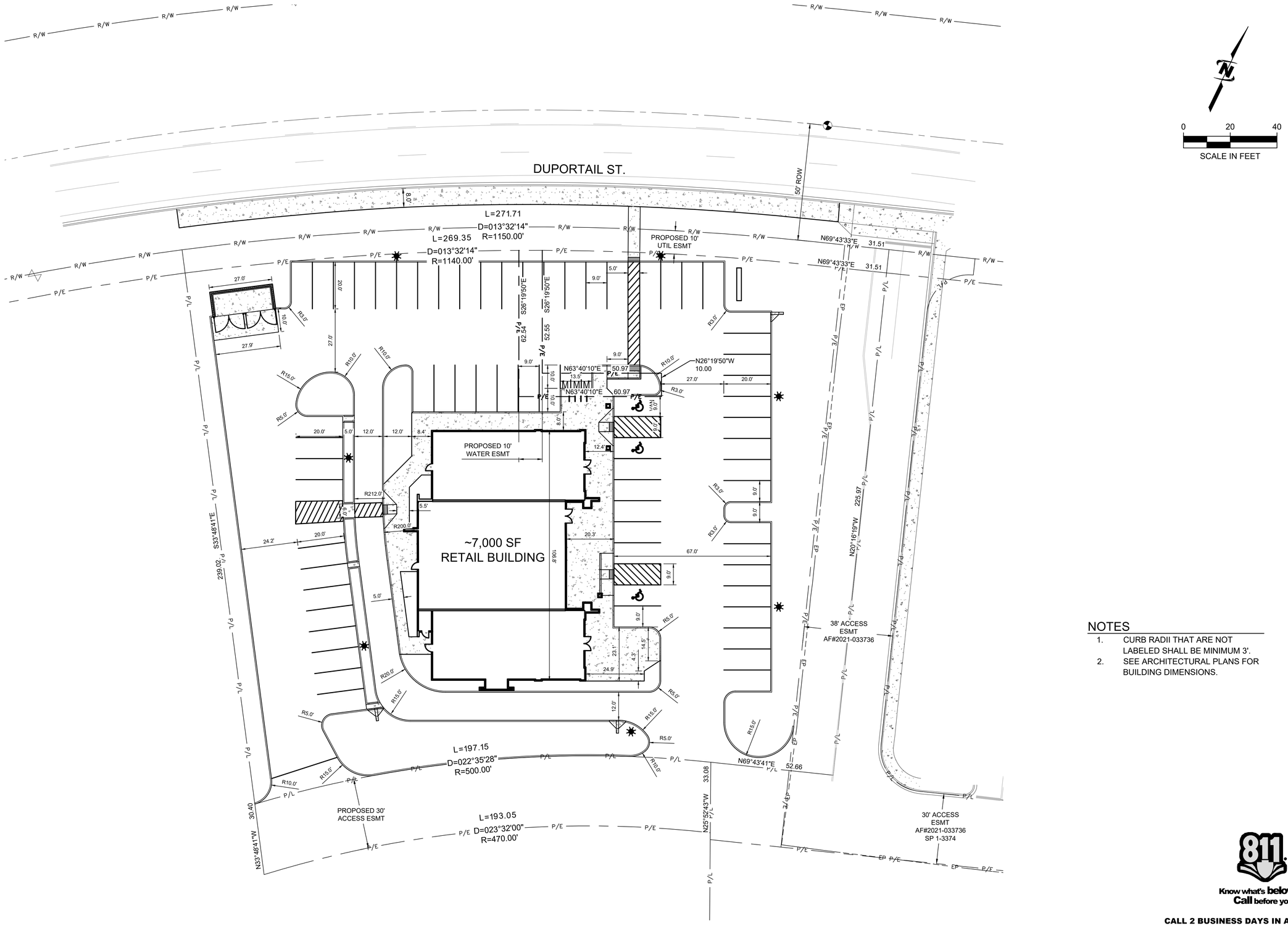
DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

SITE PLAN

FILE: 30-23-009 C-100
JUB PROJ. #: 30-23-009
DRAWN BY: JGC
DESIGN BY: DSM
CHECKED BY: MAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/18/2023

SHEET NUMBER:
C-100

Plot Date:5/18/2023 4:41 PM Plotted By: Mason Mendel
Date Created:5/10/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETL\CRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-100.DWG



NOTES

1. CURB RADII THAT ARE NOT LABELED SHALL BE MINIMUM 3'.
2. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.

Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

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3611 S. Zintel Way
Kennewick, WA 99337
Phone: 509.783.2144
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AGENCY

REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

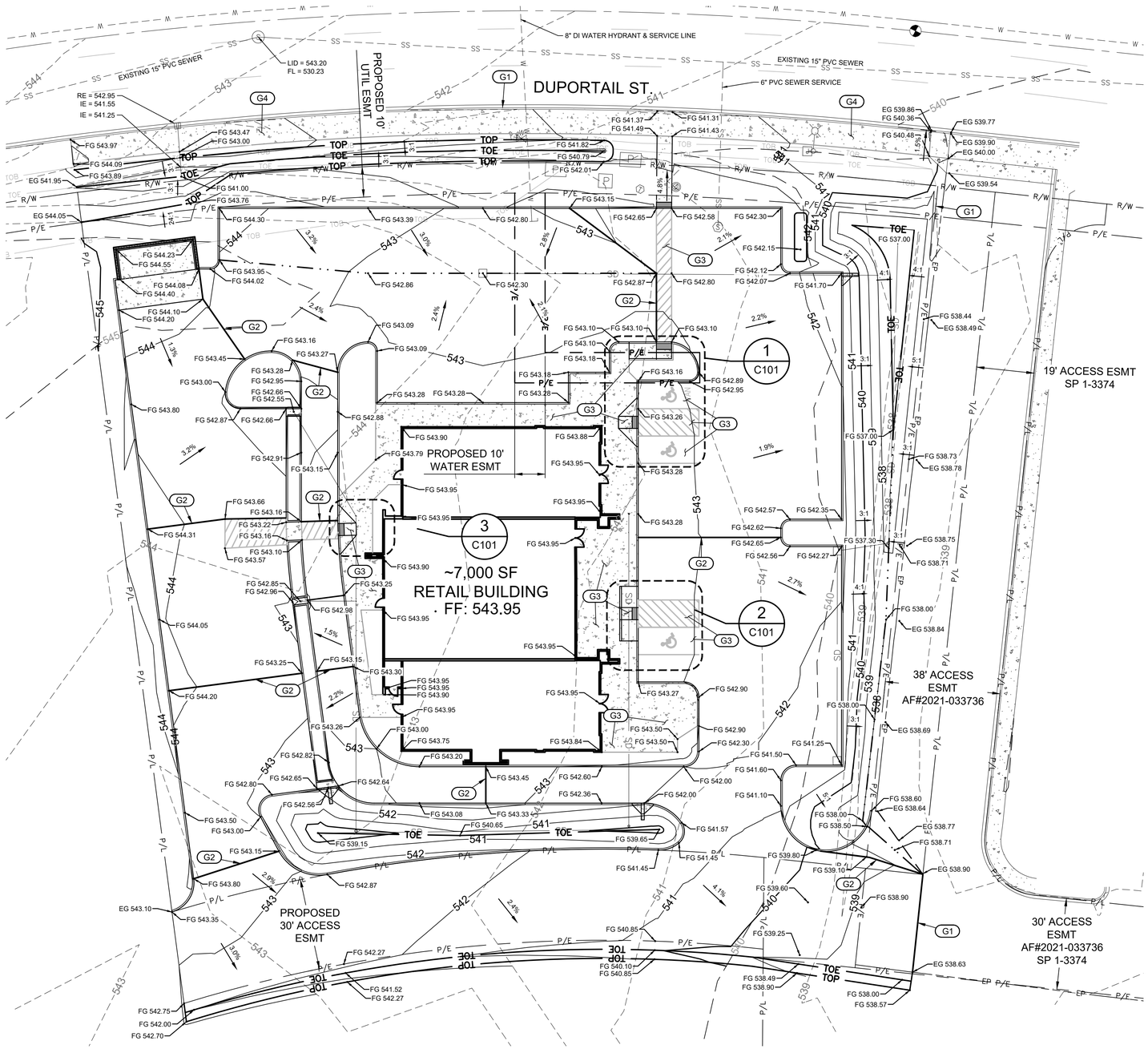
DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

GEOMETRIC CONTROL PLAN

FILE : 30-23-009_C-101
JUB PROJ. # :30-23-009
DRAWN BY: JGC
DESIGN BY: DSM
CHECKED BY: MAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/18/2023

SHEET NUMBER:
C-101

Plot Date:5/18/2023 4:42 PM Plotted By: Mason Mendel
Date Created:5/18/2023 \\JUB.COM\CENTRAL\CLIENTS\WAIGRETL\CRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-101.DWG



GRADING NOTES:

1. CONTOURS AND SPOT ELEVATIONS ARE TOP OF FINISHED GRADE UNLESS NOTED OTHERWISE.
2. ALONG FACE OF CURB, SPOT ELEVATIONS ARE TOP OF ASPHALT UNLESS NOTED OTHERWISE.

LEGEND:
FF = FINISHED FLOOR
FG = FINISHED GRADE
EG = EXISTING GRADE
TBC = TOP BACK OF CURB

KEYED NOTES:

- G1 MATCH EXISTING GRADE
- G2 GRADE BREAK
- G3 MAX 2.0% IN ADA AREAS
- G4 GRADE AREA TO ACCOMODATE CONCRETE SIDEWALK

SCALE IN FEET
0 20 40

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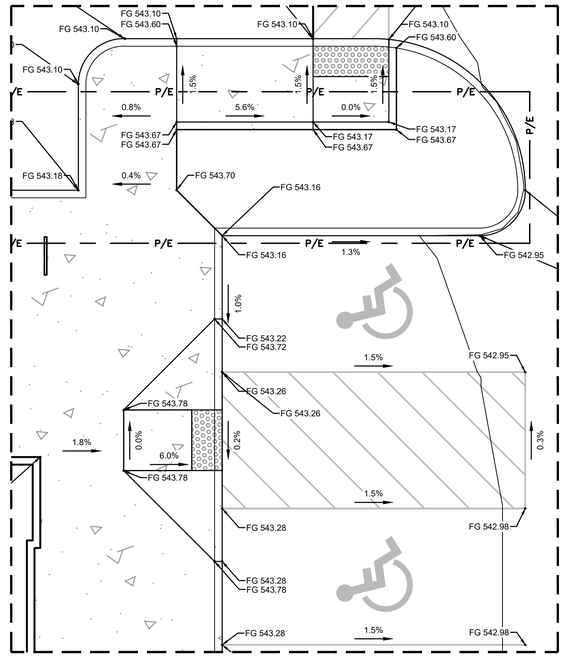
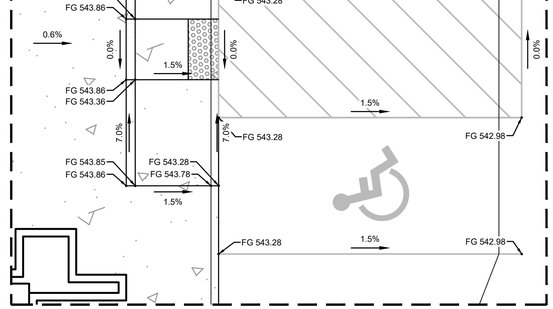
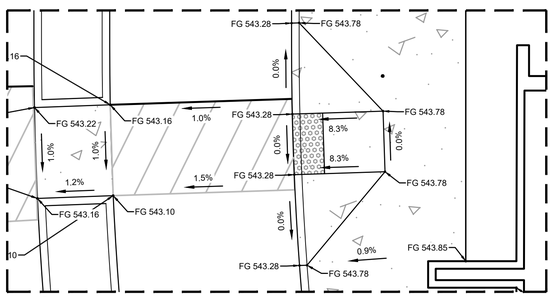


1 NE RAMP AREA
SCALE: 1"=5'



2 EAST RAMP AREA
SCALE: 1"=5'



3 WEST RAMP AREA
SCALE: 1"=5'

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NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

GRADING PLAN

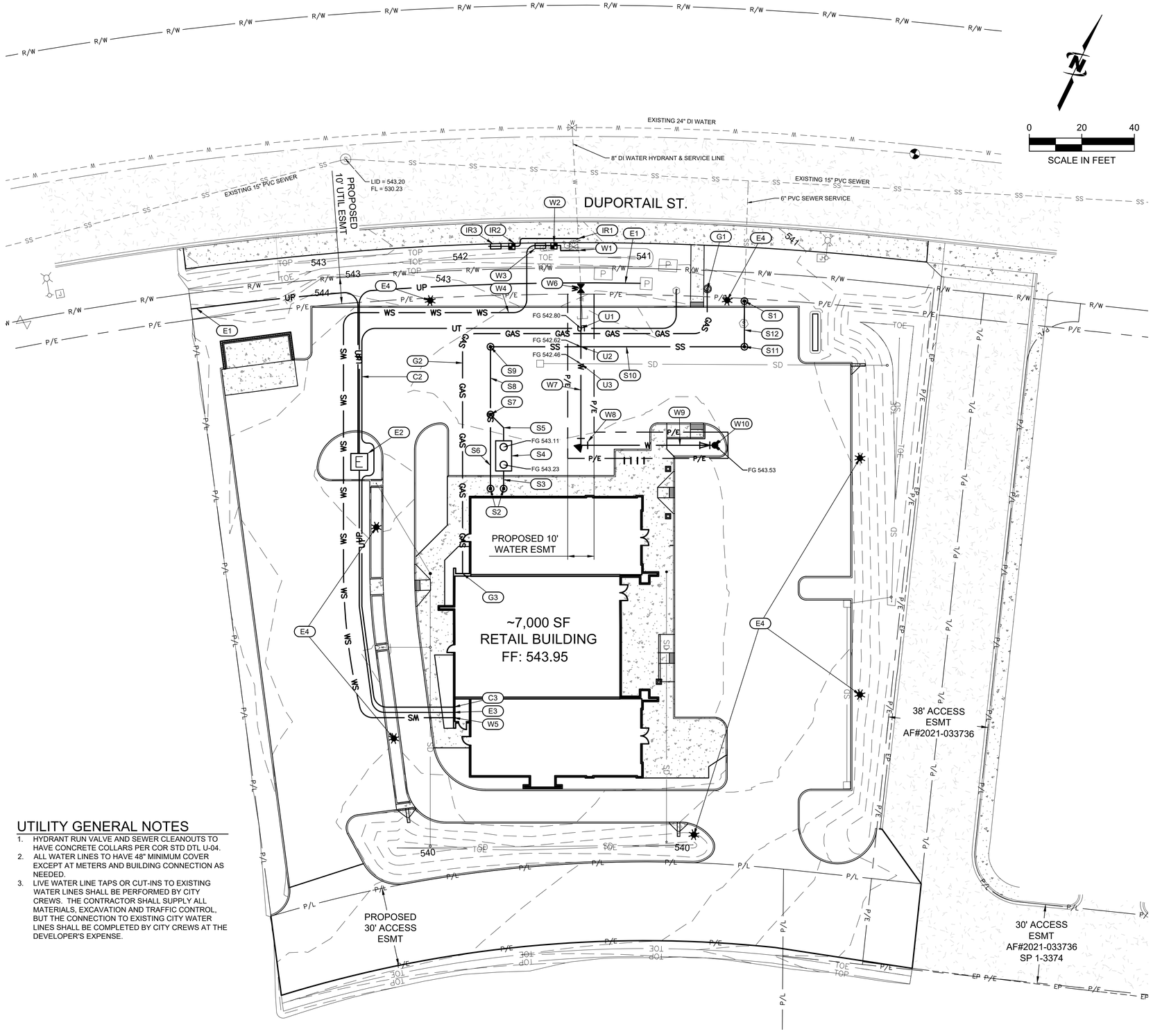
FILE :	30-23-009_C-110
JUB PROJ. # :	30-23-009
DRAWN BY:	JGC
DESIGN BY:	DSM
CHECKED BY:	MAM

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 5/18/2023

SHEET NUMBER:
C-110

Plot Date:5/18/2023 4:54 PM Plotted By: Mason Mendel
Date Created:5/18/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETL\CRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-110.DWG



UTILITY GENERAL NOTES

1. HYDRANT RUN VALVE AND SEWER CLEANOUTS TO HAVE CONCRETE COLLARS PER COR STD DTL U-04.
2. ALL WATER LINES TO HAVE 48" MINIMUM COVER EXCEPT AT METERS AND BUILDING CONNECTION AS NEEDED.
3. LIVE WATER LINE TAPS OR CUT-INS TO EXISTING WATER LINES SHALL BE PERFORMED BY CITY CREWS. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS, EXCAVATION AND TRAFFIC CONTROL, BUT THE CONNECTION TO EXISTING CITY WATER LINES SHALL BE COMPLETED BY CITY CREWS AT THE DEVELOPER'S EXPENSE.

KEYED NOTES

WATER

- (W1) 2" SERVICE CONNECTION PER COR STD DTL W-02.
- (W2) 1.5" WATER METER PER COR STD DTL W-04
- (W3) 2" RPBA PER COR STD DTL W-19. PROVIDE FREEZE PROTECTION VIA INSULATED ENCLOSURE AND HEAT TAPE.
- (W4) 2" PE WATER SERVICE (±300 LF). 4' MIN COVER
- (W5) DOMESTIC WATER CONNECTION TO BUILDING. SEE MECHANICAL
- (W6) CONNECT TO EXISTING 8" WATER LINE STUB W/ 8" DI MJxMJ GATE VALVE PER COR STD DTL W-09, VALVE THRUST BLOCK PER COR STD DTL W-16A, AND CONCRETE COLLAR PER COR STD DTL U-04.
  CONTRACTOR TO POTHOLE AND VERIFY DEPTH AND SIZE PRIOR TO CONSTRUCTION.
- (W7) 60 LF 8" DI RESTRAINED-JOINT PIPE. RESTRAIN PER COR STD DTL W-16B.
- (W8) 8" DI 90° RESTRAINED MJxMJ BEND W/ THRUST BLOCK PER COR STD DTL W-16A
- (W9) 51 LF 8" DI RESTRAINED-JOINT PIPE. RESTRAIN PER COR STD DTL W-16B.
- (W10) 8"x6" DI RESTRAINED REDUCER AND FIRE HYDRANT ASSEMBLY PER COR STD DTL W-14.

SEWER

- (S1) CONNECT TO EXISTING 6" SEWER STUB.
  CONTRACTOR TO POTHOLE AND VERIFY DEPTH AND SIZE PRIOR TO CONSTRUCTION.
  ASSUMED IE @ PROPOSED SS CO = 533.25, BASED ON 2% SLOPE FROM TOP OF MAIN.
  6" SS CLEANOUT PER COR STD DTL S-09.
- (S2) BUILDING CONNECTION
  COORDINATE ELEVATION AND EXACT LOCATION W/ MECHANICAL.
  IE = 539.3'
  6" SS CLEANOUT PER COR STD DTL S-09.
- (S3) 7.5 LF 6" SS @ 2.0%
- (S4) 1500 GALLON GREASE INTERCEPTOR PER COR STD DTL S-20.
  RE = AS SHOWN ON PLAN VIEW
  IE IN = 539.15'
  IE OUT APPROX 538.90' (VERIFY DROP WITH MANUFACTURER)
- (S5) 12 LF 6" SS @ 2.0% W/ 45° BEND AS SHOWN
- (S6) 28 LF 6" SS @ 2.3%
- (S7) 6" SS CLEANOUT AND WYE CONNECTION OF GRAY AND BLACK WATER SEWER LINES.
  CLEANOUT PER COR STD DTL S-09.
  IE = 538.66'
- (S8) 26 LF 6" SS @ 11.0%
- (S9) 6" SS CLEANOUT AND 90° BEND VIA 45° BEND AND WYE TO CLEANOUT.
  CLEANOUT PER COR STD DTL S-09.
  IE = 536.30'
- (S10) 97 LF 6" SS @ 2.0%
- (S11) 6" SS CLEANOUT AND 90° BEND VIA 45° BEND AND WYE TO CLEANOUT.
  CLEANOUT PER COR STD DTL S-09.
  IE = 534.36'
- (S12) 18 LF 6" SS @ APPROX 6%

ELECTRICAL

- (E1) PRIMARY POWER. CONNECT TO EXISTING TRANSFORMER, ROUTE TO ONSITE TRANSFORMER AND EDGE OF LOT AS SHOWN AND PER COR ENERGY SERVICES DESIGN. COR INDICATES A 4" SPARE CONDUIT IS AVAILABLE FOR USE IF FIELD VERIFICATION INDICATES IT IS SUITABLE.
- (E2) ELECTRICAL TRANSFORMER AND VAULT, DESIGN PER COR ENERGY SERVICES.
- (E3) SECONDARY POWER, ROUTE AS SHOWN TO ELECTRIC METER. SEE ELECTRICAL PLANS FOR DESIGN INFORMATION AND ARCHITECTURAL PLANS FOR METER LOCATION.
- (E4) SITE LIGHTING, SEE ELECTRICAL PLANS.

IRRIGATION

- (IR1) 1" SERVICE CONNECTION PER COR STD DTL W-01 W/ APPROX 35 LF OF 1" PE IRRIGATION SERVICE LINE.
- (IR2) 3/4" IRRIGATION METER PER COR STD DTL W-03.
- (IR3) 1" DCVA PER COR STD DTL W-20. IRRIGATION POINT OF CONNECTION, SEE LANDSCAPE PLANS FOR CONTINUATION.

GAS

- (G1) EXISTING GAS LINE. COORDINATE CONNECTION POINT WITH CNGC.
- (G2) PROPSED GAS LINE. COORDINATE POTENTIAL FUTURE LOADS WITH MECHANICAL AND LINE SIZE WITH CNGC.
- (G3) PROPOSED GAS METER AND BUILDING CONNECTION. COORDINATE WITH MECHANICAL AND CNGC.

COMMUNICATIONS

- (C1) EXISTING COMMUNICATIONS PEDESTAL. COORDINATE WITH ELECTRICAL, OWNER/ARCH, AND PURVEYORS FOR CONNECTION POINTS.
- (C2) PROPOSED COMMUNICATIONS CONDUIT. SIZE AND NUMBER TO BE DETERMINED BY OTHERS. ROUTE APPROXIMATELY AS SHOWN.
- (C3) COMMUNICATIONS CONNECTION TO BUILDING. COORDINATE WITH ARCH PLANS.

UTILITY CROSSINGS

- (U1) GAS/POWER/COM BOT = 539.7', WATER TOP = 538.6', SEPARATION = 1.1'
- (U2) WATER BOTTOM = 537.8', SEWER TOP = 536.2', SEPARATION = 1.6'
- (U3) STORM BOTTOM = 539.5', WATER TOP = 538.4', SEPARATION = 1.1'

SEE DRAINAGE PLAN FOR STORM DRAINAGE

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REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

UTILITY PLAN

FILE :	30-23-009 C-120
JUB PROJ. # :	30-23-009
DRAWN BY:	JGC
DESIGN BY:	DSM
CHECKED BY:	MAM

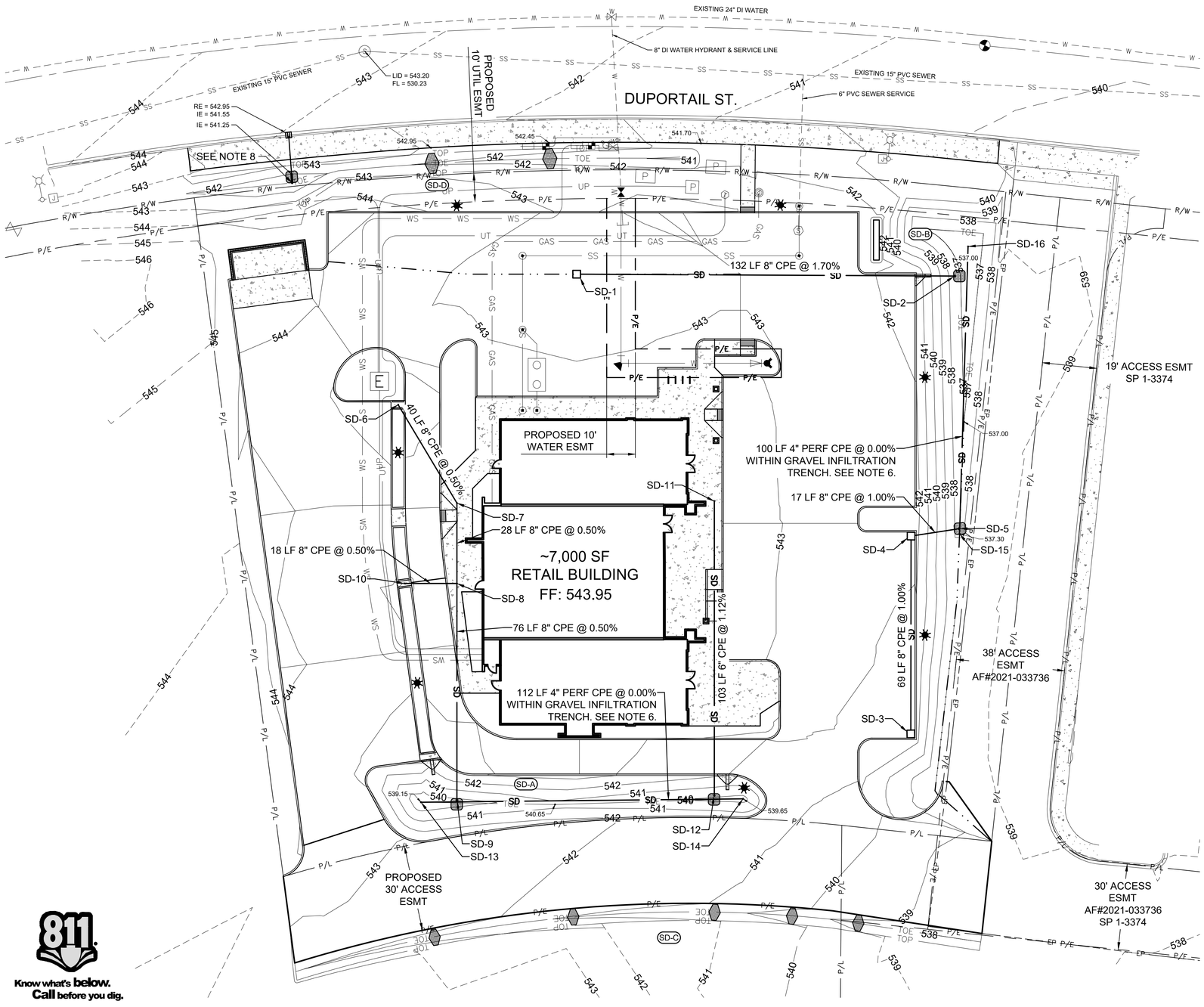
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 5/18/2023

SHEET NUMBER:

C-120

Plot Date:5/18/2023 4:42 PM Plotted By: Mason Mendel
Date Created:5/18/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETL.CRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-120.DWG



KEYED NOTES

- (SD-A) BIORETENTION SWALE A
- (SD-B) BIORETENTION SWALE B
- (SD-C) BIORETENTION SWALE C
- (SD-D) CITY BIORETENTION SWALE D

SEE NOTE 5

STORM STRUCTURES

(SD-1)	CB TYPE 1 FG: 542.30 INV OUT = 539.75
(SD-2)	OUTLET FG: 537.98 INV IN = 537.50
(SD-3)	CB TYPE 1 FG: 541.29 INV OUT = 538.43
(SD-4)	CB TYPE 1 FG: 542.17 INV IN = 537.73 INV OUT = 537.73
(SD-5)	OUTLET FG: 538.29 INV IN = 537.56
(SD-6)	8" NYLOPLAST DRAIN BASIN FG: 542.55 INV OUT = 540.22
(SD-7)	ROOF DRAIN CLEANOUT FG: 540.75 INV IN = 540.02 INV OUT = 540.02
(SD-8)	ROOF DRAIN CLEANOUT FG: 540.64 INV IN = 539.88 INV IN = 539.88 INV OUT = 539.88
(SD-9)	OUTLET FG: 540.23 INV IN = 539.50
(SD-10)	8" NYLOPLAST DRAIN BASIN FG: 542.85 INV OUT = 539.97
(SD-11)	ROOF DRAIN CLEANOUT FG: 541.69 INV OUT = 541.15
(SD-12)	OUTLET FG: 540.54 INV IN = 540.00
(SD-13)	6" NYLOPLAST DRAIN BASIN FG: 540.50 INV OUT = 536.65
(SD-14)	6" NYLOPLAST DRAIN BASIN FG: 540.50 INV IN = 536.65
(SD-15)	6" NYLOPLAST DRAIN BASIN FG: 537.30 INV OUT = 534.65
(SD-16)	6" NYLOPLAST DRAIN BASIN FG: 537.30 INV IN = 534.65

STORM NOTES

1. ALL CATCH BASINS AND DRAIN BASINS TO HAVE STANDARD GRATES AND NYLOPLAST "SNOUTS" AT PIPE OUTLETS. BASINS AND GRATES PER CITY STD DTLS S-11 & S-12 AND NYLOPLAST PRODUCT DETAILS. (5 C500)
2. STORM CLEANOUTS TO HAVE SOLID COVER. CONSTRUCT PER CITY STD DTL S-09. VERIFY CONNECTION POINTS AND ELEVATIONS WITH ARCHITECTURAL PLANS AND CONNECT WITH WYES.
3. CURB OPENING INLETS SHOWN ARE LABELED ON THE SITE PLAN, C100. CONSTRUCT PER CITY STD DTL S-19.
4. CONCRETE DRAINAGE CHANNELS SHOWN ARE LABELED ON THE SITE PLAN, C100. (6 C500)
5. SEE C-131 FOR SWALE PROFILES. CONSTRUCT SWALES PER DETAIL (7 C500)
6. PERFORATED UNDERDRAIN PIPING SHALL BE PLACED IN GRAVEL DRAINAGE TRENCH PER (7 C500) DTL.
7. PIPE OUTFALLS TO SWALES SHALL HAVE QUARRY SPALL OUTFALL ENERGY DISSIPATION PADS. PADS TO BE 4' WIDE BY 4' LONG, 4" THICK.
8. EXTEND EXISTING CITY PIPE OUTFALL APPROXIMATELY 3 LF TO EXTEND TO RECONFIGURED SWALE BOTTOM. PROVIDE OUTFALL PROTECTION PER NOTE 7.

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Phone: 509.783.2144
www.jub.com

AGENCY

MISTY AARON MENDEL — STATE OF WASHINGTON — 46160 — REGISTERED — PROFESSIONAL ENGINEER

REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

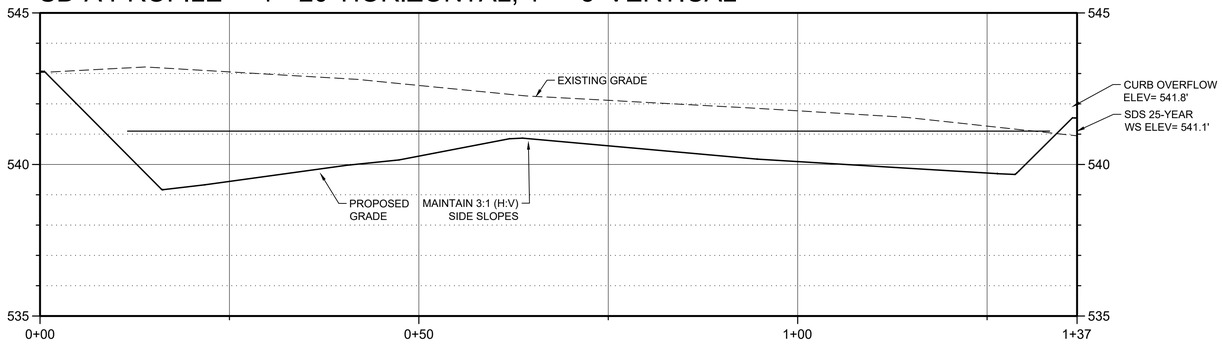
STORM DRAIN PLAN

FILE: 30-23-009 C-130
JUB PROJ. #: 30-23-009
DRAWN BY: MAM
DESIGN BY: MAM
CHECKED BY: DSM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/18/2023

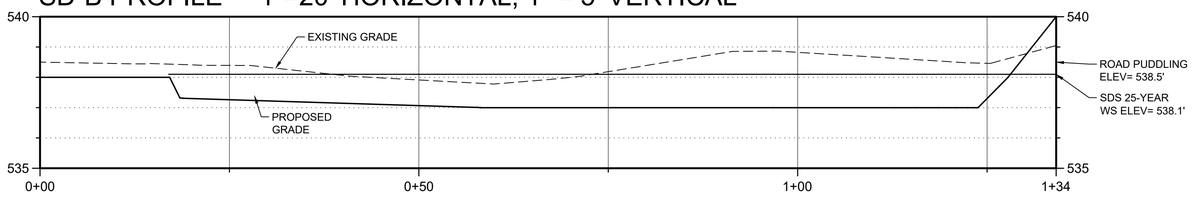
SHEET NUMBER:
C-130

Plot Date:5/18/2023 4:42 PM Plotted By: Mason Mendel
Date Created:5/18/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETL\CRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-130.DWG

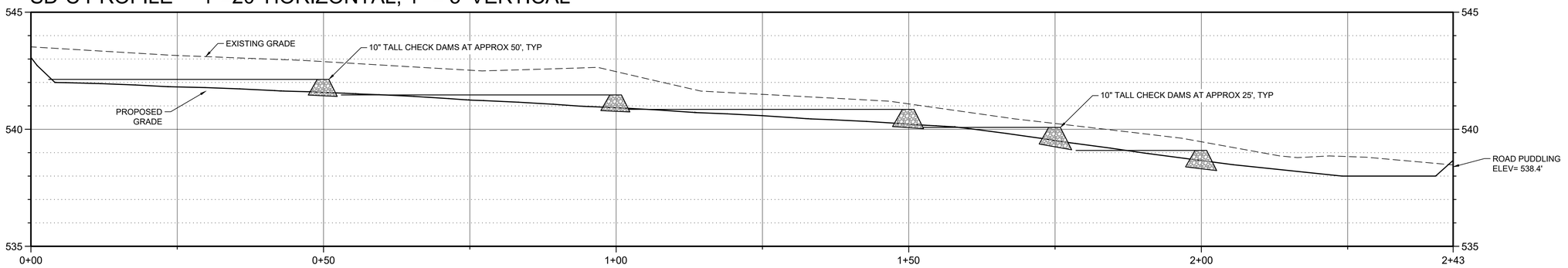
SD-A PROFILE 1"=20' HORIZONTAL, 1" = 5' VERTICAL



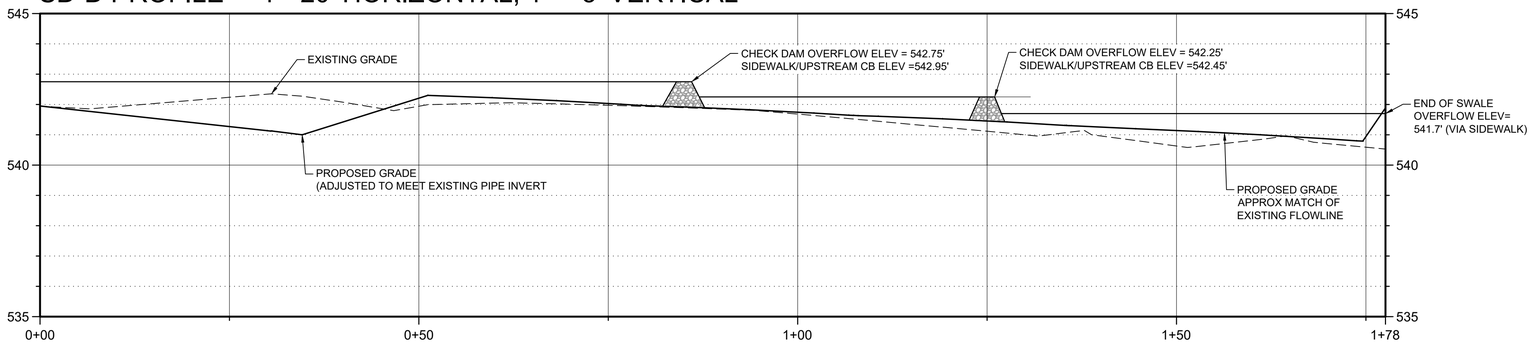
SD-B PROFILE 1"=20' HORIZONTAL, 1" = 5' VERTICAL

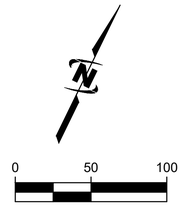


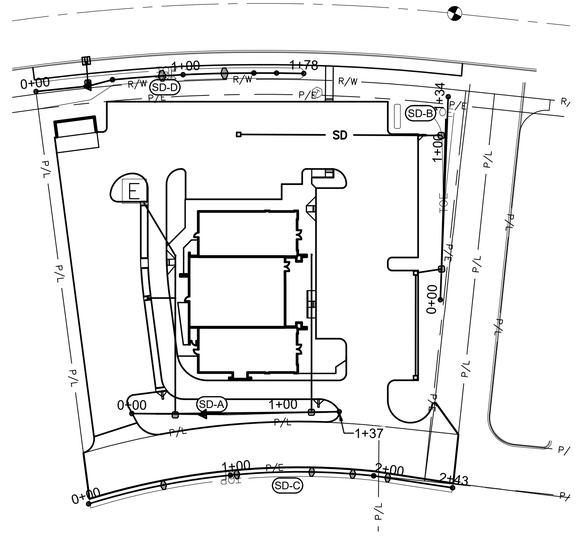
SD-C PROFILE 1"=20' HORIZONTAL, 1" = 5' VERTICAL



SD-D PROFILE 1"=20' HORIZONTAL, 1" = 5' VERTICAL







STORM NOTES

1. SEE DRAWING C-130 FOR STORM DRAINAGE PLAN.
2. SEE DRAWING C-500 FOR STORM DRAINAGE DETAILS.

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AGENCY REVIEW

NO.	DESCRIPTION	BY	APR.	DATE
	REVISION			

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

SWALE PROFILES

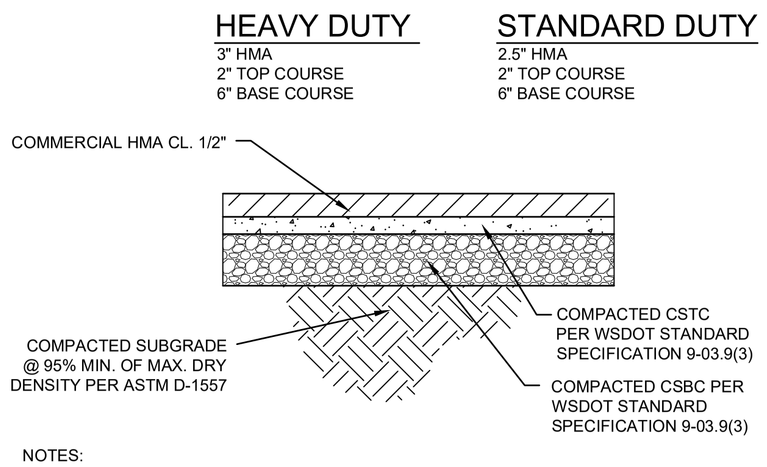
FILE :	30-23-009_C-130
JUB PROJ. # :	30-23-009
DRAWN BY:	JGC
DESIGN BY:	DSM
CHECKED BY:	MAM

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 5/18/2023

SHEET NUMBER:
C-131

Plot Date:5/18/2023 4:43 PM Plotted By: Mason Mendel
Date Created:5/18/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETLCRAWFORD\HOME\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-130.DWG

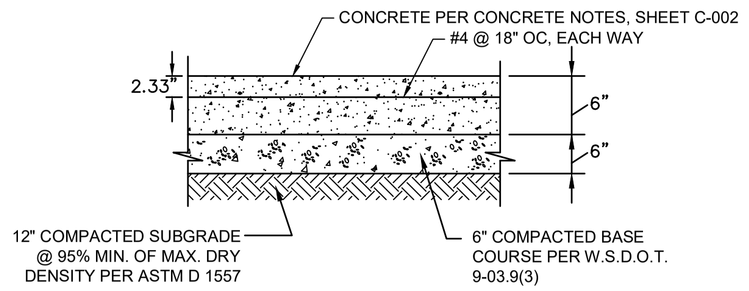


NOTES:

1. ALL GRANULAR BASE/TOP COURSE SHALL BE COMPACTED TO A MIN. 95% MAX. DRY DENSITY PER ASTM D1557.
2. HMA SHALL BE COMPACTED TO A MIN. 91% OF THE MAX. SPECIFIC GRAVITY (RICE DENSITY).
3. ASPHALT PAVEMENT SHALL BE COMMERCIAL HMA CL. 1/2" WITH PG 64-28 ASPHALT BINDER

1 ASPHALT PAVING SECTIONS

SCALE:N.T.S.

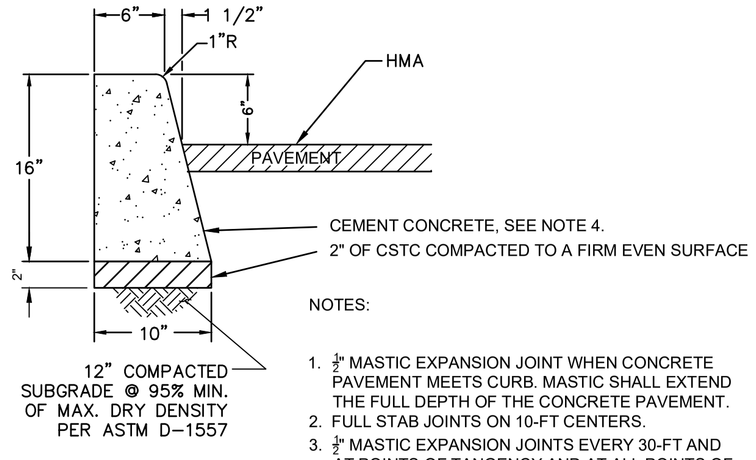


NOTES:

1. JOINTS SHALL BE SQUARE AND EVENLY SPACED.
2. ½"MASTIC EXPANSION JOINTS WHERE PAVEMENT ABUTTS A STRUCTURE.
3. MIN. 4,000 PSI 28 DAY COMPRESSIVE STRENGTH.
4. CSBC SHALL BE COMPACTED TO A MIN. 95% MAX. DRY DENSITY PER ASTM D1557.
5. CONCRETE PER CONCRETE NOTES, SHEET C-002

2 CONCRETE TRASH ENCLOSURE PAD

SCALE:N.T.S.



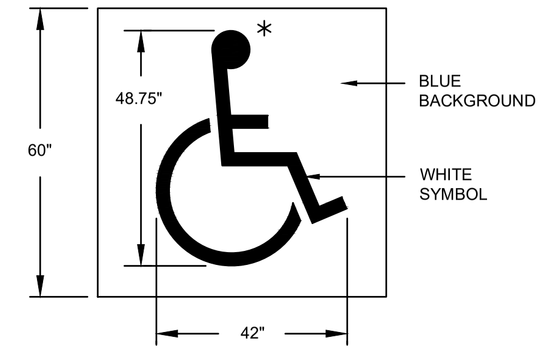
NOTES:

1. ¾" MASTIC EXPANSION JOINT WHEN CONCRETE PAVEMENT MEETS CURB. MASTIC SHALL EXTEND THE FULL DEPTH OF THE CONCRETE PAVEMENT.
2. FULL STAB JOINTS ON 10-FT CENTERS.
3. ¾" MASTIC EXPANSION JOINTS EVERY 30-FT AND AT POINTS OF TANGENCY AND AT ALL POINTS OF TERMINUS.
4. CONCRETE PER CONCRETE NOTES, SHEET C-002

3 CONCRETE BARRIER CURB

SCALE:N.T.S.

* SEE STATE FABRICATION MANUAL D-12



NOTES:

1. 60"x60" BLUE BACKGROUND. BLUE SHALL BE IN ACCORDANCE WITH MUTCD/FEDERAL SPECIFICATIONS.
2. 42"x48.75" SYMBOL OF ACCESSIBILITY SHALL BE WHITE

4 ACCESSIBLE PAVEMENT MARKING

SCALE:N.T.S.

5 NYLOPLAST DRAIN BASIN

SCALE:N.T.S.

6 DRAINAGE CHANNEL

SCALE:N.T.S.

NOTES:

1. PROVIDE INFILTRATION TRENCH WHERE SHOWN ON PLANS
2. PROVIDE CHECK DAMS WHERE SHOWN ON PLANS PER COR STD DTL S-18

7 INFILTRATION SWALE W/ TRENCH

SCALE:N.T.S.

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
3611 S. Zintel Way
Kennewick, WA 99337
Phone: 509.783.2144
www.jub.com

AGENCY REVIEW

NO.	DESCRIPTION	DATE
	REVISION BY APR.	

DUPORTAIL STREET RETAIL BUILDING
RICHLAND, WA

DETAILS

FILE : 30-23-009_C-500
JUB PROJ. # :30-23-009
DRAWN BY: JGC
DESIGN BY: DSM
CHECKED BY: MAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/18/2023

SHEET NUMBER:
C-500

Plot Date:5/18/2023 4:43 PM Plotted By: Mason Mendel
Date Created:4/10/2023 \\JUB.COM\CENTRAL\CLIENTS\WA\GRETLCRAWFORDHOMES\PROJECTS\30-23-009_DUPORTAILRETAILBUILDING\DESIGN\CAD\SHEET\30-23-009_C-500.DWG

DUPORTAIL STREET

LANDSCAPE LEGEND:

SYMBOL	DESCRIPTION
	1-3 MAN SIZE BASALT ACCENT ROCK
	BED AREA (FRACTURED BASALT ROCK)

PLANT SCHEDULE :

TREES	BOTANICAL / COMMON NAME	CONT	CAL
	Juniperus scopulorum 'Blue Arrow' / Blue Arrow Juniper	4-5`	
	Zelkova serrata `City Sprite` TM / City Sprite Zelkova	15 gal	1.5" Cal

SHRUBS	BOTANICAL / COMMON NAME	CONT
	Deschampsia cespitosa / Tufted Hair Grass	1 gal
	Hemerocallis x `Stella de Oro` / Stella de Oro Daylily	1 gal
	Lavandula x `Hidcote` / Hidcote Lavender	1 gal
	Pinus mugo 'Pumilio' / Dwarf Mugo Pine	2 gal
	Prunus laurocerasus `Otto Luyken` / Otto Luyken Laurel	5 gal
	Salvia nemorosa `May Night` / May Night Sage	1 gal

GRASSES	BOTANICAL / COMMON NAME	CONT
	Calamogrostis xacutiflora `Feather Grass / Karl Foerster Feather Reed Grass	1 gal
	Cotoneaster damerii / Bearberry Cotoneaster (3' o.c.)	

20 0 20 40 60

Scale: 1" = 20'

HERITAGE
PROFESSIONAL LANDSCAPING, INC.
2816 W. 27th Avenue
Kennewick, Wa. 99336
Phone (509) 586-0744 / Fax (509) 586-1754
www.heritagelandscaping.com
Better by Design...
CONSULTANT

DUPORTAIL ST. RETAIL BLDG.

RICHLAND, WA

DRAWN BY:	APPROVED BY:
MLM	MLM
SCALE: 1" = 20'	DATE: 4/18/2023
JOB NUMBER: XXXXXX	

REVISIONS
1 RICHLAND, WA
2
3
4
5

SHEET NAME

LANDSCAPE PLAN

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

SHEET NO.

L1

FILE:\\CADSTATION\C\2023\COM\DUPORTAIL STREET RETAIL BUILDING\DUPORTAIL STREET RETAIL BUILDING.DWG
DATE:4/18/2023
USERMATT MENDENHALL

Foundation/Slab Basis of Design

Foundation, Perimeter & Under-Slab Rigid Insulation

PROVIDE FOUNDATION, PERIMETER, AND UNDER-SLAB INSULATION AS FOLLOWS:

A. MATERIALS:
1. MATERIALS SHALL MEET THE PROPERTY REQUIREMENTS OF ONE OR MORE OF THE FOLLOWING SPECIFICATIONS AS APPLICABLE TO THE SPECIFIC PRODUCT OR END USE:
   a. AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM):
   - ASTM C 578: STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION.
   - ASTM C 518: STANDARD TEST METHOD FOR STEADY-STATE THERMAL TRANSMISSION PROPERTIES BY MEANS OF THE HEAT FLOW METER APPARATUS.
   - ASTM E 84: STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS.
   b. INTERNATIONAL CODE COUNCIL EVALUATION SERVICE (ICC-ES), EVALUATION REPORT.

2. BASIS OF DESIGN: OWENS CORNING INSULATING SYSTEMS

B. FOAM PLASTIC BOARD INSULATION
1. PROVIDE EXTRUDED POLYSTYRENE BOARD INSULATION HAVING THE FOLLOWING PROPERTIES:
   a. THERMAL RESISTANCE: (180 DAY REAL-TIME AGING AS MANDATED BY ASTM C578, MEASURED PER ASTM C 518 AT MEAN TEMPERATURE OF 75F): R-5.0 PER INCH OF THICKNESS, WITH 90% LIFETIME LIMITED WARRANTY ON THERMAL RESISTANCE.
   b. BLOWING AGENT FORMULATION: ZERO OZONE DEPLETING.
   c. EDGE CONDITION: SQUARE.
   d. SURFACE BURNING CHARACTERISTICS (ASTM E 84): FLAME SPREAD LESS THAN 25, SMOKE DEVELOPED LESS THAN 450, CERTIFIED BY INDEPENDENT THIRD PARTY SUCH AS UNDERWRITERS LABORATORIES (UL).
   e. INDOOR AIR QUALITY: COMPLIANCE CERTIFIED BY INDEPENDENT THIRD PARTY SUCH AS GREENGUARD INDOOR AIR QUALITY CERTIFIED® AND/OR GREENGUARD CHILDREN AND SCHOOLS CERTIFIED™.
   f. RECYCLED CONTENT: MINIMUM 20%, CERTIFIED BY INDEPENDENT THIRD PARTY SUCH AS SCIENTIFIC CERTIFICATION SYSTEMS.
   g. WARRANTY: LIMITED LIFETIME WARRANTY COVERING ALL ASTM C578 PHYSICAL PROPERTIES.

C. INSULATION TYPE BY INSTALLATION LOCATION
1. UNDER-SLAB: COMPLY WITH ASTM C 578, TYPE-VII, 60 PSI MINIMUM COMPRESSIVE STRENGTH, 2.20 LB/CU. FT.
2. FOUNDATION WALLS: COMPLY WITH ASTM C 578, TYPE-IV, 25 PSI MINIMUM COMPRESSIVE STRENGTH, 1.55 LB/CU. FT.
3. INTERIOR PERIMETER w/ FURRING: COMPLY WITH ASTM C 578,TYPE-X,15 PSI MINIMUM COMPRESSIVE STRENGTH, 1.30 LB/CU. FT.

C.I.P Concrete Walls

FULLY COORDINATE ALL CONCRETE REQUIREMENTS w/ STRUCTURAL DRAWINGS AND PROJECT SPECIFICATION. IN ANY CASE WHERE THE NOTES BELOW AND STRUCTURAL REQUIREMENTS CONFLICT, THE STRUCTURAL REQUIREMENTS WILL PREVAIL:

1. STEEL REINFORCEMENT
   A. REINFORCING BARS - ASTM A 615/ A 615M, GRADE 60 (GRADE 420), DEFORMED
   B. PLAIN STEEL WELDED WIRE FABRIC - ASTM A 185, FLAT SHEETS.

2. CONCRETE MATERIALS
   A. PORTLAND CEMENT: ASTM C 150, TYPE I OR II
   B. AGGREGATE: ASTM C 33, UNIFORMLY GRADED, FROM A SINGLE SOURCE
   C. WATER: ASTM C 94.
   D. COLORING ADMIXTURE: ASTM C 979, SYNTHETIC MINERAL-OXIDE PIGMENTS OR COLORED WATER-REDUCING ADMIXTURES, TEMPERATURE STABLE, NONFADING, AND ALKALI RESISTANT. COLOR FROM MANUFACTURER'S STANDARD PALETTE.
   E. ADMIXTURES AND CURING MATERIALS: AS APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER.

4. JOINTS
   A. FILLER STRIPS: ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER, OR ASTM D 1752, CORK OR SELF-EXPANDING CORK.
   B. SEAL ALL JOINTS (CONTROL/EXPANSION JOINTS AND COLD JOINTS) TO PROVIDE MOISTURE-PROOF AND FLEXIBLE SEAL.

5. CONCRETE MIXES
   A. PREPARE DESIGN MIXES, PROPORTIONED ACCORDING TO ACI 301, AND WITH PROPERTIES PER THE STRUCTURAL DRAWINGS.
   B. READY-MIXED CONCRETE: COMPLY WITH ASTM C 94.

6. CONCRETE PLACEMENT
   A. COMPLY WITH RECOMMENDATIONS IN ACI 304R FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE. CONSOLIDATE CONCRETE WITH MECHANICAL VIBRATING EQUIPMENT.
   B. SCREED AND INITIAL-FLOAT CONCRETE SURFACES USING BULL FLOATS OR DERBIES BEFORE EXCESS MOISTURE OR BLEEDWATER APPEARS ON THE SURFACE.

7. FINISH FORMED SURFACES AS FOLLOWS:
   A. APPLY SMOOTH-RUBBED FINISH (SACK FINISH) TO ALL SMOOTH-FORMED FINISHED CONCRETE EXPOSED TO PUBLIC VIEW.

8. CONCRETE PROTECTION AND CURING
   A. PROTECT CONCRETE FROM COLD OR HOT WEATHER DURING MIXING, PLACING, AND CURING. BEGIN CURING AFTER FINISHING CONCRETE, BUT NOT BEFORE FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE.
   B. CURE FORMED AND UNFORMED CONCRETE FOR AT LEAST SEVEN DAYS BY MOISTURE CURING, MOISTURE-RETAINING-COVER CURING, OR CURING COMPOUND.

9. REMOVE AND REPLACE CONCRETE THAT DOES NOT COMPLY WITH REQUIREMENTS ABOVE.

Footing Capillary Break

A. PROVIDE CAPILLARY BREAK FULL HORIZONTAL SURFACE OF ALL BELOW GRADE FOOTINGS, COLUMN PADS AND PLINTHS.

B. MATERIALS:
THE FOLLOWING MATERIALS ARE APPROVED WHEN INSTALLED AS A FOOTING CAPILLARY BREAK IN ACCORDANCE WITH MANUFACTURE'S WRITTEN INSTALLATION INSTRUCTIONS:
1. MEMBRANE: EQUAL TO DELTA FOOTING BARRIER
2. CEMENTITIOUS COATINGS (CEMENT-BASED POLYMER MODIFIED WATERPROOFING)
3. ASPHALTIC ELASTOMERIC COATING (DAMP PROOFING)
4. LATEX BASED WATERPROOF COATING
5. SILANES & SILOXANES
6. ACRYLIC POLYMER CONCRETE ADMIXTURE TO STEM/FOUNDATION WALL

C. EXECUTION:
1. IN STALL FOOTING CAPILLARY BREAK ON NEWLY PLACED OR CURED CONCRETE DEPENDING ON MATERIAL SYSTEM MANUFACTURE'S WRITTEN INSTALLATION INSTRUCTIONS.
2. FULLY SEAL AROUND ALL FOOTING PENETRATIONS SUCH AS RE-BAR, GROUNDING WIRES, ETC.
3. CONTINUE FOOTING CAPILLARY BREAK ON ALL VERTICAL SURFACES OF MONOLITHIC/STEPPED FOOTINGS.
4. SEAL ALL SEAMS AND EDGES PER MATERIAL MANUFACTURE'S WRITTEN INSTALLATION INSTRUCTIONS TO PROVIDE CONTINUOUS AND UNBROKEN CAPILLARY BREAK.
5.

Under-Slab Vapor Retarder

1. PROVIDE A COMPLETE UNDER-SLAB VAPOR RETARDER SYSTEM INSTALLED AND FULL SEALED IN ACCORDANCE WITH MANUFACTURE'S WRITTEN INSTALLATION INSTRUCTIONS.

   A. BASIS OF DESIGN: 'PERMINATOR' SYSTEM BY W.R. MEADOWS

2. PROVIDE VAPOR RETARDER MEMBRANE MANUFACTURED FROM VIRGIN POLYOLEFIN RESINS MEETING OR EXCEEDING ALL REQUIREMENTS OF ASTM E1745, CLASS-A, HAVING THE FOLLOWING CHARACTERISTICS:

   A. MAXIMUM WATER VAPOR PERMEANCE (ASTM E154 SECTIONS 7, 8, 11, 12, 13, BY ASTM E96, METHOD B OR ASTM F1249):
   - AS RECEIVED: 0.0183 PERMS.
   - AFTER WETTING AND DRYING: 0.0219 PERMS.
   - RESISTANCE TO PLASTIC FLOW AND TEMPERATURE: 0.0197 PERMS.
   - EFFECT LOW TEMPERATURE AND FLEXIBILITY: 0.0212 PERMS
   - RESISTANCE TO DETERIORATION FROM ORGANISMS AND SUBSTANCES IN CONTACTING SOIL: 0.0198 PERMS.

   B. PUNCTURE RESISTANCE (ASTM D1709): >3,500 GRAMS.

   C. TENSILE STRENGTH ASTM E154, SECTION 9: 52 LB. FORCE/INC

3. PROVIDE ALL MANUFACTURER'S ACCESSORIES, INCLUDING BUT NOT LIMITED TO:
   A. SEAM TAPE:
   - HIGH DENSITY POLYETHYLENE TAPE WITH PRESSURE SENSITIVE ADHESIVE.
   - WIDTH: 4" MIN. OR AS PROVIDED BY SYSTEM MANUFACTURER.

   B. PIPE COLLARS
   - CONSTRUCT PIPE COLLARS FROM VAPOR RETARDER MATERIAL AND PRESSURE SENSITIVE TAPE PER MANUFACTURER'S INSTRUCTIONS.

4. APPLICATION
   A. INSTALL THE VAPOR RETARDER MEMBRANE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND ASTM E 1643-98.

   B. UNROLL VAPOR RETARDER WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE POUR.

   C. LAP VAPOR RETARDER OVER FOOTINGS AND SEAL TO FOUNDATION WALLS.

   D. OVERLAP JOINTS 6" MIN. AND SEAL WITH MANUFACTURER'S TAPE.

   E. SEAL ALL PENETRATIONS (INCLUDING PIPES) WITH MANUFACTURER'S PIPE BOOT.

   F. NO PENETRATION OF THE VAPOR RETARDER IS ALLOWED EXCEPT FOR REINFORCING STEEL AND PERMANENT UTILITIES SEALED PER MANUFACTURE'S INSTRUCTIONS.

Foundation Damp-Proofing

1. SUBMITTALS
   A. SUBMIT PRODUCT DATA FOR EACH TYPE OF PRODUCT SPECIFIED, INCLUDING DATA SUBSTANTIATING THAT MATERIALS COMPLY WITH LOCAL REGULATIONS CONTROLLING USE OF VOLATILE ORGANIC COMPOUND (VOCS).

2. MANUFACTURERS
   A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
   - COLD-APPLIED, ASPHALT EMULSION DAMPPROOFING: CHEMREX, INC.; SONNEBORN BUILDING & PRODUCTS DIVISION
   - EQUAL.

3. TROWEL GRADE
   A. EMULSIFIED ASPHALT MASTIC COMPLYING WITH ASTM D 1187, TYPE I.

4. APPLICATION
   A. APPLY 1 OR 2 COATS AT A MINIMUM RATE OF 7 GAL/ 100 SF. APPLY VERTICAL DAMPPROOFING DOWN WALLS FROM FINISHED-GRADE LINE TO TOP OF FOOTING, EXTEND OVER TOP OF FOOTING, AND DOWN FULL FACE OF FOOTING TO EARTH. DO NOT EXTEND ONTO SURFACES EXPOSED TO VIEW WHEN THE PROJECT IS COMPLETED.

Cement Concrete Paving

FULLY COORDINATE ALL CONCRETE REQUIREMENTS w/ STRUCTURAL DRAWINGS AND PROJECT SPECIFICATION. IN ANY CASE WHERE THE NOTES BELOW AND STRUCTURAL REQUIREMENTS CONFLICT, THE STRUCTURAL REQUIREMENTS WILL PREVAIL:

1. REINFORCING BARS AND TIE BARS: #4 DEFORMED STEEL MIN. AT 16" O.C. EACH WAY U.O.N.

2. CONCRETE MATERIALS: PORTLAND CEMENT - ASTM C 150, NORMAL WEIGHT AGGREGATE, COMPRESSIVE STRENGTH 3500 PSI AT 28 DAYS. MAXIMUM WATER-CEMENT RATIO OF

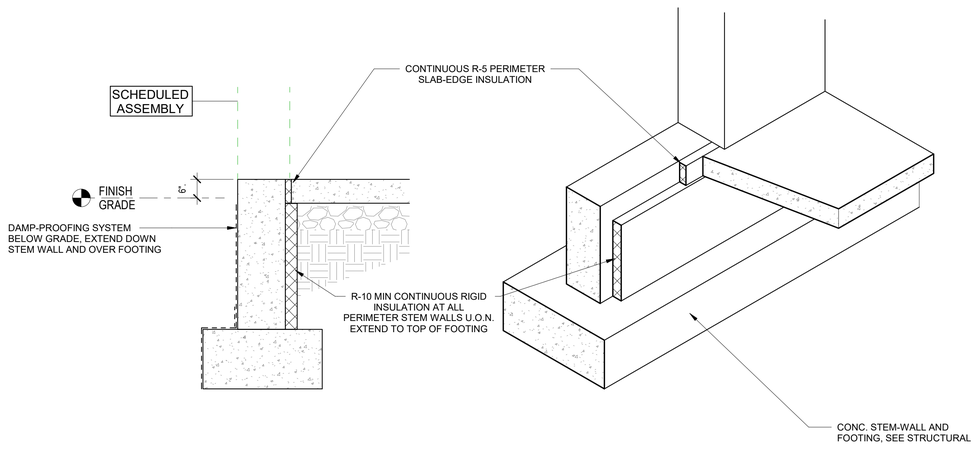
3. EXPANSION- AND ISOLATION-JOINT-FILLER STRIPS: ASPHALT-SATURATED CELLULOSE FIBER OR ASTM D 1752, CORK OR SELF-EXPANDING CORK.

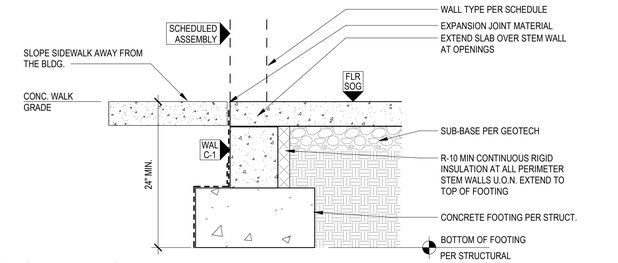
4. COLOR MATERIALS: WHERE INDICATED ON PLANS, ASTM C 979, SYNTHETIC MINERAL-OXIDE PIGMENTS OR COLORED WATER-REDUCING ADMIXTURES, TEMPERATURE STABLE, NON-FADING, AND ALKALI RESISTANT, COLOR FROM MANUFACTURER'S STANDARD PALETTE.
5. FINISHES:
   a. BROOM FINISH: APPLY A NON-SLIP BROOM FINISH TO ALL EXTERIOR CONCRETE PAVING SURFACES PERPENDICULAR TO THE DIRECTION OF TRAVEL AND TO ALL CONCRETE PLATFORMS, STEPS, AND RAMPS.

6. DECORATIVE FINISH: AS NOTED ON PLAN

7. COLD-APPLIED JOINT SEALANTS:
   A. SINGLE-COMPONENT POURABLE URETHANE. COLOR FROM MANUFACTURER'S STANDARD RANGE.
   B. FORM ISOLATION JOINT TO ALLOW ¾" X ¾" SEALANT JOINT, STRUCK FLUSH WITH CONCRETE.

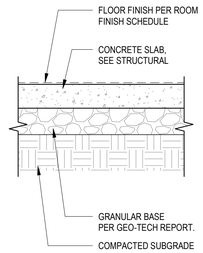
Foundation/Slab and Moisture & Vapor Control Diagram





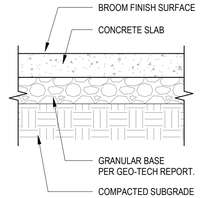
1 Slab at Wall Openings
1" = 1'-0"

SLAB ON GRADE ASSEMBLY GRAPHIC

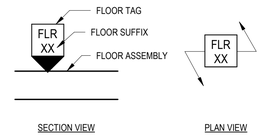


SUFFIX	LOCATION	FINISH
SOG 1	INTERIOR FLOOR SLABS	STANDARD STEEL TROWEL
SOG 2	SIDEWALKS	STANDARD BROOM

CAST IN PLACE SIDEWALK ASSEMBLY GRAPHIC



FLOOR ASSEMBLY TAG LEGEND



ASSEMBLY NOTES

1. WHERE ASSEMBLIES ARE NOT TAGGED WITH "TAG SYMBOLS" REFER TO GRAPHICAL LEGEND FOR DEFAULT TYPE.
2. VERIFY SUB-GRADE REQUIREMENTS WITH PROJECT GEO-TECHNICAL REPORTS/RECOMMENDATIONS.
3. VERIFY SLAB REQUIREMENTS WITH PROJECT GEO-TECHNICAL REPORTS/RECOMMENDATIONS, COORDINATE ADDITIONAL REQUIREMENTS w/ STRUCTURAL DRAWINGS.
4. ALL UNDER-SLAB MATERIALS AND PREPARATION SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF ACI 302.1 *GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION* AS AMENDED AND PROJECT GEO-TECHNICAL REPORTS/RECOMMENDATIONS AND STRUCTURAL REQUIREMENTS O.N.U.
5. ALL FLOOR AND SLAB CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF ACI 302.1 Guide for Concrete Floor and Slab Construction AS AMENDED, O.N.U., SEE STRUCTURAL

Bernardo Wills

153 SOUTH JEFFERSON
SPOKANE WASHINGTON 99201
WWW.BERNARDOWILLS.COM
509.838.4511 FAX:509.838.4605

4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

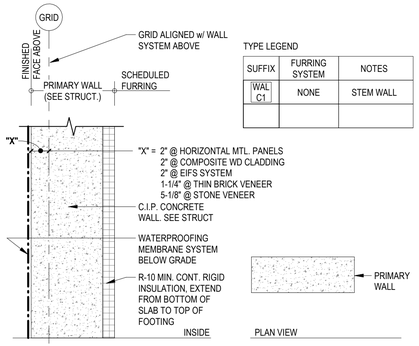
Permit Set

6/2/23

Revision Schedule

Foundation, SOG Assemblies, Details, & Schedule

A0.1

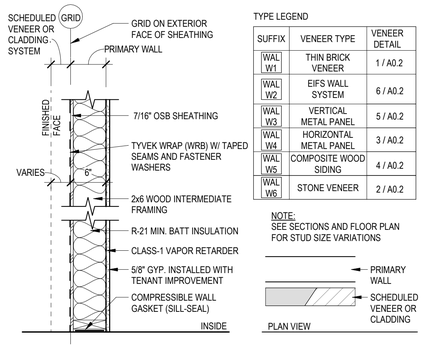


TYPE LEGEND

SUFFIX	FURRING SYSTEM	NOTES
WAL C1	NONE	STEM WALL

C Foundation Wall

1" = 1'-0"



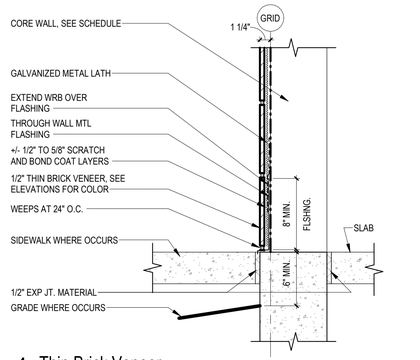
TYPE LEGEND

SUFFIX	VENEER TYPE	VENEER DETAIL
WAL W1	THIN BRICK VENEER	1 / A0.2
WAL W2	EIFS WALL SYSTEM	6 / A0.2
WAL W3	VERTICAL METAL PANEL	5 / A0.2
WAL W4	HORIZONTAL METAL PANEL	3 / A0.2
WAL W5	COMPOSITE WOOD SIDING	4 / A0.2
WAL W6	STONE VENEER	2 / A0.2

NOTE:
SEE SECTIONS AND FLOOR PLAN FOR STUD SIZE VARIATIONS

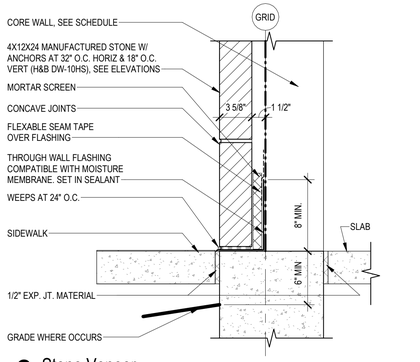
W Wood Stud Exterior Wall

1" = 1'-0"



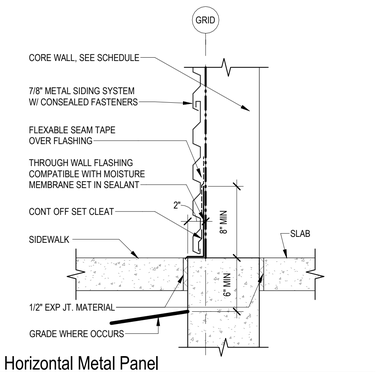
1 Thin Brick Veneer

1 1/2" = 1'-0"



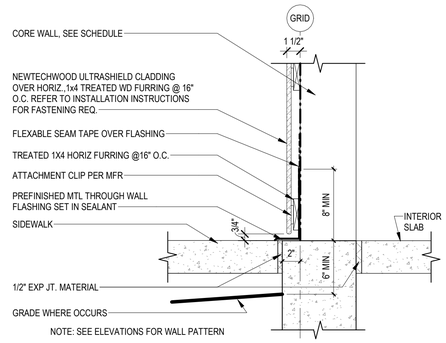
2 Stone Veneer

1 1/2" = 1'-0"



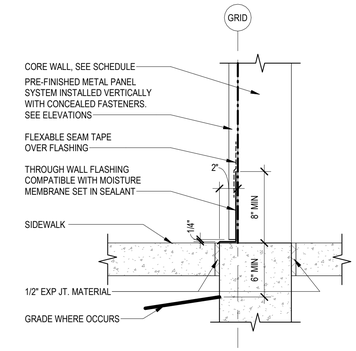
3 Horizontal Metal Panel

1 1/2" = 1'-0"



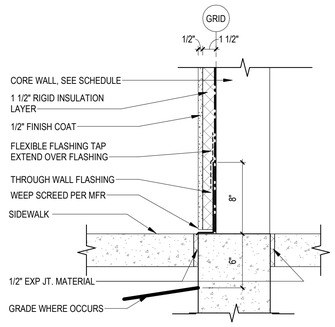
4 Composite Wood Cladding

1 1/2" = 1'-0"



5 Vertical Metal Panel

1 1/2" = 1'-0"



6 EIFS Stucco System

1 1/2" = 1'-0"

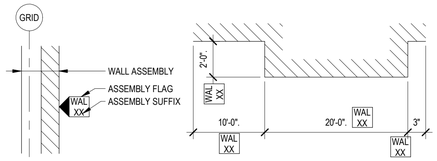
CONTRACTOR TO COORDINATE LOCATIONS OF SCHEDULED SHEATHING WITH FLOOR PLAN, ROOM DESIGNATION AND WALL FINISH CONDITIONS. FIRE RATINGS ARE TO BE MAINTAINED WHERE INDIATED.	
5/8" TYPE 'X' GYP. BD.	ALL PARTITIONS U.N.O. OR SHOWN GRAPHICALLY OTHERWISE
5/8", TYPE 'X', ABUSE RESISTANT GYP. BD.	AS IDENTIFIED ON PLANS
5/8", TYPE 'X',WATER RESISTANT GYP. BD.	PROVIDE BEHIND ALL 'WET WALL' PARTITIONS WITH PLUMBING FIXTURES (TOILETS, URINALS, LAVATORIES, ETC) TO A HEIGHT OF 4'-0" A.F.F. AND 4'-0" EACH SIDE OF FIXTURE.
5/8", CEMENT BACKER BOARD (USG DUROCK TYPE DCB OR EQUAL) W/ MOISTURE BARRIER MEMBRANE SYSTEM	USE AT PARTITIONS EXPOSED DIRECTLY TO RUNNING WATER OR SCHEDULED TO RECEIVE CERAMIC TILE.
5/8", TYPE 'X', MOISTURE RESISTANT GYP. BD.	USE AT ALL TOILET ROOMS AND JANITOR CLOSETS IN AREAS WHERE WATER RESISTANT OR CONCRETE CEMENT BOARD IS NOT USED.
5/8", TYPE 'X', GYP. BD. AND 1/2", FIRE TREATED, PLYWOOD SHEATING	MECHANICAL ROOM PARTITIONS TO RECEIVE ELECTRICAL OR TELECOMMUNICATIONS EQUIPMENT.

1. PROVIDE DEFLECTION TRACKS AND/OR CLIPS FOR ALL PARTITIONS ABUTTING STRUCTURE ABOVE.
2. EXTEND SOUND ATTENUATION INSULATION THE FULL WIDTH AND HEIGHT OF WALL.
3. MAINTAIN THE FIRE PROTECTION RATINGS FOR ALL OPENINGS IN RATED PARTITIONS.
4. REFER TO GYPSUM BOARD SCHEDULE ON THIS SHEET AND SUBSTITUTE MATERIALS WHERE NOTED.
5. PROVIDE 20 GAUGE DOUBLE STUDS @ EACH DOOR & WINDOW JAMB.
6. METAL STUD FRAMING: 16" O.C. UNLESS NOTED OTHERWISE. STUD GAGE TO BE DETERMINED BY MANUFACTURES LOAD TABLES AND STRUCTURAL ENGINEERING.
7. BLOCKING: PROVIDE 16 GAUGE SHEET METAL STRAP BLOCKING OR FIRE TREATED WOOD BLOCKING FOR ALL WALL MOUNTED ITEMS UNLESS NOTED OTHERWISE.
8. WHERE FURRING IS INSTALLED AT EXTERIOR WALLS INSTALL CLASS-I VAPOR RETARDER SYSTEM BEHIND GYP. BD. SEAL ALL EDGES AND PENETRATIONS.
9. REFER TO "TYPICAL COLUMN FURRING" DIAGRAM WHERE STRUCTURAL COLUMNS OR OBSTACLES PROTRUDE FROM THE WALL SURFACE.

Partition Sheathing Schedule & Notes

MATERIAL DESIGNATION	DESCRIPTION OF CONSTRUCTION
W	WOOD CONSTRUCTION
S	STEEL CONSTRUCTION
M	MASONRY CONSTRUCTION
C	CONCRETE CONSTRUCTION
NOTES:	
1. NOTE	

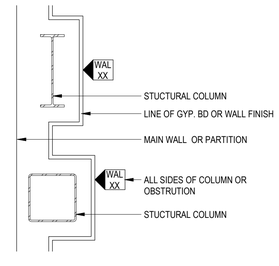
Project Construction Type Legend



NOTES:

1. STEM WALL TO ALIGN WITH FACE OF VENEER FINISH ABOVE.
2. WHERE WALLS ARE NOT FLAGGED W/ 'FLAG SYMBOLS', REFER TO GRAPHICAL LEGEND FOR DEFAULT PARTITION TYPES.
3. REFER TO "TYPICAL COLUMN FURRING" DIAGRAM WHERE STRUCTURAL COLUMNS OR OBSTACLES PROTRUDE FROM THE INTERIOR SIDE OF THE WALL SURFACE.
4. DELETE BRICK LEDGE AND RAISE FLASHING TO SLAB LEVEL WHERE SIDE WALKS ARE ADJACENT TO STEM WALL.
5. PLACE SEALANT TAPE OR EQUIVALENT BETWEEN WALL TIES AND WEATHER BARRIER, PER MANUFACTURERS REQUIREMENTS, WHERE FASTENERS PENETRATE THE WEATHER BARRIER.

Partition Flag Legend



Typical Column Furring

Bernardo Wills

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4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

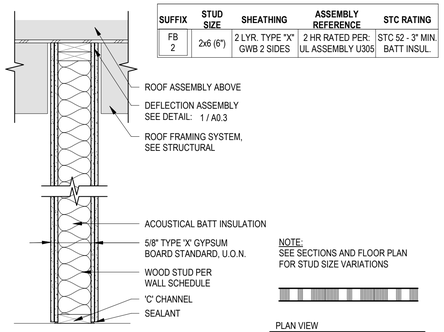
Permit Set

6/2/23

Revision Schedule

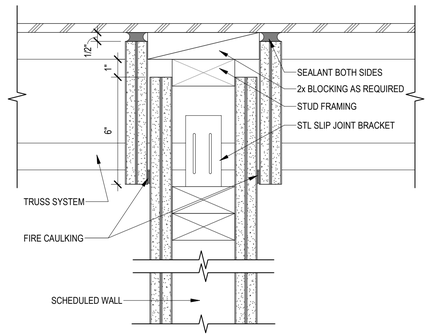
Exterior Wall Schedules & Details

A0.2



SUFFIX	STUD SIZE	SHEATHING	ASSEMBLY REFERENCE	STC RATING
FB 2	2x6 (6")	2 LYR. TYPE "X" GWB 2 SIDES	2 HR RATED PER: UL ASSEMBLY U305	STC 52 - 3" MIN. BATT INSUL.

B Fire Barrier Assembly
1" = 1'-0"

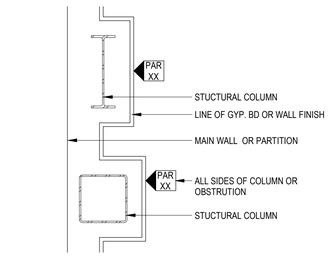


1 Slip Joint Bracket
3" = 1'-0"

CONTRACTOR TO COORDINATE LOCATIONS OF SCHEDULED SHEATHING WITH FLOOR PLAN, ROOM DESIGNATION AND WALL FINISH CONDITIONS. FIRE RATINGS ARE TO BE MAINTAINED WHERE INDIATED.	
5/8" TYPE 'X' GYP. BD.	ALL PARTITIONS U.N.O. OR SHOWN GRAPHICALLY OTHERWISE
5/8", TYPE 'X', ABUSE RESISTANT GYP. BD.	AS IDENTIFIED ON PLANS
5/8", TYPE 'X' WATER RESISTANT GYP. BD.	PROVIDE BEHIND ALL 'WET WALL' PARTITIONS WITH PLUMBING FIXTURES (TOILETS, URINALS. LAVATORIES, ETC) TO A HEIGHT OF 4'-0" A.F.F. AND 4'-0" EACH SIDE OF FIXTURE.
5/8", CEMENT BACKER BOARD (USG DUROCK TYPE DCB OR EQUAL) W/ MOISTURE BARRIER MEMBRANE SYSTEM	USE AT PARTITIONS EXPOSED DIRECTLY TO RUNNING WATER OR SCHEDULED TO RECEIVE CERAMIC TILE.
5/8", TYPE 'X', MOISTURE RESISTANT GYP. BD.	USE AT ALL TOILET ROOMS AND JANITOR CLOSETS IN AREAS WHERE WATER RESISTANT OR CONCRETE CEMENT BOARD IS NOT USED.
5/8", TYPE 'X', GYP. BD. AND 1/2", FIRE TREATED, PLYWOOD SHEATING	MECHANICAL ROOM PARTITIONS TO RECEIVE ELECTRICAL OR TELECOMMUNICATIONS EQUIPMENT.

1. PROVIDE DEFLECTION TRACKS AND/OR CLIPS FOR ALL PARTITIONS ABUTTING STRUCTURE ABOVE.
2. EXTEND SOUND ATTENUATION INSULATION THE FULL WIDTH AND HEIGHT OF WALL.
3. MAINTAIN THE FIRE PROTECTION RATINGS FOR ALL OPENINGS IN RATED PARTITIONS.
4. REFER TO GYPSUM BOARD SCHEDULE ON THIS SHEET AND SUBSTITUTE MATERIALS WHERE NOTED.
5. PROVIDE 20 GAUGE DOUBLE STUDS @ EACH DOOR & WINDOW JAMB.
6. STUD FRAMING: 16" O.C. UNLESS NOTED OTHERWISE. STUD SIZE TO BE DETERMINED STRUCTURAL ENGINEERING.
7. BLOCKING: PROVIDE 16 GAUGE SHEET METAL STRAP BLOCKING OR FIRE TREATED WOOD BLOCKING FOR ALL WALL MOUNTED ITEMS UNLESS NOTED OTHERWISE.
8. WHERE FURRING IS INSTALLED AT EXTERIOR WALLS INSTALL CLASS-I VAPOR RETARDER SYSTEM BEHIND GYP. BD. SEAL ALL EDGES AND PENETRATIONS.
9. REFER TO "TYPICAL COLUMN FURRING" DIAGRAM WHERE STRUCTURAL COLUMNS OR OBSTACLES PROTRUDE FROM THE WALL SURFACE.

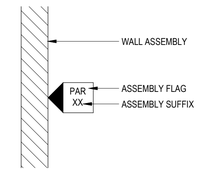
Assemblies_PAR_Sheathing Schedule & Partition Notes
1" = 1'-0"



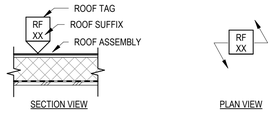
Typical Column Furring
1" = 1'-0"

MATERIAL DESIGNATION	DESCRIPTION OF CONSTRUCTION
W	WOOD CONSTRUCTION
S	STEEL CONSTRUCTION
M	MASONRY CONSTRUCTION
C	CONCRETE CONSTRUCTION
NOTES:	
1. NOTE	

Project Construction Type Legend
1" = 1'-0"

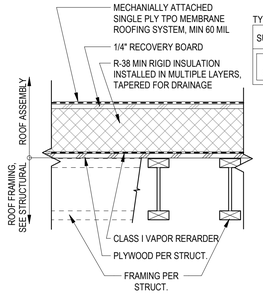


WAL-INT_Partition Flag Legend



NOTES:
1. WHERE ROOF ASSEMBLIES ARE NOT FLAGGED WITH 'FLAG SYMBOLS', REFER TO GRAPHICAL LEGEND FOR DEFAULT PARTITION TYPES
2. FLAGGED ROOF ASSEMBLY TYPES ARE ADDITIONAL ROOF ASSEMBLY VARIATIONS AS SHOWN ON THIS SHEET.
3. PROVIDE WALK PADS AS RECOMMENDED BY THE MEMBRANE MANUFACTURER ON ALL SIDES OF MECHANICAL EQUIPMENT AND ROOF HATCH AT LOW SLOPE SINGLE PLY MEMBRANE ROOF SYSTEMS
4. ON SLOPED ROOF ASSEMBLIES PROVIDE ICE AND WATER SHIELD MEMBRANE AT EAVE, RIDGE, HIP RIDGE AND VALLEY CONDITIONS. INSTALL PER CODE AND MANUFACTURERS REQUIREMENTS.
5. PROVIDE WEAR PADS UNDER ROOF TOP PIPE SUPPORTS.
6. REFER TO ROOF PLAN SHEET FOR ADDITIONAL DETAILS INCLUDING EAVES, VALLEYS, RIDGES, PENITRATIONS, ROOF DRAINS AND EQUIPMENT CURBS.

Roof Flag Legend & Notes



TYPE LEGEND

SUFFIX	ROOFING SYSTEM	ROOF SYSTEM DETAIL
RF SP1	MECHANICALLY FASTENED TPO	-

Roof Assemblies

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Richland, Washington

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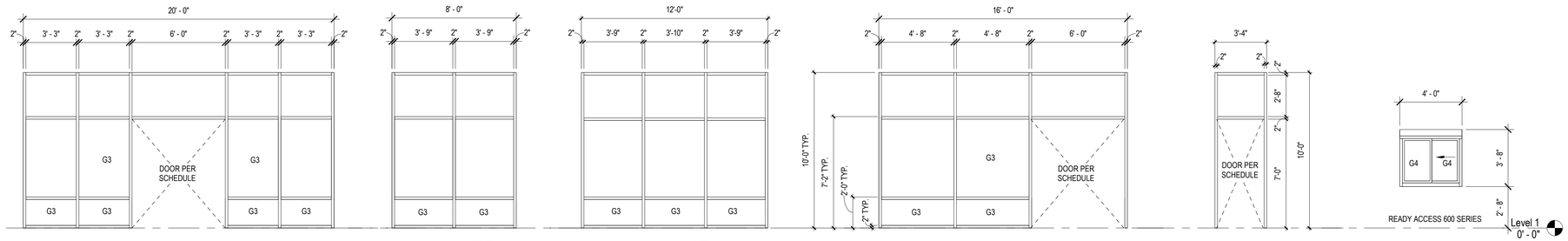
Revision Schedule

Int. Partitions, Roof Assy., Schedules & Details

A0.3



SF A Storefront - A — NOTE: STOREFRONT SYSTEM BASIS OF DESIGN: KAWNEER 451T

SF B Storefront - B — NOTE: STOREFRONT SYSTEM BASIS OF DESIGN: KAWNEER 451T

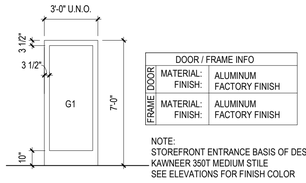
SF C Storefront - C — NOTE: STOREFRONT SYSTEM BASIS OF DESIGN: KAWNEER 451T

SF D Storefront - D — NOTE: STOREFRONT SYSTEM BASIS OF DESIGN: KAWNEER 451T

SF E Storefront - E

W 1 Drive Thru Window

ALUMINUM STORE FRONT DOORS



DOOR / FRAME INFO		
FRAME: DOOR	MATERIAL:	ALUMINUM
	FINISH:	FACTORY FINISH
	MATERIAL:	ALUMINUM
	FINISH:	FACTORY FINISH

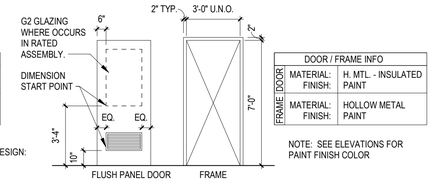
NOTE: STOREFRONT ENTRANCE BASIS OF DESIGN: KAWNEER 350T MEDIUM STILE SEE ELEVATIONS FOR FINISH COLOR

DOOR TYPE - 1

TAG	DOOR TYPE	NOTES
1A	6'-0" x 7'-0" PAIR	
1B	6'-0" x 7'-0" SINGLE	

1. SEE STOREFRONT TYPES FOR FRAME CONFIGURATION.

HOLLOW METAL DOORS



DOOR / FRAME INFO		
FRAME: DOOR	MATERIAL:	H. MTL. - INSULATED
	FINISH:	PAINT
	MATERIAL:	HOLLOW METAL
	FINISH:	PAINT

NOTE: SEE ELEVATIONS FOR PAINT FINISH COLOR

DOOR TYPE - 2

TAG	DOOR TYPE	NOTES
2A	FLUSH PANEL	

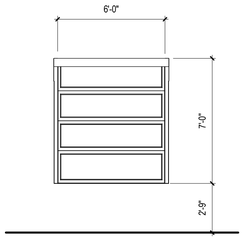
1. DOORS ARE TO BE INSULATED AT EXTERIOR LOCATIONS W/ MIN. U-VALUE OF .37
2. REFER TO SCHEDULE ABOVE FOR DOOR CONFIGURATIONS.

DOOR INDEX

DOOR NUMBER	DOOR TYPE	HARDWARE GROUP	NOTES
101A	1A	02	
101B	2A	01	
102A	1A	02	
102B			FOLDING OVERHEAD DOOR
102C	2A	01	
102D	1B	2A	SF
103A	1A	02	
103B	2A	01	
104	2A	02	MECH. RM.

Door Types & Schedule

OVERHEAD FOLD-UP GLASS DOOR



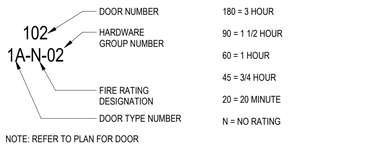
DOOR / FRAME INFO		
FRAME: DOOR	MATERIAL:	ALUMINUM
	FINISH:	PER MFR.
	MATERIAL:	ALUMINUM
	FINISH:	PER MFR.

NOTE: SEE ELEVATIONS FOR FINISH COLOR

DOOR TYPE - OH

TAG	DOOR TYPE	NOTES
OHF	FOLDING OVERHEAD DOOR	MFR: RENLITA, MODEL: SOVEREIGN

Door Annotation Diagram



NOTE: REFER TO PLAN FOR DOOR HANDING CONFIGURATION

Door Fire Rating Legend

180 = 3 HOUR

90 = 1 1/2 HOUR

60 = 1 HOUR

45 = 3/4 HOUR

20 = 20 MINUTE

N = NO RATING

1. INTERIOR DOORS TO BE 1-3/4" THICK, UNLESS NOTED OTHERWISE.
2. REDUCER STRIPS (THRESHOLDS) & FLOORING TRANSITIONS WHERE INDICATED SHALL BE CENTERED UNDER DOORS.
3. COORDINATE ALL KEYING WITH OWNER.
4. 2" DOOR / RELITE FRAME, 2" AT SILLS TYP. U.N.O.
5. ALL DOOR / RELITE FRAME OVERALL DIMENSIONS ARE ROUGH OPENING DIMENSIONS, FIELD VERIFY PRIOR TO THE INSTALLATION WORK.

Group-01 — Rear Door

3 EA	HINGES	HAGER BB1168
1 EA	EXIT DEVICE	VON DUPRIN 33A WITH CYLINDER AND EXTERIOR LATCH
1 EA	DOOR BOTTOM	PEMKO 315_N
1 EA	O.H. STOP	ROCKWOOD OH901S
1 EA	GASKET	PEMKO S88
1 EA	THRESHOLD	PEMKO 271 SADDLE THRESHOLD
1 EA	DOOR TOP RAIN GUARD	PEMKO 346

Group-02 — Storefront Door: Double (Egress)

2 SET.	OFFSET PIVOTS	PROVIDED BY STOREFRONT MANUFACTURER
2 EA.	EXIT DEVICE	VON DUPRIN 33A, CONCEALED VERITICAL ROD AND CYLINDER
2 SET	PUSH/PULL	KAWNEER CP11/C0-9
1 EA	THRESHOLD	PEMKO 271 SADDLE THRESHOLD.
2 EA	CLOSER (PARALLEL ARM)	LCN 4110 SERIES PARALLEL ARM
1 SET	WEATHER STRIPPING	MANUFACTURERS STANDARD REPLACEABLE WEATHER-STRIPPING
1 EA	1" VINYL LETTERING	'DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS' MOUNTED ON THE INTERIOR TOP DOOR FRAME

Group-2A — Storefront Door: Single (Egress)

1 SET.	OFFSET PIVOTS	PROVIDED BY STOREFRONT MANUFACTURER
1 EA	EXIT DEVICE	VON DUPRIN 33A, CONCEALED VERITICAL ROD AND CYLINDER
1 SET	PUSH/PULL	KAWNEER CP11/C0-9
1 EA	THRESHOLD	PEMKO 271 SADDLE THRESHOLD.
1 EA	CLOSER (PARALLEL ARM)	LCN 4110 SERIES PARALLEL ARM
1 SET	WEATHER STRIPPING	MANUFACTURERS STANDARD REPLACEABLE WEATHER-STRIPPING
1 EA	1" VINYL LETTERING	'DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS' MOUNTED ON THE INTERIOR TOP DOOR FRAME

Group-03 — Folding Overhead Door

HARDWARE PROVIDED BY MANUFACTURER

Door Graphic Legend and General Notes

DR - Door Hardware Groups

Glazing Types

LABEL	TYPE	LOCATION	GLAZING PROPERTIES
G1	1/4" SINGLE PANEL	INTERIOR	CLEAR ANNEALED FLOAT GLASS: ASTM C 1036, TYPE I, CLASS 1 (CLEAR), QUALITY-Q3
G2	1" INSULATED	EXTERIOR	SOLARBAN 70XL (OPTIGRAY + CLEAR) INSULATED-GLASS UNITS: FACTORY-ASSEMBLED UNITS CONSISTING OF SEALED LITES OF GLASS SEPARATED BY A DEHYDRATED INTERSPACE, QUALIFIED ACCORDING TO ASTM E 2190. 1. SEALING SYSTEM: DUAL SEALS. 2. PERIMETER SPACER: MANUFACTURER'S STANDARD SPACER MATERIAL AND CONSTRUCTION.
			PERFORMANCE REQUIREMNETS: U-VALUE 0.24 | SHGC 0.27 | VLT 64% | EVLR 12%
G3	1" INSULATED	EXTERIOR	SAME AS G2 - TEMPERED PER ASTM C 1048
G4	3/4" INSULATED	EXTERIOR	DRIVE THROUGH WINDOW SYSTEM WITH SOLARBAN 70XL GLAZING
			PERFORMANCE REQUIREMNETS: U-VALUE 0.24 | SHGC 0.20 | VLT 64%

NOTES:

1. EACH INDIVIDUAL DIFFERENT FENESTRATION TYPE MUST BE SPECIFIED TO HAVE FACTORY LABEL ADHERED TO THE PRODUCT TO INDICATE THE PERFORMANCE VALUES AND TESTING STANDARD USED TO ACHEIVE THESE VALUES. THE LABELS AT A MINIMUM SHOULD INCLUDE THE FOLLOWING PERFORMANCE STANDARDS AND THE ASSOCIATED TESTING STANDARD:

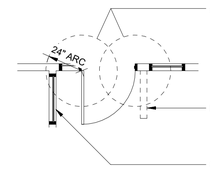
STOREFRONT	(U-VALUE, SHGC, & LEAKAGE RATE)
WINDOES	(U-VALUE, SHGC, & LEAKAGE RATE)
GLASS ENTRY DOORS	(U-VALUE, SHGC, & LEAKAGE RATE)
OPAQUE EXTERIOR SWINGING DOORS	(U-VALUE, & LEAKAGE RATE)

2. TEMPERED GLAZING PER ASTM C 1048 WHERE OCCURS, SEE OPENING TYPES
3. GLAZING TO BE 'G2' UNLESS NOTED OTHERWISE

Tempered Glazing Locations

COORDINATE GLAZING ASSEMBLIES TO RECEIVE TEMPERED GLAZING w/ PLANS AND PROVIDED WHERE ANY OF THE FOLLOWING CONDITIONS OCCUR:

1. TEMPERED (SAFETY GLAZING) SHALL BE PROVIDED AT HAZARDOUS LOCATIONS PER 2018 IBC 2406.4. TEMPERED GLAZING IS TO MEET THE IMPACT AND IDENTIFICATION REQUIREMENTS OF IBC SECTIONS 2406.1 - 2406.3.
   a. GLAZING IN DOORS. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED HAZARDOUS LOCATIONS.
2. TEMPERED GLAZING ADJACENT TO DOORS (IBC 2406.4.2)

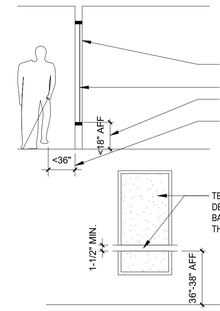


a. TEMPERED GLAZING IS REQUIRED AT INDIVIDUAL FIXED OR OPERABLE GLAZED PANELS ADJANCENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE OF THE NEAREST EDGE OF THE GLAZING IS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF THE DOOR IN THE CLOSED POSITION AND THE BOTTOM OF EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE.

b. TEMPERED GLAZING IS NOT REQUIRED WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER SEPARATING THE DOOR AND GLAZING.

c. TEMPERED GLAZING IS NOT REQUIRED AT GLAZING IN WALLS ON THE LATCH SIDE OF AND PERPENDICULAR TO THE PLANE OF THE CLOSED DOOR IN RESIDENTIAL DWELLING UNITS OF GROUP R-2 OCCUPANCIES.

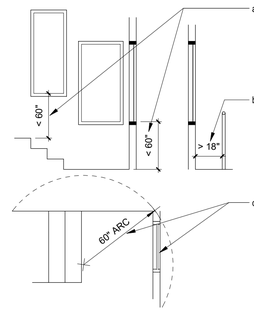
3. TEMPERED GLAZING IN WINDOWS (PER 2015 IBC 2406.4.3)



TEMPERED GLAZING IN AN INDIVIDUAL FIXED OR ALL OF THE OPERABLE PANELS IS REQUIRED WHERE FOLLOWING CONDITIONS ARE MET:
- THE TOP EDGE OF THE GLAZING IS GREATER THAN 36" INCHES ABOVE THE FLOOR.
- EXPOSED AREA OF PANE IS GREATER THAN 9 SF.
- THE BOTTOM OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR.
- ONE OR MORE WALKING SURFACE(S) ARE WITHIN 36".

TEMPERED GLAZING IS NOT REQUIRED FOR DECORATIVE GLAZING OR WHEN A PROTECTIVE BAR IS INSTALLED ON THE ACCESSIBLE SIDE OF THE GLAZING

4. TEMPERED GLAZING AND WET SURFACES (PER 2015 IBC 2406.4.5)
   a. TEMPERED GLAZING IS REQUIRED IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE ANY STANDING OR WALKING SURFACE. THIS IS TO APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE GLAZING
5. TEMPERED GLAZING ADJACENT TO STAIRWAYS, RAMPS AND BOTTOM STAIRWAY LANDING (PER 2015 IBC 2406.4.6 & 2406.4.7)



a. TEMPERED GLAZING IS REQUIRED WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS. FROM THE BOTTOM TREAD NOSING.

b. TEMPERED GLAZING IS NOT REQUIRED TO THE SIDE OF A STAIRWAY, LANDING OR RAMP WHERE THE GLAZING IS PROTECTED BY A GUARD COMPLYING WITH IBC SECTIONS 1015 & 1607.8, AND THE PLANE OF THE GLAZING IS GREATER THAT 18" HORIZONTALLY FROM THE RAILING.

c. TEMPERED GLAZING IS REQUIRED AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 60" ABOVE THE LANDING AND WITHIN A 60" HORIZONTAL ARC THAT IS LESS THAN 18/0 DEGREES FROM THE BOTTOM TREAD NOSING.

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4198 REGISTERED ARCHITECT
GARY M. BERNARDO STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

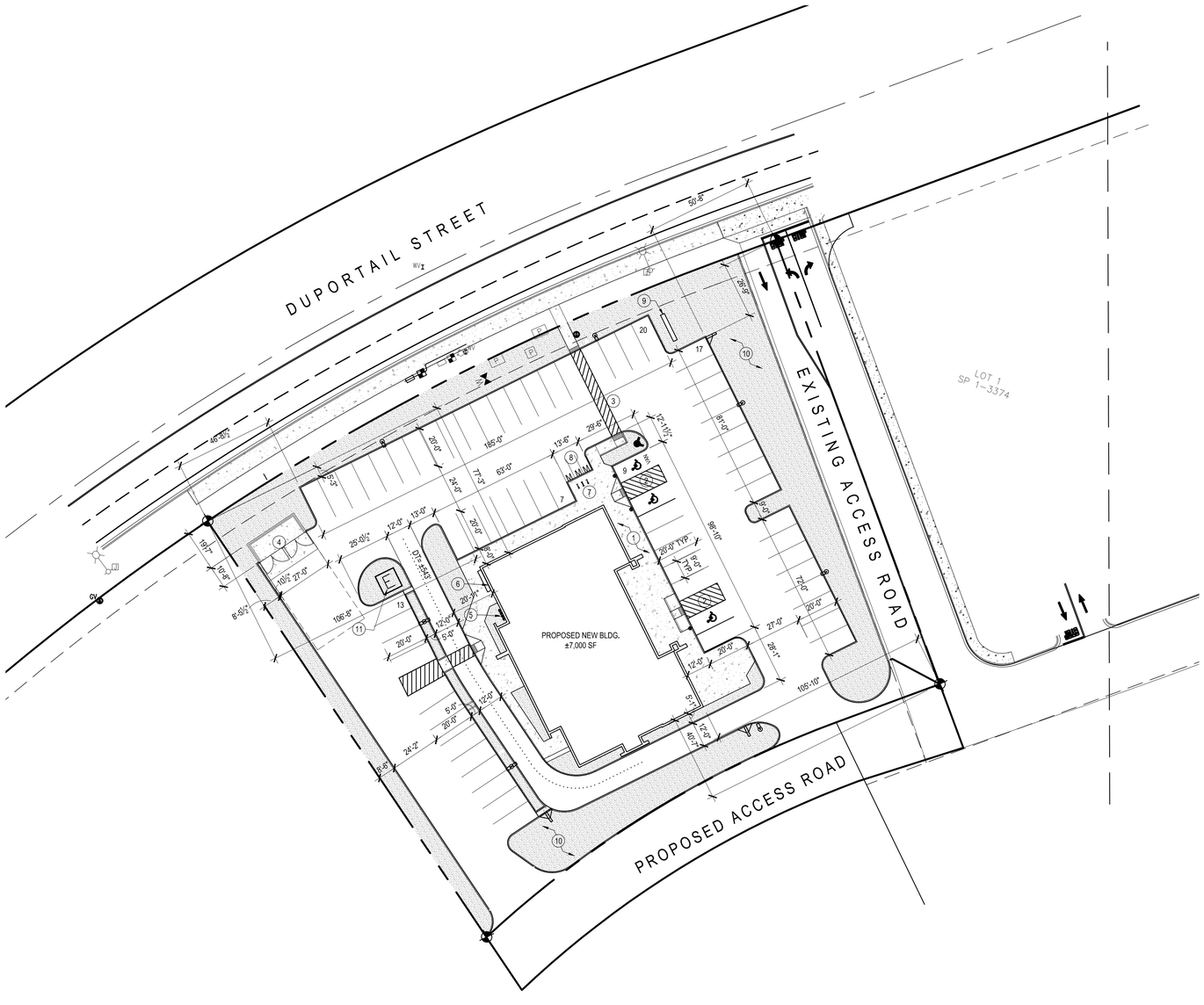
Permit Set

6/2/23

Revision Schedule

Storefronts, Doors, Windows & Hardware Schedules

A0.4



Site Plan

Scale: 1" = 30'-0"

Site Plan General Notes

1. COORDINATE LOCATIONS OF SITE FEATURES AND UTILITY LOCATIONS WITH CIVIL DRAWINGS

Keyed Notes

1. CONCRETE SIDEWALK, SEE CIVIL
2. ACCESSIBLE PARKING STALLS & SIGN, SEE 1/A1.2
3. ACCESSIBLE PATH OF TRAVEL
4. TRASH ENCLOSURE, SEE 7/A1.2
5. GAS METERS AND EQUIPMENT,COORDINATE LOCATION WITH SERVICE PROVIDER.
6. ELECTRICAL METERS AND EQUIPMENT, VERIFY LOCATION, SEE ELECTRICAL.
7. BIKE RACK, SEE DETAIL 2/A1.2
8. MOTORCYCLE PARKING STALLS
9. SUGGESTED PYLON SIGN LOCATION
10. PROPOSED SWALE LOCATIONS - SEE CIVIL
11. ELECTRICAL TRANSFORMER - SEE CIVIL

Site Graphic Legend & Symbols

ACCESSIBLE PEDESTRIAN ROUTE OF TRAVEL ACROSS A VEHICULAR WAY PER ANSI 117.1, DOJ GUIDELINES FOR ACCESSIBILITY AND ISSUING JURISDICTION'S ENGINEERING STANDARDS, SEE CIVIL.

INTERIOR LANDSCAPING TREES, PER ISSUING JURISDICTION APPROVED TREE LIST, WHERE APPLICABLE, SEE LANDSCAPE PLANS.

ON-SITE DIRECTIONAL MARKINGS PER ISSUING JURISDICTION'S ENGINEERING STANDARDS, SEE CIVIL.

CONCRETE PAVING OR WALKS. SAW CUTS, TOOLED OR PRE-FORMED JOINTS ONLY. STAMPED / TEXTURED CONCRETE PAVING NOT ALLOWED.

LANDSCAPING, SEE LANDSCAPE PLANS

BICYCLE RACK, SEE SITE DETAIL SHEET: A1.1/ 2

Property Summary

THE SUBJECT PROPERTY IS COMPRISED OF THE LOT(S) BELOW:

PARCEL ADDRESS	PARCEL NUMBER	ZONING / LAND USE	PARCEL AREA (ASSESSED)
DUPORTAIL ST	RS 1-4556	C-2 (COMMERCIAL)	±9.53 AC

Site Plan Info

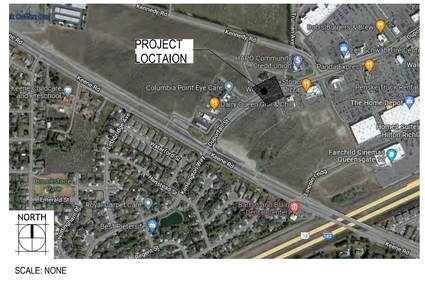
BUILDING(S) AREA & REQUIRED PARKING

BUILDING INFORMATION		MIN. REQUIRED PARKING	
BLDG or SPACE	BLDG AREA	PARK RATIO (BY USE)	MINIMUM REQUIRED
SUITE 'A' - RESTAURANT	± 2,000 SF	1: 100	20.0 STALLS
SUITE 'B' - RESTAURANT	± 3,000 SF	1: 100	30.0 STALLS
SUITE 'C' - RETAIL	± 2,000 SF	1: 300	6.7 STALLS
TOTAL:	**±7,000 SF**		**57 STALLS**

PROVIDED PARKING INFORMATION:

PROVIDED STANDARD PARKING STALLS:	66 STALLS
PROVIDED ADA PARKING STALLS:	3 STALLS
TOTAL ON-SITE PARKING PROVIDED:	**69 Stalls**
DEVELOPMENT PARKING RATIO:	9.9 STALLS / 1,000 SF
MOTOR CYCLE STALLS (RICHLAND MUNICIPAL CODE, 23.54.040)	3 STALLS
BICYCLE STALLS (RICHLAND MUNICIPAL CODE, 23.54.050)	7 STALLS

Vicinity Map



SCALE: NONE

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4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

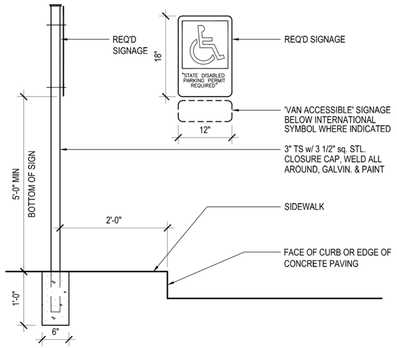
Permit Set

6/2/23

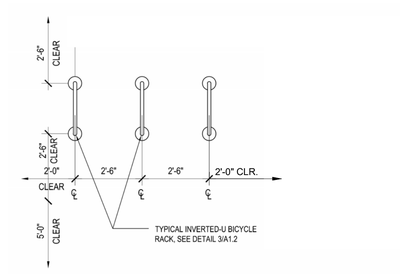
Revision Schedule

ARCH.
SITE PLAN

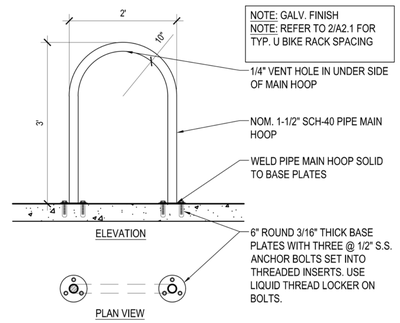
A1.1



1 Site - Accessible Parking Signage
3/4" = 1'-0"

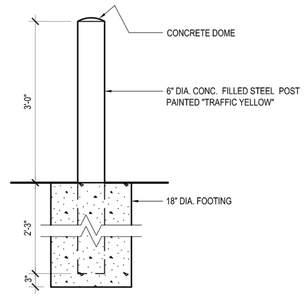


2 Site - Inverted U Bike Rack Spacing
3/8" = 1'-0"

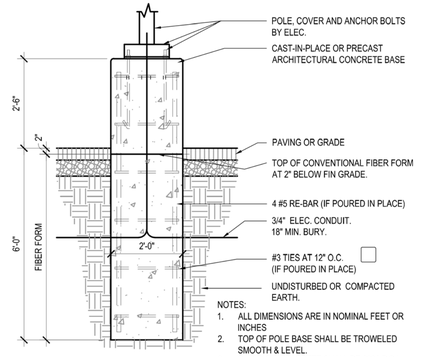


NOTE: GALV. FINISH
NOTE: REFER TO 2/A2.1 FOR TYP. U BIKE RACK SPACING

3 Site - Inverted - U Bike Rack
3/4" = 1'-0"

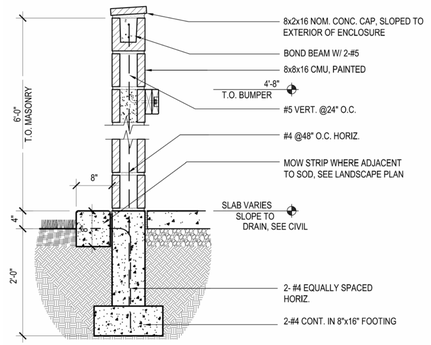


4 Site - Painted Steel Bollard
3/4" = 1'-0"

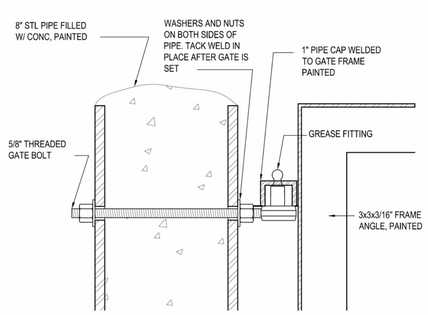


NOTES:
1. ALL DIMENSIONS ARE IN NOMINAL FEET OR INCHES
2. TOP OF POLE BASE SHALL BE TROWELED SMOOTH & LEVEL.
3. CLASS OF CONCRETE SHALL BE 3000 P.S.I. CONCRETE SHALL BE VIBRATED.

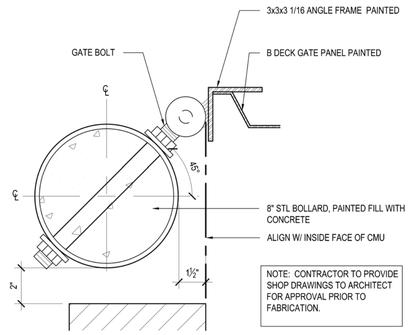
5 Site - Light Pole Base
1/2" = 1'-0"



6 Site - Refuse Enclosure - Section
3/4" = 1'-0"

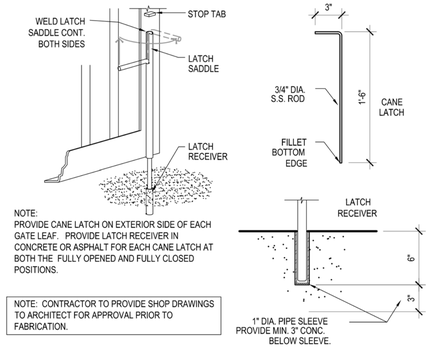


7 Typ. Gate Hinge - Section Cut
3" = 1'-0"



NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.

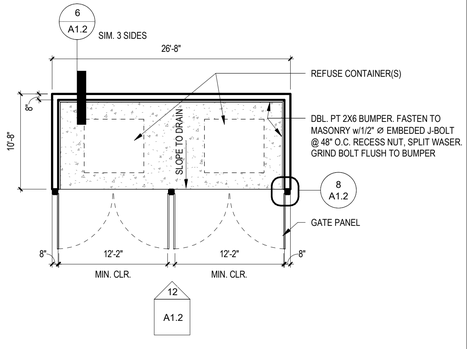
8 Typ. Gate Hinge - Section Cut
3" = 1'-0"



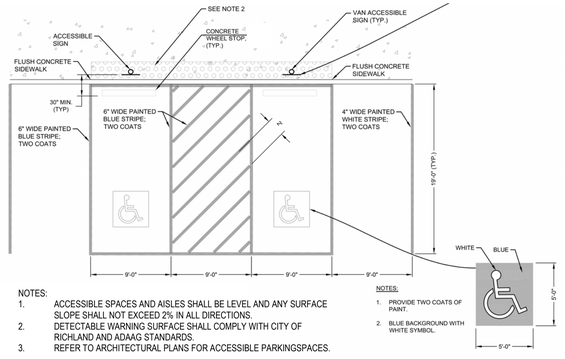
NOTE:
PROVIDE CANE LATCH ON EXTERIOR SIDE OF EACH GATE LEAF. PROVIDE LATCH RECEIVER IN CONCRETE OR ASPHALT FOR EACH CANE LATCH AT BOTH THE FULLY OPENED AND FULLY CLOSED POSITIONS.

NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.

9 Typ. Gate Hinge - Section Cut
1 1/2" = 1'-0"



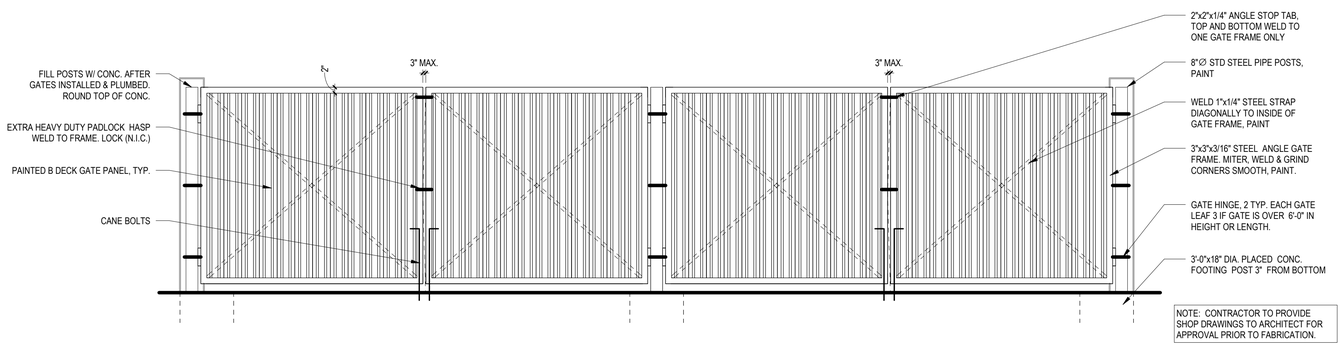
10 Refuse Enclosure - Plan
1/8" = 1'-0"



NOTES:
1. ACCESSIBLE SPACES AND AISLES SHALL BE LEVEL AND ANY SURFACE SLOPE SHALL NOT EXCEED 2% IN ALL DIRECTIONS.
2. DETECTABLE WARNING SURFACE SHALL COMPLY WITH CITY OF RICHLAND AND ADAAG STANDARDS.
3. REFER TO ARCHITECTURAL PLANS FOR ACCESSIBLE PARKINGSPACES.

NOTES:
1. PROVIDE TWO COATS OF PAINT.
2. BLUE BACKGROUND WITH WHITE SYMBOL.

11 Site - Accessible Parking Signage Copy 1
1/8" = 1'-0"



NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.

12 Refuse Enclosure Elevation
1/2" = 1'-0"

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4198 REGISTERED ARCHITECT
GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St.
Retail Building

22-09-164

Richland, Washington

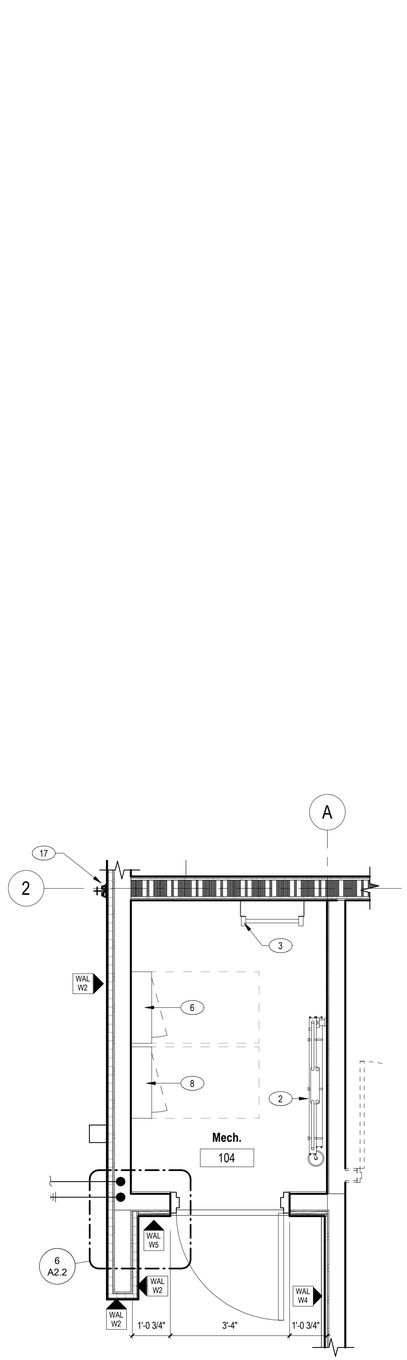
Permit Set

6/2/23

Revision Schedule

Architectural
Site Plan
Details

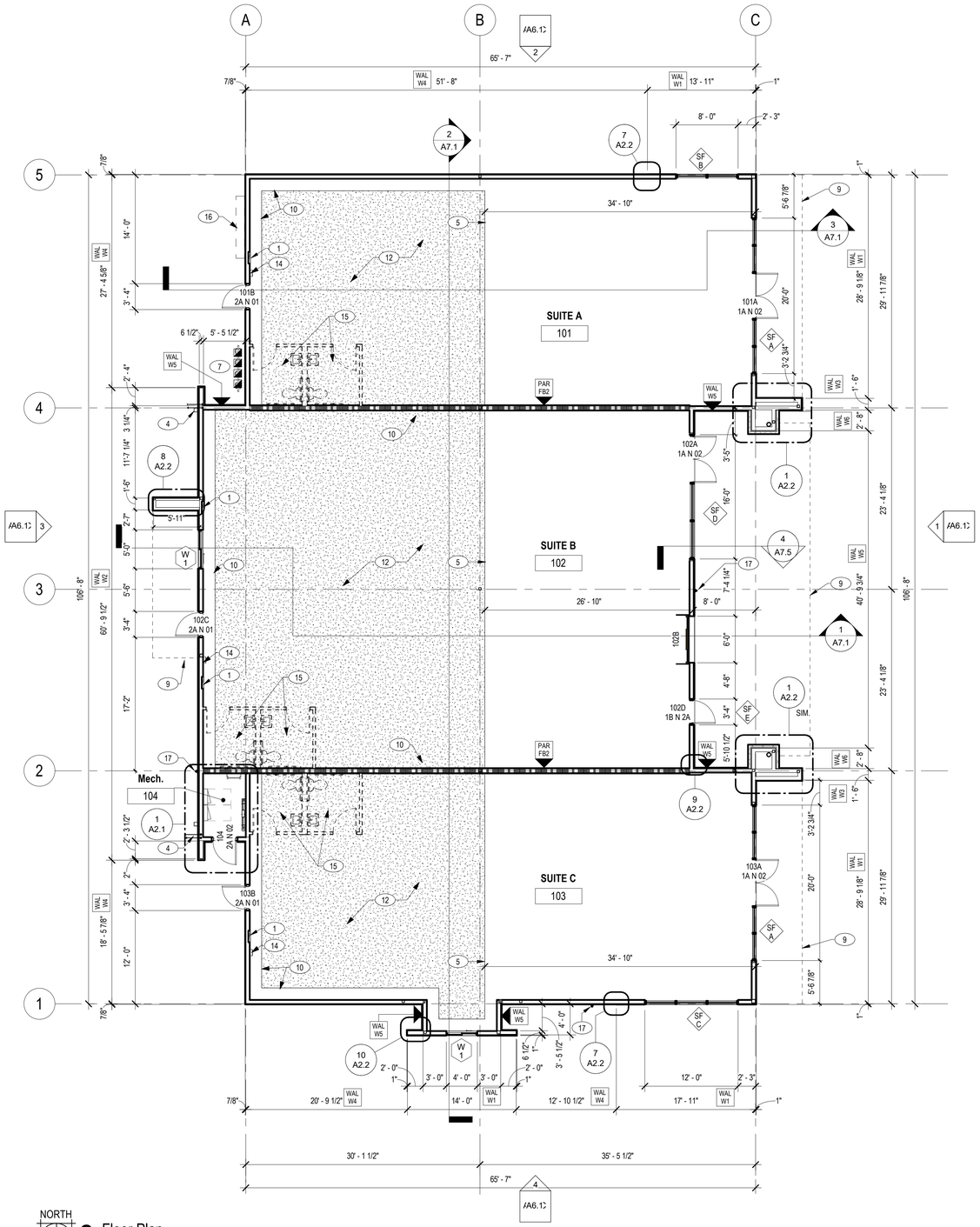
A1.2



NORTH

1 Enlarged Mechanical Room

1/2" = 1'-0"



NORTH

2 Floor Plan

1/8" = 1'-0"

General Notes

1. DIMENSIONS, UNLESS OTHERWISE NOTED, THE FOLLOWING PLAN DIMENSION STANDARDS APPLY:

A.	FRAMED EXTERIOR WALLS:	OUTSIDE FACE OF SHEATHING or GRID
B.	COLUMNS:	CENTER OF COLUMN
C.	OPENINGS:	ROUGH OPENING
D.	OTHER ELEMENTS:	FINISH FACE
E.	INTERIOR PARTITIONS:	CENTER OF WALL, U.N.O.

2. PROVIDE 2" DIAMETER TELEPHONE CONDUIT AND PULL STRING TO TENANT SPACES.
3. FIRE ALARM SYSTEM AND COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE FIRE CODES FOR TENANTS USE. FIRE ALARM SYSTEM EQUIPMENT MUST NOT BE PROPRIETARY EQUIPMENT.
4. SEE ELEVATIONS FOR EXTERIOR MATERIAL LOCATIONS AND CONFIGURATION.
5. SEE SCHEDULE SHEETS FOR EXTERIOR WALL AND PARTITION TYPES.
6. SEE SCHEDULE SHEETS FOR DOOR AND WINDOW SCHEDULES.
7. ALL DOOR OPENINGS ARE TO BE LOCATED 4" FROM FACE OF FRAMING U.O.N.

Keyed Notes

1. TENANT ELECTRICAL PANEL, SEE ELECTRICAL. VERIFY WITH TENANT FOR LOCATION.
2. DOMESTIC WATER EQUIPMENT, RISER, & SHUT OFF, SEE MECHANICAL
3. ROOF ACCESS LADDER
4. ROOF DRAIN & DOWN SPOUT, SEE CIVIL AND MECHANICAL
5. LINE OF CONCRETE SLAB
6. TELECOMMUNICATIONS SERVICE TERMINAL, GC COORDINATE w/ SERVICE PROVIDER
7. GAS METERS & EQUIPMENT. COORDINATE w/ SERVICE PROVIDER, SEE MECHANICAL
8. HOUSE ELECTRICAL METERS AND EQUIPMENT, SEE ELECTRICAL
9. LINE OF ROOF OR CANOPY ABOVE
10. EXTEND FLOOR SLAB 24" IN FROM GRID LINE AT EXTERIOR WALLS, AND 10" CENTERED AT DEMISING WALLS
11. CONNECT CANOPY DRAINS TO EXISTING STORM WATER MITIGATION SYSTEM, SEE CIVIL.
12. OMIT FLOOR SLAB AND INSTALL VAPOR RETARDER SYSTEM.
13. STEEL COLUMN
14. FIRE EXTINGUISHER LOCATION
15. FUTURE RESTROOM LOCATION
16. ELECTRICAL METER LOCATION
17. EXTERIOR HOSE BIBB LOCATION

Overall Building Area

Name	AREA TYPE	AREA
SUITE A	RETAIL	1,969 SF
SUITE B	RESTAURANT	2,970 SF
SUITE C	RESTAURANT	2,007 SF
MECH	MECHANICAL	54 SF
TOTAL		7,000 SF

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GARY M. BERNARDO
STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

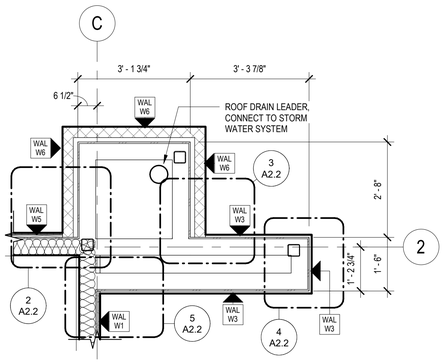
Permit Set

6/2/23

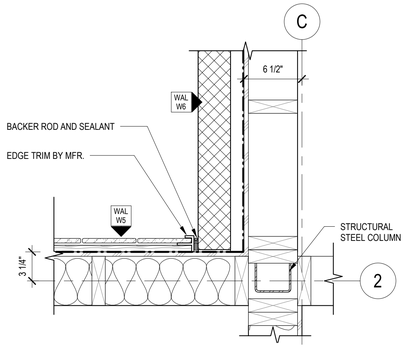
Revision Schedule

Floor Plan

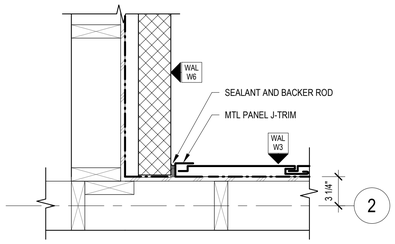
A2.1



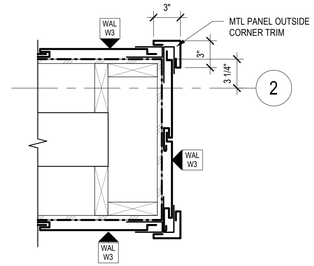
1 Floor Plan Detail
1/2" = 1'-0"



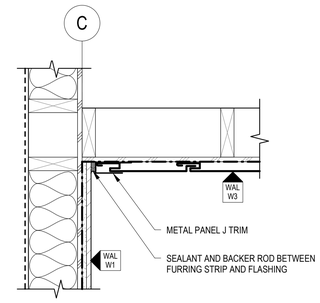
2 Floor Plan Detail
1 1/2" = 1'-0"



3 Floor Plan Detail
1 1/2" = 1'-0"



4 Floor Plan Detail
1 1/2" = 1'-0"



5 Floor Plan Detail
1 1/2" = 1'-0"

6 Floor Plan Detail
1 1/2" = 1'-0"

7 Floor Plan Detail
1 1/2" = 1'-0"

8 Floor Plan Detail
1 1/2" = 1'-0"

9 Floor Plan Detail
1 1/2" = 1'-0"

10 Floor Plan Detail
1 1/2" = 1'-0"

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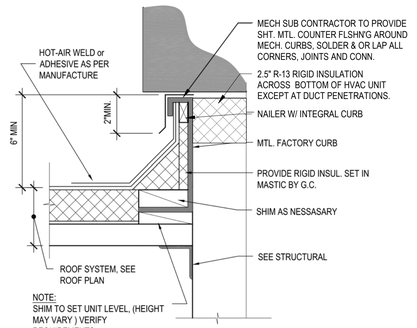
Duportail St.
Retail Building

22-09-164

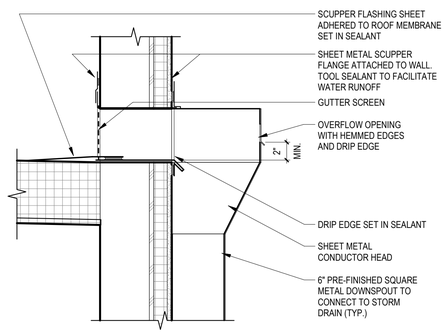
Richland, Washington

Permit Set
6/2/23
Revision Schedule

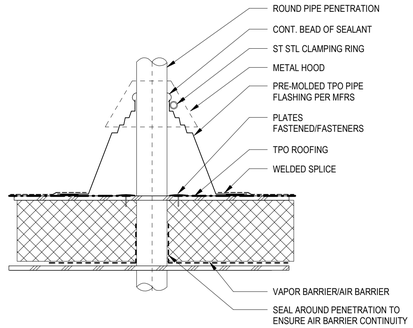
Floor Plan Details
A2.2



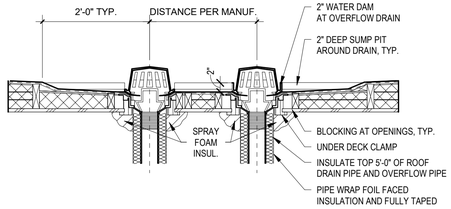
1 Mechanical Curb
3" = 1'-0"



2 Through Wall Roof Drain & Scupper
1 1/2" = 1'-0"



3 Roof Pipe Penetration
1" = 1'-0"



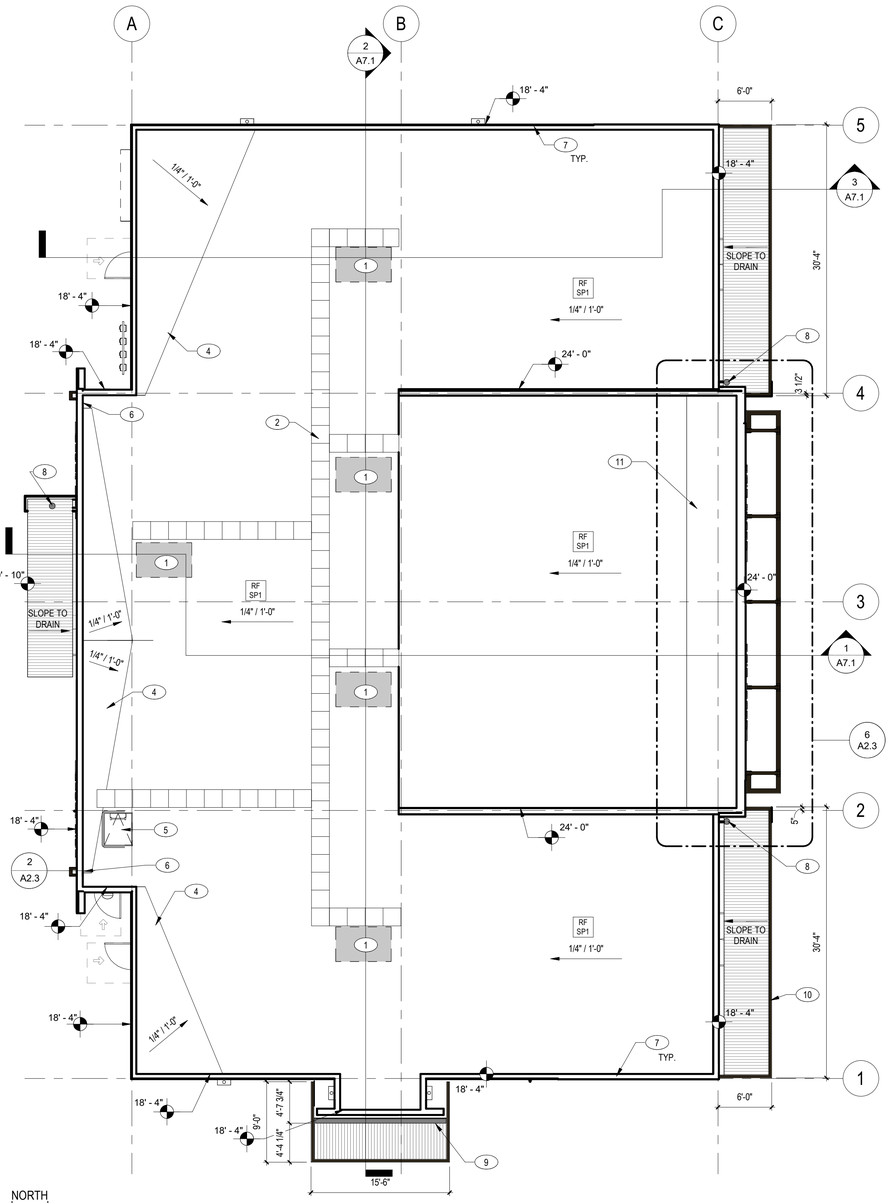
4 RF - Roof Drain Overflow, Typ
3/4" = 1'-0"

General Notes

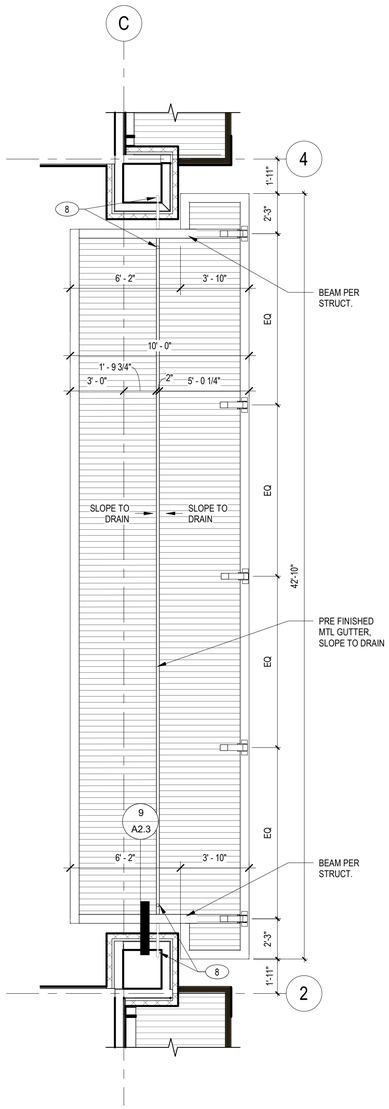
A. SEE SCHEDULE SHEETS FOR ROOF ASSEMBLY

Keyed Notes

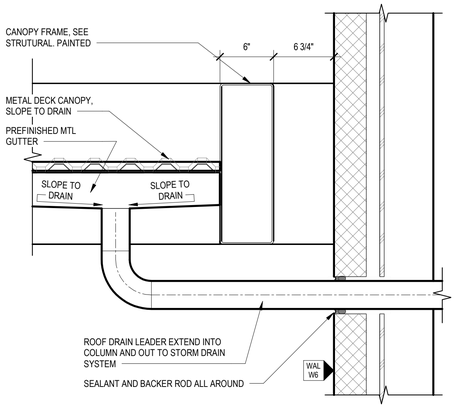
1. MECHANICAL UNITS
2. WALK OFF PAD AT UNITS, PLACE PADS ON ACCESS PANEL SIDE
3. RIDGE
4. CRICKET, SLOPE TO DRAIN
5. ROOF ACCESS HATCH - BILCO TYPE S, 36"X30" WITH LADDER UP SAFETY POST
6. ROOF DRAIN AND OVERFLOW ASSEMBLY
7. PREFINISHED METAL COPING
8. ROOF DRAIN
9. GUTTER & DOWNSPOUT ASSEMBLY
10. TPO ROOF MEMBRANE ON TAPPERED RIGID INSULATION
11. PARAPET BRACING, SEE STRUCTURAL



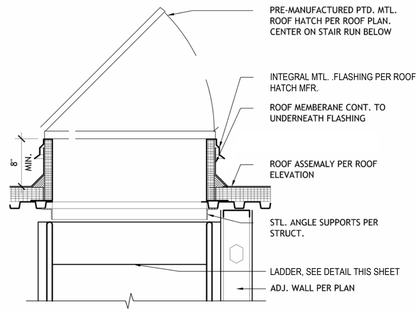
5 Roof Plan
1/8" = 1'-0"



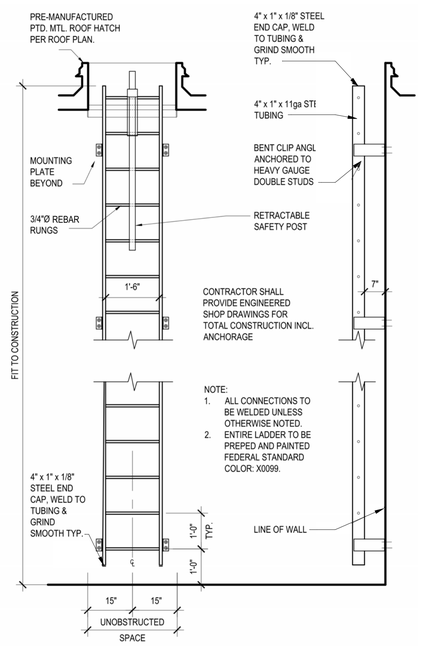
6 Canopy Roof Plan
1/4" = 1'-0"



9 Canopy @ Wall
1 1/2" = 1'-0"



7 Roof Access Hatch
1" = 1'-0"



8 Roof Access Ladder
1/2" = 1'-0"

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4198 REGISTERED ARCHITECT
GARY M. BERNARDO STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

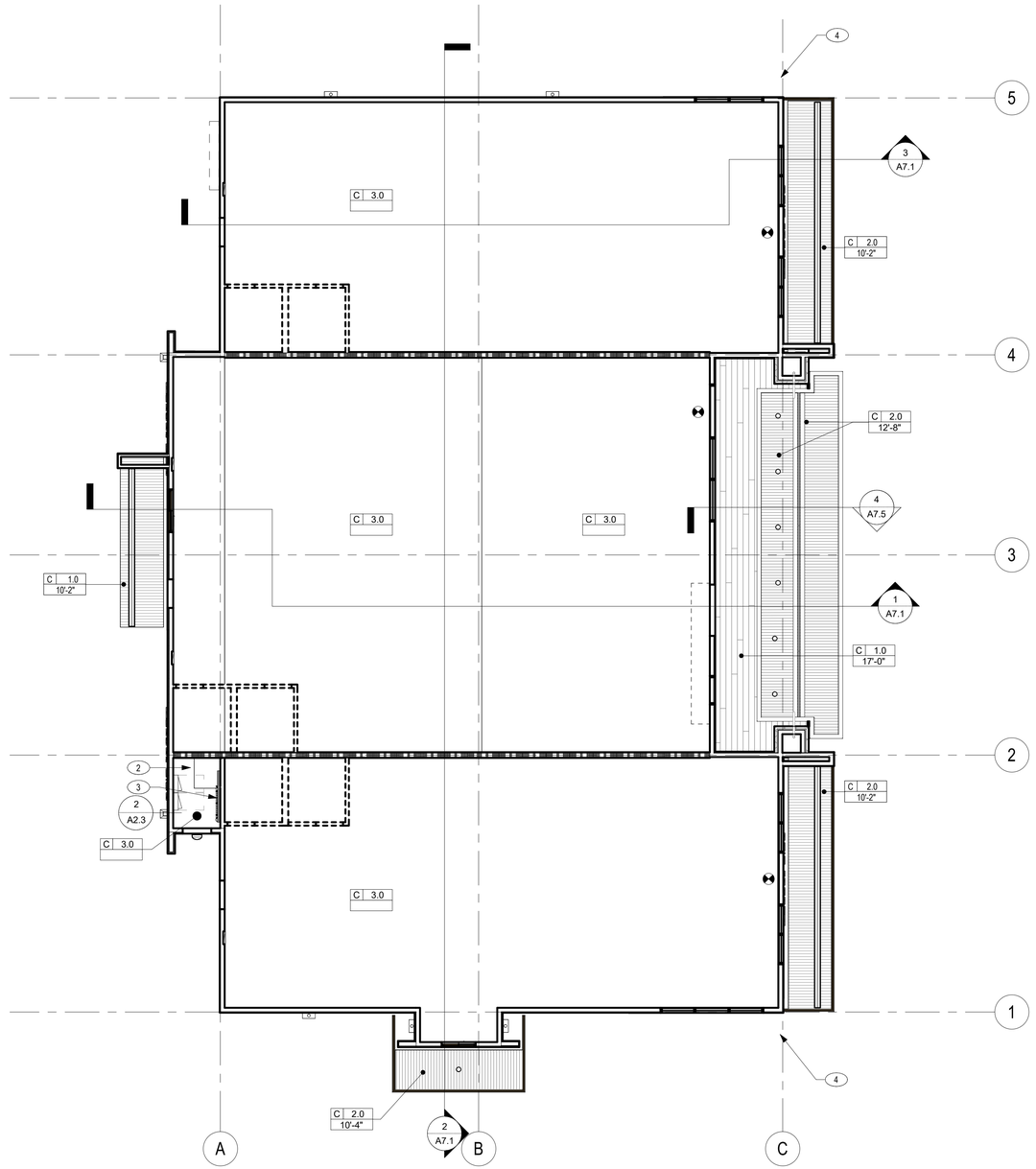
Permit Set

6/2/23

Revision Schedule

Roof Plan

A2.3



NORTH

1 Reflected Ceiling Plan

1/8" = 1'-0"

RCP General Notes

1. FINISH ELEVATIONS NOTED ABOVE FINISH FLOOR. (A.F.F.)
2. LIGHT FIXTURES, DIFFUSERS, GRILLS AND CEILING GRIDS ARE TO BE CENTERED BETWEEN WALLS / BEAMS UNLESS OTHERWISE NOTED.
3. LAY-IN CEILING GRID TO BE CENTERED IN SPACES AS SHOWN, VERIFY AS REQUIRED
4. INSTALL SUSPENDED CEILING PANEL SYSTEM IN ACCORDANCE w/ IBC 803.9.1.1 AND SEISMIC DESIGN CATEGORY 'C'.
5. SEE FINISH SCHEDULE FOR MATERIAL FINISHES.
6. SUSPENDED CEILING GRIDS SHALL BE INSTALLED LEVEL AND TRUE TO A TOLERANCE LESS THAN 1/8" IN EVERY 12'-0".
7. PERIMETER CEILING ANGLE(S) SHALL BE INSTALLED FREE FROM CURVES, BREAKS, OR OTHER IRREGULARITIES.
8. LIGHT FIXTURES, EXIT SIGNS AND OTHER CEILING ELEMENTS SHALL BE LOCATED IN THE CENTER OF INDIVIDUAL CEILING TILES, U.O.N. OR AS DIRECTED BY ARCHITECT. DO NOT LOCATE FIXTURES OR ELEMENTS ON GRID.
9. PAINT MECHANICAL GRILLES AND DIFFUSERS IN WALLS OR SOFFITS TO MATCH ADJACENT COLOR.
10. NEW EXPOSED DUCTING, CONDUIT, AND PIPING SHALL BE UNPAINTED. CEILINGS FOR TENANT ARE OPEN TO STRUCTURE WITH ISOLATED HANGING SOFFITS, U.N.O.

RCP Legend

NOTES:
1. SEE MECHANICAL, ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
2. SEE MECHANICAL AND ELECTRICAL PLANS FOR FIXTURE AND EQUIPMENT INFORMATION AND MANUFACTURERS.

GRAPHIC	DISCRIPTION
	WALL MOUNTED EXTERIOR FIXTURE
	LINER STRIP LED FIXTURE
	SURFACE MOUNTED PUCK LIGHT
	WALL MOUNTED LINEAR INTERIOR FIXTURE
	EXTERIOR RECESSED LINER FIXTURE

RCP Key Notes

1. FABRICAED CANOPY, PAINTED
2. ROOF HATCH
3. WALL MOUNTED LINEAR INTERIOR FIXTURE
4. TUBE STEEL FRAME, PAINTED.

RCP Legend

NOTES:
1. BASIS OF DESIGN PRODUCTS, ASSEMBLIES AND SYSTEMS INDICATED BELOW ARE "...OR EQUAL..." IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EQUIVALENT PERFORMANCE, SUITABILITY AND COMPATIBILITY OF ALTERNATE PRODUCTS, ASSEMBLIES OR SYSTEMS.
2. PROVIDE ALL FINISHES, PARTS, COMPONENTS, FLASHINGS, AND ACCESSORIES FOR FULL, COMPLETE AND WARRANTED INSTALLATION OF PRODUCTS, SYSTEMS, ASSEMBLIES AND FINISHES IN ACCORDANCE WITH THE MANUFACTURE.

C 1.0 X' - X"
COMPOSIT WOOD CLADDING:
MANUFACTURE: FIBERON, WILDWOOD
PROFILE: 1X8 OPEN JOINT

C 2.0 X' - X"
METAL DECK, PAINTED

C 3.0
OPEN TO STRUCTURE ABOVE

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Duportail St. Retail Building

22-09-164

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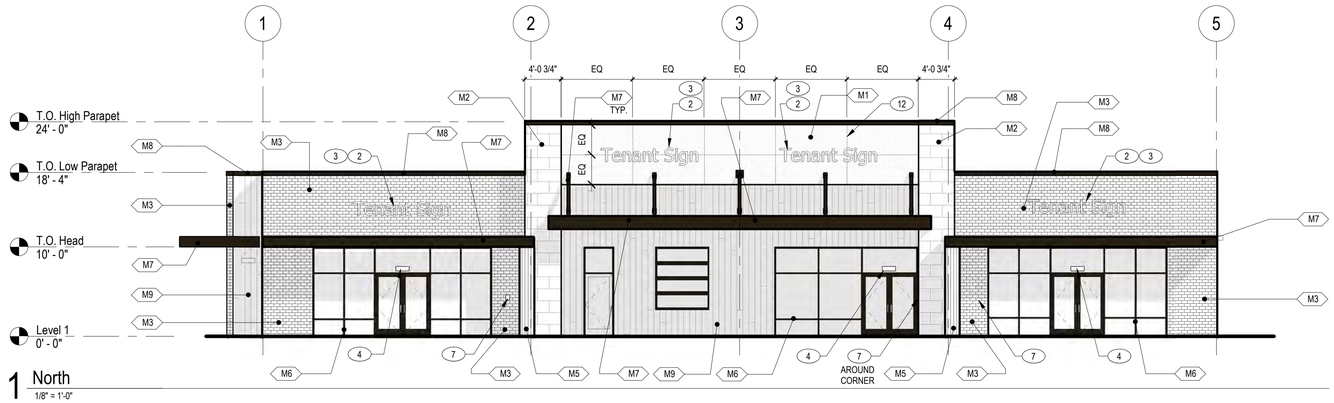
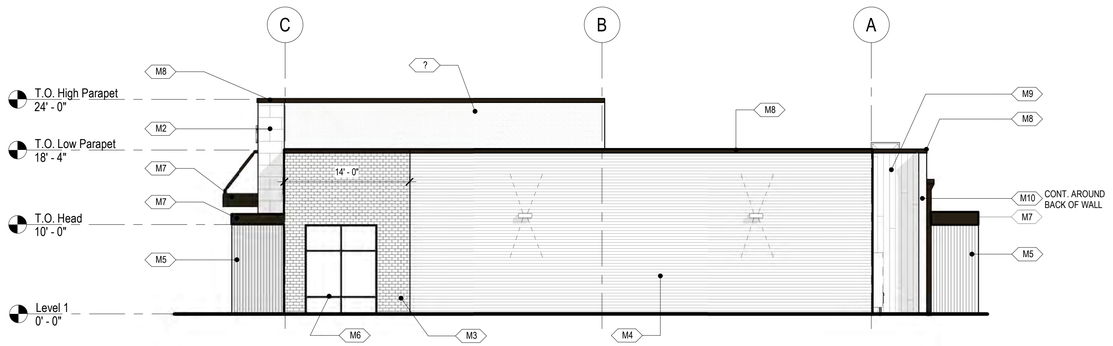
Revision Schedule

Reflected Ceiling Plan

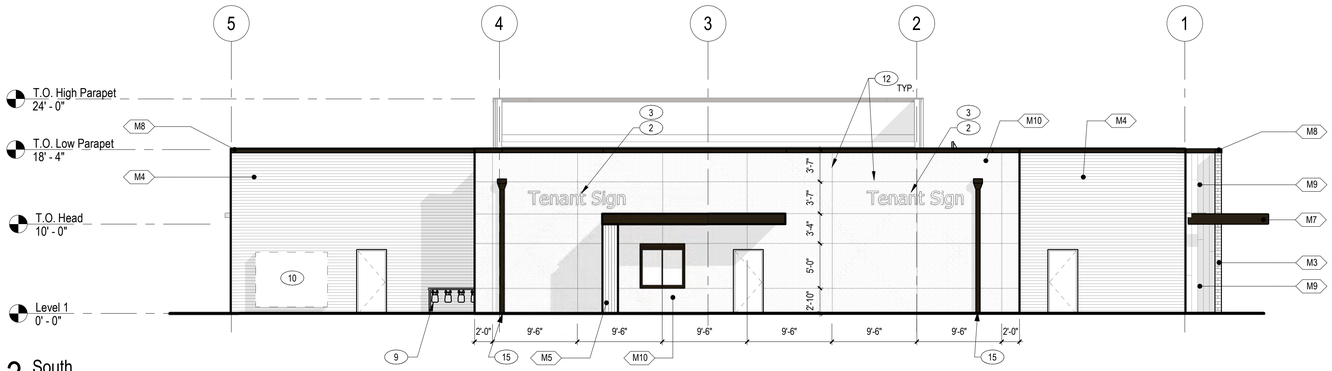
A3.1



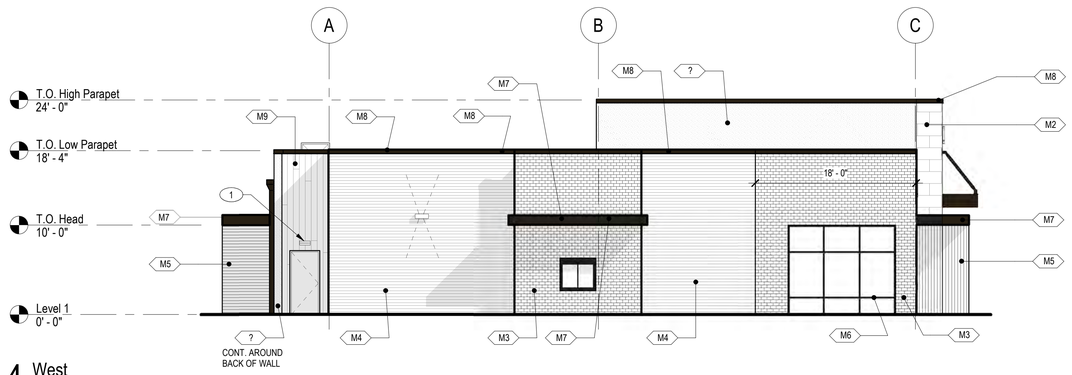
1 North
1/8" = 1'-0"



2 East
1/8" = 1'-0"



3 South
1/8" = 1'-0"



4 West
1/8" = 1'-0"

General Notes

M1 — MATERIAL

A. SLOPE FINISH GRADE AWAY FROM BUILDING 2% MIN.
B. ALL NOTES ON EXTERIOR ELEVATIONS ARE TYPICAL AND APPLY TO ALL EXTERIOR ELEVATIONS
C. PROVIDE PHYSICAL SAMPLES FOR ALL FINISH MATERIALS AND COLORS FOR OWNER & ARCHITECT REVIEW PRIOR TO ORDERING AND INSTALLATION.
D. ALL FINISH MATERIALS TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS, APPLICABLE CODE REQUIREMENTS AND PER GENERALLT ACCEPTED CONSTRUCTION PRACTICES.
E. SUB-CONTRACTORS TO PROVIDE 12" X 12" MIN. SAMPLE OF ALL FINISH MATERIALS FOR OWNERS REVIEW PRIOR TO CONSTRUCTION.
F. ALL UTILITIES TO BE SCREENED OR BELOW GRADE. COORDINATE WITH MECHANICAL DRAWINGS AS REQUIRED.
G. HOLLOW METAL DOORS AND FRAMES ARE TO BE PAINTED TO MATCH THE ADJACENT WALL FINISH MATERIAL.

Keyed Notes

1. LIGHT FIXTURE, SEE ELECTRICAL
2. TENANT SIGNAGE (N.I.C., UNDER SEPARATE PERMIT), PROVIDE EXTERIOR RATED J-BOX, & WIRING IN CONCEALED CONDUIT TYP. EACH LOCATION. CIRCUIT TO HOUSE ELECTRICAL PANEL, SEE ELECTRICAL.
3. PROVIDE SIGN MOUNTING BRACKETS AS REQUIRED, CENTER ON STOREFRONT DOOR.
4. 6" VINYL ADDRESS LETTERING CENTERED ABOVE DOOR ON GLASS TRANSOM. COORDINATE WITH FIRE DEPARTMENT FOR LETTERING SIZE, FONT, STROKE, COLOR & BACKGROUND.
5. PRECAST CONCRETE SILL BLOCK
6. HOLLOW METAL DOOR, PAINTED.
7. FIRE DEPARTMENT KNOX BOX. VERIFY LOCATION WITH FIRE DEPARTMENT PRIOR TO INSTALLATION.
8. FABRICATED CANOPY, PAINTED.
9. GAS METERS AND EQUIPMENT, SEE MECHANICAL.
10. ELECTRICAL METERS AND EQUIPMENT, SEE ELECTRICAL.
11. DOWNSPOUT, PAINT TO MATCH STOREFRONT. CONNECT TO STORM DRAIN, SEE CIVIL FOR CONNECTION.
12. 3/4" V GROOVE
13. VERTICAL RECESSED EXTERIOR LIGHT FIXTURE
14. LIGHT FIXTURE W/ UP AND DOWN WALL WASH
15. PRE-FINISHED METAL DOWNSPOUT, CONNECT TO STORMWATER SYSTEM

Elevation Material Legend - NC

M1
EIFS STUCCO SYSTEM:
MANUFACTURE: PAREX ARMOURWALL 100
FINISH: SAND FINE
COLOR: MATCH SW7566 WEST HIGHLAND WHITE

M2
MASONRY VENEER:
MANUFACTURE: CORDOVA STONE OR EL DORADO: VANTAGE 30
FINISH: CORDOVA: BUFF EL DORADO: WHITE ELM

M3
CULTURED STONE:
MANUFACTURE: EL DORADO CULTURED STONE
FINISH: HIGH DESERT USED BRICK

M4
HORIZ. MTL. PANEL OR CEMENT BOARD SIDING
MANUFACTURE: METAL SALES
PROFILE: CN88-1653
FINISH: DARK BRONZE
MANUFACTURE: HARDI BOARD ARTISAN SHIPLAP HARDI BOARD ARTISAN V-GROOVE
FINISH: MATCH DARK BRONZE

M5
VERTICAL METAL PANEL:
MANUFACTURE: METAL SALES
PROFILE: TLC-2
FINISH: DARK BRONZE (50)

M6
ALUMINUM STOREFRONT:
MANUFACTURE: KAWNEER 451T
FINISH: ANODIZED DARK BRONZE

M7
FABRICATED STEEL ELEMENTS:
FINISH: PAINTED TO MATCH DARK BRONZE

M8
PRE-FINISHED METAL COPING: 22GA. MIN.
FINISH: PRE-FINISHED PAINT TO MATCH BRONZE

M9
VERTICAL COMPOSITE WOOD PANELING:
MANUFACTURE: NEWTECH WOOD
PROFILE: VOYAGER SERIES, WOOD GRAIN
FINISH: BRAZILIAN IPE

M10
EIFS STUCCO SYSTEM
MANUFACTURE: PARAX ARMORWALL 100
FINISH: SAND FINE, MATCH SW 7044 AMAZING GRAY

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STATE OF WASHINGTON

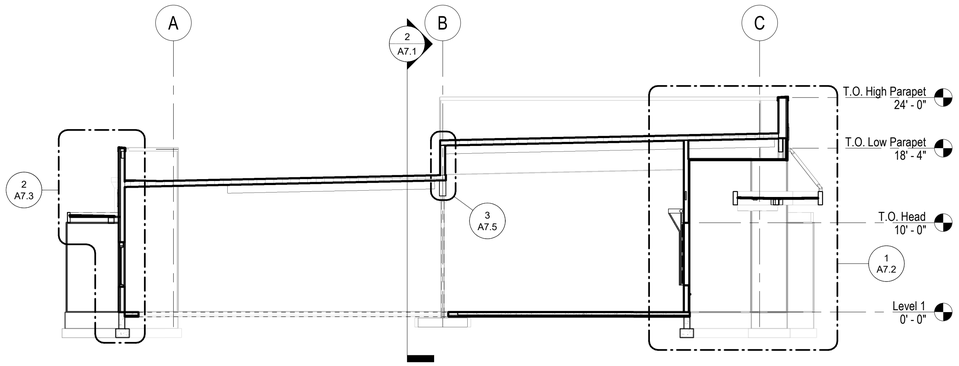
Duportail St. Retail Building

22-09-164

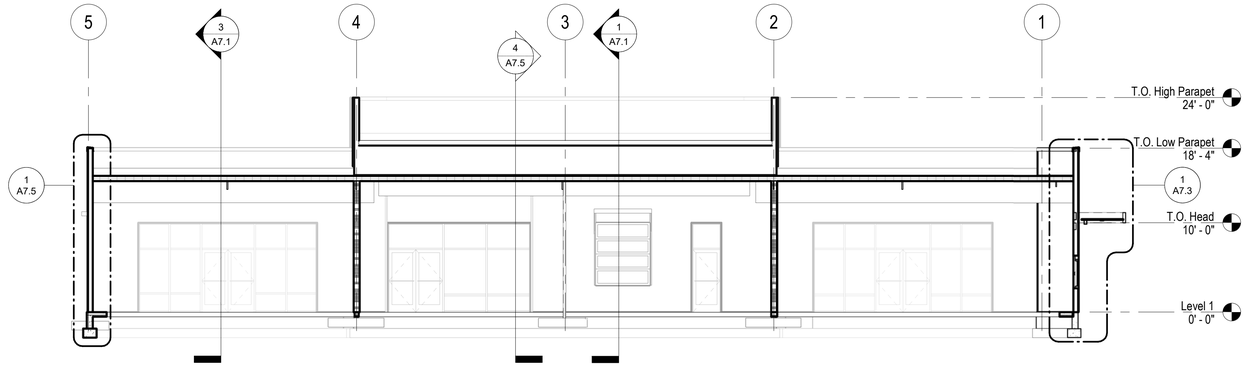
Richland, Washington

Permit Set
6/2/23
Revision Schedule

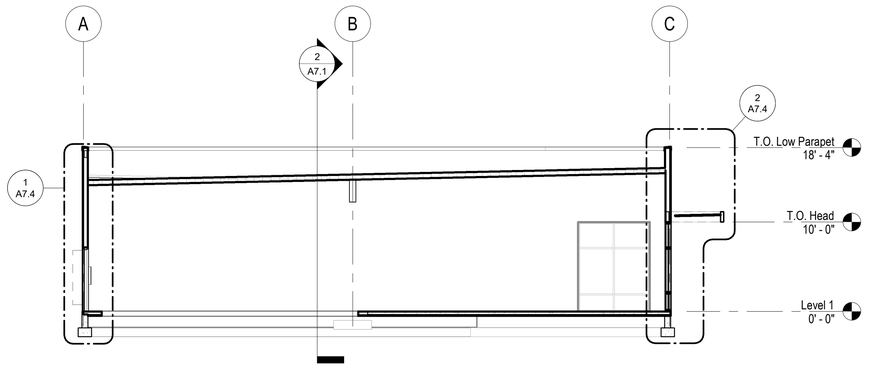
Exterior Elevations
A6.1



1 Building Section
1/8" = 1'-0"



2 Building Section
1/8" = 1'-0"



3 Building Section
1/8" = 1'-0"

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Duportail St.
Retail Building

22-09-164

Richland, Washington

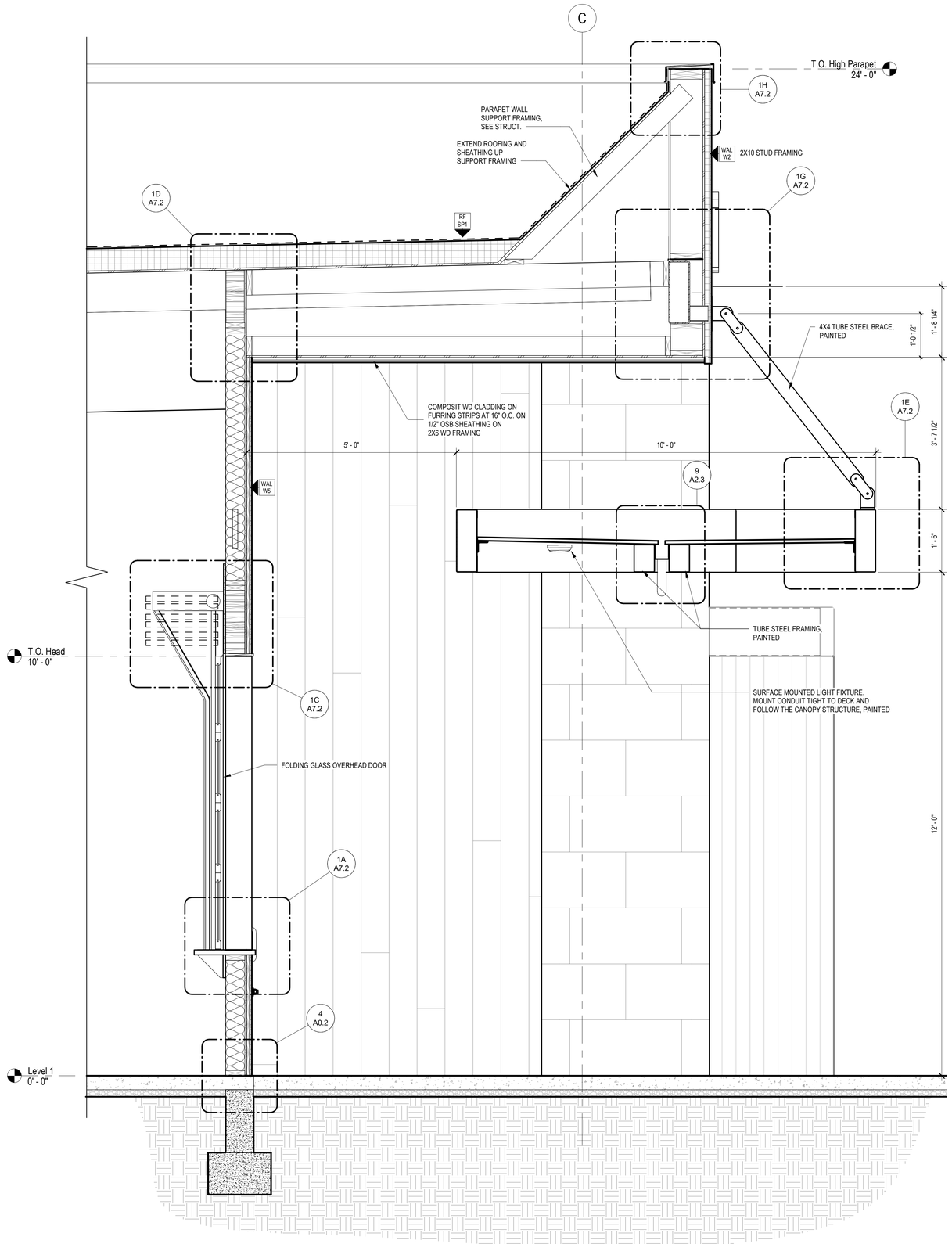
Permit Set

6/2/23

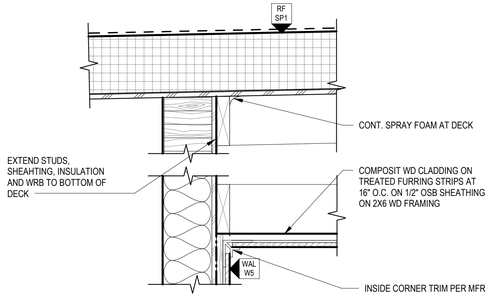
Revision Schedule

Building Sections

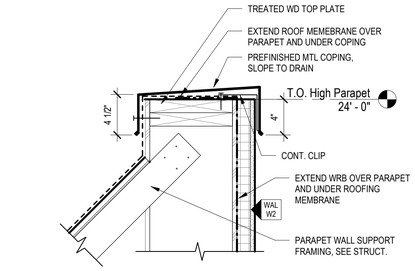
A7.1



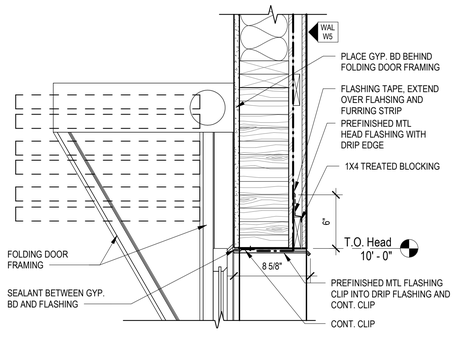
1 Wall Section
3/4" = 1'-0"



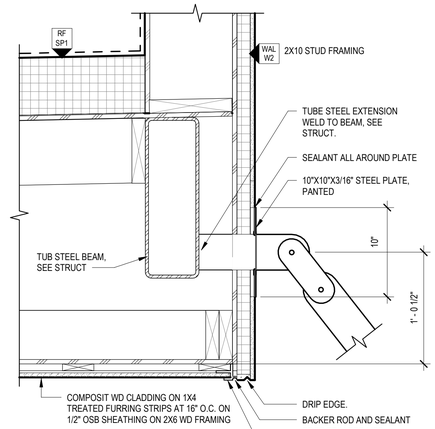
1D Comp Wood Soffit @ Wall
1 1/2" = 1'-0"



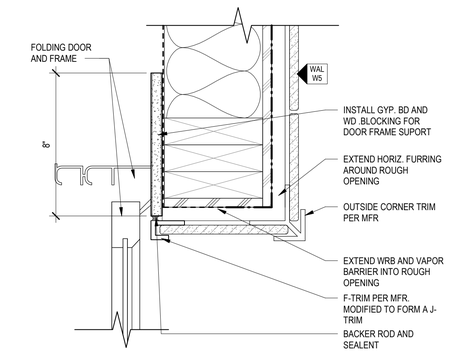
1H Parapet at EIFS
1 1/2" = 1'-0"



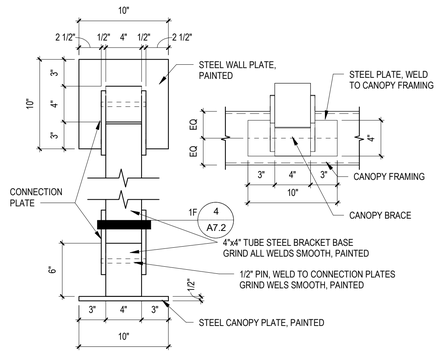
1C OH Fold Up Door Head Detail
1 1/2" = 1'-0"



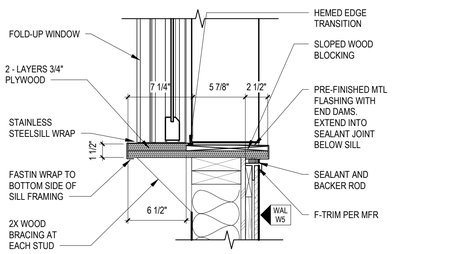
1G Canopy Soffit
1 1/2" = 1'-0"



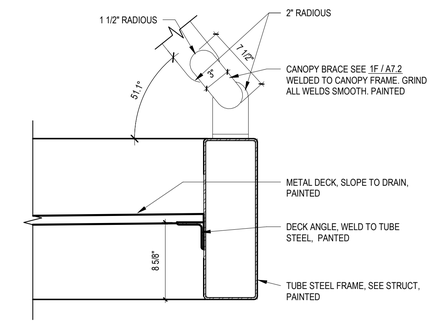
1B OH Fold Up Door Jamb
3" = 1'-0"



1F Bracket
1 1/2" = 1'-0"



1A OH Fold UP Door Sill
1 1/2" = 1'-0"



1E Canopy Brace
1 1/2" = 1'-0"

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STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

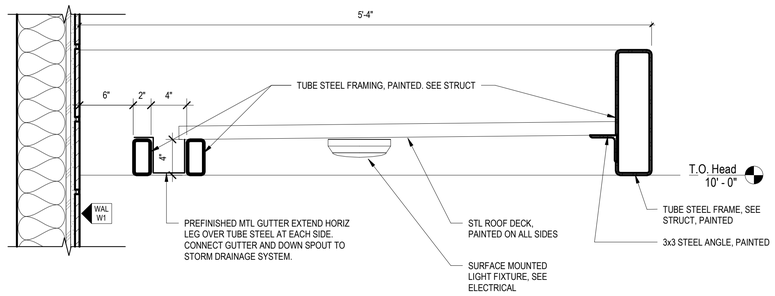
Permit Set

6/2/23

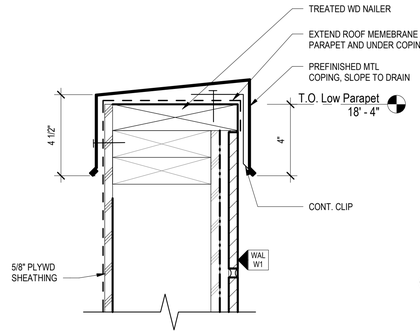
Revision Schedule

Wall Sections

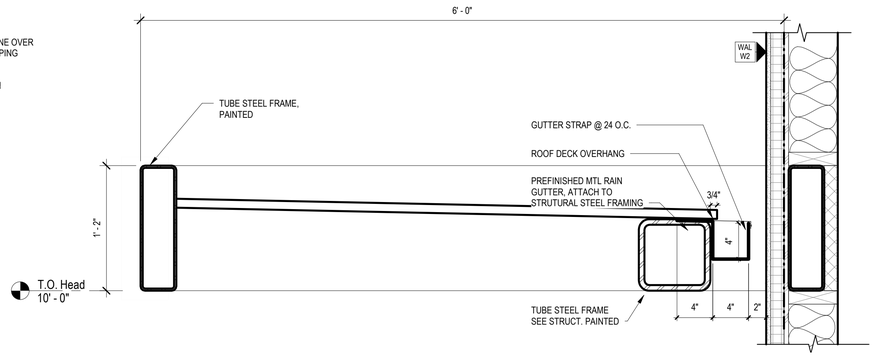
A7.2



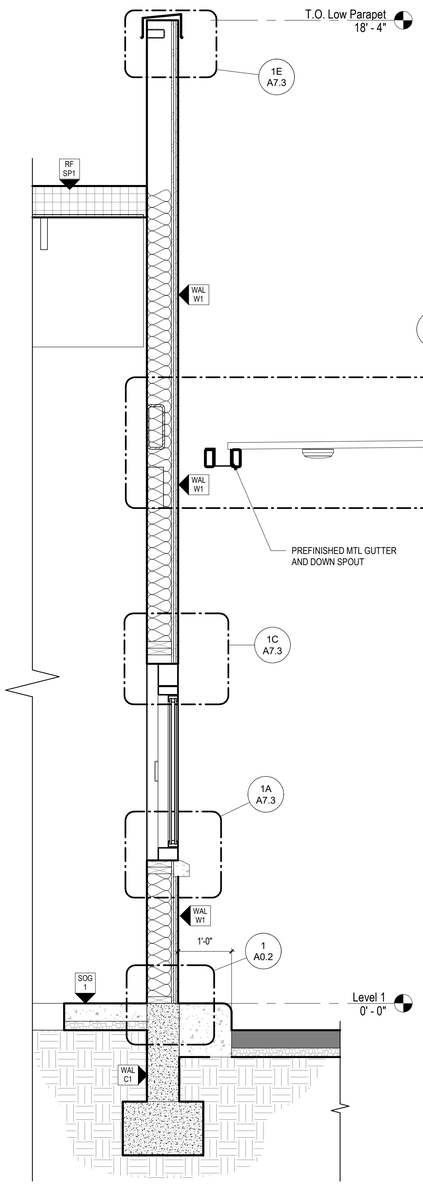
1D Drive-Thru Canopy
1 1/2" = 1'-0"



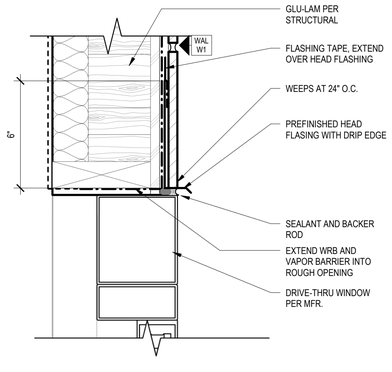
1E Masonry Parapet Detail
3" = 1'-0"



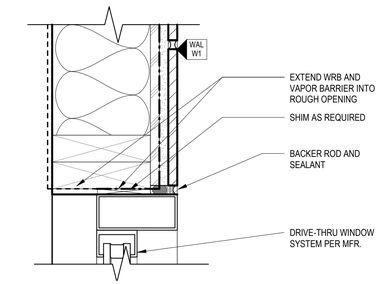
2D Canopy
1 1/2" = 1'-0"



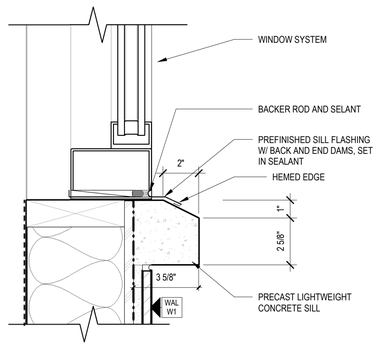
1 Wall Section
3/4" = 1'-0"



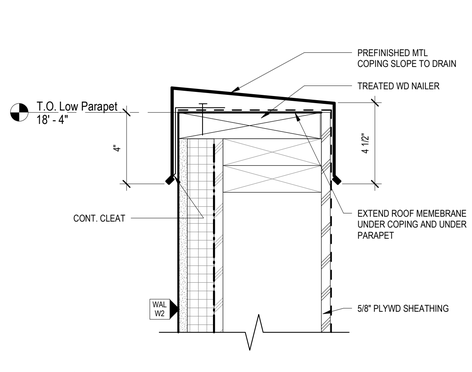
1C Drive-Thru Window Head
3" = 1'-0"



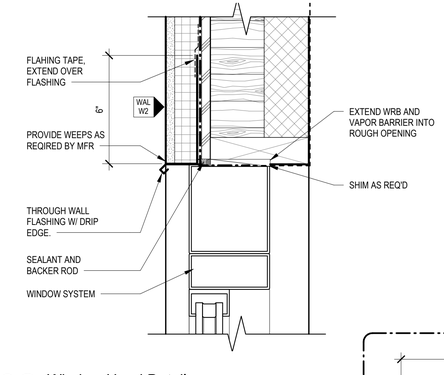
1B Drive-Thru Window Jam
3" = 1'-0"



1A Drive-Thru Window Sill
3" = 1'-0"

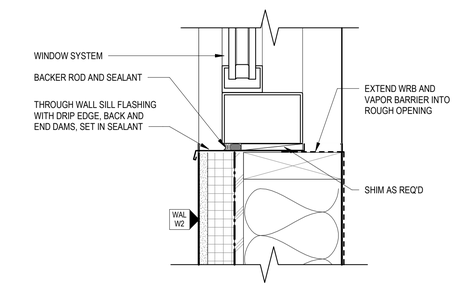


2E EIFS @ Parapet Detail
3" = 1'-0"

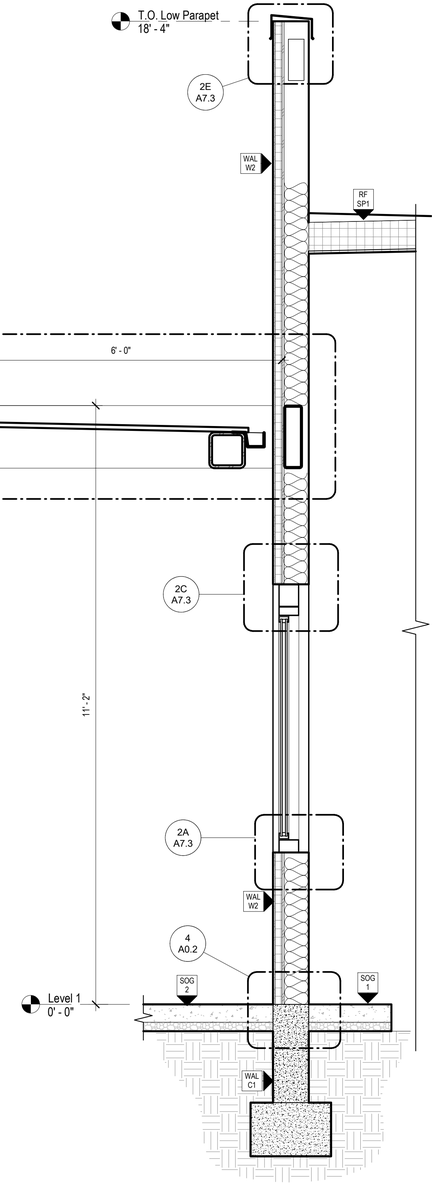


2C Window Head Detail
3" = 1'-0"

2B Window Jam Detail
3" = 1'-0"



2A Window Sill Detail
3" = 1'-0"



2 Wall Section
3/4" = 1'-0"

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Duportail St. Retail Building

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Richland, Washington

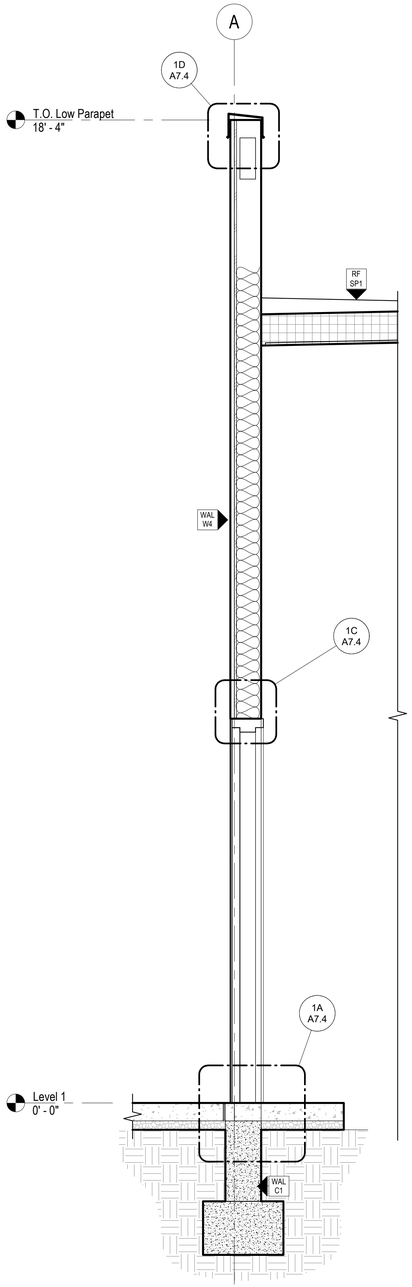
Permit Set

6/2/23

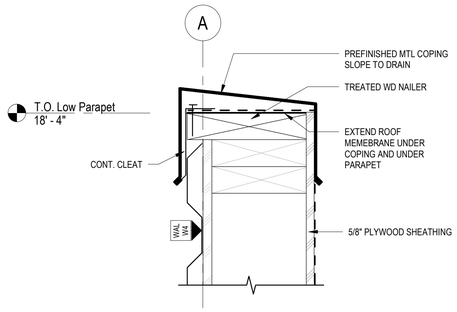
Revision Schedule

Wall Sections

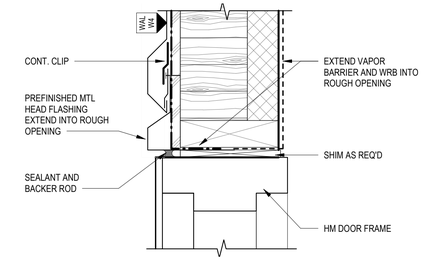
A7.3



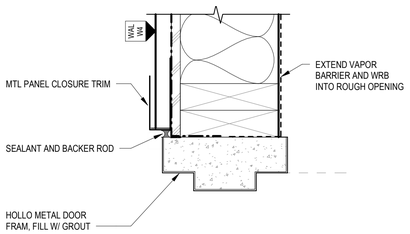
1 Wall Section
3/4" = 1'-0"



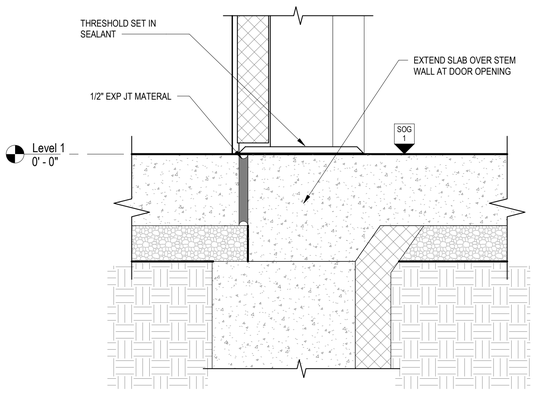
1D Parapet Detail
3" = 1'-0"



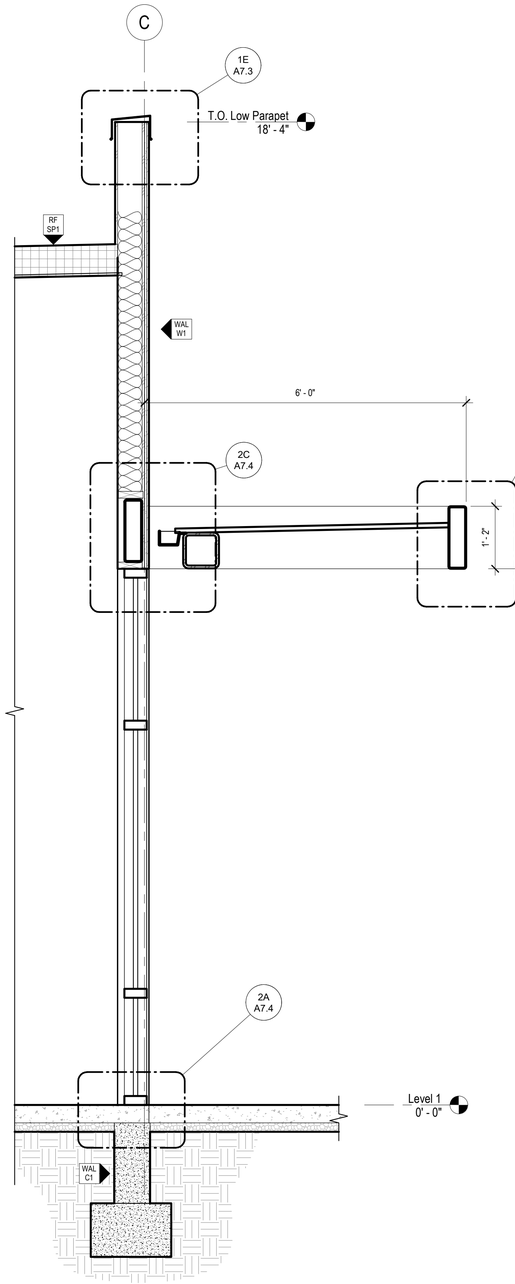
1C Hollow Mtl Door Head
3" = 1'-0"



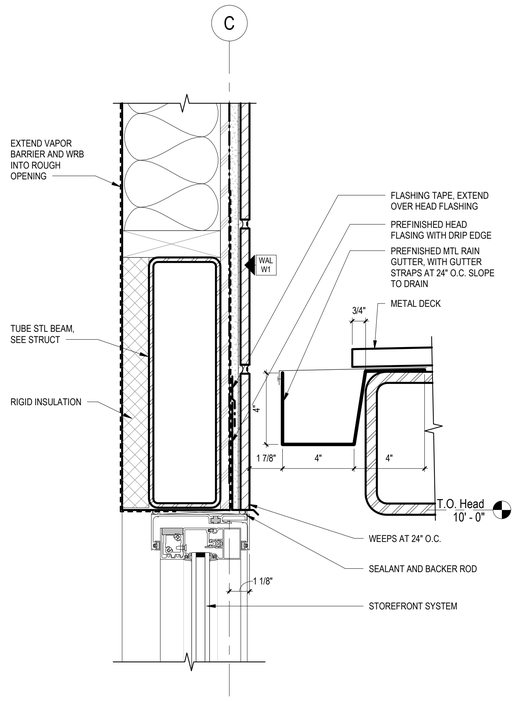
1B Hollow Mtl Door Jamb
3" = 1'-0"



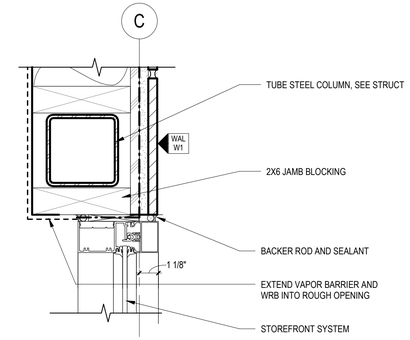
1A Hollow Mtl Door Sill
3" = 1'-0"



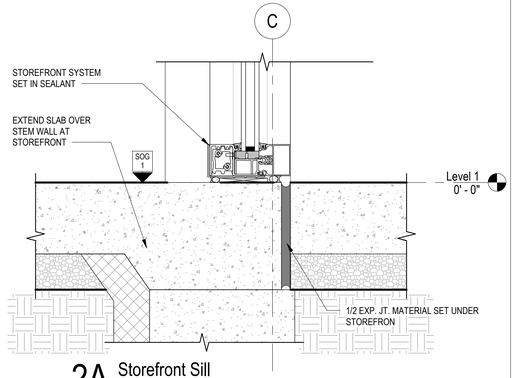
2 Wall Section
3/4" = 1'-0"



2C Storefront Head @ Canopy
3" = 1'-0"



2B Storefront Jamb
3" = 1'-0"



2A Storefront Sill
3" = 1'-0"

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STATE OF WASHINGTON

Duportail St. Retail Building

22-09-164

Richland, Washington

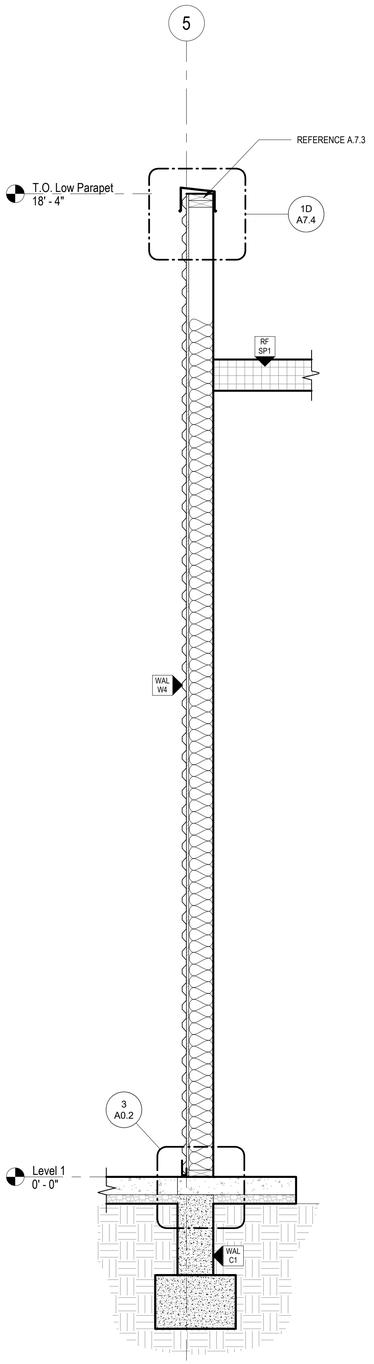
Permit Set

6/2/23

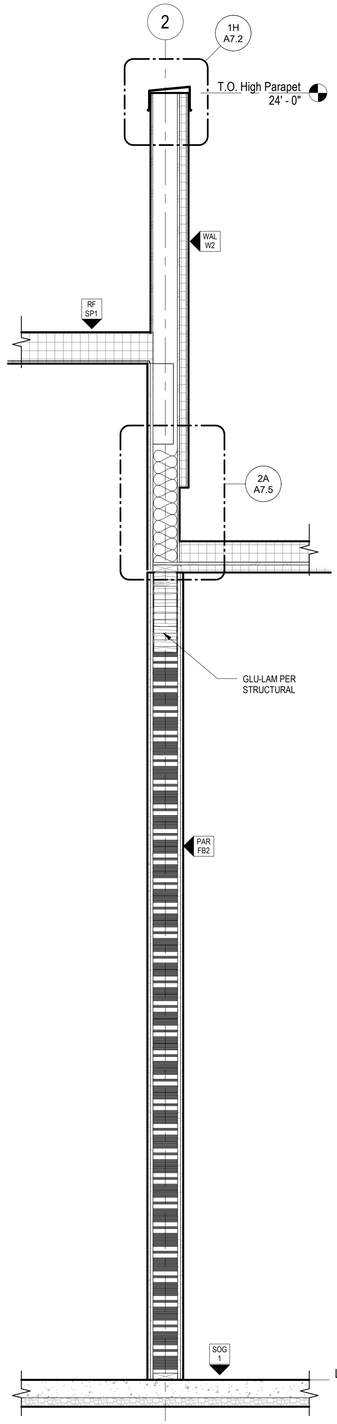
Revision Schedule

Wall Sections

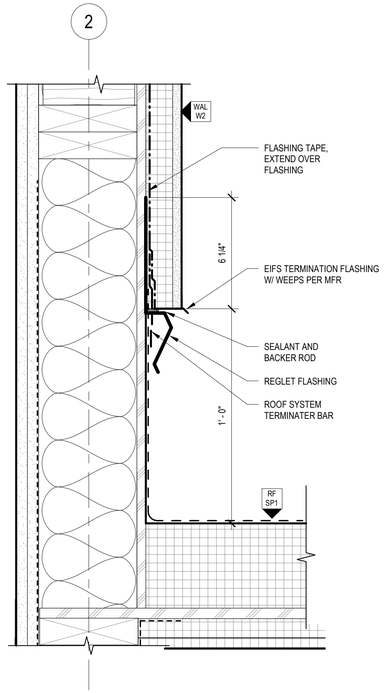
A7.4



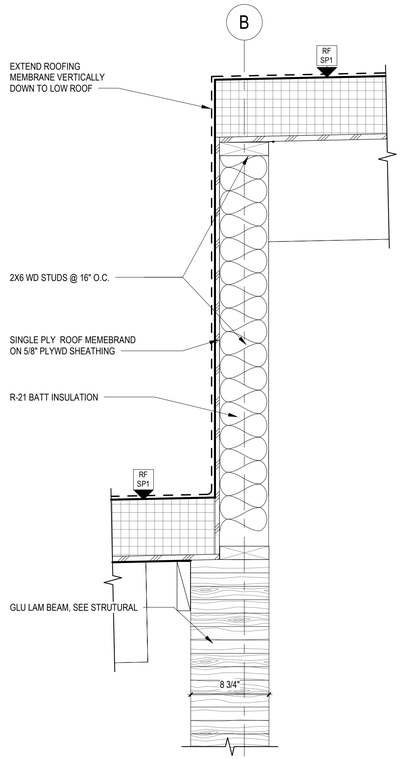
1 Wall Section
3/4" = 1'-0"



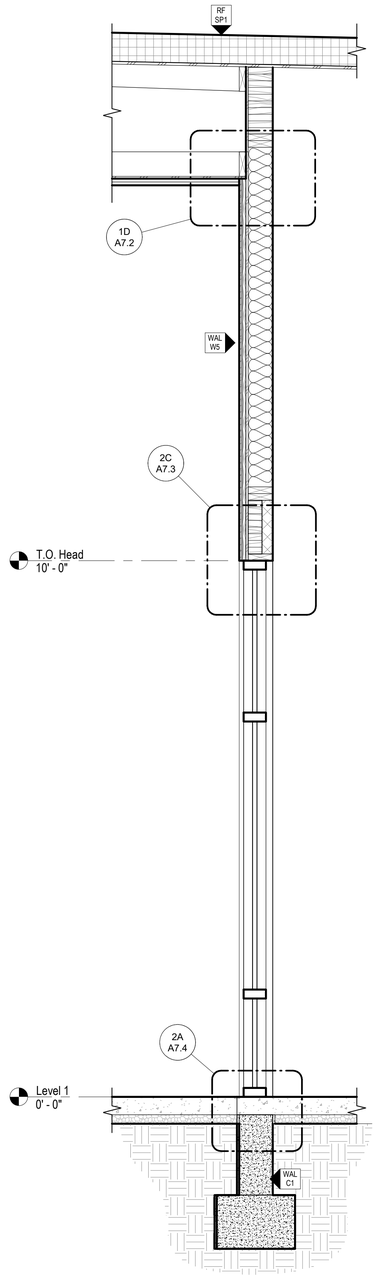
2 Wall Section
3/4" = 1'-0"



2A Detail 14
3" = 1'-0"



3 Wall Section
1 1/2" = 1'-0"



4 Section 6
3/4" = 1'-0"

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22-09-164

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Revision Schedule

Wall Sections

A7.5

STRUCTURAL - GENERAL NOTES

GENERAL REQUIREMENTS

GOVERNING CODE: The design and construction of this project is governed by the **"International Building Code (IBC)", 2018 Edition**, hereafter referred to as the IBC, as adopted and modified by the City of Richland, WA understood to be the Authority Having Jurisdiction (AHJ).

REFERENCE STANDARDS: Refer to Chapter 35 of 2018 IBC. Where other Standards are noted in the drawings, use the latest edition of the standard unless a specific date is indicated. Reference to a specific section in a code does not relieve the contractor from compliance with the entire standard.

DEFINITIONS: The following definitions cover the meanings of certain terms used in these notes:

(1) "**Architect/Engineer**" – The Architect of Record and the Structural Engineer of Record.

(2) "**Structural Engineer of Record**" **(SER)** – The structural engineer who is licensed to stamp & sign the structural documents for the project. The SER is responsible for the design of the Primary Structural System.

(3) **"Submit for review"** - Submit to the Architect/SER for review prior to fabrication or construction.

(4) **"Per Plan"** – Indicates references to the structural plans, elevations and structural general notes.

(5) "**Seismic Force Resisting System (SFRS)**" **–** A recognized structural system of components (beams, braces, drags, struts, collectors, diaphragms, columns, walls, etc) of the primary structure that are specially designed and proportioned to resist earthquake-induced ground motions and maintain stability of the structure. Fabrication and installation of components designated as part of the SFRS require the general contractor, subcontractor, or supplier who is responsible for any portion of SFRS fabrication or installation to comply with special requirements (including, but not limited to, material control, compliance certifications, personnel qualifications, documentation, reporting requirements, etc) and to provide the required Quality Control including the required coordination of Special Inspections (Quality Assurance – QA). Special provisions apply to any member designated as part of the SFRS. Refer to plans, elevations, details, Design Criteria and Symbols and Legends for applicable members and connections.

(6) **"Specialty Structural Engineer" (SSE) –** A professional engineer (PE or SE), licensed in the State where the project is located, (typically not the SER), who performs specialty structural engineering services for selected specialty-engineered elements identified in the Contract Documents, and who has experience and training in the Specialty. Documents stamped and signed by the SSE shall be completed by or under the direct supervision of the SSE.

(7) **"Bidder-designed" –** Components of the structure that require the general contractor, subcontractor, or supplier who is responsible for the design, fabrication and installation of specialty-engineered elements identified in the Contract Documents to retain the services of an SSE. Submittals of "Bidder-designed" elements shall be stamped and signed by the SSE.

SPECIFICATIONS: Refer to the project specifications issued as part of the contract documents for information supplemental to these drawings.

OTHER DRAWINGS: Refer to the architectural, mechanical, electrical, civil and plumbing drawings for additional information including but not limited to dimensions, elevations, slopes, door and window openings, non-bearing walls, stairs, finishes, drains, waterproofing, railings, curtain walls, curbs, depressions, mechanical unit locations, and other nonstructural items.

STRUCTURAL DETAILS: The structural drawings are intended to show the general character and extent of the project and are not intended to show all details of the work. Use entire detail sheets and specific details referenced in the plans as "typical" wherever they apply. Similarly, use details on entire sheets with "typical" in the name wherever they apply.

STRUCTURAL RESPONSIBILITIES: The structural engineer (SER) is responsible for the strength and stability of the primary structure in its completed form.

COORDINATION: The Contractor is responsible for coordinating details and accuracy of the work; for confirming and correlating all quantities and dimensions; for selecting fabrication processes; for techniques of assembly; and for performing work in a safe and secure manner.

MEANS, METHODS and SAFETY REQUIREMENTS: The contractor is responsible for the means and methods of construction and all job related safety standards such as OSHA and DOSH (Department of Occupational Safety and Health). Contractor is responsible to adhere to OSHA regulations regarding steel erection items specifically addressed in the latest OSHA regulations. Bolting and field welding at all member connections is to be completed prior to the release of the member from the hoisting mechanism unless reviewed and approved by the General Contractor's temporary bracing and shoring design engineer. The construction documents represent the completed structure. The contractor is responsible for means and methods of construction related to the intermediate structural conditions (i.e. movement of the structure due to moisture and thermal effects; construction sequence; temporary bracing, etc).

BRACING/SHORING DESIGN ENGINEER: The contractor shall at their discretion employ an SSE, a registered professional engineer for the design of any temporary bracing and shoring.

TEMPORARY SHORING, BRACING: The contractor is responsible for the strength and stability of the structure during construction and shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. It is the contractor's responsibility to be familiar with the work required in the construction documents and the requirements for executing it properly.

CONSTRUCTION LOADS: Loads on the structure during construction shall not exceed the design loads as noted in DESIGN CRITERIA & LOADS below or the capacity of partially completed construction as determined by the Contractor's SSE for Bracing/Shoring.

CHANGES IN LOADING: The contractor has the responsibility to notify the SER of any architectural, mechanical, electrical, or plumbing load imposed onto the structure that differs from, or that is not documented on the original Contract Documents (architectural / structural / mechanical / electrical or plumbing drawings). Provide documentation of location, load, size and anchorage of all undocumented loads in excess of 400 pounds. Provide marked-up structural plan indicating locations of any new equipment or loads. Submit plans to the Architect/Engineer for review prior to installation.

NOTE PRIORITIES: Plan and detail notes and specific loading data provided on individual plans and detail drawings supplements information in the Structural General Notes.

DISCREPANCIES: In case of discrepancies between the General Notes, Specifications, Plans/Details or Reference Standards, the Architect/Engineer shall determine which shall govern. Discrepancies shall be brought to the attention of the Architect/Engineer before proceeding with the work. Should any discrepancy be found in the Contract Documents, the Contractor will be deemed to have included in the price the most expensive way of completing the work, unless prior to the submission of the price, the Contractor asks for a decision from the Architect as to which shall govern. Accordingly, any conflict in or between the Contract Documents shall not be a basis for adjustment in the Contract Price.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site. Conflicts between the drawings and actual site conditions shall be brought to the attention of the Architect/Engineer before proceeding with the work.

ADJACENT UTILITIES: The contractor shall determine the location of all adjacent underground utilities prior to earthwork, foundations, shoring, and excavation. Any utility information shown on the drawings and details is approximate and not necessarily complete.

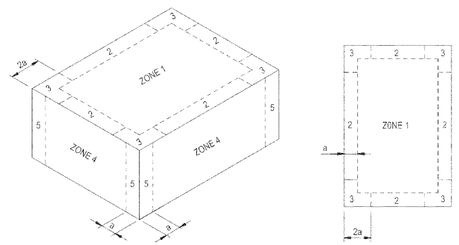
ALTERNATES: Alternate products of similar strength, nature and form for specified items may be submitted with adequate technical documentation (proper test report, etc.) to the Architect/Engineer for review. Alternate materials that are submitted without adequate technical documentation or that significantly deviate from the design intent of materials specified may be returned without review. Alternates that require substantial effort to review will not be reviewed unless authorized by the Owner.

DESIGN CRITERIA AND LOADS

OCCUPANCY:	Risk Category of Building per 2018 IBC Table 1604.5 =	II

WIND DESIGN:	**MAIN WIND FORCE RESISTING SYSTEM**		
	Ultimate Design Wind Speed, V_{ULT} (MPH)		110
	Exposure Category		C
	Internal Pressure Coefficient	Cpi =	+/- 0.18
	Topographic Factor	Kzt =	1.0
	Wind Analysis procedure used:		Envelope

WIND DESIGN: **COMPONENTS & CLADDING PRESSURES FOR DESIGN (PSF, ULTIMATE)**



EFFECTIVE WIND AREA (SQ. FT)

a = 6'-7"	10	20	50	100	500
ZONE 1	+16.0 PSF -37.0 PSF	+16.0 PSF -35.6 PSF	+16.0 PSF -31.3 PSF	+16.0 PSF -28.9 PSF	+16.0 PSF -28.9 PSF
ZONE 2	+16.0 PSF -48.8 PSF	+16.0 PSF -45.7 PSF	+16.0 PSF -41.5 PSF	+16.0 PSF -38.3 PSF	+16.0 PSF -38.3 PSF
ZONE 3	+16.0 PSF -66.4 PSF	+16.0 PSF -60.2 PSF	+16.0 PSF -51.9 PSF	+16.0 PSF -45.7 PSF	+16.0 PSF -45.7 PSF
ZONE 4	+23.2 PSF -25.2 PSF	+22.2 PSF -24.1 PSF	+20.8 PSF -22.8 PSF	+19.7 PSF -21.7 PSF	+19.7 PSF -21.7 PSF
ZONE 5	+23.2 PSF -31.1 PSF	+22.2 PSF -29.0 PSF	+20.8 PSF -26.2 PSF	+19.7 PSF -24.1 PSF	+19.7 PSF -24.1 PSF

(1) Components and Cladding Wind Pressures are based on ASCE 7-16 Chapter 30 Part 3: Buildings with h > 60 ft.
(2) Components and Cladding zone locations are based on ASCE 7-16 Table 30.5-1 for Flat Roofs θ < 10 deg.
(3) For parapets around the perimeter of the roof equal to or higher than 3 ft, Zone 3 shall be treated as Zone 2.
(4) All Parapet Components and Cladding Wind Pressures shall be determined through ASCE 7-16 Figure 30.6 -2.

SEISMIC DESIGN:	Seismic Design Category:	SDC =	D
	Basic Structural System		Bearing Wall
	Seismic Force Resisting System		Light Framed Shear Walls
	Response Modification Factor:	R =	6.5
	System Over Strength Factor	Omega =	2.5
	Deflection Amplification Factor	Cd =	4
	Site Classification per IBC 1613.3.2 & ASCE 7-16, Ch. 20 Site Class =		D
	Seismic Importance Factor per ASCE 7-16 Table 1.5-2	Ie =	1.0
	Spectral Response Acceleration (Short Period)	S_s =	0.413 g
	Spectral Response Acceleration (1-Second Period)	S_1 =	0.158 g
	Spectral Design Response Coefficient (Short Period)	S_{DS} =	0.404 g
	Spectral Design Response Coefficient (1-Second Period)	S_{D1} =	0.241 g
	Seismic response coefficient(s)	Cs =	0.18
	Redundancy Factor (North/South Direction)	N/S rho=	1.0
	Redundancy Factor (East / West Direction)	E/W rho=	1.0
	Design Base Shear (North/South Direction)	(KIPS)	19.5 (1.0 W)
	Design Base Shear (East / West Direction)	(KIPS)	13.5 (1.0 E)
	Base shear governed by:		Wind/Seismic
	Seismic Analysis procedure used:		Equivalent Lateral Force (ELF)

SNOW LOAD: (1)	Flat Roof Snow Load, (PSF)	p_f =	20 (2)
	Snow Drift Loading required by Authority Having Jurisdiction?		Yes
	Snow Load Importance Factor	I_s =	1.0 (3)
	Ground Snow Load, (PSF)	p_g =	20
	Snow Exposure Factor	C_e =	C
	Thermal Factor	C_t =	1.0
	See Roof Plan for Drift Loading		

(1) Snow Load is un-reducible and includes 5 psf rain-on-snow surcharge where ground snow load is greater than zero and 20 psf or less per ASCE 7-16 Section 7.10.
(2) Snow Load based on Richland, WA Local Design Criteria.
(3) Snow Load Importance Factor per ASCE 7-16 Table 1.5-2.

DESIGN LIVE LOADS	**AREA**	**LIVE LOADS (PSF) UNO**	**REMARKS & FOOTNOTES** (1)
	See structural loading plans for area loads and line loads. Loads listed below are for miscellaneous items.		
	Roofs	20 PSF or 300 LB	Area load is reducible. Point load per note, See above for Snow Load

(1) Unless otherwise noted, point loads to be distributed over a 2.5ft x 2.5ft area and located to produce maximum load effects on structural members.

DESIGN DEAD LOADS	BIDDER DESIGN	DEAD LOADS (PSF) UNO	REMARKS & FOOTNOTES
	Roof Dead Load, Total	15 PSF	For Prefab Roof Truss design
	Roof Dead Load, Total	35 PSF	For Prefab Roof Truss design in mechanical designated areas. See architects for extents.

SUBMITTALS

SUBMIT FOR REVIEW: SUBMITTALS of shop drawings, and product data are required for items noted in the individual materials sections and for *bidder designed* elements.

SUBMITTAL REVIEW PERIOD: Submittals shall be made in time to provide a minimum of TWO WEEKS or 10 WORKING DAYS for review by the Architect/Engineer prior to the onset of fabrication.

GENERAL CONTRACTOR'S PRIOR REVIEW: Prior to submission to the Architect/Engineer, the Contractor shall review the submittal for completeness. Dimensions and quantities are not reviewed by the SER, and therefore, must be verified by the General Contractor. Contractor shall provide any necessary dimensional details requested by the Detailer and provide the Contractor's review stamp and signature before forwarding to the Architect/Engineer.

SHOP DRAWING REVIEW: Once the contractor has completed their review, the SER will review the submittal for general conformance with the design concept and the contract documents of the building and will stamp the submittal accordingly. Markings or comments shall not be construed as relieving the contractor from compliance with the project plans and specifications, nor departures there from. The SER will return submittals in the form they are submitted in (either hard copy or electronic). For hard copy submittals, the contractor is responsible for submitting the required number of copies to the SER for review.
SHOP DRAWING DEVIATIONS: When shop drawings (component design drawings) differ from or add to the requirements of the structural drawings they shall be designed and stamped by the responsible SSE.

DEFERRED SUBMITTALS

BIDDER-DESIGNED ELEMENTS
Submit "Bidder-Designed" deferred submittals to the Architect and SER for review. The deferred submittals shall also be submitted to the city for approval, if required by the city.
Design of prefabricated, "bidder designed", manufactured, pre-engineered, or other fabricated products shall comply with the following requirements:
(1) Design considers tributary dead, live, wind and earthquake loads in combinations required by IBC.
(2) Design within the Deflection Limits noted herein and as specified or referenced in the IBC.
(3) Design shall conform to the specifications and reference standards of the governing code.
(4) Submittal shall include:
a. Calculations prepared, stamped and signed by the SSE demonstrating code conformance.
b. Engineered component design drawings are prepared, stamped and signed by the SSE.
c. Product data, technical information and manufacturer's written requirements and Agency approvals as applicable.
d. SSE may submit to the Architect/Engineer, a request to utilize relevant alternate design criteria of similar nature and generally equivalency which is recognized by the Code and acceptable to the Authority Having Jurisdiction. Submit adequate documentation of design.

DEFLECTION	**VERTICAL**	**LIMIT**
LIMITS FOR SSE / BIDDER	Roof Members, Dead + Live or Snow or Wind, Total Load (TL) Deflection	L / 240, where (L is span length,inches)
DESIGNED	Roof, Live or Snow or Wind Load (RLL)	L / 360

(1) Wind Load is reducible to 0.42 times the Component and Cladding Loads per Table 1604.3 footnote f.

GENERAL CONTRACTOR'S PRIOR REVIEW: Once the contractor has completed their review of the SSE component drawings, the SER will review the submittal for general conformance with the design of the building and will stamp the submittal accordingly. Review of the Specialty Structural Engineer's (SSE) shop drawings (component design drawings) is for compliance with design criteria and compatibility with the design of the primary structure and does not relieve the SSE of responsibility for that design. All necessary bracing, ties, anchorage, proprietary products shall be furnished and installed per manufacturer's instructions or the SSE's design drawings and calculations. These elements include but are not limited to:
(1) Exterior Cladding Systems: Curtain Wall Systems, Pre-engineered Panels
(2) Roof Mounted Components: Skylights, hatches
(3) Mechanical, Electrical, Plumbing & Sprinkler Hanger Plans

INSPECTIONS, QUALITY ASSURANCE VERIFICATIONS AND TEST REQUIREMENTS

INSPECTIONS: Foundations, footings, under slab systems and framing are subject to inspection by the Building Official in accordance with IBC 110.3. Contractor shall coordinate all required inspections with the Building Official.

SPECIAL INSPECTIONS, VERIFICATIONS and TESTS: Special Inspections, Verifications and Testing shall be done in accordance with IBC Chapter 17, the STATEMENT AND SCHEDULES OF SPECIAL INSPECTIONS listed in these drawings, and/or STATEMENT OF STRUCTURAL OBSERVATIONS.

STRUCTURAL OBSERVATION: per IBC Section 1704.6

Structural Observation is the visual observation of the structural system by a registered design professional for general conformance to the approved construction documents. It is not always required on a project, does not include or waive the responsibility for the special inspections and tests required by a Special Inspector per IBC Chapter 17, is not continuous, and does not certify conformance with the approved construction documents.

Structural Observation for this project is not required per IBC Section 1704.6.

CONTRACTOR RESPONSIBILITY: Prior to issuance of the building permit, the Contractor is required to provide the Authority Having Jurisdiction a signed, written acknowledgement of the Contractor's responsibilities associated with the above Statement of Special Inspections addressing the requirements listed in IBC Section 1704.4. Contractor is referred to IBC Sections 1705.12.5 and 1705.12.6 for architectural and MEP building systems that may be subject to additional inspections (based on the building's designated Seismic Design Category listed in the CRITERIA), including anchorage of HVAC ductwork containing hazardous materials, piping systems and mechanical units containing flammable, combustible or highly toxic materials, electrical equipment used for emergency or standby power, exterior wall panels and suspended ceiling systems.

SOILS AND FOUNDATION

REFERENCE STANDARDS: Conform to IBC Chapter 18 "Soils and Foundations."

GEOTECHNICAL REPORT: Recommendations contained in Geotechnical Engineering Evaluation Duportail Retail Building, Report Number PU23017A by GeoProfessional Innovation dated May 12th, 2023, were used for design.

CONTRACTOR'S RESPONSIBILITIES: Contractor shall be responsible to review the Geotechnical Report and shall follow the recommendations specified therein including, but not limited to, subgrade preparations, pile installation procedures, ground water management and steep slope Best Management Practices."

GEOTECHNICAL SUBGRADE INSPECTION: The Geotechnical Engineer shall inspect all sub-grades and prepared soil bearing surfaces, prior to placement of foundation reinforcing steel and concrete. Geotechnical Engineers shall provide a letter to the owner stating that soil is adequate to support the "Allowable Foundation Bearing Pressure(s)" shown below.

DESIGN SOIL VALUES:

Allowable Foundation Bearing Pressure	1500	PSF
Passive Lateral Pressure	300	PSF/FT
Coefficient of Sliding Friction	0.35	

FOUNDATIONS and FOOTINGS: Foundations shall bear on either on competent native soil or compacted structural fill as per the geotechnical report. Exterior perimeter footings shall bear not less than 24 inches below finish grade, unless otherwise specified by the geotechnical engineer and/or the building official.

FOOTING DEPTH: Tops of footings shall be as shown on plans with vertical changes as indicated with steps in the footings; locations of steps shown as approximate and shall be coordinated with the civil grading plans.

SLABS-ON-GRADE: All slabs-on-grade shall bear on compacted structural fill or competent native soil per the geotechnical report. All moisture sensitive slabs-on-grade or those subject to receive moisture sensitive coatings/ covering shall be provided with an appropriate capillary break and vapor barrier/retardant over the subgrade prepared and installed as noted in the geotechnical report, barrier manufacturer's written recommendations and coordinated with the finishes specified by the Architect.

CAST-IN-PLACE CONCRETE

REFERENCE STANDARDS: Conform to:
(1) ACI 301-16 "Specifications for Structural Concrete"
(2) IBC Chapter 19 "Concrete"
(3) ACI 318-14 "Building Code Requirements for Structural Concrete"
(4) ACI 117-10 "Specifications for Tolerances for Concrete Construction and Materials"

FIELD REFERENCE: The contractor shall keep a copy of ACI Field Reference manual, SP-15, "Standard Specifications for Structural Concrete (ACI 301) with Selected ACI and ASTM References."

CONCRETE MIXTURES: Conform to ACI 301 Section 4 "Concrete Mixtures" and IBC Section 1904.1.

MATERIALS: Conform to ACI 301 Section 4.2.1 "Materials" for requirements for cementitious materials, aggregates, mixing water and admixtures.

DRAWING LEGEND

MARK	DESCRIPTION	MARK	DESCRIPTION
F2.0	FOOTING SYMBOL (REFER TO SPREAD FOOTING SCHEDULE)	I	INDICATES WIDE FLANGE COLUMN
P1	PILE CAP SYMBOL (REFER TO PILE CAP SCHEDULE)	▫	INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR TUBE STEEL (TS) COLUMN
1	TILT-UP/PRECAST CONCRETE WALL CONNECTION SYMBOL (REFER TO CONNECTION DETAIL)	○	INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR STEEL PIPE COLUMN
2W4	SHEAR WALL SYMBOL (REFER TO SHEAR WALL SCHEDULE)	⊠	INDICATES WOOD POST
0 RFI 00	REVISION TRIANGLE	■	INDICATES BUNDLED STUDS
1	TILT-UP/PRECAST CONCRETE WALL PANEL NUMBER (REFER TO TILT-UP/ PRECAST CONCRETE WALL ELEVATIONS)		INDICATES CONCRETE COLUMN
1	CMU WALL REINFORCING SYMBOL (REFER TO CMU WALL REINFORCING SCHEDULE)		INDICATES PRECAST CONCRETE COLUMN
8"	CONTINUITY PLATE LENGTH (REFER TO TYPICAL DETAIL)		INDICATES MOMENT FRAME CONNECTION
DS	INDICATES DOUBLE SHEAR CONNECTION (REFER TO THE DOUBLE SHEAR PLATE CONNECTIONS DETAIL)		INDICATES CANTILEVER CONNECTION
00TB	INDICATES REINFORCING TYPE (REFER TO THE REINFORCING SCHEDULE)		INDICATES DRAG CONNECTION
SR__	INDICATES NUMBER OF STUD RAIL REQUIRED AT COLUMN (REFER TO STUD RAIL DETAILS)		INDICATES A LEDGER
1	ROOF/FLOOR DIAPHRAGM NAILING SYMBOL (REFER TO DIAPHRAGM NAILING SCHEDULE)		INDICATES WOOD OR STEEL STUD BEARING WALL LINE PER KEY ON SHEET
C1 COLUMN SIZE	STEEL/CONCRETE COLUMN SYMBOL (REFER TO STEEL COLUMN SCHEDULE)	OR	INDICATES WOOD OR STEEL STUD SHEAR WALL LINE AND HOLD-DOWNS PER KEY ON SHEET
T/FTG = X'-X"	ELEVATION SYMBOL (T/ REFERS TO COMPONENT THAT THE ELEVATION REFERENCES)		INDICATES MASONRY/CMU WALL
3	STUD BUBBLE (INDICATES NUMBER OF STUDS REQUIRED IF EXCEEDS NUMBER SPECIFIED IN PLAN NOTE)		INDICATES CONCRETE/TILT-UP CONCRETE WALL
	INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL)		INDICATES BEARING WALL BELOW
X SX.X	DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER)		INDICATES EXISTING WALL
00 S0.0	DETAILS OR SECTION CUT IN PLAN VIEW (DETAIL NUMBER/SHEET NUMBER)		POST-TENSION DEAD END (PLAN)
XX/SXX.XX	INDICATES LOCATION OF CONCRETE WALLS, SHEAR WALLS OR BRACED FRAME ELEVATIONS		POST-TENSION STRESSING END (PLAN)
	STRUCTURAL EXTENT SYMBOL SINGLE ARROW - END OF EXTENT DOUBLE ARROW - CONTINUOUS EXTENT ALONG THE ELEMENT LINE UNTIL THE ELEMENT IS INTERRUPTED	3	POST-TENSION TENSION (PLAN) (IN INCHES)
			INTERMEDIATE STRESSING (PLAN)
	INDICATES DIRECTION OF DECK SPAN		

ABBREVIATIONS

L	Angle	FB	Factory-Built	PJP	Partial Joint Penetration
AB	Anchor Bolt	FD	Floor Drain	PREFAB	Prefabricated
ADDL	Additional	FDN	Foundation	PSF	Pounds per Square Foot
ADH	Adhesive	FIN	Finish	PSI	Pounds Per Square Inch
ALT	Alternate	FLR	Floor	PSL	Parallel Strand Lumber
ARCH	Architectural	FRP	Fiberglass Reinforced Plastic	P-T	Post-Tensioned
B or BOT	Bottom	FRT	Fire Retardant Treated	PT	Pressure Treated
BJ	Bottom Of	FTG	Footing	R	Radius
BLDG	Building	F/	Face of	RD	Roof Drain
BLKG	Blocking	GA	Gage	REF	Refer/Reference
BMU	Brick Masonry Unit	GALV	Galvanized	REINF	Reinforcing
BP	Baseplate	GEOTECH	Geotechnical	REQD	Required
BRBF	Buckling Restrained Braced Frame	GL	Glue Laminated Timber	RET	Retaining
		GWB	Gypsum Wall Board	SB	Site-Built
BRG	Bearing	HDR	Header	SCBF	Special Concentric Braced Frame
BTWN	Between	HF	Hem-Fir		
C	Camber	HGR	Hanger	SCHED	Schedule
CB	Castellated Beam	HD	Hold-down	SER	Structural Engineer of Record
C'BORE	Counterbore	HORIZ	Horizontal		
CL or ℄	Centerline	HP	High Point	SFRS	Seismic Force-Resisting System
CLT	Cross-Laminated Timber	HSS = TS	(Hollow Structural Section)		
CIP	Cast in Place	IBC	International Building Code	SHTHG	Sheathing
CJ	Construction or Control Joint	ID	Inside Diameter	SIM	Similar
		IE	Invert Elevation	SLBB	Short Leg Back-to-Back
CJP	Complete Joint Penetration	IF	Inside Face	SMF	Special Moment Frame
		INT	Interior	SOG	Slab on Grade
CLR	Clear	k	Kips	SP	Southern Pine
CLG	Ceiling	KSF	Kips Per Square Foot	SPEC	Specification
CMU	Concrete Masonry Unit	LF	Lineal Foot	SQ	Square
COL	Column	LL	Live Load	SR	Studrail
CONC	Concrete	LLBB	Long Leg Back-to-Back	SF	Square Foot
CONN	Connection	LLH	Long Leg Horizontal	SST	Stainless Steel
CONST	Construction	LLV	Long Leg Vertical	STAGG	Stagger/Staggered
CONT	Continuous	LP	Low Point	STD	Standard
C'SINK	Countersink	LONGIT	Longitudinal	STIFF	Stiffener
CTRD	Centered	LSL	Laminated Strand Lumber	STL	Steel
DIA	Diameter	LVL	Laminated Veneer Lumber	STRUCT	Structural
DB	Drop Beam	MAS	Masonry	SWWJ	Solid Web Wood Joist
DBA	Deformed Bar Anchor	MAX	Maximum	SYM	Symmetrical
DBL	Double	MECH	Mechanical	T	Top
DEMO	Demolish	MEP	Mechanical, Electrical, Plumbing	T/	Top Of
DEV	Development			T&B	Top & Bottom
DF	Douglas Fir	MEZZ	Mezzanine	TC AX LD	Top Chord Axial Load
DIAG	Diagonal	MFR	Manufacturer	TCX	Top Chord Extension
DIST	Distributed	MIN	Minimum	TDS	Tie Down System
DL	Dead Load	MISC	Miscellaneous	T&G	Tongue & Groove
DN	Down	NIC	Not In Contract	THKND	Thickened
DO	Ditto	NLT	Nail-Laminated Timber	THRD	Threaded
DP	Depth/Deep	NTS	Not To Scale	THRU	Through
DWG	Drawing	OC	On Center	TRANSV	Transverse
(E)	Existing	OCBF	Ordinary Concentric Braced Frame	TYP	Typical
EA	Each			UNO	Unless Noted Otherwise
EF	Each Face	OD	Outside Diameter	URM	Unreinforced Masonry
EL	Elevation	OF	Outside Face		Unit
ELEC	Electrical	OPNG	Opening	VERT	Vertical
ELEV	Elevator	OPP	Opposite	W	Wide
EMBED	Embedment	OWSJ	Open Web Steel Joist	W/	With
EQ	Equal	OWWJ	Open Web Wood Joist	W/O	Without
EQUIP	Equipment	PL	Plate	WHS	Welded Headed Stud
EW	Each Way	PAF	Powder Actuated Fastener	WP	Working Point
EXP	Expansion	PC	Precast	WWF	Welded Wire Fabric
EXP JT	Expansion Joint	PERP	Perpendicular	±	Plus or Minus
EXT	Exterior	PLWD	Plywood		

FOR PERMIT
The Contractor shall not use these drawings for construction until Contractor receives written approval for use in construction by the authority having jurisdiction and DCI Engineers.

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DAVID GIORDANO STATE OF WASHINGTON 38942 REGISTERED PROFESSIONAL ENGINEER

Duportail St. Retail Building

22041-0302

Richland, Washington

Permit Set

5/31/23

Revision Schedule

GENERAL NOTES

S1.1

SUBMITTALS: Provide all submittals required by ACI 301 Section 4.1.2. Submit mix designs for each mix in the table below. Substantiating strength results from past tests shall not be older than 24 months per ACI 318 Section 26.4.3.1 (b).

TABLE OF MIX DESIGN REQUIREMENTS

Member Type/Location	Strength f'c (psi)	Test Age (days)	Nominal Maximum Aggregate	Exposure Class	Max W/C Ratio	Air Content	Notes (1 to 9 Typical UNO)
Footings	3000	28	1"	-	-	-	-
Exterior Slabs on Grade & Sidewalks	4500	28	1"	F3	0.55	6%	-
Interior Slabs on Grade	3000	28	1"	-	-	-	9

Table of Mix Design Requirements Notes:

(1) W/C Ratio: Water-cementitious material ratios shall be based on the total weight of cementitious materials. Maximum ratios are controlled by strength noted in the Table of Mix Design Requirements and durability requirements given in ACI 318 Section 19.3.

(2) Cementitious Materials:
   a. DCI encourages the reduction of cement content and/or the use of blended hydraulic cements. Where requirements of this section prohibit inclusion of any of these mixes, contact DCI for further coordination.
   b. The use of fly ash, other pozzolans, silica fume, or slag shall conform to ACI 318 Sections 19.3.2 and 26.4.2.2
   c. Cementitious materials shall conform to the relevant ASTM standards listed in ACI 318 Section 26.4.1.1.1(a).

(3) Air Content: Conform to ACI 318 Section 19.3.3.1. Minimum standards for exposure class are noted in the table. If freezing and thawing class is not noted, air content given is that required by the SER. Tolerance is ±1-½%. Air content shall be measured at point of placement.

(4) Aggregates shall conform to ASTM C33.

(5) Slump: Conform to ACI 301 Section 4.2.2.2. Slump shall be determined at point of placement.

(6) Chloride Content: Conform to ACI 318 Table 19.3.2.1.

(7) Non- chloride accelerator: Non-chloride accelerating admixture may be used in concrete placed at ambient temperatures below 50°F at the contractor's option.

(8) ACI 318, Section 19.3.1.1 exposure classes shall be assumed to be F0, S0, W0, and C0 unless different exposure classes are listed in the Table of Mix Design Requirements that modify these base requirements.

(9) Structural design is based on strength of 2500 psi and therefore does not require special inspection. The 3000 psi compressive strength is specified for serviceability.

FORMWORK & RESHORING: Conform to ACI 301 Section 2 "Formwork and Form Accessories." Removal of Forms shall conform to Section 2.3.2 except strength indicated in Section 2.3.2.5 shall be 0.75 f' c.

MEASURING, MIXING, AND DELIVERY: Conform to ACI 301 Section 4.3.

HANDLING, PLACING, CONSTRUCTING AND CURING: Conform to ACI 301 Section 5. In addition, hot weather concreting shall conform to ACI 305R-10 and cold weather concreting shall conform to ACI 306R-10.

CONSTRUCTION JOINTS: Conform to ACI 301 Sections. 2.2.2.5 and 5.3.2.6. Construction joints shall be located and detailed as on the construction drawings. Submit alternate locations per ACI 301 Section 5.1.2.4(a) for review and approval by the SER two weeks minimum prior to forming. Use of an acceptable adhesive, surface retardant, portland cement grout or roughening the surface is not required unless specifically noted on the drawings.

EMBEDDED ITEMS: Position and secure in place expansion joint material, anchors and other structural and non-structural embedded items before placing concrete. Contractor shall refer to mechanical, electrical, plumbing and architectural drawings and coordinate other embedded items.

GROUT: Use 7000 psi non-shrink grout under column base plates.

POST-INSTALLED ANCHORS to CONCRETE: Anchor location, type, diameter and embedment shall be as indicated on drawings. Reference the POST INSTALLED ANCHORS section for applicable Post-Installed Anchor Adhesives. Anchors shall be installed and inspected in strict accordance with the applicable ICC-Evaluation Service Report (ESR). Special inspection shall be per the TESTS and INSPECTIONS section.

CONCRETE PLACEMENT TOLERANCE: Conform to ACI 117-10 for concrete placement tolerance.

CONCRETE REINFORCEMENT

REFERENCE STANDARDS: Conform to:
(1) ACI 301-16 "Standard Specifications for Structural Concrete", Section 3 "Reinforcement and Reinforcement Supports."
(2) ACI SP-66(04) "ACI Detailing Manual"
(3) CRSI MSP-09, 28th Edition, "Manual of Standard Practice."
(4) ANSI/AWS D1.4: 2005, "Structural Welding Code - Reinforcing Steel."
(5) IBC Chapter 19-Concrete.
(6) ACI 318-14 "Building Code Requirements for Structural Concrete."
(7) ACI 117-10 "Specifications for Tolerances for Concrete Construction and Materials"

SUBMITTALS: Conform to ACI 301 Section 3.1.2 "Submittals." Submit placing drawings showing fabrication dimensions and placement locations of reinforcement and reinforcement supports.

MATERIALS:

Reinforcing Bars..... ASTM A615, Grade 60, deformed bars.
ASTM A706, Grade 60, deformed bars.
Smooth Welded Wire Fabric ..... ASTM A1064
Deformed Welded Wire Fabric..... ASTM A1064
Bar Supports ..... CRSI MSP-09, Chapter 3 "Bar Supports."
Tie Wire ..... 16 gage or heavier, black annealed.

FABRICATION: Conform to ACI 301, Section 3.2.2. "Fabrication", and ACI SP-66 "ACI Detailing Manual."

WELDING: Bars shall not be welded unless authorized. When authorized, conform to ACI 301, Section 3.2.2.2. "Welding", AWS D1.4, and provide ASTM A706, grade 60 reinforcement.

PLACING: Conform to ACI 301, Section 3.3.2 "Placing." Placing tolerances shall conform to ACI 117.

CONCRETE COVER: Conform to the following cover requirements unless noted otherwise in the drawings.
Concrete cast against earth ..... 3"
Concrete exposed to earth or weather..... 2"

SPLICES: Conform to ACI 301, Section 3.3.2.7, "Splices". Refer to "Typical Lap Splice and Development Length Schedule" for typical reinforcement splices. Splices indicated on individual sheets shall control over the schedule. Mechanical connections may be used when approved by the SER.

FIELD BENDING: Conform to ACI 301 Section 3.3.2.8. "Field Bending or Straightening." Bar sizes #3 through #5 may be field bent cold the first time. Subsequent bends and other bar sizes require preheating. Do not twist bars. Bars shall not be bent past 45 degrees.

TYPICAL CONCRETE REINFORCEMENT: Unless noted on the plans, concrete walls shall have the following minimum reinforcement. Contractor shall confirm minimum reinforcement of walls with SER prior to rebar fabrication.

TABLE of MINIMUM CONCRETE WALL REINFORCING

WALL THICKNESS	HORIZONTAL BARS	VERTICAL BARS	LOCATION
6"	#4 @ 12" OC	#4 @ 12" OC	center in wall
8"	#5 @ 12" OC	#5 @ 12" OC	center in wall
10"	#4 @ 16" OC EF	#4 @ 16" OC EF	EF = each face
12"	#4 @ 12" OC EF	#4 @ 12" OC EF	EF = each face

BRICK VENEER

REFERENCE STANDARDS: Conform to:

(1) IBC Chapter 14 "Exterior Walls."
(2) TMS 402-16 "Building Code Requirements for Masonry Structures."
(3) TMS 602-16 "Specification for Masonry Structures."

SUBMITTALS: Submit product specific information on anchor size, type and capacities with corresponding ICC-ESR reports regarding wire ties, sheet metal connector pieces, screws, and expansion anchors to the Architect/Engineer for review.

MATERIALS:
(1) BRICK VENEER: Conform to ASTM C216 "Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)", Grade MW.

(2) Mortar: Conform to ASTM C270, Type S, and IBC Section 2103.2 "Mortar."

(3) JOINT REINFORCING: Conforms to ASTM A951 "Standard Specification for Steel Wire for Masonry Joint Reinforcement". All joint reinforcing shall be hot dip galvanized.

(4) ANCHORS: Anchor ties shall be the Hohmann & Barnard seismic anchors. Anchor ties shall be adjustable two-piece anchors made of 14 gage or 12 gage galvanized metal and/or W2.8 (3/16" diameter) galvanized wire that shall be engineered to attach:
   a. to the face of Masonry or concrete with a ¼" expansion bolt or screw anchor for concrete or masonry embedded 2" minimum into the concrete or masonry.
   b. to steel stud with two #12 (0.209" diameter) screws per anchor.
   c. to wood stud with two #9 (0.177" diameter) screws per anchor embedded at least 1 ¼" into the wood stud.
   d. or at channel slot anchor assemblies with a 305 Dovetail Anchor Slot embedded in the concrete and a 303 SV Seismic Notch Dovetail Anchor.

All parts of the veneer anchorage system shall be fabricated of similar metals with similar coatings to reduce the possibility of galvanic corrosion occurring.

Brick veneer in Seismic Design Category D, E and F and all brick veneer not laid in a running bond pattern shall have continuous joint reinforcing of W1.7 (0.148" diameter) wires at a maximum vertical spacing of 16"oc. Lap wires 10" at splices.

Pintle anchors shall have at least two pintle legs of wire size W2.8 (3/16" diameter) each and shall have an offset not exceeding ½" from the horizontal plane of the plate anchored to the structure.

Anchors in Seismic Design Category D, E and F shall have a positive mechanical connection to the continuous wire joint reinforcing in the veneer.

Both wire and sheet-metal anchors shall extend into the veneer a minimum of 1½" and shall have a minimum of 5/8" mortar cover on the outside face.

All anchors shall adjust 1-¼" up or down to allow for different course heights and shall allow at least ½" horizontal in-plane and ¾" vertical in-plane movement to accommodate expansion, contraction, shrinkage and other movement.

Coordinate expansion joint locations with the architect prior to erection. Typically expansion joints should be installed at 24" from corners on one side of the corner, at intersecting walls, at changes in wall height, at changes in wall thickness and at 20' maximum on center.

CONSTRUCTION OVER STUDS: When applied over wood or metal stud construction, the studs shall be spaced a maximum of 16 inches on centers and approved paper shall first be applied over the sheathing or wires between studs except as otherwise provided in IBC Sections 1402-1405. An air space of at least 1-2 inch should be maintained between the backing and the veneer. The air space must be kept free and clear of debris and mortar droppings.

BRICK PANELS: The panel manufacturer is responsible for the design of the panels and their connection to the primary structure. Edge beams have been designed for vertical load only. The panel manufacturer shall provide braces and ties to account for load eccentricities and lateral forces. The maximum vertical load and location of the bearing points is noted on the drawings. Brick panel shop drawings shall indicate the magnitude and location of all loads imposed onto the primary structure. The panel manufacturer engineer shall be responsible for verifying that panel bracing or ties are attached to the primary structure in such a manner that their forces do not cause any distress to the primary structure. Where necessary, additional structural elements shall be provided by the panel manufacturer to safely distribute the loads to the anchors.

POST-INSTALLED ANCHORS (INTO CONCRETE AND MASONRY)

REFERENCE STANDARDS: Conform to:
(1) IBC Chapter 19 "Concrete"
(2) ACI 318-19 "Building Code Requirements for Structural Concrete"
(3) IBC Chapter 21 "Masonry"
(4) TMS 402-16 "Building Code Requirements for Masonry Structures"

POST-INSTALLED ANCHORS: Install only where specifically shown in the details or allowed by SER. All post-Installed anchors types and locations shall be approved by the SER and shall have a current ICC-Evaluation Service Report that provides relevant design values necessary to validate the available strength exceeds the required strength. Submit current manufacturer's data and ICC ESR report to SER for approval regardless of whether or not it is a pre-approved anchor. Anchors shall be installed in strict accordance to ICC-ESR and the manufacturer's printed installation instructions (MPII) in conjunction with edge distance, spacing and embedment depth as indicated on the drawings. The contractor shall arrange for a manufacturer's field representative to provide installation training for all products to be used, prior to the commencement of work. Only trained installer shall perform post installed anchor installation. A record of training shall be kept on site and be made available to the SER as requested. Adhesive anchors installed in horizontally or upwardly inclined orientation shall be performed by a certified adhesive anchor installer (AAI) as certified through ACI/CRSI or approved equivalent. Proof of current certification shall be submitted to the engineer for approval prior to commencement of installation. No reinforcing bars shall be damaged during installation of post-installed anchors. Special inspection shall be per the TESTS and INSPECTIONS section. Anchor type, diameter and embedment shall be as indicated on drawings.

(1) ADHESIVE ANCHORS: The following Adhesive-type anchoring systems have been used in the design and shall be used for anchorage to CONCRETE, as applicable and in accordance with corresponding current ICC ESR report. Reference the corresponding ICC ESR report for required minimum age of concrete, concrete temperature range, moisture condition, light weight concrete, and hole drilling and preparation requirements. Drilled-in anchor embedment lengths shall be as shown on drawings, or not less than 7 times the anchor nominal diameter (7D). Adhesive anchors are to be installed in concrete aged a minimum of 21 days, unless otherwise specified in the ICC ESR report.

   a. SIMPSON "SET-XP" – ICC ESR 2508 for anchorage to CONCRETE

(2) EXPANSION ANCHORS: The following Expansion type anchors are pre-approved for anchorage to CONCRETE or MASONRY in accordance with corresponding current ICC ESR report:

   a. SIMPSON "STRONG-BOLT 2" – ICC ESR-3037 for anchorage to CONCRETE

(3) SCREW ANCHORS: The following Screw type anchor is pre-approved for anchorage to CONCRETE or MASONRY in accordance with corresponding current ICC ESR report:

   a. SIMPSON "TITEN HD" – ICC ESR-2713 for CARBON STEEL to CONCRETE

STRUCTURAL STEEL

REFERENCE STANDARDS:
Conform to:
(1) IBC Chapter 22 – "Steel"
(2) ANSI/AISC 303-16 – "Code of Standard Practice for Steel Buildings & Bridges"
(3) AISC – "Manual of Steel Construction", Fifteenth Edition (2016)
(4) ANSI/AISC 360-16 – "Specification for Structural Steel Buildings"
(5) AWS D1.1:2015 – "Structural Welding Code – Steel"
(6) 2014 RCSC – "Specification for Structural Joints using High-Strength Bolts"
(7) AWS D1.8:2009 – "Structural Welding Code – Seismic Supplement"

SUBMITTALS: Submit the following documents to the SER for review:
(1) SHOP DRAWINGS complying with AISC 360 Sections M1and N3 and AISC 303 Section 4.
(2) ERECTION DRAWINGS complying AISC 360 Sections M1and N3 and AISC 303 Section 4.

Make copies of the following documents "Available upon Request" to the SER or Owner's Inspection Agency in electronic or printed form prior to fabrication per AISC 360 Section N3.2 requirements:

(1) Fabricator's written Quality Control Manual that includes, as a minimum:
   a. Material Control Procedures
   b. Inspection Procedures
   c. Non-conformance Procedures
(2) Steel & Anchor Rod suppliers' Material Test Reports (MTR's) indicating the compliance with specifications.
(3) Fastener manufacturer's Certification documenting conformance with the specification.
(4) Filler metal manufacturer's product data for SMAW, FCAW and GMAW indicating:
   a. Product specification compliance
   b. Recommended welding parameters
   c. Recommended storage and exposure requirements including baking
   d. Limitations of use
(5) Welded Headed (Shear) Stud Anchors Manufacturer's certification indicating the meet specifications.
(6) Weld Procedure Specifications (WPS's) for shop and field welding.
(7) Manufacturer's Certificates of Conformance for electrodes, fluxes and gases (welding consumables).
(8) Procedure Qualification Records (PQR's) for WPS's that are not prequalified in accordance with AWS.
(9) Welding personnel Performance Qualification Records (WPQR) and continuity records conforming to AWS standards and WABO standards as applicable for Washington State projects.

MATERIALS:
Structural steel materials shall conform to materials and requirements listed in AISC 360 section A3 including, but not limited to:
Channel (C) & Angle (L) Shapes ..... ASTM A36, Fy = 36 ksi
Structural Plate (PL)..... ASTM A36, Fy = 36 ksi
Hollow Structural Section – Square/Rect (HSS).. ASTM A500, Grade C Fy = 50 ksi
High Strength, Heavy Hex Structural Bolts..... ASTM F3125 Gr. A325/F1852, Type 1 or 3, Plain
Heavy Hex Nuts ..... ASTM A563, Grade and Finish per RCSC Table 2.1
Washers (Hardened Flat or Beveled)..... ASTM F436, Grade and Finish per RCSC Table 2.1
Anchor Rods (Anchor Bolts, typical) ..... ASTM F1554, Gr. 36
Mild Threaded Rods ..... ASTM A36, Fy = 36 ksi

STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS:

(1) ASTM F3125 Gr. A325-N bolts – "threads NOT excluded in the shear plane".
(2) High-strength bolted joints have been designed as "BEARING" connections.
(3) Provide ASTM Bolt Grade and Type as specified in the Materials section above.
(4) Provide Washers over outer ply of slotted holes and oversize holes per RCSC Table 6.1.
(5) Provide Nut and Washer grades, types and finishes conforming to RCSC specification Table 2.1.
(6) Provide *fastener assemblies* from a single supplier.
(7) Joint Types shall be:
   a. ST - "Snug Tight", for typical beam end "shear" connections, unless noted otherwise.
   b. SC - "Slip Critical", where specifically indicated. Provide with Class A Faying surface.
(8) Install bolts in joints in accordance with the RCSC Specification Section 8 and Table 4.1.
(9) Inspection is per RCSC Section 9.

ANCHORAGE to CONCRETE:

(1) EMBEDDED STEEL PLATES for Anchorage to Concrete: Plates (PL) embedded in concrete with studs (WHS) or dowel bar anchors (DBA) shall be of the sizes and lengths as indicated on the plans with minimum 1/2" dia. WHS x 6" long but provide not less than ¾" interior cover or 1 ½" exterior cover to the opposite face of concrete, unless noted otherwise.

(2) COLUMN ANCHOR RODS and BASE PLATES: All columns (vertical member assemblies weighing over 300 pounds) shall be provided with a **minimum of four ¾" diameter anchor rods**. Column base plates shall be at least ¾" thick, unless noted otherwise. Cast-in-place anchor rods shall be provided unless otherwise approved by the Engineer. Unless noted otherwise, embedment of cast-in-place anchor rods shall be 12 times the anchor diameter (12D).

FABRICATION:

(1) Conform to AISC 360 Section M2 "Fabrication" and AISC 303 Section 6 "Shop Fabrication".

(2) Quality Control (QC) shall conform to:
   a. AISC 360 Chapter N "Quality Control and Quality Assurance" and
   b. AISC 303 Section 8 "Quality Control".
   c. Fabricator and Erector shall establish and maintain written Quality Control (QC) procedures per AISC 360 section N3.
   d. Fabricator shall perform self-inspections per AISC 360 section N5 to ensure that their work is performed in accordance with Code of Standard Practice, the AISC Specification, Contract Documents and the Applicable Building Code.
   e. QC inspections may be coordinated with Quality Assurance inspections per Section N5.3 where fabricators QA procedures provide the necessary basis for material control, inspection, and control of the workmanship expected by the Special Inspector.

WELDING:
(1) Welding shall conform to AWS D1.1 with Prequalified Welding Processes except as modified by AISC 360 section J2 and AISC 341 as applicable. Welders shall be qualified in accordance with AWS D1.1 WABO, requirements.
(2) Use 70ksi strength, low-hydrogen type electrodes (E7018) or E71T as appropriate for the process selected.
(3) Welding of high strength anchor rods is prohibited unless approved by Engineer.
(4) Welding of headed stud anchors shall be in accordance with AWS D1.1 Chapter 7 "Stud Welding".

ERECTION:
(1) Conform to AISC 360 Section M4 "Erection" and AISC 303 Section 7 "Erection".
(2) Conform to AISC 360 Chapter N "Quality Control and Quality Assurance" and AISC 303 Section 8.
   a. The Erector shall maintain detailed erection quality control procedures that ensure that the work is performed in accordance with these requirements and the Contract Documents.
(3) Steel work shall be carried up true and plumb within the limits defined in AISC 303 Section 7.13.
(4) High strength bolting shall comply with the RCSC requirements including RCSC Section 7.2 "Required Testing", as applicable and AISC 360 Chapter J, Section M2.5 and Section N5.6.
(5) Welding of HEADED STUD ANCHORS shall be in accordance with AWS D1.1 Chapter 7 "Stud Welding.
(6) Provide Headed (Shear) Stud Anchors welded through the metal deck to tops of beams denoted in plans.
(7) The contractor shall provide temporary bracing and safety protection required by AISC 360 Section M4.2 and AISC 303 Section 7.10 and 7.11.

PROTECTIVE COATING REQUIREMENTS:

(1) SHOP PAINTING: Conform to AISC 360 Section M3 and AISC 303 Section 6.5 unless otherwise specified by the project specifications.

(2) INTERIOR STEEL:
   a. Unless noted otherwise, ***do not paint*** any of the steel surfaces meeting the following conditions:
      i. Concealed by the interior building finishes,
      ii. Fireproofed,
      iii. Embedded in concrete,
      iv. Specially prepared as a "faying surface" for Type-SC "slip-critical" connections including bolted connections that form a part of the Seismic Force Resisting System governed by AISC 341 unless the coating conforms to requirements of the RCSC Bolt Specification and is approved by the Engineer.
      v. Welded; if area requires painting, do not paint until after weld inspections and non-destructive testing requirement, if any, are satisfied.
   b. Interior steel, exposed to view, shall be painted with one coat of shop primer unless otherwise indicated in the project specifications. Field touch-ups to match the finish coat or as otherwise indicated in the project specifications.

(3) EXTERIOR STEEL: Exposed exterior steel shall be protected by either:
   a. Paint with an exterior multi-coat system as per the project specifications. Field touch-up painting shall be as per the project specifications.

WOOD FRAMING

REFERENCE STANDARDS: Conform to:
(1) IBC Chapter 23 "WOOD"
(2) NDS – "2018 National Design Specification (NDS) for Wood Construction"
(3) ANSI/AWC – SDPWS-15: Special Design Provisions for Wind and Seismic
(4) APA D510C-12 Plywood Design Specification
(5) ANSI/TPI 1-2014 "National Design Standard for Metal-Plate-Connected Wood Truss Construction"
(6) BCSI B1 "Guide to Good Practice for Handling, Installing, Restraining & Bracing of Trusses"
(7) TPI DSB "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses"
(8) APA Report TT-045B "Minimum Nail Penetration for Wood Structural Panel Connections Subject to Lateral Loads"
(9) APA Report TT-061 "1-5/16 Inch-Thick I-Joist Flanges and Diaphragm Nail Penetration

SUBMITTALS: Submit shop drawings to the Architect/Engineer for review. Shop drawings shall include member size, spacing, camber, material type, grade, shop and field assembly details and connections, types and location of bolts and other fasteners. Supply shop drawings for the following:
(1) Glued laminated members
(2) LSL members

DEFERRED SUBMITTALS: Submit product data and proof of ICC approval for framing members and fasteners that have been designed by others. Submit calculations prepared by the SSE in the state of Washington for all members and connections designed by others along with shop drawings. All necessary bridging, blocking, blocking panels and web stiffeners shall be detailed and furnished by the supplier. Temporary and permanent bridging shall be installed in conformance with the manufacturer's specifications. Deflection limits shall be as noted under DEFFERRED SUBMITTLALS section specific details. Products included are:

(1) Open web wood trusses

IDENTIFICATION: All sawn lumber and pre-manufactured wood products shall be identified by the grade mark or a certificate of inspection issued by the certifying agency.

MATERIALS:

(1) Sawn Lumber: Conform to grading rules of WWPA, WCLIB or NLGA and Table below. Finger jointed studs acceptable at interior walls only.

TABLE of SOLID SAWN LUMBER

Member Use	Size	Species	Grade
Wall Stud/ Top & Bottom Plates	2x4, 3x4, 2x6, 3x6	Doug Fir Larch	No. 2
Sill Plate (at concrete)	2x4, 3x4, 2x6, 3x6	PT Doug Fir Larch	No. 2
Post	4x4, 4x6, 4x8	Doug Fir Larch	No. 2
Floor or Roof Joist	2x6 through 2x12	Doug Fir Larch	No. 2
Beam	4x8 through 4x12	Doug Fir Larch	No. 2
Beam	6x8 through 6x12	Doug Fir Larch	No. 1
Post or Timber	6x6, 8x8	Doug-Fir Larch	No. 1

(2) Glued Laminated Timber: Conform to ANSI 117-**2015** "Standard Specifications for Structural Glue-laminated Timber of Softwood Species, Manufacturing and Design" and ANSI A190.1 "Structural Glued Laminated Timber." Camber all glued laminated beams, except cantilevered and continuous beams, to 3000' radius, unless shown otherwise on the plans. Fabricate cantilevered and continuous beams flat, unless shown otherwise on plans.

TABLE of GLULAM and GRADE

Member	Sizes	Species	Comb. Symbol	Uses
Beams	All	DF/DF	24F–V4	Simple Spans
Beams	All	DF/DF	24F–V8	Continuous or with Cantilever Spans
Columns	All	DF	L2	Post, Truss Member

(3) Wood Structural Sheathing (Plywood): Wood APA-rated structural sheathing includes: all veneer plywood, oriented strand board, waferboard, particleboard, T1-11 siding, and composites of veneer and wood-based material with T&G joint. **Architect** may disallow OSB. Confirm with **Architect**. Conform to "Construction and Industrial Plywood" based on Product Standard PS 1-09 by the U.S. Dept. of Commerce, and "Performance Standard for Wood-Based Structural-Use Panels" based on Product Standard PS 2-10 by the U.S. Dept. of Commerce and "Plywood Design Specification" based on APA D510C-12 by the American Plywood Association. Unless noted otherwise, sheathing shall comply with the following table:

TABLE of SHEATHING - Use, Minimum Thickness and Minimum APA Rating

Location	Thickness	Span Rating	Plywood Grade	Exposure
Roof	15/32"	32/16	C-D	1
Floor	23/32" T&G	24 OC	STURD-I-FLOOR	1
Walls	15/32"	32/16	C-D	1

Unless noted otherwise on drawings, install roof and floor panels with long dimension across supports and with panel continuous over two or more spans. End joints shall occur over supports.

(1) Timber Connectors: Shall be "Strong Tie" by Simpson Company as specified in their latest catalog. Alternate connectors by other manufacturers may be substituted provided they have current ICC approval for equivalent or greater load capacities and are reviewed and approved by the SER prior to ordering. Connectors shall be installed per the manufacturer's instructions. Where connector straps connect two members, place one-half of the nails or bolts in each member. Where straps are used as hold-downs, nail straps to wood framing just prior to drywall application, as late as possible in the framing process to allow the wood to shrink and the building to settle. Premature nailing of the strap may lead to strap buckling and potential finish damage.

Where connectors are in exposed exterior applications in contact with preservative treated wood (PT) other than CCA, connectors shall be either batch hot-dipped galvanized (HDG), mechanically galvanized (ASTM B695, Class 55 minimum) stainless steel, or provided with 1.85 oz/sf of zinc galvanizing equal to or better than Simpson ZMAX finish.

Nail straps to wood framing as late as possible in the framing process to allow the wood to shrink and the building to settle. Premature nailing of the strap may lead to strap buckling and potential finish damage.

(2) Fasteners (nails, bolts, screws, etc) attaching timber connectors (joist hangers, post caps and bases, etc) to PT wood shall have similar corrosion resistance properties (matching protective treatments) as the protected connector. Fasteners (nails, bolts, screws, etc) attaching sawn timber members or sheathing (shear walls) to PT wood shall be corrosion resistant; nails and lag bolts shall be either HDG (ASTM A153) or stainless steel. Verify the suitability of the fastener protection/coating with the wood treatment chemical manufacturer/ supplier.

Provide washers under the heads and nuts of all bolts and lag screws bearing on wood.

(3) Lag Bolts/Bolts: Conform to ASTM A307 and IBC Section 2304.10.

(4) Nails and Staples: Conform to ASTM F1667 and IBC Sections 2303.6 and 2304.10.

(5) Engineered Wood Products (RedBuilt): The following materials are based on lumber manufactured by RedBuilt and were used for the design as shown on the plans. Alternate products by other manufacturers may be substituted provided they have current ICC approval for equivalent or greater load and stiffness properties and are reviewed and approved by the Structural Engineer prior to ordering.

   a. Laminated Veneer Lumber (RedLam LVL): Conform to ICC ES Report No. ESR-2993 or CCMC Report No. 12627- R.

NAILING REQUIREMENTS: Conform to IBC Section 2304.10 "Connections and fasteners." Unless noted on plans, nail per Table 2304.10.1. Nailing for roof/floor diaphragms/shear walls shall be per drawings. Nails shall be driven flush and shall not fracture the surface of sheathing. Alternate nails may be used but are subject to review and approval by the Structural Engineer. Substitution of staples for the nailing of rated sheathing is subject to review by the structural engineer prior to construction.

STANDARD LIGHT-FRAME CONSTRUCTION: Unless noted on the plans, construction shall conform to IBC Section 2308 "Conventional Light-Frame Construction."

NAILERS ON STEEL COLUMNS and BEAMS: Wood 3x nailers are generally required on all HSS columns and steel beams abutting or embedded within wood framing. Unless noted otherwise, attach with 5/8" diameter bolts or welded studs at 16" on centers. Unless noted otherwise, wood nailers on beams supporting joist hangers shall not overhang the beam flange by more than ¼".

WOOD SHRINKAGE AND EXPANSION: Wood materials will expand or contract based on relative changes in moisture. The contractor is responsible for means and methods of construction related to mitigating and managing the effects of changes in moisture.

MOISTURE CONTENT: The contractor shall make provisions during handling and construction to prevent the structural wood members from exceeding the appropriate moisture content limits. The moisture content for solid sawn wood material used for this project shall not exceed 19%. The moisture content for engineered wood products, laminated lumber and sheathing shall not exceed the limits required by the manufacturer or 12%, whichever is less. The moisture content limits may be more stringent for particular product requirements (eg. finishes, cladding, insulation systems, etc.). The contractor shall refer to the Architect's drawings, project specifications, or installer/product requirements for additional requirements.

SHRINKAGE COMPENSATION FOR MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS: MEP systems, including ductwork, pipes, and other elements that run continuously between levels shall be installed/designed in such a manner to accommodate shrinkage in the wood framing. Wood shrinkage amounts will vary depending on the construction process and materials used. The anticipated shrinkage under typical conditions is expected to range between 1/8" and 1/4" per floor.

CLADDING COMPATIBILITY: The Architect/Owner and contractor shall review the cladding, finishes, insulation systems, other non-structural components and construction procedures proposed for the project with respect to their performance over wood framing. EIFS systems should be avoided on wood-framed projects due to problems with moisture proofing. Note that DCI is not responsible for the attachment of the cladding to the wood studs which needs to be verified and provided by the cladding supplier.
STORAGE & HANDLING: All storage and handling is to be a means and methods provided by the contractor. The contractor is to determine the best practices in order to avoid damage to the members during storage, such as fungal growth, exposure to weather conditions. The following are suggestions to aid the contractor. All materials should be stored level on site and must be raised off the ground a minimum of 6" by means of blocking and separating spacers. It is recommended that the materials are covered with an additional opaque water proof material (i.e. good quality tarpaulin). When members are wrapped in poly or another material which may inhibit air flow, the material should have slots in the material or perforations to allow for air flow and prevent the accumulation of water and or condensation. Ensure that all exposed members are protective material from exposure should be removed

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GENERAL NOTES

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only after the roof or structure providing cover is installed. Members should be constantly protected from weather during transportation, storage, and erection.

For interior glulam members the heat in the building should be gradually increased over a two to three week period in order to provide a gradual change in moisture content. Do not direct any forced air heating systems onto the glulam members. It is recommended to apply the final finish to the glulam member before heat is applied.

Members that are to be exposed to view in the finished structure should be handled using nylon or fabric slings to prevent surface damage. The contractor should also use means to protect corners of members to prevent "crushing" during transportation, storage and erection. All bolts should be galvanized, or make sure that they are free of oil to prevent staining. Glulam members should be treated and stained per the architect of records recommendations. The following are provided in order to help guide the contractor in the best practices to preserve the quality of wood products. These notes are not intended to be comprehensive and an end all solution and should be taken under consideration by the contractor and supplemented as necessary.

PRESERVATIVE TREATMENT (PT): Wood materials that are required to be "treated wood" in accordance with IBC Section 2304.12. "Protection Against Decay and Termite Protection" shall conform to the appropriate standards of the American Wood-Preservers Association (AWPA) for sawn lumber, glued laminated timber, round poles, wood piles and marine piles. Follow American Lumber Standards Committee (ALSC) quality assurance procedures. Products shall bear the appropriate mark. Fasteners or anchors in treated wood shall be of stainless steel or hot-dipped galvanized or as per IBC 2304.10.5.

Mud sill plates in normally dry interior applications may be treated with Sodium Borate (DOT - Disodium Octaborate Tetrahydrate) as recent studies have noted less connector corrosion potential than other available wood treatments or the original CCA treated sill plates. Wood treated with Sodium Borate shall be protected during shipment, storage and installation to minimize leaching of the water-soluble preservative from the lumber. Sodium borate pressure treated plates do not require hot-dipped galvanized connectors.

If using preservative treatments other than CCA or sodium borate, fasteners must be hot dipped galvanized or stainless steel. Wood treated with Alkaline Copper Quaternary (ACQ) requires steel components in contact with the wood to be stainless (nails, bolts, screws, washers & lag screws). Fasteners (nails, bolts, screws, washers & lag screws) attaching timber connectors (joist hangers, post caps and bases, etc) to PT wood shall have similar corrosion resistance properties (matching protective treatments) as the protected connector; that is, use hot dipped galvanized or stainless-steel fasteners. Fasteners (nails, bolts, screws, washers & lag screws) attaching sawn timber members or sheathing (shear walls) to Pressure Treated wood shall be corrosion resistant (hot dipped galvanized or stainless steel).

Always verify the suitability of the fastener protection/coating with the wood treatment chemical manufacturer/ supplier.

Fire Retardant Treated (FRT) Wood: Wood material that is required to be Fire Retardant Treated Wood to conform to IBC section 2303.2 – "Fire Retardant Treated Wood." Submit ICC report to SER for review and approval prior to construction.

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GENERAL NOTES

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SPECIAL INSPECTIONS

The following Statement and Schedules of Inspections are those Special Inspections and Tests that shall be performed for this project. Special Inspectors shall reference these plans and IBC Chapter 17 for all special inspection requirements.
The owner shall retain a WABO accredited Special Inspections agency to provide special inspections for this project. Special Inspectors shall be qualified persons per IBC 1704.2.1.
Special inspection reports shall be provided on a weekly basis. Submit copies of all inspection reports to the Architect/Engineer and the Authority Having Jurisdiction for review. In addition to special inspection reports and tests, submit reports and certificates noted in IBC 1704.5 to the Authority Having Jurisdiction. Final special inspection reports will be required by each special inspection firm per IBC 1704.2.4.

STATEMENT OF SPECIAL INSPECTIONS:

This statement of Special Inspections has been written with the understanding that the Building Official will:
- Review and approve the qualifications of the Special Inspectors
- Monitor the special inspection activity on the project site to assure that Special Inspectors are qualified and performing their duty as state within this statement.
- Review all Special Inspection Reports submitted to them by the Special Inspector
- Perform inspections as required by IBC Section 110.3.

The following Special Inspections are applicable to this project:

- Special Inspections for Standard Buildings	(per IBC 1705.1)	REQUIRED
- Special Inspections for Seismic Resistance	(per IBC 1705.12)	REQUIRED
- Testing for Seismic Resistance	(per IBC 1705.13)	REQUIRED
- Special Inspections for Wind Resistance	(per IBC 1705.11)	REQUIRED

SPECIAL INSPECTION OF SHOP FABRICATED GRAVITY LOAD-BEARING MEMBERS AND ASSEMBLIES:

Special Inspection of shop fabricated Gravity Load Bearing Members & Assemblies shall be verified by the Special Inspector as stated in Section 1704.2.5 which includes the following:

- Prior to the start of fabrication: Special Inspector(s), representing the Owner, shall visit the Fabricator's shop(s) where the work is to be performed, and verifies that the Fabricator maintains detailed Fabrication and Quality Control procedures that provide a basis for inspection, control of workmanship, material control, and fabricator's ability to conform to approved Construction Documents and referenced Standards.
- Fabricator shall have available for Inspector's review, detailed procedures for material control that demonstrates the fabricator's ability to maintain suitable records and procedures such that, at any time during the fabrication process, the material specification, grade and applicable test reports for primary load-carrying members, are capable of being determined.

STRUCTURAL STEEL

per IBC 1705.2.1

A qualified Special Inspector of an "approved agency" providing Quality Assurance (QA) Special Inspections for the project shall review and confirm the Fabricator and Erector's Quality Control (QC) procedures for completeness and adequacy relative to AISC 360-16 Chapter N, AISC 303-16 Code of Standard Practice, AWS D1.1-2015 Structural Welding Code, and 2018 IBC code requirements for the fabricator's scope of work.

- QA Agency providing Special Inspections shall provide personnel meeting the minimum qualification requirements for Inspection and Nondestructive Testing NDT per AISC 360 Section N4.
- Verify Fabricator and Erector QC Program per AISC 360 Section N2.
- Inspection of welds and bolts by both QC and QA personnel shall be per the Schedule of Special Inspections below. All provisions of AWS D1.1 Structural Welding Code for statically loaded structures shall apply.
- Nondestructive Testing (NDT) of welds:
  - Non-Destructive Testing (NDT) of welded joints per AISC 360 N5.5.
  - Risk Category for determination of extent of NDT per AISC 360 N5.5b is noted in the Design Criteria and Loads section of these General Requirements.
  - NDT performed shall be documented and reports shall identify the tested weld by piece mark and location of the piece.
  - For field work, the NDT report shall identify the tested weld by location in the structure, piece mark and location of the piece.
- Additional Inspection tasks per AISC 360 Section N5.8.
- Inspection for Composite Construction shall be done per AISC 360 Section N6.

POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY: shall comply with IBC Section 1703. Inspections shall be in accordance with the requirements set forth in the approved ICC Evaluation Report and as indicated by the design requirements specified on the drawings. Refer to the POST INSTALLED ANCHORS section of these notes for anchors that are the basis of the design. Special inspector shall verify anchors are as specified in the POST INSTALLED ANCHORS section of these notes or as otherwise specified on the drawings. Substitutions require approval by the SER and require substantiating calculations and current 2018 IBC recognized ICC Evaluation Services (ES) Report. Special Inspector shall document in their Special Inspection Report compliance with each of the elements required within the applicable ICC Evaluation Services (ES) Report.

PREFABRICATED CONSTRUCTION: All prefabricated construction shall conform to IBC Section 1703.

SCHEDULES OF SPECIAL INSPECTIONS:

TABLE 1705.6 - REQUIRED SPECIAL INSPECTIONS AND TEST OF SOILS

ITEM	TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1	Verify materials below shallow foundations are adequate to achieve the design bearing capacity	-	X
2	Verify excavations are extended to proper depth and have reach proper material	-	X
3	Perform classification and testing of compacted fill materials	-	X
4	Verify use of proper materials, densities and list thickness during placement and compaction of compacted fill	X	-
5	Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly	-	X

REQUIRED SPECIAL INSPECTIONS OF WOOD CONSTRUCTION

ITEM	TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD
3	Shear Walls (where fastener spacing of the sheathing is 4 inches or less on center)			[IBC Section 1705.11.1] [IBC Section 1705.12.2]
	a. Anchor Bolts including proper bottom plate sizes (2x and 3x) and plate washers	-	X	
	b. Hold-downs (HD) and Continuous Rod Tie-Down Systems (TDS) including squash blocks and anchors to concrete	-	X	
	c. A35 and LPT shear connectors	-	X	
	d. Strap Connectors	-	X	
	e. Boundary Edge Nailing	-	X	
	f. Plate Nailing and Panel Edge Nailing for size and spacing	-	X	
	g. Blocking	-	X	
4	Blocked and Unblocked Diaphragms (where fastener spacing of the sheathing is 4 inches or less on center)			[IBC Section 1705.11.1] [IBC Section 1705.12.2]
	a. Blocking and strap connections	-	X	
	b. Boundary edge and panel shear nailing size and spacing	-	X	
5	Moisture Content of wood studs, plates, beams, decking, and joists	-		As directed by the Contractor to meet moisture content requirements
6	Roof truss 'hurricane clips'	-	X	

MINIMUM REQUIREMENTS FOR INSPECTIONS OF STRUCTURAL STEEL CONSTRUCTION

ITEM	INSPECTION TASKS	QC	QA	REFERENCED STANDARD
	INSPECTION TASKS PRIOR TO WELDING			
1	Welder qualification records and continuity records	P	O	AISC 360 TABLE N5.4-1
2	Welding procedure specifications (WPSs) available	P	P	AISC 360 TABLE N5.4-1
3	Manufacturing certifications for welding consumables available	P	P	AISC 360 TABLE N5.4-1
4	Material identification (type/grade)	O	O	AISC 360 TABLE N5.4-1
5	Welder Identification system	O	O	AISC 360 TABLE N5.4-1
6	Fit-up of groove welds (including joint geometry) • Joint preparation • Dimensions (alignment, root opening, root face, bevel) • Cleanliness (condition of steel surfaces) • Tacking (tack welding quality and location) • Backing type and fit (if applicable)	O	O	AISC 360 TABLE N5.4-1
7	Fit-up of CJP groove welds of HSS T-, Y-, and K-joints without backing (including joint geometry) • Joint preparation • Dimensions (alignment, root opening, root face, bevel) • Cleanliness (condition of steel surfaces) • Tacking (tack welding quality and location)	P	O	AISC 360 TABLE N5.4-1
8	Configuration and finish of access holes	O	O	AISC 360 TABLE N5.4-1
9	Fit-up of fillet welds • Dimensions (alignment, gaps at root) • Cleanliness (condition of steel surfaces) • Tacking (tack weld quality and location)	O	O	AISC 360 TABLE N5.4-1
10	Check welding equipment	O	-	AISC 360 TABLE N5.4-1
	INSPECTION TASKS DURING WELDING			
1	Use of qualified welders	O	O	AISC 360 TABLE N5.4-2
2	Control and handling of welding consumables • Packaging • Exposure control	O	O	AISC 360 TABLE N5.4-2
3	No welding over cracked tack welds	O	O	AISC 360 TABLE N5.4-2
4	Environmental conditions • Wind speed within limits • Precipitation and temperature	O	O	AISC 360 TABLE N5.4-2
5	WPS followed • Settings on welding equipment • Travel speed • Selected welding materials • Shielding gas type/flowrate • Preheat applied • Interpass temperature maintained (min/max) • Proper position (F, V, H, OH)	O	O	AISC 360 TABLE N5.4-2
6	Welding techniques • Interpass and final cleaning • Each pass within profile limitations • Each pass meets quality requirements	O	O	AISC 360 TABLE N5.4-2
	INSPECTION TASKS AFTER WELDING			
1	Welds cleaned	O	O	AISC 360 TABLE N5.4-3
2	Size, length, and locations of welds	P	P	AISC 360 TABLE N5.4-3
3	Welds meet visual acceptance criteria • Crack prohibition • Weld/base-metal fusion • Crater cross section • Weld profiles • Weld size • Undercut • Porosity	P	P	AISC 360 TABLE N5.4-3
4	Arc strikes	P	P	AISC 360 TABLE N5.4-3
5	k-area	P	P	AISC 360 TABLE N5.4-3
6	Weld access holes in rolled heavy shapes and built-up heavy shapes	P	P	AISC 360 TABLE N5.4-3
7	Backing removed and weld tabs removed (if required)	P	P	AISC 360 TABLE N5.4-3
8	Repair activities	P	P	AISC 360 TABLE N5.4-3
9	Document acceptance or rejection of welded joint or member	P	P	AISC 360 TABLE N5.4-3
10	No prohibited welds have been added without the approval of the EOR	P	P	AISC 360 TABLE N5.4-3
	INSPECTION TASKS PRIOR TO BOLTING			
1	Manufacturer's certifications available for fastener materials	O	P	AISC 360 TABLE N5.6-1
2	Fasteners marked in accordance with ASTM requirements	O	O	AISC 360 TABLE N5.6-1
3	Correct fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	O	O	AISC 360 TABLE N5.6-1
4	Correct bolting procedure selected for joint detail	O	O	AISC 360 TABLE N5.6-1
5	Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	O	O	AISC 360 TABLE N5.6-1
6	Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used.	P	O	AISC 360 TABLE N5.6-1
7	Proper storage provided for bolts, nuts, washers and other fasteners components	O	O	AISC 360 TABLE N5.6-1
	INSPECTION TASKS DURING BOLTING			
1	Fastener assemblies, of suitable condition, placed in all holes and washers are positioned as required	O	O	AISC 360 TABLE N5.6-2
2	Joint brought to the snug-tight condition prior to the pre-tensioning operation	O	O	AISC 360 TABLE N5.6-2
3	Fastener component not turned by the wrench prevented from rotating	O	O	AISC 360 TABLE N5.6-2
4	Fasteners are pre-tensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges	O	O	AISC 360-10 TABLE N5.6-2
	INSPECTION TASKS AFTER BOLTING			
1	Document acceptance or rejection of bolted connections	P	P	AISC 360 TABLE N5.6-3
	INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT			
1	Placement and installation of steel deck	P	P	AISC 360 TABLE N6.1
2	Placement and installation of steel headed stud anchors	P	P	AISC 360 TABLE N6.1
3	Document acceptance or rejection of steel elements	P	P	AISC 360 TABLE N6.1

O - Observe these items on a random basis. Operations need not be delayed pending these inspections
P - Perform these tasks for each welded joint or member, each bolted connection, or each steel element

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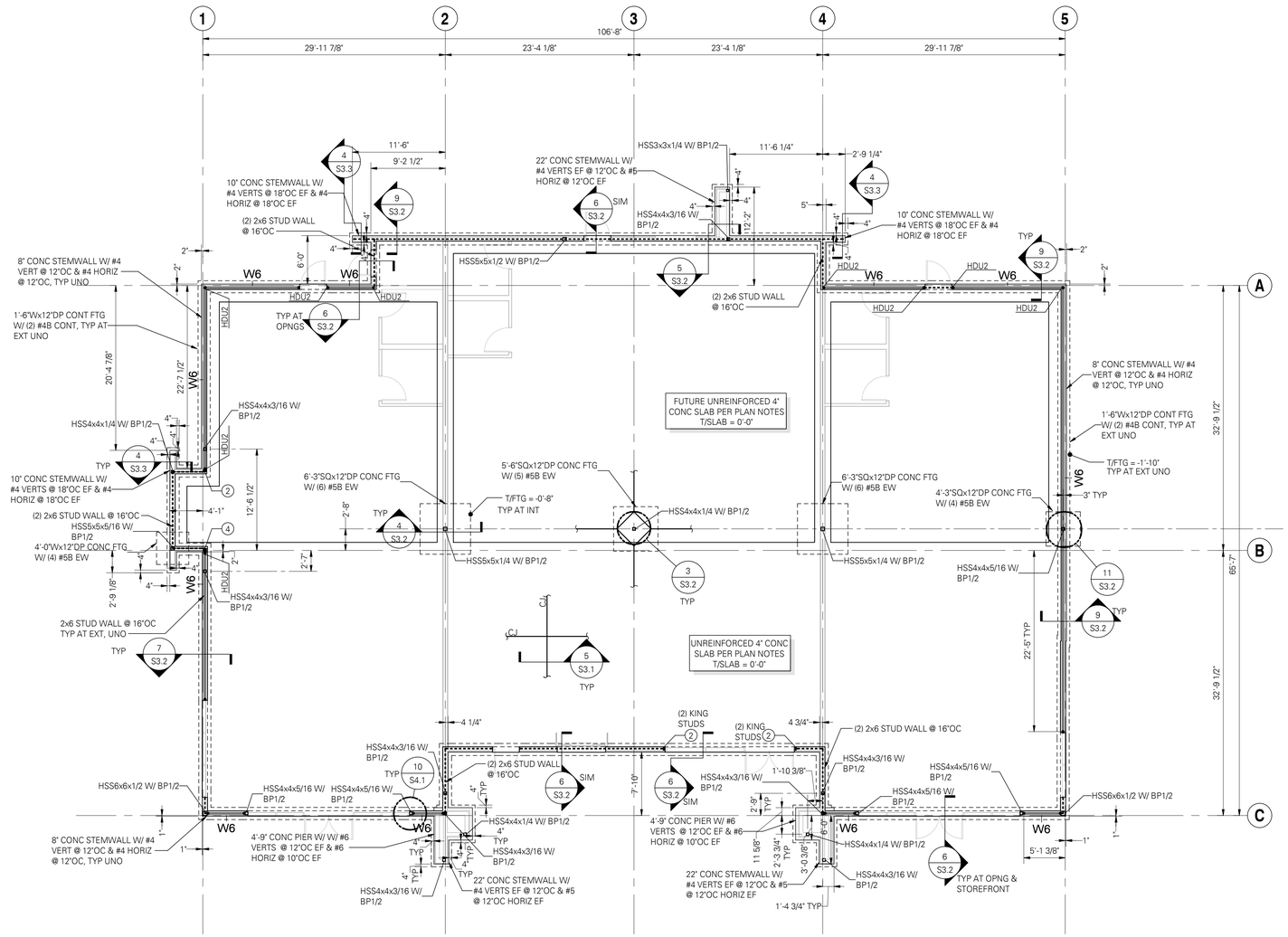
SPECIAL INSPECTIONS

S1.4



FOUNDATION PLAN NOTES:

FOUNDATION NOTES:

1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S1.1 THROUGH S1.4.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS.
3. CONTRACTOR SHALL LOCATE AND VERIFY THE FOLLOWING WITH OTHERS PRIOR TO POURING CONCRETE: ALL DOOR OPENINGS IN FOUNDATION WALLS; DRAINS AND SLOPES; BLOCKOUTS FOR FREEZERS, COOLERS, PLUMBING, SPRINKLERS AND HVAC. ALL DUCTS, CHASES AND PIPES PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER DRAWINGS. STAIR DETAILS AND GUARDRAILS PER ARCHITECTURAL DRAWINGS. CONCRETE CURBS AND LOCATIONS PER ARCHITECTURAL DRAWINGS.
4. TOP OF SLAB (T/SLAB) ELEVATION ASSUMED 0'-0". FOR ACTUAL T/SLAB ELEVATION REFER TO CIVIL AND ARCHITECTURAL DRAWINGS. PROVIDE 15 MIL VAPOR BARRIER BELOW SLAB AT INTERIOR SPACES. PROVIDE FREE-DRAINING GRANULAR FILL PER GEOTECH REPORT.
5. TYPICAL TOP OF INTERIOR (T/INTERIOR) FOOTING ELEVATION = -0'-8", UNO. TYPICAL TOP OF EXTERIOR (T/EXTERIOR) FOOTING ELEVATIONS = -1'-10", UNO.
6. ALL FOOTINGS AND SLABS TO BEAR ON COMPETENT NATIVE SOIL AND/OR STRUCTURAL FILL. SUBGRADE PREPARATION, STRUCTURAL FILL, FOOTING DRAINS, AND OTHER REQUIREMENTS PER GEOTECH REPORT AS NOTED IN THE STRUCTURAL GENERAL NOTES.
7. CJ INDICATES CONTROL JOINT PER PLAN.
8. ALL WOOD EXPOSED TO CONCRETE, WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED.
9. MOISTURE PROOF ALL CONCRETE STEM AND BASEMENT WALLS PER ARCHITECT.
10. TYPICAL DETAILS PER:

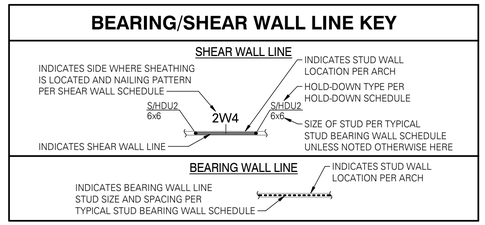
1/S3.1	STANDARD HOOKS AND BENDS
2/S3.1	LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE
3/S3.1	TYPIAL PIPE AND TRENCH LOCATIONS AT CONCRETE STEMWALL/FOOTING
5/S3.1	TYPICAL UNREINFORCED SLAB ON GRADE JOINT DETAILS
6/S3.1	PLAN - TYPICAL CORNER REINFORCING AT CONCRETE FOOTINGS
7/S3.1	PLAN - TYPICAL CORNER REINFORCING AT CONCRETE WALLS
8/S3.1	PLAN - TYPICAL CORNER REINFORCING AT CONCRETE WALLS
9/S3.1	TYPICAL STEPPED FOOTING
10/S3.1	PIPE OR CONDUIT EMBEDDED IN SLAB ON GRADE
11/S3.1	TYPICAL DEPRESSED SLAB DETAIL
12/S3.1	TYPICAL ANCHOR BOLT SCHEDULE
1/S3.2	TYPICAL SILL PLATE ANCHORAGE TO CONCRETE
2/S3.2	PLAN - TYPICAL SILL PLATE ANCHORAGE TO CONCRETE
10/S3.2	TYPICAL HOLD-DOWN AT FOUNDATION - CONCRETE STEMWALL
11/S3.2	TYPICAL BASEPLATE TO CONCRETE WALL CONNECTION - HSS COLUMN
12/S3.2	TYPICAL BASEPLATE TO FOUNDATION CONNECTION - HSS COLUMN

STUD AND SHEAR WALL NOTES:

1. LUMBER GRADE PER STRUCTURAL GENERAL NOTES.
2. ALL INTERIOR NON-BEARING, NON-STRUCTURAL WALL STUD REQUIREMENTS PER STRUCTURAL GENERAL NOTES.
3. HEADERS SHOWN ON FRAMING PLAN SHALL BE SUPPORTED BY (1) TRIMMER AND (1) KING STUD MINIMUM, UNO. WHERE MORE THAN (1) TRIMMER IS REQUIRED, THE NUMBER OF TRIMMER STUDS SHALL BE NOTED THUS: ■ ② . TRIMMERS TO BE CONTINUOUS TO THE FOUNDATION. BLOCK SOLID AT FLOOR FRAMING.
4. BEAMS SHOWN ON FRAMING PLAN SHALL BE SUPPORTED BY (2) BUNDLED STUDS MINIMUM, UNO. WHERE MORE THAN (2) BUNDLED STUDS ARE REQUIRED, THE NUMBER OF BUNDLED STUDS SHALL BE NOTED THUS: ■ ③ . BUNDLED STUDS TO BE CONTINUOUS TO THE FOUNDATION. BLOCK SOLID AT FLOOR FRAMING.
5. SHEAR WALL AND NAILING REQUIREMENTS PER SHEAR WALL SCHEDULE 9/S3.3.
6. AT STAGGERED STUD WALLS, BUNDLED STUDS, TRIMMER STUDS, KING STUDS, AND SHEAR WALL COMPRESSION STUDS ARE TO MATCH THE WIDTH OF THE WALL PLATES.
7. HD (2) 2x - INDICATES HOLD-DOWN TYPE PER HOLD-DOWN SCHEDULE 1/S3.3 CIRCLED NUMBER INDICATES NUMBER OF TRIM STUDS REQUIRED AND BOTTOM NUMBER INDICATES NUMBER OF FULL HEIGHT (KING)STUDS REQUIRED IN ADDITION TO BUNDLED OR TRIM STUDS OR POSTS SHOWN ON PLAN.
8. TYPICAL HOLD-DOWN ELEVATION PER 10/S3.2.
9. ANCHOR BOLTS TO BE 5/8" DIA x 7" MINIMUM EMBEDMENT PER 1/S3.2. PROVIDE HOT-DIPPED GALVANIZED ANCHOR BOLTS AT PRESSURE-TREATED SILL PLATES.
10. TYPICAL DETAILS PER:

3/S3.3	TYPICAL SHEAR WALL ELEVATION
9/S4.1	TYPICAL STUD WALL OPENING (HEADER) DETAIL
11/S4.2	NON-STRUCTURAL PARTITION WALL PERPENDICULAR AND PARALLEL TO TRUSSES
10/S5.1	TOP PLATE SPLICE DETAIL

BEARING/SHEAR WALL LINE KEY



FOUNDATION PLAN

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

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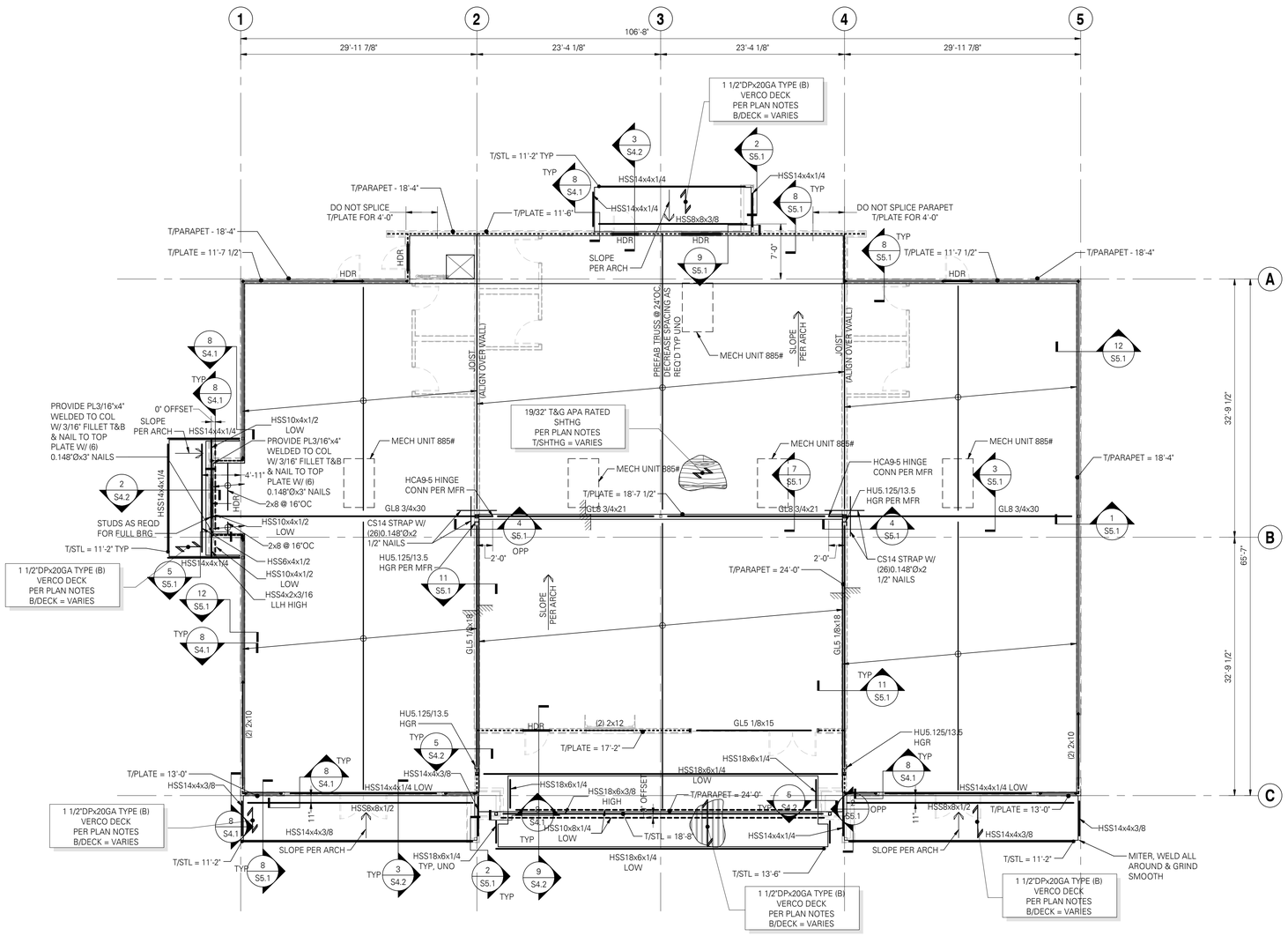
FOUNDATION PLAN

S2.1



ROOF FRAMING PLAN NOTES:

1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S1.1 THROUGH S1.4.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS.
3. ALL DUCTS, CHASES AND PIPES SHALL BE PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER DRAWINGS. STAIR DETAILS AND GUARDRAILS PER ARCHITECTURAL DRAWINGS.
4. ROOF SHEATHING PER PLAN AND STRUCTURAL GENERAL NOTES. SHEATHING TO BE NAILED TO ROOF FRAMING WITH 0.131"DIAx2 1/2" NAILS @ 6"OC AT SUPPORTED PANEL EDGES AND @ 12"OC FIELD, UNO. LAY SHEATHING WITH FACE GRAIN (LONG DIRECTION) PERPENDICULAR TO SUPPORTS AND STAGGER PANEL END JOINTS. ALLOW 1/8" SPACE BETWEEN PANEL ENDS AND EDGES.
5. ALL 2x HANGERS TO BE TOP FLANGE BEARING SIMPSON JB TYPE, UNO.
6. HEADERS SHOWN BUT NOT SPECIFIED ARE TO BE (2) 2x8 MINIMUM. HEADER SUPPORTS PER STUD AND SHEAR WALL PLAN ON FLOOR BELOW.
7. BEAMS ARE FLUSH FRAMED WITH JOISTS UNLESS NOTED OTHERWISE ON DETAILS, OR ON PLANS AS "DB" INDICATING THAT DROPPED BEAM FRAMING IS REQUIRED. BEAM SUPPORTS PER STUD AND SHEAR WALL PLAN ON LEVEL BELOW. PROVIDE A35 CLIP EACH SIDE OF FLUSH BEAMS THAT BEAR ON DOUBLE TOP PLATES.
8. PROVIDE SIMPSON H2.5A TIES AT ALL ROOF JOISTS, TYPICAL.
9. PROVIDE SOLID BLOCKING OVER ALL SHEAR WALLS AND BEARING WALLS. AT SHEAR WALLS PARALLEL TO FRAMING, ALIGN JOIST OR TRUSS OVER SHEAR WALL (ADDITIONAL JOISTS OR TRUSSES MAY BE REQUIRED).
10. HORIZONTAL STRAP TIES INDICATED ON THE FRAMING PLAN ARE TO BE CENTERED OVER WALL TOP PLATE AND/OR HEADER, BLOCKING OR BEAM.
11. ALL RIM JOISTS AND BLOCKING TO BE 1 1/2" LSL MINIMUM UNO.
12. BEARING STUD, SHEAR WALL, HOLD-DOWN, POST SIZE, AND POST CAP AND BASE REQUIREMENTS BELOW PER STUD AND SHEAR WALL PLAN.
13. TYPICAL DETAILS PER:

5/S4.1	TYPICAL BUILT-UP 2x HEADER OR BEAM
10/S4.1	TYPICAL NAILER DETAILS AT STEEL COLUMNS
9/S5.1	TYPICAL COLUMN CONNECTION AT ROOF

NOTE:

REFER TO ARCHITECTURAL FOR FUTURE MECHANICAL ZONES.

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Duportail St. Retail Building

22041-0302

Richland, Washington

Permit Set

5/31/23

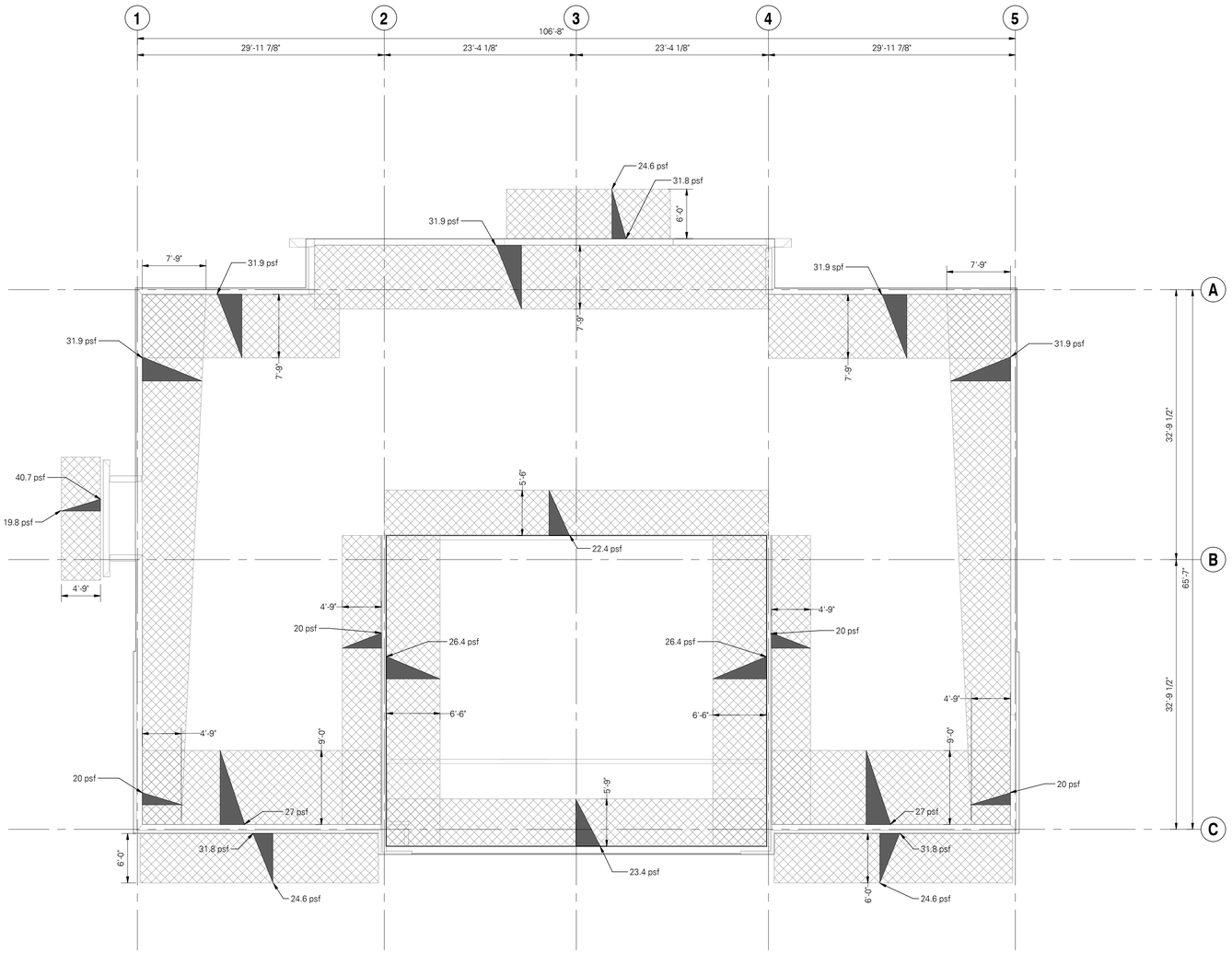
Revision Schedule

ROOF FRAMING PLAN

S2.2

ROOF FRAMING PLAN

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



NOTES:

1. LOADS SHOWN ARE SNOW DRIFT LOADS TO BE APPLIED TO JOISTS IN ADDITION TO LOADS SPECIFIED ON PLANS.

2. TRIANGULAR LOADS SLOPE UNIFORMLY FROM LOAD SHOWN TO ZERO.

SNOW DRIFT PLAN

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

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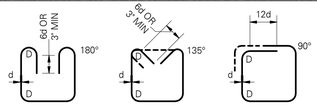
SNOW DRIFT PLAN

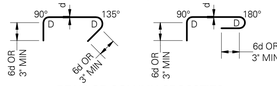
S2.3

ALL REINFORCING EXCEPT COLUMN TIES AND BEAM STIRRUPS



STIRRUP | STIRRUP OR TIE

D = 4d FOR #3, #4 & #5
D = 6d FOR #6, #7 & #8



BEAM OR COLUMN CROSSTIES

BEAM STIRRUPS AND COLUMN TIES

NOTE:
d = BAR DIAMETER, D = BEND DIAMETER

TIES AND CROSSTIES FOR SHEAR WALL BOUNDARY ELEMENTS SHALL BE DETAILED AS COLUMN TIES/CROSSTIES.

1 STANDARD HOOKS AND BENDS

SCALE: 3/4" = 1'-0" (03400)

01403A	GRADE 60 REINFORCING				
BAR SIZE	MISCELLANEOUS BARS		TOP BARS (see note #3)		HOOKED BARS
	Ld	Splice	Ld	Splice	Ldh
f'c = 3000psi					
#3	17	22	22	28	9
#4	22	29	29	38	11
#5	28	36	36	47	14
#6	33	43	43	56	17
#7	48	63	63	81	20
#8	55	72	72	93	22
#9	62	81	81	105	25

NOTES:

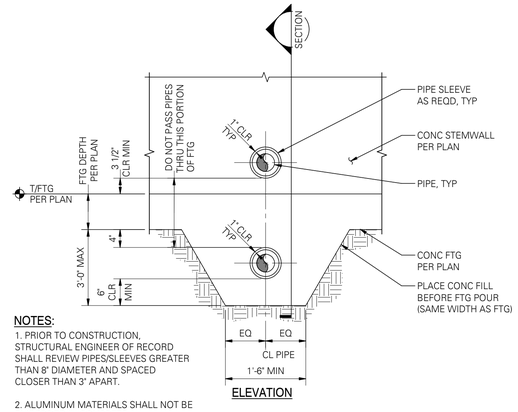
1. ALL TABULATED VALUES ARE IN INCHES.

2. VALUES FOR UNCOATED REINFORCING AND NORMAL WEIGHT CONCRETE WITH CLEAR SPACING > db, CLEAR COVER > db AND MINIMUM STIRRUPS OR TIES THROUGHOUT Ld OR CLEAR SPACING > 2db AND CLEAR COVER > db.

3. TOP REINFORCING = HORIZONTAL REINFORCING WITH MORE THAN 12" OF FRESH CONCRETE BELOW OR AS NOTED ON DOCUMENTS AS "TOP BAR".

2 LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE

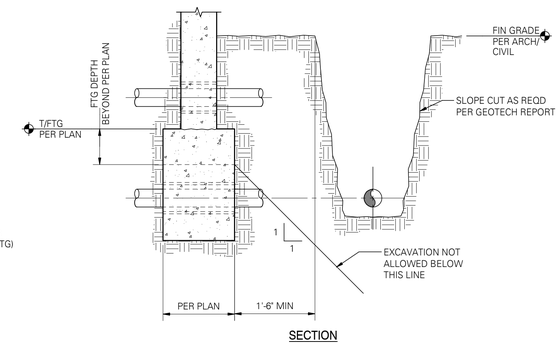
SCALE: 3/4" = 1'-0" (01403A)



NOTES:

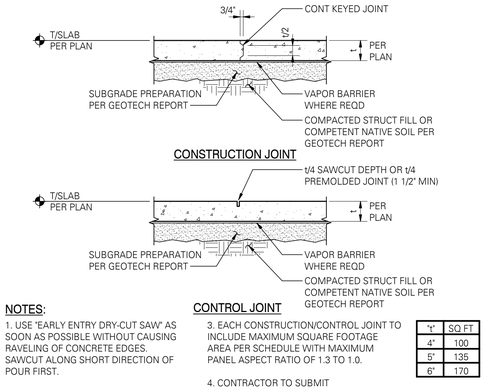
1. PRIOR TO CONSTRUCTION, STRUCTURAL ENGINEER OF RECORD SHALL REVIEW PIPES/SLEEVES GREATER THAN 8" DIAMETER AND SPACED CLOSER THAN 3" APART.

2. ALUMINUM MATERIALS SHALL NOT BE EMBEDDED IN CONCRETE.



3 TYPICAL PIPE AND TRENCH LOCATIONS AT CONCRETE STEMWALL/FOOTING

SCALE: 3/4" = 1'-0" (03190)



NOTES:

1. USE "EARLY ENTRY DRY-CUT SAW" AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OF CONCRETE EDGES. SAWCUT ALONG SHORT DIRECTION OF POUR FIRST.

2. ALIGN A CONSTRUCTION OR CONTROL JOINT WITH RE-ENTRANT SLAB CORNERS, EACH WAY, TYPICAL.

3. EACH CONSTRUCTION/CONTROL JOINT TO INCLUDE MAXIMUM SQUARE FOOTAGE AREA PER SCHEDULE WITH MAXIMUM PANEL ASPECT RATIO OF 1.3 TO 1.0.

4. CONTRACTOR TO SUBMIT CONSTRUCTION/CONTROL JOINT PLAN TO STRUCTURAL ENGINEER OF RECORD FOR REVIEW/APPROVAL.

"t"	SQ FT
4"	100
5"	135
6"	170

5 TYPICAL UNREINFORCED SLAB ON GRADE JOINT DETAILS

SCALE: 3/4" = 1'-0" (03200)

NOTE:

1. SPLICE LENGTHS PER LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE.

2. FOOTING REINFORCING PER PLAN OR ELEVATIONS, SECTIONS AND DETAILS.

6 PLAN - TYPICAL CORNER REINFORCING AT CONCRETE FOOTINGS

SCALE: 3/4" = 1'-0" (03132)

NOTES:

1. SPLICE LENGTHS PER LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE.

2. WALL REINFORCING PER PLAN OR ELEVATIONS, SECTIONS AND DETAILS.

3. AT FOOTINGS AND STEMWALLS, CORNER REINFORCING TO MATCH FOOTING AND STEMWALL HORIZONTAL REINFORCING.

7 PLAN - TYPICAL CORNER REINFORCING AT CONCRETE WALLS

SCALE: 3/4" = 1'-0" (03402)

NOTES:

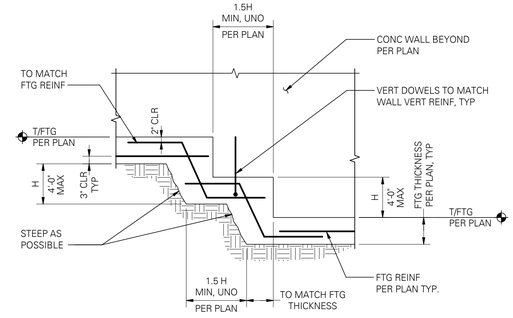
1. SPLICE LENGTHS PER LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE.

2. WALL REINFORCING PER PLAN OR ELEVATIONS, SECTIONS AND DETAILS.

3. AT FOOTINGS AND STEMWALLS, CORNER REINFORCING TO MATCH FOOTING AND STEMWALL HORIZONTAL REINFORCING.

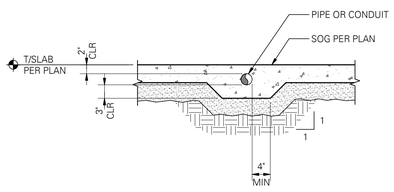
8 PLAN - TYPICAL CORNER REINFORCING AT CONCRETE WALLS

SCALE: 3/4" = 1'-0" (03403)



9 TYPICAL STEPPED FOOTING

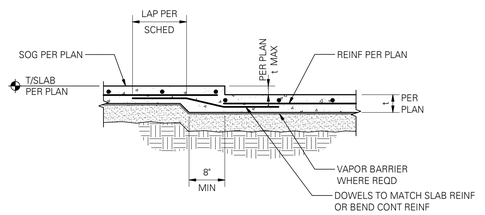
SCALE: 3/4" = 1'-0" (03140)



NOTE:
ALUMINUM MATERIALS SHALL NOT BE EMBEDDED IN CONCRETE.

10 PIPE OR CONDUIT EMBEDDED IN SLAB ON GRADE

SCALE: 3/4" = 1'-0" (03204)



11 TYPICAL DEPRESSED SLAB DETAIL

SCALE: 3/4" = 1'-0" (03202)

01901	TYPICAL ANCHOR BOLT SCHEDULE					
INSTALLATION TYPE	CAST-IN-PLACE (PRE-AUTHORIZED) [2]				DRILL-IN OPTIONS (SUBMITTAL REQUIRED) [3]	
PROJECTION NOTE [1] / BOLT TYPE	STANDARD J-BOLT	HEADED ANCHOR	THREADED ROD ANCHOR	SIMPSON "SSTB" ANCHOR BOLT	ADHESIVE ANCHOR	EXPANSION ANCHOR
MIN EMBED UNO PER PLAN / EMBEDMENT REQUIREMENTS	7 1/2"	12x DIA	TACK, 1/4" MIN	PER MFR	NOTE [4]	NOT ALLOWED AT P-T SLAB
LIMITS	5/8"Ø MAX	5/8"Ø THRU 2 1/2"Ø		FOR WOOD FRAME ONLY	5/8"Ø THRU 1"Ø	
DIA = ANCHOR BOLT DIAMETER (NOMINAL)						

NOTES:

[1] CONTRACTOR SHALL DETERMINE THE REQUIRED THREAD PROJECTION SUITABLE FOR THE THICKNESS OF MATERIAL BEING FASTENED PLUS GROUT ALLOWANCE, IF ANY, AND CONSTRUCTION TOLERANCES, UNO.

[2] CONTRACTOR MAY SELECT APPROPRIATE CAST-IN-PLACE ANCHOR BOLT OPTION WITHOUT SUBMITTAL.

[3] DRILL-IN OPTIONS ARE NOT APPROPRIATE AT ALL CONDITIONS. IF DRILL-IN METHOD IS PREFERRED, SUBMIT MANUFACTURER'S INFORMATION, ALLOWABLE LOAD VS EMBEDMENT DATA AND LOCATIONS OF WHERE SUBSTITUTIONS ARE REQUESTED. ENGINEER WILL DETERMINE IF SUBSTITUTION IS APPROPRIATE FOR LOCATION AND LOADING.

[4] EMBEDMENT OF DRILL-IN ANCHORS SHALL BE PER ENGINEERS'S SUBMITTAL REVIEW COMMENTS. EMBEDMENT SHALL BE (9) NINE TIMES THE NOMINAL ANCHOR DIAMETER, UNO.

[5] AT PRESSURE TREATED SILLS, PROVIDE HOT-DIPPED GALVANIZED OR STAINLESS STEEL ANCHORS.

12 TYPICAL ANCHOR BOLT SCHEDULE

SCALE: 1" = 1'-0" (01901)

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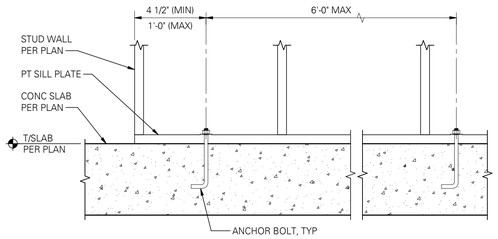
FOUNDATION DETAILS

S3.1

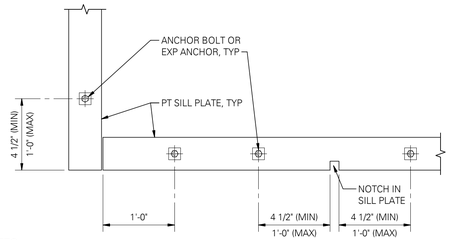


NOTES:

1. USE 5/8"Ø ANCHOR BOLTS WITH 7" MINIMUM EMBEDMENT INTO CONCRETE SLAB.
2. EACH SILL PLATE PIECE SHALL HAVE (2) BOLTS MINIMUM. HOLD-DOWN ANCHORS ARE NOT TO BE CONSIDERED AN ANCHOR BOLT.
3. LOCATE BOLTS WITHIN 1'-0" OF SILL PLATE PIECE ENDS AND AT 6'-0"OC MAXIMUM.
4. USE PLATE WASHER PER SHEAR WALL SCHEDULE AT EACH BOLT. STANDARD CUT WASHERS ARE ACCEPTABLE AT NON-SHEAR WALLS.
5. DO NOT DRILL OVERSIZE HOLES THRU SILL PLATE. USE 11/16"Ø DRILL BIT.
6. SILL PLATE THICKNESS AND FASTENING AT SHEAR WALLS PER SHEAR WALL SCHEDULE.
7. CONTACT THE ENGINEER-OF-RECORD FOR POST INSTALLED ANCHOR OPTIONS.

1 TYPICAL SILL PLATE ANCHORAGE TO CONCRETE

SCALE: 1" = 1'-0" (06910)

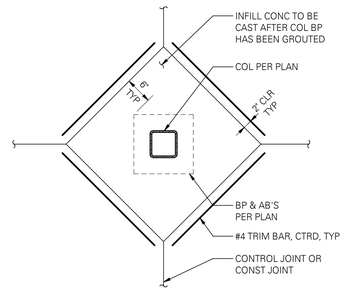


NOTES:

1. USE 5/8"Ø ANCHOR BOLT PER 1/S3.2.
2. EACH SILL PLATE PIECE SHALL HAVE (2) BOLTS MINIMUM. HOLD-DOWN ANCHORS ARE NOT TO BE CONSIDERED AN ANCHOR BOLT.
3. LOCATE BOLTS WITHIN 1'-0" OF SILL PLATE PIECE ENDS AND AT 6'-0"OC MAXIMUM.
4. USE PLATE WASHER PER SHEAR WALL SCHEDULE AT EACH BOLT. STANDARD CUT WASHERS ARE ACCEPTABLE AT NON-SHEAR WALLS.
5. DO NOT DRILL OVERSIZE HOLES THRU SILL PLATE. USE 11/16"Ø DRILL BIT.
6. SILL PLATE THICKNESS AND FASTENING AT SHEAR WALLS PER SHEAR WALL SCHEDULE.
7. CONTACT THE ENGINEER-OF-RECORD FOR POST INSTALLED ANCHOR OPTIONS.

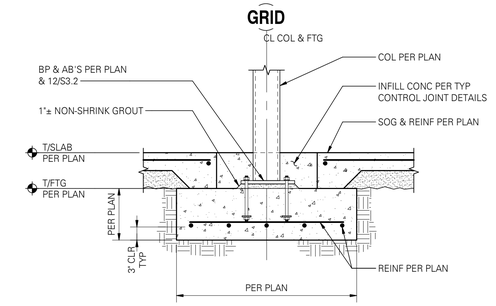
2 PLAN - TYPICAL SILL PLATE ANCHORAGE TO CONCRETE

SCALE: 1" = 1'-0" (06911)



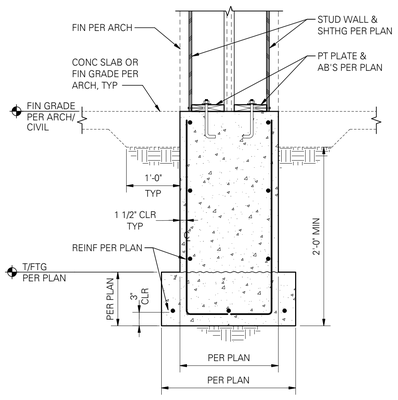
3 PLAN - TYPICAL CONTROL JOINT AT HSS COLUMN

SCALE: 3/4" = 1'-0" (03212)



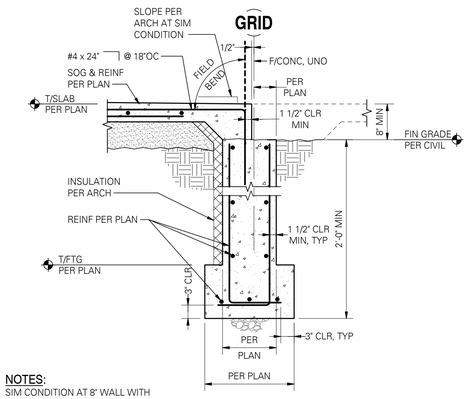
4 INTERIOR SPREAD FOOTING AT STEEL COLUMN

SCALE: 3/4" = 1'-0" (03005)



5 EXTERIOR FOOTING AND STEMWALL AT DOUBLE STUD WALL

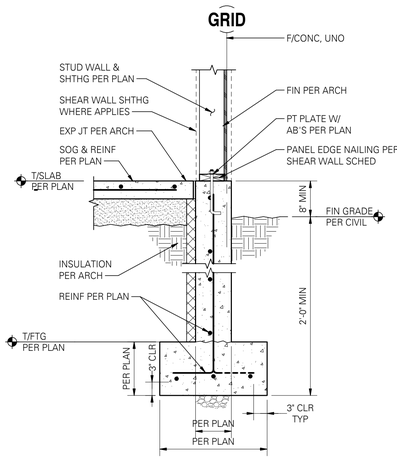
SCALE: 3/4" = 1'-0"



NOTES:
SIM CONDITION AT 8" WALL WITH (1) MAT OF REINFORCING.

6 CONCRETE SLAB AND STEMWALL AT OPENINGS

SCALE: 3/4" = 1'-0"



7 EXTERIOR FOOTING AND STEMWALL AT STUD WALL WITH VENEER

SCALE: 3/4" = 1'-0"

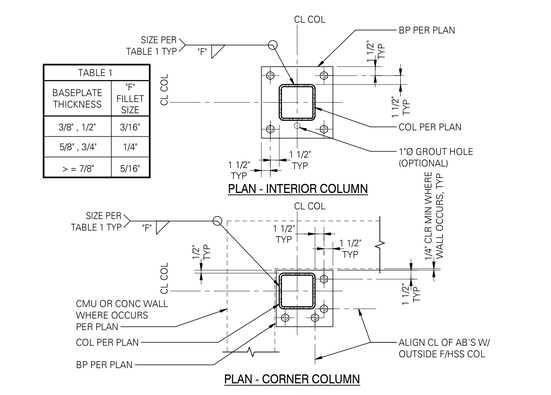
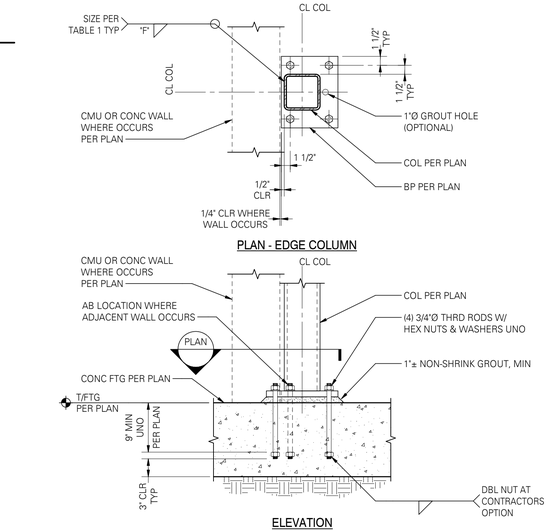
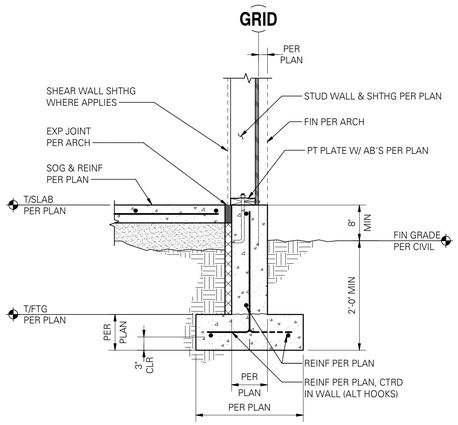


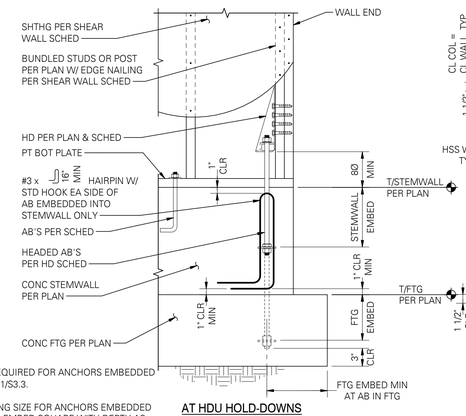
TABLE 1	
BASEPLATE THICKNESS	"F" FILLET SIZE
3/8" , 1/2"	3/16"
5/8" , 3/4"	1/4"
> = 7/8"	5/16"





9 EXTERIOR FOOTING AND STEMWALL AT STUD WALL (WITH INSULATION)

SCALE: 3/4" = 1'-0" (03032M)



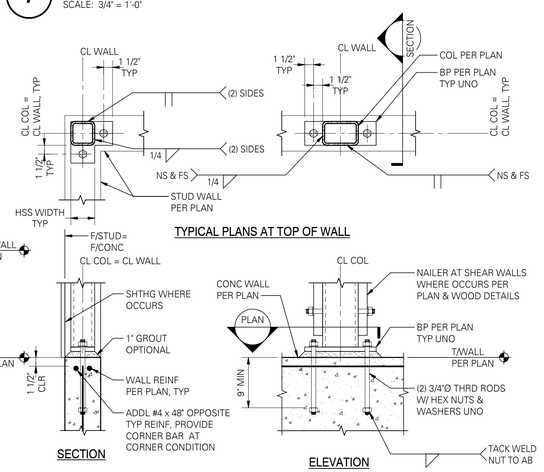
NOTES:

1. HAIRPINS NOT REQUIRED FOR ANCHORS EMBEDDED INTO FOOTING PER 1/S3.3.
2. MINIMUM FOOTING SIZE FOR ANCHORS EMBEDDED INTO FOOTING IS 2x EMBED SQUARE WITH DEPTH AS INDICATED.

AT HDU HOLD-DOWNS

10 TYPICAL HOLD-DOWN AT FOUNDATION - CONCRETE STEMWALL

SCALE: 1" = 1'-0" (06091M)



11 TYPICAL BASEPLATE TO CONCRETE WALL CONNECTION - HSS COLUMN

SCALE: 1" = 1'-0" (05032)

12 TYPICAL BASEPLATE TO FOUNDATION CONNECTION - HSS COLUMN

SCALE: 1" = 1'-0" (05030M)

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S3.2

01420

HOLD-DOWN/STRAP SCHEDULE - DOUG-FIR STUDS

[1, 2, 7, 11] ◄—— INDICATES FOOTNOTES

	TYPE	NUMBER OF STUDS/POST [3, 12]	NAILS, SCREWS OR BOLTS	ANCHOR [4] DIAMETER [10]	CONCRETE EMBEDMENT/CAPACITY STEMWALL [5] EMBED CIP [6, 14]	STEMWALL [5] CAPACITY	FOOTING EMBED CIP [6]	FOOTING CAPACITY	NOTES
WOOD TO CONCRETE	HDU2	(2) 2x	(6) SDS1/4x2 1/2	5/8"Ø	10"	3.1k	8"	3.1k	– – – –

NOTES:

[1] SOME HOLD-DOWN TYPES MAY NOT BE USED ON THIS PROJECT.

[2] TYPICAL HOLD-DOWN DETAILS PER 10/S3.2 AND 3/S3.3. ANCHOR REINFORCEMENT REQUIRED AT STEMWALLS.

[3] PROVIDE PANEL EDGE NAILING PER SHEAR WALL SCHEDULE AT HOLD-DOWN STUDS/POSTS.

[4] BASED ON MINIMUM f'c = 3000 PSI CONCRETE.

[5] STEMWALLS SHALL BE 8" WIDE x 18" TALL MINIMUM.

[6] CAST-IN-PLACE (CIP) TYPE THREADED RODS AT HOLD-DOWNS SHALL HAVE TWO HEX HEAD NUTS WITH OVERSIZED WASHERS.

[7] INCLUDES 1.6 LOAD DURATION INCREASE FOR WOOD.

[8] TOTAL NAILS SPECIFIED, USE HALF THE NAILS AT THE STUDS ABOVE AND BELOW LEVEL BEING CONNECTED.

[9] AT PRESSURE TREATED SILLS, USE HOT DIPPED GALVANIZED BOLTS.

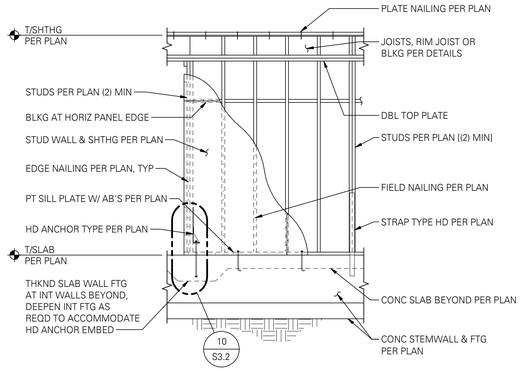
[10] POST INSTALLED HOLD-DOWN OPTIONS MAY BE AVAILABLE AT SOME CONDITIONS. CONTACT ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

[11] NAIL LAMINATE MULTIPLE 2x STUDS WITH PLATE NAILING PER SHEAR WALL SCHEDULE.

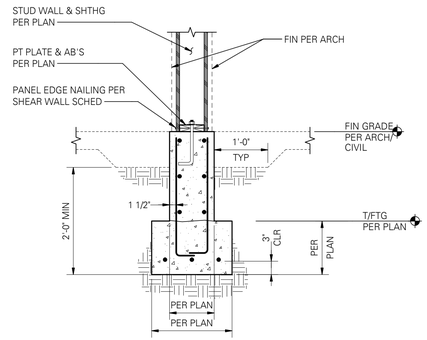
[12] MIDWALL/CORNER
WALL END

[13] STUD WALLS SHALL BE 2x6, CENTER HOLD-DOWN IN STUD WALL.

1 **HOLD-DOWN/STRAP SCHEDULE - DOUG-FIR STUDS**
SCALE: 1" = 1'-0" (01420M)



3 **TYPICAL SHEAR WALL ELEVATION**
SCALE: 1" = 1'-0" (06090m)



4 **EXTERIOR FOOTING AND STEMWALL AT SIDING DOUBLE WALL**
SCALE: 3/4" = 1'-0"

01430

SHEAR WALL SCHEDULE W6 FOR 0.131"Øx 2 1/2" NAILS IN DOUG-FIR LARCH (2018 IBC) [17]

SOME SHEAR WALL TYPES NOTED MAY NOT BE USED ON THIS PROJECT.

WALL TYPE	WALL SHEATHING APA-RATED [1, 2, 12, 13]	NAIL SIZE & SPACING AT ALL PANEL EDGES [4, 5]	BLOCKING & STUD SIZE AT ADJOINING PANEL EDGES [3, 6, 14]	RIM JOIST OR BLOCKING CONN TO TOP PLATE BELOW [7, 8]	2x PLATE ATTACHMENT NAILING TO WOOD RIM JOIST OR BLOCKING BELOW	SILL PLATE ATTACHMENT ANCHOR BOLT TO CONCRETE BELOW [10]	SILL PLATE ATTACHMENT SILL PLATE AT FOUNDATION [11]	SHEAR CAPACITY LBS/FT
W6	15/32"	0.131"Øx2 1/2" @ 6"OC	2x	CLIP @ 16"OC	0.148"Øx3 1/4" @ 8"OC	5/8"Ø @ 48"OC	2x	260

NOTES:

[1] INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY.

[2] WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON THE OPPOSITE SIDES ARE NOT LOCATED ON THE SAME STUD.

[3] BLOCKING IS REQUIRED AT ALL PANEL EDGES.

[4] PROVIDE SHEAR WALL SHEATHING AND NAILING FOR THE ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLD-DOWN REQUIREMENTS PER PLANS. (ALTERNATE NOTE: WALLS SHOWN WITH HORIZONTAL STRAPS BELOW AND/OR ABOVE OPENINGS REQUIRE SHEATHING, SHEAR WALL NAILING, ETC ABOVE AND BELOW ALL OPENINGS).

[5] SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLD-DOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLD-DOWN POSTS. ADDITIONAL INFORMATION PER HOLD-DOWN DETAILS.

[6] INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 0.131"Øx2 1/2" NAILS AT 12"OC WHERE STUDS ARE SPACED AT 16"OC AND 0.131"Øx2 1/2" NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.

[7] BASED ON 0.131"Øx1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131"Øx2 1/2" NAILS WHERE INSTALLED OVER SHEATHING.

[8] FRAMING CLIPS: A35 OR LTP5 OR APPROVED EQUIVALENT.

[9] WHERE BOTTOM PLATE ATTACHMENT SPECIFIES (2) ROWS OF NAILS OR SCREWS, PROVIDE DOUBLE JOIST, RIM JOIST OR EQUAL BELOW. STAGGER NAILS/SCREWS IN ROWS 1 1/2" APART MINIMUM.

[10] ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 0.229"x3"x3" MINIMUM. THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED 13/16"x1 3/4" PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND NUT. PLATE WASHER TO EXTEND TO WITHIN 1/2" OF THE EDGE OF THE SILL PLATE ON THE SIDE(S) WITH SHEATHING. AT 2x6 WALLS WITH SHEATHING ON BOTH SIDES USE PLATE WASHER 0.229"x4 1/2"x4 1/2" MINIMUM. EMBED ANCHOR BOLTS 7" MINIMUM INTO THE CONCRETE.

[11] PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS. ADDITIONAL INFORMATION PER STRUCTURAL GENERAL NOTES.

[12] 7/16" APA-RATED SHEATHING (OSB) MAY BE USED IN PLACE OF 15/32" SHEATHING PROVIDED THAT ALL STUDS ARE SPACED AT 16"OC MAXIMUM.

[13] WHERE WOOD SHEATHING (W) IS APPLIED OVER GYPSUM SHEATHING (G), CONTACT THE ENGINEER OF RECORD FOR ALTERNATE NAILING REQUIREMENTS.

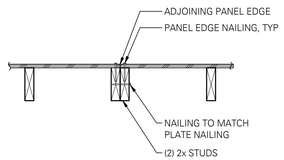
[14] AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2x STUDS SHALL BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING, PER SECTION.

[15] CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.

[16] NAIL STUDS TO 3x SILL PLATES WITH EITHER (2) 0.148"Øx4" END NAILS OR (4) 0.131"Øx2 1/2" TOENAILS.

[17] WX WHERE "W" INDICATES WOOD SHEATHING AND "X" INDICATES EDGE NAIL SPACING.

[18] EDGE NAILS SHALL BE LOCATED 3/8" FROM PANEL EDGES.



PLAN

9 **SHEAR WALL SCHEDULE - DOUG-FIR LARCH**
SCALE: 1" = 1'-0" (01430)

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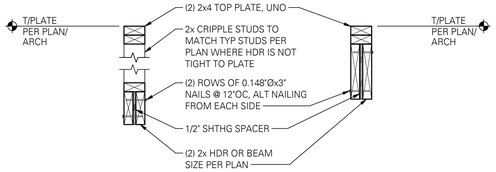
5/31/23

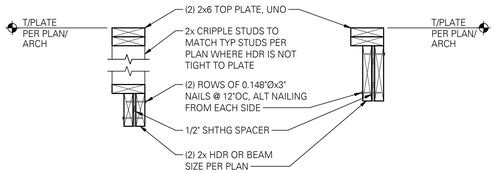
Revision Schedule

FOUNDATION DETAILS

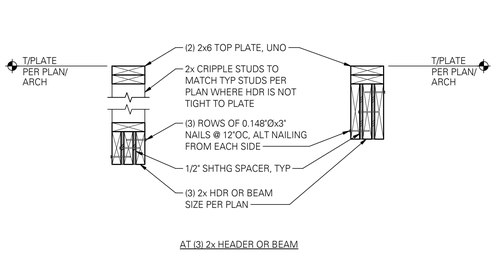
S3.3



AT 2x4 WALLS



AT (2) 2x HEADER OR BEAM



AT (3) 2x HEADER OR BEAM

AT 2x6 WALLS

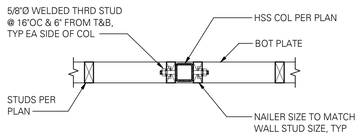
5 TYPICAL BUILT-UP 2x HEADER OR BEAM

SCALE: 1" = 1'-0" (06212M)

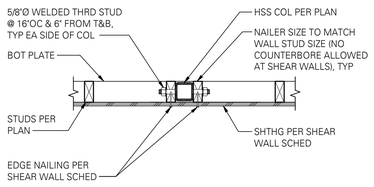
HDU HOLD-DOWNS

6 PLAN - INTERSECTING SHEAR WALLS

SCALE: 1" = 1'-0" (06110M)



PLAN - AT NON-SHEAR WALLS

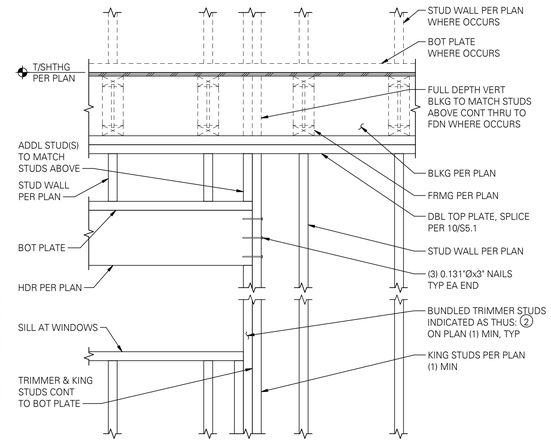


PLAN - AT SHEAR WALLS

NOTE:
ALL WELDED THREAD STUDS SHALL HAVE NUTS AND WASHERS.

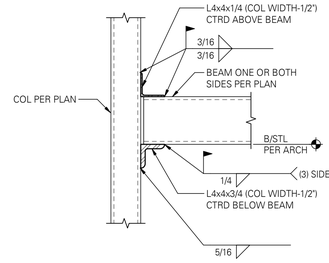
10 TYPICAL NAILER DETAILS AT STEEL COLUMNS

SCALE: 1" = 1'-0" (06909A)



9 TYPICAL HEADER

SCALE: 1" = 1'-0" (06211M)



NOTE:
AT WINDOWS AND STOREFRONT, ANGLE LEGS CAN BE TURNED
UP OR DOWN AS REQUIRED FOR WINDOW INSTALLATION.

8 HSS BEAM TO COLUMN CONNECTION

SCALE: 1" = 1'-0"

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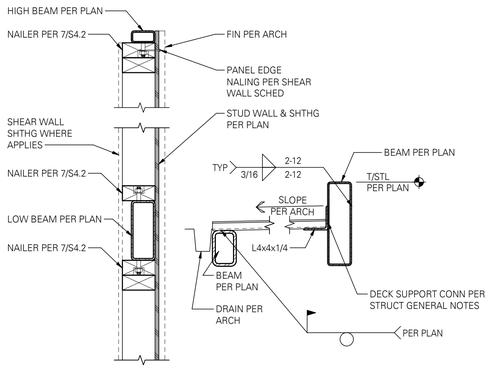
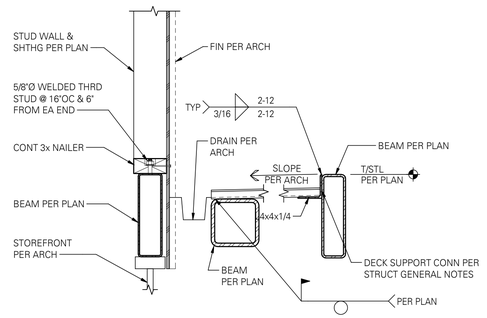
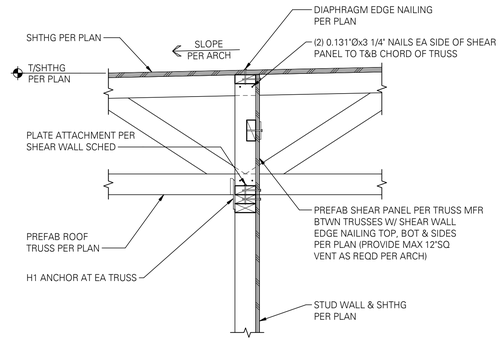
FRAMING DETAILS
S4.1

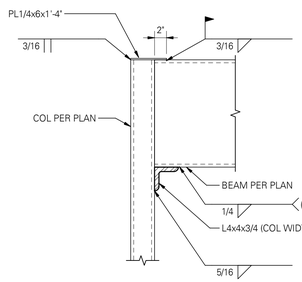






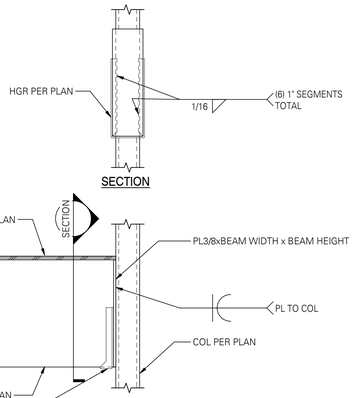
2 LEFT CANOPY SECTION

SCALE: 1" = 1'-0"



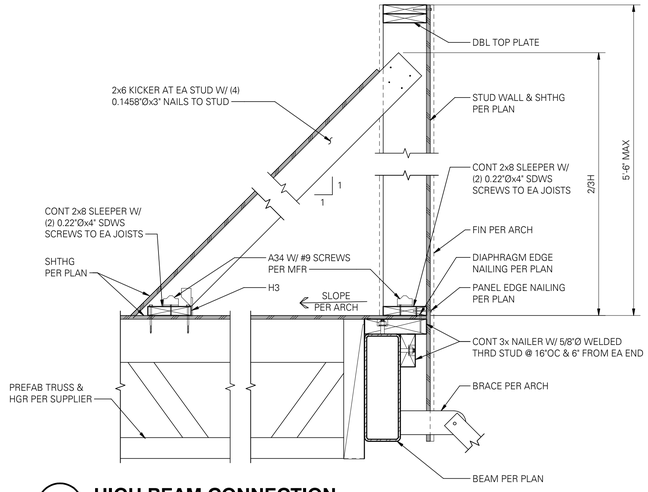
3 CANOPY SECTION

SCALE: 1" = 1'-0"



4 WALL PERPENDICULAR TO ROOF TRUSSES

SCALE: 1" = 1'-0" (06075M)



5 HSS BEAM TO COLUMN AT ROOF

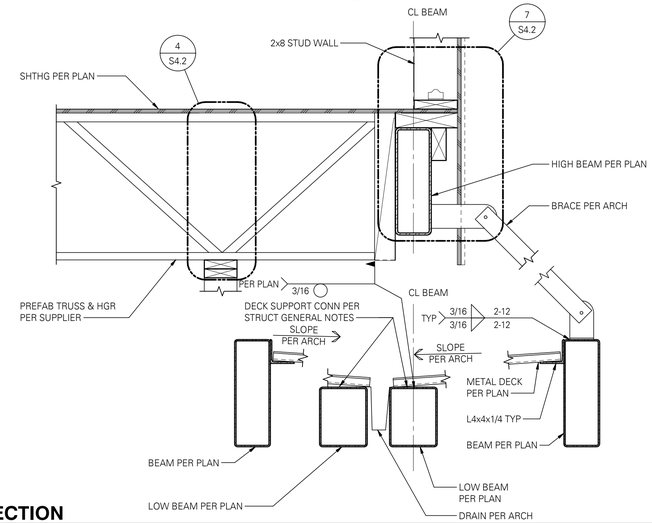
SCALE: 1" = 1'-0"

6 BEAM HANGER WELDED TO STEEL COLUN

SCALE: 1" = 1'-0"

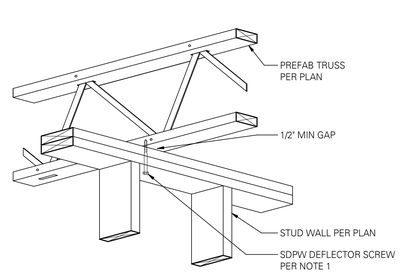
7 HIGH BEAM CONNECTION

SCALE: 1" = 1'-0"

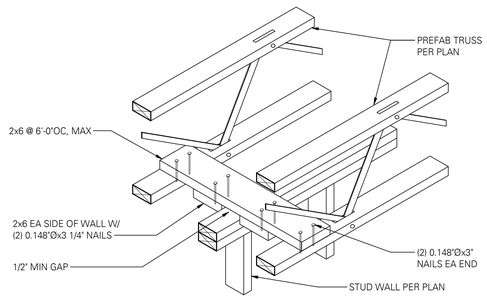


9 FRONT CANOPY SECTION

SCALE: 1" = 1'-0"



TRUSS PERPENDICULAR TO WALL



TRUSS PARALLEL TO WALL

NOTES:

1. CONTRACTOR TO REFERENCE SDPW DEFLECTOR SCREW SPECIFICATIONS IN REGARDS TO PRODUCT TYPE AT 1x AND 2x TOP PLATES OR (2) 2x TOP PLATES. FOR 1x AND 2x TOP PLATES A MAXIMUM SPACING EQUALS 42"OC AND FOR (2) 2x TOP PLATES A MAXIMUM SPACING EQUALS 48"OC. SDPW DEFLECTOR SCREWS MUST BE PLACED AT MINIMUM 6" FROM EACH END OF WALL. INSTALL WITH 3/4" OFFSET BELOW BOTTOM OF PLATE AND HEAD OF SDPW DEFLECTOR SCREW.
2. DCI ENGINEERS IS ONLY RESPONSIBLE FOR THE POSITIVE CONNECTION (SDPW DEFLECTOR SCREW) FROM THE NONBEARING WALL TO THE PRIMARY STRUCTURE. THE CONTRACTOR IS TO CONFIRM THE ATTACHMENT OF THE CEILING SHEATHING TO THE NONBEARING WALL WITH THE SUB-CONTRACTOR PERFORMING THE FRAMING, THE ARCHITECT, THE MATERIAL SUPPLIER, AND THE ACOUSTICAL CONSULTANT AS THERE ARE VARIOUS CONSIDERATIONS INCLUDING MATERIAL ATTACHMENT SPECIFICATIONS, PREFERENTIAL FRAMING TECHNIQUES BY THE SUB-CONTRACTOR, FIRE RATING AND ACOUSTICAL CAULKING REQUIREMENTS, AND NONBEARING WALL FINISH INTERFACE REQUIREMENTS. ALL OF WHICH ARE OUTSIDE OF DCI ENGINEERS EXPERTISE.
3. 16" MINIMUM, 24" MAXIMUM. CONFIRM SPACING OF CONNECTION WITH MATERIAL SUPPLIER, MATERIAL SUPPLIER TO ACCOUNT FOR MOVEMENT OF STRUCTURE.
4. 1x TOP PLATE CAN BE REMOVED GIVEN THE GAP IS 1/2" MAXIMUM.

11 NON-STRUCTURAL PARTITION WALL PERPENDICULAR AND PARALLEL TO TRUSSES

SCALE: 1" = 1'-0" (06905D)

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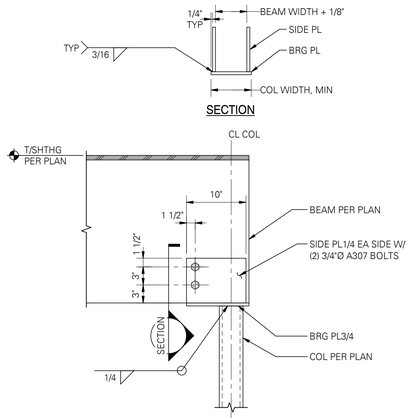
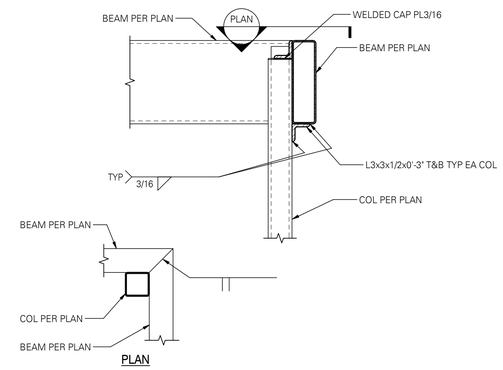
FRAMING DETAILS

S4.2



1 TYPICAL BEAM SADDLE AT BEAM END - STEEL COLUMN

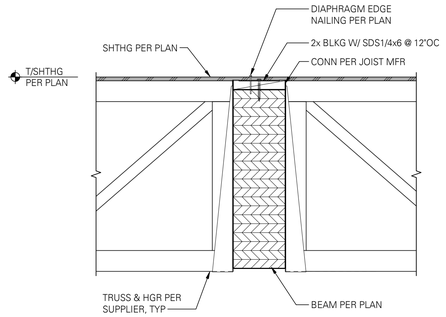
SCALE: 1" = 1'-0" (06201)



NOTE:
GRIND SMOOTH ALL EXPOSED WELDS.

2 CORNER COLUMN OF CANOPY

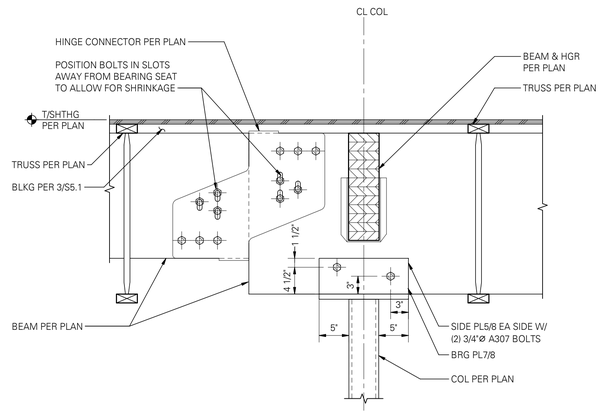
SCALE: 1" = 1'-0"



NOTE:
STAGGER JOISTS AS REQUIRED FOR BEARING.

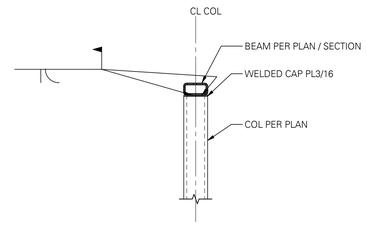
3 JOIST AT BEAM

SCALE: 1" = 1'-0"



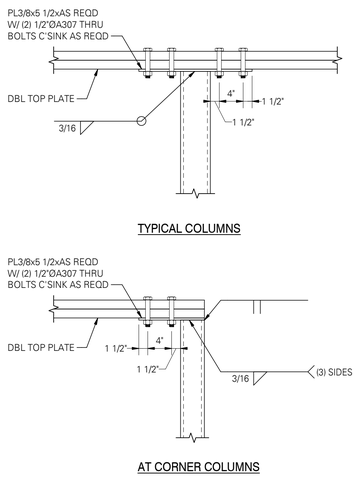
4 TYPICAL BEAM HINGE CONNECTION

SCALE: 1" = 1'-0" (06202M)



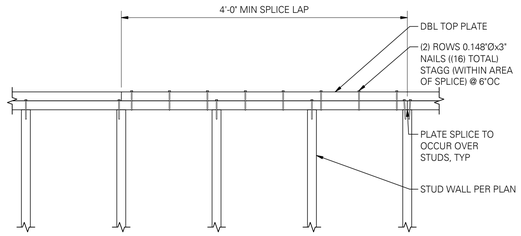
5 HIGH STEEL BEAM COLUMN CONNECTION AT DRIVE THRU

SCALE: 1" = 1'-0"



9 TYPICAL COLUMN CONNECTION AT ROOF

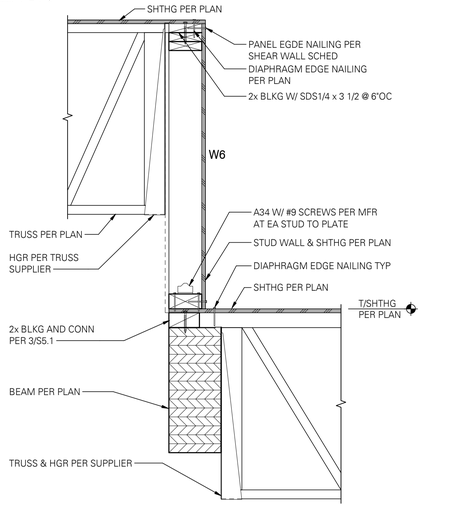
SCALE: 1" = 1'-0"



NOTE:
FLOOR/ROOF JOISTS NOT SHOWN FOR CLARITY.

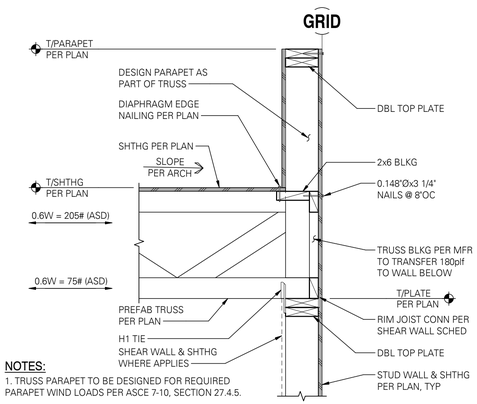
10 TYPICAL PLATE SPLICE DETAIL

SCALE: 1" = 1'-0" (06904M)



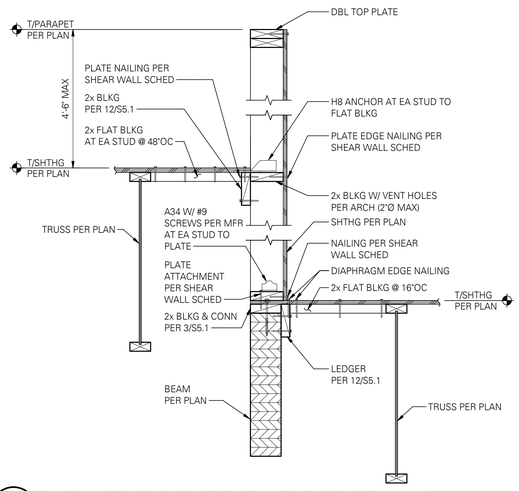
7 ROOF STEP PERPENDICULAR TO FRAMING

SCALE: 1" = 1'-0"



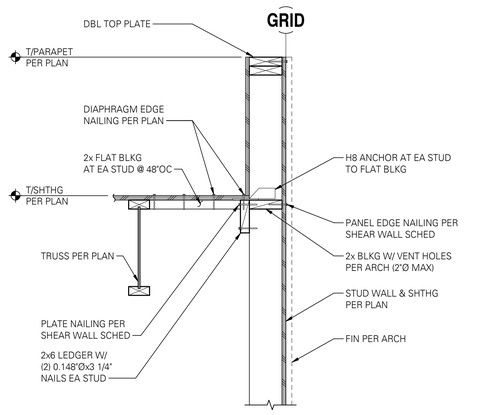
8 TYPICAL TRUSS TO WALL CONNECTION AT EXTERIOR BEARING WALL

SCALE: 1" = 1'-0" (06066M)



11 HIGH ROOF STEP PARALLEL TO FRAMING

SCALE: 1" = 1'-0"



12 PARAPET - EXTERIOR WALL PARALLEL TO JOIST

SCALE: 1" = 1'-0" (06062M)

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ROOF FRAMING DETAILS

S5.1

MECHANICAL LEGEND AND SYMBOLS

SA		SUPPLY AIR DUCT
RA		RETURN AIR DUCT
RA		EXHAUST AIR DUCT
OSA		OUTSIDE AIR DUCT
CD		CEILING DIFFUSER, 2 WAY
CD		CEILING DIFFUSER, 4 WAY
CR		CELING RETURN AIR GRILLE
CE		CELING EXHAUST AIR GRILLE
SWS		SIDE WALL SUPPLY REGISTER
SWR		SIDE WALL RETURN GRILLE
CD	CD	CONDENSATE DRAIN
	T	ROOM THERMOSTAT
	CU 1	EQUPIMENT IDENTIFICATION

SINGLE LINE	DOUBLE LINE	DESCRIPTION
		VOLUME DAMPER
FD	FD	FIRE DAMPER
FSD	FSD	FIRE/SMOKE DAMPER
SD	SD	SMOKE DAMPER
MD	MD	MOTORIZED DAMPER
		MITERED ELBOW WITH TURNING VANES
		RADIUSED ELBOW
		RECTANGULAR MAIN W/ ROUND BRANCH
		RECTANGULAR MAIN WITH RECTANGULAR BRANCH
		CONCENTRIC SQUARE TO ROUND
		ECCENTRIC TRANSITION, RECTANGULAR OR ROUND
		NON-SYMMETRICAL WYE
		SYMMETRICAL WYE
		RECTANGULAR DUCT RISER
		ROUND DUCT RISER
		RECTANGULAR DUCT DROP
		ROUND DUCT DROP
		RECTANGULAR OFFSET LESS THAN 15°
		RECTANGULAR OFFSET MORE THAN 15°
		ROUND WYE
EX	EX	EXTRACTOR
		BELLMOUTH
		ROUND DUCT WITH ROUND BRANCH
		CONCENTRIC TRANSITION, RECTANGULAR OR ROUND
		LINED DUCT (SIZES SHOWN ARE NET INSIDE)
		FLEXIBLE CONNECTION

HVAC GENERAL NOTES:

1. DUCTS SHALL BE SUPPORTED WITH APPROVED HANGERS AT INTERVALS NOT EXCEEDING 10 FEET OR BY OTHER APPROVED DUCT SUPPORT SYSTEMS DESIGNED IN ACCORDANCE WITH THE BUILDING CODE. FLEXIBLE AND OTHER FACTORY-MADE DUCTS SHALL BE SUPPORTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. THIS CONTRACTOR SHALL PAY FOR ALL PERMITS AND FEES.
3. CONTROL LOW VOLTAGE WIRING BY MECHANICAL CONTRACTOR AND CONDUIT BY ELECTRICAL CONTRACTOR. WIRING, CABLE, AND RACEWAYS SHALL BE LISTED AND LABELED AS PLENUM-RATED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE ELECTRICAL CODE, PER 2010 O.M.S.C. 602.2.1.1. NEW CONDUITS SHALL BE INSTALLED IN THE NEW SHAFTS.
4. CONDENSATE DRAIN PIPING AND FINAL CONNECTION TO UNIT BY MECHANICAL CONTRACTOR.
5. DUCT PENETRATION, CUTTING AND PATCHING BY GENERAL CONTRACTOR, UNLESS OTHERWISE NOTED ON PLAN.
6. THERMOSTAT SHALL BE 24 VOLT, ONE STAGE HEATING AND ONE OR TWO STAGE COOLING WITH MATCHING SUBBASE AND TAMPER PROOF COVER.
7. PROVIDE FILTER FOR AIR CONDITIONING AND/OR AIR SIDE UNITS AS REQUIRED PER ASHRAE AND CODE.
8. THIS CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR SIZE AND LOCATION OF DUCTWORK WALL OPENINGS AND WITH ELECTRICAL CONTRACTOR FOR ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT AND ARCHITECTURAL DRAWINGS FOR AIR DISTRIBUTION LOCATION.
9. THE CONTRACTOR SHALL SUBMIT BID BASED ON THE DRAWINGS AND ALTERNATE FOR COST SAVING. THESE DRAWINGS ARE FOR BIDDING PURPOSES.
10. COORDINATE THE LOCATION OF ALL CEILING DIFFUSERS, REGISTERS AND GRILLES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHTING LAYOUT AND ARCHITECTURAL ROOM ELEVATIONS.
11. DUCTS SHALL BE SUPPORTED WITH 1" WIDE 16-GAUGE HANGER STRAPS AND SHALL BE SPACED AT NO MORE THAN 7'-0" ON CENTERS AND SHALL BE SECURED TO STRUCTURAL MEMBER. EXPOSED DUCTWORK ON ROOF SHALL BE SUPPORTED BY GALVANIZED STEEL ANGLE & SHALL BE PER LOCAL CODE.
12. ROUND AND RECTANGULAR DUCTWORK ARE INTERCHANGEABLE IF CROSS SECTION AREAS ARE EQUIVALENT. CONTRACTOR IS TO VERIFY THE EXACT CEILING SPACE AND INTERCHANGE THE DUCT SIZE TO FIT THE CEILING SPACE WITHOUT ADDITIONAL FEE CHARGE.
13. INSTALL VOLUME CONTROL DAMPERS AT EACH SUPPLY DIFFUSER TO AFFORD COMPLETE CONTROL OF THE AIR FLOW IN THE VARIOUS DUCT SYSTEMS.
14. COORDINATE ENTIRE INSTALLATION OF THE H.V.A.C. SYSTEM WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
15. PROVIDE BACK-DRAFT DAMPERS FOR ALL EXHAUST AIR DUCTS UNLESS OTHERWISE NOTED PER CODE.
16. CONTRACTOR SHALL SUBMIT A COMPLETE BALANCE REPORT FOR APPROVAL.
    THE REPORT SHALL INCLUDE THE FOLLOWING:
    A) AIR QUANTITIES AT EACH REGISTER.
    B) STATIC PRESSURE READINGS AT INLET AND DISCHARGE OF EACH AIR HANDLING SYSTEM AND AT INLET OF EACH EXHAUST AIR SYSTEM.
    C) COOLING AND HEATING SUPPLY AND RETURN AIR TEMPERATURES AT EACH AIR CONDITIONING UNIT.
17. ALL LINED DUCT DIMENSIONS ARE NET CLEAR DIMENSION AFTER LINING HAS BEEN INSTALLED.
18. ANY MATERIAL, ARTICLE OR PIECE OF EQUIPMENT OTHER THAN THAT INDICATED SHALL NOT BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER AND ANY CHANGES IN MECHANICAL, ELECTRICAL AND/OR OTHER SYSTEMS REQUIRED DUE TO SUCH SUBSTITUTION SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR; AND AT NO ADDITIONAL COST TO THE OWNER.
19. EXHAUST TERMINATION SHALL BE MINIMUM 10'-0" AWAY OR 3'-0" ABOVE FROM ANY FRESH AIR INTAKE, OPENABLE WINDOWS, DOORS AND 10'-0" MINIMUM ABOVE GRADE.
20. THE CONTRACTOR SHALL FURNISH AND INSTALL ACCESS DOORS AND/OR ACCESS PANELS AT LOCATIONS AS NECESSARY TO SERVICE FIRE DAMPERS AND PROVIDE MAINTENANCE FOR EQUIPMENT. ALL ACCESS DOORS AND PANEL LOCATIONS SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO INSTALLATION.
21. ACCURATE AS-BUILT DRAWINGS SHALL BE MADE DURING CONSTRUCTION AND SUBMITTED FOR APPROVAL UPON COMPLETION OF INSTALLATION.
22. THE CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT AND INFORM THE ARCHITECT OF ANY DISCREPANCIES.
23. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY FOR COMPLETION OF THE WORK. ALL MATERIALS AND WORK SHALL COMPLY WITH APPLICABLE CODES AND GOVERNING REGULATIONS AND MEET THE APPROVAL OF THE LOCAL JURISDICTION.
24. TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE MATERIALS BEFORE, DURING AND AFTER INSTALLATION. IN THE EVENT OF DAMAGE, IMMEDIATELY REPAIR ALL DAMAGED AND DEFECTIVE WORK TO THE APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
25. THESE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH ALL OTHER TRADES. THIS INCLUDES COORDINATING THE LOCATION AND SIZE OF ALL OPENINGS, LOCATIONS OF EQUIPMENT PADS AND CHANGES OF ELEVATIONS OF DUCTWORK, PIPING AND OTHER EQUIPMENT.
26. PROVIDE ALL FRESH AIR INTAKES AND EXHAUST OUTLETS WITH HOOD, 1/2" GALVANIZED MESH SCREENS AND OUTSIDE AIR BACKDRAFT DAMPERS.
27. DUCTWORK SHALL BE INSULATED OR LINED AS NOTED ON DRAWINGS. ALL DUCTWORK EXPOSED ON ROOF SHALL BE INTERNALLY LINED UNLESS OTHERWISE INDICATED OR SPECIFIED. ALL DUCT SIZES ARE SHEET METAL SIZES. ALL DUCT JOINTS SHALL BE SEALED PER SPECIFICATIONS.
28. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.

GENERAL SPECIFICATIONS:

1. EVERY DUCT AND PLENUM WHICH IS A PORTION OF THE COMFORT HEATING AND/OR COOLING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF OREGON STATE MECHANICAL CODE AND/OR ASHRAE. THIS CONSTRUCTION INSULATION AND SUPPORT OF EVERY DUCT AND PLENUM SHALL COMPLY WITH LOCAL CODE.
2. CONCEALED SPACES, CIRCULATION AIR

   NO COMBUSTIBLE MATERIAL (SUCH AS EXPOSED COMMUNICATION CABLES, INSULATED WIRES, PLASTIC TUBING OR PIPING, PIPE INSULATION, CONDENSATE PAN INSULATION, WOOD, PVC, ABS AND OTHER PLASTICS) TO BE IN CONCEALED SPACES USED TO CONVEY CIRCULATING AIR SUPPLY. WHEN COMBUSTIBLE MATERIAL IS TO BE LOCATED IN THE ABOVE SPACES, IT SHALL BE APPROVED FOR SUCH INSULATION.
3. INSULATION OF DUCTS

   EVERY CONDITIONED AIR SUPPLY AND PLENUM SHALL BE INSULATED WITH NO LESS THAN THE AMOUNT OF INSULATION INDICATED BELOW (EXCEPT FOR DUCTS AND PLENUMS DIRECTLY EXPOSED TO THE CONDITIONED SPACES.) ONLY APPROVED MATERIALS SHALL BE USED WITHIN DUCTS OR PLENUMS FOR INSULATING, SOUND DEADENING OR OTHER PURPOSES.

DUCT LOCATION	INSULATION TYPE: COOLING ONLY C & W	INSULATION TYPE: HEATING ONLY A & W
ROOF OR EXPOSED TO OSA	C & W	A & W
ATTICS BETWEEN AND UNDER		
FLOOR CRAWL SPACES AND	A	A
BASEMENTS		

   INSULATION TYPES

   A 1", 0.60 LB/CU. FT. MINERAL FIBER BLANKET
   1/2 INC., 1.5 LB/CU. FT. MINERAL FIBER BLANKET (DUCT LINER)
   1/2 INC., 3 LB/CU. FT. MINERAL FIBER BOARD
   MATERIAL WITH A CONDUCTANCE OF 0.48 OR LESS

   C 3", 0.60 LB/CU. FT. MINERAL FIBER BLANKET
   1-1/2", 1.5 LB/CU. FT. MINERAL FIBER BLANKET (DUCT LINER)
   1-1/2", 3 LB/CU. FT. MINERAL FIBER BOARD
   MATERIAL WITH A CONDUCTANCE OF 0.16 OR LESS

   W WEATHERPROOF BARRIER

   WHERE DUCTS ARE USED FOR BOTH HEATING AND COOLING, THE MINIMUM INSULATION TO BE AS REQUIRED FOR THE MOST RESTRICTIVE CONDITION.

   INSULATION MAY BE OMITTED ON THAT PORTION OF A DUCT WHICH IS LOCATED WITHIN A WALL OR A FLOOR-CEILING SPACE WHERE BOTH SIDES AND THIS SPACE ARE EXPOSED TO CONDITIONED AIR AND WHERE THIS SPACE IS NOT VENTILATED OR OTHERWISE EXPOSED TO UNCONDITIONED AIR.
4. SEALING

   TRANSVERSE SUPPLY DUCTS, TAPED OR SEALED WITH MASTIC EXCEPT FOR DUCTS EXPOSED TO CONDITIONED SPACE, WHERE DUCT STATIC PRESSURE EXCEEDS 3/4" WATER, LONGITUDINAL JOINTS, TAPED OR SEALED WITH MASTIC.
5. INSPECTION

   INSPECTION TO BE MADE AND DUCTWORK APPROVED BEFORE COVERING WITH INSULATION.
6. TEMPERATURE CONTROLS

   EACH HVAC SYSTEM SHALL BE PROVIDED WITH AT LEAST ONE AUTOMATIC TEMPERATURE CONTROL DEVICE FOR THE REGULATION OF TEMPERATURE THESE AUTOMATIC TEMPERATURE CONTROL DEVICES SHALL BE CAPABLE OF BEING SET TO MAINTAIN SPACE TEMPERATURE SET POINTS FROM 55 DEGREES F TO 85 DEGREES F, SHALL BE CAPABLE OF OPERATING THE SYSTEM HEATING AND/OR COOLING IN SEQUENCE.

   EXCEPT AS ALLOWED, THESE CONTROLS SHALL BE ADJUSTABLE TO PROVIDE A DEAD BAND OF 5 DEGREES F BETWEEN FULL HEATING AND FULL COOLING. CONTROLS SHALL HAVE THE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70 DEGREES F AND OF TERMINATING ALL COOLING AT A TEMPERATURE NOT LESS THAN 78 DEGREES F.
7. AN AUTOMATIC TIME SWITCH CONTROL DEVICE WITH AN ACCESSIBLE FOUR (4) HOUR MANUAL OVERRIDE SHALL BE PROVIDED.
8. A MAINTENANCE LABEL SHALL BE AFFIXED TO MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED TO THE OWNER PER STANDARDS.
9. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL. ALL DUCTWORK SHALL BE CONSTRUCTED TO 2" PRESSURE STANDARDS AS DEFINED BY THE SMACNA "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE". CONSTRUCTION OF FITTINGS, ELBOWS AND JOINTS SHALL BE IN ACCORDANCE WITH CURRENT SMACNA AND ASHRAE STANDARDS.
10. DUCT MATERIALS:
    A. GALVANIZED STEEL DUCTS: ASTM A525 AND ASTM A527 GALVANIZED STEEL SHEET, LOCK-FORMING QUALITY, HAVING ZINC COATING OF IN CONFORMANCE WITH ASTM A90.
    B. STEEL DUCTS: ASTM A366.
    C. ALUMINUM DUCTS: ASTM B209; ALUMINUM SHEET, ALLOY 3003-H14. ALUMINUM CONNECTORS AND BAR STOCK: ALLOY 6061- T6 OR OF EQUIVALENT STRENGTH.
11. WEIGHT OF METAL DUCT:
    A. RECTANGULAR DUCTS — GAUGE

UP TO 12 INCHES	26
13 INCHES TO 30 INCHES	24
31 INCHES TO 60 INCHES	22
61 INCHES TO 90 INCHES	20
91 INCHES & OVER	18

    B. ROUND DUCT

SPIRAL PIPE GAUGE	FITTING	GUAGE
3 TO 14 INCHES	26	24
15 TO 26 INCHES	24	22
27 TO 36 INCHES	22	20
37 TO 50 INCHES	20	20

ROOF TOP UNIT SCHEDULE

MARK	MANUF. & MODEL NO.	INDOOR FAN CFM	INDOOR FAN ESP IN WG.	INDOOR FAN MTR. HP	MIN. OSA (CFM)	COOLING BTUH TOTAL	COOLING SEER/IEER	HEATING (MBH) GAS INPUT	HEATING (MBH) GAS OUTPUT	AFUE %	WEIGHT LBS.	POWER UTILIZATION VOLT/PH	FLA	MCA	MOCP	NOTES
RTU 1	CARRIER 48FCEM08A2A5-6U0A1	3,000	.92	–	200	90,000	15.0	110	88	80%	775	208/3/60	–	29	45	1,2,3,4,5
RTU 2	CARRIER 48GCEM06A2A5-6U0A1	2,000	.87	–	200	60,000	16.10	110	88	80%	770	208/3/60	–	31	45	1,2,3,4,5
RTU 3	CARRIER 48GCEM06A2A5-6U0A1	2,000	.87	–	200	60,000	16.10	110	88	80%	770	208/3/60	–	31	45	1,2,3,4,5
RTU 4	CARRIER 48FCEM07A2A5-6U0A1	2,400	.92	–	200	67,000	15.0	110	88	80%	775	208/3/60	–	29	45	1,2,3,4,5
RTU 5	CARRIER 48GCEM06A2A5-6U0A1	2,000	.87	–	200	60,000	16.10	110	88	80%	770	208/3/60	–	31	45	1,2,3,4,5

NOTES:
1. PROVIDE INTEGRAL DISCONNECT SWITCH.
2. PROVIDE FACTORY INSTALLED MOTOR STARTERS
3. PROVIDE FACTORY CURB'S.
4. PROVIDE ECONOMIZER W/POWER EXHAUST AND CONTROL SYSTEM.
5. PROVIDE AND FIELD INSTALL SMOKE DUCT DETECTOR IN RETURN SIDE. SMOKE DUCT DETECTION TO HAVE REMOTE ANNUNCIATORS, PLACEMENT SHALL BE COORDINATED WITH FIRE MARSHAL. (1)

TOTAL ENERGY MANAGEMENT, INC.
HVAC • ELECTRICAL • CONTROLS
2621 Stevens Drive
Richland, WA 99354
(509) 946-4500 • Fax 946-9383

MEP LLC CONSULTING
9220 SW BARBUR BLVD. #119-324
PORTLAND, OREGON 97219
PH: (503)718-7699
EMAIL: INFO@MEPCON.COM

MARSHALL SCOTT HILL — STATE OF WASHINGTON — 33980 — REGISTERED PROFESSIONAL ENGINEER

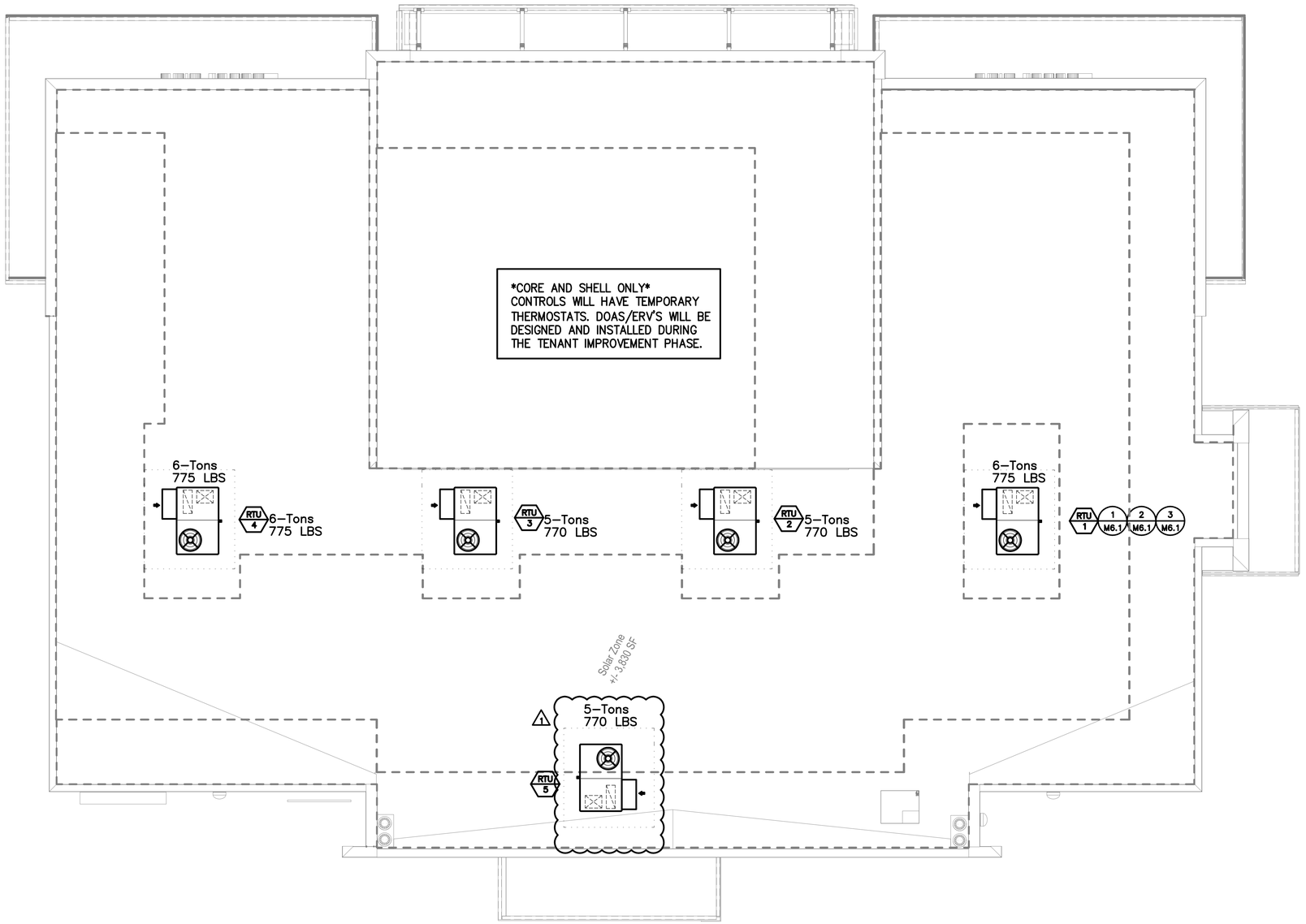
REV	DATE	DESCRIPTION
1	04.17.23	REVISIONS

DUPORTAIL ST. RETAIL BUILDING
Richland Wa, 99352

Project:
Drawn By: D. KEYS
Date: 2023.03.15

M0.1

MECHANICAL SCHEDULES & LEGENDS



1 **MECHANICAL ROOF PLAN**
SCALE: 3/16" = 1'–0"

GENERAL NOTES:

1. EVERY EFFORT HAS BEEN MADE TO ASCERTAIN EXISTING CONDITIONS. DUCTWORK INDICATED HAS BEEN ROUTED AND SIZED TO MAINTAIN CEILING CONDITIONS AND HEIGHTS INDICATED ON ARCHITECTURAL CEILING PLAN. MAINTAIN EQUIPMENT CLEARANCES.
2. CONTRACTOR IS TO SURVEY THE SPACE TO VERIFY THAT DUCTWORK CAN BE INSTALLED AS INDICATED, PRIOR TO MANUFACTURE. IF CONFLICTS ARE ENCOUNTERED AS A RESULT OF THIS SURVEY, THE ARCHITECT AND OWNER IS TO BE NOTIFIED IMMEDIATELY.
3. PROVIDE BALANCING DAMPERS FOR ALL BRANCH DUCTWORK.
4. CONTRACTOR SHALL PROVIDE VERTICAL SUPPORT AND SEISMIC BRACING FOR ALL SUSPENDED MECHANICAL EQUIPMENT, DUCTWORK AND ACCESSORIES. THE SUPPORT, BRACING AND CONNECTIONS TO THE BUILDING FRAME SHALL CONFORM TO A PRE–APPROVED, CODE–COMPLIANT SYSTEM SUCH AS NUSIG.
5. PATCH AND REPAIR ROOF PENETRATIONS PER LANDLORDS REQUIREMENTS.
6. DUCT BRACING AND SUPPORTS SHALL BE NON–COMBUSTIBLE MATERIAL SECURELY ATTACHED TO THE STRUCTURE AND DESIGNED TO CARRY GRAVITY AND SEISMIC LOADS WITHIN THE STRESS LIMITATIONS OF THE BUILDING CODE. BOLTS, SCREWS, RIVETS AND OTHER MECHANICAL FASTENERS SHALL NOT PENETRATE THE DUCT WALLS.
7. ALL PIPING PARTS EXPOSED TO THE ATMOSPHERE SHALL BE PROTECTED BY ONE (1) COAT OF CORROSION RESISTANT PRIMER AND ONE (1) COAT CORROSION RESISTANT PAINT.

SHEET NOTES:

1. ALL PIPING PARTS EXPOSED TO THE ATMOSPHERE SHALL BE PROTECTED BY ONE (1) COAT OF CORROSION RESISTANT PRIMER AND ONE (1) COAT CORROSION RESISTANT PAINT.

TOTAL ENERGY MANAGEMENT, INC.
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9220 SW BARBUR BLVD. #119-324
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MARSHALL SCOTT HILL
STATE OF WASHINGTON
53980
REGISTERED
PROFESSIONAL ENGINEER

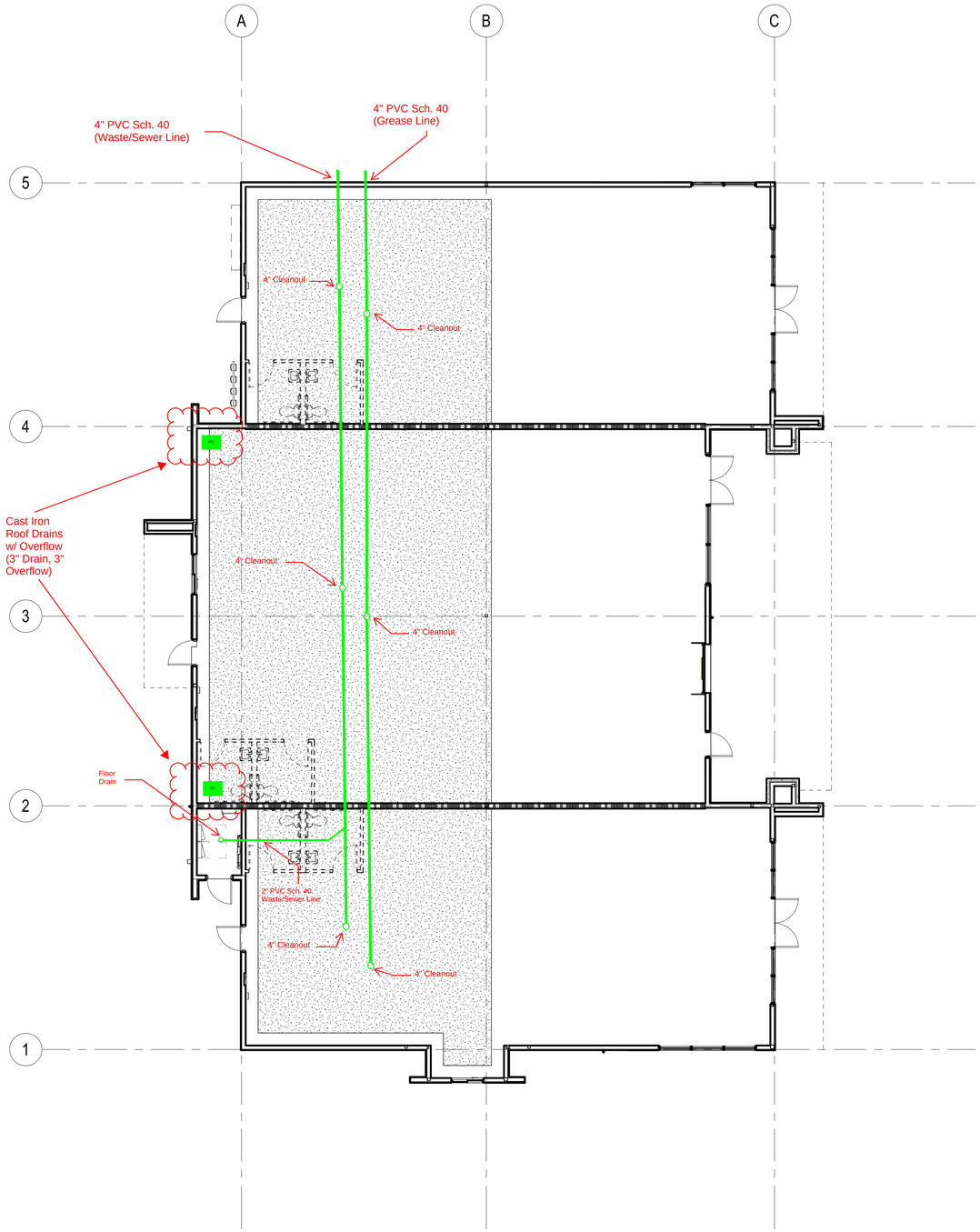
REV	DATE	DESCRIPTION
1	04.17.23	REVISIONS

DUPORTAIL ST. RETAIL BUILDING
— - Richland Wa, 99352

Project:
Drawn By: D. KEYS
Date: 2023.03.15

M1.2

MECHANICAL
ROOF PLAN



NORTH

1 Plumbing Plan - Drain and Waste Line

1/8" = 1'-0"

Bernardo Wills

153 SOUTH JEFFERSON
SPOKANE WASHINGTON 99201
WWW.BERNARDOWILLS.COM
509.838.4511 FAX 509.838.4605

DRAWING
PREPARED BY
JRT MECHANICAL

Duportail St. Retail Building

22-09-164

Richland, Washington

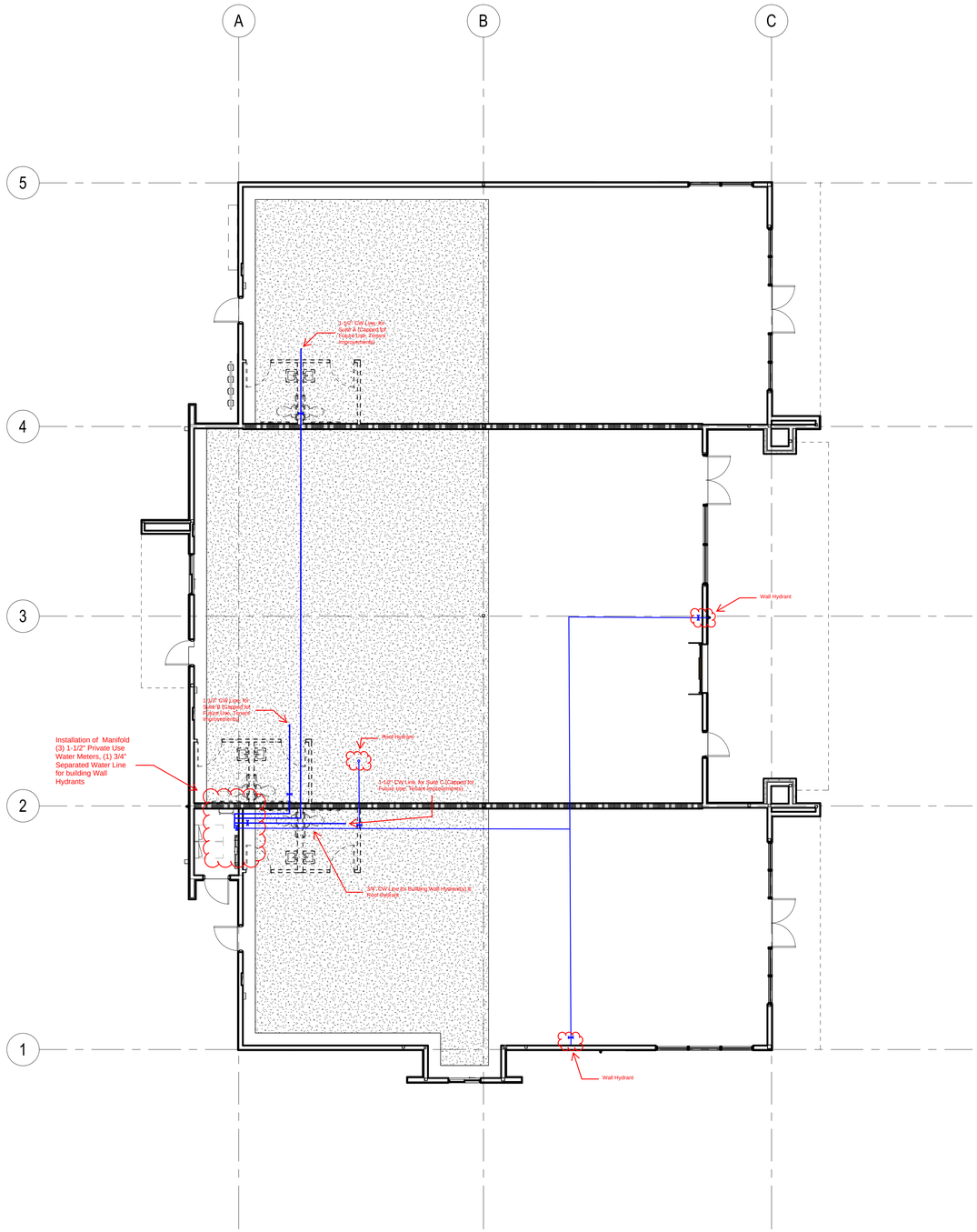
Permit Set

6/2/23

Revision Schedule

Plumbing Plan - Drain and Waste line

P1.0



NORTH

1 Plumbing Plan - Water line Piping

1/8" = 1'-0"

Bernardo Wills

153 SOUTH JEFFERSON
SPOKANE WASHINGTON 99201
WWW.BERNARDOWILLS.COM
509.838.4511 FAX 509.838.4505

DRAWING
PREPARED BY
JRT MECHANICAL

Duportail St. Retail Building

22-09-164

Richland, Washington

Permit Set

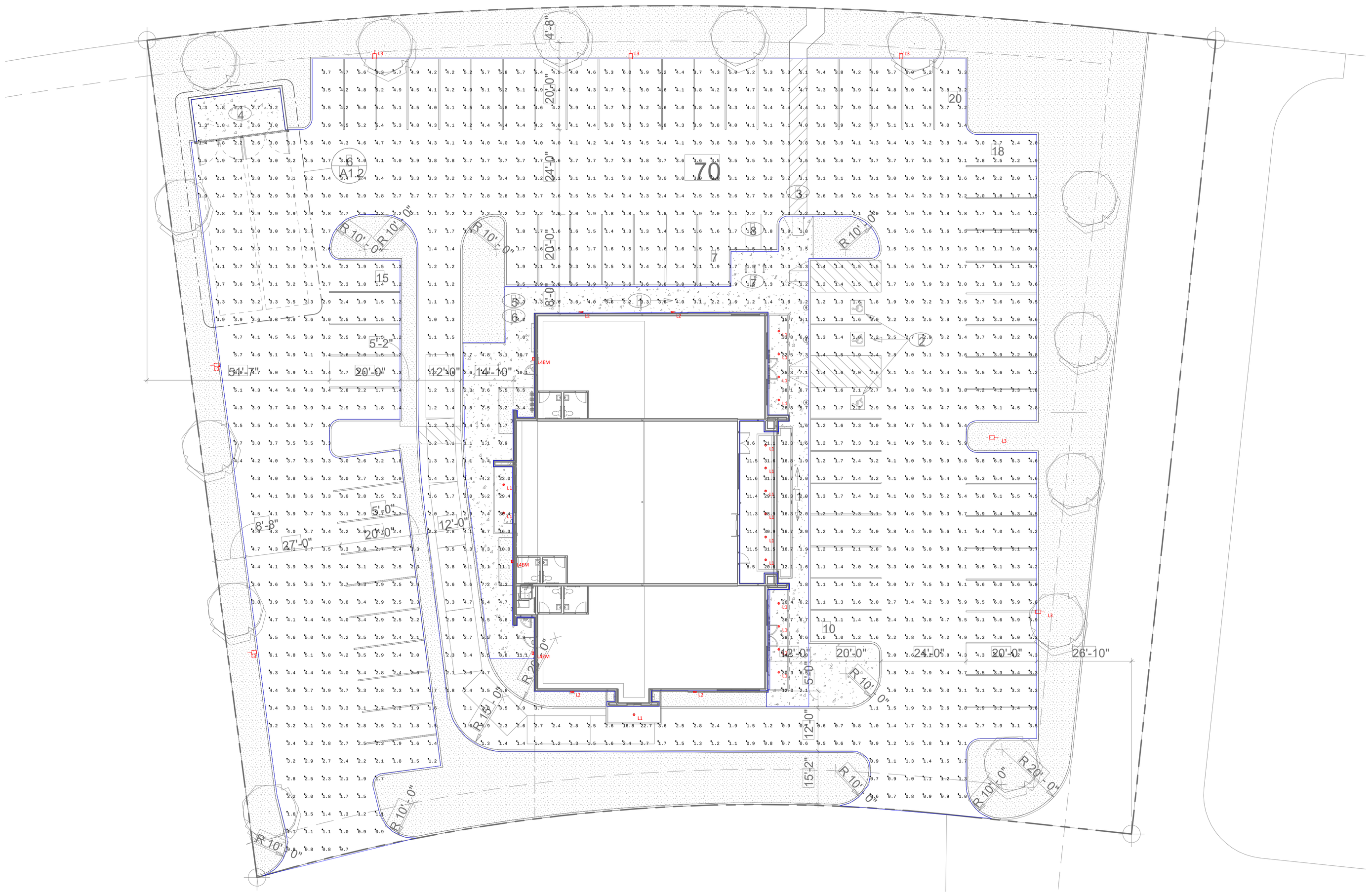
6/2/23

Revision Schedule

Plumbing Plan - Water Line Piping

P1.1

DUPORTAIL STREET



Calculation Summary							
Project: SITE							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Duportail Site_Planar	Illuminance	Fc	3.73	38.1	0.5	7.46	76.20

NOTES:
1. LIGHT LOSS FACTOR APPLIED, INITIAL VALUES WILL BE HIGHER
2. FIXTURE HEIGHT: NOTED
3. POLE HEIGHT: 20'
3. STANDARD REFLECTANCE USED: 26% GROUND EQUAL TO ASPHALT
4. CALCULATION POINTS LOCATED ON GROUND

[a]mbientlighting
& controls
2610 N Van Marter Dr, Ste #3
Spokane Valley, WA 99206
509.922.5311

TITLE
LIGHTING LAYOUT & CALCULATIONS - SITE

PROJECT NAME
DUPORTAIL ST. RETAIL BUILDING

LOCATION
RICHLAND, WASHINGTON

DATE
6/2/2023

DRAWN BY
LJ

SCALE
1 inch = 8 ft

SHEET NO.
E1.1

Luminaire Schedule					
Project: SITE					
Qty	Label	Description	Manufacturer	Luminaire Lumens	Luminaire Watts
17	L1	UJE-80052-W-W35-02-120/277V CONFIRM FINISH	LIGMAN	2286	20
4	L2	ULEE-30051-2x20w-M-T4-W35-02-120/277v CONFIRM FINISH	LIGMAN	4432	40
7	L3	GALN-SA3C-740-U-T4W-BZ/ RPSQ-20-4-11	MCGRAW-EDISON	21003	160
3	L4EM	AXCS5A-CBP	LUMARK	6300	52

[a]mbientlighting
& controls
2610 N Van Marter Dr, Ste #3
Spokane Valley, WA 99206
509.922.5301

TITLE
LUMINAIRE SCHEDULE

PROJECT NAME
DUPORTAIL ST. RETAIL BUILDING

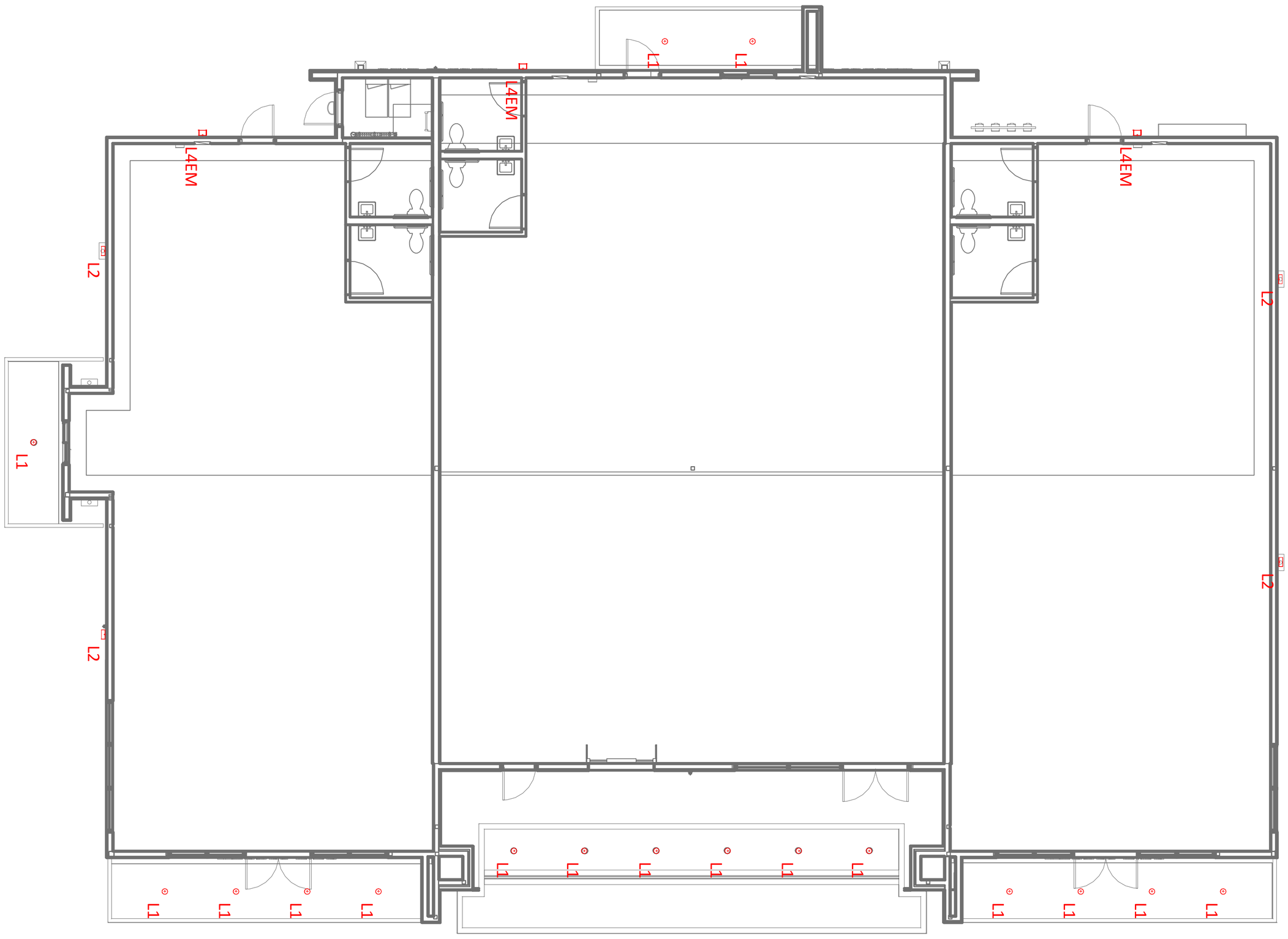
LOCATION
RICHLAND, WASHINGTON

DATE
6/2/2023

DRAWN BY
LJ

SCALE

SHEET NO.
E1.2



SHEET NO. E1.3	SCALE 1 inch = 6 ft	DRAWN BY LJ	DATE 6/2/2023

PROJECT NAME
DUPORTAIL ST. RETAIL BUILDING

LOCATION
RICHLAND, WASHINGTON

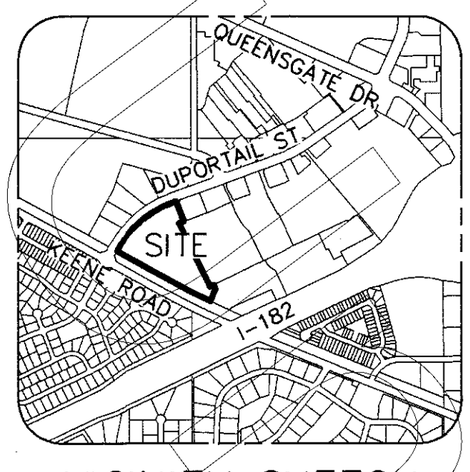
TITLE
LIGHTING LAYOUT - EXTERIOR

[a]mbientlighting & controls
2610 N Van Marter Dr, Ste #3
Spokane Valley, WA 99206
509.922.5011

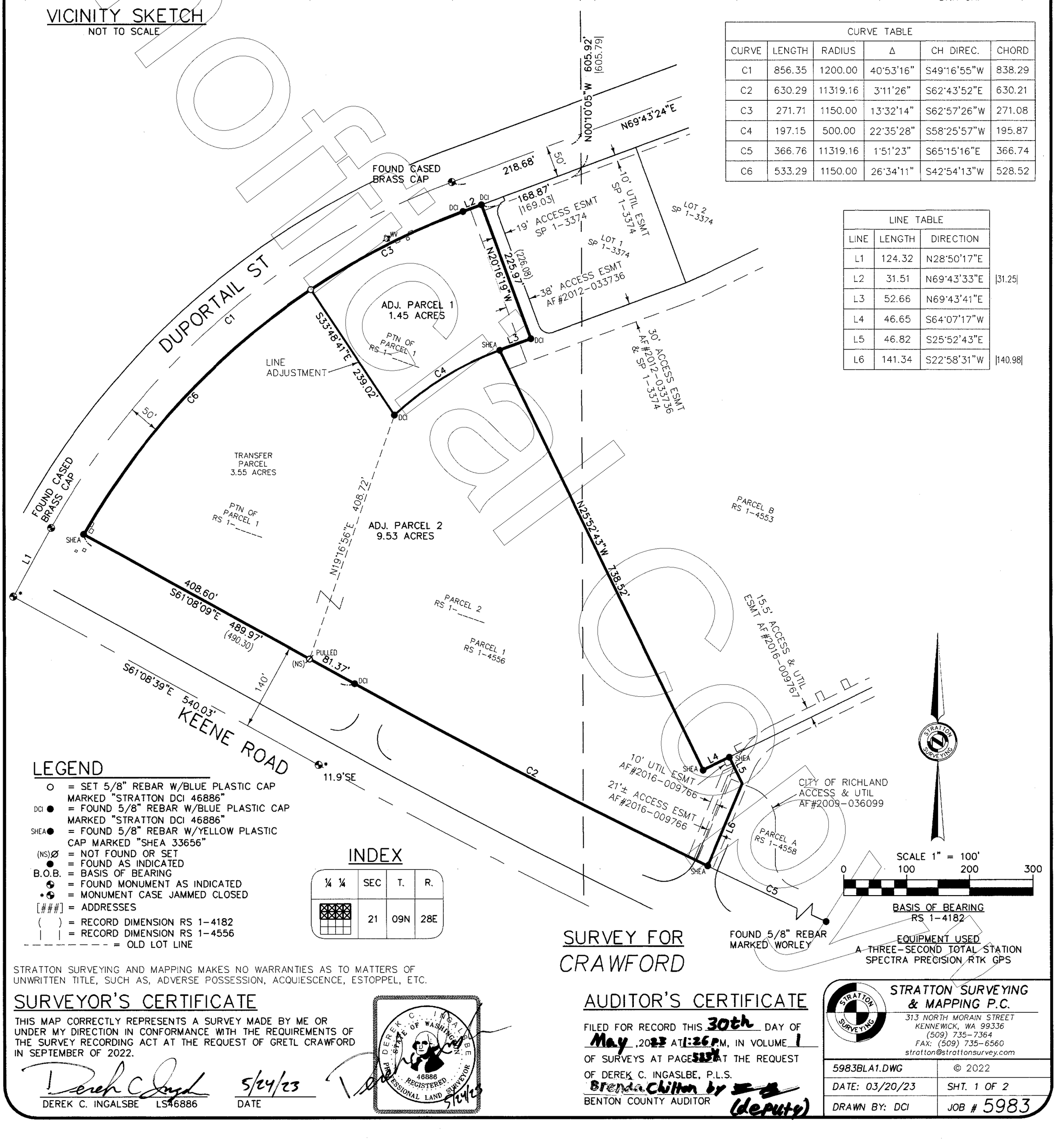
2023-010481 B: 01 P: 5834 SUR
05/30/2023 01:26:49 PM Pages: 2 Fee: $292.50
Stratton Surveying & Mapping,
Benton County, Benton County Auditor's Office

RECORD SURVEY NO. 5834

FOR A BOUNDARY LINE ADJUSTMENT
N 1/2 OF SEC. 21, T.09N., R.28E., W.M.
CITY OF RICHLAND,
BENTON COUNTY, WASHINGTON



VICINITY SKETCH
NOT TO SCALE



CURVE TABLE					
CURVE	LENGTH	RADIUS	Δ	CH DIREC.	CHORD
C1	856.35	1200.00	40°53'16"	S49°16'55"W	838.29
C2	630.29	11319.16	3°11'26"	S62°43'52"E	630.21
C3	271.71	1150.00	13°32'14"	S62°57'26"W	271.08
C4	197.15	500.00	22°35'28"	S58°25'57"W	195.87
C5	366.76	11319.16	1°51'23"	S65°15'16"E	366.74
C6	533.29	1150.00	26°34'11"	S42°54'13"W	528.52

LINE TABLE			
LINE	LENGTH	DIRECTION	
L1	124.32	N28°50'17"E	
L2	31.51	N69°43'33"E	|31.25|
L3	52.66	N69°43'41"E	
L4	46.65	S64°07'17"W	
L5	46.82	S25°52'43"E	
L6	141.34	S22°58'31"W	|140.98|

LEGEND

- ○ = SET 5/8" REBAR W/BLUE PLASTIC CAP MARKED "STRATTON DCI 46886"
- DCI ● = FOUND 5/8" REBAR W/BLUE PLASTIC CAP MARKED "STRATTON DCI 46886"
- SHEA ● = FOUND 5/8" REBAR W/YELLOW PLASTIC CAP MARKED "SHEA 33656"
- (NS)Ø = NOT FOUND OR SET
- ● = FOUND AS INDICATED
- B.O.B. = BASIS OF BEARING
- ⊕ = FOUND MONUMENT AS INDICATED
- *⊕ = MONUMENT CASE JAMMED CLOSED
- [###] = ADDRESSES
- ( ) = RECORD DIMENSION RS 1-4182
- | | = RECORD DIMENSION RS 1-4556
- – – – – – – – = OLD LOT LINE

INDEX

¼ ¼	SEC	T.	R.
▩	21	09N	28E

STRATTON SURVEYING AND MAPPING MAKES NO WARRANTIES AS TO MATTERS OF UNWRITTEN TITLE, SUCH AS, ADVERSE POSSESSION, ACQUIESCENCE, ESTOPPEL, ETC.

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF GRETL CRAWFORD IN SEPTEMBER OF 2022.

Derek C Ingalsbe — 5/24/23

DEREK C. INGALSBE LS46886 — DATE

SURVEY FOR
CRAWFORD

AUDITOR'S CERTIFICATE

FILED FOR RECORD THIS 30th DAY OF May, 2023 AT 1:26 P.M. IN VOLUME 1 OF SURVEYS AT PAGE 5834 AT THE REQUEST OF DEREK C. INGASLBE, P.L.S.

Brenda Chilton by (deputy)
BENTON COUNTY AUDITOR

STRATTON SURVEYING & MAPPING P.C.
313 NORTH MORAIN STREET
KENNEWICK, WA 99336
(509) 735-7364
FAX: (509) 735-6560
stratton@strattonsurvey.com

5983BLA1.DWG	© 2022
DATE: 03/20/23	SHT. 1 OF 2
DRAWN BY: DCI	JOB # 5983

RECORD SURVEY NO. 5834

FOR A BOUNDARY LINE ADJUSTMENT
N 1/2 OF SEC. 21, T.09N., R.28E., W.M.
CITY OF RICHLAND,
BENTON COUNTY, WASHINGTON

ORIGINAL DESCRIPTIONS

PARCEL 1
THAT PORTION OF PARCEL 1 OF THE RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., RECORDS OF BENTON COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET;
THENCE NORTH 19°16'56" EAST 408.72 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 42°51'47" EAST 500.00 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE 197.15 FEET THROUGH A DELTA ANGLE OF 22°35'28" TO AN ANGLE POINT IN SAID PARCEL;
THENCE NORTH 69°43'41" EAST ALONG THE EASTERLY LINE OF SAID PARCEL 52.66 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE NORTH 20°16'19" WEST ALONG SAID LINE 225.97 FEET TO THE MOST NORTHERLY CORNER OF SAID PARCEL;
THENCE SOUTH 69°43'33" WEST ALONG THE NORTHERLY LINE OF SAID PARCEL 31.51 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 20°16'27" EAST 1150.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE AND SAID LINE 805.00 FEET THROUGH A DELTA ANGLE OF 40°06'25" TO THE SAID POINT OF BEGINNING.

CONTAINS 5.00 ACRES

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.

PARCEL 2
THAT PORTION OF PARCEL 1 OF THE RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., RECORDS OF BENTON COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 19°16'56" EAST 408.72 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 42°51'47" EAST 500.00 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE 197.15 FEET THROUGH A DELTA ANGLE OF 22°35'28" TO AN ANGLE POINT IN SAID PARCEL;
THENCE SOUTH 25°52'43" EAST ALONG THE EASTERLY LINE OF SAID PARCEL 738.52 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE NORTH 64°07'17" EAST ALONG SAID LINE 46.65 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE SOUTH 25°52'43" EAST ALONG SAID LINE 46.82 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE SOUTH 22°58'31" WEST ALONG SAID LINE 141.34 FEET TO AN ANGLE POINT IN SAID LINE THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS NORTH 25°40'25" EAST 11,319.16 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE AND THE SOUTHERLY LINE OF SAID PARCEL 630.29 FEET THROUGH A DELTA ANGLE OF 03°11'26";
THENCE NORTH 61°08'09" WEST ALONG SAID LINE 81.37 FEET TO THE SAID TRUE POINT OF BEGINNING.

CONTAINS 5.98 ACRES

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.

TRANSFER PARCEL

THAT PORTION OF PARCEL 1 OF THE RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., RECORDS OF BENTON COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET;
THENCE NORTH 19°16'56" EAST 408.72 FEET;
THENCE NORTH 33°48'41" WEST 239.02 FEET TO THE NORTHERLY LINE OF SAID PARCEL AND THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 33°48'41" EAST 1150.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE 533.29 FEET THROUGH A DELTA ANGLE OF 26°34'11" TO THE SAID POINT OF BEGINNING.

CONTAINS 3.55 ACRES

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.

ADJUSTED DESCRIPTIONS

ADJUSTED PARCEL 1
THAT PORTION OF PARCEL 1 OF THE RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., RECORDS OF BENTON COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET;
THENCE NORTH 19°16'56" EAST 408.72 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 42°51'47" EAST 500.00 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE 197.15 FEET THROUGH A DELTA ANGLE OF 22°35'28" TO AN ANGLE POINT IN SAID PARCEL;
THENCE NORTH 69°43'41" EAST ALONG THE EASTERLY LINE OF SAID PARCEL 52.66 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE NORTH 20°16'19" WEST ALONG SAID LINE 225.97 FEET TO THE MOST NORTHERLY CORNER OF SAID PARCEL;
THENCE SOUTH 69°43'33" WEST ALONG THE NORTHERLY LINE OF SAID PARCEL 31.51 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 20°16'27" EAST 1150.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE AND SAID LINE 805.00 FEET THROUGH A DELTA ANGLE OF 40°06'25" TO THE SAID POINT OF BEGINNING;

EXCEPT BEGINNING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET;
THENCE NORTH 19°16'56" EAST 408.72 FEET;
THENCE NORTH 33°48'41" WEST 239.02 FEET TO THE NORTHERLY LINE OF SAID PARCEL AND THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 33°48'41" EAST 1150.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE 533.29 FEET THROUGH A DELTA ANGLE OF 26°34'11" TO THE SAID POINT OF BEGINNING.

CONTAINS 1.45 ACRES

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.

ADJUSTED PARCEL 2
THAT PORTION OF PARCEL 1 OF THE RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., RECORDS OF BENTON COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 19°16'56" EAST 408.72 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 42°51'47" EAST 500.00 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE 197.15 FEET THROUGH A DELTA ANGLE OF 22°35'28" TO AN ANGLE POINT IN SAID PARCEL;
THENCE SOUTH 25°52'43" EAST ALONG THE EASTERLY LINE OF SAID PARCEL 738.52 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE NORTH 64°07'17" EAST ALONG SAID LINE 46.65 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE SOUTH 25°52'43" EAST ALONG SAID LINE 46.82 FEET TO AN ANGLE POINT IN SAID LINE;
THENCE SOUTH 22°58'31" WEST ALONG SAID LINE 141.34 FEET TO AN ANGLE POINT IN SAID LINE THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS NORTH 25°40'25" EAST 11,319.16 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE AND THE SOUTHERLY LINE OF SAID PARCEL 630.29 FEET THROUGH A DELTA ANGLE OF 03°11'26";
THENCE NORTH 61°08'09" WEST ALONG SAID LINE 81.37 FEET TO THE SAID TRUE POINT OF BEGINNING;

TOGETHER WITH THAT PORTION OF PARCEL 1 OF THE RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS AT PAGE 4556, LYING IN THE NORTH-HALF OF SECTION 21, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., RECORDS OF BENTON COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST WESTERLY CORNER OF SAID PARCEL THENCE SOUTH 61°08'09" EAST ALONG THE SOUTHERLY LINE OF SAID PARCEL 408.60 FEET;
THENCE NORTH 19°16'56" EAST 408.72 FEET;
THENCE NORTH 33°48'41" WEST 239.02 FEET TO THE NORTHERLY LINE OF SAID PARCEL AND THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 33°48'41" EAST 1150.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE 533.29 FEET THROUGH A DELTA ANGLE OF 26°34'11" TO THE SAID POINT OF BEGINNING.

CONTAINS 9.53 ACRES

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.

SURVEY FOR
CRAWFORD

DEREK C. INGASLBE
STATE OF WASHINGTON
46886
REGISTERED
PROFESSIONAL LAND SURVEYOR
5/24/23

AUDITOR'S CERTIFICATE

FILED FOR RECORD THIS 30th DAY OF May ,2023 AT 1:26 P.M, IN VOLUME 1 OF SURVEYS AT PAGE 5834 AT THE REQUEST OF DEREK C. INGASLBE, P.L.S.
Brenda Chilton by
BENTON COUNTY AUDITOR (deputy)

STRATTON SURVEYING & MAPPING P.C.
313 NORTH MORAIN STREET
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