Agenda

Landmarks Preservation Commission

Planning and Development Services Department

Date: January 22, 2020
Location: 747 Market, Tacoma Municipal Bldg, Conference **Room 248**
Time: 5:30 p.m.

1. ACKNOWLEDGEMENT OF INDIGENOUS LANDS

2. ROLL CALL

3. CONSENT AGENDA

A. Excusal of Absences
B. Approval of Minutes:1/8/20
C. Administrative Review:
- 809 Pacific Ave.—Design Amendments

4. DESIGN REVIEW

A.	1908 Pacific Ave. (Union Depot/Warehouse Historic District) *Temporary mural*	Ben Mauk, University of Washington Tacoma	5 mins
B.	1122 N. K Street (North Slope Historic District) *Deck railings*	Duc Dang, Owner	10 mins
C.	100 S 9th Street, Bowes Building *Wireless installation*	Ricquel Cardoza, LDC, Inc. Richard Cardoza, LDC, Inc.	10 mins
D.	603 N. Ainsworth Ave. (North Slope Historic District) *Garage replacement*	Dawn Fast, R4 Construction	10 mins
E.	Seymour Conservatory (Individual Landmark) *Rehabilitation*	Sean Kelly, SHKS Architects	10 mins

5. PRESERVATION PLANNING/BOARD BUSINESS

A.	Amendments to the Guidelines, Bylaws, and Inventory	Staff	10 mins
B.	Events & Activities Update	Staff	3 mins

6. CHAIR COMMENTS

*Next Regular Meeting: February 12, 2020, 747 Market Street, Tacoma Municipal Bldg., **Rm. 248** 5:30 p.m.*

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MINUTES (Draft)

Landmarks Preservation Commission
Planning and Development Services Department

Date: January 8, 2020
Location: 747 Market Street, Tacoma Municipal Building, Room 248

Staff Present:
Reuben McKnight
Lauren Hoogkamer
BT Doan

Commissioner Members in Attendance:
Kevin Bartoy, Chair
Roger Johnson, Vice Chair
Sarah Hilsendeger
Jennifer Mortensen
Alex Morganroth
Lysa Schloesser
Holly Stewart
Carol Sundstrom
Jeff Williams
Deborah Cade
Leah Jaggars

Commissioner Members Excused:
Jonathan Hart

Commission Members Absent:
N/A

Others Present:
N/A

Chair Kevin Bartoy called the meeting to order at 5:30 p.m.

1. ACKNOWLEDGEMENT OF INDIGENOUS LANDS

2. ROLL CALL
To welcome the new Commissioners and get acquainted, each member of the Commission introduced themselves.

3. CONSENT AGENDA
The agenda was approved as submitted.

a. Excusal of Absences
- Jonathan Hart

b. Approval of Minutes: November 13, 2019
The minutes of the meeting on 11/13/2019 was approved as submitted.

4. PRESERVATION PLANNING/BOARD BUSINESS

a. 100 S. 9th Street, Verizon Appeal
Mr. McKnight provided background context on the application, the Commission's decision along with their reasoning, and the appeal case. During the appeal hearing, the applicant indicated that they had designed a different plan from what had been submitted to the Commission and denied, for which they were appealing. The Hearing Examiner upheld the Commission's decision. Mr. McKnight advised the Commission to expect a new application for the project. He also informed the Commission that there were missing records of the antenna installations and decisions regarding them.

Vice-Chair Johnson pointed out that for similar cases, it was important to state the guidelines in the motion and refer to it during discussion to demonstrate clear thinking and decision-making process.

Commissioner Mortensen expressed appreciation towards Commissioner Williams and Commissioner Schloesser for representing the Commission at the hearing.

b. Demolition Review Primer

Mr. McKnight stated that the City Council had passed the ordinance for citywide demolition review last year based on the recommendation from the Landmarks Preservation Commission. He proceeded to explain previous regulations, then the new ones in comparison. He also presented a chart for the demolition review process. In summary, the Commission would be asked to provide evaluation on the significance of a number of buildings that were proposed for demolition.

Discussion ensued and Mr. McKnight provided clarifications about the code to the Commission, specifically regarding exceptions and processes.

c. Amendments to the Guidelines, Bylaws, and Inventory

Mr. McKnight informed the Commission that there was no proposed changes to the Bylaws and Inventory. However, there were changes to the Design Guidelines that were suggested by the Commission through a series of discussions. The proposed amendments mainly involved solar equipment, accessory structures, and windows.

Regarding the roof plan for a new accessory structure, Commissioner Williams felt that a single ridgeline was too restrictive and such specification should be removed. The Commission went on to discuss the guideline language for new accessory structures and garages, particularly its "compatibility" with the primary structure. Also discussed was the potential location for solar panels, especially discouraging solar panels on the front façade of a historic building.

After further discussion from the Commission, Mr. McKnight indicated that staff would come back with revised language for the guidelines on the January 22nd, 2020 meeting.

d. Officer Elections

Chair Bartoy and Vice-Chair Johnson agreed to continue serving in their respective position, which was approved by the Commission.

e. Events & Activities Update

The Historic Project Grant Workshop would take place on January 9th, 2020.

Historic Preservation Month would be celebrating cultural landscape.

Volunteers were needed for the FORUMS 2020 Conference (July 22-26th, 2020). Staff was also looking for sponsors. All Commissioners were encouraged to attend.

5. DESIGN REVIEW

a. 2105 S. C Street (Individual Landmark) *Brewery Blocks Rehab*

Mr. McKnight noted that the application was just over the threshold for administratively review and ended up in front of the Commission due to some changes to the storefront. Ms. Hoogkamer read the staff report as provided in the packet. Chair Bartoy remarked that, starting with this meeting, the Commission would have the opportunity to discuss and ask questions about the staff report before the applicant's comment.

Commissioner Williams made a motion: *"I move that the Landmarks Preservation Commission approve the application for 2105 S. C Street as submitted, with the recommendation that the ductwork remains unpainted."*

Commissioner Schloesser seconded the motion. It passed unanimously.

6. CHAIR COMMENTS

Chair Bartoy mentioned there was an Advisory Committee meeting afterward and provided some background information on the Committee for the new Commissioners.

The meeting was adjourned at 7:05 p.m.

These minutes are not a direct transcription of the meeting, but rather a brief capture. For full-length audio recording of the meeting, please visit: http://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=67980

Landmarks Preservation Commission
Planning & Development Services Department

STAFF REPORT January 22, 2020

DESIGN REVIEW

AGENDA ITEM 4A:1908 Pacific Ave. (Union Depot/Warehouse Historic District)

Ben Mauk, University of Washington Tacoma

BACKGROUND
Built in 1911, this is a contributing property in the Union Depot/Warehouse Historic District). Previously, the Commission was briefed on the University's desire for a temporary mural. The applicants is now seeking approval for the final design of the temporary, removable mural, which will feature the South Sound Together "Live Like the Mountain is Out" badge and include the Lushootseed language. The mural will be printed on a vinyl wrap product, allowing for removal in 12 to 18 months. The size is approximately 12' x 12' and it would be installed on the blank concrete portion of the north exterior wall of the Walsh Gardner Building.

ACTION REQUESTED
Approval of the above scope of work.

STANDARDS
The Union Depot/Warehouse District Design Guidelines for Signs, as applicable:

Location and Size of Signs:
1. Signs shall not dominate the building facades or obscure their architectural features (arches, transom panels, sills, moldings, cornices, windows, etc.).

2. The size of signs and individual letters shall be of appropriate scale for pedestrians and slow-moving traffic. Projecting signs shall generally not exceed nine square feet on first floor level.

5. Existing historic wall signs are a contributing element within the district and should be restored or preserved in place. New wall signs shall generally be discouraged.

Messages and Lettering Signs:
1. Messages shall be simple and brief. The use of pictorial symbols or logos is encouraged.

2. Lettering should be of a traditional block or curvilinear style which is easy to read and compatible with the style of the building. No more than two different styles should be used on the same sign.

3. Letters shall be carefully formed and properly spaced so as to be neat and uncluttered. Generally, no more than 60 percent of the total sign area shall be occupied by lettering.

4. Lettering shall be generally flat or raised.

Color:
1. Light-colored letters on a dark-colored background are generally required as being more traditional and visually less intrusive in the context of the Union Station District's predominantly red-brick streetscapes.

2. Colors shall be chosen to complement, not clash with, the facade color of the building. Signs should normally contain not more than three different colors.

ANALYSIS

1. This property is a contributing structure in the Union Depot/Warehouse Historic District and, as such, is subject to review by the Landmarks Preservation Commission pursuant to TMC 13.05.047 for exterior modifications.

2. The proposed signage meets the district design guidelines for location, size, messaging, and lettering.

3. The proposed sign is temporary and will be removed without harming the historic brick.

4. No illumination is proposed.

RECOMMENDATION

Staff recommends approval of the application.

Recommended language for approval:
I move that the Landmarks Preservation Commission approve the application for 1908 Pacific Ave., as submitted.

Recommended language for deferral:
I move that the Landmarks Preservation Commission defer the application for 1908 Pacific Ave., pending submittal of [cite additional information needed to review application].

Recommended language for denial:
I move that the Landmarks Preservation Commission deny the application for 1908 Pacific Ave., based on the following [cite design guidelines.]

AGENDA ITEM 4B:1122 North K Street (North Slope Historic District)

Duc Dang, Owner

BACKGROUND

Built in 1908, this is a contributing property in the North Slope Historic District. On August 14, 2019, the Commission voted to defer this application until the applicant could provide updated plans for a new railing, which were closer to the original design. In 2019, a Stop Work order was issued for unpermitted railings on the upper decks and front stairs, which were installed in November 2018. It is not known when the original railings were removed. Historic photos showing the original railing were previously provided by former Commissioner McClintock. The applicant is seeking approval to remove the unpermitted railings and replace it with the proposed design. Railings on the upper deck are required; the previous owner had the existing railings installed as a condition of the sale to the current owner.

ACTION REQUESTED

Approval of the above scope of work.

STANDARDS

North Slope Historic District Design Guidelines for Porches

Guidelines for Porches

1. **Retain existing porches and porch details.** The original design elements of existing historic porches, when present, should be maintained. Major changes to configuration or ornamentation should be avoided. Missing or deteriorated details, such as columns and railings, should be repaired or replaced in kind.

2. **Avoid adding architecturally inappropriate details.** Items such as porch columns reflect the architecture of the home. Tapered columns atop piers are emblematic of Craftsman homes, but are not appropriate on Victorian era houses. Likewise, scrollwork, turned posts, or gingerbread are not appropriate on a Craftsman home. Replacement elements that have no historic design relationship with the architecture diminish the historic character of the building.

3. **Replace missing porches with designs and details that reflect the original design, if known.** Avoid adding conjectural elements. Photographic or other documentary evidence should guide the design of replacement porches. Where this is unavailable, a new design should be based on existing original porches from houses of similar type and age.

4. **In certain cases, building code may trump preservation guidelines.** For example, historic railing height may be considered a life safety issue, and new railings are generally required to meet building code. In these cases, innovative approaches may be needed to retain the appropriate scale and appearance.

ANALYSIS

1. This property is a contributing structure in the North Slope Historic District and, as such, is subject to review by the Landmarks Preservation Commission pursuant to TMC 13.05.047 for exterior modifications.

2. The original porch railings were previously removed on an unknown date.

3. The proposed railings do not match the original design, as shown in the historic photos; however, they are a closer match than the existing railings and similar to those found on other homes in the district.

RECOMMENDATION

Staff recommends approval of the application.

Recommended language for approval:
I move that the Landmarks Preservation Commission approve the application for 1122 North K Street, as submitted.

Recommended language for deferral:
I move that the Landmarks Preservation Commission defer the application for 1122 North K Street, pending submittal of [cite additional information needed to review application].

Recommended language for denial:
I move that the Landmarks Preservation Commission deny the application for 1122 North K Street, based on the following [cite design guidelines.]

AGENDA ITEM 4C:100 South 9th Street, Bowes Building

Ricquel Cardoza & Richard Cardoza, LDC, Inc.

BACKGROUND

Built in 1909, this is an individual landmark on the Tacoma Register of Historic Places. Verizon Wireless is proposing replacement of six existing antennas and six remote radio units (RRU) and the addition of three 5G panel antennas (mounted at parapet level), two overvoltage protectors (OVP) and two hybrid cables on the rooftop. Compared to the last application, this proposal has eliminated the MIMO technology and CBRS antennas, reducing the total proposed antenna by six. The amount of steel framing has also been reduced.

On April, 24, 2019, the Landmarks Preservation deferred this item until the feasibility of lowering and moving the antenna to reduce visibility could be studied. The Commission also commented continuous changes to the site were not desirable. In order to prevent future additions of equipment, the application was revised to include additional antenna.

On August 14, 2019, The Commission voted to deny the application; due to the increased visual impact on the building. The applicant appealed and the Hearing Examiner upheld the Commission's decision and remanded the application to the Commission pending the submittal of revised plans that reduce the visual impact of the proposal. The applicant has submitted new images showing the reduced visual impact compared to the original submittal.

ACTION REQUESTED

Approval of the above scope of work.

STANDARDS

Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

9. New additions, exterior alterations or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

ANALYSIS

1. This property is an individual landmark on the Tacoma Register of Historic Places, as such, it is subject to review by the Landmarks Preservation Commission pursuant to TMC 13.05.047 modifications.

2. No character defining features are being altered; However, the new equipment is visible from the street level, at a distance.

3. No historic material is being destroyed or removed.

4. The equipment could be removed without harming the building or its character defining features.

5. The current proposal reduces the visual impact of the overall antenna, as requested by the Commission.

RECOMMENDATION

Staff recommends approval of the application.

Recommended language for approval:
I move that the Landmarks Preservation Commission approve the application for 100 South 9th Street, as submitted.

Recommended language for deferral:
I move that the Landmarks Preservation Commission defer the application for 100 South 9th Street, pending submittal of [cite additional information needed to review application].

Recommended language for denial:
I move that the Landmarks Preservation Commission deny the application for 100 South 9th Street, based on the following [cite design guidelines.]

AGENDA ITEM 4D: 603 N. Ainsworth Ave. (North Slope Historic District)

Dawn Fast, R4 Construction

BACKGROUND

Built in 1904, this is a contributing property in the North Slope Historic District. The applicant is proposing to demolish the exiting deteriorated garage and replace it with a new 650 SF garage. The garage will have cedar siding and trim with single-hung vinyl windows that face the backyard. The man door would be vertical grain fir. The garage roof ridge would be 17'-7.5" high with an 8/12 roof pitch. No work is being done to the main house.

ACTION REQUESTED

Approval of the above scope of work.

STANDARDS

Design Guidelines for the North Slope Special Review District: Garages & Parking and New Construction

1. **Alley accessed parking is the typical and predominant residential parking configuration in the district.** Residential driveways and garages facing the street are typically only appropriate when there is no alley access, or other site constraints prevent alley accessed parking (such as a corner lot).

2. **Minimize views of parking and garages from the public right-of-way.** Parking areas and garages should be set toward the rear of the lot to minimize visibility from primary rights of way. Parking lots and banks of garage doors along the front facade of a building do not conform to the character of the neighborhood. Where it is not possible to locate a parking structure to conceal it from view, it should be set well back from the front plane of the primary structure on the property. Off-street parking lots have no historic precedent in the residential areas of the neighborhoods and should be located behind the building and away from the street.

3. **Goal:** Balance the overall height of new construction with that of nearby structures. **Guideline:** New buildings should be comparable in height to adjacent structures. Buildings that are substantially taller or shorter than the adjacent historic buildings should be avoided.

4. **Goal:** Relate the size and proportions of new buildings and their architectural elements to those of the neighborhood.

   Guideline: Building facades should be of a scale compatible with surrounding buildings and maintain a comparable setback from the property line to adjacent buildings, as permitted by applicable zoning regulations.

5. **Goal:** Break up the facades of buildings into smaller varied masses comparable to those contributing buildings in the residential historic districts. **Guideline:** Variety of forms is a distinguishing characteristic of the North Slope and Wedge residential communities. Smaller massing–the arrangement of facade details, such as projections and recesses–and porches all help to articulate the exterior of the structure and help the structure fit into the neighborhood. Avoid large, blank planar surfaces.

6. **Goal:** Emphasize entrances to structures.
   Guideline: Entrances should be located on the front facade of the building and highlighted with architectural details, such as raised platforms, porches, or porticos to draw attention to the entry. Entrances not located on the front facade should be easily recognizable from the street.

7. **Goal:** Utilize traditional roof shapes, pitches, and compatible finish materials on all new structures, porches, additions, and detached outbuildings wherever such elements are visible from the street. Maintain the present roof pitches of existing contributing buildings where such elements are visible from the street.

   Guideline:
   1. Shape and Pitch: Typically, the existing historic buildings in the districts either have gable roofs with the slopes of the roofs between 5:12 to 12:12 or more and with the pitch oriented either parallel to or perpendicular to the public right-of-way or have hipped roofs with roof slopes somewhat lower.

   2. Architectural Elements: Most roofs also have architectural details, such as cross gables, dormers, and/or “widow’s walks” to break up the large sloped planes of the roof. Wide roof overhangs, decorative eaves or brackets, and cornices can be creatively used to enhance the appearance of the roof.

   3. Materials: Roofs that are shingle or appear to be shingle, or composition roofs, are the typical historic material compatible with the district. Seam metal may be an acceptable material for simple roof structures. Slate, faux slate and terra cotta tiles are not appropriate for the districts.

8. **Goals:** Use compatible materials that respect the visual appearance of the surrounding buildings. Buildings in the North Slope and Wedge Neighborhoods were sided with shingles or with lapped, horizontal wood siding of various widths. Subsequently, a few compatible brick or stucco- covered structures were constructed, although many later uses of these two materials do not fit the character of the neighborhood.

   Guideline:
   1. New structures should utilize exterior materials similar in type, pattern, configuration and appearance to those typically found in the neighborhood.

   2. Stucco, especially commercial EIFS systems like Dryvit, is not acceptable for the historic district.

   3. Faux materials, such as vinyl or metal siding, are not acceptable for the historic district.

4. Certain siding patterns, including board and batten and panel, are not historically common in the district and should not be used.

5. Cementitious products, such as Hardiplank, may be acceptable in the district if installed in a historically correct pattern (for example, horizontal lapped siding or shingle). In such cases, the product used shall be smooth in texture (faux wood grain finish is NOT acceptable).

6. Engineered products for trim and molding, if demonstrated to be similar in appearance to painted wood, may be an environmentally responsible substitute for wood on new structures. In such cases, the applicant should demonstrate to the Commission, via product literature and material samples, that the product is compatible.

9. **Goals:** Respect the patterns and orientations of door and window openings, as represented in the neighboring buildings. Window and door proportions (including the design of sash and frames), floor heights, floor shapes, roof shapes and pitches, and other elements of the building exterior should relate to the scale of the neighborhood.

   Guideline:
   1. Placement. Typically, older buildings have doors and transoms that matched the head height of the adjacent windows. New structures should utilize this pattern.

   2. Doors. Doors should be or appear to be paneled and/or contain glazed openings.

   3. Windows. New structures should utilize existing historic window patterns in their design. Windows should be vertically oriented. Large horizontal expanses of glass may be created by ganging two or more windows into a series. Historically, the typical window in the district was a double hung sash window. Casement windows were commonly used for closets, nooks, and less commonly, as a principal window type in a structure. Many double hung sash windows had the upper sash articulated into smaller panels, either with muntin bars, leaded glazing, or arches. Commonly, windows were also surrounded with substantial trim pieces or window head trim.

ANALYSIS

1. This property is a contributing structure in the North Slope Historic District and, as such, is subject to review by the Landmarks Preservation Commission pursuant to TMC 13.05.047 for exterior modifications.

2. The garage is alley-accessed and sited towards the rear of the lot.

3. The garage will be minimally visible from the right of way.

4. The garage height and size is compatible with the district and the existing house.

5. The garage design is compatible with the district and comparable to neighboring garages.

6. The guidelines for garages do not address materials. Vinyl windows have been approved for garages.

RECOMMENDATION

Staff recommends approval of the application.

Recommended language for approval:
I move that the Landmarks Preservation Commission approve the application for 603 N. Ainsworth Ave., as submitted.

Recommended language for deferral:
I move that the Landmarks Preservation Commission defer the application for 603 N. Ainsworth Ave., pending submittal of [cite additional information needed to review application].

Recommended language for denial:

I move that the Landmarks Preservation Commission deny the application for 603 N. Ainsworth Ave., based on the following [cite design guidelines.]

AGENDA ITEM 4E: Seymour Conservatory (Individual Landmark)

Sean Kelly, SHKS Architects

BACKGROUND

Built in 1907, the Seymour Conservatory, in Wright Park, is an individually listed landmark on the Tacoma Register of Historic Places. Metro Parks is planning to expand the Conservatory to accommodate its programming. The Landmarks Preservation Commission has conducted several briefings and site visits for this expansion. In 2019, a small addition was approved and added for restrooms and storage.

The project team is now seeking approval for the rehabilitation, including structural upgrades, historic facade reconstructions, exterior envelope repairs, interior renovation of gift shop and office, mechanical system replacements, electrical and plumbing upgrades, limited site work, and accessible parking with a pathway. Restoration work will include replicating the original entrance facades, which were lost in the 1930s, as well as repainting/repairing the existing steel and glass frame. Non-original windows will be repaired and replaced. This is a Washington State Heritage Capital Grant funded project, and thus must be approved by the Washington State Department of Archaeology and Historic Preservation.

ACTION REQUESTED

Approval of the above scope of work.

STANDARDS

Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

9. New additions, exterior alterations or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

ANALYSIS

1. This property is an individual landmark on the Tacoma Register of Historic Places, as such, it is subject to review by the Landmarks Preservation Commission pursuant to TMC 13.05.047 modifications.

2. The property will be rehabilitated and restored in order to continue to serve its historic purpose.

3. The historic character of the property is being retained. Existing historic materials are being repaired and/or replaced in-kind. Missing historic features are being replicated using historic photographs.

4. New work is compatible with the historic material and does not damage character-defining features.

RECOMMENDATION
Staff recommends approval of the application.

Recommended language for approval:
I move that the Landmarks Preservation Commission approve the application for the Seymour Conservatory, as submitted.

Recommended language for deferral:
I move that the Landmarks Preservation Commission defer the application for the Seymour Conservatory, pending submittal of [cite additional information needed to review application].

Recommended language for denial:
I move that the Landmarks Preservation Commission deny the application for the Seymour Conservatory, based on the following [cite design guidelines.]

PRESERVATION PLANNING/BOARD BUSINESS

AGENDA ITEM 5A: Amendments to Guidelines, Bylaws, and Inventory

Staff

BACKGROUND
Once annually, the Commission may review and amend Commission bylaws and district guidelines and inventories. This item was held over from December due to meeting cancellation. On January 8th, the Commission provided recommendations regarding the draft language, which staff has incorporated into the draft documents.

The proposed changes include the following:

Commission Bylaws
No proposed changes.

Building Inventories
No proposed changes.

North Slope and Wedge Neighborhood Historic District Design Guidelines
Changes following 1/8/19 Landmarks meeting are in BLUE

Section and page	Subject	Proposed language changes
Roofs and Roof Shapes (p. 17)	Solar panels	New language under Rooftop Additions: Roof mounted solar equipment should be located in a manner that reduces its visual impact to the extent ~~possible~~ practicable. Solar installations should not obscure character-defining architectural features, and installations on the primary facade are discouraged. To be appropriate for the historic district, solar installations should balance performance with architectural compatibility.
Garages and Parking (p. 20)	Accessory Structures and Detached Accessory Dwelling Units*	Change title of Section to read: Accessory Structures, Garages and Parking Item 2, "Minimize Views" add the following: New accessory structures should be clearly subservient to the primary structure on the lot. New Item 5, to read: 5. New accessory structures and garages should utilize a similar material palette and configuration to historic ~~accessory~~ or to the primary structure~~s~~ on the lot. New accessory structures should meet the guidelines for new

		construction exterior materials, windows and roof form and shape. Garages and accessory structures should orient vehicle doors to the alley when possible and maintain a simple roof plan ~~with a single ridgeline~~. New Item 6, to read: 6. Conversion of accessory structures. Accessory structures ~~built during the district period of significance~~ that are converted to residential use should retain the exterior visual characteristics of the accessory structure, including door and window configuration, cladding materials, and form. Added features, such as porches, exterior staircases, and new window or door openings, should be located to be minimally visible from public rights of way.
Guidelines for New Construction (p. 25)	Windows	Item 3, to read: 3. Window configuration and detail. New structures should utilize existing historic window patterns in their design. Windows should be vertically oriented. Large horizontal expanses of glass may be created by ganging two or more windows into a series. Historically, the typical window in the district was a double hung sash window. Casement windows were commonly used for closets, nooks, and less commonly, as a principal window type in a structure. Many double hung sash windows had the upper sash articulated into smaller panels, either with muntin bars, leaded glazing, or arches. Muntins and grids should be true or simulated divided light. Grids sandwiched between thermal panes are not acceptable. Commonly, windows were also surrounded with substantial trim pieces or window head trim, and new window trim should utilize historic detail patterns. These may include crown molding, except where headers are engaged with a belly band or cornice, substantial projecting sills with aprons, and windows that are recessed or "punched in" so that the window sash and frame does not project beyond the wall plane. Design submittals for new structures shall include window trim details. Item 4, to read: 4. Window materials. Historically, windows were generally wood. New construction should use windows that are wood, or that mimic the appearance of wood (including clad or composite materials). Vinyl windows are generally not acceptable for new primary or detached accessory dwelling unit structures in the historic district.

**Note that the following zoning currently applies to DADUs*:

1. Cannot be taller than the primary structure, and can be a maximum of 18' tall for standalone DADU structures, 20' tall if over a garage, and 15' tall in VSD zones.
2. Size of DADUs is limited to:
   - No more than 15% of the lot area.
   - No more than 85% of the living area of the primary structure or dwelling.
   - No more than 1,000 square feet.

ACTION REQUESTED

- Set a public hearing date for February 26th.

AGENDA ITEM 5B: Events & Activities Update

Staff

2020 Events

1. Heritage League Annual Meeting (9am @WSHM, February 1st)

2. Trivia Night (6pm @ The Swiss, March 18th)
3. Sacred Spaces Tour TBD
4. Historic Preservation Month, May
    I. THS Historic Homes Tour, May 2nd- 3rd
    II. Proclamation and Wright Park Tour, May 5th
    III. Fort Nisqually Escape Rooms, May 7th-9th
    IV. Heritage Gardens, May 9th
    V. THS History of Old City Hall (7pm @ UPS Wheelock Student Center, May 11th)
    VI. Wapato Park Bike Ride, May 16th
    VII. Fort Nisqually Queen Victoria's Birthday, May 16th
    VIII. Historic Preservation Awards (6pm @ Point Defiance Pagoda, May 28th)
    IX. Boat Tour TBD
5. Trivia Night (6pm @ The Swiss, June 17th)
6. Fern Hill Tour TBD
7. Forum 2020: Preservation Coast to Coast (July 22-26th)
8. Salmon Beach Tour TBD
9. Trivia Night (6pm @ The Swiss, September 16th)
10. Fall Heritage Café Lecture Series: Broadening Horizons in Historic Preservation
11. November Swing Dance TBD

Landmarks Preservation Commision

Planning and Development Services Department

747 Market Street | Room 345 | Tacoma WA 98402-3793 | 253.591.5220

APPLICATION FOR DESIGN REVIEW

Permit Number: HDR20-0003

PROPERTY INFORMATION

Building/Property Name:	Walsh Gardner Temporary Mural
Building/Property Address:	1908 PACIFIC AVE
Historic/Conservation District:	Union Depot/Warehouse
Applicant's Name:	
Applicant's Address:	,
Applicant's Phone:	
Applicant's Email:	
Property Owner's Name:	BOARD OF REGENTS OF THE UNIV OF WA
Property Owner's Address:	

PROJECT SCOPE AND DESCRIPTION

Project Details

Application Type:	Commercial
Type of Work:	Other Minor Work
Estimated Valuation:	2000

Application Checklist

Features to be Modified:

12' x 12' mural

Program of Work:

n/a

Specifications of Materials and Finishes:

Vinyl wrap product rated for exterior use

Building/Roofing Information

Roof Height:

Roof Pitch:

Roof Material:

Size of Construction:

Proposed Material:

Exterior Material:

Window Information

Window Types:

Window Trim:

Window Material:

Window Locations:

Door Information

Door Types:

Door Materials:

Door Locations:

Sign/Awning Information

Existing Signage:

Sign Dimensions:

Sign Material:

Logo and Letter Size:

Lighting Specifications:

Removing or Relocating Signage:

Method of Attachment:


LIVE LIKE
SOUTH SOUND PROUD
taq"ʷ ubəʔ IS OUT

Walsh Gardner Building
1908-1910 Pacific Avenue
Current Condition

Walsh Gardner Building
1908-1910 Pacific Avenue
Proposed Use

GENERAL NOTES:

CODES:

DESIGN IS IN ACCORDANCE WITH THE 2015 INTERNATIONAL RESIDENTIAL CODE (IRC) AS AMENDED BY THE LOCAL BUILDING DEPARTMENT.

HANDRAILS:

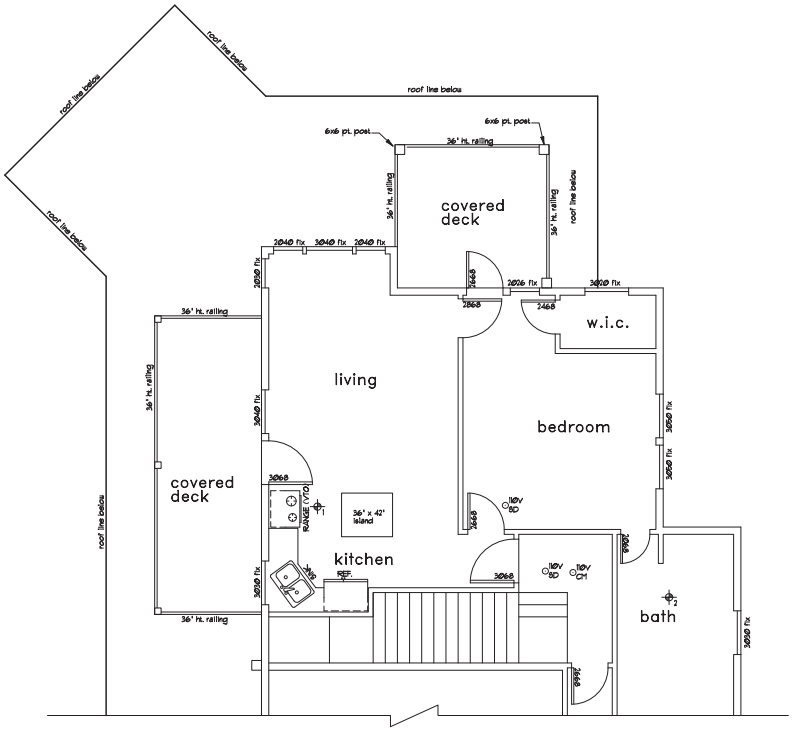
IRC SECTION R311.7.8, R311.8.3 ALL STAIRWAYS WITH 4 OR MORE RISERS SHALL HAVE AT LEAST ONE HANDRAIL. SUCH HANDRAILS SHALL BE PLACED NOT LESS THAN 34" AND NOT MORE THAN 38" ABOVE THE NOSING OF THE TREADS. HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER TO A POINT DIRECTLY ABOVE THE LOWEST RISER. HANDRAIL ENDS SHALL BE RETURNED OR TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO THE WALL SHALL HAVE A SPACE NOT LESS THAN 1/2" BETWEEN THE WALL AND THE HANDRAIL.

GUARDS:

IRC SECTION R312. TABLE R308.3 GUARDS SHALL BE PROVIDED FOR PORCHES, BALCONIES, RAMPS, OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE GRADE OR A FLOOR BELOW. GRADE SHALL BE MEASURED 36" HORIZONTALLY FROM THE EDGE OF THE FLOOR SURFACE. GUARDS SHALL BE NOT LESS THAN 36" IN HEIGHT, MEASURED FROM THE ADJACENT WALKING SURFACE, ADJACENT FIXED SEATING OR THE LINE CONNECTING THE LEADING EDGES OF A TREAD.

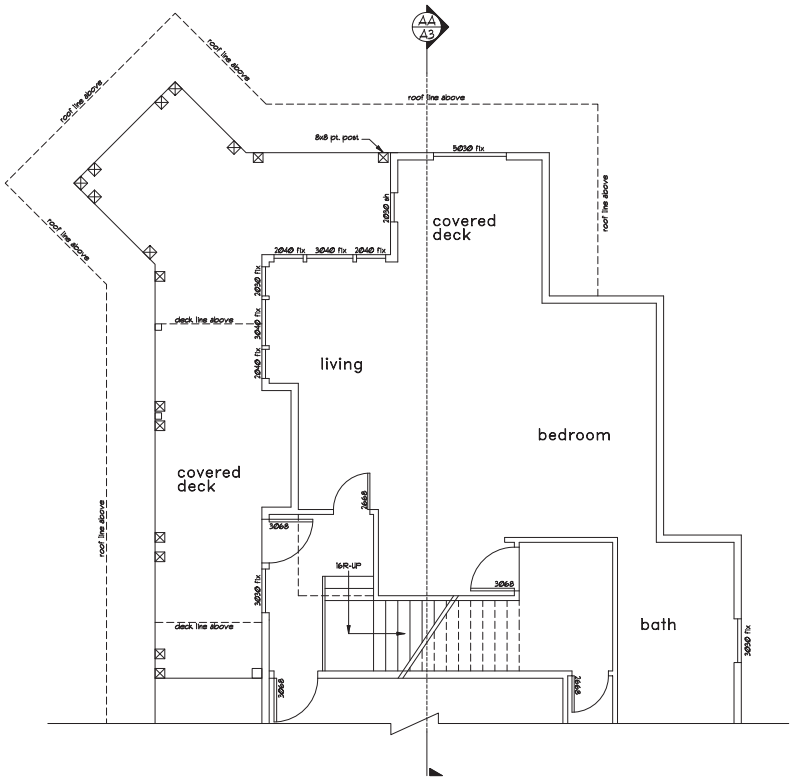
RECOMMENDATION

REMOVE THE CURRENT HAND RAIL TO INSTALL A NEW HANND RAIL. THE DECK CAN ONLY BE MAINTAINED ON THE TOP OF EXISTING LOWER ROOF. ALL DAMAGED MATERIAL WILL BE REPLACED WITH NEW ONE. ALL PORTIONS OF THE EXISTING AND PROPOSED DIMENSIONED SHOULD BE LIMITED AS ORIGINAL DEMENSIONS IN VERTICAL & HORIZONTAL MESUREMENTS. ANY ALTERNATION OF THE DECK THAT INSCREASING DIMENSION MUST BE APPROVED BY CITY. THE CHANGE WILL NOT GO BEYOND THE EXISTING DESIGN AS HISTORIC AREA.



EXISTING UPPER FLOOR PLAN

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



EXISTING MAIN FLOOR PLAN

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

PLAN KEY

WALLS:

- NEW CONSTRUCTION
- EXISTING WALLS TO REMAIN
- EXISTING WALLS AND WINDOWS TO BE REMOVED AND OR MODIFIED
- 3068 NEW DOOR
- EXISTING DOOR
- EXISTING DOOR TO BE REMOVED AND OR MODIFIED

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

*** NO FIELD ALTERATIONS WILL BE AUTHORIZED UNLESS ACCOMPANIED BY REVISED DRAWINGS.**

NORTH

DATE	REVISION	REV. BY:	

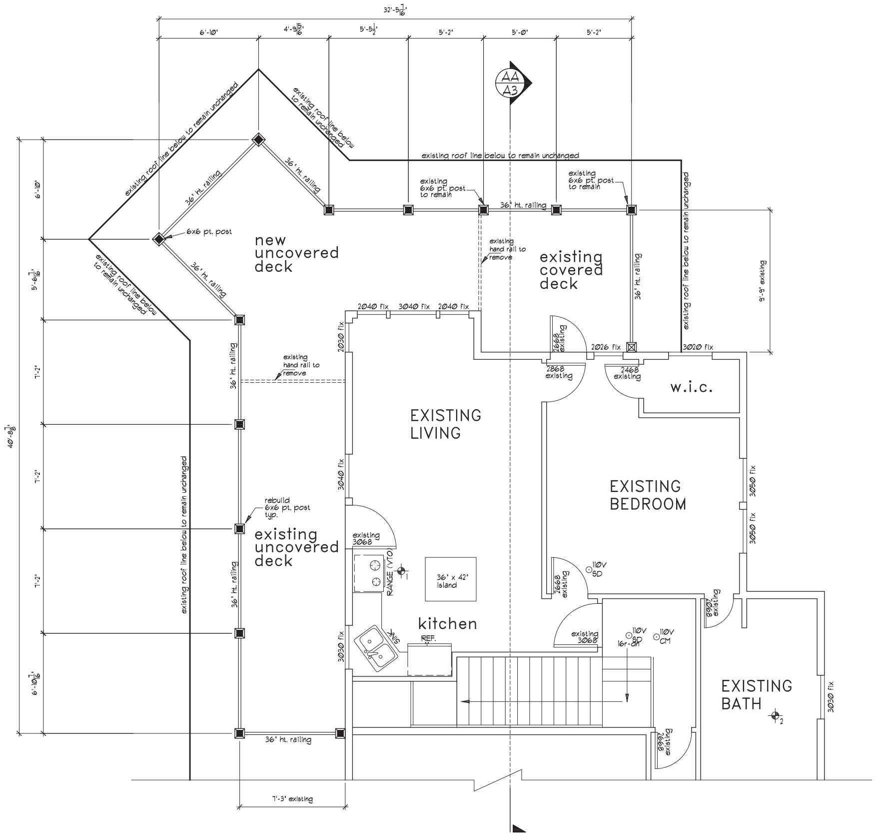
PREPARED BY:

T & L HOME DESIGN
ARCHITECTURAL—ENGINEERING—DESIGN
1313 E. 61st ST. PHONE: 253-441-1651
TACOMA, WA 98404 Email: trucwa@yahoo.com

PREPARED FOR:

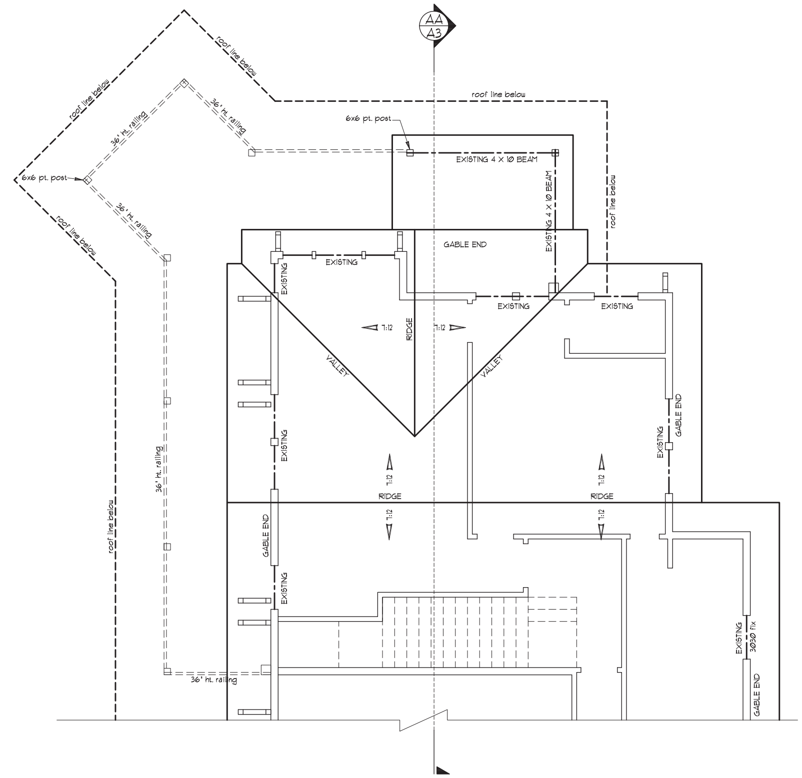
DUC DANG RESIDENCE
REBUID HISTORIC HANDRAIL
1122 North K ST. TACOMA, WA 98403

BY:	T.N.
DATE:	12-20-19
CHECKED:	TN
SHEET #	A1 / 3
PROJECT #	TL19-32



PROPOSED UPPER FLOOR PLAN

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



EXISTING ROOF FRAMING PLAN

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

PLAN KEY

WALLS:

- NEW CONSTRUCTION
- EXISTING WALLS TO REMAIN
- EXISTING WALLS AND WINDOWS TO BE REMOVED AND OR MODIFIED
- NEW DOOR (3068)
- EXISTING DOOR
- EXISTING DOOR TO BE REMOVED AND OR MODIFIED

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

NORTH

*** NO FIELD ALTERATIONS WILL BE AUTHORIZED UNLESS ACCOMPANIED BY REVISED DRAWINGS.**

DATE	REVISION	REV. BY:

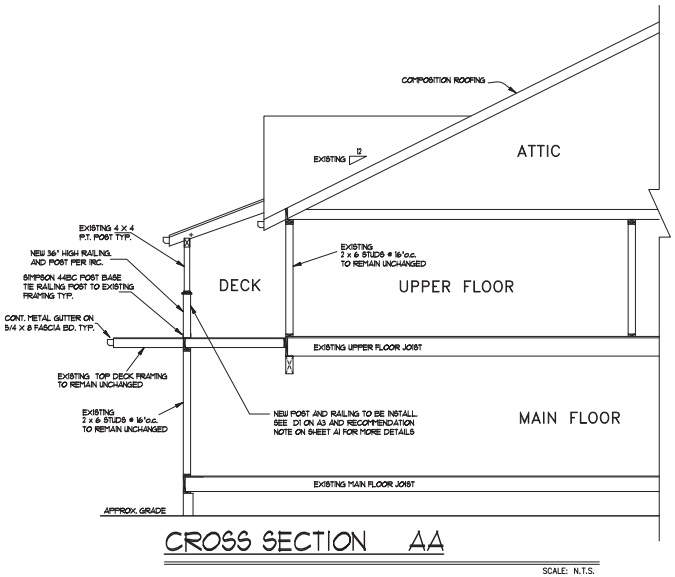
PREPARED BY:

T & L HOME DESIGN
ARCHITECTURAL–ENGINEERING–DESIGN
1313 E. 61st ST. PHONE: 253-441-1651
TACOMA, WA 98404 Email: trucwa@yahoo.com

PREPARED FOR:

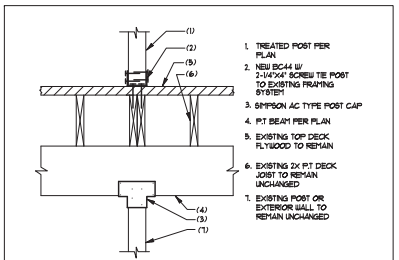
DUC DANG RESIDENCE
REBUID HISTORIC HANDRAIL
1122 North K ST. TACOMA, WA 98403

BY: T.N.
DATE: 12-20-19
CHECKED: TN
SHEET #: A2 / 3
PROJECT #: TL19-32



CROSS SECTION AA

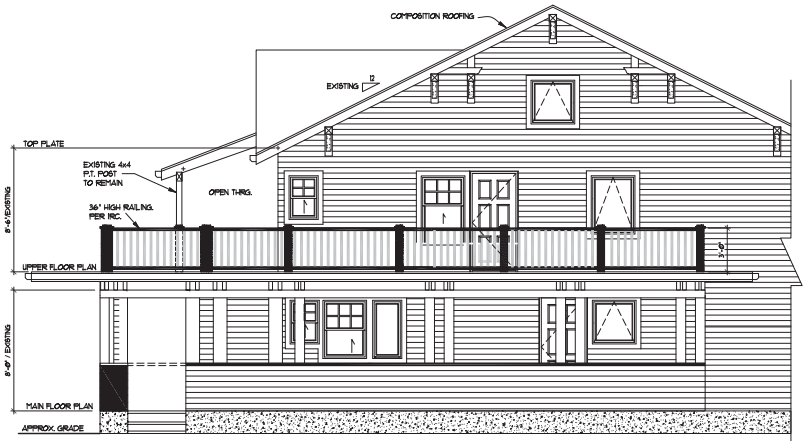
SCALE: N.T.S.



1. TREATED POST PIER PLAN
2. NEW EC44 W/ 2-1/4"X4" SCREW TIE POST TO EXISTING FRAMING SYSTEM
3. SIMPSON AC TYPE POST CAP
4. P.T BEAM PER PLAN
5. EXISTING TOP DECK FLY&GOOD TO REMAIN
6. EXISTING 2X P.T DECK JOIST TO REMAIN UNCHANGED
7. EXISTING POST OR EXTERIOR WALL TO REMAIN UNCHANGED

D2 NEW POST AT EXISTING DECK JOIST BELOW

SCALE: N.T.S.



SIDE ELEVATION

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

PLAN KEY

WALLS:

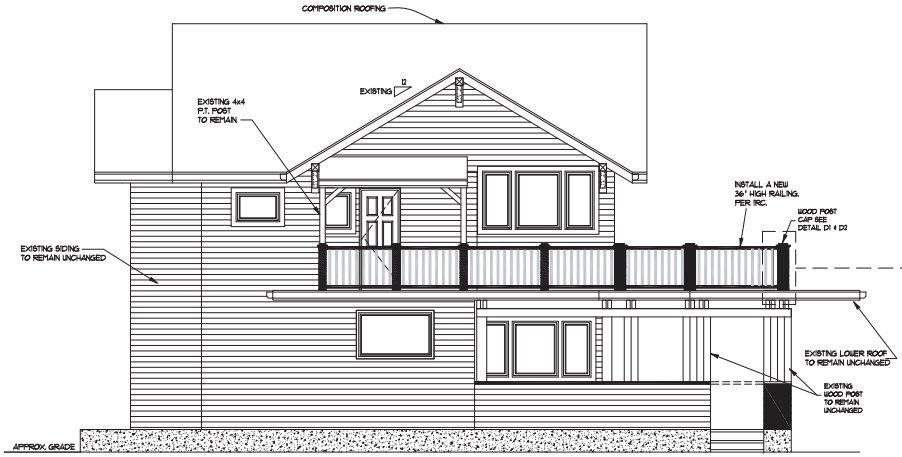
- NEW CONSTRUCTION
- EXISTING WALLS TO REMAIN
- EXISTING WALLS AND WINDOWS TO BE REMOVED AND OR MODIFIED

30x68 NEW DOOR

EXISTING DOOR

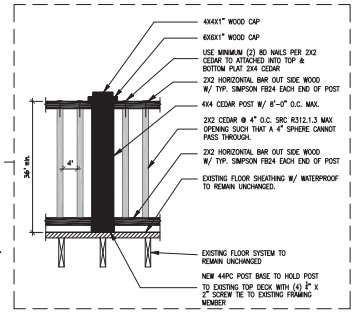
EXISTING DOOR TO BE REMOVED AND OR MODIFIED

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.



FRONT ELEVATION

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



D1 DECK GUARD RAILS DETAIL

SCALE: N.T.S.

NORTH

*** NO FIELD ALTERATIONS WILL BE AUTHORIZED UNLESS ACCOMPANIED BY REVISED DRAWINGS.**

DATE	REVISION	REV. BY:	

PREPARED BY:

T & L HOME DESIGN
ARCHITECTURAL–ENGINEERING–DESIGN
1313 E. 61st ST. PHONE: 253-441-1651
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DUC DANG RESIDENCE
REBUID HISTORIC HANDRAIL
1122 North K ST. TACOMA, WA 98403

BY:	T.N.
DATE:	12-20-19
CHECKED:	TN
SHEET #	A3 / 3
PROJECT #	TL19-32

Landmarks Preservation Commision

Planning and Development Services Department

747 Market Street | Room 345 | Tacoma WA 98402-3793 | 253.591.5220

APPLICATION FOR DESIGN REVIEW

Permit Number: HDR19-0014

PROPERTY INFORMATION

Building/Property Name:	Dang
Building/Property Address:	1122 N K ST
Historic/Conservation District:	North Slope
Applicant's Name:	Duc Dang
Applicant's Address:	1122 N K Street Tacoma, WA 98403
Applicant's Phone:	4252753519
Applicant's Email:	ductandang@yahoo.com
Property Owner's Name:	DANG DUC TAN & HUYNH LAURIE T
Property Owner's Address:	

PROJECT SCOPE AND DESCRIPTION

Project Details

Application Type:	Commercial
Type of Work:	Other Minor Work
Estimated Valuation:	4500.00

Application Checklist

Features to be Modified:

Railings

Program of Work:

Specifications of Materials and Finishes:

wood

Building/Roofing Information

Roof Height:

Roof Pitch:

Roof Material:

Size of Construction:

Proposed Material:

Exterior Material:

Window Information

Window Types:

Window Trim:

Window Material:

Window Locations:

Door Information

Door Types:

Door Materials:

Door Locations:

Sign/Awning Information

Existing Signage:

Sign Dimensions:

Sign Material:

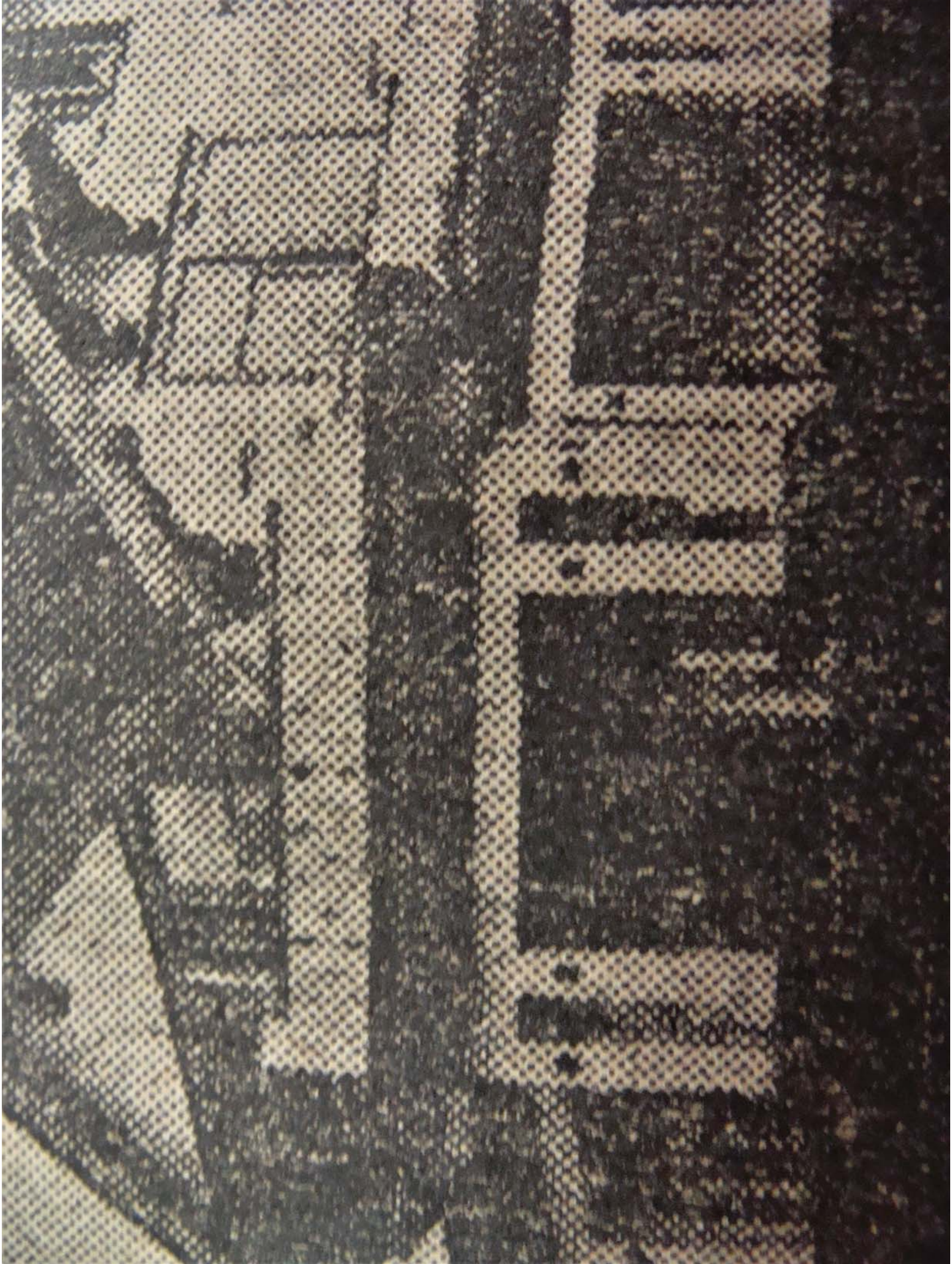
Logo and Letter Size:

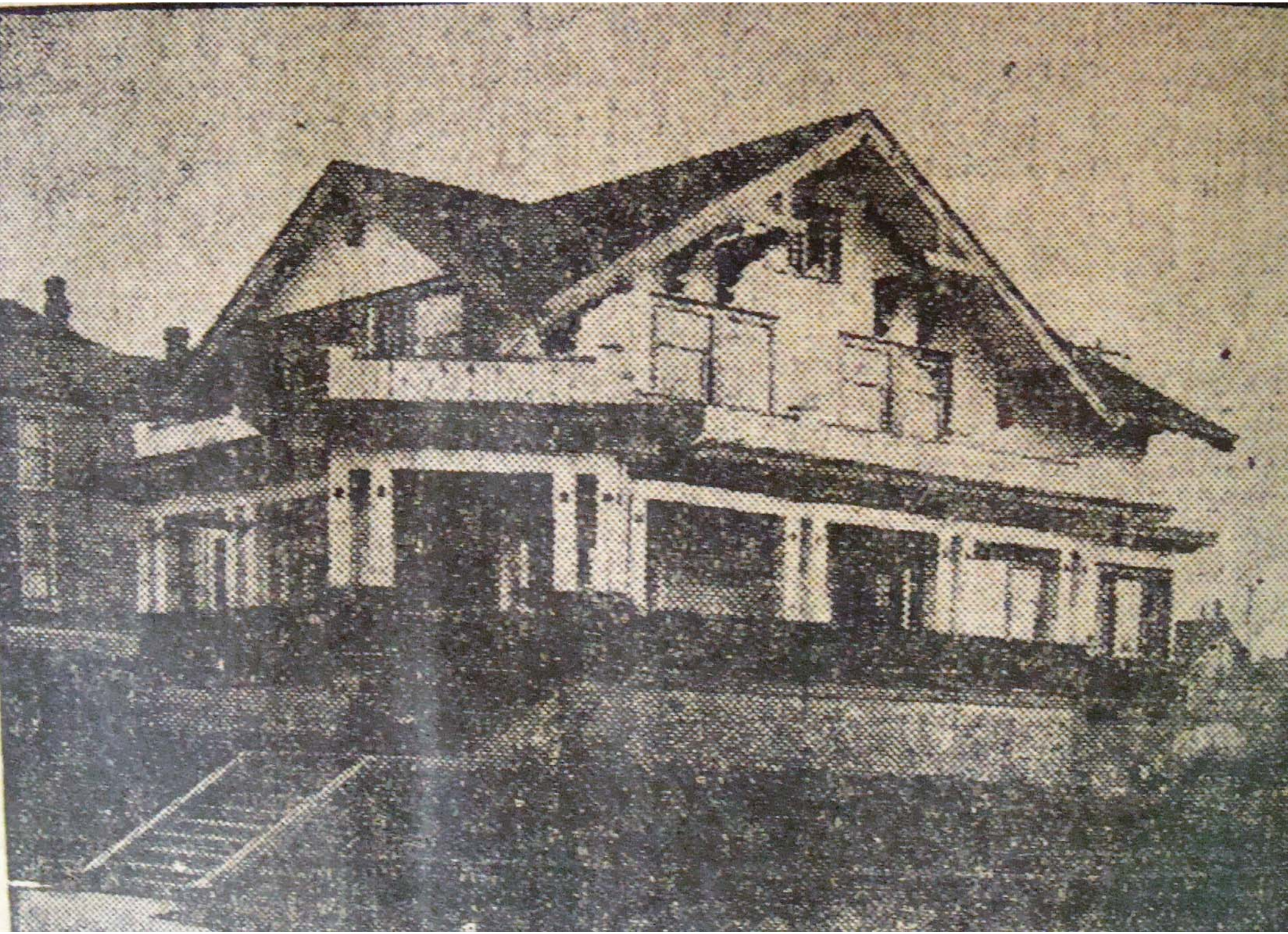
Lighting Specifications:

Removing or Relocating Signage:

Method of Attachment:

Historic Photos





Example: 1318 S. 4th


Google

LDC Surveying Engineering Planning

January 14, 2020

Landmark Historic Preservation Commission
Planning and Development Services
747 Market Street, Room 345
Tacoma, WA 98402

RE: Verizon- TAC Wheeler 5G

Dear Reviewers,

Verizon Wireless wishes to make modifications to an existing site located at the Bowe's Building on 100 S. 9th Street, the project is also known as TAC Wheeler. The proposed maintenance and technology type upgrades to the existing site are necessary to provide adequate wireless services to the general area and within the City of Tacoma network.

The new Verizon proposal involves the replacement of (6) panel antennas and (6) RRUs; Addition of (3) 5G antennas, (2) OVPs and (2) hybrid cables on an existing 42.5' building rooftop. This proposal is different from the previous proposals made to LPC last year. The new proposal eliminated MIMO technology and CBRS antennas, reducing 2 antenna per sector (6 antennas total) from the prior proposal.

The current design also includes addition of (3) 5G antennas mounted at parapet level. In addition, the new proposal reduces steel framing required for structural engineering to the extent possible.

Please feel free to call me at (253) 218-9017 or RCardoza@LDCcorp.com should you have any questions or concerns. Thank you.

Sincerely,

Rick Cardoza
Senior Project Manager

LDC, Inc.
The Civil Engineering Group
1851 Central Pl. South, Suite 101
Kent, WA 98030
www.LDCcorp.com

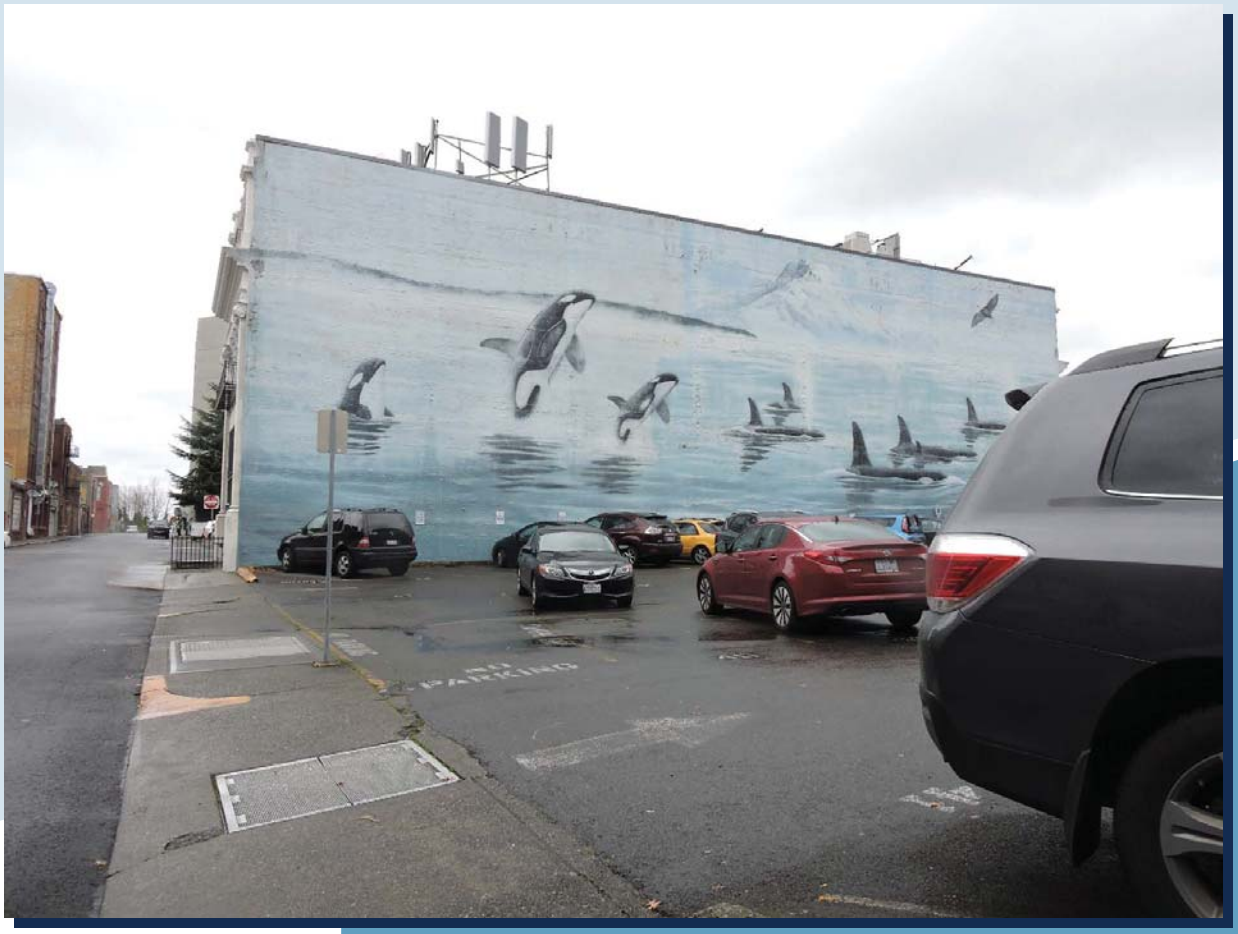
www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing



Proposed

verizon

Project Information

Project type: Building
Overall height: 42'-6"
Latitude: 47° 15' 19.75" N
Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Southwest View (Looking Northeast) from Court A and 939 Court Parking

Issue Date: 1-13-20

LDC

www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing

Proposed

verizon

Project Information

Project type: Building
Overall height: 42'-6"
Latitude: 47° 15' 19.75" N
Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Northeast View (Looking Southwest) from Fireman's Park and A Street

Issue Date: 1-13-20

LDC

www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing

Proposed

verizon

Project Information

Project type: Building
Overall height: 42'-6"
Latitude: 47° 15' 19.75" N
Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Northwest View (Looking Southeast) from Court A and S 9th Street

Issue Date: 1-13-20

LDC

www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing

Proposed

verizon

Project Information

Project type: Building
Overall height: 42'-6"
Latitude: 47° 15' 19.75" N
Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Northeast View (Looking Southwest) from S 9th Street and A Street

Issue Date: 1-13-20

LDC

FINAL ZONING

verizon

TAC WHEELER 4G & 5G

100 S. 9TH STREET
TACOMA, WA 98402

VICINITY MAP
NOT TO SCALE

GENERAL LOCATION MAP
NOT TO SCALE

DRIVING DIRECTIONS

FROM VERIZON WIRELESS OFFICE:

- HEAD EAST TOWARD 158TH AVE SE
- TURN RIGHT ONTO 158TH AVE SE
- TURN LEFT ONTO SE EASTGATE WAY
- TURN RIGHT ONTO THE SEATTLE W/SEATTLE RAMP
- KEEP LEFT TO CONTINUE TOWARD I-90 W
- KEEP LEFT, FOLLOW SIGNS FOR I-90 W/SEATTLE AND MERGE ONTO I-90 W
- USE THE RIGHT 2 LANES TO TAKE EXIT 10 FOR INTERSTATE 405 S TOWARD RENTON
- MERGE ONTO I-405 S
- TAKE THE INTERSTATE 5 S EXIT TOWARD PORTLAND
- MERGE ONTO I-5 S
- USE THE RIGHT LANE TO TAKE EXIT 133 FOR I-705 N/WA-7 S TOWARD CITY CENTER
- USE THE RIGHT LANE TO KEEP RIGHT AT THE FORK AND CONTINUE TOWARD I-705 N
- USE THE RIGHT LANE TO FOLLOW SIGNS FOR INTERSTATE 705 N/CITY CENTER
- CONTINUE ONTO I-705 N
- USE THE MIDDLE LANE TO TAKE THE EXIT TOWARD CITY CENTER
- FOLLOW A ST TO S 9TH ST
- CONTINUE ONTO A ST
- TURN LEFT ONTO S 9TH ST
- DESTINATION WILL BE ON THE LEFT

APPROVAL / SIGN OFF

APPROVED BY	DATE	SIGNATURE
SITE ACQUISITION		
ZONING		
RF		
CONSTRUCTION MANAGER		
PROJECT MANAGER		
LANDLORD		

REVIEWERS SHALL CLEARLY PLACE INITIALS ADJACENT TO EACH REDLINE NOTE AS DRAWINGS ARE BEING REVIEWED

DISCLAIMERS

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWINGS ARE SUPERSEDED BY THE LATEST REVISION.

LDC TAKES NO RESPONSIBILITY FOR ADEQUACY OF TOWER MOUNTS FOR EXISTING OR PROPOSED LOADING. CONTRACTOR AND MOUNT MANUFACTURER TAKE FULL RESPONSIBILITY FOR MOUNTING PRODUCTS USED & THEIR ADEQUACY. MOUNTS SHOWN IN DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

PROJECT CONTACT LIST

APPLICANT:
VERIZON WIRELESS
3245 158TH AVENUE SE
BELLEVUE, WA 98008

PROJECT ARCHITECT:
LDC, INC.
CONTACT: RICHARD B. HALL, AIA
PHONE: (425) 806-1869
EMAIL: rhall@ldccorp.com

PROPERTY OWNER:
BOWES BUILDING LLC.
SHAUB PROPERTIES
109 S. 9TH STREET
TACOMA, WA 98402

PROJECT CONSULTANT:
LDC, INC.
CONTACT: RICK CARDOZA
PHONE: (253) 218-9017
EMAIL: rcardoza@ldccorp.com

PROJECT INFORMATION

CODE INFORMATION:

ZONING CLASSIFICATION:	DCC (DOWNTOWN COMMERCIAL CORE)
BUILDING CODE:	IBC 2015
CONSTRUCTION TYPE:	IIB
OCCUPANCY:	B
JURISDICTION:	CITY OF TACOMA
PROPOSED BUILDING USE:	UNMANNED TELECOM

SITE LOCATION (NAD83):

LATITUDE:	47° 15' 19.49" N	(47.255414° N)
LONGITUDE:	122° 26' 16.75" W	(122.437986° W)
TOP OF STRUCTURE:	154.50'± AMSL	42.5' AGL
BASE OF STRUCTURE:	112.00'± AMSL	0.0' AGL

PROJECT LEASE AREA: N/A

PARCEL NUMBER: 2009020010

NEW IMPERVIOUS AREA: 0 SF

AREA OF PARCEL: 0.07 ACRES

GENERAL INFORMATION:
1. PARKING REQUIREMENTS ARE UNCHANGED.
2. TRAFFIC IS UNAFFECTED.
3. SIGNAGE IS UNAFFECTED.

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.

DRAWING INDEX

DWG NO.	DESCRIPTION
T-1.0	TITLE SHEET
A-1.0	SITE PLAN
A-2.0	ENLARGED ANTENNA PLAN
A-2.1	ENLARGED EQUIPMENT PLAN
A-3.0	ELEVATIONS
A-3.1	ELEVATIONS

LEGAL DESCRIPTION

SECTION 04 TOWNSHIP 20 RANGE 03 QUARTER 22 : NEW TACOMA L 1 BLK 902 HISTORIC EXEMPTION ENDED WITH 2000 TAXES DC678RJ1-23- 1989 DC08182000MJ

UTILITY COMPANIES

POWER:
TACOMA PUBLIC UTILITY
PHONE: (253) 502-8606

TELEPHONE:
CENTURY LINK
PHONE: (800) 777-9594

PROJECT DESCRIPTION

VERIZON WIRELESS PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY WITH THE:

REPLACEMENT OF:
- (6) PANEL ANTENNAS
- (6) RRUS UNITS

ADDITION OF:
- (3) 5G PANEL ANTENNAS
- (4) DISTRIBUTION OVP-6 BOXES (2 @ ANTENNAS, 2 @ EQUIPMENT)
- (2) HYBRID CABLES

verizon

LDC | Surveying Engineering Planning

Woodinville
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869

Kent
1051 Central Pl S, #101
Kent, WA 98032
www.LDCcorp.com
F 425.482.3893

DATE:	1-7-19
DRAWN BY:	SRN
CHECKED BY:	RBH

SUBMITTALS

REV	DATE	DESCRIPTION	BY
1	1-7-19	PRELIMINARY ZONING	SRN
2	3-13-19	FINAL ZONING	AAL
3	7-25-19	RFZD: UPDATE PER RFDS	AAL
4	10-24-19	RFZD: UPDATE ANTENNAS	KTL
5	1-13-20	RFZD: UPDATE 5G ANTENNAS	AAL

8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-21

APPROVAL STAMP

SITE
T18-655
TAC WHEELER 4G & 5G
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1.0

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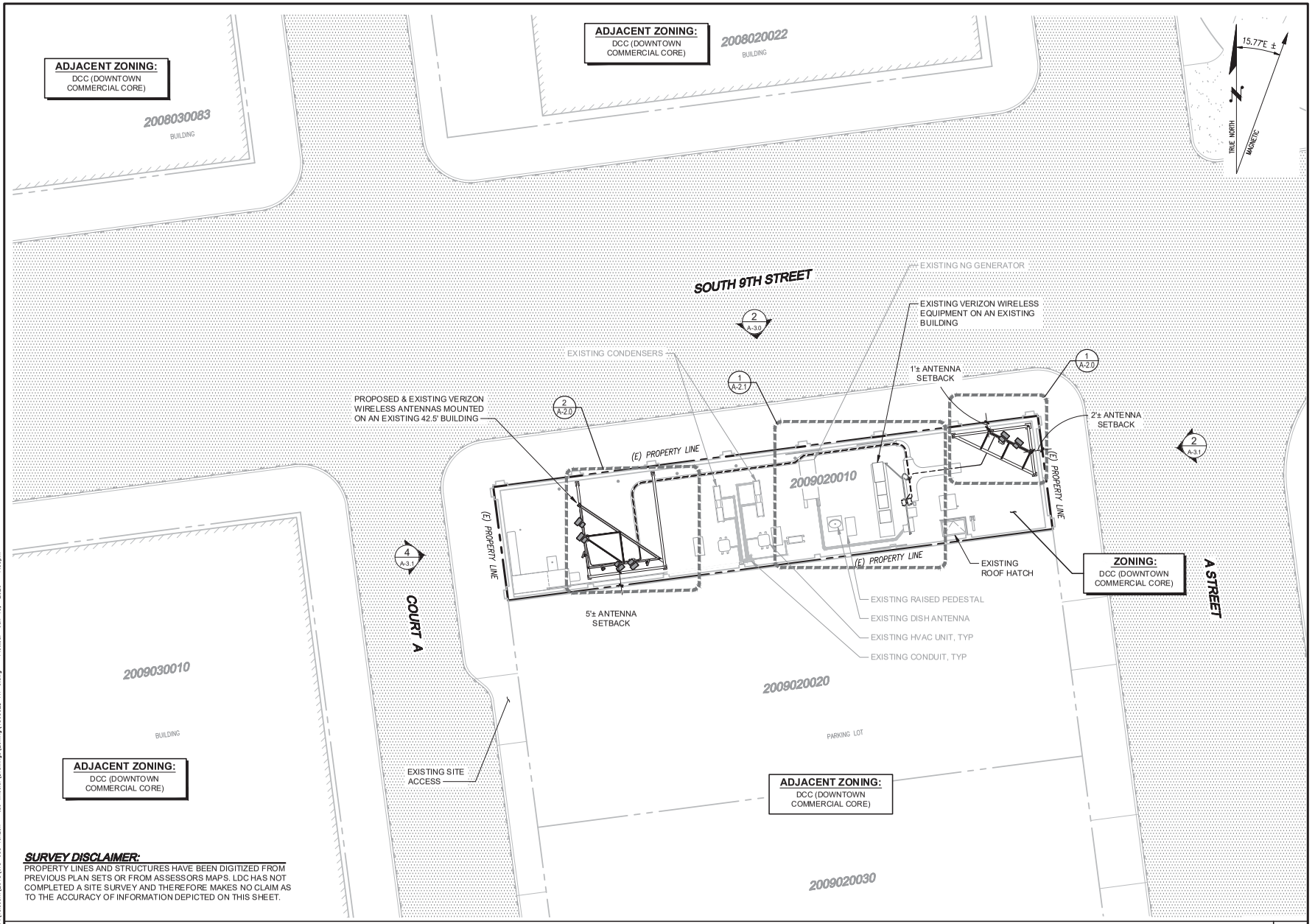

SURVEY DISCLAIMER:

PROPERTY LINES AND STRUCTURES HAVE BEEN DIGITIZED FROM PREVIOUS PLAN SETS OR FROM ASSESSORS MAPS. LDC HAS NOT COMPLETED A SITE SURVEY AND THEREFORE MAKES NO CLAIM AS TO THE ACCURACY OF INFORMATION DEPICTED ON THIS SHEET.

SITE PLAN

22"x34" SCALE: 1" = 10' | 11"x17" SCALE: 1" = 20'

1

verizon

LDC | Surveying Engineering Planning

Woodinville
20230 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869

Kent
1051 Central Pl S, #101
Kent, WA 98030
www.LDCcorp.com
F 425.482.3893

DATE:	1-7-19
DRAWN BY:	SRN
CHECKED BY:	RBH

SUBMITTALS

REV	DATE	DESCRIPTION	BY
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8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-21

APPROVAL STAMP

SITE

T18-655

TAC WHEELER 4G & 5G

100 S. 9TH STREET
TACOMA, WA 98402

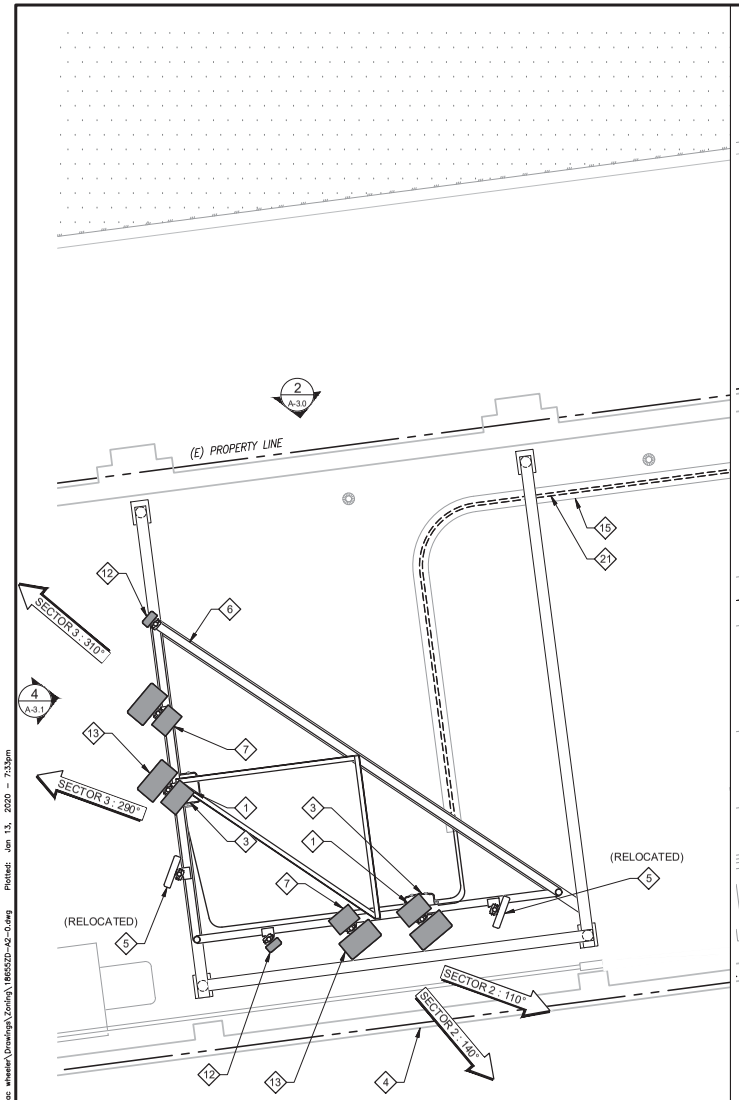
SHEET TITLE

SITE PLAN

SHEET NUMBER

A-1.0

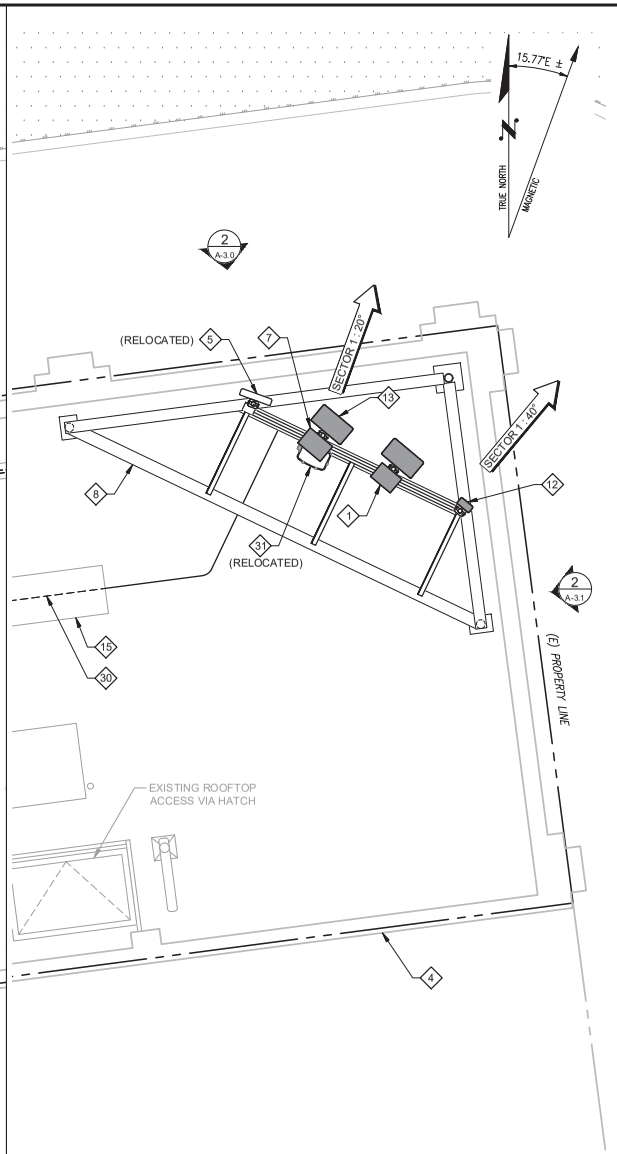
Drawing: P:\Telecom\2018\118-655 verizon - tac wheeler\Drawings\Zoning\18655ZD-A1-0.dwg Plotted: Jan 13, 2020 - 7:53pm



ENLARGED ANTENNA PLAN - SECTOR 2 & 3

22"x34" SCALE: 3/8" = 1'-0" | 11"x17" SCALE: 3/16" = 1'-0"

2



ENLARGED ANTENNA PLAN - SECTOR 1

22"x34" SCALE: 3/8" = 1'-0" | 11"x17" SCALE: 3/16" = 1'-0"

1

CONSTRUCTION PLAN KEYED NOTES

1. PROPOSED VERIZON WIRELESS RRUS 4449 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
3. PROPOSED VERIZON WIRELESS RAYCAP DISTRIBUTION OVP-6 BOX (4 TOTAL, 2 @ ANTENNAS AND 2 @ EQUIPMENT).
4. EXISTING 42.5' BUILDING (TO REMAIN).
5. EXISTING VERIZON WIRELESS PANEL ANTENNA (TYP 1 PER SECTOR, 3 TOTAL TO REMAIN).
6. EXISTING VERIZON WIRELESS ROOFTOP ANTENNA MOUNT (TO REMAIN). (RECONFIGURED PER STRUCTURAL).
7. PROPOSED VERIZON WIRELESS RRUS 8843 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
8. PROPOSED VERIZON WIRELESS ROOFTOP ANTENNA MOUNT (SEE STRUCTURAL).
12. PROPOSED VERIZON WIRELESS AIR6701 5G PANEL ANTENNA (TYP 1 PER SECTOR, 3 TOTAL).
13. PROPOSED VERIZON WIRELESS PANEL ANTENNA (TYP 2 PER SECTOR, 6 TOTAL).
15. EXISTING VERIZON WIRELESS CABLE TRAY (TO REMAIN).
21. PROPOSED VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (2 TOTAL). SEE CABLE LENGTH SCHEDULE ON RF-1.0.
30. EXISTING VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (1 TOTAL TO REMAIN).
31. EXISTING VERIZON WIRELESS RAYCAP DISTRIBUTION OVP BOX (2 TOTAL TO REMAIN, 1 @ ANTENNAS AND 1 @ EQUIPMENT).

SITE NOTES

1. VERIFY ANTENNA MODEL, TIP HEIGHT & AZIMUTHS.
2. ANALYSIS OF BUILDING SHALL BE PERFORMED BY LDC & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PROPOSED ANTENNAS, EQUIPMENT AND MOUNTING HARDWARE NEAR ANTENNA LEVEL SHALL BE PAINTED TO MATCH EXISTING.

verizon

LDC Surveying Engineering Planning
Woodinville: 20230 142nd Avenue NE, Woodinville, WA 98072, T 425.806.1869
Kent: 1051 Central Pl S, #101, Kent, WA 98030, F 425.482.3893
www.LDCcorp.com

DATE:	1-7-19
DRAWN BY:	SRN
CHECKED BY:	RBH

SUBMITTALS

REV	DATE	DESCRIPTION	BY
1	1-7-19	PRELIMINARY ZONING	SRN
2	3-13-19	FINAL ZONING	AAL
3	7-25-19	RFDS: UPDATE PER RFDS	AAL
4	10-24-19	RFDS: UPDATE ANTENNAS	KTL
5	1-13-20	RFDS: UPDATE 5G ANTENNAS	AAL

8828 REGISTERED ARCHITECT RICHARD R. HALL STATE OF WASHINGTON EXPIRES: 8-20-21

APPROVAL STAMP

SITE

T18-655

TAC WHEELER 4G & 5G

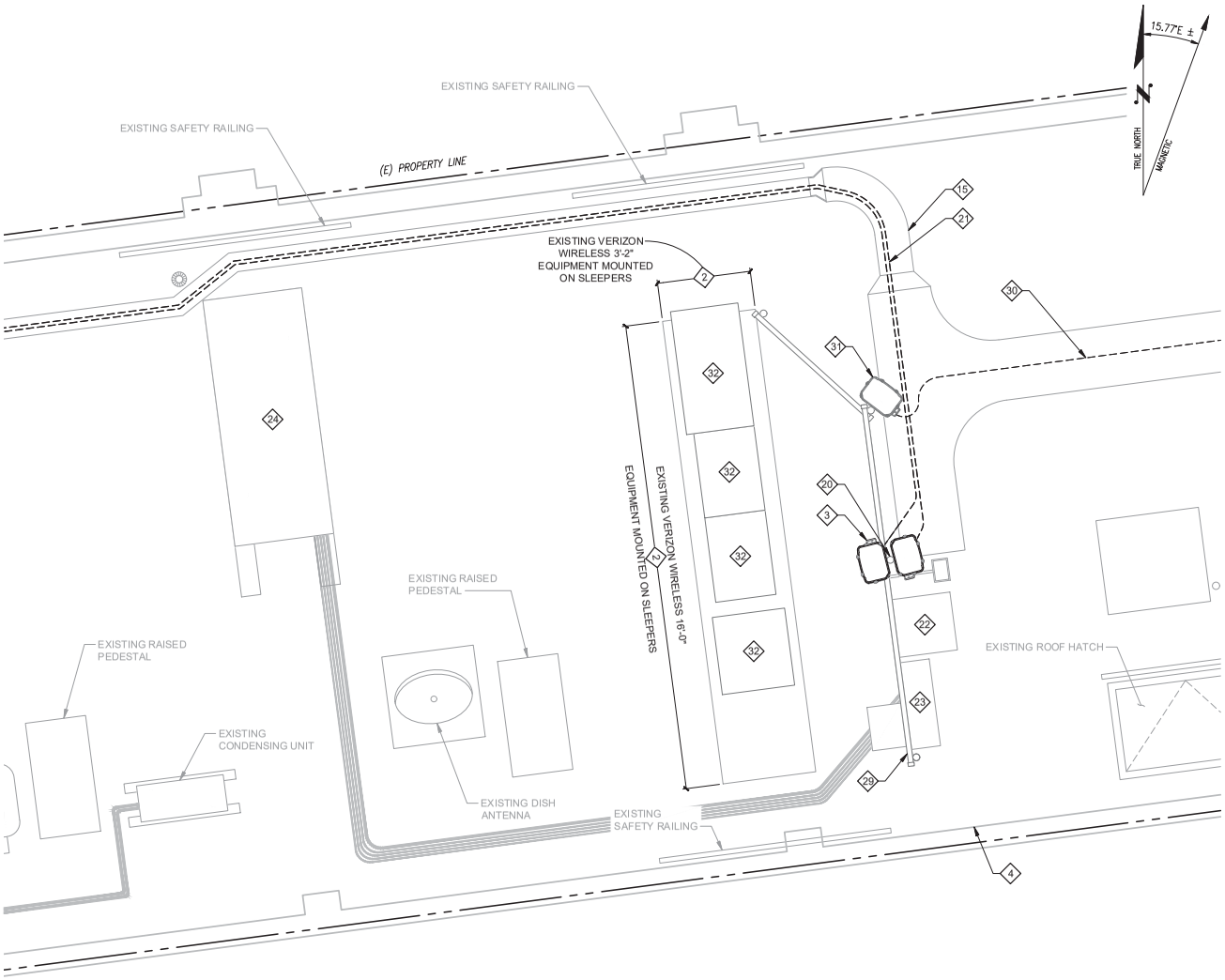
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE

ENLARGED ANTENNA PLAN

SHEET NUMBER

A-2.0



ENLARGED EQUIPMENT PLAN

1

22"x34" SCALE: 1/2" = 1'-0" | 11"x17" SCALE: 1/4" = 1'-0"

CONSTRUCTION PLAN KEYED NOTES

2. EXISTING VERIZON WIRELESS ROOFTOP EQUIPMENT MOUNTED ON SLEEPERS (TO REMAIN).
3. PROPOSED VERIZON WIRELESS RAYCAP DISTRIBUTION OVP-6 BOX (4 TOTAL, 2 @ ANTENNAS AND 2 @ EQUIPMENT).
4. EXISTING 42.5' BUILDING (TO REMAIN).
15. EXISTING VERIZON WIRELESS CABLE TRAY (TO REMAIN).
20. EXISTING VERIZON WIRELESS GPS ANTENNA (TO REMAIN).
21. PROPOSED VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (2 TOTAL). SEE CABLE LENGTH SCHEDULE ON RF-1.0.
22. EXISTING VERIZON WIRELESS TELCO/FIBER CABINET (TO REMAIN).
23. EXISTING VERIZON WIRELESS ILC CABINET (TO REMAIN).
24. EXISTING VERIZON WIRELESS GENERATOR (TO REMAIN).
29. EXISTING VERIZON WIRELESS UTILITY H-FRAME (TO REMAIN).
30. EXISTING VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (1 TOTAL TO REMAIN).
31. EXISTING VERIZON WIRELESS RAYCAP DISTRIBUTION OVP BOX (2 TOTAL TO REMAIN, 1 @ ANTENNAS AND 1 @ EQUIPMENT).
32. EXISTING VERIZON WIRELESS EQUIPMENT CABINET (4 TOTAL TO REMAIN).

SITE NOTES

1. VERIFY ANTENNA MODEL, TIP HEIGHT & AZIMUTHS.
2. ANALYSIS OF BUILDING SHALL BE PERFORMED BY LDC & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PROPOSED ANTENNAS, EQUIPMENT AND MOUNTING HARDWARE NEAR ANTENNA LEVEL SHALL BE PAINTED TO MATCH EXISTING.

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Kent, WA 98032
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5	1-13-20	RFZD: UPDATE 5G ANTENNAS	AAL

8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-21

APPROVAL STAMP

SITE

T18-655

TAC WHEELER 4G & 5G

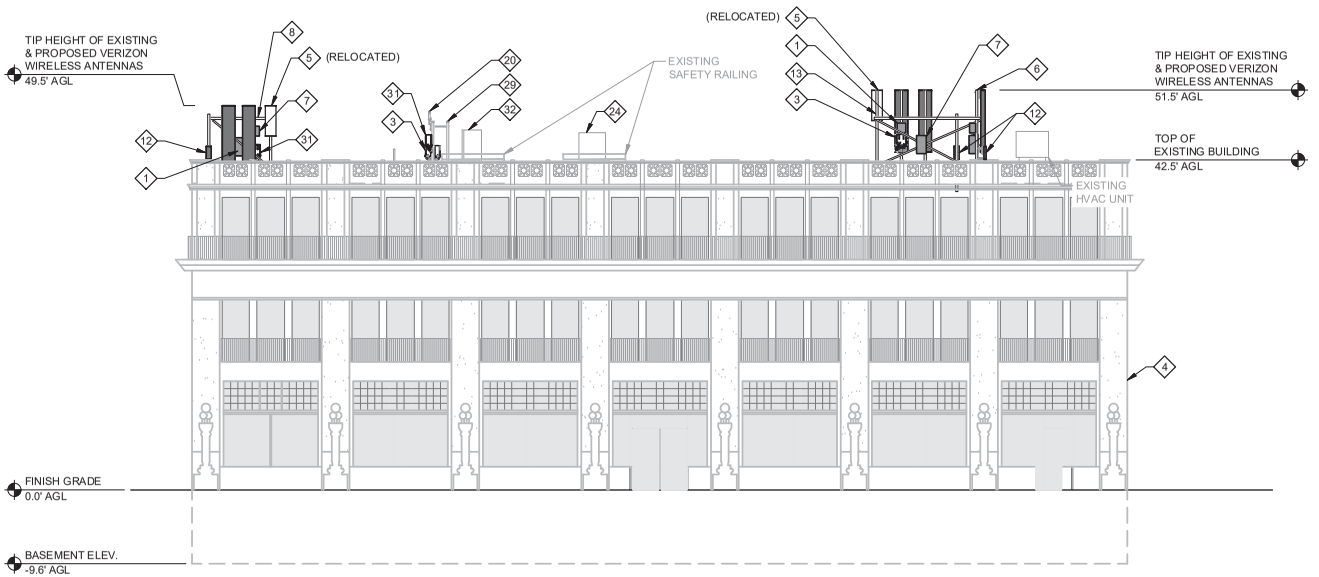
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE

ENLARGED EQUIPMENT PLAN

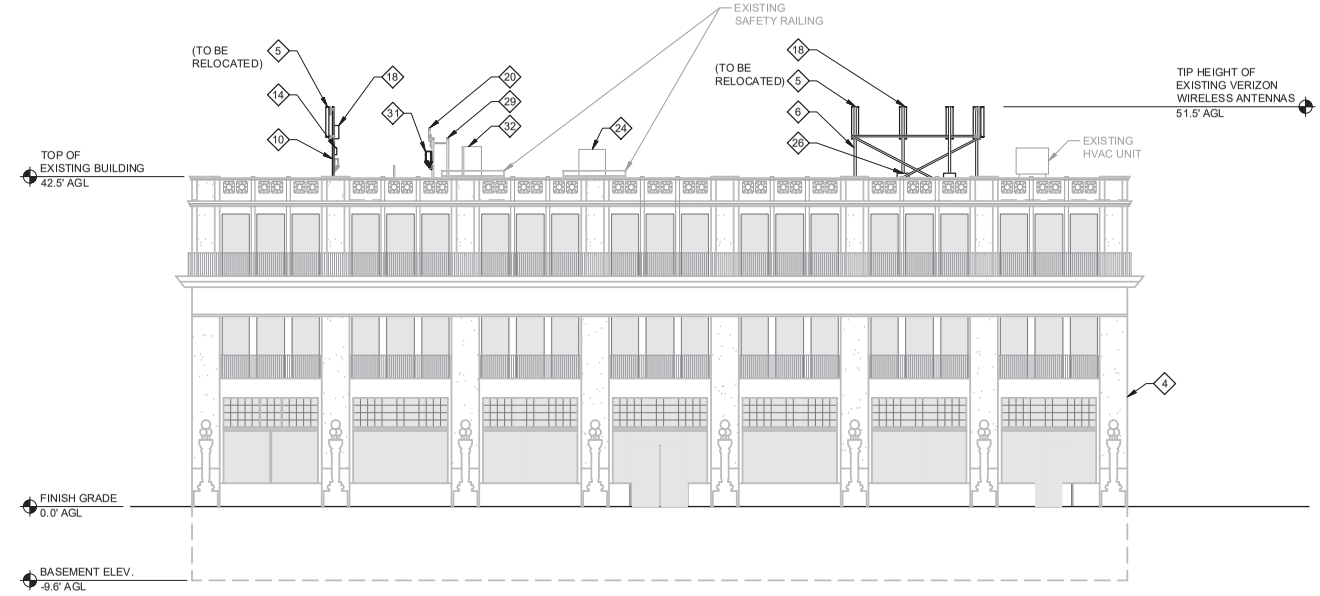
SHEET NUMBER

A-2.1



PROPOSED NORTH ELEVATION (LOOKING SOUTH) 2

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



EXISTING NORTH ELEVATION (LOOKING SOUTH) 1

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"

CONSTRUCTION PLAN KEYED NOTES

1. PROPOSED VERIZON WIRELESS RRUS 4449 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
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6. EXISTING VERIZON WIRELESS ROOFTOP ANTENNA MOUNT (TO REMAIN). (RECONFIGURED PER STRUCTURAL).
7. PROPOSED VERIZON WIRELESS RRUS 8843 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
8. PROPOSED VERIZON WIRELESS ROOFTOP ANTENNA MOUNT (SEE STRUCTURAL).
10. EXISTING VERIZON WIRELESS ROOFTOP ANTENNA MOUNT W/ SLEEPERS (TO BE REMOVED).
11. PROPOSED VERIZON WIRELESS 2208 COMBINED ANTENNA/RRU (TYP 1 PER SECTOR, 3 TOTAL).
12. PROPOSED VERIZON WIRELESS AIR6701 5G PANEL ANTENNA (TYP 1 PER SECTOR, 3 TOTAL).
13. PROPOSED VERIZON WIRELESS PANEL ANTENNA (TYP 2 PER SECTOR, 6 TOTAL).
14. EXISTING VERIZON WIRELESS TMA (TYP 1 PER SECTOR, 3 TOTAL TO BE REMOVED).
18. EXISTING VERIZON WIRELESS PANEL ANTENNA (TYP 3 PER SECTOR, 9 TOTAL TO BE REPLACED).
20. EXISTING VERIZON WIRELESS GPS ANTENNA (TO REMAIN).
24. EXISTING VERIZON WIRELESS GENERATOR (TO REMAIN).
26. EXISTING VERIZON WIRELESS RRUS UNIT (TYP 2 PER SECTOR, 6 TOTAL TO BE REPLACED).
29. EXISTING VERIZON WIRELESS UTILITY H-FRAME (TO REMAIN).
31. EXISTING VERIZON WIRELESS RAYCAP DISTRIBUTION OVP BOX (2 TOTAL TO REMAIN, 1 @ ANTENNAS AND 1 @ EQUIPMENT).
32. EXISTING VERIZON WIRELESS EQUIPMENT CABINET (4 TOTAL TO REMAIN).

SITE NOTES

1. VERIFY ANTENNA MODEL, TIP HEIGHT & AZIMUTHS.
2. ANALYSIS OF BUILDING SHALL BE PERFORMED BY LDC & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
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8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-21

APPROVAL STAMP

SITE

T18-655

TAC WHEELER 4G & 5G

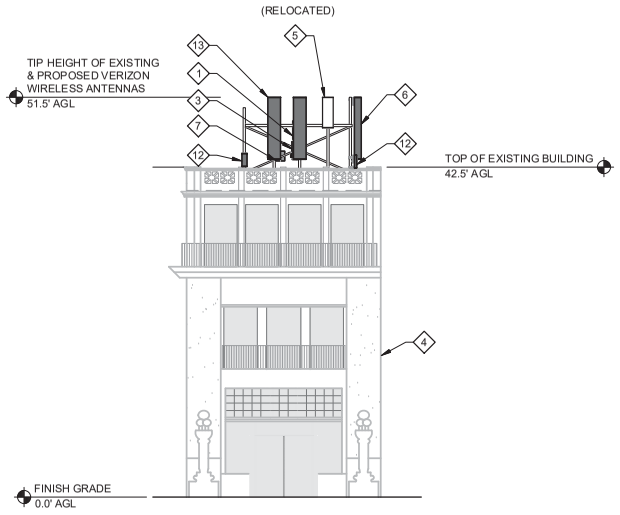
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE

ELEVATIONS

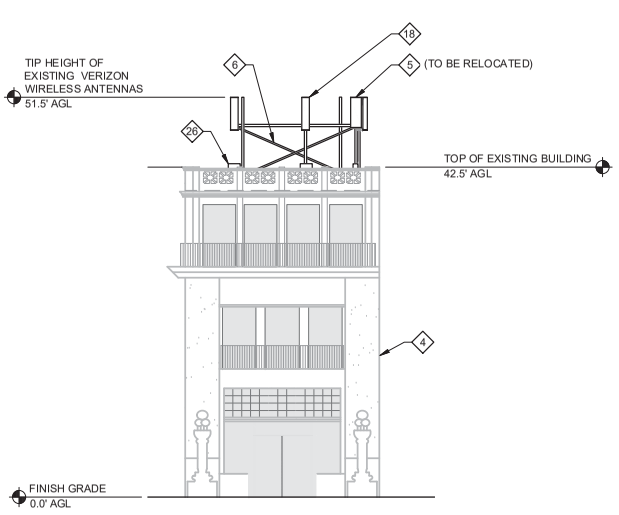
SHEET NUMBER

A-3.0



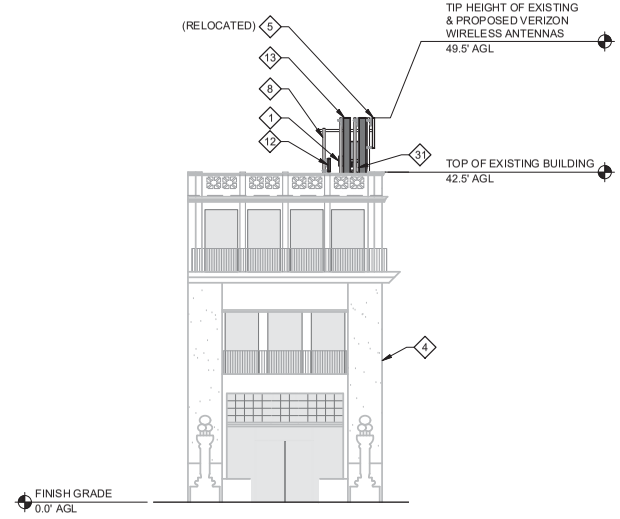
PROPOSED WEST ELEVATION (LOOKING EAST) 4

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



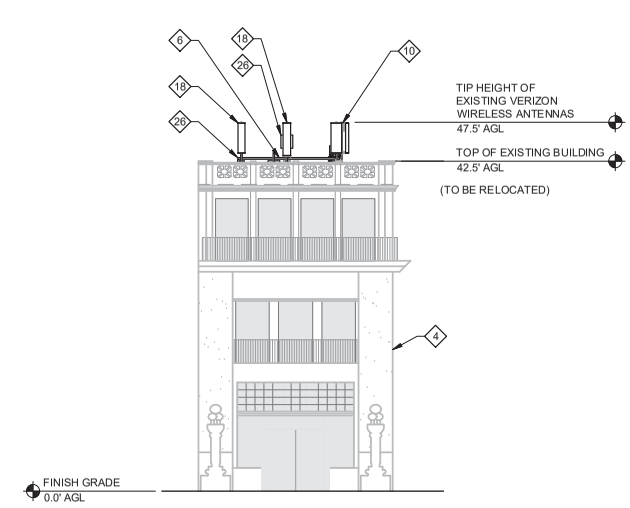
EXISTING WEST ELEVATION (LOOKING EAST) 3

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



PROPOSED EAST ELEVATION (LOOKING WEST) 2

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



EXISTING EAST ELEVATION (LOOKING WEST) 1

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CONSTRUCTION PLAN KEYED NOTES

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SITE NOTES

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APPROVAL STAMP

SITE

T18-655

TAC WHEELER 4G & 5G

100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE

ELEVATIONS

SHEET NUMBER

A-3.1

Previous application from 8/14/19

Landmarks Preservation Commision

Planning and Development Services Department

747 Market Street | Room 345 | Tacoma WA 98402-3793 | 253.591.5220

APPLICATION FOR DESIGN REVIEW

Permit Number: HDR19-0007

PROPERTY INFORMATION

Building/Property Name:	TAC Wheeler
Building/Property Address:	100 S 9TH ST
Historic/Conservation District:	N/A
Applicant's Name:	Ricquel Cardoza
Applicant's Address:	20210 142nd Avenue NE Woodinville, WA 98072
Applicant's Phone:	2067131626
Applicant's Email:	ricquelc@ldccorp.com
Property Owner's Name:	BOWES BUILDING LLC
Property Owner's Address:	

PROJECT SCOPE AND DESCRIPTION

Project Details

Application Type:	Commercial
Type of Work:	Addition
Estimated Valuation:	34000.00

Application Checklist

Features to be Modified:

Program of Work:

Specifications of Materials and Finishes:

Building/Roofing Information

Roof Height: 42.5

Roof Pitch:

Roof Material:

Size of Construction: 0 sq ft

Proposed Material:

Exterior Material:

Window Information

Window Types:

Window Trim:

Window Material:

Window Locations:

Door Information

Door Types:

Door Materials:

Door Locations:

Sign/Awning Information

Existing Signage: No

Sign Dimensions:

Sign Material:

Logo and Letter Size:

Lighting Specifications:

Removing or Relocating Signage:

Method of Attachment:

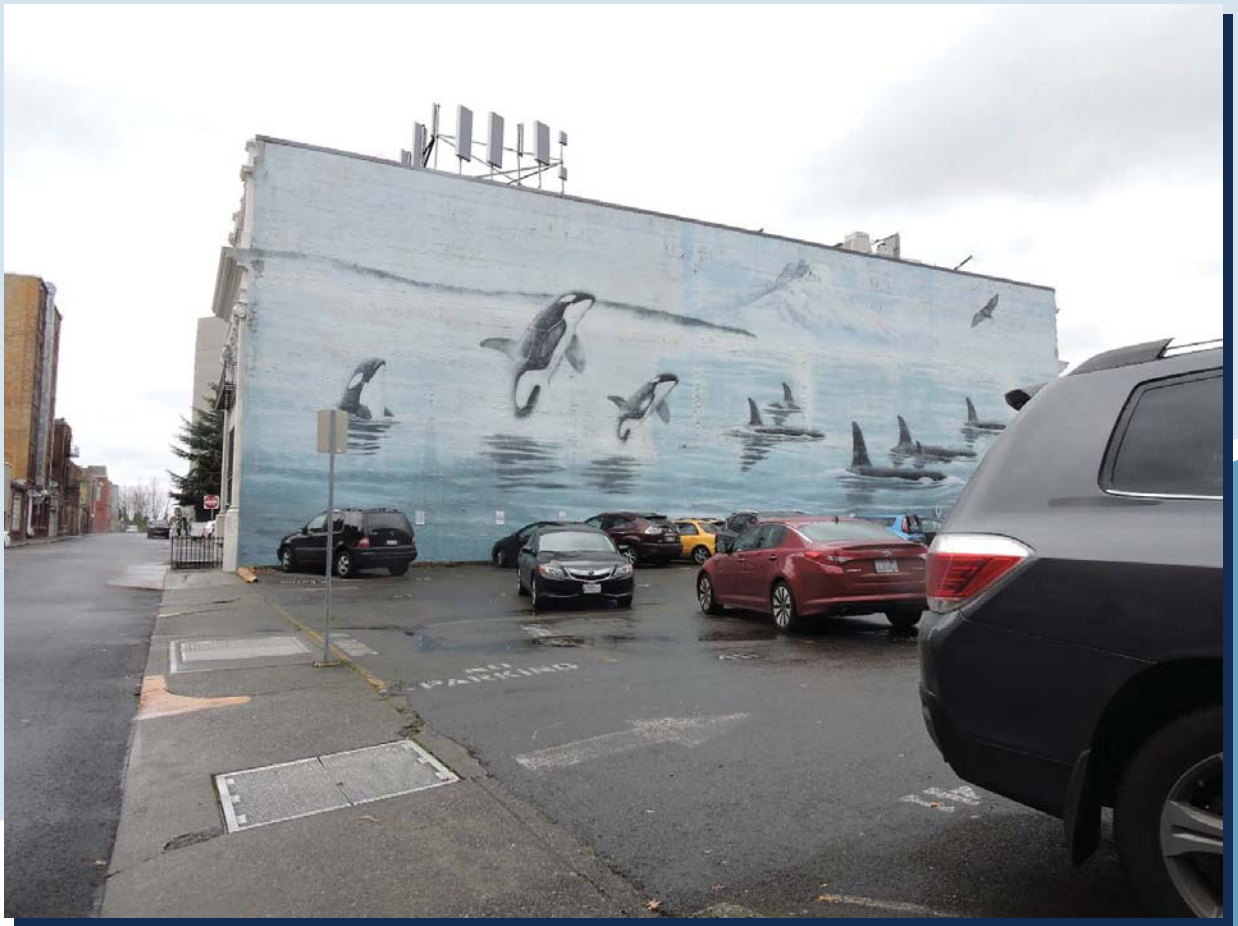
www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing



Proposed

verizon

Project Information

Project type: Building
Overall height: 42'-6"
Latitude: 47° 15' 19.75" N
Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Southwest View (Looking Northeast) from Court A and 939 Court Parking

Issue Date: 3-29-19

LDC

www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing

Proposed

verizon

Project Information

Project type: Building
Overall height: 42'-6"
Latitude: 47° 15' 19.75" N
Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Northeast View (Looking Southwest) from Fireman's Park and A Street

Issue Date: 3-29-19

LDC

www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing

Proposed

verizon

Project Information

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Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Northwest View (Looking Southeast) from Court A and S 9th Street

Issue Date: 3-29-19

LDC

www.LDCcorp.com

TAC Wheeler

Photo Location

100 S. 9th Street
Tacoma, WA 98402

Existing

Proposed

verizon

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Longitude: 122° 26' 16.75" W
Ground elevation: 112.00' AMSL
Jurisdiction: City of Tacoma
Zoning: DCC (Downtown Commercial Core)

Northeast View (Looking Southwest) from S 9th Street and A Street

Issue Date: 3-29-19

LDC

FINAL ZONING

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TAC WHEELER 4G & 5G

100 S. 9TH STREET
TACOMA, WA 98402

VICINITY MAP
NOT TO SCALE

GENERAL LOCATION MAP
NOT TO SCALE

DRIVING DIRECTIONS

FROM VERIZON WIRELESS OFFICE:

- HEAD EAST TOWARD 158TH AVE SE
- TURN RIGHT ONTO 158TH AVE SE
- TURN LEFT ONTO SE EASTGATE WAY
- TURN RIGHT ONTO THE SEATTLE W/SEATTLE RAMP
- KEEP LEFT TO CONTINUE TOWARD I-90 W
- KEEP LEFT, FOLLOW SIGNS FOR I-90 W/SEATTLE AND MERGE ONTO I-90 W
- USE THE RIGHT 2 LANES TO TAKE EXIT 10 FOR INTERSTATE 405 S TOWARD RENTON
- MERGE ONTO I-405 S
- TAKE THE INTERSTATE 5 S EXIT TOWARD PORTLAND
- MERGE ONTO I-5 S
- USE THE RIGHT LANE TO TAKE EXIT 133 FOR I-705 N/WA-7 S TOWARD CITY CENTER
- USE THE RIGHT LANE TO KEEP RIGHT AT THE FORK AND CONTINUE TOWARD I-705 N
- USE THE RIGHT LANE TO FOLLOW SIGNS FOR INTERSTATE 705 N/CITY CENTER
- CONTINUE ONTO I-705 N
- USE THE MIDDLE LANE TO TAKE THE EXIT TOWARD CITY CENTER
- FOLLOW A ST TO S 9TH ST
- CONTINUE ONTO A ST
- TURN LEFT ONTO S 9TH ST
- DESTINATION WILL BE ON THE LEFT

APPROVAL / SIGN OFF OF FINAL ZONING DRAWINGS

APPROVAL / SIGN OFF

APPROVED BY	DATE	SIGNATURE
SITE ACQUISITION		
ZONING		
RF		
CONSTRUCTION MANAGER		
PROJECT MANAGER		
LANDLORD		

REVIEWERS SHALL CLEARLY PLACE INITIALS ADJACENT TO EACH REDLINE NOTE AS DRAWINGS ARE BEING REVIEWED

DISCLAIMERS

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWINGS ARE SUPERSEDED BY THE LATEST REVISION.

LDC TAKES NO RESPONSIBILITY FOR ADEQUACY OF TOWER MOUNTS FOR EXISTING OR PROPOSED LOADING. CONTRACTOR AND MOUNT MANUFACTURER TAKE FULL RESPONSIBILITY FOR MOUNTING PRODUCTS USED & THEIR ADEQUACY. MOUNTS SHOWN IN DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

PROJECT CONTACT LIST

APPLICANT:
VERIZON WIRELESS
3245 158TH AVENUE SE
BELLEVUE, WA 98008

PROJECT ARCHITECT:
LDC, INC.
CONTACT: RICHARD B. HALL, AIA
PHONE: (425) 806-1869
EMAIL: rhall@ldccorp.com

PROPERTY OWNER:
BOWES BUILDING LLC.
SHAUB PROPERTIES
109 S. 9TH STREET
TACOMA, WA 98402

PROJECT CONSULTANT:
LDC, INC.
CONTACT: RICK CARDOZA
PHONE: (253) 218-9017
EMAIL: rcardoza@ldccorp.com

PROJECT INFORMATION

CODE INFORMATION:

ZONING CLASSIFICATION:	DCC (DOWNTOWN COMMERCIAL CORE)
BUILDING CODE:	IBC 2015
CONSTRUCTION TYPE:	IIB
OCCUPANCY:	B
JURISDICTION:	CITY OF TACOMA
PROPOSED BUILDING USE:	UNMANNED TELECOM

SITE LOCATION (NAD83):

LATITUDE:	47° 15' 19.49" N	(47.255414° N)
LONGITUDE:	122° 26' 16.75" W	(122.437986° W)
TOP OF STRUCTURE:	154.50'± AMSL	42.5' AGL
BASE OF STRUCTURE:	112.00'± AMSL	0.0' AGL

PROJECT LEASE AREA:
N/A

PARCEL NUMBER:
2009020010

NEW IMPERVIOUS AREA:
0 SF

AREA OF PARCEL:
0.07 ACRES

GENERAL INFORMATION:
1. PARKING REQUIREMENTS ARE UNCHANGED.
2. TRAFFIC IS UNAFFECTED.
3. SIGNAGE IS UNAFFECTED.

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.

DRAWING INDEX

DWG NO.	DESCRIPTION
T-1.0	TITLE SHEET
A-1.0	SITE PLAN
A-2.0	ENLARGED ANTENNA PLAN
A-2.1	ENLARGED EQUIPMENT PLAN
A-3.0	ELEVATIONS
A-3.1	ELEVATIONS

LEGAL DESCRIPTION

SECTION 04 TOWNSHIP 20 RANGE 03 QUARTER 22 : NEW TACOMA L 1 BLK 902 HISTORIC EXEMPTION ENDED WITH 2000 TAXES DC678RJ1-23- 1989 DC08182000MJ

UTILITY COMPANIES

POWER:
TACOMA PUBLIC UTILITY
PHONE: (253) 502-8606

TELEPHONE:
CENTURY LINK
PHONE: (800) 777-9594

PROJECT DESCRIPTION

VERIZON WIRELESS PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY WITH THE:

REPLACEMENT OF:
- (6) PANEL ANTENNAS
- (6) RRUS UNITS

ADDITION OF:
- (3) PANEL ANTENNAS
- (3) 5G PANEL ANTENNAS
- (3) 2208 COMBINED ANTENNA/RRU
- (4) DISTRIBUTION OVP-6 BOXES (2 @ ANTENNAS, 2 @ EQUIPMENT)
- (2) HYBRID CABLES

verizon

LDC | Surveying Engineering Planning

Woodinville
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869

Kent
1051 Central Pl S, #101
Kent, WA 98032
www.LDCcorp.com
F 425.482.3893

DATE:	1-7-19
DRAWN BY:	SRN
CHECKED BY:	RBH

SUBMITTALS

REV	DATE	DESCRIPTION	BY
1	1-7-19	PRELIMINARY ZONING	SRN
2	3-13-19	FINAL ZONING	AAL
3	7-25-19	RFZD: UPDATE PER RFDS	AAL

8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-19

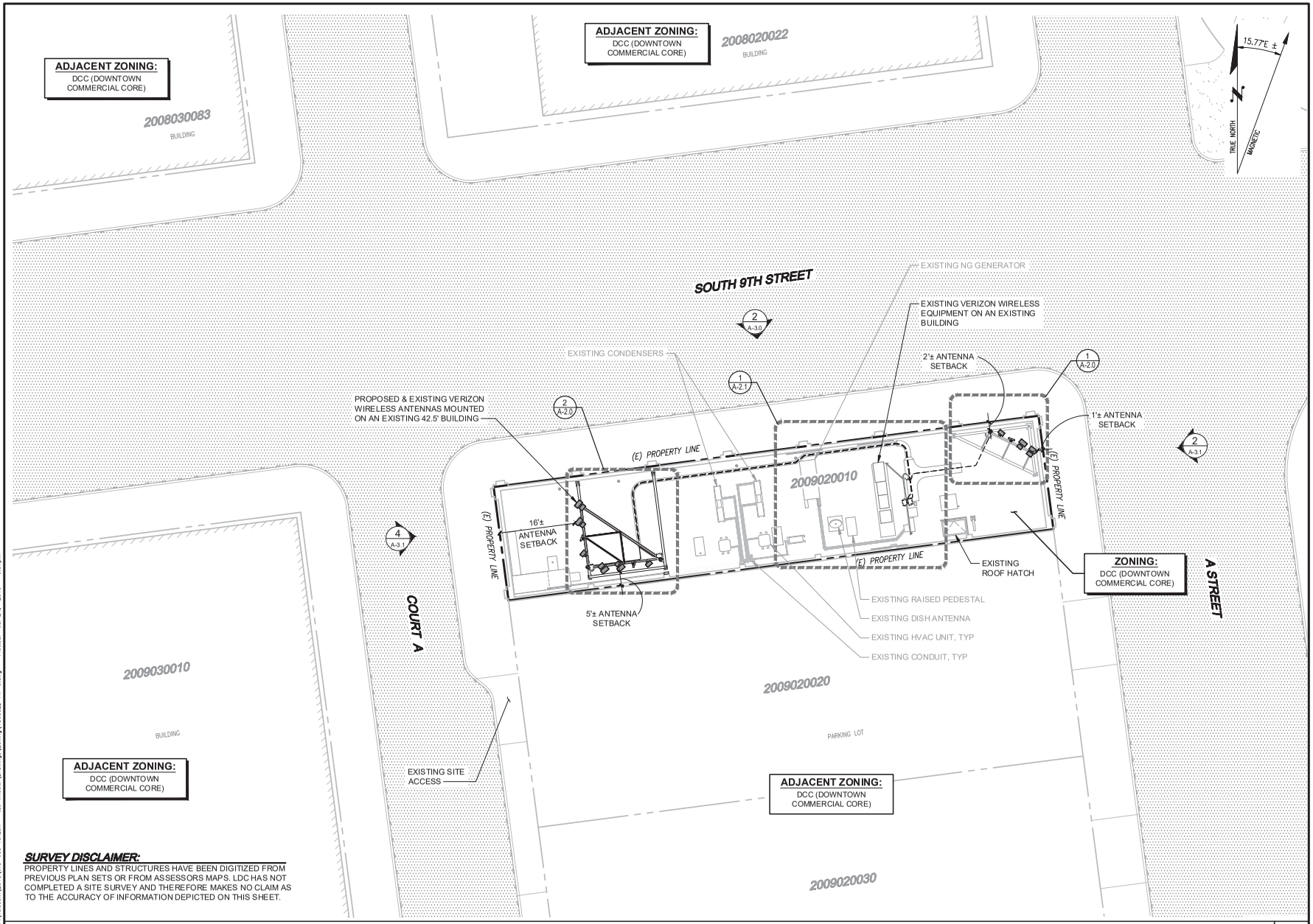
APPROVAL STAMP

SITE
T18-655
TAC WHEELER 4G & 5G
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1.0

Drawing: P:\Telecom\2018\118-655 verizon - tac wheeler\Drawings\Zoning\18655CD-T1-0.dwg Plotted: Jul 24, 2019 - 6:37pm



SURVEY DISCLAIMER:
PROPERTY LINES AND STRUCTURES HAVE BEEN DIGITIZED FROM PREVIOUS PLAN SETS OR FROM ASSESSORS MAPS. LDC HAS NOT COMPLETED A SITE SURVEY AND THEREFORE MAKES NO CLAIM AS TO THE ACCURACY OF INFORMATION DEPICTED ON THIS SHEET.

SITE PLAN

22"x34" SCALE: 1" = 10' | 11"x17" SCALE: 1" = 20'

1

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Woodinville
20230 142nd Avenue NE
Woodinville, WA 98072
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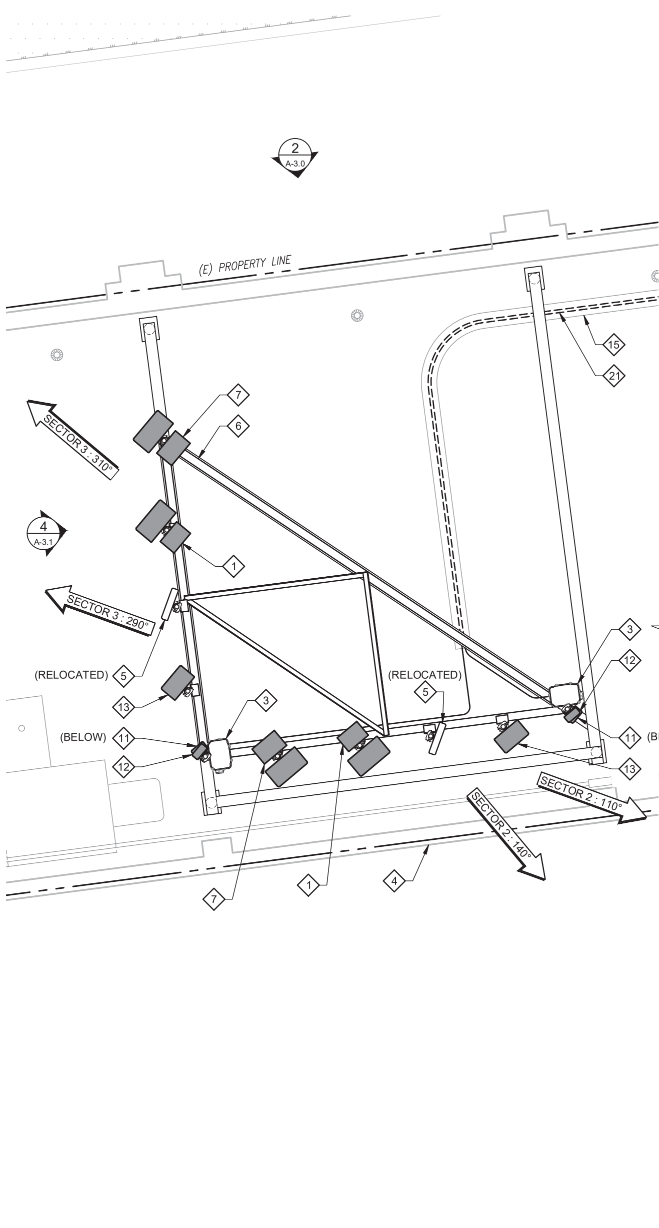
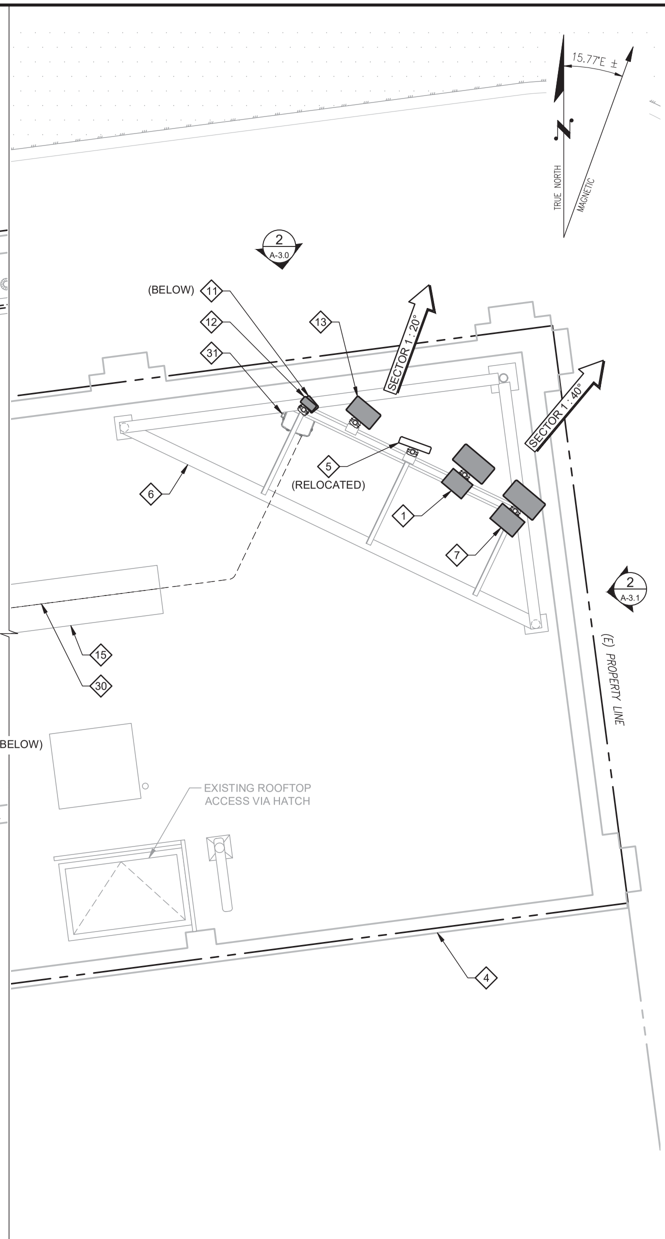


ENLARGED ANTENNA PLAN - SECTOR 2 & 3 — 2

22"x34" SCALE: 3/8" = 1'-0" | 11"x17" SCALE: 3/16" = 1'-0"



ENLARGED ANTENNA PLAN - SECTOR 1 — 1

22"x34" SCALE: 3/8" = 1'-0" | 11"x17" SCALE: 3/16" = 1'-0"

CONSTRUCTION PLAN KEYED NOTES

1. PROPOSED VERIZON WIRELESS RRUS 4449 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
3. PROPOSED VERIZON WIRELESS RAYCAP DISTRIBUTION OVP-6 BOX (4 TOTAL, 2 @ ANTENNAS AND 2 @ EQUIPMENT).
4. EXISTING 42.5' BUILDING (TO REMAIN).
5. EXISTING VERIZON WIRELESS PANEL ANTENNA (TYP 1 PER SECTOR, 3 TOTAL TO REMAIN).
6. EXISTING VERIZON WIRELESS ROOFTOP ANTENNA MOUNT (TO REMAIN). (RECONFIGURED PER STRUCTURAL).
7. PROPOSED VERIZON WIRELESS RRUS 8843 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
11. PROPOSED VERIZON WIRELESS 2208 COMBINED ANTENNA/RRU (TYP 1 PER SECTOR, 3 TOTAL).
12. PROPOSED VERIZON WIRELESS AIR6701 5G PANEL ANTENNA (TYP 1 PER SECTOR, 3 TOTAL).
13. PROPOSED VERIZON WIRELESS PANEL ANTENNA (TYP 3 PER SECTOR, 9 TOTAL).
15. EXISTING VERIZON WIRELESS CABLE TRAY (TO REMAIN).
21. PROPOSED VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (2 TOTAL). SEE CABLE LENGTH SCHEDULE ON RF-1.0.
30. EXISTING VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (1 TOTAL TO REMAIN).
31. EXISTING VERIZON WIRELESS RAYCAP DISTRIBUTION OVP BOX (2 TOTAL TO REMAIN, 1 @ ANTENNAS AND 1 @ EQUIPMENT).

SITE NOTES

1. VERIFY ANTENNA MODEL, TIP HEIGHT & AZIMUTHS.
2. ANALYSIS OF BUILDING SHALL BE PERFORMED BY LDC & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PROPOSED ANTENNAS, EQUIPMENT AND MOUNTING HARDWARE NEAR ANTENNA LEVEL SHALL BE PAINTED TO MATCH EXISTING.

verizon

LDC Surveying Engineering Planning

Woodinville 20210 142nd Avenue NE Woodinville, WA 98072 T 425.806.1869
Kent 1851 Central Pl S, #101 Kent, WA 98030 T 425.482.2893
www.LDCcorp.com

DATE: 1-7-19
DRAWN BY: SRN
CHECKED BY: RBH

SUBMITTALS

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3	7-25-19	RFZD: UPDATE PER RFDS	AAL

8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-19 7/24/19

APPROVAL STAMP

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TAC WHEELER 4G & 5G
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE
ENLARGED ANTENNA PLAN

SHEET NUMBER
A-2.0

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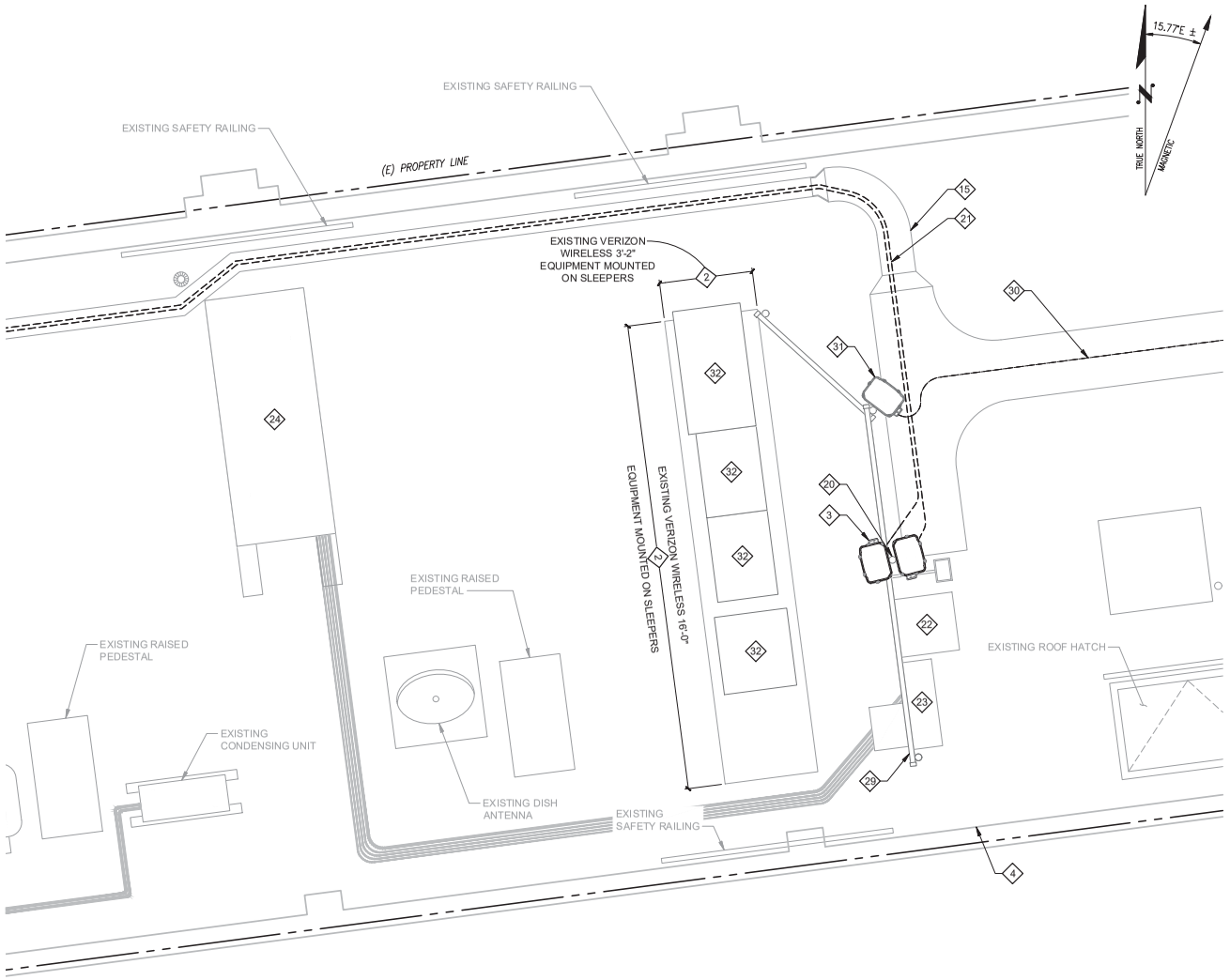

ENLARGED EQUIPMENT PLAN

1

22"x34" SCALE: 1/2" = 1'-0" | 11"x17" SCALE: 1/4" = 1'-0"

CONSTRUCTION PLAN KEYED NOTES

2. EXISTING VERIZON WIRELESS ROOFTOP EQUIPMENT MOUNTED ON SLEEPERS (TO REMAIN).
3. PROPOSED VERIZON WIRELESS RAYCAP DISTRIBUTION OVP-6 BOX (4 TOTAL, 2 @ ANTENNAS AND 2 @ EQUIPMENT).
4. EXISTING 42.5' BUILDING (TO REMAIN).
15. EXISTING VERIZON WIRELESS CABLE TRAY (TO REMAIN).
20. EXISTING VERIZON WIRELESS GPS ANTENNA (TO REMAIN).
21. PROPOSED VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (2 TOTAL). SEE CABLE LENGTH SCHEDULE ON RF-1.0.
22. EXISTING VERIZON WIRELESS TELCO/FIBER CABINET (TO REMAIN).
23. EXISTING VERIZON WIRELESS ILC CABINET (TO REMAIN).
24. EXISTING VERIZON WIRELESS GENERATOR (TO REMAIN).
29. EXISTING VERIZON WIRELESS UTILITY H-FRAME (TO REMAIN).
30. EXISTING VERIZON WIRELESS HYBRID CABLE TO ANTENNAS (1 TOTAL TO REMAIN).
31. EXISTING VERIZON WIRELESS RAYCAP DISTRIBUTION OVP BOX (2 TOTAL TO REMAIN, 1 @ ANTENNAS AND 1 @ EQUIPMENT).
32. EXISTING VERIZON WIRELESS EQUIPMENT CABINET (4 TOTAL TO REMAIN).

SITE NOTES

1. VERIFY ANTENNA MODEL, TIP HEIGHT & AZIMUTHS.
2. ANALYSIS OF BUILDING SHALL BE PERFORMED BY LDC & STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. PROPOSED ANTENNAS, EQUIPMENT AND MOUNTING HARDWARE NEAR ANTENNA LEVEL SHALL BE PAINTED TO MATCH EXISTING.

verizon

LDC Surveying Engineering Planning
Woodinville
20230 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869
Kent
1851 Central Pl S, #101
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8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-19 7/24/19

APPROVAL STAMP

SITE

T18-655

TAC WHEELER 4G & 5G

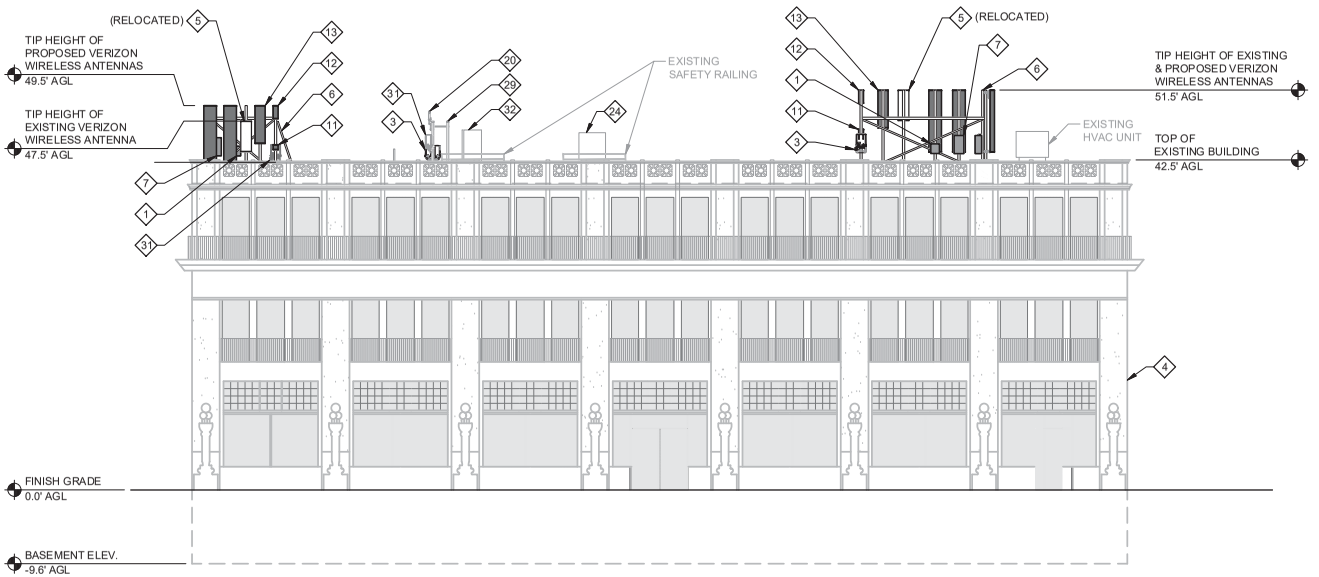
100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE

ENLARGED EQUIPMENT PLAN

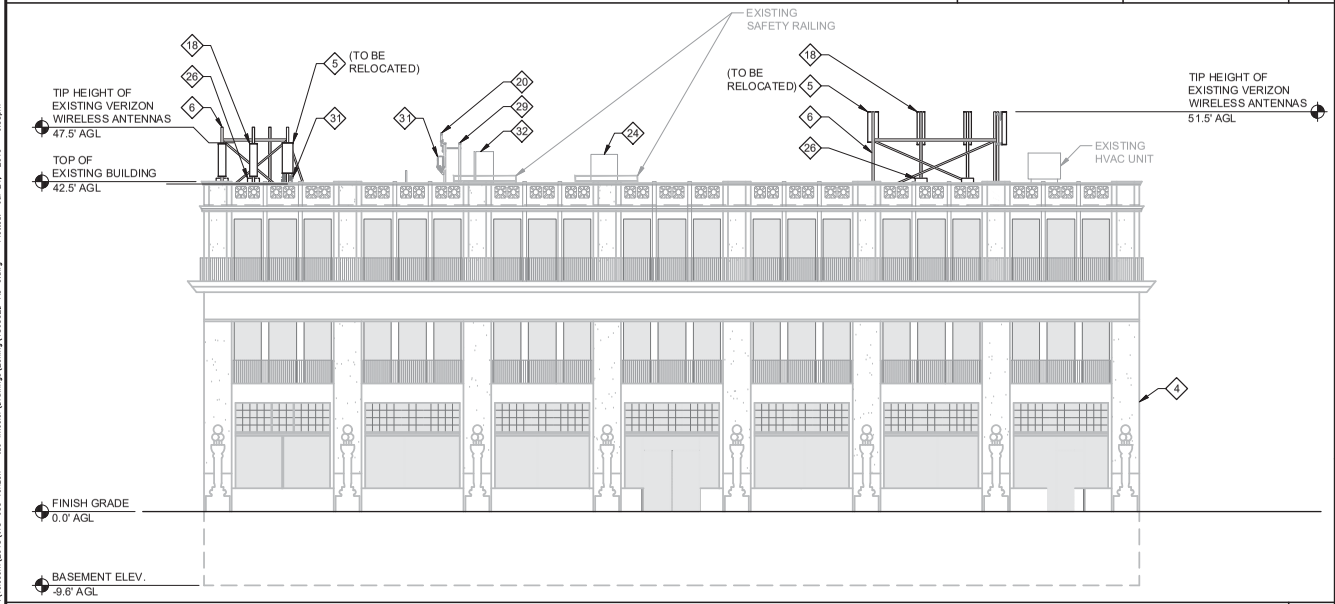
SHEET NUMBER

A-2.1



PROPOSED NORTH ELEVATION (LOOKING SOUTH) 2

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



EXISTING NORTH ELEVATION (LOOKING SOUTH) 1

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CONSTRUCTION PLAN KEYED NOTES

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7. PROPOSED VERIZON WIRELESS RRUS 8843 UNIT (TYP 1 PER SECTOR, 3 TOTAL).
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20. EXISTING VERIZON WIRELESS GPS ANTENNA (TO REMAIN).
24. EXISTING VERIZON WIRELESS GENERATOR (TO REMAIN).
26. EXISTING VERIZON WIRELESS RRUS UNIT (TYP 2 PER SECTOR, 6 TOTAL TO BE REPLACED).
29. EXISTING VERIZON WIRELESS UTILITY H-FRAME (TO REMAIN).
31. EXISTING VERIZON WIRELESS RAYCAP DISTRIBUTION OVP BOX (2 TOTAL TO REMAIN, 1 @ ANTENNAS AND 1 @ EQUIPMENT).
32. EXISTING VERIZON WIRELESS EQUIPMENT CABINET (4 TOTAL TO REMAIN).

SITE NOTES

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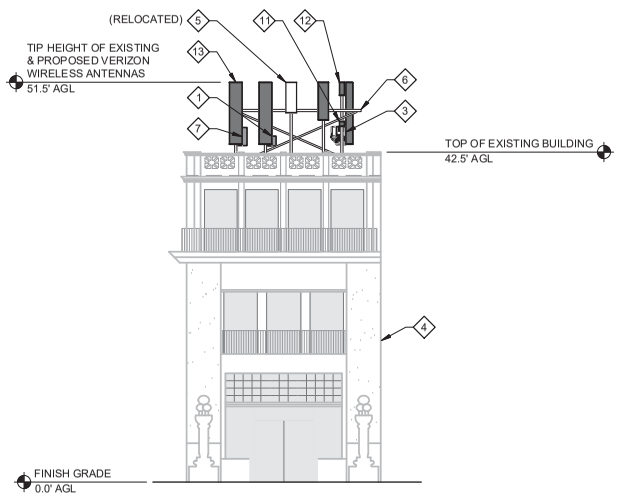
8828 REGISTERED ARCHITECT RICHARD B. HALL STATE OF WASHINGTON EXPIRES: 8-20-19

APPROVAL STAMP

SITE
T18-655
TAC WHEELER 4G & 5G
100 S. 9TH STREET
TACOMA, WA 98402

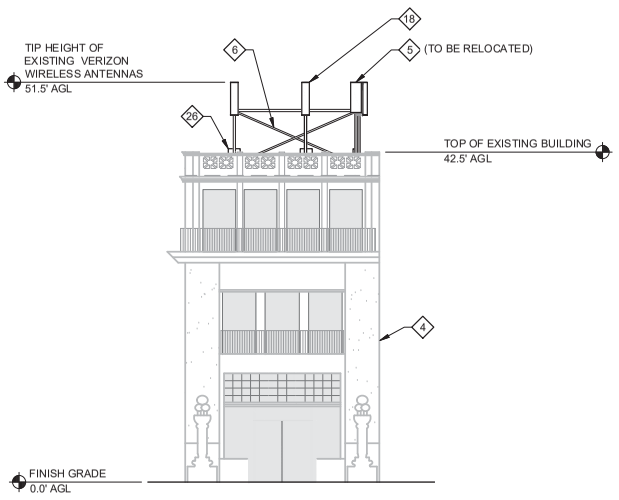
SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-3.0



PROPOSED WEST ELEVATION (LOOKING EAST) 4

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



EXISTING WEST ELEVATION (LOOKING EAST) 3

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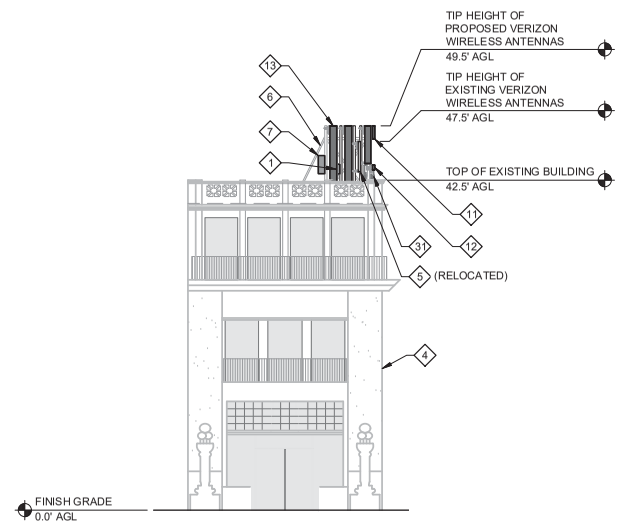
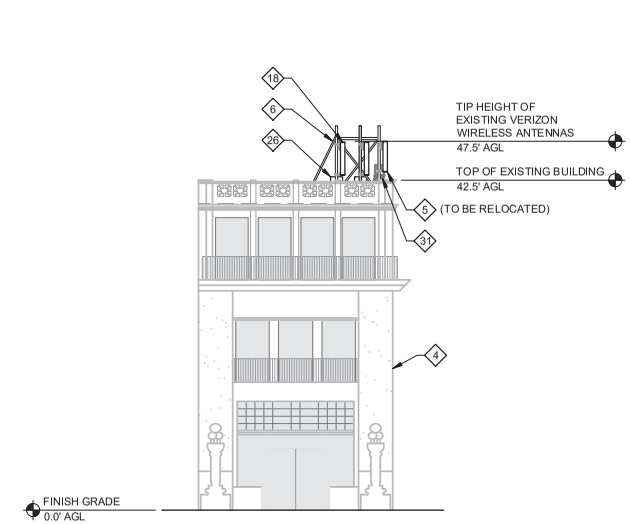


PROPOSED EAST ELEVATION (LOOKING WEST) 2

22"x34" SCALE: 1/8" = 1'-0" | 11"x17" SCALE: 1/16" = 1'-0"



EXISTING EAST ELEVATION (LOOKING WEST) 1

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verizon

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100 S. 9TH STREET
TACOMA, WA 98402

SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-3.1

Landmarks Preservation Commision

Planning and Development Services Department

747 Market Street | Room 345 | Tacoma WA 98402-3793 | 253.591.5220

APPLICATION FOR DESIGN REVIEW

Permit Number: HDR20-0001

PROPERTY INFORMATION

Building/Property Name:	new garage (BLDRN19-0274 - new garage)
Building/Property Address:	603 N AINSWORTH AVE
Historic/Conservation District:	North Slope
Applicant's Name:	R4construction
Applicant's Address:	p.o. box 7968 tacoma, WA 98417
Applicant's Phone:	2532679759
Applicant's Email:	sarork@msn.com
Property Owner's Name:	RUSSELL DON R & BARBARA A
Property Owner's Address:	

PROJECT SCOPE AND DESCRIPTION

Project Details

Application Type:	Residential
Type of Work:	Detached Garage
Estimated Valuation:	25000

Application Checklist

Features to be Modified:

Program of Work:

Specifications of Materials and Finishes:

new cedar lap siding, corner boards and facia.

Building/Roofing Information

Roof Height: 17

Roof Pitch: 812

Roof Material: 3 tab asphalt

Size of Construction: 650sq ft.

Proposed Material:

clear cedar lap siding

Exterior Material:

Clear cedar siding and trim

Window Information

Window Types:

single hung

Window Trim:

clear cedar

Window Material:

vinyl

Window Locations:

back yard side

Door Information

Door Types:

VG Fir 1/2 light man door
18ft over head door

Door Materials:

VG Fir man door

Door Locations:

man door rear side
over head alley access

Sign/Awning Information

Existing Signage:	No
Sign Dimensions:	
Sign Material:	
Logo and Letter Size:	
Lighting Specifications:	

Removing or Relocating Signage:

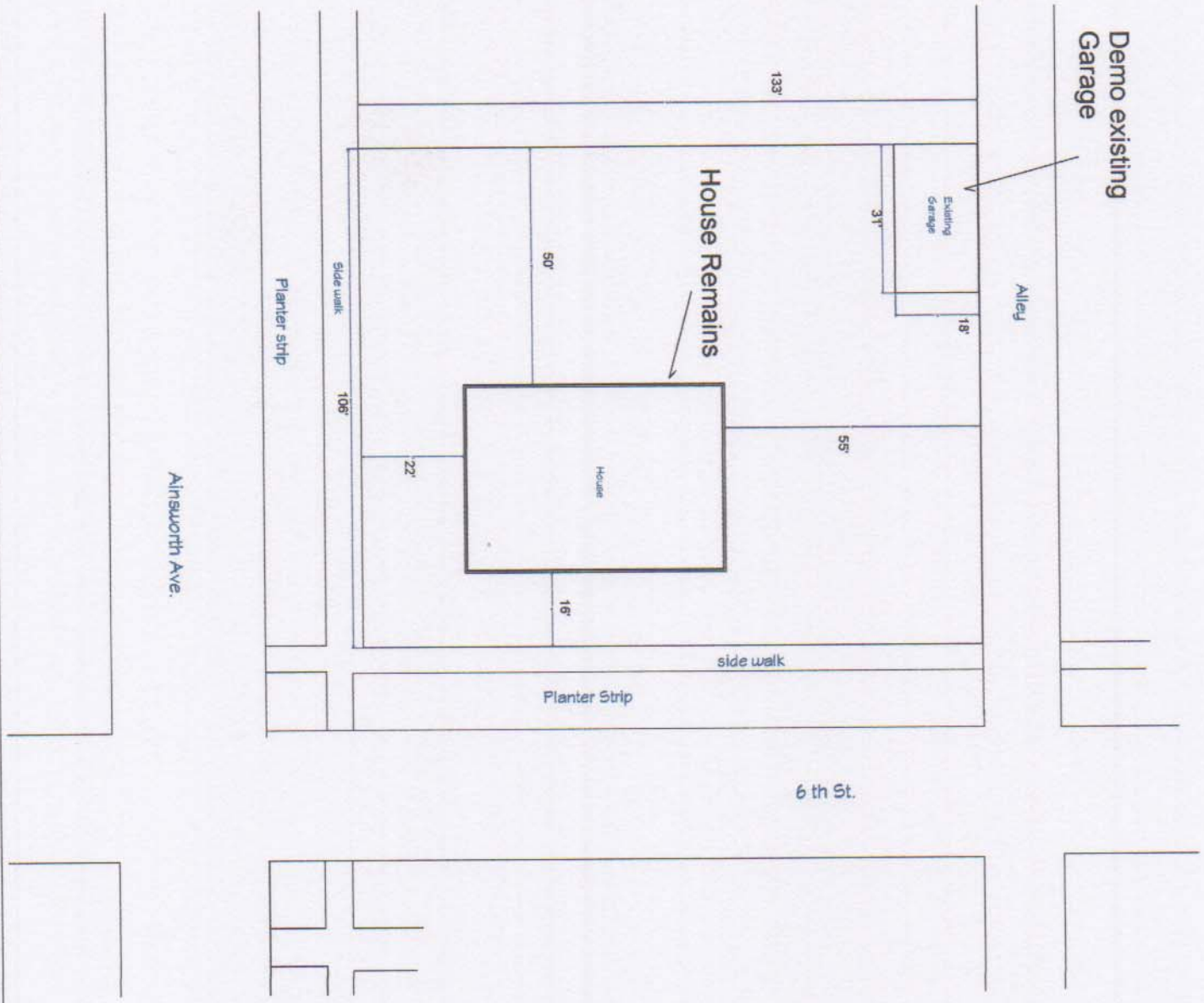
Method of Attachment:

Alley side (North) existing

South and East side existing

South side existing

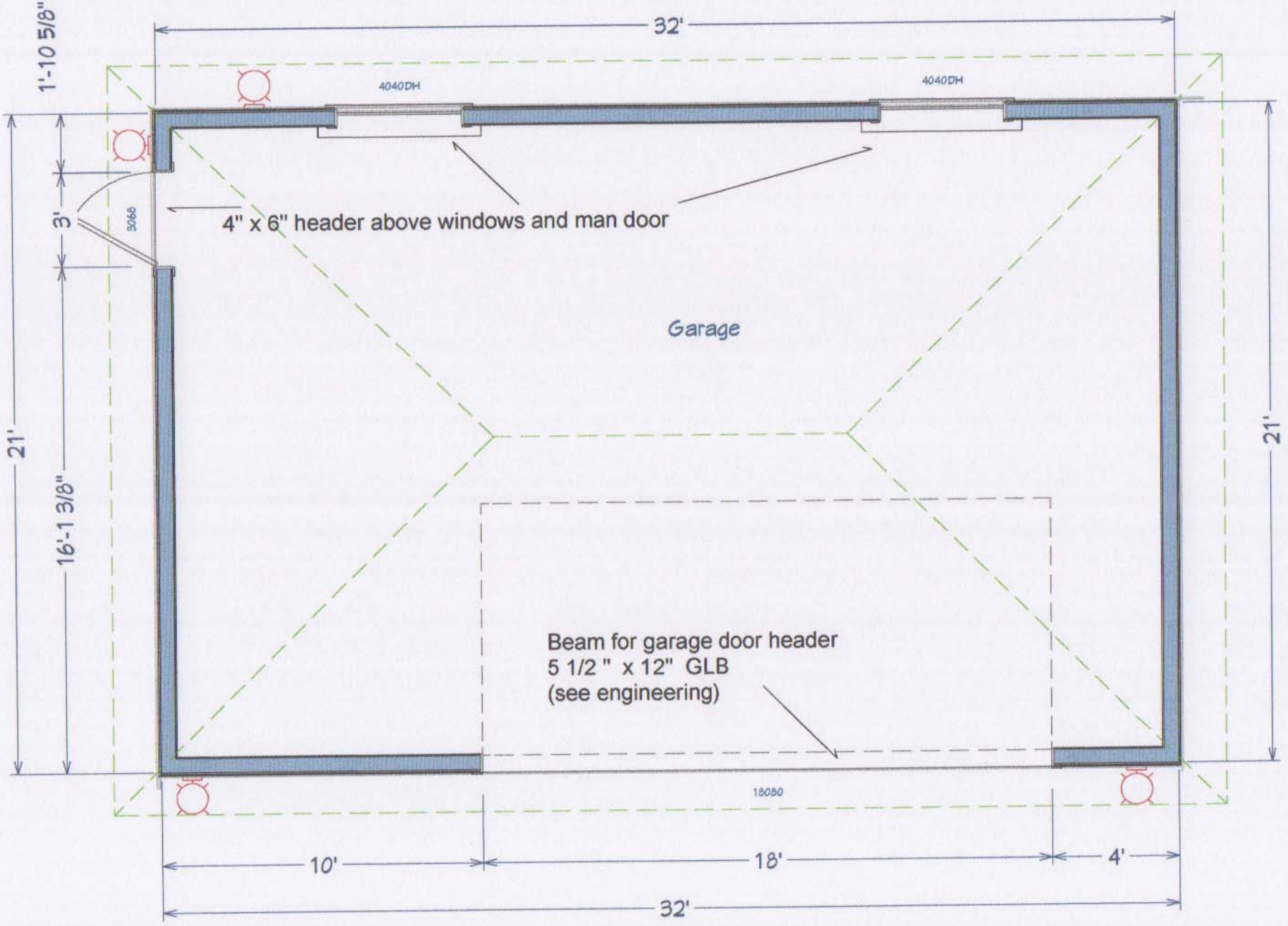
Alley side (North) existing



SHEET:	SCALE:	DATE:	DRAWINGS PROVIDED BY:	PROJECT DESCRIPTION:	SHEET TITLE:
A-1			R4 Construction 253-267-9759	Russell Garage 603 N. Ainsworth Ave Tacoma WA. 98406	Site plan

NO.	DESCRIPTION	BY	DATE

R4 Construction
P.O. Box 7566
Tacoma WA. 98417
253-301-9502



R4 Construction
P.O. Box 7568
Tacoma WA. 98417
253-267-9759

NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Foor Plan

PROJECT DESCRIPTION:
Russell Garage
603 N. Ainsworth Ave
Tacoma WA. 98406

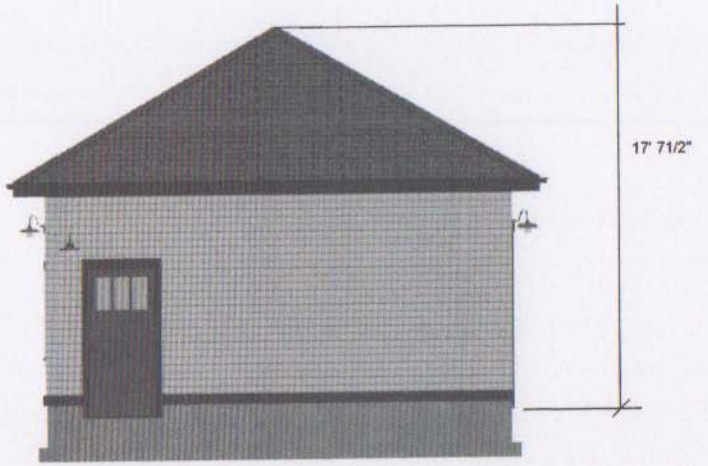
DRAWINGS PROVIDED BY:
R4 Construction
253-267-9759

DATE:

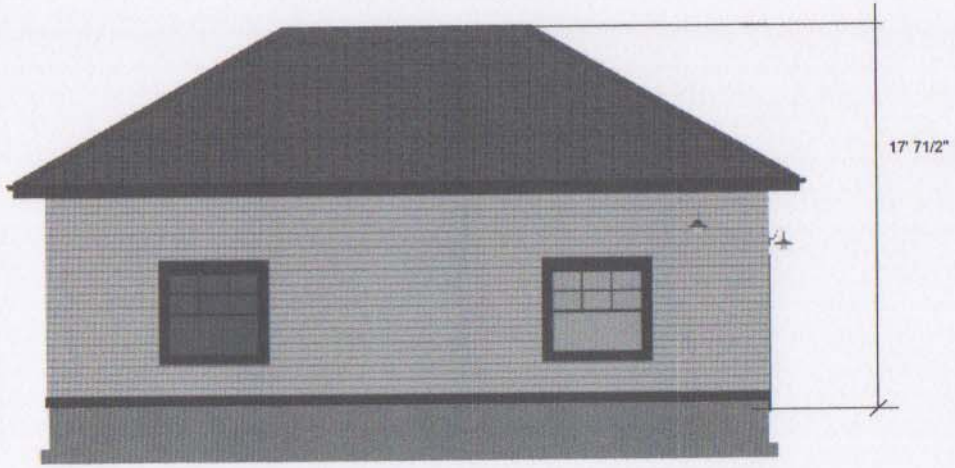
SCALE:

SHEET:
A-2

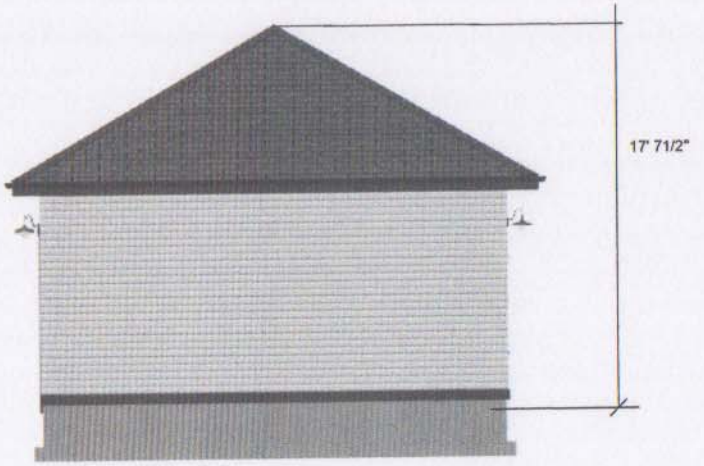
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Elevations

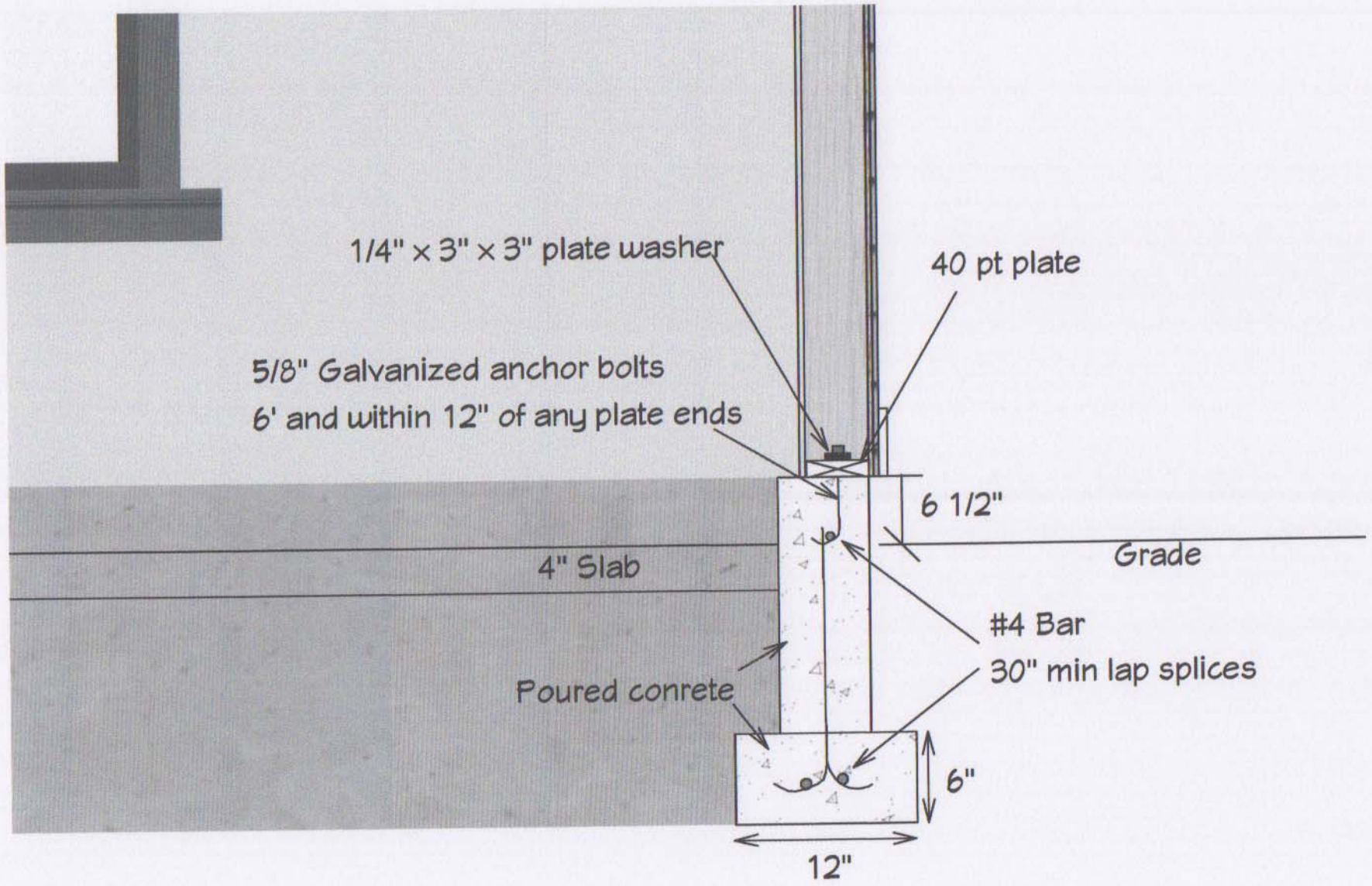
PROJECT DESCRIPTION: Russell Garage
603 N. Ainsworth Ave
Tacoma WA. 98406

DRAWINGS PROVIDED BY: R4 Construction
253-267-9759

DATE:

SCALE:

SHEET: A-3



NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Foundation Plan

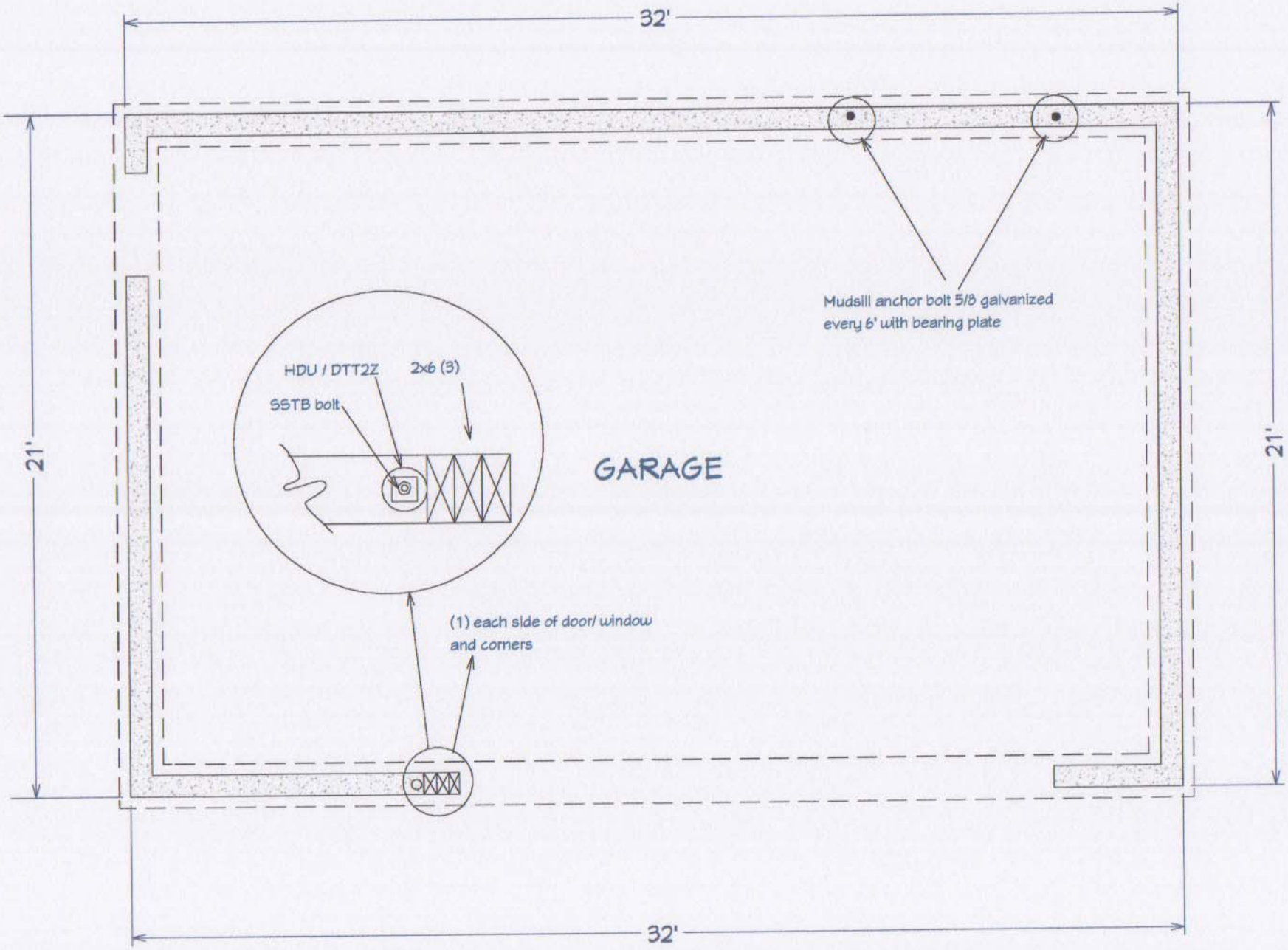
PROJECT DESCRIPTION: Russell Garage
603 N. Ainsworth Ave
Tacoma WA. 98406

DRAWINGS PROVIDED BY: R4 Construction
253-267-9759

DATE:

SCALE:

SHEET: A-4



NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Foundation

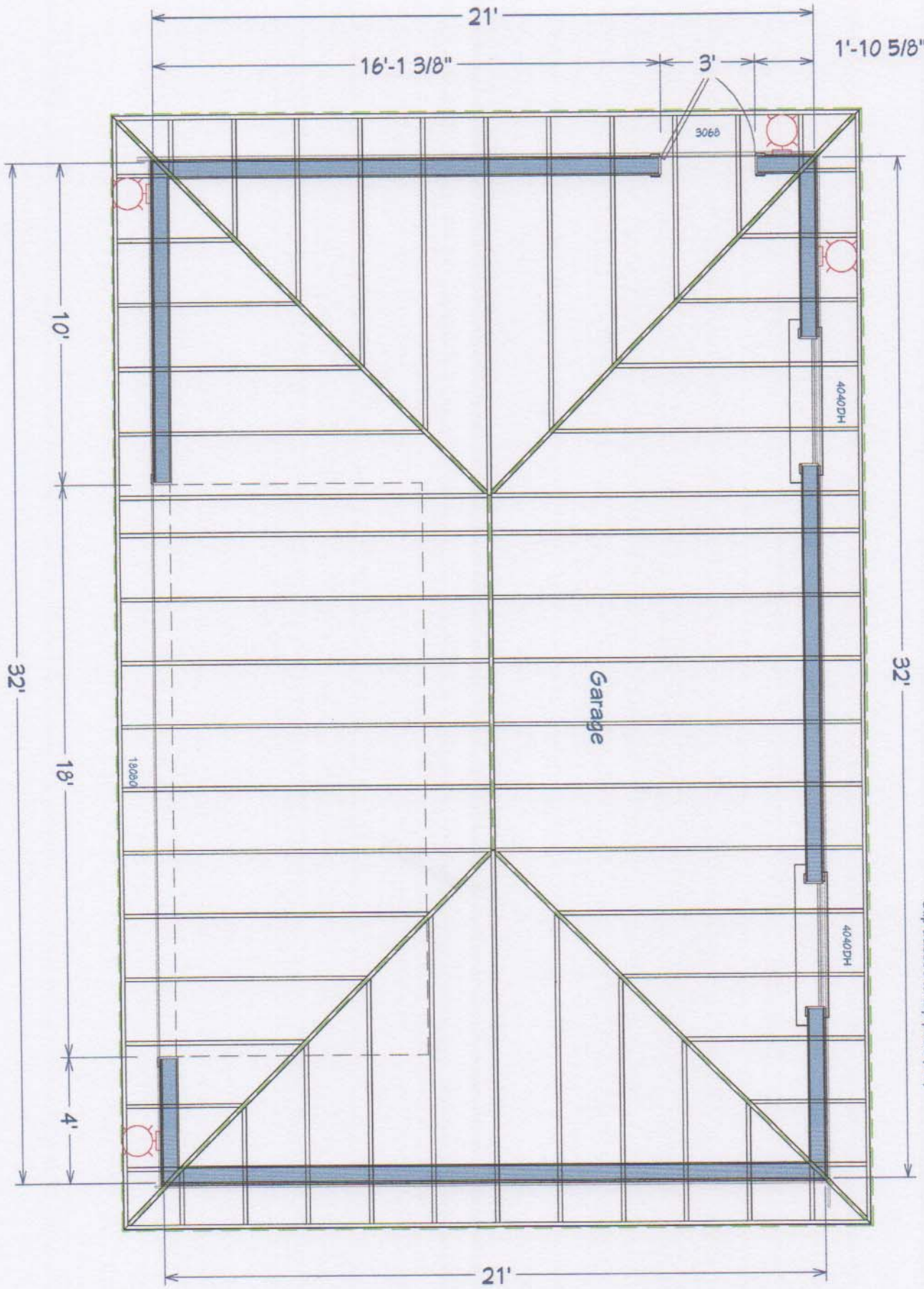
PROJECT DESCRIPTION: Russell Garage
603 N. Ainsworth Ave.
Tacoma WA. 98706

DRAWINGS PROVIDED BY: R4 Construction
253-267-9759

DATE:

SCALE:

SHEET: A-5

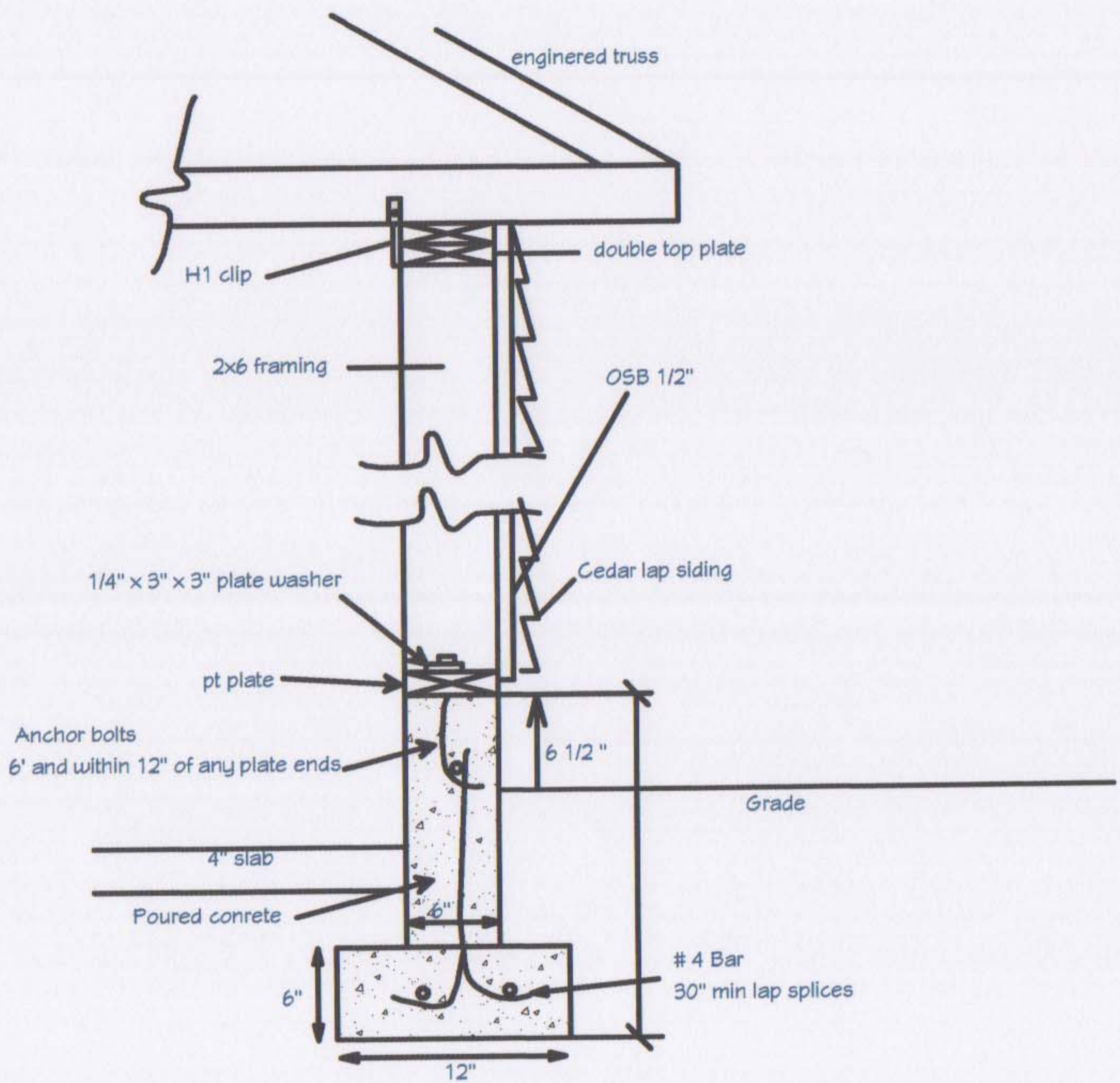


Engineerer Trusses 24" on center
Walls 2x6 construction16" OC
Headers over garage door (see engineering)
Double top plates
Clip trusses to top plate (H1)

SHEET:	SCALE:	DATE:	DRAWINGS PROVIDED BY:	PROJECT DESCRIPTION:	SHEET TITLE:
A-6			R4 Construction 253-267-9759	Russell Garage 603 vN. Ainsworth Ave. Tacoma 98406	Roof Framing

NO.	DESCRIPTION	BY	DATE

R4 Construction
P.O. Box 7998
Tacoma WA. 98417
253-301-5002



SHEET TITLE: Wall section

PROJECT DESCRIPTION: Russell Garage
603 N. Ainsworth Ave
Tacoma WA. 98406

DRAWINGS PROVIDED BY: R4 Construction

DATE:

SCALE:

SHEET: A-7

NO.	DESCRIPTION	BY	DATE

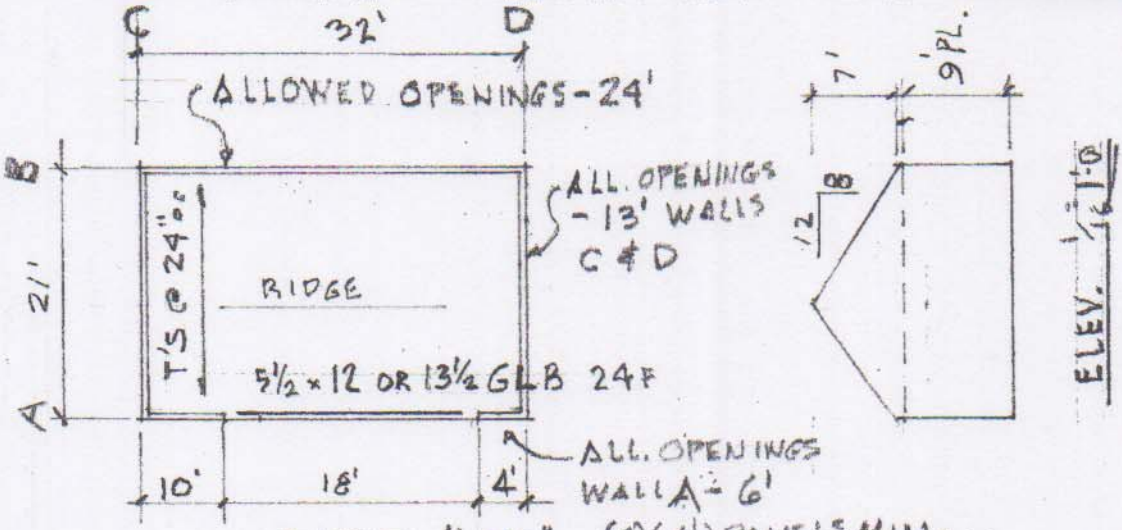
603 N. AINSWORTH AVE
TACOMA, WA. 98406

HEADER FOR 18' x 7' O.H. DOOR

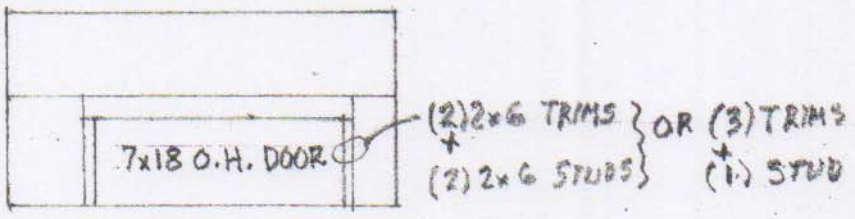
1/1

John K. Bastian SE. PE
Structural Engineer
PO Box 284
Sumner, WA. 98390
(253) 861 1775 or (253) 862-0197

DEC. 12, 2019



(2)(4') PANELS MIN.



ELEV. 1/16" = 1'-0"

LATERAL; LINES A, B

85-3-B - 10 PSF

$5' \times 10.5' \times 10 = 525^{\#}$

$+ \frac{7 \times 10.5}{2} \times 10 = 368^{\#}$

$893^{\#}$

$V_A = V_B = 893^{\#}$

8' MIN SHEAR WALL

$= 893/8 = 112$ PLF

< 258 O.K.

LINES C & D.

$W_p = 12' \times 10$ PSF $= 120$ PLF

$V_C = V_D = 120 \times 16 = 192^{\#}$

8' SHEAR WALL = 24[illegible]

< 258 O.K.

WALL NAILING IS

ALL 8d COM OR GALV BOX - 6" oc ★

EDGES; 12" oc FIELD

18' BEAM : W = 10.5 x (25 PSF SNOW + 15 PSF DL) = 420 PLF

+ 2' x 10 PSF WALL + BM = 30 PLF

T.L. = 450 PLF

$S = \frac{450(18)^2 12}{8 \times 2400 \times 1.15} = 79.24 in^3$

$I = \frac{5(450)(18^4)1728}{384(1.8 \times 10^6).9"} = 656.1 in^4$

$5\frac{1}{2} \times 12$ GLB $132 in^3$; $791.94 in^4$

★ $\Delta = .9 \times 656.1/791.94 = 0.75"$

$5\frac{1}{2} \times 13\frac{1}{2}$ $\Delta = 0.52"$

$\frac{18 \times 12}{240} = .9"$ MAX. Δ

$R = 9 \times 450 = 4050^{\#}/405 = 10^{D"}$

★ BEARING ⊥ GRAIN : (2) 2x6 = (2) 8.25 = 16.5" > 10

9' 2x6 STUD @ 10 PSF MIN. WIND - 16" oc = 13.3 PLF

$S = \frac{13.3(9)^2 12}{8 \times 1105 \times 1.33} = 1.1 in^3/2.863 = .146 + .007 = .153 \times 7 = (1)$ KING STUD

NF#2

(D.L + 5) = 30 PLF x 4/3 = 40# AXIAL/STUD $= \frac{40}{1.5 \times 5.5} = 4.85 psi/800_{Fc} = .007$ ★

JOHN K BASTIAN
STATE OF WASHINGTON
10710
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

PE
SE

John K Bastian 12/12/2019

EXPIRES 1-07-2020

Landmarks Preservation Commision

Planning and Development Services Department

747 Market Street | Room 345 | Tacoma WA 98402-3793 | 253.591.5220

APPLICATION FOR DESIGN REVIEW

Permit Number: HDR20-0002

PROPERTY INFORMATION

Building/Property Name:	W.W. Seymour Conservatory Rehabilitation
Building/Property Address:	316 S G ST
Historic/Conservation District:	Wright Park
Applicant's Name:	Sean Kelly
Applicant's Address:	1050 N 38th St seattle, WA 98103
Applicant's Phone:	2062243388
Applicant's Email:	seank@shksarchitects.com
Property Owner's Name:	METROPOLITAN PARKS DISTRICT OF TACOMA
Property Owner's Address:	

PROJECT SCOPE AND DESCRIPTION

Project Details

Application Type:	Commercial
Type of Work:	Other Minor Work
Estimated Valuation:	1400000

Application Checklist

Features to be Modified:

Included within

Program of Work:

Specifications of Materials and Finishes:

Included within

Building/Roofing Information

Roof Height:

Roof Pitch:

Roof Material:

Size of Construction:

Proposed Material:

Exterior Material:

Window Information

Window Types:

Window Trim:

Window Material:

Window Locations:

Door Information

Door Types:

Door Materials:

Door Locations:

Sign/Awning Information

Existing Signage:

Sign Dimensions:

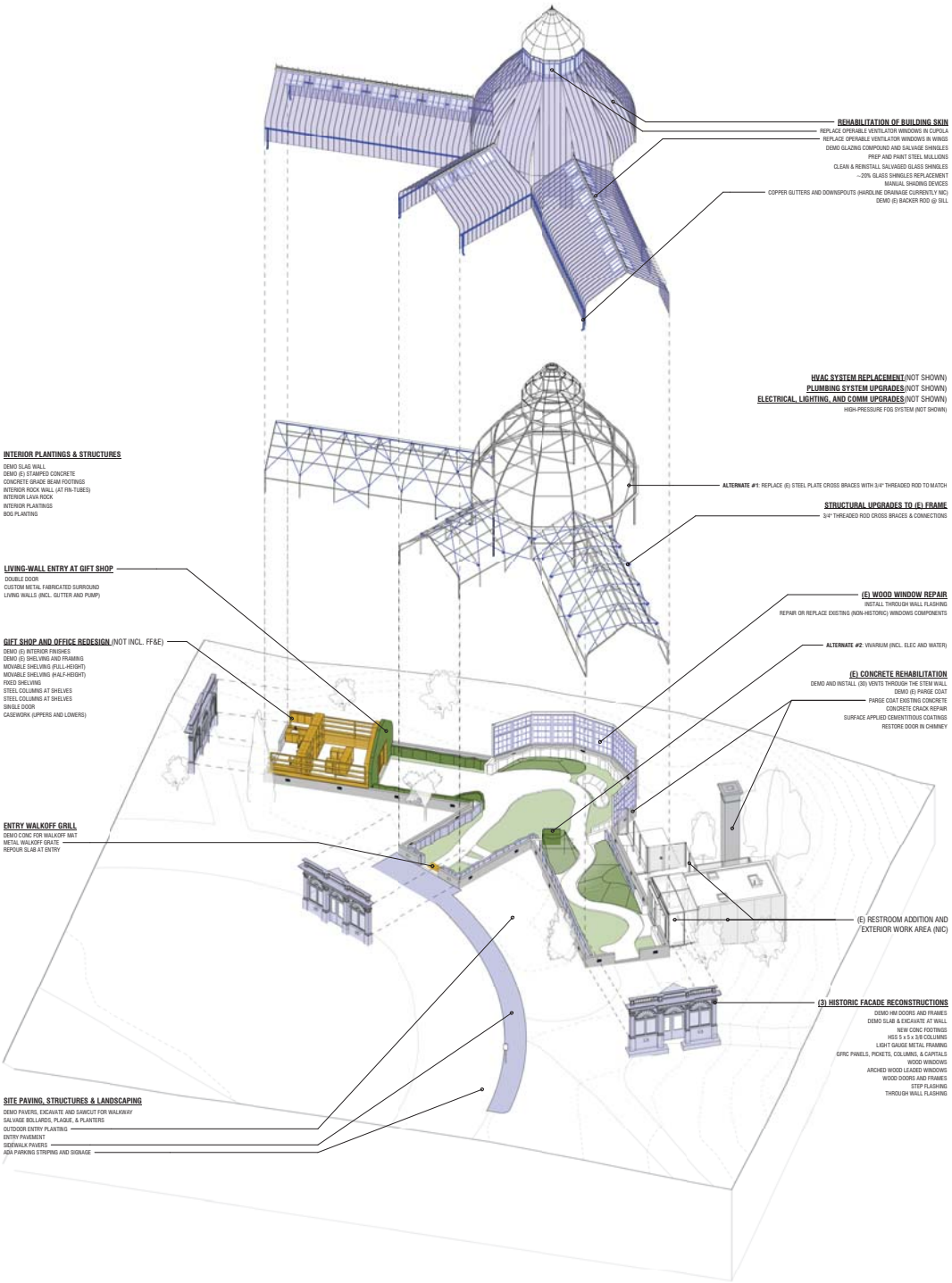
Sign Material:

Logo and Letter Size:

Lighting Specifications:

Removing or Relocating Signage:

Method of Attachment:



W.W. SEYMOUR CONSERVATORY REHABILITATION

Landmarks Design Review Application

Metro Parks Tacoma

January 8, 2020

SHKS ARCHITECTS

PROJECT OVERVIEW

This proposal is for a rehabilitation of the W.W. Seymour Botanical Conservatory. Both the W.W. Seymour Botanical Conservatory and Wright Park are listed on the National Register of Historic Places and are subject to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

The existing conservatory consists of 3,605 gross square feet (GSF) of plant display, gift shop, and offices. The existing 605 GSF basement contains mechanical, electrical, and plumbing equipment and is used for secondary storage space. A 440 GSF addition completed in 2019, extending westward from the north wing, includes accessible restrooms and storage space.

The primary purpose of this project is to rehabilitate existing building elements and reconstruct character-defining features that, over the course of more than a century, were removed, including:

- Replacement of systems that have exceeded their service lives: The mechanical system, electrical conduit, and lighting will be replaced.
- The building's seismic-performance will be upgraded to current life-safety-standards with the addition of cross-braces in the roof plane and select wall planes.
- Historic facades located at the terminus of each wing deteriorated in the late 1920's/early 1930's. This project includes reconstruction of the facades with more durable substitute materials (GFRC). The reconstruction will be based on photographic evidence.
- The existing Gift Shop and Office will be replaced with a flexible space utilizing movable shelving/partitions.
- Vertical plant display space will be introduced into the south wing along with a small bog feature.
- Low-interior walls built in 1949 and not considered part of the period of significance contain hazardous materials (heavy metals). These will be demolished and replaced with stone walls.
- The building's capacity to curate plants will be improved with the addition of manually-operated shading devices (located on the interior of the roof structure), a high-pressure fogging/misting system, and the reintroduction of intake vents through the existing concrete stem walls.
- The building's steel/glass skin will be rehabilitated by salvaging and reinstalling existing glass shingles in order to prep/repaint existing steel with a high-performance coating. The coating will be white, consistent with the original paint color.

• Existing non-original windows will be repaired or replaced, including ventilator windows on the roof and cupola and fixed windows around the west-side of the Rotunda.

• Site modifications include the addition of (1) accessible parking stall and pathway, exterior plantings on the eastside of the building, and exterior lighting at the base of the historic facades.

PROJECT BACKGROUND

SHKS has met with Tacoma Landmarks Preservation Board several times over the past four years to discuss various phases of projects proposed at the Seymour Conservatory. The initial proposal was developed through schematic design and established the framework for subsequent proposals. In short, this proposal included a renovation of the existing conservatory, as well as a new entry pavilion and subterranean addition leading to an elliptical dome, set apart from the existing conservatory in the landscape, maintaining the the ability to walk around the entire historic building.

SD SECTION *(through the existing conservatory, entry pavilion, subterannean area, and elliptical dome)*

An abbreviated version of the initial proposal was developed through design development while postponing the proposed elliptical dome for a later phase. All other elements of the proposal were retained, including a renovation of the existing conservatory, a full systems upgrade and the development of the (3) historic entry facades.

DD SITE VISUALIZATION *(the entry pavilion, and subterannean area are 'bracketed' by concrete site walls placed throughout the landscape)*

DD EXISTING CONSERVATORY ENTRY VISUALIZATION *(Historic Entry Facades are reconstructed at the end of each wing, while a new concrete site wall denotes the main building entry to the north)*

While funding was being procured for the proposed DD expansion, Metro Parks Tacoma required better accomodations for the staff and patrons, including accessible restrooms, additional storage space, and an exterior work area. A small restroom addition was proposed west of the northwing, located within the footprint of the proposed DD expansion. Elements of the restroom addition were designed to be deconstructed and integrated into the later expansion. Construction of this addition commenced in August of 2017 and was completed in Winter of 2018/2019.

RESTROOM ADDITION *(extending westward from the northwing)*

After the completion of the restroom addition, Metro Parks Tacoma was awarded a Heritage Capital Projects matching grant for renovation work to the existing conservatory. This project is a result of that grant.

EXISTING CONDITIONS

VIEW OF THE EXISTING CONSERVATORY FROM THE NORTH

VIEW OF THE EXISTING CONSERVATORY FROM THE NORTHWEST *(showing the north wing, restroom addition, existing chimney, and cupola)*

VIEW OF THE CONSERVATORY FROM THE SOUTHWEST

VIEW OF THE CONSERVATORY FROM THE SOUTHEAST

VIEW OF THE CONSERVATORY FROM THE EAST *(main entry)*

GIFT SHOP ENTRY

GLASS GASKET ENTRY *(to restroom addition)*

FLAT PLATE CROSS BRACING AND FAN AT THE ROTUNDA *(Added as part of the 2003 renovation)*

EXISTING FLAT PLATE COLUMN *(Dotted in red; At wing to rotunda transition; Added as part of the 2003 renovation)*

EXISTING SYSTEMS AT THE PEAK OF THE GABLE WINGS *(This proposal aims to simplify these systems)*

EXISTING INTAKE VENT *(The exterior of these vents were patched as part of the 2003 renovation)*

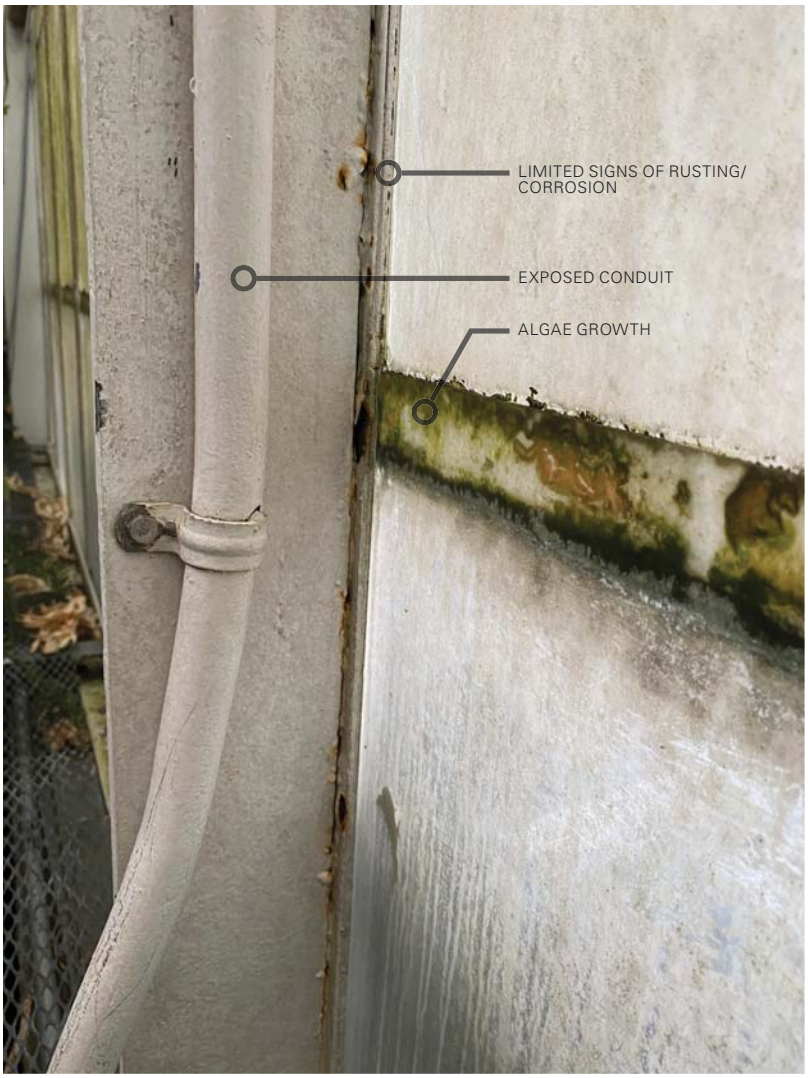
EXISTING BOILER

EXISTING SLAG WALL *(protecting fin tubes)*

EXISTING STONE WALL *(which replaced the slag walls, which contain hazardous/ heavy metals during the restroom addition)*

VENTILATOR WINDOWS *(some, but not all, were replaced as part of the 2003 renovation)*

FIXED WOOD WINDOWS *(west of the rotunda; previously replaced as part of the 1991 renovation)*



GLASS SHINGLE AND STEEL RIB CONDITION

HIGH PERFORMANCE COATING *(to match existing: used for all painted steel material during the restroom addition)*

CHIMNEY AND DOOR

MATERIALS NARRATIVE

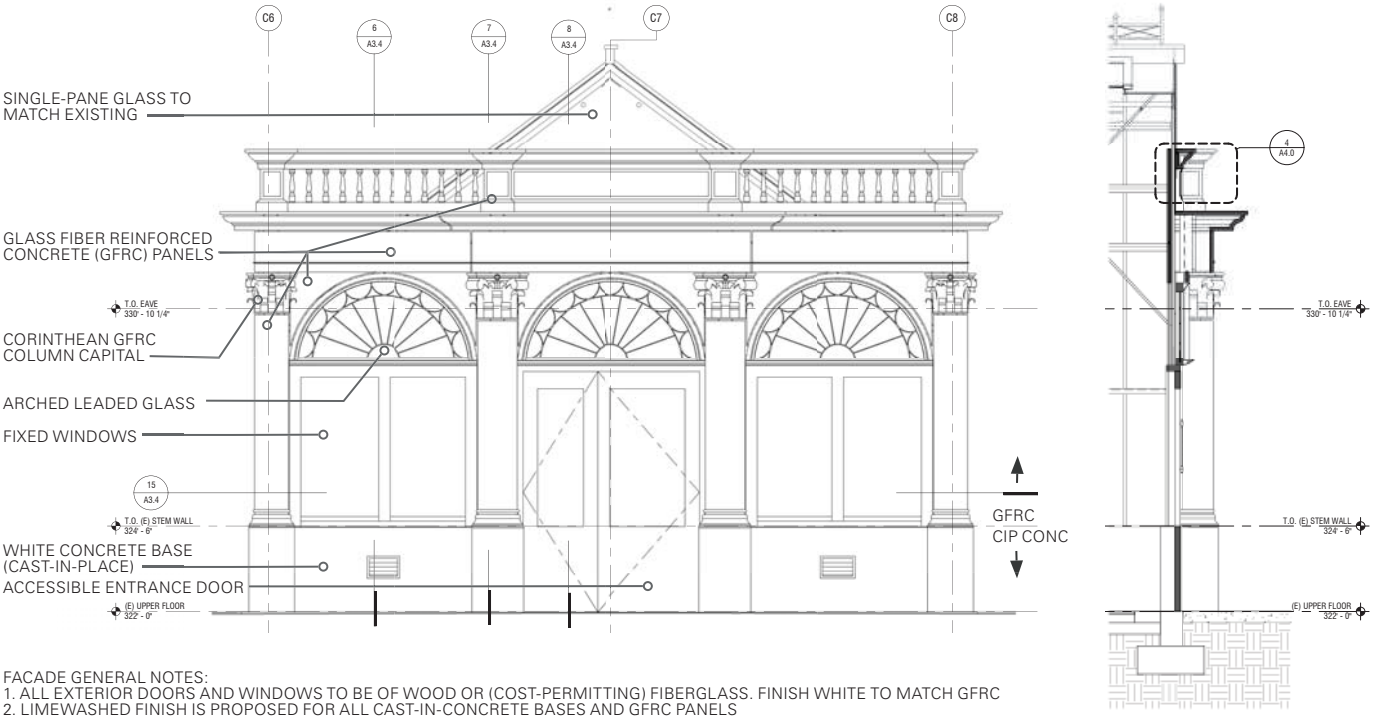
EXISTING CONSERVATORY:

A continuous concrete stem wall supports the primary framing: painted plate-steel ribs. Secondary steel "T" shape mullions support the glass-shingle skin. Wood framed ventilators are located at the ridge of each wing's roof and around the base of the central cupola. A copper cupola cap replaced the original glass cupola and ventilator. Given the high humidity environment of greenhouses in general and the age of the building, much of the original steel framing and glass shingles have been replaced during prior renovations. Photographic evidence shows these elements were not always replaced in kind, including the portion of the existing envelope impacted by this proposal. The existing steel-plate ribs are original, but the steel "T" shape mullions were replaced in 1975 and now follow a different curve at the eave condition (see additional information at the end of this document).

The low-height "slag-walls", which protect the fin-tube radiators (heating) along the perimeter of the building, were salvaged from the Asarco plant in 1949 and contain heavy metals. These walls will be demolished as part of this project.

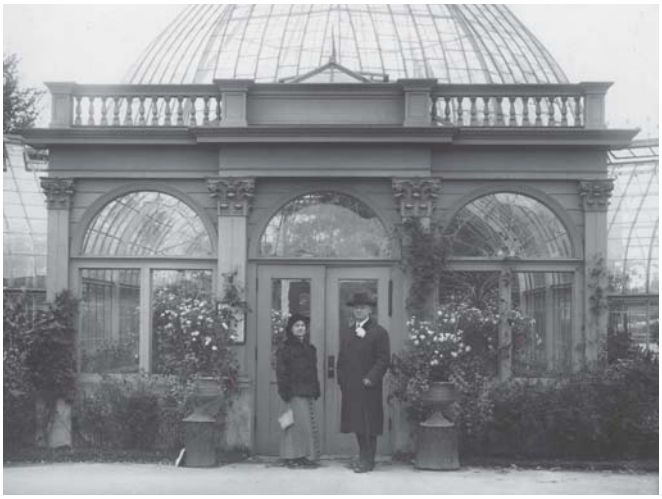
HISTORIC CONSERVATORY RECONSTRUCTIONS:

While the historic 'false front' facades were a component of the original design, their wood frames deteriorated quickly and were removed in the late 1920's or early 1930's. This was likely due to the fact that the hipped roof ends, at each of the wings, shed water towards the backs of the ornate wood facades. The historic facade reconstructions proposed will be of glass fiber reinforced concrete (GFRC), a waterproof material. To replicate the light color in the original design, the newly constructed stem wall and GFRC panels above will be cast using white cement. In addition, a limewash will be applied to exposed surfaces.



FACADE GENERAL NOTES:
1. ALL EXTERIOR DOORS AND WINDOWS TO BE OF WOOD OR (COST-PERMITTING) FIBERGLASS. FINISH WHITE TO MATCH GFRC
2. LIMEWASHED FINISH IS PROPOSED FOR ALL CAST-IN-CONCRETE BASES AND GFRC PANELS
3. THROUGH-WALL FLASHING, ATOP CIP CONC STEM WALL, SHALL BE COPPER (TO MATCH EXISTING)
4. THE SUPPORT FRAME FOR THE GFRC SHALL BE OF STRUCTURAL STEEL WITH LIGHT-GUAGE STEEL INFILL FRAMING

EAST (MAIN) ENTRY *(currently)*



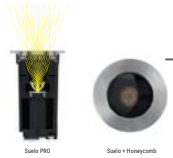
EAST (MAIN) ENTRY *(originally)*

GLASS FIBER REINFORCED CONCRETE (GFRC) PANELS

LIMEWASHED CONCRETE FINISH

COPPER GUTTER AND DOWNSPOUT (TO MATCH EXISTING)

NOTE: (MOST) PLANTINGS HIDDEN FOR CLARITY



RECESSED UPLIGHTS, (1) @ EA PIER

CONCRETE SLAB-ON-GRADE

CEMENTITIOUS PARGE COAT *(TO MATCH EXISTING)*

SAND SET PAVERS

HIGH PERFORMANCE COATING ON ALL FERROUS METAL *(TO MATCH EXISTING)*

VINYL COATED POLYESTER SHADE FABRIC, WHITE (NOT SHOWN FOR CLARITY IN RENDERING BELOW, LOCATED AT ALL ROOF PLANES AT WINGS). FASTENED TO EXISTING STRUCTURAL WITH CLAMPS

STAINLESS STEEL 3/4" DIA THREADED ROD AND CLEVIS *(MATTE FINISH)*

NOTE: (MOST) PLANTINGS HIDDEN FOR CLARITY

CUSTOM METAL FABRICATED 'THRESHOLD FROM STEEL PLATE, AND ALUMINUM FRAMED GLASS ENTRANCE DOOR, WHITE *(TO MATCH RESTROOM ADDITION)*

LIVING WALL

COWBOY COFFEE DRYSTACK STONE WALL *(TO MATCH RESTROOM ADDITION)*

PRODUCT DATA

ENTRY DOOR *(AT GIFT SHOP):*

THE LOOK YOU WANT, THE PERFORMANCE YOU NEED

AESTHETICS:

- Ultra-Narrow 1-1/8" Vertical Stiles and 2-1/2" System Depth
- Premium Cladding in Customizable Finishes
- Handle Hardware — Including Panic Devices — Mounts onto 1" Insulating Glass
- SEAL-LOC™ Clamping Mechanism Eliminates Need for Glass Stops
- Optional Integrated LED Lighting System with Roscolux Film
- Doors Can be Specified Up to 10 Feet High
- Complete Entrance System Including: Corners, Thresholds, Wall and Doorway Jambs, Vertical Mullions, and Fixed Lite Rails

PERFORMANCE:

- Thermally Broken Framing and Cladding
- Entice® Entrances have U-factors as low as 0.43
- Entice® Storefront has U-factors as low as 0.33
- Complies with California Title 24 Thermal and Air Infiltration Requirements
- NFRC Rated and Meets ASHRAE 90.1-2016 Air Infiltration Requirements
- Compatible with All High-Solar and Thermal Efficient Glass
- Entice® Entrance Passes ASTM E331 Water Penetration at 0.0 psf (AAMA Limited Water)
- Entice® Entrance Passes AAMA 1304 Forced Entry Resistance
- Optional Door Seal Kits for Reduced Sound Infiltration

Maximum Recommended Door Size:

- 36" W x 120" H – 23 PSF Wind Load
- 42" W x 111" H – 25 PSF Wind Load
- 48" W x 108" H – 24 PSF Wind Load

INSULATING TEMPERED GLASS INCLUDED

CRL US ALUMINUM MANUFACTURED IN THE USA

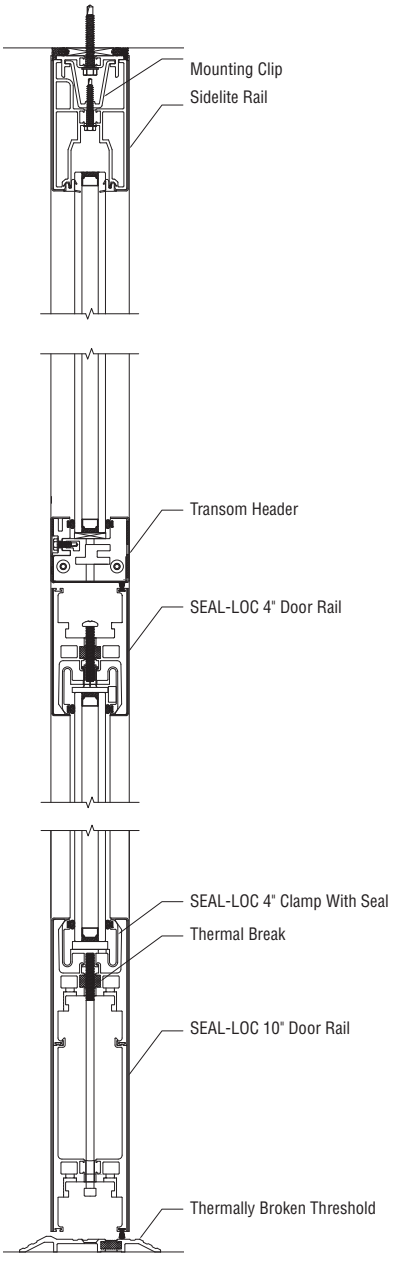
crl-arch.com/ENTICE | C.R. LAURENCE ARCHITECTURAL PRODUCTS AND SERVICES | (800) 421.6144 EXT. 15305

03

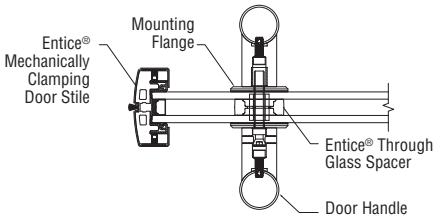
ENTICE® SERIES ENTRANCE SYSTEM
TYPICAL DETAILS

For 1" (25 mm) Insulating Glazing

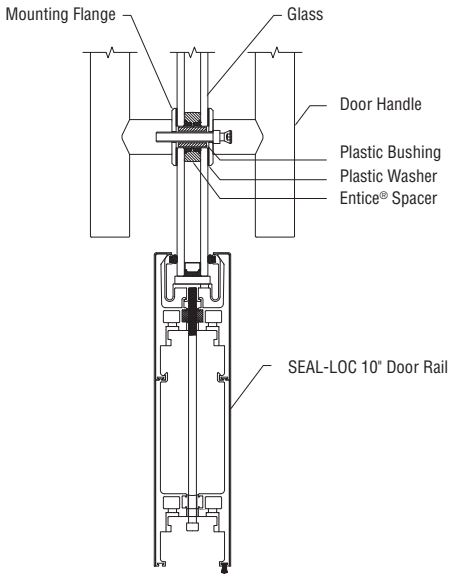
For Specifications, Details, and Testing Data go to **usalum.com**.



Section Through Door With Transom



Section Through Door Stile and Handle



Section Through Door Rail and Handle

NOT TO SCALE

AVDB4188_3/16

PHONE: **(800) 262-5151 ext. 5305** | FAX: **(866) 262-3299** | Email: **usalum@crlaurence.com** | Website: **usalum.com**

REMOVED, REPLACED, OR ADDED ITEMS

REMOVED ITEMS

- EXISTING CONCRETE IN STEM WALL FOR INTAKE VENTS
- CORROSION ON EXISTING STEEL
- BACKERROD AT EXISTING SILL

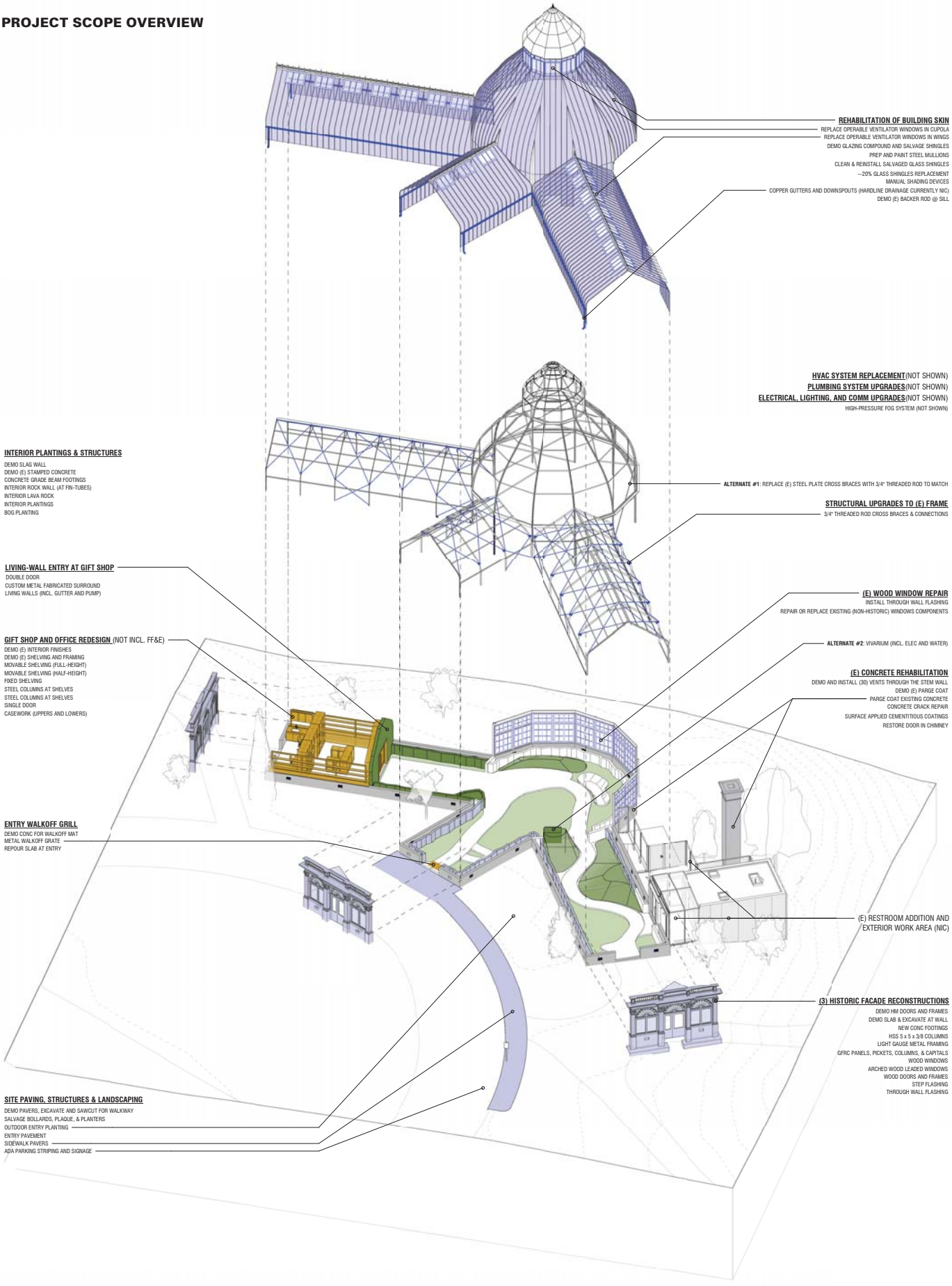
REPLACED ITEMS

- MECHANICAL SYSTEM
- ELECTRICAL CONDUIT AND LIGHTING FIXTURES
- PLUMBING FIXTURES
- PARGE COAT ON EXISTING STEM WALL AND CHIMNEY
- PAINTED FINISHES
- SLAG WALLS. *(To be replaced with drystacked stone not containing hazardous materials)*
- ENTRY PAVING AT EAST ENTRY
- GIFT SHOP CASEWORK AND SHELVING
- OPERABLE VENTILATOR WINDOWS IN ROOFS AND CUPOLA BASE
- INTERIOR AND EXTERIOR PLANTINGS
- ~20% OF GLASS SHINGLES

ADDED ITEMS

- (30) INTAKE VENTS THROUGH STEM WALL
- 3/4" THREADED ROD CROSS BRACES AND CONNECTIONS
- (3) HISTORIC (GFRC) FACADE RECONSTRUCTIONS WITH DOORS AND LEADED WINDOWS
- LIVING WALL DISPLAY AND BOG FEATURE
- ENTRY WALKOFF MAT (within non-historic slab on grade)
- COPPER GUTTERS AND DOWNSPOUTS *(to match historic)*
- HIGH PRESSURE FOGGING SYSTEM
- INTERIOR MANUALLY INSTALLED SHADING DEVICES
- SAND-SET PAVERS AT MAIN ENTRY

PROJECT SCOPE OVERVIEW



REHABILITATION OF BUILDING SKIN
REPLACE OPERABLE VENTILATOR WINDOWS IN CUPOLA
REPLACE OPERABLE VENTILATOR WINDOWS IN WINGS
DEMO GLAZING COMPOUND AND SALVAGE SHINGLES
PREP AND PAINT STEEL MULLIONS
CLEAN & REINSTALL SALVAGED GLASS SHINGLES
~20% GLASS SHINGLES REPLACEMENT
MANUAL SHADING DEVICES
COPPER GUTTERS AND DOWNSPOUTS (HARDLINE DRAINAGE CURRENTLY NIC)
DEMO (E) BACKER ROD @ SILL

HVAC SYSTEM REPLACEMENT (NOT SHOWN)
PLUMBING SYSTEM UPGRADES (NOT SHOWN)
ELECTRICAL, LIGHTING, AND COMM UPGRADES (NOT SHOWN)
HIGH-PRESSURE FOG SYSTEM (NOT SHOWN)

INTERIOR PLANTINGS & STRUCTURES
DEMO SLAG WALL
DEMO (E) STAMPED CONCRETE
CONCRETE GRADE BEAM FOOTINGS
INTERIOR ROCK WALL (AT FIN-TUBES)
INTERIOR LAVA ROCK
INTERIOR PLANTINGS
BOG PLANTING

ALTERNATE #1: REPLACE (E) STEEL PLATE CROSS BRACES WITH 3/4" THREADED ROD TO MATCH

STRUCTURAL UPGRADES TO (E) FRAME
3/4" THREADED ROD CROSS BRACES & CONNECTIONS

LIVING-WALL ENTRY AT GIFT SHOP
DOUBLE DOOR
CUSTOM METAL FABRICATED SURROUND
LIVING WALLS (INCL. GUTTER AND PUMP)

(E) WOOD WINDOW REPAIR
INSTALL THROUGH WALL FLASHING
REPAIR OR REPLACE EXISTING (NON-HISTORIC) WINDOWS COMPONENTS

GIFT SHOP AND OFFICE REDESIGN (NOT INCL. FF&E)
DEMO (E) INTERIOR FINISHES
DEMO (E) SHELVING AND FRAMING
MOVABLE SHELVING (FULL-HEIGHT)
MOVABLE SHELVING (HALF-HEIGHT)
FIXED SHELVING
STEEL COLUMNS AT SHELVES
STEEL COLUMNS AT SHELVES
SINGLE DOOR
CASEWORK (UPPERS AND LOWERS)

ALTERNATE #2: VIVARIUM (INCL. ELEC AND WATER)

(E) CONCRETE REHABILITATION
DEMO AND INSTALL (30) VENTS THROUGH THE STEM WALL
DEMO (E) PARGE COAT
PARGE COAT EXISTING CONCRETE
CONCRETE CRACK REPAIR
SURFACE APPLIED CEMENTITIOUS COATINGS
RESTORE DOOR IN CHIMNEY

ENTRY WALKOFF GRILL
DEMO CONC FOR WALKOFF MAT
METAL WALKOFF GRATE
REPOUR SLAB AT ENTRY

(E) RESTROOM ADDITION AND EXTERIOR WORK AREA (NIC)

(3) HISTORIC FACADE RECONSTRUCTIONS
DEMO HM DOORS AND FRAMES
DEMO SLAB & EXCAVATE AT WALL
NEW CONC FOOTINGS
HSS 5 x 5 x 3/8 COLUMNS
LIGHT GAUGE METAL FRAMING
GFRC PANELS, PICKETS, COLUMNS, & CAPITALS
WOOD WINDOWS
ARCHED WOOD LEADED WINDOWS
WOOD DOORS AND FRAMES
STEP FLASHING
THROUGH WALL FLASHING

SITE PAVING, STRUCTURES & LANDSCAPING
DEMO PAVERS, EXCAVATE AND SAWCUT FOR WALKWAY
SALVAGE BOLLARDS, PLAQUE, & PLANTERS
OUTDOOR ENTRY PLANTING
ENTRY PAVEMENT
SIDEWALK PAVERS
ADA PARKING STRIPING AND SIGNAGE

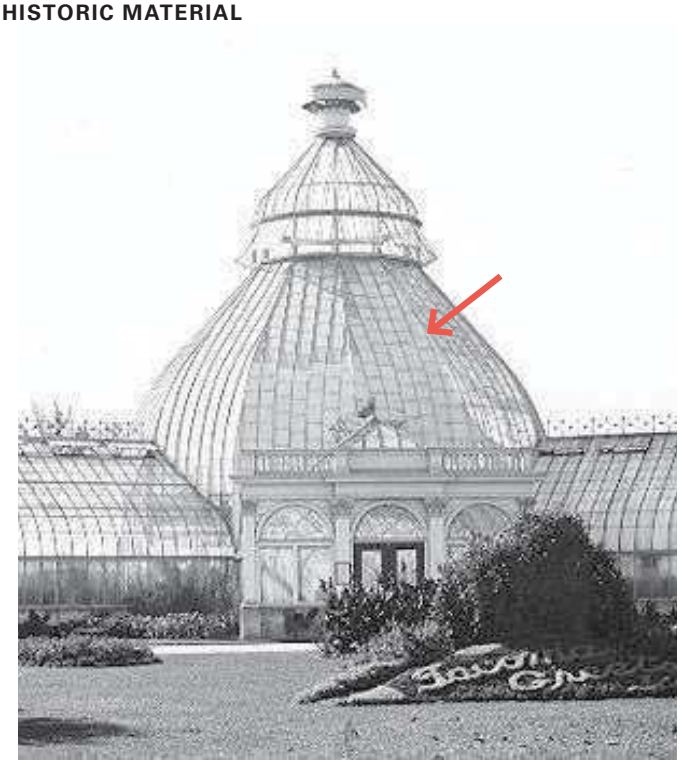
DRAWINGS

60% CONSTRUCTION DOCUMENTS (https://shksarchitects.sharefile.com/d-s08f6f7ee3ee4a9ba)

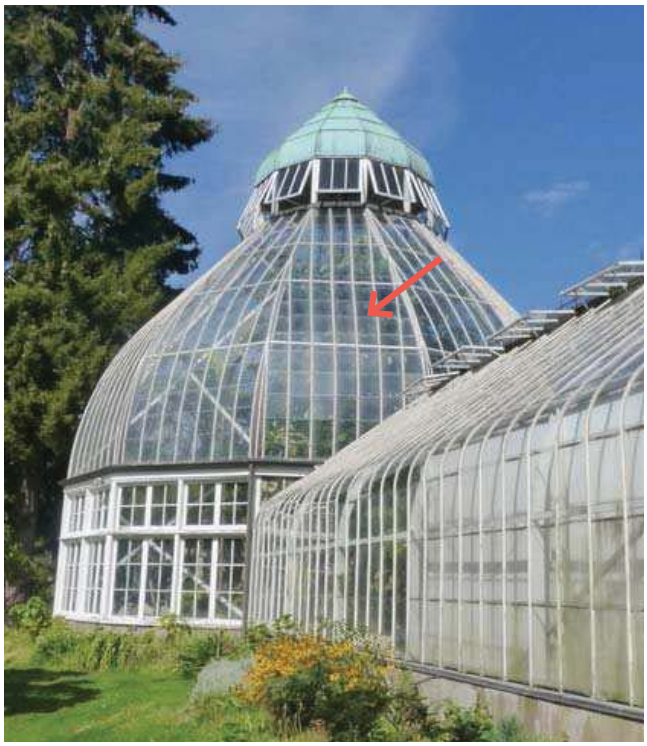
SHEET INDEX

ADDITIONAL INFORMATION

HISTORIC MATERIAL



Historically, glass at the dome had staggered joints. Photo courtesy of University of Washington.



Today, joints are even at the dome.

Historically, glass followed steel framing. Photo courtesy of Washington State Historical Society.

Today, glass curves away from the steel frame.

W.W. SEYMOUR CONSERVATORY REHABILITATION

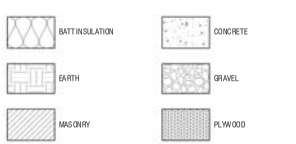
PROJECT NUMBER _____

SHKS ARCHITECTS
1050 N. 38th St.
Seattle, WA 98103
ph. 206.675.9151
www.shksarchitects.com

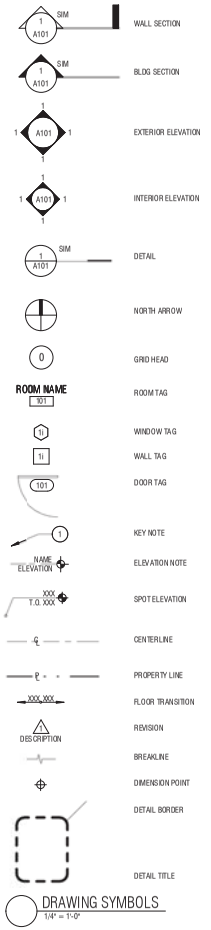
ABBREVIATIONS

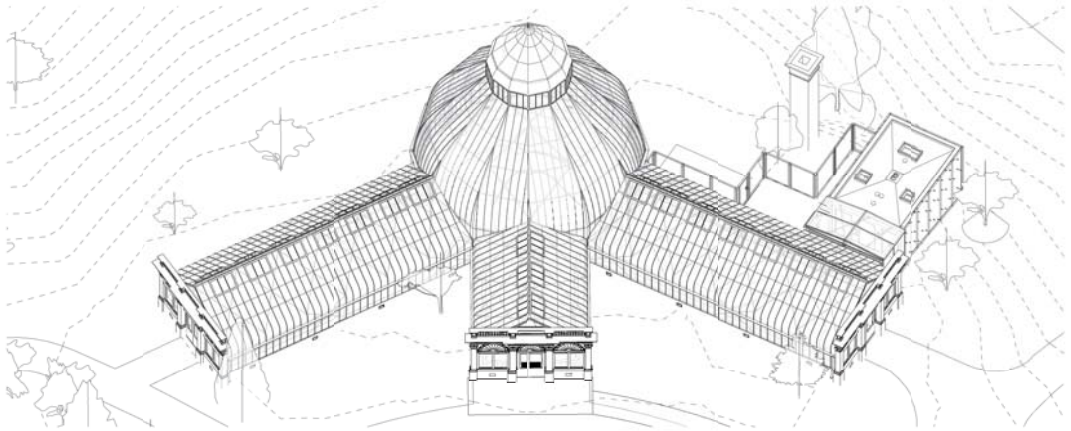
&	AND	GA	GAUGE	QT	QUARRY TILE
L	ANGLE	GALV	GALVANIZED		
@	AT	GB	GRAB BAR	R or RAD	RADIUS
⌀	DIAMETER	GL	GLASS	RB	RESILIENT BASE
#	POUND OR NUMBER	GLB	GLU-LAM BEAM	RCP	REFLECTED CEILING PLAN
(E)	EXISTING	GND	GROUND	RD	ROOF DRAIN
	CENTERLINE	GR	GRADE	REF	REFERENCE
		GR'D	GROUTED	REFR	REFRIGERATOR
A.B.	ANCHOR BOLT	GWB	GYPSUM WALL BOARD	REINF	REINFORCED
ABV	ABOVE			RELOC	RELOCATE
AC	AIR CONDITIONING	HB	HOSE BIBB	REQ'D	REQUIRED
ACT	ACOUSTIC CEILING TILE	HC	HANDICAP	RES	RESILIENT
ACU	AIR CONDITION UNIT	HCMU	HOLLOW CLAY MASONRY UNIT	RM	ROOM
ADJ	ADJUSTABLE	HDWD	HARDWOOD	RO	ROUGH OPENING
AFF	ABOVE FINISHED FLOOR	HDWE	HARDWARE	RV	ROOF VENT
ALT	ALTERNATE	HPC	HIGH-PERFORMANCE COATING	RL	RAIN WATER LEADER
ALUM	ALUMINUM	HT	HEIGHT		
APPROX	APPROXIMATELY	HM	HOLLOW METAL	S	SOUTH
		HR	HOUR	SA	SMOKE ALARM
BLDG	BUILDING	HORIZ	HORIZONTAL	SC	SOLID CORE
BLW	BELOW	I.D.	INSIDE DIAMETER	SCHED	SCHEDULE
B.O.	BOTTOM OF	INCL.	INCLUDING	SECT	SECTION
		INSUL	INSULATION	SG	SAFETY GLASS
CB	CATCH BASIN	INT	INTERIOR	SHT	SHEET
CBB	CEMENT BACKER BOARD	IGU	INSULATED GLAZED UNIT	SIM	SIMILAR
CEM	CEMENT			SPEC	SPECIFICATION
CIP	CAST-IN-PLACE	JAN	JANITOR	SQ	SQUARE
CJ	CONTROL JOINT	JT	JOINT	SS	STAINLESS STEEL
CL	CENTERLINE			STA	STATION
CLG	CEILING	KIT	KITCHEN	STD	STANDARD
CLR	CLEAR			STL	STEEL
CO	CLEAN OUT	LAB	LABORATORY	STN	STAIN
COL	COLUMN	LAM	LAMINATE	STOR	STORAGE
CONC	CONCRETE	LAV	LAVATORY	STRUCT	STRUCTURE
COND	CONDITION	LKR	LOCKER	SOG	SLAB ON GRADE
CONT	CONTINUOUS	LOC	LOCATE	SUSP	SUSPENDED
CPT	CARPET	LT	LIGHT	SYM	SYMMETRICAL
CT	CERAMIC TILE	LVL	LAMINATED VENEER LUMBER		
				T, TMP	TEMPERED
DBL	DOUBLE	M	MENS	TAG	TONGUE & GROOVE
DEMO	DEMOLISH	MATL	MATERIAL	TEL	TELEPHONE
DF	DRINKING FOUNTAIN	MAX	MAXIMUM	TER	TERRAZZO
DIA	DIAMETER	MC	MEDICINE CABINET	THK	THICK
DIFF	DIFFUSER	MECH	MECHANICAL	T.O.	TOP OF
DIM	DIMENSION	MEMB	MEMBRANE	TPD	TOILET PAPER DISPENSER
DISP	DISPENSER	MFR	MANUFACTURER	TS	TUBE STEEL
DN	DOWN	MIN	MINIMUM	TV	TELEVISION
DR	DOOR	MIR	MIRROR	TYP	TYPICAL
DS	DOWNSPOUT	MISC	MISCELLANEOUS		
DTL	DETAIL	MH	MANHOLE		
DW	DISHWASHER	MO	MASONRY OPENING	UL	UNDERWRITERS' LABORATORIES
		MTD	MOUNTED	UNO	UNLESS NOTED OTHERWISE
E	EAST	MTL	METAL		
EA	EACH	MULL	MULLION	VCT	VINYL COMPOSITION TILE
ECS	EXTERIOR COMPOSITE SIDING			VERT	VERTICAL
EF	EXHAUST FAN	N	NORTH	VEST	VESTIBULE
EJ	EXPANSION JOINT	NA	NOT APPLICABLE	VIF	VERIFY IN FIELD
EL	ELEVATION	NIC	NOT IN CONTRACT	VTR	VENT THRU ROOF
ELEC	ELECTRICAL	NOM	NOMINAL		
ELEV	ELEVATOR	NTS	NOT TO SCALE	W	WEST
EMERG	EMERGENCY	NR	NOT RATED	W/	WITH
EQ	EQUAL			WC	WATER CLOSET
EXP	EXPANSION	OA	OVERALL	WD	WOOD
		OBS	OBSCURE	WF	WIDE FLANGE
FBP	FIBER BOARD PANEL	O.C.	ON CENTER	WHS	WELDED HEADED STUD
FD	FLOOR DRAIN	O.D.	OUTSIDE DIAMETER	W/O	WITHOUT
FE	FIRE EXTINGUISHER	OFF	OFFICE	WOM	WALK OFF MAT
FF	FINISH FLOOR	OPNG	OPENING	WM	WOMEN'S
FH	FIRE HYDRANT	OPP	OPPOSITE	WP	WATERPROOFING
FIN	FINISH			WR	WATER RESISTANT
FLR	FLOOR	PC	PRECAST CONCRETE	WRB	WEATHER-RESISTIVE BARRIER
F.O.	FACE OF	PL	PLATE	WS CT	WAINSCOT
FOIC	FURNISHED BY OWNER, INSTALL BY CONTRACTOR	PLAS	PLASTER	WT	WEIGHT
		PLY	PLYWOOD		
FOIO	FURNISHED BY OWNER INSTALL BY OWNER	P.LAM	PLASTIC LAMINATE		
		PNT	PAINT		
FR	FIRE RESISTANT	PR	PAIR		
FS	FLOOR SINK	PSL	PARALLEL STRAND LUMBER		
		PT	PRESSURE TREATED		
		PTN	PARTITION		
		PVB	POLYVINYL BUTYRAL		

MATERIAL SYMBOLS



MATERIAL SYMBOLS





GENERAL NOTES

1. REFER TO LANDSCAPE, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL NOTES AND SYMBOLS.
2. MATERIALS, ASSEMBLIES AND NOTED ITEMS ARE NEW UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL VERIFY CONDITIONS. NOTIFY THE ARCHITECT OF ANY CONDITIONS INCONSISTENT WITH THE INTENT OF THE DRAWINGS PRIOR TO STARTING OR CONTINUING WORK IN THE AREA CONCERNED.

CODE:

1. ALL WORK SHALL CONFORM TO APPLICABLE CODES AND LOCAL BUILDING REQUIREMENTS, WHICH INCLUDE THE MOST CURRENT EDITIONS OF THE INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS, INTERNATIONAL MECHANICAL CODE (IMC), NATIONAL ELECTRICAL CODE (NEC), INTERNATIONAL FIRE CODE (IFC), AND WASHINGTON STATE ENERGY CODE (WEC).
2. REFER TO WINDOW SCHEDULE FOR WINDOW SIZES AND TYPES. ALL GLAZING WITHIN 18" OF INTERIOR FLOOR, EXTERIOR WALKING SURFACE OR WITHIN 24" OF A DOOR IN ANY POSITION TO BE TEMPERED GLASS UNLESS INDICATED OTHERWISE.
3. MECHANICAL, ELECTRICAL AND PLUMBING PERMITS TO BE APPLIED FOR UNDER SEPARATE APPLICATION BY CONTRACTOR.
4. PROVIDE FIREBLOCKS AND DRAFTSTOPS PER IBC.
5. PROVIDE CLOSURE MEETING THE REQUIREMENT OF GOVERNING FIRE AUTHORITIES BETWEEN FIRE RATED FLOORS, SHAFTS AND BUILDING PARTITIONS AND PENETRATING, PIPES, CONDUIT, MECHANICAL, ELECTRICAL, AND OTHER ITEMS.
6. RECESSES LOCATED WITHIN FIRE RATED PARTITIONS SHALL BE CONSTRUCTED TO MAINTAIN THE REQUIRED FIRE RATING OF THE PARTITION.
7. EXISTING FIRE EXTINGUISHERS AND CABINETS ARE NOT SHOWN ON PLANS. PROTECT EXISTING FIRE EXTINGUISHERS AND CABINETS (RECESSED OR SURFACE MOUNTED) FROM DAMAGE.

HAZMAT:

1. HAZARDOUS MATERIAL REMOVAL & DISPOSAL: BEFORE BEGINNING ANY DEMOLITION OR OTHER WORK, COMPLY WITH DOCUMENTS PREPARED BY THE OWNER'S HAZARDOUS MATERIALS CONSULTANT. THIS APPLIES TO DEMOLITION, DISPOSAL AND CONSTRUCTION OPERATIONS ASSOCIATED WITH THE PROJECT. THE CONTRACTOR WILL SUSPEND WORK IMMEDIATELY AND NOTIFY THE OWNER IF MATERIALS SUSPECTED OF BEING HAZARDOUS, AND NOT PREVIOUSLY IDENTIFIED, ARE ENCOUNTERED IN THE COURSE OF THE CONTRACTOR'S WORK.

DEMOLITION:

1. WHERE ITEMS ARE INDICATED ON PLANS TO BE DEMOLISHED, IT SHALL MEAN THE COMPLETE REMOVAL AND DISPOSAL OF THE ITEM INDICATED UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR CUTTING AND PATCHING WORK.

DIMENSIONS:

1. DO NOT SCALE DRAWINGS.
2. VERIFY DIMENSIONS SHOWN ON DRAWINGS. USE ONLY DIMENSIONS INDICATED. PRIOR TO STARTING OR CONTINUING WORK, NOTIFY ARCHITECT OF DISCREPANCIES OR CONDITIONS INCONSISTENT WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS.
3. DIMENSIONS ARE TO FACE OF CONCRETE, FACE OF MASONRY, OR CENTERLINE OF STUD, UNLESS OTHERWISE NOTED.
4. FINISHED SURFACE OF INFILL OR EXTENSIONS OF EXISTING PARTITIONS SHALL ALIGN WITH ADJACENT EXISTING SURFACES UNLESS OTHERWISE NOTED.
5. VERTICAL DIMENSIONS ARE MEASURED FROM STRUCTURAL SLAB, TOP OF STEEL OR TOP OF SHEATHING, UNLESS NOTED OTHERWISE.
6. DOORS NOT LOCATED BY DIMENSION ON PLANS SHALL BE SIX INCHES FROM FACE OF ADJOINING PARTITION TO HINGE EDGE OF DOOR OPENING. PROVIDE MINIMUM 18" CLEAR FROM FACE OF ADJOINING PARTITION OR OTHER OBSTRUCTION TO JAMB EDGE OF DOOR OPENING, UNLESS OTHERWISE NOTED. NOTIFY ARCHITECT IF REQUIRED CLEARANCES ARE NOT AVAILABLE.

COORDINATION:

1. COORDINATE ALL OPERATIONS WITH OWNER, SUCH AS AREAS USED FOR MATERIAL STORAGE, ACCESS TO AND FROM THE SITE, TIMING OF WORK AND REQUIREMENTS OF NOISE ORDINANCE. INSTALL DUST AND NOISE BARRIERS AS REQUIRED TO PROTECT EXISTING ADJACENT BUILDINGS AND OCCUPANTS AND TO MAINTAIN AN ENVIRONMENT SUITABLE TO PERMIT CONTINUED OCCUPANCY OF SUBJECT AND ADJACENT BUILDINGS.
2. REVIEW DEMOLITION DRAWINGS. PATCH AND REPAIR ALL EXISTING SURFACES AFFECTED BY DEMOLITION WORK.
3. VERIFY LOCATIONS OF EXISTING UTILITIES. CAP, MARK AND PROTECT AS NECESSARY TO COMPLETE THE WORK.
4. REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND PROVIDE ROUGH-INS THROUGH SLABS, BEAMS, WALLS, CEILINGS, AND ROOFS FOR PIPES, CONDUITS, JUNCTION BOXES, CABINETS AND EQUIPMENT. VERIFY SIZE AND LOCATION BEFORE PROCEEDING WITH WORK. COORDINATE WITH INSTALLATION REQUIREMENTS. PATCH AND REPAIR EXISTING SURFACES AS NECESSARY TO COMPLETE WORK.
5. COORDINATE AND PROVIDE REQUIRED PENETRATIONS AND PATCHING WITH INDIVIDUAL SUBCONTRACTORS TO SUIT NEW WORK.
6. CONTRACTOR TO OBTAIN AND VERIFY ROUGH-IN DIMENSION REQUIREMENTS FOR CABINETRY, EQUIPMENT, ACCESSORIES AND THE LIKE INCLUDING THOSE DESIGNATED FOIC AND FOIO. CONTRACTOR TO PROVIDE BACKING, BLOCKING, SUPPORT AS REQUIRED FOR INSTALLATION. CONTRACTOR TO COORDINATE POWER, DATA, COMMUNICATIONS AND SECURITY REQUIREMENTS FOR FOIC AND FOIO EQUIPMENT WHERE SERVICES ARE REQUIRED. INCLUDE STUB OUTS AND CONNECTIONS. VERIFY AND COORDINATE DIMENSIONS OF FOIC AND FOIO ITEMS PRIOR TO PROCEEDING WITH WORK. INCLUDE STUB OUTS FOR FUTURE WORK.
7. PIPING, CONDUITS, ETC. SHALL BE CONCEALED IN WALLS, CHASES, ABOVE SUSPENDED CEILINGS, BELOW FLOORS OR BE FURRED-IN IN ROOMS WITH EXISTING CEILINGS, UNLESS OTHERWISE NOTED. DO NOT CONCEAL PIPING, CONDUITS, ETC. IN ELECTRICAL, MECHANICAL, AND COMMUNICATION ROOMS.
8. CAREFULLY COORDINATE MECHANICAL, ELECTRICAL, AND BUILDING SYSTEM INSTALLATIONS WITH EXISTING STRUCTURE AND BUILDING SYSTEMS.
9. "REMOVE" MEANS TO COMPLETELY AND PERMANENTLY REMOVE FROM THE PROJECT.
10. REFER TO LIGHTING PLAN AND ELECTRICAL DRAWINGS FOR ELECTRICAL DEVICES AND LOCATIONS. COORDINATE AND REVIEW DEVICE LOCATIONS WITH ARCHITECT IN FIELD PRIOR TO ROUGH-IN.

PROJECT INFORMATION

PROJECT OWNER:
METRO PARKS TACOMA

PROJECT MANAGER:
KRISTI EVANS

SCOPE DESCRIPTION:
REHABILITATION TO (E) CONSERVATORY INCLUDING VOLUNTARY STRUCTURAL UPGRADES, HISTORIC FACADE RECONSTRUCTIONS, EXTERIOR ENVELOPE REPAIRS, INTERIOR RENOVATION OF GIFT SHOP AND OFFICE, MECHANICAL SYSTEM REPLACEMENT, ELECTRICAL AND PLUMBING UPGRADES, SITE WORK AND (1) ACCESSIBLE PARKING STALL

1. PROJECT ADDRESS:
316 S G STREET
TACOMA, WA 98405

2. PARCEL NUMBER
0321324003

3. LEGAL DESCRIPTION:
ALL OF BLOCKS 316, 317, 116, 117, 216, AND 417 AND SO MUCH OF BLOCKS 516 AND 517 AS LIES NORTH OF THE FIFTH STANDARD PARALLEL, SAID BLOCKS ARE LAID OUT AND DELINEATED ON THE PLAT ENTITLED "MAP OF NEW TACOMA, WASHINGTON TERRITORY" FILED IN THE OFFICE OF COUNTY AUDITOR OF SAID COUNTY OF PIERCE ON THE THIRD DAY OF FEBRUARY, 1875; ALSO ALL THAT CERTAIN STRIP, PIECE OR PARCEL OF LAND SITUATE IN SAID CITY NINETEEN HUNDRED FEET IN LENGTH FROM NORTH TO SOUTH AND TWO HUNDRED AND EIGHTY FEET IN WIDTH FROM EAST TO WEST BOUNDED NORTHERLY BY SOUTH FIRST STREET AND DIVISION AVENUE, WESTERLY BY YAKIMA AVENUE, SOUTHERLY BY SOUTH SIXTH STREET, AS SAID STEETS AND AVENUES ARE LAID OUT AND DELINEATED ON SAID "MAP OF NEW TACOMA, WASHINGTON TERRITORY" AND BOUNDED EASTERLY BY "G" STREET AS SAID STREET IS LAID OUT AND DELINEATED ON THE PLAT ENTITLED "THE TACOMA LAND COMPANY'S THIRD ADDITION TO TACOMA, WASHINGTON TERRITORY" FILED FOR RECORD IN SAID COUNTY AUDITOR'S OFFICE ON THE 21ST DAY OF JULY 1885 AND RECORDED AT PAGE 93 OF THE RECORD OF PLATS IN SAID OFFICE.

4. LOT AREA:
1,184,832 SF

5. STATUS:
CITY OF TACOMA LANDMARK AND NATIONAL REGISTER OF PROPERTY

5. ZONE:
WRIGHT PARK, R-3, SPECIAL USE

6. CURRENT USE:
CONSERVATORY

7. YEAR BUILT:
1908

8. (E) BLDG AREA:
PLANT DISPLAY: 3,500 GSF, 3,460 NSF
BASEMENT: 560 GSF

9. (E) LOT COVERAGE:
1,184,832 SF (27.20 ACRES), NO CHANGE

10. HT LIMIT:
35 FT

11. PARKING QUANTITY:
NO CHANGE

12. REQUIRED SETBACKS:
20 FT, FRONT; 5 FT, SIDE; 25 FT, REAR. NO CHANGE

DESIGN TEAM

ARCHITECT:
SHKS ARCHITECTS
1050 NORTH 38TH ST
SEATTLE, WA 98103
TEL: 206.675.9151
CONTACT: SEAN KELLY
EMAIL: seank@shksarchitects.com

LANDSCAPE ARCHITECT:
SITE WORKSHOP
222 ETRURIA ST., SUITE 200
SEATTLE, WA 98109
TEL: 206.285.3026
CONTACT: CLAYTON BEAUDOIN
EMAIL: claytonb@siteworkshop.net

LIGHTING DESIGNER:
BLANCA LIGHTING
3131 WESTERN AVE, SUITE 316
SEATTLE, WA 98121
TEL: 253.383.2422
CONTACT: LUCRECIA BLANCO
EMAIL: LBlanco@blancalighting.com

STRUCTURAL ENGINEER:
AHBL
2215 NORTH 30TH STREET, SUITE 300
TACOMA,WA 98403-3350
TEL: 253.383.2422
CONTACT: KEN LELAND
EMAIL: kleland@ahbl.com

MECHANICAL ENGINEER:
FSI CONSULTING ENGINEERS
506 SECOND AVENUE, SUITE 700
SEATTLE, WA 98104
TEL: 206.622.3321 ext. 315
CONTACT: OLA JARVEGREN
EMAIL: Ola@fsi-engineers.com

ELECTRICAL ENGINEER:
STANTEC
4100 194TH STREET SW, SUITE 400
LYNNWOOD, WA 98036-4613
TEL: 206.667.0521
CONTACT: JOE VIRVIG
EMAIL: Joe.Virvig@stantec.com

COST:
HALEY CONSULTING GROUP, INC
3661 24TH PLACE WEST, #201
SEATTLE, WA 98199
TEL: 206.391.3793
CONTACT: MARK HALEY
EMAIL: mmdhaley@msn.com

SHEET INDEX

METRO PARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

Drawn by: SK
Checked: NW/M
Date: 12.10.19
Scale: As indicated
Revisions:

No.	Date	Remarks

NOT FOR CONSTRUCTION

COVER SHEET
A0.0

12/10/2019 5:28:54 PM

ZONING ANALYSIS

TACOMA MUNICIPAL CODE: LAND USE REGULATORY CODE

1.0 ADDRESS:
316 S G STREET
TACOMA, WA 98405

1.1 PARCEL #:
0321324003

1.2 LEGAL DESCRIPTION:
ALL OF BLOCKS 316, 317, 116, 117, 216, AND 417 AND SO MUCH OF BLOCKS 516 AND 517 AS LIES NORTH OF THE FIFTH STANDARD PARALLEL, SAID BLOCKS ARE LAID OUT AND DELINEATED ON THE PLAT ENTITLED "MAP OF NEW TACOMA, WASHINGTON TERRITORY" FILED IN THE OFFICE OF COUNTY AUDITOR OF SAID COUNTY OF PIERCE ON THE THIRD DAY OF FEBRUARY, 1875; ALSO ALL THAT CERTAIN STRIP, PIECE OR PARCEL OF LAND SITUATE IN SAID CITY NINETEEN HUNDRED FEET IN LENGTH FROM NORTH TO SOUTH AND TWO HUNDRED AND EIGHTY FEET IN WIDTH FROM EAST TO WEST BOUNDED NORTHERLY BY SOUTH FIRST STREET AND DIVISION AVENUE, WESTERLY BY YAKIMA AVENUE, SOUTHERLY BY SOUTH SIXTH STREET, AS SAID STEETS AND AVENUES ARE LAID OUT AND DELINEATED ON SAID "MAP OF NEW TACOMA, WASHINGTON TERRITORY" AND BOUNDED EASTERLY BY "G" STREET AS SAID STREET IS LAID OUT AND DELINEATED ON THE PLAT ENTITLED "THE TACOMA LAND COMPANY'S THIRD ADDITION TO TACOMA, WASHINGTON TERRITORY" FILED FOR RECORD IN SAID COUNTY AUDITOR'S OFFICE ON THE 21ST DAY OF JULY 1885 AND RECORDED AT PAGE 93 OF THE RECORD OF PLATS IN SAID OFFICE.

1.3 LOT AREA:
1,184,832 SF

1.4 ZONE:
WRIGHT PARK, R-3, SPECIAL USE

1.5 STATUS:
CITY OF TACOMA LANDMARK AND NATIONAL REGISTER OF HISTORIC PROPERTY

1.6 ALLOWED USES IN UNDERLYING ZONE:
WRIGHT PARK: R3: TWO FAMILY DWELLINGS, BUILDING IS WITHIN A MIXED-USE CENTER OVERLAY, SPECIAL USE AUTHORIZATION REQUIRED.

1.7 CURRENT USE:
CONSERVATORY

1.8 PROPOSED USE:
CONSERVATORY (NO CHANGE)

1.9 YEAR BUILT
1908

1.10 EXISTING BUILDING AREAS IN WRIGHT PARK (NET FLOOR AREA)

SEYMOUR CONSERVATORY:	**3,460 NSF**
CLUBHOUSE:	9,588 NSF
RESTROOM BUILDING/CONCESSIONS 1:	448 NSF
EQUIPMENT STORAGE:	1,064 NSF
RESTROOM BUILDING/CONCESSIONS 2:	1,176 NSF
TOTAL	15,736 NSF

1.11 PROPOSED BUILDING AREA
0 NSF, NO CHANGE

1.12 LOT COVERAGE (NO LIMIT, DOES NOT APPLY TO INSTITUTIONS)
EXISTING: 3,795 SF/1,184,832 SF = 0.32%
PROPOSED: NO CHANGE

1.13 SETBACKS:
FRONT: 20 FEET; NO CHANGE
SIDE: 5 FEET; NO CHANGE
BACK: 25 FEET; NO CHANGE

1.14 SEPA EXEMPT:
PER TACOMA PLANNING AND DEVELOPMENT SERVICES

1.15 HEIGHT LIMIT:
NO CHANGE
35' FOR R3 OCCUPANCY. ADDITIONAL HEIGHT TO BE DETERMINED UNDER CONDITIONAL USE PERMIT

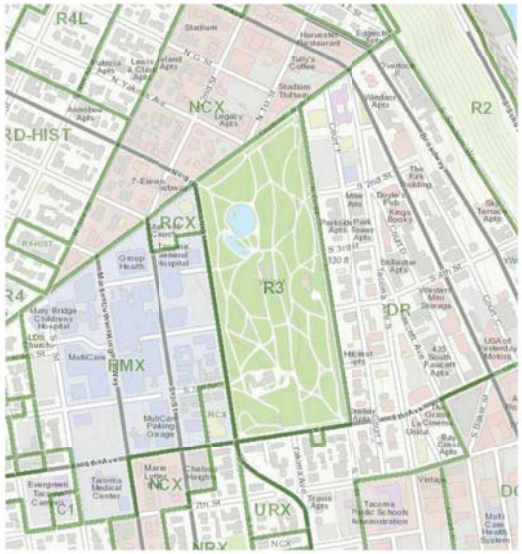
1.16 PARKING:
EXISTING:
PROPOSED: ONE (1) ACCESSIBLE STALL FROM EXISTING STALL

1.17 LIGHT AND GLARE:
PER TMC 13.06.522.1. INDIRECT OR INTERAL ILLUMINATION ONLY. NO BARE BULB ILLUMINATION. ALL EXTERNAL LIGHTING TO BE DIRECTED AWAY FROM ADJACENT PROPERTY.

1.18 NOISE:
N/A

1.19 ODORS:
N/A

1.20 PROPOSED SIGNS:
N/A



1 ZONING MAP
1" = 400'-0"

BUILDING CODE ANALYSIS

PER 2015 IBC & IEBC W/ WASHINGTON STATE AND TACOMA MUNICIPAL CODE AMENDMENTS

2.0 OCCUPANCY GROUP CLASSIFICATIONS FOR USES IN EXISTING BUILDING:
GROUP A-2, S-2 & M

2.1 CONSTRUCTION TYPE FOR EXISTING BUILDING:

TYPE 2-B (PER IBC 602.2) (55' MAXIMUM HEIGHT ALLOWED)

BUILDING ELEMENTS	RATING (HOURS)*
PRIMARY STRUCTURAL FRAME	0
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS AND PARTITIONS (EXTERIOR)	0 (FIRE SEPARATION X > 30)
NONBEARING WALLS AND PARTITIONS (INTERIOR)	0
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0

2.2 EXISTING BUILDING COMPLIANCE METHOD:
LEVEL 2 ALTERATION—AFFECTS LESS THAN 50% OF BUILDING AREA

2.3 FIRE SPRINKLERS AND ALARM/DETECTION SYSTEMS
AUTOMATIC SPRINKLER SYSTEM: NOT REQUIRED PER IBC 903.2.1.2
(GROUP A-2: FIRE AREA < 5000 SF; OCC LOAD < 100; FIRE AREA ON LEVEL OF EXIT DISCHARGE)

FIRE ALARM AND DETECTION SYSTEM: NOT REQUIRED PER IBC 907.2.1
(GROUP A: OCC LOAD < 300)

2.4 ALLOWABLE BUILDING HEIGHT AND FLOOR AREA (PER IBC TABLE 503):

GROUP A-2 = 9,500 SF
GROUP M = 12,500 SF
GROUP S-2 = 26,000 SF

AREA OF EXISTING OCCUPANCIES (UPPER FLOOR):
GROUP A-2: = 1340 SF
GROUP M = 450 SF
GROUP S2 = 129 SF

AREA OF EXISTING OCCUPANCIES (LOWER FLOOR):
GROUP S-2 = 497 SF

AREA OF PROPOSED OCCUPANCIES (UPPER FLOOR):
NO CHNAGE

AREA OF PROPOSED OCCUPANCIES (LOWER FLOOR):
NO CHANGE

NOTE: SEE SHEET A0.2 FOR OCCUPANCY CLASSIFICATIONS & LOAD TABULATIONS

2.5 MECHANICAL SYSTEM: (REF MECHANICAL DWGS)
EXISTING: HYDRONIC, GAS-FIRED BOILER

2.6 BUILDING AREA MODIFICATIONS:
NOT REQUIRED

2.7 NON-SEPARATED OCCUPANCIES
NO CHANGE

A-2 & S-2 ARE CONSIDERED NON-SEPARATED OCCUPANIES PER IBC 508.3—BOTH OCCUPANCIES ARE INDIVIDUALLY CLASSIFIED IN ACCORDANCE WITH THE MOST RESTRICTIVE CLASSIFICATION: A-2 (SEE IBC 903.2.1.3).

PER IBC 508.3.2, ALLOWABLE BUILDING AREA AND HEIGHT SHALL BE BASED ON THE MOST RESTRICTIVE OCCUPANCY. PER IBC TABLE 506.2, A TYPE 2-B, NON-SPRINKLERED, A-2 OCCUPANCIES SHALL BE MAXIMUM 9,500 SF.
TOTAL BUILDING FOOTPRINT IS 4495 GSF.

2.8 PARAPETS:
NO CHANGE

2.9 OPENINGS IN EXTERIOR WALL:
NO CHANGE
NO FIRE BARRIER REQUIRED PER IBC CHAPTER 7. NO RESTRICTION ON OPENING SIZE AND LOCATION.

PLUMBING FIXTURE COUNT - NO CHANGE

PER 2015 IBC & IEBC W/ WASHINGTON STATE AND TACOMA MUNICIPAL CODE AMENDMENTS

LOAD (BY OCCUPANCY)	WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS
	MALE	FEMALE	MALE	FEMALE	
A-3: 46.1 OCCS (MEN: 23.1, WOMEN: 23.1)	1 PER 125	1 PER 65	1 PER 200		NOT REQUIRED, SEE NOTE 4.1 BELOW
	.18	.36	.12	.12	
S-2: 2.1 OCCS (MEN: 1.1, WOMEN: 1.1)	1 PER 100		1 PER 100		
	0.011	0.011	0.037	0.037	
TOTAL REQUIRED: (ROUNDING UP)	1	1	1	1	
PROVIDED:	1	1	1	1	0

4.1 DRINKING FOUNTAIN FIXTURE REQUIREMENT WITHIN EXISTING BUILDINGS (2015 IEBC, SECTION 810.1):

"WHERE THE OCCUPANT LOAD OF THE STORY IS INCREASED BY MORE THAN 20 PERCENT, PLUMBING FIXTURES FOR THE STORY SHALL BE PROVIDED IN QUANTITIES SPECIFIED IN THE INTERNATIONAL PLUMBING CODE BASED ON THE INCREASED OCCUPANT LOAD."

INCREASED OCCUPANT LOAD IS 0%.
ADDITIONAL PLUMBING FIXTURES NEED NOT BE PROVIDED.
NO DRINKING FOUNTAINS ARE REQUIRED.

ENERGY CODE ANALYSIS

PER 2015 WASHINGTON STATE ENERGY CODE (WSEC)

3.1 GREENHOUSE ENERGY COMPLIANCE (2015 WSEC C202):

C402.1.1 LOW ENERGY BUILDINGS: THE FOLLOWING BUILDINGS, OR PORTIONS THEREOF, SEPARATED FROM THE REMAINDER OF THE BUILDING BY BUILDING THERMAL ENVELOPE ASSEMBLIES COMPLYING WITH THIS CODE SHALL BE EXEMPT FROM ALL THERMAL ENVELOPE PROVISIONS OF THIS CODE.

3. GREENHOUSES WHERE COOLING DOES NOT INCLUDE A CONDENSING UNIT AND THAT ARE ISOLATED FROM ANY OTHER CONDITIONED SPACE.

NOTE: WHILE NOT REQUIRED BY CODE, ALL NEWLY INTRODUCED AND NON-HISTORIC BUILDING ELEMENTS WILL BE TO CURRENT (PRESCRIPTIVE) CODE STANDARDS

SINGLE OR DOUBLE GLAZED FENESTRATIONS (TABLE C303.1.3(3)):
SHGC: DOUBLE GLAZED, CLEAR OR TINTED =0.4;
VT: DOUBLE GLAZED, CLEAR =0.6, TINTED =0.3

SINGLE-GLAZED (GLASS) SKYLIGHTS (TABLE C303.1.3(4)):
U-VALUE (FOR WOOD-CLAD FRAME): 1.18

OPAQUE THERMAL ENVELOPE ASSEMBLY MAXIMUM REQUIREMENTS (TABLE C402.1.4):
STEEL FRAMED WALLS, ABOVE GRADE: U-0.055

EFFECTIVE R-VALUES FOR STEEL STUD WALL ASSMBLIES (TABLE C402.1.4.1):
STUD DEPTH 3.12", @ 16" OC = R-13

C402.4.2.1 LIGHTING CONTROLS IN DAYLIGHT ZONES UNDER SKYLIGHTS:
DAYLIGHT RESPONSIVE CONTROLS COMPLYING WITH SECTION C405.2.4.1 SHALL BE PROVIDED TO CONTROL ALL ELECTRIC LIGHTS WITHIN DAYLIGHT ZONES.

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METROPARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

Drawn by: SK
Checked: NM
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Scale: 1" = 400'-0"

Revisions:

No.	Date	Remarks

NOT FOR CONSTRUCTION

CODE SUMMARY
A0.1

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FLOOR OCCUPANCY LOAD FACTOR TABULATION PER 2012 IBC

LEVEL	AREA NAME	USE & OCCUPANCY CLASSIFICATION	OCCUPANCY LOAD FACTOR (FUNCTION OF SPACE PER TABLE 1004.1.2)	S.F.PER PERSON	AREA NSF/GSF	AREA	CALC OCCUPANTS	COMMENTS
BASEMENT PLAN	001	S2	Accessory Storage Areas, Mechanical Equipment Room	300	Gross	497 SF	1.7	(E) Mechanical Equipment Room
						497 SF	1.7	
UPPER FLOOR	101	A2	Exhibition and Gallery Space	30	Net	1115 SF	37.2	Area listed is non-planted (paved) area available to occupants. Interior area dedicated to plant display (1949 SF) not included in occupant load calculation.
UPPER FLOOR	102	A2	Exhibition and Gallery Space	30	Net	118 SF	3.9	Considered an Accessory Occupancy of the (E) Conservatory
UPPER FLOOR	103	S2	Accessory Storage Areas, Mechanical Equipment Room	300	Gross	11 SF	0.0	(E) Storage Closet
UPPER FLOOR	104	S2	Accessory Storage Areas, Mechanical Equipment Room	300	Gross	118 SF	0.4	(E) Storage Shed
UPPER FLOOR	105	M	Mercantile	60	Gross	450 SF	7.5	(E) Gift Shop
UPPER FLOOR	106	A2	Restroom	30	Gross	54 SF	1.8	(E)
UPPER FLOOR	107	A2	Restroom	30	Gross	53 SF	1.8	(E)
						1919 SF	52.6	

UPPER FLOOR COMMON PATH OF EGRESS TRAVEL

PATH NAME	PATH LENGTH
Common Path 1.1	24' - 9"

NOTE: PER IBC TABLE 1006.2.1 COMMON PATHS SHALL BE < 75' FOR 'A' OCCUPANCIES
<100' FOR 'S' OCCUPANCIES

UPPER FLOOR EXIT ACCESS TRAVEL DISTANCE

PATH NAME	PATH LENGTH
Exit Path 1.1	68' - 2"

NOTE: EXIT ACCESS TRAVEL DISTANCE SHALL NOT EXCEED THE VALUE IN IBC TABLE 1017.2:
A: 200' & S:300' (WITHOUT SPRINKLER SYSTEM)

PER IBC TABLE 1020.2: MINIMUM CORRIDOR WIDTH: 44" IF OCCUPANCY LOAD >50;
36" IF OCCUPANCY LOAD < 50

FLOOR DEAD END CORRIDOR

LEVEL	DEAD END CORRIDOR	PATH LENGTH
UPPER FLOOR	DEAD END CORRIDOR PATH 1	24' - 7 3/4"

NOTE: PER IBC 1020.04 DEAD ENDS, EXCEPTION 3. A DEAD END CORRIDOR SHALL NOT BE LIMITED IN LENGTH WHERE THE LENGTH OF THE DEAD END CORRIDOR IS LESS THAN 2.5 THE LEAST WIDTH OF THE DEAD END CORRIDOR

LEAST WIDTH: 10' 5" x 2.5 = 26' 3"

UPPER FLOOR EXIT ACCESS DOORWAY ARRANGEMENT...

DIAGONAL NAME	DIAGONAL LENGTH	1/2 OF DIAGONAL LENGTH
Diagonal 0.1	92' - 4 1/8"	46' - 2"

NOTE: 59- 2" DISTANCE BETWEEN UPPER DOORS; COMPLIES
46'-2" MINIMUM DISTANCE BETWEEN DOORS REQUIRED (PER IBC 1007.1.1)

LOWER FLOOR COMMON PATH OF EGRESS TRAVEL

PATH NAME	PATH LENGTH

LOWER FLOOR EXIT ACCESS TRAVEL DISTANCE

PATH NAME	PATH LENGTH
Exit Path 0.1	52' - 9"

NOTE: PER IBC TABLE 1006.3.2 FOR SPACES WITH ONE EXIT, "S" OCCUPANCIES SHALL HAVE < 30 OCCUPANTS AND HAVE A MAXIMUM EXIT ACCESS TRAVEL DISTANCE OF 75 FEET FOR FIRST STORY BELOW GRADE. COMPLIES.

OCCUPANCY CLASSIFICATION LEGEND

A2 S2 M

OCCUPANCY TAG LEGEND

OCCUPANCY MARK
EXISTING OCCUPANCY DESIGNATION
OCCUPANCY CLASSIFICATION
AREA OF OCCUPANCY

(E) X MARK Name 1.90 SF
A

FIRE RATED ASSEMBLY LEGEND

1 HR RATED
2 HR RATED

COMMON PATH OF EGRESS TRAVEL:
DISTANCE A PERSON HAS TO TRAVEL BEFORE THEY HAVE A CHOICE OF GOING IN 2 DIRECTIONS

COMMON PATH

MAX TRAVEL DISTANCE:

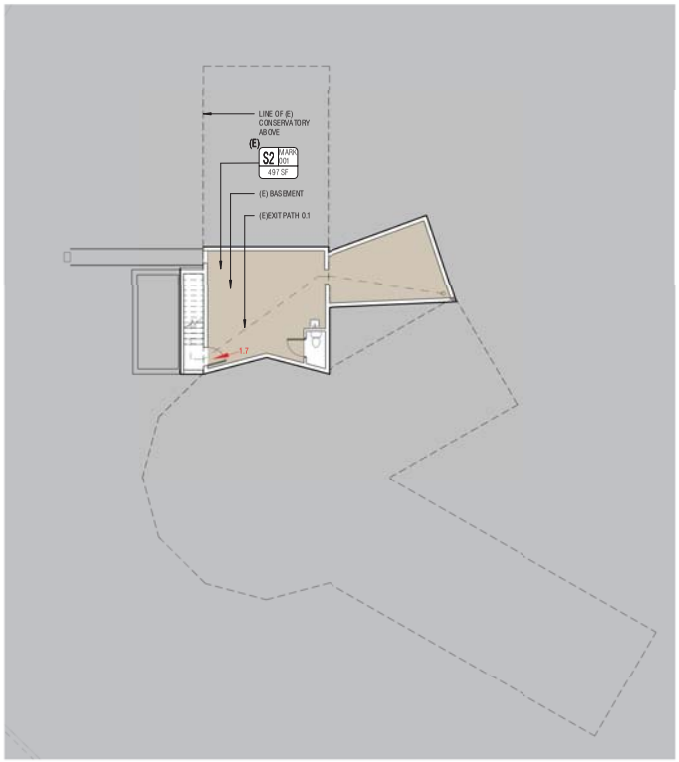
EXIT ACCESS TRAVEL DISTANCE PATH

EGRESS LEGEND:

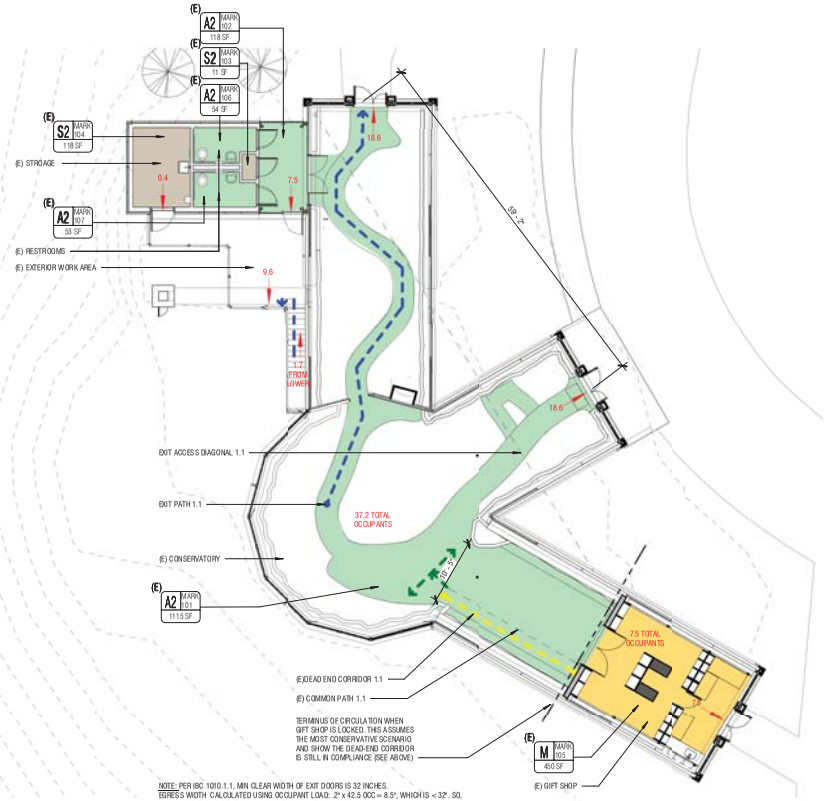
EXIT ACCESS DIAGONAL

EXITING:

84.6 # OCCUPANTS EXITING IN DIRECTION OF ARROW



1 BASEMENT PLAN
1" = 10'-0"



NOTE: PER IBC 1010.1.1, MIN CLEAR WIDTH OF EXIT DOORS IS 32 INCHES.
EGRESS WIDTH CALCULATED USING OCCUPANT LOAD. 2" x 42.5 OCC = 8.5", WHICH IS < 32". SO, MINIMUM CLEAR WIDTH FOR ALL DOORS SHALL BE 32 INCHES MINIMUM.

2 UPPER FLOOR
1" = 10'-0"

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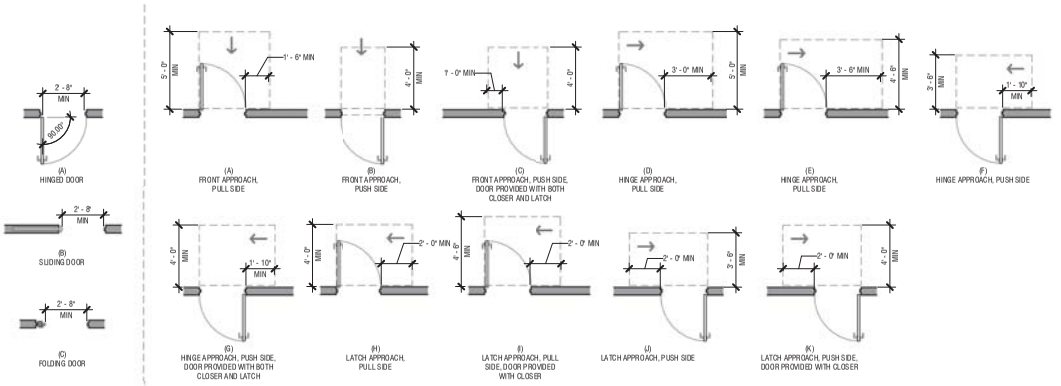


FIGURE 404.2.3
CLEAR WIDTH OF DOORWAYS

FIGURE 404.2.4.1
MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

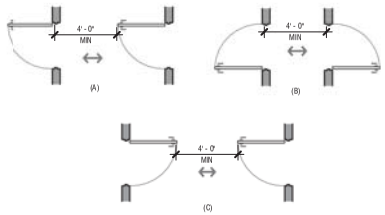


FIGURE 404.2.6
DOORS IN SERIES AND GATES IN SERIES

ADA CHAPTER 4 - DOOR CLEARANCES
1/4" = 1'-0"

FIGURE 703.2.5
HEIGHT OF RAISED CHARACTERS

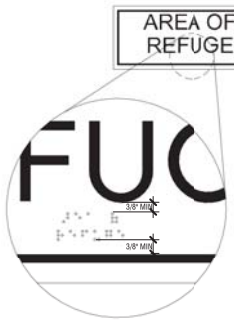


FIGURE 703.3.2
POSITION OF BRAILLE

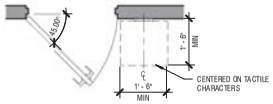


FIGURE 703.4.2
LOCATION OF TACTILE SIGNS AT DOORS

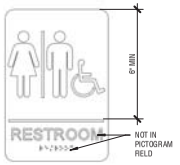
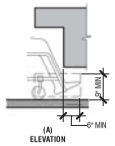


FIGURE 703.4.2
LOCATION OF TACTILE SIGNS AT DOORS

SECTION 703.7.2
SYMBOLS

ADA CHAPTER 7 COMMUNICATION ELEMENTS AND FEATURES
1/2" = 1'-0"



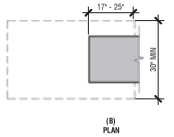
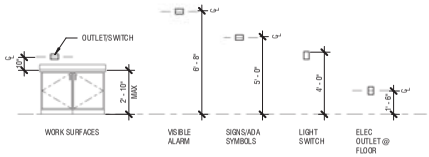


FIGURE 306.2
TOE CLEARANCE

ADA CHAPTER 3 CLEARANCES
1/2" = 1'-0"



SIGNALS, OPERATORS, AND SURFACE HEIGHTS
1/4" = 1'-0"

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ACCESSIBILITY AND SIGNAGE DESIGN CRITERIA

A0.3

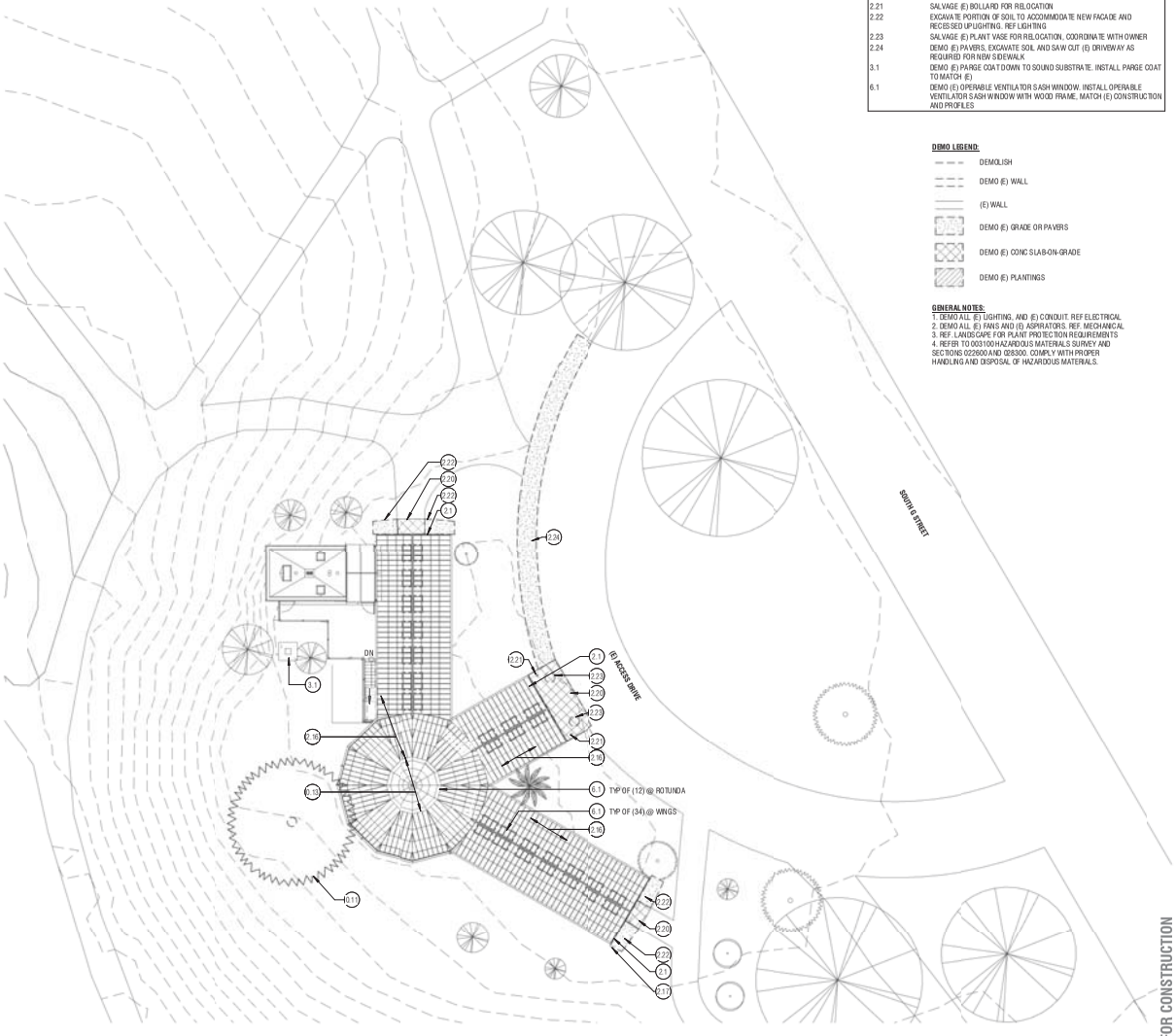
KEYNOTE LEGEND

MARK	KEYNOTE TEXT
0.11	(E) ORIENTAL SPRUCE TO BE REMOVED BY OWNER, CONFIRM WITH MPT
0.13	(E) COPPER CUPOLA CAP
2.1	DEMO (E) GLAZING, VERTICAL, AND HORIZONTAL STEEL ANGLES LIGHTING, DOORS, FRAMES, THRESHOLDS AND HARDWARE. PREPARE FOR NEW ENTRY FACADE. (E) CONC STEM WALL TO REMAIN.
2.16	SALVAGE (E) GLASS SHINGLES FOR REINSTALLATION, TYP
2.17	DEMO (E) PLUMBING VENT STACK
2.20	DEMO (E) STAMPED CONCRETE SLAB TO ACCOMODATE NEW CONSTRUCTION, LIGHTING AND BOLLARD RELOCATION
2.21	SALVAGE (E) BOLLARD FOR RELOCATION
2.22	EXCAVATE PORTION OF SOIL TO ACCOMMODATE NEW FACADE AND RECESSED UPLIGHTING. REF LIGHTING
2.23	SALVAGE (E) PLANT VASE FOR RELOCATION, COORDINATE WITH OWNER
2.24	DEMO (E) PAVERS, EXCAVATE SOIL AND SAW CUT (E) DRIVEWAY AS REQUIRED FOR NEW SIDEWALK
3.1	DEMO (E) PARGE COAT DOWN TO SOUND SUBSTRATE. INSTALL PARGE COAT TO MATCH (E)
6.1	DEMO (E) OPERABLE VENTILATOR SASH WINDOW. INSTALL OPERABLE VENTILATOR SASH WINDOW WITH WOOD FRAME, MATCH (E) CONSTRUCTION AND PROFILES

DEMO LEGEND:

- DEMOLISH
- DEMO (E) WALL
- (E) WALL
- DEMO (E) GRADE OR PAVERS
- DEMO (E) CONC SLAB-ON-GRADE
- DEMO (E) PLANTINGS

GENERAL NOTES:
1. DEMO ALL (E) LIGHTING, AND (E) CONDUIT. REF ELECTRICAL
2. DEMO ALL (E) FANS AND (E) ASPIRATORS. REF. MECHANICAL
3. REF. LANDSCAPE FOR PLANT PROTECTION REQUIREMENTS
4. REFER TO 003100 HAZARDOUS MATERIALS SURVEY AND SECTIONS 022600 AND 028300. COMPLY WITH PROPER HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS.



17 DEMO SITE PLAN / ROOF PLAN
1/16" = 1'-0"

PROJECT NORTH / TRUE NORTH

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DEMO SITE PLAN

AD2.0

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SHKS ARCHITECTS

DEMO LEGEND:

- DEMOLISH
- DEMO (E) WALL
- (E) WALL
- DEMO (E) GRADE OR PAVERS
- DEMO (E) CONC SLAB-ON-GRADE
- DEMO (E) PLANTINGS

LANDSCAPE LEGEND

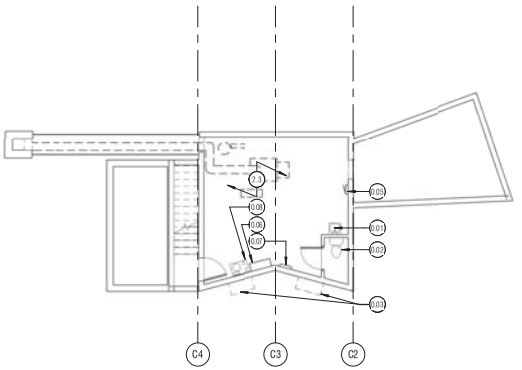
- (E) PLANTER/BED
- (E) WATER FEATURE
- BOG FEATURE
- ALT #2: VIVARIUM

GENERAL NOTES:

1. DEMO ALL (E) LIGHTING, AND (E) CONDUIT. REF ELECTRICAL
2. DEMO ALL (E) FANS AND (E) ASPIRATORS. REF. MECHANICAL
3. REF. LANDSCAPE FOR PLANT PROJECTION REQUIREMENTS
4. REFER TO 003100 HAZARDOUS MATERIALS SURVEY AND SECTIONS 022600 AND 028300. COMPLY WITH PROPER HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS.

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
0.01	(E) LAV
0.02	(E) WC
0.03	(E) MECH CHASE ABOVE
0.05	(E) ELEC PANEL
0.06	(E) ENVIRONMENTAL SYSTEMS CONTROLLER
0.07	(E) SECURITY SYSTEM CONTROLLER
0.08	(E) PUMP AND FILTRATION SYSTEM FOR POND
0.16	(E) RN-TUBES, REF MECH
0.17	(E) STONE WALL TO REMAIN
2.1	DEMO (E) GLAZING, VERTICAL AND HORIZONTAL STEEL ANGLES LIGHTING, DOORS, FRAMES, THRESHOLDS AND HARDWARE. PREPARE FOR NEW ENTRY FACADE. (E) CONC STEM WALL TO REMAIN.
2.2	DEMO (E) METAL GUTTER AND DOWNSPOUT
2.3	DEMO (E) BOILER AND DISTRIBUTION SYSTEM PER MECHANICAL
2.4	DEMO (E) WOOD FRAMING (PARTITIONS, RAFTERS, ETC.), (E) SHEATHING, (E) CASEWORK, (E) INTERIOR WINDOWS, AND (E) INTERIOR DOORS
2.5	DEMO (E) SINK, FAUCET AND PIPING PER PLUMBING
2.6	DEMO (E) METAL SHELVES, METAL FRAMING AND METAL SCREEN
2.7	DEMO (E) SLAG WALL
2.8	DEMO (E) RN-TUBES PER MECHANICAL
2.9	SALVAGE AND REINSTALL (E) STATUE
2.10	DEMO PORTION OF (E) SLAB-ON-GRADE TO ACCOMMODATE NEW WALK OFF GRATE/ TRENCH
2.13	DEMO (E) HOLLOW-METAL FRAME AND DOOR
2.20	DEMO (E) STAMPED CONCRETE SLAB TO ACCOMODATE NEW CONSTRUCTION, LIGHTING AND BOLLARD RELOCATION
2.21	SALVAGE (E) BOLLARD FOR RELOCATION
2.23	SALVAGE (E) PLANT VASE FOR RELOCATION, COORDINATE WITH OWNER
32.1	INTERIOR PLANTINGS (TREES HIDDEN IN SECTION FOR CLARITY)



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

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

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DEMO PLANS

AD2.1

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KEYNOTE LEGEND

MARK	KEYNOTE TEXT
32.4	ACCESSIBLE PARKING STALL ROAD STRIPING
32.5	ACCESSIBLE PARKING STALL SIGNAGE
32.7	CONCRETE ENTRY
32.8	PAVERS, REF LANDSCAPE

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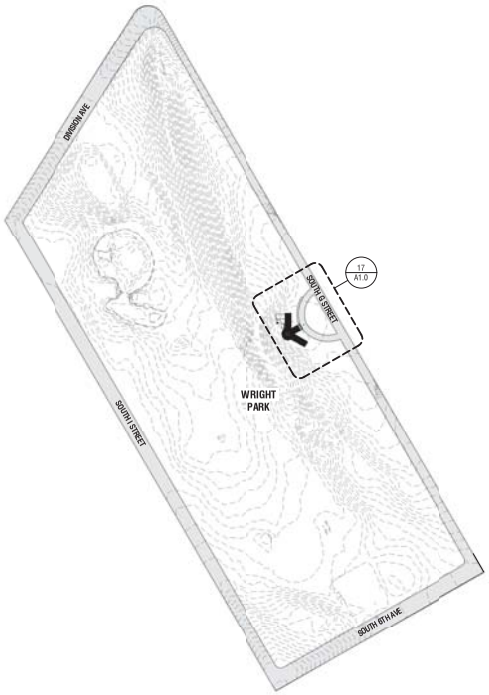
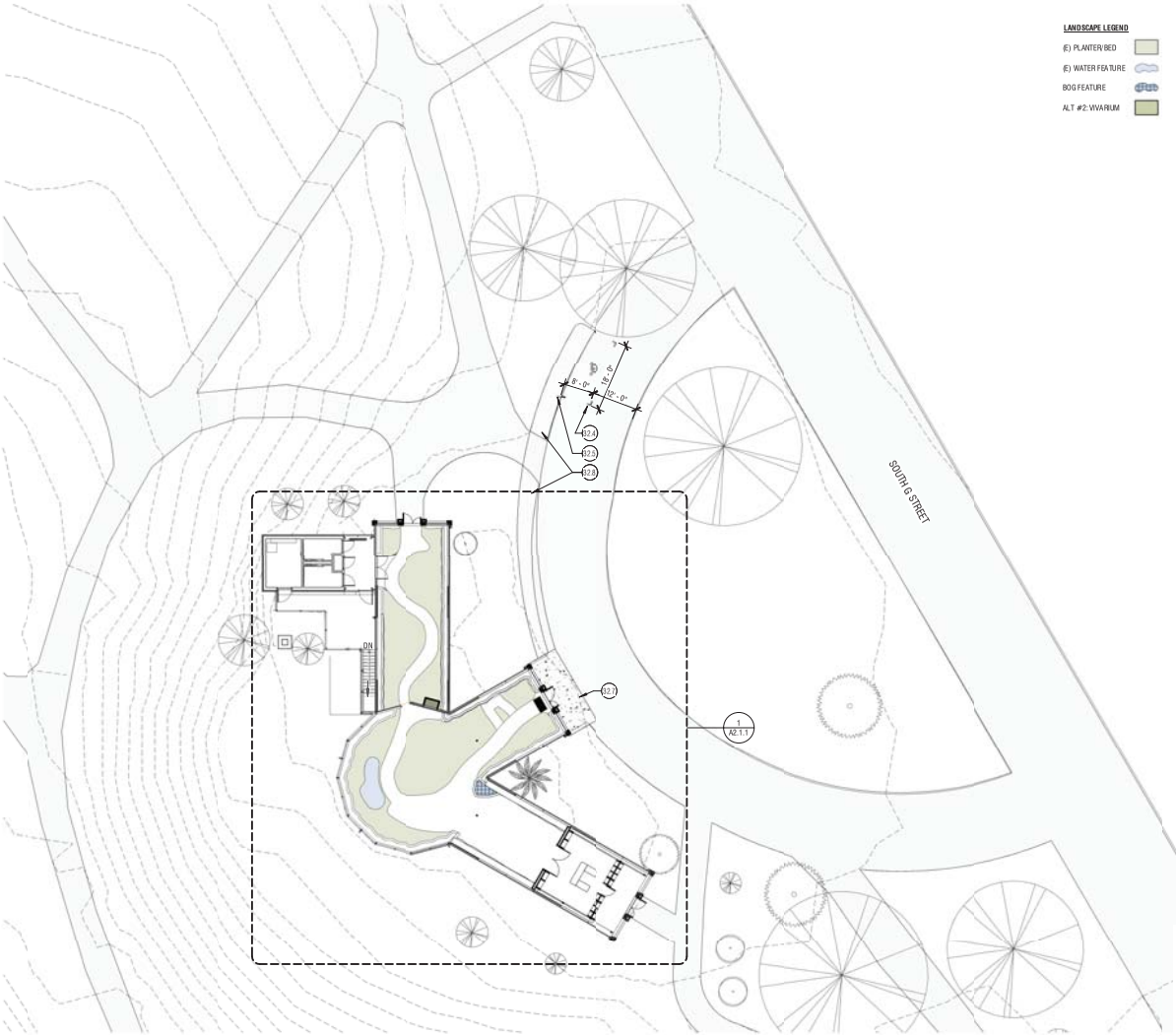
LANDSCAPE LEGEND

- (E) PLANTER BED
- (E) WATER FEATURE
- BOG FEATURE
- ALT #2: VIVARIUM



16 VICINITY PLAN
1" = 200'-0"



17 KEYPLAN
1/16" = 1'-0"

PROJECT NORTH
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SITE PLAN
A1.0

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W.W. SEYMOUR BOTANICAL CONSERVATORY

TOPOGRAPHIC SURVEY

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 32, TOWNSHIP 21 NORTH, RANGE 3 EAST OF THE WILLAMETTE MERIDIAN, CITY OF TACOMA, PIERCE COUNTY, WASHINGTON

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

METHODS AND EQUIPMENT

SURVEY PERFORMED WITH A 1" TOTAL STATION, USING TRAVERSE AND RADIAL SURVEY METHODS AND SUPPLEMENTED WITH A TOPCON HYPERLITE GPS RECEIVER UTILIZING RTK METHODS AND THE WSRN. SURVEY MEETS OR EXCEEDS ACCURACY REQUIREMENTS CONTAINED IN W.A.C. 332-130-090.

HORIZONTAL DATUM

HORIZONTAL DATUM: CGT (NAD 83/91) TIED TO CGT MONU 1433 & 1434 VIA GPS AND WSRN.
CGT MON 1433 – FOUND 3" SURFACE BRASS MON W/PUNCH, 1-8-17
709129.894
1155680.182
CGT MON 1434 – FOUND 1 1/2" DOMED BRASS MON W/"X", 1-8-17
708865.654
1155348.194

VERTICAL DATUM

CITY OF TACOMA (NGVD 29)
BENCHMARK 2351 ELEVATION = 301.56' – BRASS MON AT INTERSECTION OF SOUTH I STREET AND SOUTH 5TH AVE.

UTILITY PURVEYORS

WATER – CITY OF TACOMA
GAS – PUGET SOUND ENERGY
TELEPHONE – CENTURY LINK
SANITARY SEWER – CITY OF TACOMA
POWER – CITY OF TACOMA
CABLE – CLICK! (LINE LOCATION IN PSE TRENCHES PER PSE RECORD DATA)

SURVEY NOTES

1. DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION ON 11-29-16 THRU 1-8-17.
2. CONTOUR INTERVALS ARE ONE-FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
3. APEX ENGINEERING PLLC, ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST THAT ARE UNDETECTABLE AND/OR NOT VISIBLE.
4. THE PURPOSE OF THIS SURVEY IS TO PROVIDE A TOPOGRAPHIC BASE MAP OF EXISTING CONDITIONS FOR DESIGN AND ENGINEERING PURPOSES.
5. THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF METRO PARKS OF TACOMA AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR PERSONS WITHOUT EXPRESS CERTIFICATION BY SURVEYOR NAMING SAID PARTY.
6. UTILITIES OTHER THAN SHOWN MAY EXIST ON THE SITE. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR DOES CERTIFY THAT THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM FIELD SURVEY INFORMATION AND FIELD LOCATED UTILITY PAINT LINES. LOCATES WERE PERFORMED BY MOUNTAIN VIEW LOCATING, INC.
7. SURVEYED PROPERTY IS DESIGNATED ZONE "C" (AREAS OF MINIMAL FLOODING) ACCORDING TO FLOOD INSURANCE RATE MAP #53053C0020B, EFFECTIVE DATE DECEMBER 1, 1983.
8. NO OVERHEAD UTILITY LINES WERE OBSERVED IN THIS FIELD SURVEY.
9. FIELD LOCATED AND DIPPED STORM AND SANITARY SEWER STRUCTURES COULD POSSIBLY BE A COMBINATION OF BOTH UTILITIES IN ONE STRUCTURE.
10. EASEMENTS SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION. EASEMENT INFORMATION WAS PROVIDED BY CLIENT AND PUBLIC RECORDS AND THIS SURVEY MAY NOT REPRESENT ALL EASEMENTS THAT EXIST ON SUBJECT PROPERTY. NO CURRENT TITLE WAS PROVIDED FOR THIS SURVEY.
11. NO BOUNDARY WORK WAS DONE FOR THIS SURVEY.

LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- STORM MANHOLE
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- JUNCTION BOX
- POWER VAULT
- POWER METER
- LIGHT POLE
- GAS METER
- GARBAGE CAN
- BOLLARD
- LS LANDSCAPING
- SIGN
- SPOT ELEVATION
- EVERGREEN TREE AS NOTED
- DECIDUOUS TREE AS NOTED
- MAPLE TREE AS NOTED
- OAK TREE AS NOTED
- PINE TREE AS NOTED
- CEDAR TREE AS NOTED
- SHRUB
- CONCRETE SURFACE
- ASPHALT SURFACE
- BRICK PAVER SURFACE
- GRAVEL SURFACE
- 1' CONTOUR
- 5' CONTOUR
- SD — BURIED STORM LINE
- SD — RECORD STORM LINE
- SS — BURIED SANITARY SEWER LINE
- SS — RECORD SANITARY SEWER LINE
- G — BURIED GAS LINE
- E — BURIED POWER LINE
- W — BURIED WATER LINE
- W — RECORD WATER LINE
- IRR — RECORD IRRIGATION LINE
- BURIED CABLE LINE
- TOP — TOP OF BANK
- TOE — TOE OF SLOPE
- CHAIN LINK FENCE

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC SURVEY MADE BY ME OR UNDER MY DIRECTION AND TO THE BEST OF MY KNOWLEDGE REPRESENTS THE TOPOGRAPHIC FEATURES AS THEY EXIST ON THE GROUND AS OF 01-06-17.

MELVIN T. GARLAND, P.L.S. #18602 — DATE 1/26/2017

SIGNATURE:

REV NO	REVISION DESCRIPTION	DATE	BY

PROJECT MANAGER:

DESIGN SLS
DRAWN SLS
CHECKED MPG
SEC 32 T 21N R 3E
DISC NO 1-25-17
DATE
SCALE 1" = 20'

DATE SEALED 1/26/2017

TITLE: W.W. SEYMOUR BOTANICAL CONSERVATORY TOPOGRAPHIC SURVEY

CLIENT/OWNER: METRO PARKS TACOMA, 4702 S. 19TH ST., TACOMA, WA 98405-1175, ATTN: KRISTI EVANS PHONE: 253-305-1054

Apex Engineering PLLC
2601 South 35th, Suite 200
Tacoma, Washington 98409
(253) 472-4464 FAX (253) 473-0599

SHEET 1 OF 2
FILE NO 33558.03

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W.W. SEYMOUR BOTANICAL CONSERVATORY

TOPOGRAPHIC SURVEY

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 32, TOWNSHIP 21 NORTH, RANGE 3 EAST OF THE WILLAMETTE MERIDIAN,
CITY OF TACOMA, PIERCE COUNTY, WASHINGTON

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

SEE SHEET 1 FOR CONTINUATION

EASEMENT NOTE

A UTILITIES EASEMENT GRANTED TO TACOMA POWER WAS RECORDED UNDER AFN 2007110903H. SAID EASEMENT SUPERSEDES EASEMENT RECORDED UNDER AFN 1888258 WHICH WAS NOT PROVIDED. AFN 2007110903H HAS AN EASEMENT EXHIBIT AND DOES NOT CONTAIN A LEGAL DESCRIPTION. THE LOCATION HEREON IS APPROXIMATE ONLY AND IS BASED ON DELINEATIONS ON PUBLIC RECORDS.

LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- STORM MANHOLE
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- JUNCTION BOX
- POWER VAULT
- POWER METER
- LIGHT POLE
- GAS METER
- GARBAGE CAN
- BOLLARD
- LS LANDSCAPING
- SIGN
- SPOT ELEVATION
- EVERGREEN TREE AS NOTED
- DECIDUOUS TREE AS NOTED
- MAPLE TREE AS NOTED
- OAK TREE AS NOTED
- PINE TREE AS NOTED
- CEDAR TREE AS NOTED
- SHRUB
- CONCRETE SURFACE
- ASPHALT SURFACE
- BRICK PAVER SURFACE
- GRAVEL SURFACE
- 1' CONTOUR
- 5' CONTOUR
- BURIED STORM LINE
- RECORD STORM LINE
- BURIED SANITARY SEWER LINE
- RECORD SANITARY SEWER LINE
- BURIED GAS LINE
- BURIED POWER LINE
- BURIED WATER LINE
- RECORD WATER LINE
- RECORD IRRIGATION LINE
- BURIED CABLE LINE
- TOP TOP OF BANK
- TOE TOE OF SLOPE
- CHAIN LINK FENCE

PROJECT MANAGER
SIGNATURE

REV NO	REVISION DESCRIPTION	DATE	BY

DESIGN SLS
DRAWN SLS
CHECKED MFG
SEC 32 T 21N R 3E
DISC NO
DATE 1-25-17
SCALE 1" = 20'

DATE SEALED 1/26/2017

TITLE
W.W. SEYMOUR BOTANICAL CONSERVATORY
TOPOGRAPHIC SURVEY

CLIENT/OWNER
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TACOMA, WA 98405-1175
ATTN: KRISTI EVANS PHONE: 253-305-1054

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Tacoma, Washington 98409
(253) 473-4464 FAX: (253) 473-0099

SHEET 2 OF 2
FILE NO 33558.03

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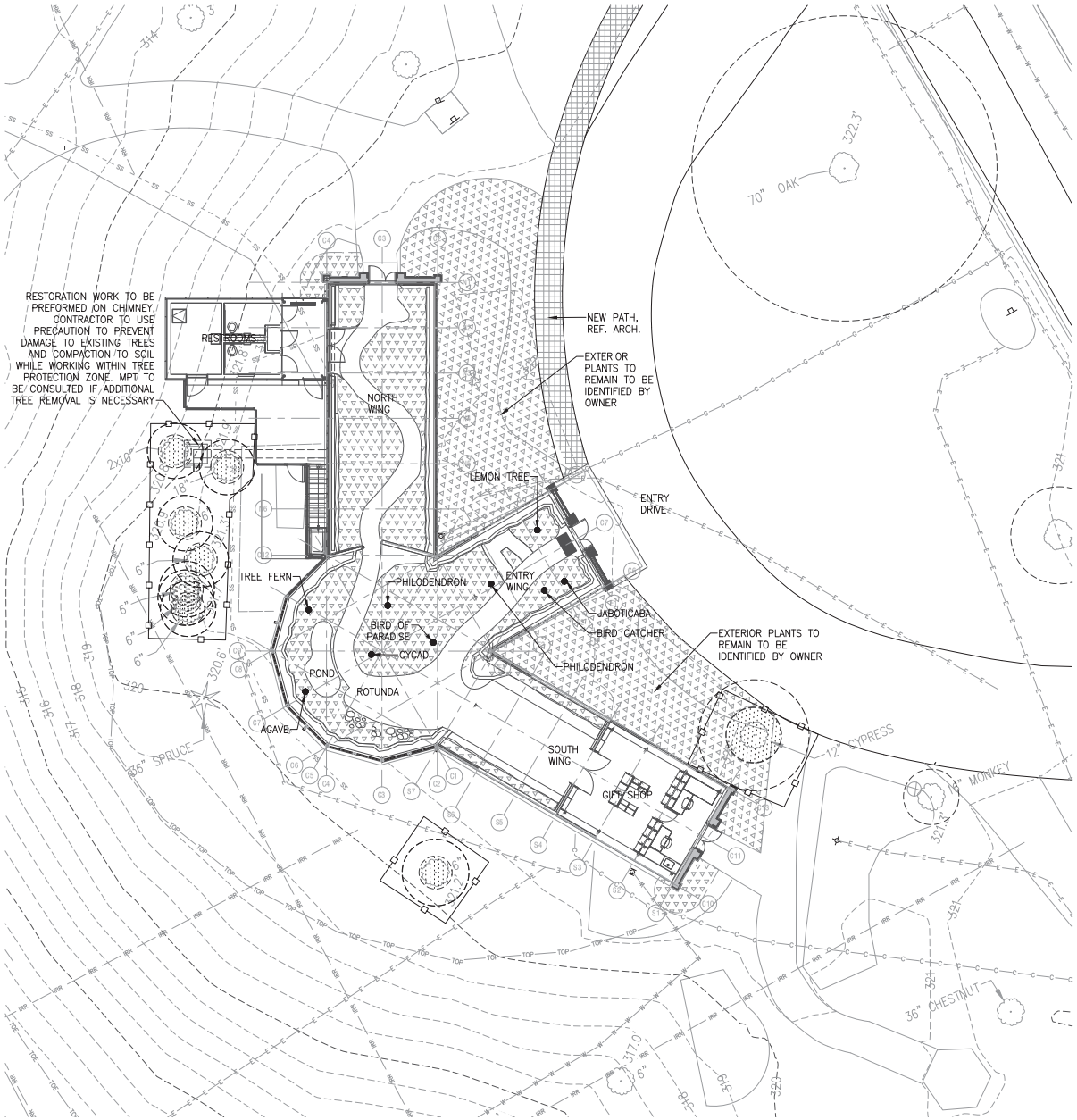


1 PLANT PROTECTION PLAN
SCALE: 1" = 10'-0"

0 5 10 20 40 FT

TREE/PLANT PROTECTION LEGEND

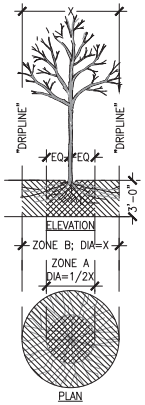
- EXST. TREE – TO BE PROTECTED IN PLACE
- EXST. TREE – REMOVE
- TREE DRIPLINE
- TREE CRITICAL ROOT ZONE
- TREE PROTECTION FENCE
- INTERIOR TREE/PLANT TO REMAIN AND BE PROTECTED IN PLACE. LOCATIONS ARE APPROXIMATE. COORDINATE EXTENTS OF PLANT PROTECTION WITH OWNER.

PLANT PROTECTION NOTES

1. PROTECT SPECIFIED EXISTING INTERIOR PLANTS AND TREES INDICATED TO REMAIN ON SITE DURING CONSTRUCTION. OWNER TO ASSIST IN IDENTIFICATION OF PLANTS TO REMAIN. OWNER TO PRUNE AND WRAP PLANTS PRIOR TO THE START OF CONSTRUCTION. OWNER TO REMOVE ALL OTHER INTERIOR PLANTS PRIOR TO START OF CONSTRUCTION.
2. ENSURE ALL INTERIOR PLANTS TO REMAIN RECEIVED ADEQUATE LIGHT AND HEAT THROUGHOUT CONSTRUCTION, AS DETERMINED BY OWNER.
3. PROTECT SPECIFIED EXISTING EXTERIOR PLANTS AND TREES INDICATED TO REMAIN ON SITE DURING CONSTRUCTION. OWNER TO ASSIST IN IDENTIFICATION OF PLANTS TO REMAIN AND PLANTS TO BE REMOVED PRIOR TO START OF CONSTRUCTION.
4. MAINTAIN ALL PLANTING AREAS THAT ARE NOT FREELY ACCESSIBLE TO OWNER'S MAINTENANCE STAFF, KEEPING THEM FREE OF WEEDS AT ALL TIMES. ENSURE THAT ALL PLANTS RECEIVE ADEQUATE IRRIGATION THROUGHOUT CONSTRUCTION.
5. MAINTAIN ACCESS TO INTERIOR PLANTING TO REMAIN FOR PERIODIC CARE AND MAINTENANCE BY OWNER THROUGHOUT CONSTRUCTION.
6. NOTIFY OWNER IF ANY TO REMAIN PLANTS AND THEIR ROOTS ARE IN CONFLICT WITH THE WORK FOR THIS CONTRACT.

TREE PROTECTION NOTES:

1. CONTRACTOR TO RETAIN A PROFESSIONAL ARBORIST (PROJECT ARBORIST) TO PREPARE TREE, VEGETATION, AND SOIL PROTECTION PLAN (TVSPP) AND DIRECT ON PRUNING BRANCHES AND ROOTS, FERTILIZING AND WATERING.
2. CONTRACTOR TVSPP AND STAGING PLAN SHALL INCORPORATE CONSTRUCTION MATERIAL STORAGE PROHIBITION WITHIN THE DRIPLINE OF EXISTING TREES SHOWN TO REMAIN. DO NOT STACK OR STORE ANY EQUIPMENT, DISPOSE OF ANY MATERIALS, SUPPLIES OR FLUIDS WITHIN DRIPLINE.
3. INSTALL 3" DEPTH BARK MULCH ACROSS ENTIRE DRIPLINE AREA (ZONE B) PRIOR TO INSTALLING PROTECTION FENCING.
4. DO NOT CUT OR DISTURB ROOTS 3" IN DIAMETER OR LARGER. NOTIFY AND CONFIRM ALL ROOT DISTURBANCE WITH PROJECT ARBORIST.



PROTECTION FENCING
6' HT. CHAIN LINK FENCING TO BE PROVIDED AND MAINTAINED AT DRIPLINE OF EACH TREE OR AT PERIMETER OF A STAND OF TREES.

PROJECT ARBORIST APPROVAL REQUIRED FOR USE/ACCESS WITHIN ZONE B. PERMISSION FOR USE/ACCESS REQUIRES SURFACE PROTECTION FOR ALL UNFENCED, UNPAVED SURFACES WITHIN ZONE B. SURFACE PROTECTION MEASURES AS DIRECTED BY PROJECT ARBORIST.

TRENCHING/EXCAVATION

ZONE A (CRITICAL ROOT ZONE)
1. NO DISTURBANCE ALLOWED WITHOUT SITE–SPECIFIC INSPECTION BY PROJECT ARBORIST AND APPROVAL OF METHODS TO MINIMIZE ROOT DAMAGE.
2. SEVERANCE OF ROOTS LARGER THAN 2" DIA. REQUIRES PROJECT ARBORIST APPROVAL.

ZONE B (DRIPLINE)
1. TRENCHING ALLOWED AS FOLLOWS:
   – EXCAVATION BY HAND OR WITH HAND–DRIVEN TRENCHER.
   – LIMIT TRENCH WIDTH. DO NOT DISTURB ZONE A. MAINTAIN 2/3 OR MORE OF ZONE B IN UNDISTURBED CONDITION.

2 EXTERIOR TREE PROTECTION DURING CONSTRUCTION
NOT TO SCALE

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W.W. SEYMOUR CONSERVATORY REHABILITATION

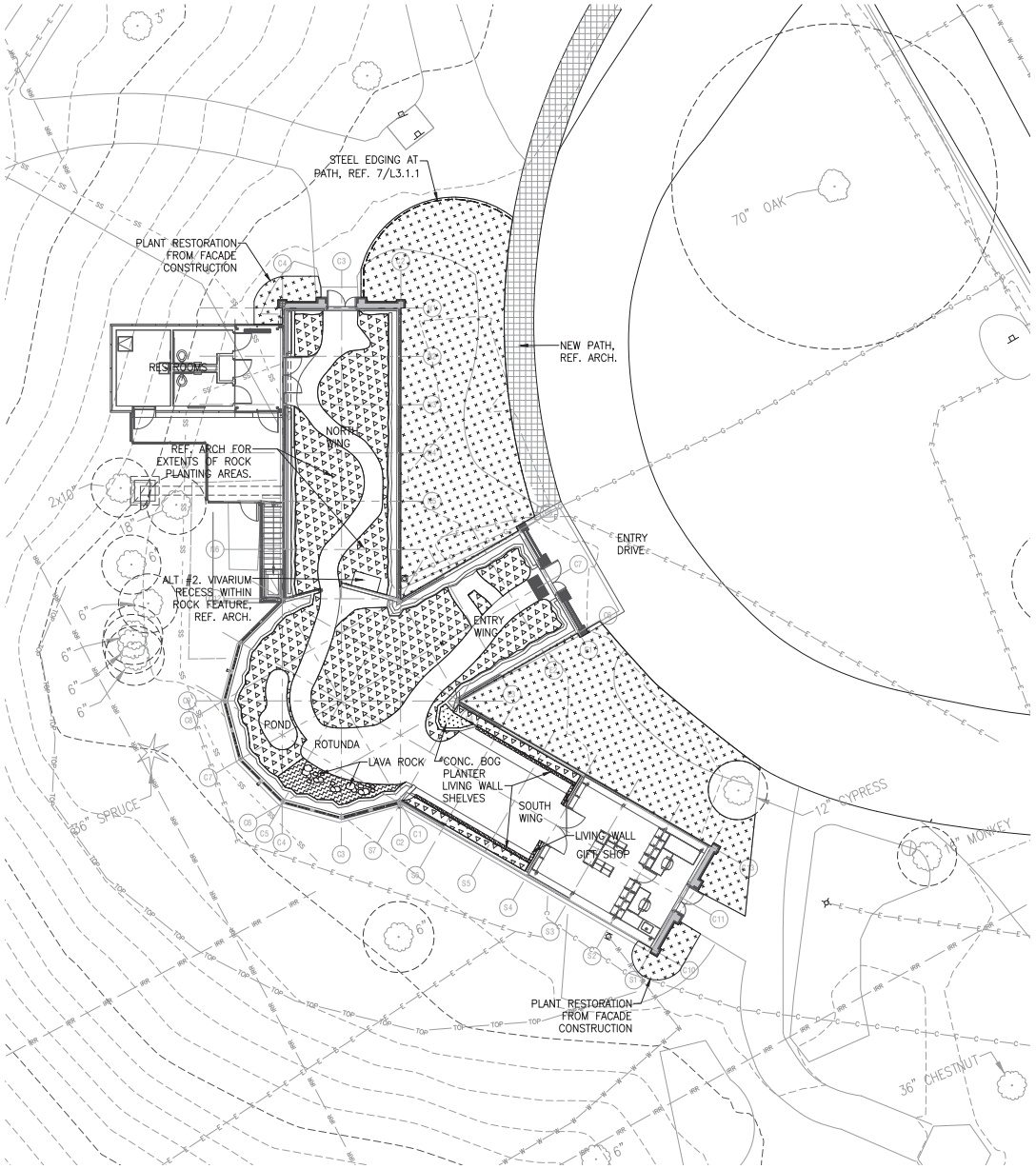
60% CD PRICING SET

316 S G ST, TACOMA, WA 98405

Drawn by: JP
Checked: CB/MW
Date: 12.10.19
Scale:

Revisions:
No. Date Remarks

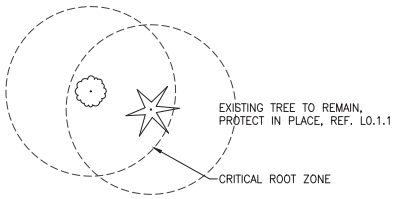
PLANT PROTECTION PLAN
L0.1.1



1 LANDSCAPE PLANTING PLAN
SCALE: 1" = 10'-0"

0 5 10 20 40 FT

PLANTING LEGEND



EXTERIOR PLANTING SCHEDULE

SYMBOL	TYPE	QUANTITY	PLANT NOTES
	OUTDOOR ENTRY PLANTING	2,200 SF	$7/SF
INTERIOR PLANTING SCHEDULE			
	EXISTING INTERIOR PLANTINGS	1,270 SF	ASSUME 25% REPLACEMENT OF EXISTING INTERIOR PLANTS DUE TO LOSS DURING RENOVATION PROCESS. $20/SF.
	XERIC PLANTING	60 SF	$20/SF
	BOG PLANTING	13 SF	$20/SF
	LIVING WALL PLANTING (GIFT SHOP)	160 SF	$12/SF
	LIVING WALL PLANTING (SHELVES)	115 SF	$12/SF

NOTES:
1. REFER TO SHEETS L2.1.2 FOR SOILS PLAN.
2. PLANT SELECTION TO BE COORDINATED WITH SEYMOUR CONSERVATORY STAFF AND METRO PARKS.
3. PLANTS TO BE PROCURED THROUGH SPECIALTY NURSERIES, ANTICIPATE HIGHER UNIT COSTS COMPARED TO COMMERCIAL NURSERIES.

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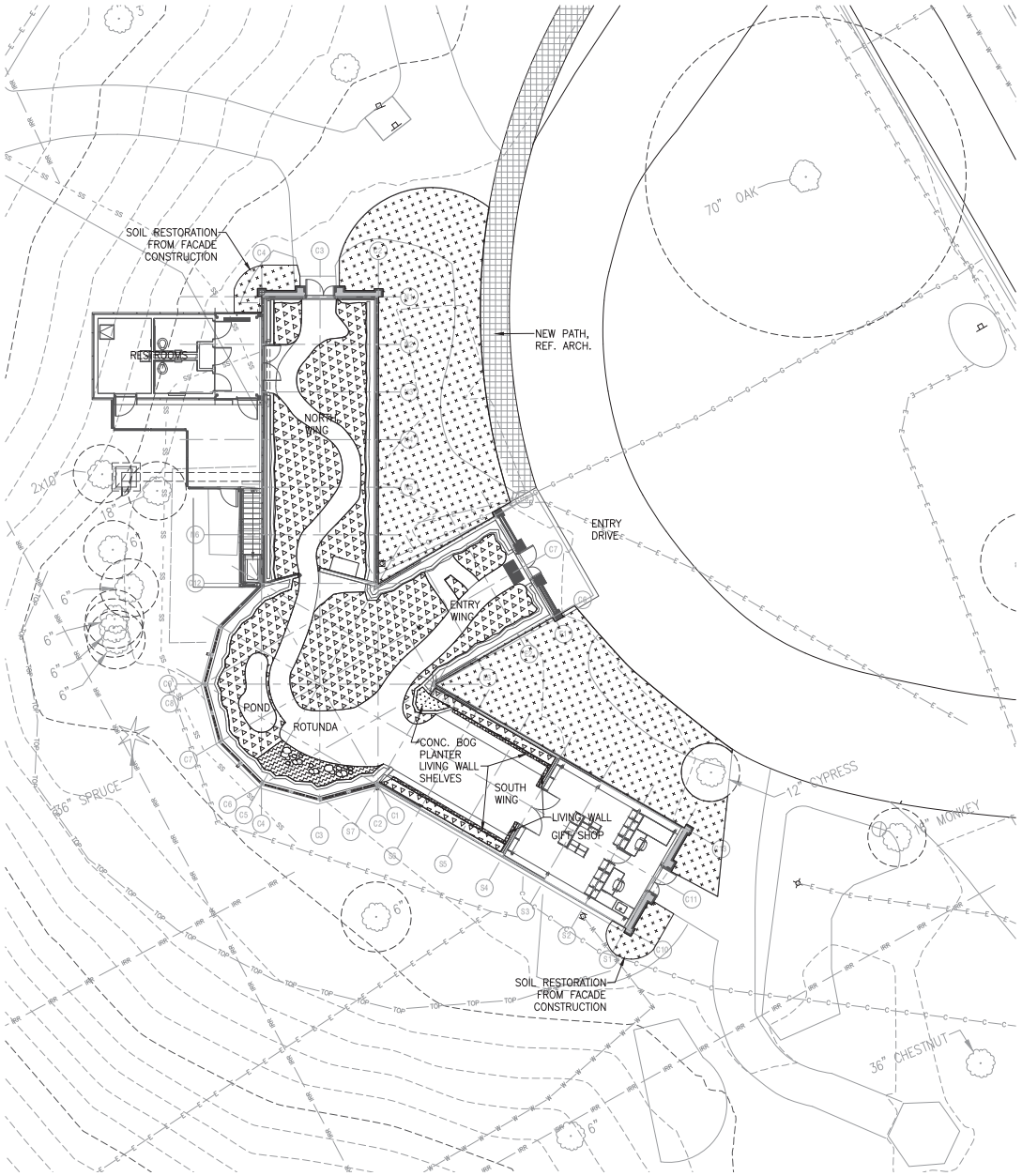
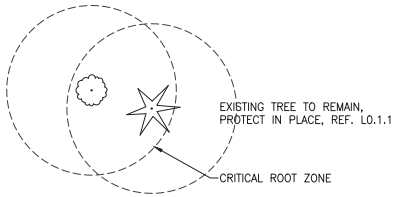
PLANTING PLAN

L2.1.1



1 LANDSCAPE SOILS PLAN
SCALE: 1" = 10'-0"

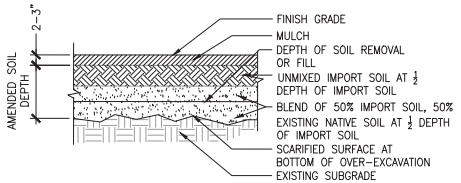
PLANTING LEGEND



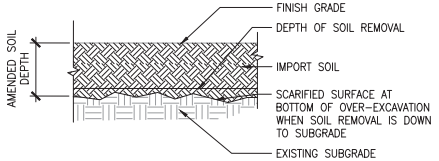
EXTERIOR SOILS SCHEDULE

SYMBOL	TYPE	QUANTITY	NOTES
	TYPE A: BIORETNETION MIX FOR EXTERIOR PLANTINGS	2,200 SF	SELECTIVELY REMOVE AND REPLACE 50% AT 12" DEPTH. REMAINING EXISTING SOIL SHALL BE SCRAPED AROUND EXISTING PLANTS AND REPLACED AT A 2"–4" DEPTH.
INTERIOR SOILS SCHEDULE			
	TYPE B: CONSERVATORY SOIL MIX	1,270 SF	REMOVE AND REPLACE AT 8" DEPTH AROUND ALL EXISTING PLANTS, REF. SPECS.
	TYPE C: XERIC SOIL MIX	60 SF	REMOVE AND REPLACE AT 8" DEPTH, REF. SPECS.
	TYPE D: BOG SOIL MIX	13 SF	AT 12" DEPTH, REF. SPECS.
	TYPE E: EPIPHYTE SOIL MIX	6 CF	TO BE PLACED AS PLANTING INFILL AROUND ROCKS AND ROCK WALLS REF. SPECS.
	SUPPLEMENTAL LIVING WALL MEDIA	275 SF	REF. SPECS.

NOTES:
1. REFER TO SHEETS L2.1.1 FOR PLANTING PLAN.
2. DURING SOIL INSTALLATION GREAT CARE MUST BE TAKEN TO AVOID DAMAGE TO EXISTING PLANTS TO REMAIN AND BE DONE UNDER THE SUPERVISION OF METRO PARKS TACOMA AND/OR THE PROJECT LANDSCAPE ARCHITECT.



2 EXTERIOR PLANTING SOIL PREPARATION
SCALE: 1" = 1'-0"



3 INTERIOR PLANTING SOIL PREPARATION
SCALE: 1" = 1'-0"

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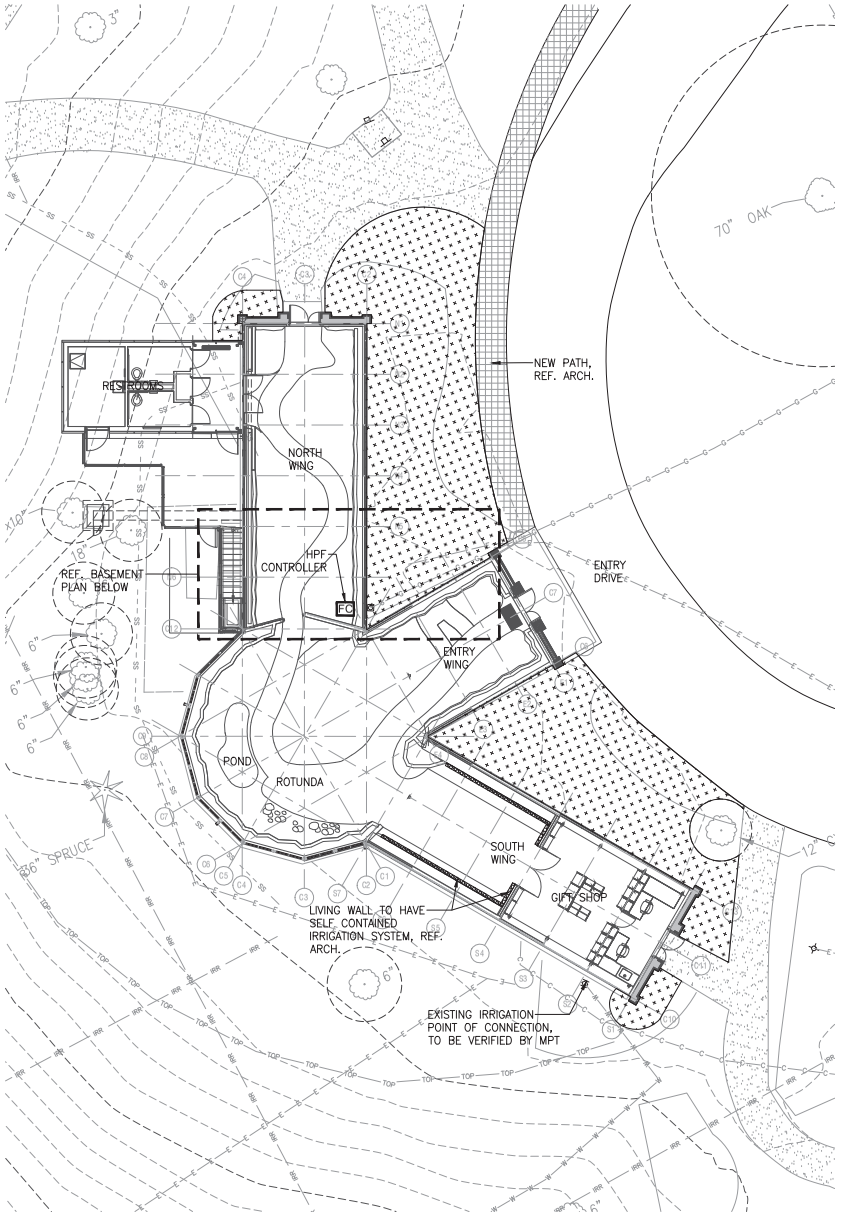
SOILS PLAN

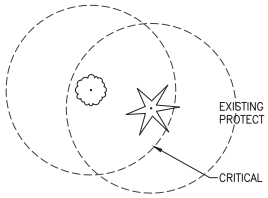
L2.1.2



1 LANDSCAPE PLANTING PLAN
SCALE: 1" = 10'-0"

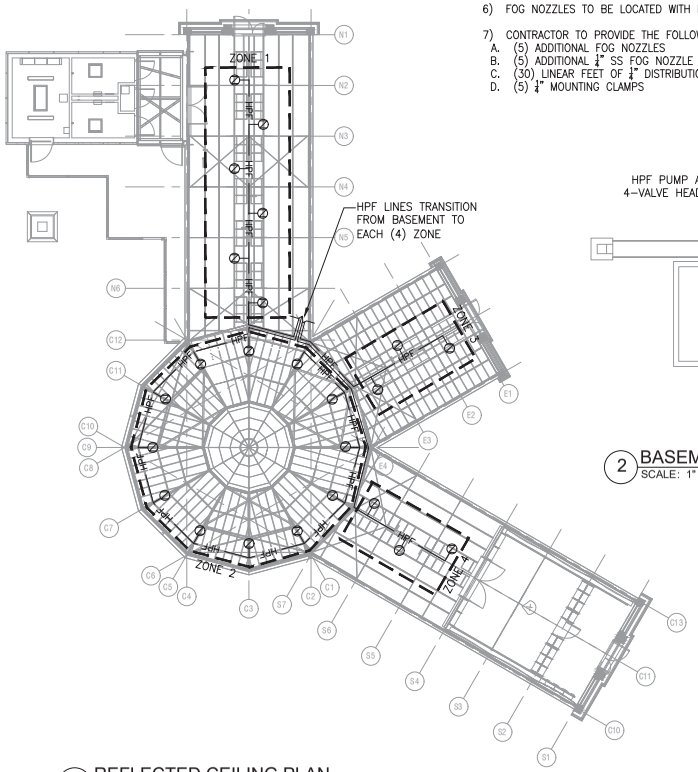
0 5 10 20 40 FT

EXTERIOR IRRIGATION LEGEND



HIGH PRESSURE FOG LEGEND

FC	MEEFOG CONTROLLER
⌀	HIGH PRESSURE FOG NOZZLE
— HPF —	1/4" SS HIGH PRESSURE FOG DISTRIBUTION LATERAL



2 REFLECTED CEILING PLAN
SCALE: 1" = 10'-0"

EXTERIOR IRRIGATION SCHEDULE

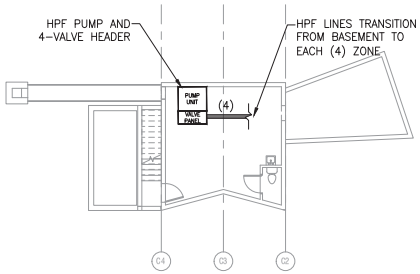
SYMBOL	TYPE	QUANTITY	IRRIGATION NOTES
	AMEND EXISTING IRRIGATION	2,200 SF	AMENDMENT TO EXISTING IRRIGATION SYSTEM FROM CONSTRUCTION DISTURBANCE, ADDITIONAL PLANTINGS, AND SOIL PLACEMENT, SHOULD BE RESTORED TO A FULLY OPERATIONAL CONDITION WITH HEAD TO HEAD COVERAGE AND WITH LIKE MATERIAL

EXTERIOR IRRIGATION NOTES:

1. PROTECT EXISTING IRRIGATION. AMEND AS NECESSARY TO PROVIDE FULL COVERAGE OF PLANTING AREAS.
2. NEW IRRIGATION TO BE CONNECTED TO EXISTING SYSTEM.

HIGH PRESSURE FOG SYSTEM NOTES:

1) PIPE ROUTING SHOWN IS DIAGRAMMATIC. ALL PIPE RUNS SHALL BE DETAILED AND COORDINATED WITH MECHANICAL ENGINEER, MECHANICAL CONTRACTOR, BUILDING SYSTEMS AND FOG SYSTEM MANUFACTURER.
2) FOG SYSTEM TO BE MEEFOG INC. HORTICULTURAL FOG LINE SYSTEM OR APPROVED EQUAL.
3) FINAL PIPE RUNS AND PIPE LOCATIONS TO BE DETERMINED BY MECHANICAL CONTRACTOR AND ENGINEER. PIPE RUNS TO BE ATTACHED TO CONSERVATORY STEEL FRAMING
4) PIPE SIZES TO BE DETERMINED BY MECHANICAL ENGINEER AND FOG SYSTEM MANUFACTURER. PROVIDE ADEQUATE WATER PRESSURE AND FLOW DEMANDS.
5) ALL PIPING REQUIRING GRAVITY DRAINAGE SHALL BE SLOPED TO DRAIN
6) FOG NOZZLES TO BE LOCATED WITH LANDSCAPE ARCHITECT PRESENT.
7) CONTRACTOR TO PROVIDE THE FOLLOWING ADDITIONAL FOG SYSTEM COMPONENTS:
A. (5) ADDITIONAL FOG NOZZLES
B. (5) ADDITIONAL ¼" SS FOG NOZZLE RISERS
C. (30) LINEAR FEET OF ¼" DISTRIBUTION TUBING
D. (5) ¼" MOUNTING CLAMPS



2 BASEMENT PLAN
SCALE: 1" = 10'-0"

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W.W. SEYMOUR CONSERVATORY REHABILITATION

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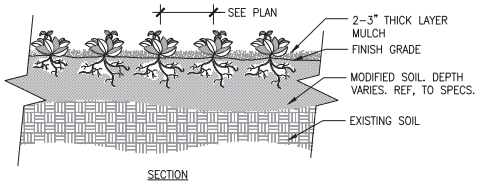
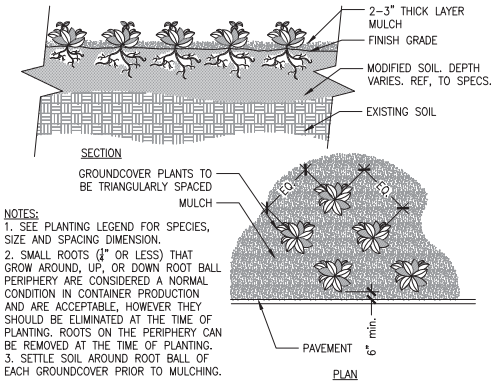
IRRIGATION PLAN

L2.1.3



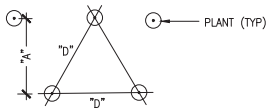
NOTES:
1. SEE PLANTING LEGEND FOR SPECIES AND SIZE.
2. SMALL ROOTS (¼" OR LESS) THAT GROW AROUND, UP, OR DOWN ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE, HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING.
3. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

1 GROUNDCOVER DETAIL
SCALE: 3/4" = 1'=0"



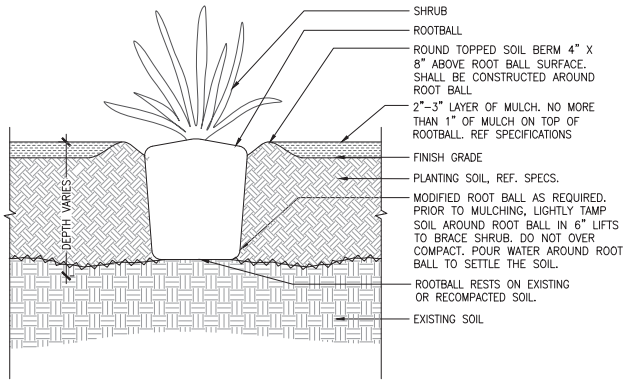
NOTES:
1. SEE PLANTING LEGEND FOR SPECIES, SIZE AND SPACING DIMENSION.
2. SMALL ROOTS (¼" OR LESS) THAT GROW AROUND, UP, OR DOWN ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE, HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING.
3. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

2 GROUNDCOVER
SCALE: 3/4" = 1'=0"

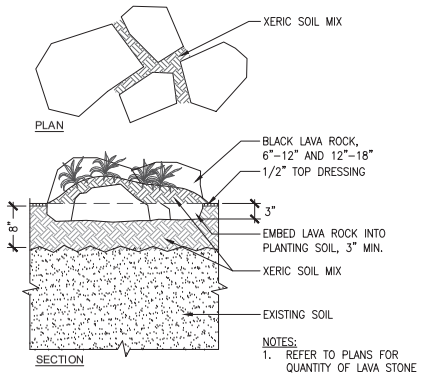


ROW "D"	ROW "A"
18" O.C.	15" O.C.
24" O.C.	21" O.C.
36" O.C.	31" O.C.

3 PLANT SPACING DIAGRAM
SCALE: N.T.S.

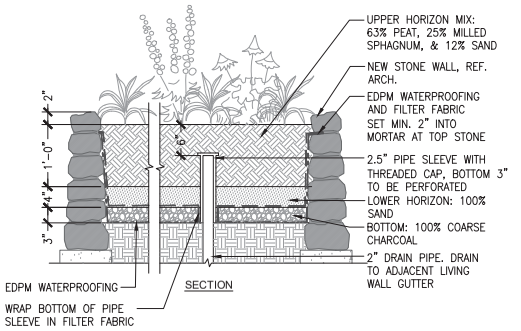


4 SHRUB PLANTING
NOT TO SCALE



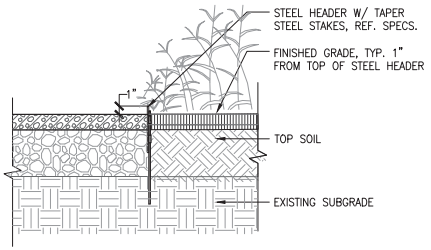
NOTES:
1. REFER TO PLANS FOR QUANTITY OF LAVA STONE

5 XERIC PLANTING IN LAVA ROCK
SCALE: 1" = 1'–0"



NOTES:
1. PROTECT PLANTING BED FROM CONTAMINATION BY CHEMICALS INCLUDING SOLVENTS, SALTS, ETC. ADD NO FERTILIZERS OR AMENDMENTS

6 BOG PLANTING AT STONE PLANTER
SCALE: 1" = 1'–0"



7 STEEL EDGING
SCALE: 1–1/2" = 1'=0"

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W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD PRICING SET

316 S G ST, TACOMA, WA 98405

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Date: 12.10.19
Scale:

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No. Date Remarks

PLANTING DETAILS

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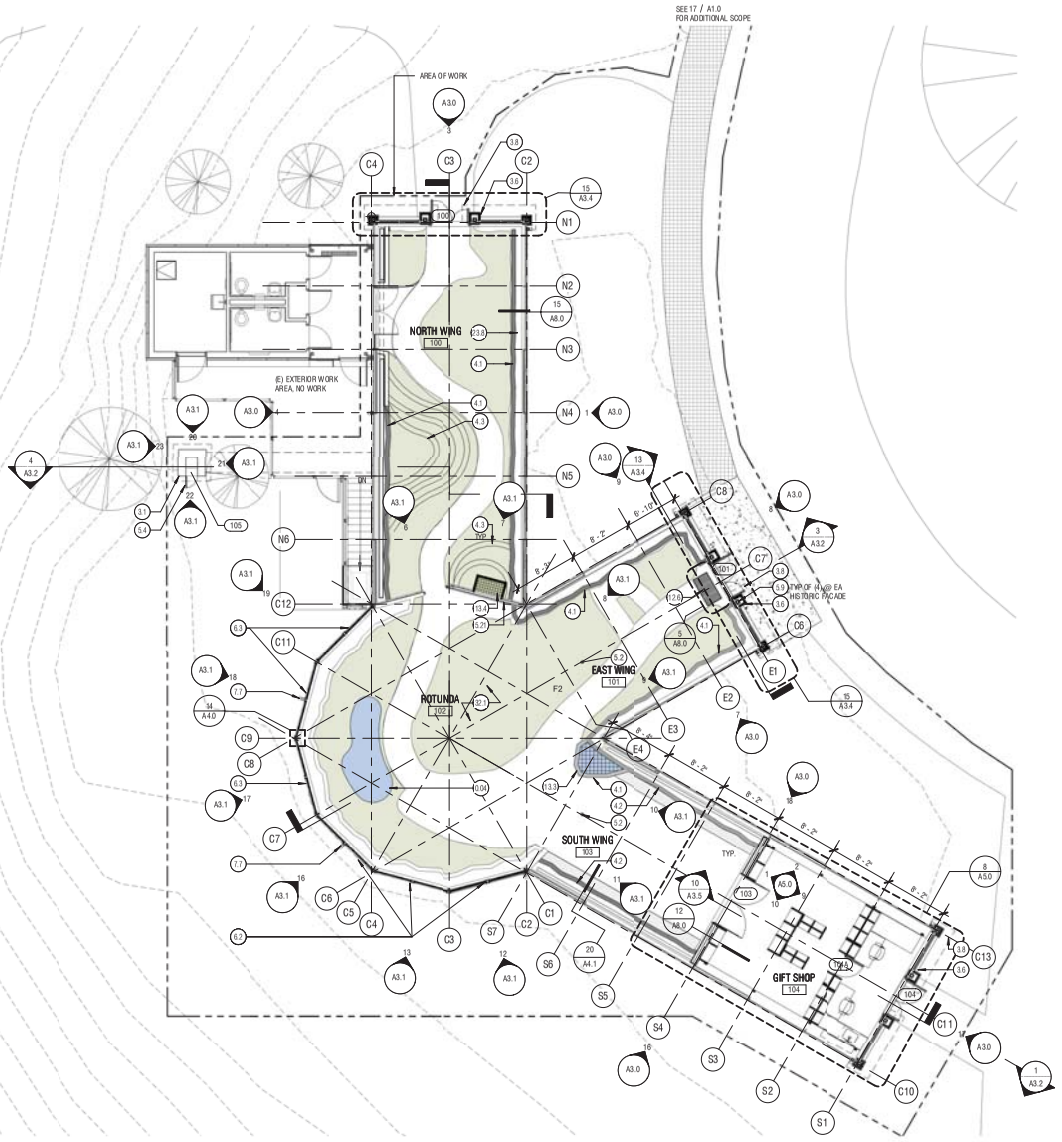


1 FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES:
1. PROTECT (E) SITE VEGETATION
2. PROTECT (E) PLANTINGS @ CONSERVATORY INTERIOR
3. REFER TO ELEVATIONS FOR WINDOW SCOPE
4. REFER TO ELECTRICAL FOR LIGHTING SCOPE

LANDSCAPE LEGEND

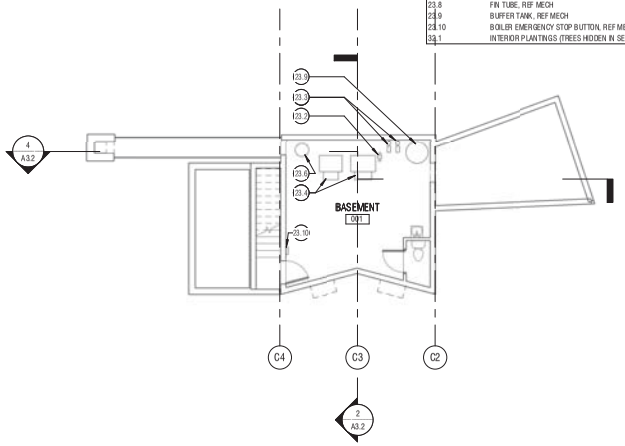
- (E) PLANTER/BED
- (E) WATER FEATURE
- BOG FEATURE
- ALT #2: VIVARIUM

WALL LEGEND

- (E) WALL
- WALL

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
0.04	(E) WATER FEATURE, FISH RELOCATION BY OWNER
3.1	DEMO (E) PARGE COAT DOWN TO SOUND SUBSTRATE. INSTALL PARGE COAT TO MATCH (E)
3.6	HISTORIC FACADE (GFRC OVER OVER STRUCTURAL STEEL FRAME)
3.8	CONC FOOTING, REF STUCT
4.1	STONE WALL TYPE 1
4.2	STONE WALL TYPE 2
4.3	STONE WALL TYPE 3
5.2	STEEL PLATE REINFORCEMENT @ (E) METAL FLAT-PLATE COLUMNS, REF STRUCT
5.4	RESTORE (E) METAL DOOR
5.9	STEEL COLUMNS, REF STRUCT
5.21	STEEL THREADED ROD CROSS BRACES FROM TOP OF STEM WALL TO UNDERSIDE OF COMPRESSION RING
6.2	REPAIR (E) WOOD WINDOW ASSEMBLY: REPLACE (E) LOWER RAILS AND SILL, REPAIR LOWER SECTION OF STILES AND CASING WITH MATERIAL TO MATCH EXISTING. INSTALL THROUGH-WALL FLASHING AT TOP OF STEM-WALL
6.3	EPOXY REPAIR EXISTING SILL AND LOWER SECTIONS OF STILE, CASING, AND RAIL. SALVAGE AND RESINSTALL EXISTING SILL AS REQUIRE TO INSTALL THROUGH-WALL FLASHING AT TOP OF STEM-WALL
7.7	SALVAGE (E) DOWNSPOUT AND FASTENING STRAPS FOR RESTORATION AND REINSTALLATION
12.6	WALK-OFF GRATE
13.3	BOG PLANTER, REF. LANDSCAPE
13.4	ALTERNATE #2 - VIVARIUM, RECESS INTO STONE DISPLAY WALL, REF. LANDSCAPE
23.2	AIR SEPARATOR, REF MECHANICAL
23.3	PUMP, REF MECHANICAL
23.4	BOILER, REF MECHANICAL
23.6	EXPANSION TANK, REF MECHANICAL
23.8	FIN TUBE, REF MECH
23.9	BUFFER TANK, REF MECH
23.10	BOILER EMERGENCY STOP BUTTON, REF MECH
33.1	INTERIOR PLANTINGS (TREES HIDDEN IN SECTION FOR CLARITY)



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

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METROPARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

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NOT FOR CONSTRUCTION

FLOOR PLANS

A2.1.1

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GENERAL NOTES:
1. STEEL & (E) STEEL SURFACES TO RECEIVE HPC-1 FINISH, UNO

LANDSCAPE LEGEND

- (E) PLANTER/BED
- (E) WATER FEATURE
- BOG FEATURE
- ALT #2: VIVARIUM

FLOOR FINISH LEGEND

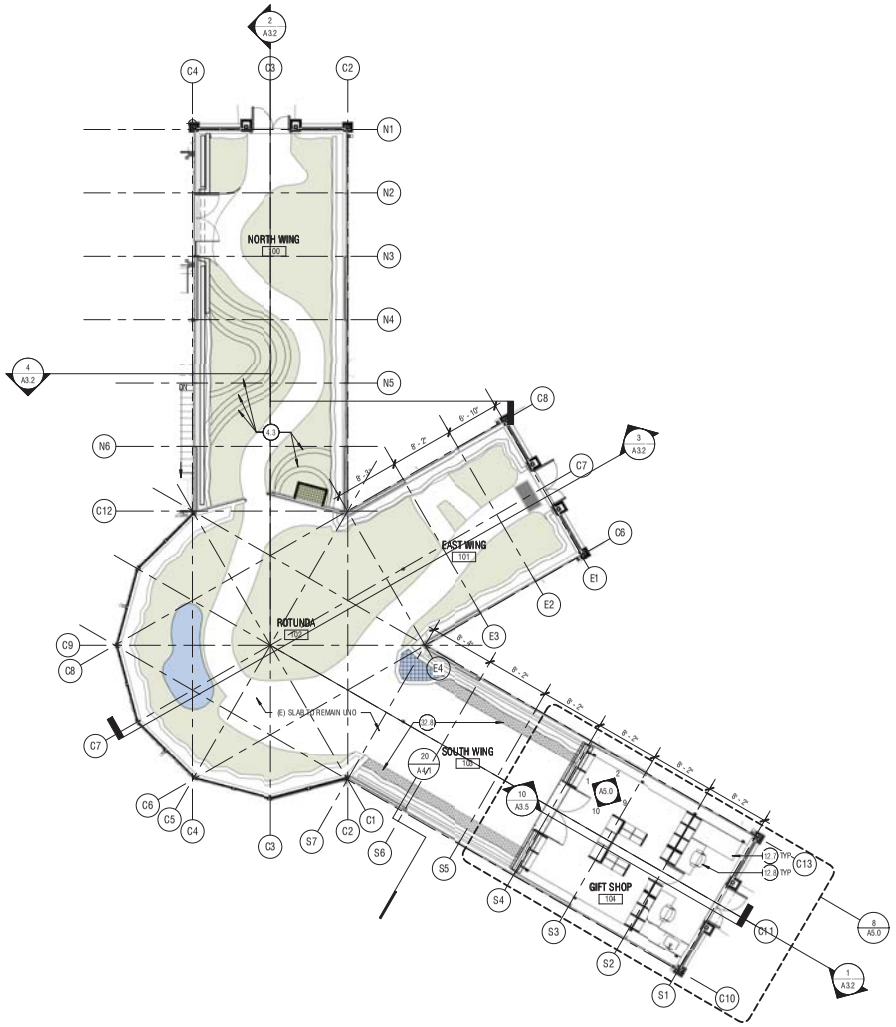
- SAND SET PAVER
- STAMPED CONCRETE TO MATCH (E)

WALL LEGEND

- (E) WALL
- WALL

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
4.3	STONE WALL TYPE 3
12.7	MOVABLE TABLE, FOIO
12.8	CHAIR, FOIO
32.8	PAVERS, REF LANDSCAPE



1 FINISH PLAN
1/8" = 1'-0"

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FINISH PLAN

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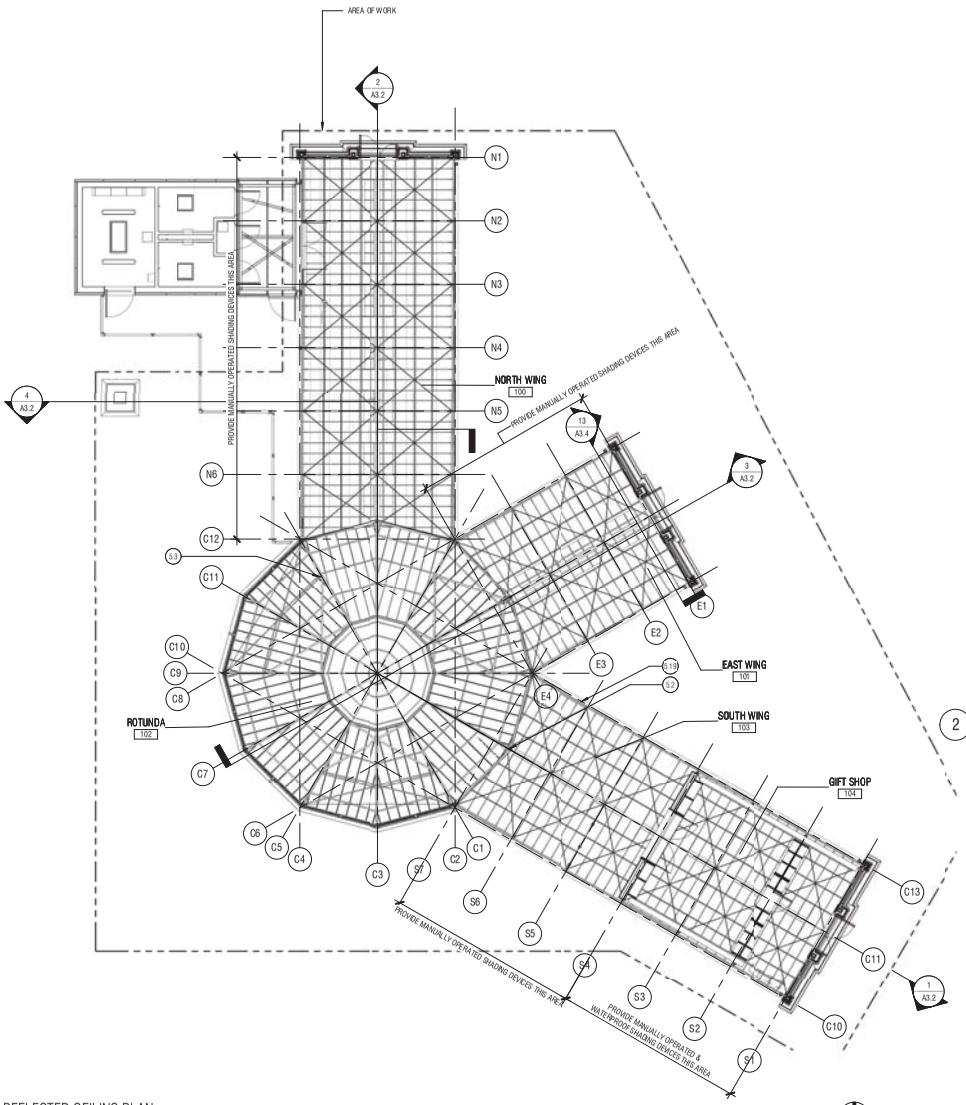
SHKS ARCHITECTS

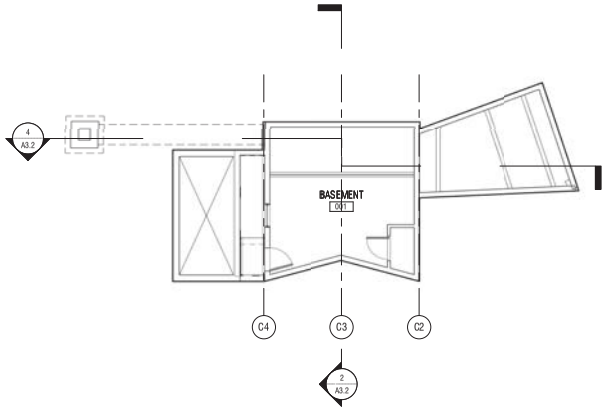
KEYNOTE LEGEND

MARK	KEYNOTE TEXT
5.2	STEEL PLATE REINFORCEMENT @ (E) METAL FLAT-PLATE COLUMNS, REF STRUCT
5.3	RE-WELD CONNECTIONS AT (E) METAL FLAT-PLATE CROSS BRACES, TYP OF (4) LOCATIONS
5.19	STEEL CROSS BRACING AT ROOF PLANE OF WINGS, TYP REF STRUCT

GENERAL NOTE:
1. REFERENCE ELECTRICAL FOR LIGHTING SCOPE



1 UPPER FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"



2 BASEMENT REFLECTED CEILING PLAN
1/8" = 1'-0"

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REFLECTED CEILING PLANS

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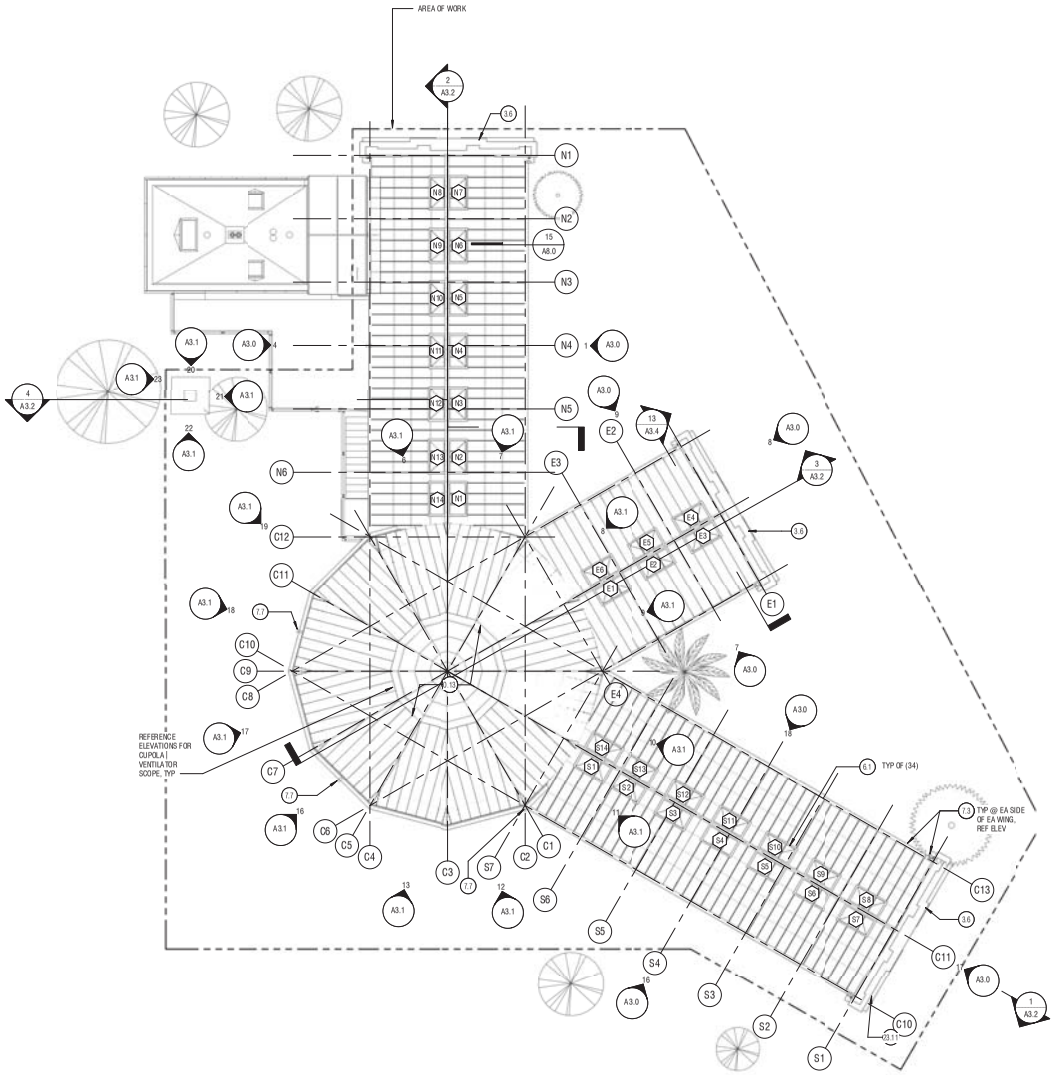
KEYNOTE LEGEND

MARK	KEYNOTE TEXT
0.13	(E) COPPER CUPOLA CAP
3.6	HISTORIC FACADE (G)FRC OVER OVER STRUCTURAL STEEL FRAME)
6.1	DEMO (E) OPERABLE VENTILATOR SASH WINDOW. INSTALL OPERABLE VENTILATOR SASH WINDOW WITH WOOD FRAME, MATCH (E) CONSTRUCTION AND PROFILES
7.3	COPPER GUTTER AND DOWNSPOUT; PROFILE TO MATCH (E). CONNECT TO (E) STORMDRAIN
7.7	SALVAGE (E) DOWNSPOUT AND FASTENING STRAPS FOR RESTORATION AND REINSTALLATION
23.11	PLUMBING VENT, INTEGRATE INTO HISTORIC FACADE

(E) CONSERVATORY GENERAL NOTES

1. DEMO (E) GLAZING COMPOUND. SALVAGE (E) GLASS SHINGLES.
2. PREP AND PAINT (E) STEEL FRAMING MULLIONS.
3. CLEAN SALVAGED GLASS SHINGLES. REINSTALL SALVAGED GLASS SHINGLES (STAGGER AT DOME, ALIGN AT WINGS). 20% OF GLASS SHINGLES TO BE REPLACED.
4. CLEAN (E) CONCRETE STEM WALL



1 ROOF PLAN
1/8" = 1'-0"

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ROOF PLAN

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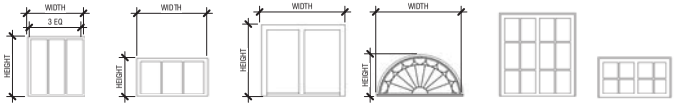


W1 CUPOLA VENTILATOR

W2 ROOF VENTILATOR

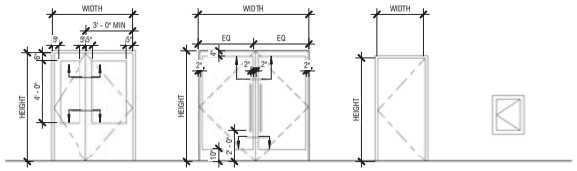
W3 FIXED HISTORIC

W4 HISTORIC ARCH

W5 EXISTING FIXED ROTUNDA (LOWER)

W6 EXISTING FIXED ROTUNDA (UPPER)

WINDOW TYPE LEGEND



A HISTORIC ENTRY

B DOUBLE FRAMELESS GLASS

C SINGLE FLUSH

D CHIMNEY DOOR

DOOR TYPE LEGEND

WINDOW SCHEDULE

MARK	TYPE	HEIGHT	WIDTH	AREA	U-VALUE	COMMENTS	TYPE MARK
C1	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C2	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C3	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C4	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C5	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C6	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C7	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C8	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C9	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C10	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C11	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
C12	CUPOLA VENTILATOR	3' - 10 3/4"	3' - 8"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W1
E1	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
E2	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
E3	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
E4	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
E5	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
E6	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
EF1	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
EF2	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
EF3	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
EF4	FIXED HISTORIC	4' - 8"	5' - 6"	26 SF	0.67	DOUBLE-PANED TEMPERED GLASS	W3
EF5	FIXED HISTORIC	4' - 8"	5' - 6"	26 SF	0.67	DOUBLE-PANED TEMPERED GLASS	W3
N1	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N2	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N3	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N4	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N5	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N6	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N7	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N8	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N9	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N 10	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N 11	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N 12	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N 13	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
N 14	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
NF1	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
NF2	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
NF3	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
NF4	FIXED HISTORIC	4' - 8"	5' - 6"	26 SF	1.12	DOUBLE-PANED TEMPERED GLASS	W3
NF5	FIXED HISTORIC	4' - 8"	5' - 6"	26 SF		DOUBLE-PANED TEMPERED GLASS	W3
RL1	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL2	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL3	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL4	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL5	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL6	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL7	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL8	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL9	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL10	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL11	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RL12	EXISTING FIXED ROTUNDA (LOWER)	2' - 0"	6' - 0"	12 SF		NO CHANGE TO GLAZING	W5
RU1	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU2	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU3	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU4	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU5	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU6	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU7	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU8	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU9	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU10	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU11	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
RU12	EXISTING FIXED ROTUNDA (UPPER)	4' - 0"	6' - 0"	24 SF		NO CHANGE TO GLAZING	W6
S1	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S2	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S3	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S4	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S5	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S6	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S7	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S8	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S9	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S10	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S11	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S12	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S13	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
S14	ROOF VENTILATOR	3' - 7"	4' - 6"	14 SF	1.12	PROVIDE TEMPERED & LAMINATED GLASS	W2
SF1	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
SF2	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
SF3	ARCHED HISTORIC	4' - 0"	5' - 6"	22 SF	1.12	CUSTOM SINGLE-PANED LEADED GLASS TO MATCH HISTORIC PROFILE	W4
SF4	FIXED HISTORIC	4' - 8"	5' - 6"	26 SF	0.67	DOUBLE-PANED TEMPERED GLASS	W3
SF5	FIXED HISTORIC	4' - 8"	5' - 6"	26 SF	0.67	DOUBLE-PANED TEMPERED GLASS	W3

DOOR SCHEDULE

MARK	TYPE	SIZE WIDTH	SIZE HEIGHT	SIZE THICKNESS	HARDWARE SETS	FRAME	FINISH	U VALUE	COMMENTS
100	A	5' - 2"	7' - 0"	2"	01	WD	WD	0.69	SINGLE-PANED TEMPERED GLASS
101	A	5' - 2"	7' - 0"	2"	01	WD	WD	0.69	SINGLE-PANED TEMPERED GLASS
103	B	7' - 0"	7' - 0"	1/2"	02	ALUM	WHITE TO MATCH HPC-1		
104	A	5' - 2"	7' - 0"	2"	01	WD	WD	0.69	SINGLE-PANED TEMPERED GLASS
104A	C	2' - 8"	6' - 8"	2"	03	WD	WD		RINISH TO MATCH SURROUNDING MILLWORK
105	D	1' - 6"	2' - 0"	1"	NO CHANGE	MTL W/ PNT	MTL W/ PNT		RESTORE EXISTING DOOR

NOTE: DEFAULT U-FACTOR FOR WOOD DOORS PER WSEC APPENDIX A TABLE A107.1(1) (SINGLE GLAZING, 45% GLAZED FENESTRATION) = 0.69
DEFAULT GLAZED FENESTRATION SHGC AND VT PER TABLE C303.1.3(3) (CLEAR SINGLE GLAZING)= SHGC=0.40, VT =0.60

PAINTING & COATING SCHEDULE

PAINT TAG	MANUFACTURER (BASIS-OF-DESIGN)	COLOR
HPC-1	TNEMEC	WHITE
PNT-1	BENAJMIN MOORE	TBD FROM MFRS FULL CATALOG
PNT-2	BENAJMIN MOORE	TBD FROM MFRS FULL CATALOG

NOTE: WHERE STRUCTURAL STEEL, METAL FABRICATIONS, AND SUPPORT FRAMING ARE EXPOSED, FABRICATE IN ACCORDANCE WITH AISC SPECIFICATION FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL. ALL EXPOSED STEEL TO RECIEVE HPC-1 FINISH UNLESS NOTED OTHERWISE.

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60% CD

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ASSEMBLIES AND SCHEDULES

A2.3

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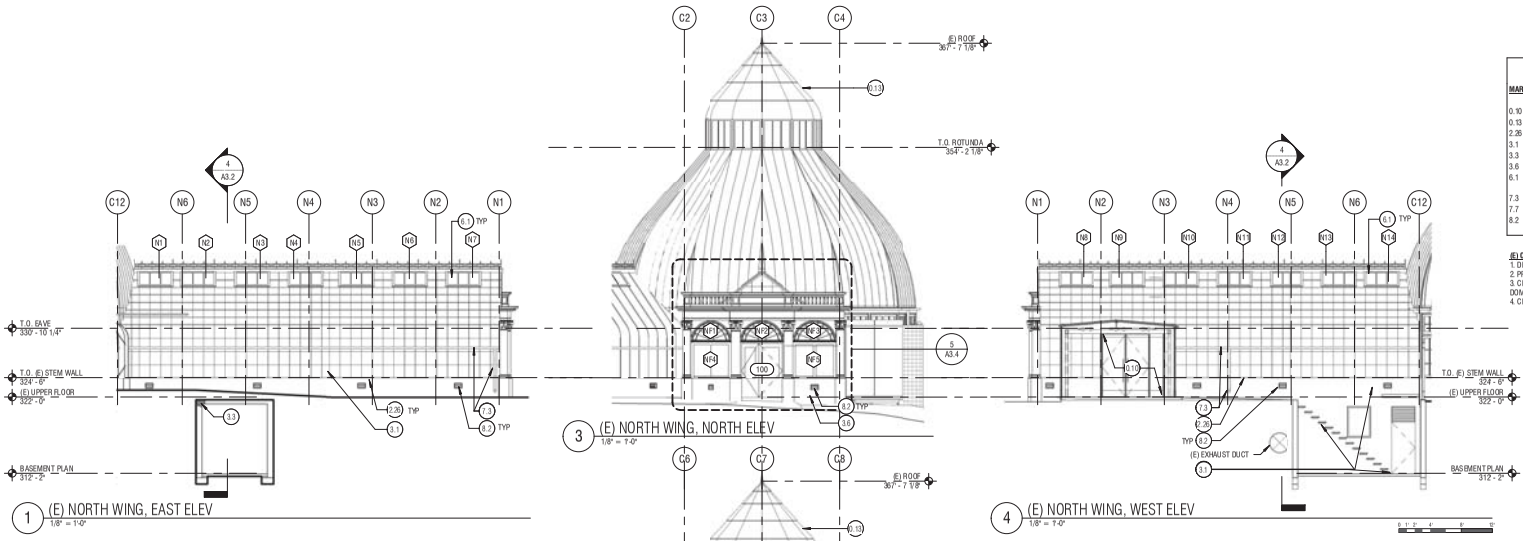
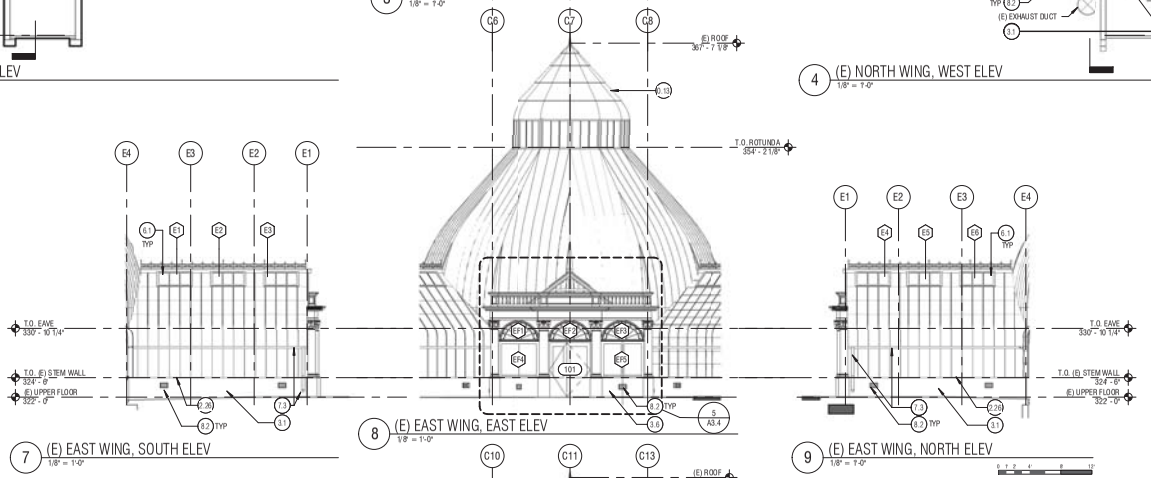


1 (E) NORTH WING, EAST ELEV
1/8" = 1'-0"

3 (E) NORTH WING, NORTH ELEV
1/8" = 1'-0"

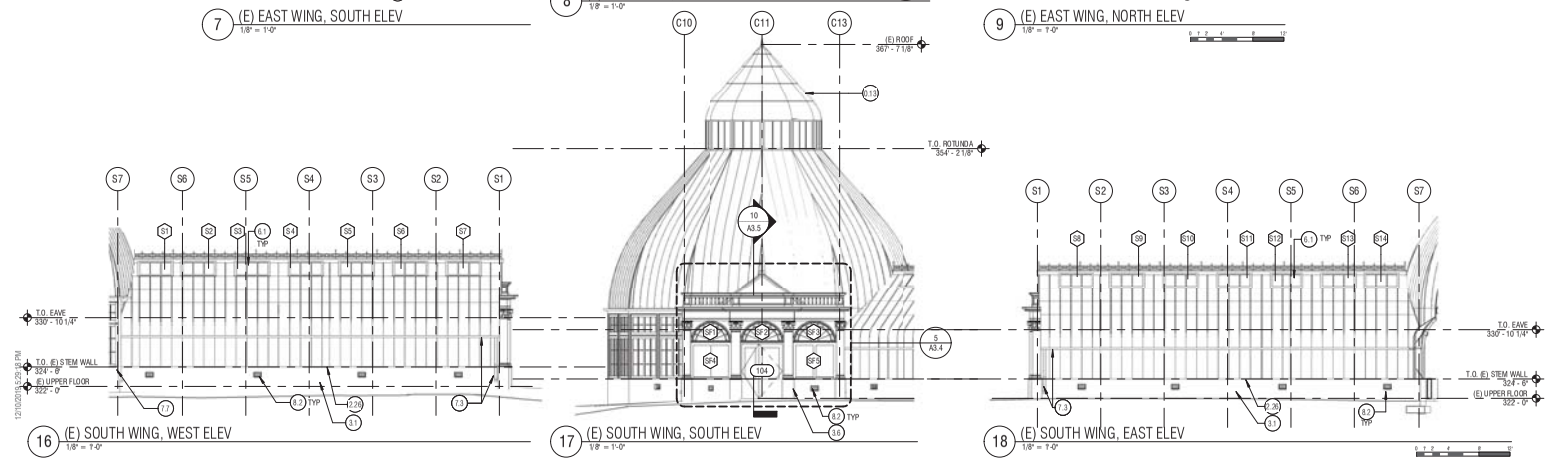
4 (E) NORTH WING, WEST ELEV
1/8" = 1'-0"



7 (E) EAST WING, SOUTH ELEV
1/8" = 1'-0"

8 (E) EAST WING, EAST ELEV
1/8" = 1'-0"

9 (E) EAST WING, NORTH ELEV
1/8" = 1'-0"



16 (E) SOUTH WING, WEST ELEV
1/8" = 1'-0"

17 (E) SOUTH WING, SOUTH ELEV
1/8" = 1'-0"

18 (E) SOUTH WING, EAST ELEV
1/8" = 1'-0"

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
0.10	(E) OPENING STOREFRONT
0.13	(E) COPPER CUPOLA CAP
2.26	DEMO (E) BAKER ROD AT GLAZING SILL
3.1	DEMO (E) PARGE COAT DOWN TO SOUND SUBSTRATE. INSTALL PARGE COAT TO MATCH (E)
3.3	RILL (E) HOLE IN BASEMENT WITH CONCRETE PATCH
3.6	HISTORIC FACADE (GFRC OVER OVER STRUCTURAL STEEL FRAME)
6.1	DEMO (E) OPERABLE VENTILATOR SASH WINDOW. INSTALL OPERABLE VENTILATOR SASH WINDOW WITH WOOD FRAME, MATCH (E) CONSTRUCTION AND PROFILES
7.3	COPPER GUTTER AND DOWNSPOUT; PROFILE TO MATCH (E). CONNECT TO (E) STORMDRAIN
7.7	SALVAGE (E) DOWNSPOUT AND FASTENING STRAPS FOR RESTORATION AND REINSTALLATION
8.2	DEMO OPENING AT (E) CONCRETE STEM WALL; INSTALL METAL VENT WITH DAMPER WITHIN (E) CONCRETE STEM WALL OPENING

(E) CONSERVATORY GENERAL NOTES

1. DEMO (E) GLAZING COMPOUND. SALVAGE (E) GLASS SHINGLES.
2. PREP AND PAINT (E) STEEL FRAMING MULLIONS.
3. CLEAN SALVAGED GLASS SHINGLES. REINSTALL SALVAGED GLASS SHINGLES (STAGGER AT DOME, ALIGN AT WINGS); 20% OF GLASS SHINGLES TO BE REPLACED.
4. CLEAN (E) CONCRETE STEM WALL

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EXTERIOR ELEVATIONS

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(E) CONSERVATORY GENERAL NOTES
1. DEMO (E) GLAZING COMPOUND. SALVAGE (E) GLASS SHINGLES.
2. PREP AND PAINT (E) STEEL FRAMING MULLIONS.
3. CLEAN SALVAGED GLASS SHINGLES. REINSTALL SALVAGED GLASS SHINGLES (STAGGER AT DOME, ALIGN AT WINGS); 20% OF GLASS SHINGLES TO BE REPLACED.
4. CLEAN (E) CONCRETE STEM WALL.

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
0.13	(E) COPPER CUPOLA CAP
3.1	DEMO (E) PARGE COAT DOWN TO SOUND SUBSTRATE. INSTALL PARGE COAT TO MATCH (E)
3.2	PREP & RILL (E) CRACKS
5.4	RESTORE (E) METAL DOOR
6.1	DEMO (E) OPERABLE VENTILATOR SASH WINDOW. INSTALL OPERABLE VENTILATOR SASH WINDOW WITH WOOD FRAME, MATCH (E) CONSTRUCTION AND PROFILES
6.2	REPAIR (E) WOOD WINDOW ASSEMBLY: REPLACE (E) LOWER RAILS AND SILL; REPAIR LOWER SECTION OF STILES AND CASING WITH MATRIAL TO MATCH EXISTING. INSTALL THROUGH-WALL FLASHING AT TOP OF STEM-WALL

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
6.3	EPOXY REPAIR EXISTING SILL AND LOWER SECTIONS OF STILE, CASING, AND RAIL. SALVAGE AND REINSTALL EXISTING SILL AS REQUIRE TO INSTALL THROUGH-WALL FLASHING AT TOP OF STEM-WALL
7.2	COPPER FLASHING
7.7	SALVAGE (E) DOWNSPOUT AND FASTENING STRAPS FOR RESTORATION AND REINSTALLATION
8.2	DEMO OPENING AT (E) CONCRETE STEM WALL; INSTALL METAL VENT WITH DAMPER WITHIN (E) CONCRETE STEM WALL OPENING

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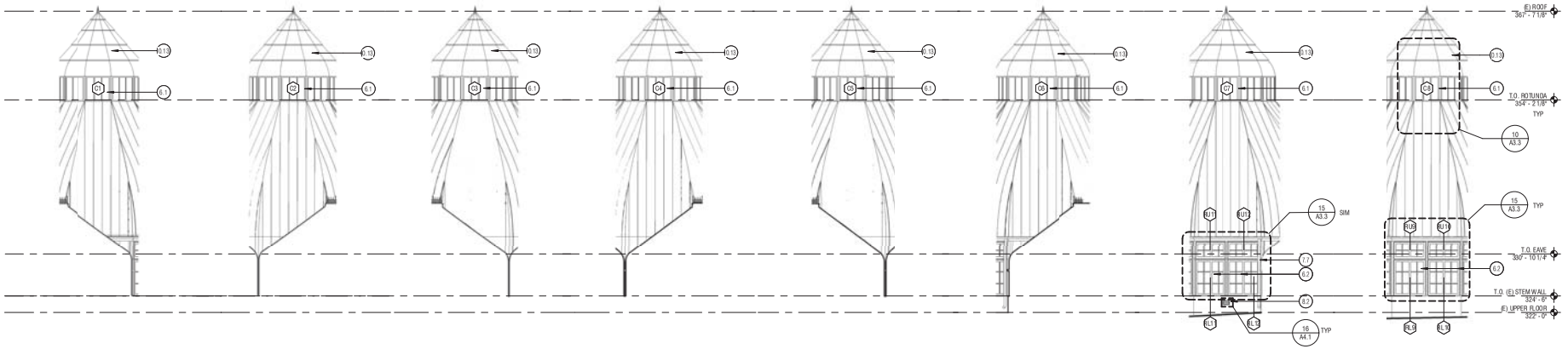
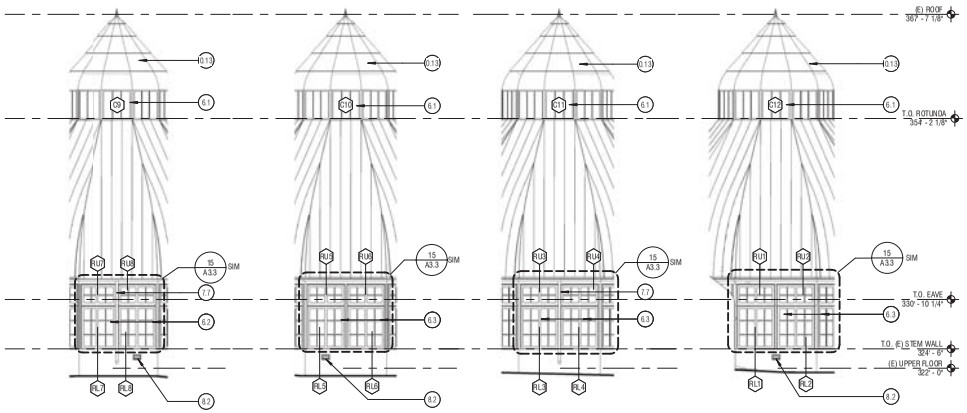
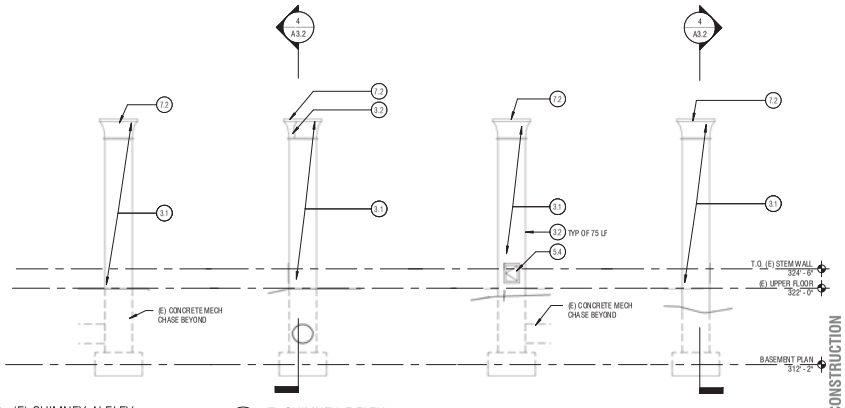


6 (E) DOME, N ELEV 1/8" = 1'-0" | 7 (E) DOME, NNE ELEV 1/8" = 1'-0" | 8 (E) DOME, NE ELEV 1/8" = 1'-0" | 9 (E) DOME, E ELEV 1/8" = 1'-0" | 10 (E) DOME, SE ELEV 1/8" = 1'-0" | 11 (E) DOME, SSE ELEV 1/8" = 1'-0" | 12 (E) DOME, S ELEV 1/8" = 1'-0" | 13 (E) DOME, SSW ELEV 1/8" = 1'-0"



16 (E) DOME, SW ELEV 1/8" = 1'-0" | 17 (E) DOME, W ELEV 1/8" = 1'-0" | 18 (E) DOME, NW ELEV 1/8" = 1'-0" | 19 (E) DOME, NNW ELEV 1/8" = 1'-0"



20 (E) CHIMNEY, N ELEV 1/8" = 1'-0" | 21 (E) CHIMNEY, E ELEV 1/8" = 1'-0" | 22 (E) CHIMNEY, S ELEV 1/8" = 1'-0" | 23 (E) CHIMNEY, W ELEV 1/8" = 1'-0"

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METROPARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

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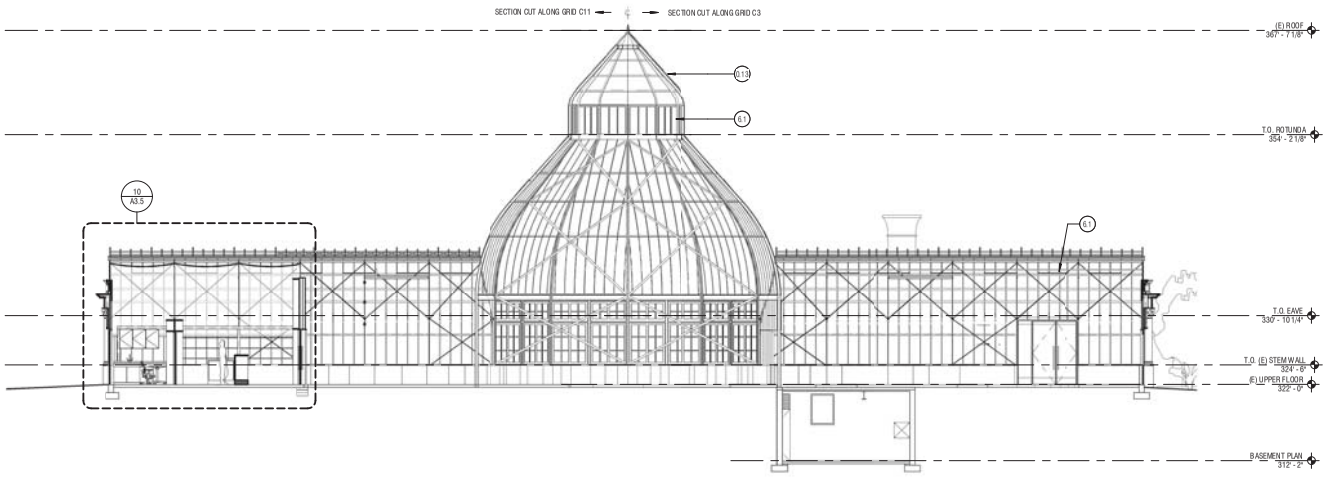
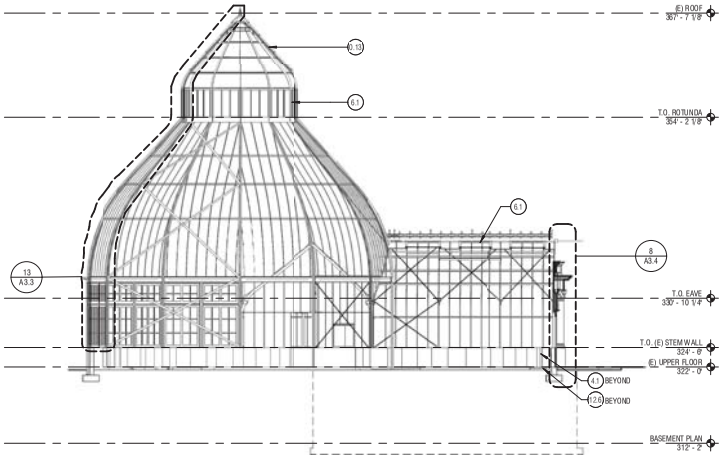
KEYNOTE LEGEND

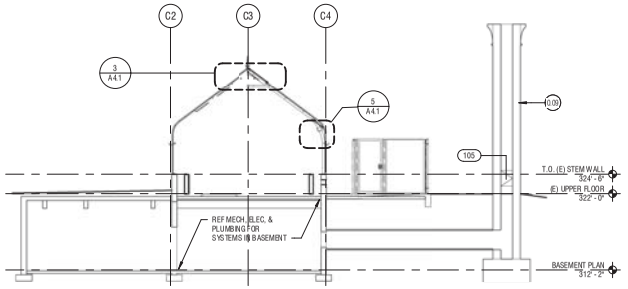
MARK	KEYNOTE TEXT
0.09	(E) CONC CHIMNEY
0.13	(E) COPPER CUPOLA CAP
4.1	STONE WALL TYPE 1
6.1	DEMO (E) OPERABLE VENTILATOR SASH WINDOW. INSTALL OPERABLE VENTILATOR SASH WINDOW WITH WOOD FRAME, MATCH (E) CONSTRUCTION AND PROFILES
12.6	WALK-OFF GRATE



1 SECTION THROUGH SOUTH AND NORTH WINGS
1/8" = 1'-0"



3 SECTION THROUGH ROTUNDA AND EAST WING
1/8" = 1'-0"



4 SECTION THROUGH NORTH WING AND CHIMNEY
1/8" = 1'-0"

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BUILDING SECTIONS

A3.2

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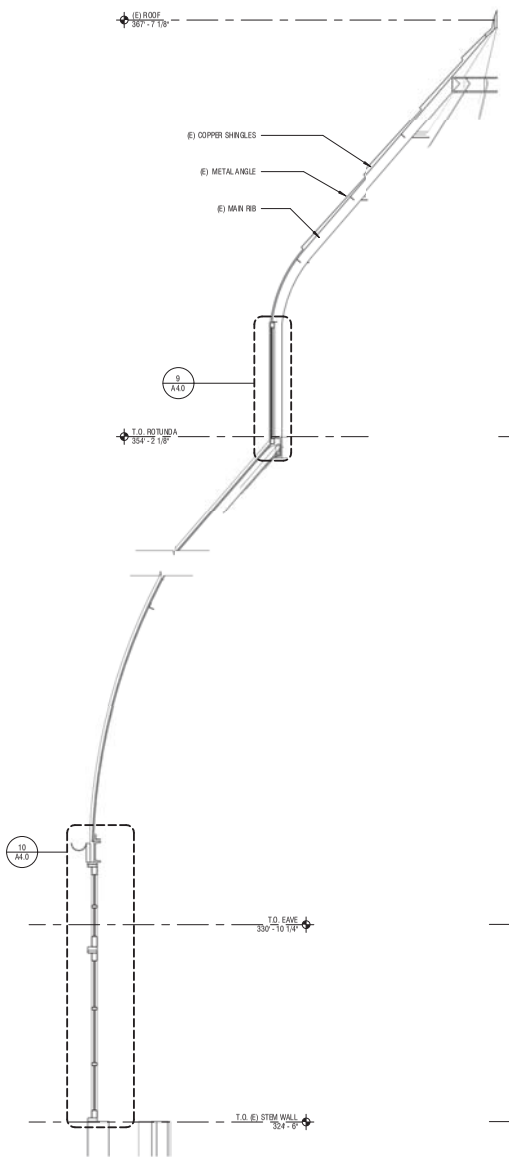
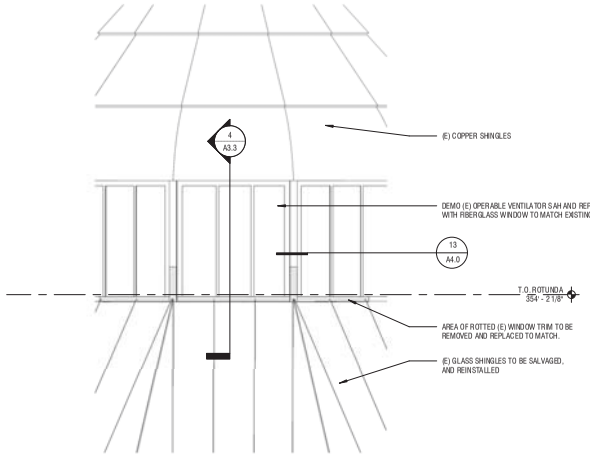
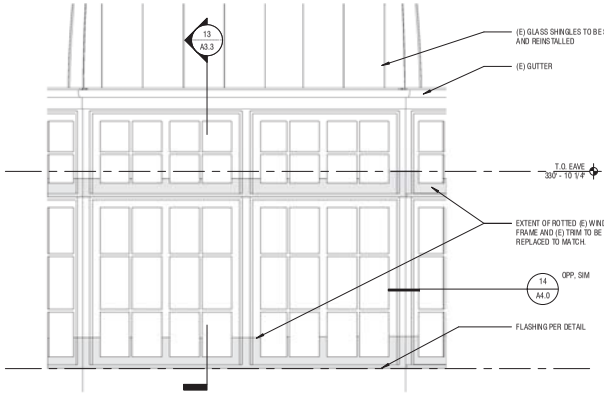


13 Section 3
1/2" = 1'-0"



10 (E) DOME, SSW ELEV - ENLARGED CUPOLA 2
1/2" = 1'-0"



15 (E) DOME, SSW ELEV - ENLARGED
1/2" = 1'-0"

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WALL SECTIONS & ENLARGED ELEVTAIONS

A3.3

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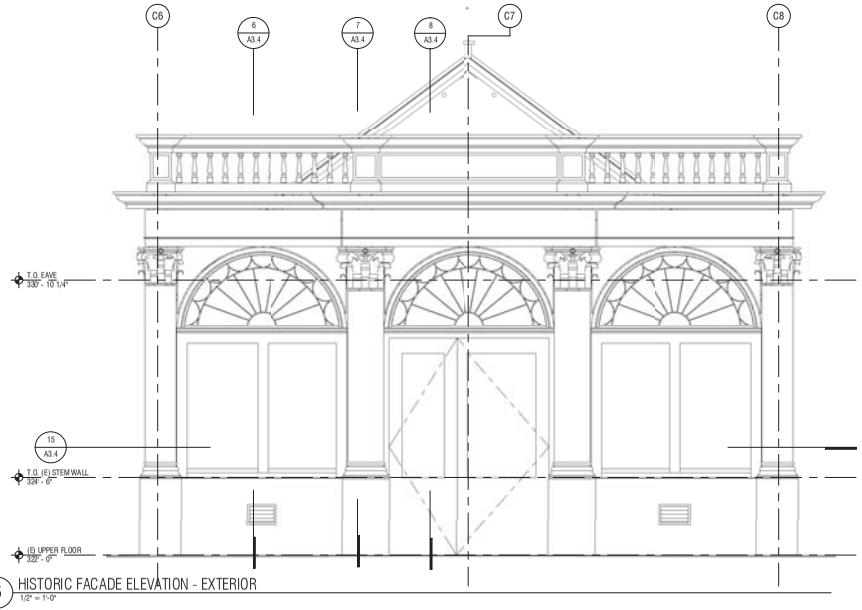
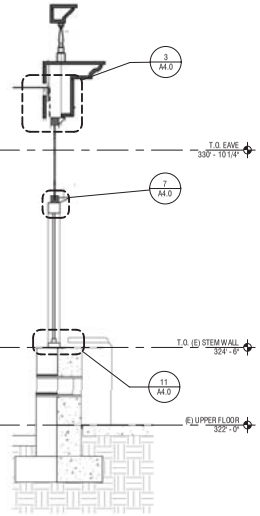
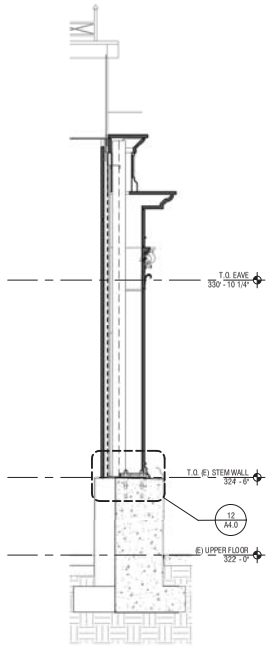


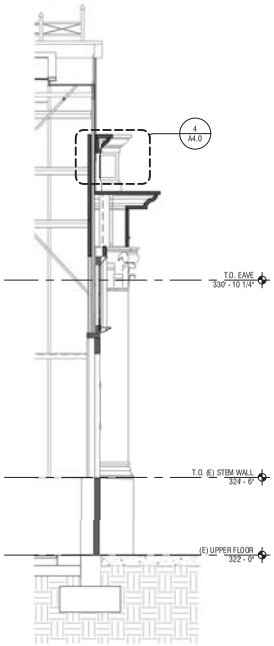
5 HISTORIC FACADE ELEVATION - EXTERIOR
1/2" = 1'-0"



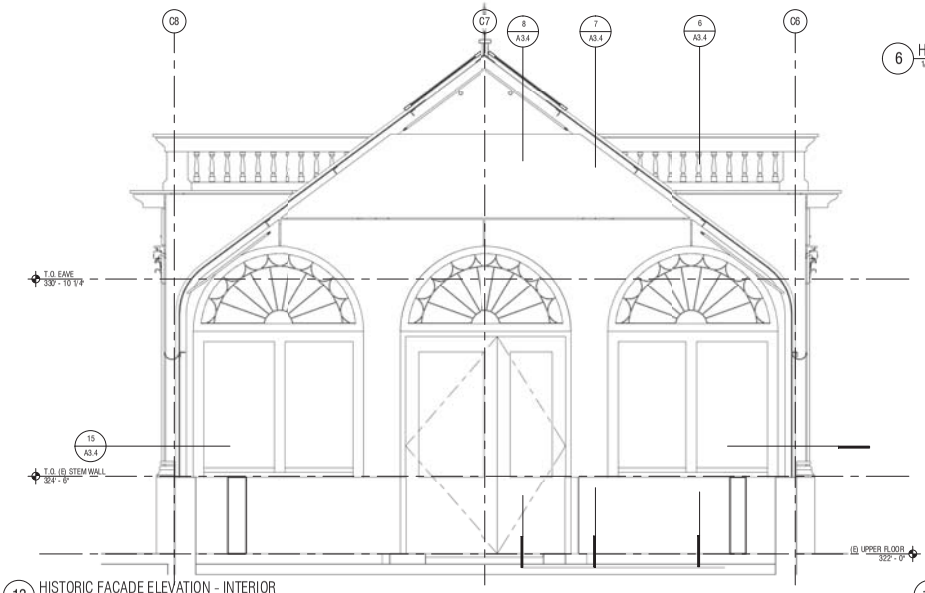
6 HISTORIC FACADE SECTION @ WINDOW
1/2" = 1'-0"



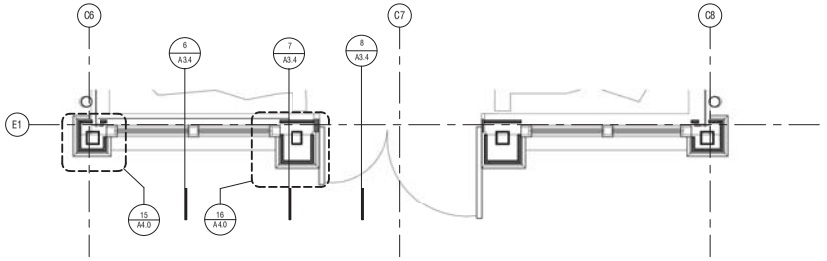
7 HISTORIC FACAED SECTION @ PILATSER
1/2" = 1'-0"



8 HISTORIC FACADE SECTION @ DOOR
1/2" = 1'-0"



13 HISTORIC FACADE ELEVATION - INTERIOR
1/2" = 1'-0"



15 HISTORIC FACADE - PLAN SECTION
1/2" = 1'-0"

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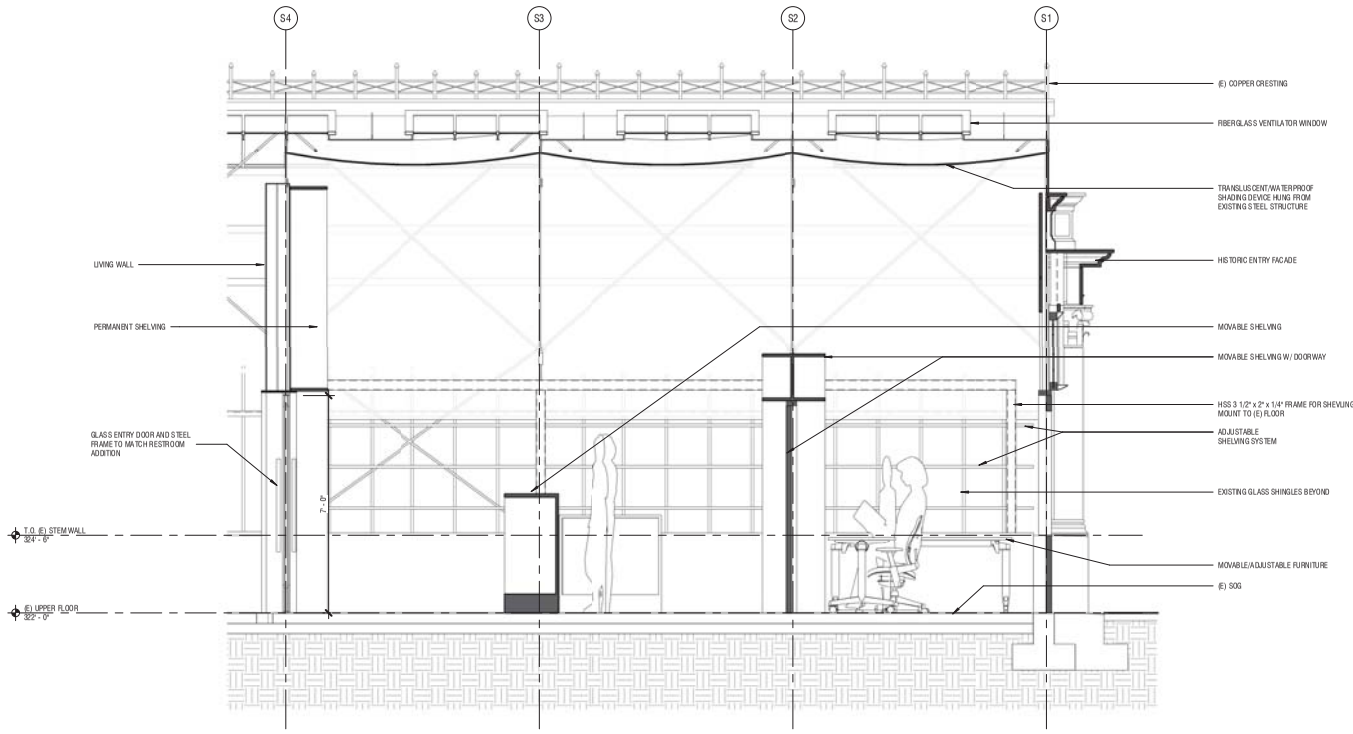

10 SECTION THROUGH GIFT SHOP & OFFICE
1/2" = 1'-0"

0 1' 2' 4'

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ENLARGED BUILDING SECTIONS

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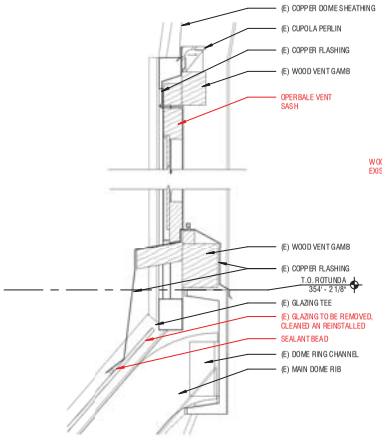
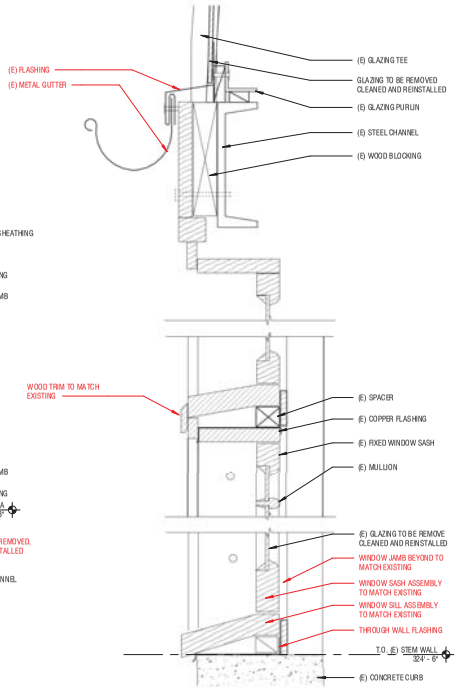
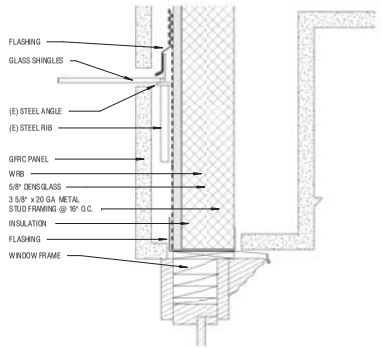


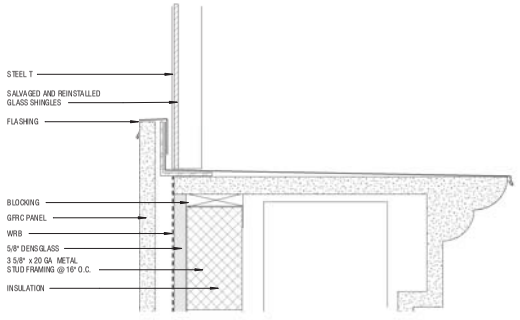
9 TYPICAL SASH/ FLASHING @CUPOLA
3" = 1'-0"



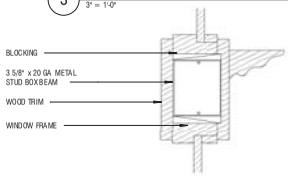
10 TYPICAL WINDOW SASH HEAD & GUTTER
3" = 1'-0"



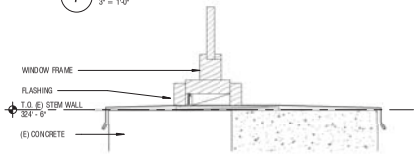
3 HISTORIC FACADE @ (E) ROOF GLAZING
3" = 1'-0"



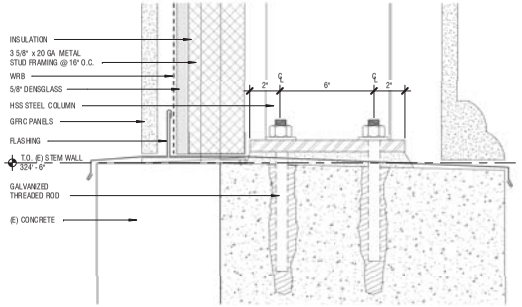
4 HISTORIC FACADE DETAIL @ ENTRY VERTICAL GLAZING
3" = 1'-0"



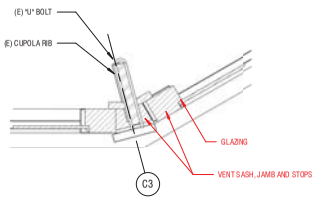
7 HISTORIC FACADE @ HORIZONTAL WINDOW MULLION
3" = 1'-0"



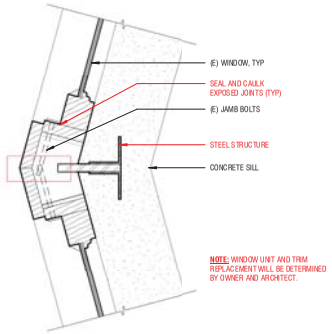
11 HISTORIC FACADE @ WINDOW SILL
3" = 1'-0"



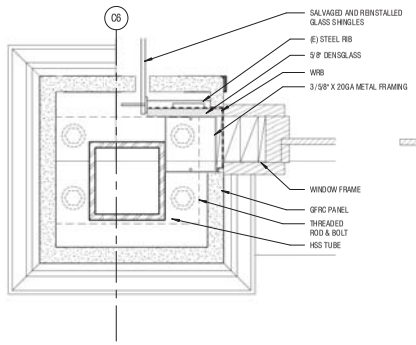
12 HISTORIC FACADE DEATIL @ STEM WALL/ GFRC
3" = 1'-0"



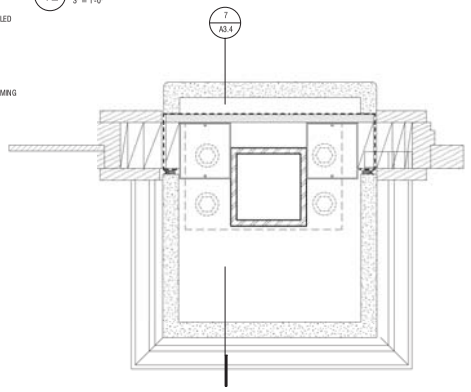
13 TYPICAL MULLION @ CUPOLA
3" = 1'-0"



14 TYPICAL MULLION @ WEST WALL
3" = 1'-0"



15 TYP OUTSIDE GFRC PIER
3" = 1'-0"



16 TYP MIDDLE GFRC PIER
3" = 1'-0"

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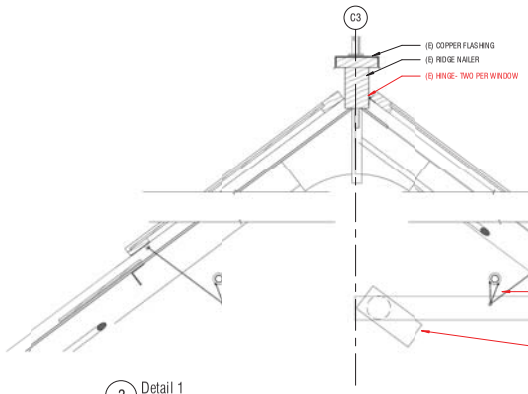
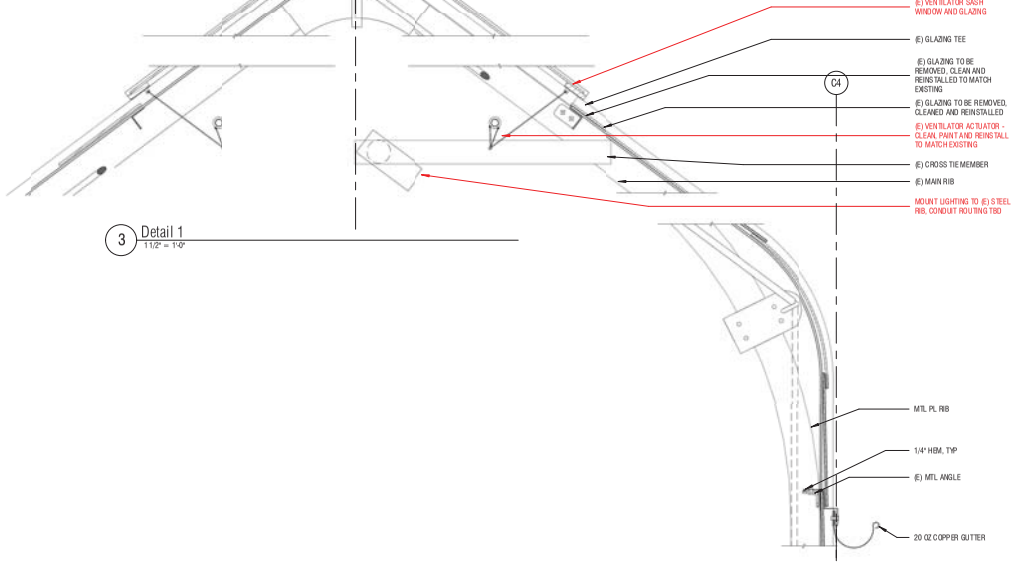
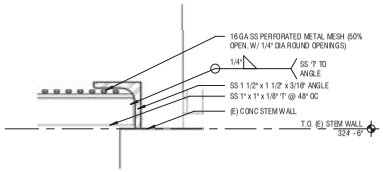


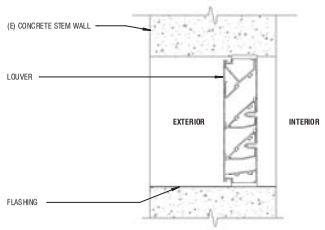
3 Detail 1
1 1/2" = 1'-0"



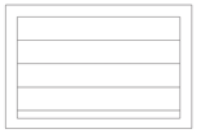
5 TYPICAL GUTTER AND CROSS BRACE CONNECTION AT WINGS
1 1/2" = 1'-0"



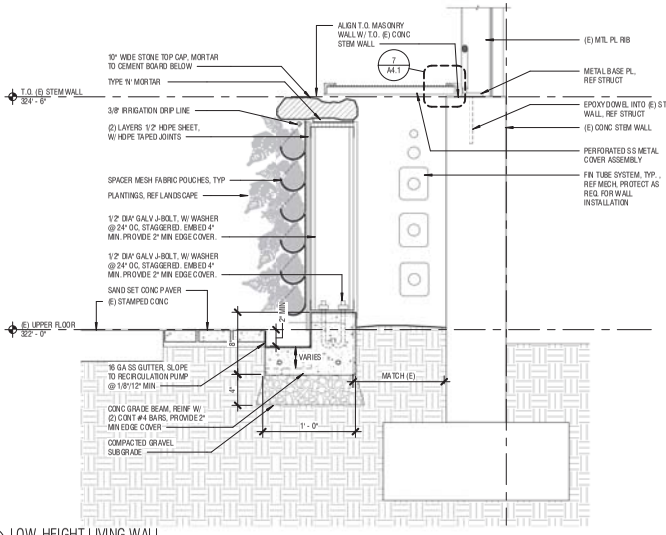
7 TYP METAL FIN TUBE COVER
6" = 1'-0"



15 TYP LOUVER @ STEM WALL
3" = 1'-0"



16 TYP LOUVER ELEVATION
3" = 1'-0"



20 LOW-HEIGHT LIVING WALL
1 1/2" = 1'-0"

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EXTERIOR DETAILS
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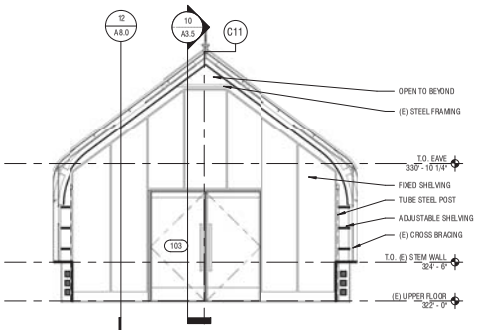
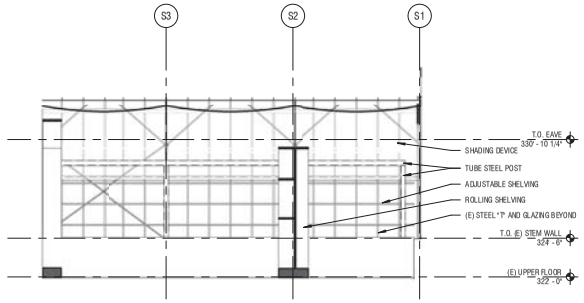
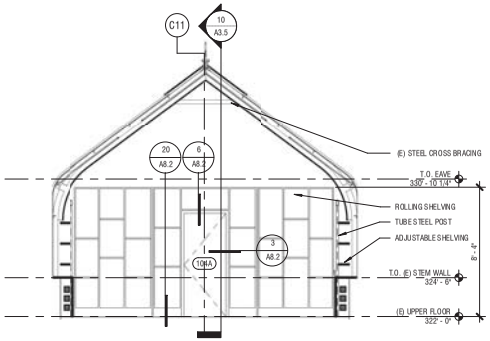


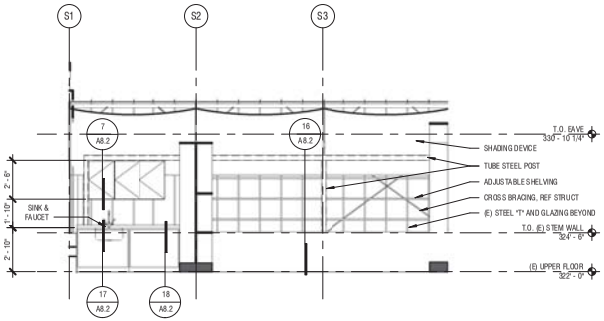
1 INTERIOR ELEVATION - ORCHID WALL BACK
1/4" = 1'-0"



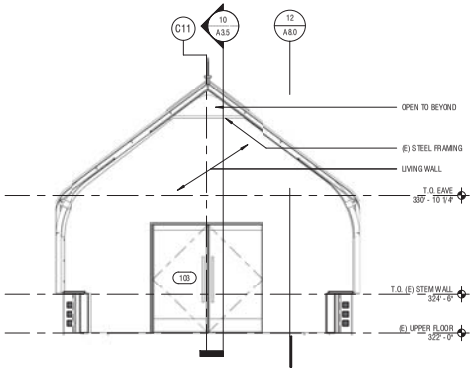
2 INTERIOR ELEVATION - NORTH WALL
1/4" = 1'-0"



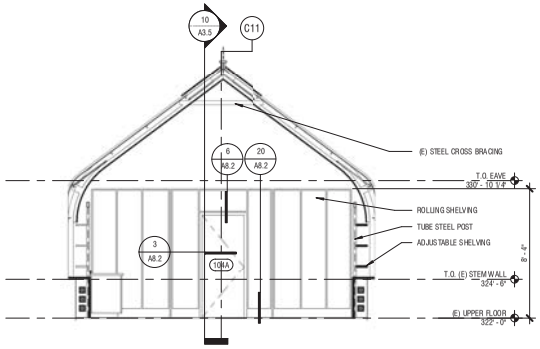
9 INTERIOR ELEVATION - SHELVING FRONT
1/4" = 1'-0"



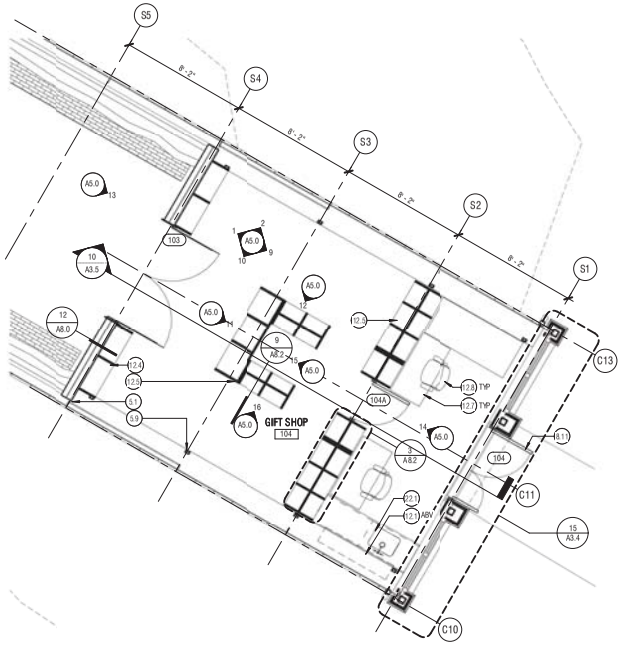
10 INTERIOR ELEVATION - SOUTH WALL
1/4" = 1'-0"



13 INTERIOR ELEVATION - ORCHID WALL FRONT
1/4" = 1'-0"



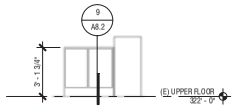
14 INTERIOR ELEVATION - SHELVING BACK
1/4" = 1'-0"



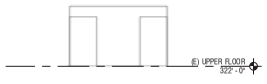
8 ENLARGED FLOOR PLAN - GIFT SHOP & OFFICE
1/4" = 1'-0"

PROJECT NORTH

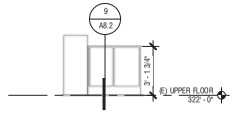
11 ROLLING SHELVING - FRONT
1/4" = 1'-0"



12 ROLLING SHELVING - SIDE A
1/4" = 1'-0"



15 ROLLING SHELVING - BACK
1/4" = 1'-0"



16 ROLLING SHELVING - SIDE B
1/4" = 1'-0"

KEYNOTE LEGEND

MARK	KEYNOTE TEXT
5.1	CROSS BRACING AT WALL AND ROOF OF (E) CONSERVATORY BAY, REF STRUCT
5.9	STEEL COLUMNS, REF STRUCT
8.11	WOOD ENTRY DOOR TO MATCH HISTORIC PROFILE (CUSTOM)
12.1	CASEWORK
12.4	SHELVING
12.5	MOVEABLE SHELVING ON CASTERS
12.7	MOVABLE TABLE, FOID
12.8	CHAIR, FOID
22.1	SINK, PLUMBING FIXTURE, AND PIPING. REF PLUMB

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ENLARGED PLAN
& INTERIOR
ELEVATIONS

A5.0

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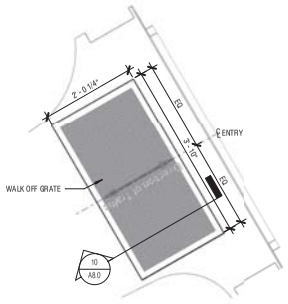
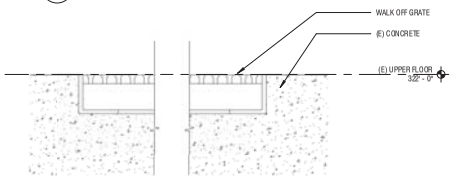
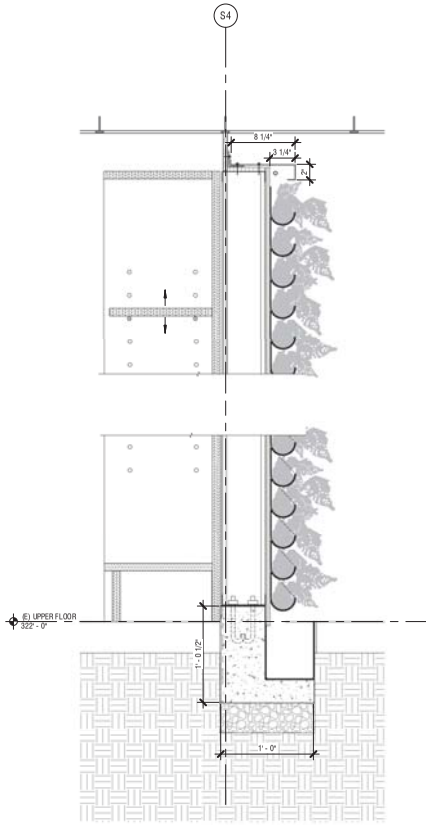


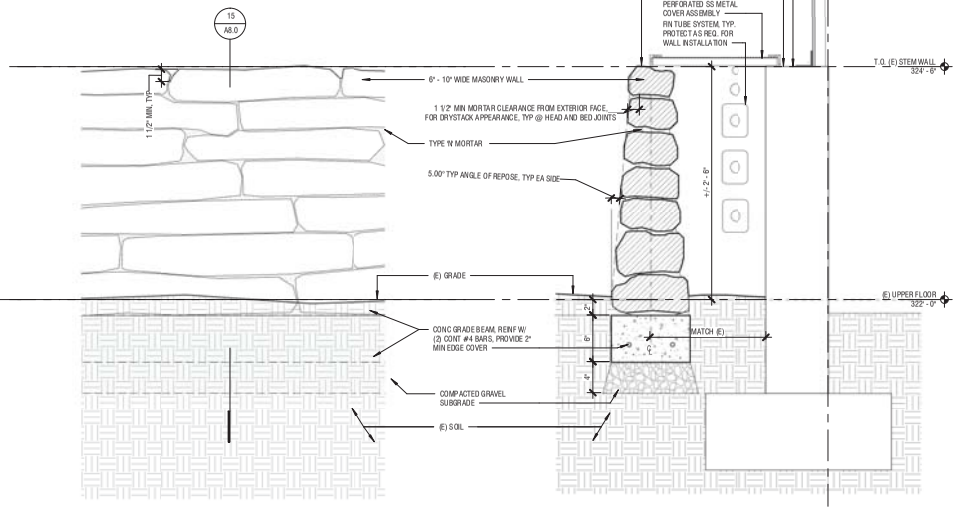
5 ENLARGED PLAN @ WALK OFF GRATE
3/4" = 1'-0"



10 SECTION DETAIL @ WALK OFF GRATE
6" = 1'-0"



12 GIFT SHOP LIVING WALL
1 1/2" = 1'-0"



13 TYP STONE WALL ELEVATION
1 1/2" = 1'-0"

15 SECTION DETAIL @ STONE WALL
1 1/2" = 1'-0"

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INTERIOR DETAILS

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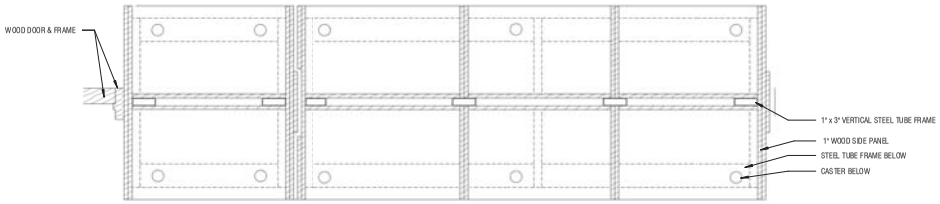
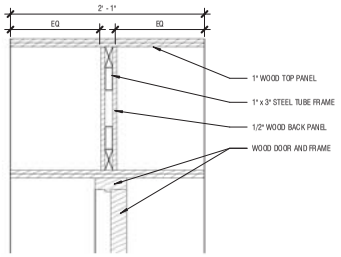
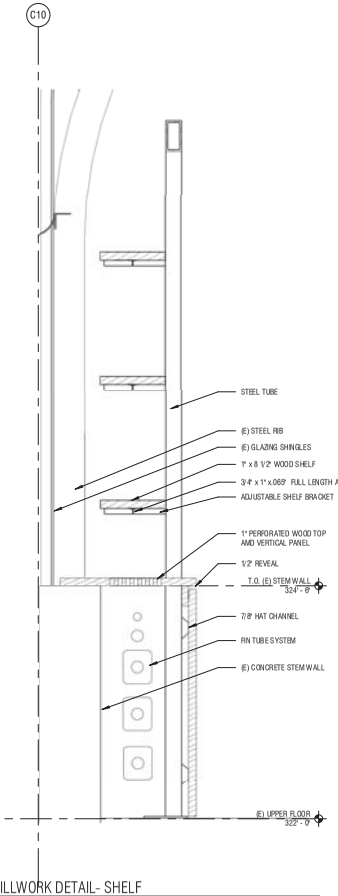


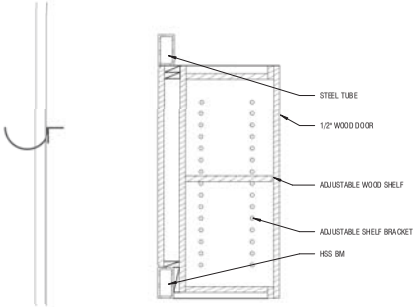
3 MILLWORK DETAIL @ MOVEABLE SHLEF JAMB
1 1/2" = 1'-0"



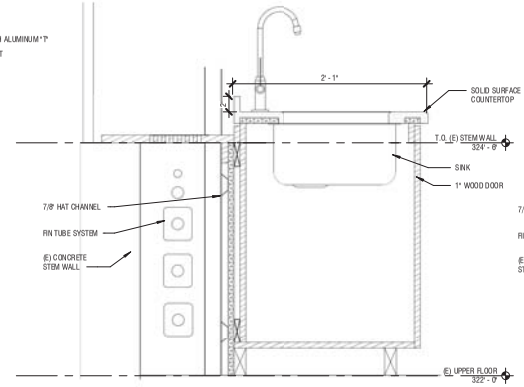
6 MILLWORK DETAIL -MOVEABLE SHEL DOOR HEAD
1 1/2" = 1'-0"



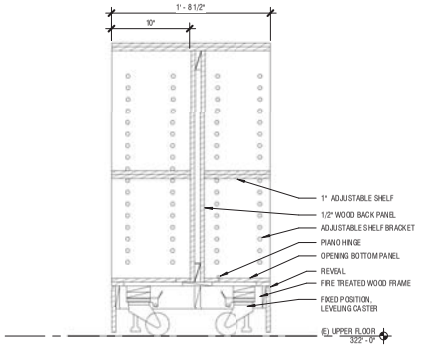
16 MILLWORK DETAIL- SHELF
1 1/2" = 1'-0"



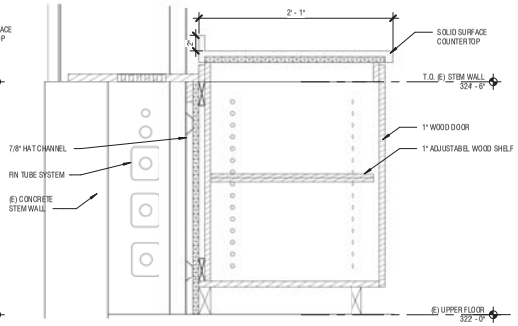
7 MILLWORK DETAIL - UPPER
1 1/2" = 1'-0"



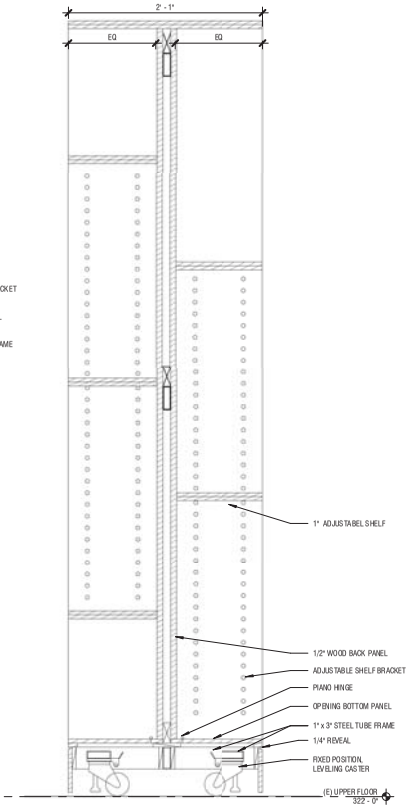
17 MILLWORK DETAIL- SINK
1 1/2" = 1'-0"



9 MILLWORK DETAIL @ CHECKOUT KIOSK
1 1/2" = 1'-0"



18 MILLWORK DETAIL - BASE
1 1/2" = 1'-0"



20 MILLWORK DETAIL - MOVEABLE SHELF
1 1/2" = 1'-0"

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MILLWORK DETAILS

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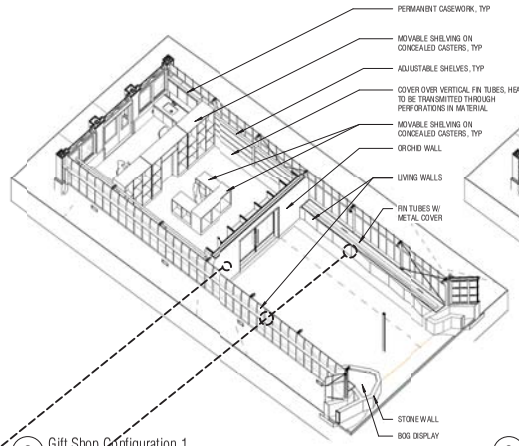
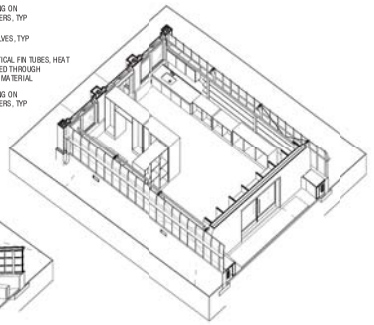
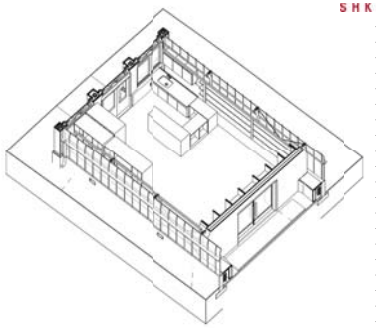


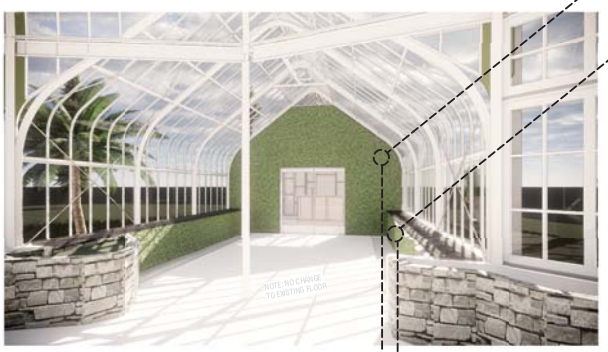
2 Gift Shop Configuration 1



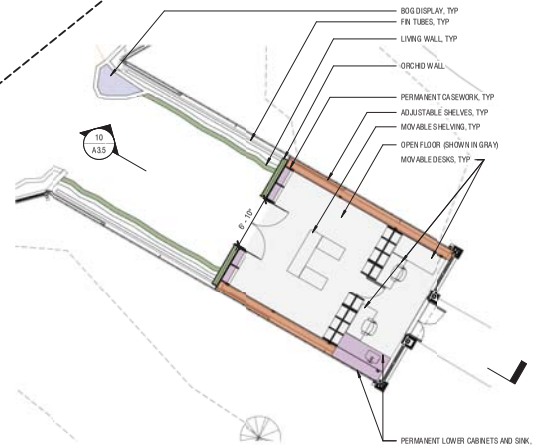
3 Gift Shop Configuration 2



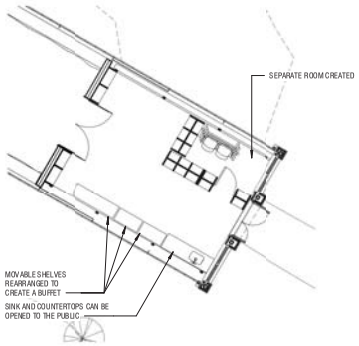
4 Gift Shop Configuration 3



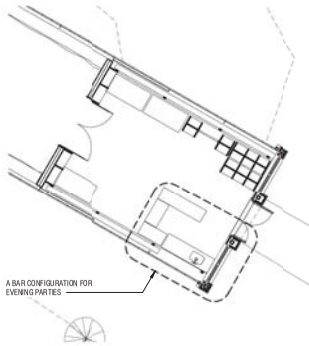
5 GIFT SHOP ENTRY / DISPLAY
12" = 1'-0"



6 ENLARGED FLOOR PLAN - GIFT SHOP & OFFICE_1
1/8" = 1'-0"



7 ENLARGED FLOOR PLAN - GIFT SHOP & OFFICE_2
1/8" = 1'-0"



8 ENLARGED FLOOR PLAN - GIFT SHOP & OFFICE_3
1/8" = 1'-0"

NOTE: THESE RECONFIGURATIONS DIAGRAMS ONLY SHOW A FEW POSSIBILITIES, THIS FLEXIBLE OPEN SPACE SHOULD ACCOMMODATE MANY MORE OPTIONS.

ORCHID WALL W/ DOORWAY

LOW-HEIGHT GREENWALL

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METROPARKS TACOMA

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NOT FOR CONSTRUCTION

LAYOUT DIAGRAMS

DIA 1

1. STRUCTURAL NOTES

1.1. ANY DISCREPANCY FOUND AMONG THE DRAWINGS, SPECIFICATIONS, THESE NOTES, AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT AND THE STRUCTURAL ENGINEER, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S RISK. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION. THE CONTRACTOR IS RESPONSIBLE FOR ALL ERECTION BRACING, FORMWORK AND TEMPORARY CONSTRUCTION SHORING.

1.2. BY THE ACT OF SUBMITTING A BID FOR THE PROPOSED CONTRACT, THE CONTRACTOR WARRANTS THAT:

1.2.1. THE CONTRACTOR AND ALL SUBCONTRACTORS THEY INTEND TO USE (INCLUDING AGENTS AND SUPPLIERS) HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS AND STRUCTURAL NOTES AND HAVE FOUND THEM COMPLETE AND FREE FROM AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED.

1.2.2. THE CONTRACTOR HAS CAREFULLY EXAMINED THE SITE OF THE WORK AND FROM THEIR OWN INVESTIGATIONS, THEY HAVE SATISFIED THEMSELF AS TO THE NATURE AND LOCATION OF THE WORK, AS TO THE CHARACTER, QUALITY, AND QUANTITIES OF MATERIAL AND DIFFICULTIES TO BE ENCOUNTERED, AS TO THE EXTENT OF EQUIPMENT AND OTHER FACILITIES NEEDED FOR THE PERFORMANCE OF THE WORK AND AS TO THE GENERAL AND LOCAL CONDITIONS, AND OTHER ITEMS WHICH MAY IN ANY WAY AFFECT THE WORK OR ITS PERFORMANCE.

1.2.3. THE CONTRACTOR AND ALL WORKERS THEY INTEND TO USE ARE SKILLED AND EXPERIENCED IN THE TYPE OF CONSTRUCTION REPRESENTED BY THE DRAWINGS AND DOCUMENTS BID UPON.

1.2.4. NEITHER THE CONTRACTOR NOR ANY OF HIS EMPLOYEES, AGENTS, INTENDED SUPPLIERS, OR SUBCONTRACTORS HAVE RELIED UPON ANY VERBAL REPRESENTATIONS ALLEGEDLY AUTHORIZED OR UNAUTHORIZED FROM THE OWNER OR THEIR EMPLOYEES OR AGENTS, INCLUDING THE ARCHITECT OR ENGINEERS, IN ASSEMBLING THE BID FIGURES.

1.2.5. THE REQUIREMENTS CONTAINED WITHIN THIS SECTION SUPERSEDE REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES", AS WELL AS CASE DOCUMENT 962-D "A GUIDELINE ADDRESSING COORDINATION AND COMPLETENESS OF STRUCTURAL CONSTRUCTION DOCUMENTS"

1.2.6. THE CONTRACTOR AND ALL SUBCONTRACTORS THEY INTEND TO USE ARE AWARE OF AND ACKNOWLEDGE THAT CLOSE COORDINATION AMONG ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND OTHER TRADE DRAWINGS IS REQUIRED.

1.2.7. THE CONTRACTOR AND ALL SUBCONTRACTORS THEY INTEND TO USE SHALL RECOGNIZE THAT THE PROJECT CONTRACT DOCUMENTS INCLUDE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL AND OTHER TRADE DRAWINGS AND SPECIFICATIONS

1.2.8. CONTRACTOR AND ALL SUBCONTRACTORS ACKNOWLEDGE THAT CLOSE COORDINATION BETWEEN DISCIPLINES INCLUDED WITHIN THE CONTRACT DOCUMENTS IS NECESSARY. ELEMENTS THAT WILL REQUIRE CLOSE COORDINATION BY THE CONTRACTOR INCLUDE (BUT ARE NOT LIMITED TO):

A. VERIFICATION OF ALL DIMENSIONS INDICATED ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS
B. DETERMINATION OF ALL COLUMN LOCATIONS
C. DETERMINATION OF TOP OF FLOOR, TOP OF STEEL, WALL PLATE AND/OR TOP OF BEAM ELEVATIONS
D. DETERMINATION OF TOP OF FOOTING ELEVATIONS AND FOOTING STEP LOCATIONS
E. MECHANICAL/ELECTRICAL EQUIPMENT LOCATIONS AND WEIGHTS
F. LOCATION AND SIZE OF ALL MECHANICAL/ ELECTRICAL PENETRATIONS THROUGH WALLS AND FLOORS/ ROOFS
G. COORDINATION WITH DESIGNERS/ SUPPLIERS OF PRE-ENGINEERED COMPONENTS (JOISTS, TRUSSES, STAIRS, ETC.)

1.2.9. THE CONTRACTOR ACKNOWLEDGES THAT TEMPORARY SHORING AND/OR BRACING MAY BE REQUIRED TO COMPLETE THE PROJECT. DESIGN AND IMPLEMENTATION OF TEMPORARY SHORING AND/OR BRACING DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

1.2.10. THE CONTRACTOR AND ALL SUBCONTRACTORS THEY INTEND TO USE SHALL MAKE CONSIDERATION FOR, AND INCLUDE MONIES FOR THE ABOVE IN THE PREPARATION OF THEIR BIDS.

1.2.11. THE CONTRACTOR SHALL NOT SCALE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS OF ELEMENTS NOTED ABOVE.

1.2.12. ELECTRONIC COPIES OF THE STRUCTURAL DRAWINGS (PDF'S, CAD DRAWINGS OR BIM MODELS) MAY BE PROVIDED TO THE CONTRACTOR FOR THEIR USE. THESE FILES MAY BE PROVIDED AT THE REQUEST OF THE CONTRACTOR FOR THEIR CONVENIENCE ONLY. THE CONTRACTOR AGREES THAT THESE FILES SHALL NOT SUPERSEDE INFORMATION SHOWN ON THE ORIGINAL BID/ CONSTRUCTION DOCUMENTS. THE CONTRACTOR AGREES TO HOLD THE STRUCTURAL ENGINEER HARMLESS FOR ANY ERRORS OR DISCREPANCIES CONTAINED WITHIN THESE ELECTRONIC FILES.

1.2.13. THE BID FIGURE IS BASED SOLELY UPON THE CONSTRUCTION CONTRACT DOCUMENTS AND PROPERLY ISSUED WRITTEN OR VERBAL REPRESENTATIONS.

1.3. EXISTING BUILDING CONDITIONS

1.3.1. STRUCTURAL DESIGN IS BASED ON EXISTING FRAMING CONDITIONS OBSERVED AND FIELD MEASURED AND/OR DESCRIBED IN ORIGINAL CONSTRUCTION DRAWINGS. FIELD OBSERVATIONS DURING DESIGN ARE LIMITED TO AREAS OPEN TO VIEW AND ACCESSIBLE.

1.3.2. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FRAMING CONDITIONS FOR COMPLIANCE WITH THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS PRIOR TO DEMOLITION AND CONSTRUCTION. AS-BUILT DEVIATIONS FROM THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE STRUCTURAL ENGINEER PRIOR TO EXECUTION OF WORK IN THE AREAS AFFECTED BY THE DISCREPANCY.

1.3.3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE REINFORCING IN EXISTING CONCRETE OR MASONRY CONSTRUCTION PRIOR TO SAW-CUTTING OR CORE-DRILLING. CUTTING OF EXISTING REINFORCING SHALL NOT BE PERMITTED UNLESS DIRECTED BY THE ENGINEER.

1.3.4. WHEN SAW-CUTTING EXISTING CONCRETE OR MASONRY CONSTRUCTION, OVER-CUTTING OF CORNERS SHALL NOT BE PERMITTED.

1.4. CODES

1.4.1. ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING AUTHORITY.

1.4.2. ALL REFERENCES TO OTHER CODES, STANDARDS AND SPECIFICATIONS, (ACI, ASTM, ETC.), SHALL BE FOR THE EDITION CURRENTLY REFERENCED BY IBC AS AMENDED AND ADOPTED BY THE LOCAL BUILDING AUTHORITY.

1.4.3. ALTERATIONS TO EXISTING BUILDINGS SHALL CONFORM TO THE 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING AUTHORITY.

1.5. DESIGN CRITERIA

1.5.1. UNIFORM LOADS:

LOCATION	LIVE LOAD	DEAD LOAD
ROOF	25 PSF (SNOW*)	ACTUAL
FLOOR	100 PSF	ACTUAL
STAIRS AND EXITS	100 PSF	ACTUAL
STORAGE	125 PSF	ACTUAL
SLAB ON GRADE (STRUCTURAL)	125 PSF	ACTUAL
HANDRAILS AND GUARDS	50 PLF OR 200# CONCENTRATED LOAD	

* THIS IS NOT A GROUND SNOW LOAD

1.5.2. SNOW LOADS PER IBC SECTION 1608 AND CHAPTER 7 OF ASCE 7:

GROUND SNOW LOAD (P_g):	20 PSF
FLAT ROOF SNOW LOAD (P_f):	12 PSF
SNOW EXPOSURE FACTOR (C_e):	1.0
SNOW IMPORTANCE FACTOR (I_s):	1.0
THERMAL FACTOR (C_t):	0.85

1.5.3. WIND LOADS (PER IBC SECTION 1609 AND ASCE 7 CHAPTERS 26 THRU 30):

ULTIMATE DESIGN WIND SPEED (V_{ult}):	110 MPH
RISK CATEGORY:	II
WIND EXPOSURE:	B
APPLICABLE INTERNAL PRESSURE COEFFICIENT:	+/-0.18
ENCLOSED STRUCTURE	
TOPOGRAPHIC FACTOR (K_{zt})	1.38

COMPONENTS AND CLADDING: ULTIMATE DESIGN WIND PRESSURES TO BE USED FOR THE DESIGN OF EXTERIOR COMPONENT AND CLADDING MATERIALS IS AS FOLLOWS:

ZONE:1	+16.0 / -29.9 PSF (10 SQ FT)
ZONE:2	+16.0 / -50.2 PSF (10 SQ FT)
ZONE:3	+16.0 / -75.6 PSF (10 SQ FT)
ZONE:4	+27.4 / -29.7 PSF (10 SQ FT)
ZONE:5	+27.4 / -36.5 PSF (10 SQ FT)

1.5.4. SEISMIC LOADS (PER IBC SECTION 1613 AND ASCE 7 CHAPTERS 11 THRU 13):

RISK CATEGORY:	II
SEISMIC IMPORTANCE FACTOR (I_e):	1.0
S_s:	1.300
S_1:	0.507
SITE CLASS:	D
S_{MS}:	0.866
S_{D1}:	0.507
SEISMIC DESIGN CATEGORY:	D
DESIGN BASE SHEAR:	0.266 W
SEISMIC RESPONSE COEFFICIENT (C_s):	0.266
ANALYSIS PROCEDURE USED:	EQUIVALENT LATERAL FORCE PROCEDURE

SEISMIC FORCE-RESISTING SYSTEM	RESPONSE MODIFICATION COEFFICIENT, R	OVERSTRENGTH FACTOR, Ω_o
B. BUILDING FRAME SYSTEMS:		
3. STEEL ORDINARY CONCENTRICALLY BRACED FRAMES	3 ¼	2
23. LIGHT FRAME (CFS) WALLS SHEATHED WITH STEEL SHEETS	7	2 ½
C. MOMENT-RESISTING FRAME SYSTEMS:		
1. STEEL ORDINARY MOMENT FRAMES	3 ½	3

NOTE: TABULATED OVERSTRENGTH FACTOR HAS BEEN REDUCED IN ACCORDANCE WITH ASCE 7 TABLE 12.2-1 FOOTNOTE G FOR STRUCTURES WITH FLEXIBLE DIAPHRAGMS.

1.6. STATEMENT OF SPECIAL INSPECTIONS

SEE STATEMENT OF SPECIAL INSPECTION AND TESTING SHEET S0.3 AND S0.4

SHOP DRAWINGS

1.6.1. SUBMIT SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR THE FOLLOWING:

A. CONCRETE MIX DESIGN SUBMITTALS
B. REINFORCING STEEL
C. STRUCTURAL AND MISCELLANEOUS STEEL INCLUDING WELD INSERTS AND ANCHORS
D. PRECAST CONCRETE PRODUCTS

1.6.2. SHOP DRAWING REVIEW NOTES

A. ENGINEER OF RECORD SHALL REVIEW SHOP DRAWINGS FOR GENERAL CONFORMANCE WITH THE PROJECT CONSTRUCTION DOCUMENTS (PLANS AND SPECIFICATIONS).
B. ENGINEER OF RECORD REVIEW OF SHOP DRAWINGS SHALL NOT RELIEVE THE GENERAL CONTRACTOR OF THEIR RESPONSIBILITY FOR REVIEW OF THE SHOP DRAWINGS FOR COMPLIANCE WITH THE PROJECT REQUIREMENTS.
C. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER OF RECORD SHALL NOT BE CONSIDERED AS A GUARANTEE BY THE ENGINEER THAT THE SHOP DRAWINGS COMPLY WITH ALL PROJECT REQUIREMENTS.

1.7. MISCELLANEOUS

1.7.1. VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD.

1.7.2. VERIFY SIZE AND LOCATION OF ALL OPENINGS IN THE FLOORS, ROOF AND WALLS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

1.7.3. CONSTRUCTION DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS OF SECTIONS OF THIS PROJECT AS APPROVED BY THE ARCHITECT/ ENGINEER.

1.7.4. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR DIMENSIONS AND LOCATIONS OF OPENINGS NOT DIMENSIONED OR SHOWN ON STRUCTURAL PLANS.

1.7.5. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND WEIGHTS OF ALL MECHANICAL AND ELECTRICAL EQUIPMENT INCLUDING HOUSEKEEPING PADS.

1.7.6. FOR PIPES, CONDUITS, DUCTS AND MECHANICAL EQUIPMENT SUPPORTED OR BRACED FROM STRUCTURE: CONFORM TO SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC., PUBLICATION "APPENDIX E: SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS." ALL BRACING AND SUPPORTS SHALL BE DESIGNED FOR SEISMIC HAZARD LEVEL (SHL) B. SPRINKLER LINE ATTACHMENTS SHALL CONFORM TO NFPA PAMPHLET 13.

1.7.7. THE STRUCTURE HAS BEEN DESIGNED TO RESIST CODE REQUIRED VERTICAL AND LATERAL FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY: ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY SHORING, FORMWORK, AND BRACING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES. WHERE SHORING IS REQUIRED, A SHORING PLAN, STAMPED BY A LICENSED PROFESSIONAL/STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

2. SITE PREPARATION/SOIL REMEDIATION

2.1. SOIL DATA

ALLOWABLE SOIL PRESSURE 4000 PSF. ALLOW 33-1/3% INCREASE FOR LOADS FROM WIND OR SEISMIC ORIGIN. SEE GEOTECHNICAL ENGINEERING REPORT BY PANGEO INCORPORATED DATED FEBRUARY 21, 2018. SEE GEOTECH REPORT FOR ALL SUBGRADE PREPARATION REQUIREMENTS AS WELL AS CAPILLARY BREAK AND VAPOR BARRIER RECOMMENDATIONS.

2.2. EXCAVATION

EXCAVATE TO DEPTH SHOWN AND TO FIRM UNDISTURBED MATERIAL. OVER-EXCAVATIONS SHALL BE BACKFILLED WITH LEAN CONCRETE (f'_c=500-1200 PSI) OR STRUCTURAL FILL AT THE CONTRACTOR'S EXPENSE. EXERCISE EXTREME CARE DURING EXCAVATION TO AVOID DAMAGE TO BURIED LINES, TANKS, AND OTHER CONCEALED ITEMS. UPON DISCOVERY, DO NOT PROCEED WITH WORK UNTIL RECEIVING WRITTEN INSTRUCTIONS FROM THE ARCHITECT. A COMPETENT REPRESENTATIVE OF THE OWNER SHALL INSPECT ALL FOOTING EXCAVATIONS FOR SUITABILITY OF BEARING SURFACES PRIOR TO PLACEMENT OF REINFORCING STEEL. PROVIDE DRAINAGE AS NECESSARY TO AVOID WATER-SOFTENED SUBGRADE.

2.3. FILL, BACKFILL AND COMPACTION

BACKFILL AGAINST WALLS SHALL NOT BE PLACED UNTIL AFTER THE REMOVAL OF ALL MATERIAL SUBJECT TO ROT OR CORROSION. ALL FILL PLACED AGAINST RETAINING WALLS OR BASEMENT WALLS SHALL BE FREE DRAINING GRANULAR MATERIAL. STRUCTURAL FILL OTHER THAN PEA GRAVEL SHALL BE GRANULAR PLACED IN 6-INCH LIFTS AND COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 (MOD PROCTOR). PEA GRAVEL FILL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3/8" DIAMETER.

3. STRUCTURAL CONCRETE

3.1. GENERAL

ALL CONCRETE SHALL BE HARD ROCK CONCRETE MEETING THE REQUIREMENTS OF ACI-301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS." PROPORTIONING OF INGREDIENTS FOR EACH CONCRETE MIX SHALL BE BY METHOD 2 OR THE ALTERNATE PROCEDURE GIVEN IN ACI-301. PLACE CONCRETE PER ACI-304 AND CONFORM TO ACI-604 (306) FOR WINTER CONCRETING AND ACI-605 (305) FOR HOT WEATHER CONCRETING. USE INTERIOR MECHANICAL VIBRATORS WITH 7,000 RPM MINIMUM FREQUENCY. DO NOT OVER-VIBRATE. CONCRETE SHALL BE PLACED MONOLITHICALLY BETWEEN CONSTRUCTION OR CONTROL JOINTS. PROTECT ALL CONCRETE FROM PREMATURE DRYING, EXCESSIVE HOT OR COLD TEMPERATURE FOR SEVEN DAYS AFTER PLACING.

3.2. STRENGTH

TWENTY-EIGHT DAY COMPRESSIVE STRENGTHS SHALL BE AS FOLLOWS:

SLABS ON GRADE	4500 PSI
FOOTINGS	4500 PSI
VERTICALLY FORMED WALLS	4500 PSI

CONCRETE SUPPLIER TO PROVIDE TEST RECORDS PER SECTION 26.4 OF ACI 318.

3.3. MATERIALS

3.3.1. CEMENT: ASTM C150, TYPE I OR TYPE II. ENGINEER'S APPROVAL IS NEEDED FOR USE OF TYPE III CEMENT.

3.3.2. COARSE AND FINE AGGREGATE: ASTM C33.

3.3.3. WATER SHALL BE CLEAN AND POTABLE.

3.3.4. FLYASH: ASTM C618 CLASS C (CLASS F MAY BE ALLOWED IF APPROVED BY THE STRUCTURAL ENGINEER)

3.3.5. GROUND GRANULATED BLAST FURNACE SLAG (GGBFS): ASTM C989 GRADE 100 OR 120. GGBFS SHALL NOT BE PERMITTED UNLESS REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER. MIX DESIGNS SUBMITTED INCLUDING GGBFS SHALL INCLUDE SHRINKAGE TEST RESULTS AT 28 DAYS.

3.4. ADMIXTURES

3.4.1. WATER REDUCING ADMIXTURE: ASTM C494. ADMIXTURES SHALL BE USED IN EXACT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

3.4.2. WATER REDUCING ADMIXTURES SHALL BE USED AT ALL HEAVILY CONGESTED AREAS (I.E. CONCRETE BEAMS, COLUMNS AND WALLS WITH REINFORCING SPACING OF 4" OR LESS)

3.4.3. CONCRETE USING ADMIXTURES TO PRODUCE FLOWABLE CONCRETE MAY BE USED SUBJECT TO ENGINEER'S APPROVAL.

3.4.4. AIR ENTRAINMENT: ASTM C260 AND ASTM C494 ENTRAIN 5% PLUS/MINUS 1.5% BY VOLUME IN ALL CONCRETE EXPOSED TO WEATHER.

3.4.5. NO OTHER ADMIXTURES PERMITTED UNLESS APPROVED BY THE ENGINEER.

3.5. FORMWORK AND SHORING

3.5.1. FOLLOW RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (ACI-347).

3.5.2. ALL SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMWORK SUPPORTS AND SHORING SHALL BE DESIGNED TO PROVIDE FINISHED CONCRETE SURFACES AT ALL FACES LEVEL, PLUMB AND TRUE TO THE DIMENSIONS AND ELEVATIONS SHOWN. TOLERANCES AND VARIATIONS SHALL BE AS SPECIFIED. A SHORING PLAN, STAMPED BY A LICENSED PROFESSIONAL ENGINEER SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

3.6. REINFORCING STEEL:

3.6.1. DETAIL, FABRICATE, AND PLACE PER ACI-315 AND ACI-318. SUPPORT REINFORCEMENT WITH APPROVED CHAIRS, SPACERS, OR TIES.

3.6.2. DEFORMED BAR REINFORCEMENT: ASTM A615 GR 60

3.6.3. EXCEPT AS NOTED SPECIFICALLY ON THE DRAWINGS, ALL CONCRETE REINFORCEMENT SHALL BE LAP-SPLICED AS FOLLOWS:

#6 AND SMALLER 48 X BAR DIAMETER
#7 AND LARGER 56 X BAR DIAMETER

NO MORE THAN 50% HORIZONTAL OR VERTICAL BARS SHALL BE SPLICED AT ONE LOCATION

3.6.4. EXCEPT AS NOTED SPECIFICALLY ON THE DRAWINGS, PROVIDE CORNER BARS TO MATCH QUANTITY AND DIAMETER OF HORIZONTAL REINFORCEMENT AND LAP WITH HORIZONTAL REINFORCEMENT AS FOLLOWS:

#6 AND SMALLER 48 X BAR DIAMETER
#7 AND LARGER 56 X BAR DIAMETER

THESE CORNER BARS SHALL BE PLACED AT ALL CORNERS AND INTERSECTIONS IN CONCRETE FOOTINGS AND WALLS.

3.7. CONCRETE COVER ON REINFORCING SHALL BE AS FOLLOWS (UNLESS SHOWN OTHERWISE):

BOTTOM OF FOOTINGS	3"
FORMED EARTH FACE AND SLAB ON GRADE	2"
WALLS, WEATHER FACE	1-1/2"
WALLS, INSIDE FACE	1"

3.8. GROUT FOR BEARING PLATES

THE NON-SHRINK GROUT SHALL MEET ASTM C1107 GRADE B OR EQUIVALENT (MASTERFLOW 928 BY BASF OR APPROVED EQUIVALENT). GROUT SHALL BE A PRE-PACKAGED HYDRAULIC CEMENT BASED MINERAL AGGREGATE GROUT, MIXED, PLACED AND CURED AS RECOMMENDED BY THE MANUFACTURER. COMPRESSIVE STRENGTH SHALL EXCEED 6000 PSI AT 28 DAYS.

3.9. ARCHITECTURAL PRECAST CONCRETE

3.9.1. CONSTRUCTION TOLERANCES, TRANSPORTATION, STORAGE AND ERECTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.

3.9.2. PROVIDE SHOP DRAWINGS AND COMPLETE DESIGN CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SPECIAL ATTENTION SHALL BE GIVEN TO ASCE 7 SECTION 13.5 FOR EXTERIOR NON-STRUCTURAL WALL ELEMENTS AND CONNECTIONS AS REFERENCED BY THE IBC.

3.9.3. ADDITIONAL REINFORCING AND INSERTS REQUIRED FOR HANDLING, ERECTION, AND TEMPORARY BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3.9.4. ANY PANELS THAT RECEIVE DAMAGE OR CRACKS DURING THE INSTALLATION PROCESS SHALL BE REPLACED OR REPAIRED. ACCEPTABILITY OF PRECAST ELEMENTS SHALL BE IN ACCORDANCE WITH ACI-533-1R.

5. METALS

5.1. STRUCTURAL STEEL GENERAL REQUIREMENTS

5.1.1. ALL DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO AISC 360-10 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AISC 341-10 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS" AND AISC 303-10 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCEPT AS AMENDED BY THESE STRUCTURAL NOTES.

5.2. STRUCTURAL STEEL

5.2.1. STEEL W SHAPES SHALL BE ASTM A992 F_y=50 KSI. OTHER SHAPES AND PLATES SHALL BE ASTM A36 F_y=36 KSI. WHERE INDICATED, 50 KSI PLATES SHALL BE ASTM A572 GRADE 50.

5.2.2. STEEL PIPE SECTIONS (PIPE) SHALL BE ASTM A53 TYPE E OR S, GRADE B, F_y=35 KSI.

5.2.3. RECTANGULAR AND ROUND HOLLOW STEEL SECTIONS (HSS) OR TUBE STEEL SECTIONS (TS) SHALL BE ASTM A500, GRADE C, F_y=50 KSI (F_y=46 KSI FOR ROUND SECTIONS)

5.2.4. BOLTS

A. MACHINE BOLTS NOT SPECIFIED AS HIGH STRENGTH SHALL BE ASTM A-307 GRADE A.
B. HIGH STRENGTH BOLTS SHALL BE ASTM F3125 GRADE A325 OR GRADE A490 AS INDICATED ON STRUCTURAL DRAWINGS. ALL BOLTS SHALL BE CONSIDERED BEARING TYPE WITH THREADS INCLUDED IN SHEAR PLANE (CONNECTION TYPE N) UNLESS NOTED OTHERWISE. ALL HIGH STRENGTH BOLTED CONNECTIONS SHALL BE INSTALLED WITH NUTS CONFORMING TO ASTM A563 AND HARDENED WASHERS CONFORMING TO ASTM F436.
C. ALL HIGH STRENGTH BOLTS SHALL BE INSTALLED PER THE SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS (LATEST EDITION) BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (WWW.BOLTCOUNCIL.ORG).

5.2.5. STEEL ANCHORAGE ELEMENTS:

A. THREADED RODS SHALL BE ALL-THREAD. (F_y=36 KSI) U.N.O.
B. ANCHOR RODS: ANCHOR RODS SHALL BE ASTM F 1554, F_y=36 KSI WITH HOOKED END AT STUD WALL CONNECTIONS UNLESS NOTED OTHERWISE. AT COLUMN LOCATIONS ANCHOR RODS SHALL BE ASTM F1554, F_y=36 KSI WITH HEADED OR THREADED/NUTTED END. TACK WELD NUT TO ANCHOR ROD UNLESS NOTED OTHERWISE. WHERE NOTED, HIGH STRENGTH ANCHOR RODS SHALL BE ASTM F1554, F_y=105 KSI WITH DOUBLE NUTTED PLATE WASHER.
C. ADHESIVE ANCHORS SHALL BE THREADED ANCHOR RODS OR REBAR DOWELS USING AN INJECTABLE ADHESIVE AS NOTED IN THE FOLLOWING TABLE. ANCHORS IN CONCRETE SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND/OR ICC-ES AC-308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. ANCHORS SHALL HAVE A CURRENT CODE REPORT THAT COMPLIES WITH THE CURRENT EDITION OF THE IBC AND SHALL BE RATED FOR USE IN THE SEISMIC DESIGN CATEGORY NOTED IN THE DESIGN CRITERIA SECTION OF THESE NOTES.

ADHESIVE ANCHORS IN CONCRETE (1) (2)	CODE REPORT
HILTI HIT HY-200 SAFE SET	ICC ESR-3187
SIMPSON AT-XP (3)	IAPMO ER-263
DEWALT AC200+ DUST-X	ICC ESR-4027

(1) ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION TO SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI, OR AN APPROVED ALTERNATE WHICH HAS BEEN SUBMITTED AND APPROVED BY THE ENGINEER. PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.

(2) ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS.

(3) SIMPSON SET-XP MAY BE USED WHERE BASE MATERIAL TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT OR FOR EMBEDMENT GREATER THAN 12-INCHES FOR LONGER GEL TIME. SEE ICC ESR-2508 (CONC) AND IAPMO ER-265 (MASONRY).

D. POWDER ACTUATED FASTENERS: PDF'S OR PAF'S SHALL BE A MINIMUM 0.157" DIA KNURLED SHANK FASTENER AS NOTED IN THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE. FASTENERS DRIVEN INTO STEEL SHALL BE DRIVEN SO THAT THE POINT OF THE FASTENER COMPLETELY PENETRATES THE STEEL BASE MATERIAL. AT TOPPING SLABS, PT SLABS OR SLABS WITH RADIANT HEAT TUBES EMBEDDED WITHIN THE SLAB, LIMIT THE PDF PENETRATION TO 3/4" MAXIMUM AND COORDINATE WITH TENDON/TUBE PLACEMENT AND COVER.

POWDER ACTUATED FASTENERS	CODE REPORT
HILTI X-U	ICC ESR-2269
SIMPSON PDPA	ICC ESR-2138
DEWALT CSI PIN	ICC ESR-2024

E. CONCRETE/MASONRY SCREWS SHALL BE AS NOTED IN THE FOLLOWING TABLE:

CONCRETE/MASONRY SCREWS	CODE REPORT
HILTI KWK CON II+	-
SIMPSON TITEN	-
DEWALT TAPPER+	ICC ESR-3068 (CONC) ICC ESR-3196 (MAS)

5.2.6. METAL PROTECTION: ALL STEEL EXPOSED TO WEATHER, MOISTURE, SOIL OR AS NOTED SHALL BE GALVANIZED PER ASTM A-123 OR A153 AS APPLICABLE. ALL OTHER STEEL SURFACES SHALL BE SHOP PRIMED AFTER FABRICATION.

REPAIR ALL DAMAGED AREAS OF GALVANIZED PARTS SUCH AS FIELD WELDS, ETC. APPLY REPAIR COATING THICKNESS GREATER THAN OR EQUAL TO ORIGINAL ZINC COATING THICKNESS.

5.2.7. STEEL COLUMNS: ALL VERTICAL LOAD CARRYING MEMBERS HAVE BEEN NOTED AS "COLUMNS" ON THE STRUCTURAL DRAWINGS. THIS NOTATION DOES NOT IDENTIFY THESE MEMBERS AS "POSTS" OR "COLUMNS" AS DEFINED BY THE LATEST OSHA RULES REGARDING COLUMN ANCHORAGE REQUIREMENTS (OSHA 29 CFR PARTS 1926.751 AND 1926.755). THE GENERAL CONTRACTOR, STEEL DETAILER, AND STEEL ERECTOR SHALL BE RESPONSIBLE TO DETERMINE THE CORRECT OSHA DESIGNATION OF EACH MEMBER REGARDLESS OF THE NOTATION SHOWN ON THE STRUCTURAL DRAWINGS.

5.2.8. WELDED MARK NUMBERS ON STRUCTURAL STEEL MEMBERS EXPOSED TO VIEW ARE UNACCEPTABLE, AND SHALL NOT BE PERMITTED. ANY WELDED MARKS SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE. SEE ARCH SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

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METROPARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

Drawn by: SSO
Checked: AS
Date: 12-10-19
Scale: As indicated
Revisions:
No. Date Remarks

STRUCTURAL NOTES

S0.1

5.3. WELDING

5.3.1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE," AWS D1.1, AWS D1.4 AND AWS D1.8 AS APPROPRIATE.

5.3.2. ALL WELDING SHALL BE BY CERTIFIED WELDERS; USE 70 KSI LOW HYDROGEN FILLER METAL, AND SHALL BE PROTECTED PER AWS D1.1 UNTIL USE. FOR ALL FULL PENETRATION WELDS, FILLER METAL SHALL BE NOTCH TOUGH TO MEET CHARPY V-NOTCH OF 20 FOOT-POUND AT -20°F.

5.3.3. ALL FULL PENETRATION FIELD AND SHOP WELDS SHALL BE FULL TIME INSPECTED AND TESTED BY NON-DESTRUCTIVE PROCEDURES. RESULTS OF TESTS SHALL BE SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER.

5.4. WELDING PROCEDURE SPECIFICATION (WPS)

5.4.1. FOR ALL WELDING OF REINFORCING STEEL, NON PREQUALIFIED WELDS AND ALL WELDING OF COMPONENTS WHICH ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM, CONTRACTOR SHALL SUBMIT A WELDING PROCEDURE SPECIFICATION (WPS) TO ENGINEER FOR APPROVAL, PRIOR TO WELDING. EACH WPS SHALL INCLUDE ALL NECESSARY INFORMATION REQUIRED BY AWS D1.1, AWS D1.4 AND AWS D1.8 AND AS FOLLOWS:

A. APPLICABLE BASE METAL TYPES AND THICKNESSES.

B. SKETCH OF JOINT INDICATING APPLICABLE DIMENSIONS. INDIVIDUAL PASSES SHALL BE IDENTIFIED AND NUMBERED TO IDENTIFY THE SEQUENCE. THE SKETCH SHALL IDENTIFY THE MAXIMUM THICKNESS AND BEAD WIDTH. IN NO CASE SHALL THE LAYER THICKNESS EXCEED 1/4" NOR THE BEAD WIDTH EXCEED 5/8".

C. PREHEAT REQUIREMENTS.

D. ELECTRICAL CHARACTERISTICS (I.E., CURRENT, VOLTAGE, TRAVEL SPEED, ETC.).

E. ELECTRODE REQUIREMENTS SHALL MEET THE REQUIREMENTS OF AWS A5.1, AWS A5.5, AWS A5.17, AWS A5.23, AWS A5.18, AWS A5.20, AWS A5.28, AND AWS A5.29, AS APPLICABLE FOR WELDING METHOD USED.

5.5. COLD FORMED STEEL FRAMING

5.5.1. ALL STUD AND/OR JOIST FRAMING MEMBERS SHALL BE OF THE TYPE, SIZE AND GAGE AS SHOWN AND SHALL BE MANUFACTURED BY A CURRENT MEMBER OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).

5.5.2. ALL STRUCTURAL STEEL STUDS AND JOISTS HAVE BEEN SPECIFIED PER THE GUIDELINES GIVEN IN THE STEEL STUD MANUFACTURER'S ASSOCIATION ICC ER-3064P. THE IDENTIFICATION CODE IDENTIFIES THE MEMBER DEPTH (IN MILS), SECTION TYPE, FLANGE WIDTH (IN MILS), AND MATERIAL THICKNESS (IN MILS). THE ICC REPORT IS AVAILABLE AT WWW.SSMA.COM.

FOR EXAMPLE, 600 S 125 - 54 [50]

600 REFERS TO MEMBER DEPTH (600 X 1/100 = 6")

S REFERS TO SECTION TYPE (S=STUD, T= TRACK)

125 REFERS TO FLANGE WIDTH (125 X 1/100 = 1.25")

54 REFERS TO MEMBER THICKNESS (54 MILS OR 16 Ga)

50 REFERS TO YIELD STRENGTH (KSI) IF OTHER THAN NOTED BELOW

5.5.3. ALL STUDS AND/OR JOISTS, 12, 13, 14 AND 16 GAGE, SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE AISI (AMERICAN IRON AND STEEL INSTITUTE) STANDARDS WITH A MINIMUM YIELD STRENGTH OF 50 KSI.

5.5.4. ALL 18 AND 20 GAGE STUDS AND/OR JOISTS, AND ALL TRACK, BRIDGING, END CLOSURES AND ACCESSORIES SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE AISI (AMERICAN IRON AND STEEL INSTITUTE) STANDARDS WITH A MINIMUM YIELD STRENGTH OF 33 KSI.

5.5.5. ALL STUDS, JOISTS AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING IN ACCORDANCE WITH ASTM A-525.

5.5.6. ALL FRAMING COMPONENTS SHALL BE CUT FOR A TIGHT FIT AGAINST ABUTTING MEMBERS, UNLESS SHOWN OTHERWISE. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.

5.5.7. AXIALLY LOADED STUDS SHALL BE INSTALLED IN A MANNER WHICH WILL ASSURE THAT ENDS OF THE STUDS ARE POSITIONED AGAINST THE INSIDE TRACK WEB, PRIOR TO STUD AND TRACK ATTACHMENT.

5.5.8. NON-AXIALLY LOADED WALL STUDS SUCH AS INTERIOR PARTITION WALLS AND EXTERIOR INFILL WALLS SHALL HAVE VERTICAL DEFORMATION CAPABILITY BETWEEN WALL AND ROOF/FLOOR STRUCTURE UNLESS SHOWN OTHERWISE.

5.6. SURE-BOARD SHEATHING:

SURE-BOARD SHALL BE SURE-BOARD SERIES 200 STRUCTURAL PANELS AS MANUFACTURED BY INTERMAT IN ACCORDANCE WITH IAPMO UES ER-0126.

A. INSTALLATION OF PANELS SHALL COMPLY WITH IAPMO UES ER-0126 AND THE SURE-BOARD SHEARWALL SCHEDULE PROVIDED ON THE STRUCTURAL DRAWINGS.

B. FASTENERS USED FOR ATTACHING SURE-BOARD PANELS SHALL BE SELF TAPPING SELF DRILLING BUGLE HEAD SCREWS, MIN. 0.138" DIA. (#6), MIN. 0.3145" DIA. HEAD, MIN. 1.25" LONG COMPLYING WITH SAE J78 AND ASTM C 954. SCREWS SHALL HAVE SUFFICIENT LENGTH OF DRILL POINT TO PREVENT PANEL FROM PUSHING OFF THE FACE OF STUDS DURING INSTALLATION.

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STRUCTURAL ENGINEER
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METROPARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

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Drawn by: SSO
Checked: AS
Date: 12-10-19
Scale: As indicated

Revisions:
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STRUCTURAL NOTES

S0.2

11. STATEMENT OF SPECIAL INSPECTIONS

IBC	SI	SO	TITLE
1705.2	✓	✓	STEEL CONSTRUCTION (SEE TABLES 15A, 15B, 15C, 15D, AND 15E)
1705.3	✓	✓	CONCRETE CONSTRUCTION (SEE TABLE 13)
1705.6	✓	N/R	SOILS (SEE TABLE 12A)
1705.12.1 1705.13.1	✓	✓	STRUCTURAL STEEL - SEISMIC FORCE RESISTING SYSTEM
1705.12.3	✓	✓	COLD FORMED STEEL FRAMING - SEISMIC FORCE RESISTING SYSTEM

SI = SPECIAL INSPECTION

SO = STRUCTURAL OBSERVATION

✓ = ITEM IS REQUIRED

N/R = ITEM IS NOT REQUIRED

SPECIAL INSPECTIONS INDICATED ARE FOR STRUCTURAL ELEMENTS ONLY. SEE ARCH, MECH AND ELEC DRAWINGS FOR ADDITIONAL SPECIAL INSPECTIONS.

11.1. INSPECTION/TESTING REQUIREMENTS:

SEE DRAWINGS, SPECIFICATIONS, AND IBC SECTIONS 110, AND CHAPTER 17.

11.2. INSPECTIONS BY THE BUILDING OFFICIAL (IBC SECTION 110):

11.2.1. FOOTING AND FOUNDATION INSPECTIONS SHALL BE MADE AFTER EXCAVATIONS ARE COMPLETE AND ANY REQUIRED REINFORCING IS IN PLACE. ANY REQUIRED FORMS SHALL BE IN PLACE PRIOR TO INSPECTION.

11.2.2. CONCRETE SLAB AND UNDER FLOOR INSPECTIONS SHALL BE MADE AFTER ALL IN SLAB OR UNDER FLOOR REINFORCING, CONDUIT, PIPING AND OTHER ANCILLARY EQUIPMENT ITEMS AND ACCESSORIES ARE IN PLACE BUT PRIOR TO CONCRETE PLACEMENT OR FLOOR SHEATHING INSTALLATION.

11.2.3. FRAMING INSPECTIONS SHALL BE MADE AFTER ALL SHEATHING, FRAMING, BLOCKING AND BRACING ARE COMPLETE AND ALL PIPES, DUCTS, ELECTRICAL, PLUMBING, ETC., ARE INSTALLED AND APPROVED PRIOR TO COVER.

11.2.4. IN ADDITION TO THE INSPECTIONS SPECIFIED ABOVE, THE BUILDING OFFICIAL IS AUTHORIZED TO MAKE OR REQUIRE OTHER INSPECTIONS OF ANY CONSTRUCTION WORK TO ASCERTAIN COMPLIANCE WITH THE PROVISIONS OF THE IBC OR OTHER LAWS ENFORCED BY THE BUILDING OFFICIAL.

11.3. STRUCTURAL TESTS AND SPECIAL INSPECTIONS (IBC CHAPTER 17):

11.3.1. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

11.3.2. STRUCTURAL TESTS AND SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 17 OF THE IBC AS WELL AS ANY ADDITIONAL REQUIREMENTS OF THE BUILDING OFFICIAL. OMISSION FROM THE LIST BELOW OF TESTING AND INSPECTION REQUIREMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING TESTING AND INSPECTION REQUIRED BY THE SPECIFICATIONS, THE IBC AND THE BUILDING OFFICIAL.

11.3.3. TESTING AND SPECIAL INSPECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 17 OF THE IBC FOR THE ITEMS LISTED IN THIS SECTION.

11.4. STRUCTURAL OBSERVATION

11.4.1. STRUCTURAL OBSERVATION SHALL BE PERFORMED DURING CONSTRUCTION IN A MANNER AS REQUIRED TO BECOME GENERALLY FAMILIAR WITH THE IN PLACE CONSTRUCTION.

11.4.2. STRUCTURAL OBSERVATION EXTENT SHALL BE AS INDICATED ABOVE. TIMING AND DURATION OF OBSERVATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR DURING CONSTRUCTION.

11.4.3. CONSTRUCTION OBSERVATION REPORTS AND FINDINGS SHALL NOT BE VIEWED AS A WARRANTY OR GUARANTEE BY THE STRUCTURAL ENGINEER.

11.5. SPECIAL INSPECTOR: SHALL BE CURRENTLY WABO CERTIFIED AND UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER.

11.5.1. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.

11.5.2. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, ENGINEER OF RECORD, ARCHITECT OF RECORD, AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE GENERAL CONTRACTOR FOR CORRECTION, THEN, IF NOT IN CONFORMANCE, TO THE PROPER DESIGN AUTHORITY AND BUILDING OFFICIAL.

11.5.3. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC. THE REPORT SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.

12A. REQUIRED SPECIAL INSPECTIONS AND TEST OF SOILS

IBC TABLE 1705.6			
SPECIAL INSPECTION OR TEST TYPE		CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	N/R	✓
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	N/R	✓
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIAL	N/R	✓
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	✓	N/R
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	N/R	✓

12.1. SPECIAL INSPECTIONS AND TESTS FOR EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT, AND LOAD-BEARING REQUIREMENTS PER IBC 1705.6., AS NOTED IN TABLE 12A.

12.1.1. THE APPROVED GEOTECHNICAL REPORT AND THE CONSTRUCTION DOCUMENTS PREPARED BY THE REGISTERED DESIGN PROFESSIONALS SHALL BE USED TO DETERMINE COMPLIANCE.

13. REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

IBC TABLE 1705.3					
SPECIAL INSPECTION OR TEST TYPE		CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1.	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	N/R	✓	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
3.	INSPECT ANCHORS CAST IN CONCRETE	N/R	✓	ACI 318: 17.8.2	
4.	INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	✓	N/R	ACI 318: 17.8.2.4	
	B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4A	N/R	✓	ACI 318: 17.8.2	
5.	VERIFY USE OF REQUIRED DESIGN MIX	N/R	✓	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	✓	N/R	ASTM C 172 ASTM C 31 ACI318:26.4, 26.12	1908.10
7.	INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	✓	N/R	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	N/R	✓	ACI 318: 26.5.3-26.5.5	1908.9
10.	INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	N/R	✓	ACI 318: 26.8	
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	N/R	✓	ACI 318: 26.11.1.2(b)	

13.1. CONCRETE: SPECIAL INSPECTION AND TESTING PER IBC TABLE 1705.3 AS NOTED IN TABLE 13, INCLUDING:

13.1.1. CONTINUOUS SPECIAL INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.

13.1.2. CONTINUOUS SPECIAL INSPECTION OF BOLTS INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.

13.1.3. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE SHALL BE AS DESCRIBED IN THE RESEARCH REPORT ISSUED BY AN APPROVED SOURCE (ICC, IAPMO, ETC.).

13.2. SPECIAL INSPECTIONS AND TESTS SHALL NOT BE REQUIRED FOR THE FOLLOWING:

13.2.1. NON-STRUCTURAL CONCRETE SLABS ON GRADE

15.A REQUIRED SPECIAL INSPECTION AND TESTS OF STRUCTURAL STEEL CONSTRUCTION – INSPECTION OF WELDING

SPECIAL INSPECTION OR TEST TYPE			CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD
AISC TABLE N5.4-1					
1.		PRIOR TO WELDING, VERIFY AND INSPECT THE FOLLOWING:			
	A.	WELDING PROCEDURE SPECIFICATIONS (WPS)	✓	N/R	
	B.	MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES	✓	N/R	AISC 360 A3.5
	C.	MATERIAL IDENTIFICATION OF STRUCTURAL STEEL MEMBERS	N/R	✓	AISC 360 A3.1
	D.	WELDER IDENTIFICATION SYSTEM	N/R	✓	
	E.	FIT-UP OF GROOVE WELDS, INCLUDING JOINT GEOMETRY			
		1) JOINT PREPARATION	N/R	✓	
		2) DIMENSIONS: ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL	N/R	✓	
		3) CLEANLINESS: CONDITION OF STEEL SURFACES	N/R	✓	
		4) TACKING: TACK WELD QUALITY AND LOCATION	N/R	✓	
		5) BACKING TYPE AND FIT (IF APPLICABLE)	N/R	✓	
	F.	CONFIGURATION AND FINISH OF ACCESS HOLES	N/R	✓	
	G.	FIT-UP OF FILLET WELDS			
		1) DIMENSIONS: ALIGNMENT, GAPS AT ROOT	N/R	✓	
		2) CLEANLINESS: CONDITION OF STEEL SURFACES	N/R	✓	
		3) TACKING: TACK WELD QUALITY AND LOCATION	N/R	✓	
	H.	CHECK WELDING EQUIPMENT	N/R	✓	
AISC 360 TABLE N5.4-2					
2.		DURING WELDING, VERIFY AND INSPECT THE FOLLOWING:			
	A.	USE OF QUALIFIED WELDERS	N/R	✓	
	B.	CONTROL AND HANDLING OF WELDING CONSUMABLES			
		1) PACKAGING	N/R	✓	
		2) EXPOSURE CONTROL	N/R	✓	
	C.	NO WELDING OVER CRACKED TACK WELDS	N/R	✓	
	D.	ENVIRONMENTAL CONDITIONS			
		1) WIND SPEED WITHIN LIMITS	N/R	✓	
		2) PRECIPITATION AND TEMPERATURE	N/R	✓	
	E.	WELDING PROCEDURE SPECIFICATIONS FOLLOWED			
		1) SETTINGS ON WELDING EQUIPMENT	N/R	✓	
		2) TRAVEL SPEED	N/R	✓	
		3) SELECTED WELDED MATERIALS	N/R	✓	
		4) SHIELDING GAS TYPE AND FLOW RATE	N/R	✓	
		5) PREHEAT APPLIED	N/R	✓	
		6) INTERPASS TEMPERATURE MAINTAINED	N/R	✓	
		7) PROPER POSITION	N/R	✓	
	F.	WELDING TECHNIQUES			
		1) INTERPASS AND FINAL CLEANING	N/R	✓	
		2) EACH PASS WITHIN PROFILE LIMITATIONS	N/R	✓	
		3) EACH PASS MEETS QUALITY REQUIREMENTS	N/R	✓	
AISC 360 TABLE N5.4-3					
3.		AFTER WELDING, VERIFY AND INSPECT THE FOLLOWING:			
	A.	WELDS CLEANED	N/R	✓	
	B.	SIZE, LENGTH, AND LOCATION OF WELDS	✓	N/R	
	C.	WELDS MEET VISUAL ACCEPTANCE CRITERIA			
		1) CRACK PROHIBITION	✓	N/R	
		2) WELD TO BASE METAL FUSION	✓	N/R	
		3) CRATER CROSS SECTION	✓	N/R	
		4) WELD PROFILES	✓	N/R	
		5) WELD SIZE	✓	N/R	
		6) UNDERCUT	✓	N/R	
		7) POROSITY	✓	N/R	
	D.	ARC STRIKES	✓	N/R	
	E.	k-AREA	✓	N/R	
	F.	BACKING REMOVED AND WELD TABS REMOVED, IF REQUIRED	✓	N/R	
	G.	REPAIR ACTIVITIES	✓	N/R	
	H.	DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	✓	N/R	

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TESTING AND INSPECTION

S0.3

15.B REQUIRED SPECIAL INSPECTION AND TESTS OF STRUCTURAL STEEL CONSTRUCTION – INSPECTION OF BOLTING

	SPECIAL INSPECTION OR TEST TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD
	AISC 360 TABLE N5.6-1			
1.	PRIOR TO BOLTING, VERIFY AND INSPECT THE FOLLOWING:			
A.	MANUFACTURER'S CERTIFICATIONS FOR FASTENER MATERIALS	✓	N/R	
B.	FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	N/R	✓	
C.	PROPER FASTENER SELECTED FOR JOINT DETAIL	N/R	✓	AISC 360 A3.1
D.	PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	N/R	✓	
E.	CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITIONS AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	N/R	✓	
F.	PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	✓	N/R	
G.	PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS	N/R	✓	
	AISC 360 TABLE N5.6-2			
2.	DURING BOLTING, VERIFY AND INSPECT THE FOLLOWING:			
A.	FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	N/R	✓	
B.	JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	N/R	✓	
C.	FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	N/R	✓	
D.	FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	N/R	✓	
	AISC 360 TABLE N5.6-3			
3.	AFTER BOLTING, VERIFY AND INSPECT THE FOLLOWING:			
A.	DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	✓	N/R	

14.1. STRUCTURAL STEEL CONSTRUCTION:

SPECIAL INSPECTION AND NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS SHALL BE IN ACCORDANCE WITH THE QUALITY CONTROL AND QUALITY ASSURANCE REQUIREMENTS OF AISC 360, AS NOTED IN TABLES 15A, 15B, 15C, AND AWS D1.1, INCLUDING:

14.1.1. INSPECTION OF ERECTED STEEL SYSTEM.

14.1.2. REVIEW OF MATERIAL TEST REPORTS AND CERTIFICATIONS FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.

14.1.3. OBSERVATION OF WELDING OPERATIONS AND VISUAL INSPECTION OF IN-PROCESS AND COMPLETED WELDS SHALL BE AS FOLLOWS:

A. VERIFY THAT WELD FILLER MATERIAL AND MANUFACTURER'S CERTIFICATE OF COMPLIANCE CONFORM TO AWS SPECIFICATION SPECIFIED. VERIFY WELDERS ARE CERTIFIED BY WABO, THAT PROPER ELECTRODES IN OVEN DRY CONDITIONS ARE USED, AND THAT PROPER METHODS AND PREPARATIONS ARE USED.

B. PERIODIC SPECIAL INSPECTION OF WELDING SHALL BE PERFORMED FOR SINGLE PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16" AND FLOOR AND DECK WELDS.

C. CONTINUOUS SPECIAL INSPECTION OF WELDING SHALL BE PERFORMED ON COMPLETE AND PARTIAL PENETRATION GROOVE WELDS AND FILLET WELDS GREATER THAN 5/16".

D. ALL WELDS SHALL BE CHECKED VISUALLY.

E. ALL SHOP AND FIELD WELDING SHALL BE SUBJECT TO INSPECTION BY A WABO CERTIFIED WELDING INSPECTOR EMPLOYED BY THE OWNER. THE INSPECTOR SHALL UTILIZE RADIOGRAPHIC, ULTRASONIC, OR MAGNETIC PARTICLE TESTING AND ANY OTHER AID TO VISUAL INSPECTION THAT MAY BE DEEMED NECESSARY TO ASSURE THE ADEQUACY OF WELDING. THE OWNER SHALL CARRY OUT TESTING AND INTERPRETATION AT ANY STAGE AFTER WELDING.

F. 10% OF ALL FILLET WELDS SHALL BE CHECKED BY MAGNETIC PARTICLE TESTING.

G. 100% OF ALL COMPLETE PENETRATION WELDS SHALL BE CHECKED BY ULTRASONIC TESTING.

H. ALL WELDS FOUND DEFECTIVE AND REPAIRED SHALL BE REINSPECTED BY THE SAME METHOD ORIGINALLY USED. THE COST OF REPAIR AND REINSPECTION SHALL BE BORNE BY THE CONTRACTOR.

I. STANDARDS FOR ACCEPTANCE SHALL BE AS GIVEN IN AWS D1.1.

14.1.4. OBSERVATION OF BOLTING OPERATIONS.

14.1.5. CONTINUOUS SPECIAL INSPECTION SHALL BE PERFORMED FOR EACH JOINT OR MEMBER. PERIODIC SPECIAL INSPECTION SHALL BE PERFORMED ON ITEMS ON A RANDOM BASIS. PERIODIC SPECIAL INSPECTION NEED NOT DELAY FABRICATION OR ERECTION OPERATIONS.

14.1.6. EPOXY ANCHORS: SPECIFIC REQUIREMENTS FOR INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE OR MASONRY SHALL BE AS DESCRIBED IN THE RESEARCH REPORT ISSUED BY AN APPROVED SOURCE (ICC, IAPMO, ETC.).

14.1.7. EXPANSION ANCHORS: SPECIFIC REQUIREMENTS FOR INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE OR MASONRY SHALL BE AS DESCRIBED IN THE RESEARCH REPORT ISSUED BY AN APPROVED SOURCE (ICC, IAPMO, ETC.).

15.1. SPECIAL INSPECTIONS AND TESTING FOR SEISMIC RESISTANCE:

15.1.1. SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE PER IBC 1705.12 SHALL BE REQUIRED FOR SEISMIC FORCE-RESISTING SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E OR F FOR THE FOLLOWING:

A. SPECIAL INSPECTIONS OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.

B. PERIODIC SPECIAL INSPECTION OF SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COLD-FORMED STEEL COMPONENTS WITHIN THE SEISMIC FORCE RESISTING SYSTEM, INCLUDING SHEAR WALLS, DIAPHRAGMS, COLLECTORS, BRACES, AND HOLDOWNS. SPECIAL INSPECTION IS NOT REQUIRED FOR SHEARWALLS, SHEAR PANELS, OR DIAPHRAGMS INCLUDING NAILING, BOLTING, ANCHORING AND OTHER FASTENING TO OTHER COMPONENTS OF THE MAIN SEISMIC FORCE RESISTING SYSTEM WHERE THE FASTENER SPACING OF THE SHEATHING IS ON ONE SIDE OF THE SHEARWALL ONLY AND IS GREATER THAN 4 INCHES ON CENTER.

C. PERIODIC SPECIAL INSPECTION DURING THE ERECTION AND FASTENING OF EXTERIOR CLADDING, INTERIOR AND EXTERIOR NON-BEARING WALLS, AND INTERIOR AND EXTERIOR VENEER IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E, OR F PER IBC 1705.12.5.

15.1.2. TESTING AND QUALIFICATION FOR SEISMIC RESISTANCE PER IBC 1705.13 SHALL BE REQUIRED FOR SEISMIC FORCE-RESISTING SYSTEM IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E OR F FOR THE FOLLOWING:

A. NONDESTRUCTIVE TESTING FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.

B. SEISMIC ISOLATION SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH SECTION 17.8 OF ASCE 7.

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TESTING AND INSPECTION

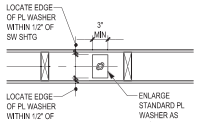
S0.4

SHEARWALL SCHEDULE

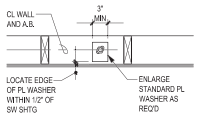
MARK	SHEATHING	NAILING		STUD SIZE AT ADJOINING PANEL EDGES	BLOCKING SIZE	FOUNDATION SILL PL ATTACHEMENT	2x BOTTOM PLATE ATTACHMENT TO WOOD BELOW	ASD ALLOWABLE UNIT SHEAR - SEISMIC	ASD ALLOWABLE UNIT SHEAR - WIND
		SIZE	SPACING						
W1	7/16" APA RATED SHEATHING	10d COMMON (0.148" DIA x 2 1/2" MIN)	6" O.C. EDGES 12" O.C. FIELD	2x	2x FLAT OR 2x	1/2" DIA. AT 48" O.C.	16d AT 6" O.C. STAGGERED	310 PLF	435 PLF
W2	7/16" APA RATED SHEATHING	10d COMMON (0.148" DIA x 2 1/2" MIN)	4" O.C. EDGES 12" O.C. FIELD	3x (12)	2x FLAT OR 3x (12)	1/2" DIA. AT 48" O.C.	(2) ROWS 16d AT 8" O.C. STAGGERED	460 PLF	645 PLF
W3	7/16" APA RATED SHEATHING	10d COMMON (0.148" DIA x 2 1/2" MIN)	3" O.C. EDGES 12" O.C. FIELD	3x (12)	2x FLAT OR 3x (12)	1/2" DIA. AT 32" O.C.	(2) ROWS 16d AT 6" O.C. STAGGERED	600 PLF	840 PLF
W4	7/16" APA RATED SHEATHING	10d COMMON (0.148" DIA x 2 1/2" MIN)	2" O.C. EDGES 12" O.C. FIELD	3x (12)	2x FLAT OR 3x (12)	1/2" DIA. AT 16" O.C.	(3) ROWS 16d AT 8" O.C. STAGGERED	770 PLF	1078 PLF
W5	7/16" APA RATED SHEATHING TWO SIDES OF WALL	10d COMMON (0.148" DIA x 2 1/2" MIN)	6" O.C. EDGES 12" O.C. FIELD	2x	2x FLAT OR 2x	1/2" DIA. AT 32" O.C.	(2) ROWS 16d AT 6" O.C. STAGGERED	620 PLF	870 PLF
W6	7/16" APA RATED SHEATHING TWO SIDES OF WALL	10d COMMON (0.148" DIA x 2 1/2" MIN)	4" O.C. EDGES 12" O.C. FIELD	3x (12)	2x FLAT OR 3x (12)	1/2" DIA. AT 16" O.C.	(3) ROWS 16d AT 6" O.C. STAGGERED	920 PLF	1290 PLF
W7	7/16" APA RATED SHEATHING TWO SIDES OF WALL	10d COMMON (0.148" DIA x 2 1/2" MIN)	3" O.C. EDGES 12" O.C. FIELD	3x (12)	2x FLAT OR 3x (12)	1/2" DIA. AT 16" O.C.	3/4" DIA. THRU BOLT AT 8" O.C.	1200 PLF	1680 PLF
W8	7/16" APA RATED SHEATHING TWO SIDES OF WALL	10d COMMON (0.148" DIA x 2 1/2" MIN)	2" O.C. EDGES 12" O.C. FIELD	3x (12)	2x FLAT OR 3x (12)	5/8" DIA. AT 8" O.C.	3/4" DIA. THRU BOLT AT 8" O.C.	1540 PLF	2155 PLF

APA RATED SHEATHING SHEARWALL NOTES:

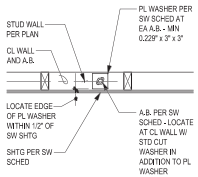
1. NAILS SHALL BE COMMON FROM AN AMERICAN OR CANADIAN MFR ONLY. MINIMUM NAIL PENETRATION INTO WOOD FRAMING SHALL BE 1 1/2" FOR 10d NAILS. UNLESS NOTED OTHERWISE, NAIL DIAMETERS AND LENGTHS SHALL BE AS NOTED IN THE CARPENTRY HARDWARE SECTION OF THE STRUCTURAL NOTES. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED.
2. APA RATED SHEATHING MATERIAL MAY BE EITHER PLYWOOD OR ORIENTED STRAND BOARD CONFORMING TO DOC PS 1 OR PS 2. SHEATHING MAY BE ORIENTED EITHER HORIZONTALLY OR VERTICALLY.
3. SHEATHING PANELS SHALL NOT BE LESS THAN 4' x 8' EXCEPT AT SHEARWALL BOUNDARIES AND CHANGES IN FRAMING. ALL EDGES OF ALL PANELS SHALL BE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR BLOCKING.
4. ALL INTERIOR SHEAR WALLS HAVE BEEN DESIGNATED. ALL EXTERIOR WALLS WITHOUT DESIGNATION SHALL BE TYPE W6. WHERE THE SHEARWALL HAS BEEN DESIGNATED ON THE PLANS TO EXTEND ALONG LENGTHS OF WALLS WITH PENETRATIONS, SHEATHING AND NAILING OF THAT TYPE SHALL BE REQUIRED ABOVE AND BELOW WALL OPENINGS. OTHERWISE, SHEATHING AND NAILING ABOVE AND BELOW OPENINGS MAY BE TYPE W6.
5. UNLESS NOTED OTHERWISE, THE SHEARWALL DESIGNATION APPLIES TO FULL EXTENT OF WALL BETWEEN CORNERS OF WALLS.
6. SHEARWALLS SHALL RUN CONTINUOUS THROUGH BREAKS CAUSED BY INTERSECTING WALLS.
7. WHEN SHEATHING IS REQUIRED ON ONE SIDE ONLY, PLACE ON THE SIDE OF THE SYMBOL. WHERE THE SHEATHING IS NOTED ON TWO SIDES OF THE WALL, STAGGER VERTICAL PANEL JOINTS SUCH THAT JOINTS ON OPPOSITE SIDES OF THE WALL DO NOT FALL ON THE SAME FRAMING MEMBER.
8. NAIL SPACING INDICATED ON SCHEDULE APPLIES TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING. NAIL SPACINGS OF 3" ON CENTER OR LESS AT ADJOINING PANEL EDGES SHALL BE STAGGERED. NAILS SHALL BE LOCATED AT LEAST 3/8" FROM PANEL EDGES.
9. PROVIDE SHEATHING EDGE NAILING TO ALL COLUMNS WITH HOLDOWNS AND STUDS ATTACHED TO STEEL TUBE COLUMNS.
10. HOT DIPPED GALVANIZED FASTENERS SHALL BE USED TO ATTACH TO ALL TREATED WOOD MEMBERS. ELECTROPLATED FASTENERS ARE NOT ACCEPTABLE.
11. SPACING OF WALL STUDS SHALL BE AS NOTED ON THE PLANS. SPACING OF STUDS SHALL NOT EXCEED 24" O.C.
12. WHERE NOTED, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL. TWO 2" NOMINAL FRAMING MEMBERS SHALL BE PERMITTED TO BE USED IN LIEU OF A SINGLE 3" NOMINAL MEMBER PROVIDED THE 2" NOMINAL MEMBERS ARE LAMINATED TOGETHER WITH NAILS OR BOLTS AS NOTED IN '2x BOTTOM PLATE ATTACHMENT TO WOOD BELOW' COLUMN IN SCHEDULE ABOVE.
13. ANCHOR BOLTS SHALL NOT BE SPACED GREATER THAN 48" OC, AND SHALL HAVE 7" MIN. EMBED. EXPANSION BOLTS SHALL HAVE 5" MIN EMBED. SEE DETAILS FOR TYPE OF CONNECTION REQUIRED. PROVIDE A MINIMUM OF (2) ANCHOR BOLTS PER PIECE, WITH ONE ANCHOR LOCATED NOT MORE THAN 12" OR LESS THAN 4" FROM EACH END OF EACH PIECE. AT NON-SHEAR WALLS, PROVIDE SPECIFIED ANCHOR BOLTS AT 48" OC MAX, UNLESS NOTED OTHERWISE.
14. FOUNDATION ANCHOR BOLTS SHALL HAVE A STEEL PLATE WASHER AT EA ANCHOR BOLT NO LESS THAN 0.229" x 3" x 3" IN SIZE. THE HOLE IN THE PLATE WASHER SHALL BE PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1 - 3/4". PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE FOUNDATION SILL PLATE. SLOTTED PLATE WASHERS SHALL BE A MINIMUM 4" x 4" FOR 2x6 WALLS, AND 6" x 6" FOR 2x8 WALLS.
15. STANDARD CUT WASHERS MAY BE SUBSTITUTED IN LIEU OF PLATE WASHERS FOR ALL TYPE W6 WALLS LONGER THAN 10 FEET.
16. FOR SHEAR WALLS FRAMED WITH ENGINEERED WOOD STUDS (LSL OR LVL), D.F. No. 2 2x FRAMING THAT MATCHES THE DEPTH OF THE STUDS MAY BE SUBSTITUTED FOR ENGINEERED WOOD AT ALL WALL FOUNDATION SILLS AND WALL TOP PLATES, AS WELL AS BLOCKING.



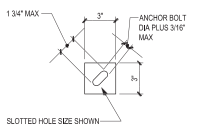
CONDITION AT WALLS SHEATHED BOTH SIDES



CONDITION AT 2x6 AND LARGER WALLS



TYPICAL CONDITION



STANDARD (MINIMUM) PL WASHER

FOOTING SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
F12.0 x 3.0	12'-0" L x 3'-0" W x 2'-0" DP	(4) #6 TOP AND BOT LONGIT W/ #4 STIRRUPS AT 12" OC	

FOOTINGS SCHEDULE NOTES:

1. TOP OF FOOTING ELEVATION = -1'-0" UNLESS NOTED OTHERWISE ON PLAN.
2. FOOTING DESIGN BASED ON 3000 PSF ALLOWABLE SOIL BEARING PRESSURE.
3. EQUALLY SPACE REINFORCING IN EACH DIRECTION.
4. PROVIDE 3" CLEAR TO REINFORCING AT BOTTOM OF FOOTING.

KEY TO ABBREVIATIONS

AB	ANCHOR BOLT	L	ANGLE
ABV	ABOVE	LLH	LONG LEG HORIZONTAL
ADDL	ADDITIONAL	LLV	LONG LEG VERTICAL
ADJ	ADJACENT	LOC	LOCATION
AFF	ABOVE FINISH FLOOR	LONGIT	LONGITUDINAL
ARCH	ARCHITECTURAL, ARCHITECT	MAX	MAXIMUM
ASD	ALLOWABLE STRESS DESIGN	MB	MACHINE BOLT
BEL	BELOW	MECH	MECHANICAL
BLKG	BLOCKING	MFR	MANUFACTURER
BM	BEAM	MIN	MINIMUM
BNDY	BOUNDARY	MIW	MALLEABLE IRON WASHER
BOT	BOTTOM	NS	NEAR SIDE
BRG	BEARING	NTS	NOT TO SCALE
BS	BOTH SIDES	NWT	NORMAL WEIGHT
BTWN	BETWEEN	OV	OVER
BU	BUILT UP	OC	ON CENTER
CIP	CAST IN PLACE	O.F.	OUTSIDE FACE
CJ	CONSTRUCTION/CONTROL JOINT	OPP	OPPOSITE HAND
CL	CENTERLINE	OPNG	OPENING
CLG	CEILING	OSB	ORIENTED STRAND BOARD
CLR	CLEAR	PC	PRE-CAST
CMU	CONCRETE MASONRY UNIT	PDF	POWER DRIVEN FASTENERS, PAF
COL	COLUMN	PAF	POWER ACTUATED FASTENERS, PDF
CONC	CONCRETE	PERP	PERPENDICULAR
CONN	CONNECT, CONNECTION	PL	PLATE
CONT	CONTINUOUS	PLF	POUNDS PER LINEAR FOOT
COORD	COORDINATE	PNL	PANEL
CSK	COUNTERSINK	PRE-ENGR	PRE-ENGINEERED
CTR	CENTER	PROV	PROVIDE
CVR	COVER	PT	POST TENSIONED
DEG	DEGREE	PW	PLYWOOD
DIA	DIAMETER	REF	REFERENCE
DBL	DOUBLE	REINF	REINFORCE, REINFORCEMENT
EA	EACH	REQ'D	REQUIRED
EF	EACH FACE	RF	ROOF
ELEV	ELEVATION, ELEVATOR	SCHED	SCHEDULE
EMB	EMBEDMENT	SFRS	SEISMIC FORCE RESISTING SYSTEM
ENGR	ENGINEER	SHTG	SHEATHING
EQ	EQUAL/EQUIVALENT	SIM	SIMILAR
EQUIV	EQUIVALENT	SIMP	SIMPSON STRONG-TIE
ES	EACH SIDE	SOG	SLAB ON GRADE
EW	EACH WAY	SPCG	SPACING
(E)	EXISTING	SQ	SQUARE
EXP	EXPANSION	STD	STANDARD
EXT	EXTERIOR	STIFF	STIFFENER
FDN	FOUNDATION	SW	SHEARWALL
FF	FINISH FLOOR	T&G	TONGUE AND GROOVE
FFE	FINISH FLOOR ELEVATION	THK	THICK
FOC	FACE OF CONCRETE	THRD	THREADED
FOM	FACE OF MASONRY	T.O.	TOP OF
FOS	FACE OF STUD	TOC	TOP OF CONCRETE
FS	FAR SIDE	TOF	TOP OF FOOTING
FTG	FOOTING	TOPL	TOP OF PLATE
GA	GAGE	TOS	TOP OF STEEL
GALV	GALVANIZED	T.O.W.	TOP OF WALL
GC	GENERAL CONTRACTOR	TRANSV	TRANSVERSE
GL	GLUE LAMINATED	TRTD	TREATED
GWB	GYPSUM WALL BOARD	TYP	TYPICAL
HGR	HANGER	UNO	UNLESS NOTED OTHERWISE
HORIZ	HORIZONTAL	VFY	VERIFY
HSS	HOLLOW STEEL SECTION	VERT	VERTICAL
HT	HEIGHT	W/	WITH
I.F.	INSIDE FACE	W/O	WITHOUT
INT	INTERIOR	WF	WIDE FLANGE
JNT	JOINT	WHS	WELDED HEADED STUD
JST	JOIST	WTS	WELDED THREADED STUD
K, KIPS	KIPS=1000 LBS	WWF	WELDED WIRE FABRIC

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60% CD

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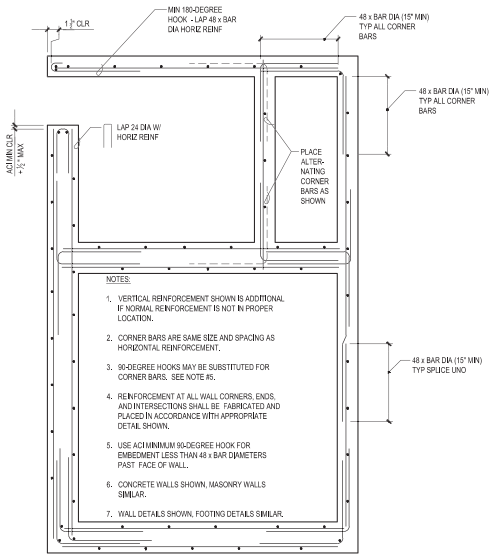
ABBREVIATONS AND SCHEDULES

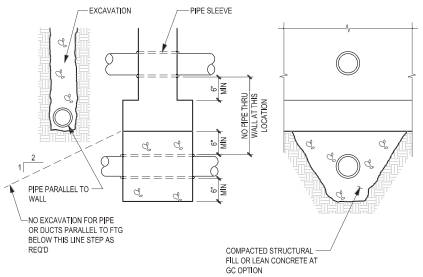
S0.5



PLAN VIEW - TYPICAL
REINFORCEMENT PLACING
DETAIL

TYPICAL 1

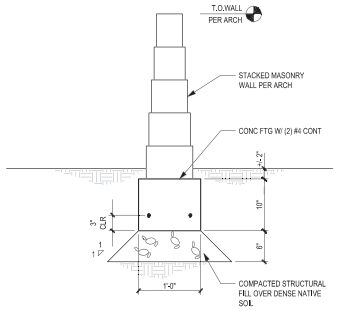
NTS



TYPICAL DETAIL OF PIPE AT CONCRETE
FOOTING

TYPICAL 2

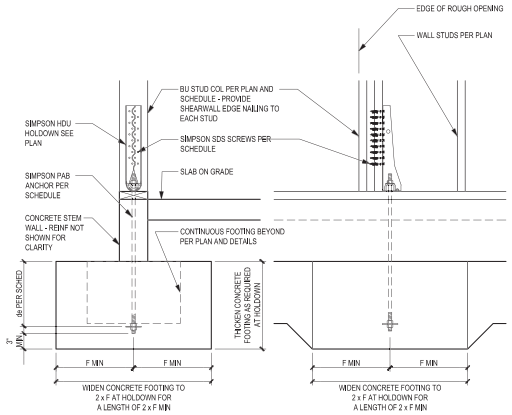
NTS



FOOTING AT INTERIOR
STACKED MASONRY WALL

TYPICAL 3

1" = 1'-0"



HOLDOWN SCHEDULE

HOLDOWN	FOUNDATION ANCHOR	de	F	FASTENERS	MINIMUM WOOD MEMBER THICKNESS	ALLOWABLE TENSION LOAD
SIMPSON HDU2	SIMP PAB5	6"	9"	(6) SIMPSON SDS 1/4" x 2 1/2"	3"	3075#
SIMPSON HDU4	SIMP PAB5	6"	9"	(10) SIMPSON SDS 1/4" x 2 1/2"	3"	4565#
SIMPSON HDU5	SIMP PAB5	6"	9"	(14) SIMPSON SDS 1/4" x 2 1/2"	3"	5645#
SIMPSON HDU8	SIMP PAB7	10"	15"	(20) SIMPSON SDS 1/4" x 2 1/2"	4 1/2"	7870#
SIMPSON HDU11	SIMP PAB8	12"	18"	(30) SIMPSON SDS 1/4" x 2 1/2"	5 1/2"	9535#
SIMPSON HDU14	SIMP PAB8	12"	18"	(36) SIMPSON SDS 1/4" x 2 1/2"	6x6	14445#

HOLDOWN SCHEDULE NOTES:

1. ALLOWABLE LOADS ARE VALID FOR HOLDOWNS FLUSH OR RAISED OFF SILL PLATE.
2. TABULATED LOADS MAY BE DOUBLED WHEN THE HDU IS INSTALLED ON OPPOSITE SIDES OF THE WOOD MEMBER PROVIDED EITHER THE POST IS LARGE ENOUGH TO PREVENT OPPOSING HOLDOWN SCREW INTERFERENCE, OR THE HOLDOWNS ARE OFFSET TO ELIMINATE SCREW INTERFERENCE.
3. SIMP PAB8 SHALL USE A HEAVY HEX ANCHOR NUT.

TYPICAL HOLDOWN REQUIREMENTS

TYPICAL 4

NTS

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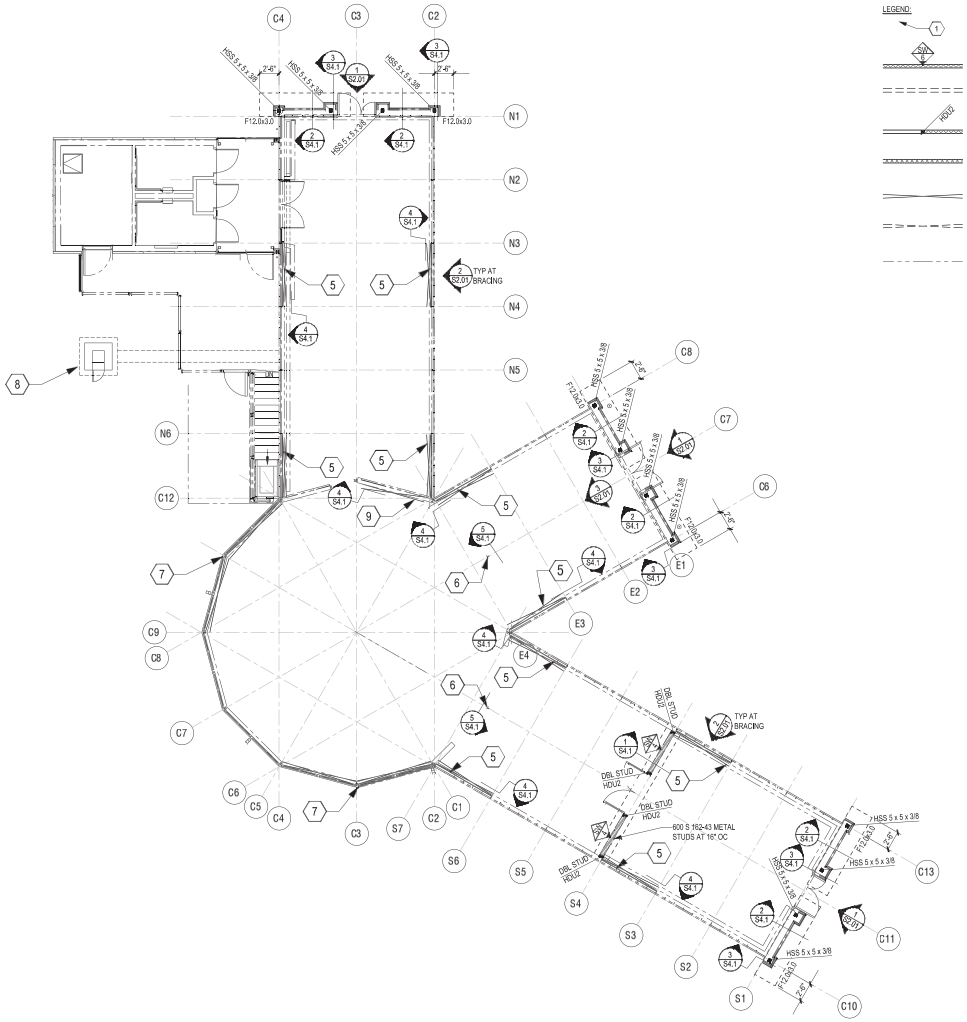
TYPICAL DETAILS

S1.1



MAIN FLOOR PLAN / FOUNDATION

1/8" = 1'-0"

1

LEGEND:

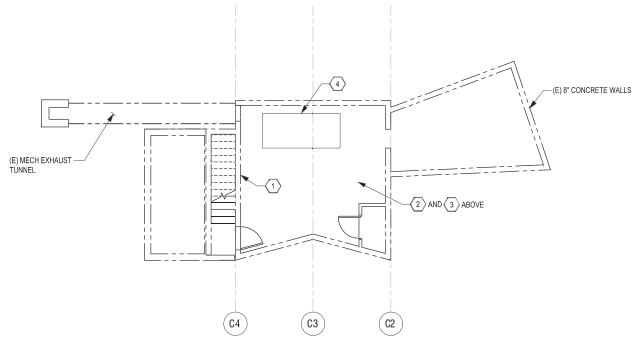
- KEYNOTE - REFER TO KEYNOTES ON THIS SHEET.
- SHEARWALL - REFER TO SHEARWALL SCHEDULE ON SHEET S1.1.
- WALL BELOW FLOOR OR ROOF FRAMING PLAN ON WHICH IT IS NOTED - SEE PLAN BELOW FOR REQUIREMENTS.
- INDICATES COLUMN WITH HOLDOWN - PROVIDE SIMPSON HOLDOWN INDICATED AND SEE DETAIL FOR REQUIREMENTS.
- STEEL STUD STRUCTURAL WALL ORIGINATING ON FOUNDATION OR FLOOR FRAMING PLAN ON WHICH IT IS NOTED.
- STEEL BRACED FRAME.
- STEEL BRACED FRAME ON BELOW FLOOR OR ROOF FRAMING PLAN ON WHICH IT IS NOTED.
- PHANTOM LINE - USED TO DEPICT EXISTING STRUCTURE

GENERAL PLAN NOTES:

1. SEE SHEET S0.1 AND S0.2 FOR GENERAL NOTES.
2. SEE SHEET S1.1 FOR TYPICAL DETAILS.
3. SEE SHEET S0.3 AND S0.4 FOR TESTING AND INSPECTION NOTES.
4. SEE SHEET S0.5 FOR SCHEDULES.

KEYNOTES

1. REPAIR (E) CRACK IN BASEMENT WALL BY INJECTING A CRACK REPAIR EPOXY, BASF MASTER INJECT OR APPROVED EQUIVALENT. REPAIR CONCRETE SPALLS USING CONCRETE REPAIR MORTAR , BASF MASTER EMACO OR APPROVED EQUIV.
2. CLEAN EXPOSED AND CORRODED REBAR AND COAT W/ RUST INHIBITOR. REPAIR OVERHEAD SPALLS W/ CONCRETE REPAIR MORTAR, BASF MASTER EMACO OR EQUIV.
3. CLEAN AND REMOVE CORROSION ON (E) STEEL BEAM. STRENGTHEN BEAM BY WELDING C8x11.5 TO UNDERSIDE OF BEAM PER DETAIL 6/S5.1
4. 4" CONCRETE HOUSEKEEPING PAD PER MECHANICAL. REINFORCE W/ #4 BARS AT 18" OC EA WAY AT MID-DEPTH
5. 3/4" DIAMETER TENSION ONLY X-BRACING.
6. FLAT BAR 3/4" x 3 REINFORCEMENT EA SIDE OF (E) FLAT PL COLUMN. SEE 5/S4.1.
7. AT OWNER OPTION REPLACE (E) FLAT BAR BRACING W/ 1 1/4" DIAMETER ROD BRACING.
8. REPAIR CHIMNEY PER DETAIL 5/S5.1.
9. 1 1/2" DIA TENSION ONLY X-BRACING.



BASEMENT PLAN

1/8" = 1'-0"

1

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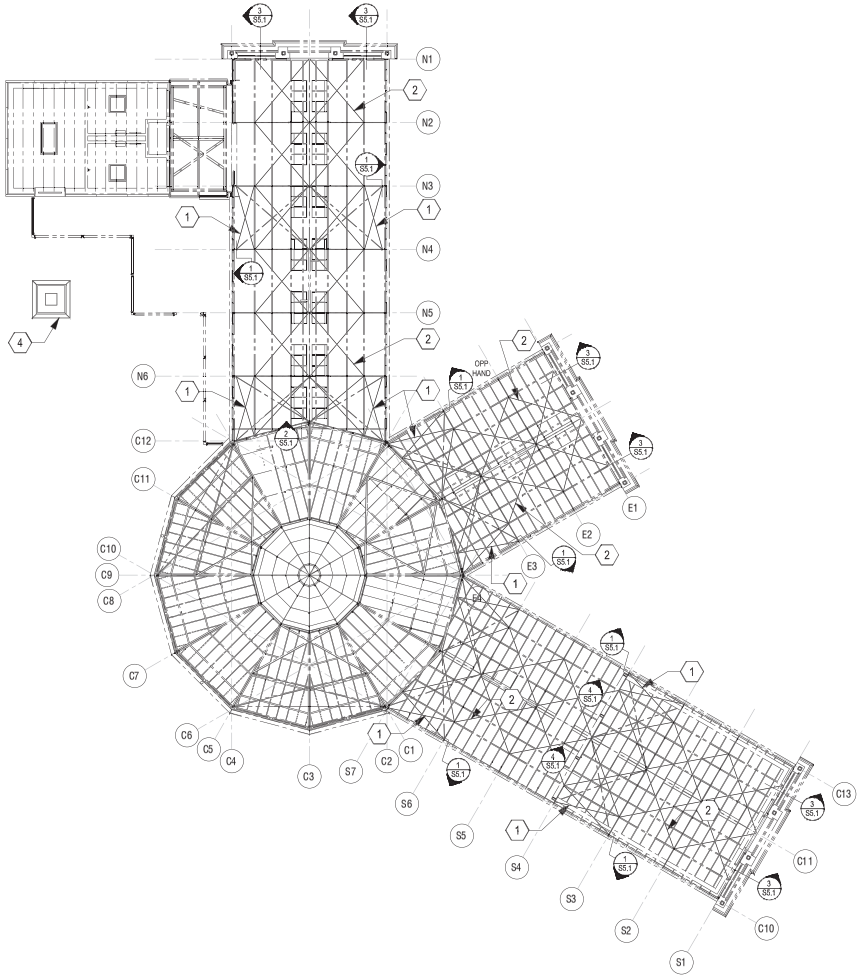
BASEMENT AND FIRST FLOOR PLAN

S2.1.1



ROOF FRAMING PLAN

1/8" = 1'-0"

1

0 4 8 16

1/8" = 1'-0"

KEYNOTES

1. 3/4" DIAMETER TENSION ONLY X-BRACING.
2. 3/4" DIA TENSION ONLY DIAPHRAGM BRACING.
3. AT OWNER OPTION REPLACE (E) FLAT BAR BRACING W/ 1 1/4" DIAMETER ROD BRACING.
4. REPAIR CHIMNEY PER DETAIL 5/S5.1

GENERAL PLAN NOTES:

1. SEE SHEET S0.1 AND S0.2 FOR GENERAL NOTES.
2. SEE SHEET S1.1 FOR TYPICAL DETAILS.
3. SEE SHEET S0.3 AND S0.4 FOR TESTING AND INSPECTION NOTES.
4. SEE SHEET S0.5 FOR SCHEDULES.

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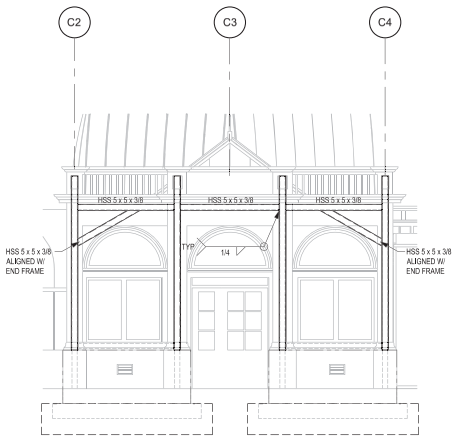
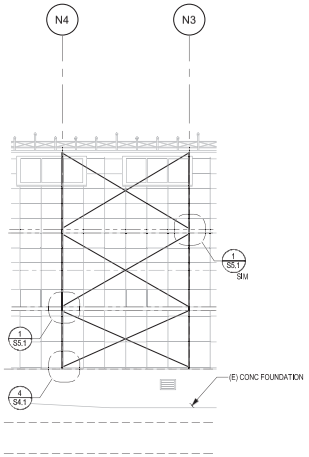
ROOF FRAMING PLAN

S2.2



ELEVATION 1

1/4" = 1'-0"



ELEVATION 2

1/4" = 1'-0"

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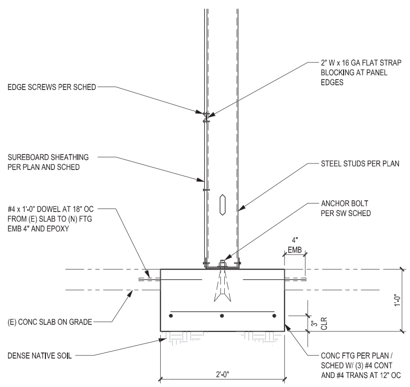
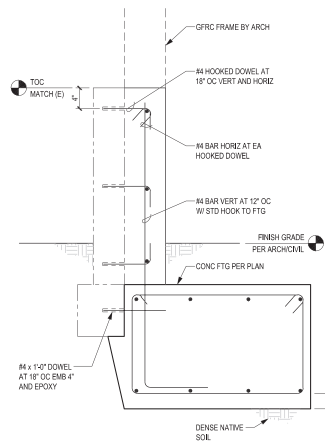
ELEVATIONS

S3.1



SECTION 1

1" = 1'-0"



SECTION 2

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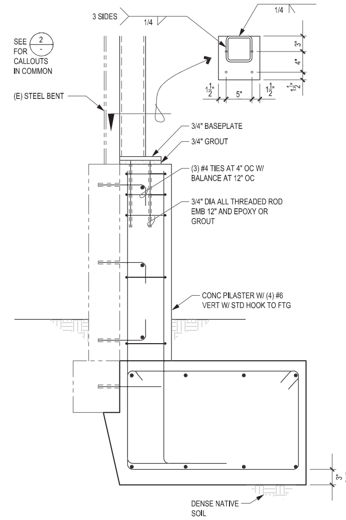
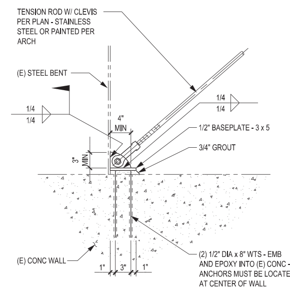


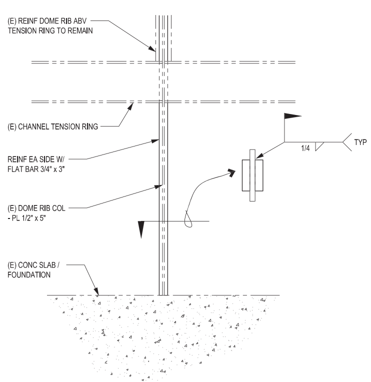
SECTION 3

1" = 1'-0"



SECTION 4

1" = 1'-0"



SECTION 5

1" = 1'-0"

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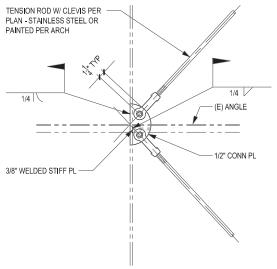
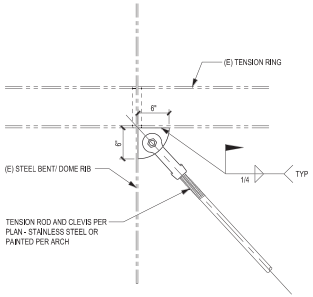
FOUNDATION DETAILS

S4.1



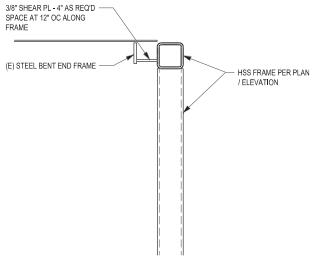
SECTION 1

1" = 1'-0"



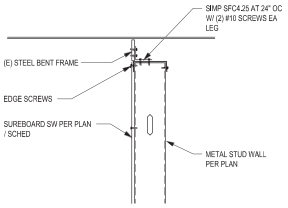
SECTION 2

1" = 1'-0"



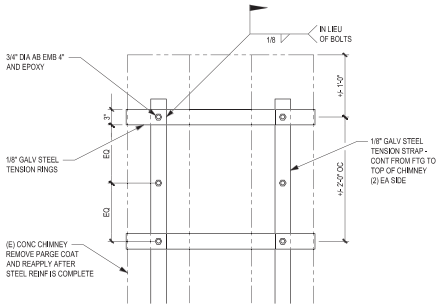
SECTION 3

1" = 1'-0"



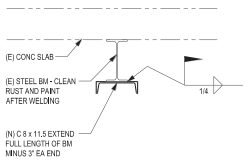
SECTION 4

1" = 1'-0"



SECTION 5

1" = 1'-0"



SECTION 5

1" = 1'-0"

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METROPARKS TACOMA

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

Drawn by: SSO
Checked: AS
Date: 12-10-19
Scale: As indicated

Revisions:
No. Date Remarks

FRAMING DETIALS

S5.1

PLUMBING LEGEND

- DOMESTIC COLD WATER (CW)
- DOMESTIC HOT WATER (HW)
- DOMESTIC HOT WATER CIRCULATING (HWC)
- SOIL, WASTE (S,W)
- VENT (V)
- XX — PIPING IDENTIFIER, SEE ABBREVIATIONS
- ELBOW DOWN
- ELBOW UP
- TEE
- TEE DN
- TEE UP
- ISOLATION OR SHUT-OFF VALVE (NO), TYP AS SPECIFIED
- ISOLATION OR SHUT-OFF VALVE (NC), TYP AS SPECIFIED
- BALL VALVE (NO)
- BALL VALVE (NC)
- BUTTERFLY VALVE (NO)
- BUTTERFLY VALVE (NC)
- GLOBE VALVE (NO)
- GLOBE VALVE (NC)
- THROTTLING VALVE, TYP AS SPECIFIED
- METERING BALANCING VALVE
- CHECK VALVE
- CONTROL VALVE
- PLUG VALVE
- PRESSURE REGULATING VALVE
- PRESSURE REDUCING VALVE
- PRESSURE RELIEF VALVE
- BACKFLOW PREVENTER
- CAP
- BLIND FLANGE
- EXPANSION JOINT
- REDUCER
- PRESSURE GAUGE
- STRAINER
- UNION
- PRESSURE/TEMPERATURE TAP
- TEMPERATURE GAUGE

PLUMBING ABBREVIATIONS

AW	ACID WASTE
A	AIR, COMPRESSED AIR
BFP	BACK FLOW PREVENTER
BOP	BOTTOM OF PIPE
C	CONDENSATE
CA	COMPRESSED AIR
CI	CAST IRON
CF	CHEMICAL FEED
CIRC	CIRCULATING
CW	CITY WATER; DOMESTIC COLD WATER
CO	CLEAN OUT
CA	COMPRESSED AIR
DI	DEIONIZED WATER
DW	DISTILLED WATER
DOM	DOMESTIC
DR	DOOR; DRAIN
DF	DRINKING FOUNTAIN
ES	EMERGENCY SHOWER
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FPHB	FREEZE PROOF HOSE BIBB
GPH	GALLONS PER HOUR
HB	HOSE BIBB
HW	DOMESTIC HOT WATER
HWC	DOMESTIC HOT WATER CIRCULATING
IPC	INTERNATIONAL PLUMBING CODE
IW	INDIRECT WASTE
JAN	JANITOR
L	LAVATORY
MV	MEDICAL VACUUM
N	NITROGEN
NG	NATURAL GAS
NO	NITROUS OXIDE; NUMBER
NPW	NON-POTABLE WATER
O	OXYGEN
PC	PUMPED CONDENSATE
PLBG	PLUMBING
PNEU	PNEUMATIC
PRV	PRESSURE REDUCING VALVE
RWL	RAIN WATER LEADER
RECIRC	RECIRCULATING
RD	ROOF DRAIN
S	SOIL
SS	SANITARY SEWER; SERVICE SINK; STAINLESS STEEL
SD	STORM DRAIN
UPC	UNIFORM PLUMBING CODE
V	VENT
VA	VALVE
VAC	VACUUM
VB	VACUUM BREAKER
VTR	VENT THRU ROOF
W	WASTE; WATER; WIDE(DIM)
WC	WATER CLOSET
WFS	WATER FLOW SWITCH
Y	WYE

PLUMBING GENERAL NOTES

1. PROVIDE COMPLETE SUPPORTS, SEISMIC AND RESTRAINTS FOR ALL PIPES AND EQUIPMENT PER SPECIFICATIONS, AS REQUIRED, AND AS SHOWN ON THE DRAWINGS.
2. PROVIDE ALL REQUIRED MISCELLANEOUS STRUCTURAL STEEL, SUPPORTS, ATTACHMENTS, AND ANCHORAGES.
3. PROVIDE ANCHOR BOLTS OF SIZE, TYPE, AND LENGTH AS REQUIRED TO SATISFY THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS, THE SPECIFICATIONS, AND AS INDICATED ON DRAWINGS.
4. PROVIDE ADDITIONAL MISCELLANEOUS STRUCTURAL MEMBERS BETWEEN STRUCTURAL ELEMENTS AS REQUIRED TO RESIST FORCES AND MEET DEFLECTION REQUIREMENTS. ALL MISCELLANEOUS STRUCTURAL MEMBERS AND ANCHORAGES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WASHINGTON. NO WELDING, BOLTING, OR OTHER MEANS OF ATTACHMENT FOR SUPPORT OR RESTRAINT SHALL BE MADE ON PORTIONS OF STRUCTURAL MEMBERS AT OR NEAR CONNECTIONS BETWEEN STRUCTURAL MEMBERS OR ON ELEMENTS DESIGNATED IN THE SEISMIC LOAD RESISTING SYSTEM UNLESS APPROVED BY THE CONTRACTING OFFICER.
5. PROVIDE MISCELLANEOUS STRUCTURAL STEEL SHOP DRAWINGS AND CALCULATIONS FOR REVIEW BY THE CONTRACTING OFFICER. ALL REQUIRED MISCELLANEOUS STRUCTURAL MEMBERS, BOLTS, AND WELDS SHALL BE DESIGNED AND MEET REQUIREMENTS OF THE SPECIFICATIONS.
6. SUPPORT FRAMING INSTALLED WITHIN THE MAIN FLOOR OF THE CONSERVATORY SHALL BE CONCEALED, UNLESS OTHERWISE INDICATED OR ACCEPTED BY THE ARCHITECT.
7. ALL DOMESTIC HOT WATER PIPING TO FIXTURES SHALL BE DONE IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE 2015 EDITION PROVISIONS INCLUDING SECTION C404. 3.

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PRELIMINARY

W.W SEYMOUR CONSERVATORY REHABILITATION

60% CD
XXX

Drawn by: GLS
Checked: AWL
Date: 12/17/19
Scale: 12" = 1'-0"

Revisions:
No. Date Remarks

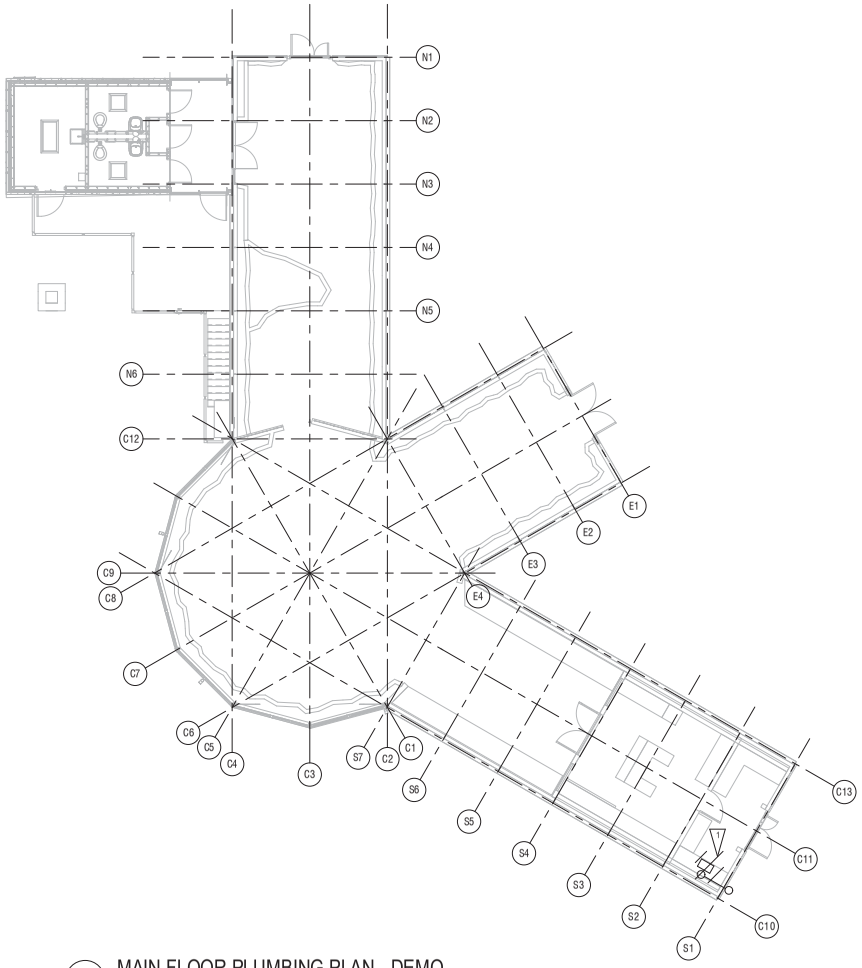
PLUMBING LEGEND, ABBREVIATIONS AND GENERAL NOTES

P0.0

12/6/2019 4:40:07 PM

CONSTRUCTION NOTES:

1. DEMO SINK AND DOMESTIC HW PIPING BACK TO WATER HEATER. PROTECT DOMESTIC CW, SAN, AND VENT PIPE FOR RECONNECTION.



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

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W.W SEYMOUR CONSERVATORY REHABILITATION

60% CD
XXX

Drawn by: GLS
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Date: 12/17/19
Scale: 1/8" = 1'-0"

Revisions:
No. Date Remarks

PLUMBING DEMO PLAN

PD2.1

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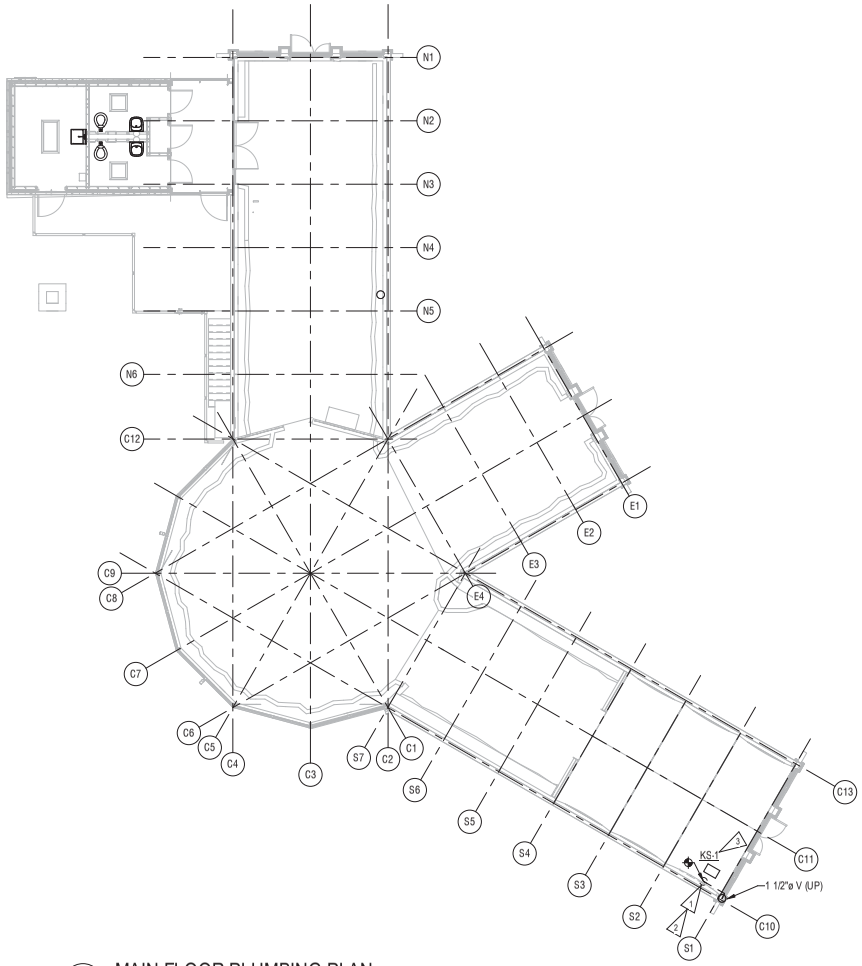
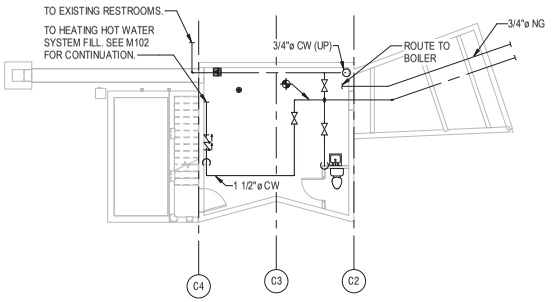
CONSTRUCTION NOTES:

1. CONNECT TO EXISTING WASTE AS PREVIOUS SINK LOCATION.
2. ROUTE VENT PIPE A MINIMUM 6" ABOVE ROOF LINE.
3. CONNECT SINK TO EXISTING DOMESTIC CW. MOUNT WH-1 BELOW COUNTER AND ROUTE HW PIPING TO SINK.



1 MAIN FLOOR PLUMBING PLAN
1/8" = 1'-0"



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

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PLUMBING PLAN
P2.1

12/6/2019 4:40:08 PM

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE DESCRIPTION	BRANCH PIPE SIZE - INCHES DIA.				ADDITIONAL COMPONENTS	BASIS OF DESIGN		REMARKS
		COLD WATER	HOT WATER	WASTE	VENT		MANUFACTURER	MODEL	
KS-1	SINGLE COMPARTMENT KITCHEN SINK	1/2"	1/2"	2"	1 1/2"	FAUCET: ELKAY #LKGT1041 DRAIN: ELKAY #LK-99 (WITH REMOVABLE STRAINER BASKET)	ELKAY	ELUH2115	

SCHEDULE NOTES:
[1] Install a single trap primer with FD see specs for details.

WATER HEATER SCHEDULE

CALLOUT		LOCATION	TYPE [1]	CAPACITY (GAL)	SERVICE CONDITIONS		RECOVERY CONDITIONS		ELECTRICAL		ELECTRICAL				RATED WATER HEATER EFFICIENCY [2] [3]	BASIS OF DESIGN		NOTES
TYPE	MARK				EWT (DEG F)	LWT (DEG F)	CAPACITY (GPH)	WATER TEMP RISE (DEG F)	INPUT KW	NO. OF STEPS	V	HZ	Ø	FLA		MANUFACTURER	MODEL	
WH	1	GIFT SHOP	INS	6	50	140	7	90	1.4	0-	120	60	1	12	98%	AO SMITH	EMT-6	

SCHEDULE NOTES:
[1] ST = STORAGE; INS = INSTANTANEOUS
[2] RATED WATER HEATER EFFICIENCY PER G.2 OF ANSI Z21.10.3. WATER HEATER IS COMPLIANT WITH TABLE C404.2 OF THE 2015 WASHINGTON STATE
[3] ET=THERMAL EFFICIENCY

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PLUMBING SCHEDULES
P6.1

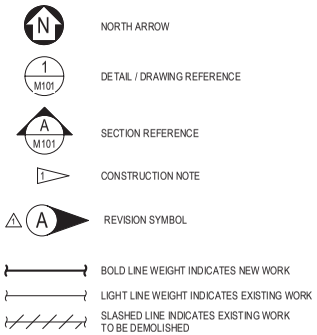
GENERAL ABBREVIATIONS

ADDN	ADDITION, ADDITIONAL
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
APPROX	APPROXIMATELY
ARCH	ARCHITECT
AUX	AUXILIARY
BAL	BALANCING
BLDG	BUILDING
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
CAP	CAPACITY
CL	CENTERLINE
COND	CONDENSATE
COL	COLUMN
CONN	CONNECT; CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS; CONTINUATION
COORD	COORDINATE
DEG	DEGREE
DIA	DIAMETER
DIFF	DIFFERENTIAL
DIM	DIMENSION
DISCH	DISCHARGE
DIV	DIVISION
DN	DOWN
DP	DIFFERENTIAL PRESSURE
DR	DRAIN
DWG	DRAWING
EA	EACH
EFF	EFFICIENCY
ELEC	ELECTRICAL ENGINEER
ELEV	ELEVATION; ELEVATOR
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
ENT	ENTERING
EQ	EQUAL
EQUIP	EQUIPMENT
ET	EXPANSION TANK
EWT	ENTERING WATER TEMPERATURE
EX, (E)	EXISTING
EXP	EXPOSED
EXPL	EXPLOSION
F	FAHRENHEIT
FIO	FURNISHED & INSTALLED BY OWNER
FLEX	FLEXIBLE
FLR	FLOOR
FOIC	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR
FP	FIRE PROTECTION; FREEZE PROTECTION
FT	FEET; FOOT; FEET OF WATER(PRESS)
GA	GAGE; GAUGE
GAL	GALLON
GC	GENERAL CONTRACTOR
GEN	GENERAL
GPM	GALLONS PER MINUTE
GWB	GYPSUM WALLBOARD
H	HEIGHT; HIGH
HOA	HAND OFF AUTOMATIC
HOR	HORIZONTAL
HP	HORSE POWER
HR	HOUR
HZ	HERTZ
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IFC	INTERNATIONAL FIRE CODE
IMC	INTERNATIONAL MECHANICAL CODE
IN	INCH
INFO	INFORMATION
INSUL	INSULATE; INSULATION
KW	KILOWATT
KWH	KILOWATT HOUR
L	LENGTH; LONG (DIM)
LAB	LABORATORY
LAV	LAVATORY
LB	POUND
LBS/HR	POUNDS PER HOUR
LF	LINEAL FEET
LO	LOW
LTG	LIGHTING
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
MAT	MATERIAL
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MECH	MECHANICAL; MECHANICAL CONTRACTOR
MED	MEDIUM
MFG	MANUFACTURING
MFR	MANUFACTURER
MIN	MINIMUM; MINUTE
MISC	MISCELLANEOUS
MTD	MOUNTED
N	NORTH
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN; NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER; OVERALL DIMENSION
OPP	OPPOSITE
PD	PRESSURE DROP
PERF	PERFORATED
PERP	PERPENDICULAR
PH	PHASE
POC	POINT OF CONNECTION
PRELIM	PRELIMINARY
PRESS	PRESSURE
PROP	PROPERTY; PROPOSAL
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAGE
PT	PRESSURE/TEMPERATURE TAP
QTY	QUANTITY
RAD	RADIATOR
REF	REFERENCE
REFR	REFRIGERATION
REQD	REQUIRED
RET	RETURN
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
S	SOUTH
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SIM	SIMILAR
SOL	SOLENOID
SPEC	SPECIFICATION
SPECD	SPECIFIED
SQ	SQUARE
STD	STANDARD
STRUCT	STRUCTURAL ENGINEER
TBD	TO BE DETERMINED
TD	TEMPERATURE DIFFERENTIAL
TEMP	TEMPERATURE
TH	TOTAL HEAD
THRU	THROUGH
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UG	UNDERGROUND
UL	UNDERWRITER'S LABORATORY
UTIL	UTILITY
V	VOLT
VAR	VARIABLE
VEL	VELOCITY
VERT	VERTICAL
VOL	VOLUME
W	WATER; WIDE(DIM); WATT
W/	WITH
W/O	WITHOUT
WT	WEIGHT
YD	YARD
YR	YEAR

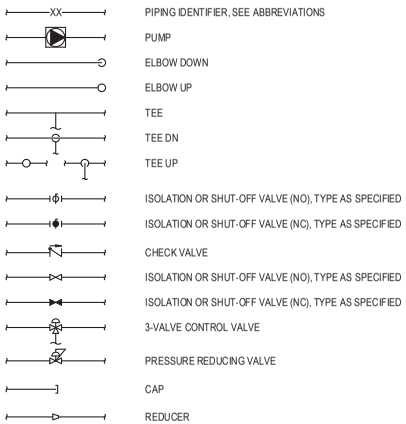
HVAC ABBREVIATIONS

AL	ACOUSTIC LINED; ALUMINUM
AD	AUTOMATIC DAMPER
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
C	COMMON
CFM	CUBIC FEET PER MINUTE
COND	CONDENSATE
CV	CONSTANT VOLUME
DDC	DIRECT DIGITAL CONTROLS
DMPR	DAMPER
DB	DRY BULB TEMPERATURE(°F)
EAT	ENTERING AIR TEMPERATURE
EXH	EXHAUST
FPM	FEET PER MINUTE
FS	FLOW SWITCH
HC	HEATING COIL
HTG	HEATING
HHWR	HEATING WATER RETURN
HHWS	HEATING WATER SUPPLY
IMC	INTERNATIONAL MECHANICAL CODE
OAT	OUTSIDE AIR TEMPERATURE
OSA	OUTSIDE AIR
T, TSTAT	THERMOSTAT
UG	UNDER GROUND
UMC	UNIFORM MECHANICAL CODE
VSD	VARIABLE SPEED DRIVE
WG	WALL GRILLE; WATER GAGE
WSEC	WASHINGTON STATE ENERGY CODE
WB	WET BULB TEMPERATURE(°F)

GENERAL LEGEND



HVAC PIPING LEGEND



GENERAL CONSTRUCTION NOTES

1. PLANS ARE DIAGRAMMATIC AND DO NOT SHOW ALL BRANCHES, VALVES, SPECIALTIES AND EQUIPMENT.
2. ALL PIPING, VALVES AND EQUIPMENT ARE TO BE REMOVED IN DEMOLITION AREAS.
3. VALVES INDICATED FOR SHUT-OFF ISOLATION ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO REFERENCED BLDG. DRAWINGS FOR DETAILED SYSTEMS.
4. FIELD VERIFY EXACT LOCATIONS VALVES, EQUIPMENT AND PIPING.
5. CONTRACTOR TO VERIFY SYSTEM SHUT DOWN PRIOR TO ANY REMOVAL WORK.
6. CONTRACTOR TO RE-OPEN VALVES AFTER COMPLETION OF REMOVAL, CAP, & CUT TO RESTORE SYSTEM OPERATION WHERE REQUIRED.
7. SYSTEM SHUT DOWN REMOVAL, CUT & CAP SHALL ONLY BEGIN AFTER NEW, RE-ROUTED SYSTEM IS IN PLACE FOR SERVICE CONTINUITY WHERE REQUIRED.
8. ALL SYSTEMS SHALL BE DRAINED AND DISPOSAL OF FLUIDS HANDLED AS REQUIRED PER OWNER'S STANDARDS.
9. MECHANICAL DRAWINGS SHOW DISCONNECT AND RECONNECT POINTS AT THE PROJECT'S BOUNDARIES. AN ATTEMPT WAS MADE TO SHOW MAJOR MECHANICAL UTILITY WORK WITHIN THE PROJECT'S BOUNDARIES. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DISPOSAL OF ALL MECHANICAL WORK WITHIN THE PROJECT'S BOUNDARY.
10. SUPPORT FRAMING INSTALLED WITHIN THE MAIN FLOOR OF THE CONSERVATORY SHALL BE CONCEALED, UNLESS OTHERWISE INDICATED OR ACCEPTED BY THE ARCHITECT.
11. ALL HVAC EQUIPMENT, PIPING, VALVING AND ACCESSORIES SHOWN CONCEALED BY ROCK WALLS/CABINETS IN THE CONSERVATORY SHALL BE CONCEALED FROM VIEW AND BELOW THE HEIGHT OF THE ROCK WALLS/ CABINETS. HVAC EQUIPMENT WILL BE INSTALLED SO THAT ALL COVERS AND SHELVES MAY BE INSTALLED FLUSH WITH WALLS. COVERS SHALL NOT BE CUT OR ROUTED AROUND EQUIPMENT UNLESS SPECIFICALLY DETAILED BY THE ARCHITECT.

WASHINGTON ENERGY CODE NOTES

1. PROVIDE POST CONSTRUCTION COMMISSIONING AND COMPLETION REQUIREMENTS IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE 2015 EDITION, SECTION C408 AND ACCORDING TO THE CONTRACT DOCUMENTS. SEE SPECIFICATION SECTIONS 23 05 00, 23 08 00 AND ALL OTHER APPLICABLE SPECIFICATION SECTIONS.
2. BALANCE ALL HVAC SYSTEMS IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE 2015 EDITION, GENERALLY ACCEPTED ENGINEERING STANDARDS AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SEE SPECIFICATION SECTION 23 05 93 AND ALL OTHER APPLICABLE SPECIFICATION SECTIONS.
3. PROVIDE CONTROLS IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE 2015 EDITION, INCLUDING SECTION C403.2.4 FOR HVAC CONTROL, C403.2.5 FOR VENTILATION, C403.2.6 FOR ENERGY RECOVERY AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, SEE TEMPERATURE CONTROL SPECIFICATION SECTIONS AND ALL OTHER APPLICABLE SPECIFICATION SECTIONS.
4. ALL MECHANICAL EQUIPMENT SHALL BE LISTED AND APPROVED BY A TESTING AGENCY.
5. ALL DOMESTIC HOT WATER PIPING TO FIXTURES SHALL BE DONE IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE 2015 EDITION PROVISIONS INCLUDING SECTION C404. 3.

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PRELIMINARY

METROPARKS

W.W SEYMOUR CONSERVATORY REHABILITATION

60% CD

XXX

Drawn by: GLS
Checked: AWL
Date: 12/17/19
Scale: 12" = 1'-0"

Revisions:

No.	Date	Remarks

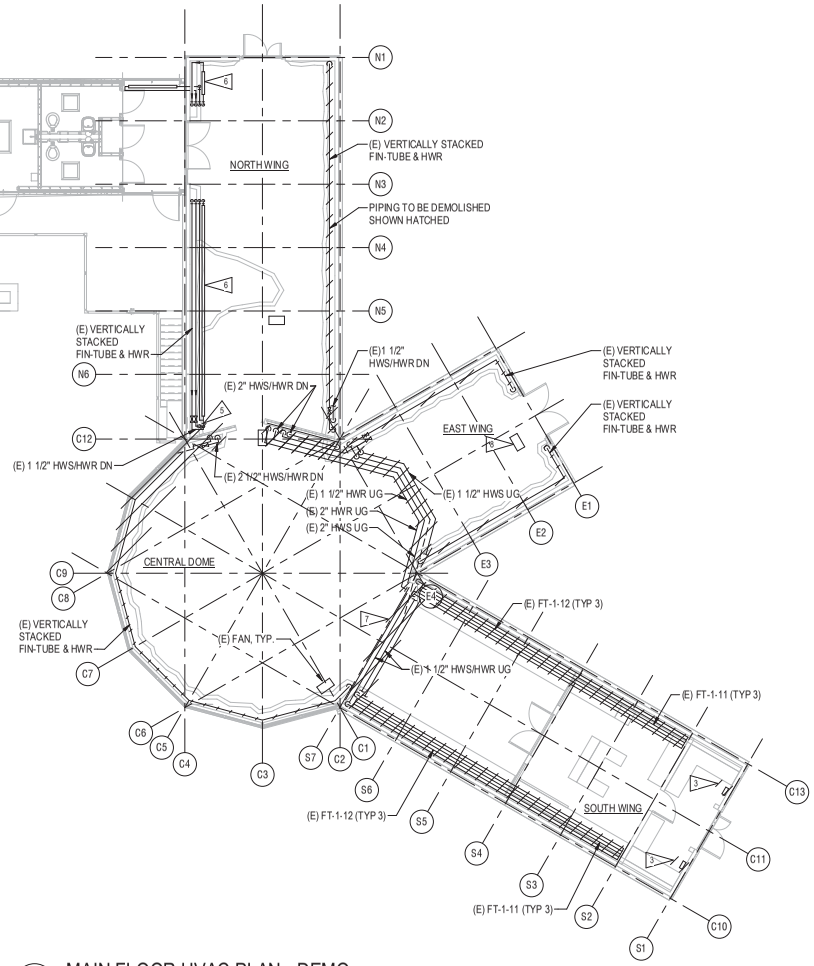
HVAC LEGEND, ABBREVIATIONS AND GENERAL NOTES

M0.0

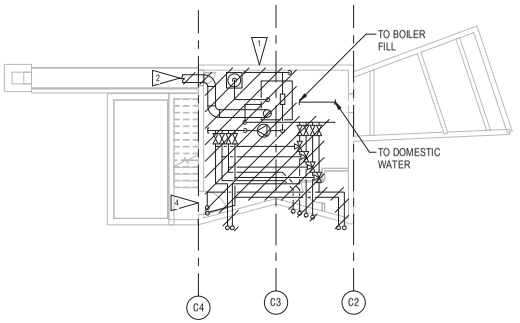
12/6/2019 4:40:03 PM

CONSTRUCTION NOTES:

1. DEMO HEATING WATER BOILER, EXPANSION TANK AND ALL ASSOCIATED PIPING AND APPURTENANCES.
2. DEMO BOILER EXHAUST FLUE UP TO CHIMNEY STACK.
3. REMOVE UNIT HEATERS.
4. EXISTING LOUVER TO REMAIN.
5. REMOVE VERTICAL PIPING.
6. RELOCATE FIN TUBES, ASSOCIATED PIPING AND VALVES BELOW ROCK WALL. SEE GENERAL NOTE 11 SHEET M0.0
7. ABANDON PIPING IN PLACE AND CAP.
8. EXISTING PROP FANS TO REMAIN.



1 MAIN FLOOR HVAC PLAN - DEMO
1/8" = 1'-0"



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

N
0 4' 8' 16' 24'
SCALE: 1/8" = 1'-0"

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Date: 12/17/19
Scale: 1/8" = 1'-0"

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HVAC DEMO PLANS

MD2.1

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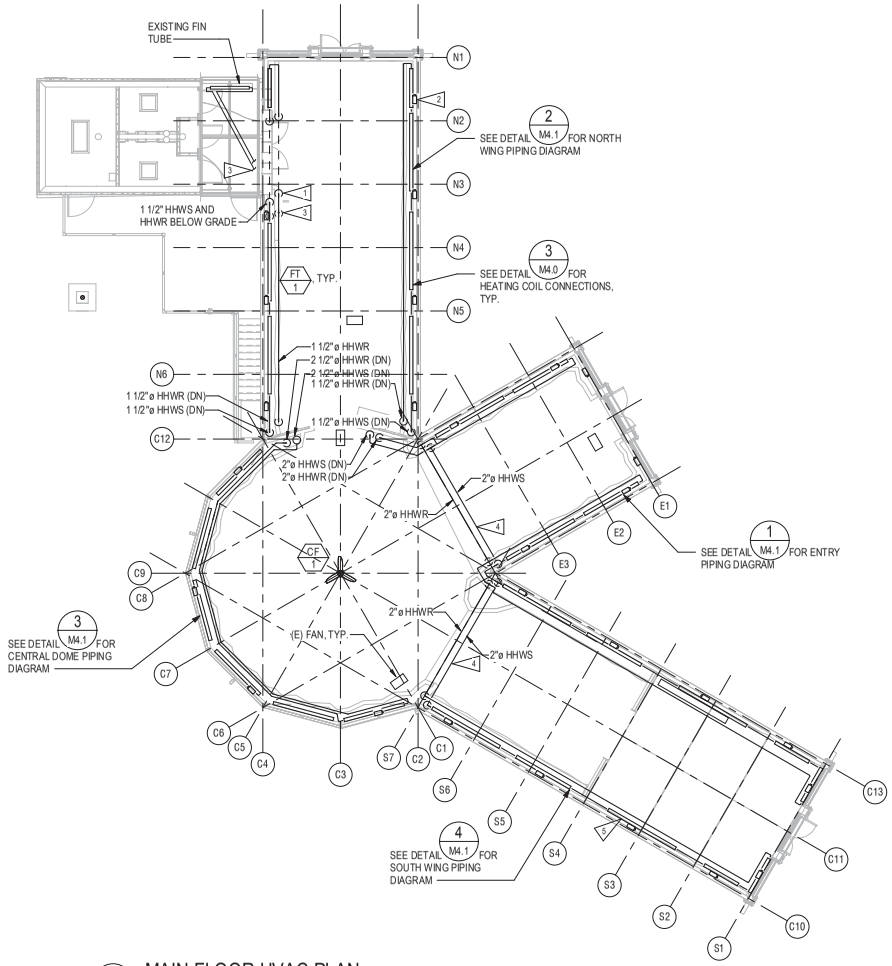

1 MAIN FLOOR HVAC PLAN
1/8" = 1'-0"

CONSTRUCTION NOTES:

1. CONNECT TO EXISTING PIPING BELOW GRADE.
2. PROVIDE CONTROL DAMPERS AND ACTUATORS AT LOW WALL OPENINGS. SEE ARCH FOR LOUVERS.
3. CONNECT EXISTING UNDERGROUND PEX PIPING TO HHW SUPPLY AND RETURN.
4. PIPING TO BE ROUTED THROUGH EXISTING BELOW GRADE CONDUIT.
5. COORDINATE VALVE LOCATIONS WITH ACCESS PANELS. TYP FOR EACH FT-1 IN GIFT SHOP AND OFFICE.
6. ROUTE PIPING BELOW SLAB.

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METROPARKS

W.W SEYMOUR CONSERVATORY REHABILITATION

60% CD
XXX

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No. Date Remarks

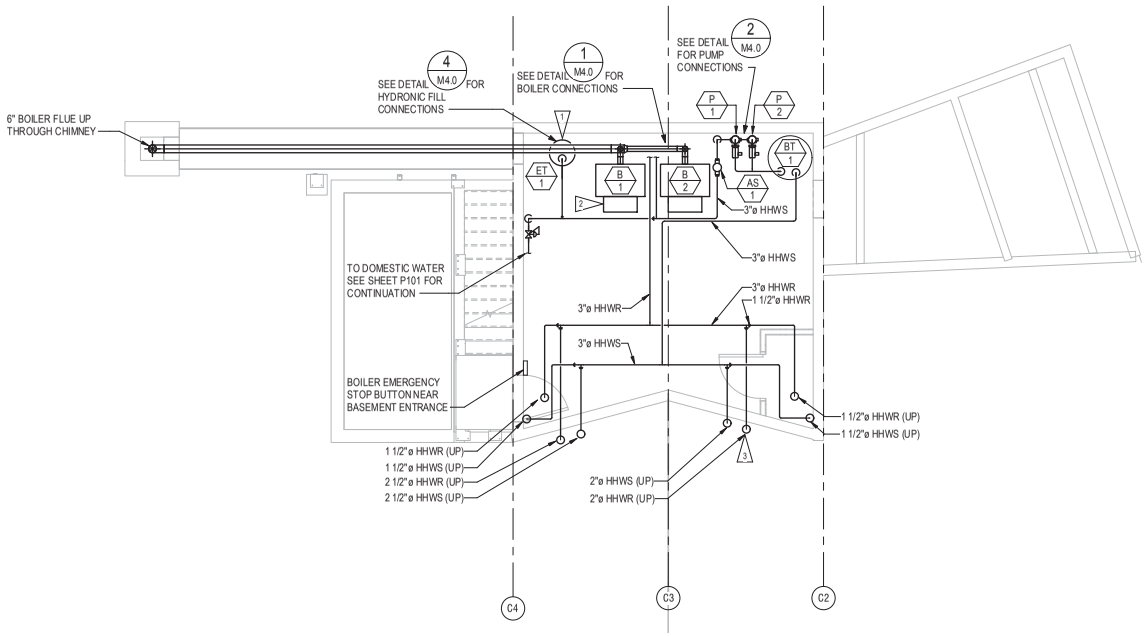
HVAC PLAN
M2.1

N 0 4' 8' 16' 24'
SCALE: 1/8" = 1'-0"

12/6/2019 4:40:04 PM

CONSTRUCTION NOTES:

1. INSTALL EXPANSION TANK ON EXISTING PAD.
2. MAINTAIN 36" MINIMUM CLEARANCE IN FRONT OF BOILER.
3. ROUTE PIPING THROUGH EXISTING POCKET AND PENETRATIONS, TYP.



1 BASEMENT PLAN
1/4" = 1'-0"

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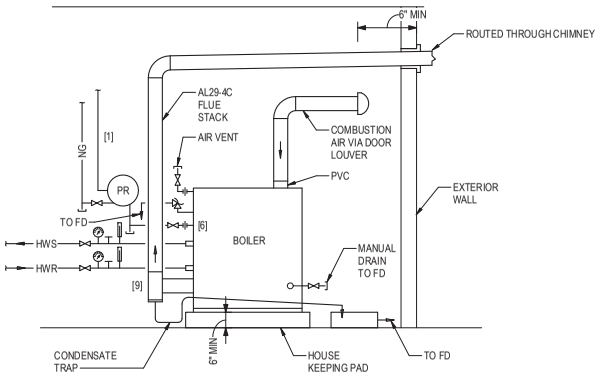
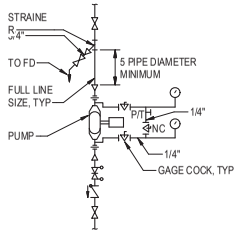
ENLARGED BASEMENT HVAC PLAN

M2.2



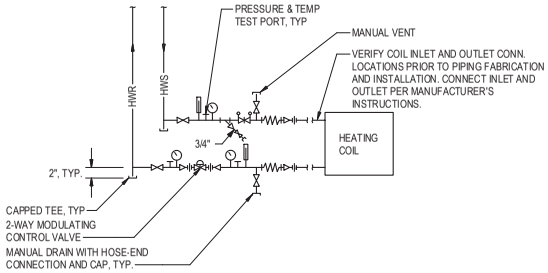
HYDRONIC CONDENSING BOILER CONNECTION DETAIL

NOT TO SCALE — 1



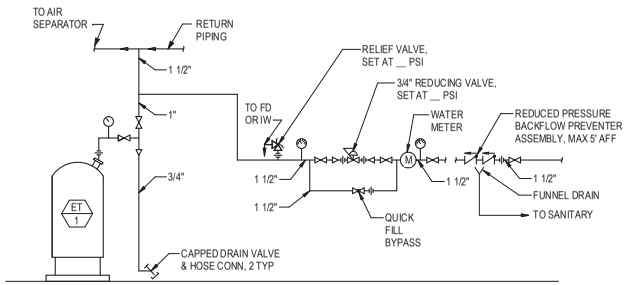
INLINE PUMP CONNECTION DETAIL

NOT TO SCALE — 2



TYPICAL HEATING COIL WITH 2-WAY VALVE DETAIL

NOT TO SCALE — 3



FILL & EXPANSION TANK DETAIL

NOT TO SCALE — 4

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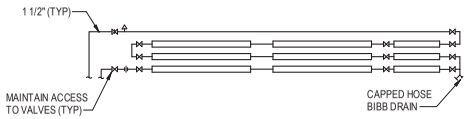
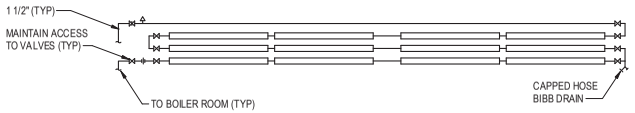
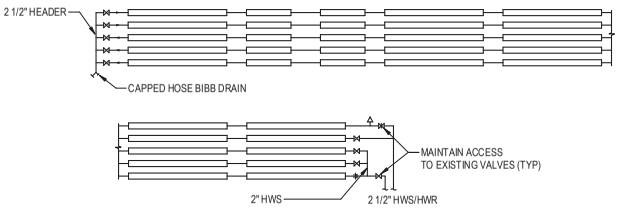
HVAC DETAILS
M4.0



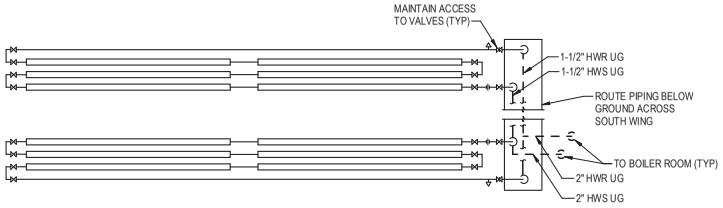
ENTRY - PIPING DIAGRAM
NOT TO SCALE
1



NORTH WING - PIPING DIAGRAM
NOT TO SCALE
2



ROTUNDA - PIPING DIAGRAM
NOT TO SCALE
3



SOUTH WING - PIPING DIAGRAM - PLAN VIEW
NOT TO SCALE
4

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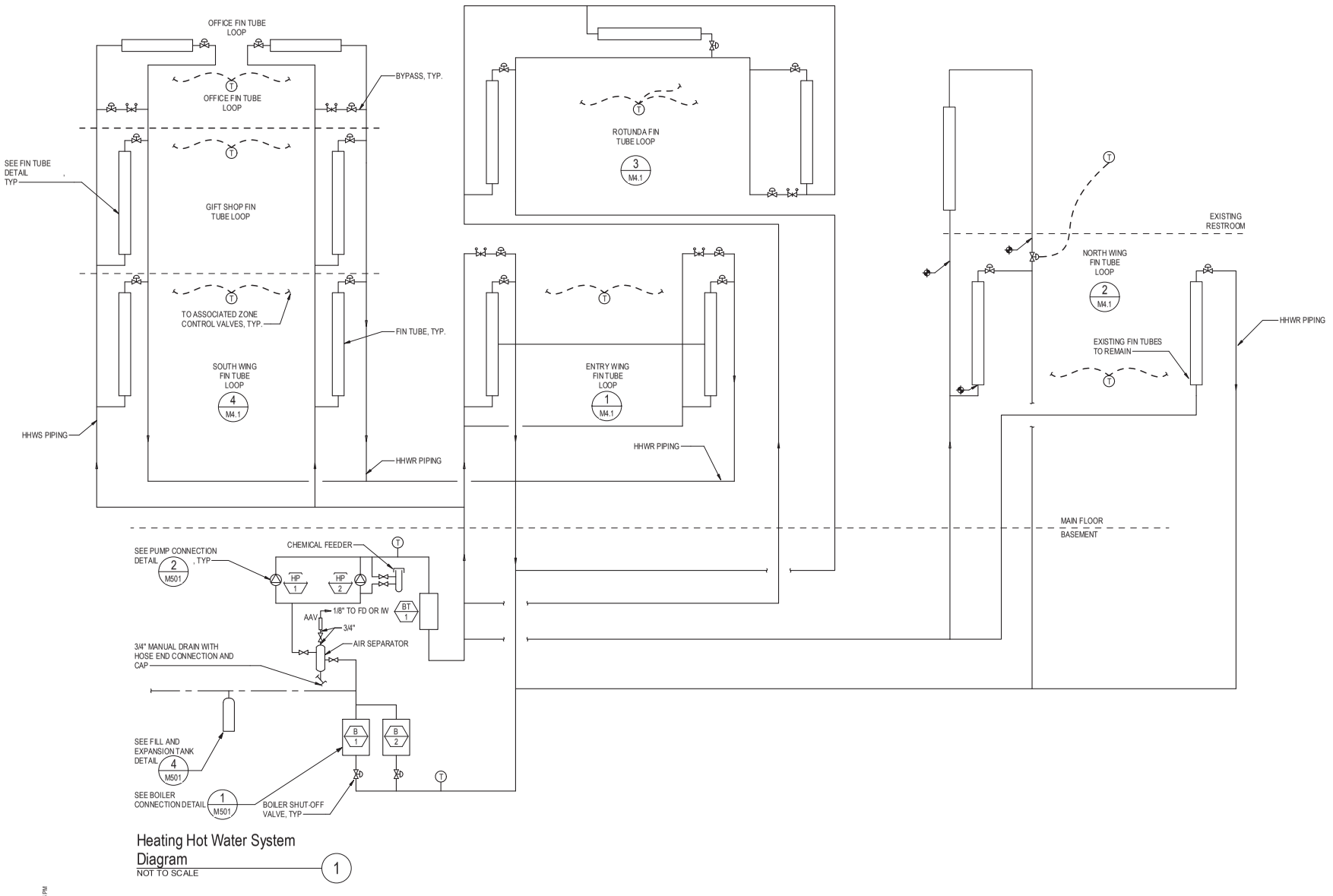
HVAC DETAILS
M4.1



Heating Hot Water System Diagram

NOT TO SCALE

1

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HVAC DIAGRAMS

M5.0

HOT WATER BOILER SCHEDULE

CALLOUT				BOILER									GAS BURNER [2]				ELECTRICAL				BASIS OF DESIGN		
TYPE	MARK	LOCATION	SYSTEM SERVED	NOMINAL CAPACITY (MBH) [4]	TYPE [1]	WATER FLOW (GPM)	MIN WATER FLOW (GPM)	EWT	LWT	MINIMUM EFFICIENCY (AHRI) [3]	WATER PD (FT)	PRESSURE RATING (PSIG)	FUEL	INPUT (MBH)	MIN INLET PRESSURE (IN WG)	OPERATING WEIGHT (LBS)	V	HZ	Ø	FLA	MANUFACTURER	MODEL	NOTES
B	1	MECH ROOM	HHW	600	FT	54	11	190	170	92%	1.98	100	NAT. GAS	600	3	1150	120	1	60	5.2	KN	6	[1] [5] [6] [7]
B	2	MECH ROOM	HHW	600	FT	54	11	190	170	92%	1.98	100	NAT. GAS	600	3	1150	120	1	60	5.2	KN	6	[1] [5] [6] [7]

SCHEDULE NOTES:
[1] WT = WATER TUBE; FT = FIRETUBE
[2] PROVIDE CSD-1 BURNER TRIM.
[3] MINIMUM EFFICIENCY AS SCHEDULED AND AS REQUIRED BY THE WASHINGTON STATE ENERGY CODE, COMMERCIAL PROVISIONS.
[4] NOMINAL BOILER CAPACITY INCLUDED FOR REFERENCE ONLY - DO NOT USE FOR FINAL SIZING OF EQUIPMENT.
[5] PROVIDE CONDENSATE NEUTRALIZATION KIT.
[6] MANUFACTURER TO PROVIDE BOILER EMERGENCY STOP BUTTON. SEE PLANS FOR LOCATION.
[7] PROVIDE MINIMUM RECOMMENDED MANUFACTURE SERVICE CLEARANCES.

PUMP SCHEDULE

CALLOUT				PUMP					MOTOR			ELECTRICAL			BASIS OF DESIGN		
TYPE	MARK	LOCATION	SERVICE	TYPE	IMPELLER DIAMETER (IN)	RPM	FLOW (GPM)	TOTAL HEAD (FT)	SPEED	HP	BHP	V	HZ	Ø	MANUFACTURER	MODEL	NOTES
P	1	MECH ROOM	HEATING HOT WATER	INLINE	6	1760	90	30	1760	1.5	1.11	240	60	1	TACO	1935	[1]
P	2	MECH ROOM	HEATING HOT WATER	INLINE	6	1760	90	30	1760	1.5	1.11	240	60	1	TACO	1935	[1]

SCHEDULE NOTES:
[1] PROVIDE WITH FACTORY MOUNTED VFD.

EXPANSION TANK SCHEDULE

CALLOUT					DIMENSIONS								BASIS OF DESIGN		
TYPE	MARK	LOCATION	VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	DIAMETER (IN)	HEIGHT (IN)	ASSUMED CW FILL TEMP (DEG F)	OCCUPIED AMBIENT TEMP (DEG F)	EXTREME TEMP (DEG F) [1]	OPERATING TEMP RANGE (DEG F) [2]	OPERATING PRESSURE RANGE (PSIG)	OPERATING WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
ET	1	BASEMENT	57	57	20	59	50	70	180	130	12	290	TACO	CA215-125	

SCHEDULE NOTES:
[1] HIGHEST TEMP FOR HEATING SYSTEMS.
[2] DIFFERENCE BETWEEN (CW FILL TEMP AND EXTREME TEMP) FOR HEATING SYSTEMS.

AIR SEPARATOR SCHEDULE

MARK	SYSTEM SERVED	LOCATION	VOLUME (GAL)	FLOW (GPM)	SYSTEM CONN (IN)	MAX WPD (FT HD)	DIMENSIONS (DIAXHT)	OPERATING WEIGHT (LBS)	BASIS OF DESIGN		REMARKS
									MANUFACTURER	MODEL	
AS-1	HEATING HOT WATER	BASEMENT	-	120	4	1.11	12" X 26-1/8"	80	TACO	4904A-125	

BUFFER TANK SCHEDULE

CALLOUT			SYSTEM		DIMENSIONS		OPERATING WEIGHT (LBS) [1]	BASIS OF DESIGN		
TYPE	MARK	LOCATION	SERVED	VOLUME (GAL)	DIAMETER (IN)	HEIGHT (IN)		MANUFACTURER	MODEL	NOTES
BT	1	MECH ROOM	HHW	150	30	68	510	TACO	BTL0150F04-125HA	[2]

SCHEDULE NOTES:
[1] INDICATES WEIGHT OF UNFILLED TANK.
[2] PROVIDE WITH 1" SILICON BLANKET

FIN TUBE ASSEMBLY SCHEDULE

CALLOUT			SYSTEM	WATER TEMPERATURE (F)	CAPACITY (BTUH/FT) [1]	VELOCITY (FPS)	BASIS OF DESIGN		NOTES
TYPE	MARK	LOCATION	SERVED				MANUFACTURER	MODEL	
FT	1	CONSERVATORY	HHW	190	1290	3	STERLING	C144	

SCHEDULE NOTES:
[1] BARE ELEMENT CAPACITY FOR A SINGLE ROW ELEMENT. SEE DETAILS FOR NUMBER OF ROWS.

CEILING FAN SCHEDULE

CALLOUT								BASIS OF DESIGN		
					ELECTRICAL					
TYPE	MARK	LOCATION	DIAMETER (IN)	POWER INPUT (WATTS)	V	HZ	Ø	MANUFACTURER	MODEL	NOTES
CF	1	ROTUNDA	52	26.6	120	1	60	BIG ASS FANS	HAIKU	

SCHEDULE NOTES:
[1] PROVIDE ALUMINUM FINISH
[2] PROVIDE UNIVERSAL MOUNT AND XX" EXTENSION TUBE

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HVAC SCHEDULES
M6.1

TELECOM

- OUTLET (WALL MOUNTED)
- OUTLET (FLOOR, FLUSH MOUNTED)
- OUTLET (CEILING MOUNTED)
- WAP — WIRELESS ACCESS POINT

TELECOM OUTLET TYPES

- 1 — INDICATES QUANTITY OF DATA JACKS. PULLSTRING ALWAYS PROVIDED. WHERE NO QUANTITY IS NOTED, 2 DATA JACKS AND PULLSTRING.
- AC — MOUNTED 3" ABOVE COUNTER BACKSPLASH
- B — BLANK FACEPLATE (ROUGH-IN ONLY)

TELECOM - MISCELLANEOUS

- J — BUNDLED CABLE SUPPORT, J-HOOK SYSTEM
- TGB — TELECOMMUNICATIONS GROUNDING BAR

FIRE ALARM

- FIREFIGHTER TELEPHONE OUTLET
- HEAT DETECTOR
- SMOKE DETECTOR
- D — SMOKE DETECTOR (DUCT MOUNTED)
- STROBE LIGHT (WALL MOUNTED)
- F — HORN AND STROBE LIGHT (CEILING MOUNTED)
- F — HORN AND STROBE LIGHT (WALL MOUNTED)
- F — MANUAL STATION (WALL MOUNTED)
- F — HORN (CEILING, FLUSH MOUNTED)
- FACP — CONTROL PANEL
- FARA — REMOTE ANNUNCIATOR
- FS — SPRINKLER FLOW SWITCH CONNECTION
- MM — MONITOR MODULE
- MP — MONITOR POINT
- PIV — POST INDICATOR VALVE
- PS — SPRINKLER PRESSURE SWITCH CONNECTION
- TS — SPRINKLER TAMPER SWITCH
- V — SPRINKLER VALVE POSITION MONITOR CONNECTION

EQUIPMENT

- EQUIPMENT CABINET
- EQUIPMENT CONNECTION,
- GROUND BAR, LENGTH TO SCALE
- MOTOR CONNECTION, SINGLE PHASE
- MOTOR CONNECTION, 3 PHASE
- SPD — SURGE PROTECTIVE DEVICE

CIRCUITS

- RACEWAY CONCEALED IN CEILING OR WALL. HASH MARKS INDICATE NUMBER OF WIRES. #12 AWG WIRE UNLESS OTHERWISE NOTED. EXPOSED RACEWAY IS ALLOWED ONLY WHERE NOTED.
- RACEWAY UP
- RACEWAY DOWN
- RACEWAY STUB-OUT WITH BUSHING
- CIRCUIT CONTINUATION
- HOME RUN TO PANEL OR LOCATION NOTED
- J — JUNCTION BOX
- PB — PULL BOX

PANELBOARDS

- 120/240V SYSTEM PANELBOARD

ELECTRONIC SECURITY

- ACP — ACCESS CONTROL PANEL
- CR — CARD READER
- CK — CARD READER\KEYPAD COMBINATION
- DS — DOOR CONTACT SWITCH
- EL — ELECTRIC LOCK
- ES — ELECTRIC STRIKE
- KP — KEYPAD
- M — MOTION DETECTOR (WALL MOUNTED)
- M — MOTION DETECTOR (CEILING MOUNTED)
- RE — REQUEST TO EXIT DETECTOR

RECEPTACLES

- SINGLE RECEPTACLE 120V
- DUPLEX RECEPTACLE 120V
- DOUBLE DUPLEX RECEPTACLE 120V
- R — DOUBLE DUPLEX RECEPTACLE 120V, (1) CONTROLLED VIA ROOM OCCUPANCY SENSOR TO BE GRAY AND MARKED "CONTROLLED" (1) WHITE AND UNCONTROLLED.
- DUPLEX RECEPTACLE, FLUSH FLOOR BOX
- DOUBLE DUPLEX RECEPTACLE, FLUSH FLOOR BOX
- DUPLEX RECEPTACLE, CEILING MOUNTED
- DOUBLE DUPLEX RECEPTACLE, CEILING MOUNTED
- MULTI-OUTLET ASSEMBLY (DEVICES AS INDICATED)

RECEPTACLE TYPES

- AC — MOUNTED 3" ABOVE COUNTER BACKSPLASH
- D — DEDICATED CIRCUIT
- G — GROUND FAULT CIRCUIT INTERRUPTER
- WP — GROUND FAULT CIRCUIT INTERRUPTER WITH WEATHER PROOF COVER

LIGHTING SWITCHES AND CONTROLS

- $ a — LOWER-CASE LETTER NEAR SWITCH DENOTES CIRCUIT CONTROLLED (TYP)
- $ — SINGLE POLE SWITCH
- $ 3 — 3-WAY SWITCH
- $ O — OCCUPANCY SENSOR SWITCH
- $ P — SWITCH WITH PILOT LIGHT
- DIMMER SWITCH
- CS 1 — CONTROL STATION, # INDICATES STATION IDENTIFICATION
- ELCU — EMERGENCY LIGHTING CONTROL UNIT
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- PC — PHOTOCELL CONTROL

CONTROLS

- FUSED DISCONNECT SWITCH (FUSE RATING INDICATED)
- DISCONNECT SWITCH
- MOTOR STARTER
- MANUAL MOTOR STARTER
- COMBINATION MOTOR STARTER FUSED DISCONNECT SWITCH
- ENCLOSED CIRCUIT BREAKER
- AUTO DOOR PUSHPLATE
- $ M — MOTOR RATED TOGGLE SWITCH

WORK DEFINITION

- FLAG NOTE
- REVISION IDENTIFICATION
- EQUIPMENT IDENTIFICATION
- EQUIPMENT IDENTIFICATION
- Det/Sheet — DETAIL REFERENCE
- PROJECT NORTH REFERENCE
- NEW WORK
- EXISTING
- FUTURE
- REMOVE EXISTING ELECTRICAL EQUIPMENT

LIGHTING

CIRCUITS: EMERGENCY / NORMAL

- N/A — LOWER-CASE LETTER NEAR FIXTURE DENOTES SWITCH LEG, TYP
- SURFACE MOUNTED RECTANGULAR FIXTURE, DRAWN TO SCALE
- STRIP FIXTURE, LENGTH TO SCALE
- WALL MOUNTED RECTANGULAR FIXTURE, LENGTH TO SCALE (NUMBER OF MOUNTING POINTS WILL VARY WITH FIXTURE LENGTH AND ARE NOT INDICATED)
- LINEAR PENDANT MOUNTED FIXTURE, LENGTH TO SCALE (NUMBER OF MOUNTING POINTS WILL VARY WITH FIXTURE LENGTH AND ARE NOT INDICATED)
- N/A — EXIT SIGN, FILLED SIDES ARE ILLUMINATED, DIRECTIONAL ARROWS AS INDICATED
- N/A — EMERGENCY BATTERY PACK
- N/A — EXIT WITH EMERGENCY BATTERY PACK
- N/A — CEILING MOUNTED LINEAR WALL WASH FIXTURE, LENGTH TO SCALE
- SURFACE MOUNTED ACCENT FIXTURE
- N/A — TRACK LIGHTING
- N/A — CONTINUOUS LINEAR SOURCE, SEE ARCHITECTURAL FOR ACTUAL FIXTURE
- N/A — UNDERCOUNTER TASK LIGHT
- N/A — STEP LIGHT
- FIXTURE ON NORMAL AND EMERGENCY CIRCUITS
- $##$ — FIXTURE IDENTIFICATION, SEE LIGHTING FIXTURE SCHEDULE
- PENDANT MOUNTED LUMINAIRE (L1)
- SURFACE MOUNTED ACCENT LUMINAIRE (L2)
- LIGHTING STANDARD: LUMINAIRE, POLE & BASE (L3)
- IN-GROUND LUMINAIRE (XL1)

GENERAL NOTES

1. COMPLY WITH THE NATIONAL ELECTRICAL CODE AS ADOPTED AND AMENDED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
2. THE LOCATIONS OF ELECTRICAL DEVICES OR LIGHTING FIXTURES INDICATED ON ARCHITECTURAL PLANS ELEVATIONS OR SECTIONS TAKE PRECEDENCE OVER LOCATIONS INDICATED ON THE ELECTRICAL DRAWINGS.
3. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHTING FIXTURE LOCATIONS.
4. FOR LIGHTING CONTROLS WHICH INCLUDE DAYLIGHT OR OCCUPANT SENSING AUTOMATIC CONTROLS, AUTOMATIC SHUT-OFF CONTROLS, OCCUPANCY SENSORS, OR AUTOMATIC TIME SWITCHES THE LIGHTING CONTROLS SHALL BE TESTED TO ENSURE THAT CONTROL DEVICES, COMPONENTS, EQUIPMENT, AND SYSTEMS ARE CALIBRATED, ADJUSTED, AND OPERATE IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS. SEQUENCE OF OPERATION SHALL ALSO BE FUNCTIONALLY TESTED TO ENSURE IT IS OPERATING IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS. A COMPLETE REPORT OF TEST PROCEDURES AND RESULTS SHALL BE PREPARED AND FILED WITH THE OWNER.

ABBREVIATIONS

ABV	ABOVE	GFI,GFCI	GROUND FAULT CIRCUIT INTERRUPTER
AC	3" ABOVE COUNTER BACKSPLASH	HH	HAND HOLE
ACH	ABOVE COUNTER HEIGHT	J-BOX	JUNCTION BOX
AFF	ABOVE FINISHED FLOOR	MTD	MOUNTED
AG	ABOVE GRADE	N	NEUTRAL
A,AMP	AMPERE	NIC	NOT IN CONTRACT
A/V	AUDIO/VISUAL	PB	PULLBOX
AWG	AMERICAN WIRE GAUGE	PNL	PANEL, PANELBOARD
CB	CIRCUIT BREAKER	POS	POSITION/POINT OF SALE
CKT	CIRCUIT	R	RACEWAY
CLG	CEILING	RECEPT	RECEPTACLE
COMM	COMMUNICATIONS	SPECS	SPECIFICATIONS
C	CONDUIT	TELECOM	TELECOMMUNICATIONS
CTRL	CONTROL	TYP	TYPICAL
CU	COPPER	UG	UNDER GROUND
D	DATA	UON	UNLESS OTHERWISE NOTED
DED	DEDICATED	UTP	UNSHIELDED TWISTED PAIR
FA	FIRE ALARM	V	VOLT OR VOICE
FB	FLOOR BOX	VEL	VERIFY EXACT LOCATION
FBOIC	FURNISHED BY OTHERS, INSTALLED BY CONTRACTOR	WAP	WIRELESS ACCESS POINT
		WP	WEATHERPROOF
G,GND	GROUND	XFMR	TRANSFORMER
		ø	PHASE

OUTLET MOUNTING HEIGHTS

SPECIAL OUTLET HEIGHTS ARE SHOWN ON THE ELECTRICAL DRAWINGS OR ON THE ARCHITECTURAL DRAWINGS. IF SPECIAL OUTLET HEIGHTS ARE NOT SHOWN OR REQUIRED, THEN LOCATE OUTLETS AS NOTED BELOW. OUTLET HEIGHTS ARE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE OUTLET UNLESS OTHERWISE NOTED.

RECEPTACLES	18 INCHES (460 mm) VERTICALLY MOUNTED
SWITCHES	43 INCHES (1095 mm) VERTICALLY MOUNTED
PANELBOARDS	72 INCHES (1830 mm) TO TOP OF PANELBOARD IF BOX < 68 INCHES (1730 mm) HIGH, OTHERWISE PER NEC 404.8
CARD READER	43 INCHES (1095 mm)
VOLUME CONTROLLER	43 INCHES (1095 mm)
FIRE ALARM PULL STATION	43 INCHES (1095 mm)
FIRE ALARM AUDIBLE NOTIFICATION DEVICES	TOP EDGE NOT LESS THAN 90 INCHES (2290 mm) AFF AND NOT LESS THAN 6 INCHES (155 mm) BELOW CEILING. 6 INCHES (155 mm) BELOW CEILING SHALL TAKE PRECEDENCE WHERE CEILING HEIGHT DOES NOT ALLOW BOTH DIMENSIONS
FIRE ALARM VISUAL AND COMBINATION AUDIBLE/VISUAL NOTIFICATION DEVICES	BOTTOM EDGE NOT LESS THAN 80 INCHES (2035 mm) AFF AND TOP EDGE NOT GREATER THAN 96 INCHES (2438 mm) AFF.
FIRE ALARM CONTROL PANEL	72 INCHES (1830 mm) TO TOP OF PANEL

SCOPE OF WORK
THIS PROJECT TO CONSIST OF RENOVATION AND UPGRADE OF THE EXISTING CONSERVATORY BUILDING WITH REPLACEMENT OF EXISTING LIGHTING, LIGHTING CONTROL, POWER CONNECTIONS TO MECHANICAL, CONVENIENCE POWER, OFFICE AND GIFT SHOP POWER AND DATA, ACCESS CONTROL AND CODE REQUIRED EGRESS LIGHTING.

Stantec

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

Drawn by: GN
Checked: DK
Date: 12.06.19
Scale: NONE

Revisions:
No. Date Remarks

SYMBOLS AND ABBREVIATIONS

E0.0

Stantec											Panel
Name	P1 (EXISTING) 120/240V	1 PH	3W	100A	Main CB				Type: Panelboard		
Location	BASEMENT				Surface Mounted				0 AIC		
Serves:	BUILDING POWER				Single Lugs						
#	Description	Load	CB	*	A	B	CB		Load	Description	#
1	Lighting STORAGE ROOM	0.00	20/1	CB	X		20/1	CB	0.00	Equip BASEMENT LIGHTS??	2
3	Misc UNKNOWN RECEPTACLES?	0.00	20/1	CB		X	20/1	CB	0.00	Equip HOT WATER	4
5	Misc UNKNOWN RECEPTACLES?	0.00	20/1	CB	X		20/1	CB	0.00	Equip POND PUMP ???	6
7	Lighting ROOF LIGHTS	0.00	20/1	CB		X	20/1	CB	0.00	Misc UNKNOWN	8
9	Misc UNKOWN	0.00	20/1	CB	X		20/1	CB	0.00	Equip HOT WATER CONTROL	10
11	Misc UNKOWN	0.00	50/2	CB		X	20/1	CB	0.00	Equip BOILER	12
13	-------	0.00	-------	---	X		20/1	CB	0.00	Spare	14
15	Misc FANS????	0.00	30/2	CB		X	20/1	CB	0.00	Lighting MAIN LEVEL	16
17	-------	0.00	-------	---	X		20/1	CB	0.00	Equip FISH POND ??	18
19	Equip FURNACE CIRC PUMP	0.00	30/2	CB		X	20/1	CB	0.00	Misc UNKNOWN RECEPTACLES?	20
21	-------	0.00	-------	---	X		20/2	CB	0.00	Equip UNKOWN	22
23	Misc HEAT	0.00	50/2	CB		X	-------	---	0.00	-------	24
25	-------	0.00	-------	---	X		20/1	CB	0.00	Misc UNKOWN	26
27	Misc HEAT	0.00	50/2	CB		X	20/1	CB	0.00	Misc UNKOWN	28
29	-------	0.00	-------	---	X		20/1	CB	0.00	Misc BOILER PUMP	30
Rev:					PH A	PH B			* Circuit Breaker Code		
Revised Ckts Marked * Existing Ckts Marked #		Connected KVA			0.00	0.00			G = GFCI H = HID Rated S = Shunt Trip C = HACR Rated D = Switching Duty # = See Note A = AFCI		
Notes:	MAIN BREAKER AT TOP OF PANEL										

Load Type	Conn KVA	NEC Demand Factor	Dem. KVA	Dem. Amps	NEC Feed %	NEC Feed Amps
Space	0.00		0.00	0		0
	0.00	0 Amps	0.00	0		0

EXISTING POWER PANEL

EXISTING RECORD INFORMATION DOES NOT SHOW CORRECT CIRCUITING OR WIRING. FIELD VERIFY EXISTING.
COORDINATE POWER SHUT DOWN WITH OWNER AT LEAST 72 HOURS PRIOR TO SHUT OFF. ASSUME POWER SHUT DOWN TO BE PERFORMED IN EVENING OFF HOURS.

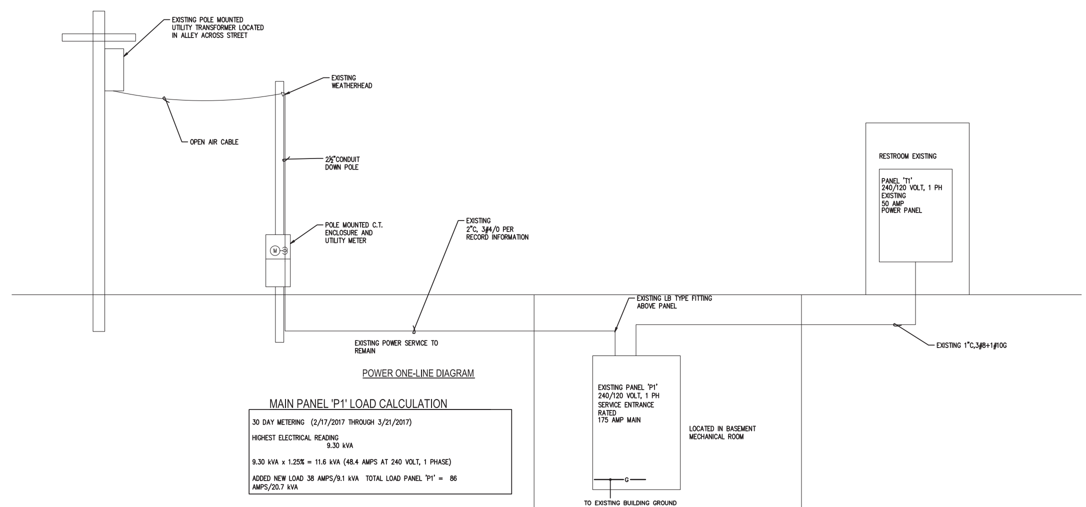
	Stantec											Panel	
	Name	P1 (REPLACEMENT 120/240V	1 PH	3W	175A	Main CB				Type: Panelboard			
	Location	BASEMENT				Surface Mounted				0 AIC			
	Serves:	BUILDING POWER				Single Lugs							
	#	Description	Load	CB	*	A	B	CB		Load	Description	#	
	1	Misc STORAGE ROOM	0.00	20/1	CB	X		20/1	CB	0.00	Equip BASEMENT LIGHTS??	2	
	3	Misc UNKNOWN	0.00	20/1	CB		X	20/1	CB	0.00	Equip HOT WATER	4	
	5	Misc UNKNOWN	0.00	20/1	CB	X		20/1	CB	0.00	Equip POND PUMP	6	
	7	Lighting ROOF LIGHTS	0.00	20/1	CB		X	20/1	CB	0.00	Misc UNKNOWN	8	
	9	Misc UNKOWN	0.00	20/1	CB	X		20/1	CB	0.00	Equip HOT WATER CONTROL	10	
	11	Misc UNKOWN	0.00	50/2	CB		X	20/1	CB	0.00	Equip BOILER B1	12	GENERAL NOTE 1,3,4
	13	-------	0.00	-------	---	X		20/1	CB	0.00	Equip BOILER B2	14	
	15	Equip FANS	0.00	30/2	CB		X	20/1	CB	0.00	Lighting NORTH END LIGHTING	16	
	17	-------	0.00	-------	---	X		20/1	CB	0.00	Equip FISH POND	18	
GENERAL NOTE 3,4	19	Equip PUMP P1	0.00	20/2	CB		X	20/1	CB	0.00	Equip	20	
	21	-------	0.00	-------	---	X		20/2	CB	0.00	Equip Pump P2	22	GENERAL NOTE 3,4
	23	Misc HEAT	0.00	50/2	CB		X	-------	---	0.00	-------	24	
	25	-------	0.00	-------	---	X		20/1	CB	0.00	Misc UNKOWN	26	
	27	Misc HEAT	0.00	50/2	CB		X	20/1	CB	0.00	Misc UNKOWN	28	
	29	-------	0.00	-------	---	X		20/1	CB	0.00	Misc BOILER PUMP	30	
GENERAL NOTE 3,4	31	Misc WH1	1.40	20/1	CB		X	20/1	CB	0.00	Lighting NORTH EAST LIGHTING	32	GENERAL NOTE 2,3,4
	33	Space	0.00	0/1		X		20/1	CB	0.00	Lighting SOUTH EAST LIGHTING	34	
	35	Space	0.00	0/1			X	20/1	CB	0.00	Equip CF1	36	
	37	Space	0.00	0/1		X		20/1	CB	0.00	Spare	38	
	39	Space	0.00	0/1			X	50/2	CB	4.80	Panel T1	40	
	41	Space	0.00	0/1		X		-------	---	3.56	-------T1	42	
	Rev:					PH A	PH B			* Circuit Breaker Code			
	Revised Ckts Marked * Existing Ckts Marked #		Connected KVA			3.56	6.20			G = GFCI H = HID Rated S = Shunt Trip C = HACR Rated D = Switching Duty # = See Note A = AFCI			
	Notes:	MAIN BREAKER AT TOP OF PANEL											

Load Type	Conn KVA	NEC Demand Factor	Dem. KVA	Dem. Amps	NEC Feed %	NEC Feed Amps
Equip	0.20	x 100%	0.20	1	x 100%	1
Lighting	0.40	x 100%	0.40	2	x 125%	2
Mech	6.00	x 100%	6.00	25	125% of Largest	27
Misc	1.70	x 100%	1.70	7	x 100%	7
Motors	0.20	x 100%	0.20	1	125% of Largest	1
Recept	1.26	10 KVA @ 100%, rest @ 50%	1.26	5	x 100%	5
Recorded Demand	9.30	x 100%	9.30	39	x 125%	48
	* Recorded Demand calculated as 9.30kVA x 100% S.A.F. x 100% O.A.F.					
	19.06	79 Amps	19.06	79		92

EXISTING POWER PANEL 'P1' - NEW ADDITIONAL CIRCUITS DETAILS

GENERAL NOTES

1. NORTH END LIGHTING TO BE FED FROM CIRCUIT 16. CONTRACTOR SHALL PROVIDE NEW LABEL ON EXISTING PANEL P1.
2. NORTH EAST LIGHTING & SOUTH EAST LIGHTING SHALL BE FED FROM CIRCUIT 32 & 34. CONTRACTOR SHALL PROVIDE NEW LABEL ON EXISTING PANEL P1.
3. CONTRACTOR SHALL REPLACE EXISTING CABLE WITH WIRE IN KIND..
4. CONTRACTOR SHALL USE EXISTING CONDUIT FOR ALL NEW BRANCH CIRCUITS. .



POWER ONE-LINE DIAGRAM

MAIN PANEL 'P1' LOAD CALCULATION

30 DAY METERING (2/17/2017 THROUGH 3/21/2017)

HIGHEST ELECTRICAL READING
9.30 kVA

9.30 kVA x 1.25% = 11.6 kVA (48.4 AMPS AT 240 VOLT, 1 PHASE)

ADDED NEW LOAD 38 AMPS/9.1 kVA TOTAL LOAD PANEL 'P1' = 86 AMPS/20.7 kVA

EXISTING SINGLE LINE DIAGRAM (FOR REFERENCE ONLY)

Stantec

W.W. SEYMOUR
CONSERVATORY
REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

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Scale: NONE

Revisions:
No. Date Remarks

POWER
ONELINE, PANEL
AND MECHANICAL
SCHEDULES

E0.01

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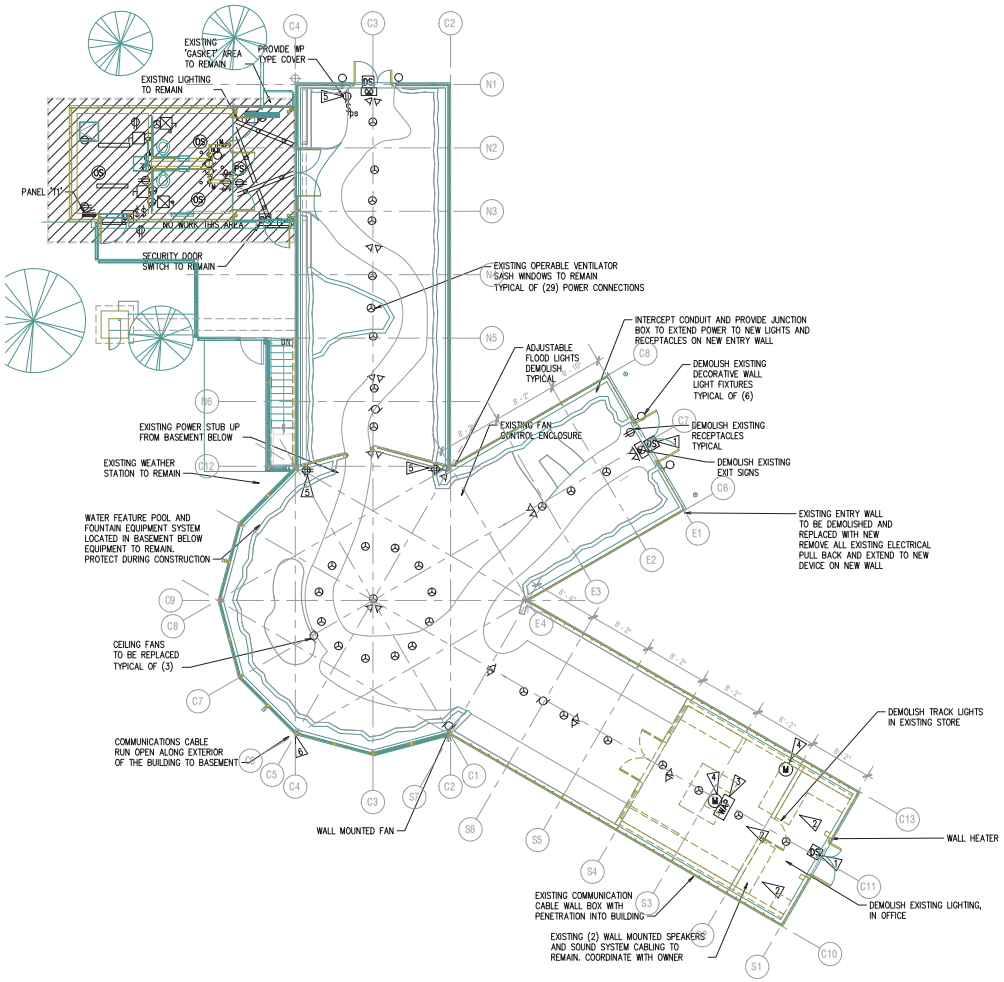
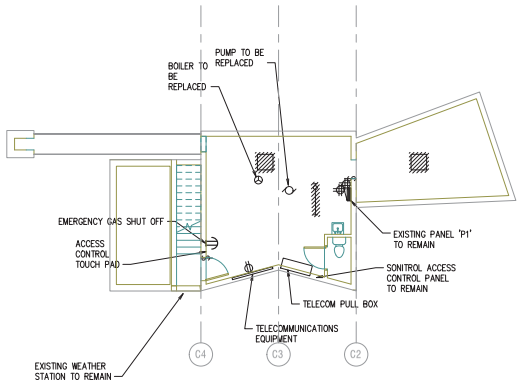


SHEET FLAG NOTES:

1. EXISTING ACCESS CONTROL MAGNETIC DOOR STRIKE TO BE REMOVED, CABLE PULLED BACK AND RE-INSTALLED ON NEW DOOR.
2. EXISTING POWER AND DATA TO BE REMOVED FROM CASEWORK, PULLED BACK AND EXTENDED TO NEW CASEWORK. SEE ARCHITECTURAL DRAWINGS FOR NEW CASEWORK PLANS AND DETAILS
3. EXISTING WAP TO REMAIN. PROTECT DEVICE AND CABLING DURING CONSTRUCTION
4. EXISTING ACCESS CONTROL SYSTEM MOTION SENSOR TO REMAIN. PROTECT DURING CONSTRUCTION.
5. EXISTING RECEPTACLE TO BE REPLACE WITH GFCI TYPE.
6. SECURE AND PROTECT THE EXISTING COMMUNICATION CABLE DURING CONSTRUCTION. AFTER COMPLETION, CABLE SHALL BE NEATLY INSTALLED AND SECURED TO THE EXTERIOR OF BUILDING.



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

PROJECT NORTH

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

PROJECT NORTH

Stantec

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

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ELECTRICAL DEMO PLANS

ED2.1

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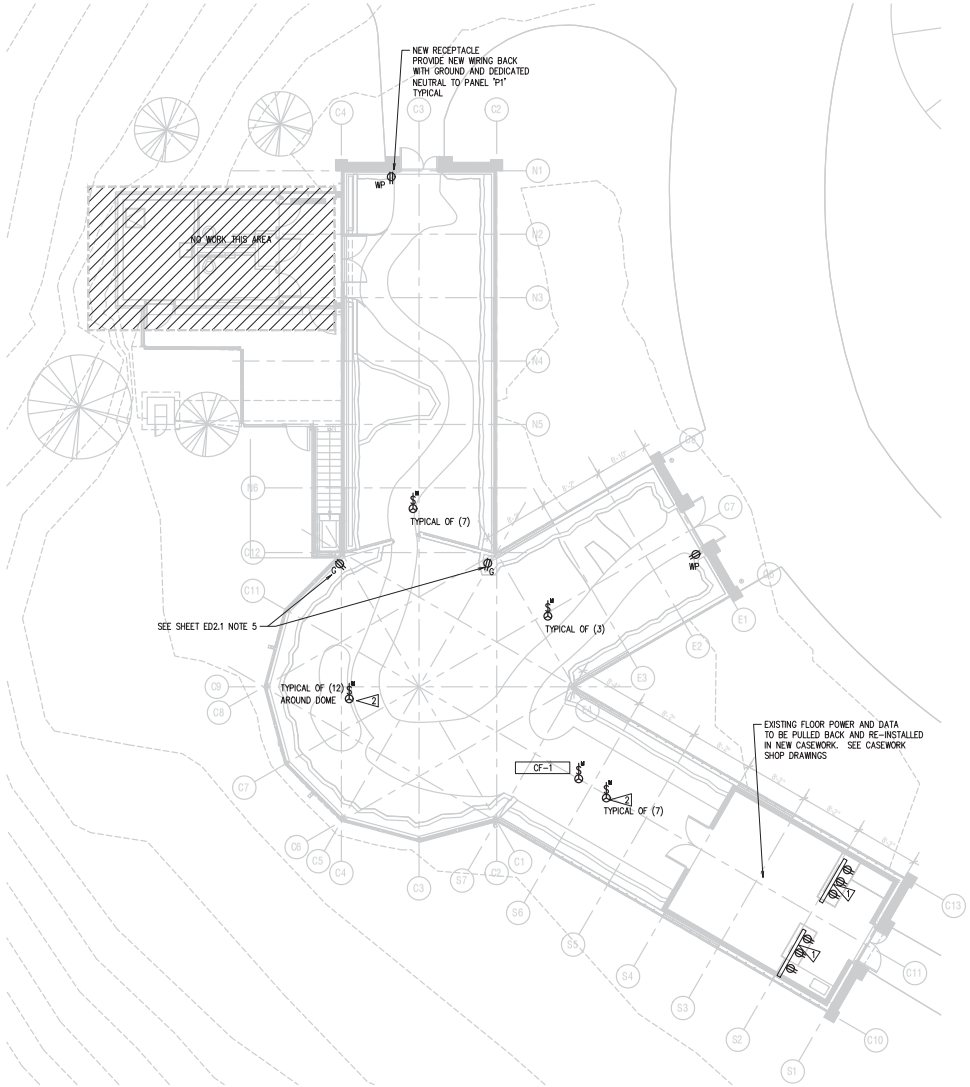


1 FLOOR PLAN
1/8" = 1'-0"

PROJECT NORTH

MECHANICAL EQUIPMENT SCHEDULE - WW SEYMOUR RESTROOM ADDITION

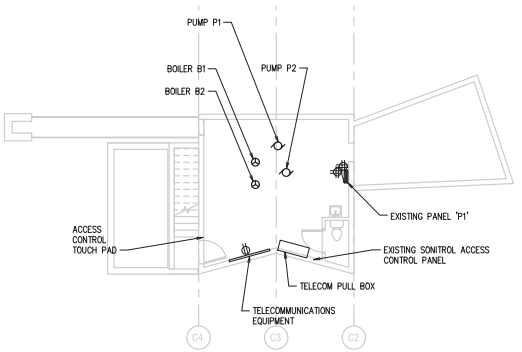
EQUIP	DESCRIPTION	HP	LOAD				PANEL	CIRCUIT	CONDUIT	WIRE	LOCATION
TAG			VA	AMPS	VOLTS	P					
B1	BOILER	-	624	5.2	120	1	P1	12	3/4"	2#12+#12G	MECH. ROOM (BASEMENT)
B2	BOILER	-	624	5.2	120	1	P1	14	3/4"	2#12+#12G	MECH. ROOM (BASEMENT)
P1	PUMP	1.50	2702	4.6	240	1	P1	19,21	3/4"	2#12+#12G	MECH. ROOM (BASEMENT)
P2	PUMP	1.50	2702	4.6	240	1	P1	22,24	3/4"	2#12+#12G	MECH. ROOM (BASEMENT)
CF1	CEILING FAN	-	27	0.22	120	1	P1	36	3/4"	2#12+#12G	GIFT SHOP
WH1	UNIT HEATER	-	1400	12	120	1	P1	31	1"	2#10+#12G	GIFT SHOP

GENERAL SHEET NOTES:

1. COORDINATE DEVICE LOCATIONS PER ARCHITECTURAL PLANS AND ELEVATIONS. SEE CASEWORK SHOP DRAWINGS.
2. PROVIDE DEDICATED NEUTRALS FOR ALL 120 VOLT CIRCUITS.
3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL TELECOM, AV AND SECURITY SYSTEM RACEWAYS, BOXES, AND POWER.
4. ALL RECEPTACLES WITHIN 6 FEET OF A SINK OR SHOWER SHALL BE GFCI UNLESS THERE IS A PHYSICAL BARRIER BETWEEN THE WATER SOURCE AND THE RECEPTACLE.
5. LOCATE DATA OUTLET BOXES WITH IN 2 FEET OF POWER RECEPTACLES.
6. IN EXISTING CONSERVATOR CONCEAL RACEWAYS WHEN POSSIBLE. COORDINATE SURFACE MOUNTED CONDUITS, RACEWAYS AND BOXES WITH OTHER SYSTEM. PROPOSE ROUTING PLAN TO DESIGN TEAM FOR REVIEW PRIOR TO INSTALLATION. NOTE WET ENVIRONMENT INSTALLATION.
7. SEE MECHANICAL EQUIPMENT SCHEDULE SHEET XXX.

SHEET FLAG NOTES:

1. PROVIDE TWO COMPARTMENT NON METALLIC SURFACE MOUNTED RACEWAY, WIREMOLD 40N2 SERIES WITH ALL NECESSARY ACCESSORIES. PROVIDE RACEWAY UP CORNER OF WALLS TO CEILING FOR DATA. PROVIDE DIVIDER FOR LOW VOLTAGE CABLING. FINISH COLOR AS SELECTED BY ARCHITECT.
2. OPERABLE VENTILATOR SASH WINDOW. CIRCUIT TO EXISTING PANEL "P1". RELOCATE EXISTING CONTROLLERS TO NEW CENTRAL LOCATION. INTERCEPT AND EXTEND CONTROL WIRES. FIELD VERIFY. COORDINATE WITH ARCHITECT.
3. EXISTING FT-2 TO REMAIN. DEMOLISH EXISTING POWER CIRCUIT AND PROVIDE NEW POWER CIRCUIT AS SHOWN.



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

PROJECT NORTH

Stantec
400 Fairview Avenue N Suite 400
Seattle Washington 98109-5802
(206) 497-0010

W.W. SEYMOUR CONSERVATORY REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

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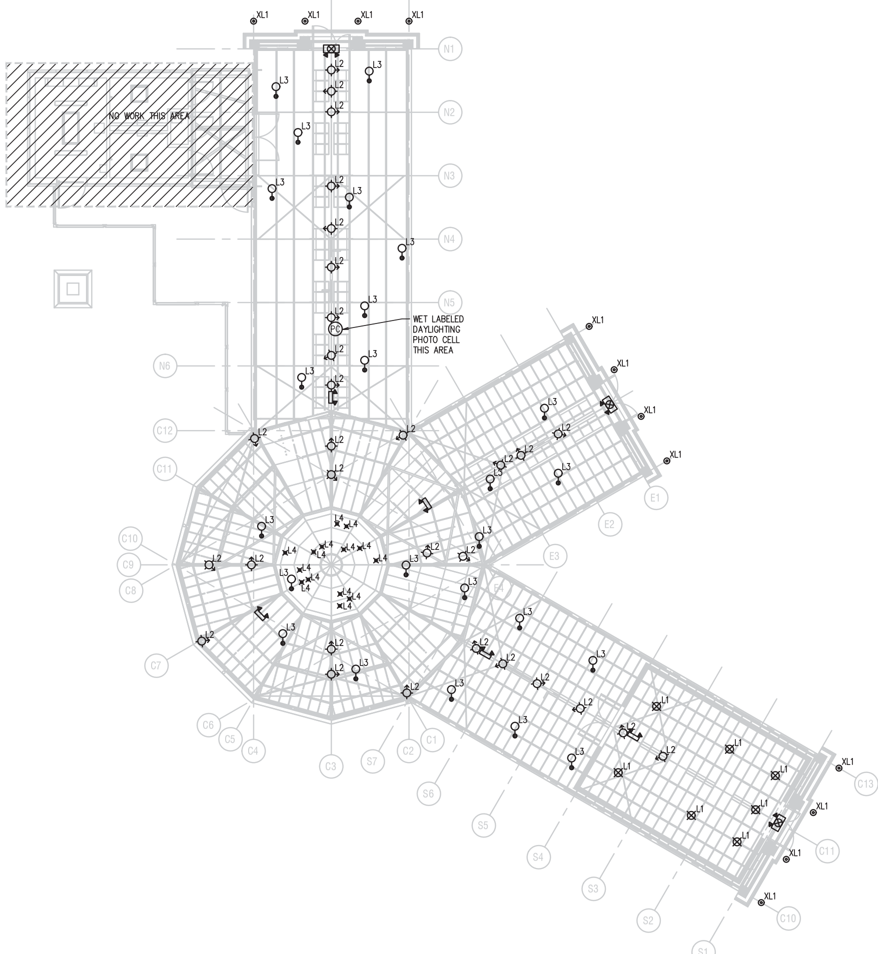
No. Date Remarks

ELECTRICAL FLOOR PLANS

E2.1.1



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

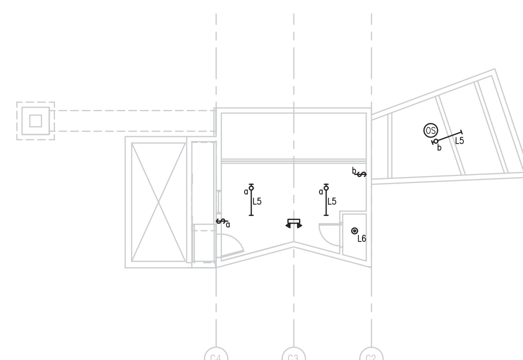
PROJECT NORTH

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG	DRIVER / DIMMING	SOURCE	INPUT WATTS	INPUT VOLT*	LOCATION
L1	DECORATIVE PENDANT MOUNTED, LED RLM FIXTURE. WET LOCATION. 14" DIAMETER. FROSTED GLASS WITH CAST GUARD. STEM MOUNTED FROM CANOPY ONTO EXISTING RAFTERS IN THE SPACE, LENGTH OF STEM MOUNT TBD, COLOR TBD.	TROY RLM	SHALLOW HEAVY DUTY RHS14-LED1227-FINISH TBD-FGG-2-HSTBD-FINISHTBD	DRIVER	2,700K, 840 LUMENS LED 90CRI	12	120	OFFICE AND SHOP
L2	WET LOCATION, CANOPY MOUNTED ADJUSTABLE ACCENT FIXTURE WITH INTEGRAL DIMMING AND ADJUSTABLE AND LOCKIABLE BEAM ANGLE. FIXTURE TO MEASURE 8 1/4" HEIGHT X 4" DIAMETER. PROVIDE SNOOT. BRONZE ON ALUMINUM FINISH. FIXTURE TO MOUNT TO EXISTING RAFTERS OR BEAMS IN THE CONSERVATORY AREA. EXACT LOCATION AND MOUNTING DETAIL TO BE COORDINATED. IP66	WAC	5212-30-BZ 5211-SNOOT-BZ	INTEGRAL	3000K, 780-2150LM, 15-60 DEGREE BEAM 85+CRI	13-31	120	SPOT ACCENT LIGHTING WITHIN LINEAR AMBIENT SYSTEM
L3	STAKE MOUNTED PATH LIGHT. ALL BRASS COMPONENTS, 1/2" SCHEDULE 40 BRASS STEM. 18-GUAGE COPPER SHADE, UNDERSIDE POWERCOATED WHITE AND TEMPERED FROSTED GLASS. 20" STEM HEIGHT. PROVIDE STANDARD GROUND SPIKE WITH CAST BRASS CAP. NOMINAL DIMENSIONS: IP66	BEACHSIDE LIGHTING	R-003-20-3W-G4-GS4	DRIVER	2800K WHITE LED	3	120	PATH LIGHTING
L4	PENDANTS SUSPENDED AT VARIOUS HEIGHTS, MOUNTED TO POWER SPAN CABLE SYSTEM. EXTON PENDANT MOUNT MODULE WITH FROSTED SPHERE GEM. TENSIONED POWER SPAN CABLE WITH REMOTE POWER SUPPLY ENCLOSURE WITH DRIVER. SURFACE MOUNTED WRAP BRACKET AND TENSIONING SURFACE END BRACKETS, MOST LIKELY REQUIRED. NOMINAL DIMENSIONS OF PENDANT: 3" DIAMETER X OVERALL HEIGHT OF 6". PENDANT DROP LENGTHS VARY BETWEEN 12-14FT. EXACT TENSIONING SYSTEM AND MOUNTING TO BE REVIWED WITH EXISTING CONDITIONS, AS IT IS TO BE MOUNTED TO EXISTING STEEL STRUCTURE. CABLES NEED TO WORK AROUND EXISTING FAN LOCATION. ALL POWER SPAN COMPONENTS TO BE WHITE FINISH. SEE MOUNTING DETAIL; IN ARCHITECTURAL SET, DRAWING DETAIL #: XX-XX.	TEGAN	KORE-EX5 IP65 POWER SPAN CABLE WITH PENDANT MOUNT FROSTED GEM SPHERE EX-5-K-PX-C-FSG-AL PROVIDE WHITE POWER SPAN MOUNTING COMPONENTS	0-10V	5W 500 LUMEN 2700K 82-85CRI	5	120	CENTRAL CONSERVATORY SPACE
L5	LENSED SURFACE MOUNTED LINEAR LED BACK OF HOUSE FIXTURE (8FT)	PHILLIPS DAY BRITE	FLUX STREAM LF-8-FR-31-30-x-DZT-	0-10V	3000K, 3100 LUMENS	18	120	BOH
L6	RECESSED LED DOWNLIGHT WITH 650 LUMENS 80 CRI 30K. NOMINAL DIMENSIONS: 2.5" APERTURE, 5" OVERALL WITH FLANGE X 4" HEIGHT. FIXTURE TO BE CONSTRUCTED OF STEEL HOUSING WITH ACRYLIC OPAL LENS. 0-10V DIMMING TO 10%. DAMP LOCATION.	LITON	LR3LH00-N-3000K	0-10V TO 10%	3000K, 650 LUMENS LED	12	120	BASEMENT
XL1	INGROUND UPLIGHT TO BE USED WITH 3000K WHITE LED. NOMINAL DIMENSIONS: 3.6" DIAMETER X 4.4" DEPTH. PROVIDE DARK LIGHT (DL) LENS. CONTRACTOR TO SELECT PROPER RECESED CASING FOR INSTALLATION. WET LOCATION, REMOTE DRIVER. TO BE GROUND RECESSED, CLOSE TO COLUMNS, APPROXIMATELY 2-4" FROM COLUMN TO BE CONFIRMED WITH HARDSCAPE DETAIL AND MOCKUP.	INTERLUX	SUELOPRO_R E805XX-W-06 DL ACCESSORY OUTER CASING AS REQUIRED FOR INSTALL	0-10V TO 10%	945 LM NARROW SPOT 3000K WHITE LED	7.2	120	AT EXTERIOR COLUMNS

UPPER LEVEL LIGHTING CONTROL
PROVIDE CONTROL AS REQUIRED BY WASHINGTON STATE ENERGY CODES.

- OFFICE TO HAVE CEILING MOUNTED OCCUPANCY SENSOR, MULTI-ZONE CONTROL, AUTOMATIC DAYLIGHT DIMMING
- GIFT SHOP/CONSERVATOR TO BE CONTROLLED VIA PROGRAMMABLE TIME SYSTEM WITH AUTOMATIC DAYLIGHT DIMMING
- EXTERIOR LIGHTING TO BE CONTROLLED VIA PROGRAMMABLE TIME SYSTEM WITH EXTERIOR MOUNTED PHOTO CELL INTERFACE



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

PROJECT NORTH

Stantec

W.W. SEYMOUR
CONSERVATORY
REHABILITATION

60% CD

316 S G ST, TACOMA, WA 98405

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LIGHTING
FLOOR PLANS

E2.1.2

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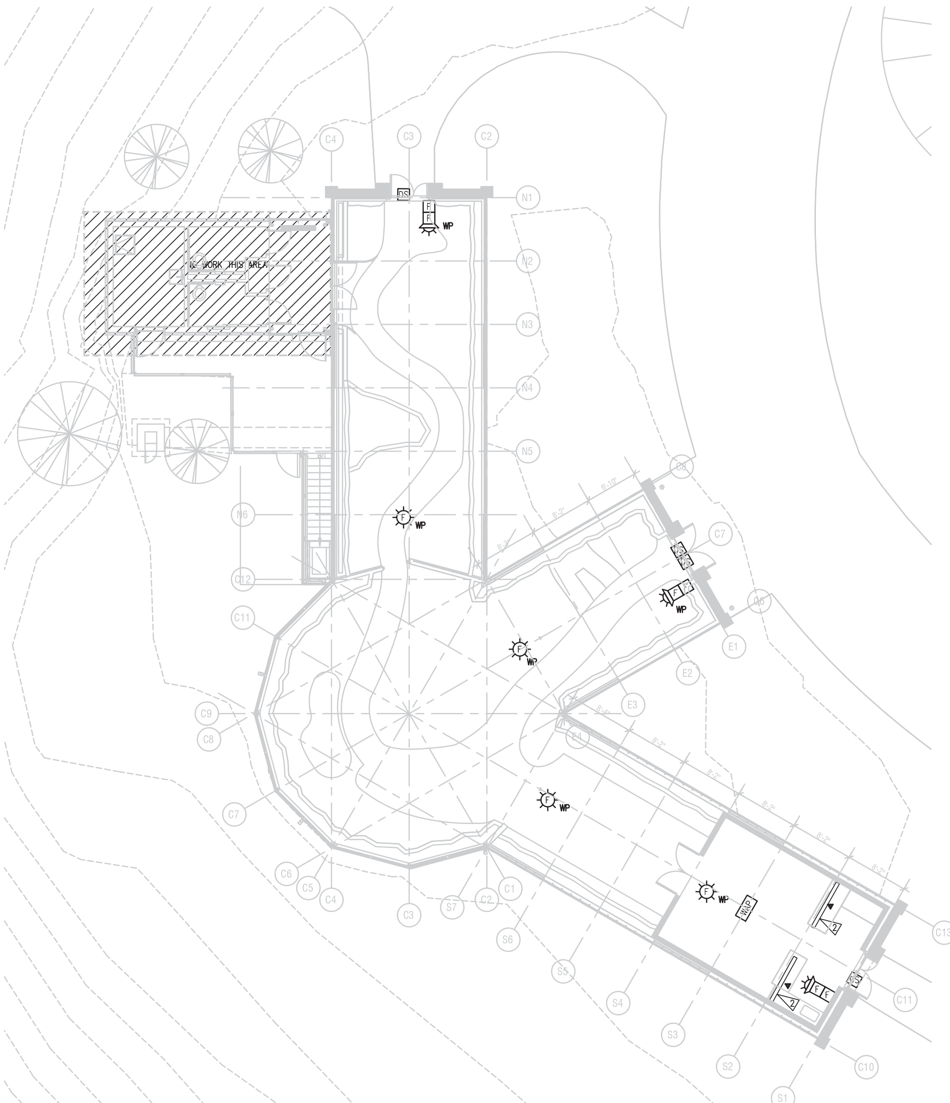


1 FLOOR PLAN
1/8" = 1'-0"

PROJECT NORTH

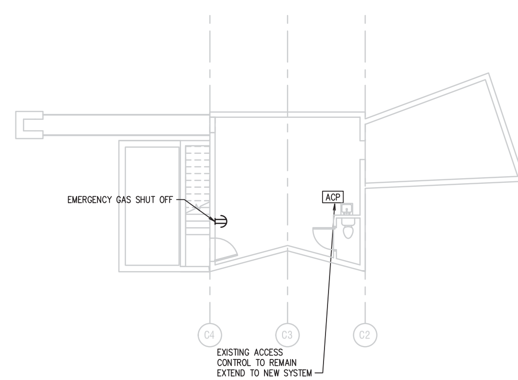
GENERAL SHEET NOTES:

1. COORDINATE DEVICE LOCATIONS PER ARCHITECTURAL PLANS AND ELEVATIONS. SEE CASEWORK SHOP DRAWINGS.
2. LOCATE DATA OUTLET BOXES WITH IN 2 FEET OF POWER RECEPTACLES.
3. ALL DEVICES AND RACEWAYS IN EXISTING CONSERVATOR ARE TO BE SURFACE MOUNTED. COORDINATE WITH NEW LIGHTING, POWER, MECHANICAL AND STRUCTURAL DRAWINGS.
4. ALL FIRE ALARM DEVICES IN THE CONSERVATOR AREA TO BE WEATHER PROOF TYPE.

SHEET FLAG NOTES:

1 COORDINATE DEVICE LOCATIONS AND ROUTING WITH CASEWORK SHOP DRAWINGS.

2 TWO COMPARTMENT SURFACE MOUNTED RACEWAY. SEE SHEET E2.1.1.



2 BASEMENT PLAN
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PROJECT NORTH

Stantec

W.W. SEYMOUR CONSERVATORY REHABILITATION

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No.	Date	Remarks

SYSTEMS FLOOR PLANS

E2.1.3

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DRAFT UPDATE
1/22/2020

Design Guidelines for the Wedge Neighborhood and North Slope Historic Special Review Districts

Adopted by the Landmarks Preservation Commission pursuant to Tacoma Municipal Code 13.07 for design review within the Wedge Neighborhood Historic District, Wedge Conservation District, and the North Slope Historic District.

Updated December 2016

Tacoma Landmarks Preservation Commission
Planning and Development Services
City of Tacoma
747 Market Street
253-591-5220
www.cityoftacoma.org/historicpreservation

TABLE OF CONTENTS

SECTION I: ABOUT GUIDELINES AND DESIGN REVIEW

These guidelines are intended to provide information to homeowners and the Landmarks Preservation Commission about the intent and purpose of the North Slope and Wedge Neighborhood Historic Districts, as well as guidance for the review and evaluation of proposed alterations to historic properties within these districts. The historic character of these neighborhoods is embodied in their homes, streetscapes, and development patterns.

Basis for these Guidelines

These design guidelines are based on the US Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties, and specifically on the Standards for Rehabilitation of Historic Properties. In certain cases, local conditions or community objectives are reflected in some of the interpretations of the Secretary's Standards.

The Landmarks Preservation Commission is required to adopt and maintain these guidelines pursuant to Chapter 13.07 of the Tacoma Municipal Code.

What is Design Review?

Design review is an approval process that certain projects involving historic properties must complete before permits are issued and work is started. The Landmarks Preservation Commission reviews projects for historic compatibility at its regular public meetings, and if the work meets the standards for historic treatment, issues a certificate of approval.

Which Projects Require Design Review?

If your house is located within the boundaries of a historic district, then changes to the exterior of your property may require design review by the Historic Preservation Officer and the Landmarks Preservation Commission if permits are required. This includes changes to windows, siding, additions, chimneys, porches and decks.

Your project will require Landmarks Preservation Commission review, if:
…It is a new construction project or demolition; or
…It involves a contributing historic structure, AND
…It involves exterior work, AND
…It requires a building permit.

Projects are exempt from Landmarks Commission review, if:
…The project involves a non-contributing structure, but does not involve demolition; or
…The project does not require a permit; or
…The project does not involve any exterior work; or
…The project involves plumbing, sewer, electrical, or landscaping work.

What is the Process?

Proposed changes to historic properties within the Wedge Neighborhood and North Slope Historic Districts must be transmitted to the Landmarks Preservation Commission using an Application for Design Review, which are available on www.cityoftacoma.org/historicpreservation in the Design Review section.

Applications should include scale plans, details, specifications, photographs, and a narrative description, as appropriate.

The Landmarks Preservation Commission reviews applications during their regular meetings, every second and fourth Wednesday of the month.

Tacoma's Residential Historic Districts

The City of Tacoma has two residential historic districts.

North Slope Historic District

The North Slope Historic District, shown in the map to the right, was created by the City of Tacoma in 1994 at the request of property owners within the district, and was expanded in 1996 and 1999 in response to citizen request. The district contains historically significant homes constructed between 1881 and 1955.

The district contains over 900 homes, making it one of the largest residential historic districts in the Western United States.

The North Slope Historic District is listed on the National, state and Tacoma Registers of Historic Places. The boundaries and buildings inventory differ slightly between the different historic registers. These design guidelines and the design review process apply to the locally designated, or Tacoma Register, historic district.

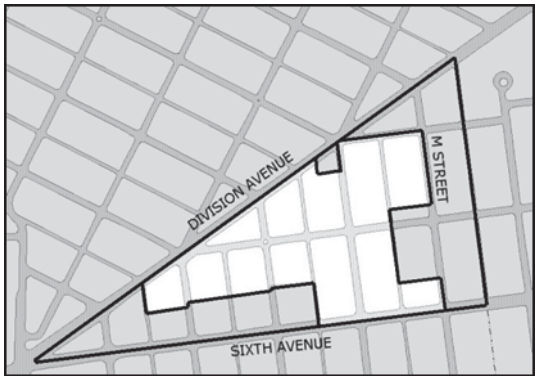
The nomination and other information for the North Slope Historic District can be found here:
www.cityoftacoma.org/HistoricDistricts

Wedge Neighborhood Historic and Conservation Districts

The Wedge Neighborhood Historic and Conservation Districts were created by City Council in 2011 at the request of the neighborhood residents, after three years of research and effort.

The Wedge Historic District is an intact middle-class residential district reflecting a period of neighborhood development from Tacoma's early history until after WWI. The Historic District is buffered by the Conservation District; design review requirements for projects within the Conservation District are generally less than those within the core historic district.

The white area on the map shown at left contains the Wedge Neighborhood Historic District, which includes approximately 70 homes. The shaded areas in the triangle show the Conservation District.



The nomination and other information for the Wedge Neighborhood Historic District can be found here:
www.cityoftacoma.org/HistoricDistricts

SECTION II: PRESERVATION AND SUSTAINABILITY

Historic Preservation is consistent with sustainable development goals. From waste stream reduction, to reduced consumption, to local sourcing, historic preservation makes sense for those who are interested in living a "green" lifestyle. Why?

♻ Preservation encourages the reuse of existing materials.

The greenest building is one that is already built. Historically, homes in the residential historic districts were handcrafted using skilled labor, and local materials. This craftsmanship was built to last, and the materials used in the construction were of top quality and are difficult to obtain now. Continuing to use these buildings and conducting proper maintenance extends the lifecycle of the original material investment, reduces environmental impacts that result from new construction and new materials, and reduces waste and waste stream impact from unnecessary demolition and replacement.

♻ Preservation encourages recycling and salvage of materials.

In many cases, lifestyle needs necessitate the remodeling of a residence or the removal/replacement of historic materials and elements. In those cases, reusing the removed materials (for instance, storing windows that have been removed onsite for later use or stockpiling historic fir siding) or ensuring that items removed are salvaged for use by others is important.

♻ Preservation employs a lifecycle approach to decision making.

All newly manufactured items, such as doors and windows, have a lifecycle cost. When upgrading a home for environmental reasons, it is important to consider the true impact of things like replacement windows—does the improvement in thermal efficiency over the service life of a new window offset the environmental impacts of manufacturing that window, the monetary expense of purchasing and installing the new window, and disposing of the original window?

♻ Preservation is local-business friendly.

Historic rehabilitation, maintenance and repair makes use of traditional carpentry skills and trades. Investing in an historic house and repairing and maintaining historic elements tends to invest less in materials and more in labor; replacement tends to invest more in materials and less in labor. Therefore, money invested in trades tends to have a higher local economic impact—more dollars stay in Tacoma, and less go to a corporate headquarters a thousand miles away.

SECTION III: GUIDELINES FOR THE ALTERATION OF EXISTING BUILDINGS

Tacoma's historic districts contribute to the social, cultural, and economic welfare of its residents by preserving the character of its early residential neighborhoods, contributing to civic pride by developing an awareness of Tacoma's heritage and sense of place, and by encouraging capital investment in and rehabilitation of historic structures through the use of incentives and design review. The historic features contained in contributing buildings and structures in the historic districts should be maintained and preserved, and new structures should be designed to be visually and aesthetically compatible with the historic character of the districts.

General Preservation Principles

1. **Maintain architectural integrity**, as it relates to scale, proportion, texture, color, compatible materials, space, and composition in various periods of architecture, in contributing properties.
2. **Retain original materials**. The historic materials present on historic buildings should be retained wherever feasible.
3. **Repair before replacement**. Historic materials should be maintained and repaired when needed, including maintaining proper weather protection. Where repair is needed, it is desirable to remove as small an amount of material as possible.
4. **Replacement in kind**. If replacement of a historic feature or material is unavoidable, they should be replaced in kind with a visual and material match whenever possible.
5. **Houses change through time**. Changes to a home, such as early additions within the historic period of the house, may be historic in themselves. In addition, historic homes are often updated to reflect modern use. Alterations should respect historic additions, as well as strive to balance modern convenience with historical appropriateness.
6. **Guidelines should be applied reasonably**. When applying the guidelines, the Commission will be considerate of clearly documented cases of economic hardship. Application of these guidelines is not intended to deprive a property owner of reasonable use of their property.

WINDOWS

Windows are a character defining feature of a historic home, reflecting both the time period of construction, the materials and craftsmanship of an era, and the architectural style of a building.

Maintaining historic integrity of the primary facades enhances and preserves the historic district. Every effort should be made to maintain existing historic windows or their visual equivalents on primary elevations within original openings, and to maintain a historic appearance on secondary elevations.

Windows are composed of individual elements, including the stiles and rails that make up the sash, muntins, joinery, window stops and casing, and each fulfills a functional role reflecting the window's historic design. Preserving both the materials and craftsmanship, and the appearance, scale and visual relationship between these components, is an objective of the historic district.

Guidelines for Windows

1. **Preserve Existing Historic Windows**. Existing historic windows in good working order should be maintained on historic homes in the district. The existing wood windows exhibit craftsmanship and carpentry methods in use at the time that the neighborhood was developed. New manufactured windows, even those made of wood, generally do not exhibit these characteristics.

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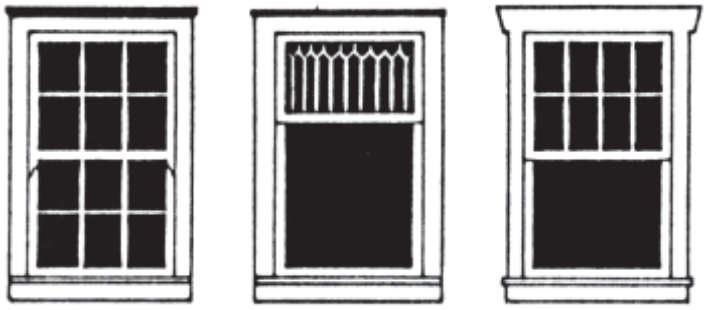

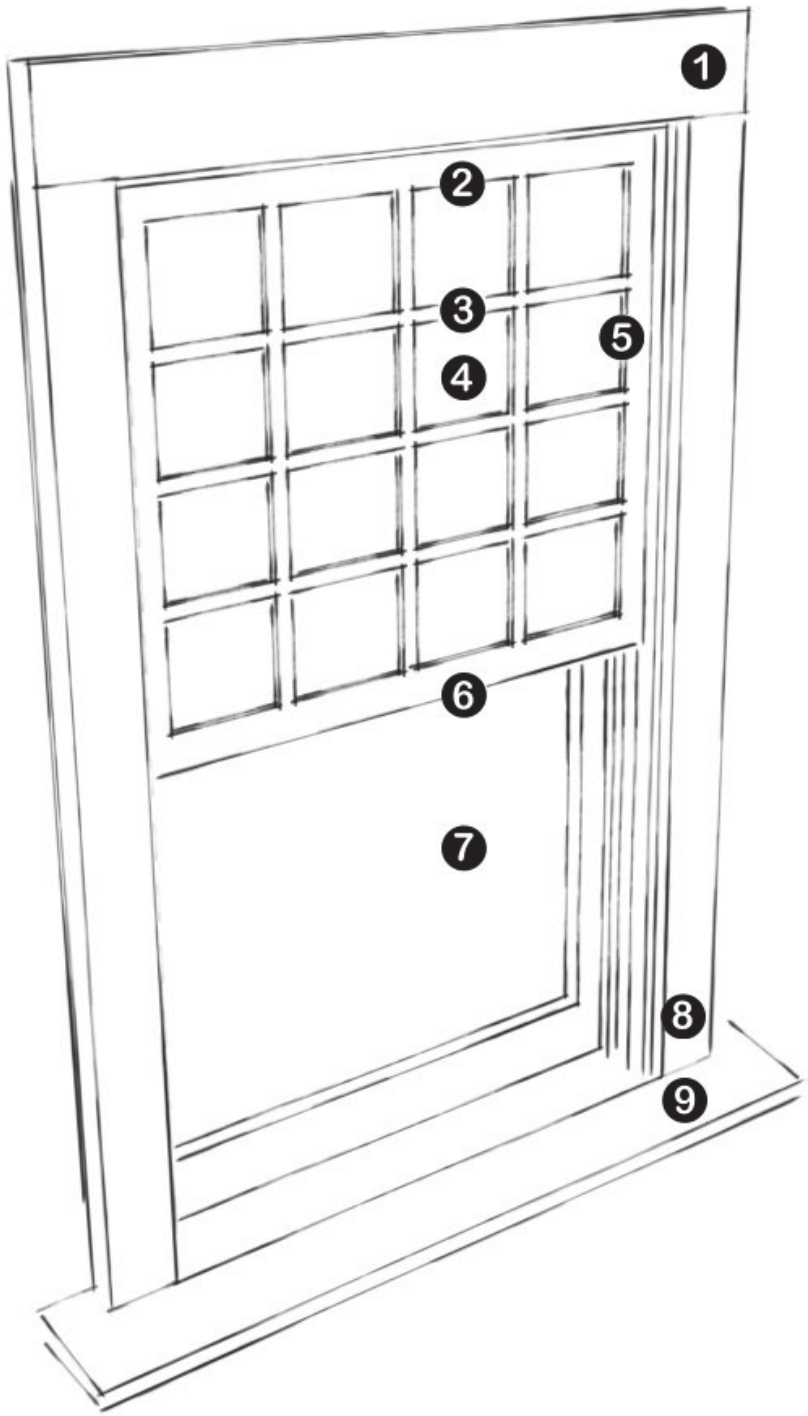

Anatomy of a Window

1. Casing: the finished wood framework around the window, including the horizontal piece at the top (sometimes called the header) and the vertical pieces on either side. The header often is slightly wider and longer than the vertical pieces, and may have a crown molding or other embellishment, depending on the architectural style.
2. Rail: the horizontal parts of a sash. On the bottom sash the rail is typically wider to protect from back splash.
3. Muntin: the small strips that separate individual panes of glass (or "lights") within a sash. Historic homes often have muntins in the top sash on primary elevations of the house; the pattern of the muntins is a character defining element of the architectural style and era. Panes may also be divided by strips of lead known as "caming."
4. Pane or light: the individual pieces of glass in a sash.
5. Stile: the vertical parts of the sash.
6. Meeting rail or checkrail: the sash rails that meet at the middle of the window; their meeting faces are beveled to ensure a tight weatherproof seal.
7. Sash: the moving part within the window frame that holds the glass. The glass in the upper sash was often divided into smaller panes; this is less common with the bottom sash.
8. Window stop: the strips of wood on the outside and inside of a window that hold the sashes in place. Between the upper and lower sashes is a thin piece of wood called a parting strip.
9. Sill: horizontal piece of the window. On the exterior it is slanted down to allow drainage.

The jamb, or window frame, is not shown in this picture. This refers to the horizontal and vertical pieces that frame the window opening.

(WINDOWS *continued from previous page*)

2. **Repair Original Windows Where Possible**. Original wood windows that are in disrepair should be repaired if feasible. The feasibility of different approaches depends on the conditions, estimated cost, and total project scope. Examples of substandard conditions that do not necessarily warrant replacement include: failed glazing compound, broken glass panes, windows painted shut, deteriorated paint surface (interior or exterior) and loose joinery. These conditions alone do not justify window replacement

   Repair of loose or cracked glazing, loose joinery or stuck sashes may be suitable for a carpenter or handyperson. Significant rot, deterioration, or reconstruction of failed joints may require the services of a window restoration company. If information is needed regarding vendors that provide these services, please contact the Historic Preservation Office.

2. **Replace windows with a close visual and material match**. When repairing original windows is not feasible, replacement may be considered.

   - Where replacement is desired, the new windows should match the old windows in design and other details, and, where possible, materials.
   - Certain window products, such as composite clad windows, closely replicate original appearance and therefore may be appropriate.` This should be demonstrated to the Commission with material samples and product specification sheets.
   - Changing the configuration, style or pattern of original windows is not encouraged, generally (for example, adding a highly styled divided light window where none existed before, or adding an architecturally incompatible pattern, such as a Prairie style gridded window to a English Cottage house).
   - Vinyl windows are not an acceptable replacement for existing historic windows.

   Depending on specific project needs, replacement windows may include:

   - Sash replacement kits. These utilize the existing window frame (opening) and trim, but replace the existing sashes and substitute a vinyl or plastic track for the rope and pulley system. Sash replacement kits require that the existing window opening be plumb and square to work properly, but unlike insert windows, do not reduce the size of the glazed area of the window or require shimming and additional trim.

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(WINDOWS *continued from previous page*)

- An insert window is a fully contained window system (frame and sashes) that is "inserted" into an existing opening. Because insert windows must accommodate a new window frame within the existing opening, the sashes and glazed area of an insert window will be slightly smaller than the original window sashes. Additional trim must be added to cover the seams between the insert frame and the original window. However, for window openings that are no longer plumb, the insert frame allows the new sashes to operate smoothly.

4. **Non-historic existing windows do not require "upgrading**." Sometimes the original windows were replaced prior to the formation of the historic district, and now must be replaced again. Although it is highly encouraged, there is no requirement to "upgrade" a non-historic window to a historically appropriate wood window. For example, a vinyl replacement window may be an acceptable replacement for a nonhistoric aluminum horizontal slider window, especially if the historic configuration (vertically operated sash) is restored.

5. **New Window Openings/Changing Window Openings**

- Enlargement or changes to the configurations of existing window openings is to be avoided on the primary elevation(s) of a historic building within the district. In specific cases, such as an egress requirement, this may not be avoidable, but steps should be taken to minimize the visual impact
- Changes to window configurations on secondary (side and rear) elevations in order to accommodate interior remodeling are not discouraged, provided that character defining elements, such as a projecting bay window in the dining room, are not affected. A typical example of this type of change might be to reconfigure a kitchen window on the side of a home to accommodate base cabinets.
- In general, openings on buildings in the historic district are vertically oriented and are aligned along the same height as the headers and transoms of other windows and doors, and may engage the fascia or belly band that runs above the window course. This pattern should be maintained for new windows.
- Window size and orientation is a function of architectural style and construction technique. Scale, placement, symmetry or asymmetry, contribute to and reflect the historic and architectural character of a building.

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6. **Sustainability and thermal retrofitting.**

   a. Window replacement is often the least cost effective way to improve thermal efficiency. Insulation of walls, sealing of gaps and insulation of switch plates, lights, and windows, as well as upgrades to the heating system all have a higher return on investment and are consistent with preservation of the character of a historic home.

   b. Properly maintained and weather stripped historic windows generally will improve comfort by reducing drafts.

   c. The energy invested in the manufacture of a new window and the cost of its purchase and installation may not be offset by the gains in thermal efficiency for 40 to 80 years, whereas unnecessary removal and disposal of a 100 year old window wastes old growth fir and contributes to the waste stream.

   d. If thermal retrofitting is proposed as a rationale for window replacement, the owner should also furnish information that shows:

      - The above systematic steps have been taken to improve the performance of the whole house.
      - That the original windows, properly weather stripped and with a storm window added, is not a feasible solution to improve thermal efficiency.
      - Minimal retrofit, such as replacing only the sash or glass with thermal paned glass, is not possible.
      - Steps to be taken to salvage the historic windows either on site or to an appropriate architectural salvage company.

Above: Storm windows, held in place with a simple metal clip (still available at some hardware stores), maintenance of glazing compound and weatherstripping were the traditional way of improving thermal performance of windows. This is still a cost effective method in the Pacific Northwest climate.

DOORS

Historic entry doors commonly include sidelights, and occasionally a transom. They tend to be paneled and/or contain glazed openings in the upper portion. Doors were constructed of wood, with stile and rail construction, or in some cases, solid wood clad with a wood veneer. The style of a door often reflects the architectural style and/or construction period of the home.

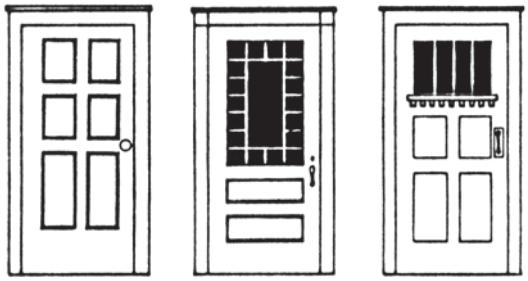
Guidelines for Doors

1. **Avoid enlarging or moving an original entry opening**, unless you can provide documentary evidence to demonstrate that the proposal is consistent with typical designs for houses of the time period, or that the change will restore a previously altered condition.

2. **Retain historic entry doors whenever feasible**. Replacement doors should, where possible, match the original door in design and other details, and materials. In many cases, for security or cost reasons, a non-custom door in alternative materials may be proposed; in these cases, the door should appear to be wood (painted fiberglass doors molded with panel indents may be acceptable; faux wood finishes tend to be inappropriate) and should be compatible with the architecture of the house (Craftsman doors should not be proposed for Victorian era houses, for example).

3. **Avoid faux treatments**. Faux wood textures, frosted glass, and gold or silver caming (lead work in stained glass) is not appropriate for use in the historic district.

4. **Avoid nonhistoric configurations**. Double entry doors were not common in the historic district, and are discouraged unless it can be demonstrated that this was an original feature to the building.



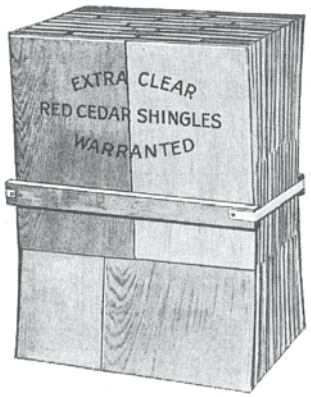
HISTORIC SIDING AND EXTERIORS

Traditional materials used for exterior cladding in the district include horizontal wood siding (including various types and dimensions of drop siding and bevel siding), wood shingles and shakes, and, to a lesser extent, brick, stucco and half timbering, and stone.

Guidelines for Exterior Siding and Materials

1. **Avoid removal of large amounts of original siding**.

2. **Repair small areas of failure before replacing all siding**. It is rarely advisable to replace all of the existing siding on a home, both for conservation reasons and for cost reasons. Where there are areas of siding failure, it is most appropriate to spot repair as needed with small amounts of matching material. Where extensive damage, including rot or other failure, has occurred, siding should be replaced with as close a material and **visual match** as is feasible, including matching reveals, widths, configuration, patterns and detailing.



3. **Other materials/configurations**. It is not historically appropriate to replace deteriorated siding with substitute materials, unless it can be demonstrated that:

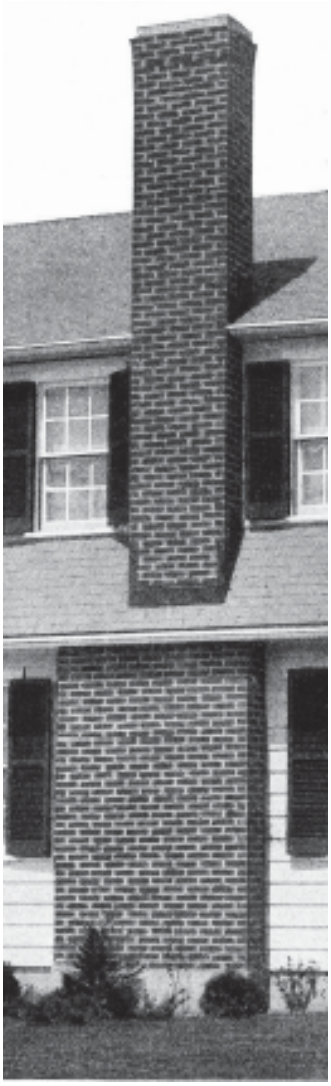
   - the replacement material is a close visual match to the historic material and can be installed in a manner in which the historically character defining details may be reproduced (mitered corners, dentil molding, etc); and
   - replacement of the existing historic material is necessary, or the original material is no longer present; and
   - there is no feasible alternative to using a substitute material due to cost or availability.

4. **Avoid changing the appearance, pattern or configuration of original siding**. The siding type, configuration, reveal, and shingle pattern all are important elements of a home's historic character.

(HISTORIC SIDING AND EXTERIORS *continued from previous page*)

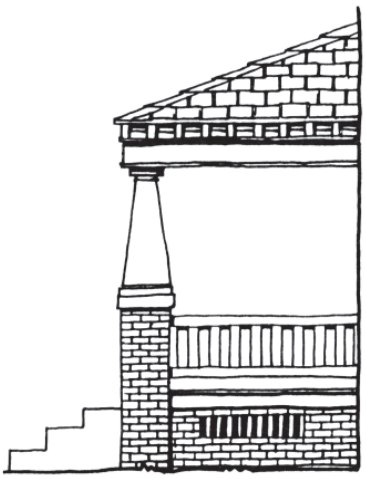
5. **Maintenance of historic masonry.** The mortar in historic masonry should be maintained in good repair to prevent mortar failure. Tuck pointing, or replacement and repair of mortar, does not require approval by the Landmarks Preservation Commission. However, the following is recommended to maintain historic masonry:

   - Match new mortar with old in color, consistency and hardness. Modern mortars are much harder than historic mortars, which contained a higher proportion of lime and less cement. If a mortar is too hard, it may result in damage to bricks (such as spalling).
   - Avoid saw cutting to remove old mortar (or do so very carefully, to avoid damage to bricks).
   - Repair mortar before bricks can be shifted by hand.
   - Do not paint historic unpainted bricks. It is extremely difficult to remove paint from bricks, and certain types of paint can trap moisture and cause problems such as frost wedging (when trapped water expands as it freezes).
   - To clean or remove paint from masonry, use gentle means. Sandblasting is never recommended, as it can destroy the hard outer surface of bricks, allowing moisture to penetrate.
   - For more information, see the National Park Service's Preservation Brief #2, Repointing Mortar Joints in Historic Masonry Buildings, available free of charge on the internet.



PORCHES

The front porch of an historic house is an important feature, providing a threshold to the interior as well as a viewing platform onto the street. It is thus a critical character defining element not just for the house, but for the district as well.



Porches are generally raised a foot or more above grade and are composed of decorative and functional elements that reflect the architectural type and time period of the home. These may include roof shape, entablature, columns, piers, railings, decking, and steps.

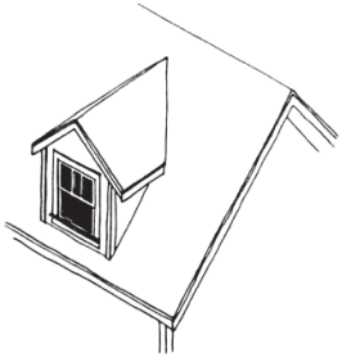
Guidelines for Porches

1. **Retain existing porches and porch details**. The original design elements of existing historic porches, when present, should be maintained. Major changes to configuration or ornamentation should be avoided. Missing or deteriorated details, such as columns and railings, should be repaired or replaced in kind.
2. **Avoid adding architecturally inappropriate details**. Items such as porch columns reflect the architecture of the home. Tapered columns atop piers are emblematic of Craftsman homes, but are not appropriate on Victorian era houses. Likewise, scrollwork, turned posts, or gingerbread are not appropriate on a Craftsman home. Replacement elements that have no historic design relationship with the architecture diminish the historic character of the building.
3. **Replace missing porches with designs and details that reflect the original design, if known. Avoid adding conjectural elements**. Photographic or other documentary evidence should guide the design of replacement porches. Where this is unavailable, a new design should be based on existing original porches from houses of similar type and age.
4. **In certain cases, building code may trump preservation guidelines**. For example, historic railing height may be considered a life safety issue, and new railings are generally required to meet building code. In these cases, innovative approaches may be needed to retain the appropriate scale and appearance.

ROOFS AND ROOF SHAPES

The roof form is fundamental to the overall form and historic character of a home. A roof may be described in terms of its plan and configuration, pitch, elements such as dormers or parapets, and material. Most historic roofs in the district were pitched (including gabled and hipped) and designed to be clad in wood shingles.

Guidelines for Roofs



1. **Preserve and retain existing roof form and appearance**. Major changes to the overall roof plan/type are discouraged. For example, changing a hipped roof to a gabled roof is generally inappropriate.
2. **Rooftop Additions should be sensitively located**. Additions that affect roof appearance may include the addition of elements such as dormers, skylights and chimneys. Additions are not discouraged, but should seek to minimize the visual impact to the overall roof form, as follows:
    - Changes to the roof form should be located to the rear and less visible sides of a home.
    - In certain cases, it may not be possible to conceal new elements such as additional dormers from view. In such cases, using examples of historic additions (location, scale, design, materials) to guide new design is appropriate.
    - Roof mounted solar equipment should be located in a manner that reduces its visual impact to the extent practicable. Solar installations should not obscure character-defining architectural features, and installations on the primary facade are discouraged. To be appropriate for the historic district, solar installations should balance performance with architectural compatibility.
3. **Existing roof heights should be maintained**. Changes to the primary ridgeline height of a house are generally discouraged, such as "bump ups," with the exception that: in certain cases it may be demonstrated that an overall ridgeline height increase will dramatically increase useful attic space in a house WITHOUT significantly changing the appearance of the home from the street (rare).

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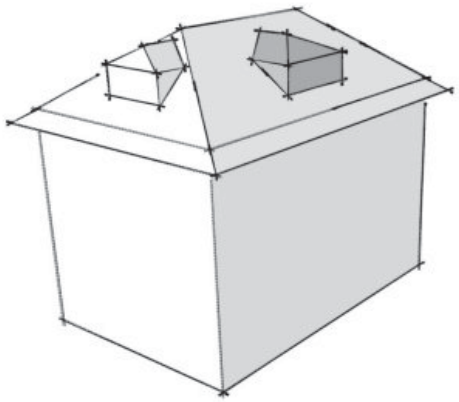
(ROOFS *continued from previous page*)

3. **Materials and colors**. Composition roofs are an acceptable substitute for shingles, and have been in use on homes since the early 20th century. Composite and engineered materials that mimic the visual qualities of shingles vary widely in quality and appearance. If an engineered material is proposed that is not common in the district, material samples and product specification sheets should be furnished to the Commission. Metal roofs are not acceptable for historic homes. Clay tile roofs are appropriate only on the few examples of Mission or Spanish influenced architecture seen in the districts.



Above: Example of a rooftop addition that is visible and in scale.

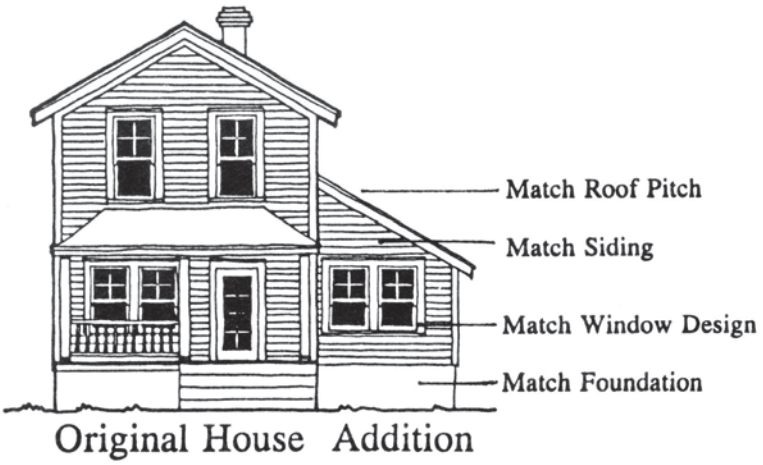
** Please note that a residential roof installation involving a single layer composition roof and sheathing may not require a building permit, and therefore, does not require design review. Other roof types may require permits and Landmarks Preservation Commission review. Homeowners and contractors should contact Plannig and Development Services at 253-591-5030 for more information.*

ADDITIONS

Additions to existing homes in the historic districts are not discouraged. Historically, additions to homes were common, either as optional add-ons to stock plans, or later phases that followed a typical pattern.

Guidelines for Additions

1. **Architectural style should be compatible** with the era and style of the principal structure, including massing, window patterning, scale of individual elements, cladding, roof form, and exterior materials.
2. **Additions should be removable** in the future without harming the character defining elements on the principal structure.
3. **Additions should be sensitively located** in a manner that minimizes visibility from primary rights of way. Where this is not possible, the design should respect the style, scale, massing, rhythm, and materials or the original building.
4. **An addition should be subservient** in size, scale and location to the principal structure.
5. **Seamless additions are discouraged**. There should be a clear visual break between the old structure and the new, such as a reduced size or footprint or a break in the wall plane, to avoid creating a falsely historic appearance (such that the original, historic portion of the house can be distinguished from the new, nonhistoric addition).

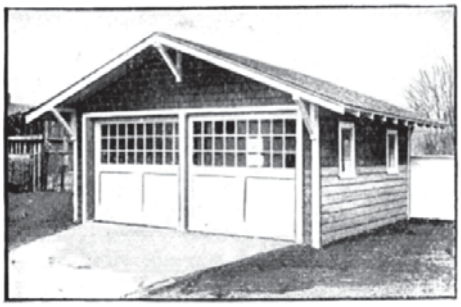


ACCESSORY STRUCTURES, GARAGES AND PARKING

Some early houses provided space for storing various means of transportation, from carriages to automobiles; however, these structures were traditionally separate from the main building and were nearly always entered from the alley rather than from the street.

Guidelines for Parking and Garages

1. **Alley accessed parking is the typical and predominant residential parking configuration in the district**. Residential driveways and garages facing the street are typically only appropriate when there is no alley access, or other site constraints prevent alley accessed parking (such as a corner lot).



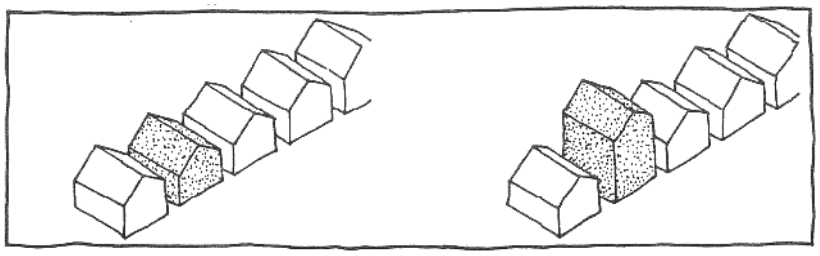
2. **Minimize views of parking, accessory structures and garages from the public right-of-way**. Parking areas and garages should be set toward the rear of the lot to minimize visibility from primary rights of way. Parking lots and banks of garage doors along the front facade of a building do not conform to the character of the neighborhood. Where it is not possible to locate a parking structure to conceal it from view, it should be set well back from the front plane of the primary structure on the property. New accessory structures should be clearly subservient to the primary structure on the lot. Off-street parking lots have no historic precedent in the residential areas of the neighborhoods and should be located behind the building and away from the street.
3. **Attached garages and carports are inappropriate.**
4. **New curb cuts are discouraged**. Residential driveways requiring curb cuts from a street or arterial are generally prohibited, unless the applicant can dem-onstrate by clear and convincing evidence that because of special circumstances not applicable to other property or facilities, including size, shape, design, topography, location, or surroundings, the strict application of this standard prevents alley-accessed parking. If approved, such curb cuts and approaches shall be consistent with the standards approved for the historic districts and on file in the Public Works Department.
5. **New accessory structures and garages should utilize a similar material palette and configuration to historic structures or to the primary structure on the lot.** New accessory structures should meet the guidelines for new construction exterior materials, windows and roof form and shape. Garages and accessory structures should orient vehicle doors to the alley when possible and maintain a simple roof plan.
6. **Conversion of accessory structures**. Accessory structures that are converted to residential use should retain the exterior visual characteristics of the accessory structure, including door and window configuration, cladding materials, and form. Added features, such as porches, exterior staircases, and new window or door openings, should be located to be minimally visible from public rights of way.

SECTION IV: GUIDELINES FOR NEW CONSTRUCTION

HEIGHT

Goal: Balance the overall height of new construction with that of nearby structures.

Guideline: New buildings should be comparable in height to adjacent structures. Buildings that are substantially taller or shorter than the adjacent historic buildings should be avoided.



Above: Example shows compatible height on the left, and incompatible height on the right.

SCALE

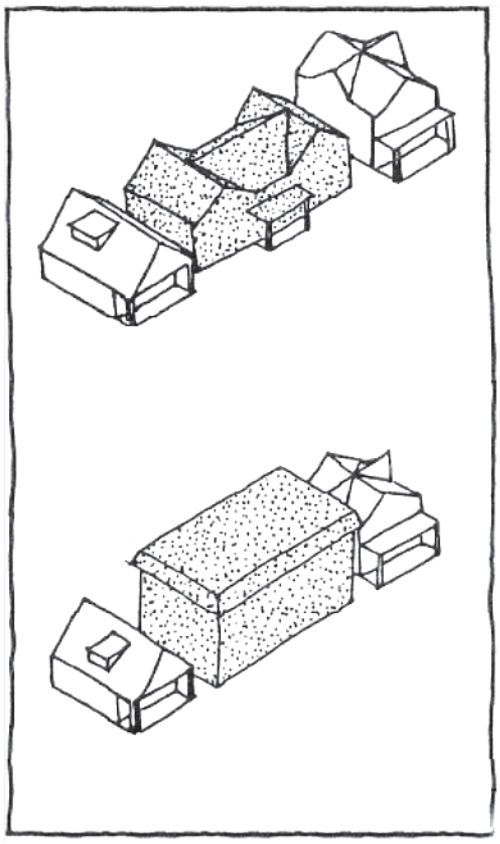
Goal: Relate the size and proportions of new buildings and their architectural elements to those of the neighborhood.

Guideline: Building facades should be of a scale compatible with surrounding buildings and maintain a comparable setback from the property line to adjacent buildings, as permitted by applicable zoning regulations.

MASSING

Goal: Break up the facades of buildings into smaller varied masses comparable to those contributing buildings in the residential historic districts.

Guideline: Variety of forms is a distinguishing characteristic of the North Slope and Wedge residential communities. Smaller massing–the arrangement of facade details, such as projections and recesses–and porches all help to articulate the exterior of the structure and help the structure fit into the neighborhood. Avoid large, blank planar surfaces.



Right: The top example shows compatible massing and scale, with individual elements that are proportionate with the architectural elements of the neighborhood. The bottom example is incompatible, with its large monolithic form, horizontal orientation, and large unbroken planar surfaces.

SENSE OF ENTRY

Goal: Emphasize entrances to structures.

Guideline: Entrances should be located on the front facade of the building and highlighted with architectural details, such as raised platforms, porches, or porticos to draw attention to the entry. Entrances not located on the front facade should be easily recognizable from the street.

Above: Many people seek residential historic districts when house shopping, because most were true "front porch" communities. Large, welcoming porches are an important element not just of the homes in the North Slope and Wedge, but also of the district itself.

ROOF SHAPES AND MATERIALS

Goal: Utilize traditional roof shapes, pitches, and compatible finish materials on all new structures, porches, additions, and detached outbuildings wherever such elements are visible from the street. Maintain the present roof pitches of existing contributing buildings where such elements are visible from the street.

Guideline:

1. Shape and Pitch: Typically, the existing historic buildings in the districts either have gable roofs with the slopes of the roofs between 5:12 to 12:12 or more and with the pitch oriented either parallel to or perpendicular to the public right-of-way or have hipped roofs with roof slopes somewhat lower.
2. Architectural Elements: Most roofs also have architectural details, such as cross gables, dormers, and/or "widow's walks" to break up the large sloped planes of the roof. Wide roof overhangs, decorative eaves or brackets, and cornices can be creatively used to enhance the appearance of the roof.
3. Materials: Roofs that are shingle or appear to be shingle, or composition roofs, are the typical historic material compatible with the district. Seam metal may be an acceptable material for simple roof structures. Slate, faux slate and terra cotta tiles are not appropriate for the districts.

EXTERIOR MATERIALS

Goals: Use compatible materials that respect the visual appearance of the surrounding buildings. Buildings in the North Slope and Wedge Neighborhoods were sided with shingles or with lapped, horizontal wood siding of various widths. Subsequently, a few compatible brick or stucco-covered structures were constructed, although many later uses of these two materials do not fit the character of the neighborhood.

Guideline:

1. New structures should utilize exterior materials similar in type, pattern, configuration and appearance to those typically found in the neighborhood.
2. Stucco, especially commercial EIFS systems like Dryvit, is not acceptable for the historic district.
3. Faux materials, such as vinyl or metal siding, are not acceptable for the historic district.
4. Certain siding patterns, including board and batten and panel, are not historically common in the district and should not be used.
5. Cementitious products, such as Hardiplank, may be acceptable in the district if installed in a historically correct pattern (for example, horizontal lapped siding or shingle). In such cases, the product used shall be smooth in texture (faux wood grain finish is NOT acceptable).
6. Engineered products for trim and molding, if demonstrated to be similar in appearance to painted wood, may be an environmentally responsible substitute for wood on new structures. In such cases, the applicant should demonstrate to the Commission, via product literature and material samples, that the product is compatible.

WINDOWS AND RHYTHM OF OPENINGS

Goals: Respect the patterns and orientations of door and window openings, as represented in the neighboring buildings. Window and door proportions (including the design of sash and frames), floor heights, floor shapes, roof shapes and pitches, and other elements of the building exterior should relate to the scale of the neighborhood.

Guideline:

1. Placement. Typically, older buildings have doors and transoms that matched the head height of the adjacent windows. New structures should utilize this pattern.
2. Doors. Doors should be or appear to be paneled and/or contain glazed openings.
3. Window configuration and detail. New structures should utilize existing historic window patterns in their design. Windows should be vertically oriented. Large horizontal expanses of glass may be created by ganging two or more windows into a series. Historically, the typical window in the district was a double hung sash window. Casement windows were commonly used for closets, nooks, and less commonly, as a principal window type in a structure. Many double hung sash windows had the upper sash articulated into smaller panels, either with muntin bars, leaded glazing, or arches. Muntins and grids should be true or simulated divided light. Grids sandwiched between thermal panes are not acceptable. Commonly, windows were also surrounded with substantial trim pieces or window head trim, and new window trim should utilize historic detail patterns. These may include crown molding, except where headers are engaged with a belly band or cornice, substantial projecting sills with aprons, and windows that are recessed or "punched in" so that the window sash and frame does not project beyond the wall plane. Design submittals for new structures shall include window trim details.

4. Window materials. Historically, windows were generally wood. New construction should use windows that are wood, or that mimic the appearance of wood (including clad or composite materials). Vinyl windows are generally not acceptable for new primary or detached accessory dwelling unit structures in the historic district.

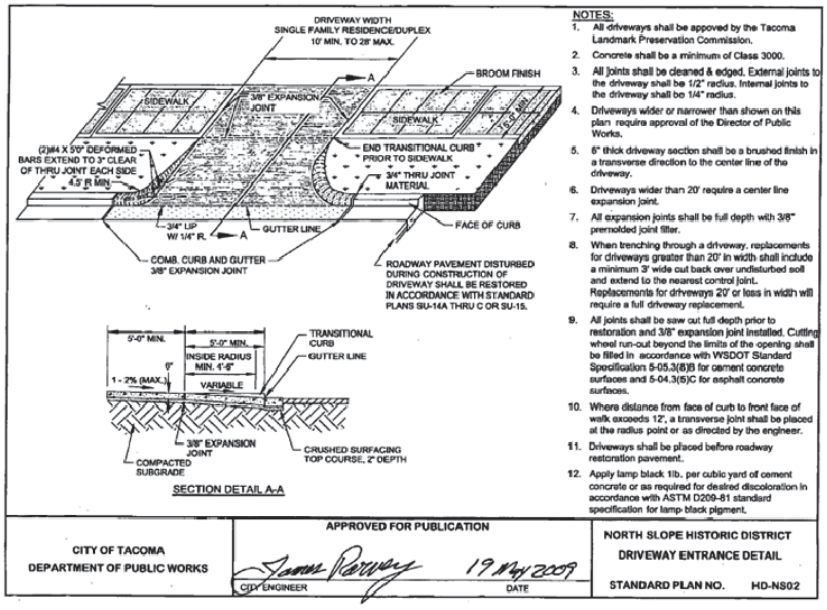
PARKING

Please see the "Guidelines for the Alteration of Existing Buildings, Parking," on page 19.

SECTION V: STREET IMPROVEMENT STANDARDS FOR THE NORTH SLOPE AND WEDGE HISTORIC DISTRICTS

The architectural character of the North Slope and Wedge Neighborhood Historic Districts is significantly enhanced by the complementary residential nature of existing street amenities, including brick and cobblestone street paving, historic streetlights, planting strips, sidewalks, historic scoring patterns in walks and driveways, healthy trees, and a restrained use of signage. These elements should be retained or enhanced. Installation, repair, or replacement of streetlights, curbs, alley approaches, sidewalks, and street surfaces shall be consistent with the standards approved for the historic districts and kept on file with the Public Works Department.

1. Driveways: refer to Standard Plan HD-NS02 *Driveway Entrance Detail*
2. Sidewalk replacement: refer to Standard Plan HD-NS03 *Cement Concrete Sidewalk*
3. Alley Entrance: refer to Standard Plan HD-NS04 *Alley Entrance*
4. Streetlight Replacement: refer to Standard Plan HD-NS05 *Streetlight*



Left: Example of a Public Works Standard Plan.

SECTION VI: GUIDELINES FOR COMMERCIAL CONSTRUCTION WITHIN THE WEDGE CONSERVATION DISTRICT

Goal: Minimize visual impacts to the core district from commercial development that occurs on the periphery of the neighborhood. There are several areas within the Wedge Conservation District boundaries where commercial buildings will be constructed. Such construction projects should seek to minimize encroachment and visual impact by:

1. **Site planning**. Design new construction in such a manner that the primary massing of new buildings is directed away from the edges of the Wedge Neighborhood Historic District, particularly where the height of the new construction will be substantially higher than the historic apartment buildings also on the edges of the residential area. Locate entrances and exits in such a manner to minimize impacts from vehicular activities on the Wedge Historic District. Maintain and improve historically compatible streetscape and pedestrian amenities. Design buffers and setbacks for new buildings to maintain integrity of siting and availability of light and air. Locate parking to the rear or alley sides of new construction and avoid new curb cuts where alley access is available.
2. **Materials.** Utilize an exterior materials palette that reflects the typical and traditional building materials of the region, including wood and stone, and utilize other durable materials on new buildings. Avoid faux treatments or overtly synthetic materials.
3. **Scale and Massing.** Individual elements on elevations and building units should be designed to break up large planar surfaces and avoid large, monolithic massing. Vertically oriented new construction, consistent with historic modulation of individual façades and façade elements, as opposed to low single-story commercial construction, is preferred.

SECTION VII: EXEMPTIONS

WEDGE NEIGHBORHOOD

The following actions are exempt from the requirements for Design Review:

1. Any alterations to noncontributing properties within the Wedge Historic Special Review Districts, as defined by the District Inventory adopted by the Commission and kept on file at the Historic Preservation Office and any alterations to properties within the designated Conservation District, are exempt from the design review requirements; provided, that alterations to accessory structures within the Historic District and the demolition of any structures in the Historic District and Conservation District, including noncontributing and accessory structures or the construction of new buildings, are not exempt from the provisions of this chapter;
2. Historically nonresidential and commercial use structures; provided, that the demolition of noncontributing or accessory structures are not exempt from the provisions of this chapter;
3. Interior modifications to existing structures, unless those modifications affect the exterior appearance of the structure;
4. Changes to the exteriors of contributing structures that are not visible from adjacent public rights-of-way may be granted an administrative Certificate of Approval by the Historic Preservation Officer, provided that staff is able to determine that the proposed project is consistent with the district design guidelines and applicable Secretary of the Interior's Standards, all without prejudice to the right of the owner at any time to apply directly to the Commission for its consideration and action on such matters;
5. Any alterations to private residential structures that are specifically exempted from permit requirements in the Residential Building Code as adopted by the City (such as painting and minor repairs such as caulking or weather-stripping);
6. The installation, alteration, or repair of public and private plumbing, sewer, water, and gas piping systems, where no right-of-way restoration is required;
7. The installation, alteration, or repair of public and private electrical, telephone, and cable television wiring systems; provided that the installation of solar panels, wind generators, and cellular antenna towers is not exempt;
8. The landscaping of private residences;
9. The maintenance of existing parking conditions and configurations, including curb cuts, driveways, alleys, and parking lots (new installations are subject to review by the Commission);
10. Signs not exceeding the limitations for a home occupation permit (TMC 13.06.100.E: one nonilluminated nameplate not exceeding one and one-half square feet in area placed flat against the building) and those installed by the City for directional and locational purposes;
11. The following types of projects within the public rights-of-way: ADA accessibility ramps and installations, in-road work, traffic-signaling equipment, utility markers, and equipment required by the United States Postal Service.

NORTH SLOPE HISTORIC DISTRICT

The following actions are exempt from the requirements for design review:

1. Any alterations to non-contributing properties as defined by the District Inventory adopted by the Commission and kept on file at the Historic Preservation Office; provided, that modifications to accessory structures and the demolition of noncontributing or accessory structures are not exempt from the provisions of this chapter;
2. Interior modifications to existing structures, unless those modifications affect the exterior appearance of the structure;
3. Any alterations to private residential structures that are specifically exempted from permit requirements in the Residential Building Code as adopted by the City (such as painting and minor repairs such as caulking or weather-stripping);
4. The installation, alteration, or repair of public and private plumbing, sewer, water, and gas piping systems, where no Right of Way restoration is required;
5. The installation, alteration, or repair of public and private electrical, telephone, and cable television wiring systems, provided that the installation of solar panels, wind generators, and cellular antenna towers is not exempt;
6. The landscaping of private residences;
7. The maintenance of existing parking conditions and configurations, including curb cuts, driveways, alleys, and parking lots (new installations are subject to review by the Commission);
8. Signs not exceeding the limitations for a home occupation permit (TMC 13.06.100.E: one non-illuminated nameplate not exceeding one and one-half square feet in area placed flat against the building) and those installed by the City for directional and locational purposes;
9. The following types of projects within the public rights of way: ADA accessibility ramps and installations, in-road work, traffic signaling equipment, utility markers, and equipment required by the United States Postal Service.