

TUALATIN ARCHITECTURAL REVIEW BOARD MEETING

WEDNESDAY, JANUARY 22, 2020, 6:30 PM

POLICE TRAINING ROOM 8650 SW TUALATIN RD TUALATIN, OR 97062

CALL TO ORDER & ROLL CALL

Nancy Grimes (Chair), Skip Stanaway, Nichole George, Patrick Gaynor, Chris Goodell, Carol Bellows, and Lisa Quichocho.

ANNOUNCEMENTS & COMMUNICATION

APPROVAL OF MINUTES

1. Approval of ARB Minutes from meeting on November 20, 2019.

ACTION ITEMS

1. Consideration of an Architectural Review application (AR 19-0008) for two industrial buildings (129,975 square feet and 187,150 square feet) on 16.5 acres at 11040 SW Tualatin-Sherwood Road (2S122D Tax lots 600 and 700, and 2S127AA Tax lot 500).

COMMUNICATION FROM CITY STAFF

ADJOURNMENT



City of Tualatin

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UNOFFICIAL

Architectural Review Board

MINUTES OF November 20, 2019

ARB MEMBERS PRESENT:	STAFF PRESENT
Commissioner Chris Goodell	Steve Koper
Commissioner Skip Stanaway	Erin Engman
Commissioner Nichole George	Lynette Sanford
Commissioner Patrick Gaynor	
Commissioner Carol Bellows	
Commissioner Lisa Quichocho	

ARB MEMBERS ABSENT: Chair Nancy Grimes

GUESTS: Campbell Clarey, Tom Clarey, Ken Sandblast

1. CALL TO ORDER AND ROLL CALL:

Commissioner Gaynor, acting Chair, called the meeting to order 6:31 PM and reviewed the agenda. Roll call was taken.

2. <u>APPROVAL OF MINUTES:</u>

Commissioner Gaynor asked for review approval of the ARB minutes dated July 24, 2019. MOTION by Commissioner Stanaway SECONDED by Commissioner Bellows to approve the minutes as written. MOTION PASSED 6-0.

Commissioner Gaynor read the script for quasi-judicial hearings. Commissioner Gaynor asked the board members if they had a conflict of interest, bias, or ex-parte contact with the applicant. Commissioner Bellows stated that a former planner for the City spoke to her about this project but that it will not affect her ability to make an inpartial decision.

3. ACTION ITEMS:

A. Consideration of an Architectural Review application (AR 18-0007) for a 264-unit multifamily development, tentatively named Commons on the Tualatin, located at SW Nyberg Lane (2S124A Tax Lots: 2600 and 2601).

These minutes are not verbatim. The meeting was recorded, and copies of the recording are retained for a period of one year from the date of the meeting and are available upon request.

Erin Engman, Associate Planner, presented the staff report for AR 18-0007, Commons on the Tualatin, which included a presentation. Ms. Engman stated that the application requests approval of a 264-unit multifamily development comprised of: five residential buildings, one recreation building, a swimming pool, 495 (surface and structured) parking stalls, as well as associated hardscaping and landscaping. Ms. Engman noted that the application was submitted prior to the adoption of Ordinance 1444-18, which amended the Tualatin Development Code in 2018. The application was reviewed under the former code.

Ms. Engman noted that the site comprises of just under 11 acres of primarily vacant land, located north of the intersection of Nyberg Road and Nyberg Lane, and is zoned Residential High Density (RH). Ms. Engman added that this site was formerly the RV Park of Portland, which was purchased by the current owner in 2012.

Ms. Engman stated that the buildings will be three stories in height and vehicular access to the site is proposed via a single driveway located off SW Nyberg Lane at the eastern edge of the site. Traffic impacts have been analyzed and final public infrastructure improvements have been decided through a separate but related Public Facilities Decision.

Ms. Engman mentioned that this application was received on October 17, 2018 and was deemed complete after various extensions were granted. Ms. Engman added that there was one public comment submitted, which is included in the application packet.

Ms. Engman stated that Type III Architectural Review approval criteria is limited to Architectural Features (TDC Chapter 73) including:

- Architecture;
- Pedestrian and Bicycle Circulation;
- Parking Lot;
- Landscaping;
- Trash Plan; and
- Lighting.

Ms. Engman stated that this proposal complies with the high-density residential standards including being a permitted use and complying with density, setbacks, and height. Ms. Engman added that the proposal complies with site design objectives for creating areas for recreation, visual and aesthetic interest, and a circulation system of safe and convenient walkways and bikeways.

Ms. Engman stated the application includes an arborist report and tree preservation plan with 135 trees proposed for removal due to the tree being within the development impact area and/or tree in poor health. Ms. Engman added that 150 trees are to be

retained.

Ms. Engman noted that a comment received from an interested party requested an additional accessway north of Building C. Ms. Engman added that this connection is not required per code requirements but in light of the comment, staff recommends a condition to ensure the connection to building A is included in the final construction drawings. Steve Koper, Planning Manager, added that Community Development staff coordinated with the Parks department and asked if whether a connection would be desirable and they responded that it would not. Mr. Koper added that the apartment complex to the east does not have a connection. Ms. Bellows questioned the reason for not having a connection. Mr. Koper responded that it is due to a combination of slope and grade changes and the trail connection to the north satisfies the requirement.

Ms. Engman confirmed that the findings demonstrate that the proposal meets the applicable criteria of the Tualatin Development Code. Therefore, staff respectfully recommends approval of AR 18-0007 as conditioned.

Ken Sandblast, Westlake Consultants, 15115 SW Sequoia Pkwy, #150, Tigard, OR

Campbell Clarey, Nyberg Rd Properties LLC, 1200 SW 66th Ave, #300, Portland, OR

Ms. Clarey represents Nyberg Rd Properties LLC and Tandem Property Management. Ms. Clarey stated that this is a family owned business located in Portland. Ms. Clarey noted that they currently own 2,700 units in the Portland metro area. Ms. Clarey stated that the property was purchased in 2012 and they are excited to get this project started. Ms. Clarey added that all of their sites design standards embody nature, the environment, and extensive landscaping.

Mr. Sandblast stated that they have been working extensively with the Parks department and Clean Water Services. This project would facilitate construction of a key linkage is the greenway trail, which is highly anticipated by the public. Mr. Sandblast noted that they have also been working with the City Engineering division regarding transportation, access, and public facilities. Mr. Sandblast added that they are going to conduct frontage improvements along Nyberg Lane including a 12-foot multi-use path. The existing path will run adjacent to the Nyberg Lane right-of-way and provide a connection to 65th and Nyberg.

Mr. Sandblast stated that the Stonesthrow Apartments on the right and Forest Rim to the left do not satisfy current standards that require a secondary emergency access. This project will add a secondary emergency access to the Forest Rim apartments through the subject site, at the northwest corner. Mr. Sandblast added that the project will include under-building parking.

Commissioner Bellows inquired about the designated play area. Ms. Clarey responded

that there will be a center courtyard play area designed for safety and interactive for all ages. There will also be a sand area and a life size chess set. On the west side there will be corn hole games, a bocci ball court, and grassy areas. Another active space includes rolling mounds with logs and a meandering path with many trees.

Commissioner Bellows inquired about the greenway trail connection on the north end. Mr. Sandblast responded that there will be an external connection on the south side and an internal connection from the site.

Commissioner Stanaway inquired about the specifics of the site design objectives. Ms. Clarey responded that a lot of thought went into it. The building design includes a wood composite material with beautiful stone in natural colors along with accent colors of blue and white. Ms. Clarey added that all of the floor plans will include balconies and that they are exceeding the tree and landscape requirement.

Commissioner Stanaway inquired about the horizontal planes and roof elevations. Ms. Clarey responded that the materials will be changed throughout the roof line which includes horizontal and vertical breaks.

Tom Clarey, Tandem Property Management, 1200 SW 66th Ave, #300, Portland, OR

Tom Clarey, owner of Tandem Property Management, stated that the images may portray a flat roof but in reality the undulation will be include three variations throughout the project.

Commissioner Stanaway inquired about gathering spaces for residents. Ms. Clarey responded that they achieved this by adding planters with benches by the main leasing offices. Ms. Clarey added that inside the leasing offices, there will be mini working spaces, couches, and a bistro space. There will also be a clubhouse with a commercial kitchen and big screen TV that can be rented out to residents. Ms. Campbell noted that there will also be a barbecue area overlooking the river and trail.

Commissioner Stanaway inquired about the long interior corridor. Ms. Clarey responded that there will be lights illuminating the corridor and faux wood accents to break it up.

Commissioner Stanaway inquired about how the architecture will blend with the neighboring complexes. Ms. Clarey responded that this project will have a modern architectural approach – the neighboring projects were built in the 80's and 90's. Ms. Clarey noted that this project will reflect contemporary building design in Tualatin and mix well with the Nyberg Woods and Nyberg Rivers shopping areas. Mr. Sandblast noted that the grade changes will also minimize the height of the project and it will blend in.

Commission Stanaway noted that the older apartment complexes have more of a single family residential style and that this project has more of an urban design style. Mr.

Sandblast replied that density has changed and this project reflects that. Ms. Clarey noted that there is a lack of housing in Tualatin and this complex will include a mix of options as well as three bedroom units.

Commissioner Stanaway inquired about the trash enclosure. Ms. Clarey responded that there will be one centralized location with the least amount of visual hardship, and will be fully enclosed with a roof and surrounding landscaping.

Commissioner Stanaway inquired about the light design in the complex. Ms. Clarey responded that there will be a recessed light on each individual balcony. There will also be pedestrian lights on the paths without overhead glare. Commissioner Stanaway asked if the lights will be LED. Ms. Clarey answered affirmatively.

Commissioner Bellows asked if there is a dark sky ordinance in Tualatin. Mr. Koper responded that there is not. Commissioner Bellows inquired about the logistics of a school bus stop. Ms. Clarey responded that they will be working with the school district. Mr. Koper added that the school district has been notified of this development and did not provide comment. Commissioner Bellows inquired about the parking requirement. Ms. Clarey responded that the minimum requirement is 275 stalls and they are planning 495 in this development.

Commissioner Stanaway asked if they are replacing the sidewalk on the south side of the development. Mr. Sandblast responded that they are planning a landscape strip and 12-foot multi use path.

Commissioner George asked if the slope towards the trail will discourage people to use it. Mr. Sandblast replied there will be a 5 percent slope from the parking lot and community building with a defined path to the trail. The trail will be 12-feet wide and have a two-foot gravel shoulder. They have worked extensively with the City and other agencies regarding the buffer, ground cover, and setback standards. Commissioner George inquired about lighting on the trail. Mr. Sandblast responded that it is a public trail and they will be working with the City regarding their standards.

Commissioner George inquired about the color scheme and landscaping near the trail. Ms. Clarey responded that there will be a landscape buffer and color scheme to blend in with the trail.

Commissioner George asked if Building F is in the high water area. Mr. Sandblast responded that it was not and that they have worked with Clean Water Services regarding their requirements regarding the flood plain.

Commissioner Gaynor inquired about the vegetative corridor area and what will the 250 trees about 1,200 shrubs look like in that area. Commissioner Gaynor mentioned that he was on the Parks committee that designed the trail and they spent a lot of time

discussing a consistent landscape theme that will last for decades. Ms. Clarey inquired about the existing landscape design of the trail. Commissioner Gaynor responded that they wanted to preserve every tree possible. Mr. Sandblast added that he noticed there are different landscape scenarios throughout the trail and they are committed to working with the Parks department regarding the landscaping criteria. Mr. Clarey noted that they eager to enhance the trail but will not have any say in the plants and trees used. Mr. Clarey added that his company has always spent a lot on landscaping and is committed to building a great project where people will want to stay. Mr. Koper mentioned that the applicant is building the trail on behalf of the Parks department and the Parks department has final say. Mr. Koper added that he will pass on their concerns.

Commissioner Gaynor inquired to how tall the trash enclosure will be. Mr. Clarey responded that it will be 12-14 feet high. Commissioner Gaynor suggested that the applicant consider a green wall with vines for camouflage. Commissioner Gaynor also had suggested tree recommendations, which he provided to the applicant.

MOTION by Commissioner Goodell, SECONDED by Commissioner Bellows to approve AR 18-0007 as conditioned. MOTION PASSED 6-0.

4. COMMUNICATION FROM CITY STAFF

None

5. ADJOURNMENT

MOTION by Commissioner Stanaway SECONDED by Bellows to adjourn the meeting at 8:20 pm.

Office Coordinator



TO:	Architectural Review Board
THROUGH:	Steve Koper, AICP, Planning Manager
FROM:	Tabitha Boschetti, AICP, Assistant Planner
DATE:	January 22, 2020

SUBJECT:

Consideration of an Architectural Review application (AR 19-0008) for two industrial buildings (129,975 square feet and 187,150 square feet) on 16.5 acres at 11040 SW Tualatin-Sherwood Road (2S122D Tax lots 600 and 700, and 2S127AA Tax lot 500).

RECOMMENDATION:

Based on the application materials and findings demonstrating compliance with the applicable review criteria, staff respectfully recommends approval of the subject Architectural Review application (AR 19-0008), subject to the recommended conditions of approval in the attached Analysis and Findings.

EXECUTIVE SUMMARY:

- The subject proposal is an Architectural Review application (AR 19-0008), a Type III land use case subject to a quasi-judicial hearing before the Architectural Review Board.
- The subject site comprises approximately 16.5 acres of primarily vacant land, located northeast of the intersection of SW Tualatin-Sherwood Road and SW 112th Ave., and at the eastern terminating cul-de-sac of SW Myslony St. The land has been used for agricultural purposes and a single-family home with accessory structures, which would be demolished to accommodate the proposed development.
- The applicant requests approval of two new industrial buildings; one 129,975 square feet and one 187,150 to be used for speculative warehouse and manufacturing uses. 274 parking spaces are proposed.
- Vehicular access to the site is proposed via SW Myslony Street, with additional emergency-only access from the north side of SW Tualatin-Sherwood Road.
- An easement is proposed for the Ice Age Tonquin Trail at the north extent of the property, connecting to SW Myslony Street.
- Traffic impacts have been analyzed and final public infrastructure improvements are being decided through a separate but related Public Facilities Decision.

OUTCOMES OF DECISION:

Approval of AR 19-0008 will facilitate construction of the proposed development.

ALTERNATIVES TO RECOMMENDATION:

The Architectural Review Board may alternatively:

- Approve AR 19-0008 with amended conditions of approval and direct staff to provide updated Analysis and Findings;
- Continue the hearing to a later date for further consideration; or
- Deny AR 19-0008.

ATTACHMENTS:

- Analysis and Findings
- Exhibit A1 Applicant's Narrative
- Exhibit A2 Elevations and Plan Set
- Exhibit A3 Arborist Report
- Exhibit A4 CWS Service Provider Letter and Site Assessment Report
- Exhibit A5 Waste Hauler Letter
- Exhibit A6 Supporting Documents
- Exhibit B Tualatin Valley Fire & Rescue Memorandum
- Exhibit C Parks and Recreation Comments
- Exhibit D Washington County Comments
- Exhibit E Clean Water Services Comments



Analysis and Findings for Tualatin Industrial Park (AR 19-0008) January 22, 2020

Case #:	AR 19-0008
Project:	Tualatin Industrial Park
Location:	11040 SW Tualatin-Sherwood Rd, Tualatin, OR. Tax Lots: 2S122D000600,
	2S127AA00500, 2S122DD00700
Applicant:	T. Chavez, Phelan Development
Owner:	Myslony Development, LLC

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Arrangements can be made to provide these materials in alternative formats such as large type or audio recording. Please contact the Planning Division at 503.691.3026 and allow as much lead time as possible.

I. INTRODUCTION

A. Applicable Criteria

The following Chapters of the Tualatin Development Code (TDC) are applicable to the subject proposal:

- TDC 33.020: Architectural Review
- TDC 33.110: Tree Removal Permit/Review
- TDC 61: General Manufacturing Zone (MG)
- TDC 71: Wetlands Protection District (WPD)
- TDC 73A: Site Design Standards
- TDC 73B: Landscaping Standards
- TDC 73C: Parking Standards
- TDC 73D: Waste and Recyclables Management Standards

Additional code sections are considered in the separate, but related, City Engineer's Decision.

Based on the Analysis and Findings presented, staff recommends approval of AR 19-0008 with conditions.

B. Site Description

The subject site is a 717,020 square-foot (16.5 acre) property located at 11045 SW Tualatin-Sherwood Road (Washington County Tax Assessor Map 2S122D000600, 2S127AA00500, 2S122DD00700), and is zoned General Manufacturing (MG).

The site has most recently been used for agriculture, with an existing house and accessory structures on the east side of the site near SW Tualatin-Sherwood Road, which would be demolished to accommodate the proposed development. The land predominantly features open fields; existing mature trees are clustered near the existing house and also edge several neighboring property lines. The north end of the property folds around the eastern cul-de-sac of SW Myslony Street, forming the primary access available to the site. The land is relatively flat, with a gradual downslope; the land reaches a high point of 166 feet in elevation at the south end near SW Tualatin-Sherwood Road, and a low point near the Myslony cul-de-sac at 146 feet. A site assessment conducted by Pacific Habitat Services (Exhibit A5) found no wetlands or waters on the site.

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Figure 1: Aerial view of subject site (highlighted)

C. Proposed Project

As described in the applicant's narrative (Exhibit A1, Page 2), Phelan Development proposes to construct two industrial building shells intended for a mix of warehouse and manufacturing uses to be determined by future tenant(s). A separate Property Line Adjustment (PLA 19-0009) will create two lots: Lot A to the north at SW Myslony Street, and Lot B to the south along SW Tualatin-Sherwood Road. Building A on Lot A would be approximately 129,975 square feet, and Building B on Lot B would be approximately 187,150 square feet.

As shown on the applicant's architectural elevations (Exhibit A2 Sheets A-4 and A-5), the proposed buildings would stand approximately 40-feet in height. The proposed design is predominantly a concrete tilt-up style in white, anchored by glazed façade areas at either end, accented in two tones of gray. On Building A, oriented toward SW Myslony Street to the west, a central entrance accented in gray with windows is proposed. On the southeast end of Building B facing SW Tualatin-Sherwood Road, a central gray area with a clerestory window is proposed. Each building would have one full elevation dedicated to loading docks; on Building A, the loading area faces east away from the right-of-way, and Building B's loading area faces north, also generally away from the right-of-way.

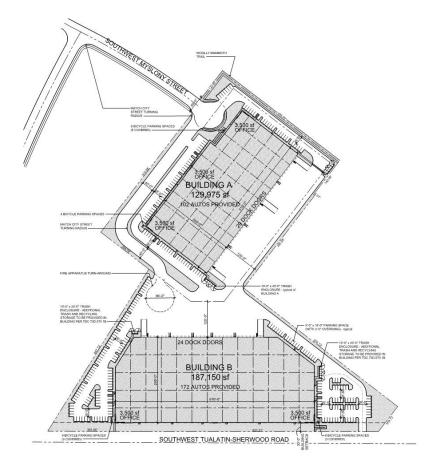
The surrounding vicinity is primarily developed with concrete tilt-up structures of a generally similar height to the proposed structure. There are several examples of similarly sized and massed buildings in the immediate area on both SW Myslony Street and SW Tualatin-Sherwood Road. Many industrial buildings on the Tualatin-Sherwood Road corridor are sited with parking areas closest to the roadway; a greater amount of landscaping and building façade will be visible from this corridor.

The majority of the site that is not dedicated to the buildings themselves, is allocated to vehicle maneuvering and parking. The site plan proposes all vehicle access off of SW Myslony Street due to access restrictions from SW Tualatin-Sherwood Road. The proposed design would include two driveways coming off of the Myslony cul-de-sac. To the south, a drive toward Building B would be separated by a landscaping strip from parking at Building A. The center of the site would provide greater room for

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maneuvering large trucks. An emergency access is proposed at SW Tualatin-Sherwood Road at the southeast corner of the site.

Figure 2: Site Plan (overview)



D. Previous Land Use Actions

• In November of 2006, the northern 170 feet of the property was annexed to the City of Tualatin (ANN 06-0001).

E. Surrounding Uses

Surrounding uses indicate a transitional are primarily light industrial uses. Adjacent land uses include:

North/East: General Manufacturing (MG)

• UPS

North/West: General Manufacturing (MG)

• Undeveloped site with wetlands

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West: <u>General Manufacturing (MG)</u>

- Tualatin Business Park
- Franklin Business Park
- East: <u>General Manufacturing (MG)</u>
 - Western Industrial Ceramics
 - Northwest Door and Supply

South: <u>General Manufacturing (MG)</u>

- A Storage Place
- Arlington Commons (business condos)
- Lakeside Lumber
- Other manufacturing and warehouse uses

F. Exhibit List

- Exhibit A1 Applicant's Narrative
- Exhibit A2 Elevations and Plan Set
- Exhibit A3 Supporting Application Documents
- Exhibit A4 Arborist Report
- Exhibit A5 CWS Service Provider Letter and Site Assessment Report
- Exhibit A6 Waste Hauler Letter

II. PLANNING FINDINGS

These findings reference the Tualatin Development Code (TDC), unless otherwise noted.

Chapter 32: Procedures

Section 32.010 – Purpose and Applicability.

[...]

(2) Applicability of Review Procedures. All land use and development permit applications and decisions, will be made by using the procedures contained in this Chapter. The procedure "type" assigned to each application governs the decision-making process for that permit or application. There are five types of permit/application procedures as described in subsections (a) through (e) below. Table 32-1 lists the City's land use and development applications and corresponding review procedure(s).

[...]

(c) Type III Procedure (Quasi-Judicial Review – Public Hearing). Type III procedure is used when the standards and criteria require discretion, interpretation, or policy or legal judgment. Quasi-Judicial decisions involve discretion but implement established policy. Type III decisions are made by the Planning Commission or Architectural Review Board and require public notice and a public hearing, with an opportunity for appeal to the City Council.

[...]

(3) Determination of Review Type. Unless specified in Table 32-1, the City Manager will determine whether a permit or application is processed as Type I, II, III, IV-A or IV-B based on the descriptions above. Questions regarding the appropriate procedure will be resolved in favor of the review type providing the widest notice and opportunity to participate. An applicant may choose to elevate a Type I or II application to a higher numbered review type, provided the applicant pays the appropriate fee for the selected review type.

Application / Action	Proced ure Type	Decision Body*	Appeal Body*	Pre- Application Conference Required	Neighborhood /Developer Mtg Required	Applicable Code Chapter
Architectural Review	I					I
Industrial Buildings 150,000 square feet and larger		ARB	сс	Yes	Yes	TDC 33.020
[]						33.020
as requested by the CM						
[] * City Council (CC); Planning Commission (PC); Architectural Review Board (ARB); City Manager or designee						

Table 32-1 – Applications Types and Review Procedures

* City Council (CC); Planning Commission (PC); Architectural Review Board (ARB); City Manager or designee (CM); Land Use Board of Appeals (LUBA).

Tualatin Industrial Park – Architectural Review (AR 19-0008) January 22, 2020 Page 7 of 44

Finding:

The proposed project includes over 317,000 square feet of industrial square footage, divided between a 129,975 square-foot building (Building A), and a 187,150 square-foot building (Building B). The project is therefore classified as a Type III Procedure Types according to Table 32-1. The application has been processed according to the applicable code for Type III procedures. This standard is met.

Section 32.030 – Time to Process Applications.

(1) Time Limit - 120-day Rule. The City must take final action on all Type II, Type III, and Type IV-A land use applications, as provided by ORS 227.178, including resolution of all local appeals, within 120 days after the application has been deemed complete under TDC 32.160, unless the applicant provides written request or consent to an extension in compliance with ORS 227.178. (Note: The 120-day rule does not apply to Type IV-B (Legislative Land Use) decisions.)

[...]

Finding:

The application was deemed complete on December 5, 2019. The 120th day will be April 3, 2020. The hearing for AR 19-0008 is scheduled for January 22, 2020. The final action will take place within the 120 days unless the applicant requests an extension in compliance with ORS 227.178. This standard is met.

Section 32.110 – Pre-Application Conference.

(1) Purpose of Pre-Application Conferences. Pre-application conferences are intended to familiarize applicants with the requirements of the TDC; to provide applicants with an opportunity discuss proposed projects in detail with City staff; and to identify approval criteria, standards, and procedures prior to filing a land use application. The pre-application conference is intended to be a tool to assist applicants in navigating the land use process, but is not intended to be an exhaustive review that identifies or resolves all potential issues, and does not bind or preclude the City from enforcing any applicable regulations or from applying regulations in a manner differently than may have been indicated at the time of the pre-application conference.

(2) When Mandatory. Pre-application conferences are mandatory for all land use actions identified as requiring a pre-application conference in Table 32-1. An applicant may voluntarily request a pre-application conference for any land use action even if it is not required.

(3) Timing of Pre-Application Conference. A pre-application conference must be held with City staff before an applicant submits an application and before an applicant conducts a Neighborhood/Developer meeting.

(4) Application Requirements for Pre-Application Conference.

(a) Application Form. Pre-application conference requests must be made on forms provided by the City Manager.

- (b) Submittal Requirements. Pre-application conference requests must include:
 - (i) A completed application form;
 - (ii) Payment of the application fee;

(iii) The information required, if any, for the specific pre-application conference sought; and (iv) Any additional information the applicant deems necessary to demonstrate the nature and scope of the proposal in sufficient detail to allow City staff to review and comment. (5) Scheduling of Pre-Application Conference. Upon receipt of a complete application, the City Manager will schedule the pre-application conference. The City Manager will coordinate the involvement of city departments, as appropriate, in the pre-application conference. Pre-application conferences are not open to the general public.

(6) Validity Period for Mandatory Pre-Application Conferences; Follow-Up Conferences. A follow-up conference is required for those mandatory pre-application conferences that have previously been held when:

(a) An application relating to the proposed development that was the subject of the preapplication conference has not been submitted within six (6) months of the pre-application conference;

(b) The proposed use, layout, and/or design of the proposal have significantly changed; or (c) The owner and/or developer of a project changes after the pre-application conference and prior to application submittal.

Finding:

The subject land use action is identified as requiring a pre-application conference in Table 32-1. The applicant participated in a pre-application meeting on August 14, 2019, 85 days prior to submittal. These standards are met.

Section 32.120 – Neighborhood/Developer Meetings.

(1) Purpose. The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet to review a development proposal and identify issues regarding the proposal so they can be considered prior to the application submittal. The meeting is intended to allow the developer and neighbors to share information and concerns regarding the project. The applicant may consider whether to incorporate solutions to these issues prior to application submittal.

(2) When Mandatory. Neighborhood/developer meetings are mandatory for all land use actions identified in Table 32-1 as requiring a neighborhood/developer meeting. An applicant may voluntarily conduct a neighborhood/developer meeting even if it is not required and may conduct more than one neighborhood/developer meeting at their election.

(3) Timing. A neighborhood/developer meeting must be held after a pre-application meeting with City staff, but before submittal of an application.

(4) Time and Location. Required neighborhood/developer meetings must be held within the city limits of the City of Tualatin at the following times:

(a) If scheduled on a weekday, the meeting must begin no earlier than 6:00 p.m.

(b) If scheduled on a weekend, the meeting must begin between 10:00 a.m. and 6:00 p.m. (5) Notice Requirements.

(a) The applicant must provide notice of the meeting at least 14 calendar days and no more than 28 calendar days before the meeting. The notice must be by first class mail providing the date, time, and location of the meeting, as well as a brief description of the proposal and its location. The applicant must keep a copy of the notice to be submitted with their land use application.
(b) The applicant must mail notice of a neighborhood/developer meeting to the following persons:

(i) All property owners within 1,000 feet measured from the boundaries of the subject property;

(ii) All property owners within a platted residential subdivision that is located within 1,000 feet of the boundaries of the subject property. The notice area includes the entire subdivision and not just those lots within 1,000 feet. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name, the notice area need not include the additional phases; and

(iii) All designated representatives of recognized Citizen Involvement Organizations as established in TMC Chapter 11-9.

- (c) The City will provide the applicant with labels for mailing for a fee.
- (d) Failure of a property owner to receive notice does not invalidate the neighborhood/developer meeting proceedings.

(6) Neighborhood/Developer Sign Posting Requirements. The applicant must provide and post on the subject property, at least 14 calendar days before the meeting. The sign must conform to the design and placement standards established by the City for signs notifying the public of land use actions in TDC 32.150.

(7) Neighborhood/Developer Meeting Requirements. The applicant must have a sign-in sheet for all attendees to provide their name, address, telephone number, and email address and keep a copy of the sign-in sheet to provide with their land use application. The applicant must prepare meeting notes identifying the persons attending, those commenting and the substance of the comments expressed, and the major points that were discussed. The applicant must keep a copy of the meeting notes for submittal with their land use application.

Finding:

The applicant has provided evidence within Exhibit A3 that they held a Neighborhood/Developer meeting on September 12, 2019, 56 days prior to application submittal. The applicant has provided documentation of sign posting and notification in compliance with this section, as well as a sign-in sheet and notes from the meeting. These standards are met.

Section 32.130 – Initiation of Applications.

(1) Type I, Type II, Type III, and Type IV-A Applications. Type I, Type II, Type III, and Type IV-A applications may be submitted by one or more of the following persons:

(a) The owner of the subject property;

(b) The contract purchaser of the subject property, when the application is accompanied by proof of the purchaser's status as such and by the seller's written consent;

(c) A lessee in possession of the property, when the application is accompanied by the owners' written consent; or

(d) The agent of any of the foregoing, when the application is duly authorized in writing by a person authorized to submit an application by paragraphs (a), (b) or (c) of this subsection, and accompanied by proof of the agent's authority.

[...]

Finding:

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The application has been signed by a representative of Myslony Development, LLC, the owner of the subject property. This standard is met.

Section 32.140 – Application Submittal.

(1) Submittal Requirements. Land use applications must be submitted on forms provided by the City. A land use application may not be accepted in partial submittals. All information supplied on the application form and accompanying the application must be complete and correct as to the applicable facts. Unless otherwise specified, all of the following must be submitted to initiate completeness review under TDC 32.160:

(a) A completed application form. The application form must contain, at a minimum, the following information:

(i) The names and addresses of the applicant(s), the owner(s) of the subject property, and any authorized representative(s) thereof;

(ii) The address or location of the subject property and its assessor's map and tax lot number; (iii) The size of the subject property;

- (iv) The comprehensive plan designation and zoning of the subject property;
- (v) The type of application(s);
- (vi) A brief description of the proposal; and

(vii) Signatures of the applicant(s), owner(s) of the subject property, and/or the duly authorized representative(s) thereof authorizing the filing of the application(s).

- (b) A written statement addressing each applicable approval criterion and standard;
- (c) Any additional information required under the TDC for the specific land use action sought;

(d) Payment of the applicable application fee(s) pursuant to the most recently adopted fee schedule;

(e) Recorded deed/land sales contract with legal description.

- (f) A preliminary title report or other proof of ownership.
- (g) For those applications requiring a neighborhood/developer meeting:
 - (i) The mailing list for the notice;
 - (ii) A copy of the notice;
 - (iii) An affidavit of the mailing and posting;
 - (iv) The original sign-in sheet of participants; and
 - (v) The meeting notes described in TDC 32.120(7).

(h) A statement as to whether any City-recognized Citizen Involvement Organizations (CIOs) whose boundaries include, or are adjacent to, the subject property were contacted in advance of filing the application and, if so, a summary of the contact. The summary must include the date when contact was made, the form of the contact and who it was with (e.g. phone conversation with neighborhood association chairperson, meeting with land use committee, presentation at neighborhood association meeting), and the result;

(i) Any additional information, as determined by the City Manager, that may be required by another provision, or for any other permit elsewhere, in the TDC, and any other information that may be required to adequately review and analyze the proposed development plan as to its conformance to the applicable criteria; Tualatin Industrial Park – Architectural Review (AR 19-0008) January 22, 2020 Page 11 of 44

(2) Application Intake. Each application, when received, must be date-stamped with the date the application was received by the City, and designated with a receipt number and a notation of the staff person who received the application.

(3) Administrative Standards for Applications. The City Manager is authorized to establish administrative standards for application forms and submittals, including but not limited to plan details, information detail and specificity, number of copies, scale, and the form of submittal.

Finding:

The applicant submitted the subject application on November 7, 2019. The application was deemed complete on December 5, 2019. The general land use submittal requirements were included with this application. These standards are met.

Section 32.150 - Sign Posting.

(1) When Signs Posted. Signs in conformance with these standards must be posted as follows:

(a) Signs providing notice of an upcoming neighborhood/developer meeting must be posted prior

to a required neighborhood/developer meeting in accordance with Section 32.120(6); and

(b) Signs providing notice of a pending land use application must be posted after land use application has been submitted for Type II, III and IV-A applications.

(2) Sign Design Requirements. The applicant must provide and post a sign(s) that conforms to the following standards:

- (a) Waterproof sign materials;
- (b) Sign face must be no less than eighteen (18) inches by twenty-four (24) inches (18" x 24"); and
- (c) Sign text must be at least two (2) inch font.

(3) On-site Placement. The applicant must place one sign on their property along each public street frontage of the subject property. (Example: If a property adjoins four public streets, the applicant must place a sign at each of those public street frontages for a total of four signs). The applicant cannot place the sign within public right of way.

(4) Removal. If a sign providing notice of a pending land use application disappears prior to the final decision date of the subject land use application, the applicant must replace the sign within forty-eight (48) hours of discovery of the disappearance or of receipt of notice from the City of its disappearance, whichever occurs first. The applicant must remove the sign no later than fourteen (14) days after:

(a) The meeting date, in the case of signs providing notice of an upcoming neighborhood/developer meeting; or

(b) The City makes a final decision on the subject land use application, in the case of signs providing notice of a pending land use application.

Finding:

The applicant provided certification within Exhibit A3 that signs in conformance with this section were placed on site in accordance with this section. These standards are met.

Section 32.160 – Completeness Review.

(1) Duration. Except as otherwise provided under ORS 227.178, the City Manager must review an application for completeness within 30 days of its receipt.

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(2) Considerations. Determination of completeness will be based upon receipt of the information required under TDC 32.140 and will not be based on opinions as to quality or accuracy. Applications that do not respond to relevant code requirements or standards can be deemed incomplete. A determination that an application is complete indicates only that the application is ready for review on its merits, not that the City will make a favorable decision on the application.

(3) Complete Applications. If an application is determined to be complete, review of the application will commence.

(4) Incomplete Applications. If an application is determined to be incomplete, the City Manager must provide written notice to the applicant identifying the specific information that is missing and allowing the applicant the opportunity to submit the missing information. An application which has been determined to be incomplete must be deemed complete for purposes of this section upon receipt of:

(a) All of the missing information;

(b) Some of the missing information and written notice from the applicant that no other information will be provided; or

(c) Written notice from the applicant that none of the missing information will be provided. (5) Vesting. If an application was complete at the time it was first submitted, or if the applicant submits additional required information within 180 days of the date the application was first submitted, approval or denial of the application must be based upon the standards and criteria that were in effect at the time the application was first submitted.

(6) Void Applications. An application is void if the application has been on file with the City for more than 180 days and the applicant has not provided the missing information or otherwise responded, as provided in subsection (4) of this section.

[...]

Finding:

The subject application was submitted on November 7, 2019. The application was deemed complete December 5, 2019. These standards are met.

Section 32.230 – Type III Procedure (Quasi-Judicial Review – Public Hearing).

Type III decisions involve the use of discretion and judgment and are made by the Planning Commission or Architectural Review Board after a public hearing with an opportunity for appeal to the City Council. The decision body for each application type is specified in Table 32-1. A hearing under these procedures provides a forum to apply standards to a specific set of facts to determine whether the facts conform to the applicable criteria and the resulting determination will directly affect only a small number of identifiable persons.

(1) Submittal Requirements. Type III applications must include the submittal information required by TDC 32.140(1).

(2) Determination of Completeness. After receiving an application for filing, the City Manager will review the application will for completeness in accordance with TDC 32.160.

(3) Written Notice of Public Hearing – Type III. Once the application has been deemed complete, the City must mail by regular first class mail Notice of a Public Hearing to the following individuals and agencies no fewer than 20 days before the hearing.

(a) Recipients:

(i) The applicant and, the owners of the subject property;

(ii) All property owners within 1,000 feet measured from the boundaries of the subject property;

(iii) All property owners within a platted residential subdivision that is located within 1,000 feet of the boundaries of the subject property. The notice area includes the entire subdivision and not just those lots within 1,000 feet. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name, the notice area need not include the additional phases;

(iv) All recognized neighborhood associations within 1,000 feet from the boundaries of the subject property;

(v) All designated representatives of recognized Citizen Involvement Organizations as established in TMC Chapter 11-9;

(vi) Any person who submits a written request to receive a notice;

(vii) Any governmental agency that is entitled to notice under an intergovernmental agreement entered into with the City and any other affected agencies, including but not limited to: school districts; fire district; where the project either adjoins or directly affects a state highway, the Oregon Department of Transportation; and where the project site would access a County road or otherwise be subject to review by the County, then the County; and Clean Water Services; Tri Met; and, ODOT Rail Division and the railroad company if a railroadhighway grade crossing provides or will provide the only access to the subject property. The failure of another agency to respond with written comments on a pending application does not invalidate an action or permit approval made by the City under this Code;

- (viii) Utility companies (as applicable); and,
- (ix) Members of the decision body identified in Table 32-1.
- (b) The Notice of a Public Hearing, at a minimum, must contain all of the following information:(i) The names of the applicant(s), any representative(s) thereof, and the owner(s) of the subject property;

(ii) The street address if assigned, if no street address has been assigned then Township, Range, Section, Tax Lot or Tax Lot ID;

(iii) The type of application and a concise description of the nature of the land use action; (iv) A list of the approval criteria by TDC section for the decision and other ordinances or regulations that apply to the application at issue;

(v) Brief summary of the local decision making process for the land use decision being made and a general explanation of the requirements for submission of testimony and the procedure for conduct of hearings;

(vi) The date, time and location of the hearing;

(vii) Disclosure statement indicating that if any person fails to address the relevant approval criteria with enough detail, he or she may not be able to appeal to the Land Use Board of Appeals on that issue, and that only comments on the relevant approval criteria are considered relevant evidence;

(viii) The name of a City representative to contact and the telephone number where additional information may be obtained; and

(ix) Statement that the application and all documents and evidence submitted to the City are in the public record and available for review, and that copies can be obtained at a reasonable cost from the City; and

(x) Statement that a copy of the staff report will be available for inspection at no cost at least seven days prior to the hearing and will be provided at reasonable cost.

(c) Failure of a person or agency to receive a notice, does not invalidate any proceeding in connection with the application, provided the City can demonstrate by affidavit that required notice was given.

Finding:

After submittal and completeness review as required by this section, notice for the Type III hearing concerning AR 19-0008 was mailed by city staff on December 16, 2019, and contained the information required by this section. These standards are met.

(4) Conduct of the Hearing - Type III.

The person chairing the hearing must follow the order of proceedings set forth below. These procedures are intended to provide all interested persons a reasonable opportunity to participate in the hearing process and to provide for a full and impartial hearing on the application before the body. Questions concerning the propriety or the conduct of a hearing will be addressed to the chair with a request for a ruling. Rulings from the chair must, to the extent possible, carry out the stated intention of these procedures. A ruling given by the chair on such question may be modified or reversed by a majority of those members of the decision body present and eligible to vote on the application before the body. The procedures to be followed by the chair in the conduct of the hearing are as follows:

(a) At the commencement of the hearing, the person chairing the hearing must state to those in attendance all of the following information and instructions:

(i) The applicable substantive criteria;

(ii) That testimony, arguments and evidence must be directed toward the criteria described in paragraph (i) of this subsection or other criteria in the plan or land use regulation which the person believes to apply to the decision;

(iii) That failure to raise an issue accompanied by statements or evidence sufficient to afford the decision maker and the parties an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals based on that issue;

(iv) At the conclusion of the initial evidentiary hearing, the decision body must deliberate and make a decision based on the facts and arguments in the public record; and

(v) Any participant may ask the decision body for an opportunity to present additional relevant evidence or testimony that is within the scope of the hearing; if the decision body grants the request, it will schedule a date to continue the hearing as provided in TDC 32.230(4)(e), or leave the record open for additional written evidence or testimony as provided TDC 32.230(4)(f).

(b) The public is entitled to an impartial decision body as free from potential conflicts of interest and pre-hearing ex parte (outside the hearing) contacts as reasonably possible. Where questions related to ex parte contact are concerned, members of the decision body must follow the guidance for disclosure of ex parte contacts contained in ORS 227.180. Where a real conflict of interest arises, that member or members of the decision body must not participate in the hearing, except where state law provides otherwise. Where the appearance of a conflict of interest is likely, that member or members of the decision body must individually disclose their relationship to the applicant in the public hearing and state whether they are capable of rendering a fair and impartial decision. If they are unable to render a fair and impartial decision, they must be excused from the proceedings.

(c) Presenting and receiving evidence.

(i) The decision body may set reasonable time limits for oral presentations and may limit or exclude cumulative, repetitious, irrelevant, or personally derogatory testimony or evidence;
(ii) No oral testimony will be accepted after the close of the public hearing. Written testimony may be received after the close of the public hearing only as provided by this section; and
(iii) Members of the decision body may visit the property and the surrounding area, and may use information obtained during the site visit to support their decision, if the information relied upon is disclosed at the beginning of the hearing and an opportunity is provided to dispute the evidence.

(d) The decision body, in making its decision, must consider only facts and arguments in the public hearing record; except that it may take notice of facts not in the hearing record (e.g., local, state, or federal regulations; previous City decisions; case law; staff reports). Upon announcing its intention to take notice of such facts in its deliberations, it must allow persons who previously participated in the hearing to request the hearing record be reopened, as necessary, to present evidence concerning the newly presented facts.

(e) If the decision body decides to continue the hearing, the hearing must be continued to a date that is at least seven days after the date of the first evidentiary hearing (e.g., next regularly scheduled meeting). An opportunity must be provided at the continued hearing for persons to present and respond to new written evidence and oral testimony. If new written evidence is submitted at the continued hearing, any person may request, before the conclusion of the hearing, that the record be left open for at least seven days, so that he or she can submit additional written evidence or arguments in response to the new written evidence. In the interest of time, after the close of the hearing, the decision body may limit additional testimony to arguments and not accept additional evidence.

(f) If the decision body leaves the record open for additional written testimony, the record must be left open for at least seven days after the hearing. Any participant may ask the decision body in writing for an opportunity to respond to new evidence (i.e., information not disclosed during the public hearing) submitted when the record was left open. If such a request is filed, the decision body must reopen the record, as follows:

(i) When the record is reopened to admit new evidence or arguments (testimony), any person may raise new issues that relate to that new evidence or testimony;

(ii) An extension of the hearing or record granted pursuant to this section is subject to the limitations of TDC 32.030, unless the applicant waives his or her right to a final decision being made within the required timeframe; and

(iii) If requested by the applicant, the decision body must grant the applicant at least seven days after the record is closed to all other persons to submit final written arguments, but not evidence, provided the applicant may expressly waive this right. Tualatin Industrial Park – Architectural Review (AR 19-0008) January 22, 2020 Page 16 of 44

Finding:

The Architectural Review Board will follow the hearing requirements set forth by this section. These standards will be met.

(5) Notice of Adoption of a Type III Decision.

Notice of Adoption must be provided to the property owner, applicant, and any person who provided testimony at the hearing or in writing. The Type III Notice of Adoption must contain all of the following information:

(a) A description of the applicant's proposal and the City's decision on the proposal, which may be a summary, provided it references the specifics of the proposal and conditions of approval in the public record;

(b) The address or other geographic description of the property proposed for development, including a map of the property in relation to the surrounding area;

(c) A statement that a copy of the decision and complete case file, including findings, conclusions, and conditions of approval, if any, is available for review and how copies can be obtained;

(d) The date the decision becomes final, unless a request for appeal is submitted; and

(e) The notice must include an explanation of rights to appeal the decision to the City Council in accordance with TDC 32.310.

(6) Appeal of a Type III Decision. Appeal of an Architectural Review Board or Planning Commission Type III Decision to the City Council may be made in accordance with TDC 32.310.

(7) Effective Date of a Type III Decision.

- (a) The written order is the final decision on the application.
- (b) The mailing date is the date of the order certifying its approval by the decision body.
- (c) A decision of the Architectural Review Board or Planning Commission is final unless:

(i) a written appeal is received at the City offices within 14 calendar days of the date notice of the final decision is mailed; or

(ii) The City Manager or a member of the City Council requests a review of the decision within 14 calendar days of the date notice of the final decision is mailed.

Finding:

A final decision and any appeal will follow the requirements of this section. These standards will be met.

Chapter 33: Applications and Approval Criteria

[...]

Section 33.020 Architectural Review

[...]

- (5) Approval Criteria.
- (b) General Development.

(i) Applications for General Single Family Dwellings (not clear and objective), must comply with TDC 73A.140.

(ii) Applications for General Development must comply with the applicable standards and objectives in TDC Chapter 73A through 73G.

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Finding:

The subject application, which is for "general development," must comply with the standards and objectives in TDC 73A through 73G. These standards are met by submittal of the subject application.

(9) Permit Expiration.

Architectural Review decisions (including Minor Architectural Review decisions) expire two (2) years from the effective date unless the applicant has received a building, or grading permit submitted in conjunction with a building permit application, substantial construction has occurred pursuant to the building permit, and an inspection has been performed by a member of the Building Division.

(10) Extension of Permit Expiration.

(a) An Architectural Review approval may be extended if the applicant, or successor interest, submits a written request for an extension of time within two (2) years of the effective date.

(b) A Minor Architectural Review approval may not be extended. A new application is required if the permit expires.

(c) Upon receipt of a request for an extension of time, the City will process the extension request as follows:

(i) If the City Manager approved the Architectural Review, then the City Manager will decide the extension request under the Type II procedures in TDC 32.220.

(ii) If the Architectural Review Board (ARB) approved the Architectural Review, then the ARB

will decide the extension request under the Type III quasi-judicial procedures in TDC 32.230. (d) The City must provide notice of the extension request to past recipients of the Architectural

Review notice of decision and the applicant must post a sign pursuant to TDC 32.150.

(e) The City Manager or Architectural Review Board, as applicable, may grant the extension of time upon finding the following:

(i) The applicant submitted a written extension request prior to the expiration date;

(ii) There have been no significant changes in any conditions, ordinances, regulations or standards of the City or applicable agencies that affect the previously approved project so as to warrant its resubmittal for Architectural Review;

(iii) If the previously approved application included a special study, the applicant provided a status report includes a letter from a recognized professional that states that conditions have not changed after the original approval and that no new study is warranted; and

(iv) If the site has been neglected so as to allow the site to become blighted, the deciding party must factor this into its decision.

(f) The City Manager or Architectural Review Board, as applicable, may grant or deny the extension request. The decision must be in writing and must be made within sixty (60) days of receipt of the request for extension. If the decision is to grant the extension, the extension can be no more than a single one-year extension.

(g) Upon making the decision, the City must provide notice of the extension decision as provided in TDC 32.220 for Type II decisions made by the City Manager and TDC 32.230 for Type III decisions made by the Architectural Review Board.

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Finding:

The proposed application is approved subject the compliance with the above criteria. With recommended Condition of Approval A1, these standards are met.

Section 33.110 Tree Removal Permit/Review

(1) Purpose. To regulate the removal of trees within the City limits other than trees within the public right-of-way which are subject to TDC Chapter 74.

(2) Applicability. No person may remove a tree on private property within the City limits, unless the City grants a tree removal permit, consistent with the provisions of this Section.

[...]

(3) Procedure Type. Tree Removal Permit applications are subject to Type II Review in accordance with TDC Chapter 32. Tree Removal Permit applications submitted with an Architectural Review, Subdivision, or Partition application will be processed in conjunction with the Architectural Review, Subdivision, or Partition decision.

Finding:

The applicant has submitted a tree plan and sufficient documentation in conjunction with the Architectural Review application. The criteria in TDC 33.110, addressed below, are the basis on approval or denial for tree removal as part of this Architectural Review. These standards are met.

Section 33.110 Tree Removal Permit/Review Approval Criteria

(5) Approval Criteria.

(a) An applicant must satisfactorily demonstrate that at least one of the following criteria are met:

(i) The tree is diseased and:

- (A) The disease threatens the structural integrity of the tree; or
- (B) The disease permanently and severely diminishes the esthetic value of the tree; or

(C) The continued retention of the tree could result in other trees being infected with a disease that threatens either their structural integrity or esthetic value.

- (ii) The tree represents a hazard which may include but not be limited to:
 - (A) The tree is in danger of falling; or
 - (B) Substantial portions of the tree are in danger of falling.
- (iii) It is necessary to remove the tree to construct proposed improvements based on

Architectural Review approval, building permit, or approval of a Subdivision or Partition Review. (b) If none of the conditions in TDC 33.110(5)(a) are met, the certified arborist must evaluate the condition of each tree.

- (i) Evergreen Trees. An evergreen tree which meets any of the following criteria as determined
- by a certified arborist will not be required to be retained:
 - (A) Trunk Condition extensive decay and hollow; or
 - (B) Crown Development unbalanced and lacking a full crown;
- (ii) Deciduous Trees. A deciduous tree which meets any of the following criteria as determined
- by a certified arborist will not be required to be retained:

- (A) Trunk Condition extensive decay and hollow;
- (B) Crown Development unbalanced and lacking a full crown; or
- (C) Structure Two or more dead limbs.

Finding:

The applicant's arborist surveyed 15 trees over 8" dbh on site, all 15 of which are proposed for removal. Of the on-site trees proposed for removal, all but one are proposed to be removed for private improvements and to accommodate demolition of the existing buildings at the north of the property. The proposed tree removal meets the standards of criterion 33.110(5)(a)(iii), which allows for tree removal where needed for development. Tree 10586 is proposed to be removed due to very poor condition including damage from past topping leading to dieback; removal of this tree is consistent with TDC 33.110(5)(a)(ii).

The tree survey also identified off-site trees which need to be protected, primarily due to grading impacts. The arborist identified 33 off-site trees likely to be impacted by proposed development on site. The applicant proposes to remove five of these neighboring trees: Tree 10828 on Tax ID 2S127AB00100, Trees 10783, 10784, 10785, and 20011 on Tax ID 2S122DD00100. In order to remove these trees, the applicant will need to demonstrate permission from the applicable property owners. A replacement tree would be necessary for Tree 10828 in order for the neighboring property to remain in compliance with perimeter landscaping standards as described in TDC 73C.230(3). With recommended Condition of Approval A4 related to requirements for tree removal on neighboring properties, and recommended Condition of Approval A5 related to tree protection, these standards are met.

Chapter 61: General Manufacturing (MG) Zone

[...]

TDC 61.200. - Use Categories.

Use Categories. Table 61-1 lists use categories Permitted Outright (P) or Conditionally Permitted
 (C) in the MG zone. Use categories may also be designated as Limited (L) and subject to the limitations listed in Table 61-1 and restrictions identified in TDC 61.210. Limitations may restrict the specific type of use, location, size, or other characteristics of the use category. Use categories which are not listed are prohibited within the zone, except for uses which are found by the City Manager or appointee to be of a similar character and to meet the purpose of this zone, as provided in TDC 31.070.
 Use Categories in the Limited Commercial Setback. Commercial uses may be further restricted

within the Limited Commercial Setback, see TDC 60.210(4).

(3) Overlay Zones. Additional uses may be allowed in a particular overlay zone. See the overlay zone Chapters for additional uses.

Table 61-1 Use Categories in the MG Zone

USE CATEGORY	STATUS	S LIMITATIONS AND CODE REFERENCES		
[]				
INDUSRIAL USE CATEGORIES				
[]				
Heavy Manufacturing	P (L)	Concrete batch plants are not permitted in the Leveton Tax Increment District. All other uses permitted outright.		
Light Manufacturing	Р	_		
Warehouse and Freight Movement	P/C	Conditional use required for warehousing of building materials and supplies. All other uses permitted outright.		

[...]

Finding:

The project identifies manufacturing and warehouse uses as the likely uses for the proposed site. These uses are permitted in the subject zone. Additional review may be necessary at the time of tenant improvements. This standard is met.

Section 61.300 – Development Standards.

Development standards in the MG zone are listed in Table 61-2. Additional standards may apply to some uses and situations, see TDC 61.310.

	Standard	Min. Proposed
MINIMUM SETBACKS	<u>.</u>	·
Front (SW Myslony)	30	21
Front (SW Tualatin-Sherwood)	30	30
	0-50 feet	60
Side		
Rear	0-50 feet	60
Parking and Circulation Areas	5 feet	10
	No minimum setback required	d
	adjacent to joint access	

Table 61-2Development Standards in the MG Zone

	approach in accorda TDC 73C.	nce with	
STRUCTURE HEIGHT			
Maximum Height	60 feet	40 feet	
[]			

Finding:

The front setback at SW Myslony Street is less than the minimum 30 feet required by the standards of this section. All other setbacks are proposed to be met. With recommended Condition of Approval A3 requiring modifications to meet the minimum front setback, these development standards will be met.

Chapter 71: Wetlands Protection District (WPD)

Section 71.060 Environmental Standards.

All construction or development, including excavation or filling, or the use of any land within the Wetlands Protection District (WPD), shall conform to the environmental standards required by TDC 71.061 to 71.066.

Finding:

The southeast portion of the site is within the Wetlands Fringe Area, a subset of the Wetlands Protection District. No portion of the property is within 40 feet of a Wetlands Protected Area and limited sections of this code chapter apply.

[...]

TDC 71.062. - Excavation and Filling.

Excavation, filling and earth-moving activities are permitted within the Wetlands Protection District (WPD), subject to the following restrictions:

[...]

- (2) Within the Wetlands Fringe Area (WFA), excavation and filling shall be allowed in all areas for purposes related to its full development and use in accordance with applicable primary planning district classifications and for purposes of increasing or decreasing the elevations within such area to, or in excess of, the level of the so-called "100-year flood plain"; provided, however:
 - (a) Excavation or filling in the Wetlands Fringe Area (WFA) shall not, when completed, result in significant increase or decrease in the volume of surface water that will thereafter flow or discharge into the Wetlands Protected Area (WPA) from the Wetlands Fringe Area (WFA).
 - (b) All excavation, filling or other earth-moving activities within the Wetlands Fringe Area (WFA) shall be conducted in such a manner that erosion and silting of surface water runoff into the Wetlands Protected Area (WPA) will not take place. Where upland areas are exposed and subject to erosion due to such excavation, filling or other earth-moving activities, temporary grass cover or other soil stabilizing vegetation shall be established immediately upon completion of such activities if such exposure and erosion will result in erosion or siltation of any portion of the Wetlands Protected Area (WPA).

- (3) Where necessary or desired in order to fully utilize all land lying in the Wetlands Fringe Area (WFA), or for the purpose of the installation or maintenance of subsurface improvements located thereon, fill, excavation or other earth-moving activities shall be permitted within the setback area above described; provided that, upon completion of such activities, the profile of the setback area shall conform with the characteristics of a "Type A" or "Type B" development setback, as depicted by Figure 71-1.
 - (a) Fill materials placed in the setback area shall consist of topsoil of suitable nature and character to allow re-vegetation in accordance with the provisions of TDC 71.064, or, in the alternative, where topsoil is not utilized for purposes of fill, the materials that are utilized as fill shall be covered with topsoil to a depth of at least 12 inches where the underlying fill material is heavily compacted.
 - (b) Quatoma, Woodburn or Hillsboro loam, when identified within the setback area or upon adjacent land inside the Wetlands Fringe Area (WFA) by the U.S. Soil Conservation Service or by other reliable means, shall be suitable in nature and character to serve as topsoil for purposes of allowing re-vegetation of soil surfaces altered by filling, excavation or other earthmoving activities undertaken within the set-back area, or elsewhere within the Wetlands Fringe Area (WFA) in accordance with the requirements of the provisions of TDC 71.064. Where other types of soils or materials are proposed for use as topsoil in accordance with this subsection, the same shall be of a type and character that will promote rapid propagation and growth of vegetation which will provide food, cover and nesting areas for wildlife, as well as a visual barrier or screen between the Wetlands Protected Area (WPA) and adjacent uplands.
 - (c) Cove clay and silty clay loam shall not be used for purposes of providing any topsoil cover required to be placed within the setback area after filling, excavation or other earth-moving activities.
 - (d) Placement of landfill and topsoil within the setback area should be accomplished before September 15 in order to provide adequate opportunity for re-vegetation to occur during the ensuing growing season. Pending permanent re-vegetation in accordance with the requirements of TDC 71.064, filled areas within the setback area should be planted with temporary grass cover, winter cereal grains (broadcast at a rate of not less than 100 pounds per acre), or other soil-stabilizing vegetation for fast and effective control of any erosion or siltation that will occur in the Wetlands Protected Area (WPA) if stabilization is not effected in such areas.

Finding:

Excavation, grading, and erosion control practices are subject to further review in permitting. With recommended Conditions of Approval A2 clarifying that the applicant must comply with the City Engineer's Decision (PRF 19-0008), these standards are met.

[...]

TDC 71.063. - Contamination and Sedimentation.

During the course of development, site preparation, construction of any improvements, or usage of lands lying within the Wetlands Fringe Area (WFA) or the Sweek Pond Management Area (SPMA), the introduction of storm drainage, surface and roof runoff into the Wetlands Protection Area (WPA) and

the Sweek Pond Management Area (SPMA) shall only occur when such runoff is substantially free of silt, debris, oil or other materials injurious to plants or wildlife in the Wetlands Protected Area and the Sweek Pond Management Area (WPA and SPMA).

- (1) All apparent and potential sources of storm drainage and surface runoff contamination located within the Wetlands Fringe Area (WFA) and the Sweek Pond Management Area (SPMA) such as operating areas, and equipment cleaning and maintenance area, shall have curbs and be drained into impoundment areas or a waste treatment system in such a manner that no contaminated storm drainage or surface runoff originating in such areas will be discharged directly into the Wetlands Protected Area (WPA) or Sweek Pond Management Area (SPMA) without treatment that would render such drainage uncontaminated.
- (2) No solid wastes that are known to be toxic to vegetation or wildlife within the Wetlands Protected Area (WPA) and the Sweek Pond Management Area (SPMA) shall be permanently stored or disposed of within the Wetlands Fringe Area (WFA) or Sweek Pond Management Area (SPMA).
- (3) No pesticides shall be used in the Wetlands Protected District before the type, duration and manner of use have been approved by the Oregon Department of Environmental Quality.
- (4) To prevent soil movement into, or erosion within, the Wetlands Protected Area and the Sweek Pond Management Area (WPA and SPMA) as a result of drainage from adjacent upland areas within the Wetlands Fringe Area (WFA) and Sweek Pond Management Area (SPMA) during the course of development, site preparation, construction of improvements or use, a combination of filters or diversions or other appropriate means to be specified by an engineer shall be employed where necessary in order to supplement soils stabilization that will result from re-vegetation as otherwise provided for and described in TDC 71.062(2) and 71.064.

Finding:

Excavation, grading, and erosion control practices are subject to further review in permitting. With recommended Conditions of Approval A2 as covered in the City Engineer's Decision (PFR 19-0008), these standards are met.

TDC 71.064. - Vegetation.

[...]

- (2) Vegetation occurring within the Wetlands Fringe Area (WFA) may be removed or altered at any time during the course of development, site preparation, construction of improvements or usage, when reasonably required for any of such purposes, subject to the following:
 - (a) Areas where vegetation has been removed or altered incidental to construction or development of land areas within the Wetlands Fringe Area (WFA) lying outside the setback area, which are not otherwise committed and used as the location or site of surface improvements associated with the development or use of the property, shall be seeded or planted to reestablish a vegetation cover compatible with the adjacent wetland habitats insofar as practicable.
 - (b) Areas where vegetation has been removed or altered incidental to development or usage of land areas within the Wetlands Fringe Area (WFA) which occurs by reason of filling, excavation or other activities undertaken within the setback areas, shall be seeded or planted so as to effect eventual reestablishment of vegetation, if practicable, of the character, type and density that occurred in the areas affected prior to such removal or alteration.

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- (c) Owners and occupiers of land lying within the setback area upon which vegetation has been disturbed as a result of development, site preparation, construction of improvements or use shall permit access to such areas by public agencies, resource management groups and environmental interest groups approved by the City for purposes of entry and the conduct of activities designed or intended to effect the seeding, planting and maintenance of vegetation within the setback area in addition to, or in lieu of, the vegetation to be placed therein in accordance with TDC 71.064(2)(b) in the nature of trees, shrubs or other vegetation forms that will provide food, cover and nesting areas for wildlife and which may also provide a visual barrier or screen between the boundary of the Wetlands Protected Area (WPA) and adjacent upland areas. No such activity shall be authorized or permitted where the same or the effects thereof may materially impair or damage the structural integrity or usefulness of landfill occurring within such area, or which may enhance the area's susceptibility to erosion or damaging surface or subsurface water flow, or which may damage, or impair the usefulness of, utilities or other improvements lying within or adjacent to the area otherwise permitted under the terms of this chapter.
- (d) Re-vegetation as required by the provisions of this section shall begin as soon as practicable, but in no event later than 60 days, after cessation of development, unless otherwise approved by the City. Such re-vegetation shall be deemed to comply with the requirements of this chapter if approved or recommended as to type, species and placement by either the U.S. Soil Conservation Service or the Oregon Department of Fish and Wildlife.
- (3) Land areas within the Wetlands Fringe Area (WFA) that lie outside the 40-foot setback area and which are not otherwise committed to development or use in connection with the intended development or use to be made of such areas by the owners, developers or occupiers thereof, shall be left, insofar as practicable, in their natural state for so long as such development or use does not require their alteration. Subject to the limitations set forth in TDC 71.064(2)(c), access shall be afforded to public agencies, resource management groups and environmental interest groups approved for purposes of planting and maintenance of vegetation within such areas that will afford food, cover and nesting areas for wildlife indigenous to the Wetlands Protected Area (WPA) except where such entry or activities are unsafe or may damage the property or security of adjacent developed areas. Any such vegetation shall be subject to removal at a later date, should such areas be required or involved in future development.
- (4) There shall be included in the statement of proposed construction methods and schedule required as part of the certification by TDC 71.040 of this chapter, a landscaping and re-vegetation plan and schedule, which shall set forth in reasonable detail the means by which the applicant(s) for any building permits, subdivision approvals or public works permits within the Wetlands Protection District (WPD) shall comply with the requirements of this section.

[...]

Finding:

Excavation, grading, and erosion control practices are subject to further review in permitting. With recommended Conditions of Approval A2 as covered in the City Engineer's Decision (PFR 19-0008). These standards are met.

Chapter 73A: Site Design

<u>Section 73A.400 – Industrial Design Standards.</u>

The following standards are minimum requirements for commercial development in all zones:

(1) *Walkways.* Industrial development must provide walkways as follows:

(a) Walkways must be a minimum of five feet in width;

(b) Walkways must be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete (not gravel or woody material);

(c) Walkways must meet ADA standards applicable at time of construction or alteration;

(e) Walkways must be provided between the main building entrances and other on-site buildings, accessways, and sidewalks along the public right-of-way;

(f) Walkways through parking areas, drive aisles, and loading areas must be of a different appearance than the adjacent paved vehicular areas; and

(g) Outdoor Recreation Access Routes must be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

Finding:

A walkway for Building A to the north is proposed connecting the SW Myslony Street right-of-way with the main entrance. Walkways are also proposed on either side of Building B, connecting with SW Tualatin-Sherwood Road. These proposed walkways are at least 5 feet wide and proposed to be constructed of hard surface. Further compliance with ADA standards will be evaluated at the time of building permit. With recommended Conditional of Approval A3 requiring a walkways of a different appearance than surrounding vehicular area to be established between the respective walkways of Building A and Building B, and connecting with the easement for the future public trail, these standards will be met.

[...]

(4) Safety and Security. Industrial development must provide safety and security features as follows:

(a) Locate windows and provide lighting in a manner that enables tenants, employees, and police to watch over pedestrian, parking, and loading areas;

(b) Locate windows and interior lighting to enable surveillance of interior activity from the public right-of-way;

(c) Locate, orient, and select exterior lighting to facilitate surveillance of on-site activities from the public right-of-way without shining into public rights-of-way or fish and wildlife habitat areas;
(d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services; and

[...]

Finding:

As seen on the elevation plans (Sheets A-4 and A-5, Exhibit A2), windows for Building A are generally oriented toward the SW Myslony Street right-of-way. Windows on Building B are generally oriented toward

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the Tualatin-Sherwood right-of-way. Loading area doors are shown with a single window each, providing additional visibility into the center and northeastern rear of the site. Lighting is provided throughout the site to enhance visibility, as seen as the applicant's photometric study (Sheet FC-2, Exhibit A2). Standards (a) and (b) are met. As shown on the applicant's photometric study (Sheet FC-2, Exhibit A2), lighting will primarily be focused toward the edges of perimeter of the buildings and interior parking areas. Standard (c) is met. Building identification will be reviewed at the time of building permit, and should meet all standards of Tualatin Valley Fire and Rescue as well as all applicable building code standards. With recommended Condition of Approval A8, criterion (d) is met.

(5) Service, Delivery, and Screening. Commercial development must provide service, delivery, and screening features as follows:

(a) Above grade and on-grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners must be screened with sight obscuring fences, walls or landscaping;

(b) Outdoor storage must be screened with a sight obscuring fence, wall, berm or dense evergreen landscaping; and

(c) Above ground pumping stations, pressure reading stations, water reservoirs; electrical substations, and above ground natural gas pumping stations must be screened with sight-obscuring fences or walls and landscaping.

Finding:

Mechanical equipment is not yet proposed with this application, though likely to be installed at the time of building permit. Likewise, outdoor storage has not been proposed. With recommended Condition of Approval A12 requiring screening, these standards are met.

(6) Adjacent to Transit. Commercial development adjacent to transit must comply with the following:
 (a) Development on a transit street designated in TDC Chapter 11 (Figure 11-5) must provide either a transit stop pad on-site, or an on-site or public sidewalk connection to a transit stop along the subject property's frontage on the transit street.
 [...]

Finding:

SW Tualatin-Sherwood Road is designated as a transit street in TDC Chapter 11, Figure 11-5. There is no existing bus stop along the frontage of this property. A walkway connection is proposed between Building B and SW Tualatin-Sherwood Road. With recommended Condition of Approval A3 requiring a walkway connection between Building B and Building A, this standard will be met.

Chapter 73B: Landscaping Standards

Section 73B.020 – Landscape Area Standards Minimum Areas by Use and Zone.

Excerpted from 73B.020

Zone	Minimum Area Requirement*	Minimum Area Requirement with dedication for a fish and wildlife habitat*
[]		
(3) CO, CR, CC, CG, ML and MG zones except within the Core Area Parking District—All uses	15 percent of the total area to be developed	12.5 percent of the total area to be developed

Finding:

As shown in the landscaping plans, Sheets L1.0 through L1.7 (Exhibit A2), 110,526 square feet of landscaping is provided. The landscape area represents 15.4% of the total site area. This standard is met.

Section 73B.040 – Additional Minimum Landscaping Requirements for Commercial Uses.

(1) General. In addition to requirements in TDC 73B.020, commercial uses must comply with the following:

(a) All areas not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas must be landscaped.

[...]

Finding:

Landscaping is provided in all areas not otherwise occupied by buildings, vehicle area, or pedestrian area; this standard is met.

(b) Minimum 5-foot-wide landscaped area must be located along all building perimeters viewable by the general public from parking lots or the public right-of-way, but the following may be used instead of the 5-foot-wide landscaped area requirement:

(i) Pedestrian amenities such as landscaped plazas and arcades; and

(ii) Areas developed with pavers, bricks, or other surfaces, for exclusive pedestrian use and contain pedestrian amenities, such as benches, tables with umbrellas, children's play areas, shade trees, canopies.

(c) 5-foot-wide landscaped area requirement does not apply to:

(i) loading areas,

(ii) bicycle parking areas,

(iii) pedestrian egress/ingress locations, and

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(iv) where the distance along a wall between two vehicle or pedestrian access openings (such as entry doors, garage doors, carports and pedestrian corridors) is less than 8 feet.

Finding:

The buildings are buffered with at least five feet of landscaping or pedestrian amenity areas, with the exception of loading and pedestrian areas, as seen on Sheets L1.0 through L3.0 (Exhibit A2). These standards are met.

Section 73B.070 – Minimum Landscaping Standards for All Zones.

The following are minimum standards for landscaping for all zones.

Standards	
(1) Required Landscape Areas	 Must be designed, constructed, installed, and maintained so that within three years the ground must be covered by living grass or other plant materials. The foliage crown of trees cannot be used to meet this requirement. A maximum of 10% of the landscaped area may be covered with un-vegetated areas of bark chips, rock or stone. Must be installed in accordance with the provisions of the American National Standards Institute ANSI A300 (Part 1) (Latest Edition). Must be controlled by pruning, trimming, or otherwise so that:
	 It will not interfere with designated pedestrian or vehicular access; and
	 It will not constitute a traffic hazard because of reduced visibility.

Finding:

The density of plantings as shown on Sheets L1.0 through L3.0 (Exhibit A2) is sufficient to provide full coverage of landscaping within three years. These standards are met.

(2) Fences	Landscape plans that include fences must integrate any fencing into the plan to guide
	wild animals toward animal crossings under, over, or around transportation corridors.

Finding:

No fences are proposed. This standard is met.

(3) Tree Preservation	• Trees and other plant materials to be retained must be identified on the landscape plan and grading plan. During construction:
	 Must provide above and below ground protection for existing trees and plant materials identified to remain; Trees and plant materials identified for preservation must be protected by
	 chain link or other sturdy fencing placed around the tree at the drip line; If it is necessary to fence within the drip line, such fencing must be specified by a qualified arborist;
	• Top soil storage and construction material storage must not be located within the drip line of trees designated to be preserved;

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•	Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip-
	line area, such grading, paving, trenching, boring, digging, or similar encroachment must only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met; and
•	Tree root ends must not remain exposed.
•	Landscaping under preserved trees must be compatible with the retention and health of the preserved tree.
•	When it is necessary for a preserved tree to be removed in accordance with TDC 33.110 (Tree Removal Permit) the landscaped area surrounding the tree or trees must be maintained and replanted with trees that relate to the present landscape plan, or if there is no landscape plan, then trees that are complementary with existing, landscape materials. Native trees are encouraged
•	100% of the area preserved under any tree or group of trees (Except for impervious surface areas) retained in the landscape plan must apply directly to the percentage of landscaping required for a development

Finding:

No trees are proposed to be retained on site. Protection for off-site trees been identified on a tree preservation plan on sheets L1.0 through L1.7 (Exhibit A2), with tree protection fencing specified (Exhibit A2). As shown, sturdy fencing is proposed. With recommended Conditions of Approval A4 and A5, these standards are met.

(4) Grading	 After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting. All planting areas must be graded to provide positive drainage. Soil, water, plant materials, mulch, or other materials must not be allowed to
	 wash across roadways or walkways. Impervious surface drainage must be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

Finding:

The applicant proposes to develop or landscape all exposed areas remaining after grading. These standards are met.

(5) Irrigation	 Landscaped areas must be irrigated with an automatic und irrigation system Exceptions: Irrigation requirement does not apply to duple townhouses. 	0 1
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Finding:

Irrigation is proposed in new landscaping areas as detailed on Sheet L2.1. This standard is met.

(6) Re-vegetation in Un-landscaped Areas	 Vegetation must be replanted in all areas where vegetation has been removed or damaged in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements,. Plant materials must be watered at intervals sufficient to ensure survival and growth for a minimum of two growing seasons. The use of native plant materials is encouraged to reduce irrigation and maintenance demands. Disturbed soils should be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity.
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Finding:

The applicant proposes to landscape all areas not otherwise proposed for development. These standards are met.

Section 73B.080 – Minimum Standards Trees and Plants.

The following minimum standards apply to the types of landscaping required to be installed for all zones.

Standard	
(1) Deciduous Shade Trees	 One and on-half inch caliper measured six inches above ground; Balled and burlapped; bare root trees will be acceptable to plant during their dormant season; Reach a mature height of 30 feet or more; Cast moderate to dense shade in summer; Live over 60 years; Do well in urban environments, tolerant of pollution and heat, and resistant to drought; Require little maintenance and mechanically strong; Insect- and disease-resistant; Require little pruning; and Barren of fruit production.
(2) Deciduous Ornamental Trees	 One and on-half inch caliper measured six inches above ground; balled and burlapped; bare root trees will be acceptable to plant during their dormant season; and Healthy, disease-free, damage-free, well-branched stock, characteristic of the species 5 feet in height above ground;
(3) Coniferous Trees	 balled and burlapped; bare root trees will be acceptable to plant during their dormant season; and

	Healthy, disease-free, damage-free, well-branched stock, characteristic of the species.	
(4) Evergreen and Deciduous Shrubs	 One to five gallon size; Healthy, disease-free, damage-free, well-branched stock, characteristic of the species; and Side of shrub with best foliage must be oriented to public view. 	
(5) Groundcovers	 Fully rooted; Well branched or leafed; Healthy, disease-free, damage-free, well-branched stock, characteristic of the species; and English ivy (Hedera helix) is prohibited. 	
(6) Lawns	Consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry;	

Finding:

Per the Plant Schedule provided on Sheets L1.1 through L1.7, and planting details on L2.0, the standards for groundcover, shrubs, and trees to be planted are met.

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Chapter 73C: Parking Standards

Section 73C.020 – Parking Lot Design Standards.

A parking lot, whether an accessory or principal use, intended for the parking of automobiles or trucks, must comply with the following:

(1) Off-street parking lot design must comply with the dimensional standards set forth in Figure 73-1; [...]

(2) Parking lot drive aisles must be constructed of asphalt, concrete, or pervious concrete;

(3) Parking stalls must be constructed of asphalt, concrete, previous concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material. Pervious surfaces, are encouraged for parking stalls in or abutting the Natural Resource Protection Overlay District, Other Natural Areas, or in a Clean Water Services Vegetated Corridor;

(4) Parking lots must be maintained adequately for all-weather use and drained to avoid water flow across sidewalks;

(5) Parking bumpers or wheel stops or curbing must be provided to prevent cars from encroaching on adjacent landscaped areas, or adjacent pedestrian walkways.

Finding:

As shown on the Hardscape Plan, Sheets C1.0 through C1.7 (Exhibit A2), stalls are proposed to be 18.5 feet long (16 feet on asphalt with a maximum 2.5 feet of overhang into landscape area) and 9 feet wide, accounting for wheel overhang into landscape areas. These standards are met. Drive aisles and stalls are proposed to be comprised of asphalt. Concrete curbs and wheel stops are also proposed. These standards are met.

(6) Disability parking spaces and accessibility must meet ADA standards applicable at time of construction or alteration;

(7) Parking stalls for sub-compact vehicles must not exceed 35 percent of the total parking stalls required by TDC 73C.100. Stalls in excess of the number required by TDC 73C.100 can be sub-compact stalls;

Finding:

The Hardscape Plan, Sheets C1.0 through C1.7 (Exhibit A2) shows eleven ADA compliant parking spaces planned near entrances at both proposed buildings. There are no subcompact stalls proposed. ADA standards will be reviewed in greater detail following submittal of a building permit. These standards are met.

(8) Groups of more than 4 parking spaces must be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley;

(9) Drives to off-street parking areas must be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site;

(10) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, must have a minimum width of 22 feet for two-

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way traffic and 12 feet for one-way traffic; When 90 degree stalls are located on both sides of a drive aisle, a minimum of 24 feet of aisle is required. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, must have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic;

Finding:

The design of the parking lot will not require movement on the public street. Drive aisles with parking are at least 26 feet wide as proposed. A drive aisle from SW Myslony Street to Building B is proposed at 40 feet wide. At the north end of the site at Building A, the drive aisle width may need to be modified in order to accommodate the full area of the required easement for the Ice Age Tonquin Trail. With recommended Condition of Approval A3, these standards will be met.

(11) Artificial lighting, must be deflected to not shine or create glare in a residential zones, street rightof-way, a Natural Resource Protection Overlay District, Other Natural Areas, or a Clean Water Services Vegetated Corridor;

(12) Parking lot landscaping must be provided pursuant to the requirements of TDC 73C.200; and

(13) Except for parking to serve residential uses, parking areas adjacent to or within residential zones or adjacent to residential uses must be designed to minimize disturbance of residents.

Finding:

As shown on the applicant's photometric study (Sheet FC-2, Exhibit A2), lighting will primarily be focused toward the edges of perimeter of the buildings and interior parking areas. These standards are met.

Section 73C.050 – Bicycle Parking Requirements and Standards.

(1) Requirements. Bicycle parking facilities must include:

(a) Long-term parking that consists of covered, secure stationary racks, lockable enclosures, or rooms in which the bicycle is stored;

(i) Long-term bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.

(b) Short-term parking provided by secure stationary racks (covered or not covered), which accommodate a bicyclist's lock securing the frame and both wheels.

(2) Standards. Bicycle parking must comply with the following:

(a) Each bicycle parking space must be at least six feet long and two feet wide, with overhead clearance in covered areas must be at least seven feet;

(b) A five (5) foot-wide bicycle maneuvering area must be provided beside or between each row of bicycle parking. It must be constructed of concrete, asphalt, or a pervious hard surface such as pavers or grasscrete, and be maintained;

(c) Access to bicycle parking must be provided by an area at least three feet in width. It must be constructed of concrete, asphalt, or a pervious hard surface such as pavers or grasscrete, and be maintained;

(d) Bicycle parking areas and facilities must be identified with appropriate signing as specified in the Manual on Uniform Traffic Control Devices (MUTCD) (latest edition). At a minimum, bicycle

parking signs must be located at the main entrance and at the location of the bicycle parking facilities;

(e) Bicycle parking must be located in convenient, secure, and well-lighted locations approved through the Architectural Review process. Lighting, which may be provided, must be deflected to not shine or create glare into street rights-of-way or fish and wildlife habitat areas;

(f) Required bicycle parking spaces must be provided at no cost to the bicyclist, or with only a nominal charge for key deposits, etc. This does not preclude the operation of private for-profit bicycle parking businesses;

(g) Bicycle parking may be provided within the public right-of-way in the Core Area Parking District subject to approval of the City Engineer and provided it meets the other requirements for bicycle parking; and

(h) The City Manager or the Architectural Review Board may approve a form of bicycle parking not specified in these provisions but that meets the needs of long-term and/or short-term parking pursuant to Architectural Review.

Finding:

As shown on Sheet A-1 (Exhibit A2) applicant proposes to provide covered outdoor bike parking at the northwest and southwest corners of Building A, and the southeast and southwest corners of Building B, near proposed tenant entrances. With recommended Condition of Approval A3 in order to show compliance with standards (a), (b), (c), and (d), these standards are met.

USE	MINIMUM MOTOR VEHICLE PARKING	MAXIMUM MOTOR VEHICLE PARKING	BICYCLE PARKING	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
[]				
(f) Industrial				
(i) Manufacturing	1.60 spaces per 1,000 square feet of gross floor area	None	2, or 0.10 spaces per 1,000 gross square feet, whichever is greater	First five spaces or 30 percent, whichever is greater
(ii) Warehousing	0.30 spaces per 1,000 square feet of gross floor area	Zone A: 0.4 spaces per 1,000 square feet of gross floor area Zone B: 0.5 spaces per 1,000 square feet of gross floor area	2, or 0.10 spaces per 1,000 gross square feet, whichever is greater	First five spaces or 30 percent, whichever is greater

Section 73C.100 – Off-Street Parking Minimum/Maximum Requirements.

Finding:

While tenants have not been named for this development, the applicant proposes to construct parking appropriate for a mix of 187,417 square feet (59%) warehousing, and 129,708 square feet (41%) of manufacturing. These standards are met.

Use	Square Footage	Vehicle Parking Min.	Proposed	Bike Parking Min.	Proposed
Manufacturing	129,708	208		13	
Warehousing	187,417	56		19	
Total	317,125	264	274	32	31

Table 1: Minimum and Proposed Parking by Use

For the mix of uses, 264 parking spaces are required; 274 are proposed. Additionally, 32 bike parking spaces are required by code based on the current total building area, 10 of which must be covered. The site will provide covered bike parking as shown on Sheet A-1 (Exhibit A2). The applicant has proposed 31 bike parking spaces, which is one short of the minimum standard. With anticipated changes to the building footprint in order to meet setback requirements, this minimum may be recalculated. With recommended Condition of Approval A3 requiring an additional bike parking space and additional detail on the standards of TDC 73C.050, these standards are met.

(2) In addition to the general parking requirements in subsection (1), the following are the minimum number of off-street vanpool and carpool parking for commercial, institutional, and industrial uses.

Number of Required Parking Spaces	Number of Vanpool or Carpool Spaces	
0 to 10	1	
10 to 25	2	
26 and greater	1 for each 25 spaces	

[...]

Finding:

Since 264 parking spaces are required, 11 are required to be carpool/vanpool spaces. No carpool/vanpool spaces are designated on the plans. With Condition of Approval A3, this standard is met.

Section 73C.120 – Off-Street Loading Facilities Minimum Requirements.

(1) The minimum number of off-street loading berths for commercial, industrial, and institutional uses is as follows:

Use	Square Feet of Floor Area	Number of Berths	Dimensions of Berth	Unobstructed Clearance of Berth
Industrial				
60,000 and over	3	12 feet x 35 feet	14 feet	60,000 and over

(2) Loading berths must not use the public right-of-way as part of the required off-street loading area.

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(3) Required loading areas must be screened from public view, public streets, and adjacent properties by means of sight-obscuring landscaping, walls or other means, as approved through the Architectural Review process.

(4) Required loading facilities must be installed prior to final building inspection and must be permanently maintained as a condition of use.

(5) The off-street loading facilities must in all cases be on the same lot or parcel as the structure they are intended to serve. In no case must the required off-street loading spaces be part of the area used to satisfy the off-street parking requirements.

[...]

Finding:

Given the nature of the proposed site, well over the minimum number of loading berths are provided; 32 on Building A and 26 on Building B. The loading berths are oriented away from the right-of-way. The loading area for Building A is to be screened from neighboring properties with juniper and dwarf strawberry trees. The loading area for Building B is to be screened with more juniper along with honeysuckle to the east. From the west, screening is provided with evergreen huckleberry, Mexican orange, as well as existing mature western red cedar trees straddling the property line and proposed for protection. These standards are met.

<u>Section 73C.130 – Parking Lot Driveway and Walkway Minimum Requirements.</u> Parking lot driveways and walkways must comply with the following requirements:

[...]

(3) Industrial Uses. Ingress and egress for industrial uses must not be less than the following:

.,	0		0
Required Parking Spaces	Minimum Number	Minimum	Minimum Pavement Walkways,
Required Parking Spaces	Required	Pavement Width	Etc.
1-250	1	36 feet for first 50' from ROW, 24 feet thereafter	No curbs or walkway required
Over 250	As required by City Manager	As required by City Manager	As required by City Manager

Finding:

The site provides two points of ingress and egress at the north and south ends of the SW Myslony Street cul-de-sac. Each is proposed as 40 feet wide for well over the first 50 feet from the right-of-way. The north access drive may need to be modified in order to accommodate the full width of the Ice Age Tonquin Trail easement, in which case, the ingress/egress will need to continue to comply with this section as discussed in recommended Condition of Approval A3. This standard is met.

(6) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths for Commercial, Industrial, and Institutional uses must not exceed 40 feet.

(b) Driveways must not be constructed within 5 feet of an adjacent property line, unless the two adjacent property owners elect to provide joint access to their respective properties, as provided by TDC73C.040.

(c) The provisions of subsection (b) do not apply to townhouses and duplexes, which are allowed to construct driveways within 5 feet of adjacent property lines.

(d) There must be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Manager.

(e) Must comply with the distance requirements for access as provided in TDC 75.

(f) Must comply with vision clearance requirements in TDC 75.

Finding:

No driveways are greater than 40 feet wide or within 5 feet of an adjacent property line other than those to be held in common ownership. The two driveways on either side of the SW Myslony Street cul-de-sac are more than 40 feet in distance from one another and the access is further addressed by the City Engineer's separate findings regarding the standards of TDC Chapter 75. These standards are met.

PARKING LOT LANDSCAPING

Section 73C.200 – Parking Lot Landscaping Standards Purpose and Applicability.

(1) Purpose. The goals of the off-street parking lot standards are to create shaded areas in parking lots, to reduce glare and heat buildup, provide visual relief within paved parking areas, emphasize circulation patterns, reduce the total number of spaces, reduce the impervious surface area and stormwater runoff, and enhance the visual environment. The design of the off-street parking area must be the responsibility of the developer and should consider visibility of signage, traffic circulation, comfortable pedestrian access, and aesthetics.

(2) Applicability. Off-street parking lot landscaping standards apply to any surface vehicle parking or circulation area.

<u>Section 73C.230 – Industrial Parking Lot Landscaping Requirements.</u> Industrial uses must comply with the following landscaping requirements for parking lots in all zones.

(1) General. Locate landscaping or approved substitute materials in all areas not necessary for vehicular parking and maneuvering

Finding:

The parking lot contains landscaping in areas not uses for vehicles and pedestrian movement. This standard is met.

(2) Clear Zone. Clear zone required for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level.

Finding:

As shown in the landscape plans L1.0 through L1.7 (Exhibit A2), the proposed plantings will provide for visual clearance at the end of drive aisles and drive entrances. With recommended Condition of Approval A16 related to maintenance, this standard is met.

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(3) Perimeter. Minimum 5 feet in width in all off-street parking and vehicular circulation areas, including loading areas and must comply with the following:

(a) Deciduous trees located not more than 30 feet apart on average as measured on center;

(b) Shrubs or ground cover, planted so as to achieve 90 percent coverage within three years;

(c) Plantings which reach a mature height of 30 inches in three years which provide screening of vehicular headlights year round;

(d) Native trees and shrubs are encouraged; and

(e) Exception: Not required where off-street parking areas on separate lots are adjacent to one another and connected by vehicular access.

Finding:

As shown in the landscape plans L1.1 through L1.7 (Exhibit A2), at least five feet of landscape buffer is proposed for all parking and vehicle drive areas. These areas are not all proposed with deciduous trees as specified under standard (a). With recommended Condition of Approval A3 to modify the landscape plan to accommodate additional trees as specified in standard (a), and to factor in potential changes to accommodate the full width of the easement for the Ice Age Tonquin Trail, these standards are met.

(4) Landscape Island. Minimum 25 square feet per parking stall must be improved with landscape island areas and must comply with the following.

(a) May be lower than the surrounding parking surface to allow them to receive stormwater runoff and function as water quality facilities as well as parking lot landscaping;

(b) Must be protected from vehicles by curbs, but the curbs may have spaces to allow drainage into the islands;

(c) Islands must be utilized at aisle ends to protect parked vehicles from moving vehicles and emphasize vehicular circulation patterns;

(d) Landscape separation required for every eight continuous spaces in a row;

(e) Must be planted with one deciduous shade trees for every four parking spaces; Required trees must be evenly dispersed throughout the parking lot;

(f) Must be planted with groundcover or shrubs;

(g) Native plant materials are encouraged;

(h) Landscape island areas with trees must be a minimum of 5 feet in width (from inside of curb to curb);

(i) Required plant material in landscape islands must achieve 90 percent coverage within three years; and

[...]

Finding:

Given 274 parking spaces, 6,850 square feet of parking lot landscape island area is required. As shown in the landscape plans L1.1 through L1.7 (Exhibit A2), the proposed parking lot landscaping exceeds this ratio. Given 274 parking spaces, 69 trees are required and 69 are proposed. Curbs are included in the design and islands are provided at aisle ends. The landscape islands meet the spacing and size criteria as well. These standards are met.

Chapter 73D: Waste and Recyclables Management Standards

Section 73D.010 – Applicability and Objectives.

(1) Applicability. The requirements of this Chapter apply to all new or expanded:

- (a) Common wall residential developments containing five or more units;
- (b) Commercial developments;
- (c) Industrial developments; and
- (d) Institutional developments.

(2) Objectives. Mixed solid waste and source separated recyclable storage areas should be designed to the maximum extent practicable to:

- (a) Screen elements such as garbage and recycling containers from view;
- (b) Ensure storage areas are centrally located and easy to use;
- (c) Meet dimensional and access requirements for haulers;
- (d) Designed to mitigate the visual impacts of storage areas;
- (e) Provide adequate storage for mixed solid waste and source separated recyclables; and
- (f) Improve the efficiency of collection of mixed solid waste and source separated recyclables.

Section 73D.020 - Design Methods.

An applicant required to provide mixed solid waste and source separated recyclables storage areas must comply with one of following methods:

(1) The minimum standards method in TDC 73D.030;

- (2) The waste assessment method in TDC 73D.040;
- (3) The comprehensive recycling plan method in TDC 73D.050; or
- (4) The franchised hauler review method in TDC 73D.060.

Finding:

The applicant proposes to use the Minimum Standards Method (TDC 73D.030) and has verified that the location and configuration of the proposed waste facility and access will satisfy Republic Services. As discussed below, these standards are met.

Section 73D.030 – Minimum Standards Method.

This method specifies a minimum storage area requirement based on the size and general use category of the new or expanded development. This method is most appropriate when specific use of a new or expanded development is not known. It provides specific dimensional standards for the minimum size of storage areas by general use category.

(1) The size and location of the storage area(s) must be indicated on the site plan. Requirements are based on an assumed storage area height of four feet for mixed solid waste and source separated recyclables. Vertical storage higher than four feet, but no higher than 7 feet may be used to accommodate the same volume of storage in a reduced floor space (potential reduction of 43 percent of specific requirements). Where vertical or stacked storage is proposed, submitted plans must include drawings to illustrate the layout of the storage area and dimensions for containers.

(2) The storage area requirement is based on uses. If a building has more than one use and that use occupies 20 percent or less of the gross leasable area (GLA) of the building, the GLA occupied by that use must be counted toward the floor area of the predominant use(s). If a building has more than one use and that use occupies more than 20 percent of the GLA of the building, then the storage area requirement for the whole building must be the sum of the area of each use. Minimum storage area requirements by use is as follows:

(a) Common wall residential 5-10 units must provide 50 square feet.

(b) Common wall residential greater than 10 units must provide 50 square feet plus an (additional 5 square feet per unit above 10.

(c) Commercial, industrial, and institutional developments must provide a minimum storage area of 10 square feet plus:

(i) Office - 4 square feet/1000 square feet gross leasable area (GLA);

(ii) Retail - 10 square feet/1000 square feet GLA;

(iii) Wholesale/ Warehouse/ Manufacturing - 6 square feet/1000 square feet GLA;

(iv) Educational and Institutional - 4 square feet/1000 square feet GLA; and

(v) All other uses- 4 square feet/1000 square feet GLA.

(3) Mixed solid waste and source separated recyclables storage areas for multiple tenants on a single site may be combined and shared.

Finding:

A minimum 780 square feet of trash enclosure area is required for Building A (129,975/1000 *6) and a minimum 1,122 square feet is required for Building B (187,150/1000 *6). Several trash enclosures are proposed as shown on the landscape plans L1.1 through L1.7 (Exhibit A2). Lot A features a 400-square-foot trash enclosure at the northeast corner and second 400-square-foot enclosure at the southeast corner. Lot B has a 200-square-foot proposed enclosure at the southwest corner and a 400-square-foot enclosure at the northeast corner. The applicant proposes to comprise the difference with an interior trash storage area. With recommended Condition of Approval A3 that the final site plans show such an interior area comprising at least 502 square feet, these standards are met.

Section 73D.070 – Location, Design and Access Standards.

The following location, design, and access standards are applicable to all storage areas:

(1) Location Standards.

(a) The storage area for source separated recyclables may be collocated with the storage area for mixed solid waste.

(b) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

(c) Exterior storage areas must:

(i) Be located in central and visible locations on the site to enhance security for users;

(ii) Be located in a parking area; and

(iii) Not be located within a required front yard setback or in a yard adjacent to a public or private street.

(2) Design Standards.

(a) The dimensions of the storage area must accommodate containers consistent with current methods of local collection at time of construction or alteration.

(b) Indoor and outdoor storage areas must comply with Oregon Building and Fire Code requirements.

(c) Exterior storage areas must be enclosed by a sight obscuring fence or wall at least 6 feet in height.

(d) Evergreen plants must be placed around the enclosure walls, excluding the gate or entrance openings for common wall, commercial, and institutional developments.

(e) Gate openings for haulers must be a minimum of 10 feet wide and must be capable of being secured in a closed and open position.

(f) Horizontal clearance must be a minimum of 10 feet and a vertical clearance of 8 feet is required if the storage area is covered.

(g) A separate pedestrian access must also be provided in common wall, commercial, and institutional developments.

(h) Exterior storage areas must have either a concrete or asphalt floor surface.

(i) Storage areas and containers must be clearly labeled to indicate the type of material accepted.

Finding:

The proposed waste areas are in visible parking areas convenient to tenant entries and loading areas, and are outside of the applicable setbacks. As shown in the applicant's submittal, Republic Services, the applicable waste hauler, has indicated that the dimensions and accessibility of the enclosures meet their service needs (Exhibit A2). Further compliance with Building and Fire Code standards will be reviewed at the time of building permit. The location and design standards are met.

(3) Access Standards.

(a) Storage areas must be accessible to users at convenient times of the day, and to hauler personnel on the day and approximate time they are scheduled to provide hauler service.(b) Storage areas must be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access.

(c) Storage areas must be accessible to hauler trucks without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius must be provided to allow hauler trucks to safely exit the site in a forward motion.

(d) Storage areas must located so that pedestrian and vehicular traffic movement are not obstructed on site or on public streets adjacent to the site.

(e) The following is an exception to the access standard:

(i) Access may be limited for security reasons.

Finding:

As shown in the applicant's submittal, Republic Services, the applicable waste hauler, has indicated that the dimensions and accessibility of the enclosures meet their service needs (Exhibit A6). These standards are met.

III. CONLUSION AND RECOMMENDATION

Based on the application materials and analysis and findings presented above, staff finds that the applicable criteria have been met relative to the proposed Architectural Review request (AR 19-0008), and therefore recommends approval of this application with the following conditions of approval:

GENERAL:

- A1. This Architectural Review approval shall expire after two years unless a building, or grading permit submitted in conjunction with a building permit application, has been issued and substantial construction pursuant thereto has taken place and an inspection performed by a member of the Building Division, or an extension is granted under the terms of Section 33.020(10).
- A2. The applicant must comply with the City Engineer's Decision (PFR 19-0008) from the City of Tualatin Engineering Division, pursuant to TDC 33.020(6)(a)(ii).

PRIOR TO BUILDING OR ENGINEERING PERMIT ISSUANCE:

- A3. The applicant must submit a Final Site Plan Set (in PDF format) to the Planning Division that is in substantial conformance to the submitted site plans and includes:
 - a. Buildings that are setback at least 30 feet from front property line at SW Myslony Street, and in conformance with all other applicable development standards.
 - a. A site configuration on the North side of Building A that will meet parking stall length (*TDC Figure 73-1*), drive aisle width (*TDC 73C.020*), and ingress/egress standards (*TDC 73C.130(3)*) without encroaching into the required 16-foot easement for the Ice Age Tonquin Trail (discussed in the City Engineer's Decision PRF 19-0008). No development other than landscaping, and pedestrian amenities related to the future trail, are permitted within the easement.
 - b. A walkway connection between Building A and Building B designed to be of a different appearance than the adjacent paved vehicular areas and meeting all standards of TDC 73A.400(1).
 - c. Detail to demonstrate that proposed bicycle parking meets the standards of TDC 73C.050(2) (a), (b), and (c), and that the number of spaces conforms with TDC 73C.100(1).
 - d. Eleven parking spaces designated as carpool/vanpool parking, consistent with TDC 73C.100(2).
 - e. Deciduous trees planted no more than 30 feet apart on the perimeter of vehicle circulation areas consistent with TDC 73C.230(3). Such trees may be omitted where the

perimeter area is also within a Public Utility Easement as required by the City Engineer's Decision, and where there are existing trees at or near the property line.

- f. At least 502 square feet of designated interior waste storage area.
- A4. The applicant must demonstrate owner permission for the removal of off-site trees and demonstrate that landscaping requirements for those neighboring properties will continue to be met. Alternatively, the applicant must provide a revised landscaping plan showing trees as preserved, with adequate protection for trees at the property line from all impacts of development.

DURING CONSTRUCTION ACTIVITY:

A5. The applicant must install the tree protection fencing consistent with Section 73.250(2). Please contact the Planning Division to schedule an inspection with a minimum of 48 hours' notice.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY:

- A6. The applicant must construct proposed buildings and all site improvements as illustrated on the approved Final Site Plan and Final Color Architectural Elevations. The applicant must contact the Planning Division for a site inspection at least 72 hours prior to requesting a certificate of occupancy. This inspection is separate from inspection(s) done by the Building Division.
- A7. Areas impacted by grading and structure demolition must be revegetated pursuant to TDC 73B.040(1).
- A8. The applicant must install an identification system which clearly locates buildings and their entries for patrons and emergency services.
- A9. The applicant must install bicycle parking signage and vanpool/carpool parking signage per MUTCD standards, pursuant to TDC 73C.010(2)(xi) and TDC 73C.050(2)(d).

THE FOLLOWING CODE REQUIREMENTS APPLY TO THE SITE IN AN ON-GOING MANNER:

- A10. This development is approved for 187,417 square-feet of warehousing uses and 129,708 square-feet of manufacturing uses. Additional review and approvals may be necessary for other uses permitted in the zone, but not contemplated as part of this approval.
- A11. Standards for this site have been reviewed considering both future parcels as one site. Future modifications to either parcel will need to be reviewed for the entire site as a whole.

- A12. All mechanical equipment must be screened in accordance with TDC 73A.300(5). Prior to approval of a mechanical permit, the applicant or property owner must submit scaled elevations that illustrate screening by a parapet or other method.
- A13. All sign permits require separate sign permit approval per TDC Chapter 38. This approval does not constitute sign permit approval.
- A14. All site, building exterior, and landscaping improvements approved through the AR process must be continually maintained, so as to remain substantially similar to original approval through the AR process, except as permitted under TDC 33.020(7) (Modifications to Previously Approved Final Architectural Review Decisions).
- A15. All parking spaces shall be continuously maintained in compliance with the dimensional standards specified in TDC Figure 73-1.
- A16. Site landscaping and street trees shall be maintained to meet the vision clearance requirements of TDC Figure 75-1.
- A17. The proposed development must comply with the noise standards of TDC 63.051.

Tualatin Industrial Park

Narrative Architectural Review Application

Prepared for:

City of Tualatin 18880 SW Martinazzi Avenue Tualatin, Oregon 97062

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> October 2019 19173.30

Tualatin Industrial Park

Summary

PROJECT DESCRIPTION

This project proposes a two structure, Industrial Park facility with associated parking, loading, landscape and utilities. The total site area is 717,020 SF, with a lot consolidation and PLA proposed to create 2 Lots. Lot A will contain 308,679 SF. Lot B will contain 408,341 SF. Building A proposes 129,975 SF and Building B proposes 187,150 SF.

SITE DESCRIPTION

The property is located at 11045 SW Tualatin-Sherwood Road. However, the project does not propose access from Tualatin-Sherwood Road. The project access is from SW Myslony Street. The property is vacant with no significant vegetation. The total site area is 717,020 SF. Lot A will contain 308,679 SF. Lot B will contain 408,341 SF. The property is zoned General Manufacturing.

APPLICABLE STANDARDS

The following narrative addresses the compliance of this project with all applicable codes and standards of the Tualatin Development Code (TDC) and the Tualatin Municipal Code (TMC).

Tualatin Development Code:	
CHAPTER 33 - Applications and Approval Criteria	3
33:110 Tree Removal Permit/Review	
CHAPTER 61 - General Manufacturing Planning District	3
CHAPTER 71 - Wetlands Protection District	6
CHAPTER 73A - Site Design Standards	9
CHAPTER 73B - Landscaping Standards	11
CHAPTER 73C - Parking Standards	15
CHAPTER 73D - Waste and Recyclables Management Standards	19
CHAPTER 74 - Public Improvements Requirements	21
CHAPTER 75 - Access Management.	26

Tualatin Municipal Code:

Chapter 03-02: Sewer Regulations	30
Chapter 03-03: Water Service	.30
Chapter 03-05 Soil Erosion, Surface Water Management,	
Water Quality, Facilities and Building & Sewers	.32

Tualatin Development Code

CHAPTER 33 - Tree Removal Permit/Review

TDC 33.110. - Tree Removal Permit/Review.

(3) Procedure Type. Tree Removal Permit applications are subject to Type II Review in accordance with TDC Chapter 32. Tree Removal Permit applications submitted with an Architectural Review, Subdivision, or Partition application will be processed in conjunction with the Architectural Review, Subdivision, or Partition decision.
(4) Specific Submittal Requirements. In addition to the general submittal requirements in TDC Chapter 32. The Review of the term of the term of the term of the term.

TDC 32.140 (Application Submittal), an applicant must submit the following:

(a) Tree Preservation Plan. A tree preservation plan drawn to scale must include:

(b) *Tree Assessment Report*. A tree assessment prepared by a certified arborist must include:

(c) *Tree Tags.* All trees on-site must be physically identified and numbered in the field with an arborist-approved tagging system that corresponds to the Tree Preservation Plan and Tree Assessment Report.

Response: A Tree Preservation Plan and Assessment Report is included in this application. On Site tree tagging corresponds to Tree Preservation Plan and Assessment Report.

(5) Approval Criteria.

(a) An applicant must satisfactorily demonstrate that at least one of the following criteria are met:

(i) The tree is diseased and:

(ii) The tree represents a hazard which may include but not be limited to:

(iii) It is necessary to remove the tree to construct proposed improvements based on Architectural Review approval, building permit, or approval of a Subdivision or Partition Review.

(b) If none of the conditions in TDC 33.110(5)(a) are met, the certified arborist must evaluate the condition of each tree.

(7) *Conditions of Approval.* Any tree required to be retained must be protected in accordance with the TDC 73B and 73C

Response: An arborist report which evaluates each tree on-site, is included in this submittal. Trees designated to be removed are indicated as within construction areas, or are dead, dying or dangerous.

CHAPTER 61 - General Manufacturing Planning District

TDC 61.200. Use Categories.

Response: Per Table 61-1 'Use Category in the MG Zone', Warehouse and Freight Movement is a permitted with conditions use. The condition restricts the warehousing of building materials and supplies. All other uses are permitted outright. Light Manufacturing is also a permitted use in this zone.

This project proposes a Warehouse use, which is permitted as conditioned above.

TDC 61.300. - Development Standards. Table 61-2

REQUIREMENT
20,000 square feet
100 feet

NOTES:

When lot has frontage on public street, minimum lot width at the street is 100'.

When lot has frontage on cul-de-sac street, minimum lot width at the street is 50'. Response: Both Lots will have access from the Myslony cul-de-sac. Lot B also fronts on Tualatin-Sherwood Road, although no access is taken from that right-of-way.

MINIMUM SETBACKS	
Front	30 feet
Front Setback Adjacent to Residential or Manufacturing Park Zone	50 feet
Side	0-50 feet
Side Setback Adjacent to Residential or Manufacturing Park Zone	50 feet
Rear	0-50 feet
Rear setback adjacent to Residential or Manufacturing Park Zone	50 feet
Parking and Circulation Areas	5 feet
Parking and Circulation Areas	10 feet
Adjacent to Residential or	
Manufacturing Park Zone	
Fences	10 feet

Notes:

Side Setback determined through Architectural Review process. No minimum setback if adjacent to railroad right-of-way or spur track.

Rear Setback determined through Architectural Review process. No minimum setback if adjacent to railroad right-of-way or spur track.

Parking and Circulation Areas have no minimum setback required adjacent to joint access approach in accordance with TDC 73C.

Fencing must be setback from public right-of-ways

STRUCTURE HEIGHT	
Maximum Height	60 feet
Maximum Height Adjacent to Residential Zone	28 feet

Notes:

Building height may be increased to 100 feet if yards adjacent to structure are not less than a distance equal to the height of the structure.

Building height measured at the 50-foot setback line, includes flagpoles. The building height may extend above 28 feet on a plane beginning at the 50-foot setback line at a slope of 45 degrees extending away from the 50-foot setback line.

Flagpoles may extend to 100 feet.

Response: The property does not abut residential uses; setbacks conform to the above code requirements.

Building A front setback is 22 feet from the property line adjacent to the cul-de-sac on Myslony street, the side setbacks vary from 120 feet at the rear to 40 feet at the north property line.

Building B front setback is 30 feet from the property line, the rear setback is 120 feet and the side setbacks vary from 36 feet to 66 feet. Parking adjacent to property line is setback 12 feet.

Building heights are typically 40 feet tall with variations to 41 feet 6 inches.

The proposed buildings meet the development standards set forth in the above tables.

TDC 61.310. - Additional Development Standards.

(1) *Outdoor Uses*. All uses must be conducted wholly within a completely enclosed building, except off-street parking and loading, Basic Utilities, Wireless Communication Facilities and outdoor play areas of child day care centers as required by state day care certification standards.

Response: All uses will be conducted within the buildings except off-street parking and loading.

(2) *Sound Barrier Construction.* Sound barrier construction is required to mitigate the impact of noise associated with overhead doors and building mechanical equipment, including but not limited to heating, cooling and ventilation equipment, compressors, waste evacuation systems, electrical transformers, and other motorized or powered machinery located on the exterior of a building. Sound barrier construction must conform to the following standards:

Response: Sound barriers are not required for this project.

(3) Setback Reduction for Developments Adjacent to Greenways and Natural Areas. To preserve natural areas and habitat for fish and wildlife, the decision-making authority may provide a front, side, or rear yard setback reduction for developments that are adjacent to Greenways or Natural Areas that dedicate land for conservation or public recreational purposes, in accordance with the following standards.

Response: The project site is not located next to a Greenway or Natural Area. No setback reductions are requested. It is however adjacent to sensitive lands as defined by CWS. A Site Assessment Report has been submitted to CWS for review and approval, which indicates that the sensitive lands and the required buffer do not fall within the project site.

CHAPTER 71 - Wetlands Protection District

TDC 71.061. - Development Setback.

(1) Except as otherwise provided for herein, all permanent surface structures and other surface improvements located adjacent to the Wetlands Protected Area (WPA) shall be set back not less than 40 feet from the boundary of the Wetlands Protected Area (WPA) established in accordance with the provisions of this chapter.

Response: The Wetland Protection District buffer is not located on the subject site, therefore, this criteria does not apply.

TDC 71.062. - Excavation and Filling.

Excavation, filling and earth-moving activities are permitted within the Wetlands Protection District (WPD), subject to the following restrictions:

(2) Within the Wetlands Fringe Area (WFA), excavation and filling shall be allowed in all areas for purposes related to its full development and use in accordance with applicable primary planning district classifications and for purposes of increasing or

decreasing the elevations within such area to, or in excess of, the level of the so-called "100-year flood plain"; provided, however:

Response: The site falls within the Wetland Fringe Area and Hedges Creek Subbasin. However, the Wetland Protection District buffer is not located on the subject site.

(a) Excavation or filling in the Wetlands Fringe Area (WFA) shall not, when completed, result in significant increase or decrease in the volume of surface water that will thereafter flow or discharge into the Wetlands Protected Area (WPA) from the Wetlands Fringe Area (WFA).

Response: The proposed Grading Plan confines stormwater to the site were it will be detained and released at pre-developed rates.

(b) All excavation, filling or other earth-moving activities within the Wetlands Fringe Area (WFA) shall be conducted in such a manner that erosion and silting of surface water runoff into the Wetlands Protected Area (WPA) will not take place. Where upland areas are exposed and subject to erosion due to such excavation, filling or other earth-moving activities, temporary grass cover or other soil stabilizing vegetation shall be established immediately upon completion of such activities if such exposure and erosion will result in erosion or siltation of any portion of the Wetlands Protected Area (WPA). **Response: Erosion control measures include standard ESC practices per CWS and DEQ 1200C permit requirements. Additional measures will be implemented should an issue be identified that is not being handled with the standard measures.**

(3) Where necessary or desired in order to fully utilize all land lying in the Wetlands Fringe Area (WFA), or for the purpose of the installation or maintenance of subsurface improvements located thereon, fill, excavation or other earth-moving activities shall be permitted within the setback area above described; provided that, upon completion of such activities, the profile of the setback area shall conform with the characteristics of a "Type A" or "Type B" development setback, as depicted by Figure 71-1.

Response: The site is located outside of the setback area. This criteria does not apply.

TDC 71.063. - Contamination and Sedimentation.

During the course of development, site preparation, construction of any improvements, or usage of lands lying within the Wetlands Fringe Area (WFA) or the Sweek Pond Management Area (SPMA), the introduction of storm drainage, surface and roof runoff into the Wetlands Protection Area (WPA) and the Sweek Pond Management Area (SPMA) shall only occur when such runoff is substantially free of silt, debris, oil or other materials injurious to plants or wildlife in the Wetlands Protected Area and the Sweek Pond Management Area (WPA and SPMA).

Response: The project site is located within the Wetland Fringe Area.

(1) All apparent and potential sources of storm drainage and surface runoff contamination located within the Wetlands Fringe Area (WFA) and the Sweek Pond Management Area (SPMA) such as operating areas, and equipment cleaning and maintenance area, shall have curbs and be drained into impoundment areas or a waste treatment system in such a manner that no contaminated storm drainage or surface runoff originating in such areas will be discharged directly into the Wetlands Protected Area (WPA) or Sweek Pond Management Area (SPMA) without treatment that would render such drainage uncontaminated.

Response: All vehicular use areas will be paved, with curb and gutter. These areas will drain into a an onsite storm system to be used to treat and complete flow control for the run off.

(2) No solid wastes that are known to be toxic to vegetation or wildlife within the Wetlands Protected Area (WPA) and the Sweek Pond Management Area (SPMA) shall be permanently stored or disposed of within the Wetlands Fringe Area (WFA) or Sweek Pond Management Area (SPMA).

Response: No toxic solid wastes will be store (there is no outdoor storage proposed) or disposed of within the WFA.

(3) No pesticides shall be used in the Wetlands Protected District before the type, duration and manner of use have been approved by the Oregon Department of Environmental Quality.

Response: Any proposed pesticides, used for landscape maintenance will be approved for use by DEQ.

(4) To prevent soil movement into, or erosion within, the Wetlands Protected Area and the Sweek Pond Management Area (WPA and SPMA) as a result of drainage from adjacent upland areas within the Wetlands Fringe Area (WFA) and Sweek Pond Management Area (SPMA) during the course of development, site preparation, construction of improvements or use, a combination of filters or diversions or other appropriate means to be specified by an engineer shall be employed where necessary in order to supplement soils stabilization that will result from re-vegetation as otherwise provided for and described in TDC 71.062(2) and 71.064.

Response: The site has been graded to keep stormwater on-site. Additional erosion control techniques will be employed during construction and remain in place through re-vegetation. After capturing of the stormwater it will be treated (water quality) and detained to be released at the pre-developed rate to not impact the downstream system.

TDC 71.064. - Vegetation.

(2) Vegetation occurring within the Wetlands Fringe Area (WFA) may be removed or altered at any time during the course of development, site preparation, construction of improvements or usage, when reasonably required for any of such purposes, subject to the following:

(a) Areas where vegetation has been removed or altered incidental to construction or development of land areas within the Wetlands Fringe Area (WFA) lying outside the setback area, which are not otherwise committed and used as the location or site of surface improvements associated with the development or use of the property, shall be seeded or planted to reestablish a vegetation cover compatible with the adjacent wetland habitats insofar as practicable.

Response: The project site is located within the Wetland Fringe Area. All setbacks and landscape areas will be planted as required by code.

(d) Re-vegetation as required by the provisions of this section shall begin as soon as practicable, but in no event later than 60 days, after cessation of development, unless otherwise approved by the City. Such re-vegetation shall be deemed to comply with the requirements of this chapter if approved or recommended as to type, species and placement by either the U.S. Soil Conservation Service or the Oregon Department of Fish and Wildlife.

Response: Re-vegetation on-site will be completed well within 60-days of completion of construction.

<u>CHAPTER 73A - Site Design Standards</u>

TDC 73A.010. - Site and Building Design Standards Purpose and Objectives. (1) *Purpose.* The purpose of the site and building design objectives and standards found in TDC 73A through TDC 73G is to promote functional, safe, innovative, and attractive sites and buildings that are compatible with the surrounding environment, including, but not limited to:

(a) The building form, articulation of walls, roof design, materials, and placement of elements such as windows, doors, and identification features; and

(b) The placement, design, and relationship of proposed site elements such as buildings, vehicular parking, circulation areas, bikeways and bike parking, accessways, walkways, buffer areas, and landscaping.

(2) *Objectives*. The objectives of site and building design standards in TDC 73A through TDC 73G are to:

(a) Enhance Tualatin through the creation of attractively designed development and streetscapes;

(b) Encourage originality, flexibility, and innovation in building design;

(c) Create opportunities for, or areas of, visual and aesthetic interest for occupants and visitors to the site;

(d) Provide a composition of building elements which responds to function, land form, identity and image, accessibility, orientation and climatic factors;

(e) Conserve, protect, and restore fish and wildlife habitat areas, and maintain or create visual and physical corridors to adjacent fish and wildlife habitat areas;

(f) Enhance energy efficiency through the use of landscape and architectural elements; and

(g) Minimize disruption of natural site features such as topography, trees, and water features.

Response: The proposed development compliments the adjacent developments through consistency of use, articulated building elevations emphasizing the entrances, and providing pedestrian circulation through the sites from SW Tualating-Sherwood Road to Myslony Street and the Woolly Mammoth trail.

TDC 73A.400. - Industrial Design Standards.

The following standards are minimum requirements for industrial development in all zones:

(1) Walkways. Industrial development must provide walkways as follows:

(a) Walkways must be a minimum of five feet in width;

(b) Walkways must be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete (not gravel or woody material);

(c) Walkways must meet ADA standards applicable at time of construction or alteration;

(e) Walkways must be provided between the main building entrances and other on-site buildings, accessways, and sidewalks along the public right-of-way;

(f) Walkways through parking areas, drive aisles, and loading areas must be of a different appearance than the adjacent paved vehicular areas; and

(g) Outdoor Recreation Access Routes must be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

Response: 5 foot wide concrete walkways are proposed between the building entrances and through parking areas connecting to the properties to Myslony Street, the Woolly Mammoth trail and SW Tualatin-Sherwood Road. (2) *Accessways.*

(a) *When Required*. Accessways are required to be constructed when a common wall development is adjacent to any of the following:

Response: The development does not propose any common walls.

(3) Drive-up Uses. Drive-up uses must comply with the following:

Response: The development does not propose a drive-up use.

(4) *Safety and Security*. Industrial development must provide safety and security features as follows:

(a) Locate windows and provide lighting in a manner that enables tenants, employees, and police to watch over pedestrian, parking, and loading areas;

(b) Locate windows and interior lighting to enable surveillance of interior activity from the public right-of-way;

(c) Locate, orient, and select exterior lighting to facilitate surveillance of on-site activities from the public right-of-way without shining into public rights-of-way or fish and wildlife habitat areas;

(d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services; and

(e) Above ground sewer or water pumping stations, pressure reading stations, water reservoirs, electrical substations, and above ground natural gas pumping stations must provide a minimum six foot tall security fence or wall.

Response: The proposed development locates windows for lighting and security toward the public street frontage. Exterior lighting is proposed that complies with dark sky initiatives. Building addresses will be prominently displayed. No above ground sewer, water pumping stations, pressure reading stations, water reservoirs, electrical substations, or above ground natural gas pumping stations are proposed as part of this development.

(5) *Service, Delivery, and Screening.* Industrial development must provide service, delivery, and screening features as follows:

(a) Above grade and on-grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners must be screened with sight obscuring fences, walls or landscaping;

(b) Outdoor storage must be screened with a sight obscuring fence, wall, berm or dense evergreen landscaping; and

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(c) Above ground pumping stations, pressure reading stations, water reservoirs; electrical substations, and above ground natural gas pumping stations must be screened with sight-obscuring fences or walls and landscaping.

Response: Above grade and on-grade utilities are screened with fences or walls and landscaping. Outdoor storage is not part of the proposed development.

(6) *Adjacent to Transit*. Industrial development adjacent to transit must comply with the following:

Response: The project does not propose a vehicular or pedestrian connection to SW Tualatin-Sherwood Rd. There is no transit within approximately 0.4 miles of the Mysloney cul-de-sac.

CHAPTER 73B - Landscaping Standards

TDC 73B.020. - Landscape Area Standards Minimum Areas by Use and Zone. The following are the minimum areas required to be landscaped for each use and zone: (3) CO, CR, CC, CG, ML and MG zones within the Core Area Parking District—All uses:

Minimum Area Requirement - 10 percent of the total area to be developed Minimum Area Requirement with dedication for wildlife habitat - 7.5 percent of the total area to be developed

Response: Please see below landscape areas for each building/lot.	
BUILDING A	
	307 100 CE

DITE DING D

TOTAL SITE AREA	= 297,108 SF
LANDSCAPE AREA REQUIRED 10% OF SITE	= 29,711 SF
LANDSCAPE ARE PROPOSED 10% OF SITE	= 29,808 SF

BUILDING B	
TOTAL SITE AREA	= 420,057 SF
LANDSCAPE AREA REQUIRED 10% OF SITE	= 42,006 SF
LANDSCAPE ARE PROPOSED 19.2% OF SITE	= 80,718 SF

TDC 73B.050. - Additional Minimum Landscaping Requirements for Industrial Uses.

(1) *General.* In addition to requirements in TDC 73B.020, industrial uses must comply with the following:

(a) All areas not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas must be landscaped.

(i) This standard does not apply to areas subject to the Hedges Creek Wetlands Mitigation Agreement.

(b) Minimum 5-foot-wide landscaped area must be located along all building perimeters viewable by the general public from parking lots or the public right-of-way, but the following may be used instead of the 5-foot-wide landscaped area requirement:

(i) Pedestrian amenities such as landscaped plazas and arcades; and

(ii) Areas developed with pavers, bricks, or other surfaces, for exclusive pedestrian use and contain pedestrian amenities, such as benches, tables with umbrellas, children's play areas, shade trees, canopies.

(c) Five-foot-wide landscaped area requirement does not apply to:

- (i) Loading areas,
- (ii) Bicycle parking areas,
- (iii) Pedestrian egress/ingress locations, and

(iv) Where the distance along a wall between two vehicle or pedestrian access openings (such as entry doors, garage doors, carports and pedestrian corridors) is less than eight feet.

(d) Development that abuts an RL or MP Zone must have landscaping approved through Architectural Review and must provide and perpetually maintain dense, evergreen landscaped buffers between allowed uses and the adjacent RL and MP zones.

Response: The landscape plan provides for a landscape strip adjacent to the building except for areas of pedestrian access. The project does not abut RL or MP zones.

(2) *MP Area—Wetland Buffer.* Wetland buffer areas up to 50 feet in width may be counted toward the required percentage of site landscaping, subject to the following: **Response: No wetland buffer exists on the proposed development site.**

TDC 73B.070. - Minimum Landscaping Standards for All Zones.

The following are minimum standards for landscaping for all zones.

(1) Required Landscape Areas:

Must be designed, constructed, installed, and maintained so that within three years the ground must be covered by living grass or other plant materials.

The foliage crown of trees cannot be used to meet this requirement.

A maximum of ten percent of the landscaped area may be covered with unvegetated areas of bark chips, rock or stone.

Must be installed in accordance with the provisions of the American National Standards Institute ANSI A300 (Part 1) (Latest Edition).

Must be controlled by pruning, trimming, or otherwise so that:

It will not interfere with designated pedestrian or vehicular access; and

It will not constitute a traffic hazard because of reduced visibility.

Response: Please see the Landscape Plan for compliance with the above code requirements.

(2) Fences:

Landscape plans that include fences must integrate any fencing into the plan to guide wild animals toward animal crossings under, over, or around transportation corridors.

Response: No fences are proposed at this time.

(3) Tree Preservation:

Trees and other plant materials to be retained must be identified on the landscape plan and grading plan.

During construction:

Must provide above and below ground protection for existing trees and plant materials identified to remain;

Trees and plant materials identified for preservation must be protected by chain link or other sturdy fencing placed around the tree at the drip line;

If it is necessary to fence within the drip line, such fencing must be

specified by a qualified arborist;

Top soil storage and construction material storage must not be located within the drip line of trees designated to be preserved;

Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's dripline area, such grading, paving, trenching, boring, digging, or similar encroachment must only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met; and

Tree root ends must not remain exposed.

Landscaping under preserved trees must be compatible with the retention and health of the preserved tree.

When it is necessary for a preserved tree to be removed in accordance with TDC 33.110 (Tree Removal Permit) the landscaped area surrounding the tree or trees must be maintained and replanted with trees that relate to the present landscape plan, or if there is no landscape plan, then trees that are complementary with existing, landscape materials. Native trees are encouraged

100 percent of the area preserved under any tree or group of trees (Except for impervious surface areas) retained in the landscape plan must apply directly to the percentage of landscaping required for a development

Response: Please see the Tree removal and protection plan for trees to be removed and protected and see the landscape plan for proposed new trees to be planted. (4) Grading:

After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

All planting areas must be graded to provide positive drainage.

Soil, water, plant materials, mulch, or other materials must not be allowed to wash across roadways or walkways.

Impervious surface drainage must be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

(6) Re-vegetation in Un-landscaped Areas:

Vegetation must be replanted in all areas where vegetation has been removed or damaged in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements.

Plant materials must be watered at intervals sufficient to ensure survival and growth for a minimum of two growing seasons.

The use of native plant materials is encouraged to reduce irrigation and maintenance demands.

Disturbed soils should be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity.

Response: All disturbed areas as a result of construction will be vegetated. Areas outside of the formal landscape design will be seeded with an appropriate no-mow non irrigated seed mix.

TDC 73B.080. - Minimum Standards Trees and Plants.

The following minimum standards apply to the types of landscaping required to be installed for all zones.

(1) Deciduous Shade Trees:

One and on-half inch caliper measured six inches above ground;

Balled and burlapped; bare root trees will be acceptable to plant during their dormant season;

Reach a mature height of 30 feet or more;

Cast moderate to dense shade in summer;

Live over 60 years;

Do well in urban environments, tolerate pollution, heat, and resistant to drought; Require little maintenance and mechanically strong;

Insect- and disease-resistant;

Require little pruning; and

Barren of fruit production.

Response: Deciduous Shade trees are specified at 1.5 inch caliper B&B, mature at 30 feet min., are long lived and do well in an urban environment. Please see the Landscape Plan for Tree species, size and specifications.

(2) Deciduous Ornamental Trees:

One and on-half inch caliper measured six inches above ground;

balled and burlapped; bare root trees will be acceptable to plant during their dormant season; and

Healthy, disease-free, damage-free, well-branched stock, characteristic of the species

Response: Ornamental trees are specified at 1.5 inch caliper B&B. Please see the Landscape Plan for Tree species, size and specifications.

(3) Coniferous Trees:

Five feet in height above ground;

Balled and burlapped; bare root trees will be acceptable to plant during their dormant season; and

Healthy, disease-free, damage-free, well-branched stock, characteristic of the species.

Response: Evergreen trees are specified at 5 feet tall B&B. Please see the Landscape Plan for Evergreen Tree species, size and specifications.

(4) Evergreen and Deciduous Shrubs:

One to five gallon size;

Healthy, disease-free, damage-free, well-branched stock, characteristic of the species; and

Side of shrub with best foliage must be oriented to public view.

Response: Please see the Landscape Plan for Shrub species, size and specifications. (5) Groundcovers:

Fully rooted;

Well branched or leafed;

Healthy, disease-free, damage-free, well-branched stock, characteristic of the species; and

English ivy (Hedera helix) is prohibited.

Response: Please see the Landscape Plan for groundcover species, size and specifications. No Hedera helix is proposed.

(6) Lawns:

Consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry;

100 percent coverage and weed free; and

Healthy, disease-free, damage-free, characteristic of the species.

Response: Please see the Landscape plan and specifications.

CHAPTER 73 - Parking Standards

TDC 73C.100. - Off-Street Parking Minimum/Maximum Requirements.

(1) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City, except these standards do not apply in the Core Area Parking District. The Core Area Parking District standards are in TDC 73C.110.

Response: The project site is not within the Core Area Parking District. The property is located within Zone B. The following off-street parking requirements apply.

(f) Industrial

(i) Manufacturing	
Minimum Vehicle Parking	- 1.60 spaces per 1,000 SF of gross floor area
Maximum Vehicle Parking	- Zone B: None
Bicycle Parking	- 2, or 0.10 spaces per 1,000 GSF, whichever is greater
% Bicycle Parking/Covered	- First 5 spaces or 30%, whichever is greater

Response: Overall the site proposes 40% manufacturing and 60% warehousing.		
% Bicycle Parking/Covered	- First 5 spaces or 30%, whichever is greater	
Bicycle Parking	- 2, or 0.10 spaces per 1,000 GSF, whichever is greater	
Maximum Vehicle Parking	- Zone B: 0.5 spaces per 1,000 SF of gross floor area	
Minimum Vehicle Parking	- 0.30 spaces per 1,000 SF of gross floor area	
(ii) Warehousing		

Building A: 129,975 SF

Manufacturing (35%) - 45,491.25

- 1.6/1000 = 73 minimum spaces
- No maximum spaces
- .1/1000 = 5 bike spaces required.
- first 5 bike spaces covered.

Warehouse (65%) - 84,483.75

- 0.30/1000=25 spaces minimum
- No maximum combined with Manufacturing
- .1/1000 = 8 bike spaces required.
- first 5 bike spaces covered.

Building A

Required

Total Provided:

98 vehicular spaces (min.) 13 bike parking spaces/10 covered

102 vehicular spaces

15 bike parking spaces/10 cover

Building B: 187,150 SF

Manufacturing (45%) - 84,217.5 SF

- 1.6/1000 = 135 minimum spaces
- No maximum spaces
- .1/1000 = 8 bike spaces required.
- first 5 bike spaces covered.

Warehouse (55%) - 102,932.5 SF

- 0.30/1000=31 spaces minimum
- No maximum combined with Manufacturing
- .1/1000 = 10 bike spaces required.
- first 5 bike spaces covered.

Building B	
Required	Total Provided:
166 vehicular spaces (min.)	172 vehicular spaces
18 bike parking spaces/10 covered	

(2) In addition to the general parking requirements in subsection (1), the following are the minimum number of off-street vanpool and carpool parking for commercial, institutional, and industrial uses.

Number of Required Parking Spaces		Number Vanpool/Carpool spaces	
0-10 spaces		1 space	
10-25 spaces		2 spaces	
26 spaces and greater		1/each 25 spaces	
Response:			
Building A:			
Vanpool/Carpool	Required - 5 spaces		
	Provided - 5 spaces		
Building A:			
Vanpool/Carpool	Required - 7 spaces		
	Provided - 7 spaces		

TDC 73C.120. - Off-Street Loading Facilities Minimum Requirements.

(1) The minimum number of off-street loading berths for commercial, industrial, and institutional users as follows:

Industrial	# of Berths	Dimensions	Unobstructed Clearance
Less than 5,000 SF	0	0	0
5,000 - 25,000	1	12' x 60'	14'
25,000 - 60,000	2	12' x 60'	14'
60,000 and over	3	12' x 60'	14'

Response: <u>Building A:</u> Off-street loading

Required - 3 berths Provided - 29 berths

Building A: Off-street Loading Required - 3 berths Provided - 24 berths

(2) Loading berths must not use the public right-of-way as part of the required off-street loading area.

Response: the loading areas for both buildings are designed with adequate maneuvering room to eliminate the use of the cul-de-sac.

(3) Required loading areas must be screened from public view, public streets, and adjacent properties by means of sight-obscuring landscaping, walls or other means, as approved through the Architectural Review process.

Response: The loading areas for both buildings are located behind the structure, affectively using the building to screen the loading areas from the views by the public rights-of-way. Landscape is used to screen these areas from adjacent properties.

(4) Required loading facilities must be installed prior to final building inspection and must be permanently maintained as a condition of use.

Response: The loading facilities will be installed prior to final building inspection and will be maintained to the highest standard.

(5) The off-street loading facilities must in all cases be on the same lot or parcel as the structure they are intended to serve. In no case must the required off-street loading spaces be part of the area used to satisfy the off-street parking requirements.

Response: The loading areas for both buildings are located on the lot, with the building it serves.

TDC 73C.130. - Parking Lot Driveway and Walkway Minimum Requirements.

Parking lot driveways and walkways must comply with the following requirements: (3) *Industrial Use*. Ingress and egress for industrial uses must not be less than the following:

Required Spaces	Min. # Required	Min. Pavement	Min. walkways
1 -250	1	36' for 1st 50' ROW	No curbs or
		24' thereafter	walkways required

Response: Per the submitted site plan the project meets these requirements.

(6) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths for Commercial, Industrial, and Institutional uses must not exceed 40 feet.

(b) Driveways must not be constructed within five feet of an adjacent property line, unless the two adjacent property owners elect to provide joint access to their respective properties, as provided by TDC73C.040.

(c) The provisions of subsection (b) do not apply to townhouses and duplexes, which are allowed to construct driveways within five feet of adjacent property lines.

(d) There must be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Manager.

(e) Must comply with the distance requirements for access as provided in TDC 75.

(f) Must comply with vision clearance requirements in TDC 75.

Response: The proposed driveways on the cul-de-sac meet these requirements.

Parking Lot Landscape

TDC 73C.230. - Industrial Parking Lot Landscaping Requirements.

Industrial uses must comply with the following landscaping requirements for parking lots in all zones.

(1) General. Locate landscaping or approved substitute materials in all areas not necessary for vehicular parking and maneuvering.

(2) *Clear Zone.* Clear zone required for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of eight feet as measured from the ground level.

(a) Exception: does not apply to parking structures and underground parking.(3) *Perimeter*. Minimum five feet in width in all off-street parking and vehicular circulation areas, including loading areas and must comply with the following:

(a) Deciduous trees located not more than 30 feet apart on average as measured on center;

(b) Shrubs or ground cover, planted so as to achieve 90 percent coverage within three years;

(c) Plantings which reach a mature height of 30 inches in three years which provide screening of vehicular headlights year round;

(d) Native trees and shrubs are encouraged; and

(e) Exception: Not required where off-street parking areas on separate lots are adjacent to one another and connected by vehicular access.

Response: Parking is surrounded by a minimum 5'-0" landscape buffer planted with trees, evergreen hedge and groundcovers. A continuous evergreen hedge is proposed that will reach a mature height of 30 inches in three years. Ground cover is proposed and will achieve 90% coverage in three years.

(4) *Landscape Island*. Minimum 25 square feet per parking stall must be improved with landscape island areas and must comply with the following.

(a) May be lower than the surrounding parking surface to allow them to receive stormwater run-off and function as water quality facilities as well as parking lot landscaping;

(b) Must be protected from vehicles by curbs, but the curbs may have spaces to allow drainage into the islands;

(c) Islands must be utilized at aisle ends to protect parked vehicles from moving vehicles and emphasize vehicular circulation patterns;

(d) Landscape separation required for every eight continuous spaces in a row;

(e) Must be planted with one deciduous shade trees for every four parking spaces; Required trees must be evenly dispersed throughout the parking lot; (f) Must be planted with groundcover or shrubs;

(g) Native plant materials are encouraged;

(h) Landscape island areas with trees must be a minimum of five feet in width (from inside of curb to curb);

(i) Required plant material in landscape islands must achieve 90 percent coverage within three years; and

(j) Exception: Landscape square footage requirements do not apply to parking structures and underground parking.

(5) Landscaping Along Driveway Access. For lots with 12 or more parking spaces:

(a) Landscape area at least five (5) feet in width on each side of an

accessway;

(b) Landscape area must extend 30 feet back from the property line; and

(c) Exceptions: does not apply to parking structures and underground parking which must be determined through the Architectural Review process. **Response: Landscape islands are provided at every eight parking spaces and at the ends of parking spaces. Each island is planted with a deciduous shade tree and groundcover. Driveway access landscaping is proposed along each side a minimum of 5 feet wide and extends 30 feet into the property. See the Landscape plans for species**

CHAPTER 73D - Waste and Recyclables Management Standards

TDC 73D.020. - Design Methods.

An applicant required to provide mixed solid waste and source separated recyclables storage areas must comply with one of following methods:

(1) The minimum standards method in TDSC 73D.030;

(2) The waste assessment method in TDC 73D.040;

(3) The comprehensive recycling plan method in TDC 73D.050; or

(4) The franchised hauler review method in TDC 73D.060.

Response: The minimum standard method has been used to size the solid waste and recycling storage areas. Two 10'-0" x 40'-0" trash/recycling enclosures will be provided for Building A. One 10'-0" x 40'-0" and one 10'-0" x 20'-0" trash/recycling enclosure will be provided for Building B with additional trash and recycling storage to be provided inside the building per municipal code section TDC 73D.070.

TDC 73D.030. - Minimum Standards Method.

This method specifies a minimum storage area requirement based on the size and general use category of the new or expanded development. This method is most appropriate when specific use of a new or expanded development is not known. It provides specific dimensional standards for the minimum size of storage areas by general use category. (1) The size and location of the storage area(s) must be indicated on the site plan. Requirements are based on an assumed storage area height of four feet for mixed solid waste and source separated recyclables. Vertical storage higher than four feet, but no higher than seven feet may be used to accommodate the same volume of storage in a reduced floor space (potential reduction of 43 percent of specific requirements). Where vertical or stacked storage is proposed, submitted plans must include drawings to illustrate the layout of the storage area and dimensions for containers.

(2) The storage area requirement is based on uses. If a building has more than one use and that use occupies 20 percent or less of the gross leasable area (GLA) of the building, the GLA occupied by that use must be counted toward the floor area of the predominant use(s). If a building has more than one use and that use occupies more than 20 percent of the GLA of the building, then the storage area requirement for the whole building must be the sum of the area of each use. Minimum storage area requirements by use is as follows:

(a) Common wall residential five to ten units must provide 50 square feet.

(b) Common wall residential greater than ten units must provide 50 square feet plus an (additional five square feet per unit above ten.

(c) Commercial, industrial, and institutional developments must provide a minimum storage area of ten square feet plus:

(i) Office—Four square feet/1,000 square feet gross leasable area (GLA);

(ii) Retail—Ten square feet/1,000 square feet GLA;

(iii) Wholesale/Warehouse/Manufacturing-Six square feet/1,000 square feet GLA;

(iv) Educational and Institutional—Four square feet/1,000 square feet GLA; and

(v) All other uses—Four square feet/1,000 square feet GLA.

(3) Mixed solid waste and source separated recyclables storage areas for multiple tenants on a single site may be combined and shared.

Response: 778 square feet of trash/recycling storage is required for Building A, two 10'-0" x 40'-0" trash/recycling enclosures will be provided (800 sf). 1,121 square feet of trash/recycling storage is required for Building B, one 10'-0" x 40'-0" and one 10'-0" x 20'-0" trash/recycling enclosure will be provided (600 sf) with additional trash and recycling storage to be provided inside the building per municipal code section TDC 73D.070.

TDC 73D.070. - Location, Design and Access Standards.

The following location, design, and access standards are applicable to all storage areas: (1) *Location Standards*.

(a) The storage area for source separated recyclables may be collocated with the storage area for mixed solid waste.

(b) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

(c) Exterior storage areas must:

(i) Be located in central and visible locations on the site to enhance security for users;

(ii) Be located in a parking area; and

(iii) Not be located within a required front yard setback or in a yard adjacent to a public or private street.

(2) Design Standards.

(a) The dimensions of the storage area must accommodate containers consistent with current methods of local collection at time of construction or alteration.

(b) Indoor and outdoor storage areas must comply with Oregon Building and Fire Code requirements.

(c) Exterior storage areas must be enclosed by a sight obscuring fence or wall at least six feet in height.

(d) Evergreen plants must be placed around the enclosure walls, excluding the gate or entrance openings for common wall, commercial, and institutional developments.

(e) Gate openings for haulers must be a minimum of ten feet wide and must be capable of being secured in a closed and open position.

(f) Horizontal clearance must be a minimum of ten feet and a vertical clearance of eight feet is required if the storage area is covered.

(g) A separate pedestrian access must also be provided in common wall, commercial, and institutional developments.

(h) Exterior storage areas must have either a concrete or asphalt floor surface.

(i) Storage areas and containers must be clearly labeled to indicate the type of material accepted.

(3) Access Standards.

(a) Storage areas must be accessible to users at convenient times of the day, and to hauler personnel on the day and approximate time they are scheduled to provide hauler service.

(b) Storage areas must be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access.

(c) Storage areas must be accessible to hauler trucks without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius must be provided to allow hauler trucks to safely exit the site in a forward motion.

(d) Storage areas must located so that pedestrian and vehicular traffic movement are not obstructed on site or on public streets adjacent to the site.

(e) The following is an exception to the access standard:

(i) Access may be limited for security reasons.

Response: Trash/recycling enclosures will comply with the requirements above. They will be constructed of 6' high concrete walls with steel gates. Pedestrian access will be provided by a 4' wide opening in the front or back wall of the enclosure. The locations and dimensions have been reviewed and approved by Republic Services, Inc – the trash and recycling hauler.

CHAPTER 74: Public Improvement Requirements

IMPROVEMENTS

Section 74.110 Phasing of Improvements.

The applicant may build the development in phases. If the development is to be phased the applicant shall submit a phasing plan to the City Engineer for approval with the development application. The timing and extent or scope of public improvements and the conditions of development shall be determined by the City Council on subdivision applications and by the City Engineer on other development applications. **Response: The project will not be phased.**

Section 74.120 Public Improvements.

(1) Except as specially provided, all public improvements shall be installed at the expense of the applicant. All public improvements installed by the applicant shall be constructed and guaranteed as to workmanship and material as required by the Public Works

Construction Code prior to acceptance by the City. No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.

(2) In accordance with the Tualatin Basin Program for fish and wildlife habitat the City intends to minimize or eliminate the negative affects of public streets by modifying right-of-way widths and street improvements when appropriate. The City Engineer is authorized to modify right-of-way widths and street improvements to address the negative affects on fish and wildlife habitat.

Response: Any public improvements completed as a result of the AR process shall be installed at expense of applicant.

Section 74.130 Private Improvements.

All private improvements shall be in-stalled at the expense of the applicant. The property owner shall retain maintenance responsibilities over all private improvements. **Response: All private improvements to be installed at expense of the applicant.**

Section 74.140 Construction Timing.

(1) All the public improvements required under this chapter shall be completed and accepted by the City prior to the issuance of a Certificate of Occupancy; or, for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

(2) All private improvements required under this chapter shall be approved by the City prior to the issuance of a Certificate of Occupancy; or for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations. [Ord. 895-93, 5/24/1993]

Response: All improvements to be done before issuance of Certificate of Occupancy.

RIGHT-OF-WAY

Section 74.210 Minimum Street Right-of-Way Widths.

The width of streets in feet shall not be less than the width required to accommodate a street improvement needed to mitigate the impact of a proposed development. In cases where a street is required to be improved according to the standards of the TDC, the width of the right-of-way shall not be less than the minimums indicated in TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G.

(2) For development applications other than subdivisions and partitions, wherever existing or future streets adjacent to property proposed for development are of inadequate right-of-way width, the additional right-of-way necessary to comply with TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G of the Tualatin Community Plan shall be dedicated to the City for use by the public prior to issuance of any building permit for the proposed development. This right-of-way dedication shall be for the full width of the property abutting the roAll adway and, if required by the City Engineer, additional dedications shall be provided for slope and utility easements if deemed necessary.

Response: No public work, improvements, or dedications are currently proposed with this project. If the City deems it necessary to include public works improvements through the Land Use Review process the team will include design updates to meet the requirements.

Section 74.330 Utility Easements.

Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.
 (2) For subdivision and partition applications, the on-site public utility easement dedication area shall be shown to be dedicated to the City on the final subdivision or partition plat prior to approval of the plat by the City; and

(3) For subdivision and partition applications which require off-site public utility easements to serve the proposed development, a utility easement shall be granted to the City prior to approval of the final plat by the City. The City may elect to exercise eminent domain and condemn necessary off-site public utility easements at the applicant's request and expense. The City Council shall determine when condemnation proceedings are to be used.

(4) For development applications other than subdivisions and partitions, and for both onsite and off-site easement areas, a utility easement shall be granted to the City; building permits shall not be issued for the development prior to acceptance of the easement by the City. The City may elect to exercise eminent domain and condemn necessary off-site public utility easements at the applicant's request and expense. The City Council shall determine when condemnation proceedings are to be used.

(5) The width of the public utility easement shall meet the requirements of the Public Works Construction Code. All subdivisions and partitions shall have a 6-foot public utility easement adjacent to the street and a 5-foot public utility easement adjacent to all side and rear lot lines.

Response: Easements are provided for all public utilities through the site.

Section 74.340 Watercourse Easements.

(1) Where a proposed development site is traversed by or adjacent to a watercourse, drainage way, channel or stream, the applicant shall provide a storm water easement, drainage right-of-way, or other means of preservation approved by the City Engineer, conforming substantially with the lines of the watercourse. The City Engineer shall determine the width of the easement, or other means of preservation, required to accommodate all the requirements of the Surface Water Management Ordinance, existing and future storm drainage needs and access for operation and maintenance.

Response: The project site is not transverse by a water way. This criteria does not apply.

Section 74.350 - Maintenance Easement or Lots

A dedicated lot or easement will be required when access to public improvements for operation and maintenance is required, as determined by the City Manager. Access for maintenance vehicles must be constructed of an all-weather driving surface capable of carrying a 50,000-pound vehicle. The width of the lot or easement must be at least 15-feet in order to accommodate City maintenance vehicles. In subdivisions and partitions, the easement or lot must be dedicated to the City on the final plat. In any other

development, the easement or lot must be granted to the City and recorded prior to issuance of a building permit.

Response: Maintenance access easements are provided for all public utilities. A shared stormwater easement between the two properties will also be completed. Lastly, an access easement for the south lot will also be utilized on this project.

TDC 74.440. - Streets, Traffic Study Required.

(1) The City Manager may require a traffic study to be provided by the applicant and furnished to the City as part of the development approval process as provided by this Code, when the City Manager determines that such a study is necessary in connection with a proposed development project in order to:

(2) The required traffic study must be completed prior to the approval of the development application.

(3) The traffic study must include, at a minimum:

(4) The applicant must implement all or a portion of the improvements called for in the traffic study as determined by the City Manager.

Response: A Traffic Study is included in this application package.

TDC 74.450. - Bikeways and Pedestrian Paths.

Response: No public bike or pedestrian paths are currently proposed with this project and site design.

TDC 74.470. - Street Lights.

Response: No street lights are currently proposed with this project and site design.

UTILITIES

TDC 74.610. - Water Service.

(1) Water lines must be installed to serve each property in accordance with the Public Works Construction Code. Water line construction plans must be submitted to the City Manager for review and approval prior to construction.

Response: The proposed design includes separate water services for each building located within their own property.

TDC 74.620. - Sanitary Sewer Service.

(1) Sanitary sewer lines must be installed to serve each property in accordance with the Public Works Construction Code. Sanitary sewer construction plans and calculations must be submitted to the City Manager for review and approval prior to construction. **Response: The proposed design includes separate sanitary sewer services for each building located within their own property.**

TDC 74.630. - Storm Drainage System.

(1) Storm drainage lines must be installed to serve each property in accordance with City standards. Storm drainage construction plans and calculations must be submitted to the City Manager for review and approval prior to construction.

(2) The storm drainage calculations must confirm that adequate capacity exists to serve the site. The discharge from the development must be analyzed in accordance with the City's Storm and Surface Water Regulations.

Response: The proposed design includes separate stormwater systems for each building located within their own property. A general stormwater agreement will also be put into place between the two properties for some drainage area overlaps. Although all piping and structures for each properties systems will be completely contained within the subject property.

TDC 74.640. - Grading.

(1) Development sites must be graded to minimize the impact of storm water runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development.

(2) A development applicant must submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. The City Manager may require the applicant to remove all excess material from the development site.

Response: The grading and stormwater systems are design to prevent onsite runoff from leaving the site and will not collect runoff from adjacent properties. These systems will also fully manage all onsite runoff.

TDC 74.650. - Water Quality, Storm Water Detention and Erosion Control.

The applicant must comply with the water quality, storm water detention and erosion control requirements in the Surface Water Management Ordinance. If required: (2) On all other development applications, prior to issuance of any building permit, the applicant must arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from Clean Water Services.

(3) For on-site private and regional non-residential public facilities, the applicant must submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant must submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site must occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.

Response: The project will provide water quality per current design code for each lot. Each lots system will be contained within its lot.

TDC 74.660. - Underground.

(1) All utility lines including, but not limited to, those required for gas, electric, communication, lighting and cable television services and related facilities must be placed underground. Surface-mounted transformers, surface-mounted connection boxes and meter cabinets may be placed above ground. Temporary utility service facilities, high capacity electric and communication feeder lines, and utility transmission lines operating at 50,000 volts or above may be placed above ground. The applicant must make all

necessary arrangements with all utility companies to provide the underground services. The City reserves the right to approve the location of all surface-mounted transformers. (2) Any existing overhead utilities may not be upgraded to serve any proposed development. If existing overhead utilities are not adequate to serve the proposed development, the applicant must, at their own expense, provide an underground system. The applicant must be responsible for obtaining any off-site deeds and/or easements necessary to provide utility service to this site; the deeds and/or easements must be submitted to the City Manager for acceptance by the City prior to issuance of the Public Works Permit.

Response: All proposed and existing utilities within the properties are placed underground.

TDC 74.765. - Street Tree Species and Planting Locations.

All trees, plants or shrubs planted in the right-of-way of the City must conform in species and location and in accordance with the street tree plan and City standards, including Table 74-1. If the City Manager determines that none of the species in City standards, including Table 74-1 is appropriate or finds appropriate a species not listed, the City Manager may substitute an unlisted species.

Response: Street trees conform to the street tree plan and city standards.

CHAPTER 75 - Access Management

TDC 75.020. - Permit for New Driveway Approach.

(1) *Applicability*. A driveway approach permit must be obtained prior to constructing, relocating, reconstructing, enlarging, or altering any driveway approach.

(2) Exceptions. A driveway approach permit is not required for:

(a) The construction, relocation, reconstruction, enlargement, or alteration of any driveway approach that requires a state highway access permit; or

(b) The construction, relocation, reconstruction, enlargement or alteration of any driveway approach that is part of the construction of a publicly or privately engineered public improvement project.

(3) *Procedure Type*. A Driveway Approach Permit is processed as a Type II procedure under TDC 32.220 (Type II).

(4) *Submittal Requirements*. In addition to the application materials required by TDC 32.140 (Application Submittal), the following application materials are also required:

(5) Criteria. A Driveway Approach Permit must be granted if:

(a) The proposed driveway approach meets the standards of this Chapter and the Public Works Construction Code;

Response: The proposed driveway meets current codes.

(b) No site conditions prevent placing the driveway approach in the required location;

Response: No site conditions prevent the placing of the driveways.

(c) The number of driveway approaches onto an arterial are minimized;

Response: Two driveways and one emergency access are proposed.

(d) The proposed driveway approach, where possible:

(i) Is shared with an adjacent property; or

(ii) Takes access from the lowest classification of street abutting the

property;

Response: All access is taken from the lowest classification of street other than the emergency only access.

(e) The proposed driveway approach meets vision clearance standards; **Response: The proposed driveways are designed to meet the vision clearance standards of this code.**

(f) The proposed driveway approach does not create traffic hazards and provides for safe turning movements and access;

Response: The proposed driveway approaches are designed to provide safe turning movements and access, without creating any traffic hazards.

(g) The proposed driveway approach does not result in significant adverse impacts to the vicinity;

Response: The proposed driveway approach will not create any adverse impacts to the vicinty.

(h) The proposed driveway approach minimizes impact to the functionality of adjacent streets and intersections; and

Response: This project proposes access from a cul-de-sac. There will be minimal impacts to surrounding streets.

(i) The proposed driveway approach balances the adverse impacts to residentially zoned property and the functionality of adjacent streets.

Response: Driveways are included and designed off of two roadways, SW Tualatin-Sherwood Rd and SW Myslony St. These driveways will be built and designed to meet the code requirements. Although, coordination with the City is on going to try to expand the driveway widths at the cul-de-sac to accommodate lager trucks entering the site.

TDC 75.040. - Driveway Approach Requirements.

(1) The provision and maintenance of driveway approaches from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. No building or other permit may be issued until scale plans are presented that show how the driveway approach requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing driveway approach requirements, it is unlawful and a violation of this code to begin or maintain such altered use until the required increase in driveway approach is authorized by the City.
 (2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same driveway approach when the combined driveway approach of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts must be placed on permanent file with the City Recorder.
 (3) Joint and Cross Access.

(a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites.

(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:

(i) A continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards;

(ii) A design speed of ten mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(iii) Stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive; and

(iv) An unified access and circulation system plan for coordinated or shared parking areas.

(c) Pursuant to this section, property owners may be required to:

(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;

(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;

(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners; and

(iv) If subsection(i) through (iii) above involve access to the state highway system or county road system, ODOT or the county must be contacted and must approve changes to subsection(i) through (iii) above prior to any changes.

(6) Except as provided in TDC 53.100, all driveway approach must connect directly with public streets.

(7) To afford safe pedestrian access and egress for properties within the City, a sidewalk must be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section must be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks must be constructed to a design and in a manner approved by the City Manager. Sidewalks approved by the City Manager may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks must provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction must include construction of the curb and gutter section to grades and alignment established by the City Manager.

Response: Driveways are included and designed off of two roadways, SW Tualatin-Sherwood Rd and SW Myslony St. These driveways will be built and designed to meet the code requirements. The Driveway off of Tualatin-Sherwood Rd will be an emergence access only.

4			Driveway Approach width
	Industrial	36 feet	Over 250 Parking Spaces = As Required by the City Manager, but not exceeding 40 feet

TABLE 75-1 Driveway Approach Width

(10) *Driveway Approach Separation*. There must be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Manager.

(11) *Distance between Driveways and Intersections*. Except for single-family dwellings, the minimum distance between driveways and intersections must be as provided below. Distances listed must be measured from the stop bar at the intersection.

(a) At the intersection of collector or arterial streets, driveways must be located a minimum of 150 feet from the intersection.

(b) At the intersection of two local streets, driveways must be located a minimum of 30 feet from the intersection.

(c) If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway must be constructed as far from the intersection as possible, while still maintaining the 5-foot setback between the driveway and property line.

(d) When considering a driveway approach permit, the City Manager may approve the location of a driveway closer than 150 feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision. **Response: As proposed, the driveways meet all applicable requirements of this code section.**

(12) Vision Clearance Area.

(a) *Local Streets*. A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections must be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are ten feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).

(b) *Collector Streets*. A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections must be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area must be ten feet (see Figure 73-2 for illustration).

(c) Vertical Height Restriction. Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction must be permitted between 30 inches and eight feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).

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Response: The Traffic Engineer has verified that the project meets the minimum vision clearance areas for the proposed driveways.

Tualatin Municipal Code

CHAPTER 3-02 - Sewer Regulations

TMC 3-2-030 - Material and Manner of Construction

(1) All building sewers, side sewers and connections to the main sewer shall be so constructed as to conform to the requirements of the Oregon State Plumbing Laws and rules and regulations and specifications for sewerage construction of the City.

(2) Old building sewers may be used in connection with new buildings only when they are found, upon examination and test by the City Inspector, to meet all requirements of the City.

Response: The proposed design includes separate sanitary sewer services for each building located within their own property. These onsite and connection designs are completed to meet code requirements. Also, any existing services to the site that will go unused will be removed or abandoned in place.

TMC 3-2-050 - Industrial Wastes.

(1) The admission into the public sewers of any waters or wastes having **Response: Industrial wastes as described in this code section will not be produced by potential uses and tenants.**

TMC 3-2-160 Construction Standards

All sewer line construction and installation of services and equipment shall be in conformance with the City of Tualatin Public Works Construction Code. In addition, whenever a property owner extends a sewer line, the extension shall be carried to the opposite property line or to such other point as determined by the Public Works Director.

Response: The owner will hire approved contractors to do the sewer work. No public sewer extensions are required.

CHAPTER 3-03 - Water Service

TMC 3-3-040 Separate Services Required.

Except as authorized by the City Engineer, a separate service and meter to supply regular water service or fire protection services shall be required for each building, residential unit of structure served. For the purposes of this section, trailer parks and multi-family residences of more than four dwelling units shall constitute a single unit unless the City Engineer determines that separate services are required.

Response: A separate service and meter is provided for each of the two buildings/lots.

TMC 3-3-080 - Fire Protection Service.

Fire protection facilities will be allowed under the following conditions:

(1) The owner of a fire protection system shall furnish and install a service meter approved by the City.

(2) When a building has a fire protection service which is separate from the regular water service to the building, an appropriate backflow device, but not less than a double check detector check, approved by the Operations Director, shall be used in place of a service meter. Water supplied through this service shall not be used for any purpose except for suppressing a fire or testing of the fire protection system. If registration of regular water usage is recorded on the detector check meter, the City may require installation of a service meter or removal of the fire protection service.

(3) The service meter shall be owned and maintained by the City and the appropriate backflow device shall be owned and maintained by the owner.

(4) No charge shall be made for water used in the extinguishing of a fire or system testing if the customer reports the use to the City in writing within ten days of the use.

(5) Water may be obtained from fire protection facilities for filling a tank connected with the fire service, but only if written permission is secured from the City in advance and an approved means of measurement is available and utilized. The water used shall be charged at the rates for general use.

(6) Charges for fire protection service shall be as specified in the rates and charges. **Response: Both lots will have private fire sprinkler services and onsite fire hydrants.**

TMC 3-3-100 - Meters.

(1) Meters up to and including two inches will be furnished by the City. Meters larger than two inches may be furnished by the customer upon approval of the Operations Director.

(2) All meters, including those for fire protection service, shall be located within the public right-of-way or within an access easement approved by the City Engineer.

Response: Meter sizes are anticipated to be 2" or larger and coordination will be completed by the owner for having the meter furnished for the project. Proposed meters are located within the right-of-way.

TMC 3-3-110 Construction Standards.

All water line construction and installation of services and equipment shall be in conformance with the City of Tualatin Public Works Construction Code. In addition, whenever a property owner extends a water line, which upon completion, is intended to be dedicated to the City as part of the public water system, said extension shall be carried to the opposite property line or to such other point as determined by the City Engineer. Water line size shall be determined by the City Engineer in accordance with the City's Development Code or implementing ordinances and the Public Works Construction Code.

Response: All water lines are designed to meet the code requirement and notes are included in the plans to verify this is held by the contractor.

TMC 3-3-120 Backflow Prevention Devices and Cross Connections.

The owner of property to which City water is furnished for human consumption shall install in accordance with City standards an appropriate backflow prevention device on the premises where any of the following circumstances exist:

Except as otherwise provided in this subsection, all irrigation systems shall be installed with a double check valve assembly. Irrigation system backflow prevention device assemblies installed before the effective date of this ordinance, which were approved at the time they were installed but are not on the current list of approved device assemblies maintained by the Oregon State Health Division, shall be permitted to remain in service provided they are properly maintained, are commensurate with the degree of hazard, are tested at least annually, and perform satisfactorily. When devices of this type are moved, or require more than minimum maintenance, they shall be replaced by device assemblies which are on the Health Division list of approved device assemblies.

Response: Back flow preventers are specified for all fire and water systems.

TMC 3-3-130 Control Valves.

The customer shall install a suitable valve, as close to the meter location as practical, the operation of which will control the entire water supply from the service. The operation by the customer of the curb stop in the meter box is prohibited.

Response: Control valves will be specified as required and reviewed for approval at Engineering Review.

<u>CHAPTER 3-05 - Soil Erosion, Surface Water Management, Water Quality</u> <u>Facilities, and Building and Sewers</u>

TMC 3-5-050 Erosion Control Permits

(1) Except as noted in subsection (3) of this section, no person shall cause any change to improved or unimproved real property that causes, will cause, or is likely to cause a temporary or permanent increase in the rate of soil erosion from the site without first obtaining a permit from the City and paying prescribed fees. Such changes to land shall include, but are not limited to, grading, excavating, filling, working of land, or stripping of soil or vegetation from land.

(2) No construction, land development, grading, excavation, fill, or the clearing of land is allowed until the City has issued an Erosion Control Permit covering such work, or the City has determined that no such permit is required. No public agency or body shall undertake any public works project without first obtaining from the City an Erosion Control Permit covering such work, or receiving a determination from the City that none is required.

(3) No Erosion Control Permit from City is required for the following:

Response: An Erosion Control permit is required for this project. A 1200-C permit application will be submitted to the City during the permit process. Permit plans comply with the code requirements.

TMC 3-5-060 Permit Process

(1) Applications for an Erosion Control Permit. Application for an Erosion Control Permit shall include an Erosion Control Plan which contains methods and interim facilities to be constructed or used concurrently and to be operated during construction to control erosion. The plan shall include either:

Response: An Erosion Control permit is required for this project. Application for such will be made as part of the Engineering Review.

TMC 3-5-110 - Air Pollution—Dust, Fumes, Smoke and Odors.

(1) Dust shall be minimized to the extent practicable, utilizing all measures necessary, including, but not limited to:

Response: BMPs and construction means and methods will be provided to prevent air pollution from leaving the site.

TMC 3-5-120 - Maintaining Water Quality.

(4) All sediment-laden water from construction operations shall be routed through stilling basins, filtered or otherwise treated to reduce the sediment load.

Response: Erosion control measures and construction means and methods will be in place to prevent water contamination onsite or leaving the site.

TMC 3-5-140 - Control of Noise Levels.

Construction noise shall be minimized by the use of proper engine mufflers, protective sound reducing enclosures, and other sound barriers. Construction activities producing excessive noise that cannot be reduced by mechanical means shall be restricted to locations where their sound impact is reduced to a minimum at the edge of work area. **Response: The contractor will be required to have methods in place to reduce noise pollution to meet standards during construction.**

TMC 3-5-150 - Natural Vegetation.

(1) As far as is practicable, the natural vegetation shall be protected and left in place. Work areas shall be carefully located and marked to reduce potential damage. Trees shall not be used as anchors for stabilizing working equipment.

(2) During clearing operations, trees shall not be permitted to fall outside the work area. In areas designated for selective cutting or clearing, care in falling and removing trees and brush shall be taken to avoid injuring trees and shrubs to be left in place.

(3) Where natural vegetation has been removed, or the original land contours disturbed, the site shall be revegetated, and the vegetation established, as soon as practicable after construction has commenced, except where construction of sewers will be followed by paving.

Response: A Tree protection plan will be followed see the Tree protection plan and all areas of disturbance will be re-vegetated per the Landscape plan.

TMC 3-5-180 - Contaminated Soils.

If the construction process reveals soils contaminated with hazardous materials or chemicals the contractor shall stop work immediately, ensure no contaminated material is hauled from the site, remove the contractor's work force from the immediate area of the contaminated area, leaving all machinery and equipment, and secure the area from access by the public until such time as a mitigation team has relieved them of that responsibility. Contractor shall notify the City and an emergency response team (911) of the situation upon its discovery. No employees who may have come in contact with the contaminated material shall be allowed to leave the site until such time as the emergency response team releases them.

Response: No contaminated soils are known to be on site, but if encountered the contractor will export them off site for treatment at one of the approved treatment facilities.

TMC 3-5-190 - Soil Erosion Control Matrix and Methods.

(1) *Establishing Primary Access Point*. As one of the initial activities at the start of any earthwork, a gravel driveway shall be established. The driveway shall meet the following: (2) *Additional Access*. Construction and delivery vehicles and equipment shall use the primary access point (the gravel driveway). Vehicles and equipment shall not access the property from any other point (shall not "hop the curb"), unless required due to the physical layout of the parcel, and not simply due to convenience.

Response: A construction entrance is proposed and will be shown on the permit plans.

If is necessary to access the site at other than the primary access point:

(a) A second temporary or permanent crushed rock access point shall be established if there is an ongoing need to access the property at a second point. Large or difficult properties may require more than one permanent access point

(b) If there is only a one time or infrequent need to access the property at other than an established access point, then the vehicle or equipment may "hop the curb". Each time the vehicle or equipment reenters the street any mud, dirt, or other such debris that falls or is deposited on the street shall be immediately cleaned using hand labor or mechanical means.

Immediate means within five minutes of the mud, dirt, or debris being deposited on the street. Mud, dirt and debris shall not be allowed to accumulate to be cleaned up at the end of the day or "later". Under no circumstance shall mud, dirt or debris be washed into the storm and surface water system.

(c) Under no circumstance shall vehicles or equipment enter a property adjacent to a stream, water course, or other storm and surface water facility, or a wetland such that it would not be possible to avoid contaminating or depositing mud, dirt, or debris into the water or wetland.

(3) *Silt Barriers*. Silt barriers shall be installed concurrent with grading, and will be inspected prior to "footing" inspection. They shall be installed downhill of all graded, filled and stripped areas, and across the path of concentrated flows. They shall be designed and installed to capture erosion on site. Silt barriers can be:

(6) *Protection Measure Removal*. The erosion control facilities and techniques shall remain in place and be maintained in good condition until all disturbed soil areas are permanently stabilized by installation of landscaping, seeding, mulching or otherwise covered and protected from erosion.

(7) *Miscellaneous*. Filter systems may not be used on catch basins in public streets as a part of single family erosion control plans. Plastic sheeting should generally not be used as an erosion control measure in single family house construction. Plastic sheeting may be used to protect small, highly erodible areas, or temporary stock-piles of material. If used, the path of concentrated flow from the plastic must be protected.

Response: : Full erosion control and 1200-C permits will be completed to verify code requirements are met and protection of all sensitive area from runoff is completed. Measures will also only be removed once we have permit closeout or approval from DEQ.

ADDITIONAL SURFACE WATER MANAGEMENT STANDARDS TMC 3-5-200 - Downstream Protection Requirement.

Each new development is responsible for mitigating the impacts of that development upon the public storm water quantity system. The development may satisfy this requirement through the use of any of the following techniques, subject to the limitations and requirements in TMC 3-5-210:

(1) Construction of permanent on-site stormwater quantity detention facilities designed in accordance with this title;

(2) Enlargement of the downstream conveyance system in accordance with this title and the Public Works Construction Code;

(3) The payment of a Storm and Surface Water Management System Development Charge, which includes a water quantity component designated to meet these requirements.

Response: All stormwater will be managed onsite and reduced runoff to the code requirements. Due to this, no affect on the downstream is anticipated as flows will be reduced from leaving the site.

TMC 3-5-210 - Review of Downstream System.

For new development other than the construction of a single family house or duplex, plans shall document review by the design engineer of the downstream capacity of any existing storm drainage facilities impacted by the proposed development. That review shall extend downstream to a point where the impacts to the water surface elevation from the development will be insignificant, or to a point where the conveyance system has adequate capacity, as determined by the City Engineer.

To determine the point at which the downstream impacts are insignificant or the drainage system has adequate capacity, the design engineer shall submit an analysis using the following guidelines:

Response: All stormwater will be managed onsite and reduced runoff to the code requirements. Due to this, no effect on the downstream is anticipated as flows will only be reduced from leaving the site. During the permit process we will investigate the downstream to make sure the best practice is being used.

TMC 3-5-220 - Criteria for Requiring On-Site Detention to be Constructed.

The City shall determine whether the onsite facility shall be constructed. If the onsite facility is constructed, the development shall be eligible for a credit against Storm and Surface Water System Development Charges, as provided in City ordinance. On-site facilities shall be constructed when any of the following conditions exist:

TMC 3-5-230 - On-Site Detention Design Criteria.

(1) Unless designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity onsite detention facilities shall be designed

to capture run-off so the run-off rates from the site after development do not exceed predevelopment conditions, based upon a 25-year, 24-hour return storm.
(2) When designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity on-site detention facilities shall be designed such that the peak runoff rates will not exceed predevelopment rates for the two through 100 year storms, as required by the determined downstream deficiency.
(3) Construction of on-site detention shall not be allowed as an option if such a detention facility would have an adverse effect upon receiving waters in the basin or subbasin in the event of flooding, or would increase the likelihood or severity of flooding problems downstream of the site.

Response: Full onsite treatment and detention systems are included in the design to fully manage all onsite stormwater runoff. Onsite stormwater will not leave the site without meeting management requirements for flow control and water quality.

TMC 3-5-240 - On-Site Detention Design Method.

(1) The procedure for determining the detention quantities is set forth in Section 4.4 Retention/Detention Facility Analysis and Design, King County, Washington, Surface Water Design Manual, January, 1990, except subchapters 4.4.5 Tanks, 4.4.6 Vaults and Figure 4.4.4G Permanent Surface Water Control Pond Sign. This reference shall be used for procedure only. The design criteria shall be as noted herein. Engineers desiring to utilize a procedure other than that set forth herein shall obtain City approval prior to submitting calculations utilizing the proposed procedure.

(3) All developments other than single family and duplex, whether residential, multifamily, commercial, industrial, or other uses, the sizing of stormwater quantity detention facilities shall be based on the impervious area to be created by the development, including structures and all roads and impervious areas which are assessed a surface water management monthly fee under Unified Sewerage Agency rules. Impervious surfaces shall be determined based upon building permits, construction plans, site visits or other appropriate methods deemed reliable by City. **Response: Full onsite treatment and detention systems are included in the design to fully manage all onsite stormwater runoff. Onsite stormwater will not leave the site without meeting management requirements for flow control and water quality. Manufactured chambers will be used for the onsite detention.**

TMC 3-5-280 - Placement of Water Quality Facilities.

Title III specifies that certain properties shall install water quality facilities for the purpose of removing phosphorous. No such water quality facilities shall be constructed within the defined area of existing or created wetlands unless a mitigation action, approved by the City, is constructed to replace the area used for the water quality facility.

Response: Mechanical systems will be utilized to treat all onsite stormwater runoff. The site does not contain wetlands so no impact will occur.

PERMANENT ON-SITE WATER QUALITY FACILITIES TMC 3-5-350 - Phosphorous Removal Standard.

The stormwater quality control facilities shall be designed to remove 65 percent of the phosphorous from the runoff from 100 percent of the newly constructed impervious surfaces. Impervious surfaces shall include pavement, buildings, public and private roadways, and all other surfaces with similar runoff characteristics.

Response: Mechanical systems will be utilized to remove phosphorous from from runoff.

TMC 3-5-360 - Design Storm.

The stormwater quality control facilities shall be designed to meet the removal efficiency of TMC 3-5-350 for a mean summertime storm event totaling 0.36 inches of precipitation falling in four hours with an average return period of 96 hours.

Response: Mechanical treatment and flow control systems will be used to meet this requirement.

TMC 3-5-370 - Design Requirements.

TMC 3-5-430 - Placement of Water Quality Facilities.

No water quality facilities shall be constructed within the defined area of existing or created wetlands unless a mitigation action is approved by the City, and is constructed to replace the area used for water quality.

Response: No wetlands or setback are located within the proposed property.

MC 3-5-440 - General Provisions.

(1) The specifications contained in this Title III, together with the State of Oregon Uniform Plumbing Code and all other applicable requirements of federal, state and local law, shall govern the installation of all building and side sewers.

Response: The proposed design includes separate sanitary sewer services for each building. These onsite and connection designs are completed to meet code requirements. The sewer for the north building will cross the property of the south building, but the distance of the crossing meets the requirements of CWS for private sewers crossing neighboring lots. A private utility easement will be provided.

TMC 3-5-450 - Building Sewers.

(1) *Materials*. Pipes for building sewers shall be one of the following types or approved equal:

(2) *Joints*. The ends of pipes, collars, gaskets and retaining clamps shall be kept clean and free of foreign material when pipe is laid. All joints shall be made watertight and gastight.

(3) *Cleanouts.* All changes in direction shall be made with long radius bends, 45 degrees, $22\frac{1}{2}$ degrees, tee or wye branches with straight-through opening plugged for a cleanout. Cleanouts shall be installed in the building sewer between the building outlet and the side sewer when the distance is greater than 100 feet. All bends within the sewer shall not exceed 135 degrees without an additional cleanout. Cleanouts shall be plugged to prevent entrance of dirt, roots, or ground water. Plugs shall be sealed with rubber gaskets and secured against back pressure.

(4) *Size*. The minimum size of any building sewer shall be determined on the basis of the total number of fixture units drained by such sewer in accordance with Table 4-3 of the Oregon State Plumbing Code.

(5) Installation.

(6) *Excavation*. All excavations required for the installation of a building sewer shall be open trench work unless otherwise approved by the City.

(7) *Alignment*. All pipe shall be true to grade with the bells upgrade. Pipe shall be carefully centered prior to jointing. The bottom of the trench shall be smooth and free from rocks which may injure the pipe. The pipe shall be laid on four inches of 3/4-inch minus crushed rock throughout its entire length, and any such piping laid in fill shall be laid on a bed of approved materials and shall be adequately supported to the satisfaction of the City.

(8) *Grade.* All sewers shall be laid on a grade of not less than $\frac{1}{4}$ inch per foot for a fourinch pipe and $\frac{3}{16}$ -inch per foot for a six-inch pipe.

(9) *Backfill*. If common material is available which is free from rocks one inch in diameter, it may be used to backfill the remainder of the ditch. If suitable material is not available, 3/4-inch minus granular material shall be used to backfill the trench to a point six inches above the top of the pipe. The remainder of the ditch may then be backfilled with common material.

A modified method of backfilling shall be used where the house service laterals cross lawn, shrub, or planting areas between the curb and the property line. In this area, backfill shall be modified so that a minimum of 18 inches and a maximum of 36 inches of compacted top soil shall be provided in the upper portions of the trench. The lower portions of the trench shall be backfilled as described above.

(10) *Cover*. Cover on private property shall be not less than 12 inches from top of pipe to finished grade.

(11) Sewer and Water Lines. Building sewers or drainage piping of materials which are not approved for use within a building shall not be laid in the same trench with water service pipes unless both of the following requirements are met.

(12) *Testing*. All building sewers shall be tested for leakage 15 minutes prior to the City inspection and prior to backfilling the trench. Sewers shall be tested by plugging the building sewer at its point of connection with the side sewer and completely filling the building sewer with water from the lowest point to the highest point thereof. The building sewer shall be watertight and have no visible leakage.

A tee shall be installed at the property line at the expense of the installer. After the test is complete, a plug shall be inserted in the tee. After a satisfactory test has been performed, the trench shall be backfilled.

Response: The proposed design includes separate sanitary sewer services for each building. The sewer for the north building will cross the property of the south building, but the distance of the crossing meets the requirements of CWS for private sewers crossing neighboring lots. A private utility easement will be provided. As proposed, the sewer designs will be specified to meet all of the requirements of the code section.

Fualatin Industrial Park Tualatin, Oregon

ARCHITECTURAL A-0 COVER SHEET

A-1 SITE PLAN

- A-2 BUILDING A FLOOR PLAN
- A-3 BUILDING B FLOOR PLAN A-4 BUILDING A- COLOR ELEVATIONS
- A-5 BUILDING B COLOR ELEVATIONS
- A-6 TRASH / RECYCLING ENCLOSURE PLANS AND **ELEVATIONS & COVERED BIKE PARKING** ELEVATIONS

ELECTRICAL

- FC-1 SITE PHOTOMETRIC
- FC-2 SITE PHOTOMETRIC
- FC-3 PHOTOMETRIC STATS & FIXTURE SPECIFICATION
- CIVIL
- C0.1 GENERAL NOTES
- C0.2 EXISTING CONDITIONS C0.3 DEMOLITION PLAN
- C1.0 HARDSCAPE PLAN
- C2.0 GRADING PLAN C3.0 UTILITY PLAN
- EC1.0 EROSION CONTROL PLAN

LANDSCAPE

- L-1.0 OVERALL TREE PROTECTION & REMOVAL PLAN
- L-1.1 LANDSCAPE PLAN L-1.2 LANDSCAPE PLAN
- L-1.3 LANDSCAPE PLAN
- L-1.4 LANDSCAPE PLAN
- L-1.5 LANDSCAPE PLAN
- L-1.6 LANDSCAPE PLAN L-1.7 LANDSCAPE PLAN
- L-2.0 LANDSCAPE DETAILS
- L-2.1 IRRIGATION DETAILS L-3.0 LANDSCAPE & IR SPECS

SHEET INDEX

LEGEND

LINE OF SOFFIT OR ELEMENT ABOVE _____ CENTER LINE

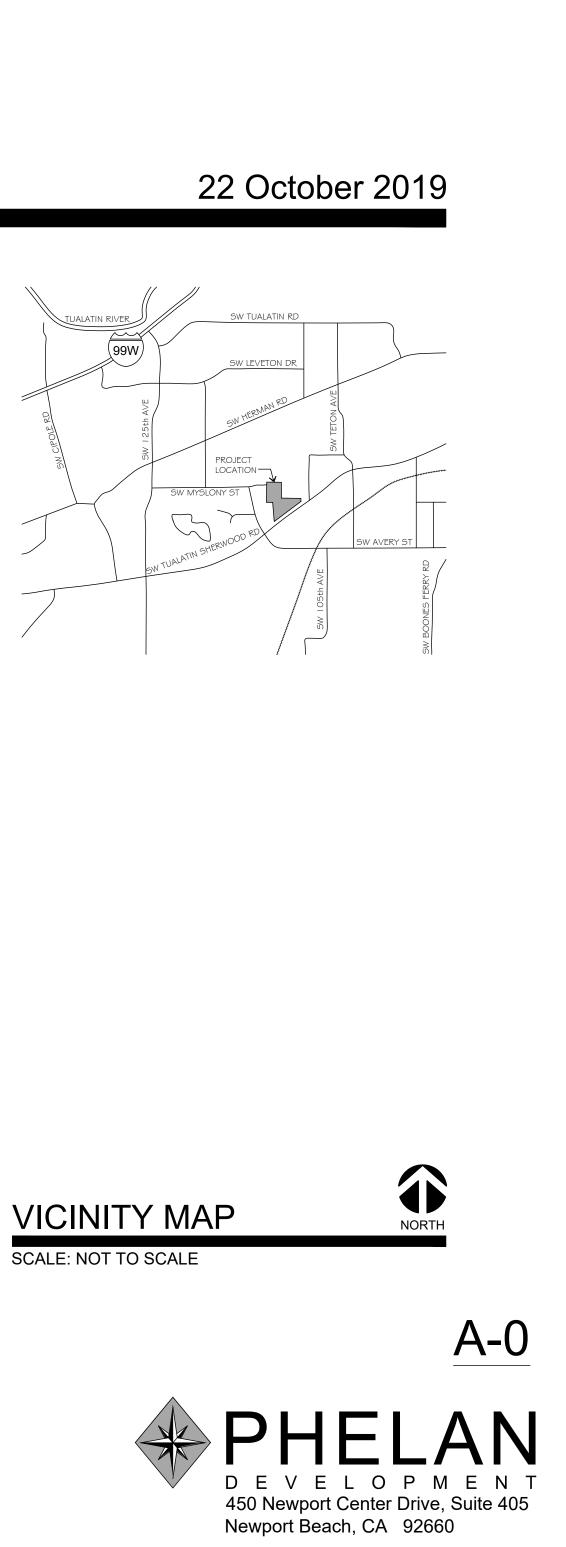
COLUMN GRID LINE

BUILDING PLUMBING FIRE ENERGY



LOT AREA: ALL CONSTRUCTION SHALL CONFORM WITH ALL CURRENT ZONING USE: MG - GENERAL MANUFACTURING PROPOSED ZONING USE: MG - GENERAL MANUFACTURING APPLICABLE LOCAL STATE AND FEDERAL CODES REGULATION AND LAWS, INCLUDING, BUT NOT LIMITED TO: LOT A: OCCUPANCY GROUP: S-1 / B LOT B: 2014 OREGON STRUCTURAL SPECIALTY CODE CONSTRUCTION TYPE: V-B TOTAL BUILDING AREA: MECHANICAL 2014 OREGON MECHANICAL SPECIALTY CODE BUILDING A: 2014 OREGON PLUMBING SPECIALTY CODE LEGAL DESCRIPTION: MANUFACTURING: ELECTRICAL 2014 OREGON ELECTRICAL SPECIALTY CODE WAREHOUSE: 2014 OREGON FIRE CODE TAX LOT 500 FROM TAX MAP 2S 1 27AA, TAX LOT 600 BUILDING B: ACCESSIBILITY 2009 ICC / ANSI A117.1 ACCESSIBILITY CODE AND 700 FROM TAX MAP 2S 1 22DD. MANUFACTURING: 2014 OREGON ENERGY EFFICIENCY WAREHOUSE: SPECIALTY CODE SITE COVE LOT A: LOT B: DOCK DO BUILDING BUILDING PARKING BUILDING MAN WAR BUILDING MAN WAR PARKING BUILDING STAN HANI BUILDING STAN HANI LANDSCA LOT A: LOT B: LANDSCA APPLICABLE CODES PROJECT SUMMARY

> **Tualatin Industrial Park** Tualatin, Oregon



AREHOUSE:	102,932.5 sf (55%)	ARCHITECT	CALVIN J. COATSWORTH ARCHITECTS, PC 1574 GULF ROAD	T
OVERAGE:	44.22 %			2
	43.75%		POINT ROBERST, WA 98281	
:	44.55%		PHONE: (949) 833-1930	
		CIVIL ENGINEER	CRAIG HARRIS	
OOR RATIO:	1 / 5,975 sf		AAI ENGINEERING	
DING A:	1 / 4,475 sf		4875 SW GRIFFITH DRIVE, SUITE 300	
DING B:	1 / 7,800 sf		BEAVERTON, OR 97005	
G REQUIRED	264 spaces		PHONE: (503) 352-3030	
DING A:	98 spaces			
IANUFACTURING (1.6 / 1,000 sf)	73 spaces			
/AREHOUSE (0.3 / 1,000 sf)	25 spaces			
DING B:	166 spaces			
IANUFACTURING (1.6 / 1,000 sf)	135 spaces			
/AREHOUSE (0.3 / 1,000 sf)	31 spaces			
G PROVIDED:	274 spaces			
DING A:	102 spaces			
TANDARD:	96 spaces			
ANDICAP ACCESSIBLE:	6 spaces			
DING B:	172 spaces			
TANDARD:	166 spaces			
ANDICAP ACCESSIBLE:	6 spaces			
CAPE REQUIRED:	71,717 sf (10%)			
.:	29,711 sf			
:	42,006 sf			
CAPE PROVIDED:	110,526 sf (15.41%)			
	29,808 sf (10.03%)			
	80,718 sf (19.22%)	PROJECT TEAM		VICI

ARCHITECT

APPLICANT

OWNER / DEVELOPER

717,165 sf ±

317,125 sf

16.46 acres ±

297,108 sf ±

420,057 sf ±

129,975 sf

187,150 sf

45,491.25 sf (35%)

84,484.75 sf (65%)

84,217.5 sf (45%)

PHELAN DEVELOPMENT COMPANY 450 NEWPORT CENTER DRIVE, SUITE 405 NEWPORT BEACH, CA 92660 (949) 720-8050

450 NEWPORT CENTER DRIVE, SUITE 405

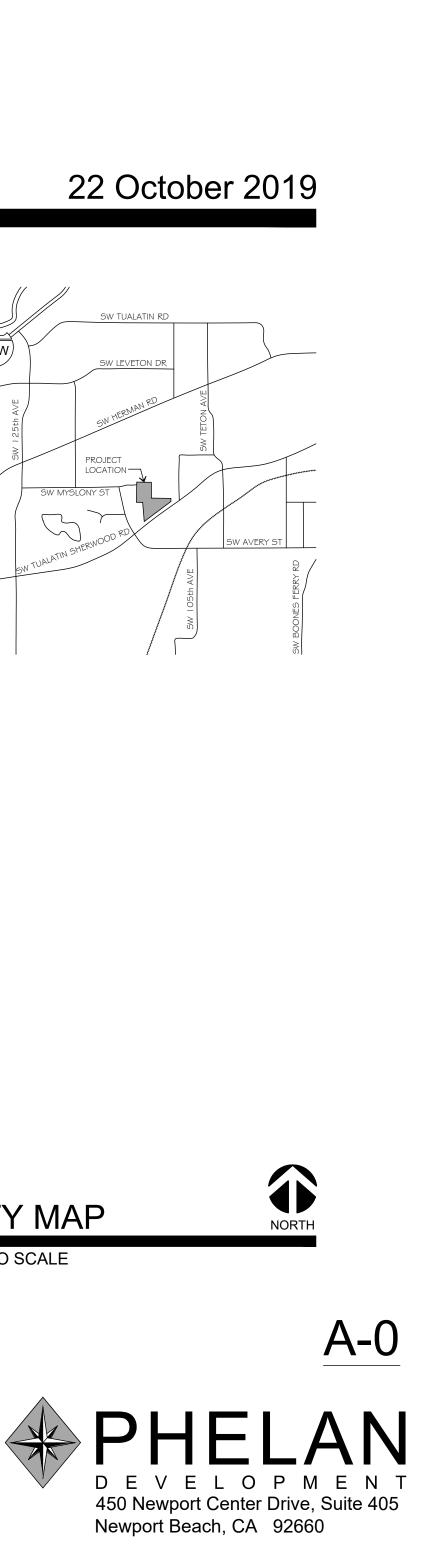
CALVIN J. COATSWORTH ARCHITECTS, PC

PHELAN DEVELOPMENT COMPANY

NEWPORT BEACH, CA 92660

MICHAEL DEARMEY

(949) 720-8050



717,165 sf ± LOT AREA: 16.46 acres ± 297,108 sf ± LOT A: 420,057 sf ± LOT B: 317,125 sf TOTAL BUILDING AREA: 129,975 sf BUILDING A: MANUFACTURING: 45,491.25 sf (35%) 84,484.75 sf (65%) WAREHOUSE: 187,150 sf BUILDING B: MANUFACTURING: 84,217.5 sf (45%) WAREHOUSE: 102,932.5 sf (55%) 44.22 % SITE COVERAGE: 43.75% LOT A: 44.55% LOT B: DOCK DOOR RATIO: 1 / 5,975 sf 1 / 4,475 sf BUILDING A: 1 / 7,800 sf BUILDING B: PARKING REQUIRED 264 spaces BUILDING A: 98 spaces MANUFACTURING (1.6 / 1,000 sf) 73 spaces WAREHOUSE (0.3 / 1,000 sf) 25 spaces 166 spaces BUILDING B: MANUFACTURING (1.6 / 1,000 sf) 135 spaces WAREHOUSE (0.3 / 1,000 sf) 31 spaces PARKING PROVIDED: 274 spaces BUILDING A: 102 spaces STANDARD: 96 spaces HANDICAP ACCESSIBLE: 6 spaces **BUILDING B**: 172 spaces STANDARD: 166 spaces HANDICAP ACCESSIBLE: 6 spaces LANDSCAPE REQUIRED: 71,717 sf (10%) LOT A: 29,711 sf 42,006 sf LOT B: LANDSCAPE PROVIDED: 110,526 sf (15.41%)

22 October 2019

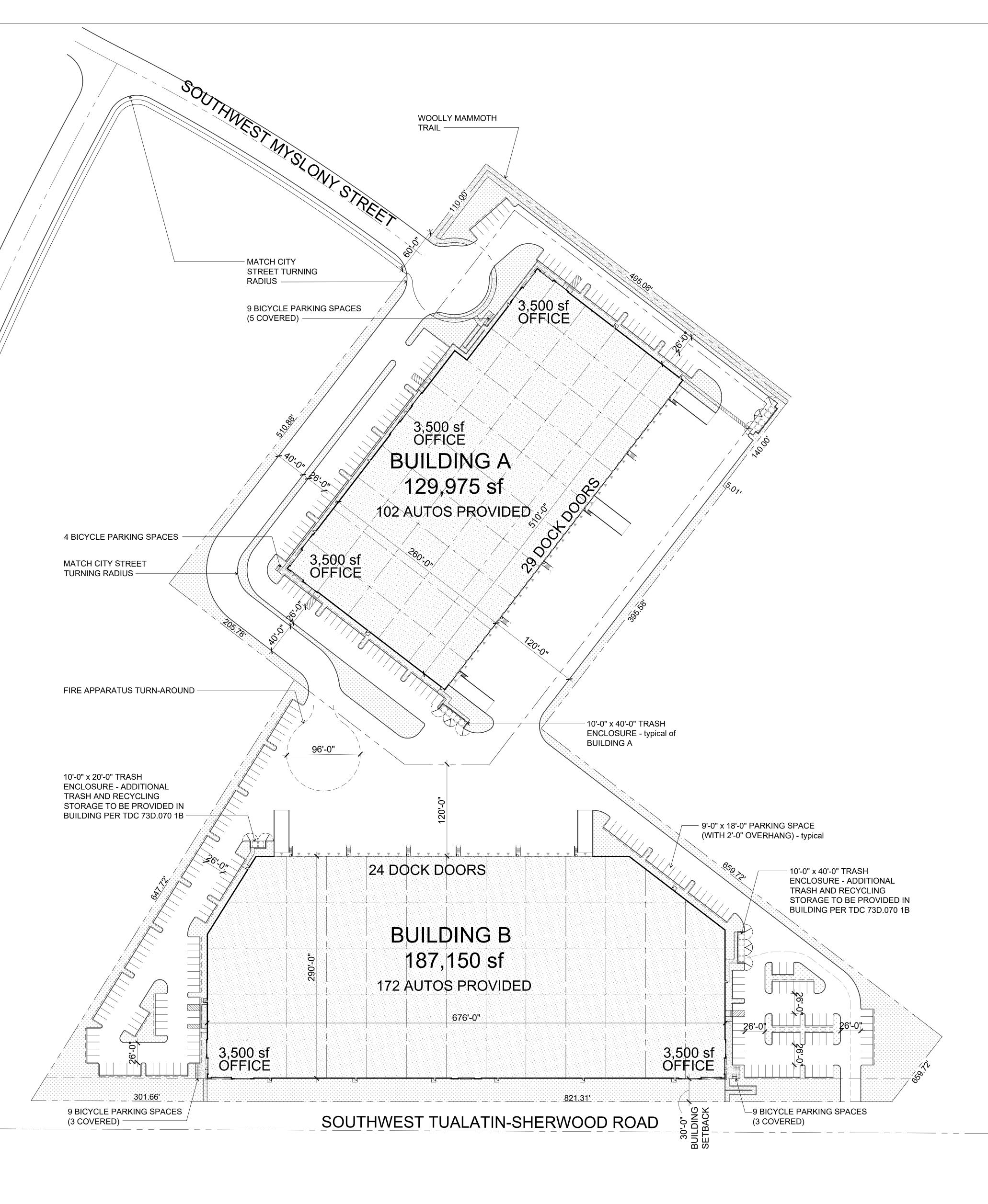
p:\2019\19500 phelan development\19500.21-tualatin industrial park (pascuzzi property), tualatin, or\19500.21 site plan scheme 13r2.dwg

29,808 sf (10.03%)

80,718 sf (19.22%)

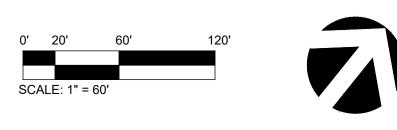


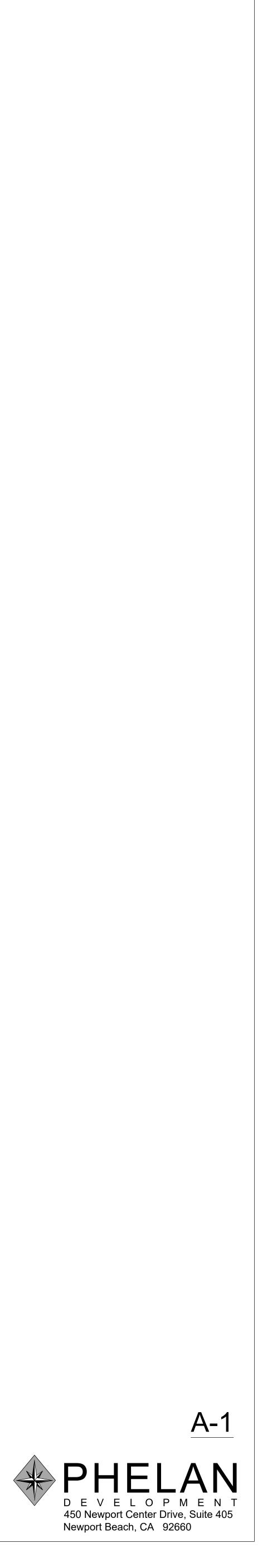
Carlile Coatsworth Architects, Inc 18600 MacArthur Boulevard - Suite 300 - Irvine, CA 92612 - Phone: (949) 833-1930

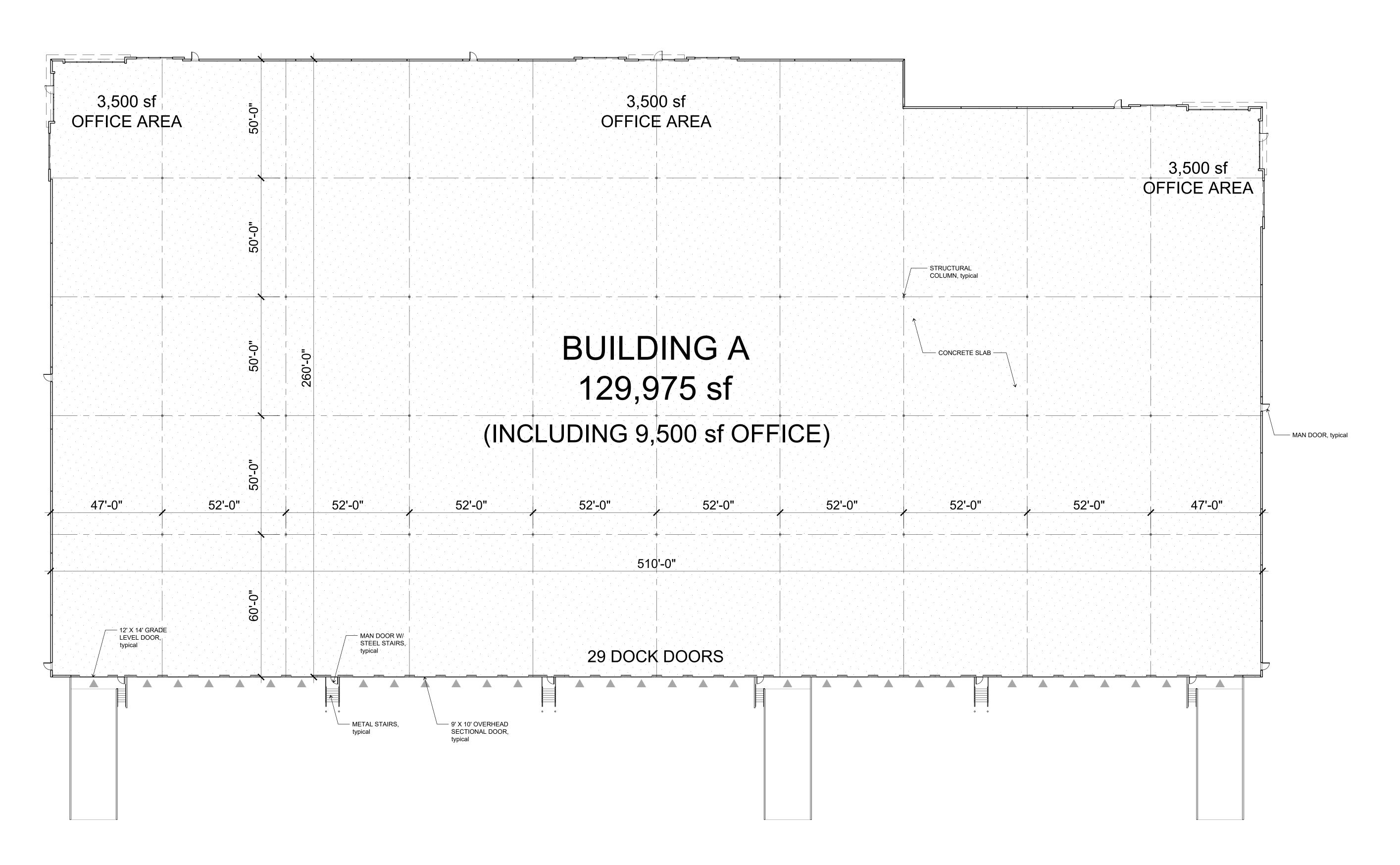


PRELIMINARY SITE PLAN SCHEME 13 R2 23 October 2019

Tualatin Industrial Park Tualatin, Oregon



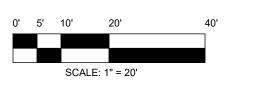


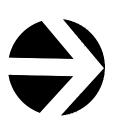


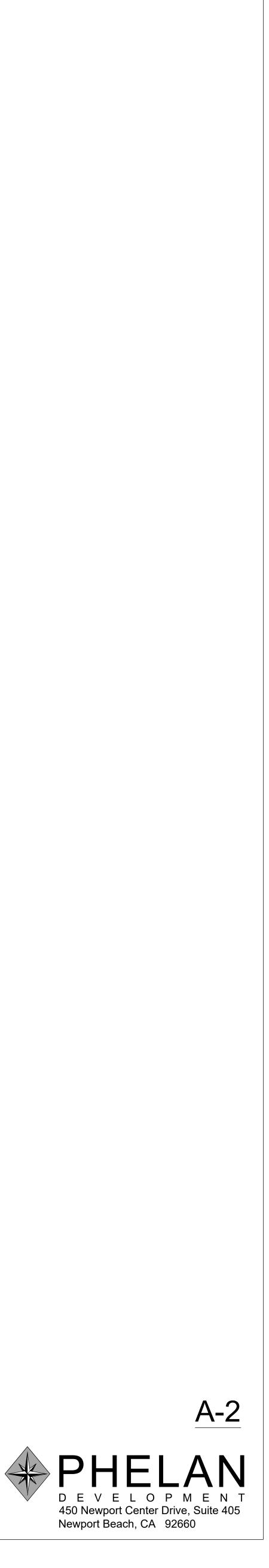


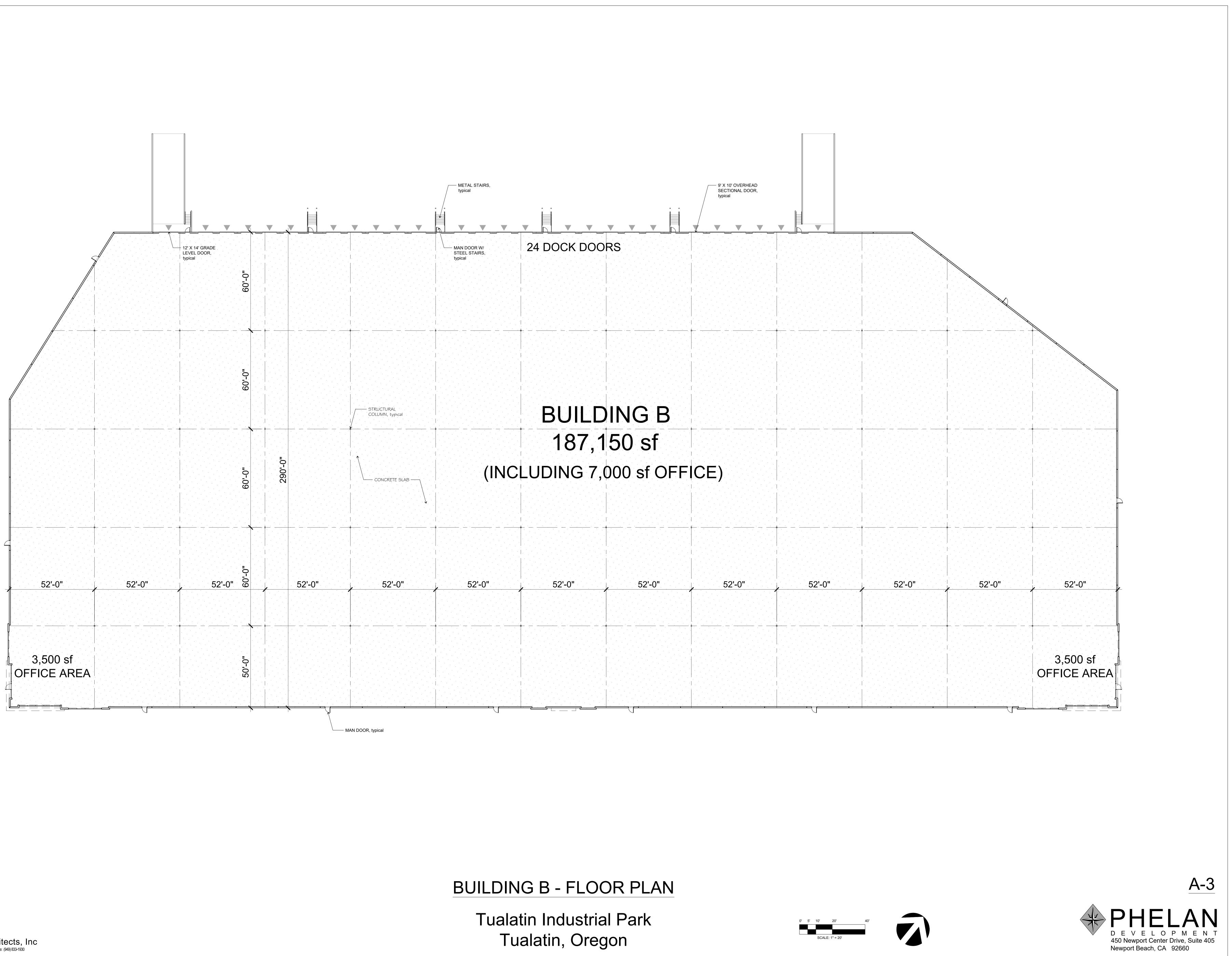
BUILDING A - FLOOR PLAN

Tualatin Industrial Park Tualatin, Oregon

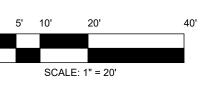




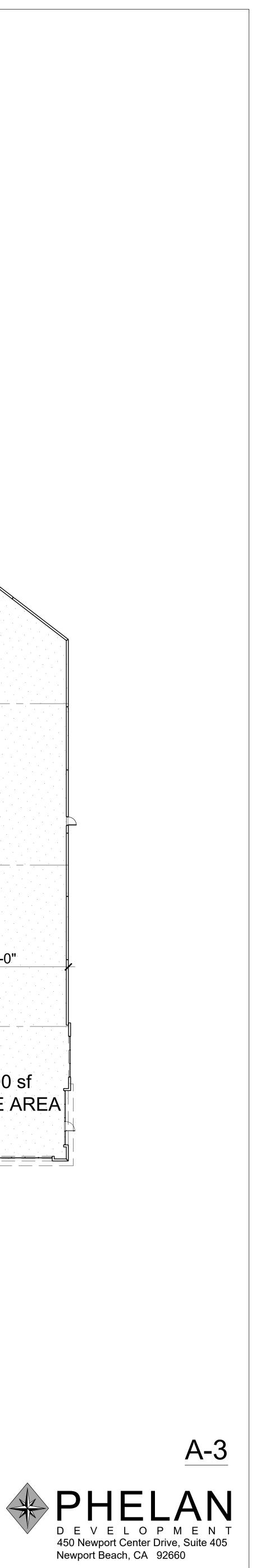


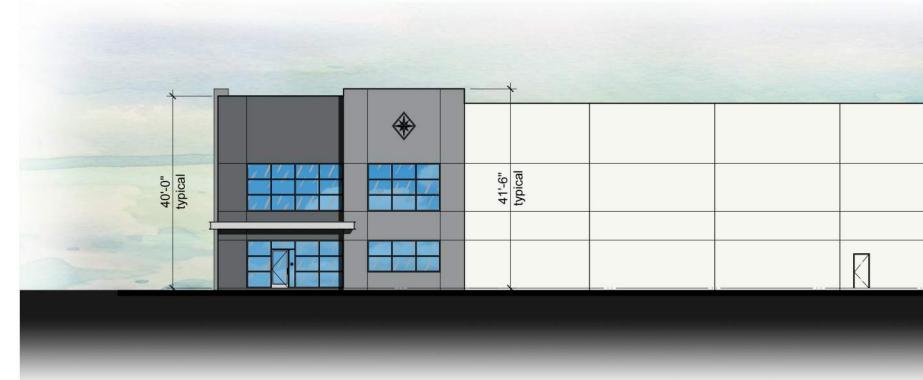




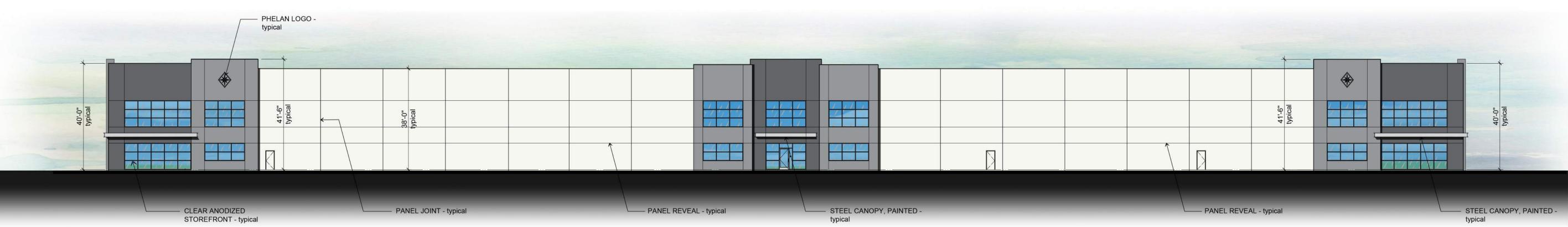








SOUTH ELEVATION



WEST ELEVATION

*					
38'-6"					
Sus-Th					
-			P	a - 1996 -	
			1		

NORTH ELEVATION



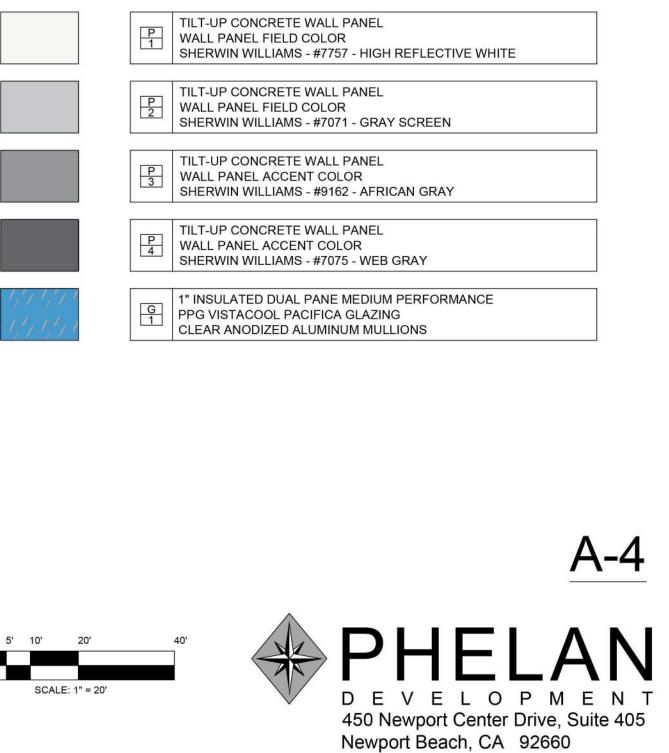


		38-6"
		 38

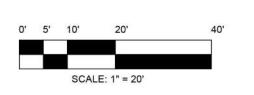


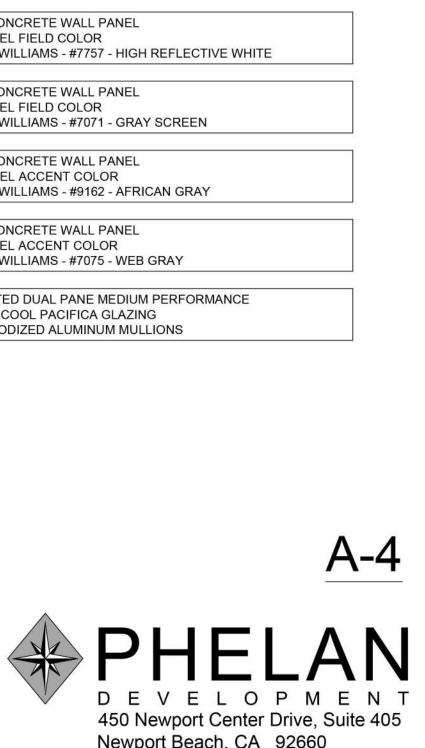
BUILDING A - EXTERIOR ELEVATIONS

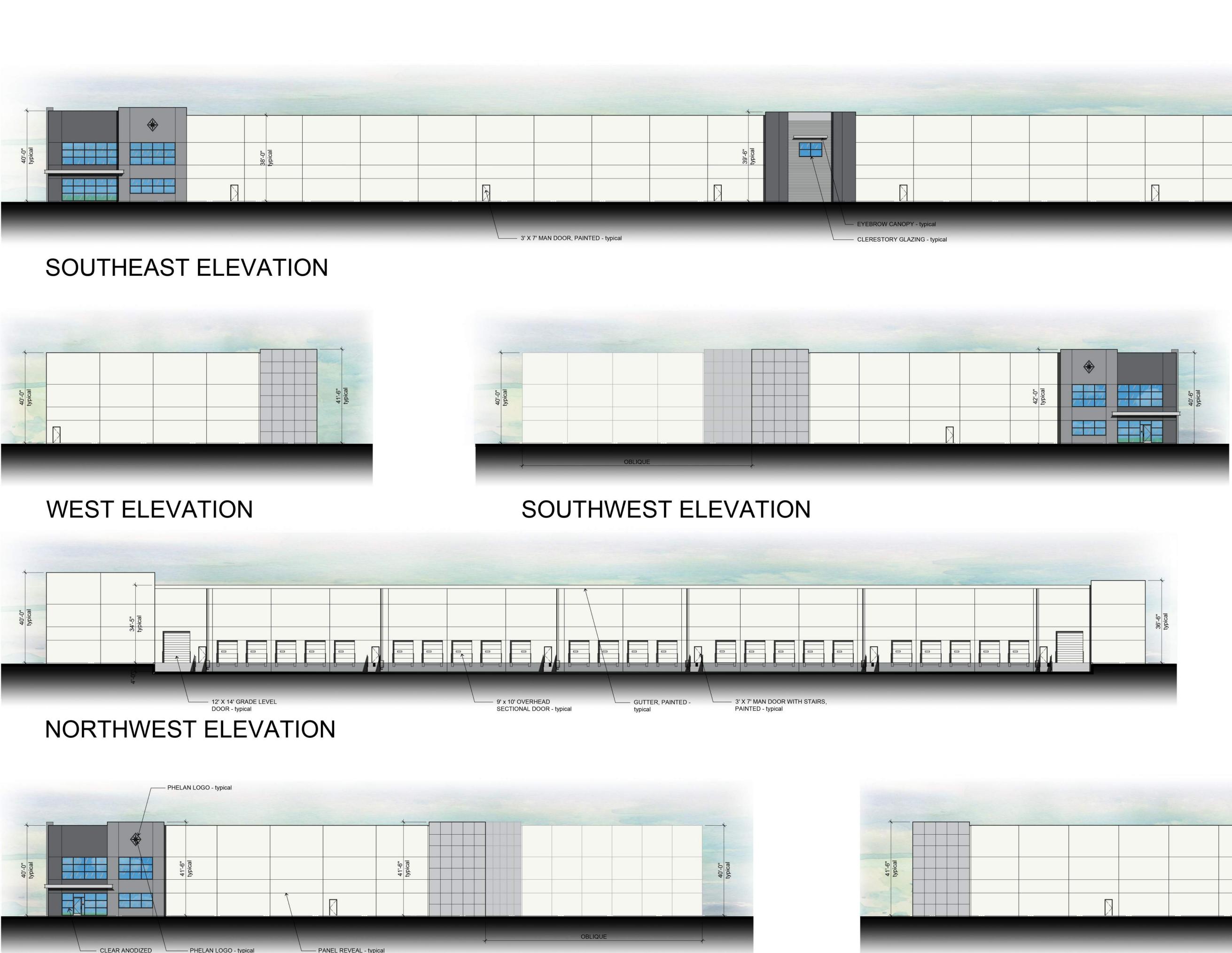
Tualatin Industrial Park Tualatin, Oregon

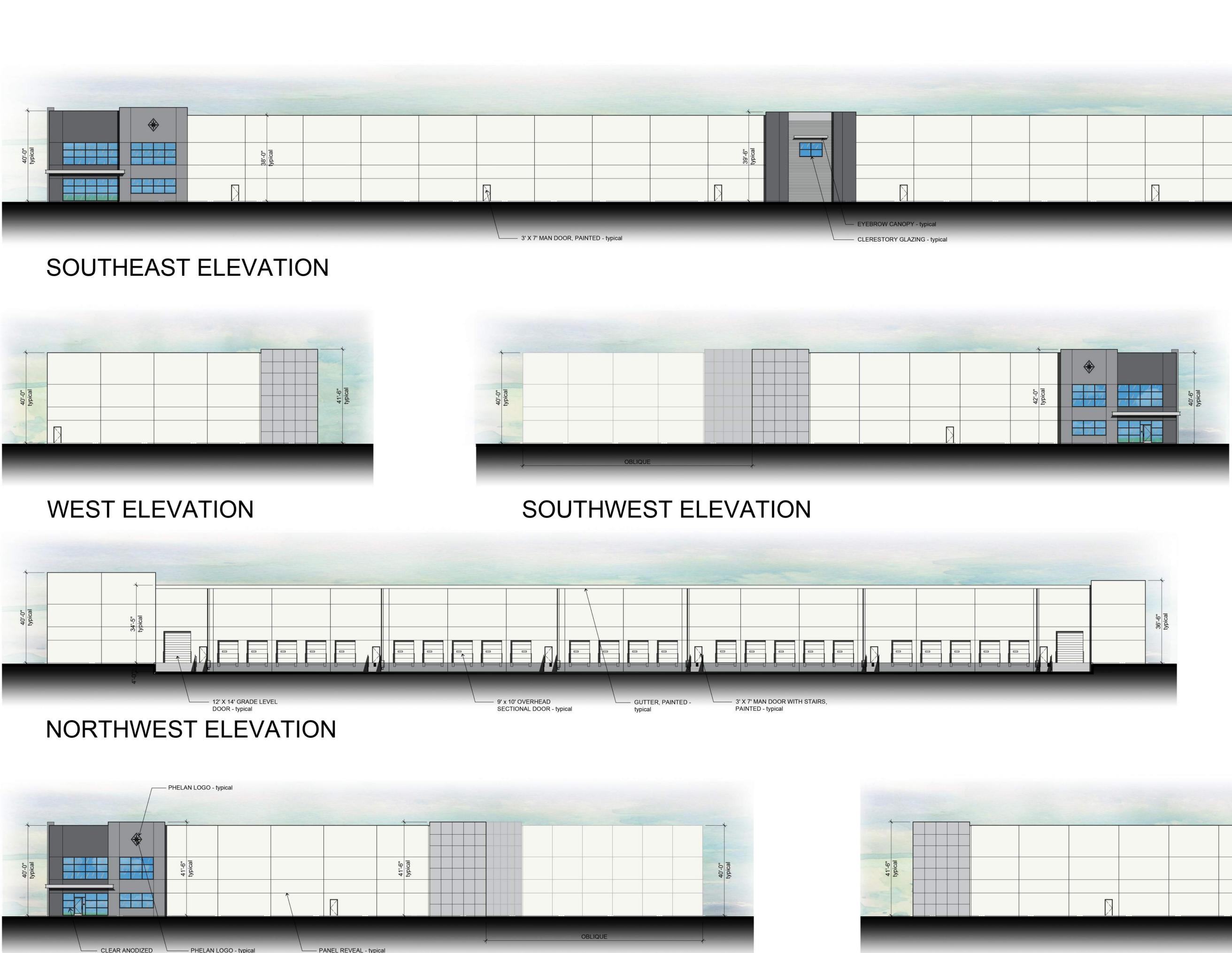


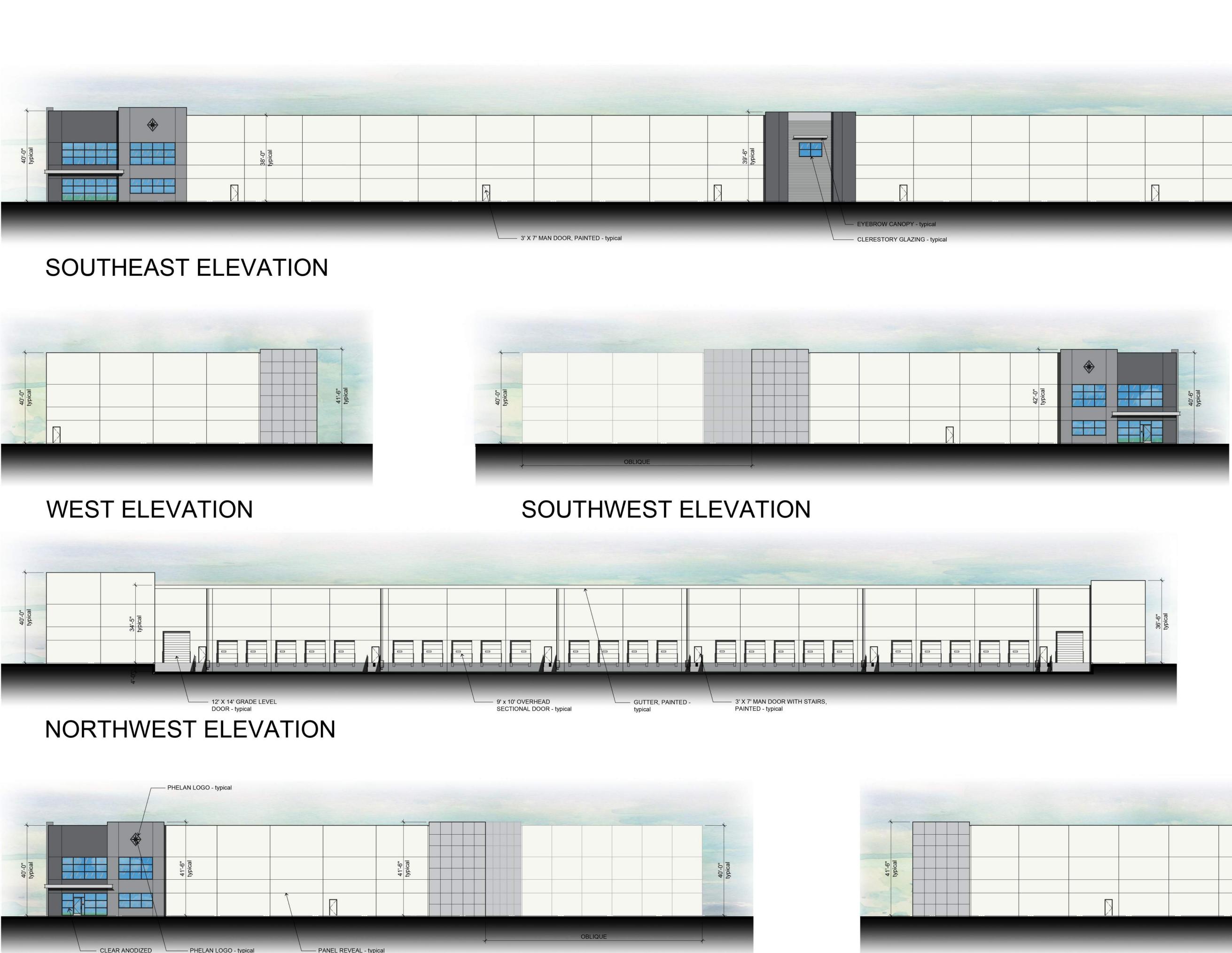


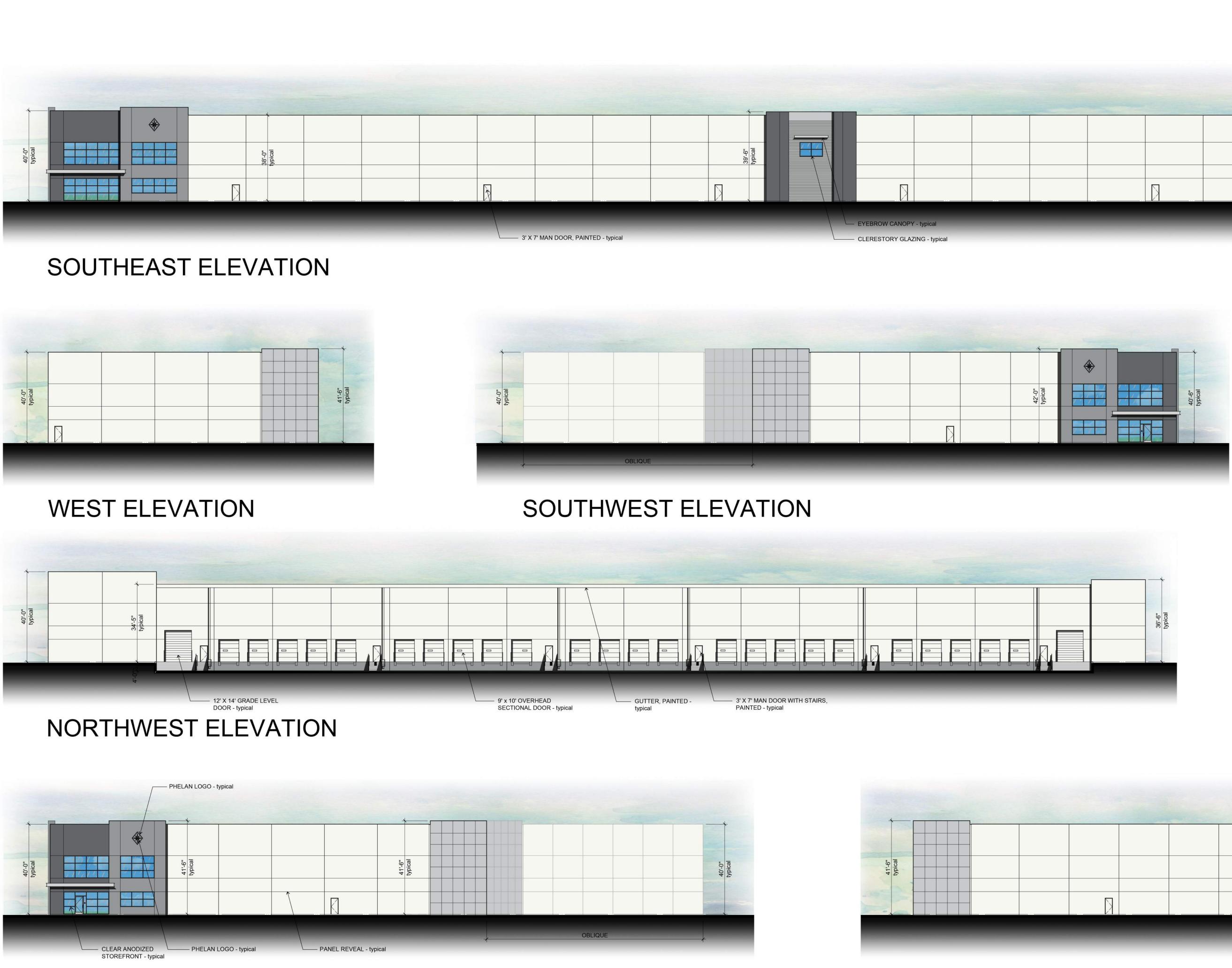










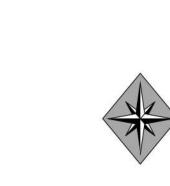


NORTHEAST ELEVATION



BUILDING B - EXTERIOR ELEVATIONS

Tualatin Industrial Park Tualatin, Oregon



NORTH ELEVATION

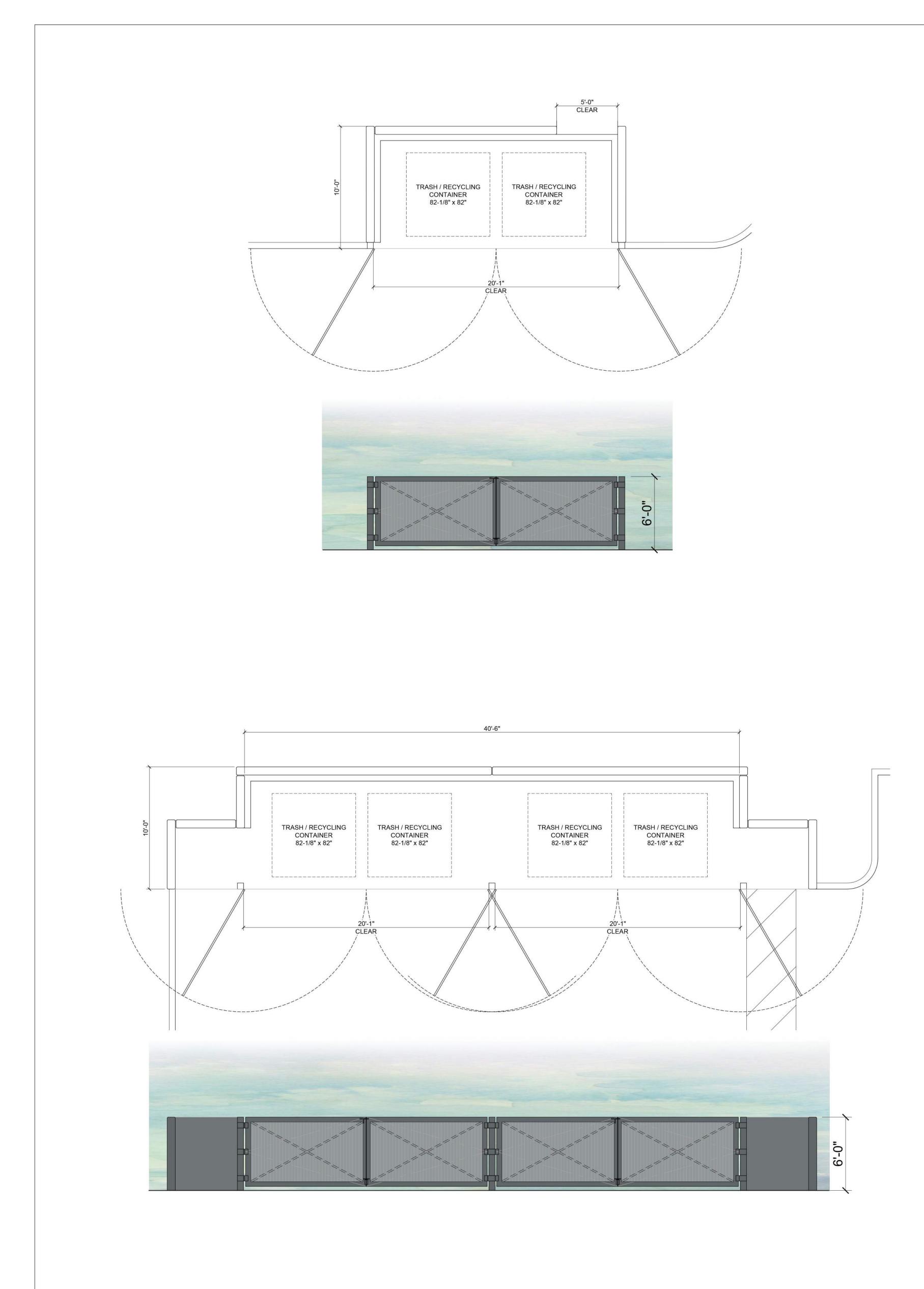
			 40'-0" typical

	36'-6" typical

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P TILT-UP CONCRETE WALL PANEL WALL PANEL FIELD COLOR SHERWIN WILLIAMS - #7757 - HIGH REFLECTIVE WHITE
P TILT-UP CONCRETE WALL PANEL WALL PANEL FIELD COLOR SHERWIN WILLIAMS - #7071 - GRAY SCREEN
PTILT-UP CONCRETE WALL PANELWALL PANEL ACCENT COLORSHERWIN WILLIAMS - #9162 - AFRICAN GRAY
P TILT-UP CONCRETE WALL PANEL WALL PANEL ACCENT COLOR SHERWIN WILLIAMS - #7075 - WEB GRAY
G 1" INSULATED DUAL PANE MEDIUM PERFORMANCE PPG VISTACOOL PACIFICA GLAZING CLEAR ANODIZED ALUMINUM MULLIONS
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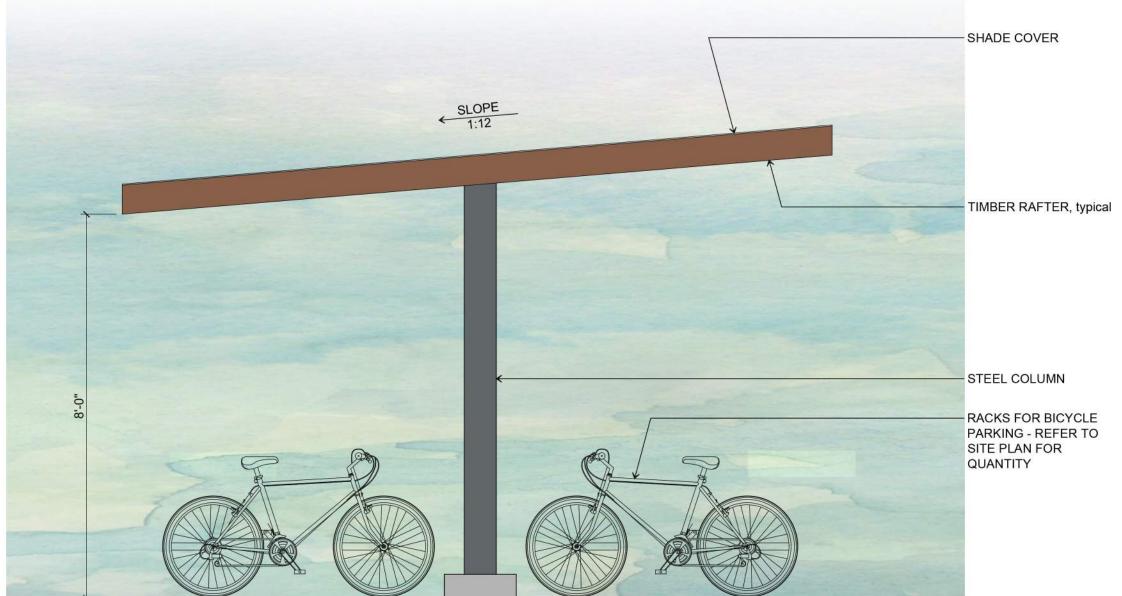




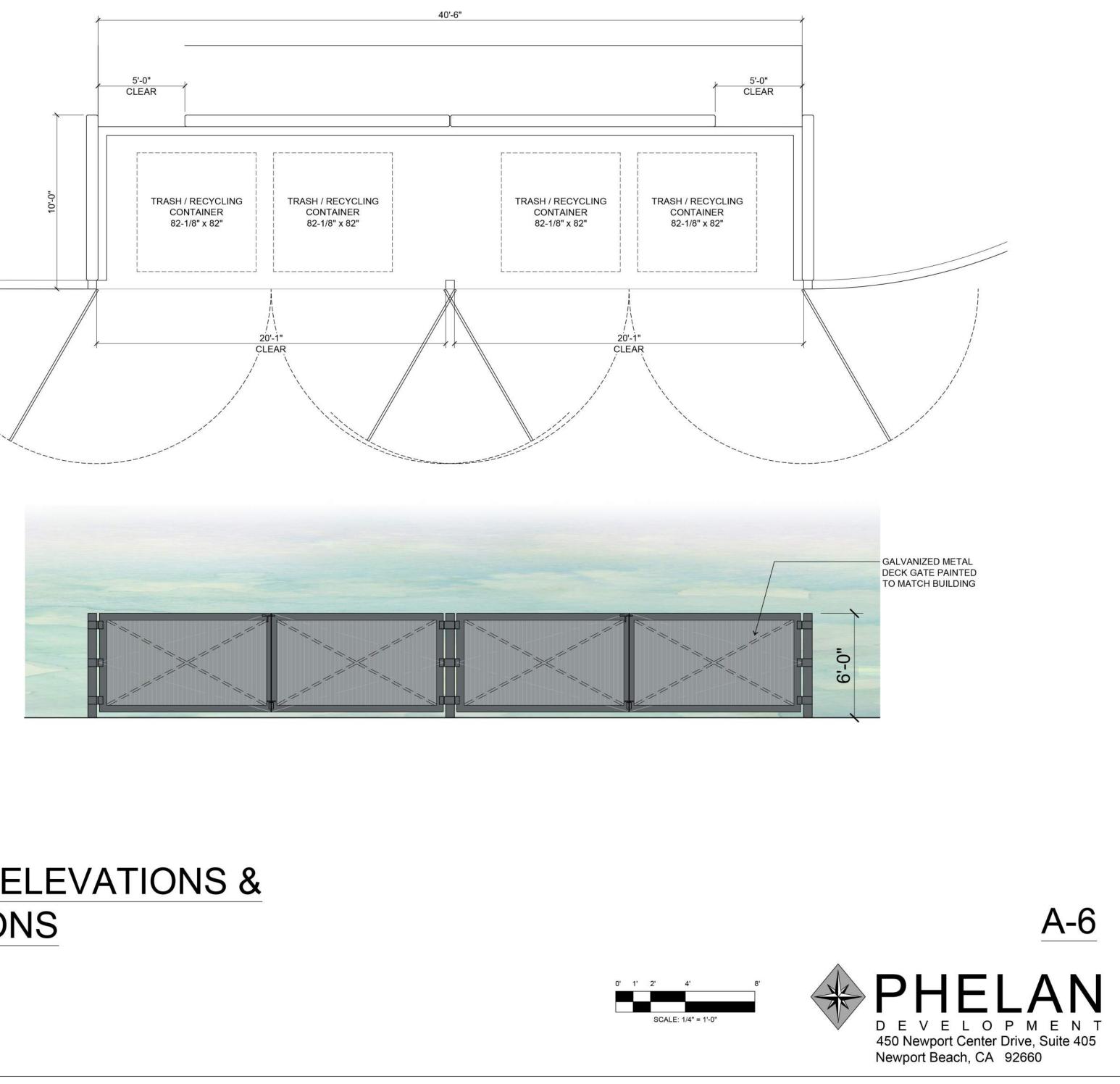


TRASH / RECYCLING ENCLOSURE PLANS AND ELEVATIONS & **COVERED BIKE PARKING ELEVATIONS**

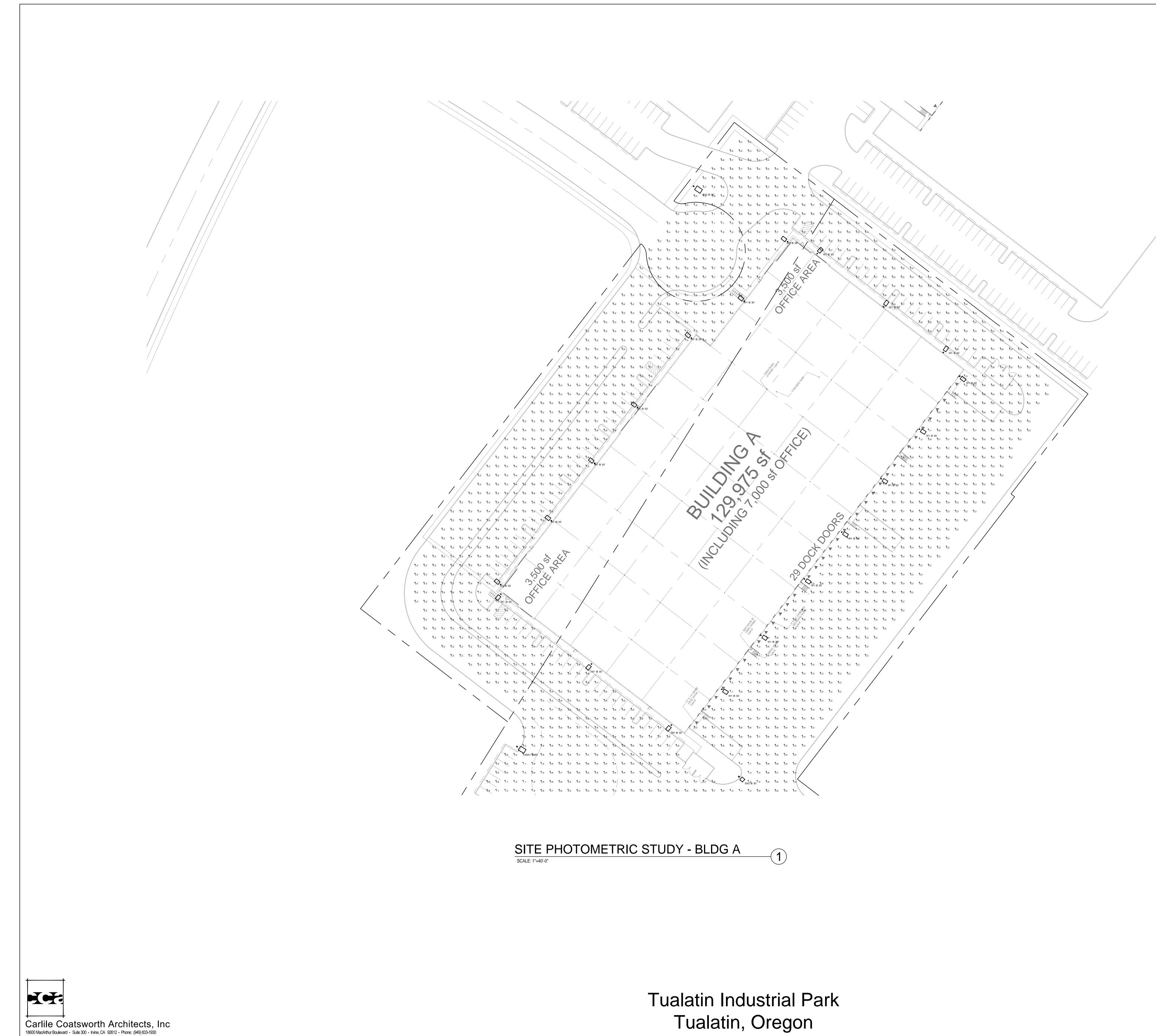
> **Tualatin Industrial Park** Tualatin, Oregon



COVERED BICYCLE PARKING ELEVATION





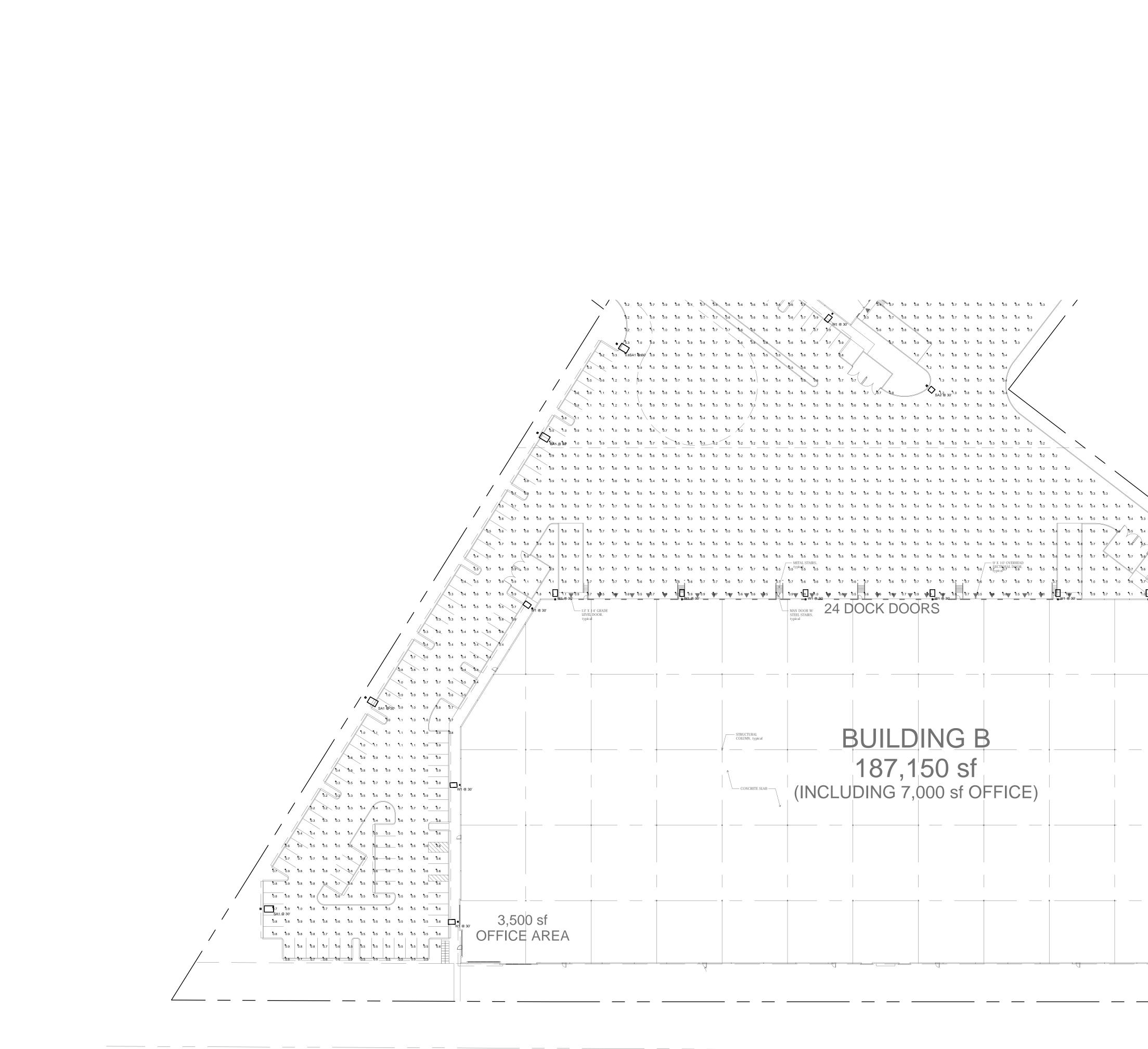


Tualatin, Oregon





SITE PHOTOMETRIC





SITE PHOTOMETRIC STUDY - BLDG B

Tualatin Industrial Park Tualatin, Oregon





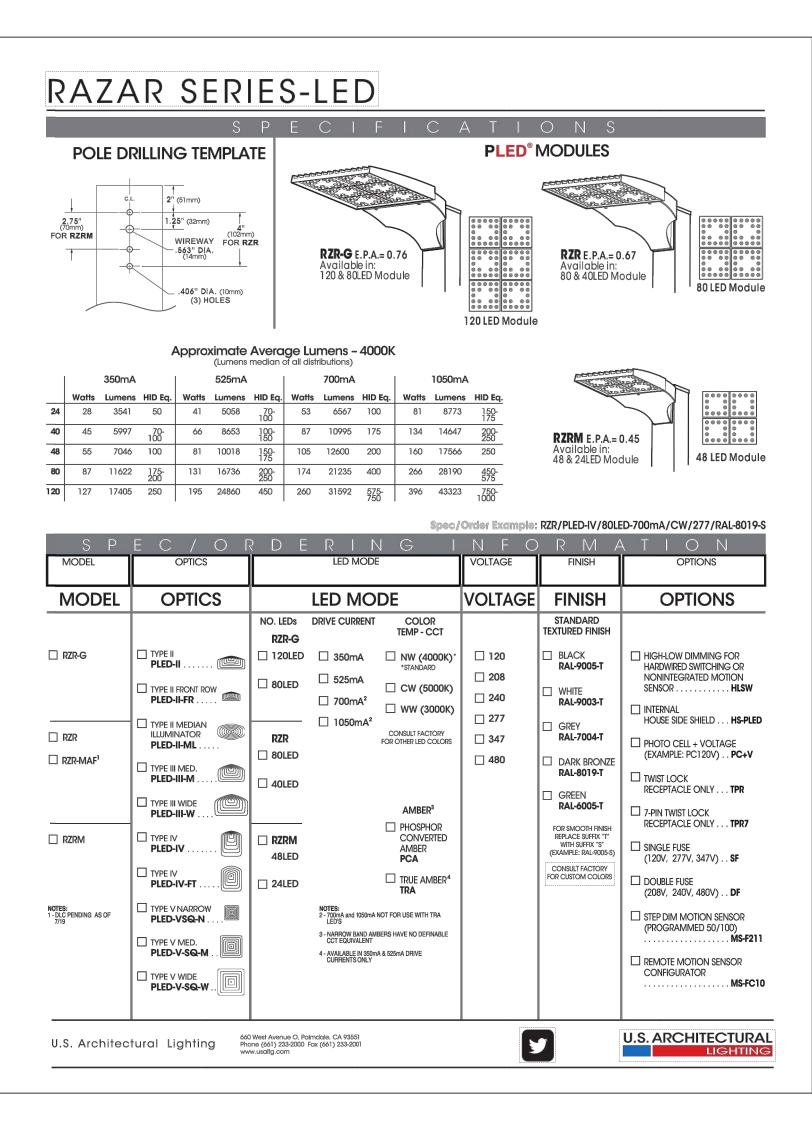
SITE PHOTOMETRIC

<u>b.7</u> <u>b.6</u> <u>b.6</u> <u>b.5</u> <u>b.5</u> <u>b.5</u> <u>b.5</u> <u>b.6</u> <u>b.6</u> <u>b.7</u> <u>b.7</u> <u>b.8</u> <u>b.9</u>	

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K CCT	INITIAL LUMENS - 3000K CCT	INITIAL LUMENS - 5000K CCT	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AM
24	LED	24 PLED[®] Optical Module - 350mA	3,298 - 3,784	3,133 - 3,595	3,463 - 3,973	60,000+	-20°F	29	120 277	0.24 0.10
24	LED	24 PLED [®] Optical Module - 525mA	4,711 - 5,405	4,475 - 5,135	4,947 - 5,675	60,000+	-20°F	42	120 277	0.34 0.15
24	LED	24 PLED [®] Optical Module - 700mA	6,023 - 6,911	5,722 - 6,565	6,324 - 7,256	60,000+	-20°F	56	120 277	0.45
24	LED	24 PLED [®] Optical Module - 1050mA	8,171 - 9,375	7,762 - 8,906	8,580 - 9,844	60,000+	-20°F	82	120 277	0.68
40	LED	40 PLED Optical	5,585 -	5,306 -	5,864 - 6,729	60,000+	-20°F	43	120	0.38
40	LED	Module - 350mA	6,408 8,059 -	6,088 7,656 -	8,462 - 9,709	60,000+	-20°F	65	277 120	0.17
40	LED	Module - 525mA	9,246	8,784 9,728 -	10,752 -	60,000+	-20°F	87	277 120	0.24
40	LED	Module - 700mA 40 PLED [®] Optical	11,749 13,642 -	11,162 12,960 -	12,337 14,324 -	60,000+	-20°F	128	277 120	0.32
48	LED	Module - 1050mA	15,652	14,870 6,234 -	16,435 6,890 -	60,000+	-20°F	53	277 120	0.49
48	LED	Module - 350mA	7,529 9,330 -	7,153 8,864 -	7,909 9,797 -	60,000+	-20°F	79	277	0.20
48	LED	Module - 525mA	10,705 11,735 -	10,170 11,148 -	11,240 12,322 -	60,000+	-20°F	106	277 120	0.29
48	LED	48 PLED [®] Optical	13,464	12,791	14,137	60,000+	-20°F	160	277	0.38
RZR		Module - 1050mA	18,771	17,832	19,709	00,0001	201	100	277	0.58
80	LED	80 PLED [®] Optical Module - 350mA	10,824 - 12,419	10,283 - 11,798	11,365 - 13,040	60,000+	-20°F	86	120 277	0.75 0.33
80	LED	80 PLED [®] Optical Module - 525mA	15,587 - 17,884	14,808 - 16,990	16,366 - 18,778	60,000+	-20°F	130	120 277	1.10 0.48
80	LED	80 PLED [®] Optical	19,767 -	18,779 -	20,755 -	60,000+	-20°F	174	120 277	1.45
80	LED	Module - 700mA 80 PLED [®] Optical Module - 1050mA	22,680 26,255 - 30,124	21,546 24,942 - 28,618	23,814 27,568 - 31,630	60,000+	-20°F	257	120 277	0.63 2.22 0.96
RZR-G		module rooming	50,124	20,010	31,030				2//	0.70
80	LED	80 PLED [®] Optical Module - 350mA	10,950 - 12,564	10,403 - 11,936	11,498 - 13,192	60,000+	-20°F	87	120 277	0.75 0.33
80	LED	80 PLED [®] Optical Module - 525mA	15,735 - 18,054	14,948 - 17,151	16,522 - 18,957	60,000+	-20°F	129	120 277	1.10 0.48
80	LED	80 PLED° Optical Module - 700mA	20,074 - 23,032	19,071 - 21,881	21,078 - 24,184	60,000+	-20°F	174	120 277	1.45 0.63
80	LED	80 PLED [®] Optical Module - 1050mA	27,651 - 31,725	26,268 - 30,139	29,033 - 33,311	60,000+	-20°F	266	120 277	2.22 0.96
120	LED	120 PLED ° Optical Module - 350mA	16,211 -	15,400 -	17,021 -	60,000+	-20°F	130	120 277	1.06 0.46
120	LED	120 PLED [®] Optical Module - 525mA	18,599 23,154 - 26,566	17,669 21996 - 25,238	19,529 24,312 - 27,894	60,000+	-20°F	192	120 277	1.63 0.70
120	LED	120 PLED [®] Optical Module - 700mA	29,424 -	27,953 -	30,895 -	60,000+	-20°F	260	120 277	2.17 0.94
120	LED	120 PLED [®] Optical	33,760 40,350 -	32,072 38,333 -	35,448 42,368 -	60,000+	-20°F	398	120	3.33
2. 3. 4.	Lumen value System Watts Fuse value st Note: Surge L70(10K) – TN	Module - 1050mA mps is the highest of startin is for LED Modules vary acco includes the source watts nould be sufficient to profe suppressors are considere 4-21 6x rule applied.	ording to the d and all driver c ct all wiring cor d a perishable	listribution type. components. mponents. For e device.	80LED array app lectronic driver o		protection, use s	urge suppresso		



		32	U.S. ARCHITECTURAL LIGHTING	RZR-WM PLED 4 8 LED NW MM51151 WALL MT AT 30 FT	CAST BLACK PAINTED FINNED METAL	FORTY WHITE LIGHT	40				
•	W1			AFG	HOUSING, CAST BLACK PAINTED METAL DRIVER COVER, 2 CIRCUIT BOARDS EACH WITH 20 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED, 1 FORMED SEMI-SPECULAR METAL OPTIC MOUNTING PLATE BELOW EACH CIRCUIT BOARD.	EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.	40	RZR-WM2-4FT-40PLED- -NW-525.ies	162	0.85	65.6
	SA1	6	U.S. ARCHITECTURAL LIGHTING	RZR-M-PLED-IV-FT-48LED- 700mA-NW-HS -MM51151 WALL MT AT 30 FT AFG	CAST BLACK PAINTED FINNED METAL HOUSING, CAST BLACK PAINTED METAL DRIVER COVER, 4 CIRCUIT BOARDS EACH WITH 12 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED, 1 MOLDED BLACK PLASTIC HOUSE SIDE SHIELD BELOW EACH OPTIC, 1 FORMED SEMI-SPECULAR METAL OPTIC MOUNTING PLATE BELOW EACH CIRCUIT BOARD.	FORTY-EIGHT WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION. PRORATED BASED ON RZRG- 120LED ITL & WORSE CASE RZRM-48PLED ITL. PR - LUMEN OUTPUT PRORATED FROM UPDATED TESTING (06/17).	48	RZRM-PLED-IV-FT- 48LED-700mA-NW- HS.IES	192	0.85	105.1
	SA3	1	U.S. ARCHITECTURAL LIGHTING	RZR-M-PLED-IV-FT-48LED- 700mA-NW-HS -MM511 POLE MT AT 30 FT AFG	CAST BLACK PAINTED FINNED METAL HOUSING, CAST BLACK PAINTED METAL DRIVER COVER, 4 CIRCUIT BOARDS EACH WITH 12 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED, 1 MOLDED BLACK PLASTIC HOUSE SIDE SHIELD BELOW EACH OPTIC, 1 FORMED SEMI-SPECULAR METAL OPTIC MOUNTING PLATE BELOW EACH CIRCUIT BOARD.	FORTY-EIGHT WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION. PRORATED BASED ON RZRG- 120LED ITL & WORSE CASE RZRM-48PLED ITL. PR - LUMEN OUTPUT PRORATED FROM UPDATED TESTING (06/17).	48	RZRM-PLED-IV-FT- 48LED-700mA-NW- HS.IES	192	0.85	105.1
	SA2	1	U.S. ARCHITECTURAL LIGHTING	RZR MPLED-VSQW 48 LED 1050MA NW -MM511 POLE MT AT 30 FT AFG	CAST BLACK PAINTED FINNED METAL HOUSING, CAST BLACK PAINTED METAL DRIVER COVER, 4 CIRCUIT BOARDS EACH WITH 12 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED, 1 FORMED SEMI-SPECULAR METAL OPTIC MOUNTING PLATE BELOW EACH CIRCUIT BOARD.	FORTY-EIGHT WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION. PRORATED BASED ON RZRG- 120LED ITL & WORSE CASE RZRM-48PLED ITL. (120VAC, 60Hz) TO THE DRIVERS.	48	RZRM-PLED-VSQ-W- 48LED-1050mA- NW.IES	373	0.85	159.6



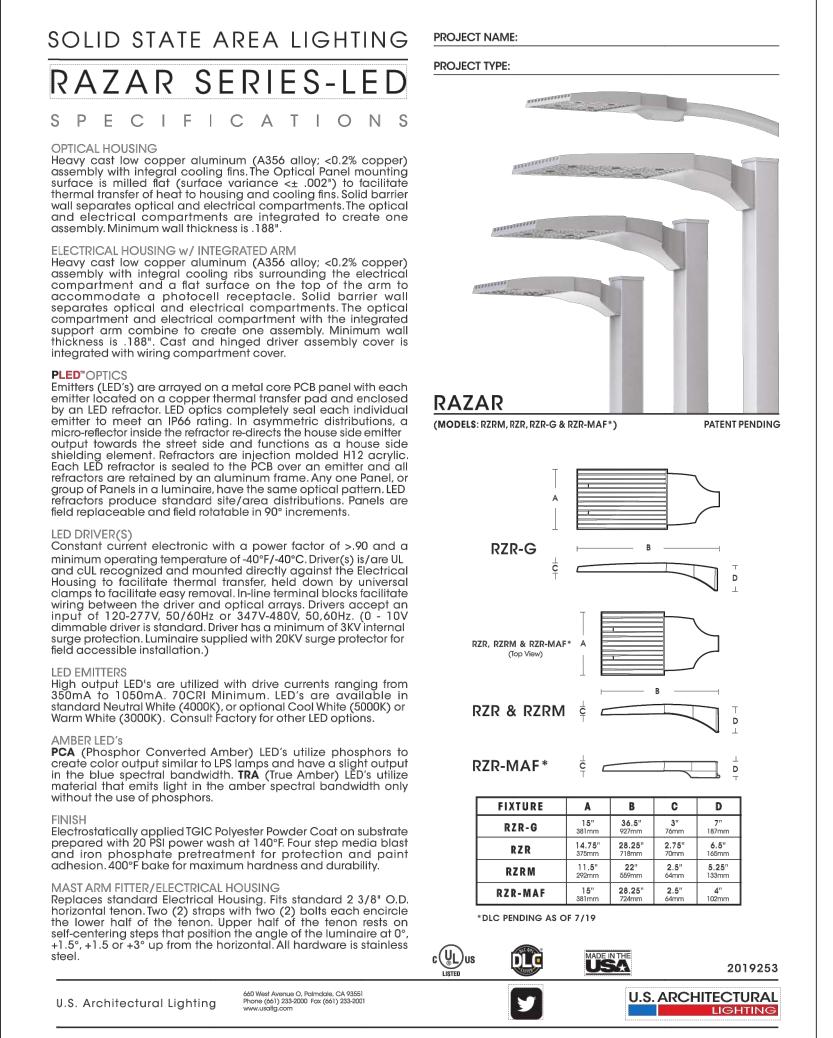
Tualatin Industrial Park Tualatin, Oregon



PHOTOMETRIC STATS &

FIXTURE SPECIFICATION





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			in		ural Consultan		Attachment 2
TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH ¹	CONDITION ²	STRUCTURE ²	COMMENTS	TREATMENT
10056	bigleaf maple	Acer macrophyllum	18,18, 18	fair	fair	multiple leaders at 3' with decay, history of branch failure	remove
10057	sweet cherry	Prunus avium	8	fair	fair	one sided, overtopped by adjacent tree, large wound with decay at lower trunk	remove
10058	sweet cherry	Prunus avium	11,9	fair	fair	codominant at ground level with included bark, one sided	remove
10059	sweet cherry	Prunus avium	11,9	very poor	very poor	dead	remove
10060	sweet cherry	Prunus avium	16,15, 10	poor	poor	multiple leaders at ground level with decay, significant branch dieback	remove
10061	sweet cherry	Prunus avium	16	good	fair	one sided	remove
10062	sweet cherry	Prunus avium	16,16, 16,15, 13	fair	fair	multiple leaders at 2' with included bark	remove
10063	sweet cherry	Prunus avium	20	good	fair	codominant at 8', one sided	remove
10111	English walnut	Juglans regia	8,8,8,8 ,7	good	fair	multiple leaders at 2' with included bark	remove
10112	English hawthorn	Crataegus monogyna	8,8,5	good	fair	multiple leaders at ground level	remove
10149	English holly	Ilex aquifolium	7,6,5,5 ,5	fair	fair	multiple leaders at ground level, moderately thin crown	remove
10162	incense cedar	Calocedrus decurrens	30	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10163	incense cedar	Calocedrus decurrens	20	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10164	incense cedar	Calocedrus decurrens	22	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10165	incense cedar	Calocedrus decurrens	18	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10166	incense cedar	Calocedrus decurrens	18	fair	fair	excessive competition with adjacent trees due to close spacing	retain

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Tree Plan for Tualatin Industrial Kyle Bertelsen, Phelan Development

TERAGAN ASSOCIATES, INC.

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October 4, 2019

Page 7 of 10

			"IN"	Arboricult	URAL CONSULTAN	TS	Attachment 2
TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH1	CONDITION ²	STRUCTURE ²	COMMENTS	TREATMENT
10167	incense cedar	Calocedrus decurrens	26	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10168	incense cedar	Calocedrus decurrens	18	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10169	incense cedar	Calocedrus decurrens	12	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10170	incense cedar	Calocedrus decurrens	24	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10171	incense cedar	Calocedrus decurrens	15	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10172	incense cedar	Calocedrus decurrens	12	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10173	incense cedar	Calocedrus decurrens	11	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10174	incense cedar	Calocedrus decurrens	12	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10175	incense cedar	Calocedrus decurrens	23	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10176	incense cedar	Calocedrus decurrens	16	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10177	incense cedar	Calocedrus decurrens	14	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10178	incense cedar	Calocedrus decurrens	20,18	fair	fair	excessive competition with adjacent trees due to close spacing	retain

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Tree Plan for Tualatin Industrial

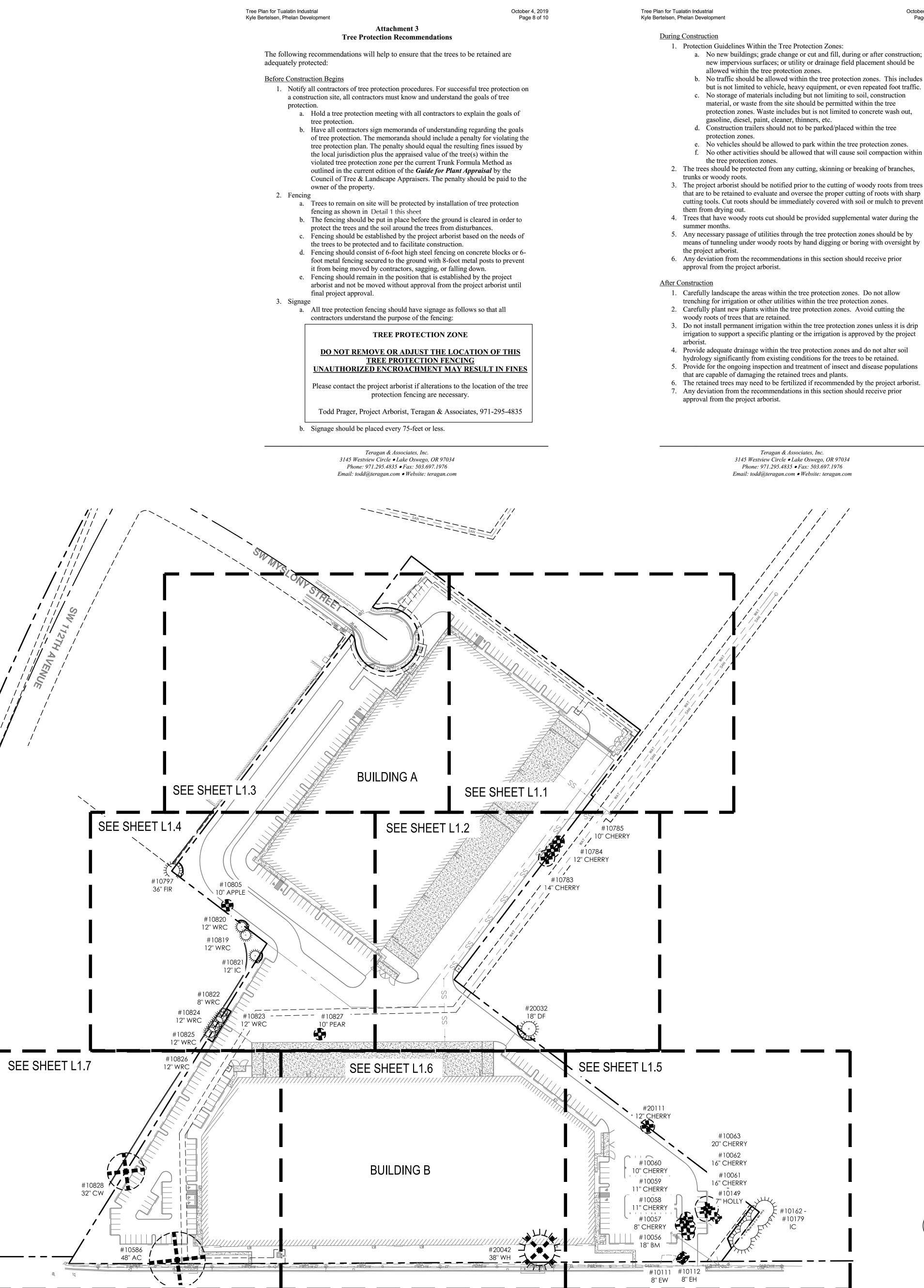
Kyle Bertelsen, Phelan Development

TERAGAN 🖏 🞖 ASSOCIATES, INC. ARBORICULTURAL CONSULTANTS

			140	Arboricult	ural Consultan	TS	Attachment 2
TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH1	CONDITION ²	STRUCTURE ²	COMMENTS	TREATMENT
10179	incense cedar	Calocedrus decurrens	24,16	fair	fair	excessive competition with adjacent trees due to close spacing	/ retain /
10586	American chestnut	Castanea dentata	48,10, 8	very poor	very poor	extensive top dieback, topped for overhead power clearance	remove
10783	sweet cherry	Prunus avium	14	good	fair	multiple leaders	remove
10784	sweet cherry	Prunus avium	12,10, 8	good	fair	multiple leaders at 2'	remove
10785	sweet cherry	Prunus avium	10,10	good	fair	codominant at 1'	remove
10797	Douglas-fir	Pseudotsuga menziesii	36	good	fair	one sided, retaining wall cut at 12 feet from NW side of tree	retain
10805	orchard apple	Malus domestica	10,10, 10,10, 7,7,3	fair	fair	not maintained for fruit production	remove
10819	western redcedar	Thuja plicata	12	good	good		retain
10820	western redcedar	Thuja plicata	12	good	good		retain
10821	incense cedar	Calocedrus decurrens	12	good	good		retain
10822	western redcedar	Thuja plicata	8,6	good	fair	codominant at 1'	retain
10823	western redcedar	Thuja plicata	12,4	good	fair	codominant at 1'	retain
10824	western redcedar	Thuja plicata	12	good	good		retain
10825	western redcedar	Thuja plicata	12	good	good		retain
10826	western redcedar	Thuja plicata	12	good	good		retain
10827	orchard pear	Pyrus sp.	18,16, 10	fair	fair	not maintained for fruit production	remove
10828	black cottonwood	Populus trichocarpa	32	good	good		remove
20011	sweet cherry	Prunus avium	12	good	fair	one sided, multiple leaders	remove
20023	n/a	n/a	n/a	n/a	n/a	not located	n/a
20032	Douglas-fir	Pseudotsuga menziesii	18	good	fair	one sided	retain
20042	western hemlock	Tsuga heterophylla	38	good	fair	lost top, upright competing leader at 15'	remove

¹**DBH** is the trunk diameter in inches measured per International Society of Arboriculture (ISA) standards. ²Condition and Structure ratings range from very poor, poor, fair, to good.

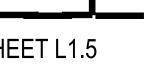
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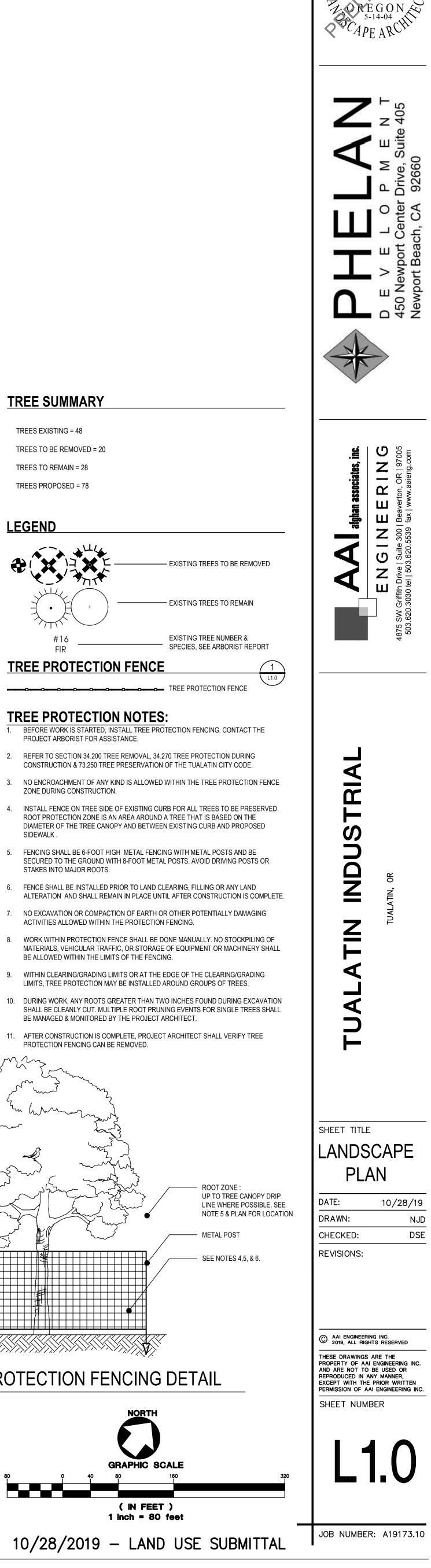


- new impervious surfaces; or utility or drainage field placement should be allowed within the tree protection zones.
- b. No traffic should be allowed within the tree protection zones. This includes but is not limited to vehicle, heavy equipment, or even repeated foot traffic. c. No storage of materials including but not limiting to soil, construction material, or waste from the site should be permitted within the tree
- protection zones. Waste includes but is not limited to concrete wash out, gasoline, diesel, paint, cleaner, thinners, etc. d. Construction trailers should not to be parked/placed within the tree
- e. No vehicles should be allowed to park within the tree protection zones. f. No other activities should be allowed that will cause soil compaction within
- 2. The trees should be protected from any cutting, skinning or breaking of branches,
- 3. The project arborist should be notified prior to the cutting of woody roots from trees that are to be retained to evaluate and oversee the proper cutting of roots with sharp cutting tools. Cut roots should be immediately covered with soil or mulch to prevent 4. Trees that have woody roots cut should be provided supplemental water during the
- 5. Any necessary passage of utilities through the tree protection zones should be by
- 6. Any deviation from the recommendations in this section should receive prior

- 1. Carefully landscape the areas within the tree protection zones. Do not allow
- 2. Carefully plant new plants within the tree protection zones. Avoid cutting the
- 3. Do not install permanent irrigation within the tree protection zones unless it is drip
- irrigation to support a specific planting or the irrigation is approved by the project
- 4. Provide adequate drainage within the tree protection zones and do not alter soil hydrology significantly from existing conditions for the trees to be retained.
- 5. Provide for the ongoing inspection and treatment of insect and disease populations
- that are capable of damaging the retained trees and plants.
- 7. Any deviation from the recommendations in this section should receive prior

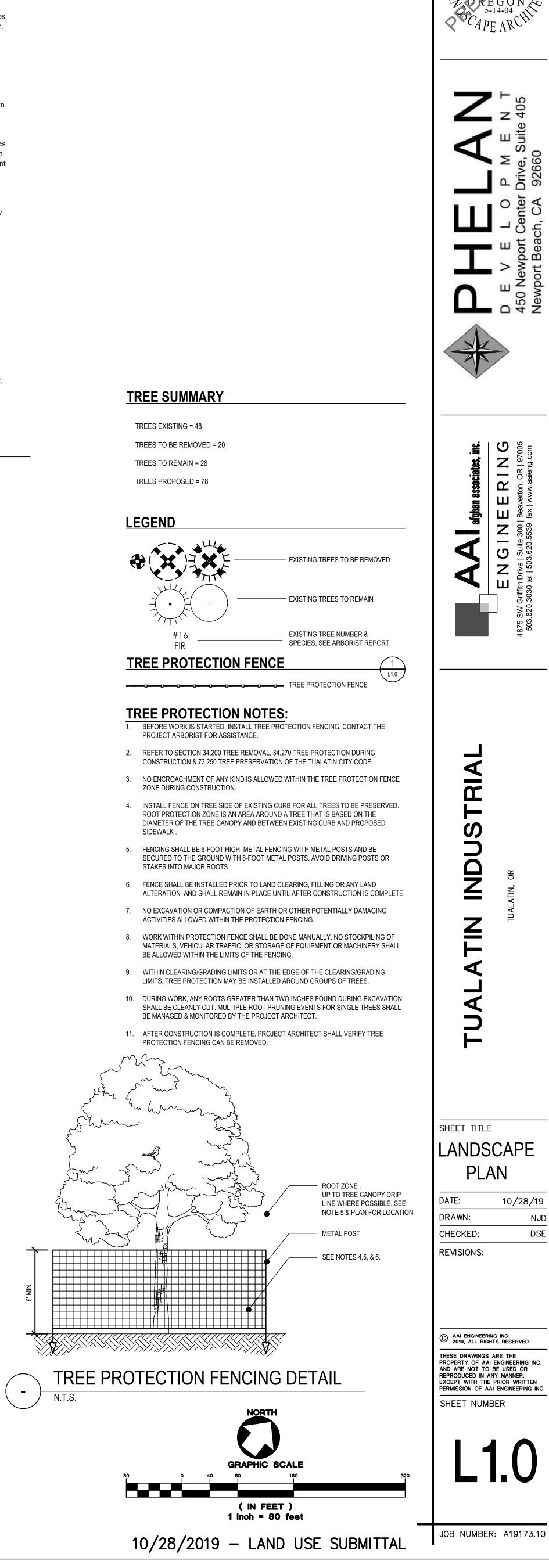
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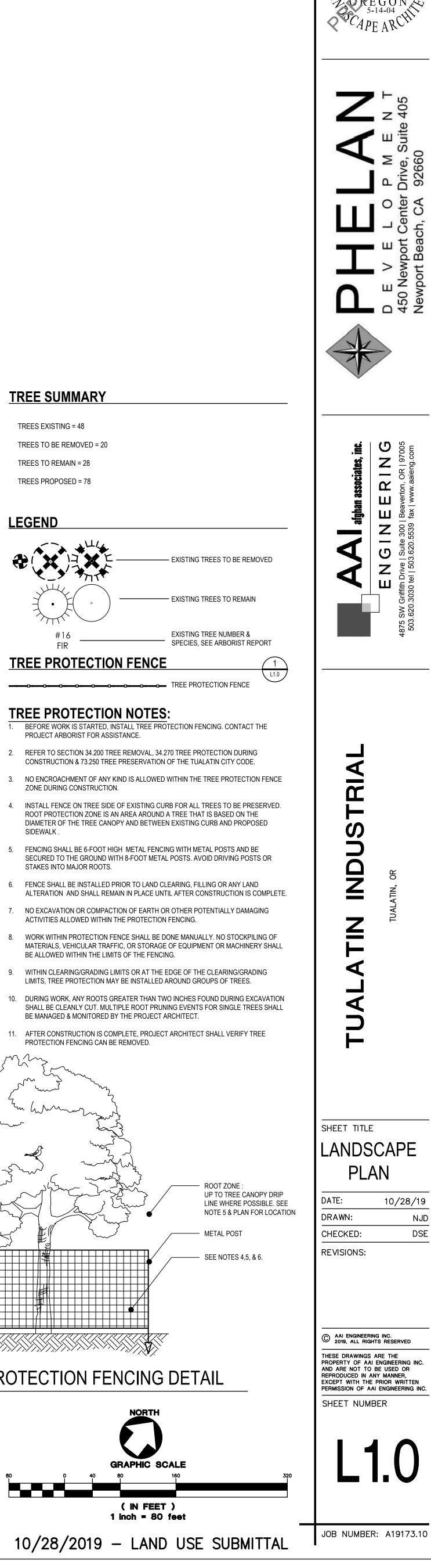




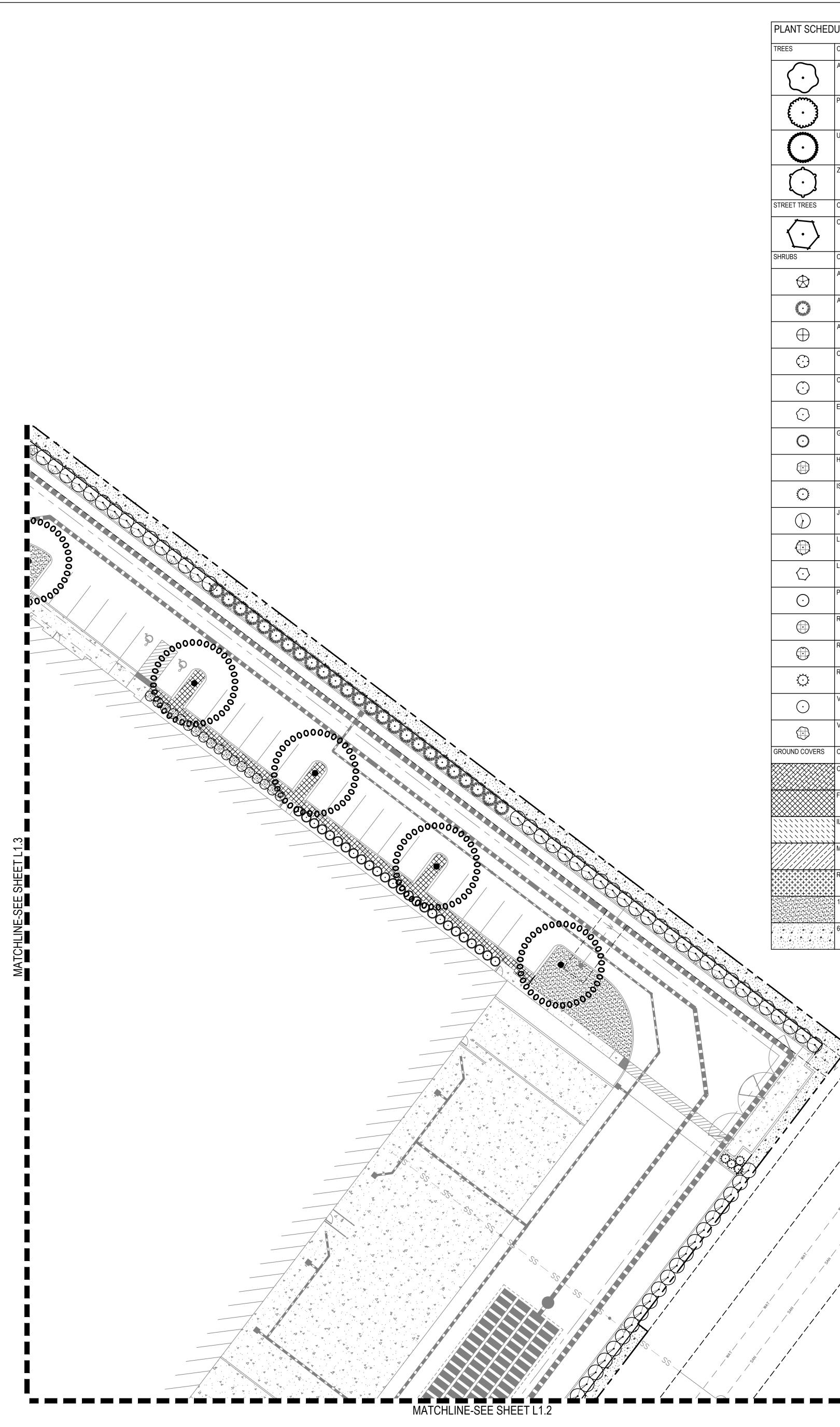
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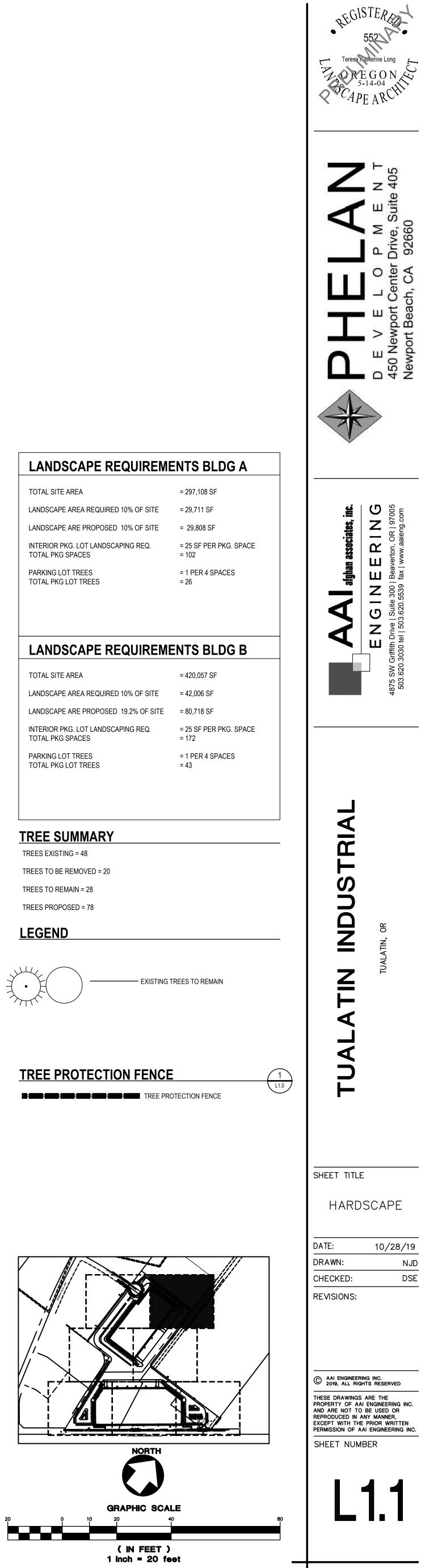
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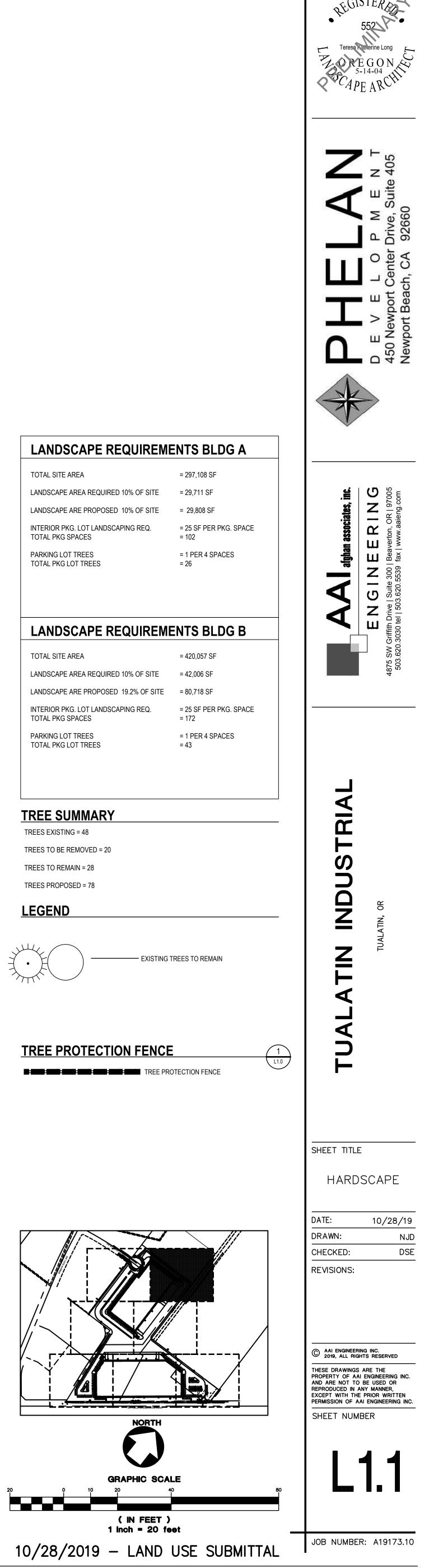


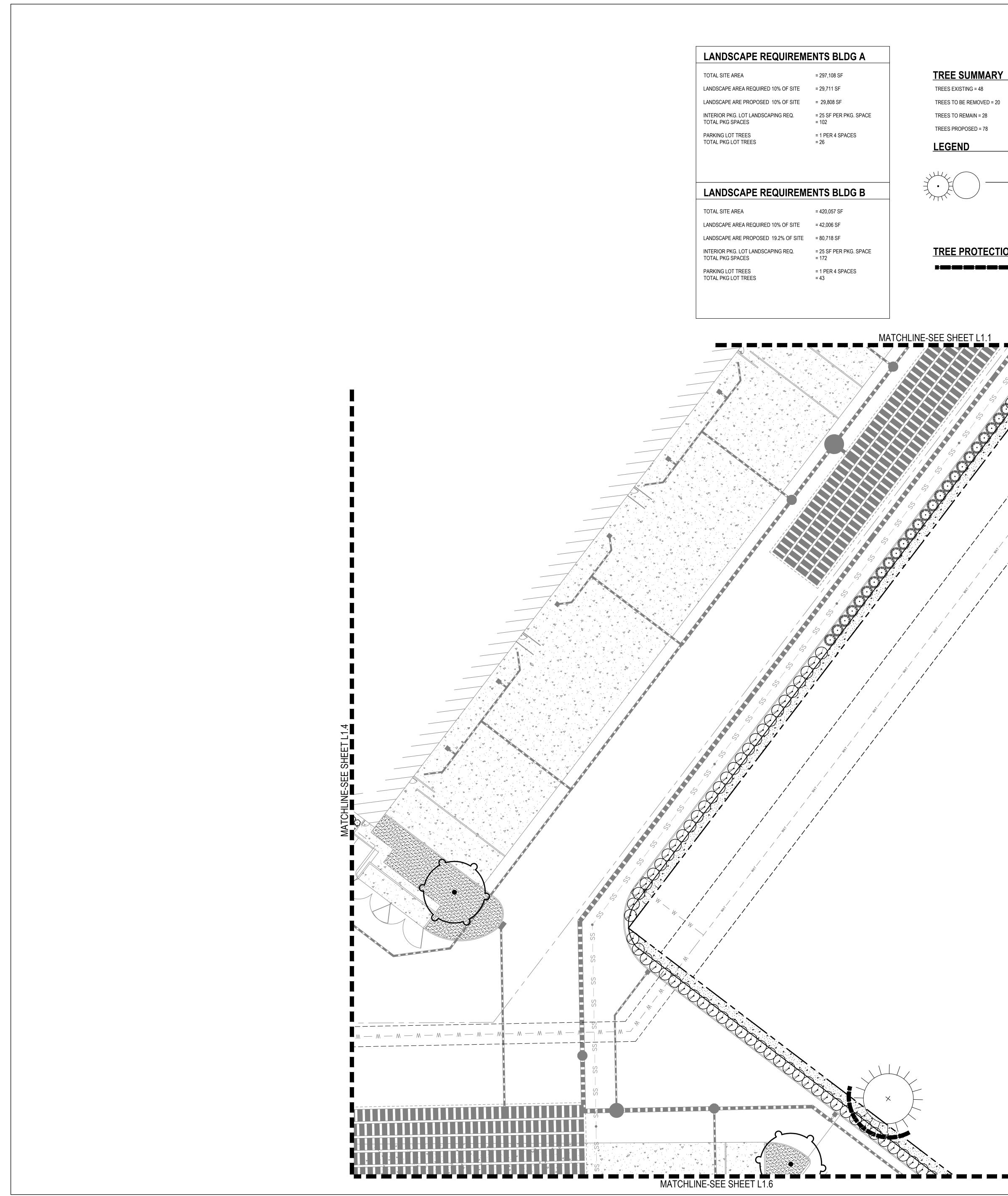
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
AF	22	ACER RUBRUM `FRANKSRED` TM	RED SUNSET MAPLE	1.5" CAL.	
u		MEDIUM		1.5 OAL.	
PC	13	PISTACIA CHINENSIS MEDIUM	CHINESE PISTACHE	1.5" CAL.	
С	32	ULMUS X `FRONTIER`	AMERICAN ELM	1.5" CAL.	
<u>v</u>	11	ZELKOVA SERRATA 'VILLAGE GREEN'	SAWLEAF ZELKOVA	1.5" CAL.	
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
В	10	CARPINUS BETULUS `FASTIGIATA`	PYRAMIDAL EUROPEAN HORNBEAN	1.5" CAL.	
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
ΑE	56	ABELIA X GRANDIFLORA `EDWARD GOUCHER`	GLOSSY ABELIA	1 GAL.	
AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE	1 GAL.	
٩A	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA	1 GAL.	
CF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS	1 GAL.	
СТ	33	CHOISYA TERNATA	MEXICAN ORANGE	1 GAL.	
ES	81	EUONYMUS JAPONICUS `SILVER KING`	SILVER KING EUONYMUS	1 GAL.	
GS	105	GAULTHERIA SHALLON	SALAL	1 GAL.	
HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA	1 GAL.	
S	59	ILEX GLABRA `SHAMROCK`	INKBERRY	3 GAL.	
JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	1 GAL.	
LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE	1 GAL.	
LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE	1 GAL.	
PV	22	PIERIS JAPONICA `VALLEY ROSE`	VALLEY ROSE JAPANESE PIERIS	1 GAL.	
RE	72	RHAPHIOLEPIS INDICA `CONOR`	ELEANOR TABOR INDIAN HAWTHORN	1 GAL.	
RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON	1 GAL.	
RG	62	ROSA GYMNOCARPA	DWARF ROSE	1 GAL.	
VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	1 GAL.	
VS	96	VIBURNUM TINUS 'SPRING BOUQUET'	SPRING BOUQUET LAURESTINUS	1 GAL.	
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
CW	719	COTONEASTER SALICIFOLIUS REPENS	WILLOWLEAF COTONEASTER	1 GAL.	24" o.c.
FL	778	FRAGARIA CHILOENSIS 'LIPSTICK'	BEACH STRAWBERRY	1 GAL.	18" o.c.
L	208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE	1 GAL.	24" o.c.
MR	490	MAHONIA REPENS	CREEPING MAHONIA	1 GAL.	24" o.c.
RE2	388	RUBUS CALYCINOIDES 'EMERALD CARPET'	EMERALD CARPET CREEPING RASPBERRY	1 GAL.	24 0.C.
				I GAL.	24 0.C.
16,375 S	SF	LAWN			
65,146 S	SF	PROTIME (PT) 454 NATIVE URBAN MEADOW MIX 1 APPLICATION RATE: 3 OZ PER 1,000 SF			

TOTAL SITE AREA	= 297,10
LANDSCAPE AREA REQUIRED 10% OF SITE	= 29,71
LANDSCAPE ARE PROPOSED 10% OF SITE	= 29,80
INTERIOR PKG. LOT LANDSCAPING REQ. TOTAL PKG SPACES	= 25 SF = 102
PARKING LOT TREES TOTAL PKG LOT TREES	= 1 PER = 26

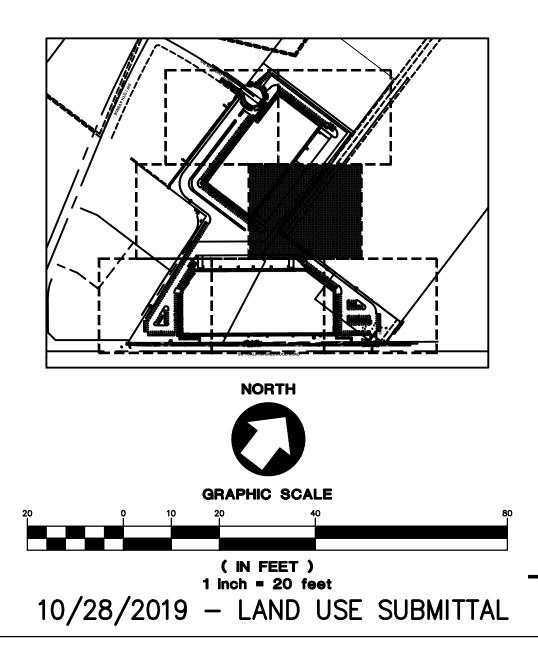
TOTAL SITE AREA	= 420,0
LANDSCAPE AREA REQUIRED 10% OF SITE	= 42,00
LANDSCAPE ARE PROPOSED 19.2% OF SITE	= 80,71
INTERIOR PKG. LOT LANDSCAPING REQ. TOTAL PKG SPACES	= 25 SF = 172
PARKING LOT TREES TOTAL PKG LOT TREES	= 1 PEF = 43







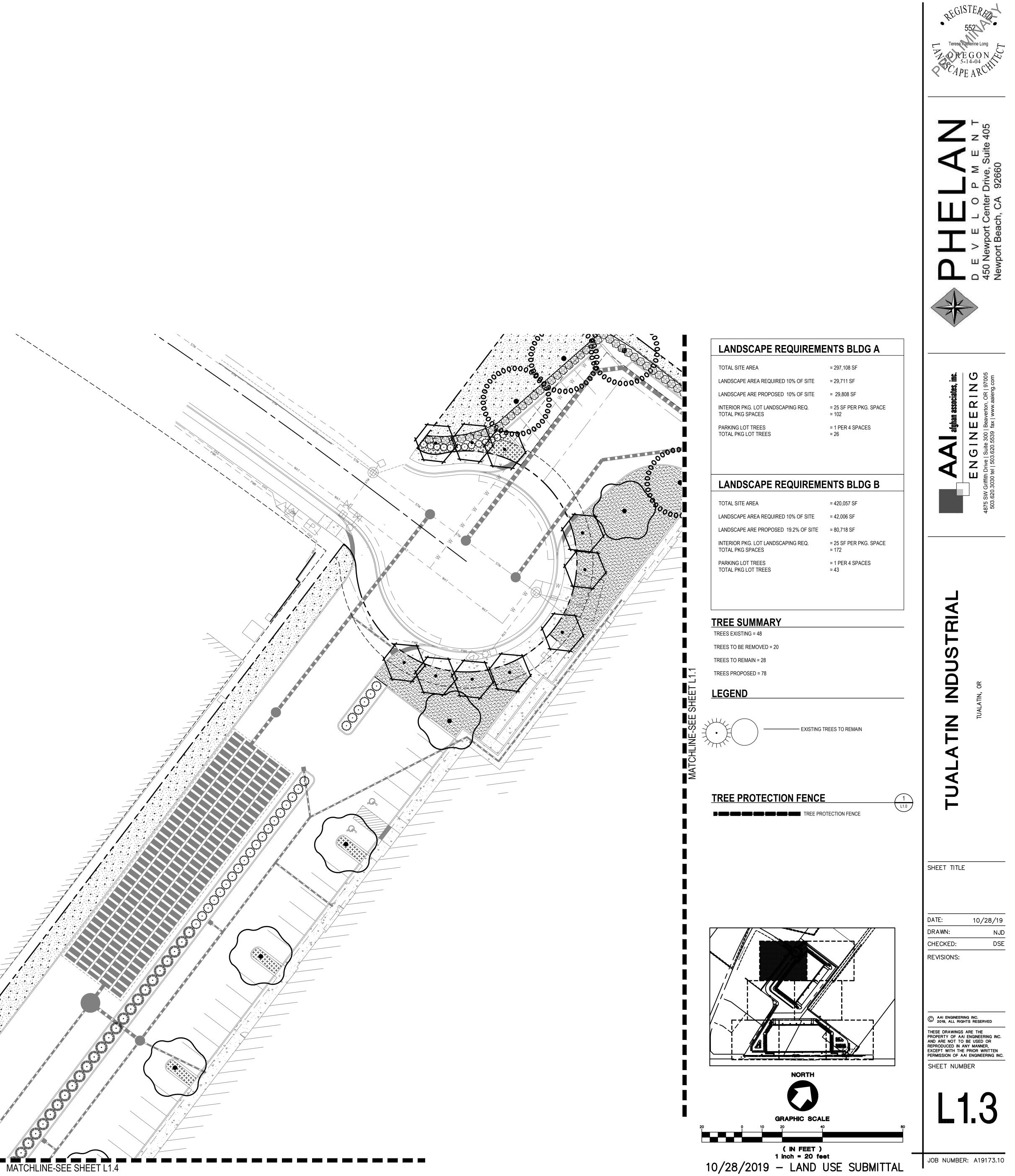
	PLANT SCHED	ULE			
	TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME
Y	$\overline{(\cdot)}$	AF	22	ACER RUBRUM `FRANKSRED` TM MEDIUM	RED SUNSET MAPLE
)	$\widetilde{(\cdot)}$	PC	13	PISTACIA CHINENSIS MEDIUM	CHINESE PISTACHE
	$\overline{\bigcirc}$	UC	32	ULMUS X `FRONTIER`	AMERICAN ELM
		ZV	11	ZELKOVA SERRATA `VILLAGE GREEN`	SAWLEAF ZELKOVA
	STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME
EXISTING TREES TO REMAIN	$\langle \cdot \rangle$	СВ	10	CARPINUS BETULUS `FASTIGIATA`	PYRAMIDAL EUROPEAN HORNBEAN
	SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME
	\otimes	AE	56	ABELIA X GRANDIFLORA `EDWARD GOUCHER`	GLOSSY ABELIA
TION FENCE		AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE
	\oplus	AA	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA
	\bigcirc	CF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS
	\bigcirc	СТ	33	CHOISYA TERNATA	MEXICAN ORANGE
	\odot	ES	81	EUONYMUS JAPONICUS `SILVER KING`	SILVER KING EUONYMUS
SS - SS		GS	105	GAULTHERIA SHALLON	SALAL
		HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA
	Ō	IS	59	ILEX GLABRA `SHAMROCK`	INKBERRY
	\bigcirc	JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER
	\bigcirc	LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE
	\bigcirc	LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE
	\odot	PV	22	PIERIS JAPONICA 'VALLEY ROSE'	VALLEY ROSE JAPANESE PIERIS
ut the second	\bigcirc	RE	72	RHAPHIOLEPIS INDICA 'CONOR'	ELEANOR TABOR INDIAN HAWTHORN
	Ţ.	RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON
	<u>نې</u>	RG	62	ROSA GYMNOCARPA	DWARF ROSE
	\odot	VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY
	Ð	VS	96	VIBURNUM TINUS `SPRING BOUQUET`	SPRING BOUQUET LAURESTINUS
	GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME
		CW	719	COTONEASTER SALICIFOLIUS REPENS	WILLOWLEAF COTONEASTER
		FL	778	FRAGARIA CHILOENSIS `LIPSTICK`	BEACH STRAWBERRY
	· · · · · · · · · · · · · · · · · · ·		208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE
		MR	490	MAHONIA REPENS	CREEPING MAHONIA
		RE2	388	RUBUS CALYCINOIDES `EMERALD CARPET`	EMERALD CARPET CREEPING RASPBERRY
		16,375 SI			
		65,146 SI	+	PROTIME (PT) 454 NATIVE URBAN MEADOW MIX 1 APPLICATION RATE: 3 OZ PER 1,000 SF	



SIZE	
1.5" CAL.	
SIZE	
1.5" CAL.	
SIZE	
1 GAL.	
3 GAL.	
1 GAL.	
1 GAL.	
1 GAL. 1 GAL.	
1 GAL.	
SIZE	SPACING
1 GAL.	24" o.c.
1 GAL.	18" o.c.
1 GAL.	24" o.c.
1 GAL.	24" o.c.
1 GAL.	24" o.c.

GISTERD 552 G ())), ()) ப LL \mathbf{O} **ND**N TUAL SHEET TITLE 10/28/19 DATE: DRAWN: NJD DSE CHECKED: **REVISIONS:** © AAI ENGINEERING INC. 2019, ALL RIGHTS RESERVED THESE DRAWINGS ARE THE PROPERTY OF AAI ENGINEERING INC. AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF AAI ENGINEERING INC. SHEET NUMBER tam ti s Kam

REES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
\frown	AF	22	ACER RUBRUM `FRANKSRED` TM	RED SUNSET MAPLE	1.5" CAL.	
$\{\cdot\}$			MEDIUM			
<u>~</u>	PC	13	PISTACIA CHINENSIS	CHINESE PISTACHE	1.5" CAL.	
$\{\cdot\}$			MEDIUM			
	UC	32	ULMUS X `FRONTIER`	AMERICAN ELM	1.5" CAL.	
\bigcirc						
r 7	ZV	11	ZELKOVA SERRATA `VILLAGE GREEN`	SAWLEAF ZELKOVA	1.5" CAL.	
لحنها						
TREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
$\langle \cdot \rangle$	СВ	10	CARPINUS BETULUS 'FASTIGIATA'	PYRAMIDAL EUROPEAN HORNBEAN	1.5" CAL.	
	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
	AE	56	ABELIA X GRANDIFLORA 'EDWARD GOUCHER'	GLOSSY ABELIA	1 GAL.	
\bigotimes		50	ABELIA A GRANDIFLORA EDWARD GOUCHER	GLUSST ABELIA	T GAL.	
	AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE	1 GAL.	
$\overline{\bigcirc}$	AA	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA	1 GAL.	
\oplus	CF	01				
\bigcirc	GF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS	1 GAL.	
\odot	СТ	33	CHOISYA TERNATA	MEXICAN ORANGE	1 GAL.	
	ES	81	EUONYMUS JAPONICUS `SILVER KING`	SILVER KING EUONYMUS	1 GAL.	
\bigcirc	GS	105	GAULTHERIA SHALLON	SALAL	1 GAL.	
SUMULVE LE HAR						
	HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA	1 GAL.	
	IS	59	ILEX GLABRA `SHAMROCK`	INKBERRY	3 GAL.	
Ò		160				
\bigcirc	JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	1 GAL.	
\bigcirc	LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE	1 GAL.	
	LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE	1 GAL.	
\bigcirc						
\odot	PV	22	PIERIS JAPONICA `VALLEY ROSE`	VALLEY ROSE JAPANESE PIERIS	1 GAL.	
\bigcirc	RE	72	RHAPHIOLEPIS INDICA `CONOR`	ELEANOR TABOR INDIAN HAWTHORN	1 GAL.	
	RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON	1 GAL.	
$\dot{\mathbf{x}}$	RG	62	ROSA GYMNOCARPA	DWARF ROSE	1 GAL.	
$\overline{\bigcirc}$	VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	1 GAL.	
	VS	96	VIBURNUM TINUS `SPRING BOUQUET`	SPRING BOUQUET LAURESTINUS	1 GAL.	
\bigcirc						
ROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACIN
	CW	719	COTONEASTER SALICIFOLIUS REPENS	WILLOWLEAF COTONEASTER	1 GAL.	24" o.c.
	FL	778	FRAGARIA CHILOENSIS `LIPSTICK`	BEACH STRAWBERRY	1 GAL.	18" o.c.
		208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE	1 GAL.	24" o.c.
	, ' L	200			T GAL.	24 U.C.
	MR	490	MAHONIA REPENS	CREEPING MAHONIA	1 GAL.	24" o.c.
//////////////////////////////////////	RE2	388	RUBUS CALYCINOIDES `EMERALD CARPET`	EMERALD CARPET CREEPING RASPBERRY	1 GAL.	24" o.c.
++++++++++++++++++++++++++++++++++++++						
	16,375 S	θF	LAWN			
	: 65,146 S	_	PROTIME (PT) 454 NATIVE URBAN MEADOW MIX 1			

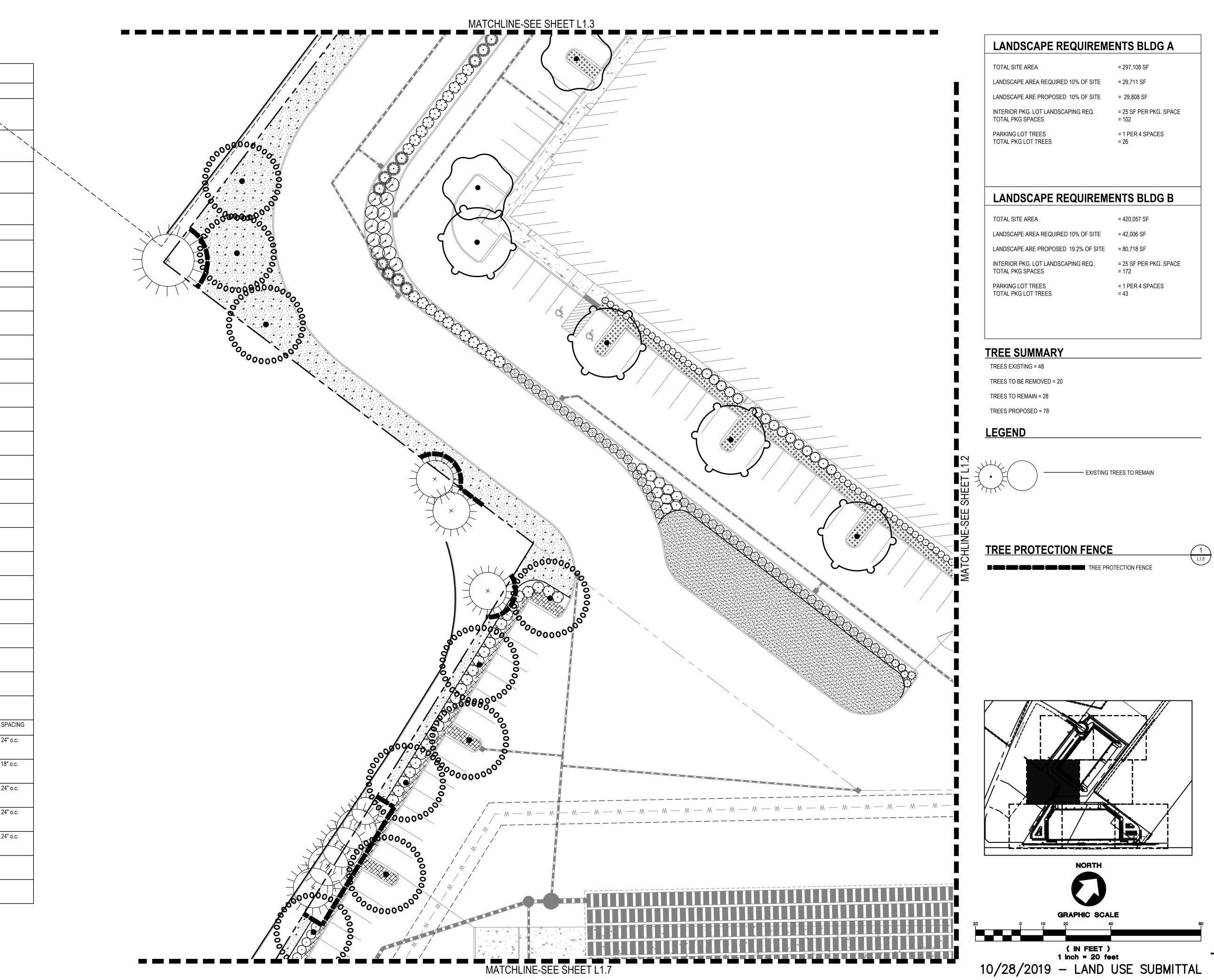


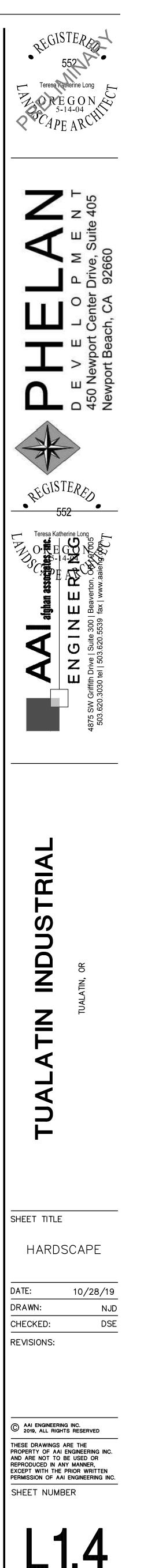
MATCHLINE-SEE SHEET L1.4

TOTAL SITE AREA	= 297,1
LANDSCAPE AREA REQUIRED 10% OF SITE	= 29,71
LANDSCAPE ARE PROPOSED 10% OF SITE	= 29,8
INTERIOR PKG. LOT LANDSCAPING REQ. TOTAL PKG SPACES	= 25 SI = 102
PARKING LOT TREES TOTAL PKG LOT TREES	= 1 PE = 26

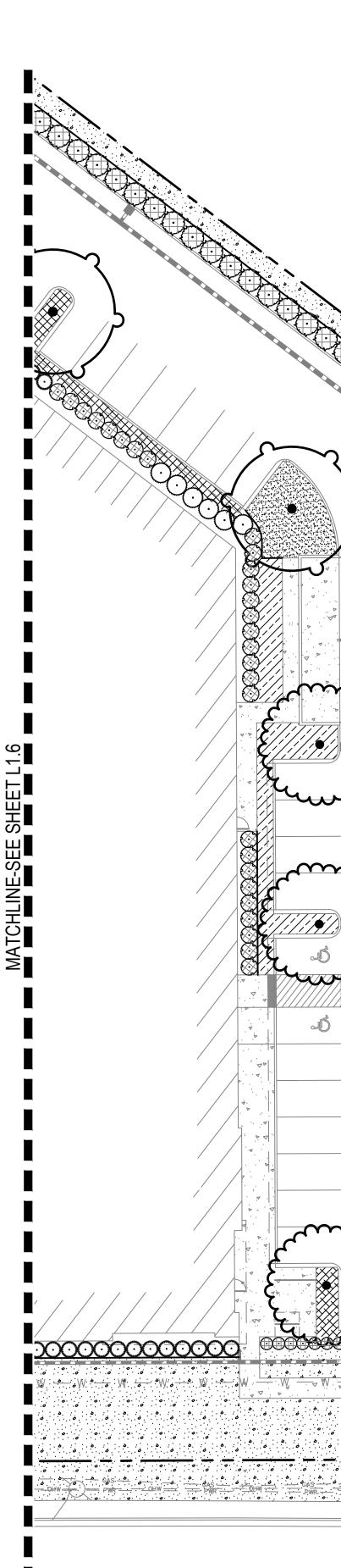
TOTAL SITE AREA	= 420,
LANDSCAPE AREA REQUIRED 10% OF SITE	= 42,0
LANDSCAPE ARE PROPOSED 19.2% OF SITE	= 80,7
INTERIOR PKG. LOT LANDSCAPING REQ. TOTAL PKG SPACES	= 25 S = 172
PARKING LOT TREES TOTAL PKG LOT TREES	= 1 PE = 43

PLANT SCH	EDULE					
TREES	CODE	QTY	BOTANICAL NAME		SIZE	
$\overline{(\cdot)}$	AF	22	ACER RUBRUM `FRANKSRED` TM MEDIUM	RED SUNSET MAPLE	1.5" CAL.	
$\overline{\bigcirc}$	PC	13	PISTACIA CHINENSIS MEDIUM	CHINESE PISTACHE	1.5" CAL.	
$\overline{\bigcirc}$	UC	32	ULMUS X `FRONTIER`	AMERICAN ELM	1.5" CAL.	
	ZV	11	ZELKOVA SERRATA `VILLAGE GREEN`	SAWLEAF ZELKOVA	1.5" CAL.	
STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
$\langle \cdot \rangle$	CB	10	CARPINUS BETULUS `FASTIGIATA`	PYRAMIDAL EUROPEAN HORNBEAN	1.5" CAL.	
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
\bigotimes	AE	56	ABELIA X GRANDIFLORA `EDWARD GOUCHER`	GLOSSY ABELIA	1 GAL.	
	AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE	1 GAL.	
\oplus	AA	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA	1 GAL.	
\bigcirc	CF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS	1 GAL.	
\bigcirc	СТ	33	CHOISYA TERNATA	MEXICAN ORANGE	1 GAL.	
\bigcirc	ES	81	EUONYMUS JAPONICUS `SILVER KING`	SILVER KING EUONYMUS	1 GAL.	
ANNOVER THE AND	GS	105	GAULTHERIA SHALLON	SALAL	1 GAL.	
\bigcirc	HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA	1 GAL.	
\sim	IS	59	ILEX GLABRA `SHAMROCK`	INKBERRY	3 GAL.	
\bigcirc	JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	1 GAL.	
\bigcirc	LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE	1 GAL.	
$\langle \cdot \rangle$	LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE	1 GAL.	
\odot	PV	22	PIERIS JAPONICA 'VALLEY ROSE'	VALLEY ROSE JAPANESE PIERIS	1 GAL.	
\bigcirc	RE	72	RHAPHIOLEPIS INDICA `CONOR`	ELEANOR TABOR INDIAN HAWTHORN	1 GAL.	
÷	RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON	1 GAL.	
<u>{``</u> }	RG	62	ROSA GYMNOCARPA	DWARF ROSE	1 GAL.	
$\overline{\mathbf{\cdot}}$	VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	1 GAL.	
	VS	96	VIBURNUM TINUS 'SPRING BOUQUET'	SPRING BOUQUET LAURESTINUS	1 GAL.	
		QTY	BOTANICAL NAME		SIZE	SPA
	cw	719	COTONEASTER SALICIFOLIUS REPENS	WILLOWLEAF COTONEASTER	1 GAL.	24"
	FL FL	778	FRAGARIA CHILOENSIS `LIPSTICK`	BEACH STRAWBERRY	1 GAL.	18" (
××××××××××××××××××××××××××××××××××××××		208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE	1 GAL.	24"
	MR	490	MAHONIA REPENS	CREEPING MAHONIA	1 GAL.	24"
//////////////////////////////////////	+++ +++ +++ +++	388	RUBUS CALYCINOIDES `EMERALD CARPET`	EMERALD CARPET CREEPING RASPBERRY	1 GAL.	24"
<u></u>	+ + 16,375 S)F	LAWN		_1	1
• • • • • •	65,146 S	F	PROTIME (PT) 454 NATIVE URBAN MEADOW MIX 1 APPLICATION RATE: 3 OZ PER 1,000 SF			
<u> </u>						





JOB NUMBER: A19173.10



	PLANT SCHEE	DULE					
	TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
	$\overline{(\cdot)}$	AF	22	ACER RUBRUM `FRANKSRED` TM MEDIUM	RED SUNSET MAPLE	1.5" CAL.	
		PC	13	PISTACIA CHINENSIS	CHINESE PISTACHE	1.5" CAL.	
				MEDIUM		1.5 UAL.	
		UC	32	ULMUS X `FRONTIER`	AMERICAN ELM	1.5" CAL.	
	<u> </u>						
	$\left \begin{array}{c} \end{array} \right $	ZV	11	ZELKOVA SERRATA `VILLAGE GREEN`	SAWLEAF ZELKOVA	1.5" CAL.	
	STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
		СВ	10	CARPINUS BETULUS `FASTIGIATA`	PYRAMIDAL EUROPEAN HORNBEAN	1.5" CAL.	
	SHRUBS	CODE	QTY 56	BOTANICAL NAME ABELIA X GRANDIFLORA `EDWARD GOUCHER`	COMMON NAME GLOSSY ABELIA	SIZE	
	\bigotimes	AL	50	ABELIA X GRANDIFLORA EDWARD GOUCHER	GLOSST ABELIA	T GAL.	
		AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE	1 GAL.	
	\bigcirc	AA	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA	1 GAL.	
		CF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS	1 GAL.	
	\bigcirc	СТ	33	CHOISYA TERNATA	MEXICAN ORANGE	1 GAL.	
	\bigcirc						
	\bigcirc	ES	81	EUONYMUS JAPONICUS `SILVER KING`	SILVER KING EUONYMUS	1 GAL.	
	<u>(</u>)	GS	105	GAULTHERIA SHALLON	SALAL	1 GAL.	
		HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA	1 GAL.	
		IS	59	ILEX GLABRA `SHAMROCK`	INKBERRY	3 GAL.	
	<u></u>						
	\bigcirc	JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	1 GAL.	
	\bigcirc	LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE	1 GAL.	
	$\overline{\bigcirc}$	LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE	1 GAL.	
		PV	22	PIERIS JAPONICA 'VALLEY ROSE'	VALLEY ROSE JAPANESE PIERIS	1 GAL.	
	$\overline{\bigcirc}$	RE	72	RHAPHIOLEPIS INDICA 'CONOR'	ELEANOR TABOR INDIAN HAWTHORN	1 GAL.	
	\bigcirc	KE	12	RHAFHIOLEFIS INDICA CONOR	ELEANOR TABOR INDIAN HAWTHORN	T GAL.	
	÷	RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON	1 GAL.	
	<u> </u>	RG	62	ROSA GYMNOCARPA	DWARF ROSE	1 GAL.	
		VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	1 GAL.	
	\odot	VS	96	VIBURNUM TINUS `SPRING BOUQUET`	SPRING BOUQUET LAURESTINUS	1 GAL.	
	\bigcirc						
	GROUND COVERS	CODE CW	QTY 719	BOTANICAL NAME COTONEASTER SALICIFOLIUS REPENS	COMMON NAME WILLOWLEAF COTONEASTER	SIZE 1 GAL.	SPACING 24" o.c.
		FL X	778	FRAGARIA CHILOENSIS 'LIPSTICK'	BEACH STRAWBERRY	1 GAL.	18" o.c.
			208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE	1 GAL.	24" o.c.
		MR	490	MAHONIA REPENS	CREEPING MAHONIA	1 GAL.	24" o.c.
	++++++++++++++++++++++++++++++++++++	+ RE2	388	RUBUS CALYCINOIDES `EMERALD CARPET`	EMERALD CARPET CREEPING RASPBERRY	1 GAL.	24" o.c.
	+ + + + + + + + + + + + + + + + + + +	+] +] +]					
		16,375 S	ŝF	LAWN			
		65,146 S	F	PROTIME (PT) 454 NATIVE URBAN MEADOW MIX 1 APPLICATION RATE: 3 OZ PER 1,000 SF			
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LANDSCAPE REQUIREMENTS BLDG A

TOTAL SITE AREA	= 297,108 SF
LANDSCAPE AREA REQUIRED 10% OF SITE	= 29,711 SF
LANDSCAPE ARE PROPOSED 10% OF SITE	= 29,808 SF
INTERIOR PKG. LOT LANDSCAPING REQ. TOTAL PKG SPACES	= 25 SF PER F = 102
PARKING LOT TREES TOTAL PKG LOT TREES	= 1 PER 4 SPA = 26

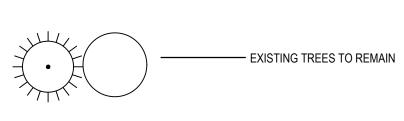
LANDSCAPE REQUIREMENTS BLDG B

TOTAL SITE AREA	= 420.0
	120,0
LANDSCAPE AREA REQUIRED 10% OF SITE	= 42,00
LANDSCAPE ARE PROPOSED 19.2% OF SITE	= 80,71
INTERIOR PKG. LOT LANDSCAPING REQ. TOTAL PKG SPACES	= 25 SF = 172
PARKING LOT TREES TOTAL PKG LOT TREES	= 1 PEI = 43

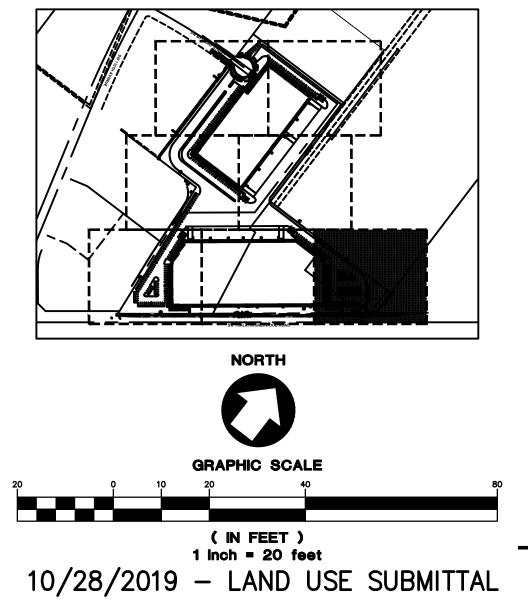
TREE SUMMARY

TREES EXISTING = 48 TREES TO BE REMOVED = 20 TREES TO REMAIN = 28 TREES PROPOSED = 78

LEGEND



TREE PROTECTION FENCE TREE PROTECTION FENCE





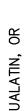
- 5 SF PER PKG. SPACE
- PER 4 SPACES
-),057 SF ,006 SF ,718 SF 5 SF PER PKG. SPACE
- PER 4 SPACES











SHEET TITLE

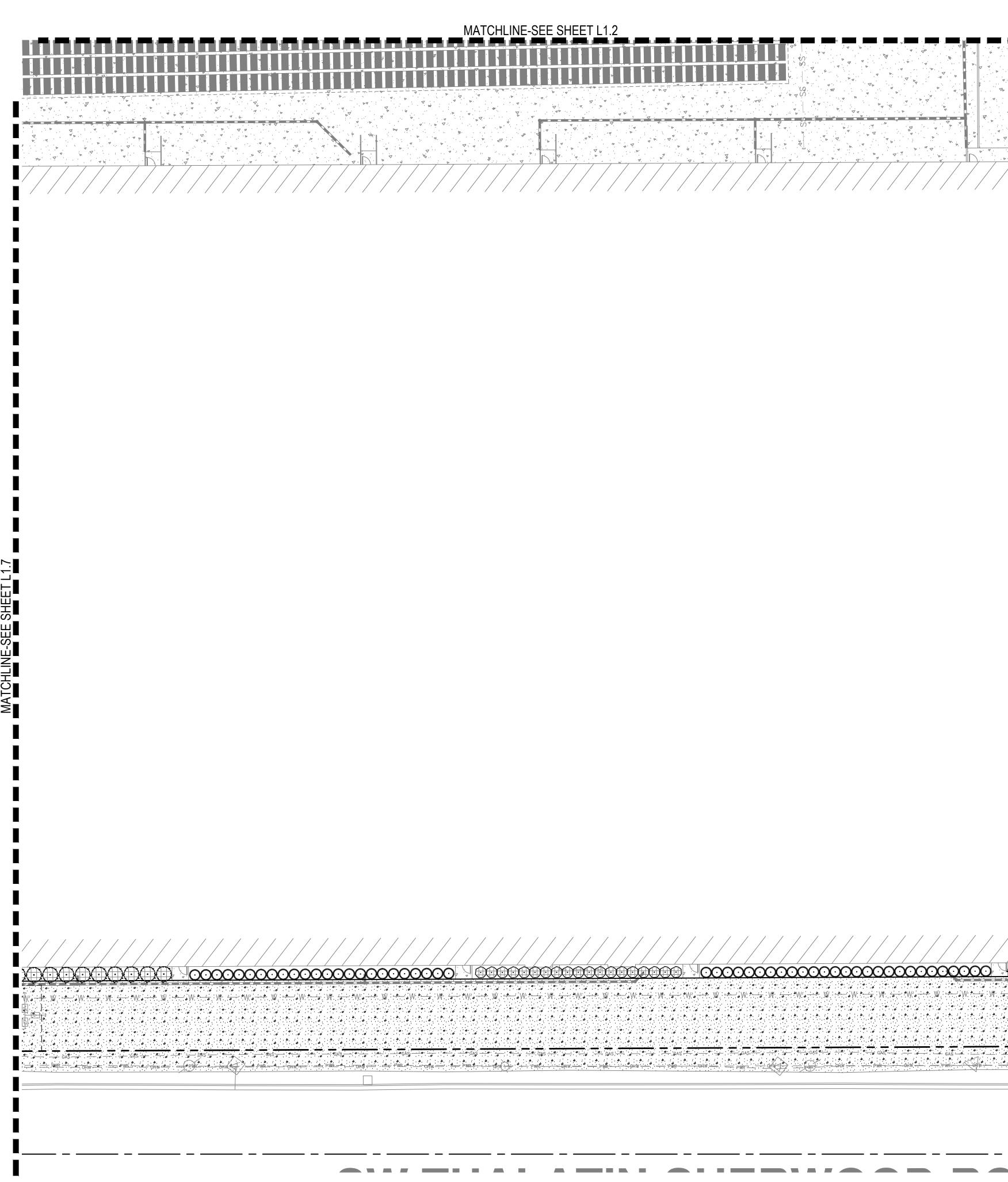
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HARDSCAPE

DATE:	10/28/19
DRAWN:	NJD
CHECKED:	DSE
REVISIONS:	

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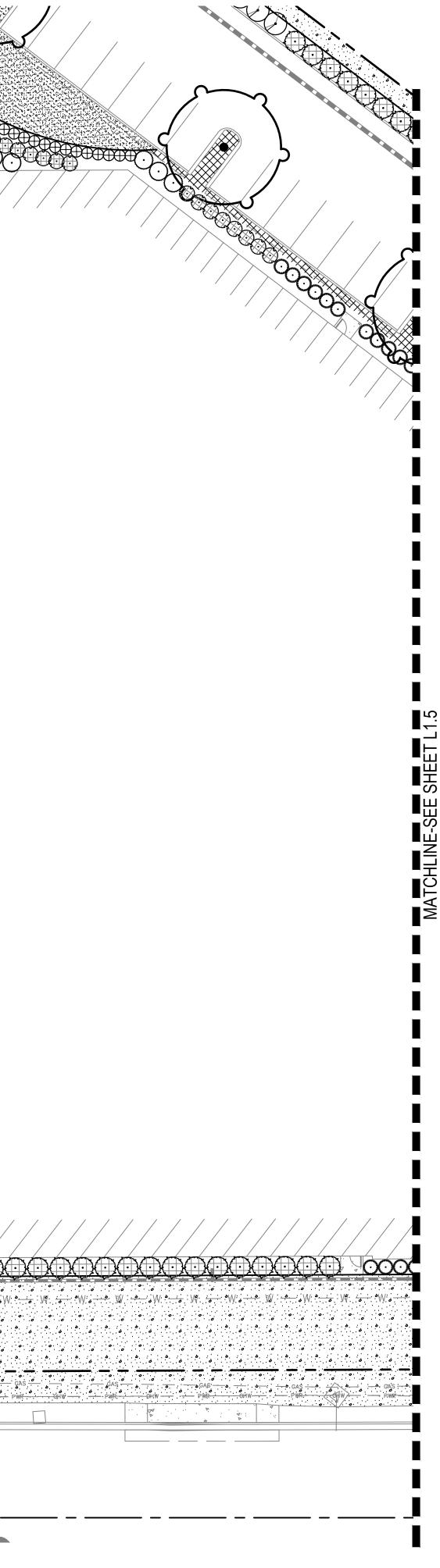
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LANDSCAPE REQUIREMENTS BLDG A

TOTAL SITE AREA LANDSCAPE AREA REQUIRED 10 LANDSCAPE ARE PROPOSED 10 INTERIOR PKG. LOT LANDSCAPIN TOTAL PKG SPACES PARKING LOT TREES TOTAL PKG LOT TREES

LANDSCAPE REQUIREMENTS BLDG B

TOTAL SITE AREA LANDSCAPE AREA REQUIRE LANDSCAPE ARE PROPOSED INTERIOR PKG. LOT LANDSCA TOTAL PKG SPACES PARKING LOT TREES TOTAL PKG LOT TREES



	= 2
0% OF SITE	= 2
0% OF SITE	= 2
NG REQ.	= 2 = 1

= 297,108 SF = 29,711 SF = 29,808 SF = 25 SF PER PKG. SPACE = 1 PER 4 SPACES

= 26

ED	10%	OF	SIT	E
D	19.29	% C	F S	ITE
CA	PING	RE	Q.	

= 25 SF PER PKG. SF = 172	ACE
= 1 PER 4 SPACES = 43	

= 420,057 SF

= 42,006 SF

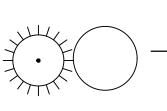
= 80,718 SF

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
$\overline{(\cdot)}$	AF	22	ACER RUBRUM `FRANKSRED` TM MEDIUM	RED SUNSET MAPLE	1.5" C
$\overline{\bigcirc}$	PC	13	PISTACIA CHINENSIS MEDIUM	CHINESE PISTACHE	1.5" C
$\overline{(\cdot)}$	UC	32	ULMUS X `FRONTIER`	AMERICAN ELM	1.5" C
$\overline{(\cdot)}$	ZV	11	ZELKOVA SERRATA `VILLAGE GREEN`	SAWLEAF ZELKOVA	1.5" C
STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
$\langle \cdot \rangle$	СВ	10	CARPINUS BETULUS `FASTIGIATA`	PYRAMIDAL EUROPEAN HORNBEAN	1.5" C
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
\bigtriangleup	AE	56	ABELIA X GRANDIFLORA `EDWARD GOUCHER`	GLOSSY ABELIA	1 GAL
	AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE	1 GAL
	AA	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA	1 GAL
\odot	CF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS	1 GAL
	СТ	33	CHOISYA TERNATA	MEXICAN ORANGE	1 GAL
\odot	ES	81	EUONYMUS JAPONICUS 'SILVER KING'	SILVER KING EUONYMUS	1 GAL
AND	GS	105	GAULTHERIA SHALLON	SALAL	1 GAL
\bigcirc	HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA	1 GAL
$\langle \cdot \rangle$	IS	59	ILEX GLABRA `SHAMROCK`	INKBERRY	3 GAL
\bigcirc	JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	1 GAL
\bigcirc	LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE	1 GAL
$\langle \cdot \rangle$	LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE	1 GAL
$\overline{(\cdot)}$	PV	22	PIERIS JAPONICA 'VALLEY ROSE'	VALLEY ROSE JAPANESE PIERIS	1 GAL
	RE	72	RHAPHIOLEPIS INDICA `CONOR`	ELEANOR TABOR INDIAN HAWTHORN	1 GAL
÷	RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON	1 GAL
<i>{</i> `}}	RG	62	ROSA GYMNOCARPA	DWARF ROSE	1 GAL
\odot	VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	1 GAL
	VS	96	VIBURNUM TINUS 'SPRING BOUQUET'	SPRING BOUQUET LAURESTINUS	1 GAL
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
	CW	719	COTONEASTER SALICIFOLIUS REPENS	WILLOWLEAF COTONEASTER	1 GAL
	FL	778	FRAGARIA CHILOENSIS `LIPSTICK`	BEACH STRAWBERRY	1 GAL
	IL	208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE	1 GAL
	MR	490	MAHONIA REPENS	CREEPING MAHONIA	1 GAL
++++++++++++++++++++++++++++++++++++++	RE2	388	RUBUS CALYCINOIDES `EMERALD CARPET`	EMERALD CARPET CREEPING RASPBERRY	1 GAL
	16,375 S	SF	LAWN		
	65,146 S	ŝF	PROTIME (PT) 454 NATIVE URBAN MEADOW MIX 1 APPLICATION RATE: 3 OZ PER 1,000 SF		

TREE SUMMARY

TREES EXISTING = 48
TREES TO BE REMOVED = 20
TREES TO REMAIN = 28
TREES PROPOSED = 78

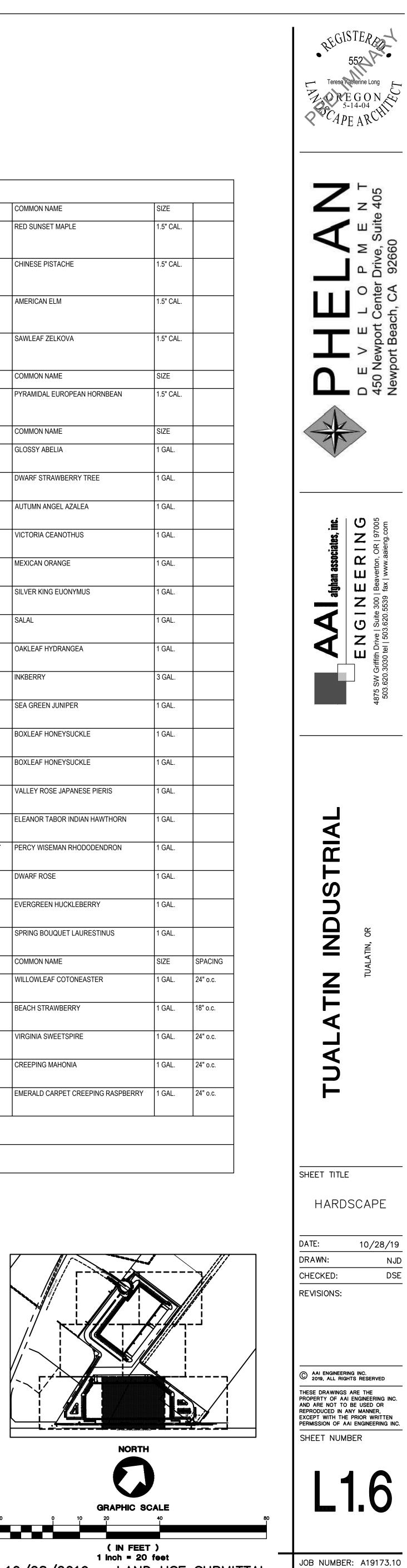
LEGEND



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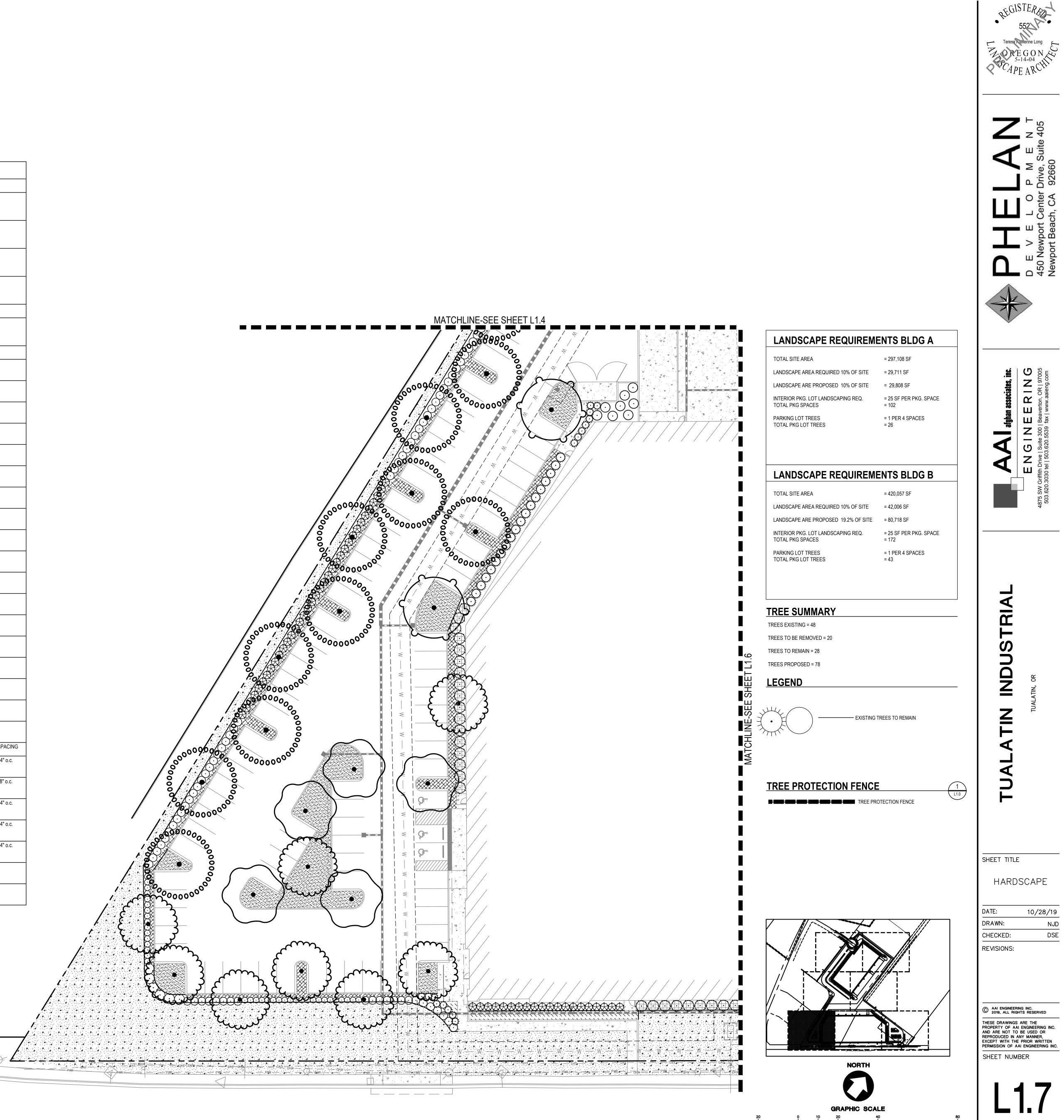
TREE PROTECTION FENCE

TREE PROTECTION FENCE



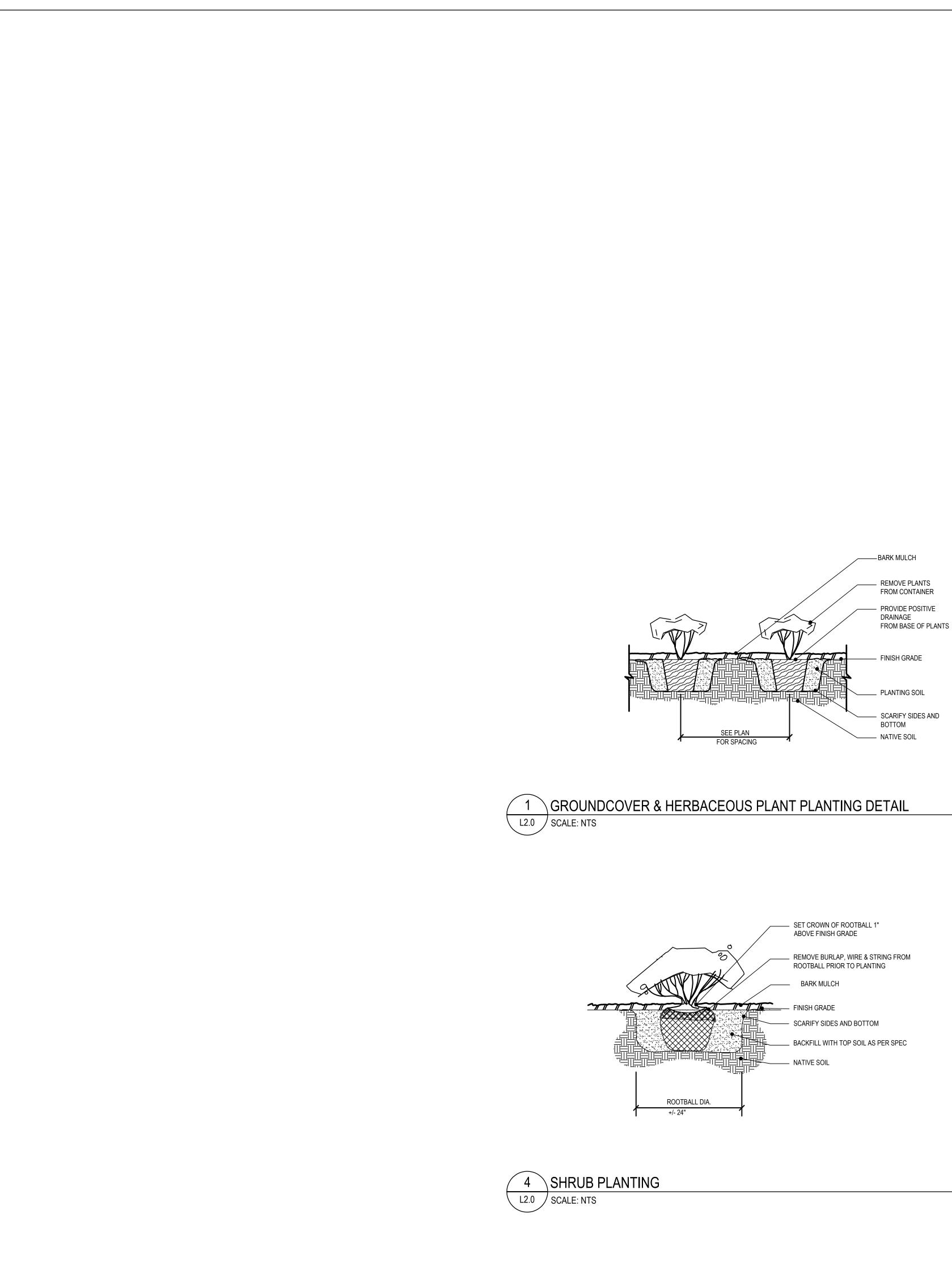
(IN FEET) 1 Inch = 20 feet 10/28/2019 — LAND USE SUBMITTAL

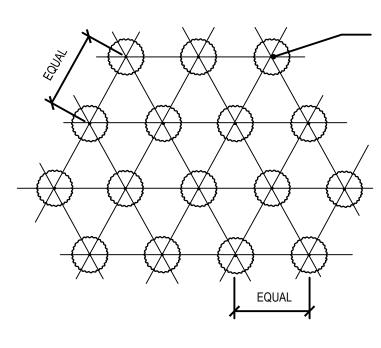
EES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
	AF	22	ACER RUBRUM `FRANKSRED` TM	RED SUNSET MAPLE	1.5" CAL.	
$\{\cdot\}$			MEDIUM			
<u>~</u>	PC	13	PISTACIA CHINENSIS	CHINESE PISTACHE	1.5" CAL.	
$\left\{ \cdot \right\}$			MEDIUM			
	UC	32	ULMUS X 'FRONTIER'	AMERICAN ELM	1.5" CAL.	
(\cdot)						
	ZV	11	ZELKOVA SERRATA `VILLAGE GREEN`	SAWLEAF ZELKOVA	1.5" CAL.	
EET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
	СВ	10	CARPINUS BETULUS 'FASTIGIATA'	PYRAMIDAL EUROPEAN HORNBEAN	1.5" CAL.	
\bigvee						
RUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
\bigotimes	AE	56	ABELIA X GRANDIFLORA `EDWARD GOUCHER`	GLOSSY ABELIA	1 GAL.	
	AC2	102	ARBUTUS UNEDO `COMPACTA`	DWARF STRAWBERRY TREE	1 GAL.	
\oplus	AA	18	AZALEA X `AUTUMN ANGEL`	AUTUMN ANGEL AZALEA	1 GAL.	
	CF	21	CEANOTHUS THYRSIFLORUS 'VICTORIA'	VICTORIA CEANOTHUS	1 GAL.	
\bigcirc						
$\mathbf{\dot{\mathbf{\cdot}}}$	СТ	33	CHOISYA TERNATA	MEXICAN ORANGE	1 GAL.	
\sim	ES	81	EUONYMUS JAPONICUS `SILVER KING`	SILVER KING EUONYMUS	1 GAL.	
\bigcirc						
MANANA CARE AND	GS	105	GAULTHERIA SHALLON	SALAL	1 GAL.	
	HW	19	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA	1 GAL.	
\bigcirc						
₹ ` }	IS	59	ILEX GLABRA `SHAMROCK`	INKBERRY	3 GAL.	
()	JF	160	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	1 GAL.	
\mathcal{D}	LB	97	LONICERA NITIDA `BAGGESEN`S GOLD`	BOXLEAF HONEYSUCKLE	1 GAL.	
\bigcirc		51	LUNICERA NITIDA DAGGESEN 5 GOLD	BOALEAF HONETSUCKLE	T GAL.	
$\langle \cdot \rangle$	LN	9	LONICERA NITIDA `LEMON BEAUTY`	BOXLEAF HONEYSUCKLE	1 GAL.	
	PV	22	PIERIS JAPONICA `VALLEY ROSE`	VALLEY ROSE JAPANESE PIERIS	1 GAL.	
\odot						
\bigcirc	RE	72	RHAPHIOLEPIS INDICA 'CONOR'	ELEANOR TABOR INDIAN HAWTHORN	1 GAL.	
	RP	64	RHODODENDRON YAKUSIMANUM `PERCY WISEMAN`	PERCY WISEMAN RHODODENDRON	1 GAL.	
\bigcirc						
₹ •}	RG	62	ROSA GYMNOCARPA	DWARF ROSE	1 GAL.	
	VO	72	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	1 GAL.	
\odot						
\bigcirc	VS	96	VIBURNUM TINUS 'SPRING BOUQUET'	SPRING BOUQUET LAURESTINUS	1 GAL.	
OUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACINO
	X cw	719	COTONEASTER SALICIFOLIUS REPENS	WILLOWLEAF COTONEASTER	1 GAL.	24" o.c.
						4.01
	FL	778	FRAGARIA CHILOENSIS `LIPSTICK`	BEACH STRAWBERRY	1 GAL.	18" o.c.
$\overset{\scriptstyle ()}{\overset{\scriptstyle ()}}{\overset{\scriptstyle ()}{\overset{\scriptstyle ()}}{\overset{\scriptstyle ()}{\overset{\scriptstyle ()}}{\overset{\scriptstyle ()}{\overset{\scriptstyle ()}}{\overset{\scriptstyle ()}{\overset{\scriptstyle ()}{\overset{\scriptstyle ()}{\overset{\scriptstyle ()}}}}{\overset{\scriptstyle ()}{\overset{\scriptstyle (i}{\overset{\scriptstyle ()}{\overset{\scriptstyle (i}{\overset{\scriptstyle \\{\scriptstyle (i}{\overset{\scriptstyle \scriptstyle \\ \scriptstyle \\{ \scriptstyle (i}{\overset{\scriptstyle \: \\{\scriptstyle (i}{\overset{\scriptstyle \: \\ \scriptstyle \\{\scriptstyle (i}{\overset{\scriptstyle \: \\{\scriptstyle \: \\ \scriptstyle \\{\scriptstyle i}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$	<u> </u>	208	ITEA VIRGINICA `LITTLE HENRY` TM	VIRGINIA SWEETSPIRE	1 GAL.	24" o.c.
······		400				0.41
	MR	490	MAHONIA REPENS	CREEPING MAHONIA	1 GAL.	24" o.c.
//////////////////////////////////////	/ <u>/</u> ++ RE2 ++	388	RUBUS CALYCINOIDES 'EMERALD CARPET'	EMERALD CARPET CREEPING RASPBERRY	1 GAL.	24" o.c.
+ + + + + + + + + + + + + + + + + + +	+++ ++ ++ ++					
a state of the second	16,375 SF		LAWN			

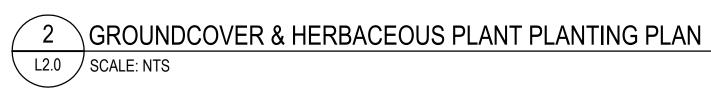


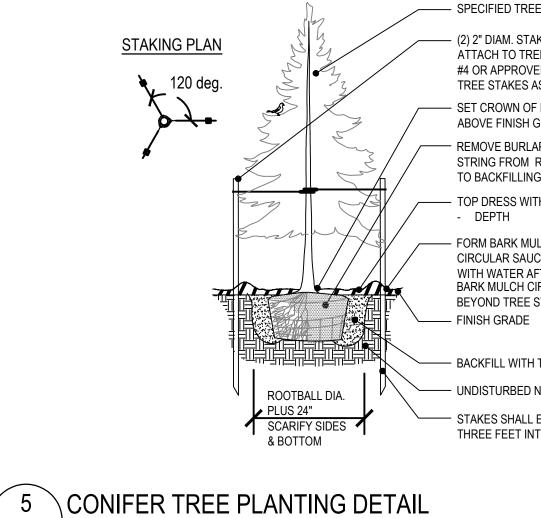
(IN FEET) 1 Inch = 20 feet 10/28/2019 — LAND USE SUBMITTAL

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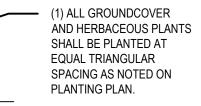








L2.0 SCALE: NTS



(2) LOCATE GROUNDCOVER ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY CURB, SIDEWALK, OR OTHER HARD SURFACE, UNLESS OTHERWISE DIRECTED.

— SPECIFIED TREE

 (2) 2" DIAM. STAKES, AS SPECIFIED.
 ATTACH TO TREE WITH CHAINLOCK
 #4 OR APPROVED EQUAL. STAIN
 TREE STAKES AS PER SPEC. — SET CROWN OF ROOTBALL MIN. 1" ABOVE FINISH GRADE

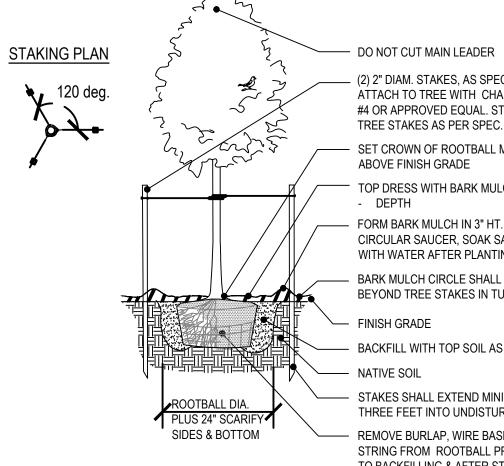
REMOVE BURLAP, WIRE BASKET & STRING FROM ROOTBALL PRIOR TO BACKFILLING & AFTER STAKING

— TOP DRESS WITH BARK MULCH - DEPTH

----- FORM BARK MULCH IN 3" HT. CIRCULAR SAUCER, SOAK SAUCER WITH WATER AFTER PLANTING BARK MULCH CIRCLE SHALL EXTEND 6" BEYOND TREE STAKES IN TURF AREAS

— BACKFILL WITH TOP SOIL AS PER SPEC

- UNDISTURBED NATIVE SOIL STAKES SHALL EXTEND MINIMUM OF THREE FEET INTO UNDISTURBED SOIL



(2) 2" DIAM. STAKES, AS SPECIFIED. ATTACH TO TREE WITH CHAINLOCK #4 OR APPROVED EQUAL. STAIN TREE STAKES AS PER SPEC. ------ SET CROWN OF ROOTBALL MIN. 1" ABOVE FINISH GRADE — TOP DRESS WITH BARK MULCH - DEPTH

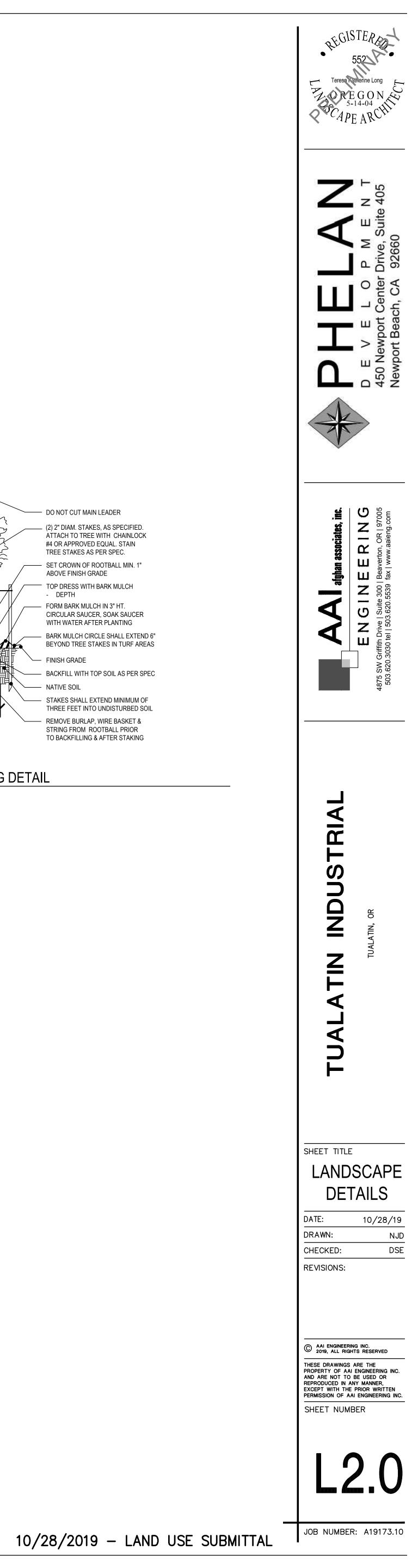
FORM BARK MULCH IN 3" HT. CIRCULAR SAUCER, SOAK SAUCER WITH WATER AFTER PLANTING _____ BARK MULCH CIRCLE SHALL EXTEND 6" BEYOND TREE STAKES IN TURF AREAS

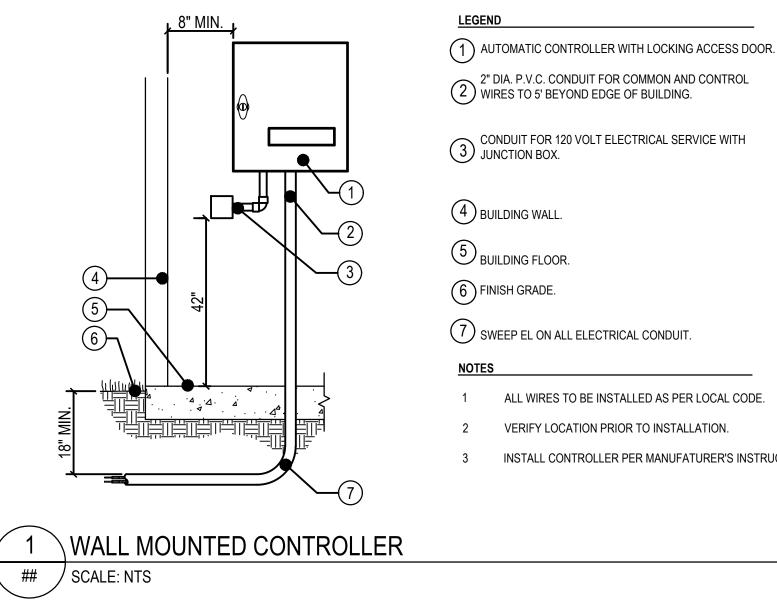
BACKFILL WITH TOP SOIL AS PER SPEC

— NATIVE SOIL - STAKES SHALL EXTEND MINIMUM OF THREE FEET INTO UNDISTURBED SOIL

REMOVE BURLAP, WIRE BASKET & STRING FROM ROOTBALL PRIOR TO BACKFILLING & AFTER STAKING

3 DECIDUOUS TREE PLANTING DETAIL L2.0 SCALE: NTS





FINISH GRADE -----6" ROUND VALVE BOX — VACUUM RELIEF VALVE -----1/2" PVC COUPLING -----

1/2" SCH. 80 NIPPLE -----(LENGTH AS REQUIRED)

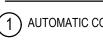
PEA GRAVEL SUMP — PVC PIPING AND FITTING -

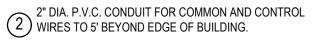


FINISH GRADE -6" ROUND VALVE BOX —— FLUSH VALVE -----

PVC COUPLING -POLY PIPE FROM HEADER -----BRICK SUPPORTS (THREE) -3/4" PEA GRAVEL SUMP — - 1 CUBIC FOOT

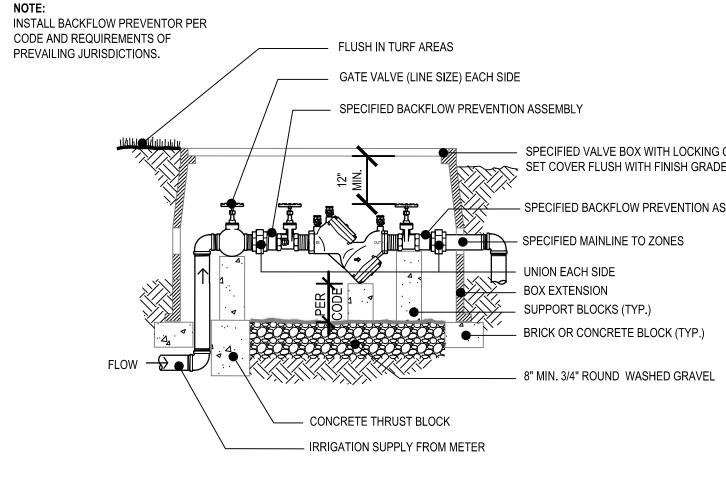




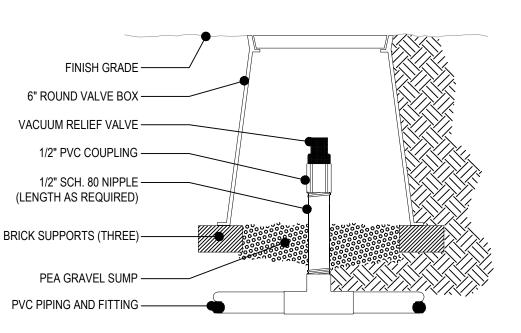


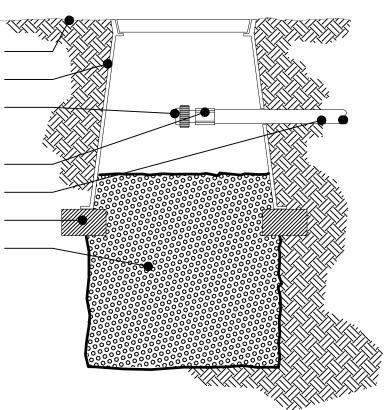


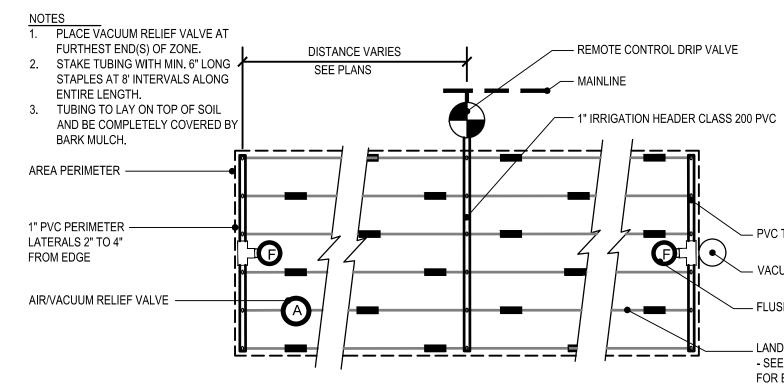
- 1 ALL WIRES TO BE INSTALLED AS PER LOCAL CODE.
- VERIFY LOCATION PRIOR TO INSTALLATION.
- 3 INSTALL CONTROLLER PER MANUFATURER'S INSTRUCTIONS.



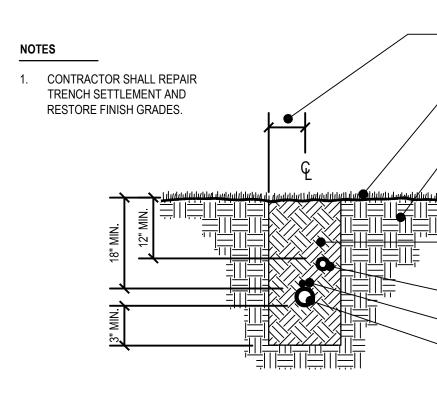
 $2 \rightarrow BACKFLOW PREVENTION DEVICE ASSEMBLY$ ## / SCALE: NTS







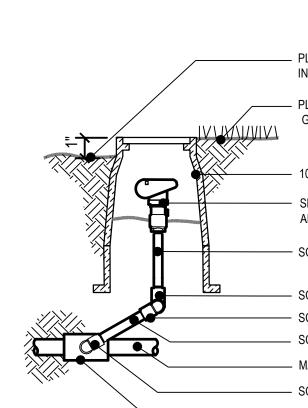




8 IR TRENCHING DETAIL ## / SCALE: NTS

10/28/2019 – LAND USE SUBMITTAL





PLACE LID 1" ABOVE FINISH GRADE IN PLANT BEDS

— PLACE LID FLUSH WITH FINISH GRADE IN LAWN AREAS

— 10" ROUND VALVE BOX — SPECIFIED QUICK COUPLING VALVE MOUNTED 3/4" ABOVE DIRT GRADE

SCHED. 80 P.V.C. NIPPLE, 3/4" X 8" MIN.

- SCHED. 40 P.V.C. T X T 90 DEG. EL SCHED. 80 P.V.C. NIPPLE, 3/4" X 8" MIN.

MAINLINE

— SCHED. 40 P.V.C. STREET EL

- SCHED. 40 P.V.C. STREET EL

— SCHED. 40 ELBOW OR TEE

/ SCALE: NTS

— SPECIFIED EMITTER LANDSCAPE DRIP LINE - SEE IRRIGATION LEGEND FOR EMITTER SPACING 6 NINLINE EMITTER TUBING INSTALLATION

NOTES

 NOTES

 1.
 PLACE VACUUM RELIEF VALVE AT FURTHEST
 END(S) OF ZONE. 2. STAKE TUBING WITH MIN. 6" LONG STAPLES AT 8' INTERVALS ALONG ENTIRE LENGTH. REMOTE CONTROL DRIP VALVE DISTANCE VARIES MAINLINE SEE PLANS - IRRIGATION HEADER CLASS 200 PVC

- SPECIFIED VALVE, WYE FILTER AND 18" COIL PRESSURE REGULATOR ∕ OF WIRE - SPECIFIED VALVE BOX WITH LOCKING LID - UNION EACH SIDE OF VALVE ₩**5** STANDARD BRICK OR CONCRETE BLOCK (TYP.) ------ 6" MIN. DEPTH, 3/4" WASHED ROUND RIVER ROCK

- IF POSSIBLE LOCATE QUICK COUPLER

PER DETAIL AND ATTACH WITH 1/2"

WITH VALVE IN BOX. INSTALL ASSEMBLY

GALV. PIPE X 3' LONG-ATTACH TO RISER WITH TWO S.S. IRRIGATION BANDS

LINE SIZE ISOLATION VALVE (PER VALVE BOX)

3 \DRIP IR CONTROL VALVE ASSEMBLY ## / SCALE: NTS

1. LOCATION OF QUICK COUPLER WITHIN

2. EXACT FITTING REQUIREMENTS,

DIFFER FROM THAT SHOWN.

VALVE BOX IS SHOWN FOR CLARIFICATION

COMPONENT SHAPES AND SEQUENCE MAY

ONLY. INSTALL OFF-SET FROM MAINLINE.

NOTES

_ 8" MIN. 3/4" ROUND WASHED GRAVEL

SUPPORT BLOCKS (TYP.)

SPECIFIED MAINLINE TO ZONES

— SPECIFIED BACKFLOW PREVENTION ASSEMBLY

——— SPECIFIED VALVE BOX WITH LOCKING COVER. SET COVER FLUSH WITH FINISH GRADE

- PVC TEE CONNECTION VACUUM RELIEF VALVE • == LANDSCAPE DRIP LINE ----- SEE IRRIGATION LEGEND FOR EMITTER SPACING

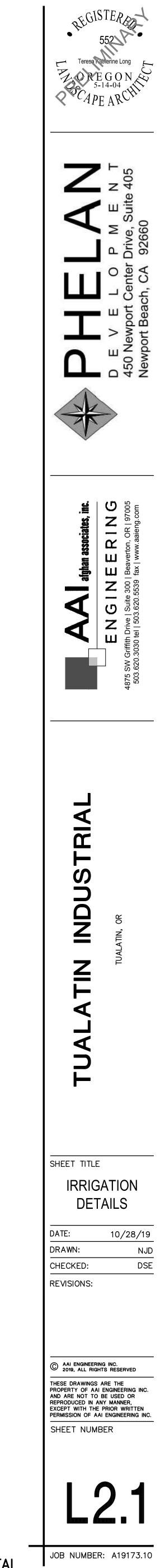
- 3" MIN. FROM EDGE OF TRENCH, PAVING OR FOOTING ------ FINISH GRADE

OR COMPACTED FILL

- BACKFILL, PER SPECS

- LATERAL LINE - CONTROL WIRE & TRACE WIRE

- MAINLINE



Landscape Construction Specifications

General

- carried out by the contractor.
- and the actual field conditions shall be reported to the Owner's representative.
- agencies.
- standards of these Specifications, the provisions of the more stringent shall govern.

Mandatory Site Inspection Schedule

- following:
- Pre-Construction Site Meeting

Rough Grading Inspection

Open Trench Irrigation Inspection

- Plant Material Inspection

Final Landscape Areas and Irrigation Performance Inspection

Erosion Control

- environmental conditions. Comply with jurisdictional requirements.
- operations. Remove only upon approval of Owner's Representative.

Invasive Weed Control Prior to Construction

- landscaped:
 - Cirsium arvense (Canadian Thistle) Lotus corniculatus (Bird's foot Trefoil Convolvulus spp. (Morning Glory) Lythrium salicaria (Purple Loosestrife) Cytisus scoparus (Scotch Broom) Melilotus spp. (Sweet Clover) Dipsacus sylvestris (Common Teasel) Myriophyllum spicatum (Eurasian Milfoil) Equisetum spp. (Horsetail) Phalaris arundinaceae (Reed Canary Grass) Festuca arundinaceae (Tall Fescue) Rubus discolor (Himalayan Blackberry) Hedera helix (English Ivy) Solanum spp. (Nightshade) Holcus canatus (Velvet Grass) Trifolium spp. (Clovers) Lolium spp. (Rye Grasses)

Rough Grade Inspection

- activities specified herein, and defined on the plan.
- material for a minimum depth of 12 inches
- the directive, and prior to the commencement of particular construction activities.

1. Municipal, County, State and Federal laws, regarding uses and regulations governing or relating to any portion of the work depicted on these plans are hereby incorporated into and made part of these specifications, and their provisions shall be

2. The Contractor shall verify the locations of all existing utilities, structures, and services before commencing work. The location of utilities, structures, services shown on these plans are approximate only. Any discrepancies between these plans

3. The Contractor shall locate and protect all existing utilities, features and plants on and adjacent to the project site during construction. Contractor shall repair, at his own expense, all damage resulting from his operations or negligence.

4. The Contractor shall obtain all necessary valid licenses, permits, and insurance required to perform the work indicated herein before commencing work, and shall be responsible for coordinating work with all parties involved, including jurisdictional

5. The Contractor shall use all means necessary to protect the public at all times during the construction process.

6. In the event of conflict between pertinent codes, regulations, structural notes, and/or requirements, or the referenced

7. Weather Limitations: Soil work shall be performed only when the weather conditions do not detrimentally affect the quality of

1. Schedule for Mandatory site inspection procedures. The mandatory site inspections include but are not limited to the

Contractor shall be notified a minimum of 48 hours prior to meeting to review site conditions, proposed construction and construction schedule, and review construction specifications prior to commencement of construction operations.

Contractor shall notify Owner's Representative a minimum 48 hours prior to request for inspection of rough soil grades. All rough grading operations shall be completed per specifications and prepared for inspection. No topsoil placement or backfilling in areas to be landscaped should occur until written approval by Owner's Representative has been issued.

Contractor shall notify Owner's Representative 24 hours prior to inspection for written approval of irrigation trench depths, piping conditions, and pressure testing. (Refer to Irrigation Specification for inspection procedures)

Plant material quality and layout inspection and written approval shall occur with 24 hours notice to Owner's Representative prior to installation of any plant material. (Refer to Planting Specification for inspection procedures)

Contractor shall notify Owner's Representative 48 hours prior to inspection for approval of landscape and irrigation work. Irrigation operations and coverage shall be inspected. Plant quality and layout shall be inspected. Written approval shall be issued upon inspection approval of specified construction. (Refer to relative specification sections)

1. Provide and maintain positive drainage patterns throughout the construction process, and as directed by the Owner's Representative if weather or construction activity creates drainage conflicts detrimental to construction process or

2. Maintain erosion measures throughout the landscaping process. Restore erosion control measures disturbed by landscaping

1. Verify and identify conditions requiring eradication of invasive weeds and grasses prior to existing soil surface disturbance as directed by Owner's Representative. Stockpiled topsoil shall be treated to eradicate weeds prior to soil ripping and stockpiling. Weed eradication shall include herbicide and non-herbicide methods only administered by a currently licensed applicator. Eradication shall include and is not limited to elimination of the following invasive species from areas to be

1. Conditions and quality of rough grade shall be inspected and approved by Owner's Representative prior to the commencement of specified work in areas to be landscaped. The contractor shall then be responsible for completion of

In all plant bed areas the sub-grade shall be free of unsuitable material such as stumps, roots, rocks, concrete, asphalt, or metals, for a minimum depth of 24 inches, and in all lawn or seeded areas the sub-grade shall be free of unsuitable

The Owner's Representative, at their discretion, shall direct further rough grading or soil preparation if specified activities have not created a surface satisfactory for further work to commence. Compensation for additional surface work created by conditions unknown at the outset and as directed in writing by the Owner's Representative shall be negotiated at the time of

Finish Grading

1. Verify that rough grade in landscape areas is sufficiently below proposed final grade for planting beds and lawn areas to allow for placement of topsoil mix. Refer to grading plans for finish grade references. Verify that grades provide positive drainage at all landscape areas, and slope away from structures at a minimum of 2% slope. Final grades in all landscape areas shall be crowned at center to facilitate proposed drainage.

Installation Of Irrigation Sleeving

1. Sleeving conduit shall be installed at existing and proposed paved areas as per specifications, as directed by the Owner's Representative, or as irrigation installation requirements, prior to preparation for paving construction. Set piping to provide minimum covers of:

18-inch for sleeving beneath walkways;

24-inch for sleeving beneath vehicular traffic or structures.

Mark each end of sleeving with a 2 x 4 stake with 24" exposed, clearly marked 'SLEEVE LOCATION' Contractor shall maintain staking identification and location throughout construction process. Protect all existing paving when installing sleeving. Restore all paving damaged by sleeve installation.

- 2. Size of sleeving conduit pipe shall be a minimum of two times the diameter of the bell end of the pipe that is to be fed into the sleeve.
- 3. Set sleeving in a compacted bed of material that will not damage the pipe during compaction of surface backfill

Design / Build Irrigation Specification

- 1.1 DESIGN BUILD SUBMITTALS AND REQUIREMENTS
- A. Design Criteria: Submitted plan shall meet the following criteria and shall be approved for construction only upon verification that all required criteria have been met.
- 1. Drawings submitted for design approval: a. Must clearly illustrate irrigation heads, dripline, valve, controller and point of connection locations. Individual valves and controllers shall be numbered sequentially. The size and
- maximum flow through each valve and capacity of each controller shall be clearly noted. b. Must clearly illustrate pipe sizes from all laterals and mainline pipe.
- c. Drawings must be to a standard measurable engineering scale that is at a minimum of 1"=30'-0".
- d. Drawings must be CAD generated. e. Drawings must include a legend that describes all symbols and materials represented on the
- f. Drawings must clearly illustrate that the proposed irrigation system meets all performance criteria described by these specifications.
- g. Must utilize graphics that clearly distinguish between lateral and mainline pipe and sleeves under pavement; dripline; manual or automatic control valves, isolation valves and drain valves; irrigation controllers and all other equipment located on the plan.
- B. Irrigation system as designed and installed shall perform within the tolerances and specification of the specified manufacturers.
- C. The system shall be fully adjustable to fine-tune the system performance for specific zones. Indicate water pressure and gallonage parameters at available water source on the required submittal.
- D. Irrigation system shall be designed so that planting beds, sloped banks and lawn zones are on separate control valves to facilitate the different water requirements of each area.
- E. System shall be designed to supply manufacturer's specified minimum operating pressure to furthest emitter from water meter. Water flow through piping shall not exceed a velocity of 5 feet per second. F. System shall furnish components to allow operation within manufacturer's specified tolerances for
- optimum performance. Undersized components shall not be approved for installation.
- 5. Upon completion of the irrigation system installation and as a condition of it's acceptance, deliver to the Owner's representative the following 'As- built' drawings; Three prints and one reproducible sepia of all changes to the irrigation system including a Controller Zone Reference chart. Instruct owner of system components operation, system winterization, and controller adjustment processes. Instruct owner of precipitation requirements and schedule of anticipated controller adjustments as landscape matures.
- 6. Protect existing buildings, walls, pavements, reference points, monuments, and markers on this site. Verify location of and protect all utilities. Protect adjacent property. Protect work and materials of other trades. Protect irrigation system materials before, during, and after installation. In the event of damage, repair or replace items as necessary to the approval of the Owner's representative and at no additional cost to the Owner. Use all means necessary to protect the public from injury at all times.
- 7. Provide warranty for all installed materials and work for one year beyond the date of final acceptance of the irrigation system installation.
- 8. Verify gallonage, pressure, size, and location of service water line. The Contractor shall guarantee an irrigation system that functions to manufacturer's specifications with the source volume and pressure afforded to site. Make arrangements for water shut-off during construction if necessary, notify owner 24 hours prior to suspension of water service.
- 9. Irrigation trenches shall be a depth to provide a minimum cover of 18 inches for sleeving beneath walkways; 18 inches for all pressurized main lines; 36 inches for sleeving beneath asphalt paving, and 12 inches for all lateral lines. Backfill with clean fill void of material injurious to system components. All sleeving under vehicular traffic to be Class 200 PVC, all other sleeving shall be class 200 PVC Locate top of zone valves a minimum of 6" below finish grade.
- 10. Combine wire and piping where possible.
- 11. Contractor shall follow manufacturer's instructions for solvent welding of PVC pipe and fittings to achieve tight and inseparable joints. Utilize single wrap Teflon tape at all threaded joints.

- 12. Install all valves with fittings that facilitate maintenance removal and place valve boxes at location that are easily serviced but not in conspicuous locations. Locate in planting beds wherever possible, away from mower, edger, or de-thatcher operations.
- 13. Contractor shall install one manual drain valve at discharge side of each remote control valve and at all low points in mainline pipe so as to allow for complete drainage of all main lines. Mark with a painted sleeve cover and indicate locations on As-Built drawings.
- 14. Contractor shall provide backflow prevention as required per local and state codes, installed as per manufacturer's specifications.
- 15. Contractor shall install irrigation controller in accordance with manufacturer's specifications. Verify a 120 V.A.C. electrical source and a min. 1 1/2" conduit from controller location open to all electrical zone valves in field. Weatherproof any exterior wall penetrations.
- 16. Automatic Controller: Rainbird or Hunter capable of meeting Water Sense EPA Criteria or approved equal. Controller shall have ability for all zones to fully operate and meet both normal and specified low volume system requirements as specified herein, and as required by site conditions. Coordinate location in field with owner's representative.
- 17. Install all wire in accordance with manufacturer's specifications with a minimum of 18 inch looped inside valve box at each remote control valve and at the controller. All splices shall occur within valve boxes with water-proof connectors.
- 18. Contractor shall install all sprinkler heads with flexible risers, using flexible polyethylene pipe not to exceed 18 inches in length or PVC swing joints. Tee fittings shall extend horizontally from pipe .
- 19. Contractor shall thoroughly flush irrigation system after piping, risers, and valves are installed but prior to installing sprinkler heads. Thoroughly clean, adjust and balance the installed irrigation system. Adjust spray pattern of nozzles to minimize throw of water onto buildings, walls, roads and parking lots. Adjust controller for optimum performance and precipitation rates utilizing proper water conservation measures.

Topsoil Placement and Soil Preparation

- 1. Contractor shall submit certified topsoil analysis report for owner's approval prior to plant installation.
- 2. Contractor is responsible for any amendments to soil PH, fertility and/or drainage conditions necessary to ensure proper growing conditions for proposed planting.
- 3. Topsoil shall be friable soil from existing stockpiled material or imported, with added soil amendments as specified. It shall not be delivered while in a frozen or muddy condition. Protect from erosion at all times. Utilize existing stockpiled topsoil only under the direction of the Owner's Representative. Do not place topsoil in areas that have not been cleared of weeds listed herein. Topsoil shall meet the following requirements:
 - a. Free of roots and rocks larger than 1/2 inch,
 - b. Free of subsoil, debris, large weeds, foreign matter and any other material deleterious to plant material health c. Acidity range (pH) of 5.5 to 7.5.
 - d. Containing a minimum of 4 percent and a maximum of 25 percent inorganic matter with decaying matter of 25 percent content by volume or less. e. Textural gradations shall be sand: 45-75%, silt: 15-35%, clay: 05-20%.
- 4. Commercial fertilizer shall be an organic base, complete fertilizer containing in available form by within a minimum of 10N 10P 5K - with 50 percent of the available nitrogen in slow-release formula, Webfoot
- Compost shall be yard debris compost meeting industry and jurisdictional standards.
- 6. Contractor shall remove all debris, rocks one inch in diameter or larger, sticks, mortar, concrete, asphalt, paper, contaminated soil and any material harmful to plant life, in all planting areas.
- 7. Contractor shall rototill subgrade six (6) inches deep before placing topsoil. Specified imported topsoil shall be placed at a minimum depth of **12**" in all planting areas. Do not place material during wet conditions. Do not work saturated soils in any manner. floated to a level, sloped or mounded grade between any existing or constructed point on the site, such as curbs, walls, walks, paving and the like. Final soil grades in planting beds shall be 2" below adjacent paving and curbs for mulch application.
- 8. Distribute following soil amendments to all landscape areas in even layers and power rototill or spade to a minimum depth of six (6) inches into topsoil, as follows;

Planting Beds:

- a. Compost: Apply nine cubic yards per 1000 sq. ft. b. Commercial Fertilizer: Apply 50 pounds per 1000 sq. ft.
- 9. Preparation of backfill planting soil mix shall be as follows:
- Thoroughly blend and mix the following proportion of materials while in a moist condition: - Three cubic yards topsoil
- 1 1/2 cubic yards compost

Organic Delux, or approved equal.a

- 1 1/2 cubic yards medium bark,
- 10 pounds commercial fertilizer - Five pounds bonemeal
- 10. Keep project free from accumulation of debris, topsoil and other material. At completion of each area of work, remove debris, equipment and surplus materials. Any paved area or surfaces stained or soiled from landscaping materials shall be cleaned with a power sweeper using water under pressure. Building surfaces shall be washed with proper equipment and materials as approved by the Owner's representative.

Seed Installation

- 1. Seeding operations shall occur only between March 15 and October 15.
- 2. Seeding is not permitted during cold weather (less than 32 degrees F), hot weather (greater than 80 degrees F), when soil temperature is less than 55 degrees F, when ground is saturated, or when wind velocity is greater than 10 mph.
- 3. Contractor shall float rough graded seedbed. Do not disturb natural drainage patterns. Remove rocks, clumps, or debris at surface. Lightly scarify surface.
- 4. Contractor shall apply 10 pounds commercial fertilizer per 1,000 square feet of surface area before spreading seed.
- 5. Lawn Seed: Contractor shall manually broadcast or hydro-seed eight pounds of Sunmark "Northwest Supreme Lawn Mix" grass seed per 1,000 square feet.
- 6. Fieldgrass Seed: Contractor shall manually broadcast or hydro-seed eight pounds of Sunmark "Diamond Green" grass seed per 1,000 square feet.
- 7. The Contractor shall protect and maintain the seeded area by fencing, watering, feeding, reseeding, mowing and repairing as necessary to establish a thick, uniform stand of grass acceptable to the Owner's representative. Contractor to maintain lawn for a minimum of 3 mowings.

Trees, Shrubs, & Groundcover Installation

- 1. Contractor shall guarantee materials and workmanship in general landscape areas for one year from date of conditional acceptance. Plant material shall be in accordance with American Standard for Nursery Stock (ANSI Z60.1), shall comply with State and Federal laws with respect to inspection for insect infestation and plant diseases and shall be free of insect pests and plant diseases.
- 2. Plant materials shall have a minimum of 6 inches of prepared soil under the root ball, and a minimum of 6 inches on each side of the root ball. Tree roots or root ball shall have a minimum of 12 inches of plant soil under the root ball and a minimum of 12 inches on each side of the root ball, or roots. Final grade should maintain root ball slightly above surrounding grade (not to exceed one inch) for bark mulch installation.
- 3. Root control barrier shall be installed in trenches, alongside hardscape structures and utility lines such as sidewalks, curbs, pavement, walls, and concrete located within 5 feet of new trees measured from the trunk. Root barrier is to be 40 - 60 mil HDPE, minimum 18" deep and extend 10' in either direction measured from the center of the trunk.
- 4. Mulch all planting beds after planting, final raking, grading and leveling of the planting beds with a layer of Hem/Fir medium screened bark mulch as specified on the plans.
- 5. Balled and burlapped trees, boxed trees or bare root trees shall be either guyed or staked as detailed on the plans.
- 6. Remove all dead or dying branches and criss-crossing branches from trees. Do not cut leader.
- 7. Keep project free from accumulation of debris, topsoil and other material. At completion of each area of work, remove debris, equipment and surplus material. All paved areas or surfaces stained or soiled from landscape material shall be cleaned with a water-pressure power sweeper. Building surfaces shall be washed with proper equipment and materials as approved by the Owner.
- 8. River Rock Mulch: River rock mulch shall be minimum 3/4" to maximum 1-1/2" diameter washed round river rock, uniform in size. All fines shall be screened from the aggregate within a one-quarter inch (1/4") tolerance. Color shall be white to light brown. Contractor shall provide the owner with samples of river rocks for approval prior to installation.

Maintenance

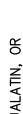
- 1. Contractor shall maintain general landscape areas for one year after accepted completion of project.
- 2. Maintenance shall include; all grade resettlement, weeding, policing and removal of plant material debris during maintenance period. Remove and replace dead plant material as needed at no cost to owner for maintenance period. Seasonal leaf fall removal is outside the scope of this maintenance specification.
- 3. Any unsatisfactory condition arising during this maintenance period shall be brought to the attention of the Owner's Representative immediately.

552 Teresa Katherine Lon, OREGON 5-14-04

REGISTERA







SHEET TITLE

LANDSCAPE & IR SPECS

DATE: 10/28/19 DRAWN: NJD CHECKED: DSE **REVISIONS:**

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JOB NUMBER: A19173.10

GENERAL NOTES

- SHALL BE STAKED BY A PROFESSIONAL AS SHOWN, ON THE PLANS.
- CONSTRUCTION LAYOUT.
- CONSTRUCTION LAYOUT.
- RECORD IMMEDIATELY UPON DISCOVERY.
- PRIOR TO CONSTRUCTION LAYOUT.
- ANY MONUMENTS DAMAGED OR REMOVED DURING BY A LICENSED SURVEYOR.
- OREGON PLUMBING SPECIALTY CODE AND REQUIREMENTS OF THE CITY OF TUALATIN.
- WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
- GRADE AND ALIGNMENT CONFLICTS.
- PERFORMANCE OF THE WORK.
- SITE
- DUST CONTROL AS REQUIRED.
- 14. TRAFFIC CONTROL SHALL BE PROVIDED BY THE COMMENCING CONSTRUCTION.
- OWNER.
- REPRESENTATIVE SHALL BE REQUIRED.
- 18. THE CONTRACTOR SHALL KEEP THE ENGINEER AND
- 24-HOUR NOTICE IS REQUIRED. 19. EXISTING SURVEY MONUMENTS ARE TO BE PROTECTED

1. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SURVEYOR, REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS,

2. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE HORIZONTAL POSITION PRIOR TO BEGINNING

3. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE VERTICAL POSITION BASED ON THE BENCHMARK STATED HEREON, PRIOR TO BEGINNING

4. WHEN DIMENSIONS AND COORDINATE LOCATIONS ARE REPRESENTED – DIMENSIONS SHALL HOLD OVER COORDINATE LOCATION. NOTIFY THE CIVIL ENGINEER OF

- 5. BUILDING SETBACK DIMENSIONS FROM PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED BUILDING SETBACKS SHALL BE VERIFIED
- 6. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF

CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED 7. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, THE PROJECT SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2017

8. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS. ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE EXECUTION AND COMPLETION OF

9. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE

TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232–1987). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH UNDERGROUND UTILITIES IN THE PROJECT AREA AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING AN EXCAVATION, SO UTILITIES MAY BE ACCURATELY LOCATED.

10. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL TYPES OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF AAI ENGINEERING, 72 HOURS PRIOR TO START OF CONSTRUCTION TO PREVENT

11. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE

12. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. THE CONTRACTOR SHALL ADHERE TO CITY OF TUALATIN FOR MINIMUM EROSION CONTROL MEASURES. THE ESC FACILITIES SHOWN IN THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE

13. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS. KEEPING THEM CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS, AND PROVIDING

CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO CITY OF TUALATIN FOR REVIEW AND APPROVAL PRIOR TO

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE

16. NOTIFY CITY INSPECTOR 72 HOURS BEFORE STARTING WORK. A PRECONSTRUCTION MEETING WITH THE OWNER, THE OWNER'S ENGINEER, CONTRACTOR AND THE CITY

17. THE CONTRACTOR SHALL HAVE A FULL SET OF THE CURRENT APPROVED CONSTRUCTION DOCUMENTS INCLUDING ADDENDA ON THE PROJECT SITE AT ALL TIMES.

JURISDICTION INFORMED OF CONSTRUCTION PROGRESS TO FACILITATE SITE OBSERVATIONS AT REQUIRED INTERVALS.

DURING CONSTRUCTION OR REPLACED IN ACCORDANCE WITH OREGON REVISED STATUTES 209.140 - 209.155.

CONSTRUCTION NOTES

DEMOLITION

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING AC, CURBS, SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE SITE AREA IDENTIFIED IN THE PLANS.
- EXCEPT FOR MATERIALS INDICATED TO BE STOCKPILED OR TO REMAIN ON OWNER'S PROPERTY. CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, REMOVED FROM THE SITE, AND DISPOSED OF PROPERLY.
- ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED AND DELIVERED STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
- 4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, BEYOND THE IDENTIFIED SITE AREA, DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL CONDITION OR BETTER.
- 5. CONCRETE SIDEWALKS SHOWN FOR DEMOLITION SHALL BE REMOVED TO THE NEAREST EXISTING CONSTRUCTION JOINT.
- 6. SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND NEW PAVEMENT.

<u>UTILITIES</u>

- ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE BOXES, CATCH BASINS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.
- CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW FLEXIBLE UTILITIES (WATER, TV, TELEPHONE, ELÉC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT ÓCCURS.
- 3. CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OF OR ADJUSTMENT TO GAS, ELECTRICAL, POWER AND TELEPHONE SERVICE.
- 4. BEFORE BACKFILLING ANY SUBGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL SURVEY AND RECORD MEASUREMENTS OF EXACT LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.

<u>STORM AND SANITARY</u>

- CONNECTIONS TO EXISTING STORM AND SANITARY SEWERS SHALL CONFORM TO THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 00490, "WORK ON EXISTING SEWERS AND STRUCTURES".
- BEGIN LAYING STORM DRAIN AND SANITARY SEWER PIPE AT THE LOW POINT OF THE SYSTEM, TRUE TO GRADE AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. THE CONTRACTOR SHALL ESTABLISH LINE AND GRADE FOR THE STORM AND SANITARY SEWER PIPE USING
- A LASER. 3. ALL ROOF DRAIN AND CATCH BASIN LEADERS SHALL HAVE A MINIMUM SLOPE OF 2 PERCENT UNLESS NOTED OTHERWISE IN THE PLANS.

<u>WATER</u>

- 1. ALL WATER AND FIRE PROTECTION PIPE SHALL HAVE A MINIMUM 36-INCH COVER TO THE FINISH GRADE.
- 2. ALL WATER AND FIRE PRESSURE FITTINGS SHALL BE PROPERLY RESTRAINED WITH THRUST BLOCKS PER DETAIL.
- 3. ALL WATER MAIN / SANITARY SEWER CROSSINGS SHALL CONFORM TO THE OREGON STATE HEALTH DEPARTMENT REGULATIONS, CHAPTER 333.

<u>EARTHWORKS</u>

- 1. CONTRACTOR SHALL PREVENT SEDIMENTS AND SEDIMENT LADEN WATER FROM ENTERING THE STORM DRAINAGE SYSTEM.
- TRENCH BEDDING AND BACKFILL SHALL BE AS SHOWN ON THE PIPE BEDDING AND BACKFILL DETAIL. THE PROJECT SPECIFICATIONS AND AS REQUIRED IN THE SOILS REPORT. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER WILL NOT BE PERMITTED.
- 3. SUBGRADE AND TRENCH BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER IS NOT PERMITTED.

<u>PAVING</u>

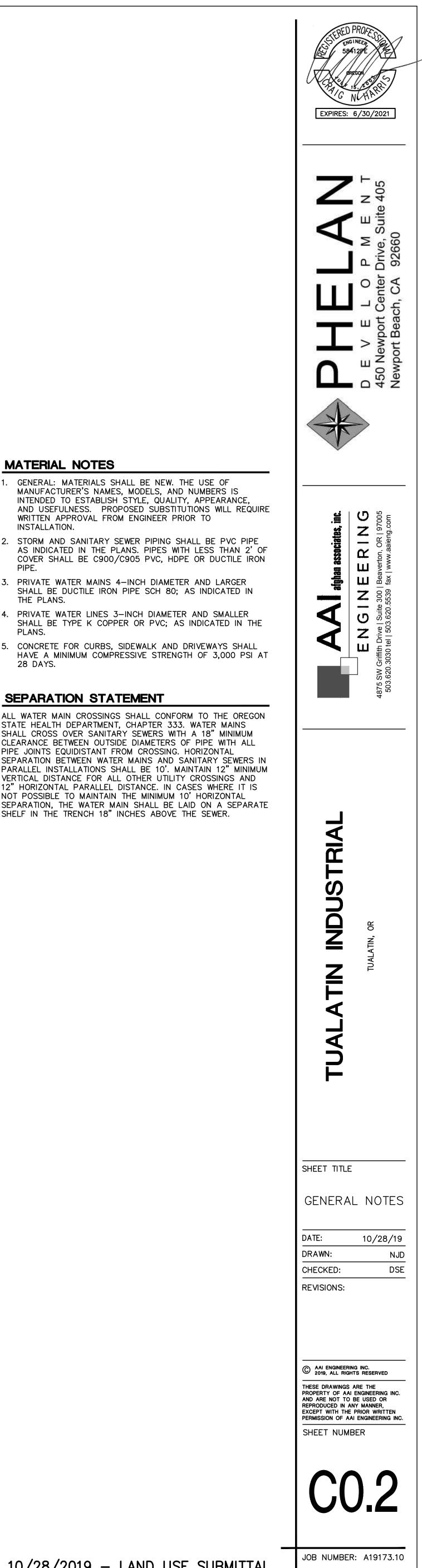
1. SEE ARCHITECTURAL PLANS FOR SIDEWALK FINISHING AND SCORING PATTERNS.

MATERIAL NOTES

- GENERAL: MATERIALS SHALL BE NEW. THE USE OF MANUFACTURER'S NAMES, MODELS, AND NUMBERS IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, AND USEFULNESS. PROPOSED SUBSTITUTIONS WILL REQUIRE WRITTEN APPROVAL FROM ENGINEER PRIOR TO INSTALLATION.
- 2. STORM AND SANITARY SEWER PIPING SHALL BE PVC PIPE AS INDICATED IN THE PLANS. PIPES WITH LESS THAN 2' OF COVER SHALL BE C900/C905 PVC, HDPE OR DUCTILE IRON PIPF
- 3. PRIVATE WATER MAINS 4-INCH DIAMETER AND LARGER SHALL BE DUCTILE IRON PIPE SCH 80; AS INDICATED IN THE PLANS.
- 4. PRIVATE WATER LINES 3-INCH DIAMETER AND SMALLER SHALL BE TYPE K COPPER OR PVC; AS INDICATED IN THE PLANS.
- 5. CONCRETE FOR CURBS, SIDEWALK AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

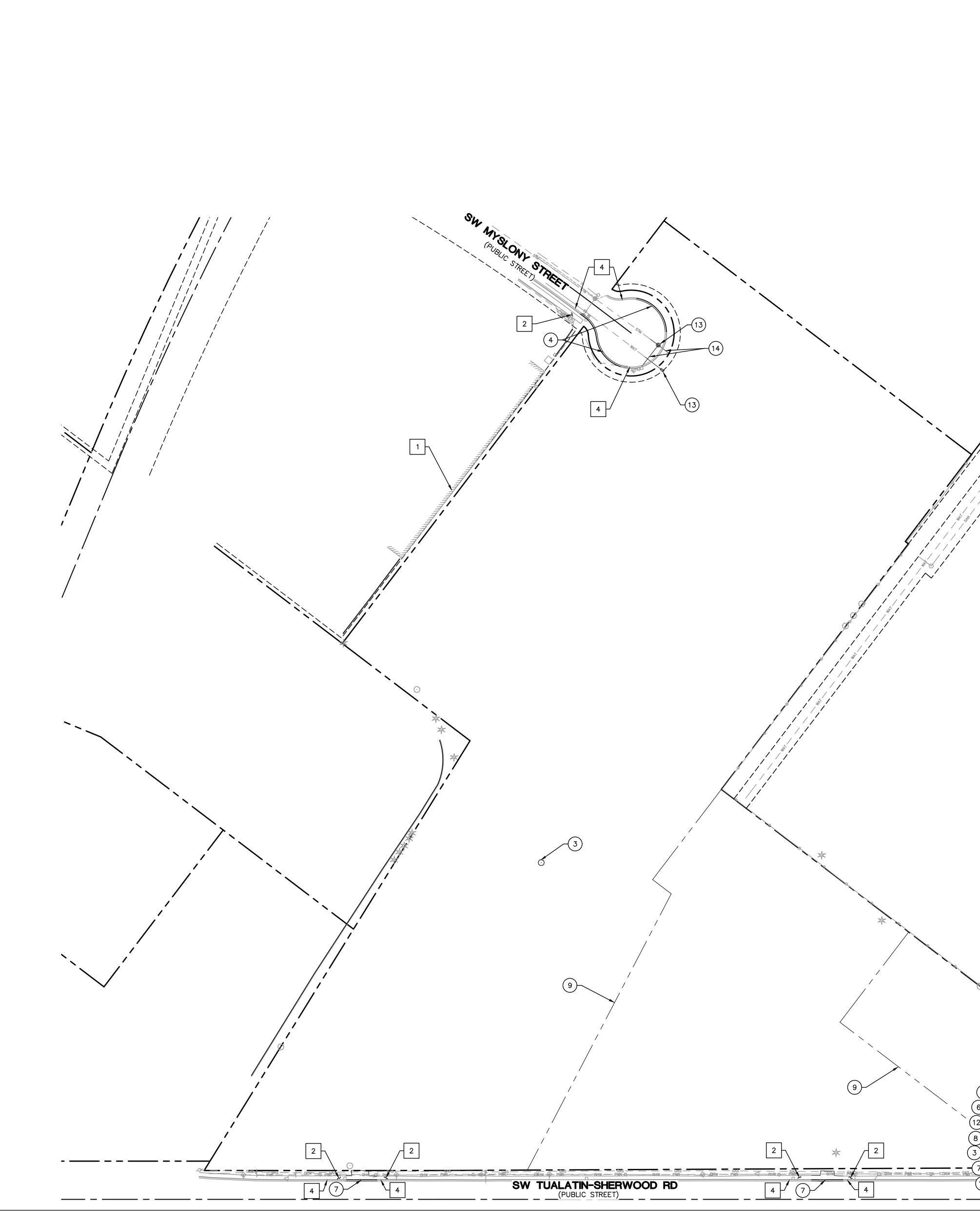
SEPARATION STATEMENT

STATE HEALTH DEPARTMENT, CHAPTER 333. WATER MAINS SHALL CROSS OVER SANITARY SEWERS WITH A 18" MINIMUM CLEARANCE BETWEEN OUTSIDE DIAMETERS OF PIPE WITH ALL PIPE JOINTS EQUIDISTANT FROM CROSSING. HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS IN PARALLEL INSTALLATIONS SHALL BE 10'. MAINTAIN 12" MINIMUM VERTICAL DISTANCE FOR ALL OTHER UTILITY CROSSINGS AND 12" HORIZONTAL PARALLEL DISTANCE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN THE MINIMUM 10' HORIZONTAL SEPARATION, THE WATER MAIN SHALL BE LAID ON A SEPARATE SHELF IN THE TRENCH 18" INCHES ABOVE THE SEWER.











- DEMOLITION.

1	REMOVE EXISTING BUILDING
2	REMOVE EXISTING GRAVEL ROAD
3	REMOVE EXISTING TREE

- 14 REMOVE EXISTING STORM PIPE

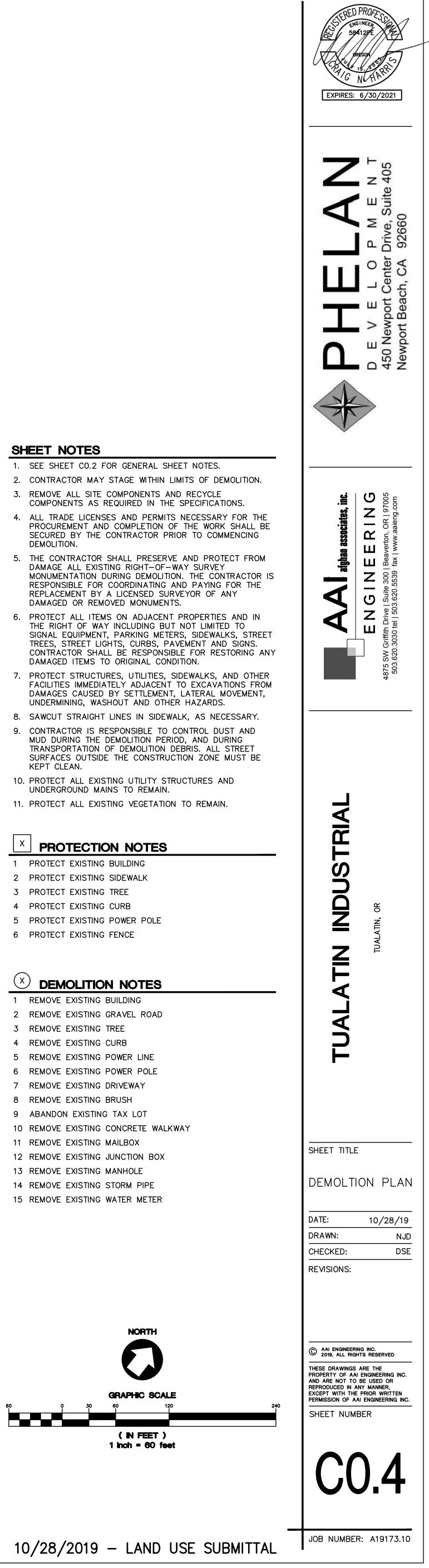
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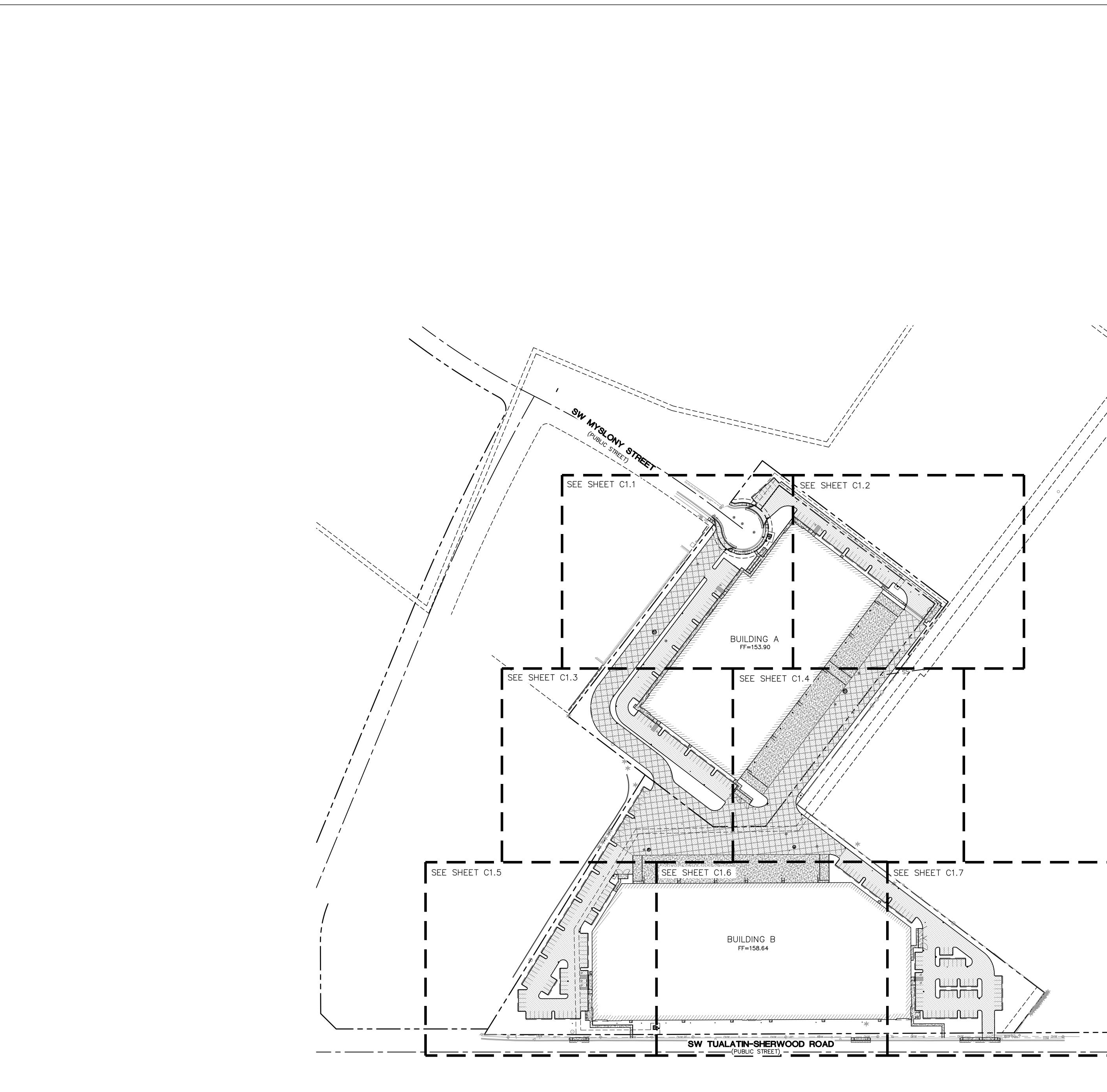
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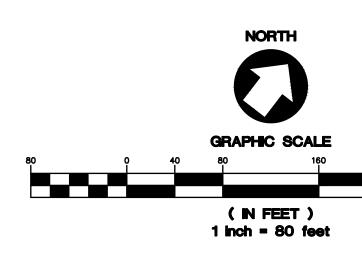


- 1. SEE SHEET CO.2 FOR GENERAL SHEET I
- 2. SEE ARCHITECTURAL PLANS FOR ADDITION INFORMATION.
- 3. THE CONTRACTOR SHALL HAVE A FULL S CURRENT APPROVED CONSTRUCTION DOCI INCLUDING ADDENDA ON THE PROJECT SI
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LEGEND

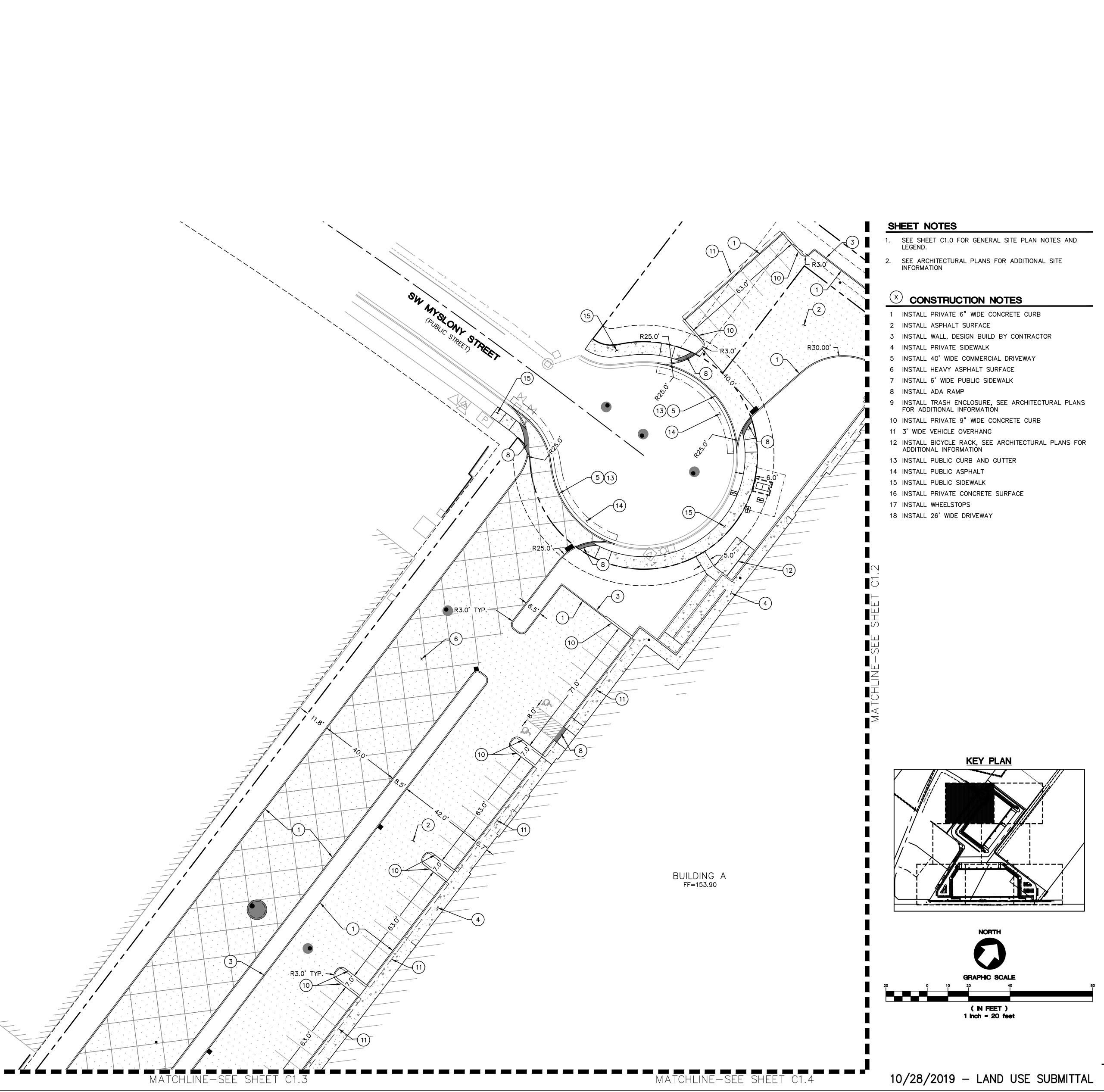
PROPERTY LINE	
CONCRETE SURFACING	
PRIVATE ASPHALT	

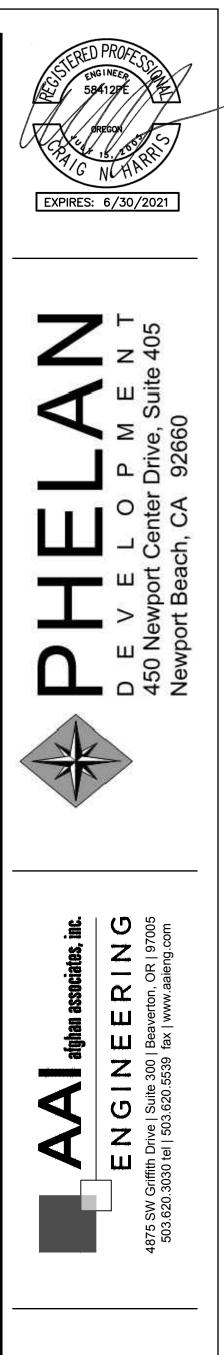
SURFACING COMMERCIAL ASPHALT SURFACE



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	EXPIRES: 6/30/2021
	PHELAN DEVELOPMENT 450 Newport Center Drive, Suite 405 Newport Beach, CA 92660
NOTES. IONAL SITE SET OF THE DCUMENTS SITE AT ALL TIMES. GINEER AND HON PROGRESS TO EQUIRED INTERVALS.	4875 SW Griffith Drive Suite 300 Beaverton, OR 97005 503.620.3030 tel 503.620.5539 fax www.aaieng.com
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	SHEET TITLE HARDSCAPE PLAN DATE: 10/28/19 DRAWN: NJD CHECKED: DSE REVISIONS:
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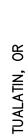






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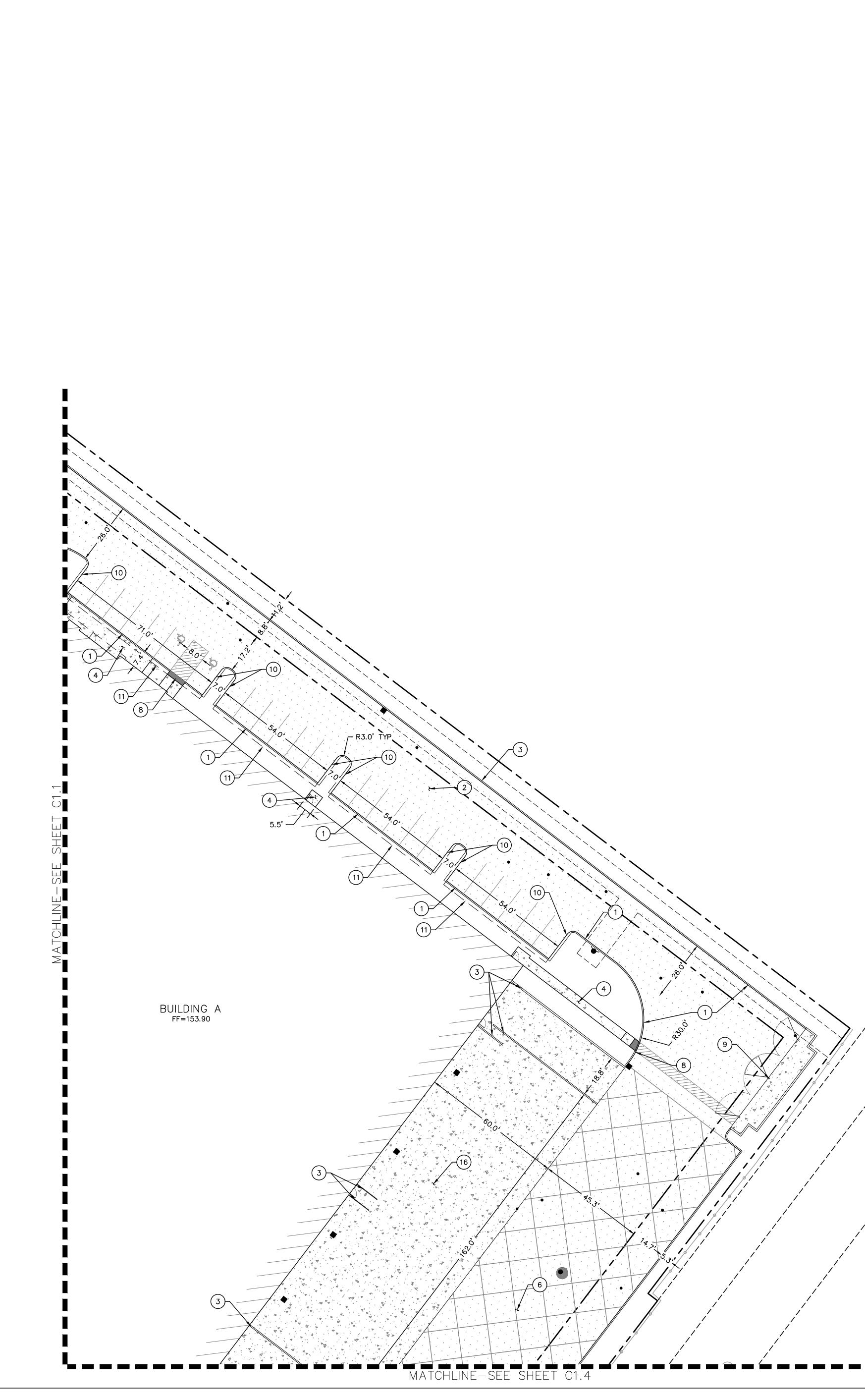
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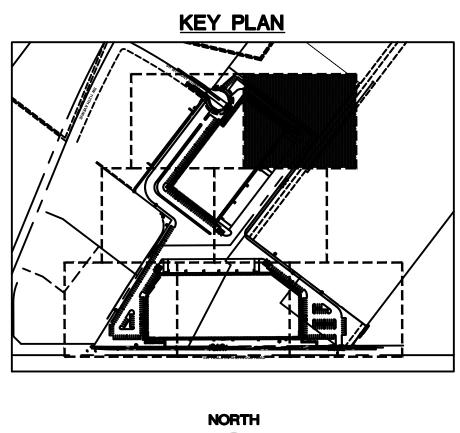


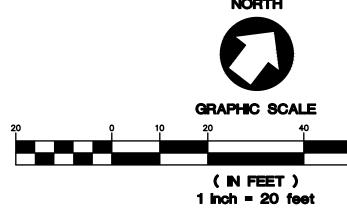


- SEE SHEET C1.0 FOR GENERAL SITE PLAN NOTES AND LEGEND.
- 2. SEE ARCHITECTURAL PLANS FOR ADDITIONAL SITE INFORMATION

× CONSTRUCTION NOTES

- 1 INSTALL PRIVATE 6" WIDE CONCRETE CURB
- 2 INSTALL ASPHALT SURFACE
- 3 INSTALL WALL, DESIGN BUILD BY CONTRACTOR
- 4 INSTALL PRIVATE SIDEWALK
- 5 INSTALL 40' WIDE COMMERCIAL DRIVEWAY
- 6 INSTALL HEAVY ASPHALT SURFACE
- 7 INSTALL 6' WIDE PUBLIC SIDEWALK
- 8 INSTALL ADA RAMP
- 9 INSTALL TRASH ENCLOSURE, SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION
- 10 INSTALL PRIVATE 9" WIDE CONCRETE CURB
- 11 3' WIDE VEHICLE OVERHANG
- 12 INSTALL BICYCLE RACK, SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION
- 13 INSTALL PUBLIC CURB AND GUTTER
- 14 INSTALL PUBLIC ASPHALT
- 15 INSTALL PUBLIC SIDEWALK
- 16 INSTALL PRIVATE CONCRETE SURFACE
- 17 INSTALL WHEELSTOPS
- 18 INSTALL 26' WIDE DRIVEWAY













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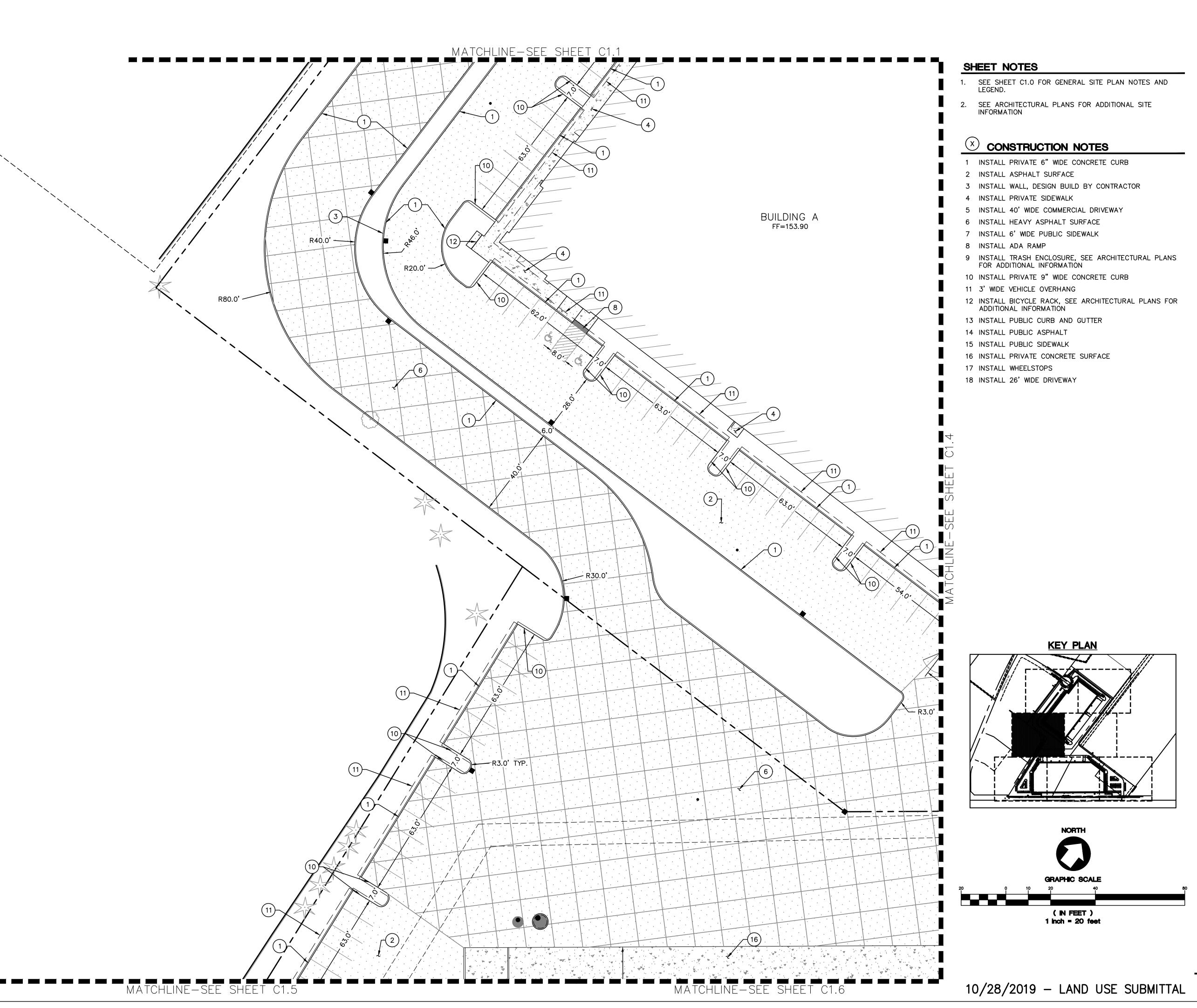
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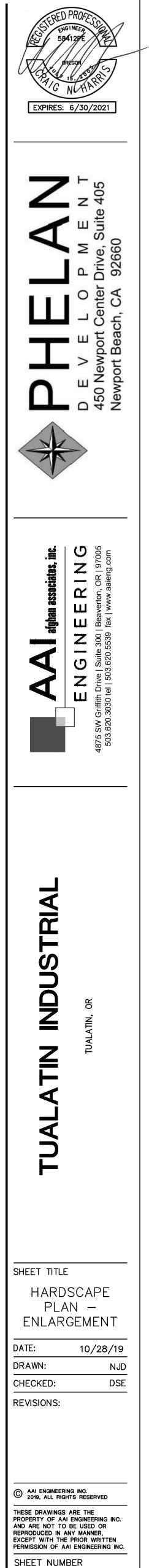




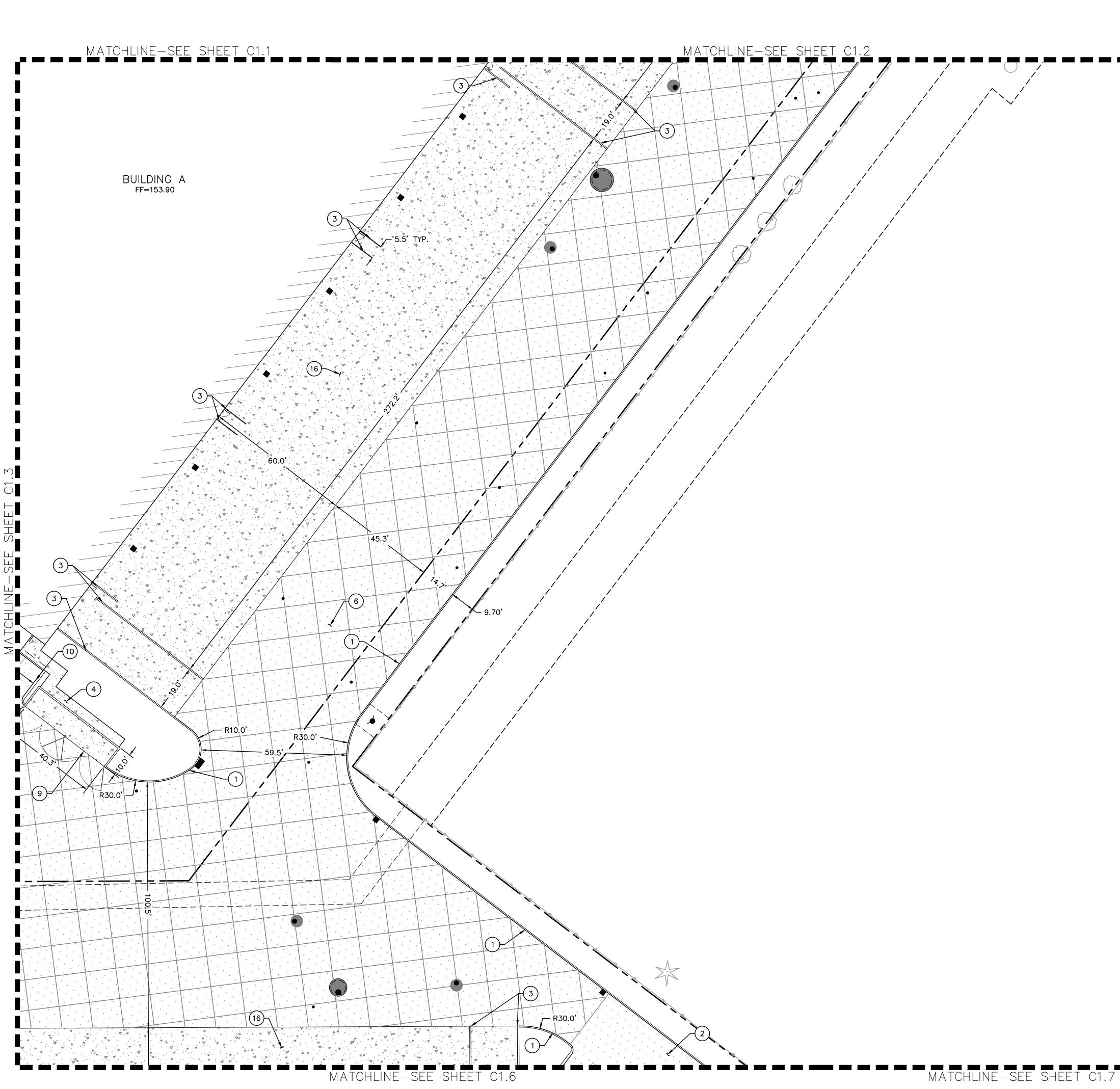
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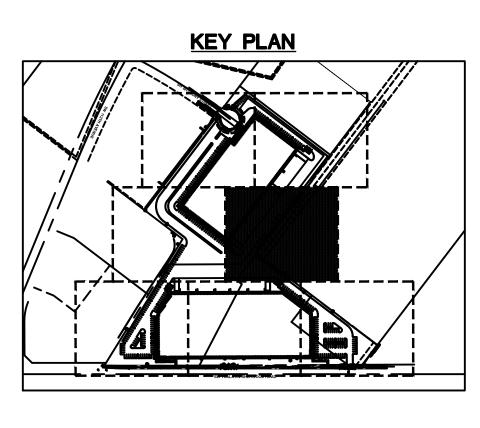


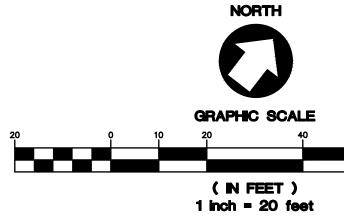


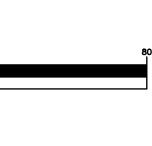
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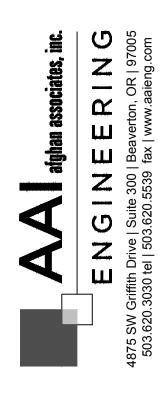
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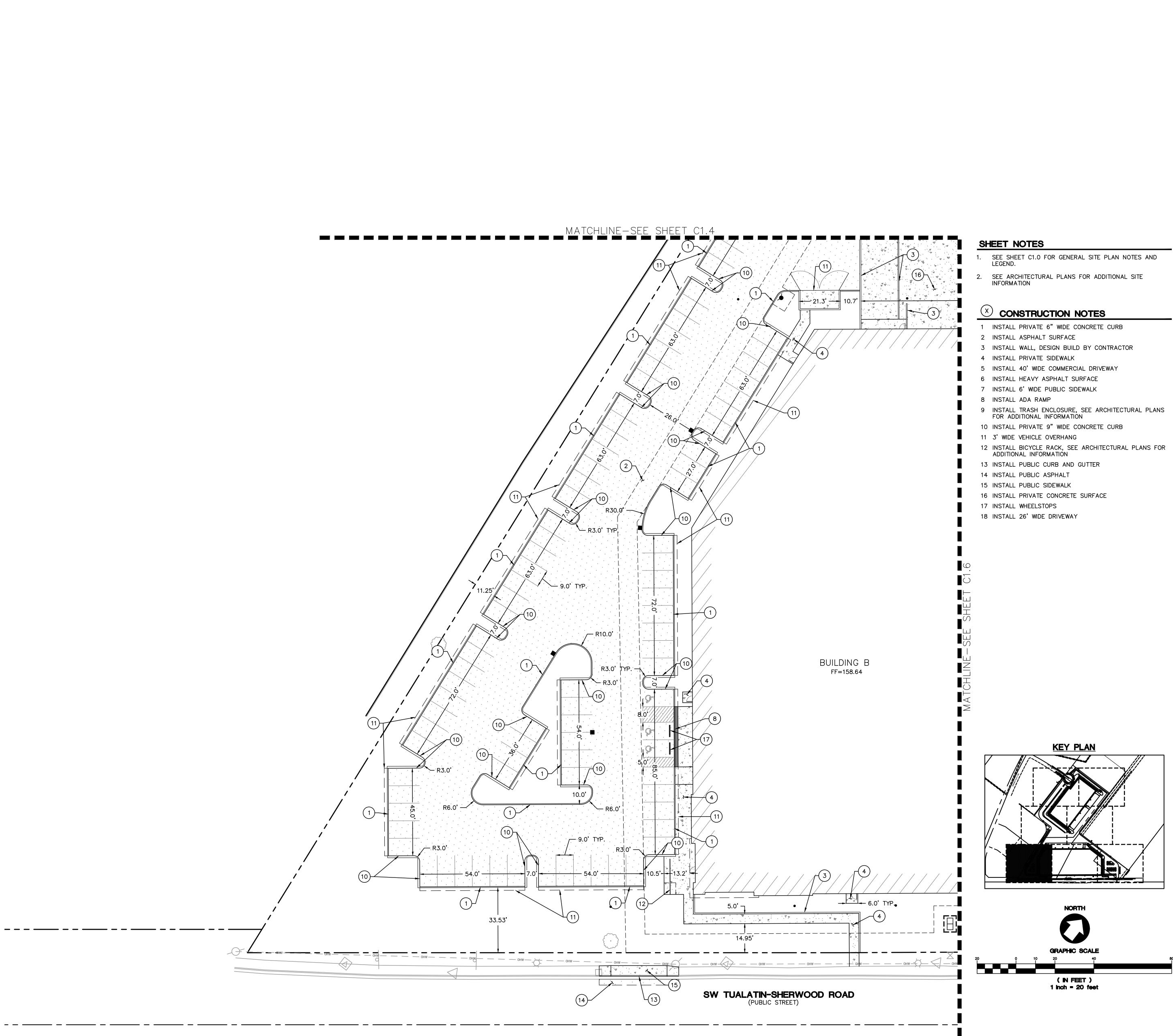
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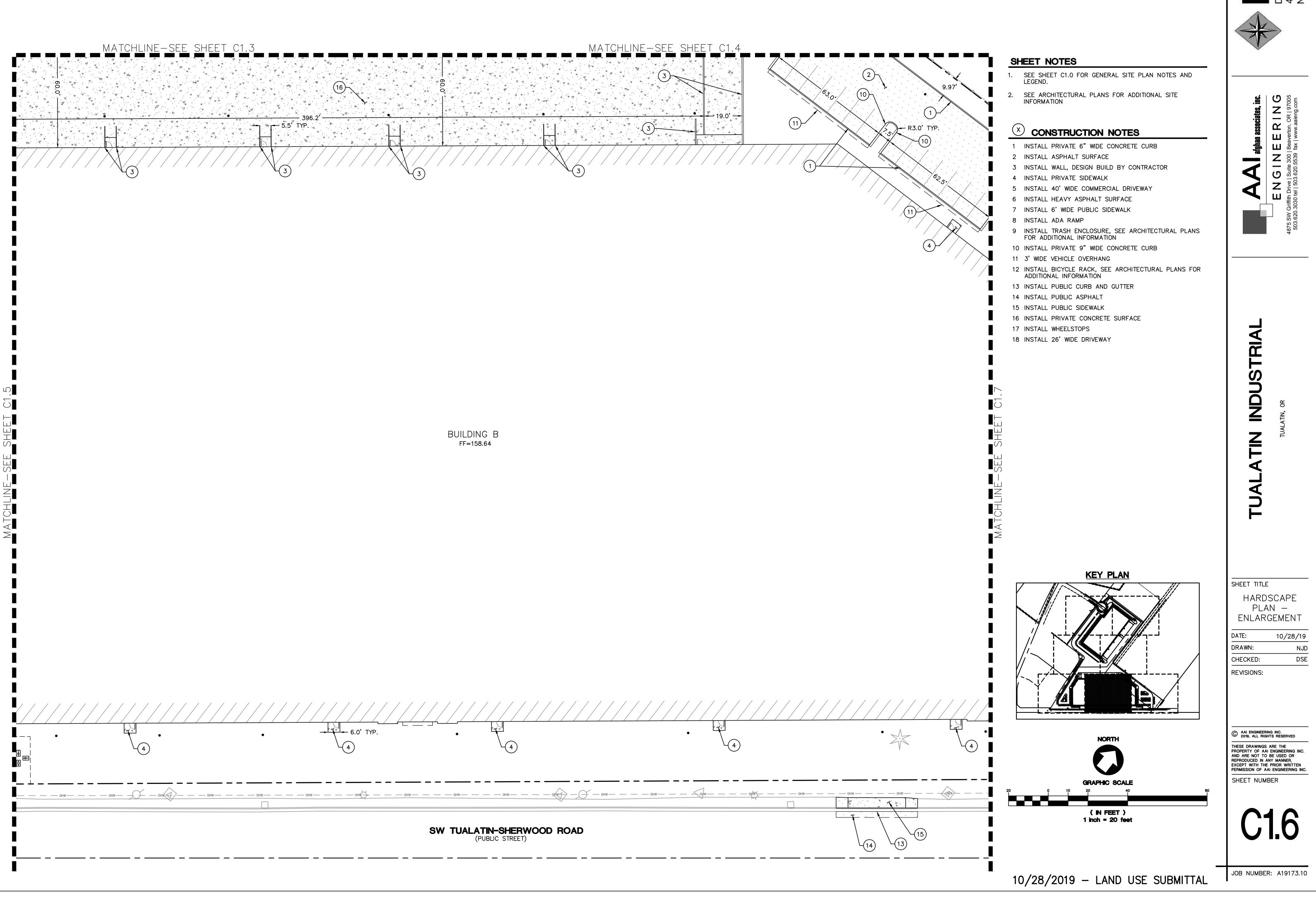


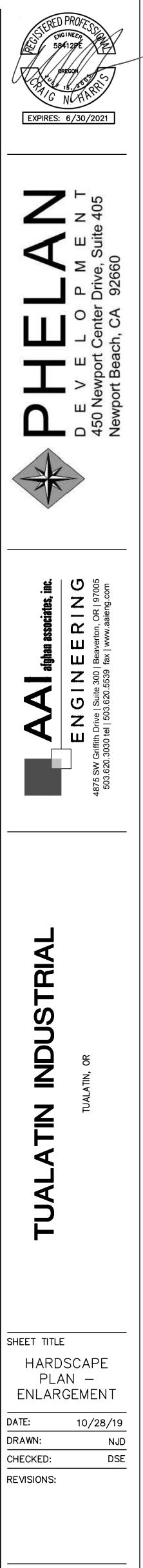
SHEET TITLE HARDSCAPE PLAN -ENLARGEMENT DATE: 10/28/19 DRAWN: NJD CHECKED: DSE **REVISIONS:**

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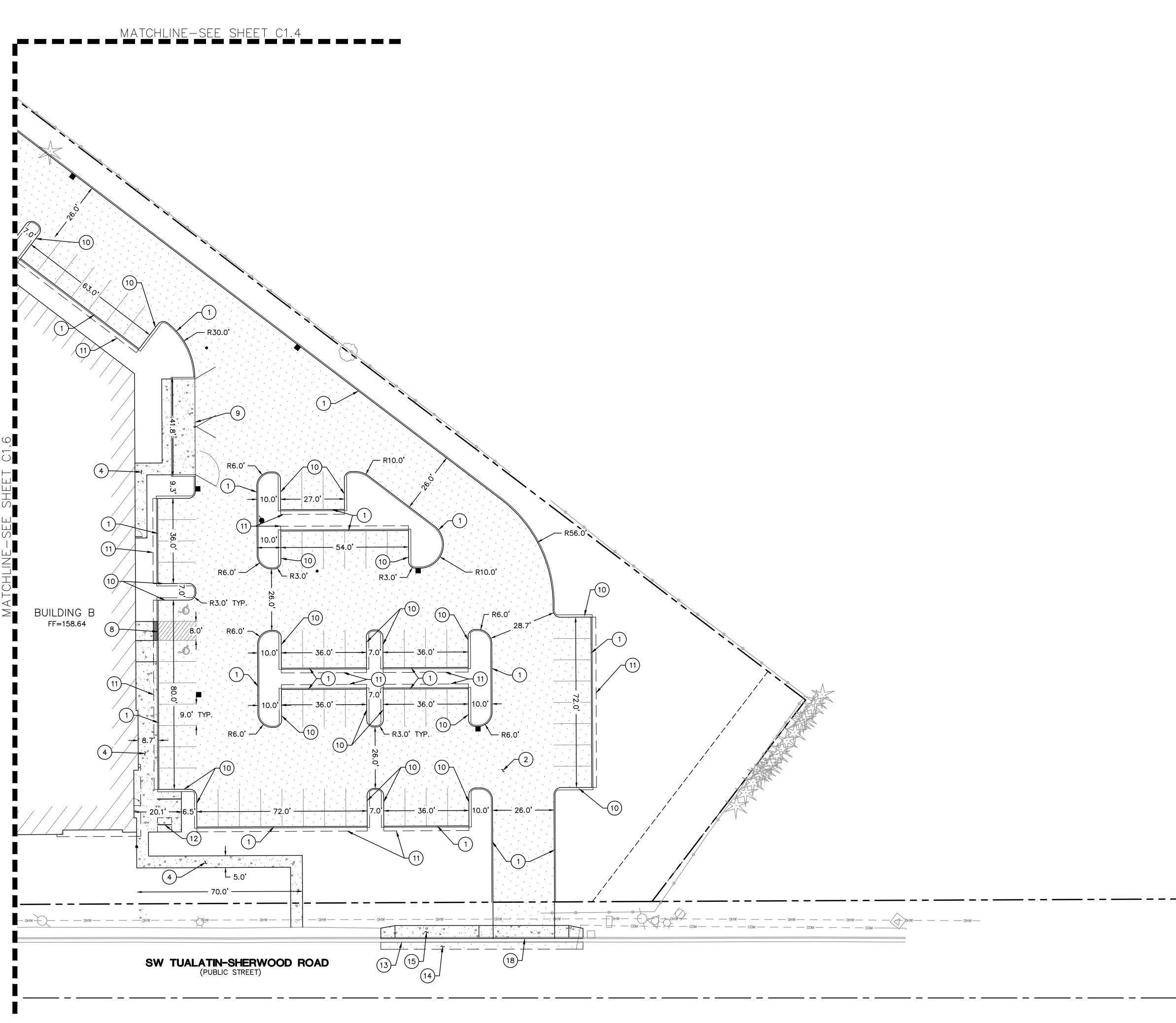
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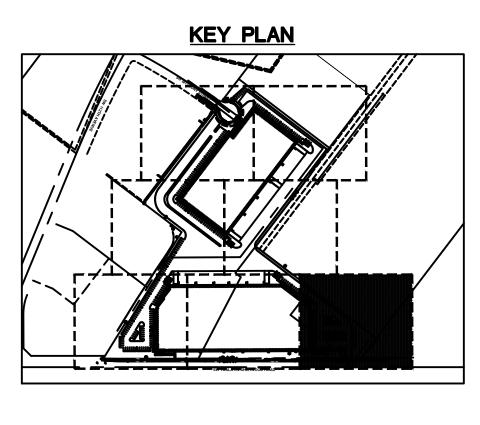


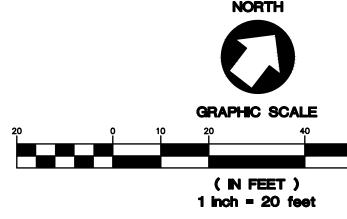


2. SEE ARCHITECTURAL PLANS FOR ADDITIONAL SITE INFORMATION

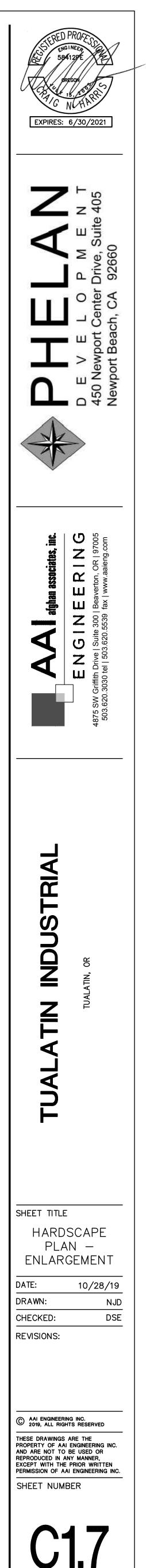
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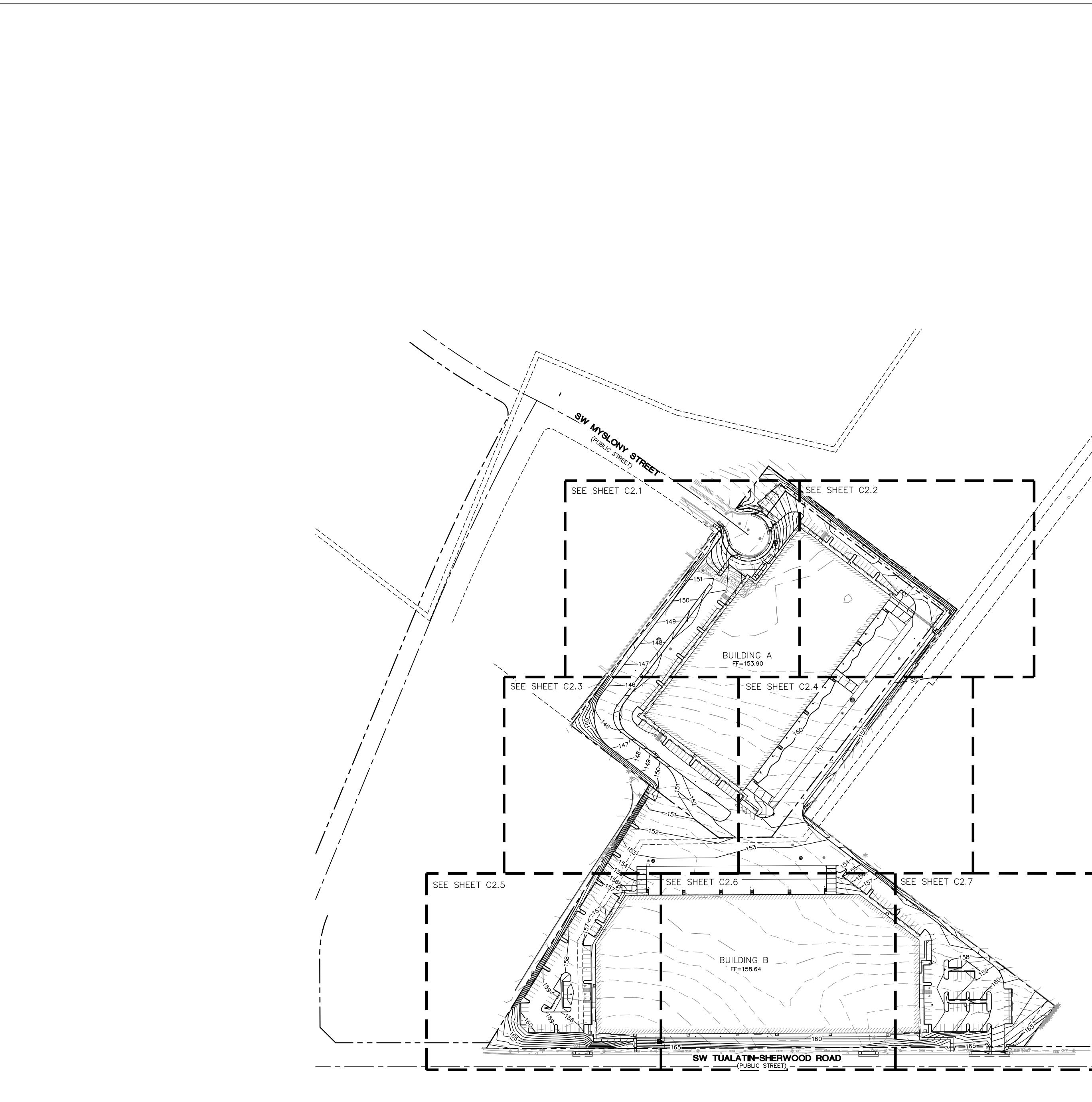
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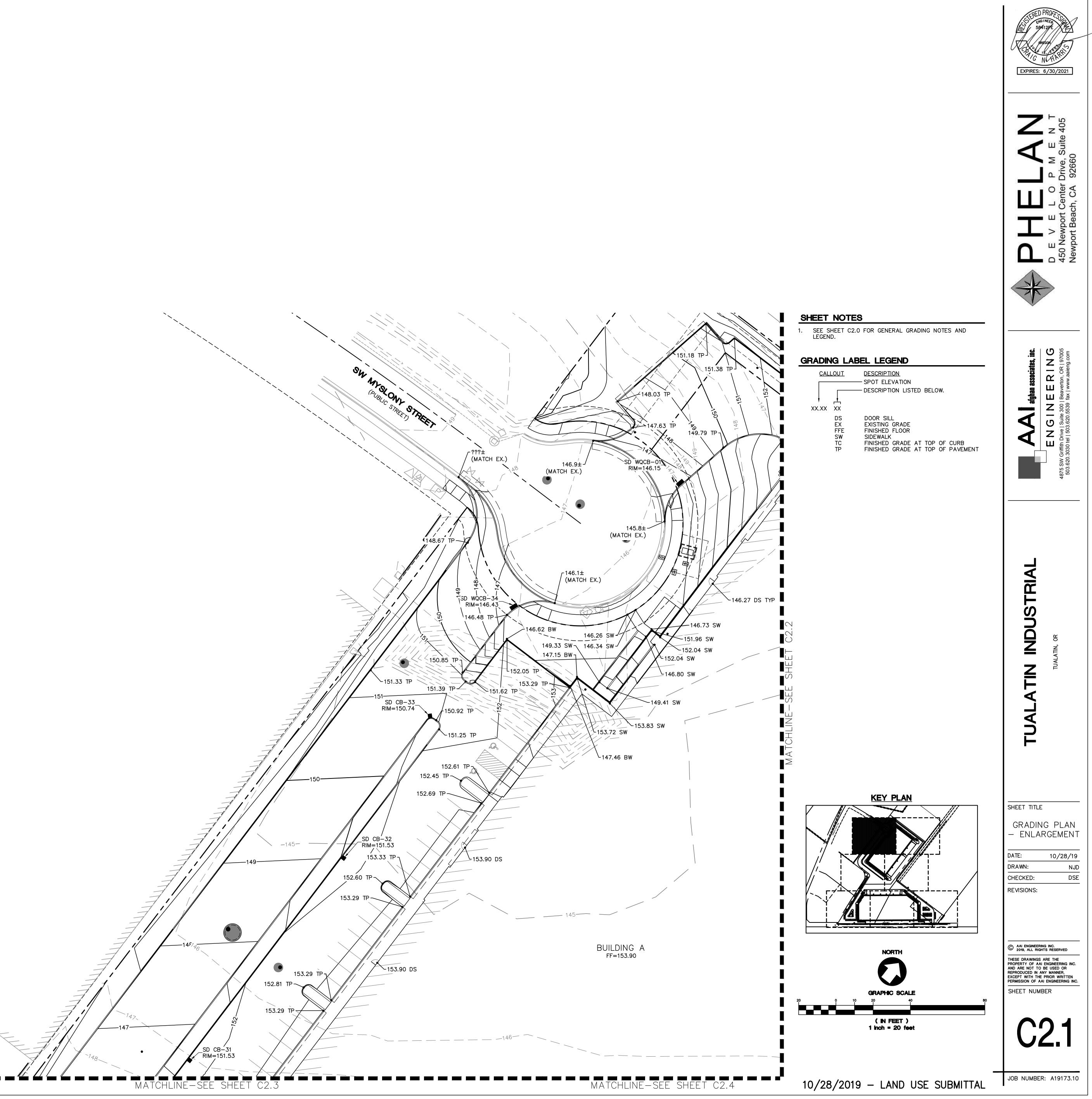
1. SEE SHEET C1.0 FOR GENERAL SITE PLAN NOTES AND LEGEND.

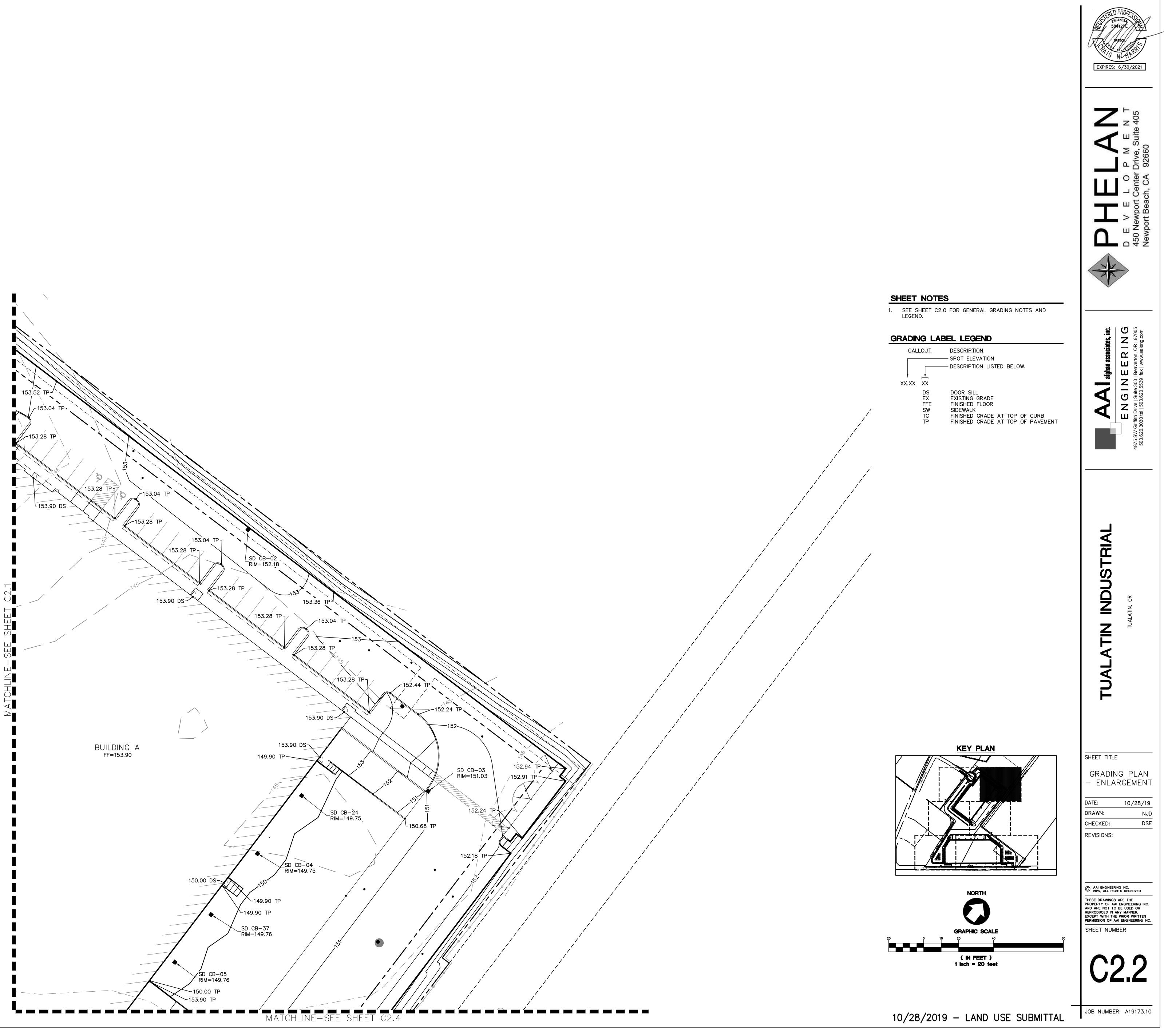




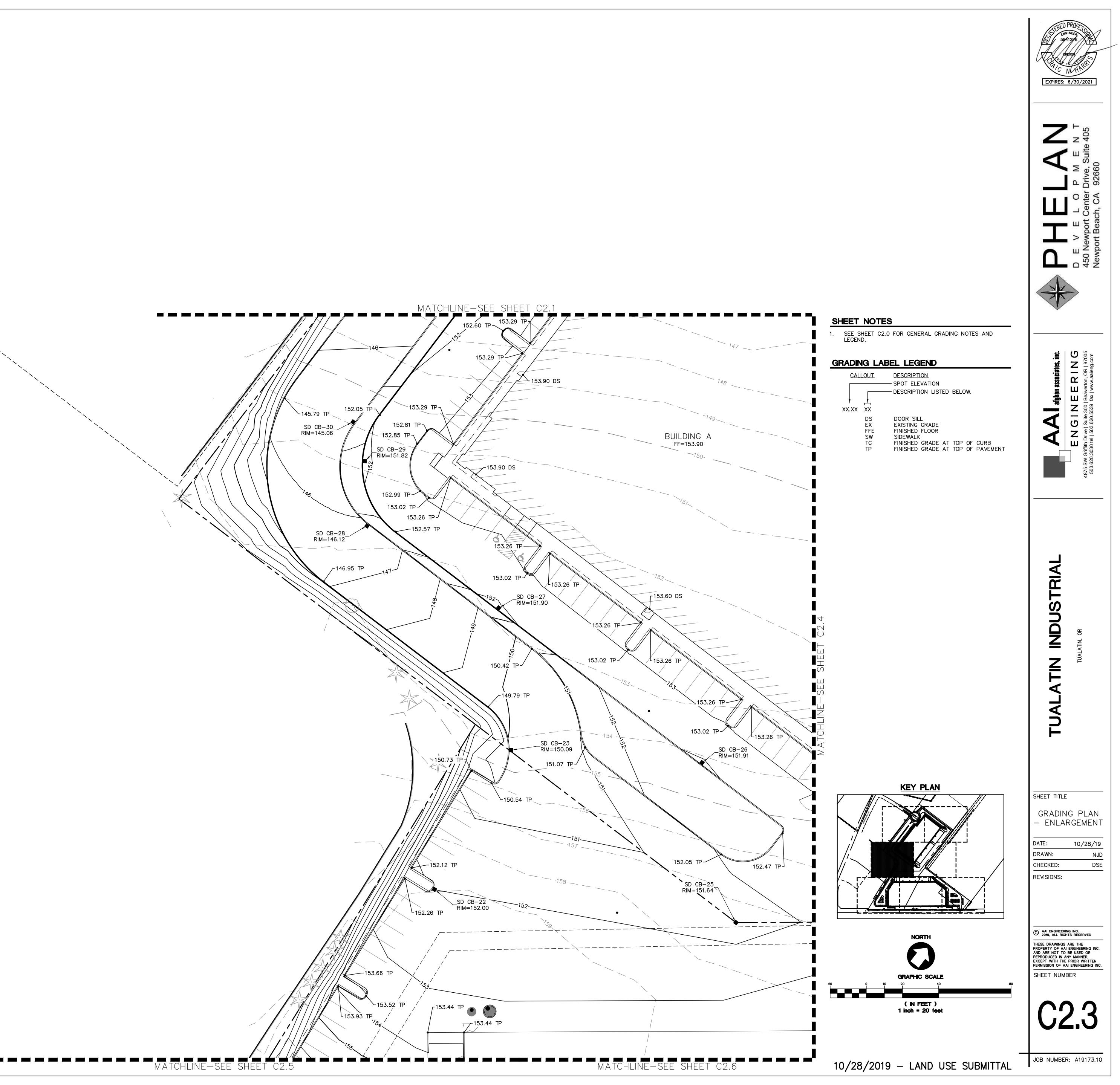


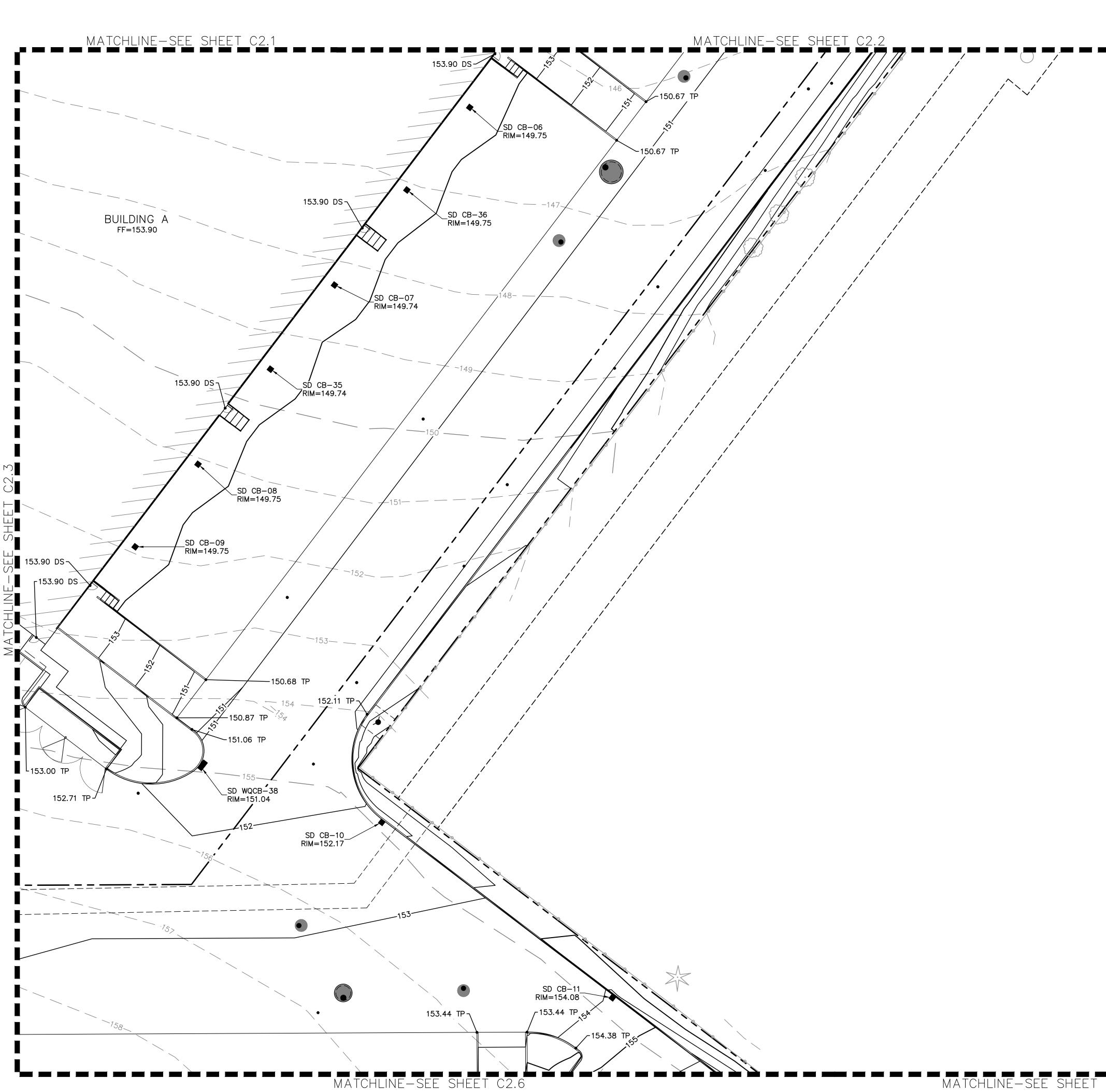
	EXPIRES: 6/30/2021
	PHELAN DEVELOPMENT 450 Newport Center Drive, Suite 405 Newport Beach, CA 92660
<list-item> SHEET NOTES SEE SHEET CO.2 FOR GENERAL SHEET NOTES. CURB HEIGHTS ARE 6" UNLESS NOTED OTHERWISE. LANDINGS ON ACCESSIBLE ROUTES SHALL NOT EXCEED 2% IN ANY DIRECTION. ALL ACCESSIBLE ROUTES SHALL COMPLY WITH CURRENT ADA ACCESSIBILITY GUIDELINES FOR BUILDING AND FACILITIES (ADAAG). ALL WALKWAYS FROM ACCESSIBLE UNITS ARE DESIGNED TO NOT REQUIRE HANDRAILS. THEREFORE, RAMPS WITH SLOPES STEEPER THAN 5.0% AND LESS THAN 8.33% SHALL NOT EXCEED 0.5' RISE OR 6.0' LENGTH. FINISH GRADES ARE TO BE BROUGHT TO WITHIN 0.08 FT IN 10 FT OF THE GRADES SHOWN AT SUBGRADE AND TO WITHIN 0.03 FT IN 10 FT AT FINISH GRADE. CONTRACTOR TO ALLOW FOR PLACEMENT OF REQUIRED TOPSOIL IN ROUGH GRADING. GRADING ELEVATIONS AS SHOWN ON SITE AND LANDSCAPE PLANS ARE FINISHED GRADE WHICH INCLUDES SUBGRADE GRADING WITH BOTH EXCAVATOR AND LANDSCAPE CONTRACTOR. </list-item>	Band aghan associates, inc. ENGINEERING 4875 SW Griffith Drive Suite 300 Beaverton, OR 97005 503.620.3030 tel 503.620.5539 fax www.aaieng.com
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RAPHIC SCALE 0 0 0 0 0 160 320 (N FEET) 1 inch = 80 feet	© AAI ENGINEERING INC. 2019, ALL RIGHTS RESERVED THESE DRAWINGS ARE THE PROPERTY OF AAI ENGINEERING INC. AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF AAI ENGINEERING INC. SHEET NUMBER
– 10/28/2019 – LAND USE SUBMITTAL	JOB NUMBER: A19173.10



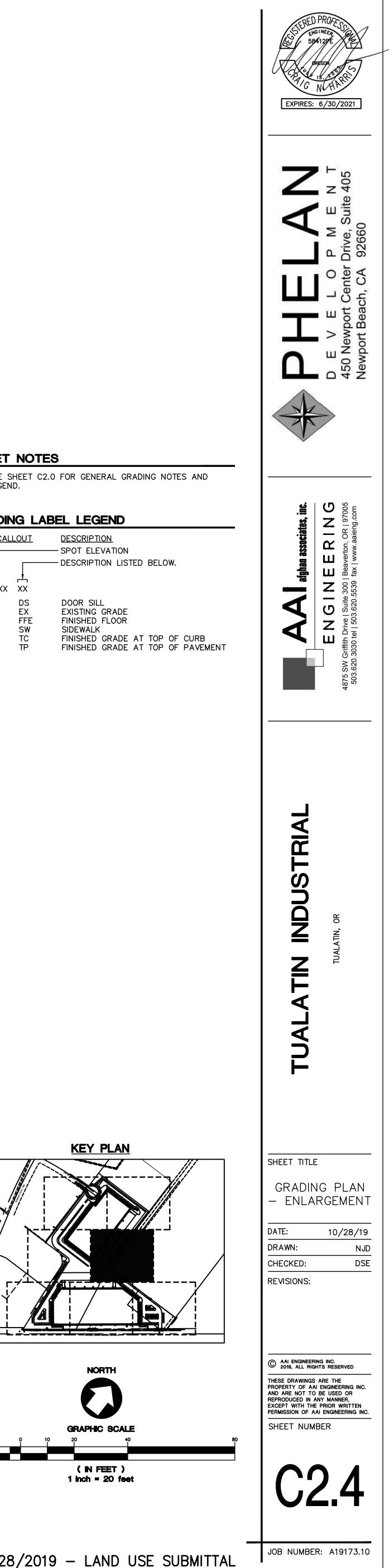


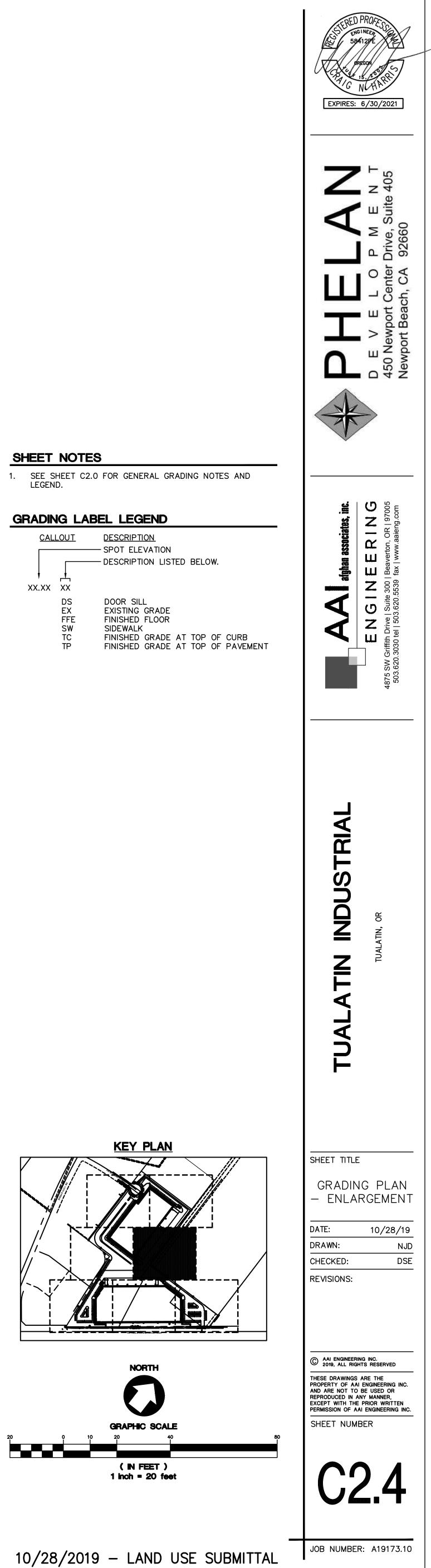


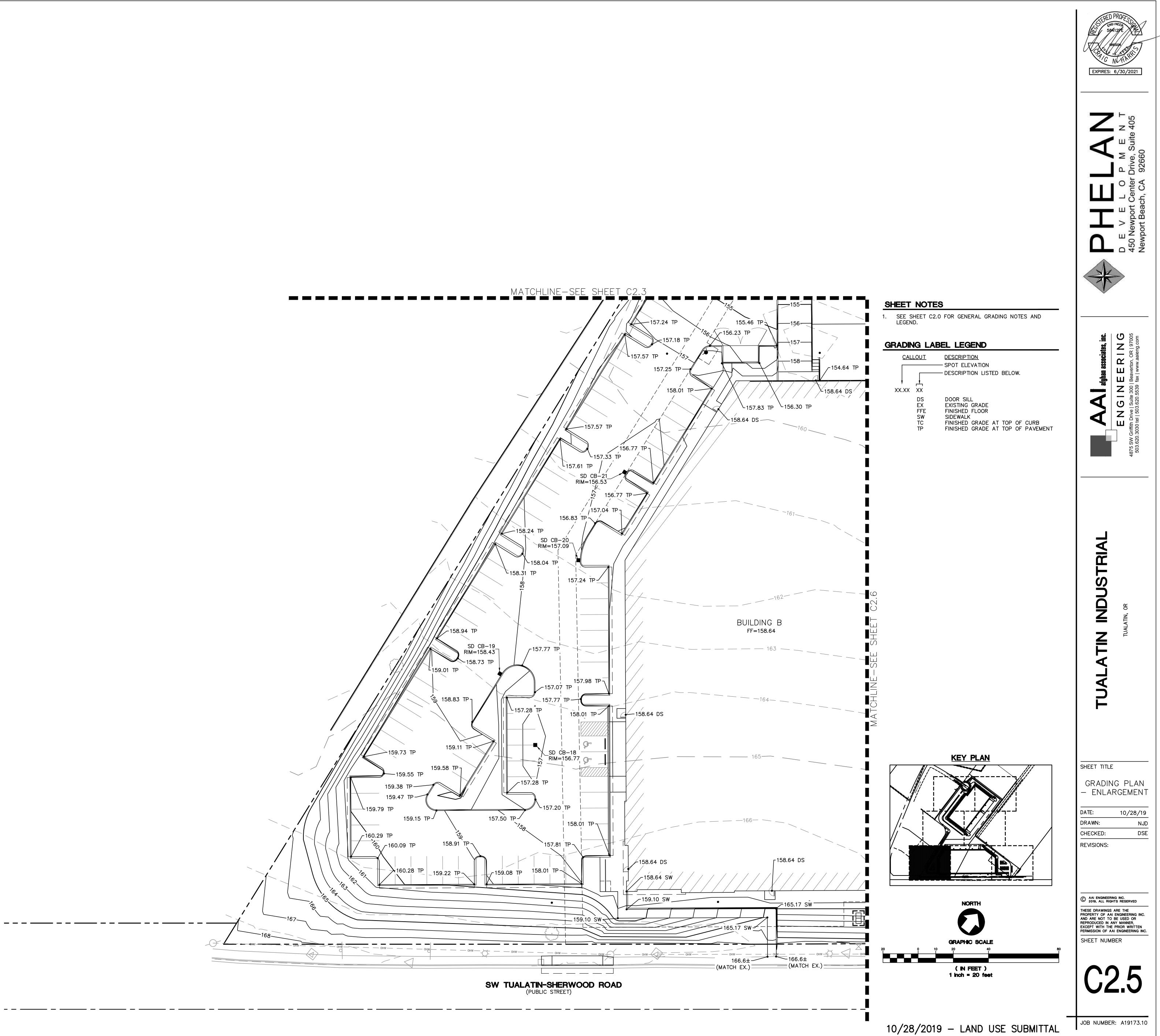


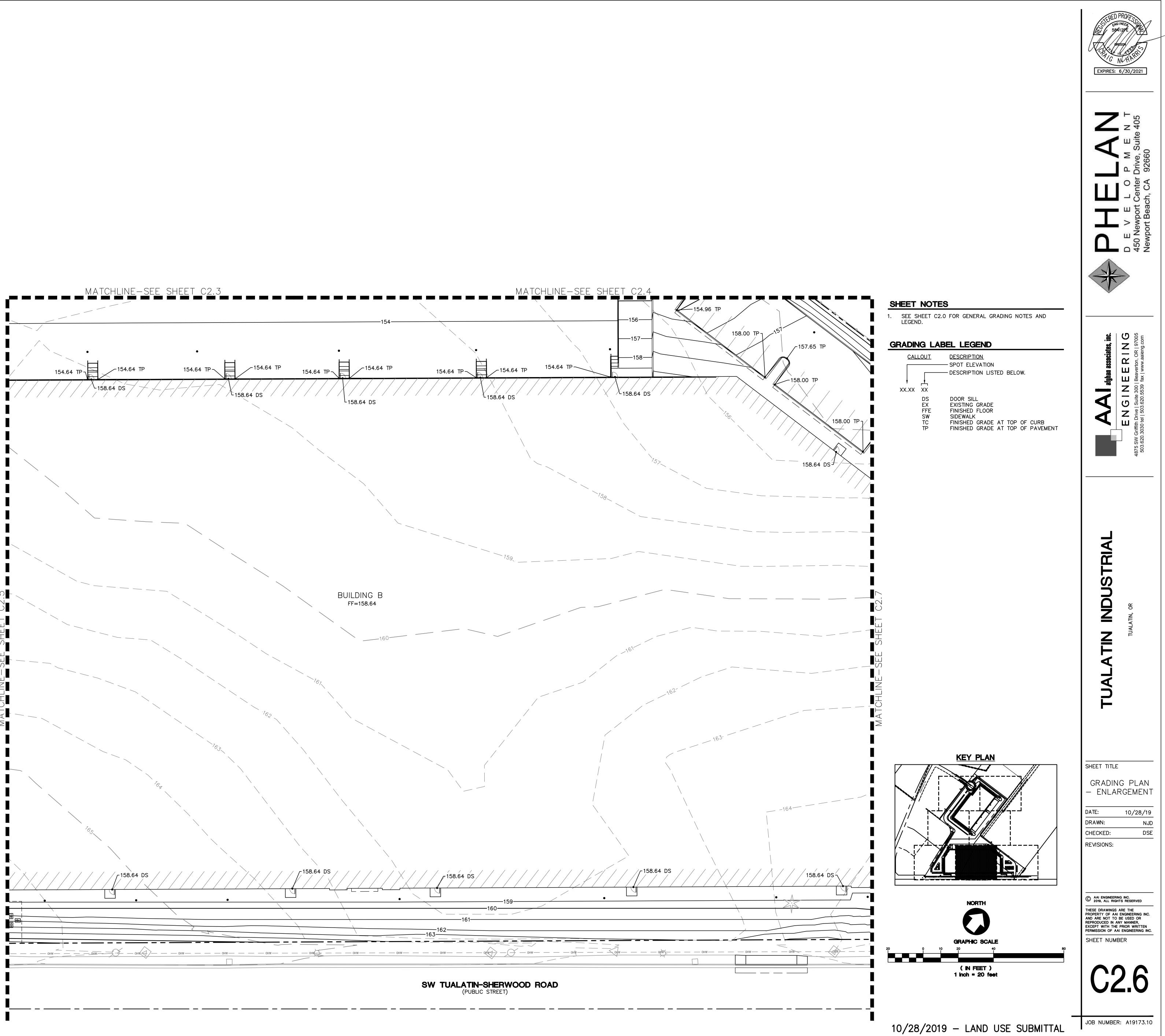


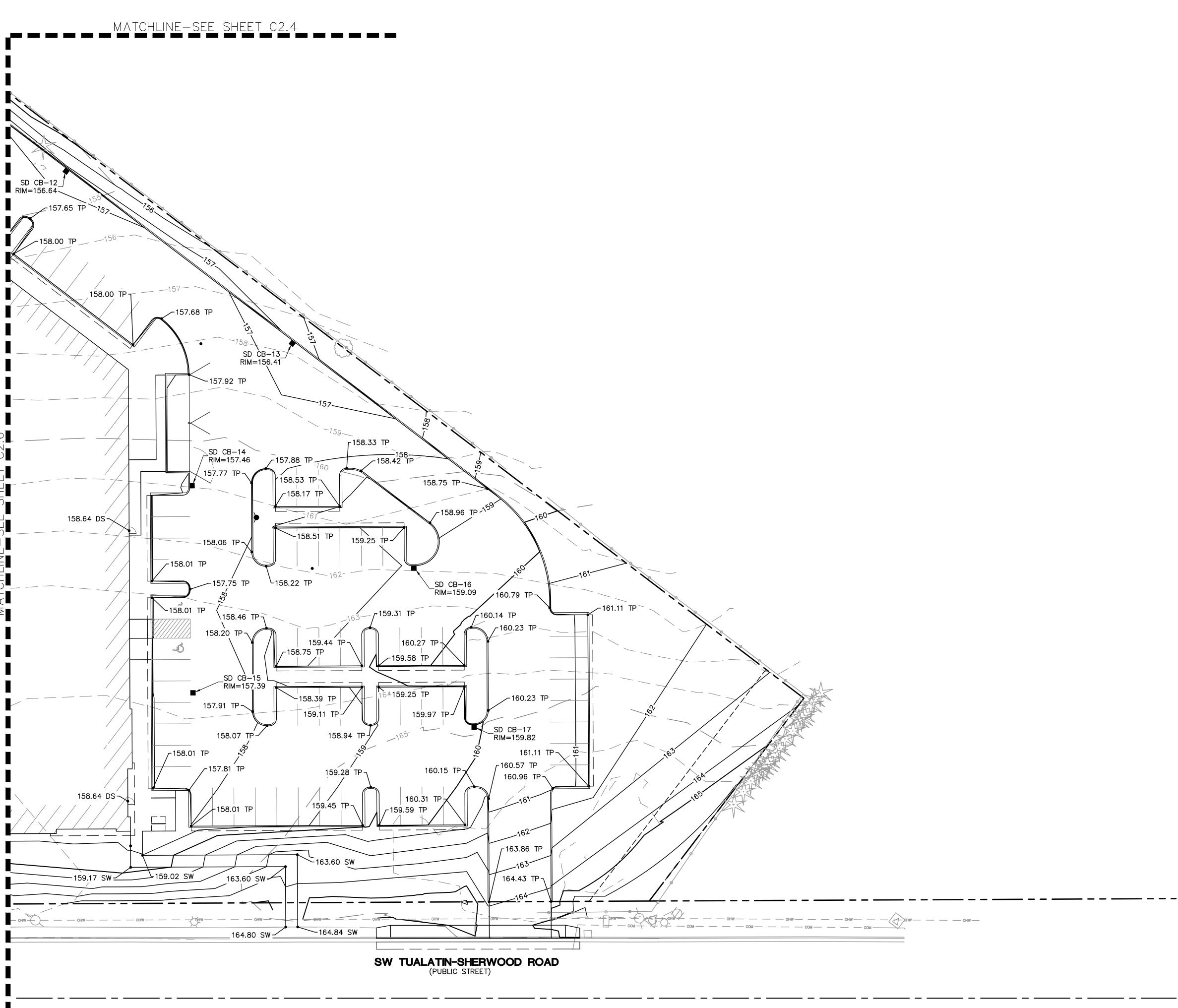
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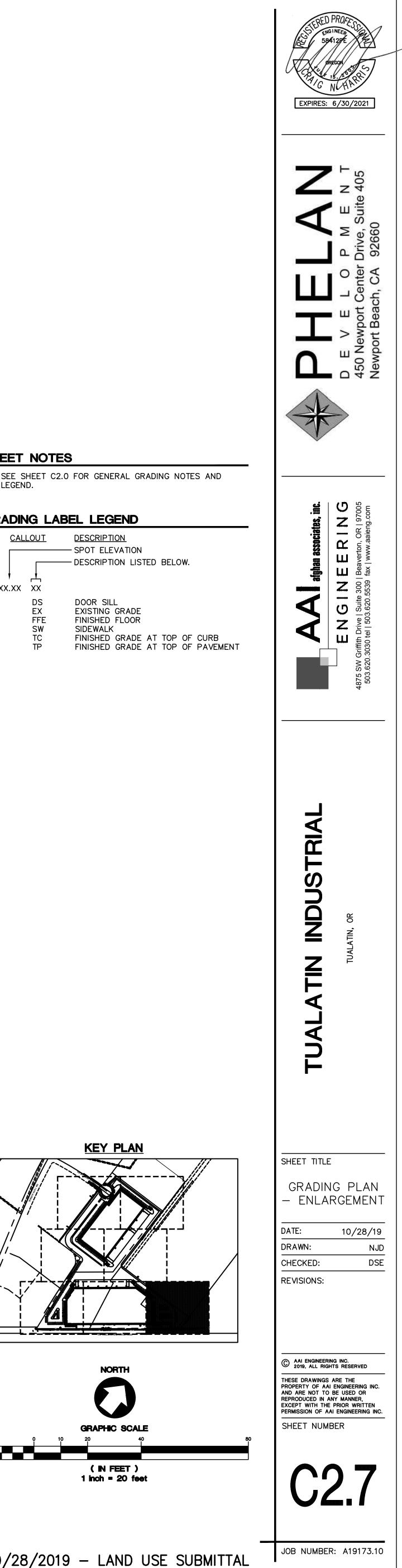


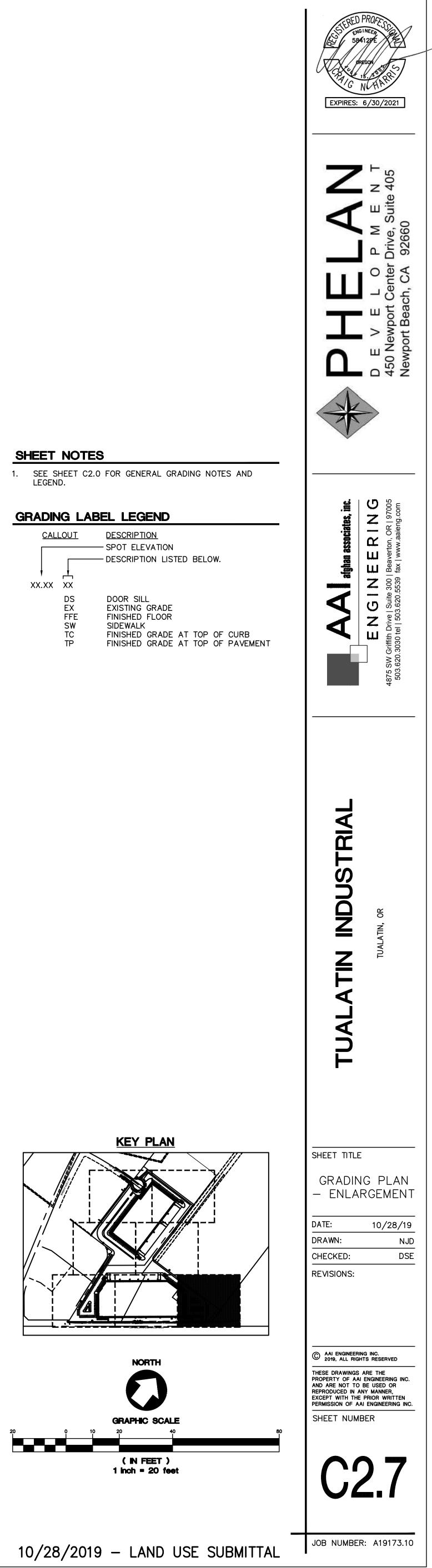


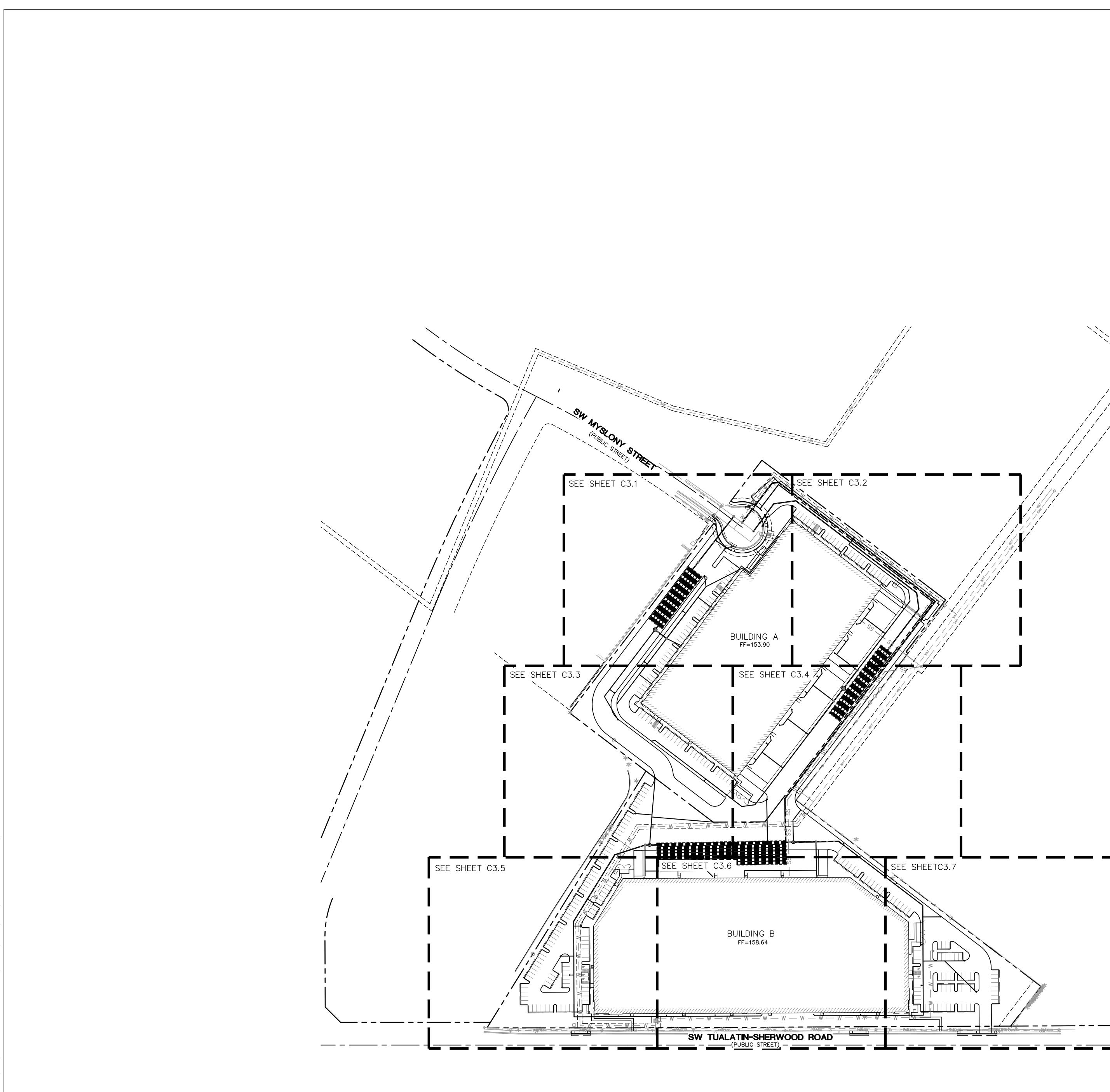




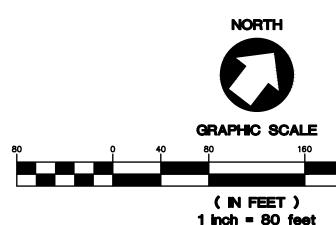


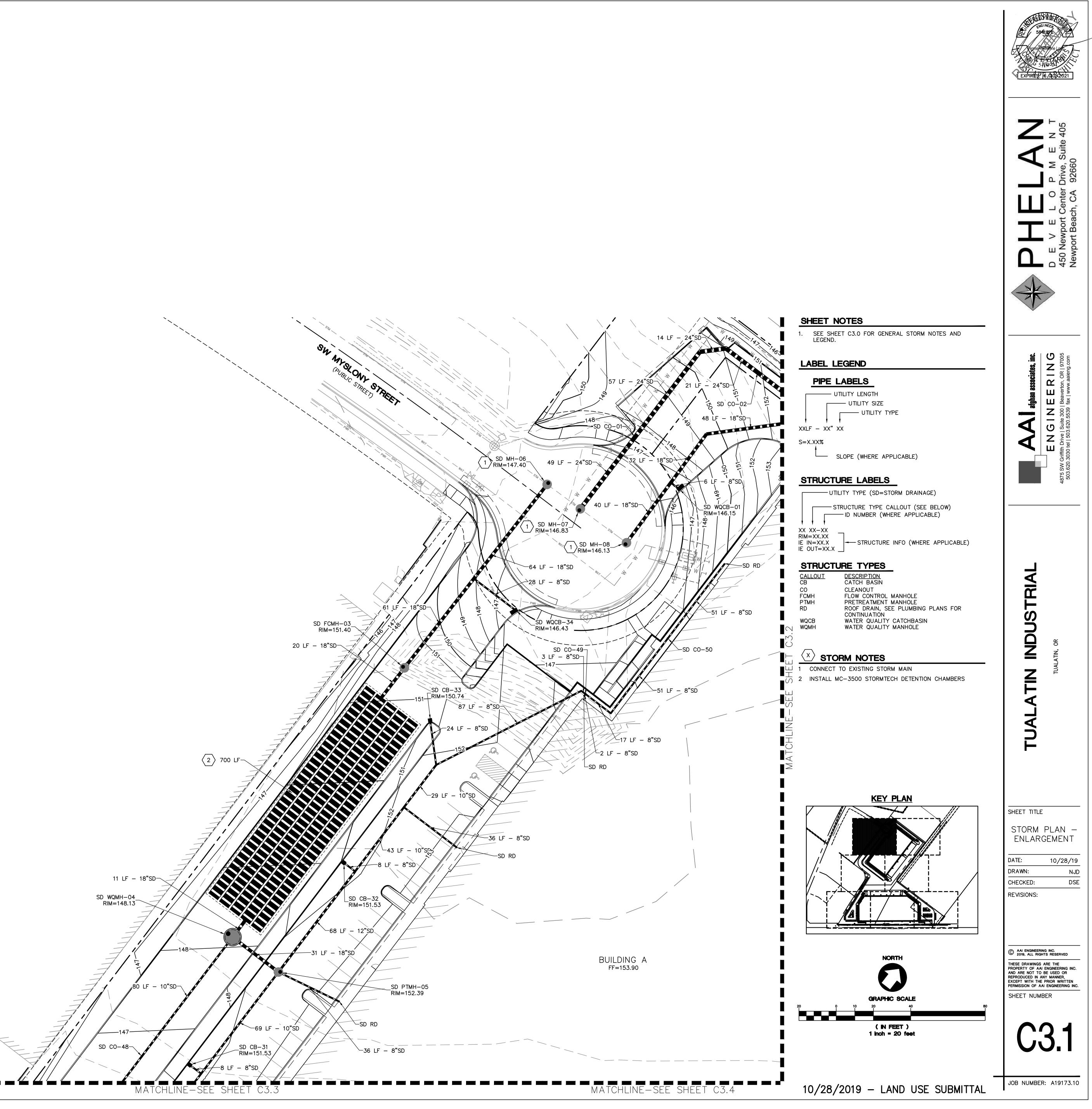


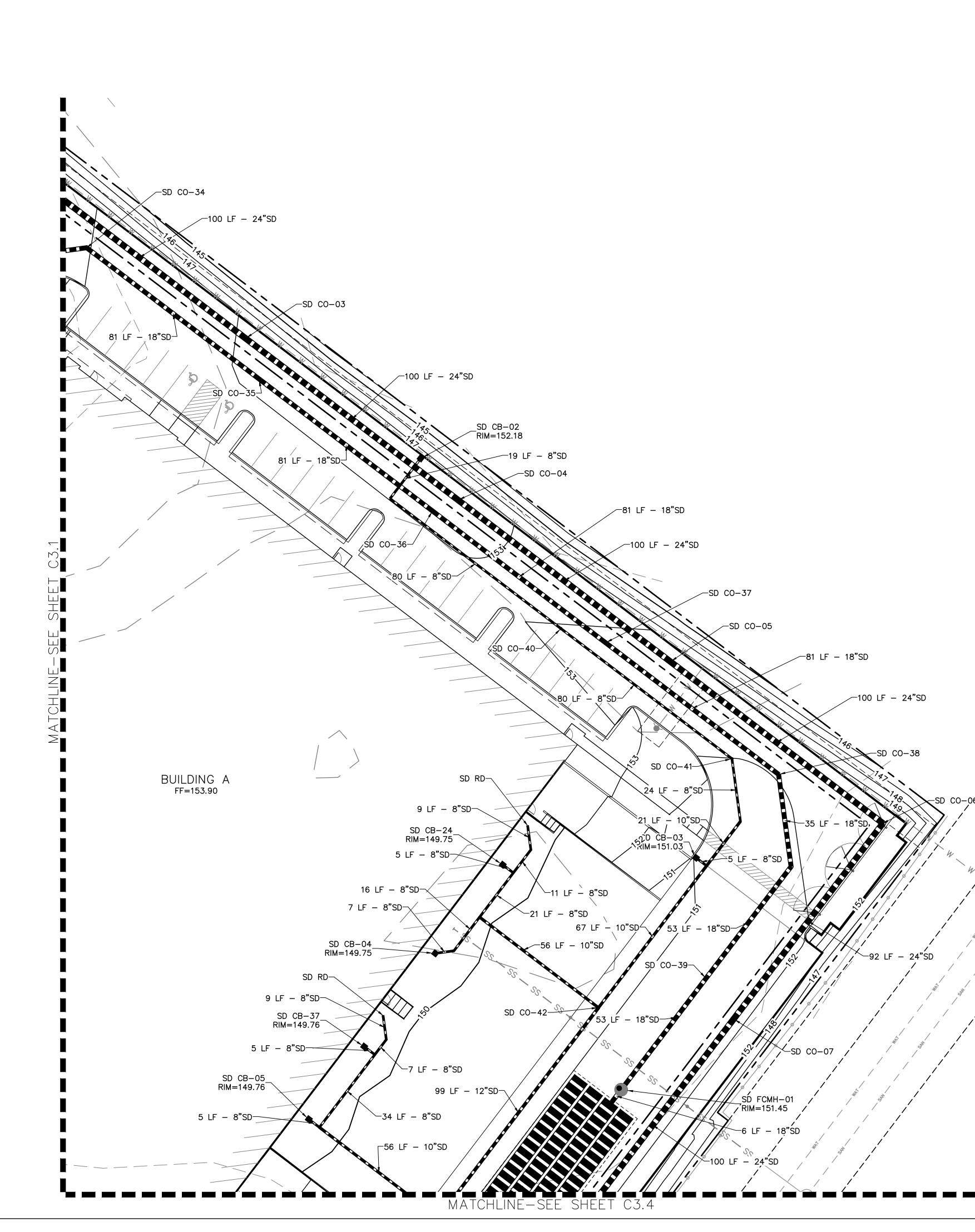


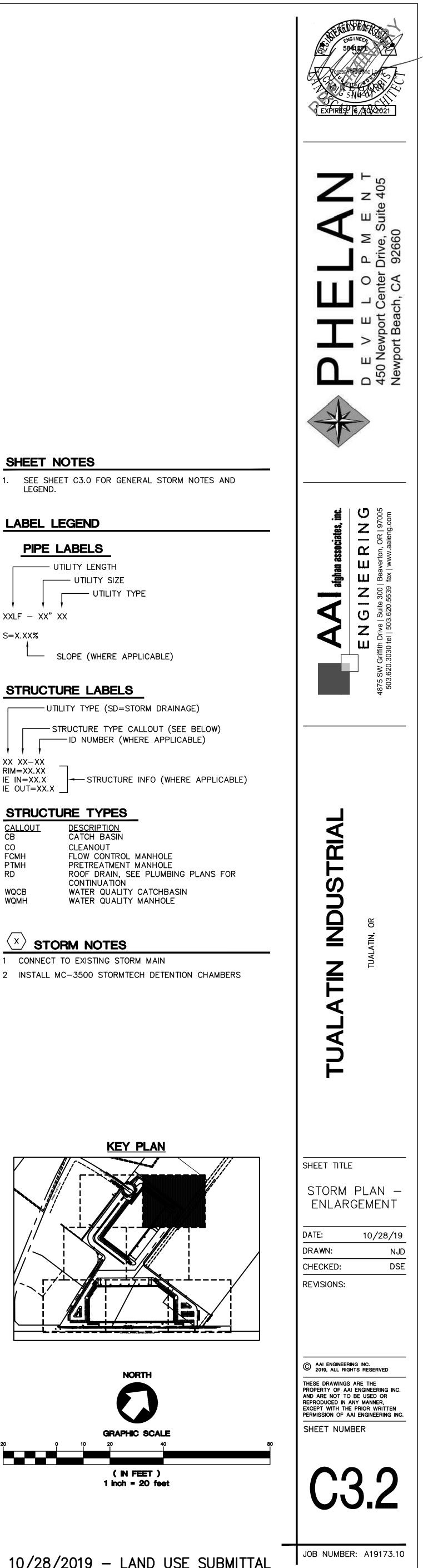


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NORTH GRAPHIC SCALE 0 40 80 160 320 (N FEET) 1 inch = 80 feet	☑ AAI ENGINEERING INC. 2019, ALL RIGHTS RESERVEDTHESE DRAWINGS ARE THE PROPERTY OF AAI ENGINEERING INC. AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF AAI ENGINEERING INC.SHEET NUMBERGG33.0GG33.0GG33.0
– 10/28/2019 – LAND USE SUBMITTAL	JOB NUMBER: A19173.10



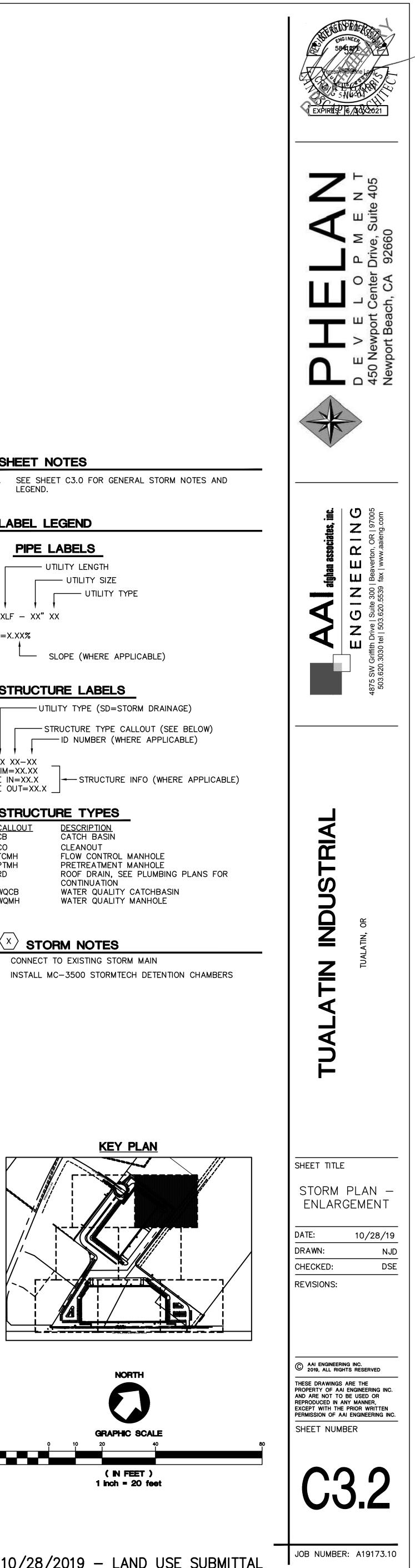


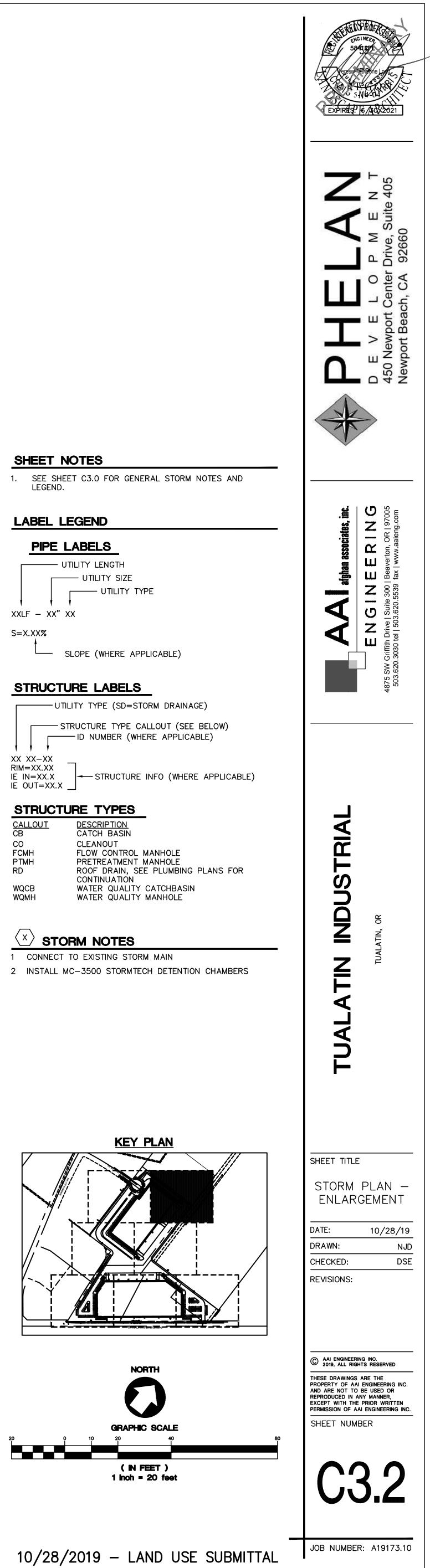


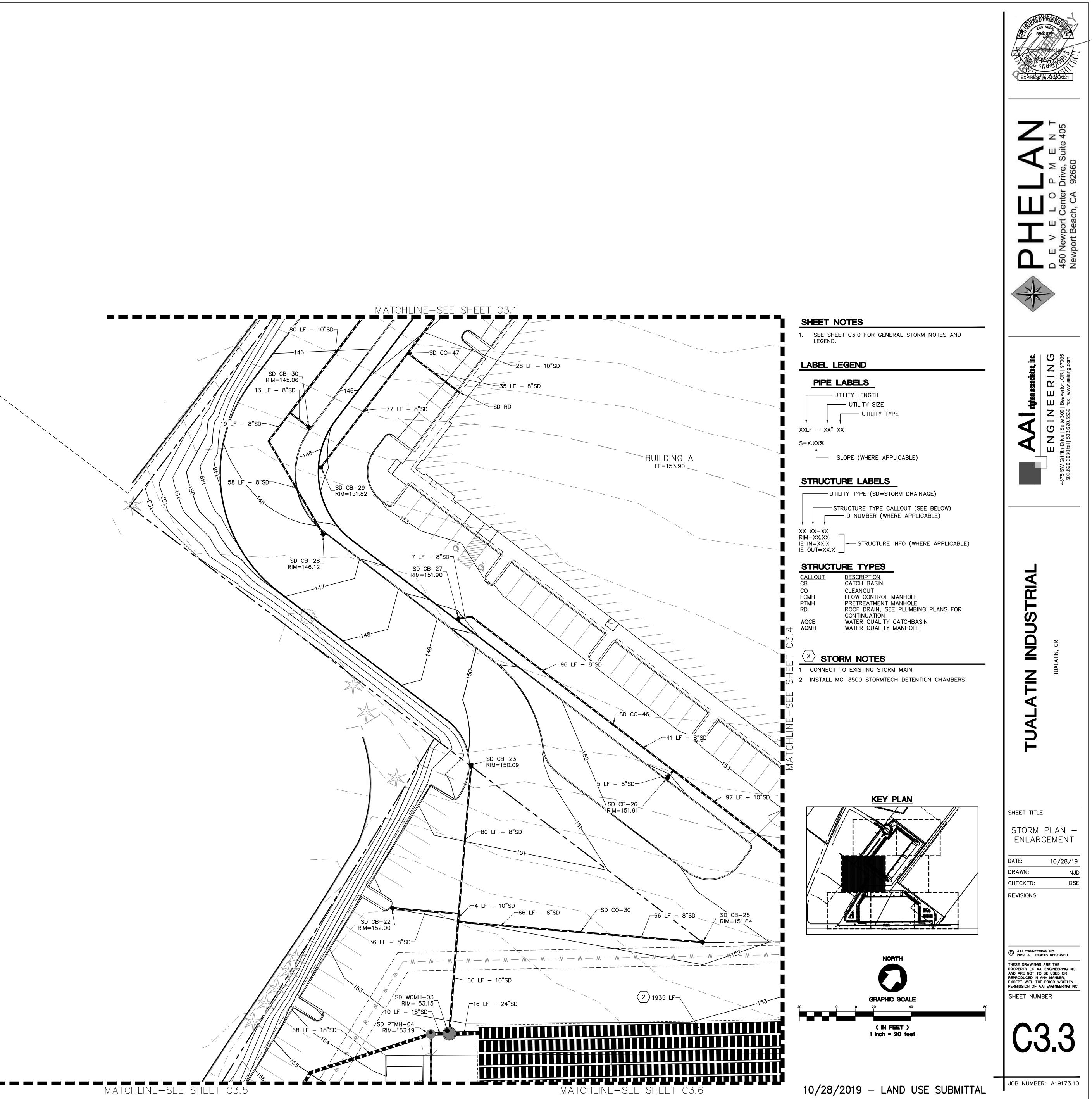


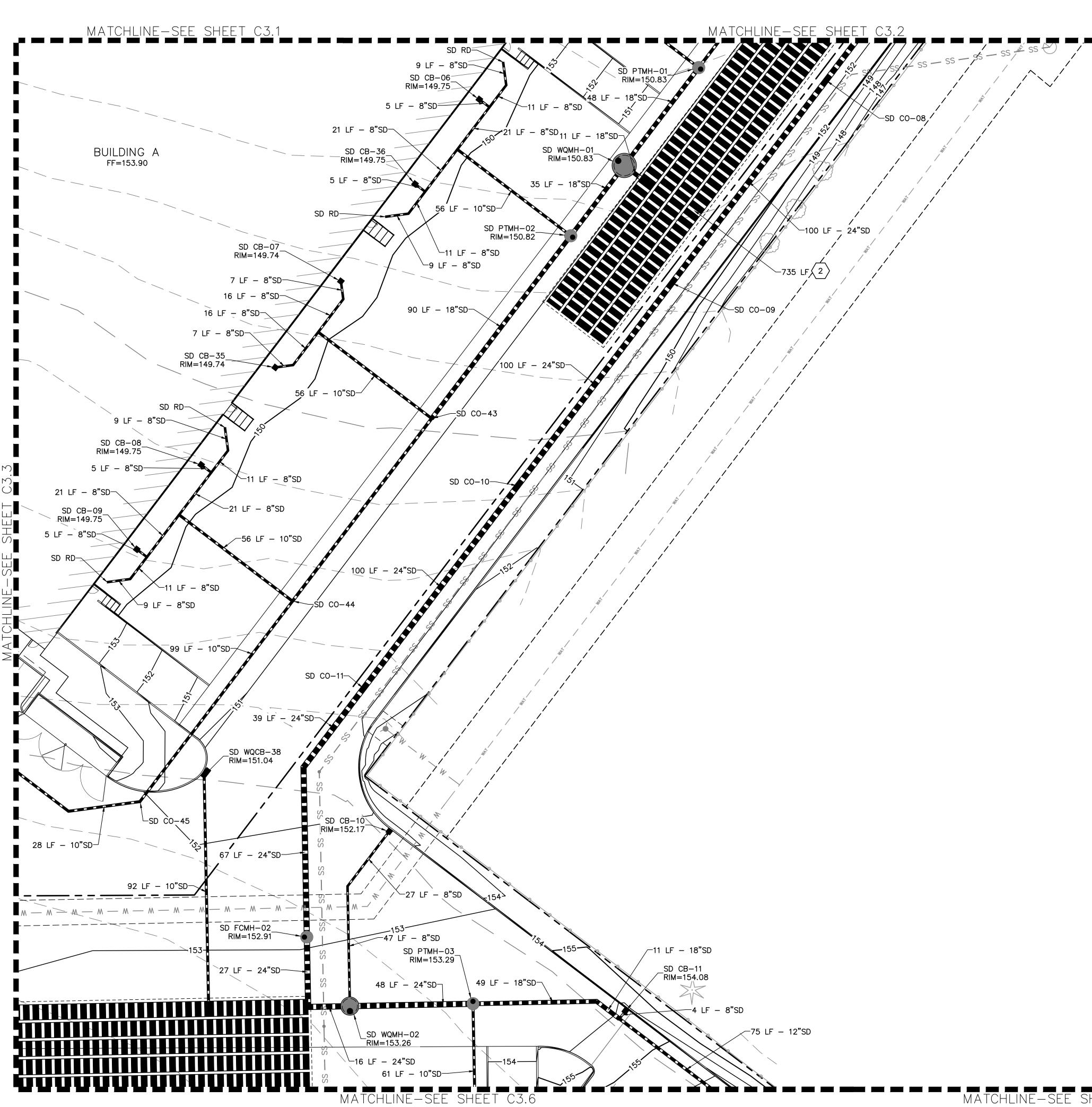
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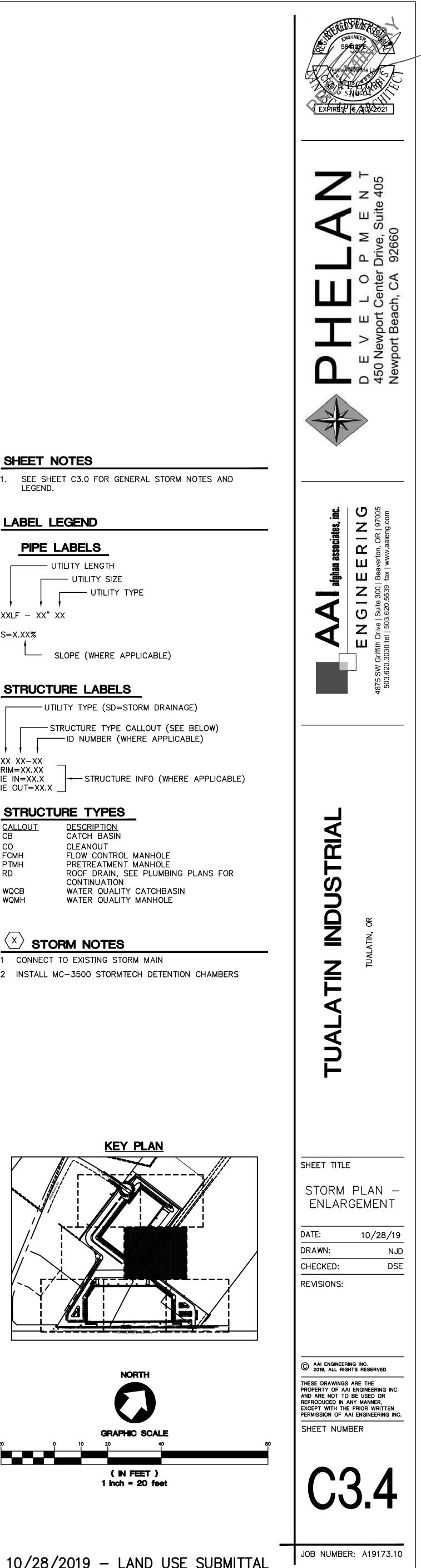
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FCMH	FLOW CONTROL MANHOLE
РТМН	PRETREATMENT MANHOLE
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	CONTINUATION
WQCB	WATER QUALITY CATCHBASIN



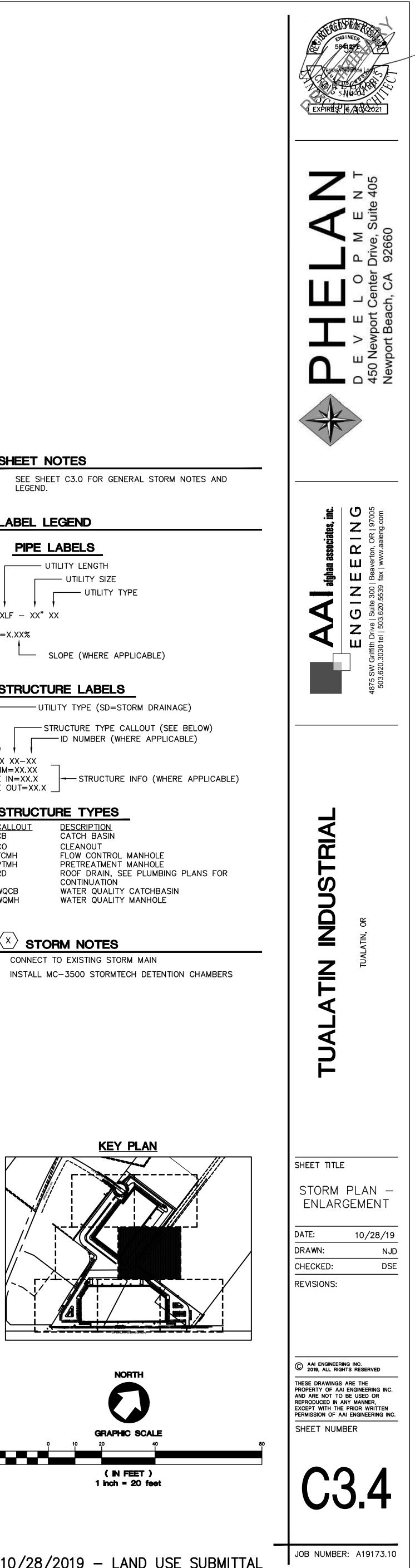


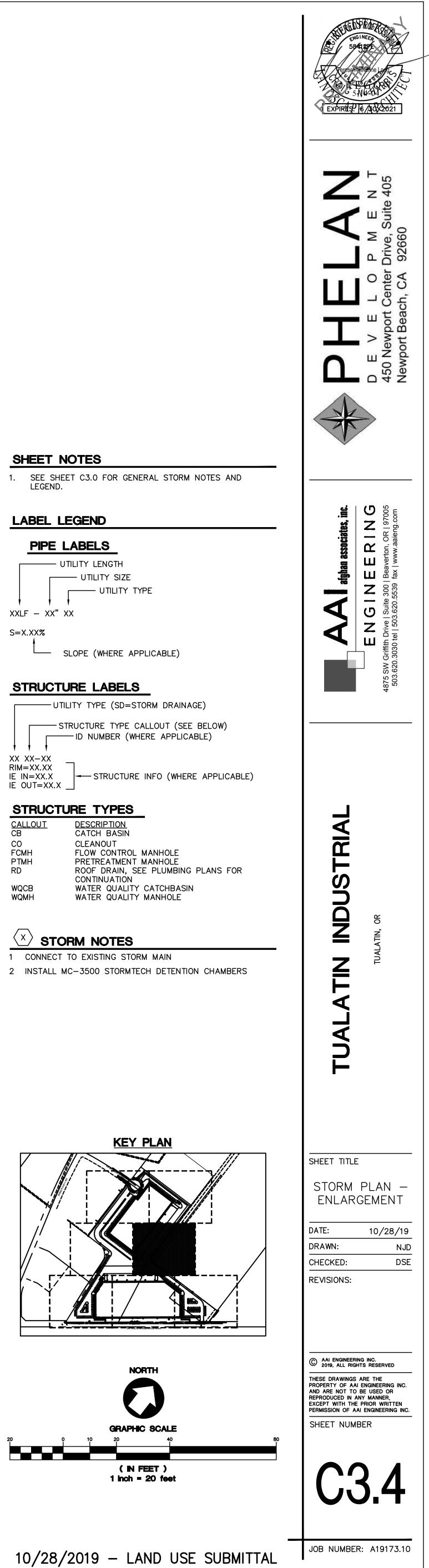


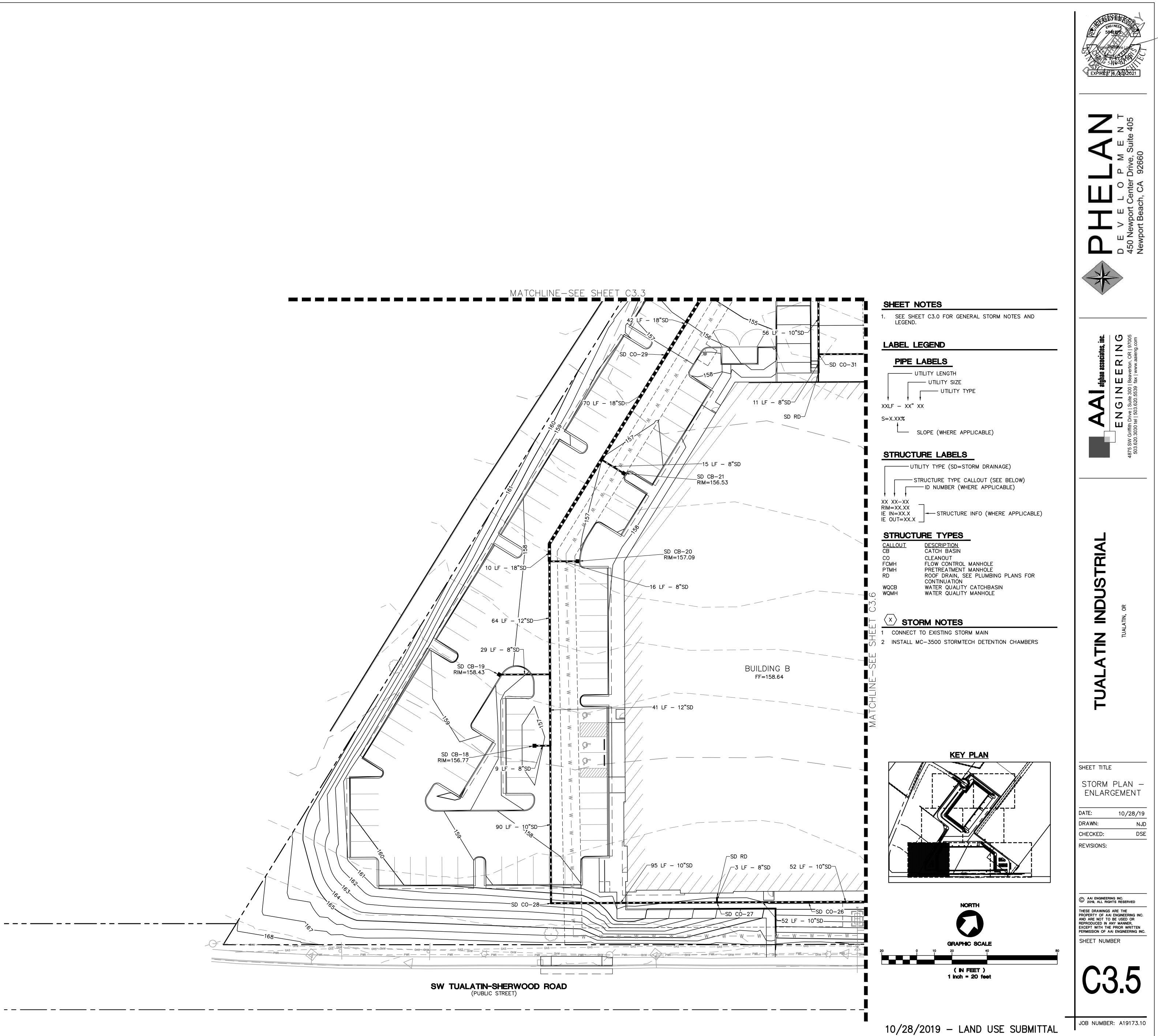


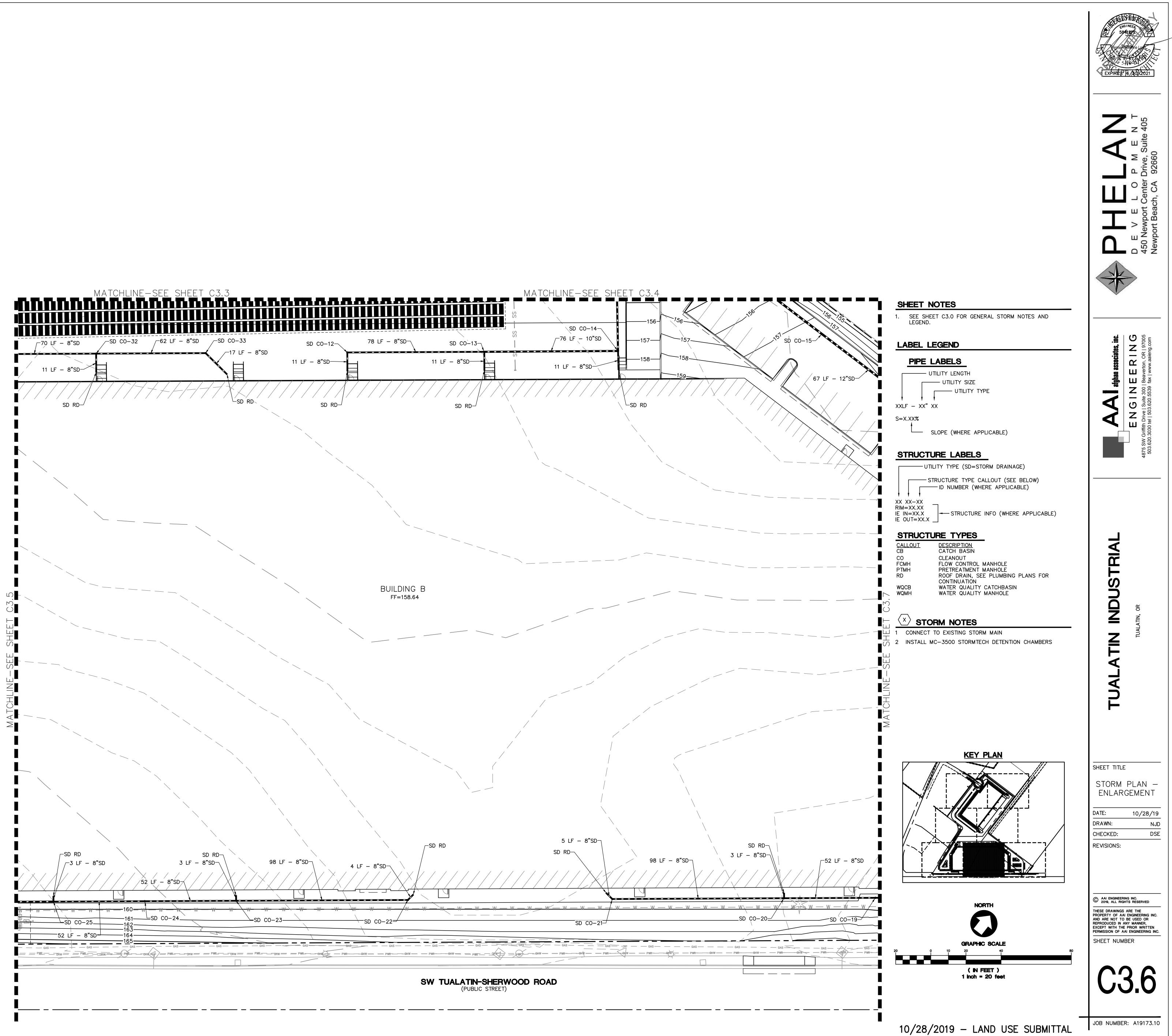


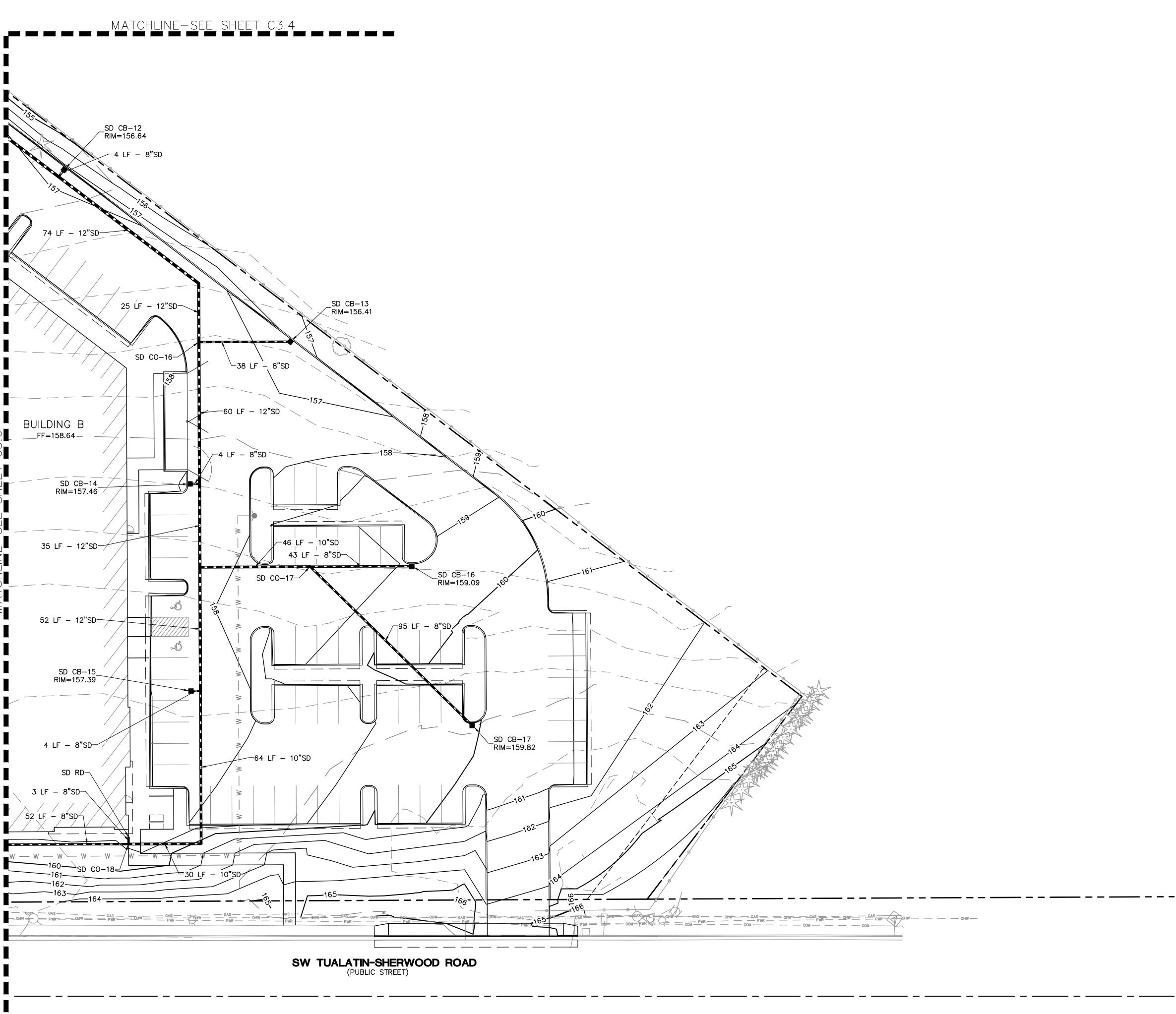
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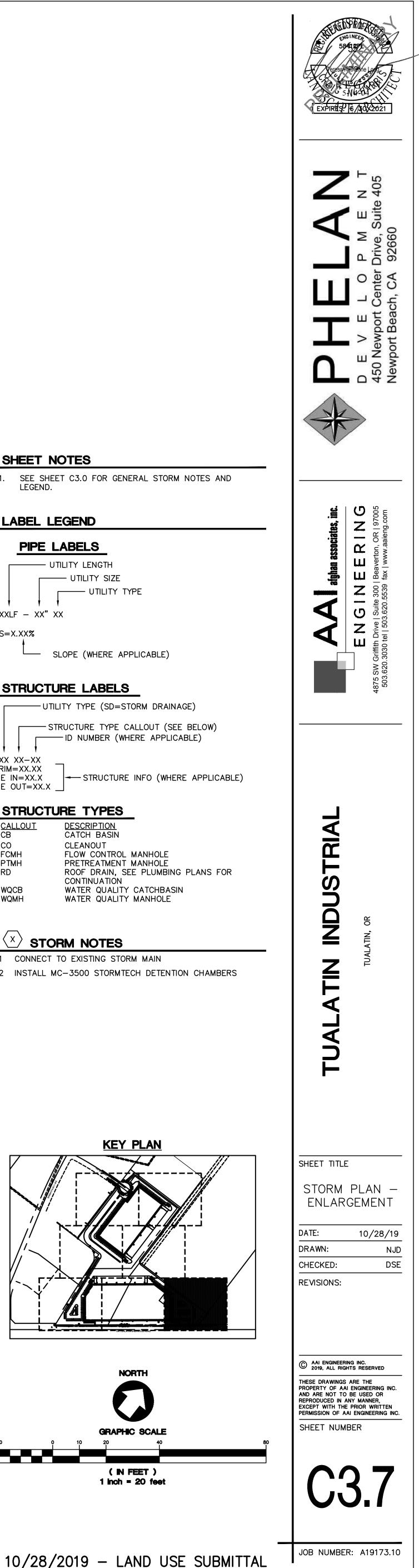




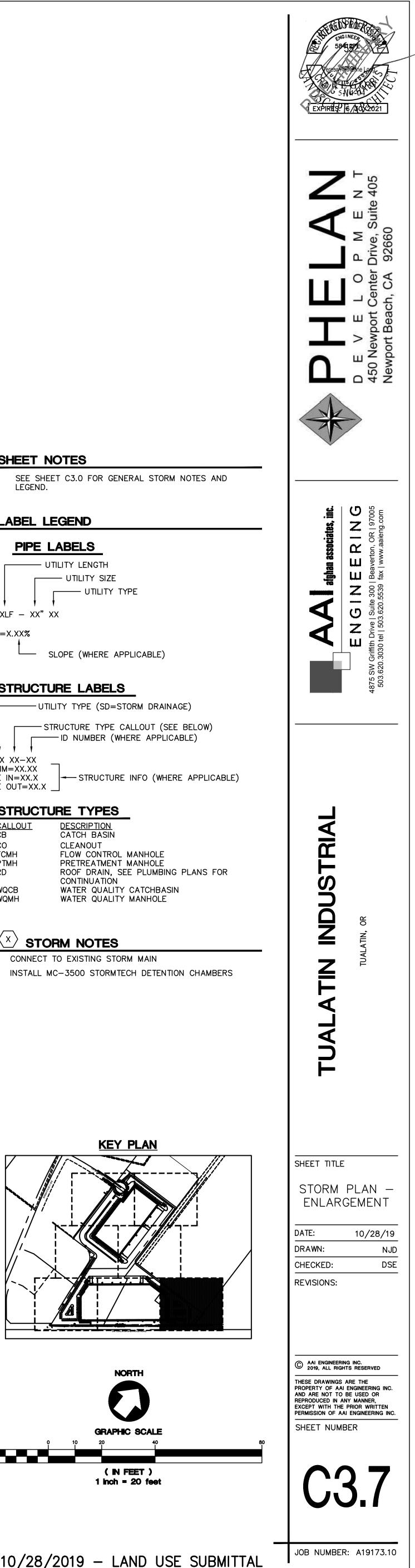


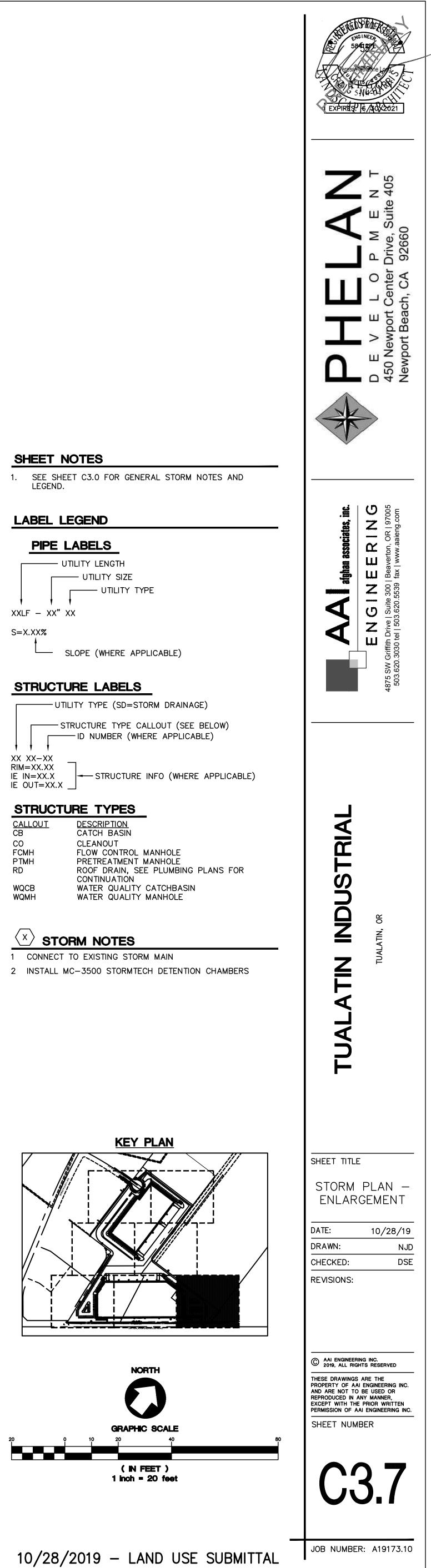






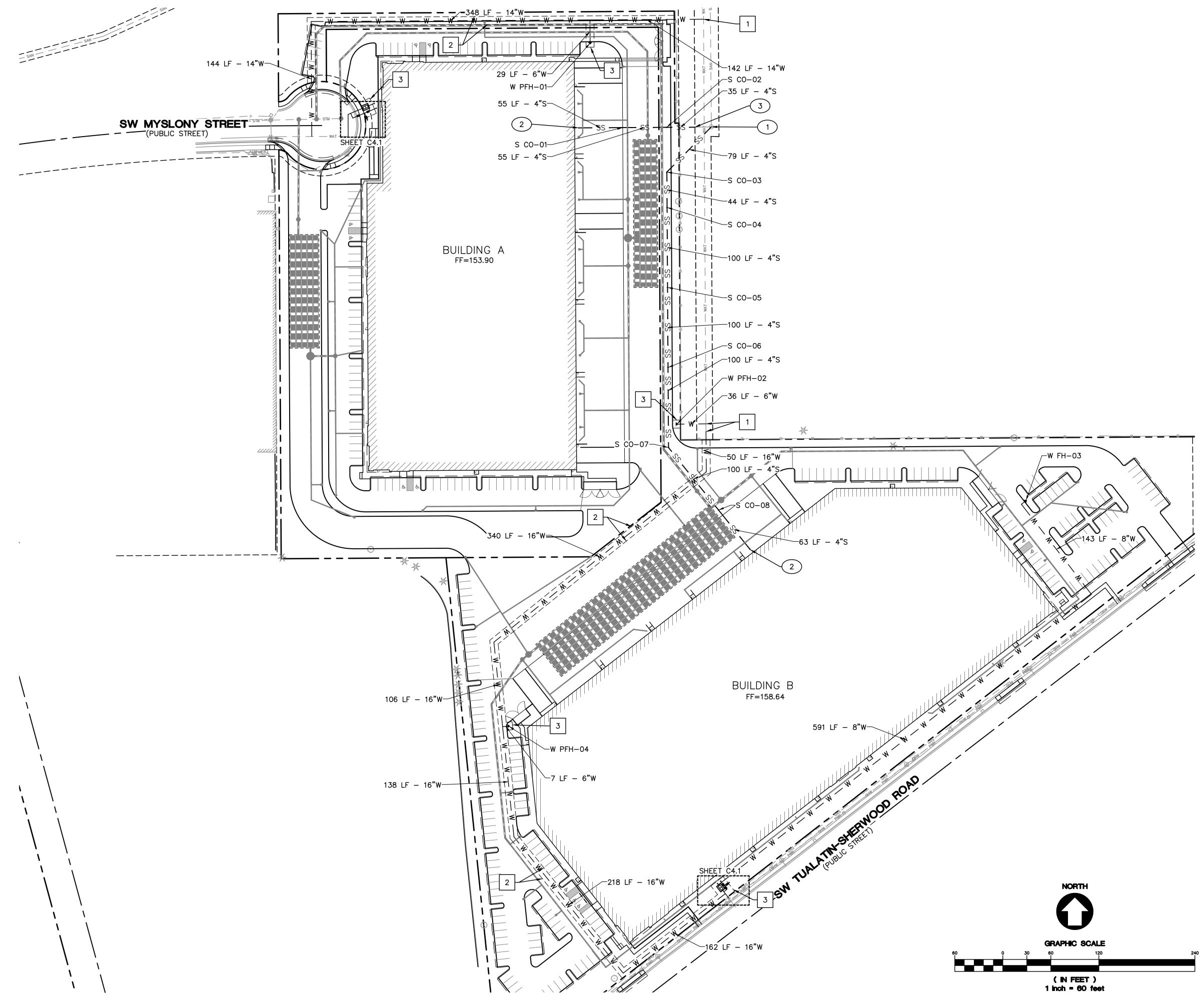
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VQMH	WATER QUALITY MANHOLE





SW MYSLONY STREET (PUBLIC STREET)

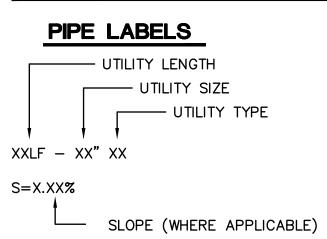
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SHEET NOTES

- 1. SEE SHEET CO.2 FOR GENERAL SHEET NOTES. 2. INSTALL THRUST BLOCKS ON FIRE AND WATER LINES.
- ALL SANITARY PIPING SHALL BE PVC 3034 OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
- 4. THIS PLAN IS GENERALLY DIAGRAMMATIC. IT DOES NOT SHOW EVERY JOINT, BEND, FITTING, OR ACCESSORY REQUIRED FOR CONSTRUCTION.
- 5. CLEAN OUTS SHALL BE INSTALLED IN CONFORMANCE WITH UPC CHAPTER SEVEN, SECTION 707 AND SECTION 719. THIS PLAN MAY NOT SHOW ALL REQUIRED CLEAN OUTS.
- 6. DOMESTIC WATER AND FIRE LINES AND ACCESSORIES BETWEEN THE WATER METER AND THE BUILDING SHALL BE INSTALLED BY A LICENSED PLUMBER EMPLOYED BY A LICENSED PLUMBING CONTRACTOR.
- 7. UTILITIES WITHIN FIVE FEET OF A BUILDING SHALL BE CONSTRUCTED OF MATERIALS APPROVED FOR INTERIOR USE AS DESCRIBED IN THE CURRENT EDITION OF THE UPC.
- 8. INLETS AND OUTLETS TO ON-SITE MANHOLES SHALL HAVE FLEXIBLE CONNECTION NO CLOSER THAN 12" AND NO FARTHER THAN 36" FROM THE MANHOLE.
- 9. CONTRACTOR TO VERIFY SANITARY AND WATER SIZING WITH APPROVED PLUMBING PLANS PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION OF SAID UTILITIES.

LABEL LEGEND



STRUCTURE LABELS

	ILITY TYPE (FP=FIRE PROTECTIO =WATER)
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STRUCT	URE TYPES
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FH	PRIVATE FIRE HYDRANT
PFH	PUBLIC FIRE HYDRANT

LEGEND

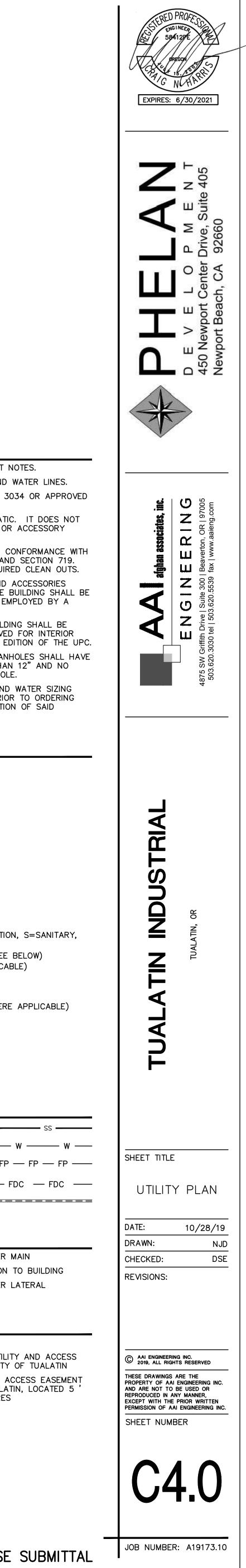
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FDC LINE	
STORM LINE	

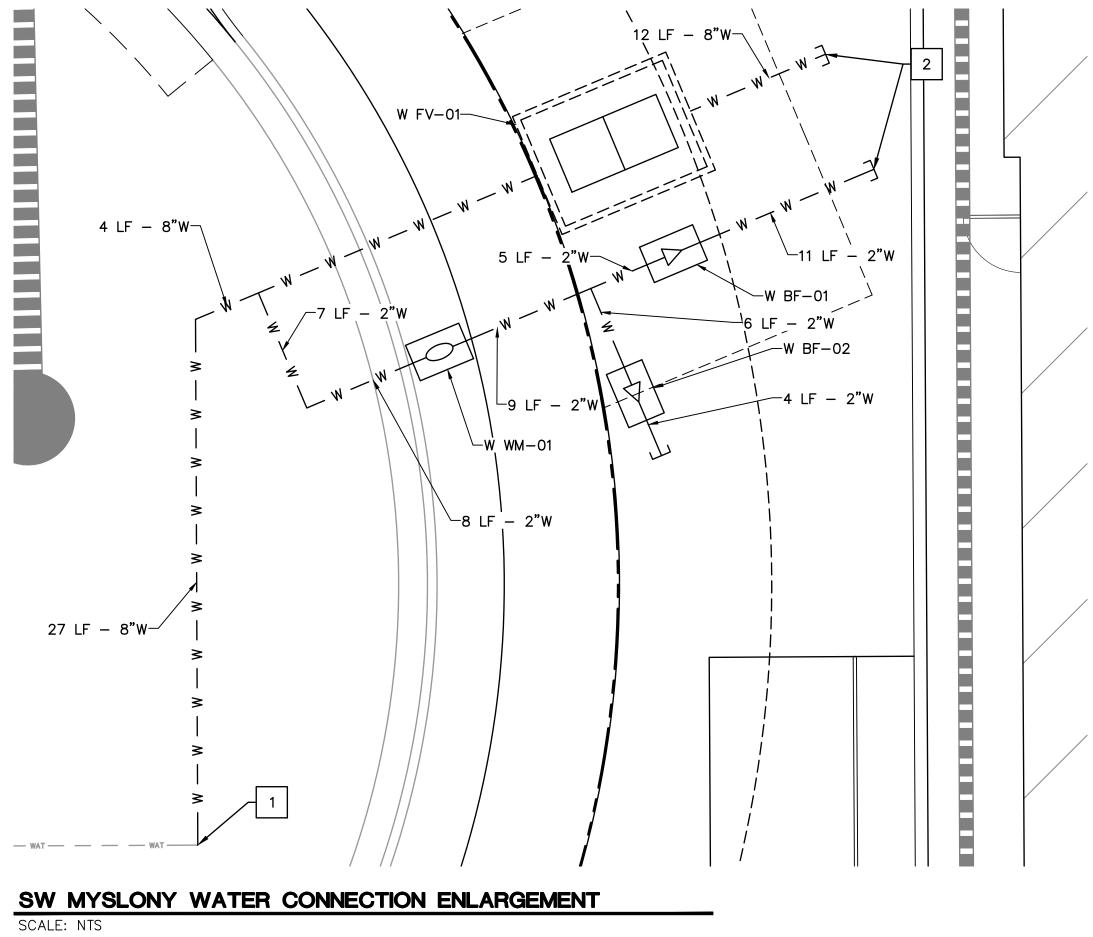
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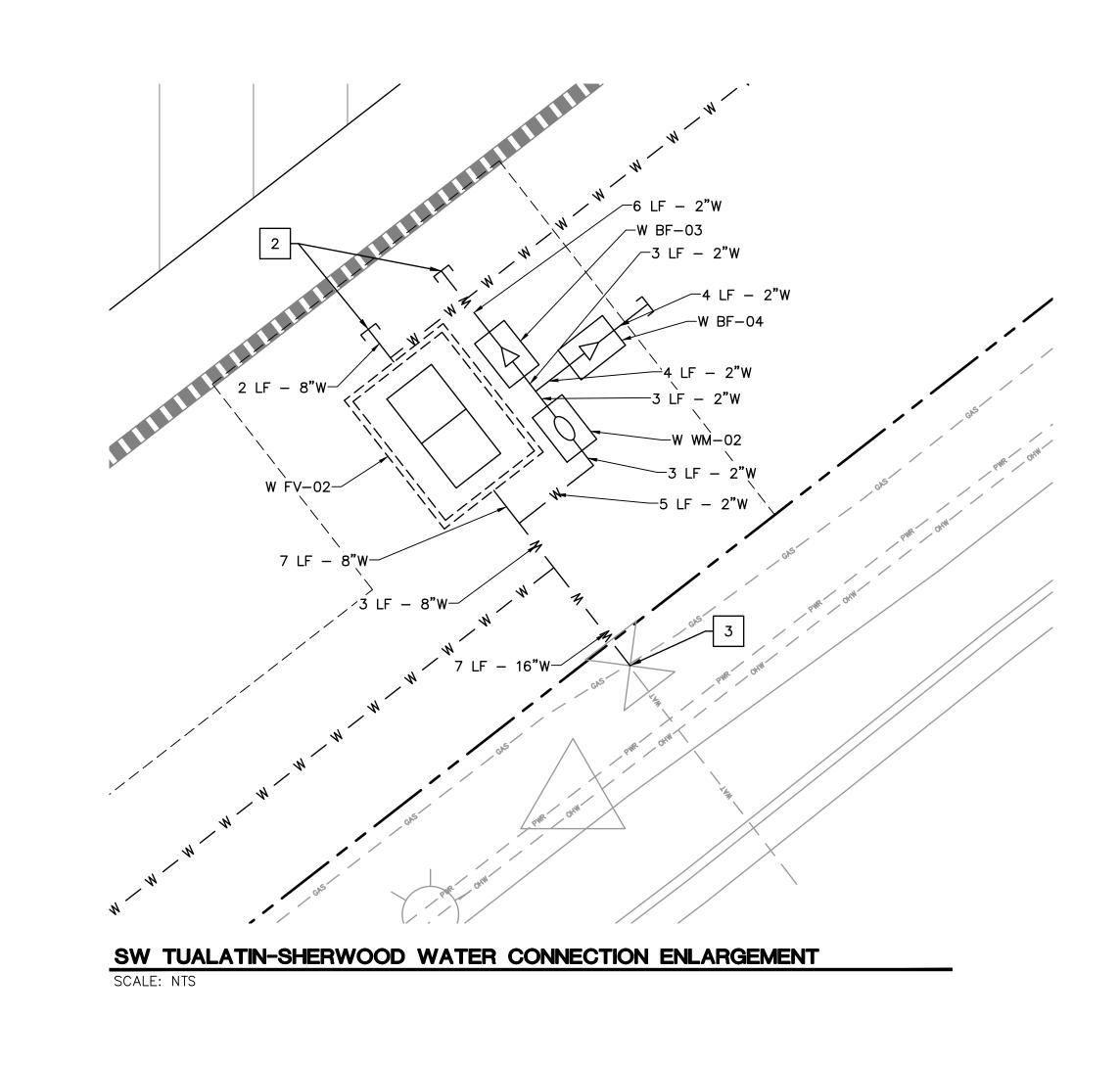
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- 3 CONNECT TO EXISTING SANITARY SEWER LATERAL

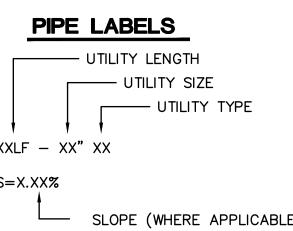
WATER NOTES

- 1 CONNECT TO EXISTING WATER MAIN
- 2 PROPOSED 10' WIDE PUBLIC WATER UTILITY AND ACCESS EASEMENT TO THE BENEFIT OF THE CITY OF TUALATIN
- 3 PROPOSED PUBLIC WATER UTILITY AND ACCESS EASEMENT TO THE BENEFIT OF THE CITY OF TUALATIN, LOCATED 5 ' OFF THE PROPOSED PUBLIC STRUCTURES



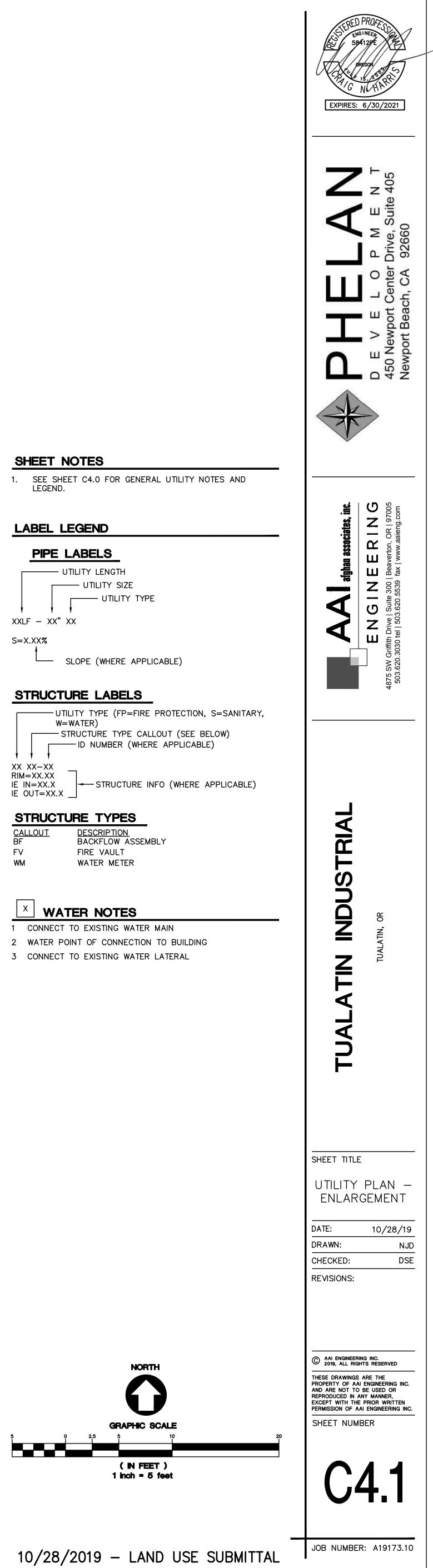






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STRUCTURE	TYPES





CITY OF TUALATIN 18880 SW Martinazzi Ave Tualatin, OR 97062-7092 Phone: (503) 692-2000 Fax: (503) 692-0147

DEVELOPMENT APPLICATION: SUBDIVISION/PARTITION/ PROPERTY LINE ADJUSTMENT

Application for:			
Project Address: 1045 AW Tudatin - Shenwood Rd . Planning District: MG			
Project Tax Map Number: <u>29 1 22 D</u> Tax Lot Number(s): <u>Harb</u> 700 1 800			
Property Owner(s): Myslony Davelopment UL			
Property Owner's Address: 10250 SW NorTH DAKOTA ST. /Tigard, Orean 97223			
Owner's Phone Number: (503) 320-4575 Fax Number: (503) 684-4734			
Owner's Email Address: plpascuzzi@gmail. Com			
Owner's Signature: Date: Oct. 8, 2019			
Owner's Signature: Date:			
Owner's Signature:			
Applicant's Name: <u>Philan Development</u>			
Applicant's Address: 450 Newport Center Drive, Suite 405, Newport Beach UA 921060			
Applicant's Phone Number: 949-720-8050 Fax Number: 949-720-8040			
Applicant's Email Address: Tchavez Ophelandevco.com			
Applicant's Signature: Date: 10/7/19			
Consultant's Name: Beth Zaunev			
Consultant's Company: All Engineering			
Consultant's Address: 4875 SW Griffith Br. #300 Braverton, OR 97005			
Consultant's Phone Number: 1700-620-3030 Fax Number: 1500-620-5539			
Consultant's Email Address: <u>bellizeaai ang.com</u>			
Direct Communication to:			
Existing Use: Vacant land, Proposed Use: Industrial Park.			
Total Acreage: 16. He derce. No. of Lots/Parcels:			
Average Lot/Parcel Width: Average Lot/Parcel Area:			
Subdivision Name (if applicable):			
Receipt Number: Job Number: By: Page 1 of 3 Job Number:			

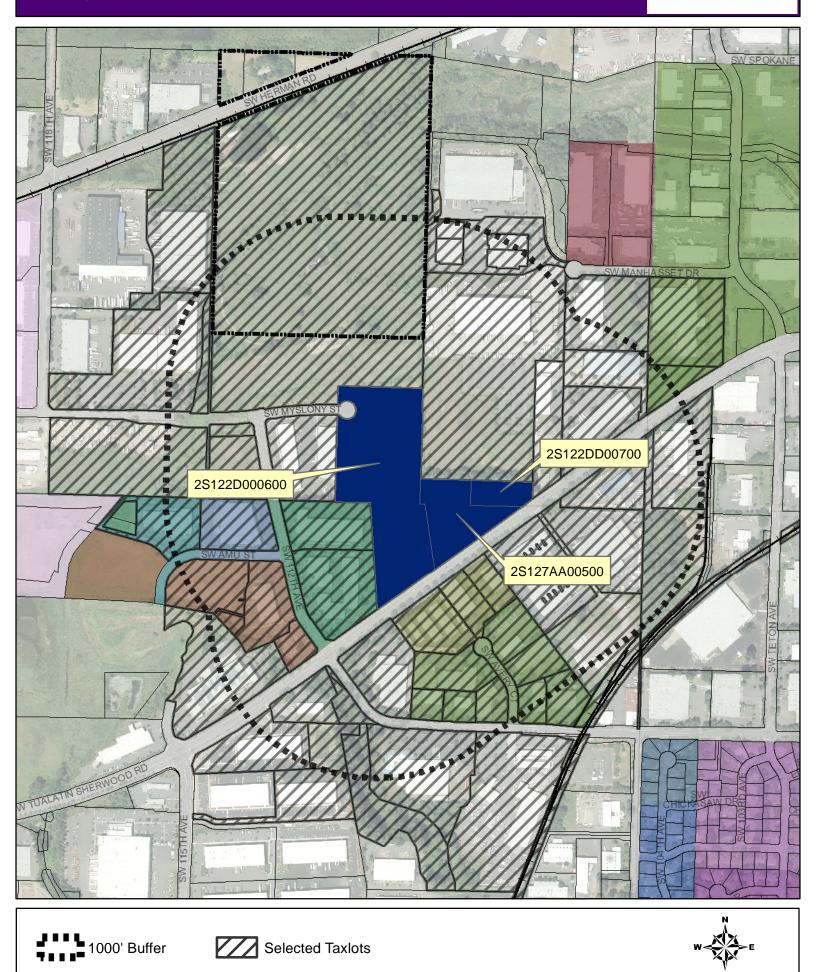
杀	CITY OF TUALATIN	
	Community Development Department	nent-Planning Division
	Land Use Application—7	Гуре III
PROPOSAL N/	AME Tualatin Industrial	Park
	IMMARY (Brief description)	
New con parkin	struction of two Industria g, Losding, utilitize + lan	el Fouldings w/assoc.
PROPERTY INI	FORMATION	
Location (addre	ss if available): 11045 Stal Turiation -	-sherwood Pd.
Tax Map & Lot #	H(s): 25 4 22 DC	Planning District: MG
Total site size:	16,46 acres.	Developed X Undeveloped
	DNTACT INFORMATION mary Contact Name:	ant
	: 450 Newport Conter Drive, S	
	ewport Brach, UA	Zip: 92660
_		a) photon dev co.com
Phone: 111		S PNEIDUIGE VES. LOW
Applicant's Signa		Date: 10 7 19
	ige that I have read this application and understand the requirement and is correct, that I am the owner or authorized agent of the owner, a	
of Tualatin Develop	ment (TDC) and Municipal (TMC) Codes.	
PROPERTY OW	NER/DEED HOLDER INFORMATION (Attach list if more	e than one)
Name: MY	slony Development U.C.	
ی۔ :Mailing Address	10250 SW North Dakota	<u>St. /</u>
City/State:	Tigard, Opegon	zip: 97223
Phone: (503)	320-4575 Email: plpascu	1221@quail.com
Property Owner : Power of attorney o	Signature:	Date: 0, 8, 2019 Date: 0, 8, 2019
		FOR STAFF USE ONLY
AND USE APPL		Case No.:
Architectural	Review (ARB) G Sign Variance (SVAR) Ister Plan (IMP) G Transitional Use Permit (TRP)	Date Received:
J Variance (VA		Fee Amount S: Received by:

City of Tualatin | 18880 SW Martinazzi, Tualatin, OR 97062 | 503-691-3026 | www.tualatinoregon.gov

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Mailing List - Taxlots 2S122D000600, 2S122DD00700, and 2S127AA00500

TUALGIS



NOTICE OF NEIGHBOR/DEVELOPER MEETING

08/21/2019

Pascuzzi Industrial 10775 SW Tualatin-Sherwood Rd Tualatin, OR, 97062

RE: Pascuzzi Industrial Development Neighborhood/Developer Meeting

Dear Property Owner:

You are cordially invited to attend a meeting on September 12, 2019 at 6:00 PM at the Tualatin Public Library. This meeting shall be held to discuss a proposed project located at 10775 SW Tualatin-Sherwood Rd. The proposal is to construct two new buildings for industrial use, along with associated landscape and hardscape.

This is an informational meeting to share the development proposal with interested neighbors. You will have the opportunity to review preliminary plans and identify topics of interest or consideration. Feel free to contact me with any questions or commentary.

Regards,

Andisheh Afghan AAI Engineering, Inc. (503)-620-3030; <u>AndishehA@AAIeng.com</u>

CC: LSanford@tualatin.gov; Tualatin Community Development Department

Neighborhood Developer Meetings Community Development Department - Planning Division

AFFIDAVIT OF MAILING NOTICE

STATE OF OREGON)) SS COUNTY OF WASHINGTON)

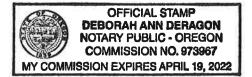
I, AND IS HEH AFGHAN being first duly sworn, depose and say:

That on the 22^{NO} day of <u>August</u> 20<u>19</u>, I served upon the persons shown on Exhibit "A" (Mailing Area List), attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer Meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true and correct copy of the original hereof. I further certify that the addresses shown on said Exhibit "A" are their regular addresses as determined from the books and records of the Washington County and/or Clackamas County Departments of Assessment and Taxation Tax Rolls, and that said envelopes were placed in the United States Mail with postage fully prepared thereon.

SUBSCRIBED AND SWORN to before me this ______ day of _____ Sup tomber 20_19_.

Notary Public for Oregon My commission expires:

RE: PASCUZZI INDUSTRIAL



CERTIFICATION OF SIGN POSTING



In addition to the requirements of <u>TDC 31.064(2)</u>, the 18" x 24" sign must display the meeting date, time, and address as well as a contact phone number. The block around the word "NOTICE" must remain **orange** composed of the **RGB color values Red 254, Green 127, and Blue 0**. Staff has a Microsoft PowerPoint 2007 template of this sign design available through the Planning Division homepage at:

https://www.tualatinoregon.gov/planning/land-use-application-sign-templates

As the applicant for the	PASCUZZI	INDUSTRIAL	project, I hereby
certify that on this day, O	6/22/2019 sign((s) was/were posted on the subject property	in accordance with
the requirements of the Tu	alatin Development Code a	and the Community Development Division.	

Applicant's Name:	ANDISHEH AFGHAN
	(Please Print)
Applicant's Signature	- Andrehab Il ikf
	Date: 09/25/2019

Tualatin Industrial Park 10775 SW Tualatin-Sherwood Road Tualatin, OR 97062

NEIGHBORHOOD MEETING MINUTES

The first (and only) attendees arrive at approximately 6:20 pm. However, the two people (Dayne and Tiffney) were not concerned about our project, rather the fact that they lived off of Tualatin-Sherwood Road and understood that future improves might impact their property. There property is located approximately 5 miles from the project site, so we could not be particularly helpful.

We did take the opportunity to present our project, however the attendees had no comments or questions.

Beth Zauner

112th Avenue/Myslony Street Pre-Application Meeting 8-14-19 Summary

Thank you for discussing the proposed development at 11045, 10835, 10775 SW Tualatin-Sherwood Road. Below, please find a summary of some of the points we were able to discuss. If there is anything else you would like to document from our meeting, please respond with your notes as well. Thank you.

Development Standards

The site is within the General Manufacturing (MG) zone, the standards for which are located in Tualatin Development Code (TDC) <u>Chapter 61</u>. In addition to zone-specific standards, new development also needs to meet the standards and criteria of TDC Chapters 73A through 73D, Site Development, Landscaping, Parking, and Waste and Recyclables Management.

Required Land Use Reviews

Property line adjustment or lot consolidation (Type I staff decision):

 Application packet: <u>https://www.tualatinoregon.gov/sites/default/files/fileattachments/engineering/page/5159/de</u> velopment - app sub par pla w sign and mailing labels.pdf

Architectural Review

Industrial development over 150,000 SF – Type III Architectural Review Board decision

- Application packet: https://www.tualatinoregon.gov/planning/architectural-review-ar-application
- Architectural rendering of buildings along Tualatin-Sherwood is appreciated for the Architectural Review Board meeting
- Architectural Review application may be submitted while PLA plat is being reviewed by the County; however plat must be recorded prior to issuance of AR approval.

Criteria to address:

- Tualatin Municipal Code:
- o <u>03-02: Sewer Regulations</u>
- o <u>03-03: Water Service</u>
- <u>03-05: Soil Erosion, Surface Water Management, Water Quality Facilities, and Building & Sewers</u>
- o Tualatin Development Code:
- o <u>33:110 Tree Removal Permit/Review</u>
- o <u>61: General Manufacturing Zone</u>
- o 71: Wetland Protection District
- o <u>73A</u>, <u>73B</u>, <u>73C</u>, and <u>73D: Design Standards</u>
- o <u>74: Public Improvements</u>
- o <u>75: Access</u>

Neighborhood/Developer Meeting:

A packet with detailed information about this meeting is online here: <u>https://www.tualatinoregon.gov/sites/default/files/fileattachments/planning/page/4823/ndm_packet_20171109.pdf</u>

- My colleague, Lynette Sanford (<u>lsanford@tualatin.gov</u> or 503-691-3026) can produce the address list for your notice letters for a \$32 fee.
- Popular locations for these meetings include the library (503-691-3071) or Juanita Pohl Center (503-691-9786)
- Neighborhood/Developer meetings may be held up to six months prior to submittal.

Transportation and Site Access

Scope a traffic impact analysis with Mike McCarthy, 503-691-3674.

• Tualatin-Sherwood Road is under Washington County's jurisdiction. Contact Naomi Vogel at 503-846-7636 to discuss potential for right in/right out.

Public Utilities

Water will require a flow test by contacting Terrance Leahy, Water Division Manager, 503-691-3095. The hydraulic modeling application is located in the AR application with instructions that require a fee for each new building over 48,300 SF or of known use will be over 870 gallons per acre per day of water.

Your team will need to confirm stormwater capacity of the public system if connecting to the lines in the streets or outfall into the wetlands. Separate treatment and detention is generally required per lot with some exceptions allowed for shared parking areas if using filter cartridges. For the portion that includes the WPD fringe, Tualatin does not require detention, however CWS hydromodification may result with the need for detention.

You must route sanitary sewer lines per lot to public systems with the potential of a limited crossing of private property. A 16" public water loop will be required to connect stubs located in Myslony to the eastern property line stub to the Tualatin-Sherwood Road line within new 15-foot wide public easements. Please share a plan view exhibit to initiate discussion.

Fire Suppression:

• TVF&R: Tom Mooney, Deputy Fire Marshal: <u>tmooney@tvfr.com</u>, 503-259-1419

Building Fees

• Contact, Lauren Gonzalez (<u>lgonzalez@tualatin.gov</u>, 503-691-3048) to generate a fee estimate.

Additional Information:

- Ice Age Tonquin Trail Work with Rich Mueller (<u>rmueller@tualatin.gov</u>, 503-691-3064) to determine easement alignment along the north end of the property.
- You may reference recently submitted applications for land use examples: <u>https://www.tualatinoregon.gov/projects</u>



MEMORANDUM

DATE:	October 4, 2019
то:	Kyle Bertelsen (Phelan Development Company)
FROM:	Todd Prager, RCA #597, ISA Board Certified Master Arborist
RE:	Tree Removal and Protection Plan for Tualatin Industrial

Summary

This report includes tree removal and protection recommendations for the construction of the Tualatin Industrial project in Tualatin.

Background

Phelan Development Company is proposing to construct the Tualatin Industrial project in Tualatin. The proposed site plan with proposed grading and existing tree locations is provided in Attachment 1.

The purpose of this report is to:

- 1. Provide tree removal findings and recommendations based on the proposed site plan; and
- 2. Provide recommendations for adequately protecting the trees to be retained during construction.

Tree Assessment

On September 30, 2019, I completed the inventory of all trees over 8-inches in trunk diameter (DBH) at the project site. The complete inventory data is provided in the tree inventory spreadsheet in Attachment 2. The data collected for each tree includes the tree number, species (common and scientific names), DBH, tree health condition, tree structural condition, pertinent comments, and treatment (remove/retain). The tree numbers in the tree inventory in Attachment 2 correspond to the tree numbers on the proposed site plan in Attachment 1. The onsite trees were also tagged with their corresponding numbers in the field.

Proposed Tree Removal

A typical minimum recommended tree protection zone encompasses a radius around a tree that is .5 feet per inch of trunk diameter. For example, a tree with a 24-inch trunk diameter would have a minimum protection radius of 12 feet. However, this standard may need to be adjusted on a case by case basis due to tree health, species characteristics, root distribution, whether the tree will be impacted on multiple sides, and other factors. In some cases such as when the tree will be impacted on multiple sides, the tree protection zone will be increased to a radius of up to one foot per inch of trunk diameter.

Attachment 1 shows the proposed construction and grading impacts in relation to the trees. Onsite trees 10056 through 10063, 10111, 10112, 10149, 10586, 10805, 10827, and 20042 are within the construction and grading footprint and will be removed for construction purposes. In addition, property line trees 10783, 10784, 10785, 10828, and 20011 are within the grading footprint and either nuisance species (sweet cherry, *Prunus avium*) or lower value species (black cottonwood, *Populus trichocarpa*). Note that the neighbor will need to approve the removal of property line trees since they are shared property. The proposed removal of these onsite and property line trees meets the tree removal criteria in section 34.230.1(c) of the Tualatin Code because their removal is required "to construct proposed improvements".

Protection recommendations for the remaining trees to be retained at the site are provided in the next section of this report.

Tree Protection Recommendations

The following tree protection measures will be necessary to protect the trees during construction:

- *Tree Protection Fencing*: Erect six foot metal tree protection fencing in the locations shown in Attachment 1 to protect the trees from construction.
- *Retaining Wall Construction*: A retaining wall or other method for shifting grading to outside the tree protection zones will be required to protect trees 10162 through 10179, 10797, 10820, and 10822 through 10826 as shown in Attachment 1.
- *Tree Pruning*: Some of the trees to be retained may need to be reduction and/or clearance pruned prior to construction in accordance with ANSI A300 pruning standards the minimum necessary to allow for construction.

Additional tree protection recommendations that are consistent with City of Tualatin standards are provided in Attachment 3.

Conclusion

Twenty trees are recommended for removal with construction. The 28 trees to be retained will be adequately protected during construction by adhering to the recommendations in this report. Any change to the tree protection plan should be completed by the project arborist to ensure that the trees to be retained are properly protected.

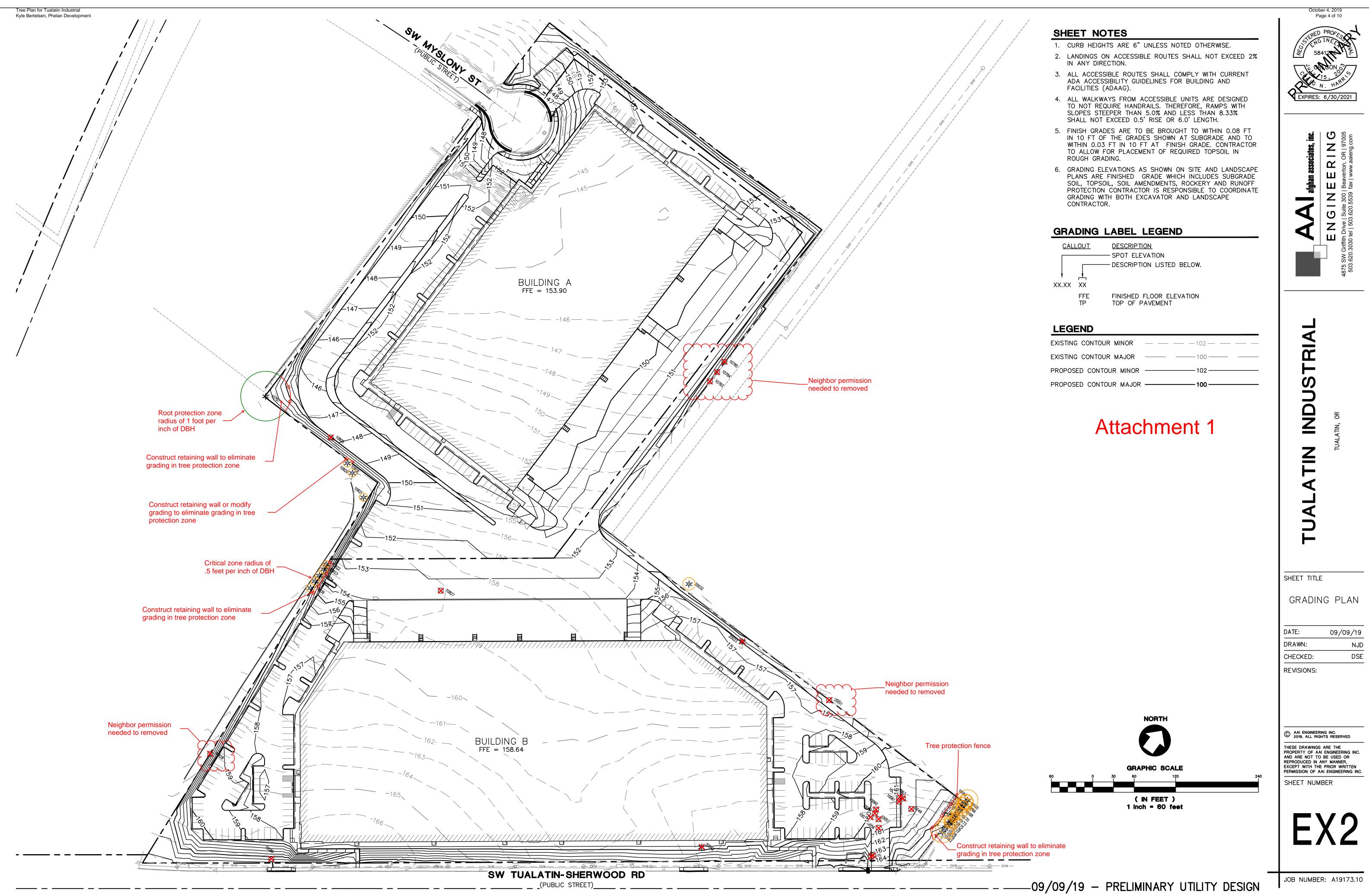
Please contact me if you have questions, concerns, or need any additional information.

Sincerely,

Todd Prager

Todd Prager ASCA Registered Consulting Arborist #597 ISA Board Certified Master Arborist, WE-6723B ISA Qualified Tree Risk Assessor AICP, American Planning Association

Enclosures: Attachment 1 – Site Plan with Tree Removal and Protection Attachment 2 – Tree Inventory Attachment 3 – Tree Protection Recommendations Attachment 4 – Assumptions and Limiting Conditions



9,	/09,	/19	_	PRELIMINARY	UTILITY	DESIG
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Attachment 2

TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH ¹	CONDITION ²	STRUCTURE ²	COMMENTS	TREATMENT
10056	bigleaf maple	Acer macrophyllum	18,18, 18	fair	fair	multiple leaders at 3' with decay, history of branch failure	remove
10057	sweet cherry	Prunus avium	8	fair	fair	one sided, overtopped by adjacent tree, large wound with decay at lower trunk	remove
10058	sweet cherry	Prunus avium	11,9	fair	fair	codominant at ground level with included bark, one sided	remove
10059	sweet cherry	Prunus avium	11,9	very poor	very poor	dead	remove
10060	sweet cherry	Prunus avium	16,15, 10	poor	poor	multiple leaders at ground level with decay, significant branch dieback	remove
10061	sweet cherry	Prunus avium	16	good	fair	one sided	remove
10062	sweet cherry	Prunus avium	16,16, 16,15, 13	fair	fair	multiple leaders at 2' with included bark	remove
10063	sweet cherry	Prunus avium	20	good	fair	codominant at 8', one sided	remove
10111	English walnut	Juglans regia	8,8,8,8 ,7	good	fair	multiple leaders at 2' with included bark	remove
10112	English hawthorn	Crataegus monogyna	8,8,5	good	fair	multiple leaders at ground level	remove
10149	English holly	Ilex aquifolium	7,6,5,5 ,5	fair	fair	multiple leaders at ground level, moderately thin crown	remove
10162	incense cedar	Calocedrus decurrens	30	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10163	incense cedar	Calocedrus decurrens	20	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10164	incense cedar	Calocedrus decurrens	22	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10165	incense cedar	Calocedrus decurrens	18	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10166	incense cedar	Calocedrus decurrens	18	fair	fair	excessive competition with adjacent trees due to close spacing	retain

Teragan Associates, Inc. 3145 Westview Circle • Lake Oswego, OR 97034 Phone: 971.295.4835 • Fax: 503.697.1976 Email: todd@teragan.com • Website: teragan.com



October 4, 2019 Page 6 of 10

Attachment 2

TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH ¹	CONDITION ²	STRUCTURE ²	COMMENTS	TREATMENT
10167	incense cedar	Calocedrus decurrens	26	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10168	incense cedar	Calocedrus decurrens	18	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10169	incense cedar	Calocedrus decurrens	12	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10170	incense cedar	Calocedrus decurrens	24	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10171	incense cedar	Calocedrus decurrens	15	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10172	incense cedar	Calocedrus decurrens	12	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10173	incense cedar	Calocedrus decurrens	11	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10174	incense cedar	Calocedrus decurrens	12	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10175	incense cedar	Calocedrus decurrens	23	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10176	incense cedar	Calocedrus decurrens	16	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10177	incense cedar	Calocedrus decurrens	14	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10178	incense cedar	Calocedrus decurrens	20,18	fair	fair	excessive competition with adjacent trees due to close spacing	retain

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Attachment 2

TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH1	CONDITION ²	STRUCTURE ²	COMMENTS	TREATMENT
10179	incense cedar	Calocedrus decurrens	24,16	fair	fair	excessive competition with adjacent trees due to close spacing	retain
10586	American chestnut	Castanea dentata	48,10, 8	very poor	very poor	extensive top dieback, topped for overhead power clearance	remove
10783	sweet cherry	Prunus avium	14	good	fair	multiple leaders	remove
10784	sweet cherry	Prunus avium	12,10, 8	good	fair	multiple leaders at 2'	remove
10785	sweet cherry	Prunus avium	10,10	good	fair	codominant at 1'	remove
10797	Douglas-fir	Pseudotsuga menziesii	36	good	fair	one sided, retaining wall cut at 12 feet from NW side of tree	retain
10805	orchard apple	Malus domestica	10,10, 10,10, 7.7.3	fair	fair	not maintained for fruit production	remove
10819	western redcedar	Thuja plicata	12	good	good		retain
10820	western redcedar	Thuja plicata	12	good	good		retain
10821	incense cedar	Calocedrus decurrens	12	good	good		retain
10822	western redcedar	Thuja plicata	8,6	good	fair	codominant at 1'	retain
10823	western redcedar	Thuja plicata	12,4	good	fair	codominant at 1'	retain
10824	western redcedar	Thuja plicata	12	good	good		retain
10825	western redcedar	Thuja plicata	12	good	good		retain
10826	western redcedar	Thuja plicata	12	good	good		retain
10827	orchard pear	Pyrus sp.	18,16, 10	fair	fair	not maintained for fruit production	remove
10828	black cottonwood	Populus trichocarpa	32	good	good		remove
20011	sweet cherry	Prunus avium	12	good	fair	one sided, multiple leaders	remove
20023	n/a	n/a	n/a	n/a	n/a	not located	n/a
20032	Douglas-fir	Pseudotsuga menziesii	18	good	fair	one sided	retain
20042	western hemlock	Tsuga heterophylla	38	good	fair	lost top, upright competing leader at 15'	remove

¹**DBH** is the trunk diameter in inches measured per International Society of Arboriculture (ISA) standards.

²Condition and Structure ratings range from very poor, poor, fair, to good.

Teragan Associates, Inc. 3145 Westview Circle • Lake Oswego, OR 97034 Phone: 971.295.4835 • Fax: 503.697.1976 Email: todd@teragan.com • Website: teragan.com

Attachment 3 Tree Protection Recommendations

The following recommendations will help to ensure that the trees to be retained are adequately protected:

Before Construction Begins

- 1. Notify all contractors of tree protection procedures. For successful tree protection on a construction site, all contractors must know and understand the goals of tree protection.
 - a. Hold a tree protection meeting with all contractors to explain the goals of tree protection.
 - b. Have all contractors sign memoranda of understanding regarding the goals of tree protection. The memoranda should include a penalty for violating the tree protection plan. The penalty should equal the resulting fines issued by the local jurisdiction plus the appraised value of the tree(s) within the violated tree protection zone per the current Trunk Formula Method as outlined in the current edition of the *Guide for Plant Appraisal* by the Council of Tree & Landscape Appraisers. The penalty should be paid to the owner of the property.
- 2. Fencing
 - a. Trees to remain on site will be protected by installation of tree protection fencing as shown in Attachment 1.
 - b. The fencing should be put in place before the ground is cleared in order to protect the trees and the soil around the trees from disturbances.
 - c. Fencing should be established by the project arborist based on the needs of the trees to be protected and to facilitate construction.
 - d. Fencing should consist of 6-foot high steel fencing on concrete blocks or 6foot metal fencing secured to the ground with 8-foot metal posts to prevent it from being moved by contractors, sagging, or falling down.
 - e. Fencing should remain in the position that is established by the project arborist and not be moved without approval from the project arborist until final project approval.
- 3. Signage
 - a. All tree protection fencing should have signage as follows so that all contractors understand the purpose of the fencing:

TREE PROTECTION ZONE

DO NOT REMOVE OR ADJUST THE LOCATION OF THIS TREE PROTECTION FENCING UNAUTHORIZED ENCROACHMENT MAY RESULT IN FINES

Please contact the project arborist if alterations to the location of the tree protection fencing are necessary.

Todd Prager, Project Arborist, Teragan & Associates, 971-295-4835

b. Signage should be placed every 75-feet or less.

During Construction

- 1. Protection Guidelines Within the Tree Protection Zones:
 - a. No new buildings; grade change or cut and fill, during or after construction; new impervious surfaces; or utility or drainage field placement should be allowed within the tree protection zones.
 - b. No traffic should be allowed within the tree protection zones. This includes but is not limited to vehicle, heavy equipment, or even repeated foot traffic.
 - c. No storage of materials including but not limiting to soil, construction material, or waste from the site should be permitted within the tree protection zones. Waste includes but is not limited to concrete wash out, gasoline, diesel, paint, cleaner, thinners, etc.
 - d. Construction trailers should not to be parked/placed within the tree protection zones.
 - e. No vehicles should be allowed to park within the tree protection zones.
 - f. No other activities should be allowed that will cause soil compaction within the tree protection zones.
- 2. The trees should be protected from any cutting, skinning or breaking of branches, trunks or woody roots.
- 3. The project arborist should be notified prior to the cutting of woody roots from trees that are to be retained to evaluate and oversee the proper cutting of roots with sharp cutting tools. Cut roots should be immediately covered with soil or mulch to prevent them from drying out.
- 4. Trees that have woody roots cut should be provided supplemental water during the summer months.
- 5. Any necessary passage of utilities through the tree protection zones should be by means of tunneling under woody roots by hand digging or boring with oversight by the project arborist.
- 6. Any deviation from the recommendations in this section should receive prior approval from the project arborist.

After Construction

- 1. Carefully landscape the areas within the tree protection zones. Do not allow trenching for irrigation or other utilities within the tree protection zones.
- 2. Carefully plant new plants within the tree protection zones. Avoid cutting the woody roots of trees that are retained.
- 3. Do not install permanent irrigation within the tree protection zones unless it is drip irrigation to support a specific planting or the irrigation is approved by the project arborist.
- 4. Provide adequate drainage within the tree protection zones and do not alter soil hydrology significantly from existing conditions for the trees to be retained.
- 5. Provide for the ongoing inspection and treatment of insect and disease populations that are capable of damaging the retained trees and plants.
- 6. The retained trees may need to be fertilized if recommended by the project arborist.
- 7. Any deviation from the recommendations in this section should receive prior approval from the project arborist.

Attachment 4 Assumptions and Limiting Conditions

- 1. Any legal description provided to the consultant is assumed to be correct. The site plans and construction information provided by Phelan Development Company and their consultants was the basis of the information provided in this report.
- 2. It is assumed that this property is not in violation of any codes, statutes, ordinances, or other governmental regulations.
- 3. The consultant is not responsible for information gathered from others involved in various activities pertaining to this project. Care has been taken to obtain information from reliable sources.
- 4. Loss or alteration of any part of this delivered report invalidates the entire report.
- 5. Drawings and information contained in this report may not be to scale and are intended to be used as display points of reference only.
- 6. The consultant's role is only to make recommendations. Inaction on the part of those receiving the report is not the responsibility of the consultant.
- 7. The purpose of this report is to:
 - Provide tree removal findings and recommendations based on the proposed site plan; and
 - Provide recommendations for adequately protecting the trees to be retained during construction.



November 05, 2019

AAI ENGINEERING 4875 SW GRIFFITH DR #300 BEAVERTON OR 97005

Re: CWS file 19-003074; 11045 SW Tualatin-Sherwood Road (Tax map 2S122DD Tax lot 00700, Tax map 2S127AA Tax lot 00500, Tax map 2S122D0 Tax lot 00600)

Clean Water Services has reviewed your proposal for the above referenced activity on your site. Staff has conducted a pre-screen review and requested completion of a Sensitive Areas Certification Form. Following review of submitted materials it appears that Sensitive Areas do not exist on-site or within 200' from your project. In light of this result, this document will serve as your Service Provider letter as required by Resolution and Order 19-5, Section 3.02.1. All required permits and approvals must be obtained and completed under applicable local, state, and federal law.

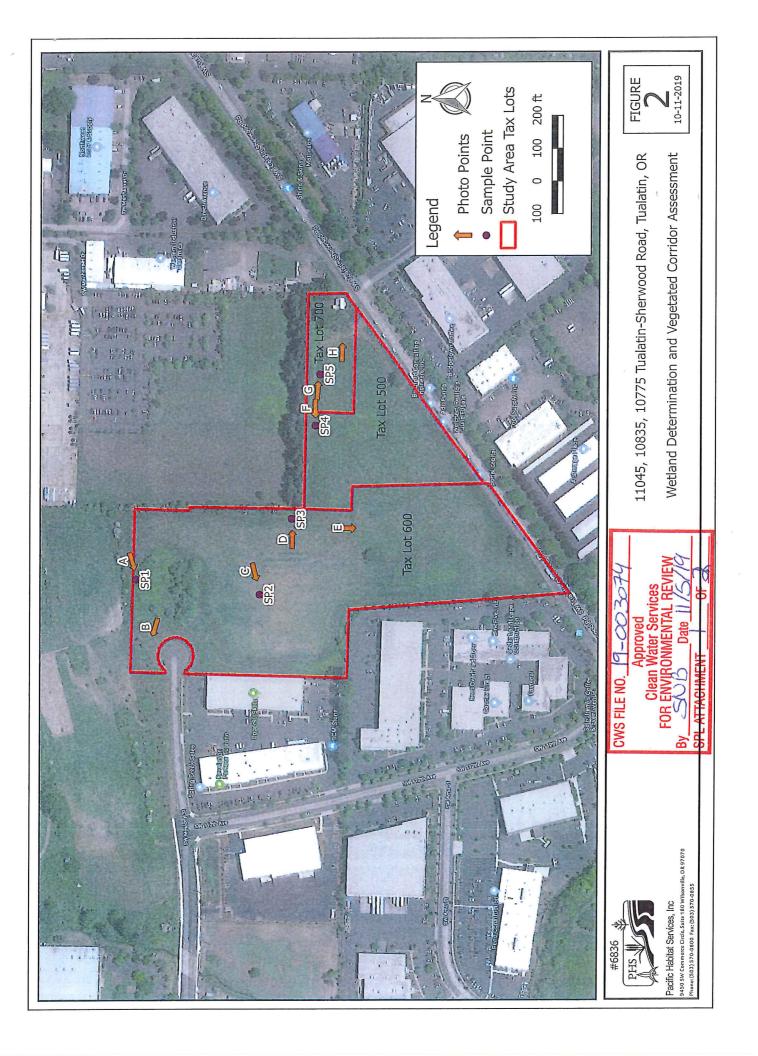
This concurrence letter does NOT eliminate the need to protect Sensitive Areas if they are subsequently identified on your site.

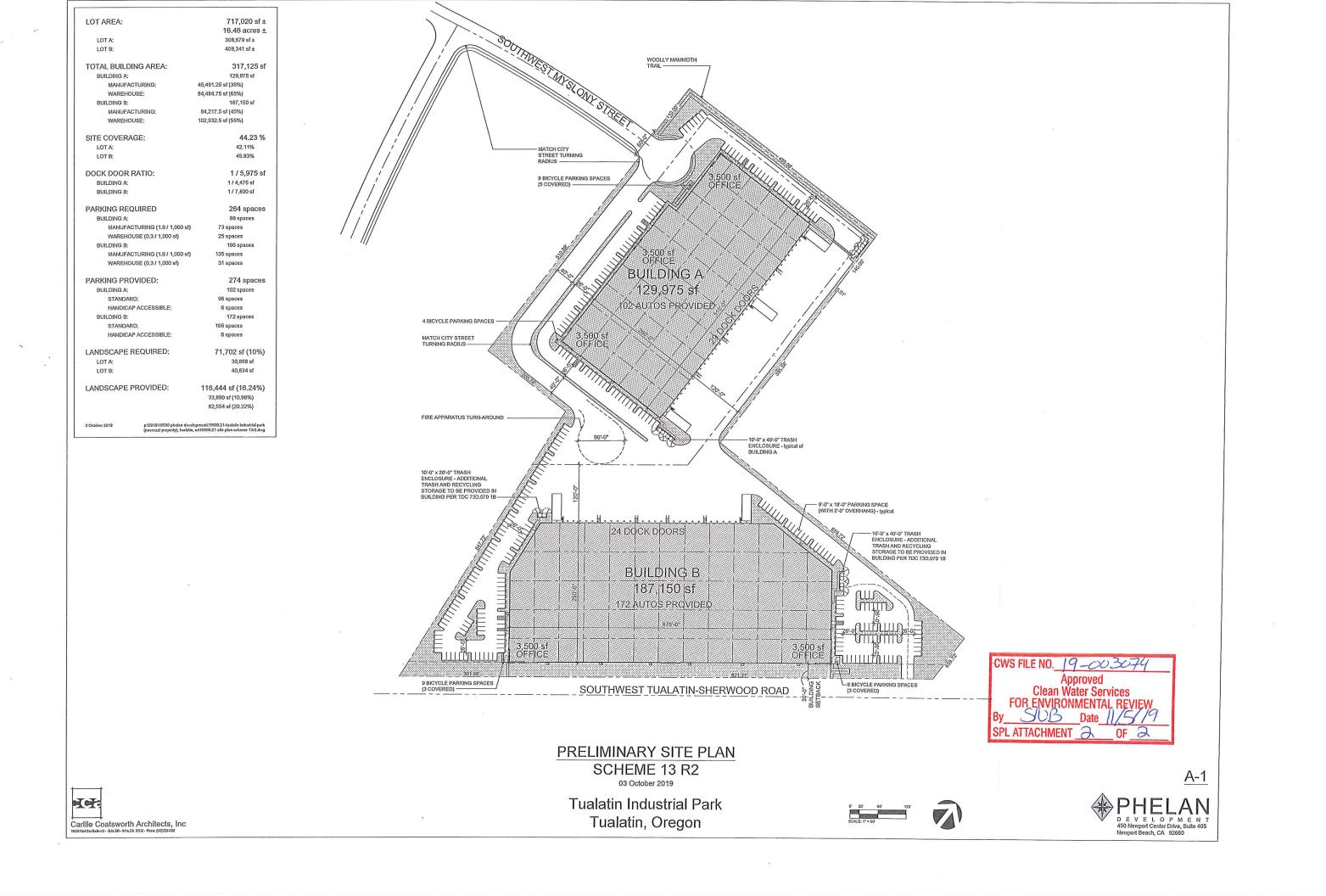
If you have any questions, please feel free to call me at (503) 681-3667.

Sincerely,

Stace Benjamin

Stacy Benjamin Environmental Plan Review









11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, OR

Pacific Habitat Services, Inc

9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070 Phone: (503) 570-0800 Fax: (503) 570-0855



9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070

PACIFIC HABITAT SERVICES, INC.

(800) 871-9333 • (503) 570-0800 • Fax (503) 570-0855

October 11, 2019

Phelan Development Company, LLC Attn: Dane Palanjian 450 Newport Center Drive, Suite 405 Newport Beach, CA 92660

RE: Wetland Determination and Vegetated Corridor Assessment for 10835, 11045, 10775 Tualatin-Sherwood Road, Tualatin, Oregon PHS #6836

Pacific Habitat Services, Inc. (PHS) conducted a wetland determination and vegetated corridor assessment on September 19, 2019, of City of Tualatin Parcels 500, 600, and 700, Tax Map 2S122D (T2S, R1W, Section 22D), which together comprise a study area of 16.34 acres (Figures 1 and 2, attached). The result of the wetland determination is that **no potentially jurisdictional wetlands or waters are present on the property and no sensitive areas are located within 200 feet of the study area**.

Pacific Habitat Services (PHS) has been on the site on three prior occasions for wetland determinations and in each instance did not find wetlands. In 2008, PHS conducted a wetland delineation of the southern portion of Tax Lot 550 (formerly Tax Lot 502), which is adjacent to the northern and northwestern boundary of the study area (North of SW Myslony Street). A wetland was identified on Tax Lot 550, approximately 540 feet west of the study area; however, no sensitive areas including wetlands or waters were present within 200 feet of the study area boundary.

Existing Conditions

The study area is located in the western portion of Tualatin in an area where former agricultural lands are gradually being converted to industrial uses. The topography is relatively flat and slopes gently to the north, toward Hedges Creek, which is a perennial stream and tributary to the Tualatin River. The largest vegetation community is a large agricultural grass field that appears to have been fallow for several years and is dominated by mixed grass species including oat (*Avena* spp.), ryegrass (*Lolium* spp.), velvet grass (*Holcus lanatus*, FAC), and tall fescue (*Schedonorus arundinaceus*, FAC) as well as rough cat's ear (*Hypochaeris radicata*, FACU), Queen Anne's lace (*Daucus carota*, FACU), and lesser hawkbit (*Leontodon saxatilis*, FACU). There are several large stands of Himalayan blackberry (*Rubus armeniacus*, FAC) intermixed with English hawthorn (*Crataegus monogyna*, FAC) and black hawthorn (*Crataegus douglasii*, FAC). A large stand of this vegetation community extends north of Tax Lot 600 for approximately 30 feet where it transitions to an agricultural field. A large area of earthen fill, approximately three feet above the natural grade, extends west of Tax Lot 600, north of SW Myslony Street.

Dane Palanjian, Phelan Development Company, LLC 10835, 11045, 10775 Tualatin-Sherwood Road, Tualatin, Oregon Pacific Habitat Services, Inc. / PHS #6836 October 11, 2019 Page 2

West of the study area and south of SW Myslony Street is a large industrial park and northeast of the study area there is a large agricultural field with a narrow strip of Douglas fir (*Pseudotsuga menziesii*, FACU) trees along the property boundary. There is a farmhouse in the far eastern portion of the study area, surrounded by Douglas' fir and Oregon oak (*Quercus garryana*, FACU) trees. The southern boundary of the study area borders SW Tualatin-Sherwood Road.

Offsite and On-site Determination of Wetlands or Waterways

Prior to the field investigation, precipitation information from the Rex 1 S WETS station was examined to determine hydrological conditions for the three months preceding the September wetland delineation fieldwork and the Weather Underground website (<u>https://www.wunderground.com</u>) was examined to determine hydrological conditions for the preceding two weeks. As shown below in Table 1, precipitation for the preceding three months of June, July, and August were well below normal; however, precipitation for the preceding two weeks was 3.02 inches, which is 495 percent of normal (0.61 inches).

Month	Average	30% chanc	e will have	Observed	Percent of	
wionth	Precipitation ¹	Less than ¹ More than ¹		Precipitation ¹	Normal	
June	1.69	0.98	2.06	0.54	32	
July	0.7	0.22	0.81	0.46	66	
August	0.89	0.29	1	0.21	24	

Table 1.	Average Monthly and observed precipitation	on for Rex 1 S (NRCS WETS Table)

Notes: ¹Source: http://agacis.rcc-acis.org/?fips=41071

Below-normal rainfall for the three months preceding the wetland determination fieldwork and above normal precipitation for the preceding two weeks did not result in significant variations in the typical hydrological conditions for groundwater during late summer in the Willamette Valley, when water tables are either at or near their lowest point. Although sufficient hydrology indicators for a wetland determination were not present at any sample point, dry season evaluations for oxidized rhizospheres along living roots geomorphic position, and the Fac-Neutral test were utilized. Five sample points were taken throughout the property to determine if wetland existed with in the study area.

Sample Point 1 (Tax lot 600) was placed in the northern portion of the study area. Dominant vegetation in this area consists of Himalayan blackberry, colonial bentgrass (*Agrostis capillaris*, FAC), and velvet grass and meets the wetland vegetation criteria for wetlands. Hydric soils meet the requirements for depleted matrix; however, wetland hydrology indicators are not present.

Sample Point 2 (Tax lot 600) was placed in the center of the field, which had recently been mowed. Vegetation consists of unidentified grasses and lesser hawkbit and does not meet the wetland vegetation criteria; hydric soils and wetland hydrology are also not present.

Sample point 3 (Tax lot 600) was placed in an area that had recently been disturbed, possibly for geotechnical excavations; however, there was adequate undisturbed ground available to assess vegetation, soils, and hydrology. Vegetation consists of unidentified grasses, black-bindweed (*Fallopia convolvulus*, FACU), and oat (assumed UPL) and does not meet wetland vegetation criteria; hydric soils and wetland hydrology are also not present.

Dane Palanjian, Phelan Development Company, LLC 10835, 11045, 10775 Tualatin-Sherwood Road, Tualatin, Oregon Pacific Habitat Services, Inc. / PHS #6836 October 11, 2019 Page 3

Sample Point 4 (Tax lot 500) was placed in a large, open field in the western portion of the study area. The dominant vegetation is ryegrass, which meets wetland vegetation criteria; however, hydric soils and wetland hydrology are not present.

Sample Point 5 (Tax lot 700) was placed in the northeast portion of the study area. The dominant vegetation consists of Himalayan blackberry and ryegrass, which meets wetland vegetation criteria; however, hydric soils and wetland hydrology are not present.

Wetland Determination Data Forms for Sample Points 1-5 and photographs of the site are attached.

Results and Conclusions

Wetland Determination

As described above, PHS did not identify any potentially jurisdictional wetlands or waters of the State/US within the study area. This finding is in agreement with the Tualatin Natural Resource Inventory and Local Wetland Inventory (LWI) mapping, which also did not map any wetlands or waters within the study area.

Vegetated Corridor Assessment

As a result of the wetland determination and the previous wetland delineation performed by PHS, it is clear that there are no sensitive areas or regulated vegetated corridors affecting the study area. As slopes in the study area and to the north range from 0 to 4 percent, regulated vegetated corridors would extend no further than 50 feet from any sensitive areas that may be located north of the study area. As the nearest wetland is approximately 540 feet west of the northern portion of the study area, there are no vegetated corridors within a minimum of 50 feet from the site.

Required Disclaimer

This letter documents the investigation, best professional judgment and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055. Also,

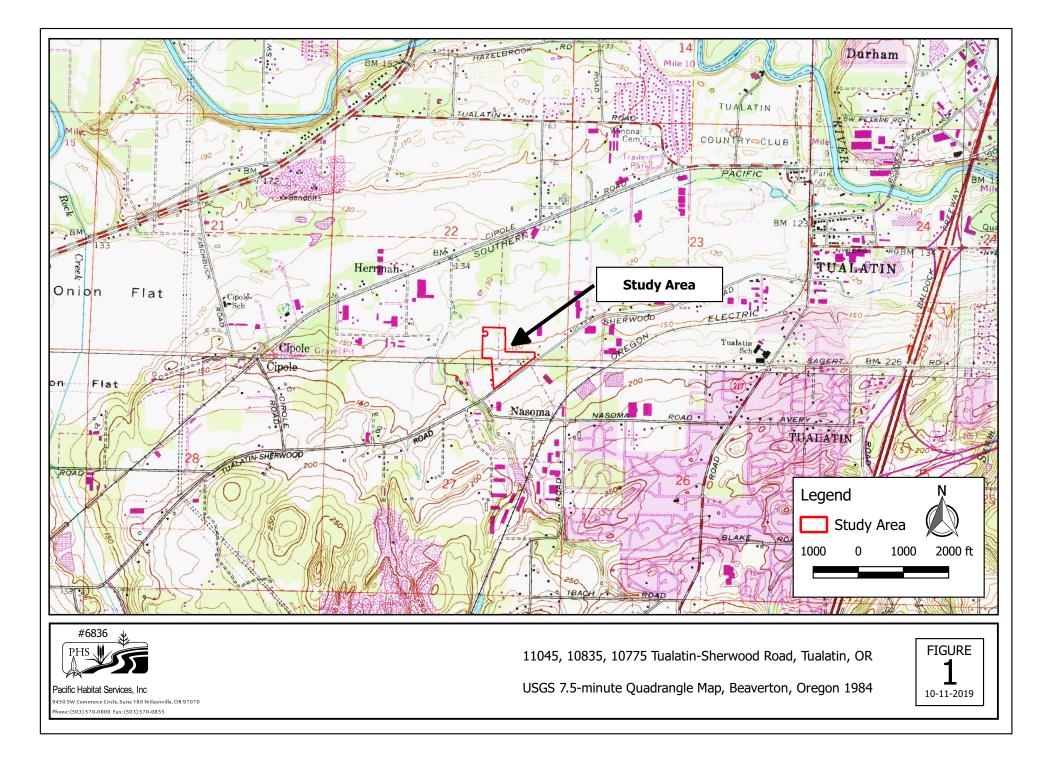
Feel free to contact me directly should you require any additional information pertinent to this determination memo and Vegetated Corridor Assessment.

Sincerely

Joe Phompson

Joe Thompson

Enclosures: Figures 1 and 2 Wetland Determination Data Forms Site Photos







Pacific Habitat Services, Inc 9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070 Phone: (503) 570-0800 Fax: (503) 570-0855 11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, OR

Wetland Determination and Vegetated Corridor Assessment



WETLAND DETER	RMINATION		RM - Weste	rn Mountains, Vall	evs, and Coa	PHS # st Region	6836
Project/Site: Tualatin-Sherwood Rd I		City/County:		in/Washington	Sampling Date:	-	/2019
Applicant/Owner: Phelan Developme	nt			State:	OR	Sampling Point:	1
nvestigator(s): JT/MS		Section, Township, Range:		Townsh	ip 2S, Range 1 V	V, Section 22D	
andform (hillslope, terrace, etc.:)	Flat	-	Local relief (cor	ncave, convex, none):	None	Slope (%):	0
Subregion (LRR):		Lat:	45.3767		-122.791179	Datum:	WSG85
oil Map Unit Name:	Labish Muc	– ky Clay - Hydr	ic	NWI Clas	ssification:	None	
Are climatic/hydrologic conditions on the site to			Yes	X No		olain in Remarks)	
re vegetation Soil or Hy	drology	significantly dist	urbed?	Are "Normal Circumstanc			
· ·	drology	-		, explain any answers in Re			
UMMARY OF FINDINGS – Attac	h site map	showing san	npling point	locations, transects,	, important feat	tures, etc.	
ydrophytic Vegetation Present? Yes	X No					•	
lydric Soil Present? Yes	X No		ls Sampled Ar a Wetlar			No X	
	No	X	a wetiai	<u> </u>			
emarks:							
/EGETATION - Use scientific nan	nes of plant	s.					
	absolute	Dominant	Indicator	Dominance Test worl	ksheet:		
rea Ctratum (rl-t-i	% cover	Species?	Status				
ree Stratum (plot size:)				Number of Dominant Spec		2	(A)
2				That are OBL, FACW, or F	AU:	3	(A)
				Total Number of Dominant	ł		
3 				Species Across All Strata:		3	(B)
	0	= Total Cover					(=)
apling/Shrub Stratum (plot size: 15	<u> </u>			Dereent of Deminent Cross	ine		
apling/Shrub Stratum (plot size: 15 Rubus armeniacus	_ [/] 70	x	FAC	Percent of Dominant Spec That are OBL, FACW, or		100%	(A/B)
Crataegus douglasii	10		FAC			10076	(~, D)
Crataegus monogyna	10		FAC	Prevalence Index Wo	rksheet:		
				Total % Cover of	Multiply b	by:	
;				OBL Species	x 1 =	• 0	
	90	= Total Cover		FACW species	x 2 =	0	
<i></i>				FAC Species	x 3 =		
erb Stratum (plot size: 5)	~~	v	540	FACU Species	x 4 =		
Agrostis capillaris	80	<u> </u>	FAC FAC	UPL Species	x 5 =		(D)
Holcus lanatus Hypericum perforatum	<u>20</u> 1		FAC FACU	Column Totals	0 (A)	0	(B)
	<u> </u>		PAGU	Prevalence Index =E	β/Δ =	#DIV/0!	
·							
				Hydrophytic Vegetati	on Indicators:		
					- Rapid Test for Hyd	drophytic Vegetatio	n
					2- Dominance Test is		
	101	= Total Cover			3-Prevalence Index i		
					I-Morphological Ada		
oody Vine Stratum (plot size:)				lata in Remarks or o	•)
					5- Wetland Non-Vaso		(nlain)
		- T-4 1 0			Problematic Hydroph		
	0	= Total Cover		¹ Indicators of hydric soil ar disturbed or problematic.		y must be present,	unless
				Hydrophytic			
	<u>م</u>			Vegetation	Yes X	No	
6 Bare Ground in Herb Stratum	0			Present?		·	

SOIL			PHS #	6836)			Sampling Point: 1
	iption: (Describe to	the depth r	needed to docume			firm the abse	nce of indicators.)	
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redox Fe	eatures Type ¹	Loc ²	Texture	Remarks
0-2	10YR 3/2	100	10YR 3/4	<1	C	PL	Silty Clay Loam	
2-9	10YR 3/2	100					Silty Clay Loam	
9-15	10YR 5/2	85	5YR 4/6	15	С	м	Silt Loam	Medium, Coarse
								2
	centration, D=Depleti Indicators: (Appl						Indica	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
,	Histosol (A1)				ndy Redox			2 cm Muck (A10)
	Histic Epipedon (A2)				ipped Mat			Red Parent Material (TF2)
	Black Histic (A3)						(except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A4	1)				ed Matrix (F2)	,	Other (explain in Remarks)
	Depleted Below Dark		A11)		pleted Ma			
	Thick Dark Surface (X11)	·		Surface (F6)		
						. ,		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera Sandy Gleyed Matrix				-	rk Surface (F7) essions (F8)		hydrology must be present, unless disturbed or problematic.
estrictive	Layer (if present)	:						
ype: Oepth (inche Remarks:	s): cky clay (hydric)						Hydric Soil Pres	ent? Yes <u>X</u> No
ype: Depth (inche Remarks: .abish muc	ky clay (hydric)	 s:					Hydric Soil Pres	ent? Yes X No
ype: Depth (inche lemarks: .abish muo HYDROLC Vetland Hy	cky clay (hydric) DGY rdrology Indicator		uired; check all tr	nat apply)			Hydric Soil Pres	
ype:)epth (inche emarks: abish muc IYDROLC Vetland Hy	cky clay (hydric) DGY		Jired; check all th		ater staine	d Leaves (B9)	Hydric Soil Pres	sent? Yes X No Secondary Indicators (2 or more required) Water stained Leaves (B9)
ype:)epth (inche emarks: abish muc IYDROLC Vetland Hy	cky clay (hydric) DGY rdrology Indicator cators (minimum o	of one requ	uired; check all th	Wa	ater stained 2, 4A, and			Secondary Indicators (2 or more required)
ype: epth (inche emarks: abish muo IYDROLC Vetland Hy	CKy clay (hydric) OGY rdrology Indicator cators (minimum o Surface Water (A1)	of one requ	uired; check all th	Wa 1, 2		4B)		Secondary Indicators (2 or more required)
ype: epth (inche emarks: abish muo IYDROLC /etland Hy	Cky clay (hydric) DGY vdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2	of one requ	uired; check all th	Wa 1, 2 Sal	2, 4A, and It Crust (B	4B)	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
ype: epth (inche emarks: abish muo IYDROLC /etland Hy	CKy clay (hydric) OGY Adrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3)	of one requ	uired; check all th	Wa 1, 2 Sal Aqu	2, 4A, and It Crust (B uatic Inver	1 4B) 11)	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
ype: epth (inche emarks: abish muo IYDROLC Vetland Hy	Cky clay (hydric) DGY rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	of one requ	uired; check all th	Wa 1, 2 Sal Aqu Hyd	2, 4A, and It Crust (B uatic Inver drogen Su	1 4B) 11) tebrates (B13) Ifide Odor (C1	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
ype: Pepth (inche emarks: abish muc IYDROLC Vetland Hy rimary Indi	Cky clay (hydric) CGY rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	f one requ 2) 32)	uired; check all th	Wa 1, 2 Sal Aqu Hya Oxid	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi	1 4B) 11) tebrates (B13) Ifide Odor (C1	(Except MLRA)) ng Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
ype: Pepth (inche emarks: abish muc IYDROLC Vetland Hy rimary Indi	Cky clay (hydric) CGY Cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	f one requ 2) 32)	uired; check all th	Wa 1, 2 Sal Aqu Hyo Oxi Pre	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I	14 B) 11) tebrates (B13) Ifide Odor (C1 zospheres alo Reduced Iron	(Except MLRA)) ng Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
ype: epth (inche emarks: abish muo IYDROLO Vetland Hy rimary Indi	Cky clay (hydric) DGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B	f one requ 2) 32) 4)	uired; check all th	Wa 1, 2 Sal Aqu Hyo Oxio Pre Ree	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi esence of I	14 B) 11) tebrates (B13) Ifide Odor (C1 zospheres alo Reduced Iron	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)
ype: Depth (inche abish muc IYDROLC Vetland Hy Primary Indi	cky clay (hydric) OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5)	1 one requ 2) 32) 4) (B6)		Wa 1, 2 Sal Aqu Oxio Pre Red Study	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi esence of I cent Iron F unted or St	14 B) 11) tebrates (B13) Ifide Odor (C1 zospheres alo Reduced Iron Reduction in P	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
ype: epth (inche emarks: abish muo IYDROLO Vetland Hy rimary Indi	Cky clay (hydric) CGY rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (of one requ 2) 32) 4) (B6) Aerial Imag	ıgery (B7)	Wa 1, 2 Sal Aqu Oxio Pre Red Study	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi esence of I cent Iron F unted or St	14 B) 11) tebrates (B13) Ifide Odor (C1 zospheres alor Reduced Iron Reduced Iron Reduction in P tressed Plants	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
ype: Depth (inche emarks: abish muc IYDROLC Vetland Hy Primary Indi	cky clay (hydric) Code Cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (of one requ 2) 32) 4) (B6) Aerial Imag	ıgery (B7)	Wa 1, 2 Sal Aqu Oxio Pre Red Study	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi esence of I cent Iron F unted or St	14 B) 11) tebrates (B13) Ifide Odor (C1 zospheres alor Reduced Iron Reduced Iron Reduction in P tressed Plants	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
ype: Depth (inche abish muc HYDROLC Vetland Hy Primary Indi	cky clay (hydric) Cody Cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Tvations: Present? Yes	of one requ 2) 32) 4) (B6) Aerial Imag	igery (B7) urface (B8) No <u>X</u>	Wa 1, 2 Sal Aqu Hya Oxi Pre Rea Stu Oth Depth (inc	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I scent Iron F unted or SI her (Explai	14 B) 11) tebrates (B13) Iffide Odor (C1 zospheres alor Reduced Iron Reduced Iron Reduction in P tressed Plants in in Remarks)	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
ype: Depth (inche abish muc HYDROLC Vetland Hy Primary Indi	cky clay (hydric) Cody Cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Tvations: Present? Yes	of one requ 2) 32) 4) (B6) Aerial Imag	ıgery (B7) urface (B8)	Wa 1, 2 Sal Aqu Dyo Oxi Pre Red Stu Oth	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I scent Iron F unted or SI her (Explai	14 B) 11) tebrates (B13) Ifide Odor (C1 zospheres alor Reduced Iron Reduced Iron Reduction in P tressed Plants	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
ype: Depth (inche iemarks: abish muc iemarks: itip Content Primary Indi Primary Indi ield Obser urface Water /ater Table F aturation Pre	Cky clay (hydric) Chydrology Indicator Cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (C Tvations: Present? Yes Esent? Yes	of one requ 2) 32) 4) (B6) Aerial Imag	igery (B7) urface (B8) No <u>X</u>	Wa 1, 2 Sal Aqu Hya Oxi Pre Rea Stu Oth Depth (inc	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I scent Iron F unted or St her (Explai	14 B) 11) tebrates (B13) Iffide Odor (C1 zospheres alor Reduced Iron Reduced Iron Reduction in P tressed Plants in in Remarks)	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inche Remarks: Labish muc HYDROLC Vetland Hy Primary Indi Primary Indi	Cky clay (hydric) Chydrology Indicator Cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (C Tvations: Present? Yes Esent? Yes	of one requ 2) 32) 4) (B6) Aerial Imag Concave Su	igery (B7) urface (B8) No X No X No X	Wa 1, 2 Sal Aqu Hyo Oxi Pre Ree Stu Oth Depth (inc Depth (inc	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I cent Iron F unted or St her (Explai	14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (Reduction in P tressed Plants in in Remarks) >15 >15	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hydr	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present?
ype: Depth (inche Remarks: Labish muc HYDROLC Vetland Hy Primary Indi Primary Indi	Cky clay (hydric) CGY rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (C rvations: r Present? Yes Present? Yes Present? Yes Present? Yes	of one requ 2) 32) 4) (B6) Aerial Imag Concave Su	igery (B7) urface (B8) No X No X No X	Wa 1, 2 Sal Aqu Hyo Oxi Pre Ree Stu Oth Depth (inc Depth (inc	2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I cent Iron F unted or St her (Explai	14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (Reduction in P tressed Plants in in Remarks) >15 >15	(Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hydr	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present?

ND DETE	RMINATION		RM - Weste	rn Mountains, Val	leys, and Coa	-	6836
erwood Rd	Property	City/County:	Tualat	tin/Washington	Sampling Date	9/19	9/2019
Developme	ent			State:	OR	Sampling Point:	2
JT/MS		Section, To	wnship, Range:	Townsh	nip 2S, Range 1 V	N, Section 22D	
.:)	Flat		Local relief (cor	ncave, convex, none):	None	Slope (%):	1
LRR	Α	Lat:	45.3760	075 Long:	-122.791242	Datum:	WSG85
Qı	uatama Loam,	0-3 Percent S	lopes	NWI Cla	ssification:	None	
ns on the site	typical for this tin	ne of year?	Yes	X No	(if no, ex	plain in Remarks)	
or H	ydrology	significantly dist	urbed?	Are "Normal Circumstand	ces" present? (Y/N)	Y	
or H	ydrology	naturally proble	matic? If needed	, explain any answers in Re	emarks.)		
		_					
			npling point	locations, transects	, important fea	tures, etc.	
	No		Is Sampled Ar	ea within			
Yes -	No	<u> </u>	a Wetlar	nd? Yes		No X	
Yes	No	<u> </u>					
entific na	mes of plant	.e					
	absolute	Dominant	Indicator	Dominance Test wor	ksheet:		
	% cover	Species?	Status				
))						(a)
				That are OBL, FACW, or	FAC:	1	(A)
						2	(B)
	0	= Total Cover		Species Across Air Strata		2	(D)
	<u> </u>						
size:	_)					50%	
				That are OBL, FACW, or	FAC:	50%	(A/B)
				Prevalence Index Wo	orksheet:		
						by:	
				OBL Species			
	0	= Total Cover		FACW species	x 2 =	= 0	
				FAC Species	x 3 =	= 0	
5)			FACU Species			
				-			
		<u> </u>	FACU	Column Totals	U (A)	0	(B)
				Prevalence Index =	B/A =		
					B/A -		
				Hydrophytic Vegetat	ion Indicators:		
						drophytic Vegetatio	on
					2- Dominance Test i	s >50%	
	100	= Total Cover					
e:)						t)
<u> </u>		- T-1 - 0					
	0	= Total Cover		¹ Indicators of hydric soil a disturbed or problematic.	na weliana nyarolog	y must be present,	uniess
ı				Hydrophytic Vegetation	Yes	No	х
	erwood Rd Developm JT/MS) LRR Q ns on the site or H or H GS – Atta t? Yes Yes Yes	erwood Rd Property Development JT/MS Exr. Flat LRR A Quatama Loam, ns on the site typical for this tim or Hydrology GS - Attach site map No Yes No Yes No Yes No Yes No size:) 5) 80 20 size:) 100 state	erwood Rd Property City/County: Development Section, To JT/MS Section, To LRR A Lat: Quatama Loam, 0-3 Percent S ns on the site typical for this time of year? or Hydrology significantly dist or Hydrology naturally problem GS - Attach site map showing sam t? Yes Yes No Yes No Yes No Yes No yes No 0 = Total Cover size:) 0 = Total Cover size:) 100 = Total Cover	erwood Rd Property City/County: Tualat Development	erwood Rd Property City/County: Tualatin/Washington Development State: JT/MS Section, Township, Range: Townsi	erwood Rd Property City/County: Tualatin/Washington Sampling Date Development State: OR JT/MS Section, Township, Range: Township 2S, Range 1 \\ .:) Flat Local relief (concave, convex, none): None LRR A Lat: 45.376075 Long: -122.791242 Quatama Loam, 0-3 Percent Slopes NWI Classification: No (fro. ex or Hydrology _significantly disturbed? Are "Normal Circumstances" present? (YN) or Hydrology _naturally problematic? If needed, explain any answers in Remarks.) GS = Attach site map showing sampling point locations, transects, important feat Yes Yes No X Is Sampled Area within a Wetland? Yes No X Sacher Area within a Wetland? yes No X Percent of Dominant Species That are OBL, FACW, or FAC:	Development State OR Sampling Point: JT/MS Section, Township, Range: Township 25, Range 1 W, Section 22D .:) Flat Local relief (concave, convex, nore); None Signe (%); LURA Lat: 45.376075 Long:122.791242 Deturn: Quatama Loam, 0-3 Percent Slopes NWI Classification: None None Signe (%);

Profile Descr			PHS #	6836	-		Sampling Point: 2
		the depth	needed to docume	ent the indicator or co	onfirm the abser	nce of indicators.)	
Depth	Matrix	%		Redox Features % Type ¹	Loc ²	Tautura	Demedia
(Inches) 0-14	Color (moist) 10YR 3/4	100	Color (moist)	% Type'		Texture Silt Loam	Remarks
0-14	1018 3/4	100				Silt Loain	
	·			·	·		
	·			·	·		
				·	·		
				·	·		
	·						
				·	·		
	·				·		
				Covered or Coated Sa			² Location: PL=Pore Lining, M=Matrix.
Hydric Soil		licable to	all LRRs, unles	s otherwise noted		Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)			Sandy Red	ox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2))		Stripped M			Red Parent Material (TF2)
	Black Histic (A3)			·	ky Mineral (F1)(except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A	4)		Loamy Gle	ved Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark	k Surface (/	411)	Depleted N	atrix (F3)		
	Thick Dark Surface ((A12)		Redox Dar	surface (F6)		³ Indiastors of hydrophytic versition and waterd
	Sandy Mucky Minera	al (S1)		Depleted D	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	k (S4)		Redox Dep	ressions (F8)		problematic.
Restrictive	Layer (if present)):					
Туре:							
Depth (inche	es):					Hydric Soil Pres	ent? Yes No X
HYDROLC Wetland Hy	DGY						
mediana my	drology Indicato	rs:					
-			uired; check all th	nat apply)			Secondary Indicators (2 or more required)
-	vdrology Indicator icators (minimum c Surface Water (A1)		uired; check all th		ed Leaves (B9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9)
-	icators (minimum c	of one req	uired; check all th			Except MLRA	
-	icators (minimum c Surface Water (A1)	of one req	uired; check all th	Water stain	nd 4B)	Except MLRA	Water stained Leaves (B9)
-	icators (minimum c Surface Water (A1) High Water Table (A	of one req	uired; check all th	Water stair 1, 2, 4A, ar Salt Crust (nd 4B)	Except MLRA	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
-	icators (minimum o Surface Water (A1) High Water Table (A Saturation (A3)	of one req 2)	uired; check all th	Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv	nd 4B) B11)		Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
-	icators (minimum c Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1)	of one req 2)	uired; check all th	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1)		Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
-	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (of one req 2) B2)	uired; check all th	Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1)	g Living Roots (C3)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
-	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (Drift Deposits (B3)	of one req 2) B2)	uired; check all th	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon	g Living Roots (C3) C4)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
-	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E	<u>of one req</u> 2) B2) 34)	uired; check all th	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C	g Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3)
-	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5)	of one req 2) B2) 34) (B6)		Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C n Reduction in Plo	g Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
-	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks	of one req 2) B2) 34) (B6) n Aerial Ima	ıgery (B7)	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C Reduction in Plo Stressed Plants (g Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
-	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated	of one req 2) B2) 34) (B6) n Aerial Ima	ıgery (B7)	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C Reduction in Plo Stressed Plants (g Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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Primary Indi	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated rvations: r Present? Yes	of one req 2) B2) 34) (B6) n Aerial Ima	ıgery (B7) urface (B8)	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	nd 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C Reduction in Plo Stressed Plants (g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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Primary Indi	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated rvations: rr Present? Yes Present? Yes esent? Yes my fringe)	of one req 2) B2) 34) (B6) n Aerial Ima Concave S	igery (B7) urface (B8) No X No X No X	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp Depth (inches): Depth (inches):	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C r Reduction in Plo Stressed Plants (ain in Remarks) >14 >14	g Living Roots (C3) C4) bwed Soils (C6) D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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Field Obser Surface Water Water Table F Saturation Pre (includes capilla	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated rvations: rr Present? Yes Present? Yes esent? Yes my fringe)	of one req 2) B2) 34) (B6) n Aerial Ima Concave S	igery (B7) urface (B8) No X No X No X	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp Depth (inches): Depth (inches):	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C r Reduction in Plo Stressed Plants (ain in Remarks) >14 >14	g Living Roots (C3) C4) bwed Soils (C6) D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Field Obser Surface Water Water Table F Saturation Pre (includes capilla Describe Reco	icators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated rvations: rr Present? Yes Present? Yes esent? Yes my fringe)	of one req 2) B2) 34) (B6) n Aerial Ima Concave S	igery (B7) urface (B8) No X No X No X	Water stain 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp Depth (inches): Depth (inches):	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon f Reduced Iron (C r Reduction in Plo Stressed Plants (ain in Remarks) >14 >14	g Living Roots (C3) C4) bwed Soils (C6) D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

WETLAND DE			RM - Weste	rn Mountains, Val	leys, and Coast	PHS # Region	6836
t/Site: Tualatin-Sherwood		City/County:		in/Washington	Sampling Date:	-	/2019
ant/Owner: Phelan Develo				State:	OR S	ampling Point:	3
igator(s): JT/I		Section. To	wnship, Range:	Townsh	nip 2S, Range 1 W, S	ection 22D	
orm (hillslope, terrace, etc.:)	Flat	,		ncave, convex, none):	None	Slope (%):	1
	RRA	Lat:	45.3777	· · · · ·	-122.790458	Datum:	WSG8
	Voodburn Silt Loa	_			ssification:	- None	
matic/hydrologic conditions on the			Yes		(if no, explair		
		-				,	
·	or Hydrology			Are "Normal Circumstanc		<u> </u>	
getation Soil	or Hydrology	naturally proble	matic? If needed	, explain any answers in Re	emarks.)		
IMARY OF FINDINGS - A	ttach site map	showing san	pling point	locations, transects	, important featur	es, etc.	
phytic Vegetation Present? Yes				· ·	•		
Soil Present? Yes			Is Sampled Ar	× ×	No	x	
nd Hydrology Present? Yes			a Wetlar	iu?			
rks:							
ETATION - Use scientific	names of plan	ts.					
	absolute	Dominant	Indicator	Dominance Test wor	ksheet:		
	% cover	Species?	Status				
Stratum (plot size:)			Number of Dominant Spe	cies		
				That are OBL, FACW, or I	FAC:	1	(A)
				Total Number of Dominan	t		
				Species Across All Strata:		2	(B)
	0	= Total Cover					
g/Shrub Stratum (plot size:)			Percent of Dominant Spec	cies		
				That are OBL, FACW, or	FAC: 50)%	(A/B)
				Prevalence Index Wo	orksheet:		
				Total % Cover of	Multiply by:	_	
				OBL Species	x 1 =	0	
	0	= Total Cover		FACW species	x 2 =	0	
Stratum (plot size: 5	`			FAC Species	x 3 =		
Stratum (plot size: 5 Inidentified grass) 40	v		FACU Species	x 4 =	0	
allopia convolvulus	40 40	<u> </u>	(FAC) FACU	Column Totals	x 5 =		(P)
vena sp	20		(UPL)	Column Totais	0 (A)		(B)
olium perenne	20		FAC	Prevalence Index =	ח#	V/0!	
olcus lanatus	10		FAC			v/0:	
nidentified forb	10		(FAC)	Hydrophytic Vegetat	ion Indicators		
					1- Rapid Test for Hydrop	hvtic Vegetatio	n
					2- Dominance Test is >5		
	140	= Total Cover			3-Prevalence Index is ≤ 3		
					4-Morphological Adaptat		upporting
y Vine Stratum (plot size:)				data in Remarks or on a	separate sheet)
					5- Wetland Non-Vascula	r Plants ¹	
					Problematic Hydrophytic	Vegetation ¹ (Ex	xplain)
	0	= Total Cover		¹ Indicators of hydric soil a	nd wetland hydrology mu	ust be present,	unless
				disturbed or problematic.			
e Ground in Herb Stratum	0			Hydrophytic Vegetation	Yes	No	х
				ITOUCIULIUI	100	110	~

Wetland Hydrology Indicators: Secondary Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Water stained Leaves (B9) (Except MLRA High Water Table (A2) 1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Dift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soli Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Pepth (inches): Pried Observations: No X Surface Water Present? Yes No No X Depth (inches): Surface Water Mage, Yes No X Depth (inches): >14 Yes No Water Table Present? Yes No X Depth (inches): >14 Yes No X No exriation Visible on aerial phot			PHS #	6836			Sampling Point:	3
(https://get/linear/get/	• •	•	needed to docum		firm the absen	ce of indicators.)		
0-13 10YR 3/3 100			Color (moist)	1	loc^2	Texture	Remarks	
Type: C=Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Stand Grains.		<u> </u>		<u>/////////////////////////////////////</u>				
type 2 or Mack (A10) Histos (A1) Sandy Redax (S5) 2 or Mack (A10) Histos (A1) Sandy Redax (S5) 2 or Mack (A10) Biack Histic (A3) Loamy Gleged Matrix (S0) Red Perent Material (T2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Other (explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F2) off (explain in Remarks) Sandy Macky Mineral (S1) Depleted Matrix (F2) off (explain in Remarks) Sandy Gleged Matrix (C4) Redox Dark Surface (F6) *indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Ype:		100	·			Ont Loann		
ydiric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ¹ : Hintso((A1) Sardy Redox (S5) 2 cm Mack (A10) Hintso((A1) Sardy Redox (S5) 2 cm Mack (A10) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Suffice (A41) Depieded Matrix (F2) Other (explain in Remarks) Depieded Blew Dark Surface (A11) Depieded Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depieded Dark Surface (F7) *indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. ype: ype: ype: No X ype: ype: No X marks: strubbed Indicators (Informace): Hydric Soil Present? Yes No X strubbed Indicators (Informace): Hydric Soil Present? Yes No X strubbed Indicators (Informace): Hydric Soil Present? Yes No X strubbed Indicators (Informace): Hydric Soil Present? Yes No X Strubbel Indicators (Informace): Hydric Soil Present? Yes No <			·		······································			
yperie Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Hattadi (A1) Samdy Redox (S5) 2 cm Mack (A10) Haittadi (A2) Samdy Redox (S5) 2 cm Mack (A10) Black Hatic (A3) Loamy Micky Minoral (F1)(except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Suffac (A4) Loamy Gleyed Matrix (F2) Other (explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F2) "Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic." Samdy Micky Mineral (S1) Depleted Dark Surface (F7) "Indicators of hydrophylic vegetation and wetland hydrology must be present; unless disturbed or problematic." ype:			·		······································			
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Haitosa (A1) Sandy Redx (S5) 2 cm Mack (A10) Haitosa (A1) Sandy Redx (S5) 2 cm Mack (A10) Haitosa (A1) Cammy Glayed Matrix (S1) Red Parent Matrial (T2) Hydrogon Sulfide (A4) Loamy Glayed Matrix (F2) Other (explain in Remarks) Depieted Below Dark Surface (A11) Depieted Matrix (F3) Thick Dark Surface (A12) Redx Dark Surface (F7) Sandy Micky Mineral (S1) Depieted Dark Surface (F7) "Indicators of hydrophylic vegetation and wetland hydrology must be present; unless disturbed of problematic." startbet Layer (if present): ype: ype: No X geth (inches):								
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Hintosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Hintosol (A2) Sandy Redox (S5) Red Parent Material (T2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Pojeted Below Dark Surface (A12) Redox Dark Surface (F7) *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Micky Mineral (S1) Depleted Dark Surface (F7) *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. ype: update Matrix (S4) Redox Depressions (F8) *indicators (2 or more required) ype: water stained Leaver (B9) (Except MLRA 1) Water stained Leaver (B9) (MLRA 4, and 4B) Water ratin decave (B9) (MLRA 4, and 4B) YDROLOGY *indicators (2 or more required) *indicators (2 or more required) Saturation Visible on Aerial magery (B1) Saturbed hummocky. Recent geotechnical excavations in general area. Secondary Indicators (2 or more required) Saturation Visible on Aerial magery (B1) Saturation (A3) Saturation Chaid (B1) Dranage Patterne (E10) Dranage Patterne (E10) Saturation Visible on Aerial magery (B2)								
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Hintosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Hintosol (A2) Sandy Redox (S5) Red Parent Material (T2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Pojeted Below Dark Surface (A12) Redox Dark Surface (F7) *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Micky Mineral (S1) Depleted Dark Surface (F7) *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. ype: update Matrix (S4) Redox Depressions (F8) *indicators (2 or more required) ype: water stained Leaver (B9) (Except MLRA 1) Water stained Leaver (B9) (MLRA 4, and 4B) Water ratin decave (B9) (MLRA 4, and 4B) YDROLOGY *indicators (2 or more required) *indicators (2 or more required) Saturation Visible on Aerial magery (B1) Saturbed hummocky. Recent geotechnical excavations in general area. Secondary Indicators (2 or more required) Saturation Visible on Aerial magery (B1) Saturation (A3) Saturation Chaid (B1) Dranage Patterne (E10) Dranage Patterne (E10) Saturation Visible on Aerial magery (B2)								
ydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls*: Hatesa (A1) Samdy Redox (S5) 2 cm Mack (A10) Hatesa (A1) Samdy Redox (S5) 2 cm Mack (A10) Hatesa (A1) Samdy Redox (S5) Red Parent Material (T2) Hydrogen Suffac (A3) Loamy Gleyed Matrix (F3) Very Shallow Dark Surface (TF12) Thick Dark Surface (A11) Depleted Matrix (F3) Other (explain in Remarks) Samdy Micky Mineral (S1) Depleted Matrix (F3) "Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic." sandy Gleyed Matrix (S4) Redox Dark Surface (F7) "Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic." ype: upplic fileness): Hydric Soil Present? Yes No X water tained Leaver (flopresent): Ype: No X ype: Indicators (C or more required) Saturbed hummocky. Recent geotechnical excavations in general area. Secondary Indicators (2 or more required) Saturbed hummocky. Recent geotechnical excavations in general area. Secondary Indicators (2 or more required) Mater atalined Leaves (B9) (Except MLRA (10) Water atalined Leaves (B9) (MLRA A), and 49) Dataliand Leaves (B9) (MLRA A), an			·					1
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Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummocks (D7) Field Observations: No X Depth (inches): Popth (inches): <	Vetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat	ninimum of one red Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	quired; check all tl	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I	4B) 11) tebrates (B13) lfide Odor (C1) zospheres along Reduced Iron (C	Living Roots (C3)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (ives (B9) i nd 4B) r (B10) r Table (C2) on Aerial Imagery (ion (D2) [D3)
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): >14 Wetland Hydrology Present? Vater Table Present? Yes No X Depth (inches): >14 Yes No X Saturation Present? Yes No X Depth (inches): >14 Yes No X Includes capillary fringe) No X Depth (inches): >14 Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Previous inspections), if available: Previous inspections), if available:	Vetland Hydrology Primary Indicators (m Surface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo	hinimum of one rec /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5)	quired; check all tl	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Ploy	Living Roots (C3) 4) wed Soils (C6)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (ves (B9) ind 4B) r (B10) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5)
Field Observations: No X Depth (inches): Yes No X Depth (inches): >14 Wetland Hydrology Present? Vater Table Present? Yes No X Depth (inches): >14 Yes No X Saturation Present? Yes No X Depth (inches): >14 Yes No X Saturation Present? Yes No X Depth (inches): >14 Yes No X Includes capillary fringe) No X Depth (inches): >14 Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: If available: Saturations) If available:	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S	hinimum of one rec vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6)		Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St	4B) 11) tebrates (B13) lfide Odor (C1) zospheres along Reduced Iron (C Reduction in Ploy ressed Plants (E	Living Roots (C3) 4) wed Soils (C6)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) ds (D6) (LRR A)
Sturface Water Present? Yes No X Depth (inches): >14 Wetland Hydrology Present? Vater Table Present? Yes No X Depth (inches): >14 Wetland Hydrology Present? Saturation Present? Yes No X Depth (inches): >14 Yes No X Includes capillary fringe) Ves No X Depth (inches): >14 Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: If available: If available: If available:	Vetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	hinimum of one red Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im	agery (B7)	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St	4B) 11) tebrates (B13) lfide Odor (C1) zospheres along Reduced Iron (C Reduction in Ploy ressed Plants (E	Living Roots (C3) 4) wed Soils (C6)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) ds (D6) (LRR A)
Vater Table Present? Yes No X Depth (inches): >14 Wetland Hydrology Present? Saturation Present? Yes No X Depth (inches): >14 Yes No X Includes capillary fringe) No X Depth (inches): >14 Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: If available: If available:	Vetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W	hinimum of one rec vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im vegetated Concave S	agery (B7)	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St	4B) 11) tebrates (B13) lfide Odor (C1) zospheres along Reduced Iron (C Reduction in Ploy ressed Plants (E	Living Roots (C3) 4) wed Soils (C6)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) ds (D6) (LRR A)
Staturation Present? Yes No X Depth (inches): >14 Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Stream gauge, monitoring well, aerial photos, previous inspections), if available: Stream gauge, monitoring well, aerial photos, previous inspections), if available:	Vetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatior Sparsely N Field Observations:	hinimum of one red Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im Vegetated Concave S	agery (B7) Surface (B8)	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explai	4B) 11) tebrates (B13) lfide Odor (C1) zospheres along Reduced Iron (C Reduction in Ploy ressed Plants (E	Living Roots (C3) 4) wed Soils (C6)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) ds (D6) (LRR A)
ncludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely N Field Observations: Surface Water Present?	hinimum of one rec vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im vegetated Concave S Yes	agery (B7) Surface (B8)	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explained Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E in in Remarks)	Living Roots (C3) 4) wed Soils (C6) D1) (LRR A)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hum	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (C ion (D2) (D3) D5) ds (D6) (LRR A)
	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observations: Surface Water Present?	hinimum of one rec vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im vegetated Concave S Yes Yes Yes	agery (B7) Surface (B8) No <u>X</u>	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explain Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14	Living Roots (C3) 4) wed Soils (C6) D1) (LRR A)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (C ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)
marks:	Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	hinimum of one rec vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im vegetated Concave S Yes Yes Yes	agery (B7) Surface (B8) No <u>X</u>	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explain Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14	Living Roots (C3) 4) wed Soils (C6) D1) (LRR A)	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)
marks:	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely N Field Observations: Surface Water Present? Nater Table Present? Saturation Present? Saturation Present?	hinimum of one red Vater (A1) For Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im Vegetated Concave S Yes Yes Yes Yes	agery (B7) Surface (B8) No X No X No X	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai Depth (inches): Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14 >14 >14	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hyd	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)
marks:	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely N Field Observations: Surface Water Present? Nater Table Present? Saturation Present? Saturation Present?	hinimum of one red Vater (A1) For Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im Vegetated Concave S Yes Yes Yes Yes	agery (B7) Surface (B8) No X No X No X	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai Depth (inches): Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14 >14 >14	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hyd	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)
	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely N Field Observations: Surface Water Present? Vater Table Present? Saturation Present? Describe Recorded Data	hinimum of one red Vater (A1) For Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im Vegetated Concave S Yes Yes Yes Yes	agery (B7) Surface (B8) No X No X No X	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai Depth (inches): Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14 >14 >14	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hyd	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)
	Wetland Hydrology Primary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely N Field Observations: Surface Water Present? Nater Table Present? Saturation Present? Saturation Present?	hinimum of one red Vater (A1) For Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im Vegetated Concave S Yes Yes Yes Yes	agery (B7) Surface (B8) No X No X No X	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai Depth (inches): Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14 >14 >14	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hyd	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ves (B9) ind 4B) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)
	Vetland Hydrology Vetland Hydrology Verimary Indicators (m Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatior Sparsely N ield Observations: urface Water Present? aturation Present? aturation Present? aturation Present? aturation Present? aturation Present?	hinimum of one red Vater (A1) For Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) h Visible on Aerial Im Vegetated Concave S Yes Yes Yes Yes	agery (B7) Surface (B8) No X No X No X	Water stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai Depth (inches): Depth (inches):	4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plov ressed Plants (E n in Remarks) >14 >14 >14	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hyd	Water stained Lea (MLRA1, 2, 4A, a Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (Fac-Neutral Test (Raised Ant Mound Frost-Heave Hump	ives (B9) ind 4B) (B10) r Table (C2) on Aerial Imagery (ion (D2) (D3) D5) is (D6) (LRR A) mocks (D7)

WETLAND DETEN	RMINATION		RM - Weste	rn Mountains, Vall	evs. and Coast	PHS # Region	6836
Project/Site: Tualatin-Sherwood Rd		City/County:		tin/Washington	Sampling Date:	-	2019
Applicant/Owner: Phelan Developme	ent			State:	OR s	ampling Point:	4
nvestigator(s): JT/MS		Section, To	wnship, Range:	Townsh	ip 2S, Range 1 W, S	Section 22D	
andform (hillslope, terrace, etc.:)	Flat	-	Local relief (cor	ncave, convex, none):	Flat	Slope (%):	1
ubregion (LRR):	4	Lat:	453755	29 Long:	-122.789179	Datum:	WSG85
	Isboro Loam,	- 0-3 Percent S	lopes	NWI Clas	ssification:	- None	
re climatic/hydrologic conditions on the site t	ypical for this tim	e of year?	Yes	X No		n in Remarks)	
re vegetation Soil or Hy	/drology	significantly dist	urbed?	Are "Normal Circumstanc			
· <u> </u>		-		l, explain any answers in Re	,		
UMMARY OF FINDINGS – Attac	ch site map s	showing sam	npling point	locations, transects,	, important featur	es, etc.	
ydrophytic Vegetation Present? Yes	X No		Is Sampled Ar	ea within			
ydric Soil Present? Yes	No	<u> </u>	a Wetlar		N	o <u>X</u>	
/etland Hydrology Present? Yes	No	<u> </u>					
emarks:			-				
EGETATION - Use scientific nar	nes of plant	s					
	absolute	Dominant	Indicator	Dominance Test worl	ksheet:		
	% cover	Species?	Status				
ree Stratum (plot size:)				Number of Dominant Spec			(A)
				That are OBL, FACW, or F	-AC:	1	(A)
				Total Number of Dominant			
3 				Species Across All Strata:		1	(B)
·	0	= Total Cover				•	(2)
apling/Shrub Stratum (plot size:	<u> </u>			Dereent of Dominant Space	ico		
apling/Shrub Stratum (plot size: 1	_)			Percent of Dominant Spec That are OBL, FACW, or		00%	(A/B)
2							()
3				Prevalence Index Wo	rksheet:		
1				Total % Cover of	Multiply by:	_	
5				OBL Species	x 1 =	0	
	0	= Total Cover		FACW species	x 2 =	0	
erb Stratum (plot size: 5)				FAC Species	x 3 = x 4 =	0	
Lolium sp	100	x	(FAC)	UPL Species	x 5 =	0	
2			(1710)	Column Totals	0 (A)		(B)
3				-	(`)		,
1				Prevalence Index =E	3/A = #D	IV/0!	
j							
§				Hydrophytic Vegetati	on Indicators:		
7					I- Rapid Test for Hydrop		ו
	100	- Total Cavar			2- Dominance Test is >5 3-Prevalence Index is ≤		
	100	= Total Cover			-Prevalence Index is ≤ I-Morphological Adapta		upporting
loody Vine Stratum (plot size:)				lata in Remarks or on a		
				5	5- Wetland Non-Vascula	r Plants ¹	
2				F	Problematic Hydrophytic	Vegetation ¹ (Ex	plain)
	0	= Total Cover		¹ Indicators of hydric soil ar	nd wetland hydrology m	ust be present,	unless
				disturbed or problematic. Hydrophytic			
6 Bare Ground in Herb Stratum	0			Vegetation	Yes X	No	

SOIL			PHS #	6836			Sampling Point: 4
		the depth	needed to docun		or or confirm the abse	ence of indicators.)	
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redox Fea	atures Fype ¹ Loc ²	Texture	Remarks
0-10	10YR 3/3	100				Silt Loam	Tenlaris
10-14	7.5YR 4/4	100				Silt Loam	
						·	
						·	
	centration, D=Deplet						² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators: (Appl	icable to	all LRRs, unle	ss otherwise i	noted.)	Indic	ators for Problematic Hydric Soils ³ :
I	Histosol (A1)			Sand	dy Redox (S5)		2 cm Muck (A10)
H	Histic Epipedon (A2)			·	pped Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)			Loar	my Mucky Mineral (F1)	(except MLRA 1)	Very Shallow Dark Surface (TF12)
ł	Hydrogen Sulfide (A	4)		Loar	my Gleyed Matrix (F2)		Other (explain in Remarks)
[Depleted Below Dark	k Surface (/	A11)	Depl	leted Matrix (F3)		
	Thick Dark Surface (A12)		Rede	ox Dark Surface (F6)		3
	Sandy Mucky Minera	al (S1)		Depl	leted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		Rede	ox Depressions (F8)		problematic.
	_ayer (if present)):					
Туре:							
).						
Depth (inches Remarks:	·					Hydric Soil Pres	sent? Yes No <u>X</u>
Remarks: HYDROLO		rs:					
Remarks: HYDROLO Wetland Hyd	GY		uired; check all	that apply)			NO X
Remarks: HYDROLO Wetland Hyd Primary Indic	GY drology Indicator cators (minimum c Surface Water (A1)	of one req	uired; check all	Wate	er stained Leaves (B9) 4A, and 4B)		
Remarks: HYDROLO Wetland Hyd Primary Indic	GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A	of one req	uired; check all	Wate 1, 2,	4A, and 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Remarks: HYDROLO Wetland Hyd Primary Indic	GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3)	of one req	uired; check all	Wate 1, 2, Salt	4A, and 4B) Crust (B11)	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Remarks: HYDROLO Wetland Hyo Primary Indic	GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1)	of one req 2)	uired; check all	Wate 	4A, and 4B) Crust (B11) atic Invertebrates (B13)	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Remarks: HYDROLO Wetland Hyo Primary Indic	GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (I	of one req 2)	uired; check all	Wate 	4A, and 4B) Crust (B11) atic Invertebrates (B13) rogen Sulfide Odor (C1	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
Remarks: HYDROLO Wetland Hyo Primary Indic	GY drology Indicator surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (I Drift Deposits (B3)	of one req 2) B2)	uired; check all	Wate 1, 2, Salt Aqua Hydr Oxid	4A, and 4B) Crust (B11) atic Invertebrates (B13)	(Except MLRA)) ng Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
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Remarks: HYDROLO Wetland Hyo Primary Indic	GY drology Indicator surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (I Drift Deposits (B3)	of one req 2) B2) B2)	uired; check all	Wate 1, 2, Salt Aqua Hydr Oxid Pres Rece	4A, and 4B) Crust (B11) atic Invertebrates (B13) rogen Sulfide Odor (C1 lized Rhizospheres alo sence of Reduced Iron	(Except MLRA))ng Living Roots (C3) (C4) lowed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
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6836	PHS # I Coast Region	leys, and C	ntains, Vall	M - Western Mo	I DATA FOI	RMINATION		WETLAND	
/2019	•	Sampling [·	Tualatin/Was	City/County:			Tualatin-Sherv	roject/Site:
5	Sampling Point:	OR	State:			ent	Developme	: Phelan De	– pplicant/Owner:
	ge 1 W, Section 22D	nip 2S, Range	Townshi	ship, Range:	Section, To		JT/MS		vestigator(s):
1	at Slope (%):	Flat	ex, none):	ocal relief (concave, co	•	Flat	.:)	pe, terrace, etc.:)	andform (hillslop
WSG85	88449 Datum:	-122.7884	Long:	45.375524	Lat:	4	LRR A):	ubregion (LRR)
	None	ssification:		pes	- 3-7 Percent S	llsboro Loam,	Hil		oil Map Unit Na
	f no, explain in Remarks)	(if no	No	Yes X				ologic conditions o	re climatic/hvdro
	(Y/N) Y		nal Circumstance	ed? Are "N	significantly dist	ydrology	or Hv	Soil	re vegetation
	()			tic? If needed, explain	• ° ,			Soil	re vegetation
		,	,	, - , - , - , -	, p				
	nt features, etc.	, important	s, transects,	ling point locatio	showing sam	ch site map s	GS – Attac	OF FINDINGS	UMMARY (
				s Sampled Area withir		X No	? Yes	etation Present?	ydrophytic Vege
	No X		Yes	a Wetland?	X	No	Yes	ent?	ydric Soil Prese
					Х	No	Yes	gy Present?	etland Hydrolog
									emarks:
			.	, , , , I		•	ientific nar	N - Use scier	EGETATIO
		ksheet:	nce Test work	Indicator Domin Status	Dominant Species?	absolute % cover			
		cies	f Dominant Spec))	(plot size:	ree Stratum (
(A)	3	FAC:	BL, FACW, or F	That an					
		t	ber of Dominant	Total N					}
(B)	3		cross All Strata:	Species					1
					= Total Cover	0			
		cies	Dominant Spec	Percen)	size: 15	tratum (plot size	apling/Shrub St
(A/B)	100%	FAC:	DBL, FACW, or F	FAC That ar	X	10		neniacus	Rubus arn
		orksheet:	nce Index Wo	Preva					3
	lultiply by:	Mult		Total %					l
	x 1 = 0		Species						;
	x 2 = 0 x 3 = 0		V species		= Total Cover	10			
	$\begin{array}{c} x \ 0 = \\ x \ 4 = \\ \end{array}$		J Species)	5)	(plot size:	erb Stratum (
	x 5 = 0		Species		х	60	^		Lolium sp
(B)	A) 0	0 (A)	nn Totals		X	38			2 Unidentifie
				FACU		2		communis	3 Lapsana c
	#DIV/0!	B/A =	alence Index =B	P					۱ <u> </u>
									5
	ors:	ion Indicators	nytic Vegetation	Hydro					<u> </u>
n	t for Hydrophytic Vegetation								
		2- Dominance T			- T-t-1 0	400			3
upportina	a Index is ≤ 3.0° cal Adaptations ¹ (provide s	3-Prevalence Ind 4-Morphological			= Total Cover	100			
	irks or on a separate sheet)	e:	atum (plot size:	oody Vine Stra
-	on-Vascular Plants ¹					_		_	
kplain)	Hydrophytic Vegetation ¹ (Ex	Problematic Hyc	P						2
unless	ydrology must be present,	nd wetland hydr	-		= Total Cover	0			
			or problematic.						
		Vee	-	Hydro		0		in Llark Stratum	Bare Ground in
	X No	Yes	on	Veget		U			

SOIL			PHS #	6836	_		Sampling Poin	t: 5
		the depth	needed to docume	ent the indicator or c	onfirm the absen	ice of indicators.)		
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redox Features % Type ¹	Loc ²	Texture	Rem	arks
0-10	10YR 3/3	100				Silt Loam		
10-13	7.5YR 3/3	100	· · · · · · · · · · · · · · · · · · ·	·		Silt Loam		
				Covered or Coated S		Indic	² Location: PL=Pore Lining	
-	Histosol (A1)		un Errits, unes	Sandy Red		indice	2 cm Muck (-
	Histic Epipedon (A2)			Stripped M				Material (TF2)
	Black Histic (A3)				cky Mineral (F1) (e	except MI RA 1)		v Dark Surface (TF12)
	Hydrogen Sulfide (A4	D.			eved Matrix (F2)			
	, , ,	·	A 4 4)					in in Remarks)
	Depleted Below Dark	-	A (1)	Depleted N				
	Thick Dark Surface (A				k Surface (F6)		³ Indicators of hydrophytic	vegetation and wetland
	Sandy Mucky Minera Sandy Gleyed Matrix				Dark Surface (F7) Dressions (F8)		hydrology must be preser problem	
Restrictive I	_ayer (if present)	:						
Туре:								
).					Usualutia Catil Duas	ent? Yes	No X
Depth (inches Remarks:	,					Hydric Soil Pres		
Remarks: HYDROLO	GY	 s;				Hyaric Soli Pres		
Remarks: HYDROLO Wetland Hyd	GY drology Indicator		uired: check all th)at apply)		Hyaric Soll Pres		
Remarks: HYDROLO Wetland Hyd Primary Indio	GY drology Indicator cators (minimum o		uired; check all th	11 37	ned Leaves (B9) (I		Secondary Indicators	(2 or more required)
Remarks: HYDROLO Wetland Hyd Primary India	GY drology Indicator	f one requ	uired; check all th	11 37	ned Leaves (B9) (I nd 4B)		Secondary Indicators	
Remarks: HYDROLO Wetland Hyd Primary Indio	GY drology Indicator cators (minimum o Surface Water (A1)	f one requ	uired; check all th	Water stair	nd 4B)		Secondary Indicators	(2 or more required) ed Leaves (B9) 4A, and 4B)
Remarks: HYDROLO Wetland Hyd Primary Indio	GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2	f one requ	uired; check all th	Water stain 1, 2, 4A, a Salt Crust	nd 4B)		Secondary Indicators Water staine (MLRA1, 2, Drainage Pa	(2 or more required) ed Leaves (B9) 4A, and 4B)
Remarks: HYDROLO Wetland Hy Primary Indio	GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3)	f one requ 2)	uired; check all th	Water stain 1, 2, 4A, a Salt Crust Aquatic Inv	nd 4B) (B11)		Secondary Indicators Water staine (MLRA1, 2, Drainage Pa Dry-Season	(2 or more required) ed Leaves (B9) 4A, and 4B) tterns (B10)
Remarks: HYDROLO Wetland Hy Primary India	GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	f one requ 2)	uired; check all th	Water stain U, 2, 4A, a Salt Crust Aquatic Inv Hydrogen	nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1)		Secondary Indicators Water staine (MLRA1, 2, Drainage Pa Dry-Season Saturation V	(2 or more required) ed Leaves (B9) 4A, and 4B) tterns (B10) Water Table (C2)
Remarks: HYDROLO Wetland Hyd Primary Indic	GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E	<u>f one req</u> 2) 32)	uired; check all th	Water stain	nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1)	Except MLRA	Secondary Indicators Water staine (MLRA1, 2, Drainage Pa Dry-Season Saturation V	(2 or more required) ed Leaves (B9) 4A, and 4B) tterns (B10) Water Table (C2) isible on Aerial Imagery Position (D2)
Remarks: HYDROLO Wetland Hy Primary Indic	GY drology Indicator Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	<u>f one req</u> 2) 32)	uired; check all tr	Water stain	nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along	Except MLRA g Living Roots (C3) C4)	Secondary Indicators Water staine (MLRA1, 2, Drainage Pa Dry-Season Saturation V Geomorphic	(2 or more required) ed Leaves (B9) 4A, and 4B) tterns (B10) Water Table (C2) isible on Aerial Imagery Position (D2) itard (D3)
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Photo A:

Looking southwest at Sample Point 1.

Photo taken on September 19, 2019

Photo B:

Looking west at a raised area with fill, north of SW Myslony Street in the northwest corner of the study area.

Photo taken on September 19, 2019



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Photo C:

Looking southwest at Sample Point 2.

Photo taken on September 19, 2019

Photo D:

Looking east at Sample Point 3. Photo taken on September 19, 2019



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Photo E:

Looking south at southwest portion of study area (Tax lot 600).

Photo taken on September 19, 2019

Photo F:

Looking west at Sample Point 4. Photo taken on September 19, 2019



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Photo G:

Looking east at Sample Point 5. Photo taken on September 19, 2019

Photo H:

Looking east at residence in northeast portion of study area (Tax lot 700).

Photo taken on September 19, 2019



Project #6836 9/23/2019



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10295 Southwest Ridder Road Wilsonville, OR 97070 o 503.570.0626 f 503.582.9307 republicservices.com

October 7, 2019

Alex Jewell Carlile Coatsworth Architects

Re: Commercial Development TBD – SW Myslony St. and SW 112th Ave Tualatin, OR 97062

Dear Alex,

Thank you, for sending us the final site plans for this proposed development in Tualatin, OR.

My Company: Republic Services of Clackamas and Washington Counties has the franchise agreement to service this area with the City of Tualatin. We will provide complete commercial waste removal and recycling services as needed on a weekly basis for this location

The proposed design location and dimensions of the enclosures sent 10/3/2019 repositioned as we requested, will allow improved access for our trucks to service future front load trash and recycle containers.

Thanks Alex for your help and concerns for our services prior to this project being developed.

Sincerely,

Kelly Herrod Operations Supervisor Republic Services Inc.





Tonight's Presentation

- 1. Site Background
- 2. Applicable Criteria:
 - Procedures
 - Site Design
 - Landscaping
 - Tree removal
 - Parking
 - Waste and Recycling
- 3. Conclusion and Recommendation

AR 19-0008 Tualatin Industrial Park



Site Background



ARCHITECTURAL REVIEW BOARD January 22, 2020



Architectural Review (Type III quasi-judicial decision process): Approval criteria limited to "Architectural Features" (TDC Chapter 73A through 73G):

- Architecture;
- Pedestrian and Bicycle Circulation;
- Parking Lot;
- Landscaping;
- Trash Plan; and
- Lighting.

Public improvements are reviewed through a separate but related City Engineer's Decision (PRF 19-0008).

AR 19-0008 Tualatin Industrial Park



Development Standards

The application demonstrates the proposal complies with requirements for the General Manufacturing (MG) zone:

- Permitted uses
- Heights
- Setbacks (as conditioned)

AR 19-0008 Tualatin Industrial Park

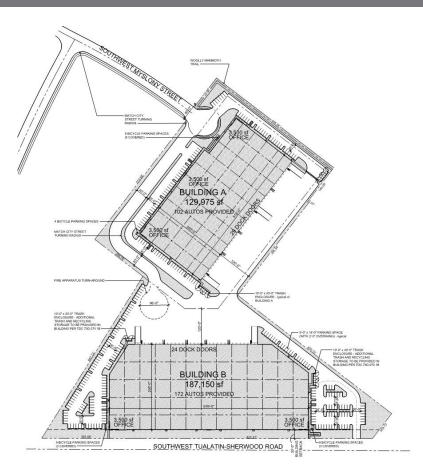
STANDARD	REQUIREMENT	MIN. PROPOSAL
Setbacks:		
Front	30 ft	21 ft
Side	0-50 ft	>50 ft
Rear	0-50 ft	>50 ft
Building Height:	60 ft	41.5 ft



Site Design

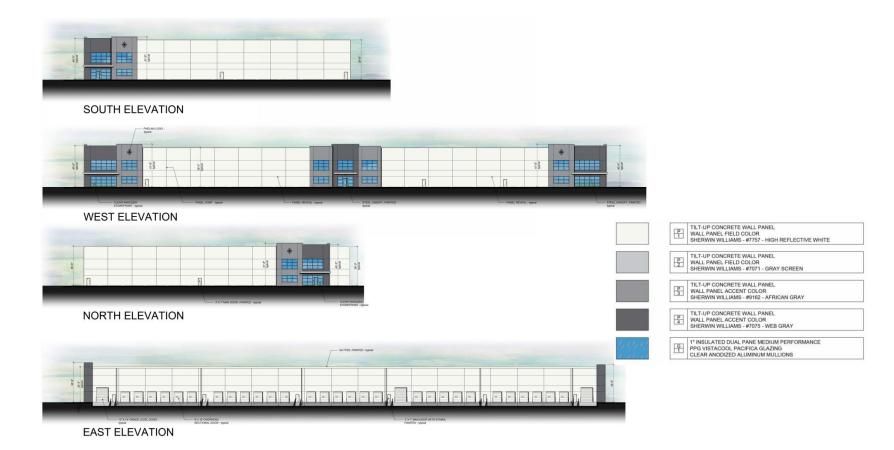
The application demonstrates the proposal complies with objectives for:

- Creating areas of visual interest for occupants and visitors;
- Attractively designed development and streetscapes;
- Building elements that respond to function, land form, identity, image, orientation, climactic factors.





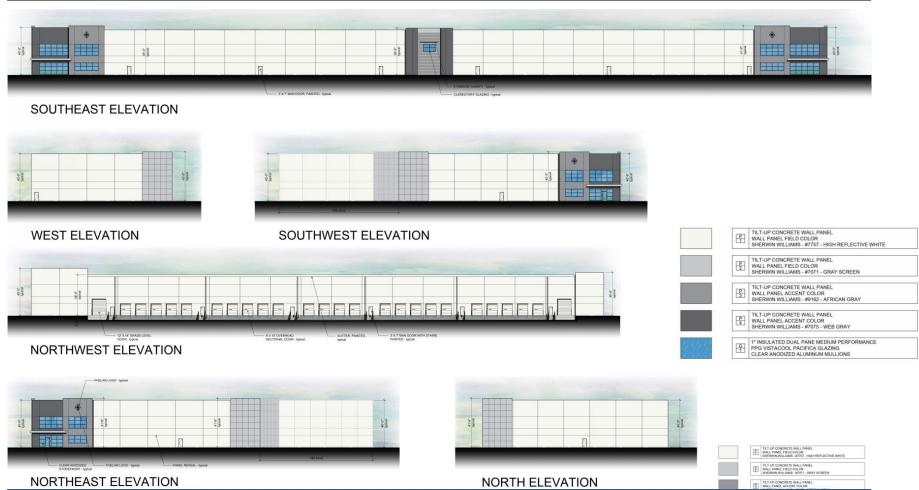
Site Design: Building A



AR 19-0008 Tualatin Industrial Park



Site Design: Building B



AR 19-0008 Tualatin Industrial Park



Site Design Cont'd



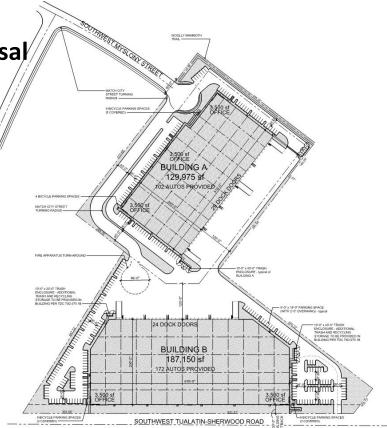
AR 19-0008 Tualatin Industrial Park



Site Design (TDC 73A)

The application demonstrates the proposal complies with requirements for:

- Onsite pedestrian and bike access
- Windows
- Lighting
- Safety and security
- Storage and screening



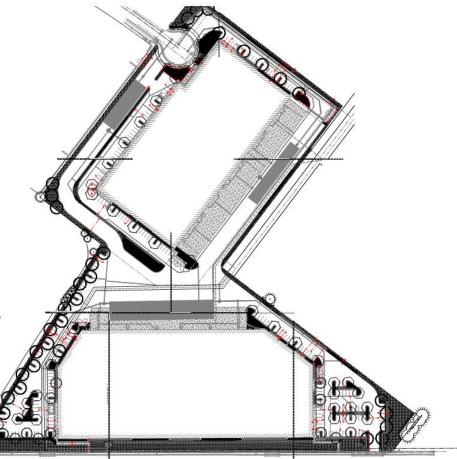
ARCHITECTURAL REVIEW BOARD January 22, 2020



Landscaping Standards (TDC 73B)

The application demonstrates the proposal complies with requirements for:

- Minimum landscape area (15%)
- Landscape buffers
- Tree preservation
- Irrigation
- Revegetation of disturbed areas
- Minimum standards for plantings



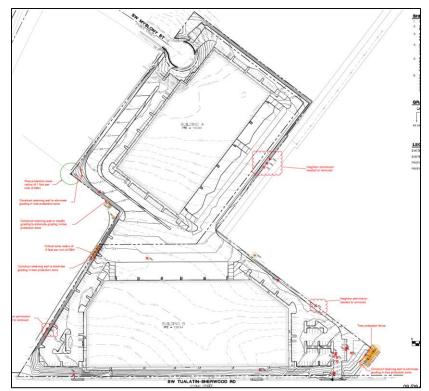
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Tree Removal (TDC 33.110)

The application provides:

- Tree removal justified by either
 - Need for development or;
 - Health/condition of tree.
- The application includes a tree preservation plan and arborist report.

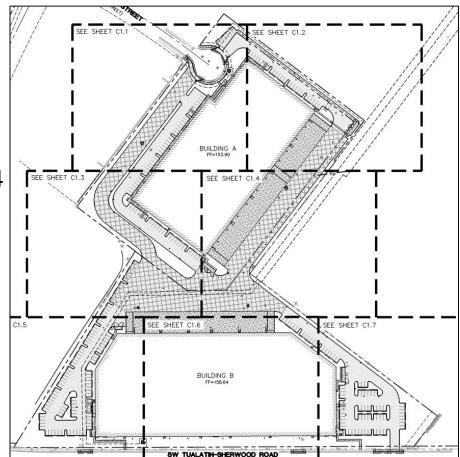




Parking Standards (TDC 73C)

The application demonstrates the proposal complies with requirements for:

- Minimum/maximum vehicle parking spaces for office use (274 spaces proposed, 264 required)
- Bike parking (32 spaces required)
- Parking and drive aisle standards
- Loading berth standards
- Parking lot landscaping
- Walkway standards



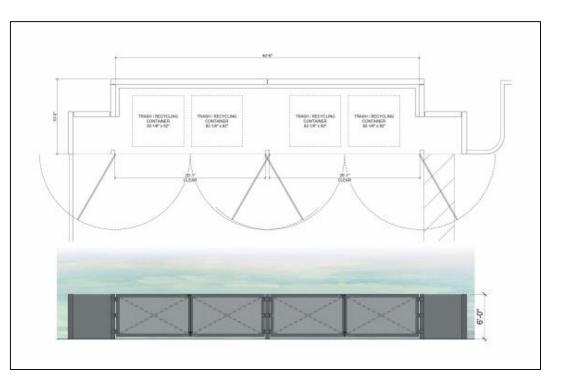
ARCHITECTURAL REVIEW BOARD January 22, 2020



Waste and Recyclables (TDC 73D)

The application demonstrates the proposal complies with requirements for:

- Minimum waste and recyclables storage area
- Location
- Design and screening
- Access



ARCHITECTURAL REVIEW BOARD January 22, 2020



Conclusion and Recommendation

- The findings demonstrate that the proposed development meets the applicable criteria of the Tualatin Development Code with the recommended Conditions of Approval.
- Therefore, staff respectfully recommends approval of the subject Architectural Review application (AR 19-0008), as conditioned.
- Questions?