

Development Review Committee is represented by the City of Chehalis:
Building and Planning | Engineering | Public Works | Fire Department | Police Department | Airport

Development Review Committee Agenda

Chehalis Building and Planning Department

December 13, 2023, at 9 A.M.

Meeting Location: Chehalis Airport Conference Room

9:00 AM UGA-ST-23-0002 and UGA-SEPA-23-002; 207 MAURIN RD

The Port of Chehalis proposes the construction of a grain terminal facility which will support storage and transload of grain products from the local farms into rail cars for regional transport. Lewis County Parcel 017756002003 & 017756002001 are zoned IL – Light Industrial in the UGA totaling 8.49 acres

11:00 Interdepartmental staff meeting.

Join Zoom Meeting

<https://us06web.zoom.us/j/83910241095?pwd=dUI1Ym0rTkt6SHZCZjkxUTRlVDBUUT09>

Directions to Development Review Committee

Chehalis Airport Conference Room



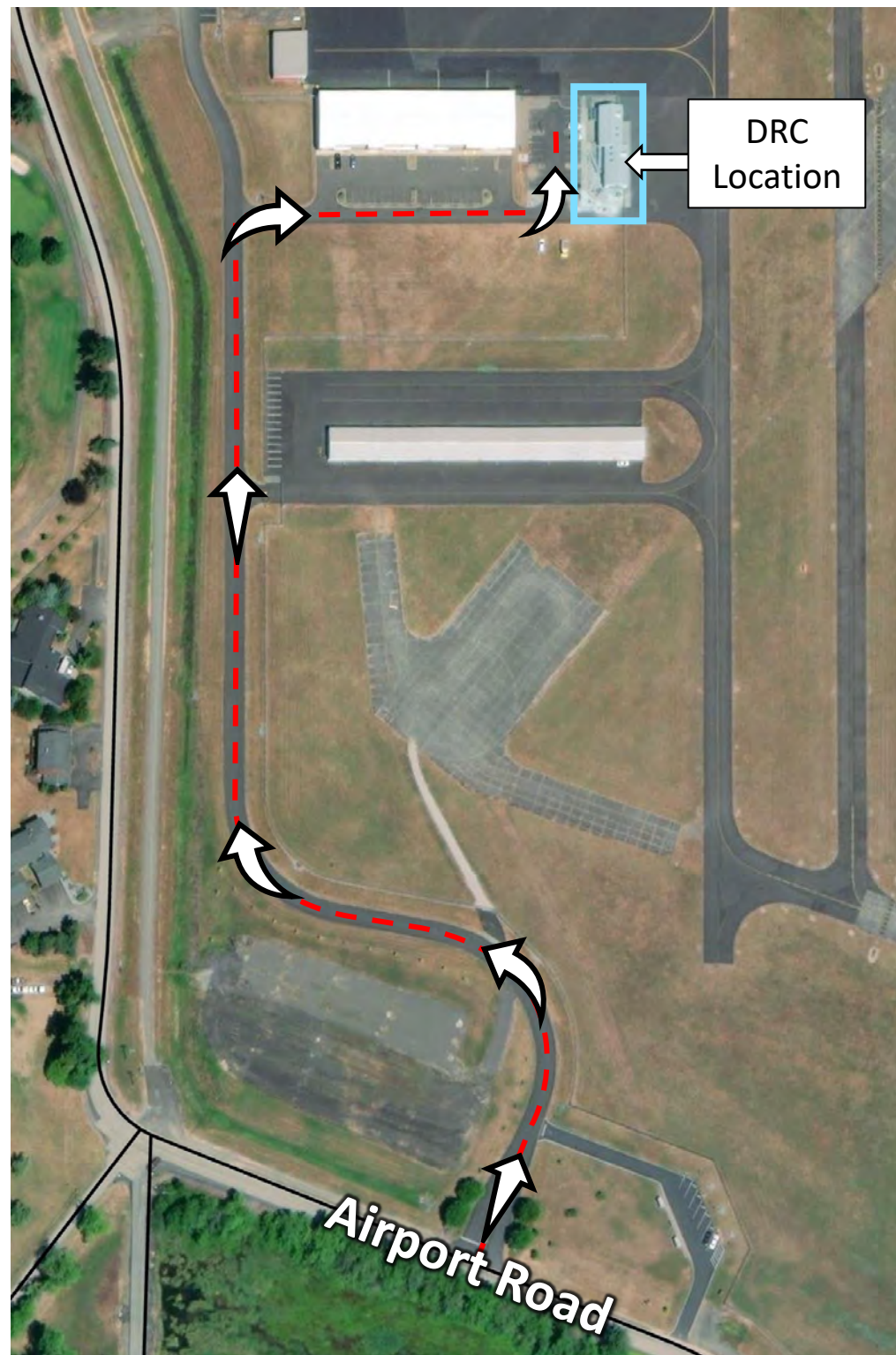
Coordinates:

(46.672787, -122.984924)

or

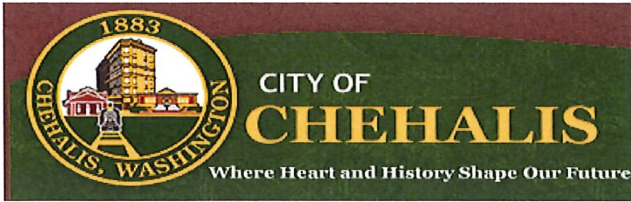
46° 40' 22.0332" N

122° 59' 5.7264" W





Vicinity Map for UGA-SEPA-23-002
and UGA-ST-23-0002 at 207 Maurin
Rd. Port of Chehalis Grain Terminal
Facility



Return your permit application to Community Development
 Department
 1321 S Market Blvd. Chehalis, WA 98532
 (360) 345-2229
www.ci.chehalis.wa.us email: comdev@ci.chehalis.wa.us

Job address: 207 Maurin Rd

Parcel #: 017756002003 & 017756002001

Applicant/Contact person

Name: Port of Chehalis / Bill Teitzel

Mailing address: 321 Maurin Rd

City, State, and Zip: Chehalis, WA 98532

Phone #: 360.748.9365

Email: (required) bteitzel@portofchehalis.com

Contractor/Engineer/Surveyor

Contact Name: Chris Aldrich, Planning Manager

Company/Firm Name: RB Engineering

Mailing address: PO Box 923

City, State, and Zip: Chehalis, WA 98532

Phone #: 360.740.8919

Email: (required) chrisa@rbengineers.com

Contractor's L&I #:

Project Description: (Create a project narrative on a separate page if there is not enough room to completely describe your project below.)

Construction of a grain terminal facility which will support storage and transload of grain products from local farms onto rail cars for regional transport.

Current market value of proposed work: \$3.5 million
 (Fair market labor and materials)

Only the plan(s) submitted will be reviewed for compliance with applicable codes. By signing below, you grant permission for any City of Chehalis employee the right to access and remain on the property for the purpose of review and approval of this proposal and to conduct inspections related to this proposal.

Signature:

Date: 5.30.23

Print Name: Chris Aldrich

Office use only

Received by: LF

Date Received: 6/06/2023

Parcel # 017756002003

Permit #: UGA-SEPA-23-002

Zoning: IL-UGA

Flood Zone: yes no Zone Classification:

Clearing, Filling or Grading Attachment

City of Chehalis

Public Works Department

2007 NE KRESKY AVE; CHEHALIS, WA 98532

(360) 748-0238 / fax (360) 748-0694

Type of Proposed Work:

Filling

Grading

Clearing

Number of Days Required to Complete Work: 60 Number of Acres Directly Affected: 2.13 AC

Number of Cubic Yards of Fill Involved: 3,550 CY (including gravel base/top course)

Maximum Fill Height: 2.5 FT Maximum Excavation Depth: 4 FT

The following items are required with **every application**:

Site Plan

Grading Plan

Interim Erosion & Sediment Control Plan

Work Schedule

Required information (Check Applicable Boxes)

Environmental Checklist YES NO N/A: _____

Final Erosion/Sediment Control Plan YES NO N/A: _____

Soil Engineering Report YES NO N/A: _____

Engineering Geology Report YES NO N/A: _____

SEPA YES NO N/A: _____

Other: YES NO N/A: _____

Other Requirements / Comments: Structural soils report pending for footing and pavement design

“CALL BEFORE YOU DIG” 1-800-424-5555

****State law requires 48 hours advance notice to all utilities prior to any excavation work****

See Chehalis Municipal Code 15.28 for complete permit requirements and conditions.

Subject to all the terms, conditions and provisions written on, printed on, or attached to this form, the applicant is hereby authorized to perform the work as described on the application and approved plans. The City of Chehalis reserves the right to alter, amend, and/or rescind this permit, or modify any conditions or requirements.

SEPA ENVIRONMENTAL CHECKLIST

Southwest Washington Grain Project

RBE Project No. 22130

Port of Chehalis, POC23-0002

May 30, 2023

Prepared by:

RB Engineering



Table of Contents

Section A	Background.....	Page 3
Section B	Environmental Elements.....	Page 5
Section C	Signature.....	Page 16

A. Background

1. Name of proposed project, if applicable:

Southwest Washington Grain Project

RBE Project No. 22130

2. Name of applicant:

Port of Chehalis

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

321 Maurin Road
Chehalis, WA 98532

4. Date checklist prepared:

May 25, 2023

5. Agency requesting checklist:

City of Chehalis

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

Construction 2023/2024 for operations starting summer 2024

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

No.

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

A Geotechnical Report has been prepared by Insight Geologic in conjunction with the development of regional drainage facility on the MRISII site. Additional geotechnical structural recommendatinos are being prepared for the terminal site.

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

Yes, a boundary line adjustment is in process to configure the development lot for the grain terminal area.

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

This project will include the following permits: Land Use, Grading, ROW, Site Development Permit, NPDES Construction Permit.

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

Proposed is a grain terminal facility on 2.1 acres of land which will support storage and transload of grain products from local farms onto rail cars for regional transport. Facility will store roughly 82,000 bushels of product at capacity.

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

Property address(s) is 207 Maurin Rd, Chehalis WA 98532, Parcel No.(s) 017756002001 & 017756002003, Section 10, Township 13N, Range 02W, W.M.

B. Environmental Elements

1. Earth

a. General description of the site:

The site is flat and covered with field grass.

Flat, Rolling, Hilly, Steep slopes, Mountainous, other: _____

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

Steepest slope onsite is approximately 2%.

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

Per NRCS Soil Data Survey, Lacamas Silt Loam is present onsite.

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

There is no indication of history of unstable soils in the immediate vicinity.

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

The site will involve approximately 4,000 cy of granular fill under paved areas or footings. Material will be from a local DNR approved mining operation. Rough grading on the site will be minimal.

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

Yes, however a Stormwater Pollution Prevention Plan (SWPPP) will be prepared that outlines appropriate Best Management Practices to control and contain any sediment migration within the project limits.

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

90 percent of the grain terminal parcel will be covered with impervious surface.

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

Best Management Practices will be used to prevent and contain erosion onsite during construction. The project's SWPPP requires that a Certified Erosion and Sediment Control Lead (CESCL) monitors the site during construction.

2. Air

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

Normal emissions associated with construction equipment combustion engine exhaust and possible dust emissions will be generated during the construction phase of the project. Once the project is completed the project would generate modest amounts of commercial vehicle emissions during operations. The potential for airborne particulate generation is low as the material conveyances are covered; materials exposure during transloading is limited to small areas at unloading hoppers and loading spouts which are shielded.

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

No

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

Provide and maintain covers and shielding on materials conveyances.

3. Water

a. Surface Water:

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

Dillenbaugh Creek runs to the north of project site and eventually flows into the Chehalis River.

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

No. The parcel and project site are outside of any flood plains or shorelines.

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

None.

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

No.

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

No.

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

No.

b. Ground Water:

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

No.

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

None.

c. Water Runoff (including stormwater):

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

The project will create new impervious surface that will generate stormwater runoff. The runoff will be conveyed to the existing regional stormwater facility that was previously sized to accommodate the entire MRIS II site. The stormwater facility will discharge runoff back into the ground.

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

No.

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

No.

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

The project will incorporate a SWPPP and stormwater design that provides water quality and flow control facilities to mitigate the impacts to surface and ground waters.

4. Plants

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

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

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

Approximately 2 acres of vegetation will be removed to construct this project. Vegetation includes predominantly grass.

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

None known.

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

Landscaping will consist of native drought resistant plantings.

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

None known.

5. Animals

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: hawk, heron, eagle, songbirds, other: _____

Mammals: deer, bear, elk, beaver, other: _____

Fish: bass, salmon, trout, herring, shellfish, other: _____

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

None known.

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

Yes, Pacific Flyway Migration Route.

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

None.

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

None known.

6. Energy and Natural Resources

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

Electricity will be used for lighting and conveyance motors.

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

No.

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

The project building design will utilize the latest IBC and Energy Codes to provide an energy efficient facility.

7. Environmental Health

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

No.

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

None.

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

None known.

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

Project will not store hazardous materials.

c. Describe special emergency services that might be required.

None.

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

Access to grain storage tanks will be limited and regulated through WISHA/OSHA industrial safety codes.

b. Noise

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

Normal traffic noise from Maurin Road and industrial operations at adjacent manufacturing plant.

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

Short Term: Construction noise from equipment and building construction.

Long Term: During transload operations there will be modest noise levels from motors and conveyance equipment.

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

Construction will be limited to Monday through Friday, 7:30 to 4:30pm; the facility will provide and maintain shielding and covers on motors and conveyance equipment to minimize noise.

8. Land and Shoreline Use

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

The site is currently vacant land. Adjacent properties consist of vacant land and industrial/commercial businesses.

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

The project site has been included in the Port of Chehalis master plan for some time. No farmlands will be impacted with this project but will provide better access to markets for local grain production.

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

No

c. Describe any structures on the site.

None.

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

No.

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

Light Industrial

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

Industrial.

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

N/a

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

No

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

Facility will generally require one part time employee for operations.

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

None.

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

Not applicable

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

Proposed use is compatible with existing zoning and Port master planned uses.

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

None.

9. Housing

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

None.

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

None.

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

None.

10. Aesthetics

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

The tallest portion of the terminal facility will be roughly 60 feet. Construction is predominately steel.

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

None.

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

None proposed.

11. Light and Glare

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

Site lighting is proposed for security and operations.

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

No.

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

None.

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

Light fixtures will have cut-offs to prevent light spillage off site.

12. Recreation

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

Newaukum Golf Course, Stan Hedwall Park and several public schools are within 4.3 miles from project site.

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

No.

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

None.

13. Historic and Cultural Preservation

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

No.

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

No. The location is in an area of high probability for buried precontact artifacts. A Cultural Resource Survey was prepared by Archaeological Investigations Northwest, Inc on 2.7.17.

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

The Maurin Road Industrial Site II was reviewed for cultural resources by AINW in 2017 which included the subject site. The review included a pedestrian survey, research, and shovel pits which resulted in a recommendation of "No Historic Properties Adversely Affected"; report attached.

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

Include an inadvertent discovery protocol on grading plan conditions.

14. Transportation

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

Maurin Road currently serves as a stabilized access to project site.

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

Yes, nearest transit stop is .8 miles away.

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

Private access will be developed with the terminal facility.

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

The project site has previously developed a rail spur.

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

The project will generate 1 to 2 AM or PM peak hour trips based on the ITE manual for LUC's 110 or 130 (General Light Industrial or Industrial Park, respectively). Commercial traffic to/from the terminal facility will generally be seasonal (for grain storage or transload). Estimated average weekday trips would be 15-20 and occur off-peak hour.

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

The project will support local agricultural product movement access to storage and rail transload.

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

Development of a new dedicated commercial access on Maurin Road.

15. Public Services

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

The project would require a modest increased need for fire protection based on a low number of employees at proposed facility.

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

Future industrial business will provide added tax base to the area.

16. Utilities

a. Check utilities currently available at the site:

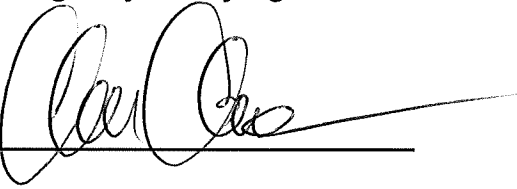
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other: _____

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

Sewer Service - City of Chehalis
Water Service - City of Chehalis
Gas Service - Puget Sound Energy
Phone Service - Lumen, Rainier Connect, Comcast
Cable Service - Dish Service, Comcast
Power - Lewis County PUD

C. Signature

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

X  _____

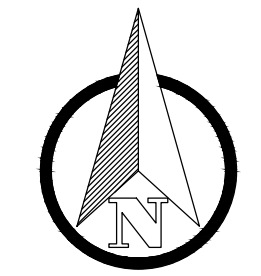
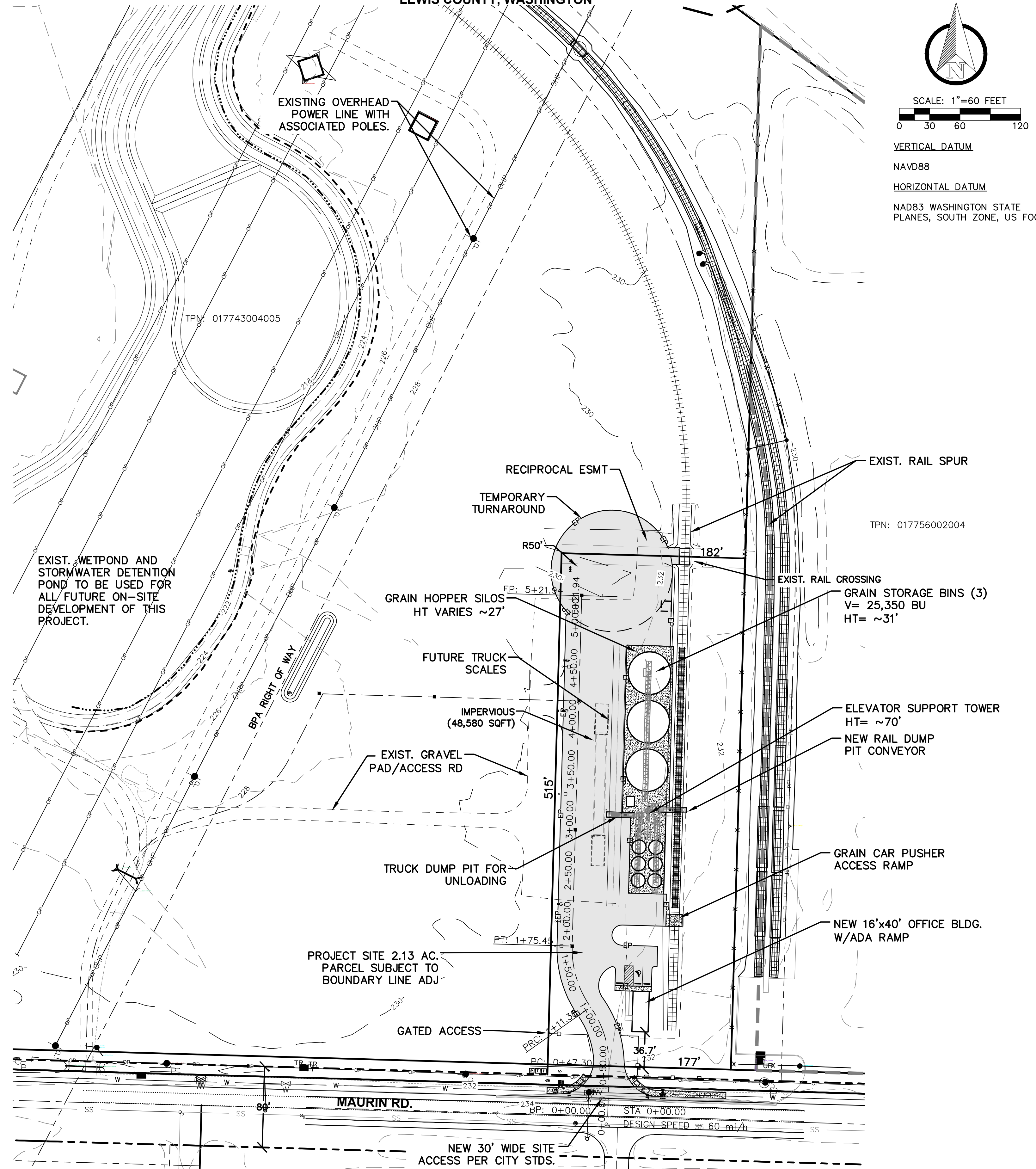
Type name of signee: Chris Aldrich

Position and agency/organization: Planning Manager / RB Engineering

Date submitted: 5.30.23

SOUTHWEST WASHINGTON GRAIN PROJECT

SECTION 10, TOWNSHIP 13 NORTH, RANGE 02 WEST, W.M.
LEWIS COUNTY, WASHINGTON



SCALE: 1"=60 FEET
0 30 60 120

VERTICAL DATUM

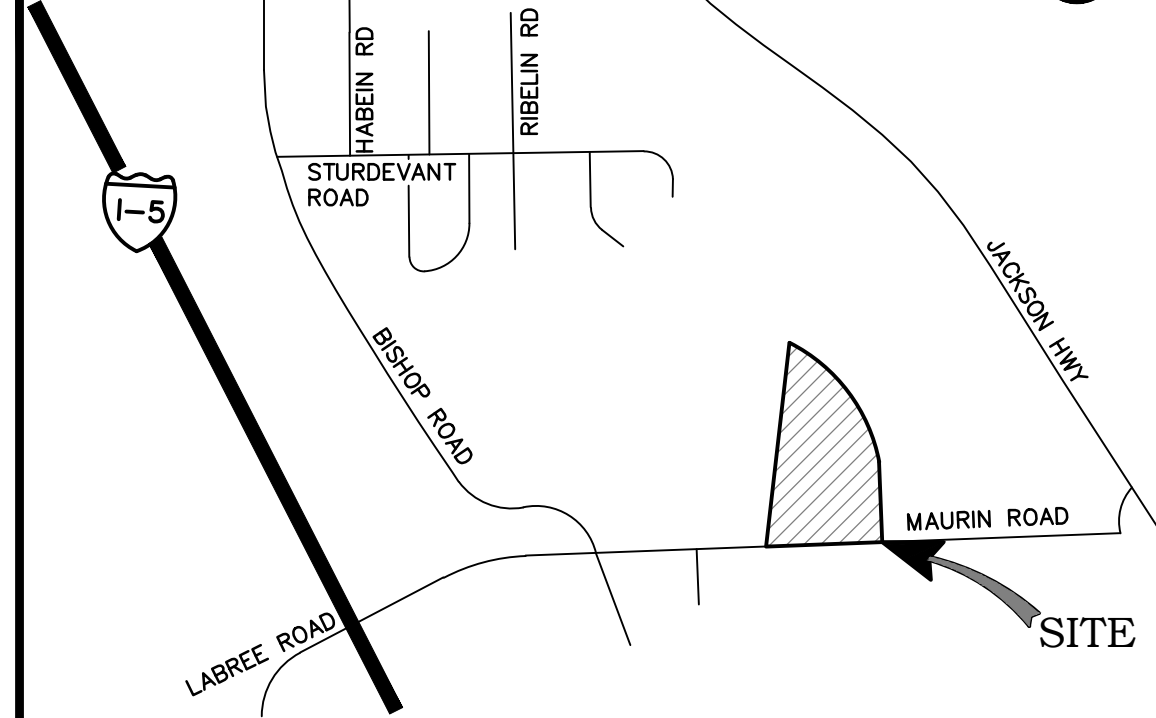
NAVD88

HORIZONTAL DATUM

NAD83 WASHINGTON STATE
PLANES, SOUTH ZONE, US FOOT

VICINITY MAP

N.T.S.



PROJECT INFORMATION

APPLICANT: PORT OF CHEHALIS
ATTN: BILL TEITZEL
321 MAURIN RD.
CHEHALIS, WA 98532
(360) 748-9365
BTEITZEL@PORTOFCHEHALIS.COM

PARCEL NOS: 017756002003

SITE ADDRESS: 321 MAURIN RD.
CHEHALIS, WA 98532

ZONING: IL-LIGHT INDUSTRIAL
(CHEHALIS UGA)

SITE AREA: 2.13 ACRES (PROPOSED BLA)

GRADING: ~400 CY CUT, ~1,400 CY FILL

SOILS: 118-LACAMAS SILT LOAM

SANITARY SEWER: CITY OF CHEHALIS

WATER: CITY OF CHEHALIS

FIRE DISTRICT: LCFD#6

LEGEND

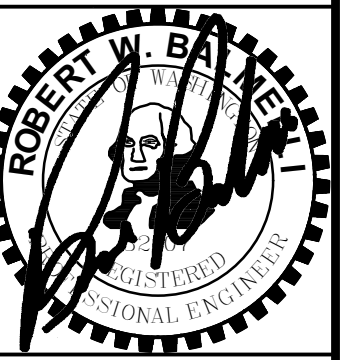
EXISTING	PROPOSED	
— W —	— W —	WATER MAIN
— SS —	— SS —	SANITARY SEWER MAIN
— FM —	— FM —	FORCE MAIN
— SD —	— SD —	STORM MAIN
— RD —	— RD —	ROOF DRAIN
— G —	— G —	FOOTING DRAIN
— UGP —	— UGP —	GAS LINE
— T —	— T —	POWER LINE
— TV —	— TV —	TELEPHONE LINE
— — —	— — —	CABLE TV LINE
— — —	— — —	ROADWAY CENTERLINE
— — —	— — —	RIGHT-OF-WAY LINE
— — —	— — —	EASEMENT LINE
— — —	— — —	FRONT/BACK OF CURB
— — —	— — —	EDGE OF GRAVEL SHOULDER
— EP —	— EP —	EDGE OF PAVEMENT
— — —	— — —	PHASE LINES

NO.	DATE	REVISION

DESIGNED BY: CA
DRAWN BY: CL/A/ALF
CHECKED BY: R/WB
DATE: 6.6.23
SCALE: 1" = 60'

**SOUTHWEST WASHINGTON
GRAIN PROJECT**
CITY OF CHEHALIS, WA.

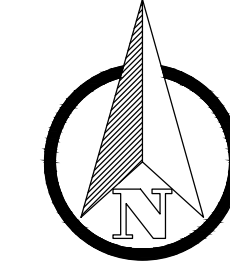
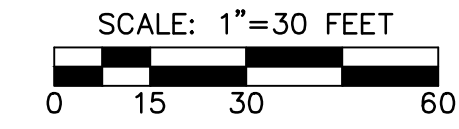
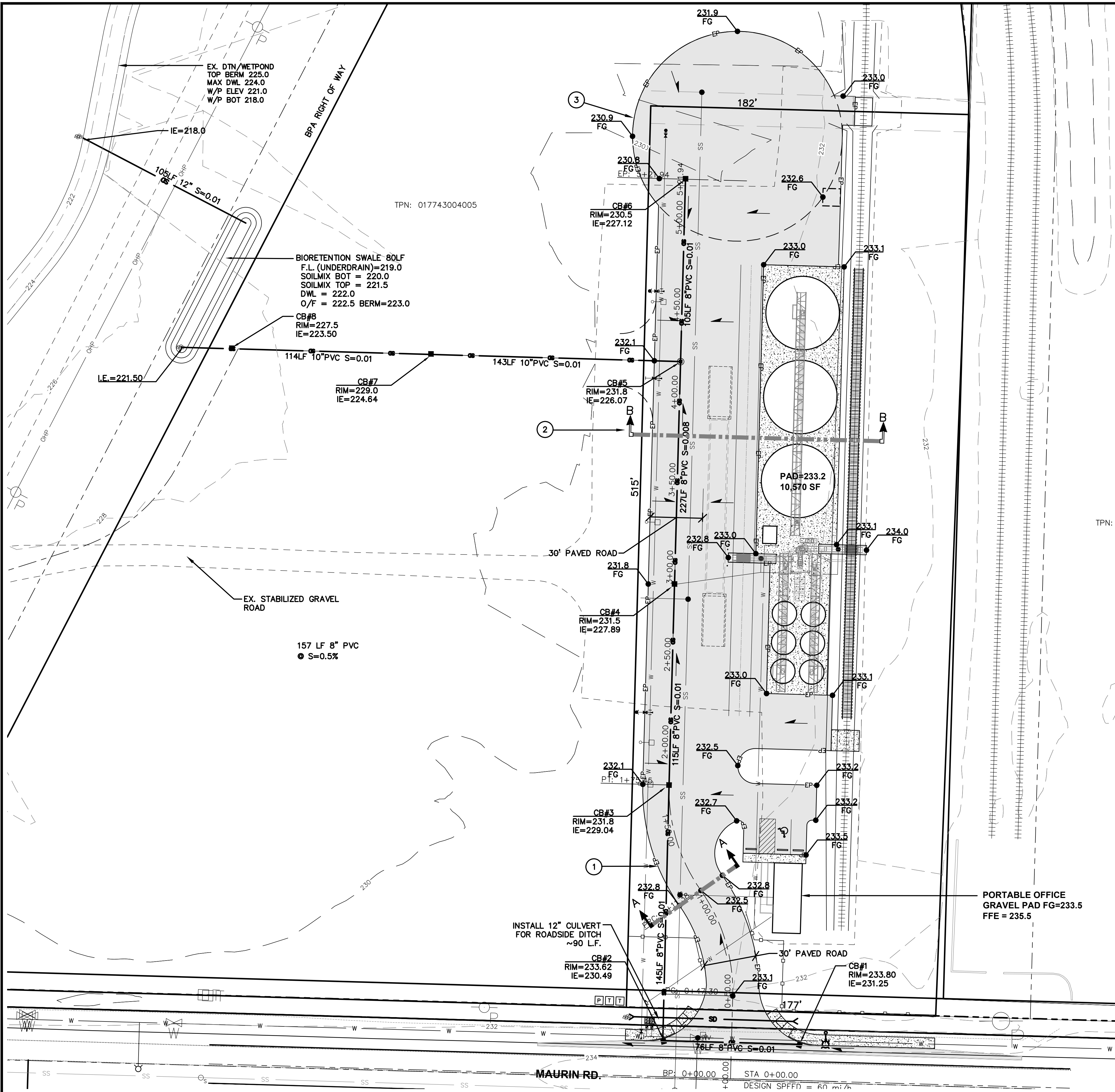
PRELIMINARY SITE PLAN



RB Engineering
DESIGN → PERMIT → MANAGE
OFF: (360) 740-8819
CHEHALIS, WA 98532
P.O. Box 923
EMAIL: Chief@rbengineering.com

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

JOB NUMBER
22130
DRAWING NAME
22130_P1.0_PSP
P1.0
1 OF 5



VERTICAL DATUM

NAVD88

HORIZONTAL DATUM

NAD83 WASHINGTON STATE
PLANES, SOUTH ZONE, US FOOT

GRADING NOTES:

- 1 GRADE AND CONSTRUCT NEW 30' WIDE INVERTED CROWN ROAD SECTION PER DETAIL A-A ON SHEET P2.1
- 2 GRADE NEW PAD WITH TRUCK LANE AND 30' WIDE INVERTED CROWN DRIVE LANE PER SECTION B-B ON SHEET P2.1.
- 3 GRADE AND PAVE NEW TRUCK TURN AROUND PAVED AREA SHALL BE SLOPED TO CATCH BASIN
- 4 NEW PARKING PAD SLOPED TO DRAIN TO CATCH BASIN PER PLAN.
- 5 GRADE AND CONSTRUCT NEW COMBINATION WETPOND/ DETENTION POND PER PLAN AND SECTION DETAIL D-D ON SHEET C2.2.
- 6 STORM DRAIN CONTROL STRUCTURE TO BE INSTALLED PER FINAL DESIGN.
- 7 TYPE 1 CATCH BASINS TO BE INSTALLED PER FINAL DESIGN.
- 8 STORMWATER PVC PIPE TO BE INSTALLED PER FINAL DESIGN.

PAVING NOTE:

ALL PAVING SHALL BE DONE PRIOR TO OCTOBER 1ST. PAVING AFTER OCTOBER 1ST WILL REQUIRE APPROVAL FROM THE OWNER AND PROJECT ENGINEER. SUB-GRADE THAT DOES NOT MEET COMPACTION OR IS SATURATED WILL REQUIRE THE CONTRACTOR TO PROVIDE A WRITTEN 2 YEAR WARRANTY FOR THE PAVING.

ADA NOTE:

ALL NEW SIDEWALKS SHALL NOT EXCEED 2% SIDE SLOPE AND ADA PARKING STALLS AND RAMP LANDINGS SHALL NOT EXCEED 2 PERCENT SLOPE IN ALL DIRECTIONS. ALL ADA ACCESSIBLE ROUTES IDENTIFIED ON THE PLANS SHALL NOT EXCEED 5% LONGITUDINAL GRADE. ALL ADA RAMPS SHALL NOT EXCEED 8% GRADE AND 2% CROSS SLOPE. CONTRACTOR IS RESPONSIBLE TO CHECK GRADES PRIOR TO CONCRETE AND PAVING WORK. ANY GRADES EXCEEDING THE ABOVE LIMITS WILL BE REQUIRED TO BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR.

TPN: 01775600204

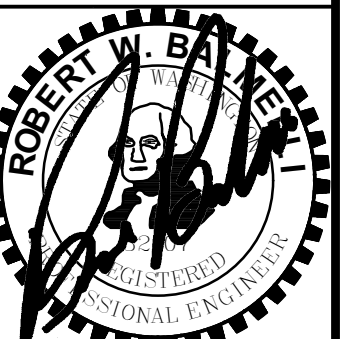
TPN: 017743004005

NO.	DATE	REVISION

DESIGNED BY: CA
 DRAWN BY: CLA/ALF
 CHECKED BY: RWB
 DATE: 6.6.23
 SCALE: 1" = 30'

**SOUTHWEST WASHINGTON
GRAIN PROJECT**

**PRELIMINARY GRADING AND
DRAINAGE PLAN**



RB Engineering
 DESIGN → PERMIT → MANAGE
 OFF: (509) 740-8819
 P.O. Box 923
 CHEHALIS, WA 98532
 EMAIL: Chief@rbengr.com

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

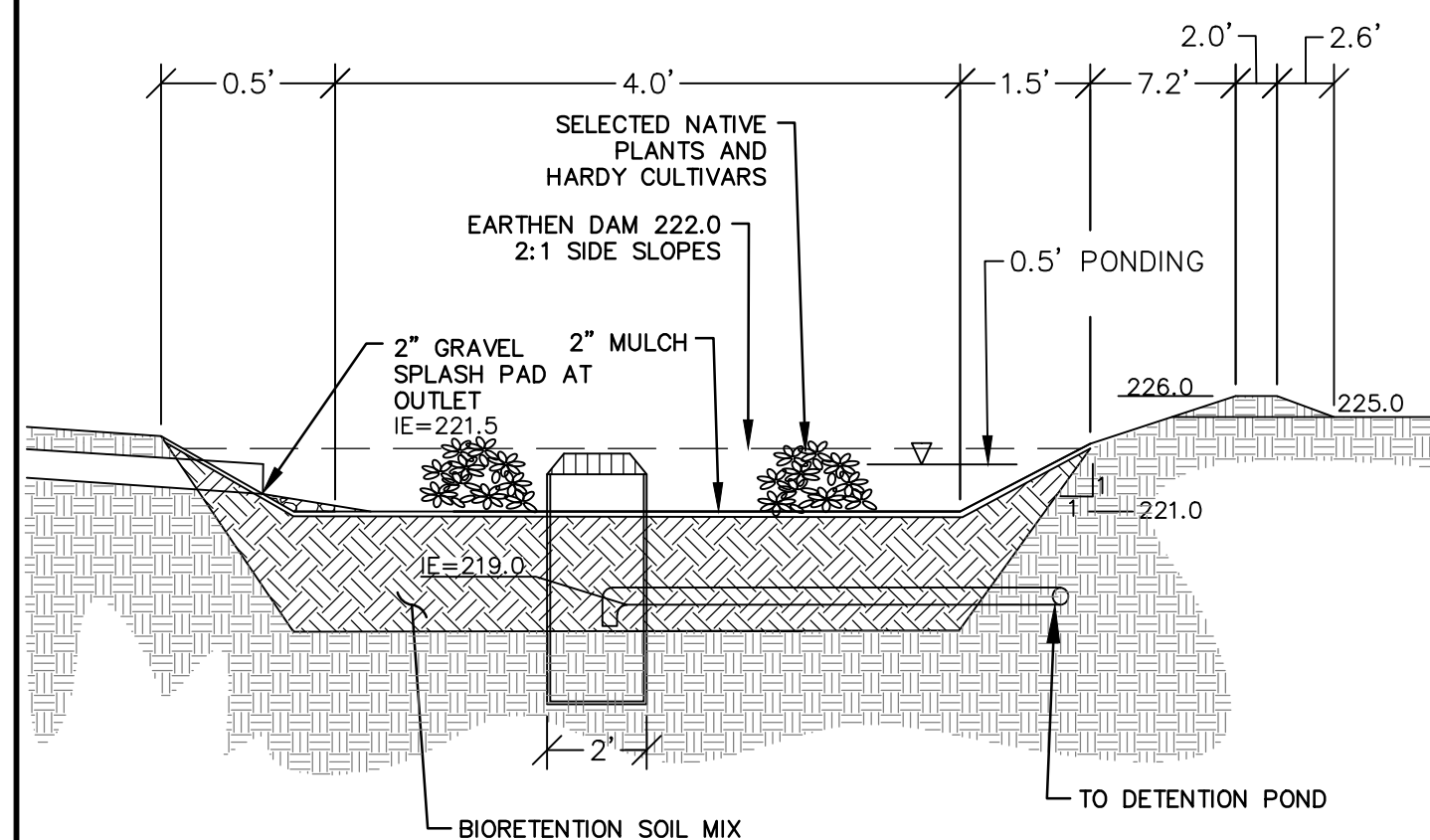
BIORETENTION SOIL MIX:

CONTRACTOR TO PROVIDE SUBMITTAL OF BIO-RETENTION GRADATION SOIL MIX TO CITY AND ENGINEER PRIOR TO CONSTRUCTION.
SOIL MIX:

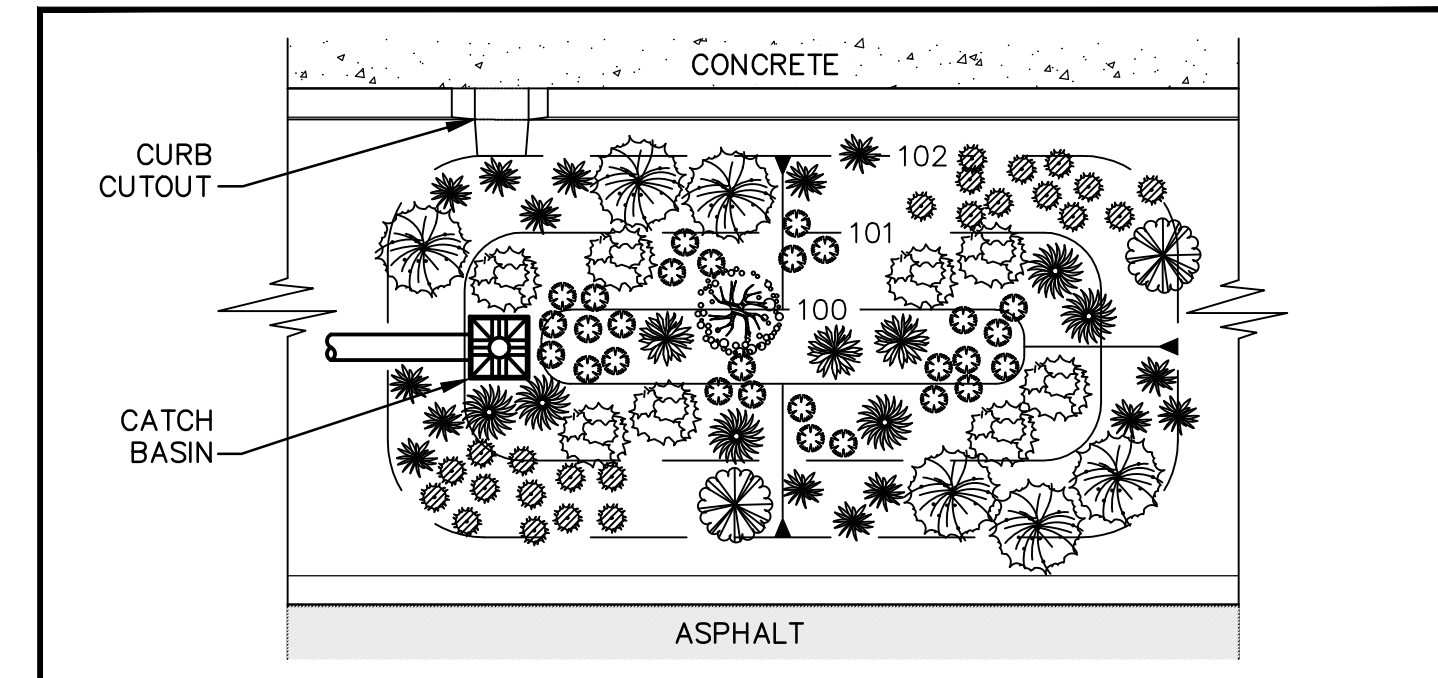
- 60% TO 65% GRAVELLY SAND AND 35% TO 40% COMPOST (SEE SPECIFICATION BELOW).
- GRAVELLY SAND GRADATION PER ASTM D 422 LESS THAN 5%

SIEVE SIZE	PERCENT PASSING
US NO. 0.375	100
US NO. 4	100
US NO. 10	75-90
US NO. 40	24-40
US NO. 100	4-10
US NO. 200	2-5

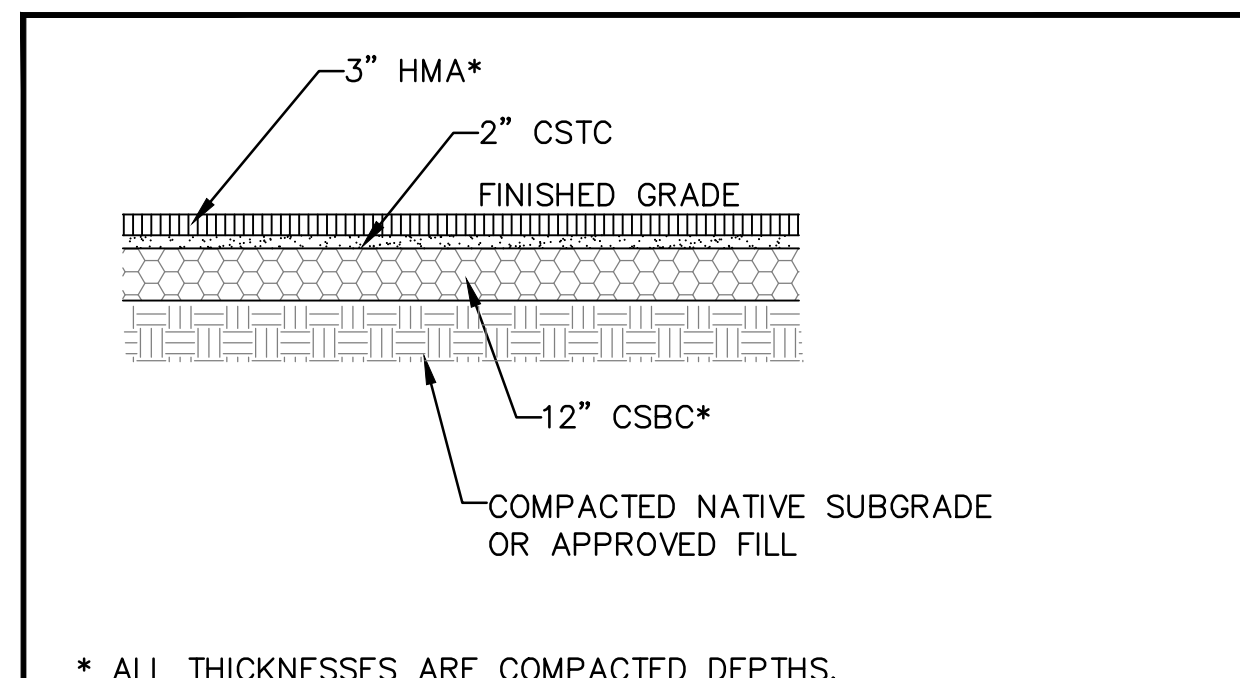
- MAXIMUM CLAY CONTENT SHOULD BE LESS THAN 5%
- SOIL MIXTURE SHOULD BE UNIFORM, FREE OF STONES, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES
- ON-SITE SOIL MIXING OR PLACEMENT NOT ALLOWED IF SOIL IS SATURATED OR SUBJECTED TO WATER WITHIN 48 HOURS
- COVER AND STORE SOIL ACCORDINGLY TO PREVENT WETTING OR SATURATION
- TEST SOIL FOR FERTILITY AND MICRONUTRIENTS AND, IF NECESSARY, AMEN MIXTURE TO CREATE OPTIMUM CONDITIONS FOR PLANT ESTABLISHMENT AND EARLY GROWTH AT RATES RECOMMENDED BY AN INDEPENDENT LABORATORY SOIL TEST.
- ORGANIC CONTENT OF THE SOIL MIXTURE SHOULD BE 5% TO 8%
- CATION EXCHANGE CAPACITY (C.E.C.) MUST BE LESS THAN 5 MILLIEQUIVALENTS PER 100 GRAMS OF DRY SOIL.



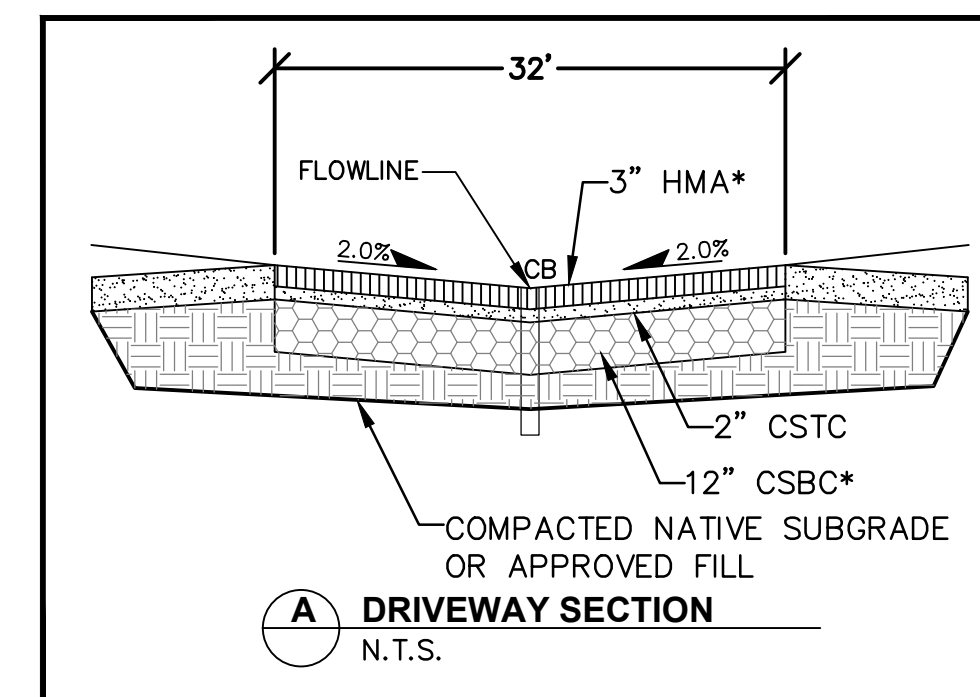
1 BIORETENTION CELL
N.T.S.
RB ENGINEERING
BIORTN_CELL.dwg



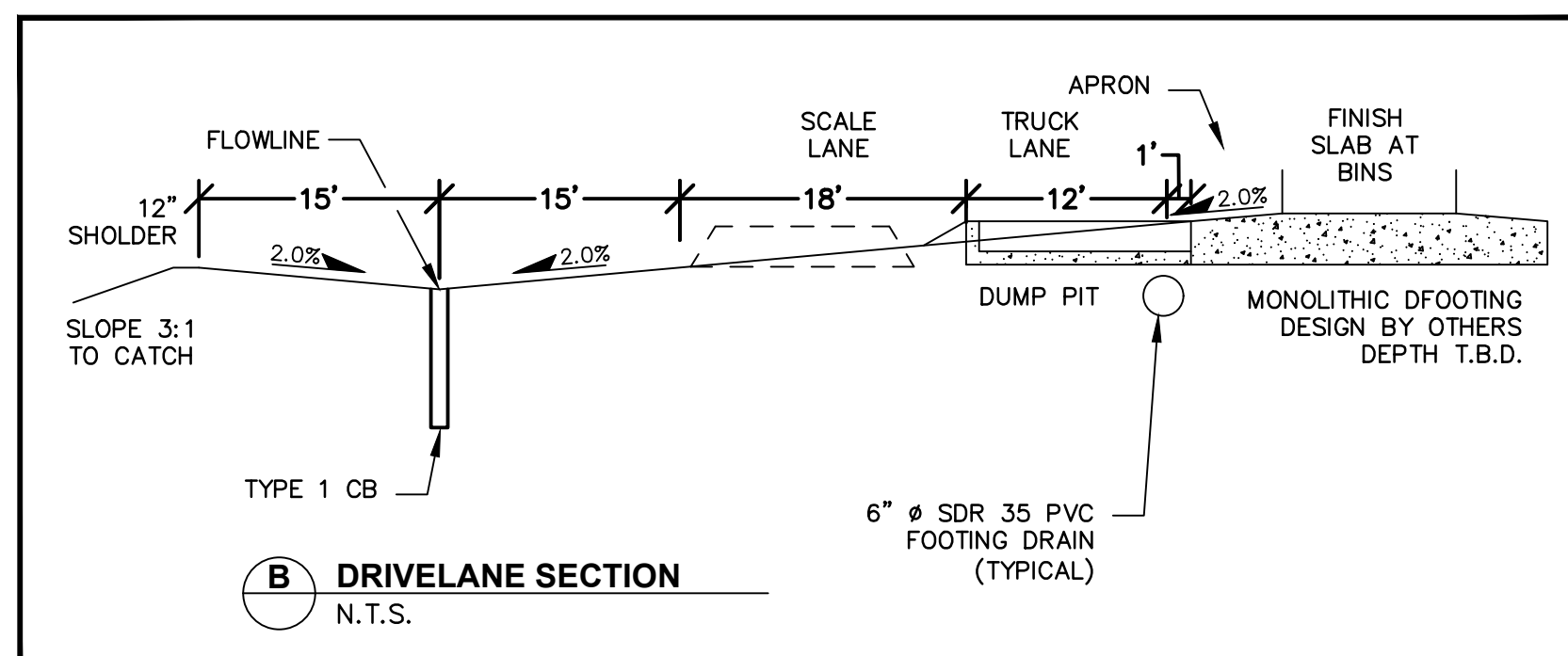
BIORETENTION POND
N.T.S.
RB ENGINEERING
BIO_RTN_PND.dwg



TYPICAL STRUCTURAL PAVING SECTION
N.T.S.
RB ENGINEERING
PAVING_SECTION.dwg



A DRIVEWAY SECTION
N.T.S.



B DRIVELANE SECTION
N.T.S.

STANDARD STORM DRAINAGE NOTES

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY/COUNTY STANDARDS AND THE MOST CURRENT COPY OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA).

TEMPORARY EROSION/WATER POLLUTION MEASURES SHALL BE REQUIRED IN ACCORDANCE WITH SECTION 1-07.15 OF THE STANDARD SPECIFICATIONS AND THE DRAINAGE DESIGN AND EROSION CONTROL MANUAL ("DRAINAGE MANUAL").

PROPOSER SHALL COMPLY WITH ALL OTHER PERMITS AND OTHER REQUIREMENTS OF THE GOVERNING AUTHORITY OR AGENCY.

A PRECONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION OR STAKING OF THE SITE.

HYDROSEED FILTER STRIP, INFILTRATION SWALE, AND ANY EXPOSED DISTURBED AREAS. HYDROSEED TO BE APPLIED IMMEDIATELY UPON COMPLETION OF GRADING.

STORM DRAIN PIPE SHALL MEET THE FOLLOWING REQUIREMENTS:

- PLAIN CONCRETE PIPE CONFORMING TO THE REQUIREMENTS OF AASHTO M86, CLASS 2.
- REINFORCED CONCRETE PIPE CONFORMING TO THE REQUIREMENTS OF AASHTO M 170.
- PVC PIPE CONFORMING TO ASTM D3034 SDR OR ASTM F 789 WITH JOINTS AND GASKETS CONFORMING TO ASTM D3212 AND ASTM F 477.
- DUCTILE IRON PIPE CONFORMING TO THE REQUIREMENTS OF AWWA C 151, THICKNESS CLASS AS SHOWN ON THE PLANS.
- POLYETHYLENE SMOOTH WALL PIPE PER ADVANCED DRAINAGE SYSTEMS (ADS) N-12 OR HANCOR HI-Q CONSTRUCTED PER WSDOT/APWA STANDARD SPECIFICATIONS 7-04. (FOR PIPE SIZED UP THROUGH 24" DIA.)

SPECIAL STRUCTURES, OIL/WATER SEPARATORS, AND OUTLET CONTROLS SHALL BE INSTALLED PER PLANS AND MANUFACTURERS RECOMMENDATIONS.

PROVIDE TRAFFIC CONTROL PLAN(S) AS REQUIRED IN ACCORDANCE WITH MUTCD. CALL UNDERGROUND LOCATE LINE 1-800-424-5555 MINIMUM 48 HOURS PRIOR TO ANY EXCAVATION.

ALL SURVEYING AND STAKING SHALL BE PERFORMED BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK. THE ENGINEER OR SURVEYOR DIRECTING SUCH WORK SHALL BE LICENSED BY THE STATE OF WASHINGTON.

THE MINIMUM STAKING OF STORM SEWER SYSTEMS SHALL BE AS FOLLOWS:

- STAKE LOCATION OF ALL CATCH BASIN/MANHOLES AND OTHER FIXTURES FOR GRADE AND ALIGNMENT.
- STAKE LOCATION, SIZE, AND DEPTH OF RETENTION/DETENTION FACILITY.
- STAKE FINISHED GRADE OF ALL STORMWATER FEATURES, INCLUDING BUT NOT LIMITED TO CATCH BASIN/MANHOLE RIM ELEVATIONS, OVERFLOW STRUCTURES, WEIRS, AND INVERT ELEVATIONS OF ALL PIPES IN CATCH BASINS, MANHOLES, AND THOSE PIPES THAT DAYLIGHT.

ALL DRIVEWAY CULVERTS SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FOR THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED SECTIONS TO MATCH THE SIDE SLOPE. THE STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED ACCORDING TO APPROVED PLANS ON FILE WITH THE JURISDICTION. ANY MATERIAL DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL FROM THE JURISDICTION.

A COPY OF THE APPROVED STORMWATER PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SIMILARLY STABILIZED TO THE SATISFACTION OF THE JURISDICTION. FOR SITES WHERE GRASS HAS BEEN PLANTED THROUGH HYDROSEEDING, THE PERFORMANCE BOND WILL NOT BE RELEASED UNTIL THE GRASS HAS BEEN THOROUGHLY ESTABLISHED, UNLESS OTHERWISE APPROVED BY THE JURISDICTION.

ALL EROSION CONTROL AND STORMWATER FACILITIES SHALL BE REGULARLY INSPECTED AND MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION PHASE OF THE DEVELOPMENT PROJECT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.

ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE CURRENT W.S.D.O.T. STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL SHALL APPLY.

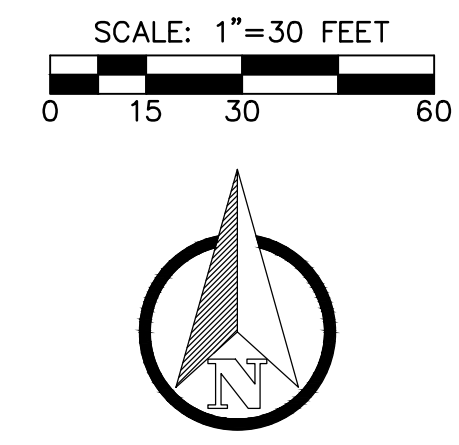
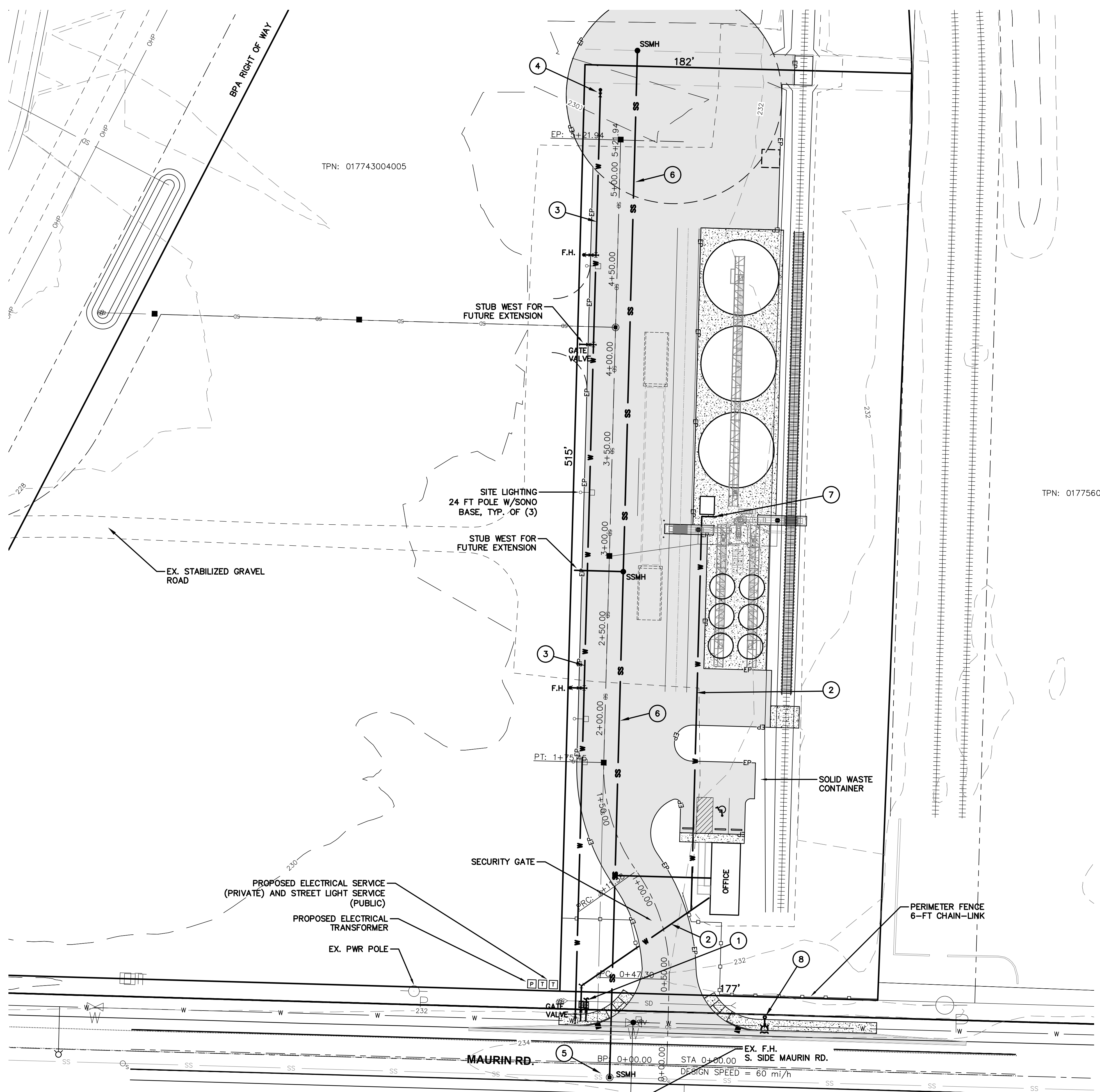
IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND OTHER RELATED OR REQUIRED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY IN THE JURISDICTIONS RIGHT-OF-WAY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ANY CONSTRUCTION.

NO FINAL CUT OR FILL SLOPE SHALL EXCEED TWO (2) HORIZONTAL AND ONE (1) VERTICAL WITHOUT STABILIZATION BY ROCKERY OR BY A STRUCTURAL RETAINING WALL.

THE CONTRACTOR SHALL VERIFY THE LOCATIONS, WIDTHS, THICKNESSES, AND ELEVATIONS OF ALL EXISTING PAVEMENTS AND STRUCTURES, INCLUDING UTILITIES AND OTHER FRONTAGE IMPROVEMENTS, THAT ARE TO INTERFACE WITH WORK. PROVIDE ALL TRIMMING, CUTTING, SAW CUTTING, GRADING, LEVELING, SLOPING, COATING, AND OTHER WORK, INCLUDING MATERIALS AS NECESSARY TO CAUSE THE INTERFACE WITH EXISTING WORKS TO BE PROPER, WITHOUT CONFLICT, ACCEPTABLE TO THE ENGINEER AND THE JURISDICTION, COMPLETE IN PLACE, AND READY TO USE.

COMPACTION OF ALL FILL AREAS SHALL BE PER CURRENT APWA SPECIFICATIONS. FILL SHALL BE PROVIDED IN 6" MAXIMUM LIFTS AND SHALL BE COMPACTED TO 95 PERCENT OF ITS MAXIMUM RELATIVE DENSITY.

NO.	DATE	REVISION
DESIGNED BY: CA	DRAWN BY: CL/A/ALF	CHECKED BY: R/WB
DATE: 6.6.23	SCALE: AS NOTED	
SOUTHWEST WASHINGTON GRAIN PROJECT		
PRELIMINARY GRADING AND DRAINAGE DETAILS		
CITY OF CHEHALIS, WA.		
RB Engineering DESIGN → PERMIT → MANAGE OFF: (360) 740-8819 EMAIL: Chief@rbengr.com P.O. Box 923 CHEHALIS, WA 98532		
811 Know what's below. Call 811 before you dig.		
JOB NUMBER: 22130 DRAWING NAME: 22130_P2.0_PGDT P2.1 3 OF 5		



- UTILITY NOTES:**
- ① PROPOSED DOMESTIC WATER & IRRIGATION SERVICE CONNECTIONS TO EXISTING WATER MAIN IN MAURIN RD.
 - ② PROPOSED 1 1/2" PVC DOMESTIC WATER SERVICE LINE TO OFFICE & TERMINAL FAUCETS
 - ③ PROPOSED 8" FIRE LINE AND HYDRANTS PER PLAN.
 - ④ PROPOSED WATER BLOW OFF
 - ⑤ PROPOSED CONNECTION TO EXISTING SANITARY SEWER FORCEMAIN. CUT AND RESTORE STREET SECTION.
 - ⑥ PROPOSED 8" SDR35 SANITARY SEWER GRAVITY MAIN PER PLAN.
 - ⑦ PROPOSED FROST-FREE HYDRANT FOR FACILITY CLEANUP
 - ⑧ PROPOSED STREET LIGHT PER CITY OF CHEHALIS STANDARDS FOR MAURIN ROAD SECTION.

UTILITY SEPARATION NOTE:

MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER LINES AND SANITARY SEWER LINES.

WHERE VERTICAL SEPARATION IS LESS THAN 18" BETWEEN WATER LINES AND SEWER LINES, SLEEVE WATER LINES WITH A 20' LENGTH OF DUCTILE IRON PIPE WITH ENDS EQUAL DISTANCE FROM CROSSING.

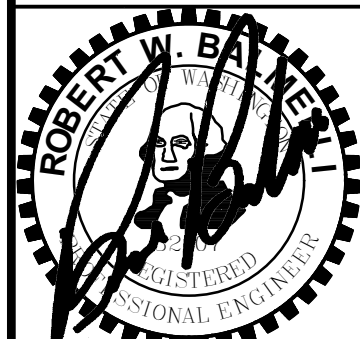
PROVIDE SAND CUSHION BETWEEN PIPES THAT HAVE LESS THAN 8" OF SEPARATION.

NO.	DATE	REVISION

DESIGNED BY: CA
 DRAWN BY: CL/A/ALF
 CHECKED BY: RWB
 DATE: 6.6.23
 SCALE: 1" = 30'

**SOUTHWEST WASHINGTON
GRAIN PROJECT**
 CITY OF CHEHALIS, WA.

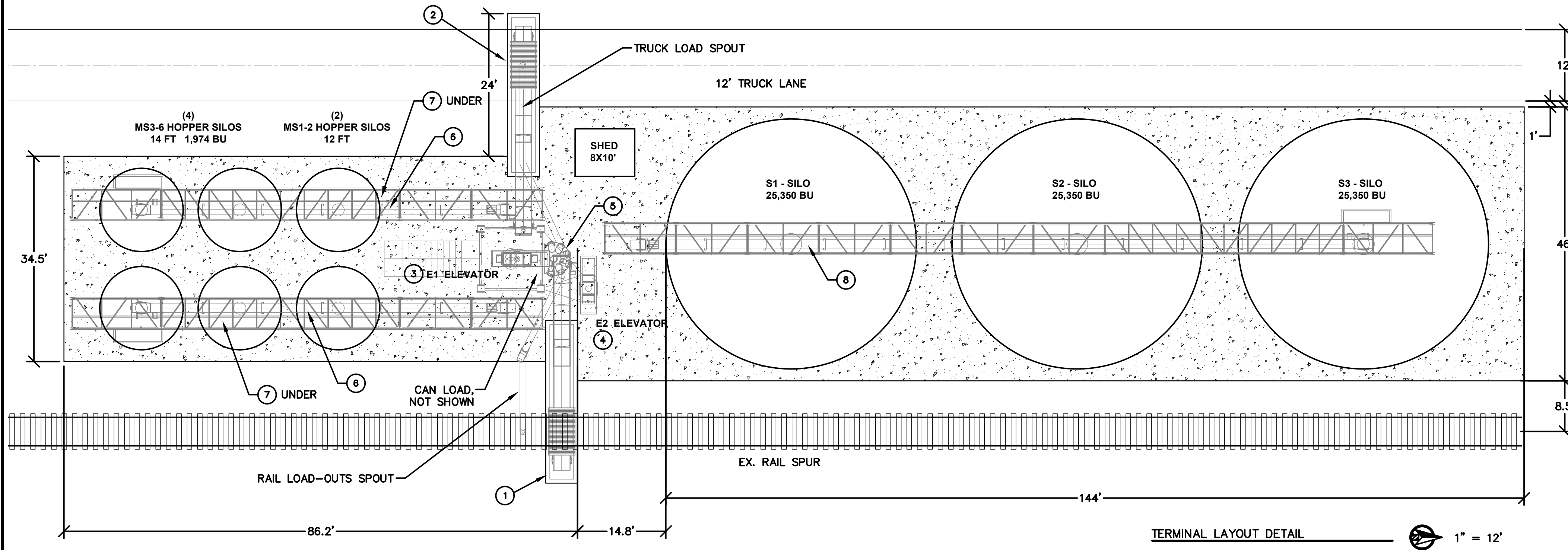
PRELIMINARY UTILITIES PLAN



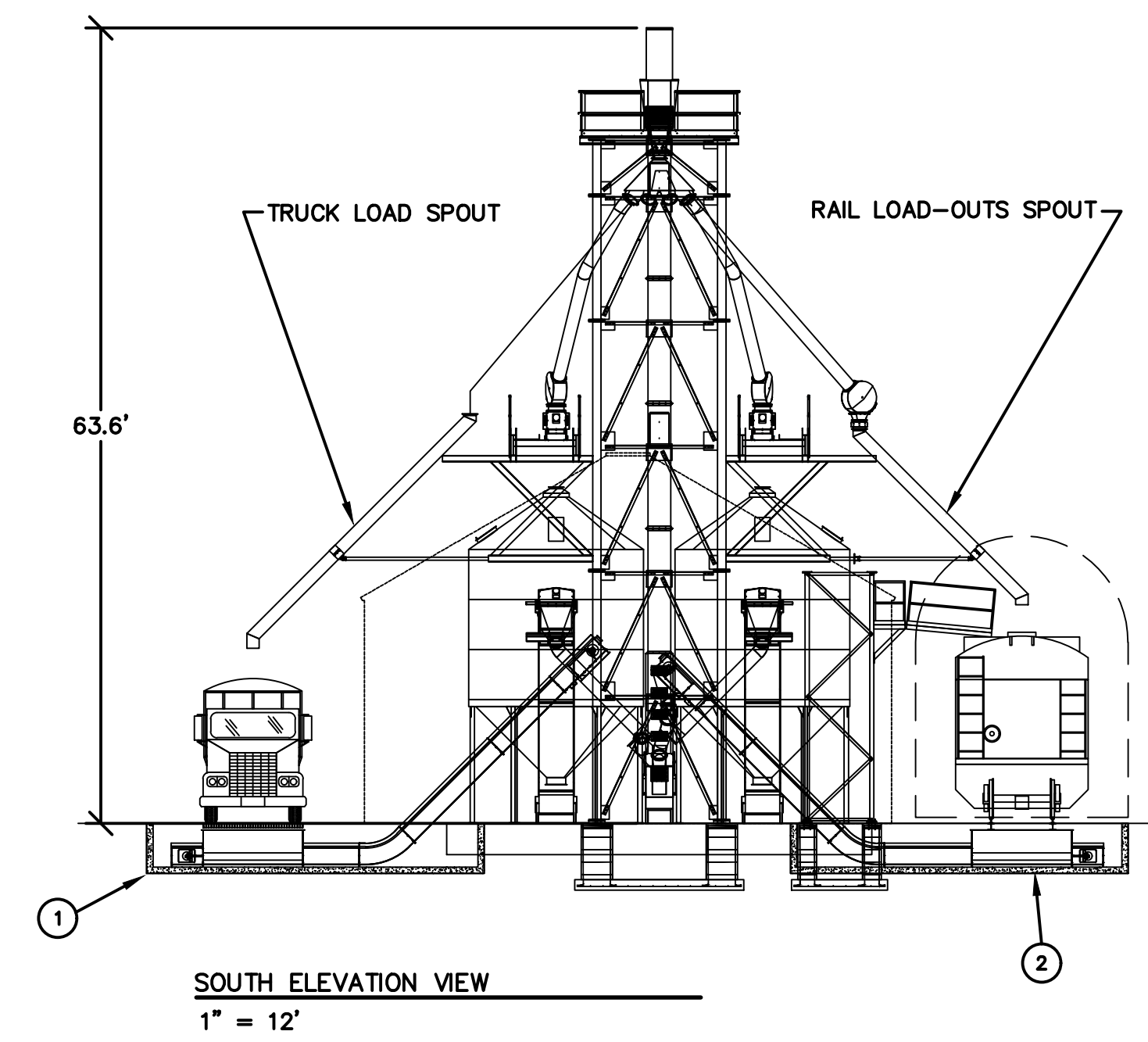
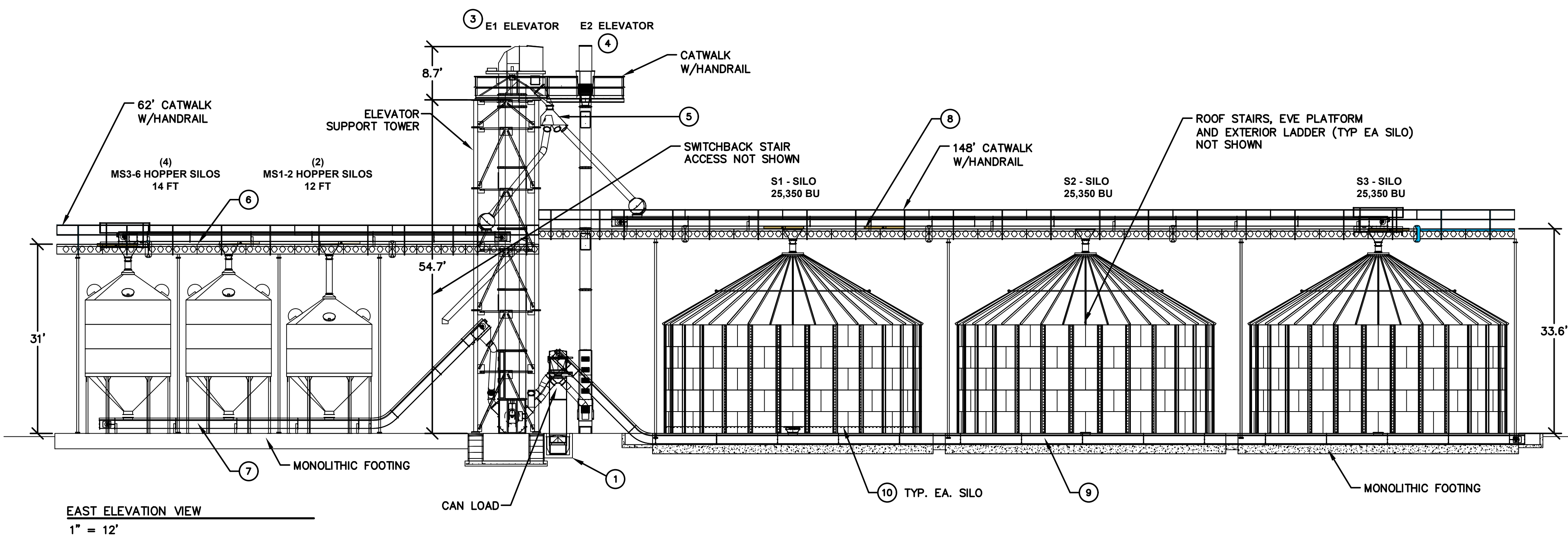
RB Engineering
 DESIGN → PERMIT → MANAGE
 OFF: (360) 740-8819
 P.O. Box 923
 CHEHALIS, WA 98532
 EMAIL: Carl@rbengr.com

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

JOB NUMBER
22130
 DRAWING NAME
22130_P3.0_PUTP
P3.0
 4 OF 5



- TERMINAL COMPONENTS**
- 1 RAIL RECEIVING PIT WITH AUGER AND INCLINED RAIL PIT CONVEYER
 - 2 TRUCK RECEIVING PIT AND INCLINED TRUCK PIT CONVEYER
 - 3 E1- BUCKET ELEVATOR 1 WITH SUPPORT TOWER HT = 54'6"
 - 4 E2- BUCKET ELEVATOR 2 BRACED TO SUPPORT TOWER
 - 5 6 POSITION FLAT BACK DISTRIBUTOR
 - 6 TOP LOAD DRAG CONVEYORS (2) 7,500 BPH W/ELECTRIC RACK & PINION GATES
 - 7 DISCHARGE DRAG CONVEYORS (2) 7,500 BPH W/ELECTRIC ROLLER GATES
 - 8 TOP LOAD DRAG CONVEYOR 7,500 BPH W/ELECTRIC RACK & PINION GATES
 - 9 DISCHARGE DRAG CONVEYOR INSTALLED IN 9" DEEP FOUNDATION TRENCH
 - 10 FULL FLOOR DRYING SYSTEM WITH 24" TALL LEGS AND SILO SWEEP AUGERS TO MANUAL GATES

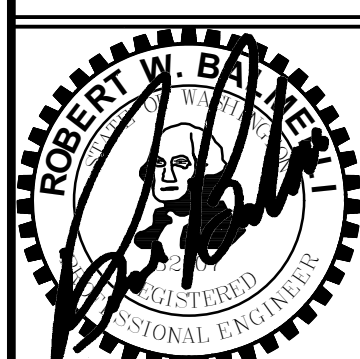


NO.	DATE	
DESIGNED BY: CA	DRAWN BY: CL/A/ALF	CHECKED BY: RWB
DATE: 6.6.23	SCALE: AS NOTED	

SOUTHWEST WASHINGTON GRAIN PROJECT

PRELIMINARY TERMINAL FACILITY ELEVATIONS

CITY OF CHEHALIS, WA.



RB Engineering
 DESIGN → PERMIT → MANAGE
 OFF: (360) 740-8819
 P.O. Box 923 CHEHALIS, WA 98532
 EMAIL: Chief@RBCEngineers.com

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

JOB NUMBER: 22130
 DRAWING NAME: 22130_P4.0_TERMINAL
P4.0
 5 OF 5