

City of Sumner

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." in addition, complete the supplemental sheet for nonproject actions (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. Background

1. Name of proposed project, if applicable:

Salmon Springs Transmission Main Replacement

2. Name of applicant:

City of Puyallup

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

**Mark Palmer
City of Puyallup
333 South Meridian
Puyallup, WA 98371
253-435-3606**

4. Date checklist prepared:

July 1, 2015 – Supplement on February 19, 2016

5. Agency requesting checklist:

City of Sumner

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

Project is estimated to take place in the summer of 2016

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.

**Habitat Management Plan
Wetland Memo
SWPPP**

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.

None are known to be pending.

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

**Hydraulic Project Approval (HPA)
NPDES permit
City of Sumner Critical Area Variance is not required
City of Sumner Fill and Grade Permit**

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

The City of Puyallup is proposing to replace the existing Salmon Springs Transmission Main from just below the existing concrete dam to the existing chlorination compound in the City of Sumner, Pierce County, WA. This transmission main is the oldest and most important piece of infrastructure in the City of Puyallup's water system. It was originally constructed in 1906, with the portion just below the concrete dam replaced in 1997. In 2013, Salmon Springs provided nearly 63% of the City's water. Due to the age and critical nature of this transmission main, the City is proposing to construct a new transmission main from the spring source to the existing chlorination compound. This will be accomplished by tying into the 16-inch ductile iron pipe south of the concrete dam that was replaced in 1997 and following the proposed alignment to the existing chlorination compound. The existing portion of the transmission main that will be bypassed will remain in place to maintain service during construction, to provide redundancy in case of a landslide or seismic event, and to minimize ground disturbance and vegetation removal in sensitive areas.

Out of the eight (8) alternative alignments analyzed for this project, the proposed alignment results in the least amount of environmental impact. A majority of the new transmission main will be buried underground with only a small portion exposed for an elevated crossing of Salmon Tributary, a spring-fed creek that provides spawning and rearing habitat for anadromous fish species. The proposed alignment would require no in-water work and would not result in any impacts to the creek or the adjacent seepage slope wetland as the pipeline would be buried in a natural upland levee between Salmon Tributary and the adjacent wetland. A small bridge is also proposed just upstream of the elevated pipeline crossing to provide maintenance access to the transmission main. **The deck for this bridge will be temporary to allow for maintenance vehicle access while the block abutments will be permanent to avoid future impacts to the stream bank. A 0.25 acre laydown area on City of Sumner property will also be utilized for staging of materials/equipment.**

Open trenching will be used for a majority of the proposed alignment. This trenching will result in temporary and permanent impacts to stream and wetland buffers, and up to 5 trees may need to be felled. After the new pipeline is constructed, the trench will be backfilled with native material and/or Washington State Department of Transportation (WSDOT) standard trench backfill to allow for movement of shallow groundwater that is often present in the project area. 8,133 sq. ft. (0.19 acre) of vegetated stream/wetland buffer will be permanently impacted due to the proposed anchor blocks for the elevated stream crossing of the pipeline, the proposed access bridge, and maintenance of a 12 ft. tree and shrub-free corridor along the alignment to allow for access to the new transmission main. 4,571 sq. ft. (0.10 acre) of vegetated stream/wetland buffer will be temporarily impacted due to clearing and grubbing.

Mitigation for the anticipated temporary and permanent impacts to stream and wetland buffers will include utilizing all felled trees as large woody debris (LWD) within or directly adjacent to disturbed areas, replanting all temporarily disturbed areas with native riparian plants, and **preserving additional buffer along Salmon Creek, just upstream of the mouth of Salmon Tributary, as mitigation for temporary and permanent buffer impacts. **Tree removal will be mitigated for by preservation of addition buffer along Salmon Creek, some of which is forested.** Planted areas will be monitored for a period of up to ten years to ensure compliance with the success standards established in the Habitat Management and Mitigation Plan that will be approved prior to construction. **Monitoring may conclude after 5 years if success standards are met by this time.****

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.

The project is located just north of the confluence of Salmon Tributary and Salmon Creek, starting at the existing chlorination compound approximately 0.1 mile upstream of this confluence. Salmon Tributary enters Salmon Creek at approximately river mile (RM) 0.5 of Salmon Creek. The proposed project is located just north of Downtown Sumner in Section 18 of Township 20N and Range 05E (Figures 1, 2, and 3).

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): **Flat**, rolling, hilly, **steep slopes**, mountainous, other

The transmission main project area is characterized by a moderately steep ravine. This ravine becomes steeper as the project approaches the existing concrete dam at the north end of the project area. The laydown area is a flat open area.

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

25%

- 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 prime farmland.

According to soil survey data for Pierce County, soils in the vicinity of the transmission main consist solely of Xerochrepts, 45 to 70% slopes. This soil type is characterized by deep gravelly sandy loam that formed from sandy and gravelly outwash and/or glacial till on valley sides. The upper layer of soil contains a significant amount of loose gravel and stream cobbles. Soils within the laydown area consist of Snohomish silty clay loam and Briscot loam. Both of these soil types formed from alluvium in floodplains. Both of these soils are classified as prime farmland if drained.

The project area and laydown area are not within the vicinity of any agricultural resource lands or the 300-foot buffer of agricultural resource lands as identified on the City of Sumner's Agricultural Resource Land Map.

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

The upper layer of soil within the project area is generally unstable as it consists mostly of loose gravel and cobbles. The project is also within an area mapped by the City of Sumner as a Type II landslide hazard due to generally steep slopes (15% to 24.99%). However, no landslides have been mapped in the vicinity of the project site and geotechnical analysis indicates that the project area is globally stable and the potential for a deep seated landslide and slope instability is low. The project area is not within an area mapped by the City of Sumner as a seismic hazard area.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Approximately 310 cubic yards (CY) of excavation will occur for the open trenching for the new transmission main. No native material will be hauled off site. The native excavated material will be used for pipe bedding and backfill. There will be a net fill of native material of approximately 55 CY due to the volume displaced by the proposed pipe. Approximately 30 CY of this fill will be used for the proposed bridge approaches while the remaining 25 CY will be graded out along the 655-foot pipe alignment. 30 CY of imported pit run will also be used for grading in the connection areas at each end of the proposed transmission main. Overall, there will be a net fill of approximately 85 CY. **There may be temporary fill within the laydown area; any temporary fill placed within the laydown area will be removed prior to the completion of the project.**

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

Short-term erosion may occur during construction as clearing, grubbing, and excavation will occur.

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

There will be de minimis addition of impervious surface within the project area due to the anchor blocks for the elevated stream crossing and bridge. The remaining section of the new transmission main will be completely buried below the ground surface with pervious backfill used to backfill the trench.

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

Standard temporary sediment and erosion control (TESC) best management practices (BMPs) will be installed prior to construction and regularly inspected throughout. These BMPs will include, but are not limited to: biodegradable erosion control blankets, temporary seeding, silt fence, straw bales, containment fences, stabilized construction entrances, and final revegetation of the disturbed areas. In addition, the project will comply with the City of Sumner’s municipal NPDES permit with the Department of Ecology as well as all related City code.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

The project may result in short-term reductions in air quality due to increased emissions from construction equipment, vehicles, and dust during construction. The project will not create any long term source of air emissions.

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

There are no off-site sources of emissions or odor that may affect this proposal

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

During construction, measures will be taken to limit the amount of idling time of construction equipment and vehicles. Dust will be minimized by spraying exposed soil with water, if necessary.

3. Water

a. Surface:

- 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.

The project will be adjacent to and over Salmon Tributary, a spring-fed tributary of Salmon Creek. Salmon Tributary enters Salmon Creek at approximately RM 0.5 of Salmon Creek. Salmon Creek flows approximately 0.5 miles west to the White River. There is also a seepage wetland in the immediate vicinity of the project area that is identified on the City of Sumner's wetland inventory map and delineated in the field. This wetland is not identified on the National Wetland Inventory. Lastly, the laydown area is in the vicinity of Salmon Creek.

- 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.

Work will occur over and within 200 ft. of Salmon Tributary. No in-water work or wetland impacts are proposed as a natural upland levee between a large seepage wetland and the ordinary high water mark (OHWM) of the creek will be utilized for the new alignment and access bridge approaches/abutments. The proposed stream crossing will be the only elevated portion of the proposed pipeline. Anchor blocks for this proposed stream crossing will be completely outside the limits of the OHWM of the creek and appropriate TESC BMPs will be installed prior to any ground disturbance to prevent impacts to the creek during construction. An environmental inspector will also be on site during all work within regulated buffers to ensure that there are no impacts to Salmon Tributary or the adjacent wetland. To facilitate construction and future maintenance/emergency access, a small bridge will be constructed just upstream of the elevated crossing. This bridge will be constructed of precast concrete block abutments outside of the limits of the OHWM of the creek and the deck will consist of a prefabricated engineered timber or steel structure that allows for adequate clearance for flood flows and potential debris. The bridge deck will be temporary while the block abutments will be permanent to avoid future impacts to the stream bank. The laydown area is also located within 200 feet of Salmon Creek but is located outside of the 100-foot buffer.

- 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.

No fill or dredge material will be placed in or removed from Salmon Tributary or the adjacent seepage wetland.

- 4) Will the proposal require surface water withdrawals or diversions? Give 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.

The proposal is not within any FEMA mapped 100-year floodplain. However, it is likely within the limits of 100-year flooding of Salmon Tributary. The proposed elevated stream crossing has been designed to allow for adequate clearance for flood flows and potential debris. The bridge constructed for construction access and future maintenance has also been designed to allow for adequate clearance of flood flows and potential debris.

- 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 waste material will be discharged to surface waters.

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

It is anticipated that groundwater will be encountered during open trenching for the proposed transmission main. Any groundwater that is encountered will be withdrawn and treated according to all applicable federal, state, and local laws.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: 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.

No waste material will be discharged into the ground.

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.

De minimis runoff, including stormwater, will be created by the proposed transmission main as it will be almost completely buried below the ground surface. Runoff from the proposed access bridge will also be de minimis due to its grated deck and potential pollutants will be minimal due to the infrequency of travel over the bridge.

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

Due to the close proximity of Salmon Tributary and high groundwater to the project area, there is potential for waste materials to enter both ground and surface waters. Appropriate BMPs will be installed and maintained throughout construction to ensure that waste materials do not enter any ground or surface waters. In addition, a Spill Prevention Control and Countermeasures (SPCC) Plan will be prepared and spill containment kits will be onsite throughout construction.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

To reduce or avoid impacts to surface, ground, and runoff water impacts, the project will incorporate the following measures at the minimum:

- **Preparation and implementation of an approved TESC plan**
- **Erosion control BMPs (silt fence, straw wattle, straw bales, erosion control blankets, seeding, planting, etc.)**
- **Provide containment structures below both of the proposed anchor blocks for the elevated stream crossing to catch any debris generated from work on the elevated portion of the pipeline**
- **Check equipment daily for leaks**
- **Proper containment of any concrete, petroleum, or other potentially hazardous substances**
- **Conduct refueling operations at least 50 feet from any open water body**

- **Preparation of a SPCC plan for procedures and contacts to act upon in the event of a spill**
- **Having spill containment kits onsite throughout construction**
- **Having an environmental inspector on site during all work within the regulated buffers of Salmon Tributary and the adjacent wetland to ensure that there are no aquatic impacts**

4. Plants

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

- deciduous tree: **alder, maple**, cottonwood, aspen, **other**
- evergreen tree: fir, **cedar**, pine, other
- shrubs**
- grass**
- pasture
- crop or grain
- 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?

Up to 5 trees (all red alders) will be removed along the proposed alignment for construction access and pipeline trenching. Approximately 0.29 acre of shrub and herbaceous vegetation will be removed. Removed trees will be mitigated for by the preservation of forested buffer along Salmon Creek. The 4,571 sq. ft. (0.10 acre) of temporarily disturbed buffers will be replanted with native shrubs and herbaceous plant species. No trees will be planted to prevent large roots from growing along the new transmission main. The 8,133 sq. ft. (0.19 acre) of permanently disturbed buffers will be seeded with native grasses. No shrubs or trees will be planted to allow for maintenance/emergency access to the new transmission main.

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

No listed threatened or endangered plant species are known to be on or near the site.

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

Existing vegetation will be preserved to the maximum extent practicable. Reinforced silt fence will be installed at the clearing limits prior to construction due to the close proximity of Salmon Tributary and the adjacent seepage wetland. All trees to be removed will be utilized as large woody debris, either adjacent to the wetted channel of Salmon Tributary or within restored and/or enhanced riparian areas. Remaining trees will be protected during construction. All disturbed areas along the proposed alignment of the transmission main will be seeded and replanted with native vegetation. No trees will be replanted within the impacted buffers due to the proximity of the proposed transmission main. Shrubs will be replanted outside of the 12-foot maintained corridor along the new alignment. The 12-foot corridor will be seeded with native grasses but will not be replanted with shrubs to allow for maintenance access.

In order to provide additional compensatory mitigation for the proposed vegetation loss within the regulated buffers of Salmon Tributary and the adjacent seepage wetland, additional buffer along Salmon Creek, upstream of the mouth of Salmon Tributary, will be preserved. 86,730 sq. ft. (1.99 acres) of Salmon Creek buffer will be preserved. Removed trees will be mitigated for by the preservation of forested buffer along Salmon Creek. Vegetation establishment within restoration planting areas will be monitored for a period of up to ten years in order to comply with the

conditions of the City of Sumner's required Habitat Management Plan. Monitoring requirements will cease after 5 years if success standards are met by this time.

5. Animals

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: **hawk**, heron, eagle, **songbirds**, other:

mammals: **deer**, bear, elk, beaver, other: **skunk**, **opossum**, **squirrel**,

fish: bass, **salmon**, **trout**, herring, shellfish, other:

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

Endangered Species Act listed species with the potential to be present on or near the site include Chinook salmon (Puget Sound ESU) and steelhead trout (Puget Sound DPS). However, any anadromous fish that may utilize Salmon Tributary likely only occur in the lower gradient portion of the creek below the existing chlorination compound. Above the chlorination compound the stream gradient increases significantly and there are several cascades that are barriers to fish passage. WDFW data only shows documented or modeled anadromous fish occurrence in approximately the lower 400 ft. of the creek, while the Puyallup Tribal Fisheries' Annual Salmon, Steelhead, and Bull Trout Report for the Puyallup/White River Watershed (2013-2014) mentions that the flow in Salmon Tributary is likely too low to provide spawning access to Chinook and steelhead.

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

Most of the State of Washington is within the Pacific Flyway.

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

No in-water work or wetland impacts are proposed in order to preserve these sensitive areas, especially since Salmon Tributary provides excellent spawning habitat for anadromous fish species in its lower reach. Construction of the proposed elevated stream crossing and access bridge will be conducted during an approved work window in order to minimize potential inadvertent impacts to fish or fish habitat within Salmon Tributary. Previously-listed BMPs above will avoid or minimize any impacts to habitat for wildlife. In addition, the riparian/aquatic habitat will be enhanced with the installation of large woody debris. Removed trees will be anchored into the bank, as deemed suitable. They will be allowed to overhang the wetted channel of the creek. The restoration of temporarily disturbed areas with native plant species, the installation of large woody debris, and the **preservation of 1.99 acres of Salmon Creek buffer will provide enhanced wildlife habitat within and directly upstream of the project area.**

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.

None.

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

The proposal will not affect the potential use of solar energy.

- 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:

None.

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 as a result of this proposal? If so, describe.

No environmental health hazards are anticipated. However, as there will be concrete work involved and heavy construction equipment used, there is the potential for spill of concrete or petroleum products.

- 1) Describe special emergency services that might be required.

No additional emergency services will be required. The SPCC plan will have necessary contact information and procedures in the event of a spill. Spill containment kits will be available on site at all times.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Spill cleanup kits and containment materials will be on site at all times. All waste materials will be fully contained and disposed of offsite in accordance with federal, state, and local laws. No equipment will operate in the water and all refueling will be conducted at least 50 ft. from open water.

b. Noise

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

There is very minimal noise in the project area as the project will be within a relatively steep ravine away from any major roads. There is minor traffic noise in the vicinity of the laydown area. Noise is not anticipated to affect the project.

- 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.

There will be short-term increased noise from construction activities. The loudest form of noise during construction will be from tracked equipment such as excavators and front-end loaders. There are not any noise receptors in the immediate vicinity of the project as the project is within a heavily wooded ravine. There are noise receptors in the vicinity of the laydown area. Construction activities will be conducted between 7:00 am and 6:00 pm on weekdays and 10:00 a.m. to 6:00 p.m. on Saturdays, Sundays, and legal holidays according to Sumner Municipal Code 15.34. There will not be any long-term noise impacts as a result of this project.

- 3) Proposed measures to reduce or control noise impacts, if any:

For short term noise, construction will be limited to be conducted between 7:00 am and 6:00 pm on weekdays and 10:00 am to 6:00 pm on Saturdays, Sundays, and legal holidays

according to Sumner Municipal Code 15.34. All noise generated by project construction activities will comply with Sumner Municipal Code 8.14.

8. Land and Shoreline use

a. What is the current use of the site and adjacent properties?

The project area is currently used as a utility corridor for the existing transmission main. It is largely undeveloped due to the sensitive areas and steep slopes in the vicinity. The laydown area is currently an undeveloped open field with adjacent residential development.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

The only above ground structures on the site are the existing chlorination plant at the southern end of the project area and the existing concrete dam at the northern portion of the project area.

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

A portion of the existing fence around the chlorination compound will be demolished; however, it will be rebuilt after the new pipeline is constructed.

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

Low Density Residential 12000 (LDR-12)

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

Public-Private Utilities & Facilities

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 an “environmentally sensitive” area? If so, specify.

The project is within the 50/100 ft. standard buffer of Salmon Tributary as well as within the 75 ft. buffer of the adjacent seepage wetland regulated by the City of Sumner. However, Sumner Municipal Code 16.56.100(G)2 allows for public utility corridors within buffers “provided that the proposal is subject to review under the State Environmental Policy Act, and that the structure and function of impacted fish and wildlife habitat is replaced and restored; and that appropriate federal agencies are notified of the project.” The laydown area is located just outside the 100 ft. buffer of Salmon Creek.

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

N/A

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

N/A

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

N/A

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

This project is compatible with existing and projected land uses and plans as it will continue to provide water to the City of Puyallup from the source at Salmon Springs. The existing project area is owned by the City of Puyallup for protection of the springs and for operation and maintenance of the existing transmission main. The laydown area is located on City of Sumner property and will only involve temporary staging of materials and will be fully restored upon completion of the project. The project area and laydown area are also designated by the City of Sumner’s Comprehensive Plan as Public-Private Utilities & Facilities.

9. Housing

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

N/A

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

N/A

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

N/A

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 proposed structure will be the portion of the pipeline elevated over Salmon Tributary. The top of the pipeline will be approximately 5 ft. above the OHWM of Salmon Tributary. The proposed elevated portion of the pipeline will be constructed of ductile iron pipe on top of concrete anchor blocks.

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

No views will be altered or obstructed as the project area is an undeveloped wooded area.

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

The project will completely stabilize and restore unimproved disturbed areas upon completion.

11. Light and glare

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

None.

- 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:

None.

12. Recreation

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

There are no designated or informal recreational opportunities in the vicinity of the project area as the area is secured by the City of Puyallup for protection of Salmon Springs and associated utility infrastructure. There are also no designated or informal recreation opportunities in the immediate vicinity of the laydown area.

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

No. The project will not affect any recreational uses.

- 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 places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

- c. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known.

- b. Proposed measures to reduce or control impacts, if any:

None.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street

system. Show on site plans, if any.

There are no public streets or highways that serve the project area. There is a gravel access road, gated by the City of Puyallup, which is used to access the existing chlorination compound. This access road is located at the northern terminus of Parker Road East. Parker Road East serves the laydown area.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The site is not served by public transit. The nearest transit stop is the Sounder Station in downtown Sumner, located approximately 1.5 miles southwest of the project area. Access to this transit stop will not be affected by the proposed project.

c. How many parking spaces would the completed project have? How many would the project eliminate?

The project will not create or eliminate any parking spaces.

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

No, the proposal will not require any new roads or improvements to existing roads.

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

The project will not use or occur in the vicinity of any water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

N/A

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

N/A

15. Public services

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

Increased need for public services is not anticipated.

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

None.

16. Utilities

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

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

The project will involve replacement of an existing transmission main for the City of Puyallup between Salmon Springs and an existing chlorination compound. The existing transmission main will remain in place to maintain service during construction, to provide redundancy in case of a landslide or seismic event, and to minimize ground disturbance and vegetation removal in sensitive areas.

C. SIGNATURE

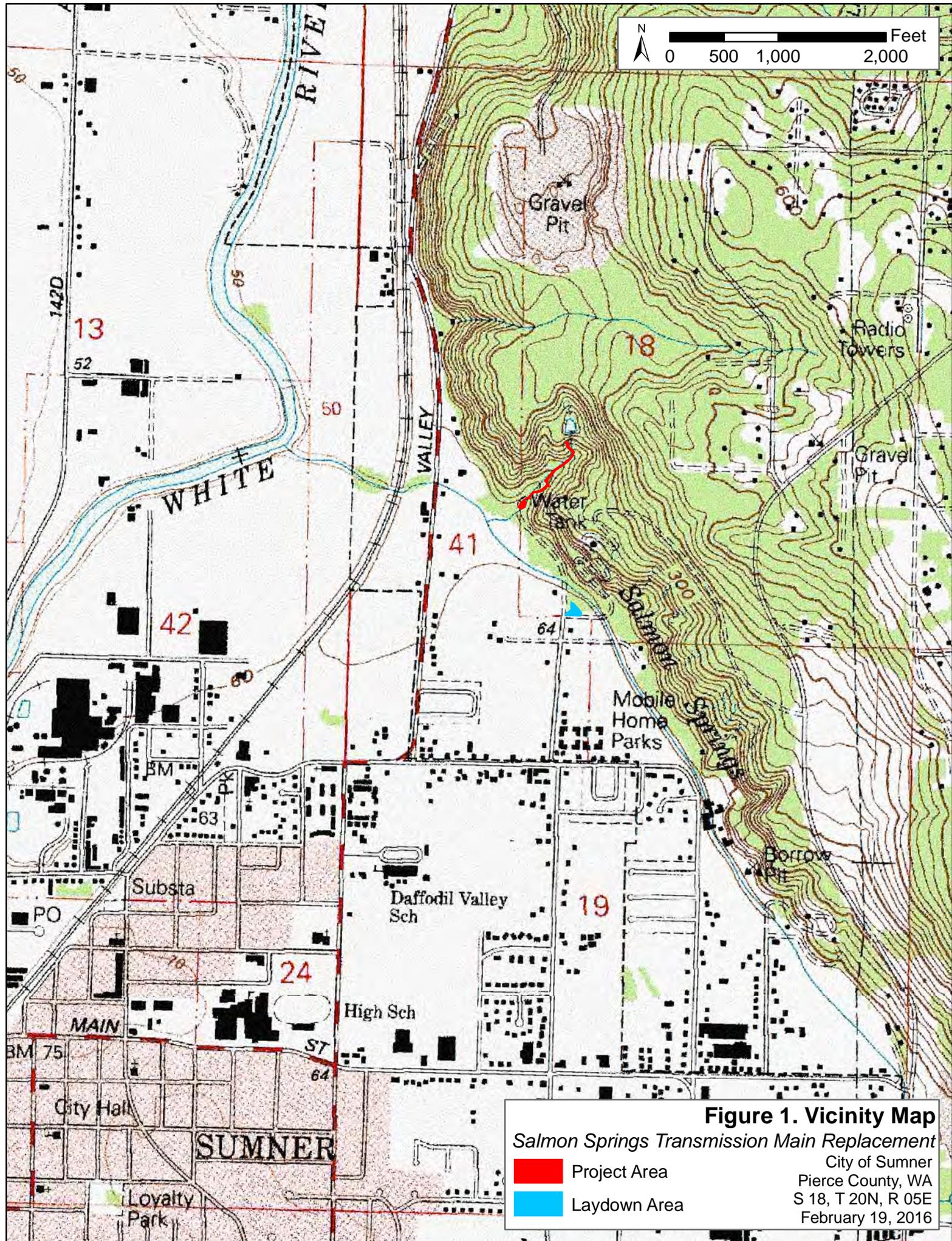
I, the undersigned, swear under the penalty of perjury that the above responses are made truthfully and to the best of my knowledge. I also understand that, should there be any willful misrepresentation or willful lack of full disclosure on my part, the agency may withdraw any determination of non-significance that it might issue in reliance upon this checklist.

Signature:

Name:

Date Submitted:

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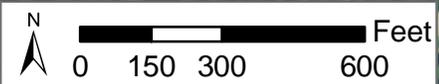


N
0 500 1,000 2,000 Feet

Figure 1. Vicinity Map
Salmon Springs Transmission Main Replacement
 City of Sumner
 Pierce County, WA
 S 18, T 20N, R 05E
 February 19, 2016

Project Area
 Laydown Area

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E Valley Hwy

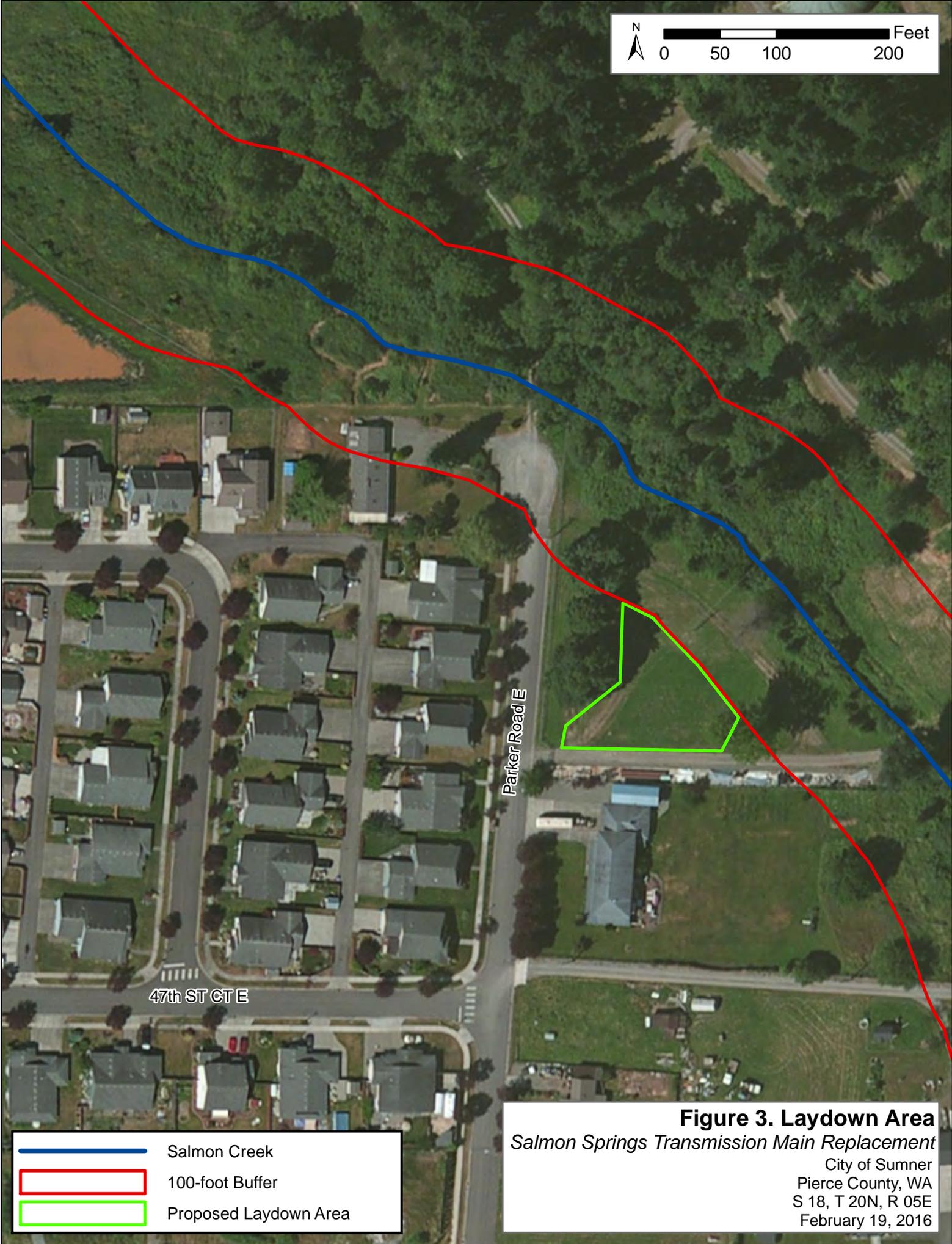
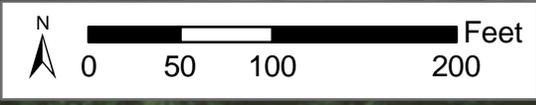
Parker Road E



Figure 2. Project Area
Salmon Springs Transmission Main Replacement
City of Sumner
Pierce County, WA
S 18, T 20N, R 05E
February 19, 2016

 Project Area

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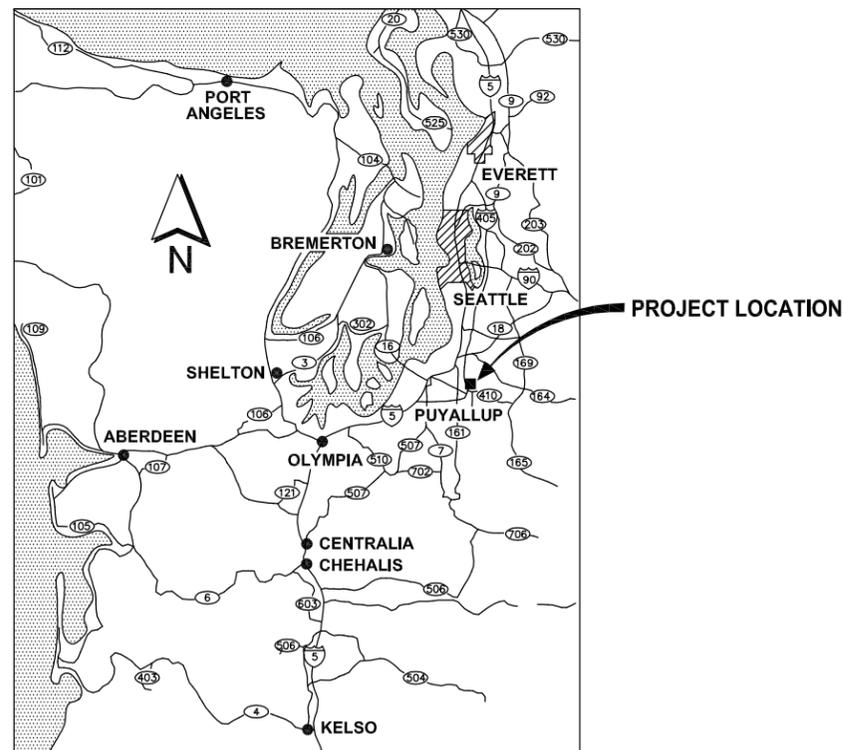
-  Salmon Creek
-  100-foot Buffer
-  Proposed Laydown Area

Figure 3. Laydown Area
Salmon Springs Transmission Main Replacement
 City of Sumner
 Pierce County, WA
 S 18, T 20N, R 05E
 February 19, 2016

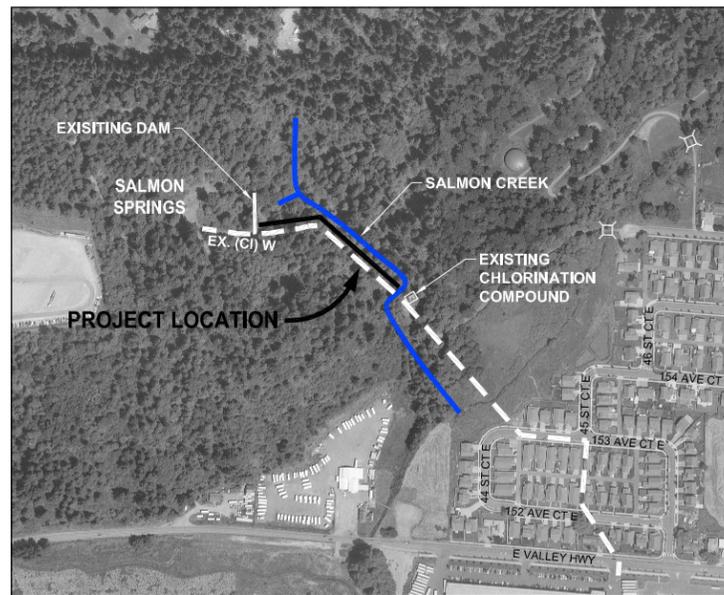
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SALMON SPRINGS TRANSMISSION MAIN REPLACEMENT

60% REVIEW SUBMITTAL
PUYALLUP, WASHINGTON



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

INDEX TO DRAWINGS		
SHT NO.	DWG NO.	SHEET TITLE
GENERAL		
1	G1	TITLE SHEET, LOCATION, SITE, VICINITY MAPS AND INDEX TO DRAWINGS
2	G2	LEGEND, ABBREVIATIONS, AND NOTES (NOT INCLUDED)
3	G3	SURVEY CONTROL SHEET (NOT INCLUDED)
WATER		
4	C1	WATER PLAN AND PROFILE STA 10+00 TO STA 12+50
5	C2	WATER PLAN AND PROFILE STA 12+50 TO STA 15+40
6	C3	WATER PLAN AND PROFILE STA 15+40 TO STA 17+77.82
DETAILS		
7	DT1	MISCELLANEOUS DETAILS
8	DT2	MISCELLANEOUS DETAILS

APPROVED

BY _____
CITY OF PUYALLUP
ENGINEERING DEPARTMENT

DATE _____

NOTE:
This approval is void after 1 year from approval date.
The City will not be responsible for errors and/or omissions on these plans.
Field conditions may dictate changes to these plans as determined by the City Engineer.

60% REVIEW SUBMITTAL
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PATH: U:\PSO\Projects\Clients\1895-CityOfPuyallup\216-1895-065-Salmon_Springs\995ves\CADD\DWG\ LAYOUT_G1

REVISIONS	DATE	BY	DESIGNED
			J. WRIGHT
			E. SOTO
			CHECKED
			APPROVED

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IF NOT, SCALE ACCORDINGLY

FILE NAME
PSO1895065-G

JOB No.
216-1895-065

DATE
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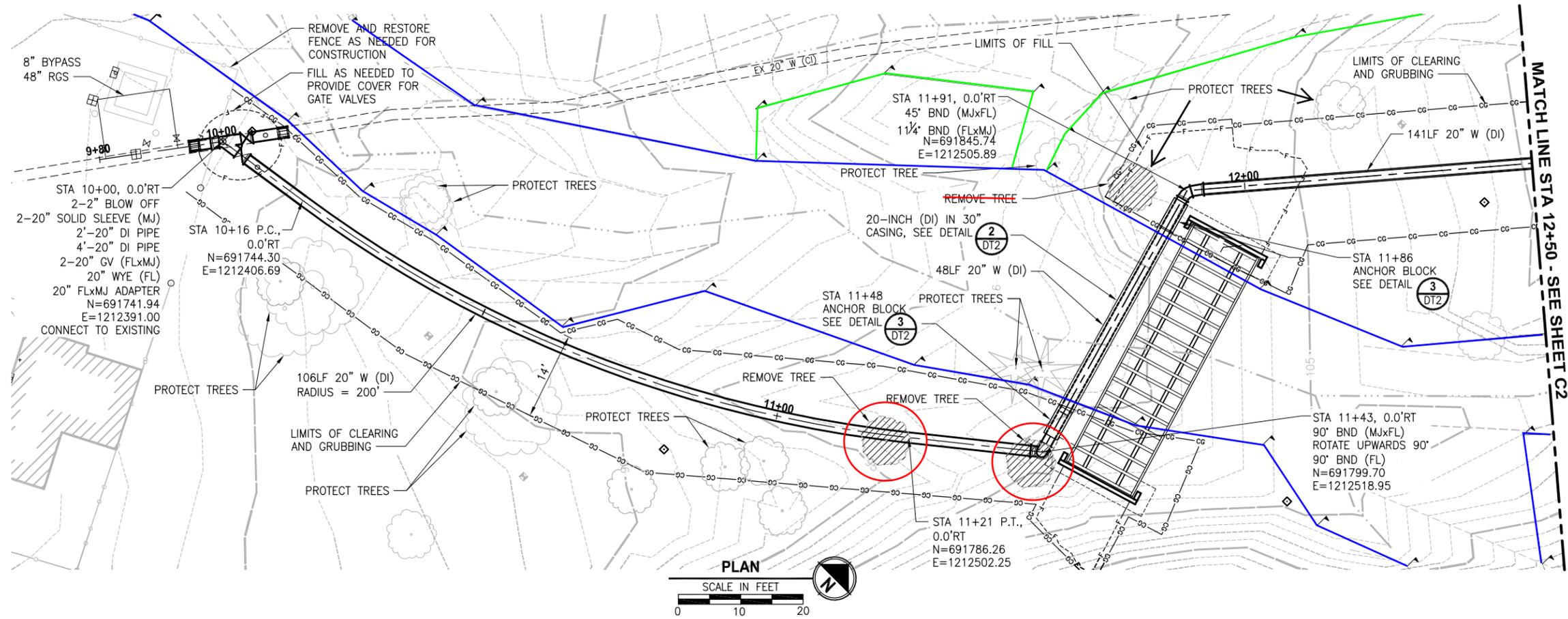
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PROJECT NAME
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TRANSMISSION MAIN
REPLACEMENT**

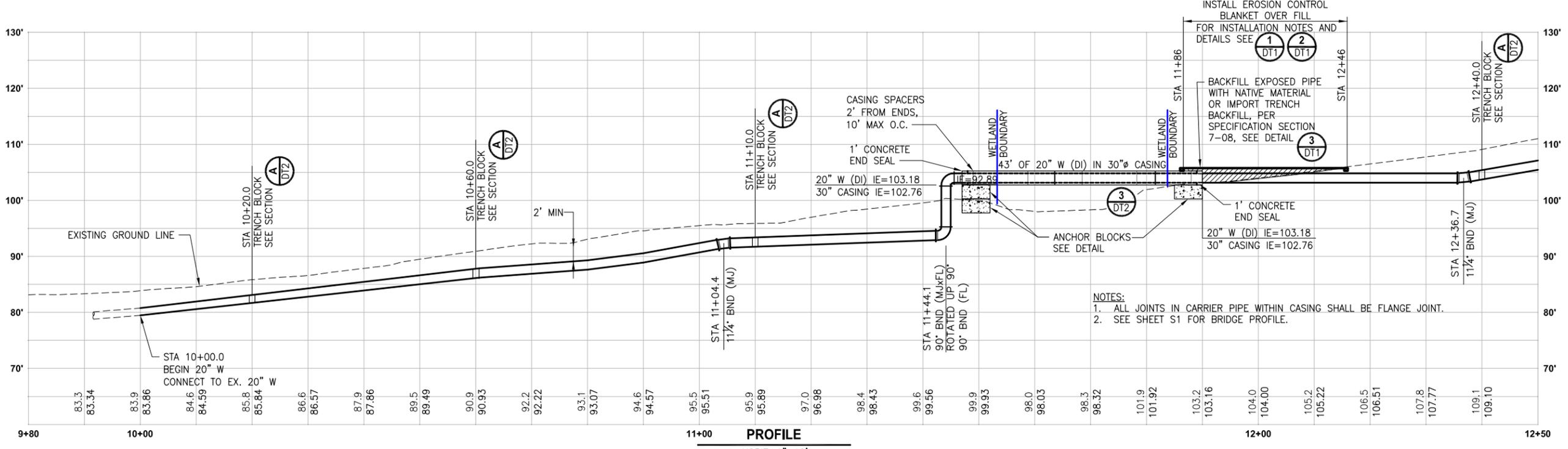
**TITE SHEET, LOCATION,
SITE, VICINITY MAPS,
AND INDEX TO DRAWINGS**

SHEET NO.
1 OF X
G1

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- CONSTRUCTION NOTES:**
1. ALL PIPE AND FITTING JOINTS SHALL BE RESTRAINED. SEE SPECIFICATIONS.
- = Tree Removal
 - = Delineated OHW
 - = Delineated Wetland



- NOTES:**
1. ALL JOINTS IN CARRIER PIPE WITHIN CASING SHALL BE FLANGE JOINT.
 2. SEE SHEET S1 FOR BRIDGE PROFILE.

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PRELIMINARY

REVISIONS	DATE	BY	DESIGNED
			R. HERMES
			DRAWN
			C.D. CLARK
			CHECKED
			APPROVED

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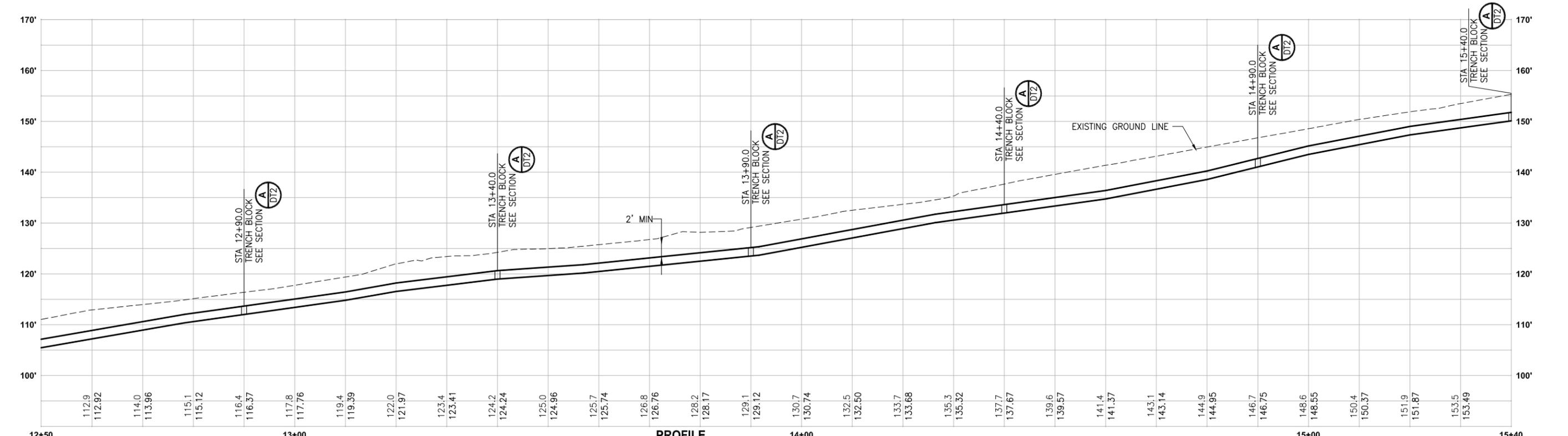
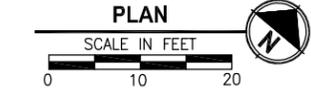
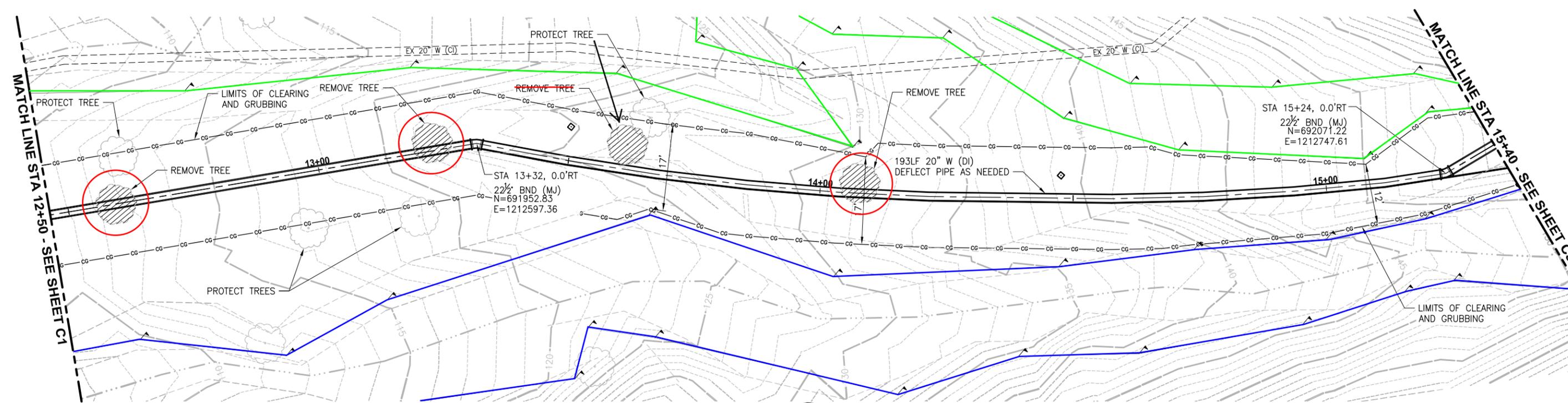
PROJECT NAME
**SALMON SPRINGS
TRANSMISSION MAIN
REPLACEMENT**

**SALMON SPRINGS
WATER MAIN PLAN AND PROFILE
STA 10+00 TO STA 12+50**

SHEET NO.
4 OF X

C1

LAYOUT: C2
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PROFILE
 HORIZ: 1"=10'
 VERT: 1"=10'

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			DRAWN C.D. CLARK
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			APPROVED

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 216-1895-065
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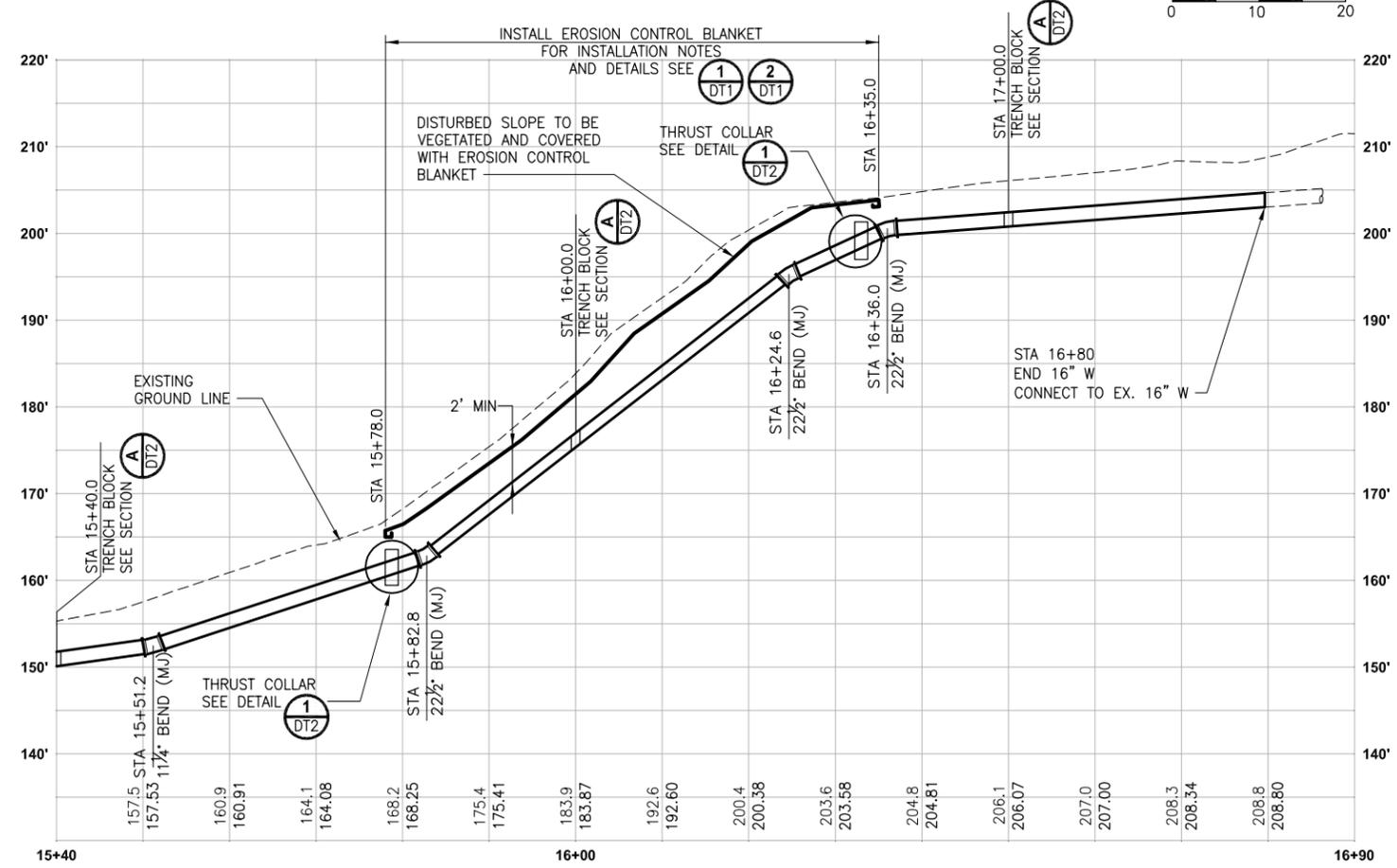
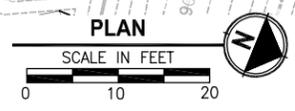
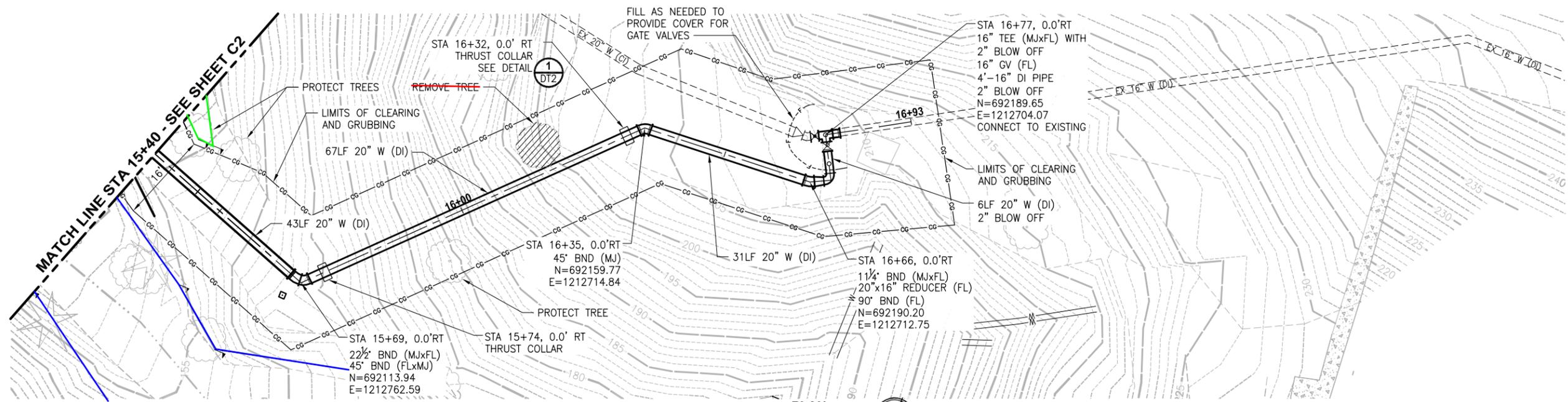
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PROJECT NAME
**SALMON SPRINGS
 TRANSMISSION MAIN
 REPLACEMENT**

**SALMON SPRINGS
 WATER MAIN PLAN AND PROFILE
 STA 12+40 TO STA 15+40**

SHEET NO.
 5 OF X
C2

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PROFILE
 HORIZ: 1"=10'
 VERT: 1"=10'

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REVISIONS	DATE	BY	DESIGNED
			R. RAYMOND
			DRAWN C.D. CLARK
			CHECKED
			APPROVED

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 JOB No: 216-1895-065
 DATE: DECEMBER 2014



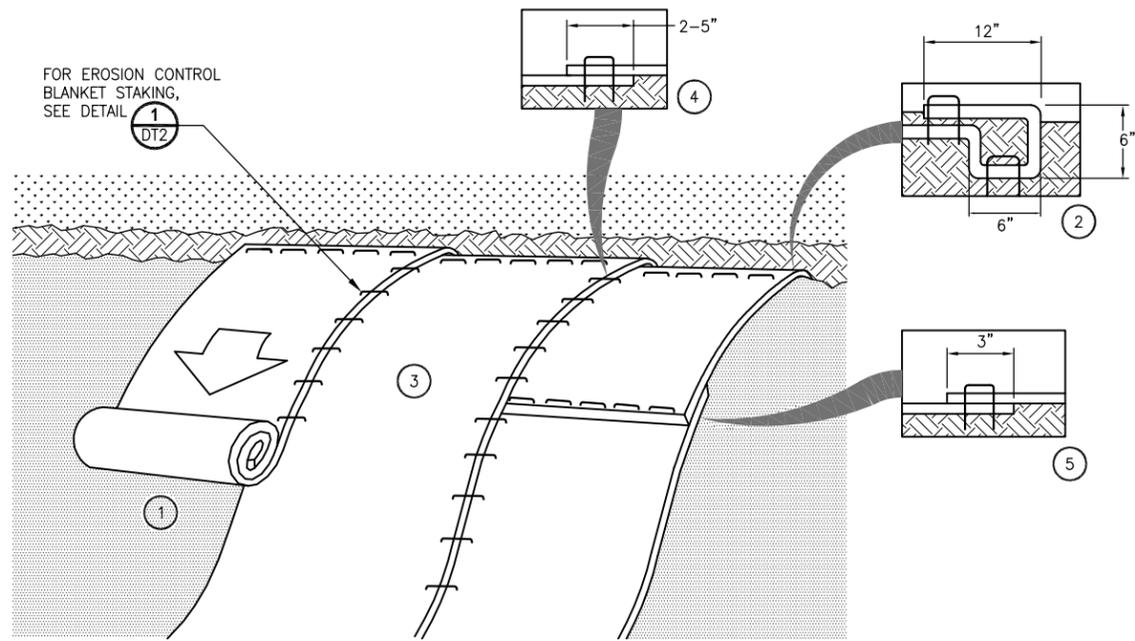
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PROJECT NAME
SALMON SPRINGS TRANSMISSION MAIN REPLACEMENT

SALMON SPRINGS WATER MAIN PLAN AND PROFILE
 STA 15+40 TO STA 17+77.82

SHEET NO.
 6 OF X
C3

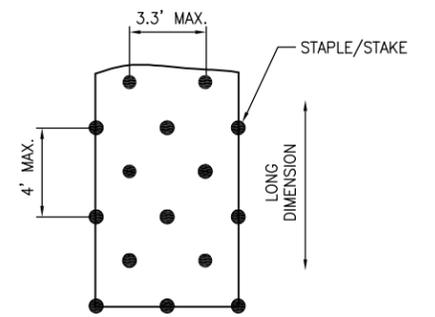
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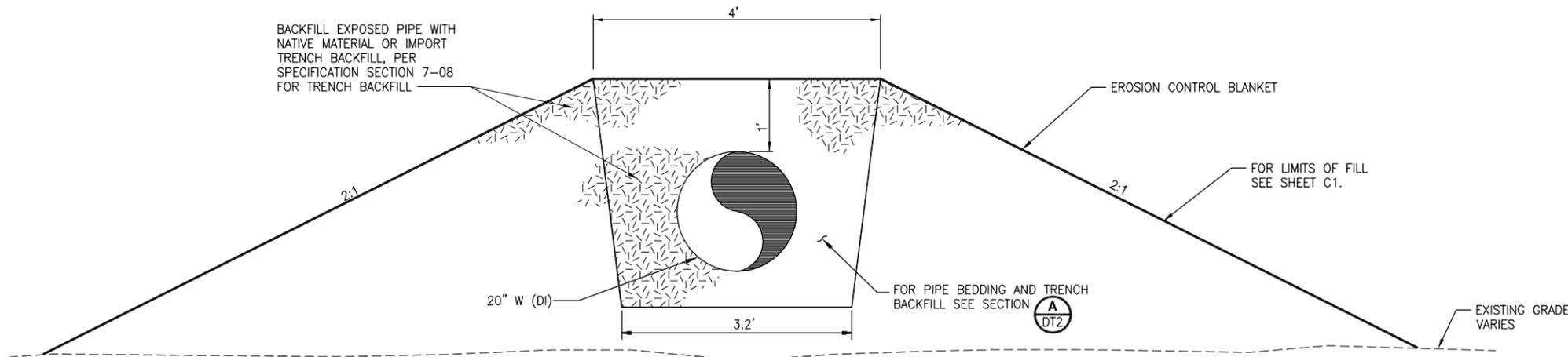
EROSION CONTROL BLANKET PLACEMENT
DETAIL 1
 NO SCALE TYP

EROSION CONTROL BLANKET INSTALLATION NOTES:

- 1 PLACEMENT OF TEMPORARY EROSION CONTROL BLANKET SHALL ONLY BE AFTER PLACEMENT OF SEED AND FERTILIZER. PLACEMENT SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
- 2 TEMPORARY EROSION CONTROL BLANKET SHALL BE INSTALLED FROM TOP OF SLOPE DOWN BY ANCHORING THE BLANKET IN A 6 INCH DEEP BY SIX INCH WIDE TRENCH WITH TWELVE INCHES OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. BLANKET SHALL BE ANCHORED WITH A ROW OF STAPLES/STAKES TWELVE INCHES APART IN THE BOTTOM OF THE TRENCH. TRENCH SHALL BE BACKFILLED AND COMPACTED AFTER STAPLING. SEED SHALL BE APPLIED TO COMPACTED SOIL AND REMAINING TWELVE INCH PORTION OF BLANKET SHALL BE FOLDED BACK OVER SEED AND COMPACTED SOIL. BLANKET SHALL BE SECURED OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED TWELVE INCHES APART ACROSS THE WIDTH OF THE BLANKET.
- 3 BLANKETS SHALL BE ROLLED DOWN THE SLOPE. ALL BLANKETS SHALL BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN LOCATIONS AS SHOWN IN DETAIL 2.
- 4 THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH A MINIMUM OF 6 INCHES OF OVERLAP OR AS RECOMMENDED BY MANUFACTURER.
- 5 CONSECUTIVE BLANKETS SHALL BE SPLICED END OVER END (SHINGLE STYLE) WITH A MINIMUM OF 6 INCHES OF OVERLAP. STAPLES SHALL BE PLACED THROUGH OVERLAPPED AREA AT A TWELVE INCH SPACING ACROSS THE ENTIRE BLANKET WIDTH.
- 6 IN FIRM SOIL CONDITIONS, STAPLES OR STAKES SHALL BE A MINIMUM OF SIX INCHES IN LENGTH. IN LOOSE SOIL CONDITIONS, STAPLES OR STAKES SHALL BE A MINIMUM OF 12 INCHES IN LENGTH OR AS NECESSARY TO PROPERLY SECURE THE BLANKETS.
- 7 WIDTH OF EROSION CONTROL BLANKET IS WIDTH OF DISTURBED SLOPE (~20').



EROSION CONTROL BLANKET STAKING
DETAIL 2
 NO SCALE



EXPOSED PIPE BACKFILL
DETAIL 3
 NO SCALE TYP

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REVISIONS	DATE	BY	DESIGNED
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			DRAWN C.D. CLARK
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			APPROVED

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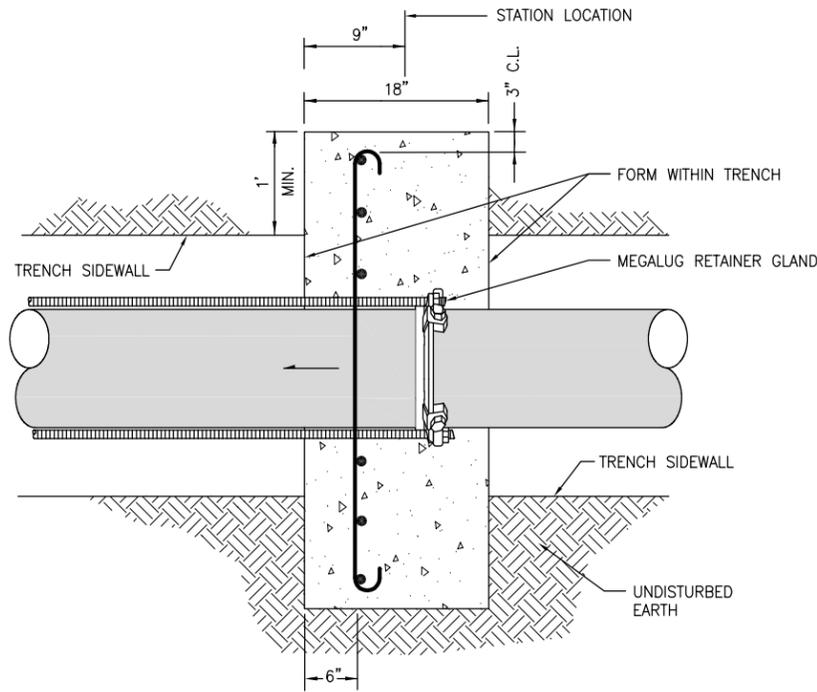
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PROJECT NAME
**SALMON SPRINGS
 TRANSMISSION MAIN
 REPLACEMENT**

MISCELLANEOUS DETAILS

SHEET NO.
 7 OF X
DT1

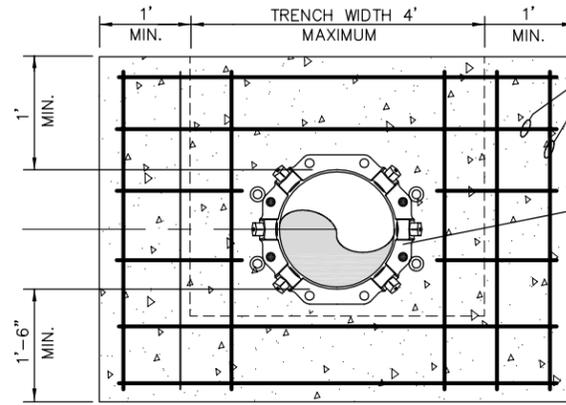
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TOP SECTION VIEW
NOT TO SCALE

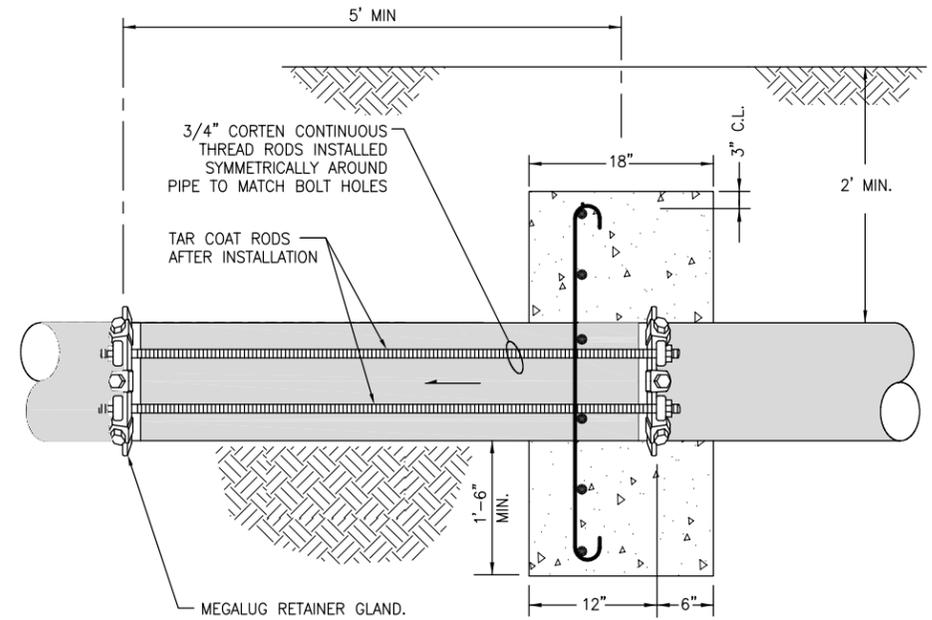
THRUST COLLAR NOTES:

1. CONCRETE SHALL BE 3000 PS COMMERCIAL CONCRETE.
2. REINFORCING BARS SHALL BE DEFORMED BARS AND TIED TOGETHER.
3. PLACE THRUST COLLAR ON ONE FULL JOINT OF PIPE.
4. FORMWORK AT FACE OF ANCHOR WALLS MUST BE REMOVED. BACKFILL AT FACE OF ANCHOR WALL MUST BE COMPACTED TO 95% MAX DRY DENSITY BASED ASTM D1557 PRIOR TO REINSTATING SERVICE OF THE WATER MAIN.



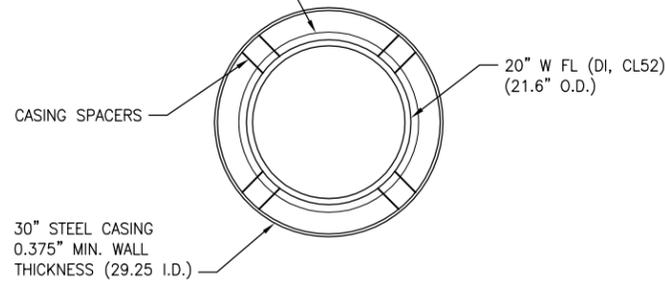
ELEVATION VIEW
NOT TO SCALE

THRUST COLLAR & BLOCKING WITH MEGALUG RETAINER GLAND
DETAIL 1
NO SCALE



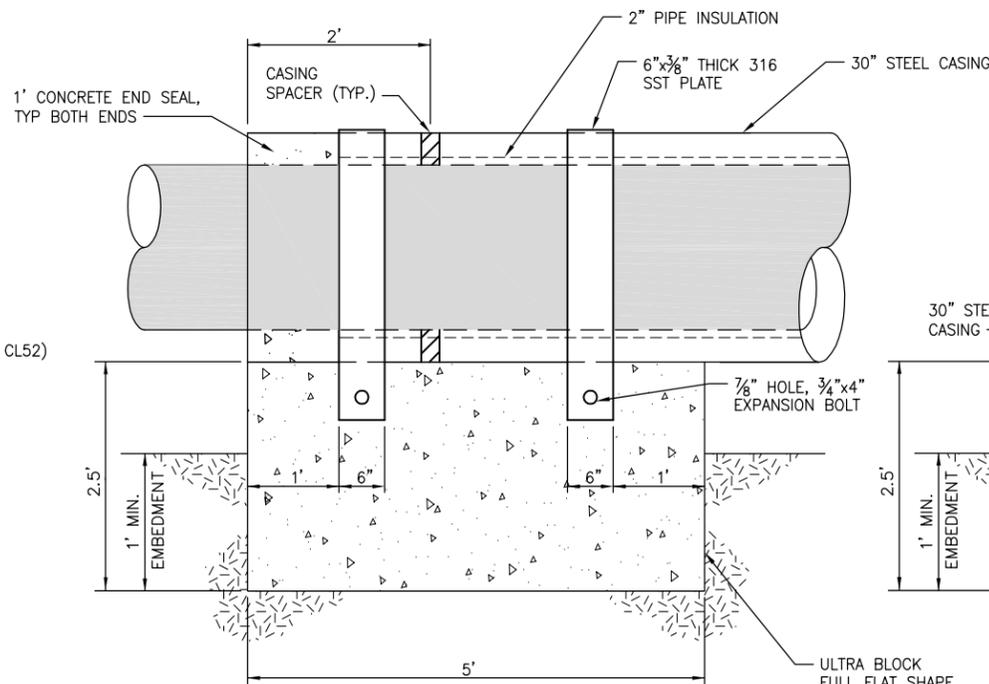
SIDE SECTION VIEW
NOT TO SCALE

2" PIPE INSULATION WITH ALUMINUM JACKETING, (FLG'S EXCLUDED). ATTACH WITH STAINLESS STEEL BAND 1' O.C. PROVIDE STAINLESS STEEL PIPE INSULATION PROTECTION SHIELD WHENEVER PIPE CROSSES A SUPPORTING MEMBER.



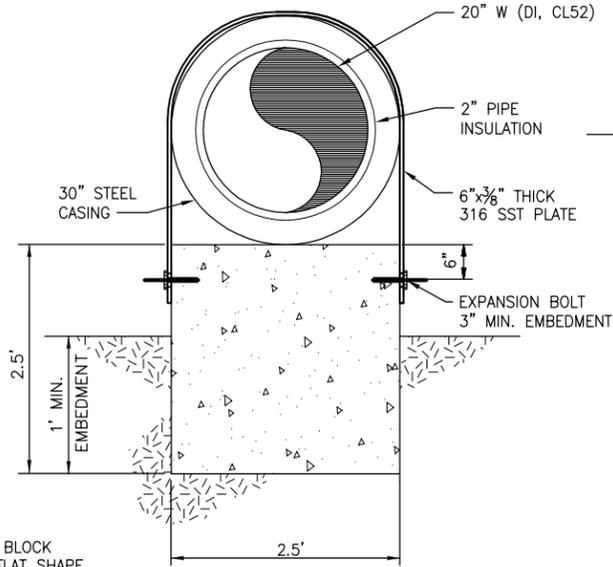
20" W (DI) IN 30" STEEL CASING
DETAIL 2
1"=1'-0" TYP

NOTE: ALL PIPE JOINTS IN CASING SHALL BE FLANGE JOINT.

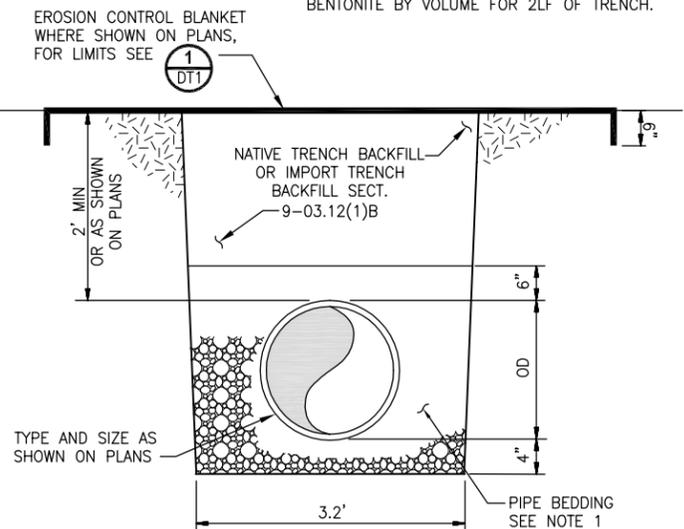


SIDE SECTION VIEW
NOT TO SCALE

ULTRA BLOCK-FULL FLAT ANCHOR BLOCK
DETAIL 3
NO SCALE



ELEVATION VIEW
NOT TO SCALE



TYPICAL WATER TRENCH BACKFILL SECTION
A
NO SCALE TYP

TRENCH BACKFILL NOTES:

1. SELECT NATIVE MATERIAL (1" MINUS) OR CSTC PER SPECIFICATION SECTION 9-03.9(3).
2. FOR TRENCH BLOCK, PLACE BEDDING AMENDED WITH 10% POWDERED SODIUM BENTONITE BY VOLUME FOR 2LF OF TRENCH.

60% REVIEW SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS	DATE	BY	DESIGNED
			R. HERMES
			DRAWN C.D. CLARK
			CHECKED
			APPROVED

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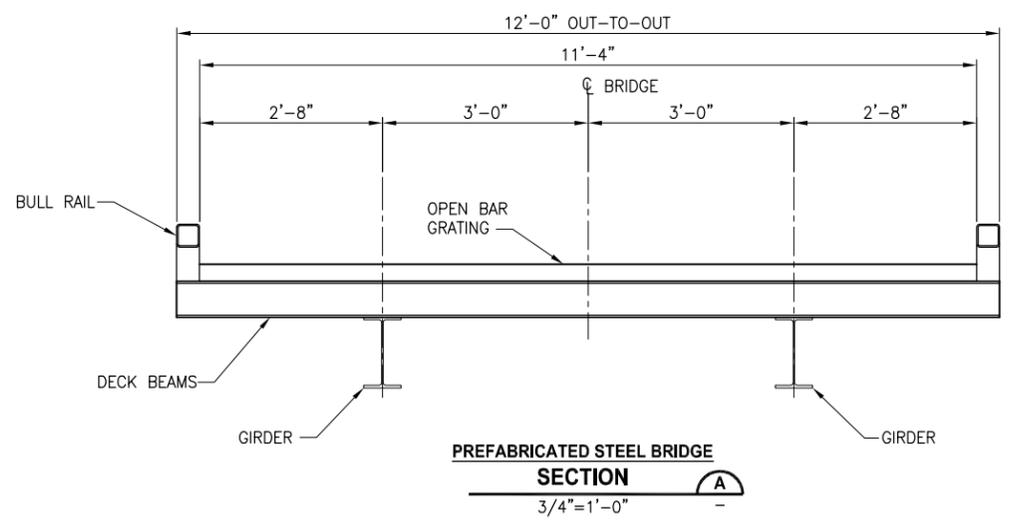
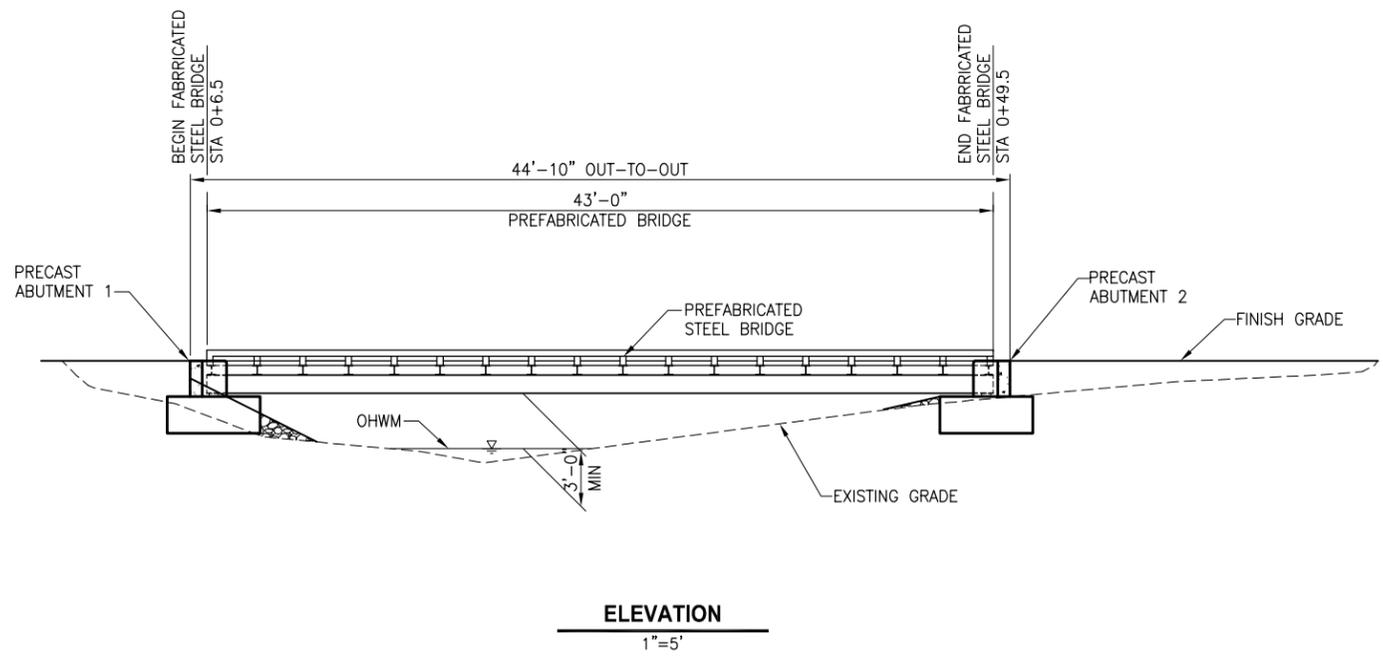
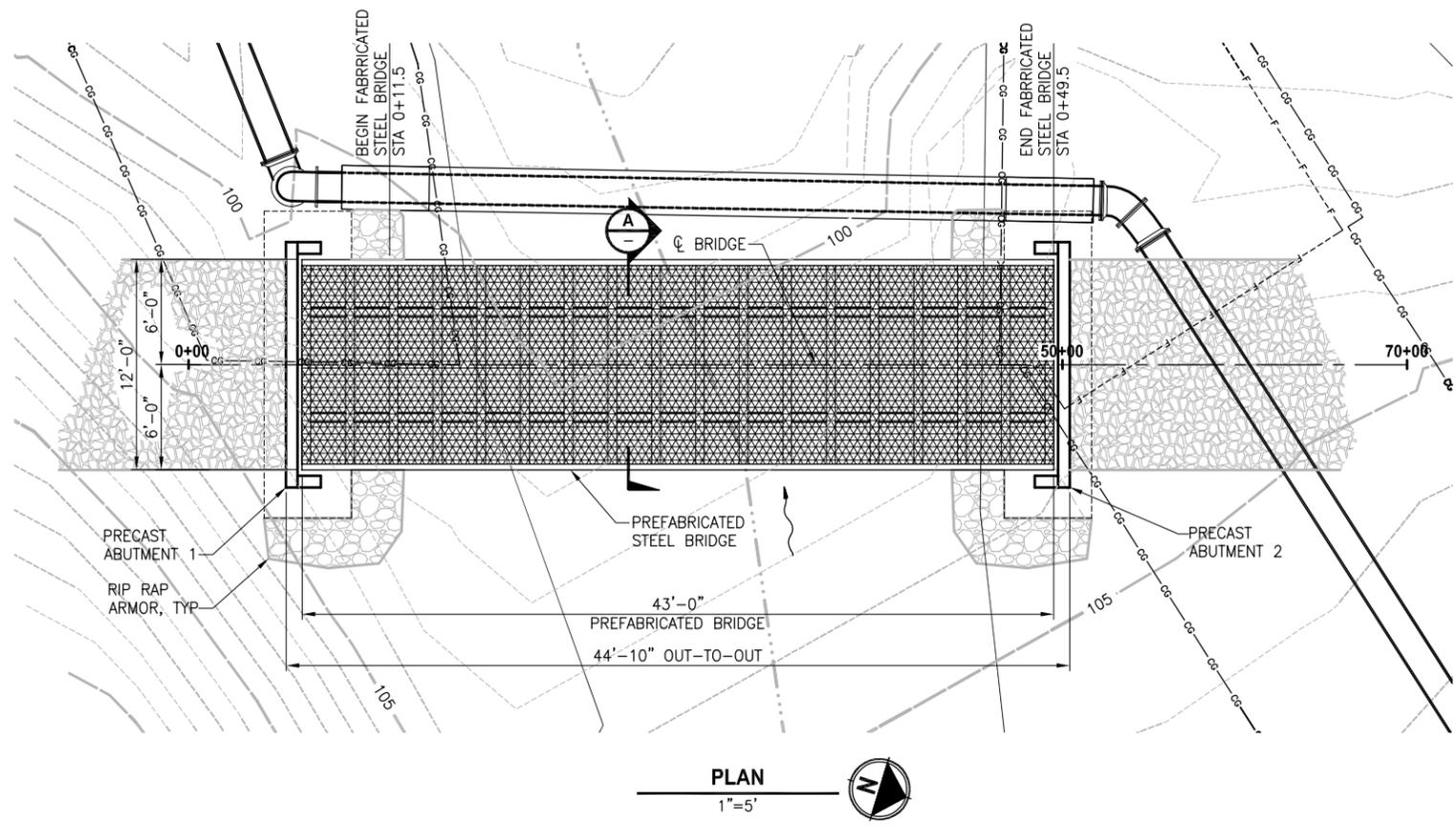
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PROJECT NAME
SALMON SPRINGS TRANSMISSION MAIN REPLACEMENT

MISCELLANEOUS DETAILS

SHEET NO.
 8 OF X
DT2

LAYOUT: S1
 PATH: U:\PSO\Projects\Clients\1895-CityOfPuyallup\216-1895-065-Salmon Springs\995\CS\CADD\DWG\
 PLOTTED BY: valencia DATE: Tuesday, April 28, 2015 2:11:00 PM



STRUCTURAL NOTES:

DESIGN SPECIFICATIONS – AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, CURRENT EDITION.

PRE-ENGINEERED BRIDGE MANUFACTURER SHALL BE AISC QUALITY CERTIFIED (FRACTURE CRITICAL AND SOPHISTICATED PAINT ENDORSEMENT)

SUBMIT ALL REQUIRED SHOP DRAWINGS AND CALCULATIONS TO THE ENGINEER FOR APPROVAL, PRIOR TO FABRICATION.

DESIGN:
 SOIL WEIGHT = 130 P.C.F.
 BACKFILL ANGLE OF INTERNAL FRICTION = 34°
 EXISTING GROUND ANGLE OF INTERNAL FRICTION = 30°
 10K SERVICE VEHICLE
 REQUIRED SOIL BEARING PRESSURE = 1.5 KSF
 THERMAL RANGE -30°F TO 120°F
 DEFLECTION LIMIT (SPAN/800)

STRUCTURAL STEEL: ASTM A588 WEATHERING STEEL FY = 50 KSI
 STEEL BRIDGE DECK: ASTM A653 GRADE 50 CLASS 1 FY = 50 KSI (GALV)
 ANCHOR BOLTS: ASTM F1554 GRADE 36 FY = 36 KSI
 ELASTOMERIC PADS: GRADE 4, DUROMETER 60
 NO SALTS, DE-ICING OR DUST PROHIBITIVE CHEMICALS ALLOWED

CONCRETE SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 4000 PSI

REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615. ALL REINFORCING SHALL BE FURNISHED AS GRADE 60.

ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO LRFD ARTICLE 5.10. ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL HAVE 2 INCH CLEAR COVER UNLESS NOTED OTHERWISE.

ALL WELDING SHALL CONFORM TO AWS D1.1 WELDING CODE. MINIMUM SIZE WELDS 3/16" CONTINUOUS FILLET.

CHAMFER ALL EXPOSED CORNERS 3/4" UNLESS NOTED OTHERWISE.
 COMPACT BACKFILL FOR FOOTING AND WALL BASE
 MINIMUM 95 PERCENT OF ASTM D698 MAXIMUM DRY DENSITY.
 DIMENSIONS SHALL NOT BE SCALED.

30 % REVIEW SUBMITTAL
 NOT FOR CONSTRUCTION

REVISIONS	DATE	BY	DESIGNED
			B. SCHLACHTER
			A. VALENCIA
			CHECKED
			APPROVED

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY
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 JOB No: 216-1895-065
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PROJECT NAME
SALMON SPRINGS TRANSMISSION MAIN REPLACEMENT

BRIDGE PLAN, ELEVATION AND TYPICAL SECTION

SHEET NO.
 X OF X
S1

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