SKAGIT COUNTY PLANNING & DEVELOPMENT SERVICES NOTICE OF DEVELOPMENT APPLICATION WITH OPTIONAL SEPA DNS:

For: Skagit County Public Works Department SEPA Environmental Review, File: PLAN2-2025-0036

PROJECT DESCRIPTION:

Notice is hereby given that on October 30, 2025, the Skagit County Public Works Department applied for SEPA environmental review (File # PLAN2-2025-0036) associated with the Thomas Creek bridge replacement project. The existing Thomas Creek bridge (No. 40113) is a 3-span 91-year-old timber trestle bridge that measures 52 feet long and 32 feet wide. This bridge carries Old Highway 99 North (Old Hwy 99) over Thomas Creek north of the City of Burlington, Washington. The primary goal of the Thomas Creek Bridge replacement project is to replace the existing bridge with a new bridge that significantly reduces maintenance and operation needs from the County.

The replaced bridge will be a precast girder superstructure supported on drilled shaft foundations, which will be installed above the Ordinary High-Water Mark (OHWM). The proposed bridge length is 77' long with two 25' long approaches, for an overall length of 127'. The width inside the concrete barriers is 40' wide, including the barriers it is 42' 2" wide. The bridge height is 2' 6" of voided slab girders with a minimum of 5" cast in place concrete deck on top, and then the concrete barriers on the edge of the bridge is 3' 6". An overall bridge height including the concrete barriers is 6' 5".

FILLING ACTIVITIES:

Filling is required for widening the road fill prism to support the increased height of the new bridge structure. The total road fill is ~4,279 cubic yards (CY) and includes the gravel road shoulder and fill associated with installing the stormwater treatment infrastructure which are compost-amended vegetated filter strips (CAVFS) (8,327 SF). Under the bridge, streambed mix (20 CY) is proposed within the channel waterward of the Ordinary High-Water Mark (OHWM) to fill the voids following excavation of the timber piles and abutment. Above the OHWM at the abutments, a 1-foot layer of cobbles (50 CY) is proposed to prevent scour. Fill materials will be sourced from a licensed facility with streambed mix and cobble rock washed and free of fines.

EXCAVATION ACTIVITIES:

Under the bridge, the project includes removal of relic creosote treated timber piles and timber abutment. There are (20) 12-inch creosote treated piles located below the OHWM. Approximately 100 CY will be excavated to remove the existing south timber abutment, and 108 CY will be excavated to remove the existing north timber wall for a total of ~208 CY of timber abutment excavation. Approximately 50 CY of topsoil will be excavated near the bridge abutments below the proposed final grade prior to installation of proposed cobble armoring. An additional 15 CY of existing silty streambed material will be excavated in areas of proposed regrading.

GRADING ACTIVITIES:

Regrading is proposed within the channel under the bridge at a 1.5:1 and will tie into the upstream and downstream banks within the limits of the road right of way. The total grading footprint below OHWM is approximately 4,449 feet.

ZONING DISTRICT:

The proposed bridge replacement project is located in the **Agricultural Natural Resource Lands Zoning District** of unincorporated Skagit County.

COMPLETENESS: The SEPA application was **deemed complete on November 12, 2025.**

PROJECT LOCATION:

The proposed project is located at the Old Hwy 99 crossing over Thomas Creek in Skagit County within a portion of Section 18, Township 35 North, Range 4 East, Willamette Meridian. The project is within the public road right-of-way (ROW) but is adjacent to the following parcels: P36849, P36854, P103111 and P36855.

APPLICANT & LANDOWNER:

Skagit County, Public Works Department, 1800 Continental Place, Mount Vernon, WA 98273

PUBLIC COMMENT PERIOD:

Written comments must be received no later than <u>4:30 PM on Monday</u>, <u>December 1, 2025</u>. Email correspondence <u>will not be accepted</u>. However, comments may be submitted via the PDS website under the "recent legal notices" tab. (www.skagitcounty.net/pdscomments).

REQUIRED PROJECT PERMITS/APPROVALS:

The following permits/approvals may be required in addition to the above: Commercial Building Permit, Grading Permit, Construction Stormwater Permit, Floodplain Development Permit, HPA Permit, CWA Section 401 Water Quality Certification, CWA Section 404 Permit, Section 7 Endangered Species Act Compliance, NEPA Approval

SEPA REVIEW:

Based on the submitted application and available information, the County anticipates issuing a Mitigated Determination of Non-Significance (MDNS) for this proposal and the optional DNS process as specified in WAC 197-11-355 is being utilized. Consequently, this <u>may be the only opportunity to comment on the environmental impacts of this proposal</u>. A copy of the subsequent SEPA threshold determination for the proposal may be obtained upon request.

EXISTING ENVIRONMENTAL DOCUMENTS:

SEPA environmental checklist; Site Plan; Wetland and Fish and Wildlife Habitat Conservation Areas Report; Wetland Mitigation Bank Use Plan; Joint Aquatic Resource Permit Application; Biological Evaluation; NEPA Categorical Exclusion Documentation; Hazardous Material (Hazmat) Technical Report; Geotechnical Engineering Report; Archaeological Survey and Monitoring Report; & Stormwater Site Plan. This information is available to the public on request.

PUBLIC HEARING: No public hearing is required for SEPA environmental review.

HOW TO BECOME A PARTY OF RECORD:

You may become a party of record by submitting written comments, including a (USPS) mailing address, to the Skagit County Planning & Development Services Department at the address listed below. Any

person desiring to express his or her views or to be notified of the action taken on this application should be in writing within the fifteen (15) day comment period. Questions about this proposal, requests to receive future notices, and/or the decision, once made, and/or appeal procedures should be directed to the contact person listed below. The application and complete case file are available for review at the Skagit County Planning & Development Services Department located at 1800 Continental Place, Mount Vernon, WA 98273. A decision on this application will be made within 100 days from the date the application was deemed complete.

FOR PROJECT INFORMATION:

Kevin Cricchio, AICP, Senior Planner; Phone: (360) 416-1423; Email: kcricchio@co.skagit.wa.us; Skagit County Planning & Development Services, 1800 Continental Place, Mount Vernon, WA 98273

AGENCIES & DEPARTMENTS SOLICITED:

Public Works Department, Fire Marshall, Stormwater Review, Critical Area Review, Water Resources Review, Public Health, NW Clean Air Agency, WDOE, WDFW, WDNR, DAHP, SEPA Register, Samish Indian Nation, Upper Skagit Indian Tribe, Skagit River Systems Coop, Swinomish Indian Nation, WSDOT, Drainage District #14 & #25, Dike District #25, Fire District #6, Army Corps of Engineers

Date Emailed to Applicant: November 12, 2025

Date Transmitted to Skagit Valley Herald: November 10, 2025

Date Published in Skagit Valley Herald: November 13, 2025

SEPA¹ Environmental Checklist

Purpose of checklist

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

Instructions for applicants

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

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

Instructions for lead agencies

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

Use of checklist for nonproject proposals

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

¹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A.Background

Find help answering background questions²

1. Name of proposed project, if applicable:

Thomas Creek Bridge Replacement

2. Name of applicant:

Thomas Weller, P.E.

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

1800 Continental Place, Mount Vernon, WA 98273, (360) 416-1400

4. Date checklist prepared:

June 19, 2025

5. Agency requesting checklist:

Skagit County

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

Construction in spring 2027 through winter 2028.

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

No. The purpose of the project is to significantly reduce maintenance and operation needs of the bridge.

- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
 - Wetland and Fish and Wildlife Habitat Conservation Areas Report (GeoEngineers 2024) (Provided as Attachment 3)
 - Wetland Mitigation Bank Use Plan (GeoEngineers 2025) (Provided as Attachment 4)
 - Joint Aquatic Resource Permit Application (JARPA) (GeoEngineers 2025)
 - Biological Evaluation (BE) (GeoEngineers 2025) (Provided as Attachment 5)
 - NEPA Categorical Exclusion Documentation (CED) Form (GeoEngineers 2025)
 - Hazardous Material (Hazmat) Technical Report (GeoEngineers 2024) (Provided as Attachment 6)
 - Geotechnical Engineering Report (HWA GeoSciences Inc, 2025) (Provided as Attachment 7)
 - Archaeological Survey and Monitoring Report (ERCI 2024) (Provided as Attachment
 8)

² https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

- Stormwater Site Plan (KPFF 2025) (Provided as Attachment 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.
- 10. List any government approvals or permits that will be needed for your proposal, if known.
 - NEPA Approval (WSDOT/FHWA)
 - Section 7 Endangered Species Act Compliance
 - Section 106 Compliance
 - CWA Section 404 Permit (USACE)
 - CZM Act Consistency
 - CWA Section 401 Water Quality Certification (Ecology)
 - HPA Permit (WDFW)
 - Critical Areas Ordinance, Skagit County Code (SCC) Chapter 14.24
 - Floodplain Development Permit (Skagit County)
- 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 Thomas Creek Bridge (No. 40113) is a 3-span, 91-year old timber trestle bridge, measuring 52 feet long and 32 feet wide. This bridge carries Old Highway 99 North (Old Hwy 99) over Thomas Creek at mile post (MP) 2.9 north of the City of Burlington, Washington. Old Hwy 99 is a major collector with an ADT over 4,300 cars a day, in addition to being a critical corridor for nearby asphalt and gravel pits. The County received federal local bridge grant funds to replace the bridge. The primary goal of the Thomas Creek Bridge Replacement Project (project) is to replace the existing bridge with a new bridge that significantly reduces, maintenance and operation needs from the County. The replaced bridge will be a precast girder superstructure supported on drilled shaft foundations, which will be installed above the Ordinary High Water Mark (OHWM).

See attached **Project Description (Attachment 1)** for further details.

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 proposed project is located at the Old Hwy 99 crossing over Thomas Creek in Skagit County in Section 18 of Township 35 N and Range 4 E of the Willamette Meridian (W.M.) (Figure 1, Vicinity Map and Figure 2, Plan View). The site is within Water Resource Inventory Area (WRIA) 03 (Lower Skagit/Samish). The project is within the public road right-of-way but is adjacent to the following parcels: P36849, P36854, P103111 and P36855.

B.Environmental Elements

1. Earth

Find help answering earth questions³

a. General description of the site:

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

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

Generally the site is flat with less than a 3% slope. Thomas Creek stream banks are steep with some areas at a 1:1 slope.

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

Samish silt loam and Snohomish silt loam are mapped and clay soils were observed on site. There is agricultural land adjacent to the project area designated as prime farmland, however only soils within the road right-of-way (ROW) of Old Hwy 99 will be disturbed. Project review by the Natural Resource Conservation Service (NRCS) determined that this project is exempt from the Farmland Protection Policy Action (FPPA).

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

No, the project location is in a floodplain with topography generally flat with no significant surface indications or history of unstable soils.

³ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

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.

Filling Activities

Filling is required for widening the road fill prism to support the increased height of the new bridge structure. The total road fill is 4,279 cubic yards (CY) and includes the gravel road shoulder and fill associated with installing the stormwater treatment infrastructure which are compost-amended vegetated filter strips (CAVFS) (8,327 SF). Under the bridge, streambed mix (20 CY) is proposed within the channel waterward of the Ordinary High Water Mark (OHWM) to fill the voids following excavation of the timber piles and abutment. Above the OHWM at the abutments, a 1-foot layer of cobbles (50 CY) is proposed to prevent scour. Fill materials will be sourced from a licensed facility with streambed mix and cobble rock washed and free of fines.

Excavation Activities

Under the bridge, the project includes removal of relic creosote treated timber piles and timber abutment. There are (20) 12-inch creosote treated piles located below the OHWM. Approximately 100 CY will be excavated to remove the existing south timber abutment and 108 CY will be excavated to remove the existing north timber wall for a total of 208 CY of timber abutment excavation.

Approximately 50 CY of topsoil will be excavated near the bridge abutments below the proposed final grade prior to installation of proposed cobble armoring. An additional 15 CY of existing silty streambed material will be excavated in areas of proposed regrading.

Grading Activities

Regrading is proposed within the channel under the bridge at a 1.5:1 and will tie into the upstream and downstream banks within the limits of the road right of way. The total grading footprint below OHWM is approximately 4,449 feet.

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

Yes, clearing and construction has the potential to result in erosion. However, appropriate best management practices (BMPs) will be implemented to stabilize exposed soils, especially slopes, during construction.

Potential BMPs include: wood chip mulch, straw wattles or silt fences. A temporary erosion and sediment control plan (TESC) will be developed and implemented to prevent erosion at the site during construction. All bare soils will be hydroseeded after project completion with a native upland seed mix. Scour protection may be installed around the new bridge abutments and slopes to minimize scour and prevent excessive erosion.

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

The project consists of a bridge replacement and associated roadway and therefore the site will remain covered with impervious surfaces after the project construction. However, the project proposes a net reduction of 0.08 acres in pollution generating impervious surfaces after project construction.

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

Appropriate BMPs including erosion control barriers (i.e. silt fence, mulching, and temporary covers). Timely restoration of the disturbed surface will further reduce erosion potentials. The contractor will monitor and review the use and maintenance of BMPs throughout construction and restoration activities. Construction limits will be kept to a minimum and will be marked prior to start of construction and grading and construction will be phased to reduce the time that soil is exposed to the extent possible.

2. Air

Find help answering air questions⁴

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.

Emissions from construction vehicles and disturbed dust from construction activities. The quantities of emissions generated and transported off site from the project site will depend upon wind and weather conditions but are anticipated to be minor and of short duration.

Odors from the project materials may occur and engine exhaust will be present during the project actions but are also anticipated to be minor and of short duration. No long-term sources of air emissions associated with post project conditions of this project are anticipated.

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

There is a sand and gravel mine to the east of the project site and agricultural fields in all other directions. Vehicles and activities associated with agriculture and sand or gravel mining may be sources of offsite emissions such as dust, overspray, and exhaust.

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

Standard emission control devices, in conformance with federal and state air quality standards will be utilized during construction. Dust control BMPs including wetting of exposed soil surfaces and/or use of approved soil tackifiers will be implemented as needed by the contractor to limit fugitive dust. Efficient construction practices and

⁴ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air

timely restoration of areas of temporary disturbance will further reduce dust generating sources.

3. Water

Find help answering water questions⁵

a. Surface:

Find help answering surface water questions⁶

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.

Yes, there is a perennial type-F stream, Thomas Creek, that flows through the project site. Work will occur in and over Thomas Creek. Thomas Creek discharges into the Samish River approximately 1600 feet downstream of the project site.

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.

Yes, the project consists of replacing the existing Old Hwy 99 bridge crossing over Thomas Creek, with some work in the creek. See attached **Project Description** (Attachment 1) and 60% Design Drawings (Attachment 3) for details on the work within and adjacent to Thomas Creek.

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.

Road fill will be placed in the margins of three wetlands within the ROW of Old Hwy 99. A total of 725 CY of fill will be placed across 8,327 SF.

A discountable quantity of rocks and organics will be scraped from the surface of wetlands. Excavated material will be hauled off site and disposed of at an approved facility.

Below the bridge, there are relic creosote treated piles and timber abutments that will be removed once the existing bridge deck is demolished. These features occur at the OHWM boundary and therefore include work both within and directly adjacent to Thomas Creek. A total of 100 CY will be excavated to remove the existing south timber wall and a total of 108 CY will be excavated to remove the existing north timber wall for a total of 208 CY of timber abutment excavation. A total of (20) 12-

⁵ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water

⁶ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water

inch creosote treated timber piles will be removed from the Thomas Creek channel waterward of the OHWM.

Following the demolition of the timber abutments and piles, the stream channel will be regraded and approximately 50 CY of topsoil will be excavated below proposed final grade for the installation of proposed armoring for scour protection at the abutments and an additional 15 CY of existing silty streambed material will be excavated in areas of proposed regrading.

Approximately 50 CY of cobble sized rock will be placed in a 1-foot layer above the OHWM of Thomas Creek to prevent scour at the bridge abutments over an area of approximately 1,340 SF. Streambed mix will be placed in the voids within the areas where timber pilings and abutments are being removed approximately 20 CY over 544 SF.

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

A stream bypass system will be required to bypass the summer low flows in Thomas Creek. All work below the OHWM will be conducted during the approved in-water work window when Thomas Creek is expected to have little to no flow. The Contractor will develop a Fish Exclusion and Work Area Isolation Plan which will include the stream bypass plan that will be in place during the construction period.

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

Yes, the entire project is within the 100-year floodplain (as shown on JARPA Sheet 1).

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.

The project does not involve the discharge of waste materials into surface waters.

b. Ground:

Find help answering ground water questions⁷

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 groundwater will be withdrawn.

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

⁷ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater

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.

The proposed project will not result in the discharge of waste material 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.

The existing roadway surface is the main source of runoff, but there are agricultural fields adjacent to the work area that may also be a source of runoff into the project site. A total of 4 Threshold Discharge Areas (TDAs) have been identified within the project area. One TDA discharges to Thomas Creek and the other three discharge to wetlands in adjacent agricultural fields. The project will not change the current stormwater flow patterns but will be installing enhanced treatment to treating runoff from all 4 TDAs through construction of compost amended vegetated filter strips (CAVFS) within the new road shoulders.

Overall the project will result in a net decrease in pollutant-generating impervious surface (PGIS) of 0.084 acres.

See attached Stormwater Site Plan (KPFF 2025) for more details.

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

With proper BMPs and stream diversion, debris and sediment from construction activities will be prevented from entering Thomas Creek. Plastic sheeting and other methods to ensure dry storage of creosote treated piles to ensure no mobility of debris off site and that all removed materials are hauled off site and disposed of at a licensed facility.

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

No, the current drainage patterns that exist at the site will be maintained following construction.

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

Proper BMPs to control runoff will be installed and the stream reach within the project work area will be dewatered prior to construction and cleaned prior to the reintroduction of flow. The Contractor will maintain BMPs for the duration of the project to ensure that no construction debris or stormwater enters the waterway.

4. Plants

Find help answering plants questions

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

deciduous tree: aider, mapie, aspen, other
\square evergreen tree: fir, cedar, pine, other
⊠ shrubs (Himalyan blackberry)
⊠ grass (Reed canarygrass)
□ pasture
\square crop or grain
$\hfill \Box$ orchards, vineyards, or other permanent crops.
oxtimes wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
\square water plants: water lily, eelgrass, milfoil, other
⋈ other types of vegetation

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

Herbaceous vegetation, predominantly reed canarygrass and Himalayan blackberry, will be removed as part of the construction activities. Approximately 1,500 SF of grassy vegetated wetlands and 1,500 SF of grassy vegetated buffers are proposed for clearing and grubbing to complete the work.

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

None.

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

There will be some temporary vegetation clearing within the right-of-way of Old Hwy 99 and adjacent to the existing Thomas Creek bridge. Cleared vegetation in temporary impacts areas, which consists of mostly invasive reed canarygrass and Himalayan blackberry, will be replaced with a native riparian seed mix via hydroseeding of all disturbed upland areas where bare soil is exposed.

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

Himalayan blackberry (Rubus armeniacus)

Reed canarygrass (Phalaris arundinacea)

5. Animals

Find help answering animal questions⁸

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.

⁸ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals

Examples include:

- **Birds:** hawk, heron, eagle, songbirds, other: Hawk, heron, eagle, songbirds, gull, geese, waterfowl, migratory birds
- Mammals: deer, bear, elk, beaver, other: Deer
- Fish: bass, salmon, trout, herring, shellfish, other: Salmon, trout

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

- Bull Trout/ Dolly Varden (Salvelinus confluentus/S. malma)
- Fall Chinook (Oncorhynchus tshawytscha)
- Steelhead (O. mykiss)

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

Yes; the site is within the Pacific Flyway and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) identifies 12 migratory bird species within the project area.

Thomas Creek flows through the site and provides a migratory corridor for fish with mapped fish use consisting of documented presence of Chinook (*Oncorhynchus tshawytscha*), documented spawning of Chum (*Oncorhynchus keta*), documented rearing of Coho Salmon (*Oncorhynchus kisutch*), a presumed presence of Winter Steelhead (*Oncorhynchus mykiss*), and gradient accessible presence of Pink Salmon (*Oncorhynchus qorbuscha*).

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

Work below the OHWM will occur during the approved in-water work window when Thomas Creek is expected to have little to no flow and the likelihood of fish occurring within the project area is low. A Fish Exclusion and Work Area Isolation Plan developed by the Contractor will also ensure the handling of any fish within the work area are properly handled.

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

There are no known invasive animal species known to be on or near the project site. However, American bullfrog (*Rana catesbeiana*) tadpoles have been observed in similar agricultural ditch / slough streams in Skagit County.

6. Energy and natural resources

Find help answering energy and natural resource questions⁹

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 project will not affect the potential use of solar energy by adjacent properties.

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

Health Find help with answering environmental health questions¹⁰

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.

Environmental health hazards are limited to spills or risk of fire explosion associated with construction vehicles and equipment. The use of proper BMPs will reduce this risk. The project will not increase any environmental health hazards.

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

Based on the Hazardous Materials Technical Report (GeoEngineers 2024) there is one state listed cleanup site within ½ miles from the site. However, based on the distance, it is unlikely that contamination from this site will be present at the project site. Other than the creosote treated timber piles that are scoped for removal, there is no known contamination at the site.

2. 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.

https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health

3. 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.

Gasoline and diesel will be used and potentially stored onsite during project construction. No toxic or hazardous chemicals will be stored or used onsite after project completion.

4. Describe special emergency services that might be required.

The potential exists for a gasoline explosion and diesel and gasoline spills from equipment during construction. The possibility of an explosion is very remote provided the contractor follows state safety rules. A diesel or gasoline spill could occur during equipment refueling or operation. If a spill were to occur the contractor would be required to immediately contain the spill and implement appropriate cleanup procedures.

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

There are no known environmental health hazards that will result from this project. There are no known hazardous materials that will be used for the project other than the use of fuels for equipment and construction vehicles. BMPs will be utilized as needed and will be developed in accordance with the City and Washington State Department of Ecology's (Ecology) regulations and guidelines. It is anticipated the contractor will use double-containment and dry storage for the creosote treated pile removal activities and have a spill prevention plan in place.

b. Noise

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

The project is along a highway in Skagit County, Washington, which will have associated traffic noise. The agricultural fields and sand and gravel mine in the vicinity of the project may create noise during operation. However, these existing traffic noise sources will not 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 temporary elevated noise levels during construction from equipment such as excavators, dump trucks, and backhoes during normal daytime weekday work hours. The project does not increase the vehicle capacity of the roadway; therefore, long-term increase in traffic noise is not anticipated to result from the proposed project.

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

None.

8. Land and shoreline use

Find help answering land and shoreline use questions¹¹

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 current land use of the site is a public ROW. Adjacent properties consist of agricultural and industrial use. The proposal will not affect current land uses on nearby or adjacent properties. No ROW acquisition is required for completing this project.

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 not been used as working farmlands or working forest lands. No conversion of agricultural or forest land of long-term commercial significant will be converted because of this project.

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?

The project is on Old Hwy 99 surrounded by agricultural fields and presumably provides access for agricultural vehicles between sites. The existing bridge will need to be closed during construction and a temporary detour will be provided. This may affect normal business operation for the adjacent land uses. Furthermore, normal business operations on the fields may include the application of pesticides and fertilizer which could pose a health risk to those working on the project site due to the proximity of the fields to Old Hwy 99.

c. Describe any structures on the site.

There is a public highway, associated railings and signage, a bridge, and a sewer pipe on the property.

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

The existing bridge, creosote pilings and timber abutment will be demolished.

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

The project is occurring within a public roadway right of way.

The project site is within a Mineral Resource Overlay 1/4 Mile Buffer and adjacent to [Ag-NRL] Agricultural – NRL and [NRI] Natural Resource Industrial zoned parcels.

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

¹¹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use

Project includes two designations:

- [RRc-NRL] Rural Resource NRL / [MRO] Mineral Resource Overlay
- Agricultural NRL
- g. If applicable, what is the current shoreline master program designation of the site?
 Not applicable.
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes, the project site is adjacent to and over Thomas Creek, a mapped stream (Fish and Wildlife Habitat Conservation Area) per SCC 14.24.500. The site is also within the 100-year floodplain and includes several wetlands.

- i. Approximately how many people would reside or work in the completed project? None.
- j. Approximately how many people would the completed project displace? None.
- k. Proposed measures to avoid or reduce displacement impacts, if any.

None.

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

The project will not change the existing and projected land uses within and adjacent to the site.

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

None.

9. Housing

Find help answering housing questions¹²

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:

¹² https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing

None.

10. Aesthetics

Find help answering aesthetics questions¹³

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

No structures are proposed as part of this project other than the new bridge and roadway, which will be raised 3 feet from the existing grade.

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.

11. Light and glare

Find help answering light and glare questions¹⁴

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

Find help answering recreation questions

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

None. Land use in the immediate vicinity is privately owned agricultural and industrial land use.

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

No.

¹³ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics
¹⁴ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare

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

Find help answering historic and cultural preservation questions¹⁵

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 Washington State Department of Archaeology and Historic Preservation (DAHP) was contacted regarding the proposal and determined that the property is not eligible for listing in the National Register of Historic Places and that no historic resources would be affected by the project.
- 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.
 - See attached "Archaeology Survey and Monitoring Report" (ERCI 2024) for details on assessment of cultural and historic resources.
- 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.

None, the DAHP determined that no historic resources would be affected by the project.

¹⁵ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p

14. Transportation

Find help with answering transportation questions¹⁶

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

The project is on Old Hwy 99. See attached 60% Design Plans for details on where the project is in relation to other neighboring streets.

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?

No. The nearest transit stop is the Chuckanut Park and Ride approximately 3 miles south of the project site.

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).

Yes, the existing roadway approaches of Old Hwy 99 North will be replaced as part of the bridge replacement and be designed to meet current roadway standards. The project also proposes to install enhanced stormwater treatment in the form of CAVFS to treat stormwater within the project footprint.

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

No.

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

None.

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.

Movement of agricultural products may be impacted by the detour necessary to complete the work. However, the detour timing will be limited in duration. The replaced bridge structure is designed to reduce County maintenance needs and the raised bridge height will protect the structure during flooding events which will have long term benefits for the movement of agricultural and any forest products on Old Hwy 99 North.

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

¹⁶ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation

The detour impacts will be minimized by limiting the duration to the greatest extent possible and through installation of adequate signage so the public is informed and able to plan accordingly during that time.

15. Public services

Find help answering public service questions¹⁷

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

No

Proposed measures to reduce or control direct impacts on public services, if any.
 None.

16. Utilities

Find help answering utilities questions¹⁸

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

Electricity, natural gas, water, telephone, sanitary sewer

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.

See Attached Project Description for details on existing utilities and construction activities to replace as part of the bridge construction.

C.Signature

Find help about who should sign¹⁹

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.

Type name of signee:

Thomas Weller

https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services
 https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities
 https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature

Position and agency/organization:

Date submitted:

D.Supplemental sheet for nonproject actions

Find help for the nonproject actions worksheet²⁰

Do not use this section for project actions.

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

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

- 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?
 - Proposed measures to avoid or reduce such increases are:
- 2. How would the proposal be likely to affect plants, animals, fish, or marine life?
 - Proposed measures to protect or conserve plants, animals, fish, or marine life are:
- 3. How would the proposal be likely to deplete energy or natural resources?
 - Proposed measures to protect or conserve energy and natural resources are:
- 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
 - Proposed measures to protect such resources or to avoid or reduce impacts are:

²⁰ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

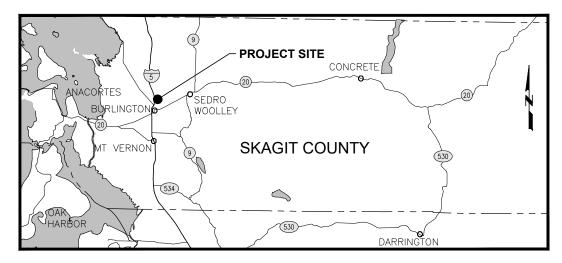
- 5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?
 - Proposed measures to avoid or reduce shoreline and land use impacts are:
- 6. How would the proposal be likely to increase demands on transportation or public services and utilities?
 - Proposed measures to reduce or respond to such demand(s) are:
- 7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

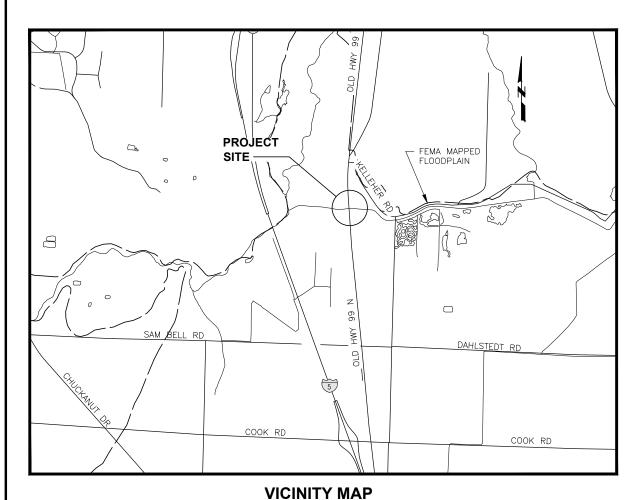
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MOUNT VERNON, WAS 98273-5825
(360) 336-9400 FAX (360) 336 9478

FEDERAL AID NO.: BRS-M291(010)



AREA MAP



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02	EXISTING CONDITIONS NOTES - EC-01
0.3	EXISTING CONDITIONS PLAN - EC-02
04	EXISTING CONDITIONS PLAN - EC-02
05	EXISTING CONDITIONS PLAN — EC-03
06	HORIZONTAL CONTROL PLAN - HC-01
07	HORIZONTAL CONTROL PLAN - HC-02
08	HORIZONTAL CONTROL PLAN - HC-03
09	SITE PREPARATION AND TESC - SP-01
10	SITE PREPARATION AND TESC - SP-02
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12	GRADING AND DRAINAGE PLAN - GD-01
13	GRADING AND DRAINAGE PLAN - GD-02
14	GRADING AND DRAINAGE PLAN - GD-03
15	TYPICAL ROADWAY SECTIONS - TS-01
16	ROADWAY PLAN AND PROFILE - PP01
17	ROADWAY PLAN AND PROFILE - PP02
18	ROADWAY PLAN AND PROFILE - PP03
19	ROADWAY DETAILS - RD01
20	WATERLINE PLAN AND PROFILE - WA-01
21	GENERAL STRUCTURAL NOTES
22	BRIDGE LAYOUT
23	BRIDGE TYPICAL SECTION
24	SUGGESTED CONSTRUCTION SEQUENCE
25	FOUNDATION PLAN
26	SHAFT DETAILS
27	ABUTMENT PLAN AND ELEVATION
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33	GIRDER DETAILS 3
34	BEARING PAD DETAILS
35	END DIAPHRAGM DETAILS
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38	TRAFFIC BARRIER DETAILS 1
39	TRAFFIC BARRIER DETAILS 2
40	BRIDGE RAILING BP 1
41	BRIDGE RAILING BP 2



SKAGIT COUNTY OFFICIALS

BOARD OF COMMISSIONERS

- •PETER BROWNING, CHAIR
- •LISA JANICKI, COMMISSIONER •RON WESEN, COMMISSIONER
- PUBLIC WORKS
- MICHAEL SEE, DIRECTOR

MICHAEL SEE, PUBLIC WORKS DIRECTOR/COUNTY ENGINEER

DATE

THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET

01 OF 42

SURVEY NOTES:

HORIZONTAL DATUM: NAD83 WASHINGTON STATE PLANE NORTH ZONE VERTICAL DATUM: NAVD88





SURVEY NOTES:

- 1. THIS SURVEY WAS PERFORMED IN NOVEMBER AND DECEMBER OF 2023, AND JANUARY OF 2024 BY SKAGIT COUNTY PUBLIC WORKS.
- 2. ANGULAR AND LINEAR MEASUREMENTS WERE COLLECTED USING A COMBINATION OF LEICA MS 50 ROBOTIC MULTI-STATION AND LEICA GS18 GNSS RECEIVER (WSRN), ACCURACY MEETS OR EXCEEDS THE STANDARDS SET FORTH WITHIN WAC
- 3. HORIZONTAL DATUM: NAD 83/11 WASHINGTON STATE PLANE NORTH ZONE

BASIS OF BEARING: THE MONUMENTED EAST 1/4 CORNER AND THE MONUMENTED SOUTHWEST SECTION CORNER OF SECTION 18. SECTION SUBDIVISION DIMENSIONS PROVIDED BY RECORD OF SURVEY AF#199902110013.

4. VERTICAL DATUM: NAVD 88

TEMPORARY BENCHMARK ELEVATIONS ARE AN APPROXIMATION OF NAVD 88 VALUES BASED UPON THE REAL-TIME KINEMATIC (RTK)-VIRTUAL REFERENCE STATION (VRS) OBSERVATIONS:

- SCPW CONTROL POINT #103 ELEVATION 35.281 FEET.
- 5. BASIS OF COORDINATES:

COORDINATES ARE AN APPROXIMATION OF NAD 83/11, BASED UPON THE REAL TIME KINEMATIC (RTK)-VIRTUAL REFERENCE STATION (VRS) OBSERVATIONS:

- SCPW CONTROL POINT #103 NORTHING = 560,226.23 USFT EASTING = 1,275,215.34 USFT
- OLD HIGHWAY 99 (Co.Rd.#50510) RIGHT-OF-WAY BASED UPON THE AS-BUILT ROAD CENTERLINE AND "STATE ROUTE 1 (LAKE SAMISH ROAD BRANCH) BURLINGTON -NORTH, SKAGIT COUNTY", MAP APPROVED DEC. 5, 1933.

THIS IS NOT A BOUNDARY SURVEY. EASEMENTS AND OTHER ENCUMBRANCES OF RECORD MAY EXIST WHICH ARE NOT DEPICTED HEREON.

- 7. SKAGIT COUNTY ASSUMES NO LIABILITY FOR ANY SUBSURFACE UTILITIES OR FEATURES THAT MAY EXIST THAT ARE UNDETECTABLE AND/OR NOT VISIBLE. SKAGIT COUNTY CAN NOT INDEPENDENTLY ASCERTAIN THE ACCURACY OF ANY DEPICTED UTILITY THAT WAS NOT DIRECTLY OBSERVED IN THE COURSE OF THIS SURVEY.
- 8. CONTOUR INTERVALS ARE SHOWN AT 1 FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.

OCCUPATIONAL INDICATORS NOTE:
THIS SURVEY MAY DEPICT EXISTING FENCE LINES AND/OR ENCROACHMENTS IN
ACCORDANCE WITH WAC 332.130. THESE OCCUPATIONAL INDICATORS MAY INDICATE A POTENTIAL FOR CLAIMS OF UNWRITTEN TITLE OWNERSHIP. THE LEGAL RESOLUTION OF OWNERSHIP BASED UPON UNWRITTEN TITLE CLAIMS HAS NOT BEEN RESOLVED BY THIS SURVEY.

HIGH WATER LEVELS AND DIFFICULT TERRAIN LIMITED ACCESS TO PRECISE MEASUREMENTS OF THE CREEK BED DURING THE NOVEMBER AND DECEMBER 2023 DATA COLLECTION. THE THALWEG WAS NOT DEFINED DURING THIS SURVEY

SEASONAL FLOODING MAY HAVE, OR IN THE FUTURE RESHAPE THE CREEK CORRIDOR SHOWN HEREON.

REVISION

- a. NEW CHANNELIZATION STRIPING FOR OLD HIGHWAY 99 ADDED FROM SKAGIT COUNTY PUBLIC WORKS 2024 HMA PROJECT.
- b. OWNERSHIP LINES ADDED FOR DRAINAGE DISTRICT 14 PER SUPERIOR COURT CAUSE
- c. UPDATED WATER LINE ADDED BY KPFF ON 4/30/25. LINEWORK BASED ON SKAGIT COUNTY PUD BOW HILL RESERVOIR, BOOSTER AND PIPELINE AS-BUILTS (FEB. 1995).

LINE TYPES:

· · ·	SECTION LINE
	RIGHT-OF-WAY LINE
	EASEMENT LINE
	ROAD CENTERLINE
	ASPHALT EDGE
	CONCRETE EDGE
	GRAVEL EDGE
	DOUBLE YELLOW CENTERLINE
	LANE EDGE LINE
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
	GUARDRAIL LINE
20	MAJOR CONTOUR
	MINOR CONTOUR
	CULVERT
x x	FENCE
— OP — — —	OVERHEAD POWER
—— BF ———	BURIED FIBER OPTIC
—— ss———	SANITARY SEWER (FORCE MAIN)
w	WATER
	DELINEATED WETLAND

SYMBOLS:

→ SIGN -⊙-POWER POLE DOWN GUY ANCHOR

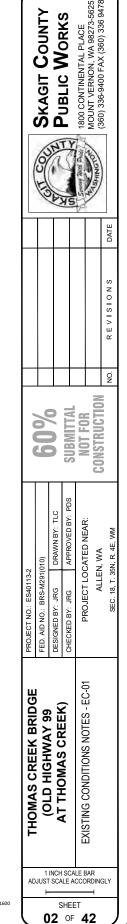
SS SANITY SEWER M WATER VALVE

STOP STOP SIGN

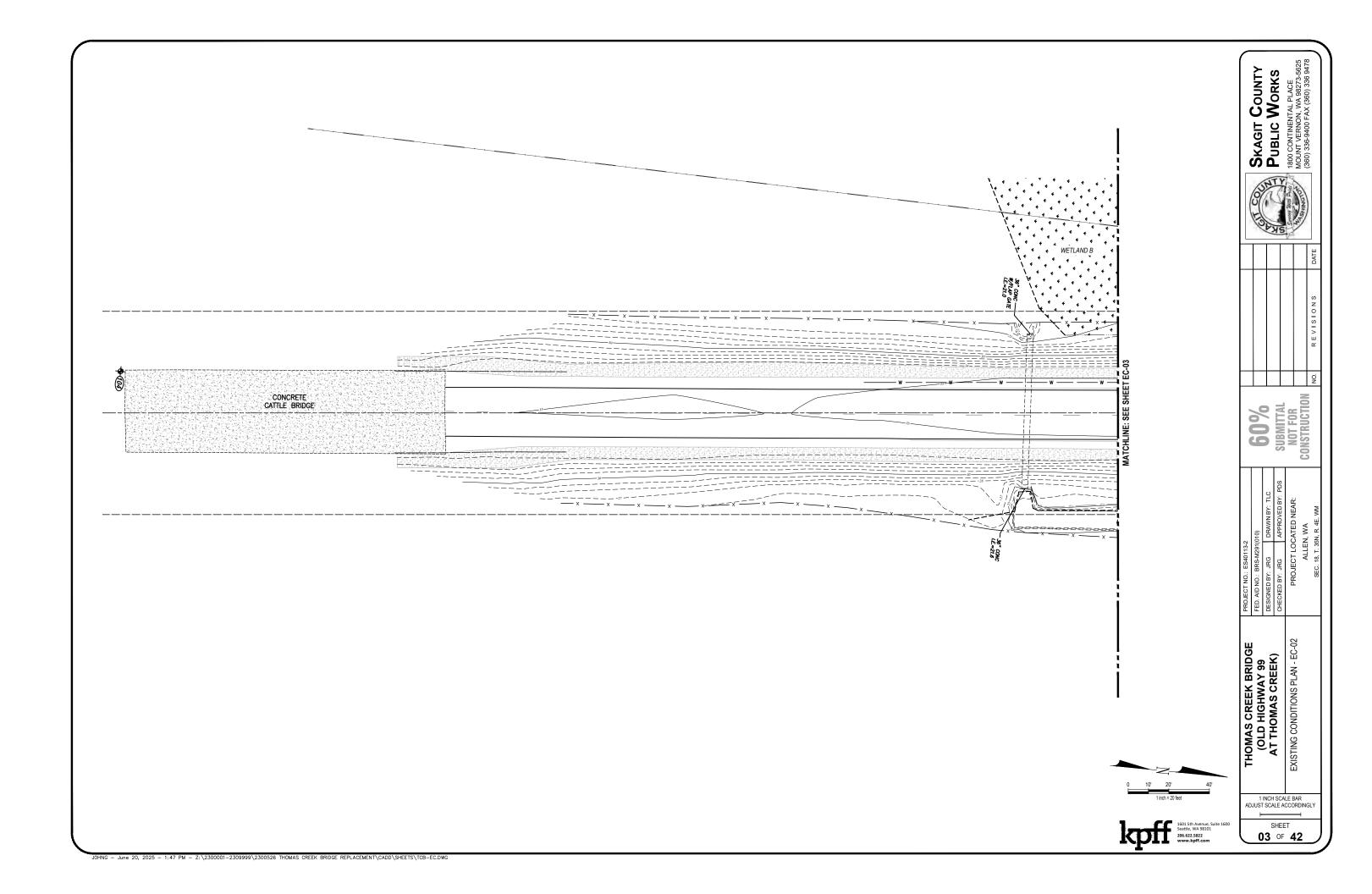
MAIL BOX WOOD PILE

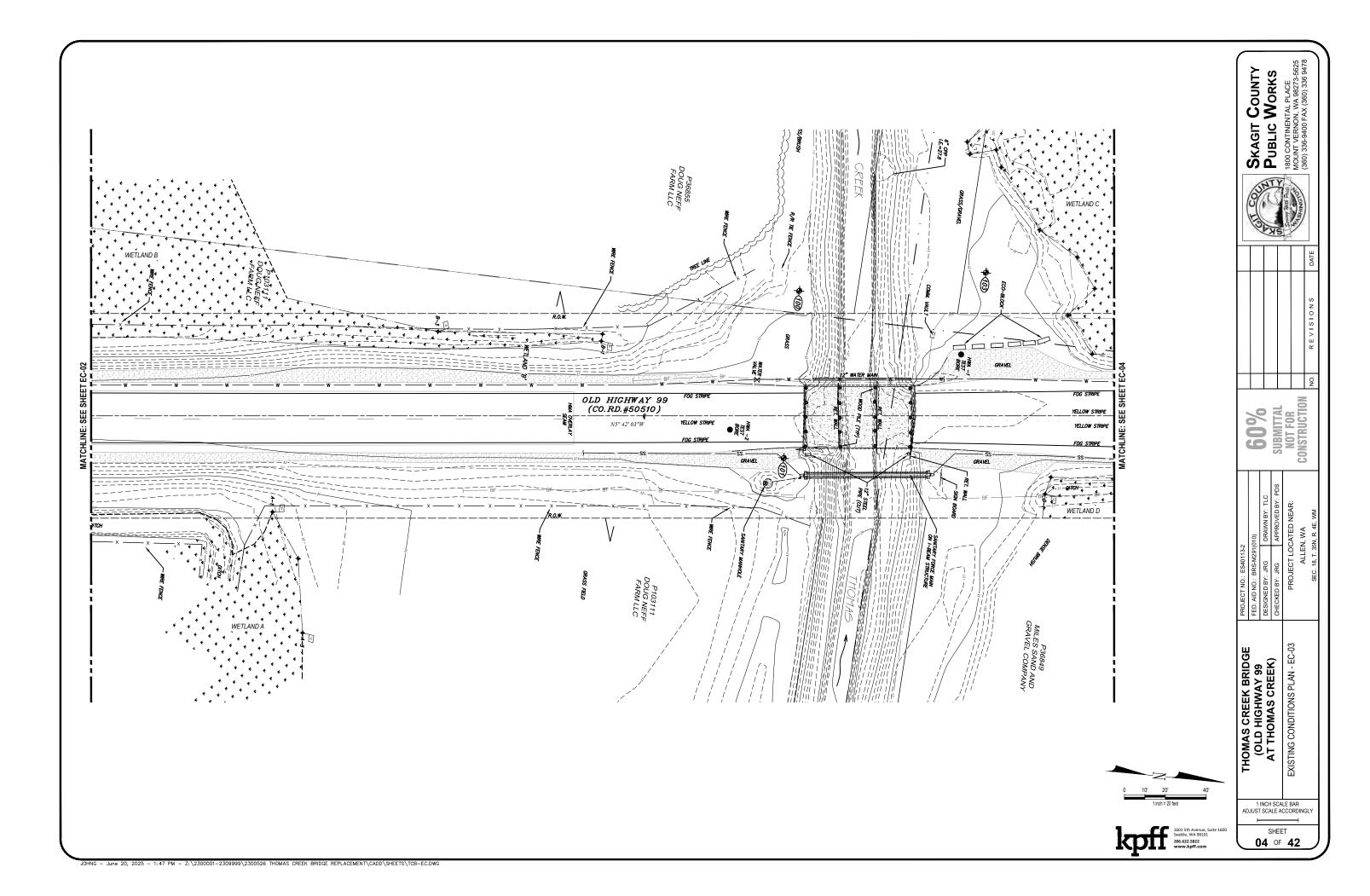
0 WETLAND FLAG

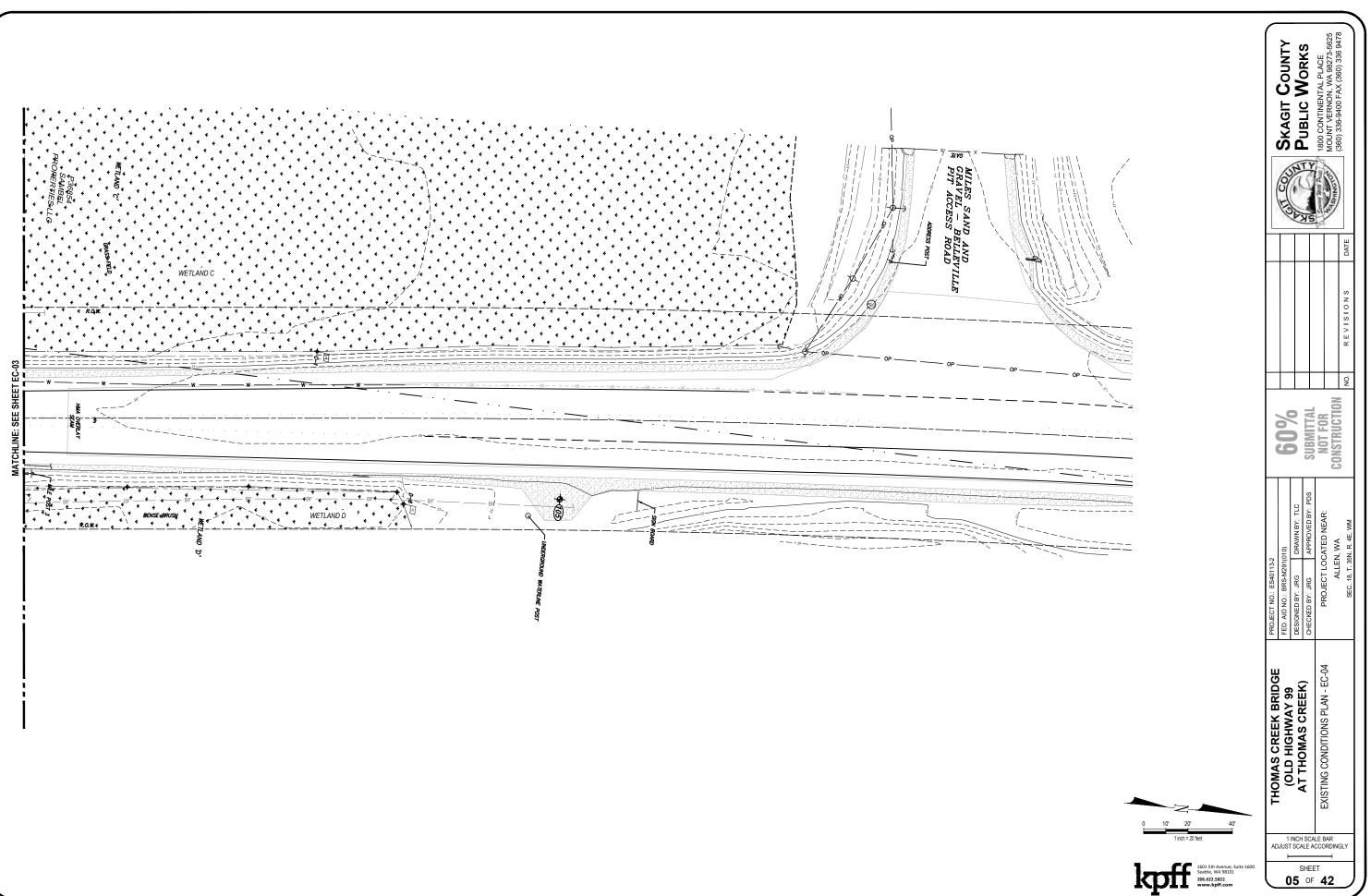
SURVEY CONTROL TABLE						
NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION		
100	560136.34	1275233.28	34.92'	SET 40d SPIKE		
101	560136.92	1275315.32	35.16'	SET 40d SPIKE		
103	560226.23	1275215.34	35.28'	SET 40d SPIKE		
104	559307.45	1275356.80	34.51'	SET MAG/WASH		
105	560539.69	1275291.13	34.90'	SET 40d SPIKE		

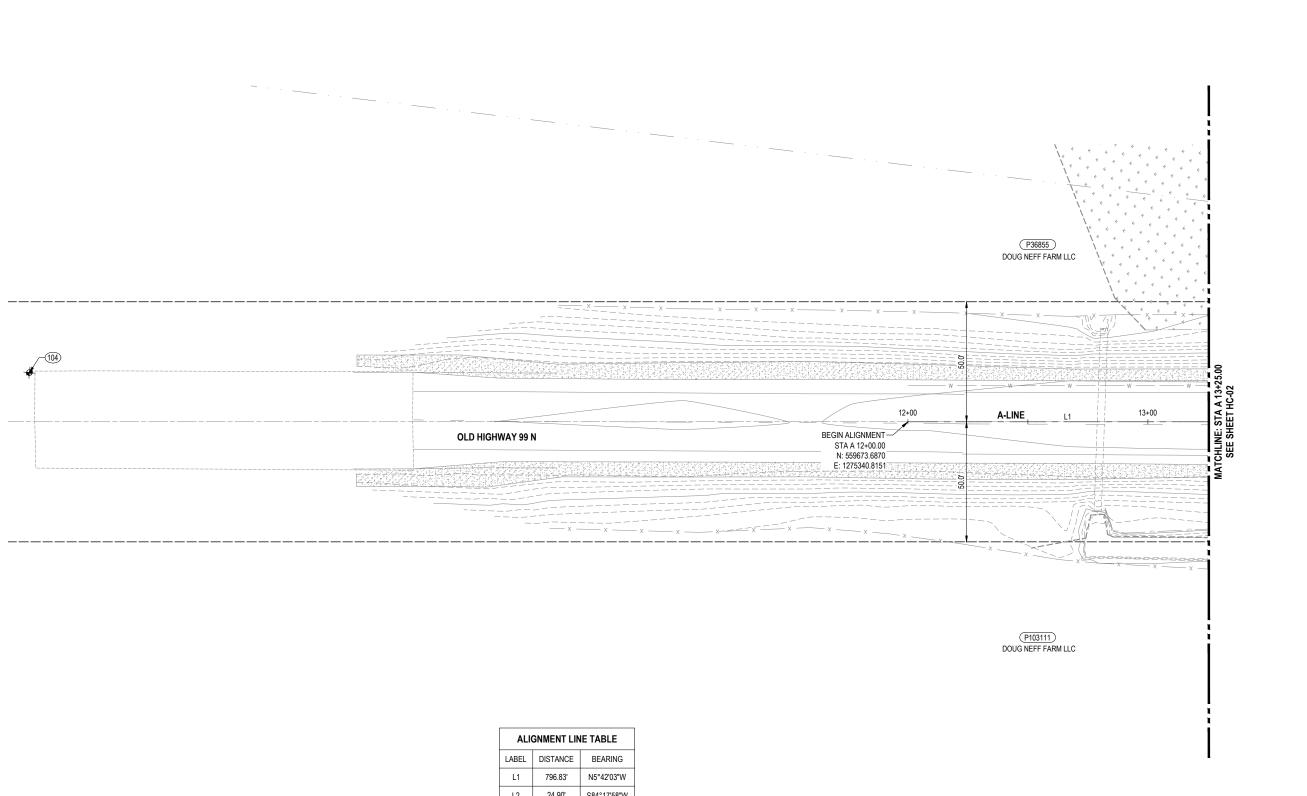










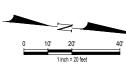


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104	559307.45	1275356.80	34.51	SET MAG/WASH		
105	560539.69	1275291.13	34.90'	SET 40d SPIKE		

ALIC	GNMENT LIN	IE TABLE
LABEL	DISTANCE	BEARING
L1	796.83'	N5°42'03"W
L2	24.90'	S84°17'58"W
L3	55.49'	S5°34'26"E

ALIGNMENT CURVE TABLE							
LABEL	DELTA	RADIUS	LENGTH	CHORD BEARING	P.I. STATION	NORTHING	EASTING
C1	2°01'54"	5730.00'	203.17'	N04°41'05.80"W	STA A 20+98.42	560567.6670	1275251.5723
C2	89°52'24"	12.50'	19.61'	S39°21'45.74"W	STA B 10+37.37	560271.9824	1275243.5289



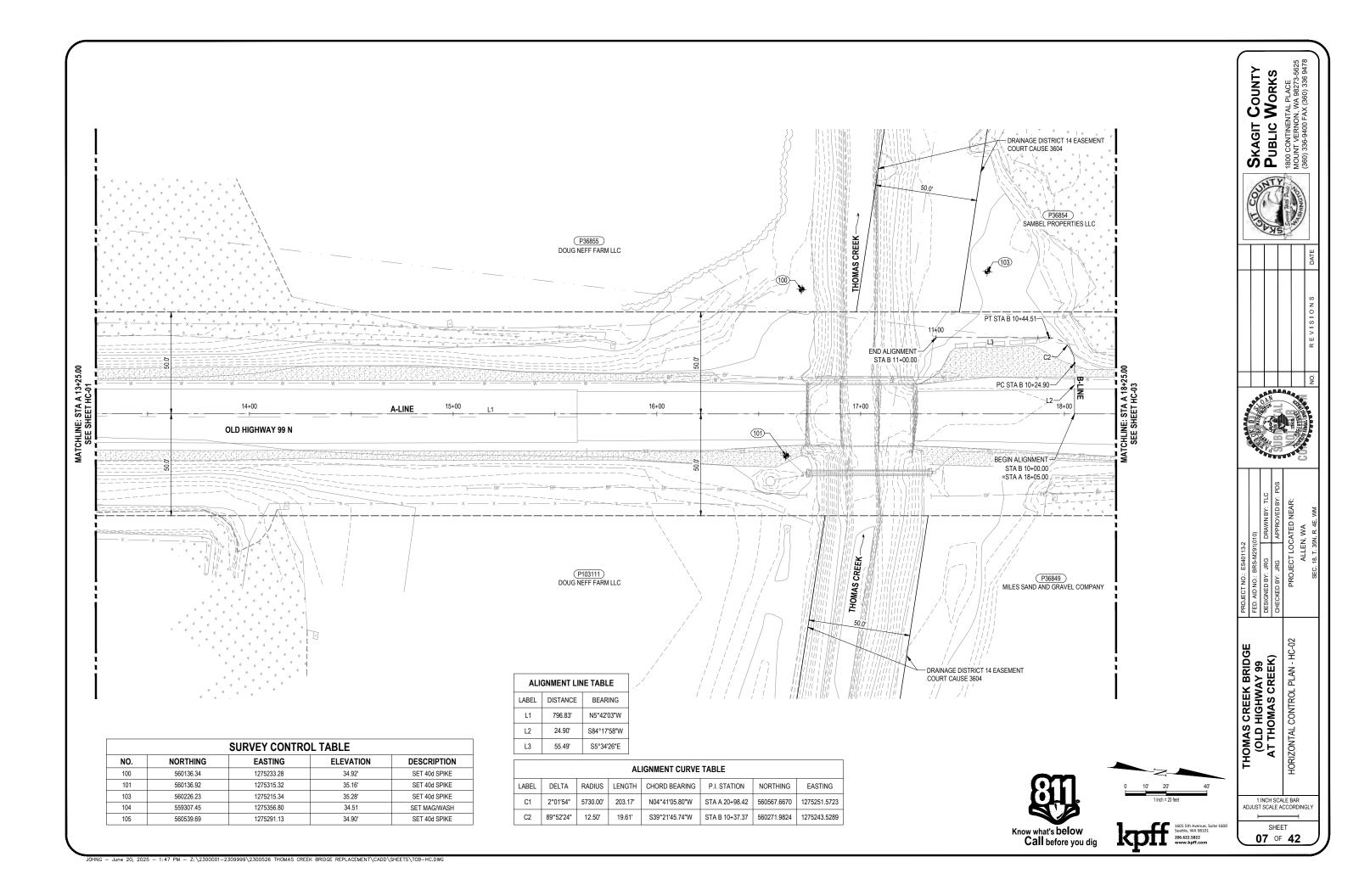


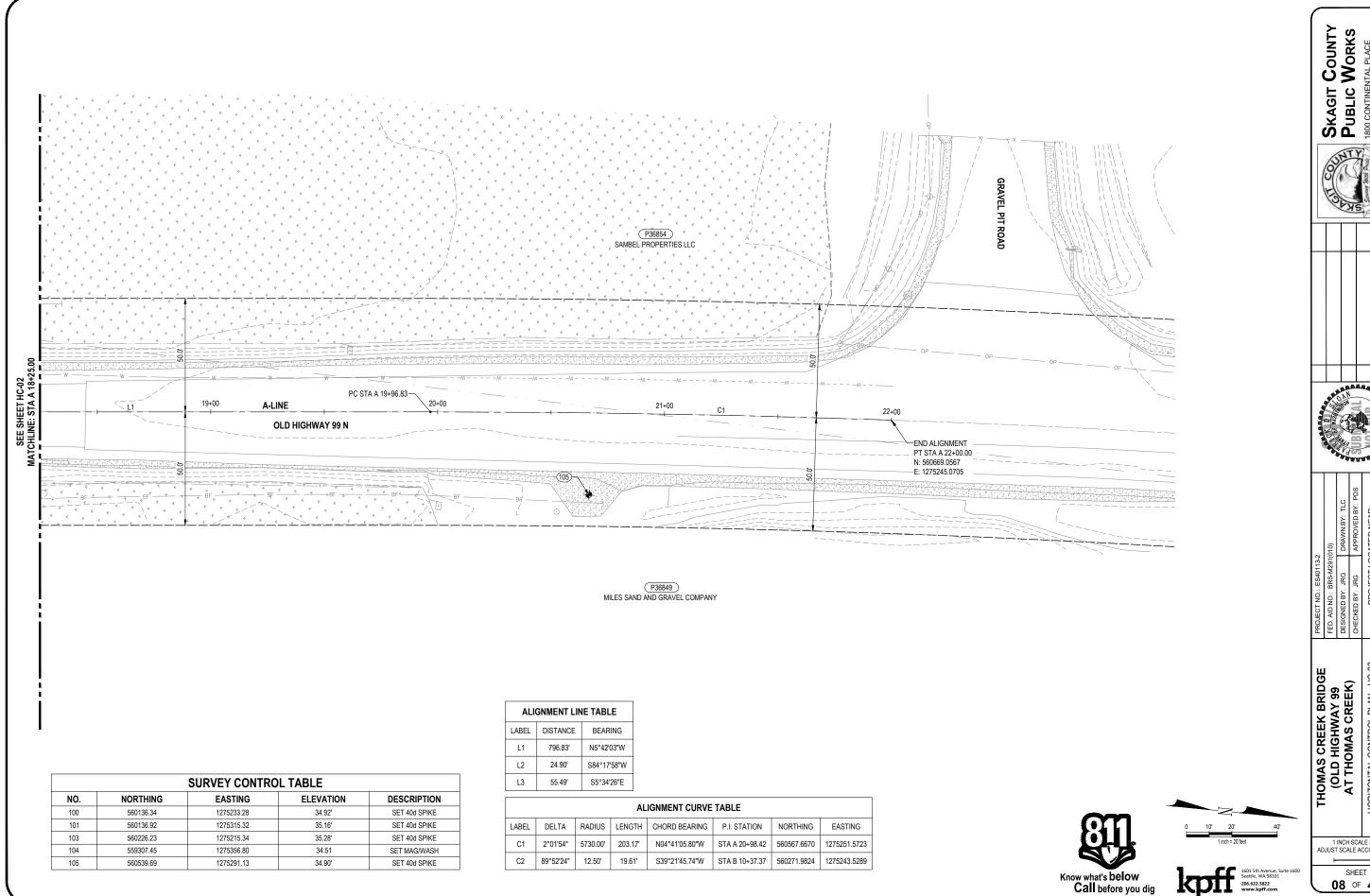


THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK) HORIZONTAL CONTROL PLAN - HC-01 1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY SHEET

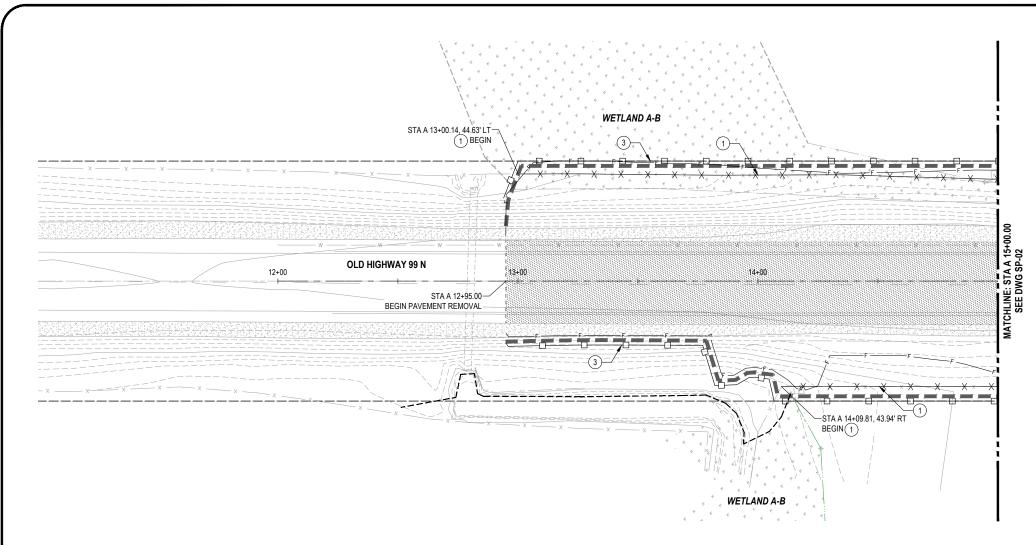
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SKAGIT COUNTY
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SKAGIT COUNTY
PUBLIC WORKS
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(360) 336-9400 FAX (360) 336-9478 HORIZONTAL CONTROL PLAN - HC-03 1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

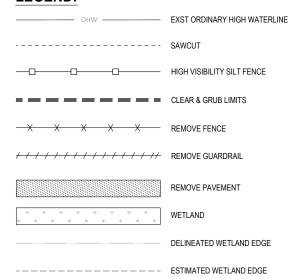


EROSION AND SEDIMENT CONTROL NOTES:

- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATER, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- 2. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS.
- 3. ALL CLEARING, GRUBBING, AND GRADING SHALL BE CONTAINED WITHIN THE LIMITS ESTABLISHED BY THE ENGINEER. ALL VEGETATION OUTSIDE DESIGNATED LIMITS SHALL REMAIN UNDISTURBED.
- 4. ALL STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND PROTECTED FROM EROSION BY MECHANICAL OR VEGETATIVE MEANS.
- ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY SEEDING, MULCHING, MATTING, OR PLASTIC COVERING. FROM OCT. 1 TO APRIL 30, NO SOILS SHALL REMAIN UNSTABILIZED FOR MORE THAN 2 DAYS. FROM MAY 1 TO SEPT. 30, NO SOILS SHALL REMAIN UNSTABILIZED FOR MORE THAN 7 DAYS.
- ALL POLLUTANTS OTHER THAN SEDIMENTS THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER. PER 2019 DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WA.

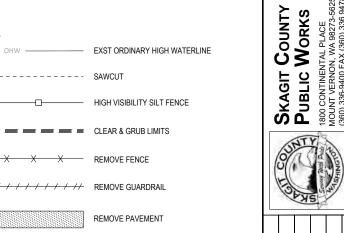
- SEDIMENTS TRANSPORTED ONTO A ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCIDENTAL TO THE VARIOUS
- CLEARING AND GRUBBING LIMITS SHALL EXTEND 2-FEET BEYOND THE CUT/FILL LINES AND OTHER CONSTRUCTION LIMITS OR WITHIN THE RIGHT OF WAY LINE. WATTLES OR SILT FENCE SHALL BE INSTALLED AT LIMITS OF CLEARING AND GRUBBING OR AS NECESSARY. STATION AND OFFSETS OF SILT FENCE ARE
- 9. DISTURBED AREAS SHALL BE SEEDED AND MULCHED PER SPECIFICATIONS SECTION 8-01.

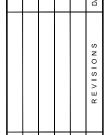
LEGEND:



CONSTRUCTION NOTES:

- 1 REMOVE EXISTING BARBED WIRE FENCE
- 2 REMOVE GUARDRAIL RAILING, POSTS, AND ANCHORS
- (3) INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STD PLAN I-30.15-02
- 4 REMOVE EXISTING BRIDGE, INCLUDING TWENTY (20) 12-INCH CREOSOTE TREATED TIMBER PILES AND TWO (2) 500 LF SECTIONS OF UNTREATED TIMBER ABUTMENTS.







THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

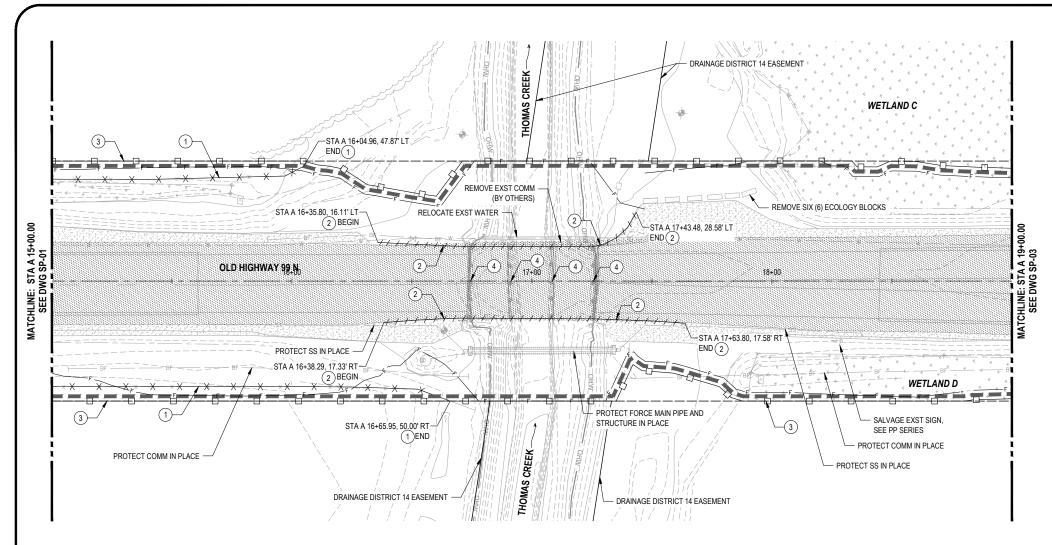
PREPARATION AND TESC -

SITE

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET





EROSION AND SEDIMENT CONTROL NOTES:

- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATER, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
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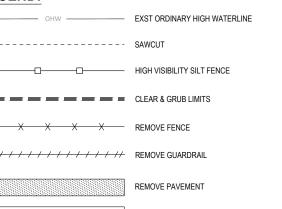
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- 9. DISTURBED AREAS SHALL BE SEEDED AND MULCHED PER SPECIFICATIONS SECTION 8-01.

LEGEND:

EXST ORDINARY HIGH WATERLINE
SAWCUT
HIGH VISIBILITY SILT FENCE
CLEAR & GRUB LIMITS
REMOVE FENCE
REMOVE GUARDRAIL
REMOVE PAVEMENT
WETLAND
DELINEATED WETLAND EDGE
ESTIMATED WETLAND EDGE

CONSTRUCTION NOTES:

- 1 REMOVE EXISTING BARBED WIRE FENCE
- 2 REMOVE GUARDRAIL RAILING, POSTS, AND ANCHORS
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COUNTY Works

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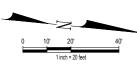
MAS CREEK BRIDGE	PROJECT NO.: ES40113-2	
	FED. AID NO.: BRS-M291(010)	010)
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I Indimas cheen)	CHECKED BY: JRG	APPROV
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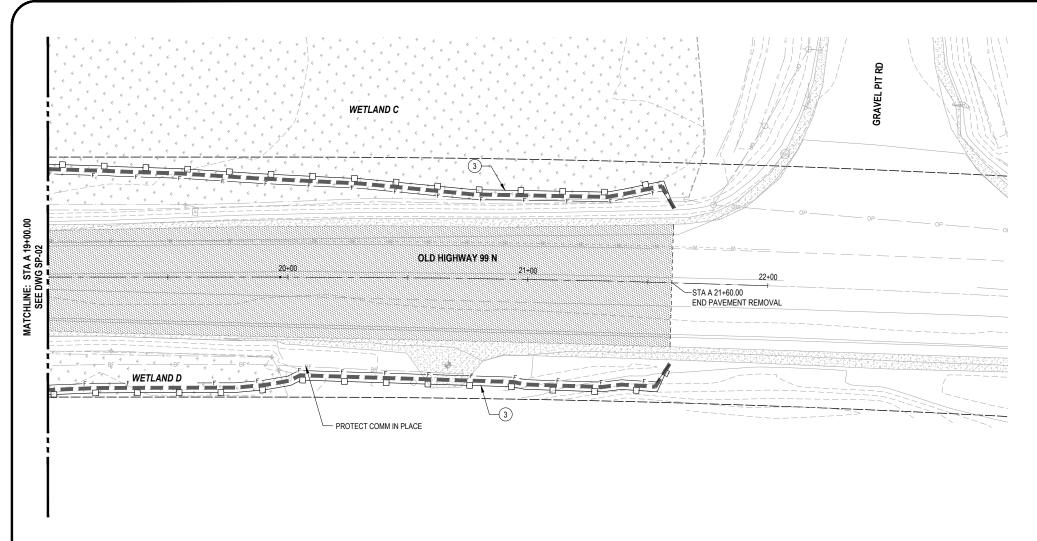
SITE

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET





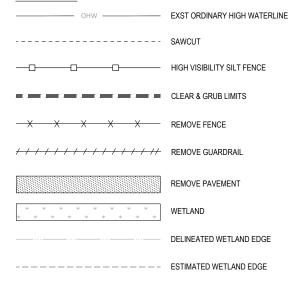


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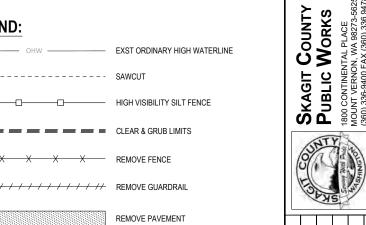
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LEGEND:



CONSTRUCTION NOTES:

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PROJECT NO.: ES40113-2	FED. AID NO.: BRS-M291(010)	DESIGNED BY: JRG	CHECKED BY: JRG	PROJECT LO	ALLEI	F 010

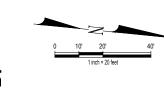
THOMAS CREEK BRIDGE (OLD HIGHWAY 99 ATTHOMAS CREEK)

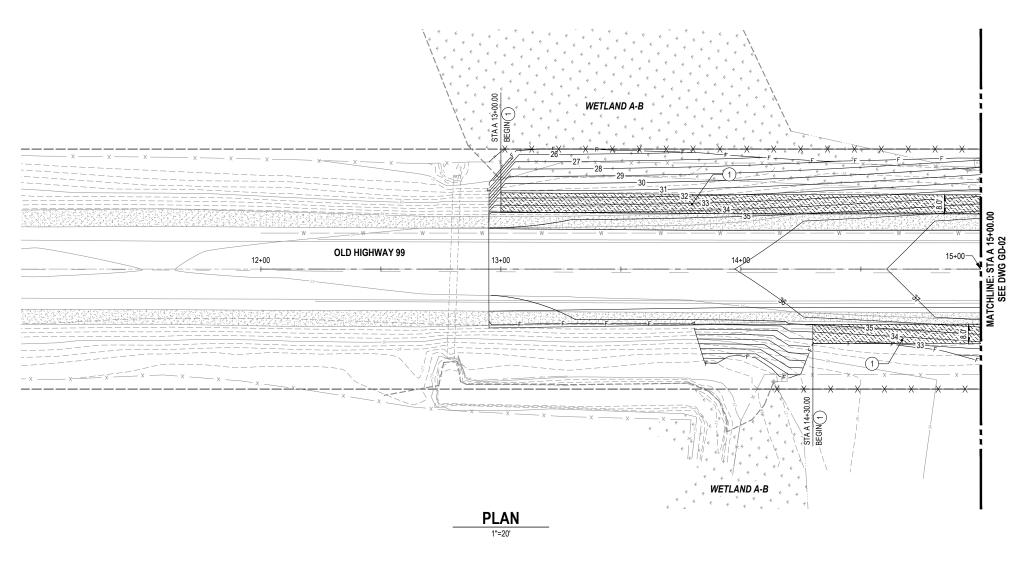
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

PREPARATION AND TESC

SITE

SHEET





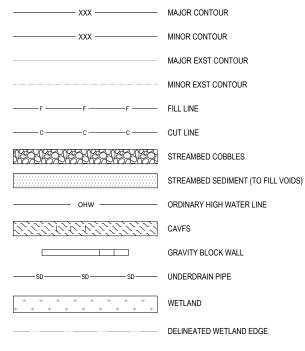
HMA PAVEMENT LEVEL SPREADER GRAVEL BORROW NATIVE SOIL COMPOST TILLED INTO TOPSOIL TYPE A TOPSOIL TYPE A, SEE TS SERIES

1 COMPOST AMENDED VEGETATED FILTER STRIP (CAVFS) DETAIL

GENERAL NOTES:

- 1. SEE TS SERIES FOR GRADING REQUIREMENTS
- 2. SEE SHEET RD-01 FOR SUPERELEVATION DIAGRAMS

LEGEND:



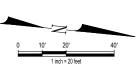
CONSTRUCTION NOTES:

(1) CONSTRUCT COMPOST AMENDED VEGETATED FILTER STRIP (CAVFS) PER DETAIL 1/GD-01

----- ESTIMATED WETLAND EDGE

(2) STREAMBED SEDIMENT PLACED AS NEEDED IN VOIDS LEFT FROM REMOVAL OF TIMBER PILINGS AND ABUTMENTS TO MEET FINAL GRADE







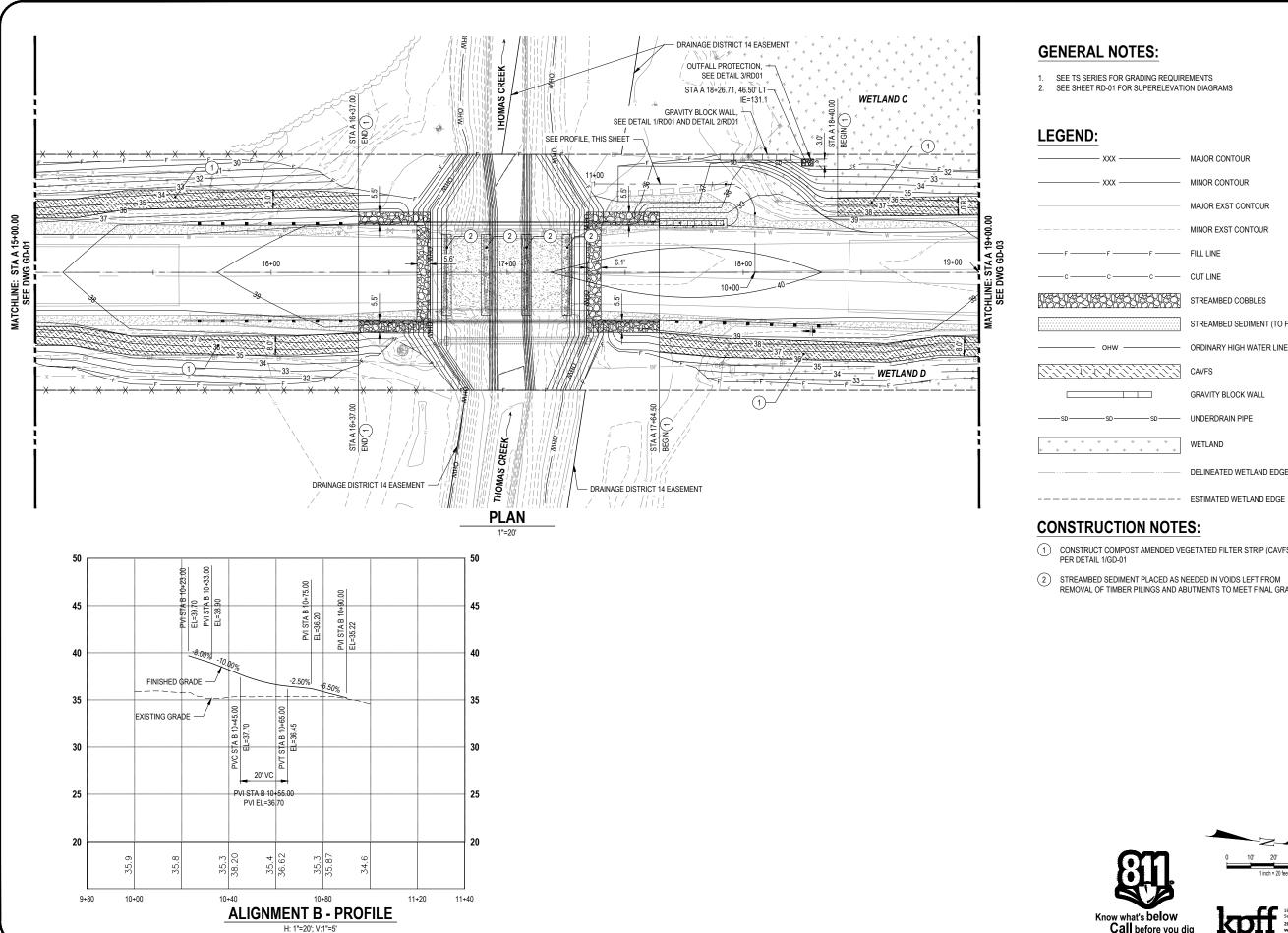
THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET

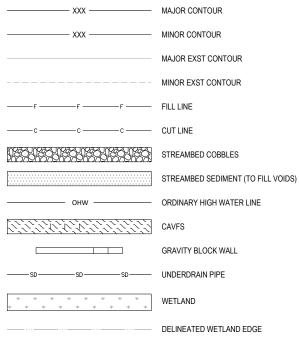
12 OF **42**

SKAGIT COUNTY
PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625



- 1. SEE TS SERIES FOR GRADING REQUIREMENTS
- 2. SEE SHEET RD-01 FOR SUPERELEVATION DIAGRAMS

LEGEND:

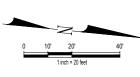


CONSTRUCTION NOTES:

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- (2) STREAMBED SEDIMENT PLACED AS NEEDED IN VOIDS LEFT FROM REMOVAL OF TIMBER PILINGS AND ABUTMENTS TO MEET FINAL GRADE

Know what's below





JOHNG - June 20, 2025 - 1:47 PM - Z:\2300001-2309999\2300526 THOMAS CREEK BRIDGE REPLACEMENT\CADD\SHEETS\TCB-GD.DWG

SKAGIT COUNTY
PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 336-9400 FAX (360) 336-9400



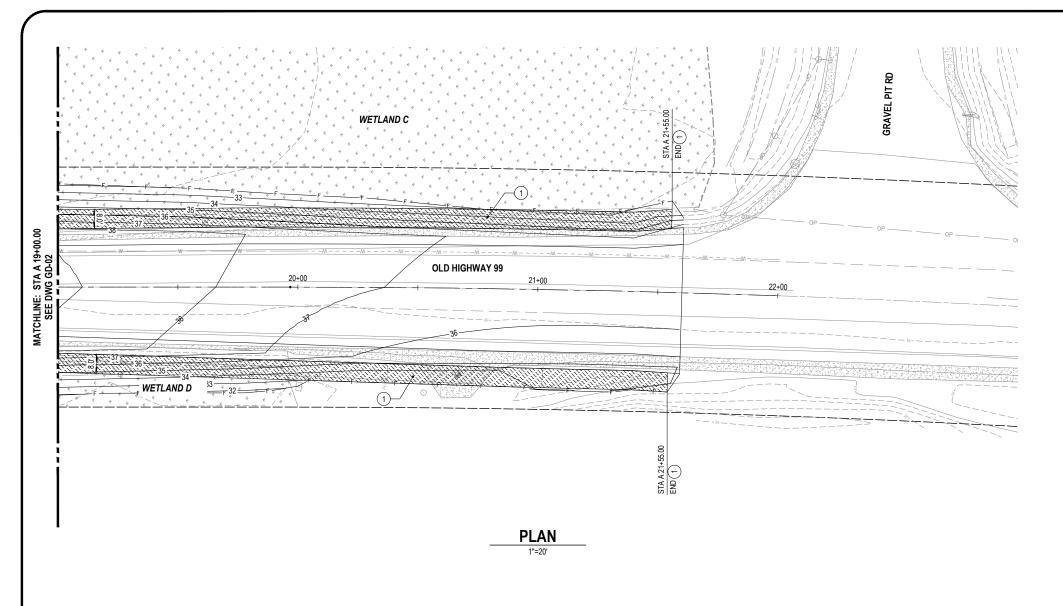


THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

GRADING AND DRAINAGE PLAN - GD-

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET **13** OF **42**



- SEE TS SERIES FOR GRADING REQUIREMENTS
 SEE SHEET RD-01 FOR SUPERELEVATION DIAGRAMS

GRADING AND DRAINAGE PLAN - GD-03

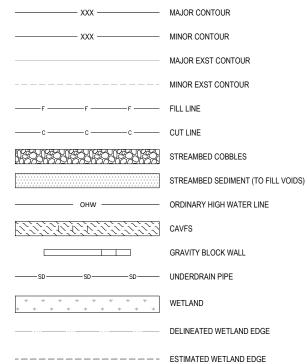
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET

14 OF **42**

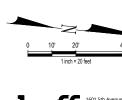
THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

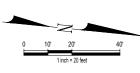
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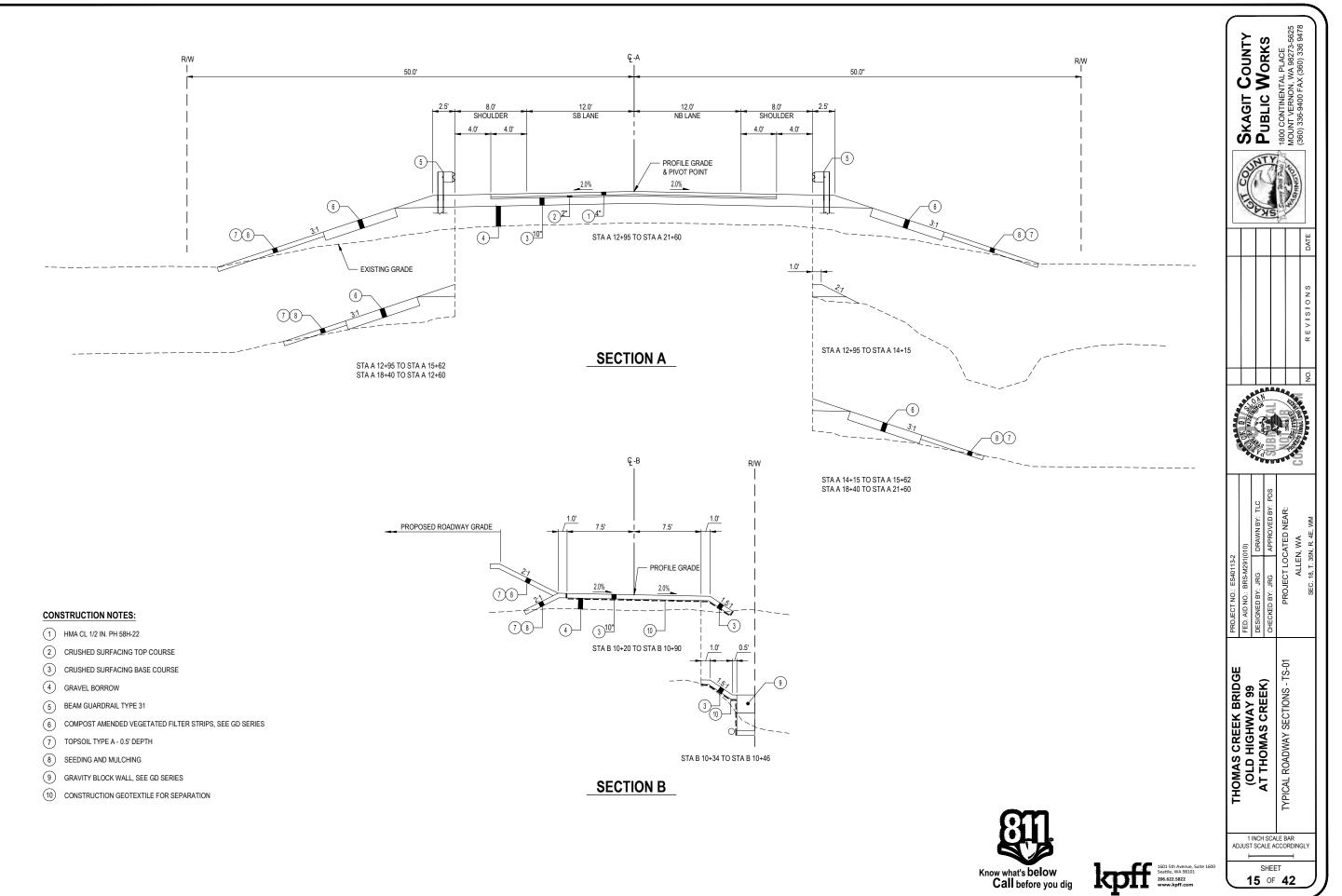
CONSTRUCTION NOTES:

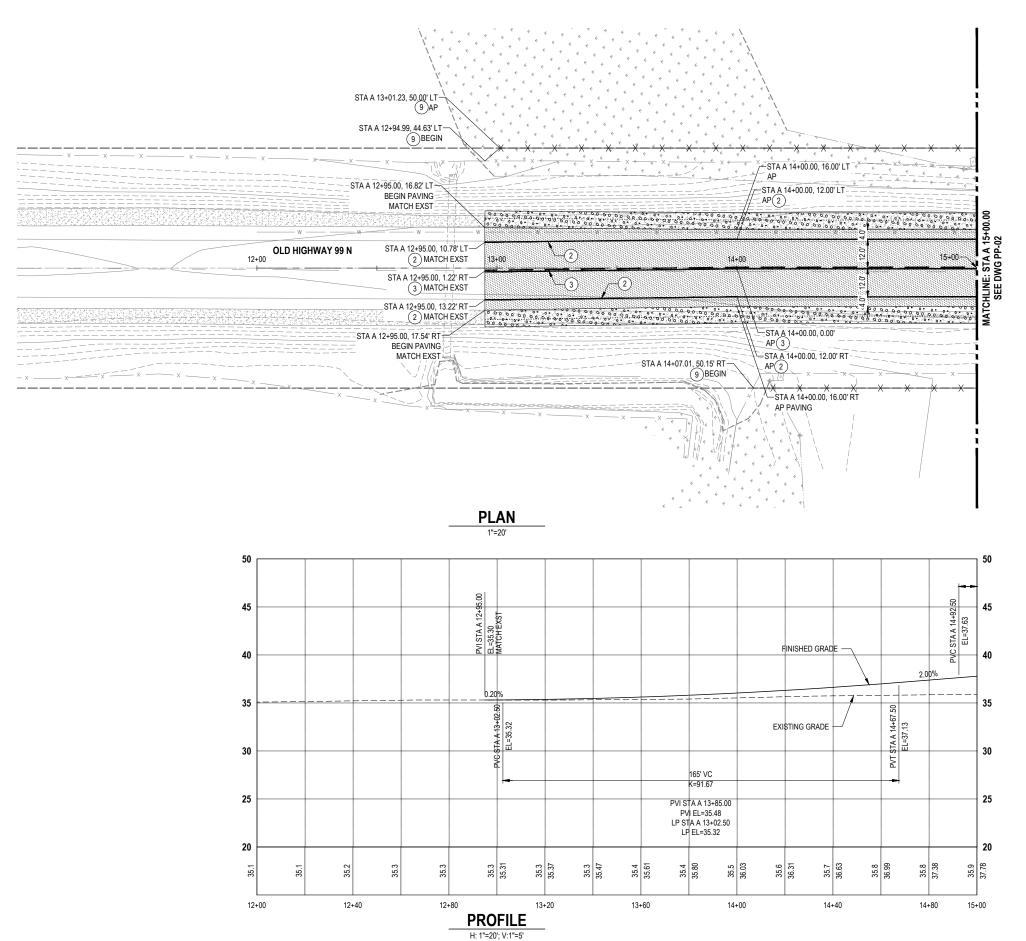
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- (2) STREAMBED SEDIMENT PLACED AS NEEDED IN VOIDS LEFT FROM REMOVAL OF TIMBER PILINGS AND ABUTMENTS TO MEET FINAL GRADE



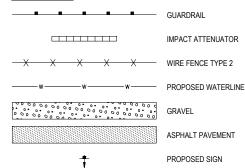








LEGEND:



CONSTRUCTION NOTES:

- (1) CONSTRUCT YELLOW DOUBLE CENTERLINE PER WSDOT STD. PLAN M-20.10-04
- (2) CONSTRUCT WHITE PLASTIC EDGE LINE PER WSDOT STD. PLAN M-20.10-04
- (3) CONSTRUCT YELLOW NO-PASS LINE PER WSDOT STD PLAN M-20.10-04
- (4) CONSTRUCT WHITE WIDE LANE LINE PER WSDOT STD PLAN M-20.10-04
- 5) CONSTRUCT BEAM GUARDRAIL TYPE 31 PER WSDOT STD. PLAN C-20.10-09
- 6 CONSTRUCT TYPE 21 GUARDRAIL TRANSITION WITH TYPE D CONNECTORS PER WSDOT STD PLAN C-25.20-07 AND C-24.10-05
- (7) CONSTRUCT NON-FLARED TERMINAL PER WSDOT STD PLAN C-22.40-11
- (8) CONSTRUCT QUADGUARDS ELITE (8-BAY) 24" IMPACT ATTENUATOR
- 9 CONSTRUCT WIRE FENCE TYPE 2 PER WSDOT STD PLAN L-10.10-02
- (10) RELOCATE SALVAGED MILE MARKER SIGN, INSTALL ON NEW 2"x2" STEEL POST PER WSDOT STD. PLAN G-10.10-00
- (11) CONSTRUCT TYPE 2SL TRAFFC ARROW PER WSDOT STD. PLAN M-24.40-02

GENERAL NOTES:

- SEE SHEET RD-01 FOR SUPERELEVATION DIAGRAM
 SEE SHEET WA-01 FOR WATERLINE DESIGN



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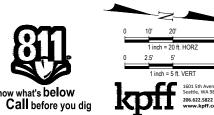
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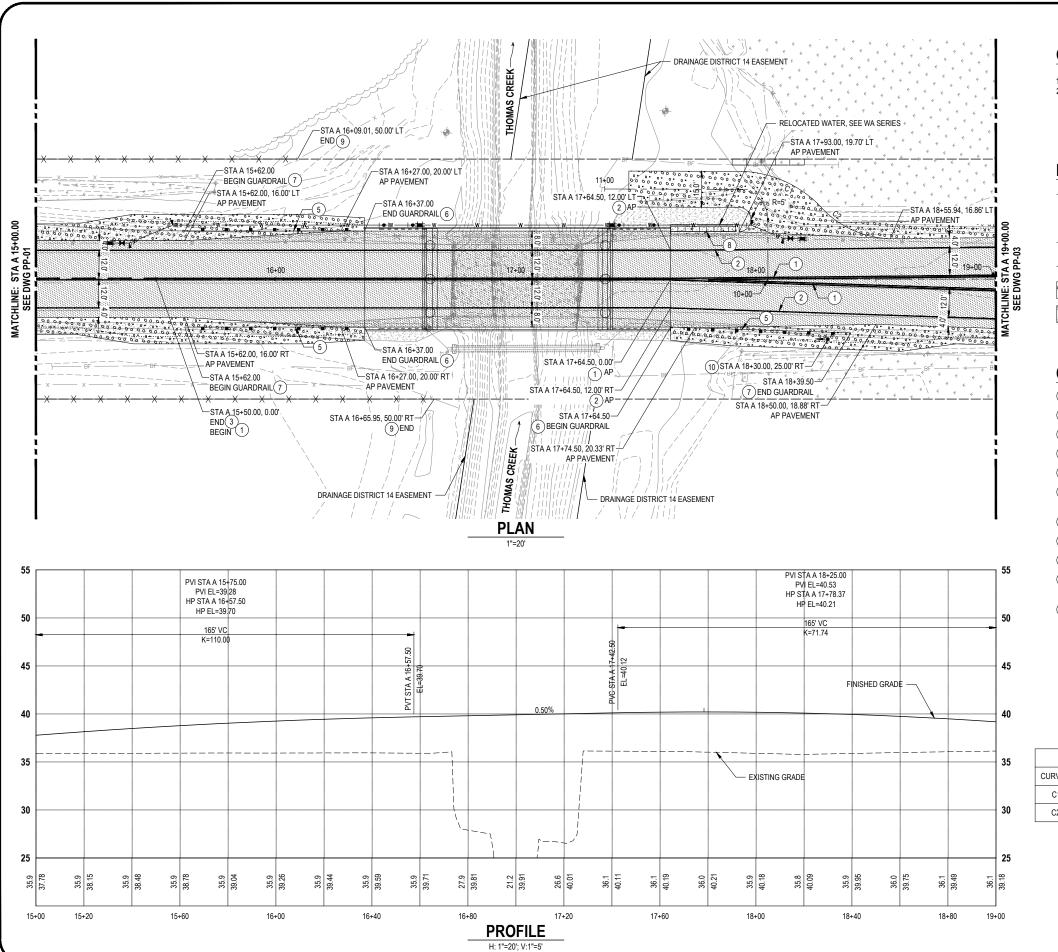


PROJECT NO.: ES40113-2	
FED. AID NO.: BRS-M291(010)	010)
DESIGNED BY: JRG	DRAWN BY: TLC
CHECKED BY: JRG	APPROVED BY: PDS
PROJECT LO	PROJECT LOCATED NEAR:
ALLEI	ALLEN, WA
F 010	

THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

ROADWAY PLAN AND PROFILE - PP01 1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY SHEET





- 1. SEE SHEET RD-01 FOR SUPERELEVATION DIAGRAM
- SEE SHEET WA-01 FOR WATERLINE DESIGN

LEGEND: GUARDRAIL IMPACT ATTENUATOR — WIRE FENCE TYPE 2 PROPOSED WATERLINE ASPHALT PAVEMENT PROPOSED SIGN

CONSTRUCTION NOTES:

- 1) CONSTRUCT YELLOW DOUBLE CENTERLINE PER WSDOT STD. PLAN M-20
- (2) CONSTRUCT WHITE PLASTIC EDGE LINE PER WSDOT STD. PLAN M-20.10-
- (3) CONSTRUCT YELLOW NO-PASS LINE PER WSDOT STD PLAN M-20.10-04
- (4) CONSTRUCT WHITE WIDE LANE LINE PER WSDOT STD PLAN M-20.10-04
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- CONSTRUCT NON-FLARED TERMINAL PER WSDOT STD PLAN C-22.40-11
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- 9) CONSTRUCT WIRE FENCE TYPE 2 PER WSDOT STD PLAN L-10.10-02
- (10) RELOCATE SALVAGED MILE MARKER SIGN, INSTALL ON NEW 2"x2" STEEL POST PER WSDOT STD. PLAN G-10.10-00
- (11) CONSTRUCT TYPE 2SL TRAFFC ARROW PER WSDOT STD. PLAN M-24.40-02

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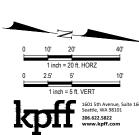
COUNTY: WORKS
ENTAL PLACE
NON, WA 98273-562
OF FAX (360) 336 947

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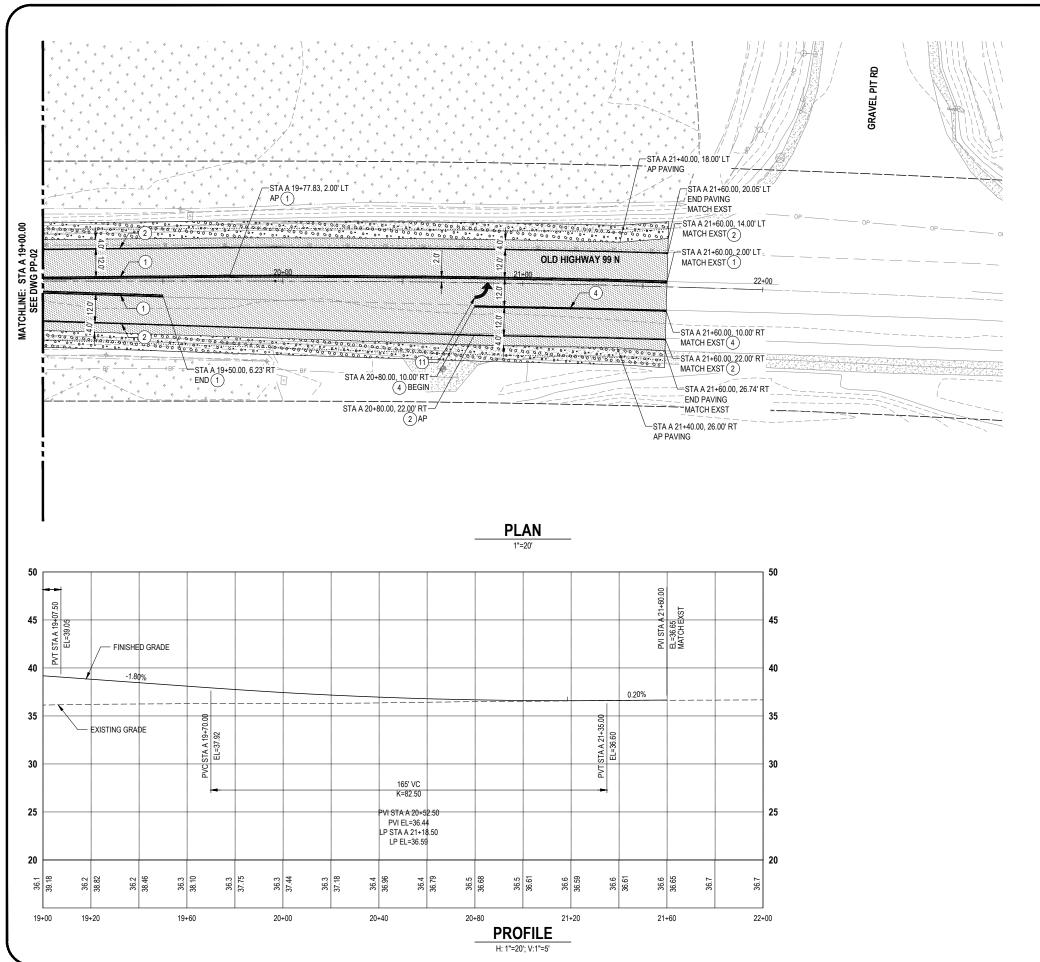
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CURVE#	LENGTH	RADIUS	DELTA	PC STATION	PT STATION
C1	39.30'	48.13'	46.7793	STA B 10+44.63, 7.50' RT	STA B 10+26.58, 22.76' RT
C2	31.04'	40.00'	44.4627	STA B 10+26.58, 22.76' RT	STA B 10+16.90, 49.91' RT





	THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)	ROADWAY PLAN AND PROFILE - PP02
	1 INCH SCA ADJUST SCALE A	
0	SHEE 17 OF	42



- SEE SHEET RD-01 FOR SUPERELEVATION DIAGRAM
 SEE SHEET WA-01 FOR WATERLINE DESIGN

LEGEND: GUARDRAIL IMPACT ATTENUATOR — WIRE FENCE TYPE 2 PROPOSED WATERLINE ASPHALT PAVEMENT PROPOSED SIGN

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PROJECT NO.: ES40113-2 PROJECT NO.: BRS-M291(010) PROJECT NO.: BRS-M291(010) DESIGNED BY: JRG DRAWN BY: TLC APPROVED BY: PDS CHECKED BY: JRG APPROVED BY: PDS PROJECT LOCATED NEAR: ALLEN: WA SEC. 18, T. 3SN, R. 4E, WM NO.		SKAGII COUNIY	SKACKAO VOCKAO	1800 CONTINENTAL PLACE	MOUNI VERNON, WA 982/3-350	DATE (360) 330-8
O(10) DRAWN BY: TLC APPROVED BY: PDS CATED NEAR: A; WA NO. 8. 4E, WM						REVISIONS
010) DRAWN BY: TLC APPROVED BY: PDS CATED NEAR: I, WA N, R, 4E, WM	Separate Separate	Color Massillian	SUBSTAN	A South State of the State of t	Section 18 and 1	NO.
W C C C C C C C C C	PROJECT NO.: ES40113-2	FED. AID NO.: BRS-MZ91(010) DESIGNED BY: JRG DRAWN BY: TLC	APPROVED BY: PDS	PROJECT LOCATED NEAR:	AW N	SEC. 18, T. 35N, R. 4E, WM

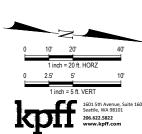
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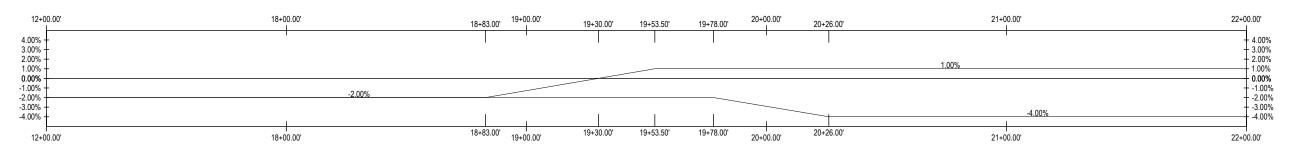
ROADWAY PLAN AND PROFILE - PP.

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

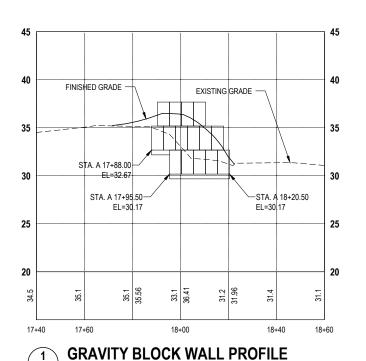
SHEET



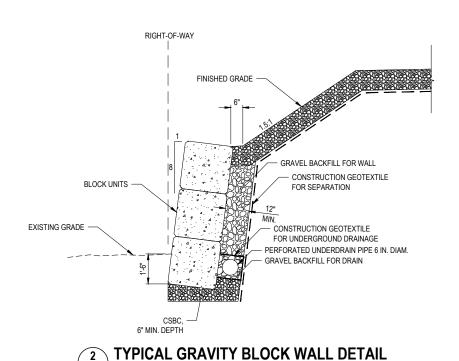


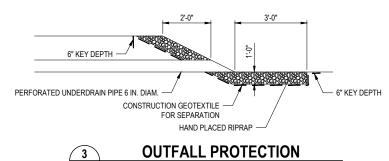


ALIGNMENT A - SUPERELEVATION



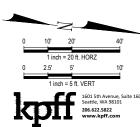
H: 1"=20'; V:1"=5'

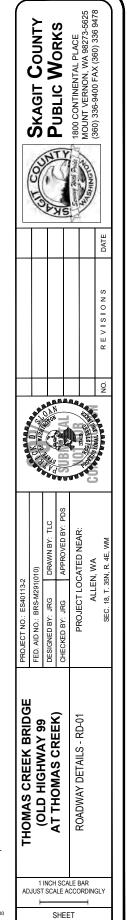


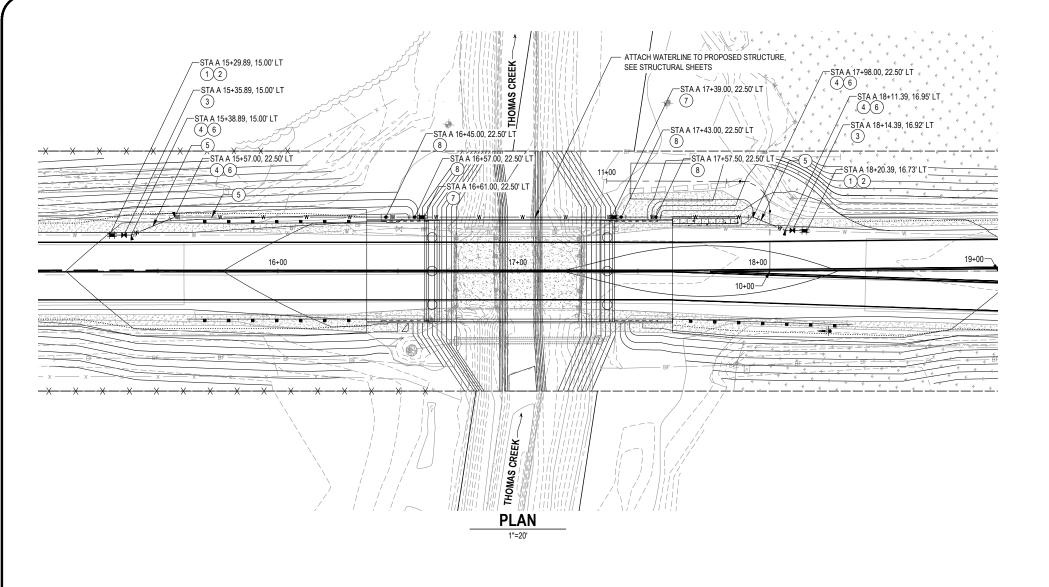












 CONTRACTOR SHALL PROCURE ALL WATERLINE MATERIALS
 NECESSARY TO PERFORM THE WORK SHOWN ON THESE PLANS.
 SKAGIT COUNTY PUD WILL PERFORM THE TAP. CONTRACTOR WILL INSTALL ALL OTHER ITEMS.

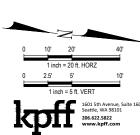
LEGEND:

PROPOSED WATERLINE

CONSTRUCTION NOTES:

- (1) CONNECT TO EXISTING WATERLINE, SEE GENERAL NOTE 1
- 2 PROCURE 12" COUPLING, TO BE INSTALLED BY OWNER
- (3) PROCURE 12" GATE VALVE (RJ), TO BE INSTALLED BY OWNER
- (4) CONSTRUCT 12" 45° HORIZONTAL BEND (RJ)
- 5 CONSTRUCT 12" DUCTILE IRON WATER PIPE
- (6) CONSTRUCT THRUST BLOCK PER SKAGIT COUNTY PUD STANDARD WT-1
- 7) CONSTRUCT 12" FLEXIBLE COUPLING
- 8 CONSTRUCT 22.5° VERTICAL BEND (RJ)





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THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK) WATERLINE PLAN AND PROFILE - WA-01 1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET

GENERAL STRUCTURES NOTES

- . ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION", DATED 2025, AND PROJECT SPECIAL PROVISIONS.
- 2. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS NINTH EDITION DATED 2020 INCLUDING 2021 ERRATA.
- 3. SEISMIC DESIGN OF THE STRUCTURE HAS BEEN COMPLETED USING:

 $\begin{array}{lll} PGA & = 0.417 \\ A_S & = 0.413 \\ S_{DS} & = 0.956 \\ S_{DI} & = 0.3 - 0.5 \\ SITE CLASS & = D/E \end{array}$

4. DESIGN LOADS: <u>DEAD LOAD:</u>

CONCRETE – 155 PCF

SUPERIMPOSED DEAD LOAD FOR ASPHALT OVERLAY - 140 PCF

LIVE LOAD:

VEHICLE – AASHTO HL93 W/IMPACT

SURCHARGE - 250 PSF

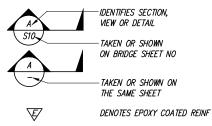
EARTH PRESSURE:

LATERAL - 55 PCF EQUIVALENT ACTIVE FLUID PRESSURE

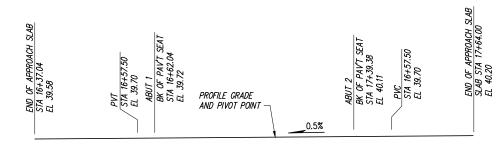
- 55 PCF EQUIVALENT SEISMIC ACTIVE FLUID PRESSURE

- 5. UNLESS OTHERWISE SHOWN IN THE PLANS, THE CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING STEEL SHALL BE 3 INCHES WHEN CAST AGAINST THE GROUND AND 1.5 INCHES AT ALL OTHER LOCATIONS.
- 6. DECK CONCRETE SHALL BE CLASS 4000D, APPROACH SLAB CONCRETE SHALL BE 4000A, SHAFT CONCRETE SHALL BE 4000P, ALL OTHER CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000, UNO.
- 7. REINFORCING STEEL SHALL BE ASTM A706, GRADE 60.
- 8. ALL EXTERIOR CONCRETE CORNERS AND EDGES SHALL HAVE A 3/4" CHAMFER AND ALL INTERIOR CONCRETE CORNERS SHALL HAVE A 3/4" FILLET UNO.
- 9. ALL EXISTING DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO WORK. CONTRACTOR SHALL CONTACT PROJECT ENGINEER WITH ANY DISCREPANCIES.
- 10. THE GEOTECHNICAL INFORMATION PROVIDED BY HWA AS PART OF THEIR 09/09/2024 GEOTECHNICAL REPORT WAS USED FOR DESIGN.
- 11. THE HYDRAULIC INFORMATION PROVIDED BY NHC AS PART OF THEIR 8/16/2024 H&H MEMO, WAS USED FOR DESIGN.

LEGEND



BB−2 BORING BY GEOENGINEERS



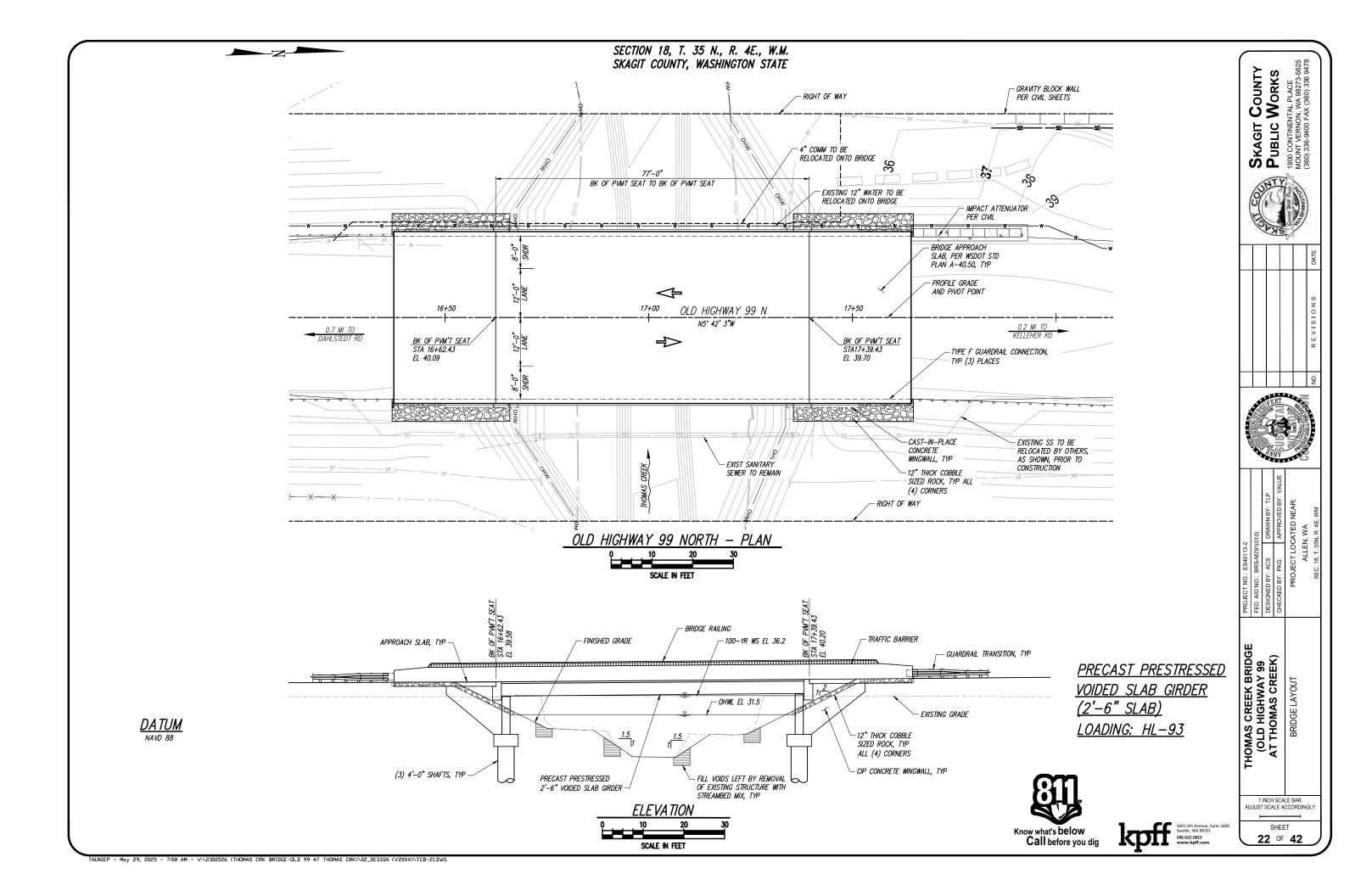
OLD HIGHWAY 99 N PROFILE GRADE

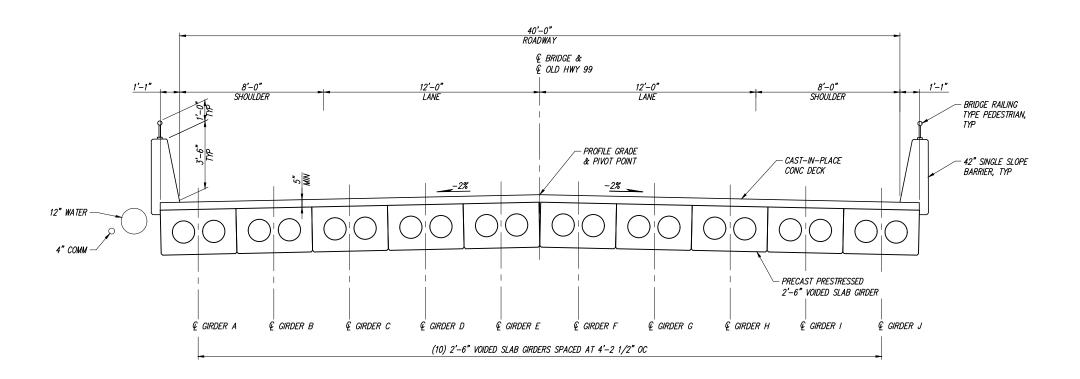






SHEET



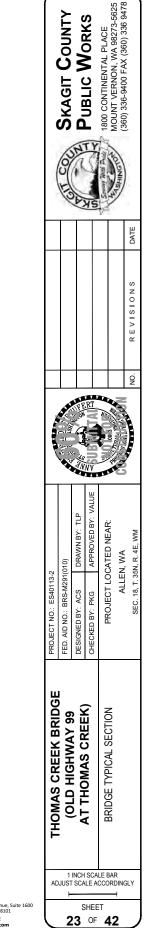


TYPICAL SECTION

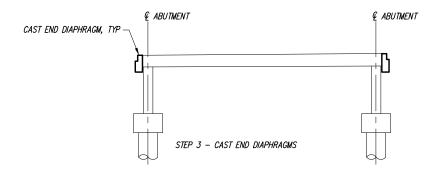
SCALE: 3/8" = 1'-0"



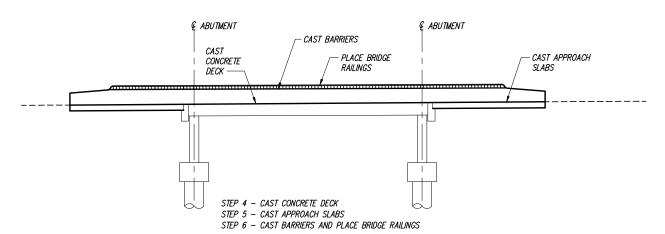




CUT TEMPORARY STRANDS (SEE "TEMPORARY STRAND CUTTING SEQUENCE" THIS SHEET) **€** ABUTMENT *Q* ABUTMENT



STEP 1 - SET GIRDERS IN PLACE STEP 2 - CUT TEMPORARY STANDS



SUGGESTED SUPERSTRUCTURE CONSTRUCTION SEQUENCE





TEMPORARY STRAND CUTTING SEQUENCE

- 1. ERECT AND BRACE GIRDERS.
- 2. JUST PRIOR TO CUTTING THE TEMPORARY STRANDS, REMOVE EXPANDED POLYSTYRENE IN BLOCKOUTS IN TOP FLANGE OF GIRDERS. ONCE THE EXPANDED POLYSTYRENE HAS BEEN REMOVED FROM THE STRAND DETENSIONING BLOCKOUT, PREVENT MOISTURE FROM ENTERING THE BLOCKOUT UNTIL THE TEMPORARY TOP STRAND IS CUT AND THE BLOCKOUT FILLED WITH GROUT.
- 3. CUT STRANDS IN BLOCKOUTS. STRANDS MAY BE CUT BY USING A CUTTING TORCH AND MOVING THE FLAME BACK AND FORTH OVER THE LENGTH OF EXPOSED STRAND TO LET INDIVIDUAL WRES BREAK ONE AT A TIME TO LESSEN THE SHOCK TO THE GIRDER STRANDS SHALL BE RELEASED IN A SYMMETRICAL MANNER ABOUT THE GIRDER CENTERLINE STARTING WITH THOSE FURTHEST FROM THE CENTERLINE AND WORKING INWARDS. FOR POST-TENSIONED TEMPORARY TOP STRANDS, ACTIVELY RESTRAIN THE STRAND CHUCKS AT THE GIRDER ENDS
- 4. WITHIN 24 HOURS OF CUTTING THE TEMPORARY STRANDS, FILL THE BLOCKOUTS WITH A GROUT CONFORMING TO STD. SPEC. 9-20.3(2). REMOVE ALL MOISTURE IN BLOCKOUTS PRIOR TO FILLING THEM WITH GROUT.



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			DATE	
			REVISIONS	
			NO.	

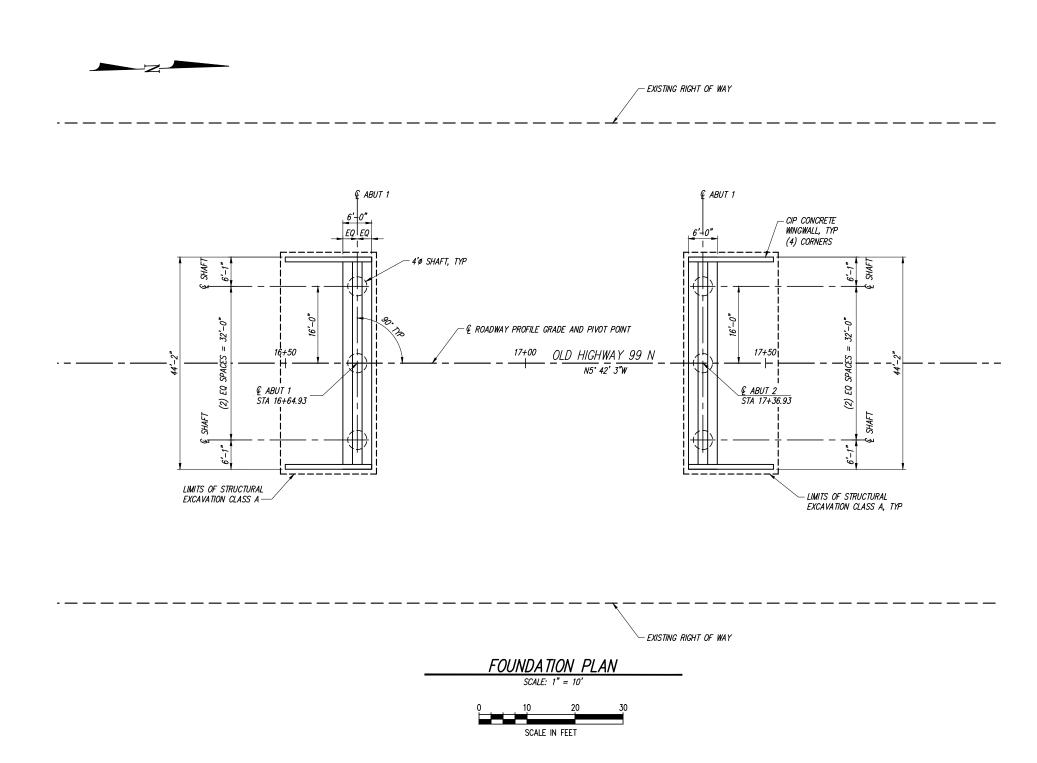


ROJECT NO.: ES40113-2	
ED. AID NO.: BRS-M291(010)	010)
JESIGNED BY: ACS	DRAWN BY: TLP
:НЕСКЕD ВҮ: РКG	APPROVED BY: AMFS
PROJECT LOG	PROJECT LOCATED NEAR:
ALLEI	ALLEN, WA
MW 11 0 135 F 01 010	70 40 3004

표 | 표 | 표 | 후 | SUGGESTED CONSTRUCTION SEQUENCE THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK)

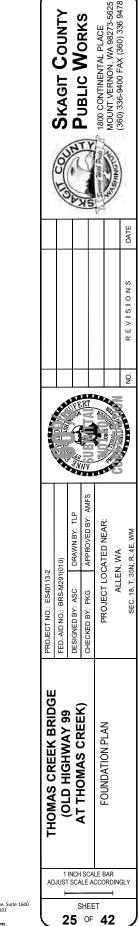
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

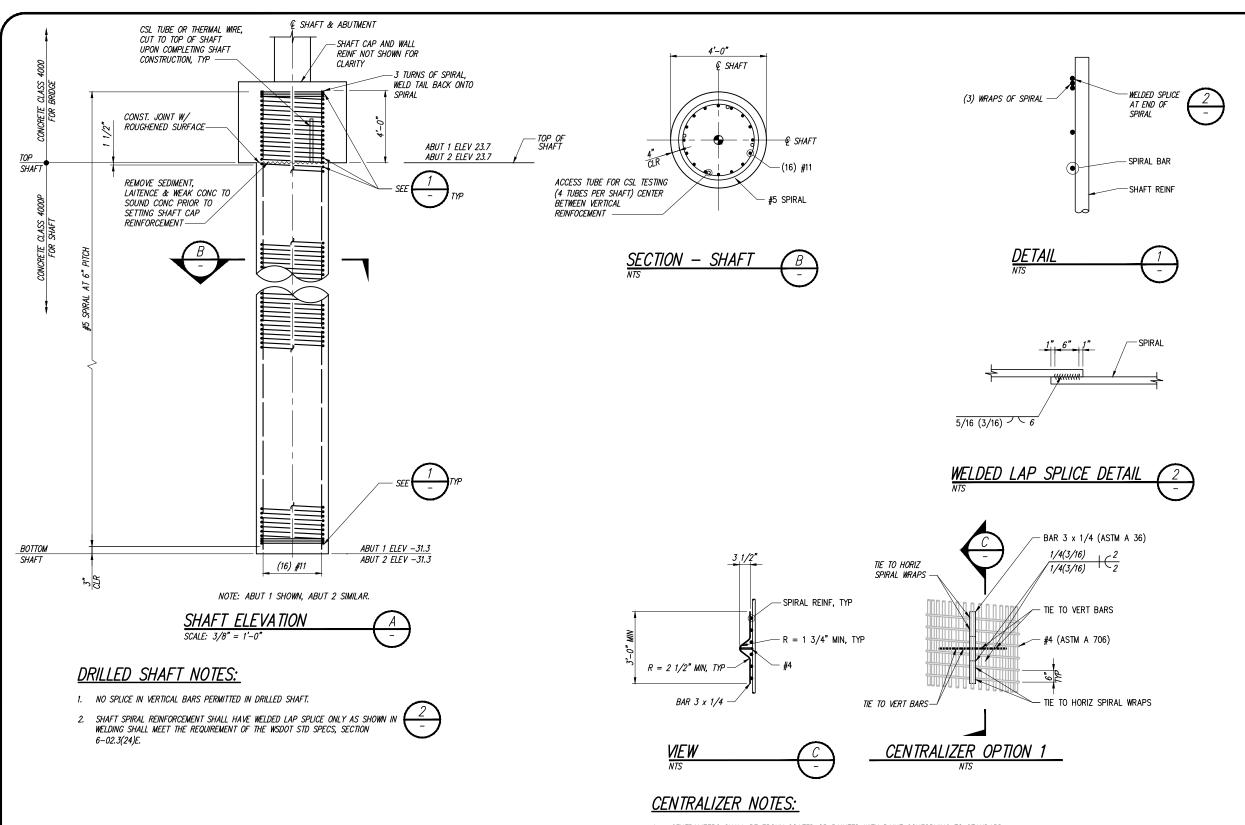
SHEET **24** OF **42**







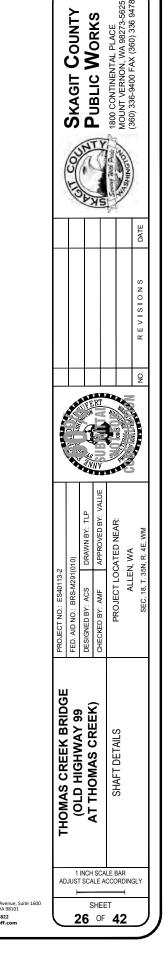


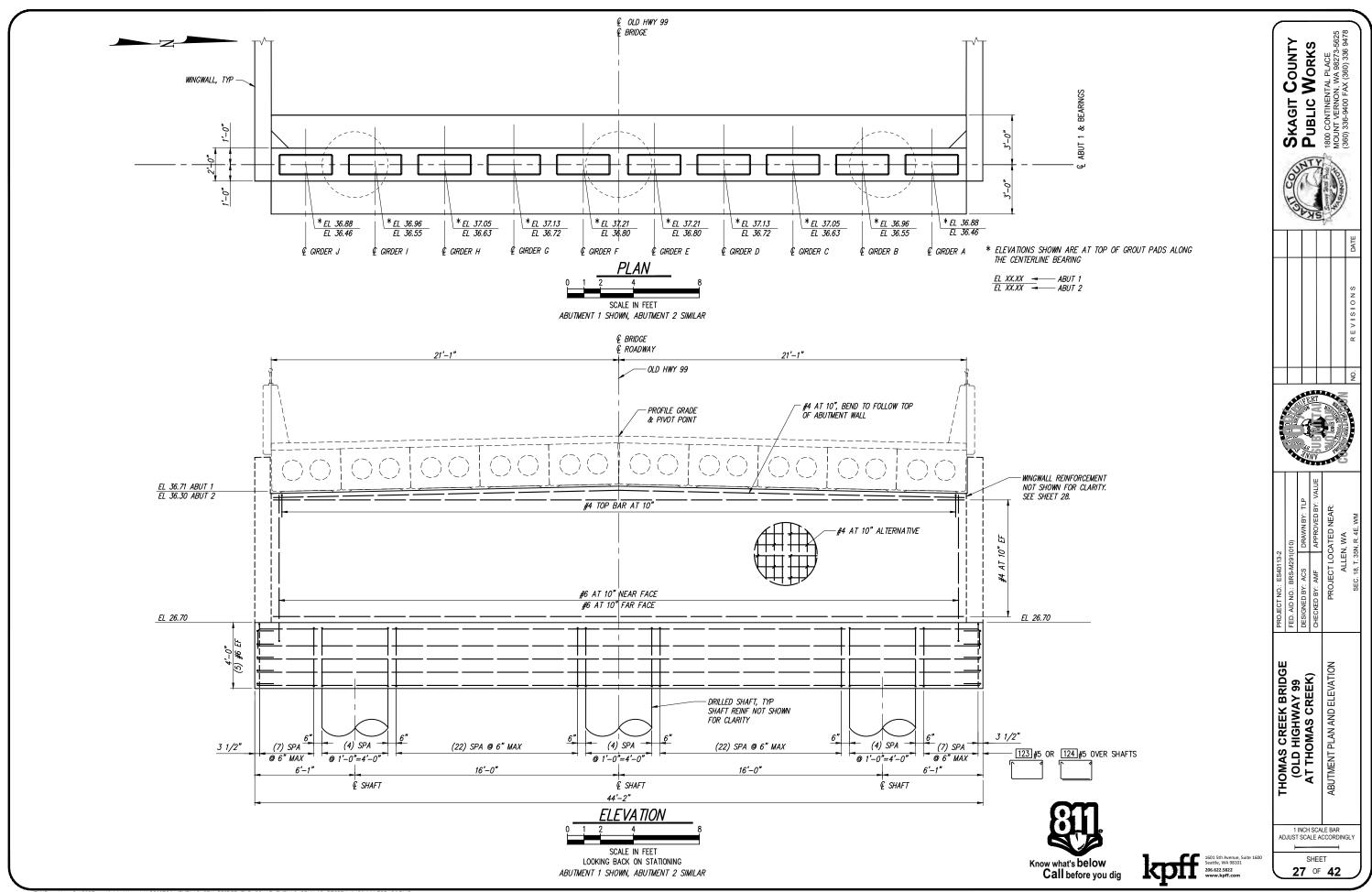


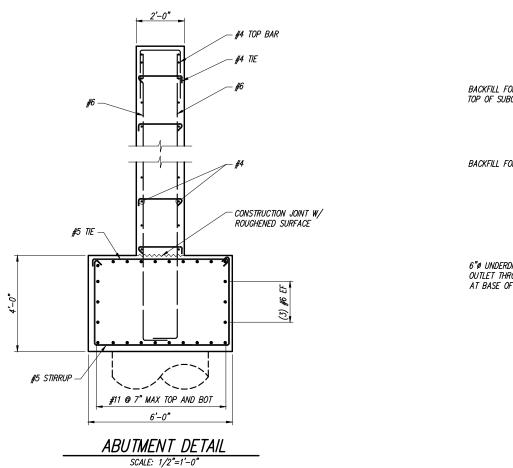
- 1. CENTRALIZERS SHALL BE EPOXY COATED OR PAINTED WITH PAINT CONFORMING TO STANDARD SPECIFICATION 9-08.1(2)c OR 9-08.1(2)f AFTER FABRICATION.
- 2. EACH LEG SHALL BE TIED TO TWO (2) VERTICAL BAR AND TWO (2) SPIRAL WRAPS OR TWO (2) HOOPS.
- 3. CAGECASER® REBAR CAGE SPACERS BY FOUNDATION TECHNOLOGIES MAY BE USED IN LIEU OF DETAIL SHOWN. SPACING REQUIREMENTS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. EACH LEG SHALL BE TIED TO A MINIMUM OF TWO (2) SPIRAL WRAPS OR HOOPS.



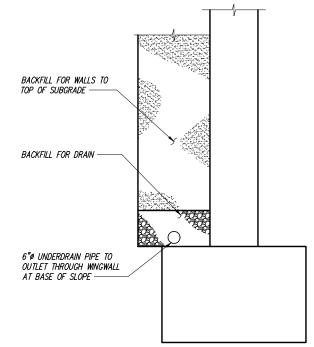






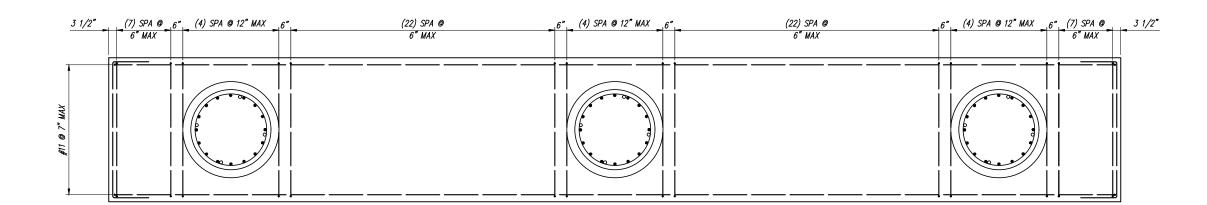


SHAFT REINFORCEMENT NOT SHOWN FOR CLARITY



DRAINAGE DETAIL

SCALE: 1/2"=1'-0"



CAP BEAM REINFORCEMENT — PLAN

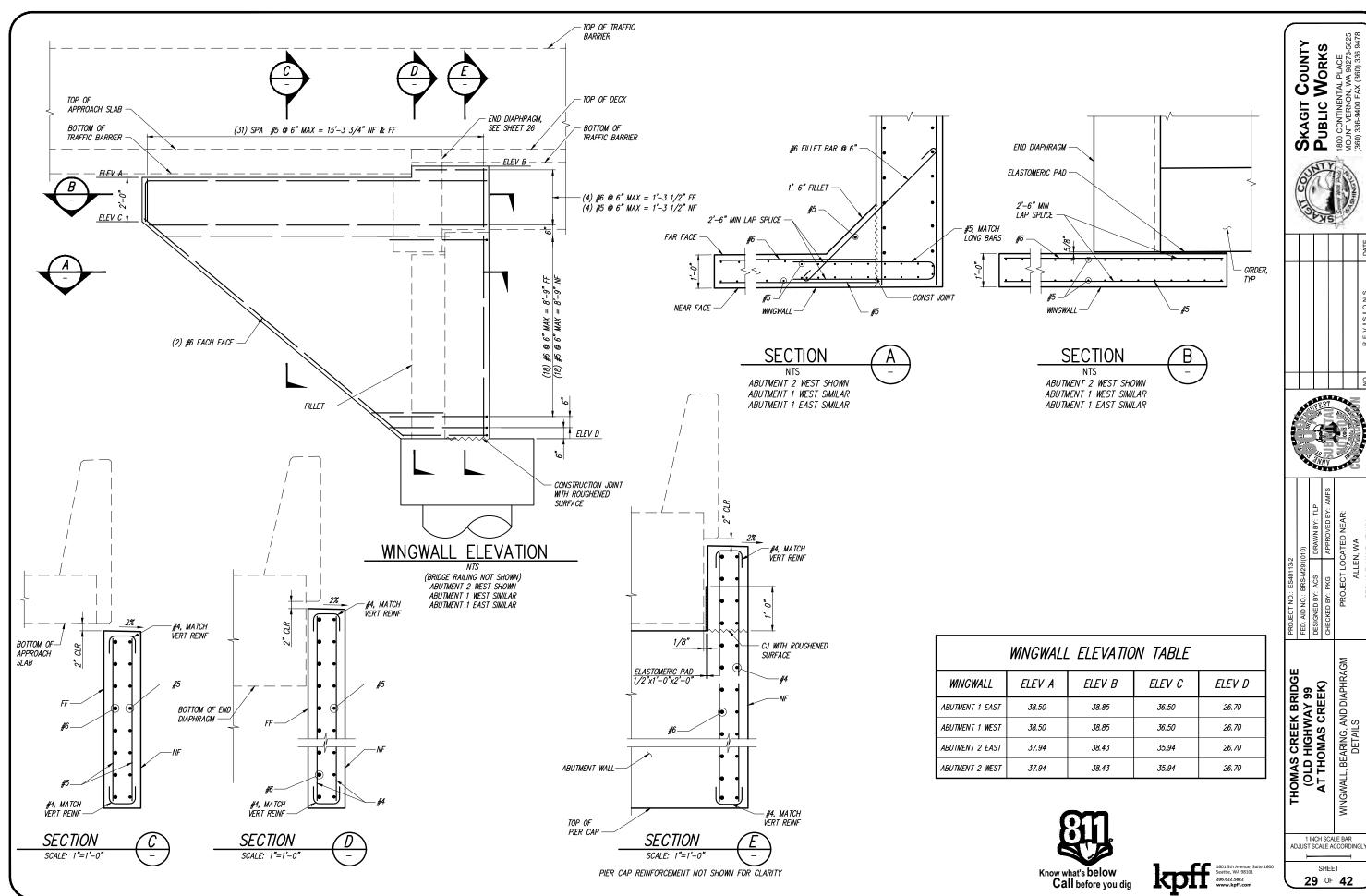
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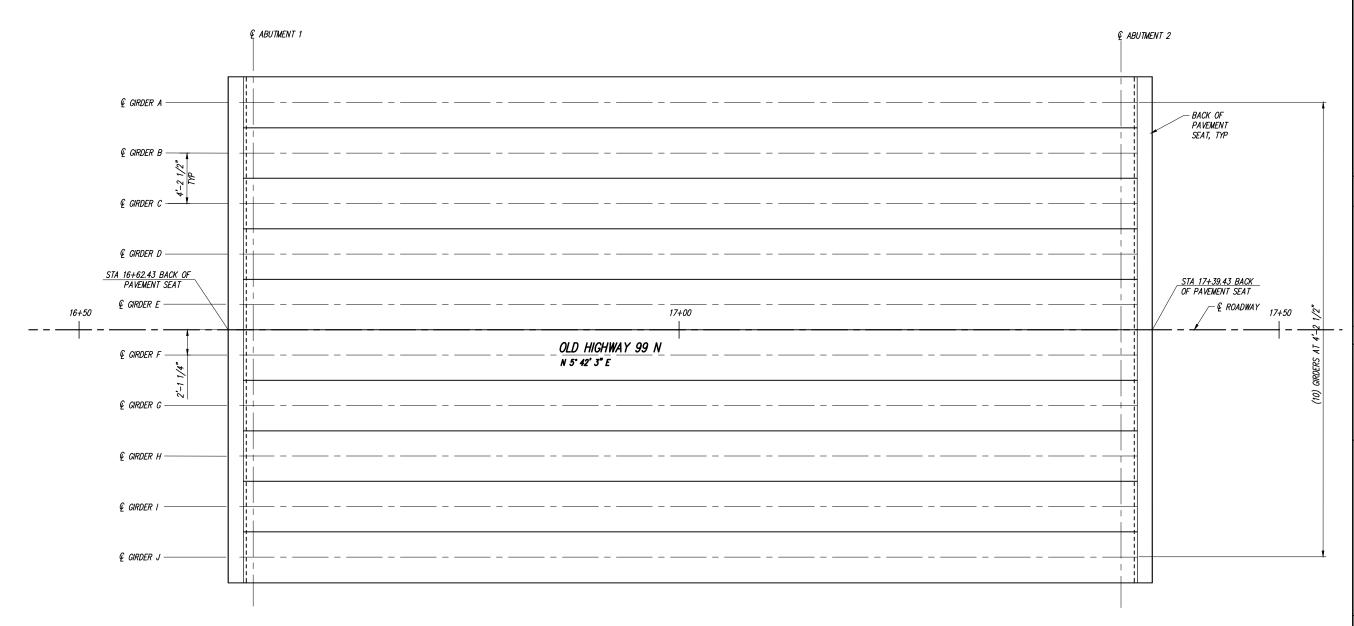




SHEET **28** OF **42**



MINGWALL, BEARING, AND DIAPHRAGM DETAILS



FRAMING PLAN

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





THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK) FRAMING PLAN 1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY SHEET 30 OF 42

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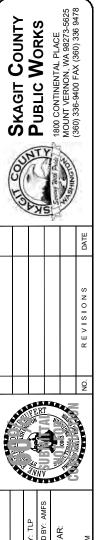
	GIRDER SCHEDULE																																					
GIRDER TYPE	GIRDER HEIGHT	GIRDER WIDTH	PLAN LENGTH	VO	IDS	GIRDI	PER END	DETAILS	MIN CO COMP S	ONCRETE TRENGTH	PRES		G STRANDS (OTES 2 – 4)		7		VEF	SPAN RTICAL		775	PANSVER	RSE REINI	IFORCEM	ENT								TUDINAL PRCEMENT	-		SHI	IPPING AN	D HANDLING DETA	ILS
(SEE TABLE)	Н	w	(ALONG GIRDER				6	$\theta_1 \theta_2$	G			ROW	1	TOP RO	W Gu	IBER C	DEFL	ECTION D	ZO	DNE 1		ZONE 2	2	ZONI	3	ZONE	· 4		ZONE 5	[G1	G2	2 1	L L	.1	L ₂	Kθ	W _{CC}
			GRADE) (SEE GIRDER NOTE 1)	NUMBER	DIAMETER	END 1 TYPE	END 2 TYPE		@ 28-DAYS F'((KSI)	@ RELEASE F'C (KSI)	PERMANENT STRANDS	EXTENDED NUMBER AND LENGTH	DEBONDED NUMBER AND LENGTH	PERMANENT STRANDS TEMPORARY	STRANDS "A" DIMENSION AT BEARINGS	DECK SCREED CAM	LOWER BOUND @ 40 DAYS	UPPER BOUND @ 120 DAYS	BAR SIZE	SPACING	BAR SIZE	SPACING	ТЕМСІН	BAR SIZE	LENGTH	BAR SIZE	LENGTH	BAR SIZE	SPACING	LENGTH BAR SITE	NO. OF BARS	BAR SIZE	NO. OF BARS				MINIMUM SHIPPING SUPPORT ROTATIONAL SPRING CONSTANT (kip-in/rad)	MINIMUM SHIPPING SUPPORT CNTR—TO—CNTR WHEEL SPACING
1	2'-6"	4'-2 5/8"	76'-9"	2	18"	A	A 9	90	10.0	7.0	30	-	2 @ 6' 1 @ 9'	2 4	6 1/2	" 1/2"	3/4"	1 5/8"	5 1	1/2" 0.12	25' 5	3"	1'	5 5	5'	5 6	<i>"</i> 6'	4	g" TO	O MID SPAN 6	12	_	- 3'-	-0" 2'-	-6"	2'-6"	80,000	8'-0"

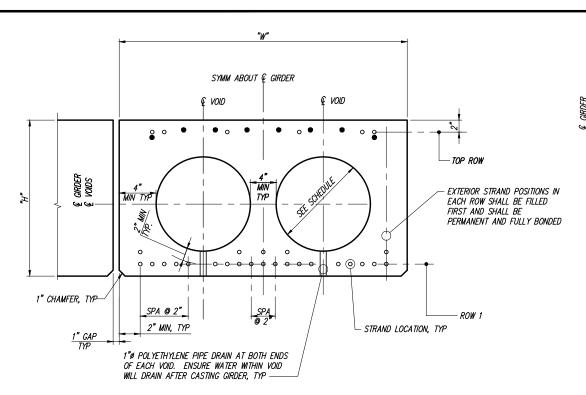
GIRDER NOTES:

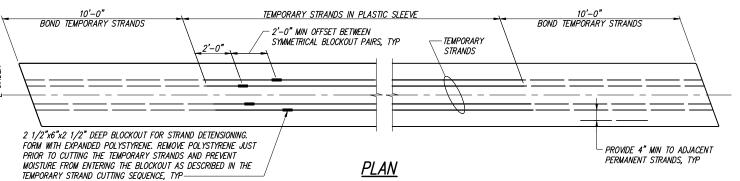
- 1. PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
- ALL STRANDS SHALL BE 0.6"Ø AASHTO M203 GRADE 270 LOW RELAXATION STRANDS, JACKED TO 202.5
 KSI. STRANDS SHALL BE SYMMETRICAL ABOUT THE GIRDER CENTERLINE. EXTERIOR STRANDS IN EACH
 ROW SHALL BE FULLY BONDED.
- 3. SPACE EXTENDED STRANDS SYMMETRICALLY AND EVENLY ACROSS GIRDER WIDTH.
- 4. DEBONDED STRANDS SHALL BE DEBONDED AT EACH GIRDER END FOR THE INDICATED LENGTH PARALLEL TO THE GIRDER CENTERLINE. DEBONDED STRANDS SHALL NOT BE EXTENDED PAST GIRDER ENDS. DEBONDED STRANDS SHALL BE SYMMETRICALLY PLACED ABOUT THE GIRDER CENTERLINE. DEBONDED LENGTHS OF PAIRS OF STRANDS THAT ARE SYMMETRICALLY POSITIONED ABOUT THE GIRDER CENTERLINE SHALL BE EQUAL.









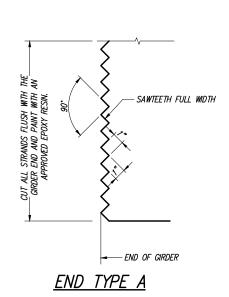


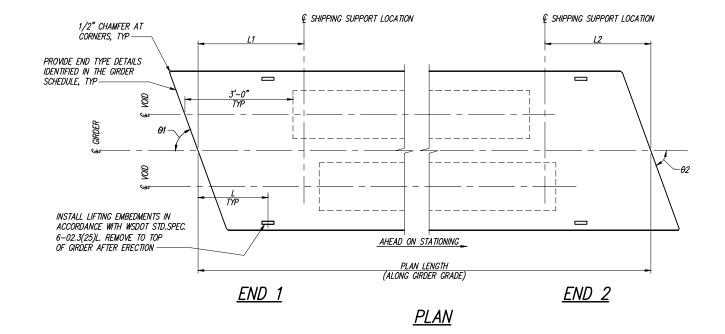
TEMPORARY STRANDS

GIRDER NOTES:

- 1. SEE GIRDER SCHEDULE FOR REQUIRED NUMBER OF TEMPORARY STRANDS. TEMPORARY STRANDS SHALL BE PLACED IN THE TOP ROW.
- 2. FOR GIRDERS ERECTED ON A LONGITUDINAL GRADE, STRAND DETENSIONING BLOCKOUTS SHALL BE PLACED AT THE LOW END OF THE GIRDER.
- 3. SEE "TEMPORARY STRAND CUTTING SEQUENCE" ON CONSTRUCTION SEQUENCE SHEET FOR TEMPORARY STRAND DETENSIONING PROCEDURE.

TYPICAL GIRDER SECTION







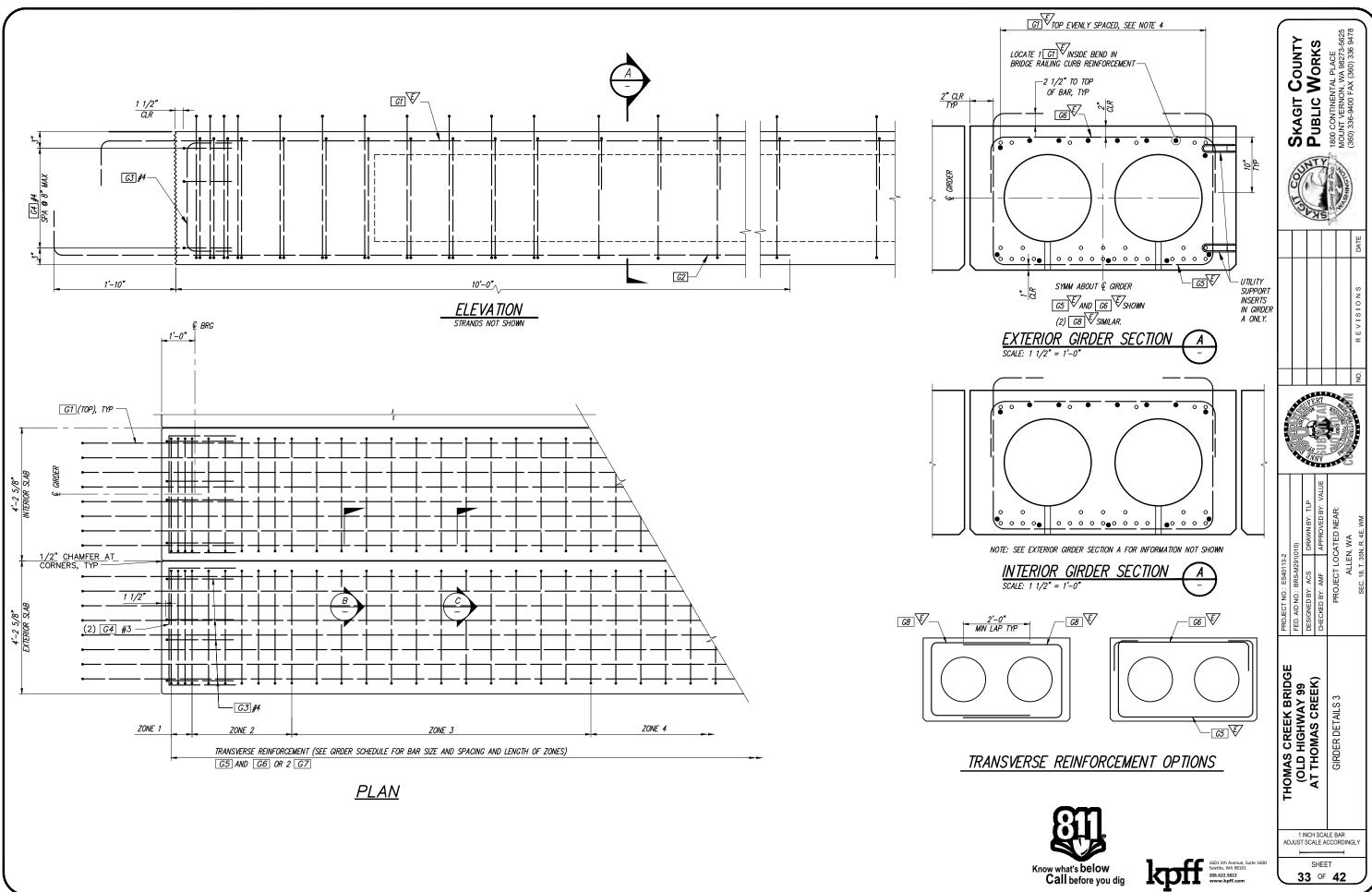


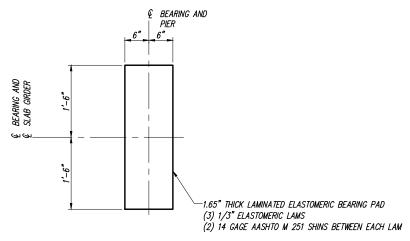
SKAGIT COUNTY
PUBLIC WORKS

1800 CONTINENTAL PLACE
MOUNT VERNON, WAS 98273-5625
(360) 336-9400 FAX (360) 336 9478 THOMAS CREEK BRIDGE (OLD HIGHWAY 99 AT THOMAS CREEK) GIRDER DETAILS 2

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

SHEET

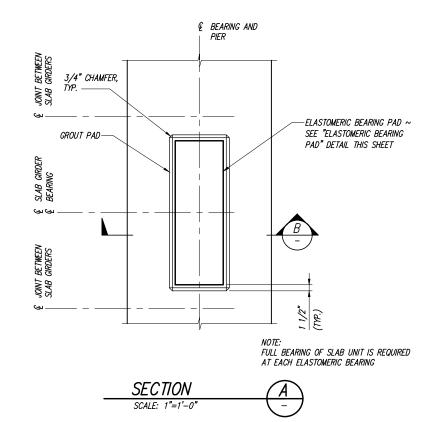


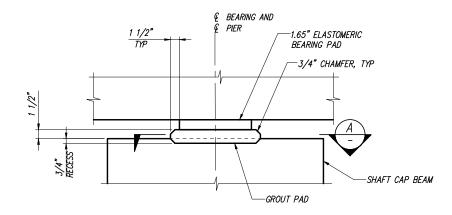


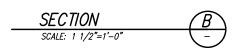
ELASTOMERIC BEARING PAD

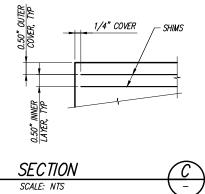
ELASTOMERIC SHEAR MODULUS = 165PSI

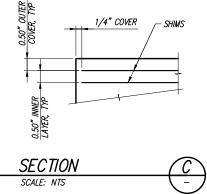
SCALE: 1"=1'-0"





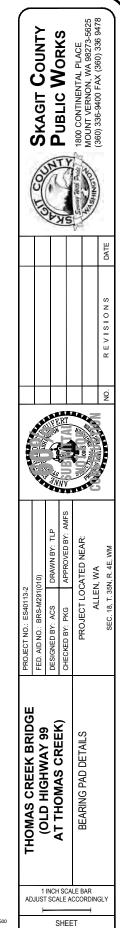


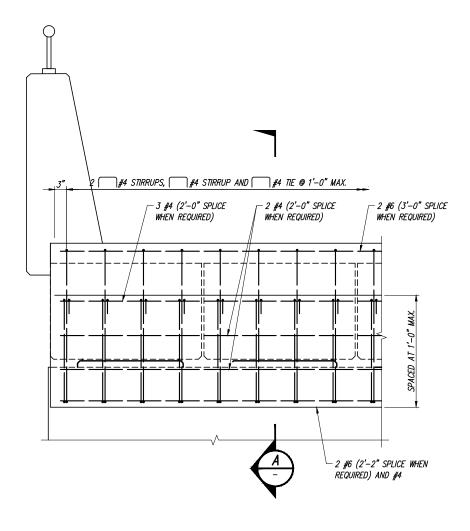






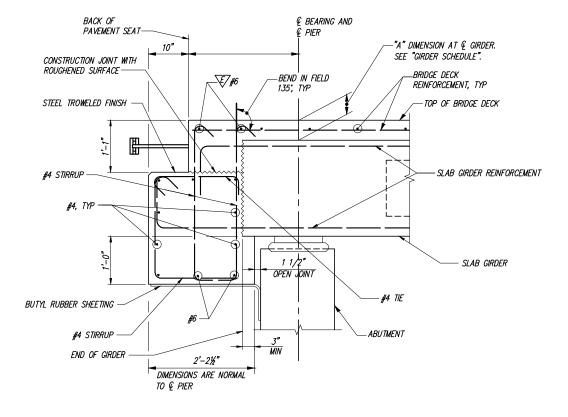






ELEVATION END DIAPHRAGM

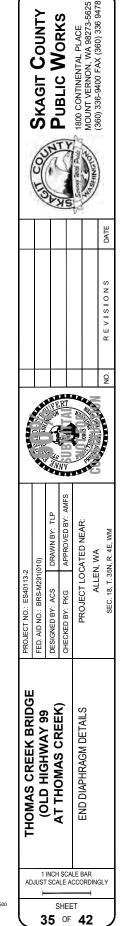
SCALE: 1" = 1'-0"
DIMENSIONS ARE PARALLEL TO © PIER

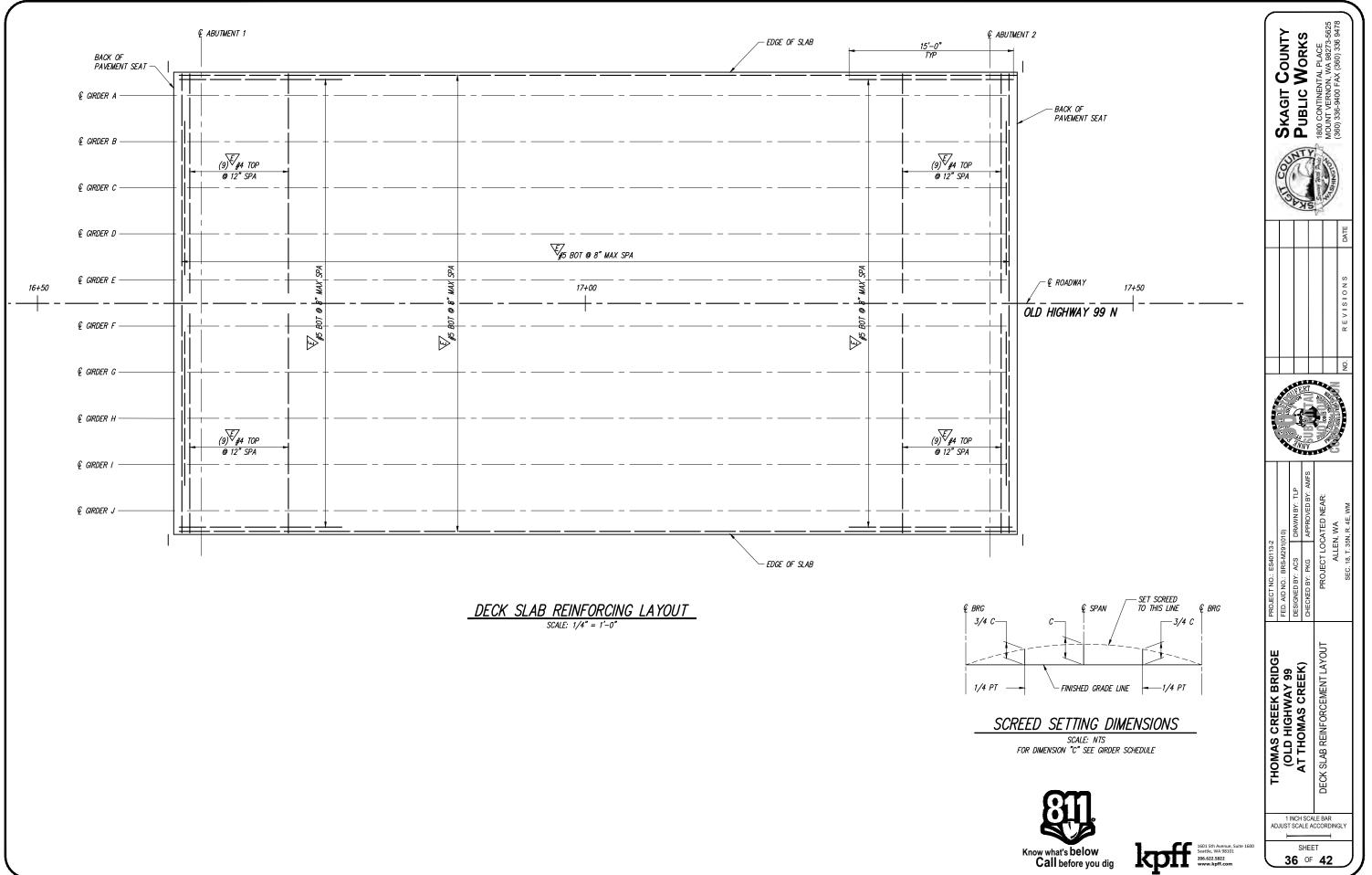


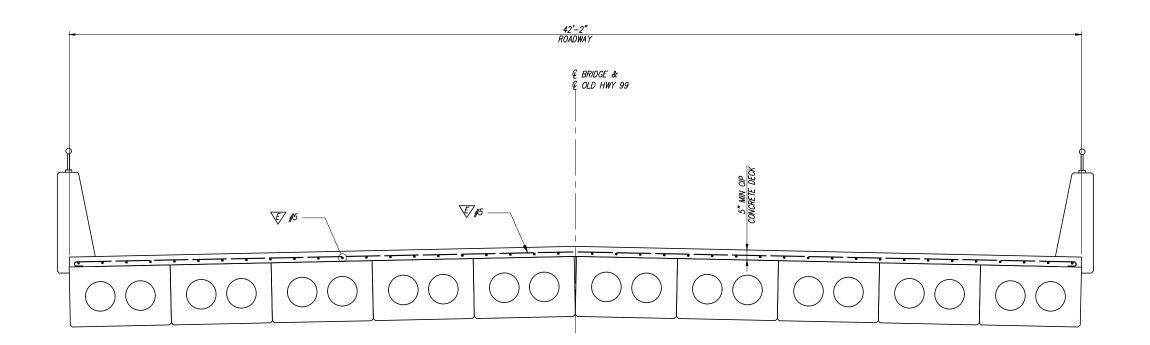
<u>SECTION</u> SCALE: 1" = 1'-0"









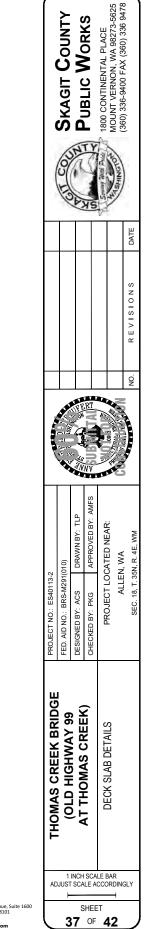


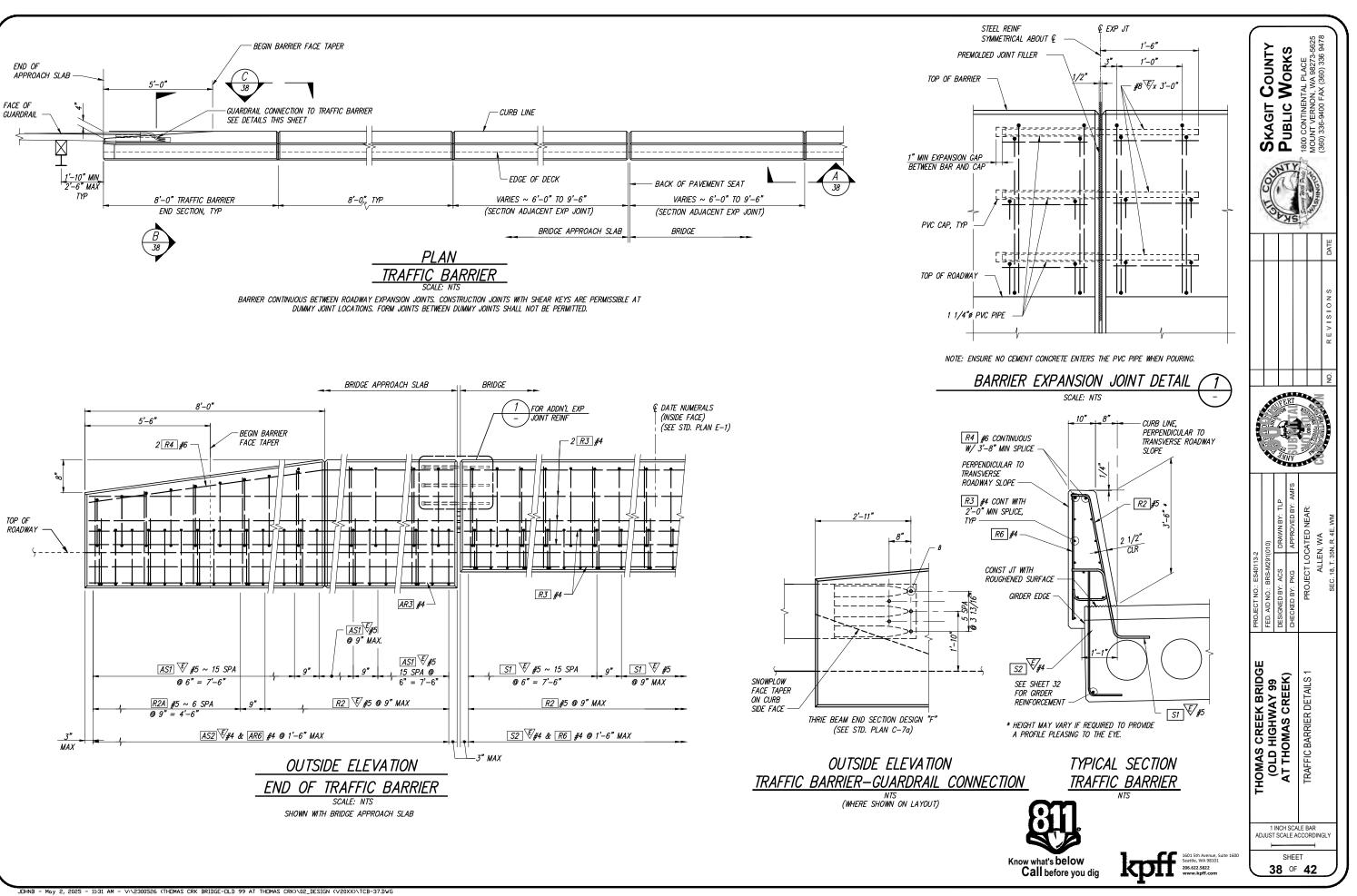
TYPICAL DECK SLAB SECTION

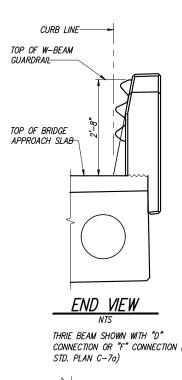
SCALE: 1/2" = 1'-0"

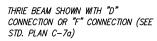


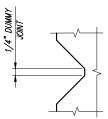












DUMMY KEY DETAIL

3 1/4"

11 1/2"

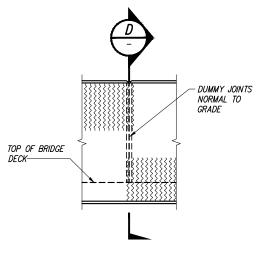
3 5/8"-

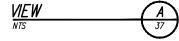
ALL DIMENSION ARE OUT TO OUT.

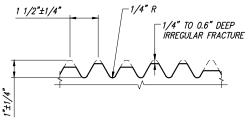
S1 FAND AS1

BRIDGE

DECK-









6 3/8"

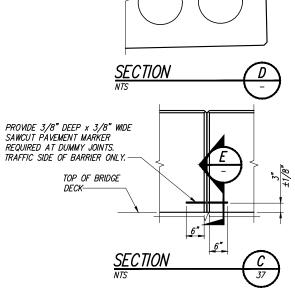
R2B

-TOP OF BRIDGE DECK

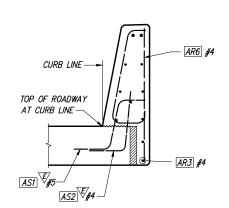
6 3/8"

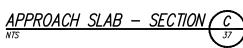
R9



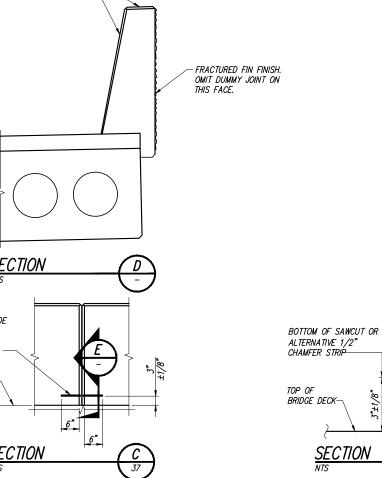


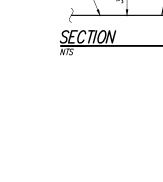
DUMMY JOINT-





FOR DETAILS NOT SHOWN SEE "OUTSIDE ELEVATION" AND "TYPICAL SECTION — TRAFFIC BARRIER"

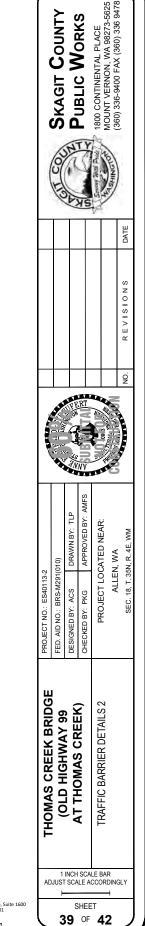








3/8"



R2

BENDING DIAGRAM

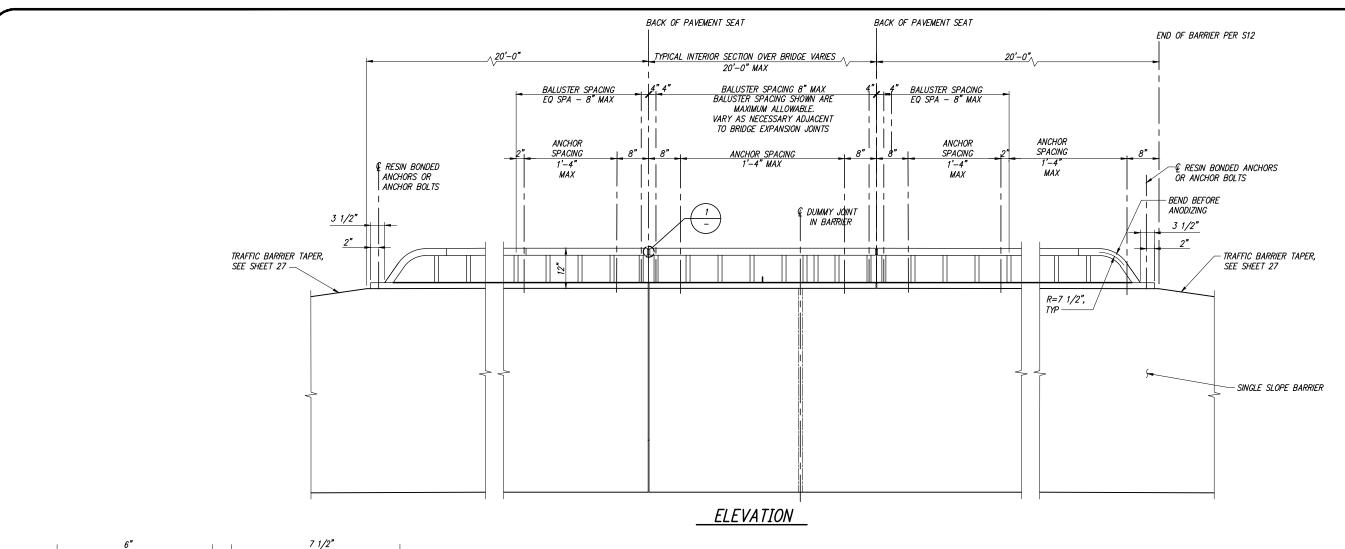
6 3/8"

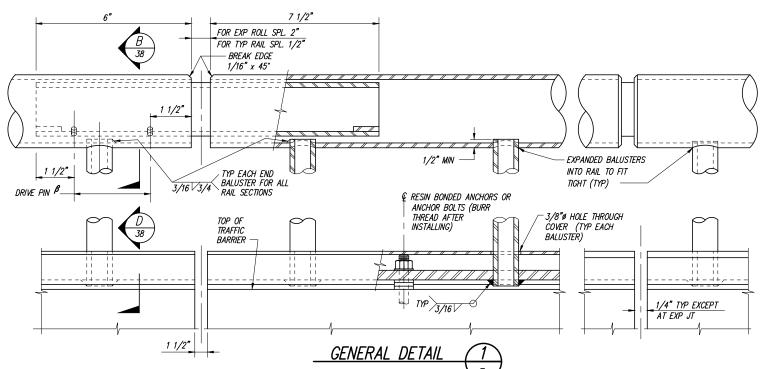
1'-0"

6 3/8"

S2 AND AS2

R2A





NOTES

α PROVIDE EXPANSION RAIL SPLICE

AT TRAFFIC BARRIER EXPANSION

NOT REQUIRED AT TRAFFIC

BARRIER DUMMY JOINTS.

₽ LOCATE ON OPPOSITE SIDE OF TRAFFIC. DRIVE PINS SHALL BE DRIVEN FLUSH

THE RAILING.

WITH THE OUTSIDE FACE OF

JOINTS. RAIL SPLICE JOINTS ARE

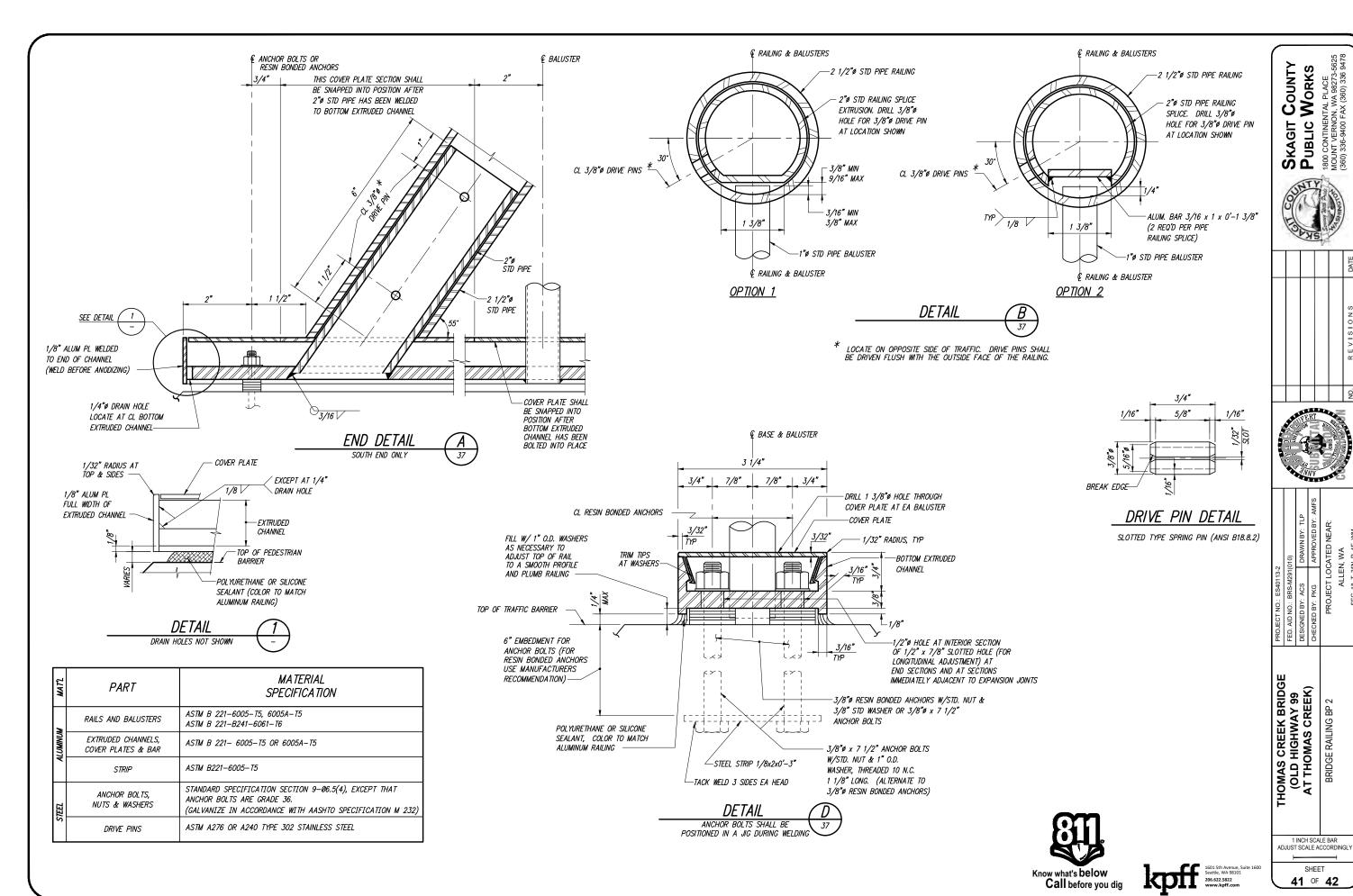
- 1. SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED FOR APPROVAL SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION AND INCLUDING AN ERECTION DIAGRAM. MATERIAL BEING USED SHALL BE SPECIFIED IN THE SHOP DRAWINGS FOR ALL COMPONENTS.
- 2. CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.
- 3. WELDING OF ALUMINUM SHALL CONFROM TO STD. SPEC. SECTION 9-28.14(3).
- 4. ALL ALUMINUM PARTS SHALL BE GIVEN A BLACK ANODIC COATING OF AT LEAST 0.0006 INCHES THICK, AND SEALED TO MEET THE REQUIREMENTS OF ASTM B580 WITH A UNIFORM FINISH.
- 5. PIPE RAILING, PIPE BALUSTERS, AND PIPE RAILING SPLICES SHALL BE ADEQUATELY WRAPPED TO INSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.

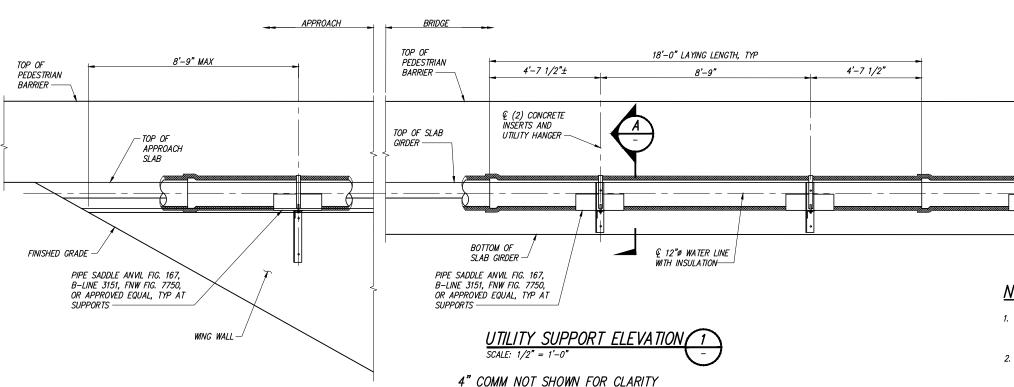


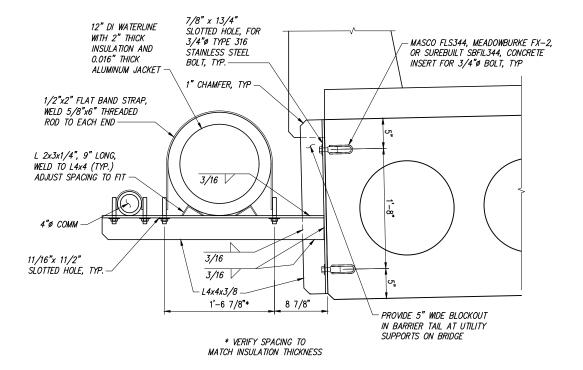




SHEET











- 1. PAYMENT FOR BRIDGE SUPPORTED DUCTILE IRON FOR WATER 12"
 DIA. SHALL BE MEASURED BETWEEN THE POINTS WHERE IT EXITS
 THE GROUND AT THE BRIDGE APPROACHES.
- EACH CONCRETE INSERT IN THE MSE WALLS SHALL BE DESIGNED FOR A VERTICAL LOAD OF 2 KIPS AND A HORIZONTAL LOAD OF 3 KIPS.
- 3. ALL COSTS ASSOCIATED WITH DESIGNING AND FURNISHING THE CONCRETE INSERTS IN THE MSE WALLS SHALL BE INCLUDED IN THE SF COST FOR SEW WALLS.

