

**KING CONSERVATION DISTRICT
BOARD OF SUPERVISORS MEETING**

August 8th, 2022 at 5:00 PM

Hybrid Meeting

In Person: 800 Southwest 39th Street, Suite 150, Renton WA 98057

Or Remote Access: <https://zoom.us/j/95893176590>

Call In Number: (253) 215-8782

Meeting Agenda

Call to Order

- 1. Preliminary Matters** **5:00 PM – 5:05 PM**
- a) Introductions
 - b) Additions or Corrections to the Agenda
 - c) Adoption of the Board Agenda

- 2. Consent Agenda** **5:05 PM – 5:10 PM**

Items listed below will be enacted by one motion. If separate discussion is desired on an item, that may be removed from the Consent Agenda and placed on the Regular Agenda at the request of a Board Supervisor.

- a) Board Minutes (pgs 4-10)
 - 1) 07/11/22 KCD Board of Supervisors Meeting
 - 2) 07/25/22 KCD Grant Subcommittee Meeting
- b) Member Jurisdiction Grant Applications (pgs 11-23)
 - 1) AI 22-061: City of Renton – Cedar River Bank Stabilization – Saavedra
- c) Agricultural Drainage Assistance Program (pgs 24-26)
 - 1) AI 22-076: ADAP Application – Sweeters – Stockton

- 3. Public Comment** **5:10 PM – 5:15 PM**

- 4. Welcome New Employee** **5:15 PM – 5:25 PM**
- a) Matt Mega – Senior Director of Stewardship Programs

- 5. Reports** **5:25 PM – 5:40 PM**
- a) Executive Director – Méndez-Perez (pgs 28-30)
 - b) Board of Supervisors
 - c) Washington Federation of State Employees (WFSE)

- 6. Finance** **5:40 PM – 6:00 PM**
- a) AI 22-062: June 2022 Financial Statements and Check Register – Reed (pgs 32- 45)
 - b) AI 22-051: Restricted Funds Reconciliation Update – Reed
 - c) AI 22-063: Contingency Policy – Reed
 - d) AI 22-064: Resolution # 22-001: Resolution to Rescind Resolution 18-003 – Lewis (pgs 46-59)

- 7. Presentations** **6:00 PM – 6:15 PM**
- a) KCD Outreach – Dostal (pgs 61- 85)

- 8. New Business** **6:15 PM – 6:45 PM**
- a) AI 22-065: Amendment to Neighborhood Farmers Markets (NFM) – Streamlined Farmers Market Vendor Application and Management Systems – Méndez-Perez (pgs 87- 89)
 - b) AI 22-066: ADAP Small Public Works Contract – Pepka Stiles – Stockton (pgs 90-98)
 - c) AI 22-067: ADAP Small Public Works Contract – Griffin Creek – Stockton (pgs 99- 106)
 - d) AI 22-068: ADAP Small Public Works Contract – Von Dolin – Stockton (pgs 107- 116)
 - e) AI 22-069: ADAP Small Public Works Contract – Wallace – Stockton (pgs 117- 123)
 - f) AI 22-070: LIP Application – Sullivan Aquatic Area Buffer – L. Redmond (pgs 124- 165)

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- g) AI 22-071: LIP Application – Hightower Forest Health Management – L. Redmond (pgs 166-183)
- h) AI 22-072: Lip Application – Holland Waste Storage Facility – L. Redmond (pgs 184- 214)
- i) AI 22-073: Board Resolution 22-002 – Establishing Board Election Zones – Haugen (pgs 215-216)
- j) AI 22-074: Federally Owned Parcels – Méndez-Perez (pg 217)

9. Unfinished Business

6:45 PM – 7:00 PM

- a) AI 22-075: Foster Irrigation Well – Stockton (pgs 219- 224)
- b) AI 22-055: LIP Application – Cherry Valley Dairy Waste Storage Facility – L. Redmond (pgs 225-295)
- c) AI 22-056: LIP Application – Sullivan Buffer Fence – L. Redmond (pgs 296-331)
- d) AI 22-057: LIP Application – Pepka Stream Crossing – L. Redmond (pgs 332-353)
- e) AI 22-058: LIP Application – Devaney Cover Crops – L. Redmond (pgs 354 -363)

Consent Agenda

KING CONSERVATION DISTRICT

Board of Supervisors Meeting Minutes

July 11th, 2022

1 **Supervisors Present:** Kirstin Haugen – Chair, Brittney Bush Bollay, Chris Porter – Vice Chair,
2 Burr Mosby, Bill Knutsen

3 **Supervisors Not Present:**

4 **Guests Present:** Carmela Ennis – King County Council, Mike Lufkin – King
5 County

6 **Staff Present:** Lorna Miss, Kathryn Lewis, Jessica Saavedra, Maria Chang-Ward, Miranda
7 Smith, Carrie King, Liz Stockton, Liz Clark, Erin Reed, Mark Dostal, Rosa Méndez-Perez

8 **Preliminary Matters:**

9 Chair Haugen called the meeting to order at 5:04 PM. All attendees introduced themselves.

10 Chair Haugen asked for any additions or corrections to the agenda.

11 Haugen asked, on behalf of Supervisor Porter, to move Board Election after the Envirothon
12 Presentation.

13 **Bush Bollay moved; Mosby seconded, passed unanimously a motion to approve the**
14 **amended agenda (4 ayes, 0 nays).**

15 **Knutsen moved; Mosby seconded, passed unanimously a motion to approve the**
16 **consent agenda (4 ayes, 0 nays).**

17 **Public Comment:** There was no public comment.

18

19 **New Employee Introduction:**

20

21 Executive Director Méndez-Perez introduced new employee, Miranda Smith, Agriculture
22 Program Coordinator.

23 **Reports:**

24

25 Executive Director Méndez-Perez provided a monthly report to the Board. A detailed letter
26 was provided in the Board packet.

27 **WFSE:**

28 Jessica Saavedra provided a WFSE Report, discussing the compensation study and
29 upcoming bargaining negotiations.

30 **Finance:**

31 Erin Reed presented AI 22-050: May 2022 Financial Reports.

32 **Bush Bollay moved; Knutsen seconded, passed unanimously a motion to approve AI**
33 **22-050: May 2022 Financial Reports (5 ayes, 0 nays).**

34 Reed also presented AI 22-051: Reconciliation of Restricted Funds.

35 **Board Elections:**

36 **Mosby moved; Porter seconded, passed unanimously a motion to approve Kirstin**
37 **Haugen as Board of Supervisors Chair (5 ayes, 0 nays).**

38 **Bush Bollay moved; Haugen seconded, passed unanimously a motion to approve Chris**
39 **Porter as Board of Supervisors Vice Chair (5 ayes, 0 nays).**

40 **Presentations:**

41 The Envirothon presentation will be postponed.

42 **New Business:**

43 Méndez-Perez presented AI 22-052: 2022-2023 Washington State Department of Ecology
44 Conservation Corps Contract.

45 **Mosby moved; Knutsen seconded, passed unanimously a motion to approve AI 22-052:**
46 **2022-2023 Washington State Department of Ecology Conservation Corps Contract (5**
47 **aves, 0 nays).**

48 Méndez-Perez presented six Landowner Incentive Program applications for first reading: AI
49 22-053: Zweirs Riparian Forest Buffer, AI 22-054: Tesar Forest Health Management, AI 22-
50 055: Cherry Valley Dairy Waste Storage Facility & Roof Runoff Structure, AI 22-056:
51 Sullivan Buffer Fence, AI 22-057: Pepka Stream Crossing, and AI 22-058: Devaney Cover
52 Crops.

53 Knutsen requested more detail on AI 22-055: Cherry Valley Dairy Waste Storage Facility &
54 Roof Runoff Structure application.

55 Liz Stockton presented two requests to award small public works contracts for Agricultural
56 Drainage Projects AI 22-059: Ivar Farm and AI 22-060: Cedar Grove Farm.

57 **Knutsen moved; Mosby seconded, passed unanimously a motion to award a small**
58 **public works contract for Agricultural Drainage Project AI 22-059: Ivar Farm (5 ayes,**
59 **0 nays).**

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Board of Supervisors Meeting Minutes
July 11th, 2022

Mosby moved; Porter seconded, passed unanimously a motion to award a small public works contract for Agricultural Drainage Project AI 22-060: Cedar Grove Farm (5 ayes, 0 nays).

Unfinished Business:

Mark Dostal presented AI 22-043: 2021 Annual Report for second reading.

Bush Bollay moved; Knutsen seconded, passed unanimously a motion to approve AI 22-043: 2021 Annual Report (5 ayes, 0 nays).

Méndez-Perez presented two Landowner Incentive Program applications for second reading: AI 22-045: Cunningham Cedar Grove and AI 22-047: McKittrick Stream Crossing.

Knutsen moved; Mosby seconded, passed unanimously a motion to approve AI 22-045: Cunningham Cedar Grove and AI 22-047: McKittrick Stream Crossing (5 ayes, 0 nays).

Executive Session RCW 42.30.110(1)(i) to discuss with legal counsel representing the agency litigation or potential litigation.

Haugen indicated that the board would be moving into an executive session for 15 minutes, unless extended. The Board moved into Executive Session at 6:29 PM using a Breakout Zoom Room. No decisions, actions or motions were made following the session. The Board meeting was reconvened by Haugen at 6:44 PM.

There was no more business before the Board.

Mosby moved; Bush Bollay seconded, passed unanimously a motion to adjourn the meeting at 6:45 PM (5 ayes, 0 nays).

Authorized Signature

Date

Summary of Motions

Bush Bollay moved; Mosby seconded, passed unanimously a motion to approve the amended agenda (4 ayes, 0 nays).

Knutsen moved; Mosby seconded, passed unanimously a motion to approve the consent agenda (4 ayes, 0 nays).

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July 11th, 2022

Bush Bollay moved; Knutsen seconded, passed unanimously a motion to approve AI 22-050: May 2022 Financial Reports (5 ayes, 0 nays).

Mosby moved; Porter seconded, passed unanimously a motion to approve Kirstin Haugen as Board of Supervisors Chair (5 ayes, 0 nays).

Bush Bollay moved; Haugen seconded, passed unanimously a motion to approve Chris Porter as Board of Supervisors Vice Chair (5 ayes, 0 nays).

Mosby moved; Knutsen seconded, passed unanimously a motion to approve AI 22-052: 2022-2023 Washington State Department of Ecology Conservation Corps Contract (5 ayes, 0 nays).

Knutsen moved; Mosby seconded, passed unanimously a motion to award a small public works contract for Agricultural Drainage Project AI 22-059: Ivar Farm (5 ayes, 0 nays).

Mosby moved; Porter seconded, passed unanimously a motion to award a small public works contract for Agricultural Drainage Project AI 22-060: Cedar Grove Farm (5 ayes, 0 nays).

Bush Bollay moved; Knutsen seconded, passed unanimously a motion to approve AI 22-043: 2021 Annual Report (5 ayes, 0 nays).

Knutsen moved; Mosby seconded, passed unanimously a motion to approve AI 22-045: Cunningham Cedar Grove and AI 22-047: McKittrick Stream Crossing (5 ayes, 0 nays).

Mosby moved; Bush Bollay seconded, passed unanimously a motion to adjourn the meeting at 6:45 PM (5 ayes, 0 nays).

KING CONSERVATION DISTRICT

Board of Supervisors

Grant Subcommittee Meeting

Meeting Minutes

July 25th, 2022

1 **Supervisors Present:** Kirstin Haugen – Chair, Brittney Bush Bollay – Supervisor, Burr Mosby
2 – Supervisor, Bill Knutsen – Supervisor

3 **Supervisors Not Present:** Chris Porter – Vice Chair

4 **Guests Present:** Cailin Hunsaker – City of Renton.

5 **Staff Present:** Lorna Miss, Rosa Méndez-Perez, Jessica Saavedra, Miranda Smith.

6 **Preliminary Matters:**

7 Chair Haugen called the meeting to order at 5:01 PM. All attendees introduced themselves.

8 Chair Haugen asked for any additions or corrections to the agenda.

9 **Additions and Corrections to Agenda:**

10 Cailin Hunsaker from the City of Renton will be speaking.

11 Talia Shire from The Common Acre will not be speaking.

12 Removed discussion on Farmers Market under Regional Food System Grant Program Items.

13 **Mosby moved; Bush Bollay seconded, passed unanimously a motion to approve the**
14 **amended agenda (3 ayes, 0 nays).**

15 **Public Comment:** There was no public comment.

16

17 **Discussion:**

18 Saavedra talked about the types of farm/garden equipment funded by Member Jurisdiction
19 and Regional Food System Grant Programs. The subcommittee reviewed a list of
20 farm/garden equipment that has been funded. Saavedra noted that a specific list of allowable
21 equipment items will be helpful for program management and for grant applicant to the
22 Member Jurisdiction Grant Program (including the Seattle Community Partnership Grant
23 Program). Saavedra stated that equipment items listed in class 1-4, such as tractors, were
24 appropriately funded by the Regional Food System grant program and are not appropriate
25 for the Member Jurisdiction program. Equipment listed in classes #4-11 have been funded
26 by the Member Jurisdiction Grant Program and are more appropriate for smaller urban
27 agriculture activities. Saavedra recommended that the grant subcommittee approve items

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Grant Subcommittee Meeting Minutes
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listed in classes 4-11 as allowable equipment expenses for the Member Jurisdiction Grant Program.

Mosby Moved, Bush Bollay seconded, passed unanimously a motion to approve farm and garden equipment classes # 4-11 as eligible for funding from the Member Jurisdiction Grant Program (including Seattle Community Partnership Grants).(4 ayes, 0 nays).

Applications:

Cailin Hunsaker, the Parks and Trails director for City of Renton, talked about the need for Bank Stabilization on the Cedar River.

Saavedra then reviewed the City of Renton-Cedar River Bank Stabilization application.

Bush Bollay moved, Haugen seconded, passed unanimously a motion to recommend the City of Renton Cedar River Bank Stabilization Project application for approval at the August Board of Supervisors meeting (3 ayes, 0 nays).

Close Outs:

Mosby moved, Bush Bollay seconded, passed unanimously a motion to close the City of Bellevue Tree Giveaway Project grant agreement (3 ayes, 0 nays).

Regional Food System Grant Program Items:

Mendez-Perez talked about the email from Colleen Donovan from Neighborhood Farmers Markets in response to questions from the subcommittee at their June meeting. The response was included in the agenda packet. She then talked about the details of their amendment request.

Amendments:

The Neighborhood Farmers Markets (NFM) Streamlined Farmers Market Vendor Application and Management Systems (King County Pilot) amendment will be moved to the BOS Meeting on August 8th when Mary Embleton, Chris Porter and the applicant can attend and give full details and answers to questions.

There was no more business before the Board.

Bush Bollay moved, Mosby seconded, passed unanimously a motion to adjourn the meeting at 5:57 PM (3 ayes, 0 nays).

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Grant Subcommittee Meeting Minutes
July 25th, 2022

63

64

65 _____
Authorized Signature

Date

66

67

Summary of Motions

68 **Mosby moved; Bush Bollay seconded, passed unanimously a motion to approve the**
69 **amended agenda . (3 ayes, 0 nays).**

70 **Mosby Moved, Bush Bollay seconded, passed unanimously a motion to approve farm**
71 **and garden equipment classes # 4-11 as eligible for funding from the Member**
72 **Jurisdiction Grant Program (including Seattle Community Partnership Grants).(4**
73 **ayes, 0 nays).**

74 **Bush Bollay moved, Haugen seconded, passed unanimously a motion to recommend**
75 **the City of Renton Cedar River Bank Stabilization Project application for approval at**
76 **the August Board of Supervisors meeting (3 ayes, 0 nays).**

77 **Mosby moved; Bush Bollay seconded, passed unanimously a motion to close the City of**
78 **Bellevue Tree Giveaway Project grant agreement (3 ayes, 0 nays).**

79 **Bush Bollay moved; Mosby seconded, passed unanimously a motion to adjourn the**
80 **meeting at 5:57 PM. (3 ayes, 0 nays).**

81

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

AI 22-061

SUBJECT: AI 22 061

- Motion to approve the Member Jurisdiction grant application from the City of Renton for the Cedar River Bank Stabilization Project.

FISCAL IMPACT

- The applicant is requesting \$53,811.00 from KCD-Renton Member Jurisdiction Funds

POLICY CONSIDERATION

This proposal addresses the following natural resource improvement actions

- Direct Improvement of Natural Resources
- Capacity Building

PRINCIPAL PARTNERS

- FEMA, US Army Corps of Engineers, WS Dept of Ecology, WS Dept of Fish and Wildlife, Muckleshoot Tribe, GeoEngineers, Inc.

BACKGROUND

This proposal was reviewed at the last grant subcommittee meeting on July 25th, 2022. This is a stormwater project that proposes to due to riverbank erosion next to the Cedar River Trail in 2020, this project will temporarily reroute the Cedar River Trail and install materials to stabilize the river bank from future erosion events, and restore the trail to original alignment.

EFFECTIVE DATE:

- If approved, this Motion becomes effective on the date of approval.
- The grant project proposes to start on 07/15/2023 and end on 12/31/2023

OPTIONS

- Vote in favor or not in favor of approving the consent agenda.
- Request that this item be removed from the consent agenda for discussion.

RECOMMENDATION

The grant subcommittee recommends approval of this grant application.

MOTION

Motion to approve the Member Jurisdiction grant application for \$53,811.00 from KCD-Renton Member Jurisdiction funds for the City of *Renton Cedar River Bank Stabilization Project*.

Cedar River Bank Stabilization Project

Member Jurisdiction Grant Program

Renton

1055 South Grady Way
City Hall - 6th Floor
Renton, WA 98057

parksandrec@rentonwa.gov
O: 425-430-6600

Cailín Hunsaker

1055 South Grady Way
City Hall - 6th Floor
Renton, WA 98057

CHunsaker@Rentonwa.gov
O: 425-430-6606
M: 425-757-3007

Application Form

Summary Information

Project Title*

Cedar River Bank Stabilization Project

Project Description - Short*

Provide a short, concise description of the project no more than two or three sentences.

Following riverbank erosion next to the Cedar River Trail in 2020, this project will temporarily reroute the Cedar River Trail and install materials to stabilize the river bank from future erosion events, and restore the trail to original alignment.

Principal Partners (if any)

FEMA, US Army Corps of Engineers, WS Dept of Ecology, WS Dept of Fish and Wildlife, Muckleshoot Tribe, GeoEngineers, Inc.

Amount of KCD Funding Requested*

You will need to upload a detailed budget document before you submit your application. Please make sure the amount requested and total project cost amounts you list here match the amounts in the uploaded budget document.

\$53,811.00

Total Project Cost*

\$1,076,228.00

Total Matching Funds (optional)

\$1,022,417.00

Project Start Date*

07/15/2023

Project End Date*

12/31/2023

Close Date**Project Location***

Address, Parcel #, OR L&L Points, for site specific projects only.

If more than two locations, state "multiple" and explain.

Parcel 1723059015; ¼ Section SE17, Section 17, Township 23, Range 05
Cedar River Trail between Cedar River Dog Park and Riverview Park, south of and across the river from
Riviera Apartments at 2201 Maple Valley Highway, Renton 98057

Jurisdiction

If the applicant is not a city or jurisdiction, please type in the city or jurisdiction this project is located in.

Is your project on public or private land?*

Public

State Legislative District #*

Click here to find it on the web. If your project resides in more than one district, type in the primary district or type in zero.

11

King County District #*

Click here to find it on the web. If your project resides in more than one district, type in the primary district or type in zero.

5

Narratives, Budget, & Attachments

Project Description - Detailed*

Provide a description of the project that summarizes what you will do, how you will do it, and why you will do it. Describe target audience, outcomes, objectives and general timelines.

In February 2020, a flood event occurred on the Cedar River that eroded a section of riverbank next to the well-traveled Cedar River Trail (CRT) in Renton. Between the Cedar River Dog Park and Riverview Park a

150-foot section of the left river bank eroded up to the edge of the trail and, for the safety of trail patrons, the trail has been narrowed to half its width with sections of chain-link fence.

The trail is located on the south side of the Cedar River in the Cedar River Natural Area, part of Renton Parks property. The trail is 12 feet wide, asphalt pavement surface with 2 feet wide gravel shoulders on each side. Riparian vegetation consists of a dense mix of mature deciduous and conifer trees, commonly big-leaf maple (*Acer macrophyllum*) and red alder (*Alnus rubra*) with an understory of sword fern (*Polystichum munitum*) and salmonberry (*Rubus spectabilis*), as well as some Himalayan blackberry (*Rubus armeniacus*). There is a strip of herbaceous species including grasses and horsetail that border the trail. The banks of the Cedar River upstream and downstream of the eroded area are steep with slopes between of 1H:1V to 1.5H:1V.

The Cedar River is designated as a Shoreline of the State (Type S) and is approximately 100 feet wide at this location. The river supports a number of fish species including Chinook (*Oncorhynchus tshawytscha*), Coho (*Oncorhynchus kisutch*), Chum (*Oncorhynchus keta*) and Sockeye Salmon (*Oncorhynchus nerka*), as well as Bull Trout (*Salvelinus confluentus*), Cutthroat (*Oncorhynchus clarki*) and Rainbow/Steelhead (*Oncorhynchus mykiss*) trout as well as other aquatic organisms native to Puget Sound streams. The riparian area and undeveloped portions of the park property provide important habitat for wildlife.

There are two main elements to the Cedar River Bank Stabilization project: Stabilizing the eroding bank and temporarily relocating and reconstructing the trail.

The first main project element is to permanently stabilize the eroding bank by constructing large woody material (LWM) habitat structures along the toe of the river bank. LWM structures will consist of three individual structures that extend slightly into the channel. The slope will be restored to approximately the original toe location and graded to approximately 2H:1V (horizontal:vertical), which is slightly flatter than the original bank. The bank will be stabilized with erosion control fabric and planted with native plants and grasses. The LWM will interact with all river flows to reduce erosive energy and also provide in-stream habitat for aquatic organisms including threatened and endangered species of Pacific salmon. The roots of native vegetation installed on the slope will help stabilize soils and the plants will support riparian habitat functions.

The second main element of work is to restore/reconstruct the Cedar River Trail. The project goal is to restore the trail as close to its original alignment as possible, which will depend on soil conditions encountered during construction, and matching bank contours upstream and downstream of the eroding area. The trail will be temporarily relocated approximately 14 feet west during construction to provide workspace while protecting trail users. Following construction, the trail will be reconstructed as close to the existing alignment as possible. The temporary trail is approximately 228 feet long, including alignment transitions sections to connect to the existing trail.

Construction work will be completed with traditional construction equipment including hauling material by dump trucks, grading using excavator or backhoe, heavy rollers for asphalt compaction, and hydroseeding by spray application or hand work, and installation of plants by hand labor.

Site Preparation and Trail Temporary Relocation:

It will be necessary to temporarily relocate the trail to the west in order to construct the project. Installing temporary erosion control Best Management Practices (BMPs) will be the first step to prepare the site for construction. The area for the temporary trail will be clear of topsoil and grass (no trees will be impacted), and then gravel will be placed to form the temporary trail.

Bank Stabilization:

Constructing the project will require temporarily isolating the work area along the toe of the eroding bank from the broader Cedar River by installing a gravity type cofferdam structure comprised of supersacks filled with gravel or similar approach. Existing LWM within the construction limits will be set aside for potential re-use or replacement on the project, depending on suitability. The area inside the isolation structure will be dewatered using pumps. Fish block nets and a cofferdam will be installed to isolate the area and fish will be captured and relocated, and then the area can be dewatered as needed.

To access the eroding bank for grading and installing LWM, it will be necessary to excavate down to create one or more work benches for equipment. The entire length of the eroding bank will be excavated down to approximately the Ordinary High Water (OHW) line to form a flat work area adjacent to the area where LWM structures will be installed. Each of the three LWM structures will be constructed by placing individual large wood pieces in a stepwise process to form a stable LWM structure.

The reconstructed bank will be graded at an approximately 2V: 1H slope and blend into the existing bank at the upstream and downstream ends. The slope may include horizontal soil reinforcement products and a wrapped face to provide structural stability. Imported sand and gravel structural fill material will be used to reconstruct the bank. The face of the bank above the water level will be covered with an erosion control fabric, hydroseeded with native herbaceous species and reestablished within native shrubs and live stakes.

Trail Reconstruction:

Following construction of the bank stabilization, the temporary trail will be removed. The disturbed area will be restored to its original topography and the area will be hydroseeded with native grasses. The preferred outcome is to restore the trail to its original width and alignment; however, depending on field conditions encountered during construction the restored trail may be shifted 5 to 10 feet landward from its original location. Minor adjustments to the trail may be made to accommodate trail design standards and provide safe distance between the bank and trail. The trail will be re-constructed with gravel and hot mix asphalt pavement.

Material Re-use and Disposal: Excavated materials that meet streambed or geotechnical specifications will be used where feasible rather than importing fill; however, the geotechnical boring indicates materials are likely to be too wet or fined-grained to meet specifications. Also, the site has limited space for stockpile of large quantities of soil for drying or later re-use. Fill material will consist of sandy soil, topsoil and streambed materials (sand, gravel, cobbles) obtained from commercial quarries, sand/gravel mines and/or materials suppliers. Material placed into the Cedar River will be completed within a work isolation structure (cofferdam formed of gravel filled supersacks, or similar).

The CRT is a 17-mile paved trail that follows the Cedar River from where it enters Lake Washington in Renton to the community of Landsburg at the boundary of the City of Seattle's Cedar River Watershed. The trail follows a historic railroad route along State Route 169 and, in Renton, its five-mile length is used by thousands of bicyclists and pedestrians every week for commuting and recreation. It is also a maintenance route for City of Renton Park and Trails Division staff to access different parks and perform trail work.

No trail alternatives are available in this location because of the topography between the Cedar River to the north and steep inclines to the south. Trail detours direct people to sidewalks next to Maple Valley Highway and detract from the safety and natural experience of a forested route.

The goal of the Cedar River Trail Bank Stabilization Project is to stabilize an area of erosion on the left bank of the Cedar River at approximately River Mile 2.5. The riverbank at this location is on the outside edge of a bend in the river channel that eroded over a length of approximately 150 feet during the February 8, 2020, storm event that was declared a Federal Disaster. Erosion from Cedar River floodwaters has damaged the integrity and function of the Cedar River Trail system by undermining the prism and weakening the trail structure. To address the threat to the existing trail and prevent further damage, bank stabilization is proposed at this location.

Bid solicitation is slated for January 2023 and project completion by EOY 2023. This grant request is 5% of the engineers' cost estimate for project construction, the rest to be reimbursed by the Federal Emergency Management Agency (FEMA) and Washington State Emergency Management Fund.

Project Activities and Measurable Results*

List specific project activities to be completed with KCD grant funds and the associated outcomes or measurable results, and timeline.

KCD grant funds will help complete some portion of the mobilization and demobilization, earthworks, and habitat and landscape restoration as estimated with the current 30% design estimated construction cost.

The goal of the Cedar River Trail Bank Stabilization Project is to stabilize an area of erosion on the left bank of the Cedar River at approximately River Mile 2.5. The riverbank at this location is on the outside edge of a bend in the river channel that eroded over a length of approximately 150 feet during the February 8, 2020, storm event that was declared a Federal Disaster. Erosion from Cedar River floodwaters has damaged the integrity and function of the Cedar River Trail system by undermining the prism and weakening the trail structure. To address the threat to the existing trail and prevent further damage, bank stabilization is proposed at this location.

The preferred outcome is to restore the trail to its original width and alignment; however, depending on field conditions encountered during construction the restored trail may be shifted 5 to 10 feet landward from its original location. Minor adjustments to the trail may be made to accommodate trail design standards and provide safe distance between the bank and trail. The trail will be re-constructed with gravel and hot mix asphalt pavement to match existing conditions as closely as possible.

The project is expected to improve aquatic habitat for salmonids as compared to existing conditions. The project has been designed using LWM to increase roughness and decrease flow velocities along the project area bank. The use of multiple LWM structures will increase bank and bottom channel complexity and will create a range of velocities at each flow condition that benefit adult migration and juvenile refugia. The LWM structures will mimic natural trees falling in the river. The LWM will also be source of organic matter that provided habitat for insects, which in turn provide a source of food for fish.

Timeline: Bid solicitation January 2023 and project completion by EOY 2023.

Project Budget and Expenses*

Fill out and upload separate Application Budget Form also available on the KCD Member Jurisdiction Grant Program website. Budget must be detailed with footnotes, appropriate and reasonable, *meeting state auditor/GAAP guidelines. Please do not use forms from previous applications. Please only upload the form linked above. Thank you!*

KCD MJ Grant App Budget CR Bank Stabilize 22.pdf

Member Jurisdiction Authorization Letter

If you are a nonprofit organization seeking Member Jurisdiction funding, you must upload written authorization from the Member Jurisdiction to apply for funding. This can be in the form of a letter or scanned copy of an email.

Additional Attachments

Upload any photos or maps of your project here. Only one file will be accepted. Please combine multiple files into one if possible.

CR Bank Stabztn Plan and 30% Cost Est 22.pdf

Natural Resource Improvement Actions- Criteria Checklist

You must select at least one natural resource improvement action, otherwise your application is not eligible.

However, please only select "yes" below the action that your project **directly** addresses.

Direct Improvement of Natural Resource Conditions*

To improve landscape and natural resource conditions as a result of direct action that enhances water quality, protects and conserves soils, implements ecosystem restoration and preservation projects *(examples include supporting private property owners with land stewardship, water quality, aquatic and wildlife habitat resources, removal of invasive weeds, stewardship on public land)*

Does your project directly address this issue?

Yes

Education and Outreach*

To raise awareness, deepen knowledge, and change behaviors of residents, landowners, and other land managers and organizations to practice exemplary stewardship of natural resources *(examples include education about stormwater management; the value of farmland, local farms and food systems, shorelines, salmon habitat, forests and other ecosystems)*

Does your project directly address this issue?

No

Pilot and Demonstration Projects*

To test and/or improve concepts and/or approaches in natural resource management that can be replicated by others *(examples include low impact development or green infrastructure demonstration projects, development of new best management practices, distribution of local farm products, urban agriculture (e.g. farmers markets and backyard food production to promote or support social economic independence and healthy living); technological innovation for natural resource conservation)*

Does your project directly address this issue?

No

Capacity Building*

To enhance the ability of organizations, agencies, residential landowners and other land owners and managers to have knowledge, skills, tools, support systems and technical resources to implement exemplary best management practices and deliver natural resource management actions on the ground *(examples include urban agriculture development, assistance to and inclusion of private property owners, preservation, restoration, and/or expansion of urban and/or rural agricultural lands, rural and urban forest lands, riparian restoration and stewardship on private and public lands)*

Does your project directly address this issue?

Yes

Project Type*

Stormwater

KCD Acknowledgement and Signature

By signing below, the applicant agrees to acknowledge King Conservation District funding by placing the KCD-provided logo on signs, materials, and documents produced as part of the above proposal. In addition, the applicant will notify KCD of public events and activities funded by the KCD.

*

I have read the above paragraph about acknowledging KCD and I will use the provided logo.

Authorized Applicant Electronic Signature*

Please enter your full name to sign and agree to the above.

Cailin Hunsaker

Title

Parks and Trails Director

Date*

07/12/2022

File Attachment Summary

Applicant File Uploads

- KCD MJ Grant App Budget CR Bank Stabilize 22.pdf
- CR Bank Stabztn Plan and 30% Cost Est 22.pdf



Member Jurisdiction Grant Program

Grant Application Project Budget Form

Promoting sustainable uses of natural resources
through responsible stewardship

Project Name	Cedar River Bank Stabilization Project		
Applicant	City of Renton		
Contact	Cailin Hunsaker, Parks and Trails Director		
Mailing Address	1055 South Grady Way, 6th Floor, Renton, WA 98057		
E-mail	chunsaker@rentonwa.gov	Project Start Date:	7/15/2023
Phone	(425) 430-6606	Project End Date:	12/31/2023

Please provide detailed budget information below. Itemize categories such as supplies, contracted services with footnotes and detailed descriptions below

Budget Item	KCD Funds	Other Funds	Other Funds	Total
		(identify source and status of matching funds here ex. Rose Foundation - Pending)	(identify source and status of matching funds here ex. DON Small and Simple - Secured)	
Salaries & Benefits				\$0
Travel/ Meals/ Mileage (for volunteers, staff)				\$0
				\$0
				\$0
				\$0
Office Supplies				\$0
				\$0
				\$0
Field Supplies				\$0
Contracted/ Professional Services	\$53,811	\$968,606	\$53,811	\$1,076,228
Permits				\$0
Other: (specify)				\$0
Other: (specify)				\$0
Other: (specify)				\$0
Other: (specify)				\$0
Other: (specify)				\$0
TOTAL	\$53,811	\$968,606	\$53,811	\$1,076,228

Total Project Cost	\$1,076,228
Total Match	\$1,022,417
Amount of KCD Funding Requested	\$53,811
Match Percentage	95%

Footnotes:

Other Funds = 90% FEMA reimbursement - Pending

5% State Emergency Management Fund reimbursement - Pending

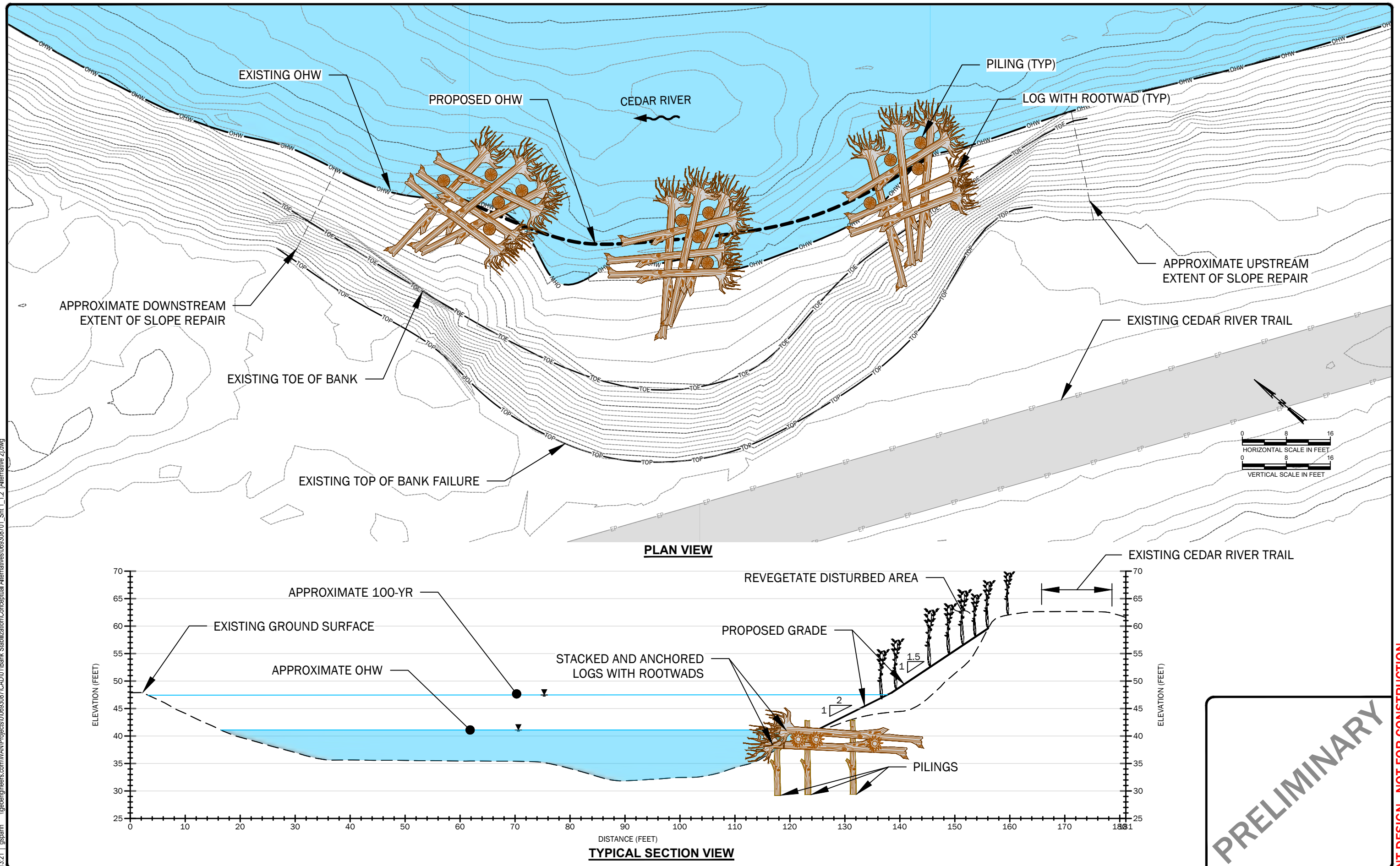
General Preparation - Mobilization and Demobilization = \$134,000

Earthwork = \$433,000

Habitat and Landscape = \$215,000

Contingency = 25%

Plotted: 04/05/2021, 13:21 | gspanm \\geoengineers.com\WANI\Projects\00693087\CADD\11\Bank Stabilization\Conceptual Alternatives\069308701_Sht 1_1.2 [Alternative 2].dwg



NO.	DATE	BY	ISSUE / DESCRIPTION

DESIGNED BY:	TMM
DRAWN BY:	GLS
APPROVED BY:	JOC
REVISION NO.:	—
DATE:	02/19/21

Cedar River Bank Stabilization and Trail Repair
Renton, Washington
30 Percent Design Estimated Construction Cost

Item#	Item Description	Est Qty	Unit	Engineer's Estimate		Comment
				Unit Price	Cost	
PREPARATION, GENERAL						
1	MOBILIZATION AND DEMOBILIZATION	1	LS	8%	\$0	Typical precentage for Public Works projects. % of Construction Cost
2	SURVEY	1	LS	\$ 10,000	\$10,000	GeoEngineers estimate
3	CLEARING & GRUBBING	0.28	Acre	\$ 20,000	\$6,000	Review of selected WSDOT Bid Tabs
4	DEMOLISH TRAIL PAVEMENT	100	SY	\$ 50	\$5,000	Review of selected WSDOT Bid Tabs
5	ACCESS CONTROL AND FENCING	1	LS	\$ 10,000	\$10,000	GeoEngineers estimate
6	TRAFFIC CONTROL (SIGNAGE)	1	LS	\$ 10,000	\$10,000	GeoEngineers estimate
7	FLAGGER	480	HR	\$ 70	\$34,000	WSDOT Bid Tab \$70/hr, assume 2 at 30 days each
8	TESC (INCLUDING STAGING AND STOCKPILE AREA)	1	LS	\$ 40,000	\$40,000	GeoEngineers estimate
9	WOOD CHIP MULCH FOR ACCESS	170	CY	\$ 50	\$9,000	GeoEngineers estimate
10	FISH EXCLUSION	1	LS	\$ 10,000	\$10,000	GeoEngineers estimate
SUB-TOTAL					\$134,000	
EARTHWORK						
11	EXCAVATION W/ON-SITE STOCKPILE, BACKFILL (TOPSOIL)	140	CY	\$ 40	\$6,000	Review of selected WSDOT Bid Tabs
12	EXCAVATION W/ON-SITE STOCKPILE, BACKFILL (GENERAL)	700	CY	\$ 30	\$21,000	Review of selected WSDOT Bid Tabs
13	EXCAVATION W/OFF-SITE DISPOSAL	3,100	CY	\$ 40	\$124,000	Review of selected WSDOT Bid Tabs
14	FOUNDATION BACKFILL (QUARRY SPALLS)	200	Ton	\$ 100	\$20,000	Review of selected WSDOT Bid Tabs
15	GRAVEL BORROW	3,200	Ton	\$ 35	\$112,000	Review of selected WSDOT Bid Tabs.
	COBBLES	300	Ton	\$ 100	\$30,000	Review of selected WSDOT Bid Tabs.
16	TOPSOIL	300	CY	\$ 50	\$15,000	Review of selected WSDOT Bid Tabs
17	CRUSHED SURFACING BASE COURSE	350	Ton	\$ 75	\$27,000	Review of selected WSDOT Bid Tabs
18	HOT MIX ASPHALT PAVEMENT	40	Ton	\$ 200	\$8,000	Review of selected WSDOT Bid Tabs
19	RIVER ISOLATION STRUCTURE	1	LS	\$ 30,000	\$30,000	GeoEngineers estimate
20	DEWATERING	1	LS	\$ 40,000	\$40,000	Assumes sumping, settling tank
SUB-TOTAL					\$433,000	
HABITAT AND LANDSCAPE						
21	EROSION CONTROL BLANKET	1,000	SY	\$ 10	\$10,000	Review of selected WSDOT Bid Tabs
22	WOODCHIP MULCH	100	CY	\$ 50	\$5,000	Review of selected WSDOT Bid Tabs
23	COMPOST SOCK	525	LF	\$ 20	\$11,000	Review of selected WSDOT Bid Tabs
24	LARGE WOOD (FROM ON-SITE REUSE)	5	EACH	\$ 1,000	\$5,000	GeoEngineers estimate
25	LARGE WOOD (NEW)	40	EACH	\$ 4,000	\$160,000	GeoEngineers estimate
26	SLASH	1	LS	\$ 10,000	\$10,000	GeoEngineers estimate
27	HYDROSEED	0.7	ACRE	\$ 5,000	\$4,000	Review of selected WSDOT Bid Tabs
28	PLANTINGS	1	LS	\$ 10,000	\$10,000	GeoEngineers estimate
SUB-TOTAL					\$215,000	
CONSTRUCTION COST SUBTOTAL					\$782,000	
CONTINGENCY 25%		25%			\$195,500	
ESTIMATED TOTAL CONSTRUCTION COST SUBTOTAL					\$977,500	
SALES TAX				10.1%	\$98,728	
ESTIMATED TOTAL CONSTRUCTION COST W/SALES TAX					\$1,076,228	

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

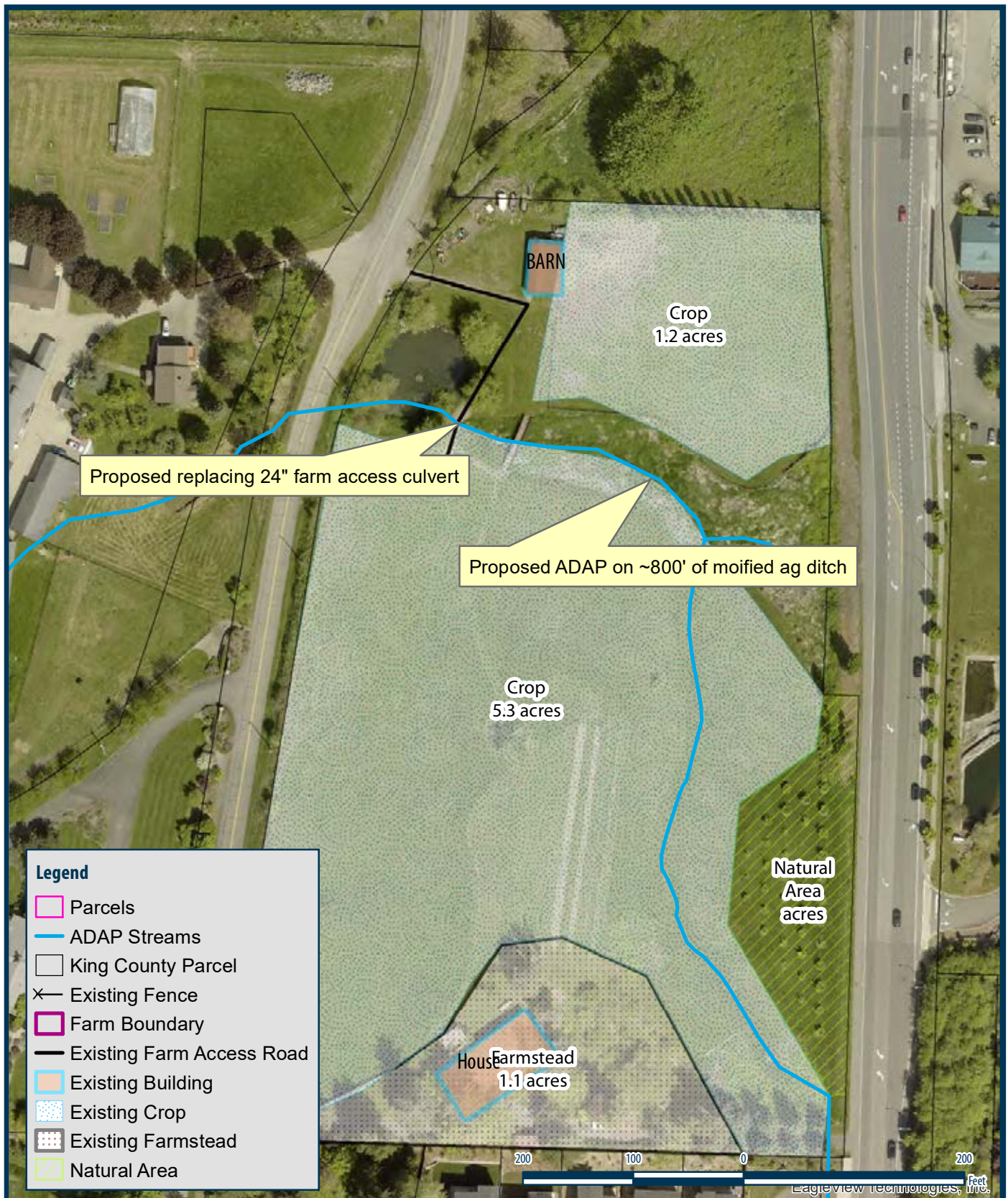
SUBJECT:

The Sweeters Ag Drainage project was approved by the District's ED on July 27, 2022 for \$13,167. This is under the \$15,000 threshold per KCD's Small Public Works Policy.

BACKGROUND:

The purpose of King CD's Agricultural Drainage Program is to help farmers and farm managers navigate the complexities of maintaining drainage systems on farmland and implement drainage projects through the KCD Ag Drainage cost share program. King CD works with King County's Agricultural Drainage Assistance Program (ADAP) to implement these programs. Typically, funding for the construction costs associated with drainage projects comes from an annual grant via the King County Flood Control District. However, the 2022 construction season will fund projects through a combination of KCD Working Lands funds, the KCD Landowner Incentive Program, and KCD Ag Drainage funding supported through the Interlocal Agreement with King County.

The Sweeter's first requested assistance with their drainage issues from King County stormwater services in 2016. The lead engineer was able to assist the Sweeter's this year with their smaller project this year in the Sammamish APD. The project scope consists of maintaining approximately 550 linear feet of agricultural drainage that has a very high unlikelihood of finding any salmonids at any time of the year due to a series of pipes that stretch several hundred feet from the Sammamish river moving east up the valley hillside towards the Sweeter's farm. There is also a small farm pond that received sediment removal of around 200 cubic yards. This project is meant to improve hay production on approximately 6 acres. The small public works process was completed in early July and only one bid was received for \$12,000. Southworth & Sons was the winning bidder for this work.



Landowner Name: Mark Sweeter		Map Type: Planned Map_2022	Directional: SW
Address: 12006 Woodinville-Redmond Rd NE		KCD Staff Name: Liz Stockton	Section: 26
Redmond, WA 98052		Map Date: July 07, 2022	Township: 26
Acres: 9.8	Parcel #(s): 262605-9009		Range: 05

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Document Path: \\KING-FS1\gis-data\GIS_Data\KCD_GIS_Data\Farm\MXDs\Projects\Farm_26\Maps\SW\Sweeters\KCD_FRM_Sweeter_.mxd



Reports

**KING CONSERVATION DISTRICT
BOARD OF SUPERVISORS MEETING**

TO: BOARD OF SUPERVISORS

FROM: ROSA MENDEZ-PEREZ

SUBJECT: EXECUTIVE DIRECTOR REPORT

DATE: AUGUST 8TH, 2022

CC: LORNA MISS

Please find below highlights of King Conservation District's July and early August actions and updates.

- Annual Report and Presentation

KCD submitted our annual report on July 12th (<https://kingcd.org/2022/07/12/kcd-2021-annual-report/>) and presented to the King County Council Local Services committee on July 26th (<https://vimeo.com/732622820#t=21m30s>).

- Hiring
 - Our new Senior Director of Stewardship Programs, Matt Mega, began on August 2nd. Matt has worked in the environmental field for more than 25 years. His diverse background includes land protection, policy advocacy, habitat restoration, and environmental education. For the past four years Matt was the Executive Director of Tahoma Audubon Society, a 50-year-old environmental organization focused on connecting people to birds and nature. Before that he worked at Forterra as their Green Cities South Sound Manager, helping the cities of Kent, Tacoma and Puyallup restore critical green space. Matt earned an undergraduate degree in Landscape Architecture from the University of Massachusetts and holds two master's degrees from the University of Minnesota in Urban Planning and Landscape Architecture. He is an avid birder and an amateur photographer. He spends as much time as possible exploring the Pacific Northwest and beyond with his partner Veronica.
 - We closed the job posting for Chief Administrative Officer after receiving many applications. We are proceeding with selecting candidates for interviews.
 - Marinn Carpenter accepted a new role as Field Operations Specialist. For the past year plus, Marinn worked on special projects for KCD such as the City of Shoreline Trees for Rail program, a multitude of education and outreach events, coordination of the annual bareroot plant sale and work at the native plant nursery. Prior to this role, Marinn spent a year as a member of our Washington

Conservation Corps crew. We are excited to have Marinn as a permanent staff member in her new role assisting the riparian team with habitat restoration projects, coordinating the daily activities of our Conservation Corps crews and contractors, and coordinating the Wetland Plant Cooperative Nursery and Native Plant Holding Facility as well as the Annual Bareroot Plant Sale.

- Finance and Administration
 - Classification and Compensation Study – Compensation Connections provided job match information. These are descriptions of job functions they are using as comparisons for the study. The next deliverable is recommendations on our compensation and classification structure.
 - Strategic Planning: Diversity, Equity, and Inclusion – Staff, board, and advisory committee members received an anonymous survey with responses requested by August 2nd. The completed surveys will help us plan the focus of workshops and trainings. The Athena Group will be part of discussion of survey results with the board at the second August meeting, with staff in mid-August, and with the advisory committee on August 9th.
- Program Updates
 - KCD's Member Jurisdiction Grant Program awarded 26 grants to date, totaling \$1,265,545. Projects are located in 13 different jurisdictions, including Auburn, Bellevue, Burien, Des Moines, Kent, unincorporated King County, Kirkland, Normandy Park, Renton, SeaTac, Seattle and Tukwila. Types of projects funded include environmental education in south King County schools, paid environmental internships for youth, shoreline restoration, community garden development and food box distribution to communities in need.
 - We held the second LIP policy subcommittee on August 3rd, 2022. Teams are on track to spend down the LIP budget for 2022. The next LIP Review Committee meeting is on August 16th.
 - The Engagement Program completed a busy July including getting the 2021 Annual Report wrapped up and published, prepping for the successful annual presentation to King County Council, and supporting implementation programs. In August, Engagement will be pivoting to planning for Orca Recovery Day, Elections, and the 2023 Native Plant Sale.
 - In August, landowners from the rural forestry program will be hosting two forest tours to promote KCD's technical and financial assistance programs. The first tour will be August 20th in Maple Valley. And the second will be part of WSU's Vashon Forest Field Day on August 27th.
 - Outreach for the Trees for Rail program in Shoreline and tree giveaways in Kenmore and Kirkland are in full swing including translation of all materials into Spanish and Chinese.
 - KCD Education Team is busy planning our August stewardship tours, transitioning between AmeriCorps placements, gearing up for fall school outreach, and hiring the new Education Program Coordinator. There are three

peer-to-peer tours scheduled for shoreline and forestry projects over the next three weeks. Support from the Engagement Team increased registration numbers, and the August 20th forestry tour is already sold out. We have selected the new Education AmeriCorps placement that will start in September and are interviewing candidates for the Education Program Coordinator position this week. The Education Program Manager position has been opened internally and will be posted externally this weekend. We look forward to the new Education Team starting this fall!

- Our Urban Shorelines Program is planning to host a ‘twilight tour’ scheduled for the evening of August 11th on Longfellow Creek in West Seattle for homeowners living on streams, lakes and wetlands to tour a streamside buffer restoration project and learn techniques for managing weeds, selecting the right plants, and providing beneficial wildlife habitat.
- One of KCD’s oldest and largest CREP projects, on the Snoqualmie River, came to the end of its 15-year contract and we were delighted to assist the landowner through the reenrollment process with the Federal Government for an additional 15-year contract. It will be exciting to see the habitat gains through this next contract period. Wildlife cameras and field sightings have shown a very large black bear has taken up residence on the site!
- The Shore Friendly King County Program selected contracted Engineers and Geologists to perform technical site assessments on 11 marine shoreline parcels in Seattle and Vashon Island to determine if bulkhead removal and shoreline restoration projects or soft shore armoring alternatives are feasible. Upon completion of their assessment, the Shore Friendly Team will select which projects are most likely to meet the intention of the Shore Friendly Program by restoring coastal processes in Central Puget Sound and move these projects into the conceptual design phase.
- In July, with half of the year behind us, the Farm Team completed 114 technical assists, wrote 33 farm plans, worked on 18 cost-share applications, updated one dairy nutrient management plan, and authored one new dairy nutrient management plan.
- We are happy to report that we received 27 grant applications in the KCD online grant portal for the Regional Food System Grant Program. The total amount requested is \$1,037,000 with matching funds reported at \$1,180,000. The program set aside \$300,000 for the competitive grant round. The Regional Food System Working Group of the Advisory Committee is currently reviewing and scoring applications in the portal and will meet to make their final recommendations to the Board on August 25th. Recommended applications will then go to grant subcommittee for review on September 26th and to the full Board on October 10th for final review and approval.

Thank you,

Rosa Méndez-Perez

Finance

KING CONSERVATION DISTRICT

JUNE FINANCIAL SUMMARY

For the Six Months Ended June 30, 2022

EXECUTIVE SUMMARY

KCD is half-way through the year. Revenue is coming in as expected and in line with the budget. KCD's Main financial focus for the rest of the year will be confirming categorization of Restricted Funds carried forward, making a targeted recommendation for use of those funds, implementing a contingency policy, and continuing to get funds out into the community supporting projects. This will ensure spending that is in line with the budget.

FINANCIAL HIGHLIGHTS

- Revenues are on track to meet budget expectations for the year.
- There continues to be a need to get spending out into the projects in the community. Expenses are lower than budget in some categories, however spending is expected to increase in the second half of the year.
- Salary & Benefits are a bit behind budget due to delay in hiring as compared to expected timing included in budget.
- Interest Rate on income from LGIP Account is increasing a bit, if not back to previous or budgeted levels.
- The "Other" Category on the Revenue and Expense vs. Budget by Program Category report includes Member Jurisdiction Funds, Election Funds, Engagement, Education, and all Administrative items that are not directly allocated to programs.

RECOMMENDATIONS

- KCD suffered a fraudulent check situation in June and early July. The Finance Coordinator caught this, during daily review of banking transactions. Claims were filed with the bank and the bank is in the process of investigating and refunding all funds. It is recommended that KCD move forward with improvements in the bill paying system. This involves moving to an electronic bill pay system with multiple approval levels. The team is in the process of looking at options. Reducing or eliminating manual checks will decrease risk for KCD.
- It is recommended that KCD complete transformation of the Credit Card distribution and policy also.
- We are accumulating action steps for the new CAO upon arrival:
 - 1) Determine internal reporting requirements and schedules.
 - 2) Confirm categorization of Restricted Funds carried forward and work with Rosa to propose use of funds in alignment with current ILA Agreement.

ATTACHMENTS

- Comparative Statements of Financial Position – Modified Cash Basis
- Comparative Statements of Activities vs. Budget – Modified Cash Basis
- Statement of Cash Flows
- Revenue and Expense vs. Budget by Program Category

KING CONSERVATION DISTRICT
COMPARATIVE STATEMENTS OF FINANCIAL POSITION - MODIFIED CASH BASIS
As of June 30, 2022 and December 31, 2021

	<u>6/30/2022</u>	<u>12/31/2021</u>	<u>Variance</u>
ASSETS			
CURRENT ASSETS			
Cash and Equivalents	\$ 14,382,033	\$ 12,711,667	\$ 1,670,366
Accounts Receivable	<u>-</u>	<u>-</u>	<u>-</u>
Total Current Assets	14,382,033	12,711,667	1,670,366
 Total Assets	<u>\$ 14,382,033</u>	<u>\$ 12,711,667</u>	<u>\$ 1,670,366</u>
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES			
Accounts Payable	\$ 11,310	\$ 7,978	\$ 3,332
Accrued Leave Payable	132,921	117,474	15,447
Benefits and Taxes Payable	<u>14,974</u>	<u>45,592</u>	<u>(30,618)</u>
Total Current Liabilities	159,205	171,044	(11,839)
 Total Liabilities	<u>159,205</u>	<u>171,044</u>	<u>(11,839)</u>
 NET ASSETS	<u>14,222,828</u>	<u>12,540,623</u>	<u>1,682,205</u>
 Total Liabilities and Net Assets	<u>\$ 14,382,033</u>	<u>\$ 12,711,667</u>	<u>\$ 1,670,366</u>

KING CONSERVATION DISTRICT
COMPARATIVE STATEMENTS OF ACTIVITIES VS BUDGET - MODIFIED CASH BASIS
For the Six Months Ended June 30, 2022 and the Year Ended December 31, 2021

	06/30/2022	2022 Budget	2021	% of Budget	% of Prior Year
REVENUE AND SUPPORT					
Grants and Contract Revenue	\$ 345,158	\$ 415,285	\$ 526,818	83%	66%
Rates and Charges Receipts	4,562,815	7,959,586	7,944,916	57%	57%
Landowner Cost Share Receipts	11,124	-	-	-	-
Plant Sale Revenue	6,324	120,000	129,359	5%	5%
Interest Income	24,496	108,408	11,405	23%	215%
Other Income	3,131	-	9,058	-	35%
Total Revenue and Support	<u>4,953,048</u>	<u>8,603,279</u>	<u>8,621,556</u>	58%	57%
EXPENSES					
Salaries & Wages	877,285	3,251,364	2,177,315	27%	40%
Benefits	335,898	-	755,982	-	44%
Professional Services	933,540	2,135,624	2,548,079	44%	37%
Member Jurisdiction Payments	330,620	4,440,477	978,778	7%	34%
Cost Share & LIP	62,498	942,087	256,064	7%	24%
Regional Food System Grants	310,745	3,313,296	595,674	9%	52%
Sponsorships & Awards	1,214	54,980	3,879	2%	31%
Occupancy	194,640	410,000	434,638	47%	45%
Field Supplies	89,510	207,106	151,206	43%	59%
Equipment	45,596	42,800	67,222	107%	68%
Insurance	-	46,500	52,054	0%	0%
Office Expense	10,113	46,663	33,937	22%	30%
Soil Testing	10,548	30,000	26,524	35%	40%
Training	11,556	32,080	24,921	36%	46%
Communications	14,678	29,850	16,430	49%	89%
Travel	3,675	26,171	11,745	14%	31%
Repairs & Maintenance	4,057	17,000	4,974	24%	82%
Advertising	10,154	14,150	6,743	72%	151%
Publications & Subscriptions	9,500	11,500	-	83%	-
Dues & Membership	7,791	8,340	6,217	93%	125%
Fuel	2,354	8,000	6,540	29%	36%
Permits & Fees	557	6,625	15,872	8%	4%
Bank Fees	4,314	-	8,741	-	49%
Interest Expense	-	-	118	-	0%
Total Expenses	<u>3,270,843</u>	<u>15,074,613</u>	<u>8,183,653</u>	22%	40%
Change in Net Assets	1,682,205	(6,471,334)	437,903	-26%	384%
Net Assets, Beginning of Year	<u>12,540,623</u>	<u>12,540,623</u>	<u>12,102,720</u>	100%	104%
Net Assets, End of Year	<u>\$ 14,222,828</u>	<u>\$ 6,069,289</u>	<u>\$ 12,540,623</u>	234%	113%

KING CONSERVATION DISTRICT
STATEMENT OF CASH FLOWS
For the Six Months Ended June 30, 2022

OPERATING ACTIVITIES	
Change in Net Assets	\$ 1,682,205
To Adjust for Changes In:	
Accounts Receivable	-
Accounts Payable	3,332
Leave Payable	15,447
Benefits Payable	(30,618)
Net Cash Provided by Operating Activities	<u>1,670,366</u>
Cash at Beginning of Period	<u>12,711,667</u>
Cash at End of Period	<u><u>\$ 14,382,033</u></u>

KING CONSERVATION DISTRICT
REVENUE AND EXPENSE VS BUDGET BY PROGRAM CATEGORY
For the Six Months Ended June 30, 2022

	Agriculture & Local Food		Clean Water		Healthy Forests	
	Actual	Budget	Actual	Budget	Actual	Budget
CURRENT YEAR REVENUE	<u>\$ 1,017,432</u>	<u>\$ 1,651,233</u>	<u>\$ 2,092,975</u>	<u>\$ 3,841,312</u>	<u>\$ 946,715</u>	<u>\$ 1,439,580</u>
EXPENSES						
Salaries & Wages	79,646	393,723	500,440	1,809,146	192,100	823,170
Benefits	15,656	-	102,404	-	40,469	-
Professional Services	30,091	420,930	201,745	1,011,884	80,081	232,075
Member Jurisdiction Payments	-	-	-	-	-	-
Cost Share & LIP	-	-	33,304	387,887	29,195	554,200
Regional Food System Grants	310,745	3,313,296	-	-	-	-
Sponsorships & Awards	-	15,095	200	28,260	-	9,765
Occupancy	-	61,500	110	246,000	-	86,100
Field Supplies	2,852	16,115	84,777	144,185	830	46,642
Equipment	-	7,150	12,686	33,400	-	210
All Other Expense	311	36,721	19,440	180,550	718	40,518
Total Expenses	<u>439,301</u>	<u>4,264,529</u>	<u>955,105</u>	<u>3,841,312</u>	<u>343,393</u>	<u>1,792,680</u>
Change in Net Assets	<u>\$ 578,131</u>	<u>\$ (2,613,296)</u>	<u>\$ 1,137,870</u>	<u>\$ -</u>	<u>\$ 603,322</u>	<u>\$ (353,100)</u>

KING CONSERVATION DISTRICT
REVENUE AND EXPENSE VS BUDGET BY PROGRAM CATEGORY
For the Six Months Ended June 30, 2022

	Other (MJ, Election, Indirect) Actual	Budget	Total Actual	Total Budget
CURRENT YEAR REVENUE	\$ 895,926	\$ 1,671,153	\$ 4,953,048	\$ 8,603,279
EXPENSES				
Salaries & Wages	105,100	225,325	877,285	3,251,364
Benefits	177,368	-	335,898	-
Professional Services	621,623	470,735	933,540	2,135,624
Member Jurisdiction Payments	330,620	4,440,477	330,620	4,440,477
Cost Share & LIP	-	-	62,498	942,087
Regional Food System Grants	-	-	310,745	3,313,296
Sponsorships & Awards	1,014	1,860	1,214	54,980
Occupancy	194,530	16,400	194,640	410,000
Field Supplies	1,051	164	89,510	207,106
Equipment	32,910	2,040	45,596	42,800
All Other Expense	68,830	19,091	89,298	276,879
Total Expenses	<u>1,533,044</u>	<u>5,176,091</u>	<u>3,270,843</u>	<u>15,074,613</u>
Change in Net Assets	<u>\$ (637,118)</u>	<u>\$ (3,504,938)</u>	<u>\$ 1,682,205</u>	<u>\$ (6,471,334)</u>

King Conservation District
Check Detail
June 2022

AI 22-062

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check		06/14/2022			1020 · US Bank - 0152		-25.45
						8200 · Bank Fees	-25.45	25.45
TOTAL							-25.45	25.45
	Check	ACH	06/01/2022	WA Dept of Retirement System (DRS)		1000 · Bank of America - 0408		-1,700.00
				King County		2220 · PERS Payable	-1,700.00	1,700.00
TOTAL							-1,700.00	1,700.00
	Check	ACH	06/01/2022			1020 · US Bank - 0152		-71.00
				King County:Riparian Restoration / Improvement:Plant Sale:		8200 · Bank Fees	-71.00	71.00
TOTAL							-71.00	71.00
	Check	ACH	06/03/2022	Navia Benefit Solutions Client Pay		1000 · Bank of America - 0408		-89.24
				King County		2240 · FSA Payable	-89.24	89.24
TOTAL							-89.24	89.24
	Check	ACH	06/03/2022	WA Dept of Retirement System (DRS)		1000 · Bank of America - 0408		-24,314.36
				King County		2220 · PERS Payable	-24,314.36	24,314.36
TOTAL							-24,314.36	24,314.36
	Check	ACH	06/04/2022	UPS		1000 · Bank of America - 0408		-48.50
				King County:Rural Land Stewardship		6100 · Postage	-48.50	48.50
TOTAL							-48.50	48.50
	Check	ACH	06/07/2022	Navia Benefit Solutions Client Pay		1000 · Bank of America - 0408		-247.00
				King County		2240 · FSA Payable	-247.00	247.00
TOTAL							-247.00	247.00
	Check	ACH	06/07/2022	UPS		1000 · Bank of America - 0408		-129.03
				King County:Rural Land Stewardship		6100 · Postage	-129.03	129.03
TOTAL							-129.03	129.03
	Check	ACH	06/08/2022	PayNorthwest		1000 · Bank of America - 0408		-400.88
				King County		7800 · Professional Services	-400.88	400.88
TOTAL							-400.88	400.88
	Check	ACH	06/09/2022	PayNorthwest		1000 · Bank of America - 0408		-56,263.78
				King County		7800 · Professional Services	-56,263.78	56,263.78
TOTAL							-56,263.78	56,263.78
	Check	ACH	06/09/2022	PayNorthwest		1000 · Bank of America - 0408		-21,942.17
				King County		7800 · Professional Services	-21,942.17	21,942.17
TOTAL							-21,942.17	21,942.17
	Check	ACH	06/10/2022	Chevron		1000 · Bank of America - 0408		-405.38
						7400 · Fuel	-405.38	405.38
TOTAL							-405.38	405.38
	Check	ACH	06/10/2022	PayNorthwest		1000 · Bank of America - 0408		-295.13
				King County		7800 · Professional Services	-295.13	295.13
TOTAL							-295.13	295.13
	Check	ACH	06/11/2022	Bank of America		1000 · Bank of America - 0408		-30.00
				King County		8200 · Bank Fees	-30.00	30.00
TOTAL							-30.00	30.00
	Check	ACH	06/15/2022	US Bank VISA		1000 · Bank of America - 0408		-6,452.18

King Conservation District
Check Detail
June 2022

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
					2010 · Credit Card Payable - 5635	-6,452.18	6,452.18
TOTAL						-6,452.18	6,452.18
Check	ACH	06/17/2022	Navia Benefit Solutions Client Pay		1000 · Bank of America - 0408		-609.87
			King County		2240 · FSA Payable	-609.87	609.87
TOTAL						-609.87	609.87
Check	ACH	06/21/2022	UPS		1000 · Bank of America - 0408		-40.77
			King County:Rural Land Stewardship		6100 · Postage	-40.77	40.77
TOTAL						-40.77	40.77
Check	ACH	06/22/2022	Bank of America		1000 · Bank of America - 0408		-15.00
			King County		8200 · Bank Fees	-15.00	15.00
TOTAL						-15.00	15.00
Check	ACH	06/23/2022	PayNorthwest		1000 · Bank of America - 0408		-22,114.44
			King County		7800 · Professional Services	-22,114.44	22,114.44
TOTAL						-22,114.44	22,114.44
Check	ACH	06/23/2022	PayNorthwest		1000 · Bank of America - 0408		-57,714.18
			King County		7800 · Professional Services	-57,714.18	57,714.18
TOTAL						-57,714.18	57,714.18
Check	ACH	06/24/2022	PayNorthwest		1000 · Bank of America - 0408		-125.60
			King County		7800 · Professional Services	-125.60	125.60
TOTAL						-125.60	125.60
Check	ACH	06/24/2022	Navia Benefit Solutions Client Pay		1000 · Bank of America - 0408		-395.77
			King County		2240 · FSA Payable	-395.77	395.77
TOTAL						-395.77	395.77
Check	ACH	06/28/2022	WA Dept of Retirement System (DRS)		1000 · Bank of America - 0408		-28,862.95
			King County		2220 · PERS Payable	-27,412.95	27,412.95
			King County		2220 · PERS Payable	-1,450.00	1,450.00
TOTAL						-28,862.95	28,862.95
Check	ACH	06/28/2022	UPS		1000 · Bank of America - 0408		-38.35
			King County:Rural Land Stewardship		6100 · Postage	-38.35	38.35
TOTAL						-38.35	38.35
Bill Pmt -Check	24405	06/06/2022	A&L Western Ag Labs, Inc.		1000 · Bank of America - 0408		-1,584.40
Bill	238543	05/24/2022	King County:Rural Land Stewardship		6910 · Soil Testing	-1,584.40	1,584.40
TOTAL						-1,584.40	1,584.40
Bill Pmt -Check	24406	06/06/2022	Alliance 2020, Inc.		1000 · Bank of America - 0408		-82.58
Bill	5837915	05/31/2022	King County		7800 · Professional Services	-82.58	82.58
TOTAL						-82.58	82.58
Bill Pmt -Check	24407	06/06/2022	Association of Washington Cities (AWC)		1000 · Bank of America - 0408		-6,700.00
Bill	97922	05/27/2022	King County		6800 · Dues & Memberships	-6,700.00	6,700.00
TOTAL						-6,700.00	6,700.00
Bill Pmt -Check	24408	06/06/2022	Builders Exchange of WA Inc		1000 · Bank of America - 0408		-45.00
Bill	1071822	05/05/2022	King County:Rural Land Stewardship		6730 · Publications & Subscriptions	-45.00	45.00
TOTAL						-45.00	45.00
Bill Pmt -Check	24409	06/06/2022	Comcast - PA		1000 · Bank of America - 0408		-406.01

King Conservation District
Check Detail
June 2022

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Bill	146011114	05/01/2022	King County		6600 · Communications	-406.01	406.01
TOTAL							-406.01	406.01
	Bill Pmt -Check	24410	06/06/2022	Domain Listings		1000 · Bank of America - 0408		-288.00
	Bill		05/09/2022	King County		6730 · Publications & Subscriptions	-288.00	288.00
TOTAL							-288.00	288.00
	Bill Pmt -Check	24411	06/06/2022	Flores, Julio & Camille		1000 · Bank of America - 0408		-1,083.00
	Bill	2019-07	06/03/2022	King County:Small Lot Forest Stewardship		9994 · Cost Share & LIP	-1,083.00	1,083.00
TOTAL							-1,083.00	1,083.00
	Bill Pmt -Check	24412	06/06/2022	Health Care Authority		1000 · Bank of America - 0408		-24,434.72
	Bill	P202206	06/02/2022	King County		5200 · Health Insurance	-24,434.72	24,434.72
TOTAL							-24,434.72	24,434.72
	Bill Pmt -Check	24413	06/06/2022	Inslee Best Doezie & Ryder, P.S.		1000 · Bank of America - 0408		-1,216.00
	Bill	380735	05/20/2022	King County		7800 · Professional Services	-1,216.00	1,216.00
TOTAL							-1,216.00	1,216.00
	Bill Pmt -Check	24414	06/06/2022	InTWO fka ICS Support Inc		1000 · Bank of America - 0408		-17,250.94
	Bill	25617	05/15/2022	King County		7800 · Professional Services	-6,075.44	6,075.44
	Bill	001510	05/26/2022	King County		7800 · Professional Services	-11,175.50	11,175.50
TOTAL							-17,250.94	17,250.94
	Bill Pmt -Check	24415	06/06/2022	Jason Mirro		1000 · Bank of America - 0408		-66.39
	Bill	06032022	06/03/2022	King County:Rural Land Stewardship		7700 · Travel	-66.39	66.39
TOTAL							-66.39	66.39
	Bill Pmt -Check	24416	06/06/2022	JL Consulting Group LLC		1000 · Bank of America - 0408		-11,737.50
	Bill	2022-0015	05/31/2022	King County		7800 · Professional Services	-11,737.50	11,737.50
TOTAL							-11,737.50	11,737.50
	Bill Pmt -Check	24417	06/06/2022	Kathryn Lewis		1000 · Bank of America - 0408		-7,216.00
	Bill	1032	05/23/2022	King County		7800 · Professional Services	-6,644.00	6,644.00
				King County:Regional Food System		7800 · Professional Services	-572.00	572.00
TOTAL							-7,216.00	7,216.00
	Bill Pmt -Check	24418	06/06/2022	Liz Stockton		1000 · Bank of America - 0408		-270.27
	Bill	06032022	06/03/2022	King County:Agricultural Drainage Assistance		7700 · Travel	-270.27	270.27
TOTAL							-270.27	270.27
	Bill Pmt -Check	24419	06/06/2022	Lorrie Joeschke		1000 · Bank of America - 0408		-637.50
	Bill	2018-01	06/03/2022	King County:Small Lot Forest Stewardship		9994 · Cost Share & LIP	-637.50	637.50
TOTAL							-637.50	637.50
	Bill Pmt -Check	24420	06/06/2022	Mountain Mist		1000 · Bank of America - 0408		-70.35
	Bill	004773931	05/27/2022	King County		7000 · Rentals	-70.35	70.35
TOTAL							-70.35	70.35
	Bill Pmt -Check	24421	06/06/2022	National Construction Rentals		1000 · Bank of America - 0408		-162.95
	Bill	6554861	05/12/2022	King County:Riparian Restoration / Improvement		7000 · Rentals	-81.48	81.48
				King County:Riparian Restoration / Improvement		7000 · Rentals	-81.47	81.47
TOTAL							-162.95	162.95
	Bill Pmt -Check	24422	06/06/2022	Navia Benefit Solutions Client Pay		1000 · Bank of America - 0408		-137.00
	Bill	10475142	05/31/2022	King County		5200 · Health Insurance	-137.00	137.00
TOTAL							-137.00	137.00
	Bill Pmt -Check	24423	06/06/2022	Nikki Wolf		1000 · Bank of America - 0408		-351.66

King Conservation District
Check Detail
June 2022

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Bill		06/03/2022			7700 · Travel	-351.66	351.66
TOTAL							-351.66	351.66
	Bill Pmt -Check	24424	06/06/2022	Pacific Topsoils, Inc.		1000 · Bank of America - 0408		-138.48
	Bill	22-T1256187	05/23/2022	King County:Riparian Restoration / Improvement		6410 · Field Supplies	-70.65	70.65
	Bill	6-T1013887	06/02/2022	King County:Riparian Restoration / Improvement		9994 · Cost Share & LIP	-33.92	33.92
				King County:Riparian Restoration / Improvement		6410 · Field Supplies	-33.91	33.91
TOTAL							-138.48	138.48
	Bill Pmt -Check	24425	06/06/2022	Renton Office Park LLC		1000 · Bank of America - 0408		-13,574.51
	Bill	001977	05/24/2022	King County		6000 · Occupancy	-13,574.51	13,574.51
TOTAL							-13,574.51	13,574.51
	Bill Pmt -Check	24426	06/06/2022	Rosie McGoldrick		1000 · Bank of America - 0408		-131.04
	Bill	06032022	06/03/2022	King County		7700 · Travel	-131.04	131.04
TOTAL							-131.04	131.04
	Bill Pmt -Check	24427	06/06/2022	Salix Advisors LLC		1000 · Bank of America - 0408		-6,375.00
	Bill	22-117	05/31/2022	King County		7800 · Professional Services	-6,375.00	6,375.00
TOTAL							-6,375.00	6,375.00
	Bill Pmt -Check	24428	06/06/2022	Snoqualmie Valley Watershed Imp. Dist.		1000 · Bank of America - 0408		-2,403.00
	Bill	2022-02	01/24/2022	King County		7800 · Professional Services	-1,443.00	1,443.00
	Bill	2022-01	01/24/2022	King County		7800 · Professional Services	-960.00	960.00
TOTAL							-2,403.00	2,403.00
	Bill Pmt -Check	24429	06/06/2022	State Auditor's Office		1000 · Bank of America - 0408		-4,446.63
	Bill	L147452	03/10/2022	King County		7800 · Professional Services	-4,446.63	4,446.63
TOTAL							-4,446.63	4,446.63
	Bill Pmt -Check	24430	06/06/2022	Summit Law Group PLLC		1000 · Bank of America - 0408		-524.00
	Bill	136997	05/20/2022	King County		7800 · Professional Services	-524.00	524.00
TOTAL							-524.00	524.00
	Bill Pmt -Check	24431	06/06/2022	T-Mobile		1000 · Bank of America - 0408		0.00
TOTAL							0.00	0.00
	Bill Pmt -Check	24432	06/06/2022	Thomas Amorose		1000 · Bank of America - 0408		-638.25
	Bill	2018-02	06/03/2022	King County:Small Lot Forest Stewardship		9994 · Cost Share & LIP	-638.25	638.25
TOTAL							-638.25	638.25
	Bill Pmt -Check	24433	06/06/2022	US Bank Eq. Finance		1000 · Bank of America - 0408		-3,298.91
	Bill	472893486	05/20/2022	King County		7000 · Rentals	-3,298.91	3,298.91
TOTAL							-3,298.91	3,298.91
	Bill Pmt -Check	24434	06/06/2022	WA Assn of District Employees (WADE)		1000 · Bank of America - 0408		-10,585.00
	Bill	3	05/15/2022	King County		7600 · Conferences & Trainings	-10,585.00	10,585.00
TOTAL							-10,585.00	10,585.00
	Bill Pmt -Check	24435	06/06/2022	WFSE-Union		1000 · Bank of America - 0408		-1,594.39
	Bill	05312022 - WFSE	06/03/2022	King County		2250 · Union Dues Payable	-1,567.27	1,567.27
	Bill	04302022A - WFSE	06/03/2022	King County		2250 · Union Dues Payable	-27.12	27.12
TOTAL							-1,594.39	1,594.39
	Bill Pmt -Check	24436	06/06/2022	Whatcom Conservation District		1000 · Bank of America - 0408		-435.92
	Bill	GIS 22-15	05/26/2022	King County		6730 · Publications & Subscriptions	-435.92	435.92
TOTAL							-435.92	435.92

King Conservation District
Check Detail
June 2022

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Bill Pmt -Check	24437	06/06/2022	Your Part-Time Controller, LLC		1000 · Bank of America - 0408		-4,438.75
	Bill	22-5-3150	05/23/2022	King County		7800 · Professional Services	-2,917.50	2,917.50
	Bill	22-5-4027	05/30/2022	King County		7800 · Professional Services	-1,521.25	1,521.25
TOTAL							-4,438.75	4,438.75
	Bill Pmt -Check	24438	06/21/2022	African Community Housing & Development		1000 · Bank of America - 0408		-1,004.73
	Bill	FF00092 Q1 2022	06/17/2022	King County:Regional Food System		9992 · Regional Food System Grants	-1,004.73	1,004.73
TOTAL							-1,004.73	1,004.73
	Bill Pmt -Check	24439	06/21/2022	City of Renton Utility Division		1000 · Bank of America - 0408		-93.47
	Bill	020097-000	05/30/2022	King County:Riparian Restoration / Improvement		6410 · Field Supplies	-93.47	93.47
TOTAL							-93.47	93.47
	Bill Pmt -Check	24440	06/21/2022	Comcast - PA		1000 · Bank of America - 0408		-405.92
	Bill	148099356	06/01/2022	King County		6600 · Communications	-405.92	405.92
TOTAL							-405.92	405.92
	Bill Pmt -Check	24441	06/21/2022	Comcast Business		1000 · Bank of America - 0408		-254.10
	Bill	8498340053212140	05/26/2022	King County		6005 · Utilities	-254.10	254.10
TOTAL							-254.10	254.10
	Bill Pmt -Check	24442	06/21/2022	Compensation Connections LLC		1000 · Bank of America - 0408		-5,100.00
	Bill	2203	06/06/2022	King County		7800 · Professional Services	-5,100.00	5,100.00
TOTAL							-5,100.00	5,100.00
	Bill Pmt -Check	24443	06/21/2022	DPdrones LLC		1000 · Bank of America - 0408		-695.00
	Bill	443	05/24/2022	King County:Agricultural Drainage Assistance		7800 · Professional Services	-695.00	695.00
TOTAL							-695.00	695.00
	Bill Pmt -Check	24444	06/21/2022	EarthCorps		1000 · Bank of America - 0408		-14,360.00
	Bill		06/17/2022	King County:Member Jurisdiction Grants		9998 · Member Jurisdiction Payments	-14,360.00	14,360.00
TOTAL							-14,360.00	14,360.00
	Bill Pmt -Check	24445	06/21/2022	Enduris Washington		1000 · Bank of America - 0408		-19.09
	Bill	C10221 Overpmt	05/31/2022	King County		7100 · Repairs & Maintenance	-19.09	19.09
TOTAL							-19.09	19.09
	Bill Pmt -Check	24446	06/21/2022	Ferguson Waterworks		1000 · Bank of America - 0408		-125.15
	Bill	CP468619	05/17/2022	King County:Agricultural Drainage Assistance		6410 · Field Supplies	-125.15	125.15
TOTAL							-125.15	125.15
	Bill Pmt -Check	24447	06/21/2022	Greenbelt Consulting		1000 · Bank of America - 0408		-4,350.00
	Bill		05/27/2022	King County:Riparian Land Stewardship		7800 · Professional Services	-4,350.00	4,350.00
TOTAL							-4,350.00	4,350.00
	Bill Pmt -Check	24448	06/21/2022	Health Care Authority		1000 · Bank of America - 0408		-442.97
	Bill	P202206B	06/08/2022	King County		5200 · Health Insurance	-442.97	442.97
TOTAL							-442.97	442.97
	Bill Pmt -Check	24449	06/21/2022	Highline College		1000 · Bank of America - 0408		-4,482.22
	Bill	FF00080	06/08/2022	King County:Regional Food System		9992 · Regional Food System Grants	-4,482.22	4,482.22
TOTAL							-4,482.22	4,482.22
	Bill Pmt -Check	24450	06/21/2022	InTWO fka ICS Support Inc		1000 · Bank of America - 0408		-6,477.11
	Bill	25800	06/01/2022	King County		7800 · Professional Services	-346.62	346.62
	Bill	001510	06/13/2022	King County		7800 · Professional Services	-55.05	55.05
	Bill	25896	06/15/2022	King County		7800 · Professional Services	-6,075.44	6,075.44
TOTAL							-6,477.11	6,477.11

King Conservation District
Check Detail
June 2022

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Bill Pmt -Check	24451	06/21/2022	John Bethel		1000 · Bank of America - 0408		-3,300.00
	Bill	2022-01	05/26/2022	King County:Riparian Land Stewardship		7800 · Professional Services	-3,300.00	3,300.00
TOTAL							-3,300.00	3,300.00
	Bill Pmt -Check	24452	06/21/2022	Maria C Ward		1000 · Bank of America - 0408		0.00
TOTAL							0.00	0.00
	Bill Pmt -Check	24453	06/21/2022	Mt. Adams Institute		1000 · Bank of America - 0408		-13,000.00
	Bill	2 (FINAL)	06/15/2022	King County:Urban Forest Stewardship		7800 · Professional Services	-6,500.00	6,500.00
				King County:Small Lot Forest Stewardship		7800 · Professional Services	-6,500.00	6,500.00
TOTAL							-13,000.00	13,000.00
	Bill Pmt -Check	24454	06/21/2022	National Construction Rentals		1000 · Bank of America - 0408		-256.54
	Bill	6423673	01/20/2022	King County:Riparian Restoration / Improvement		7000 · Rentals	-81.47	81.47
				King County:Riparian Restoration / Improvement		7000 · Rentals	-81.48	81.48
	Bill	6567214	05/24/2022	King County:Riparian Restoration / Improvement		7000 · Rentals	-93.59	93.59
TOTAL							-256.54	256.54
	Bill Pmt -Check	24455	06/21/2022	Nikki Wolf		1000 · Bank of America - 0408		-140.00
	Bill		06/17/2022	King County:Riparian Land Stewardship		7700 · Travel	-140.00	140.00
TOTAL							-140.00	140.00
	Bill Pmt -Check	24456	06/21/2022	Pacific Topsoils, Inc.		1000 · Bank of America - 0408		-1,647.93
	Bill	2-O1099753-01	05/20/2022	King County:Riparian Restoration / Improvement		9994 · Cost Share & LIP	-800.98	800.98
				King County:Riparian Restoration / Improvement		6410 · Field Supplies	-800.98	800.98
	Bill	18-T1204218	06/09/2022	King County:Riparian Restoration / Improvement		9994 · Cost Share & LIP	-45.97	45.97
TOTAL							-1,647.93	1,647.93
	Bill Pmt -Check	24457	06/21/2022	Percolator Consulting LLC		1000 · Bank of America - 0408		-287.50
	Bill	3125	04/15/2022	King County		7800 · Professional Services	-287.50	287.50
TOTAL							-287.50	287.50
	Bill Pmt -Check	24458	06/21/2022	Premiere Excavating LLC		1000 · Bank of America - 0408		-17,206.12
	Bill	22-0601	06/01/2022	King County:Agricultural Drainage Assistance		7800 · Professional Services	-17,206.12	17,206.12
TOTAL							-17,206.12	17,206.12
	Bill Pmt -Check	24459	06/21/2022	Renton Office Park LLC		1000 · Bank of America - 0408		-20,534.67
	Bill	July 2022	06/17/2022	King County		6000 · Occupancy	-20,534.67	20,534.67
TOTAL							-20,534.67	20,534.67
	Bill Pmt -Check	24460	06/21/2022	Restoration Analytics & Design LLC		1000 · Bank of America - 0408		-1,500.00
	Bill	0167	06/14/2022	King County:Urban Forest Stewardship		7800 · Professional Services	-1,500.00	1,500.00
TOTAL							-1,500.00	1,500.00
	Bill Pmt -Check	24461	06/21/2022	Rosa Mendez-Perez		1000 · Bank of America - 0408		-285.48
	Bill		06/17/2022	King County		7700 · Travel	-285.48	285.48
TOTAL							-285.48	285.48
	Bill Pmt -Check	24462	06/21/2022	Rosie McGoldrick		1000 · Bank of America - 0408		-261.49
	Bill		06/17/2022	King County		7700 · Travel	-261.49	261.49
TOTAL							-261.49	261.49
	Bill Pmt -Check	24463	06/21/2022	Sustainable Seattle		1000 · Bank of America - 0408		-30,502.08
	Bill	SE00097	06/17/2022	King County:Member Jurisdiction Grants		9998 · Member Jurisdiction Payments	-30,502.08	30,502.08
TOTAL							-30,502.08	30,502.08
	Bill Pmt -Check	24464	06/21/2022	The Athena Group		1000 · Bank of America - 0408		-445.00

King Conservation District
Check Detail
June 2022

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Bill	4686	06/08/2022	King County		7800 · Professional Services	-445.00	445.00
TOTAL							-445.00	445.00
	Bill Pmt -Check	24465	06/21/2022	The Common Acre		1000 · Bank of America - 0408		-6,294.08
	Bill	SE00087	06/17/2022	King County:Member Jurisdiction Grants		9998 · Member Jurisdiction Payments	-6,294.08	6,294.08
TOTAL							-6,294.08	6,294.08
	Bill Pmt -Check	24466	06/21/2022	WA Department of Ecology		1000 · Bank of America - 0408		-45,401.83
	Bill	WC000000952	06/10/2022	King County:Riparian Restoration / Improvement		7800 · Professional Services	-19,997.42	19,997.42
				King County:Riparian Restoration / Improvement		7800 · Professional Services	-15,942.17	15,942.17
				King County:Riparian Restoration / Improvement		9994 · Cost Share & LIP	-675.88	675.88
				King County:Riparian Restoration / Improvement		7800 · Professional Services	-675.88	675.88
				King County:Riparian Restoration / Improvement		7800 · Professional Services	-8,110.48	8,110.48
TOTAL							-45,401.83	45,401.83
	Bill Pmt -Check	24467	06/21/2022	Your Part-Time Controller, LLC		1000 · Bank of America - 0408		-1,905.00
	Bill	22-6-427	06/06/2022	King County		7800 · Professional Services	-310.00	310.00
	Bill	22-6-1326	06/13/2022	King County		7800 · Professional Services	-1,595.00	1,595.00
TOTAL							-1,905.00	1,905.00
	Bill Pmt -Check	24468	06/21/2022	Maria C Ward		1000 · Bank of America - 0408		-490.56
	Bill		06/17/2022	King County		7700 · Travel	-490.56	490.56
TOTAL							-490.56	490.56
	Check	FRAUD-24514	06/16/2022			1000 · Bank of America - 0408		-721.64
						8600 · Miscellaneous	-721.64	721.64
TOTAL							-721.64	721.64
	Check	FRAUD-24536	06/17/2022			1000 · Bank of America - 0408		-727.13
						8600 · Miscellaneous	-727.13	727.13
TOTAL							-727.13	727.13
	Check	FRAUD-24545	06/28/2022			1000 · Bank of America - 0408		-468.36
						8600 · Miscellaneous	-468.36	468.36
TOTAL							-468.36	468.36
	Check	FRAUD-24623	06/21/2022			1000 · Bank of America - 0408		-608.64
						8600 · Miscellaneous	-608.64	608.64
TOTAL							-608.64	608.64
	Check	FRAUD-24629	06/21/2022			1000 · Bank of America - 0408		-750.00
						8600 · Miscellaneous	-750.00	750.00
TOTAL							-750.00	750.00
	Check	FRAUD-24630	06/21/2022			1000 · Bank of America - 0408		-742.16
						8600 · Miscellaneous	-742.16	742.16
TOTAL							-742.16	742.16
	Check	FRAUD-24631	06/21/2022			1000 · Bank of America - 0408		-763.14
						8600 · Miscellaneous	-763.14	763.14
TOTAL							-763.14	763.14
	Check	FRAUD-24660	06/22/2022			1000 · Bank of America - 0408		-725.63
						8600 · Miscellaneous	-725.63	725.63
TOTAL							-725.63	725.63
	Check	FRAUD-24668	06/27/2022			1000 · Bank of America - 0408		-763.15
						8600 · Miscellaneous	-763.15	763.15
TOTAL							-763.15	763.15

King Conservation District
Check Detail
June 2022

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	1000001	06/10/2022	Maya Klem		1000 · Bank of America - 0408		-1,306.74
			King County		24000 · Payroll Liabilities	-1,306.74	1,306.74
TOTAL						-1,306.74	1,306.74

**KING CONSERVATION DISTRICT
KING COUNTY, WASHINGTON**

RESOLUTION NO 22-001

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE KING
CONSERVATION DISTRICT, KING COUNTY, WASHINGTON,
RESCINDING BOARD RESOLUTION 18-003.

WHEREAS, in 2018 the Board of Supervisors of the King Conservation District discussed
a potential resolution regarding certain bank accounts; and

WHEREAS, a signed copy of Resolution #18-003 exists in the King Conservation District
digital storage; and

WHEREAS, the record of Board of Supervisors meetings is unclear as to whether
Resolution 18-003 was actually passed or not; and

WHEREAS, it is in the interests of King Conservation District to continue to use the bank
accounts named; now, therefore

BE IT RESOLVED by the Board of Supervisors of the King Conservation District, King
County, Washington, as follows:

- 1) Board Resolution #18-003 is formally rescinded.

ADOPTED BY THE BOARD OF SUPERVISORS of the King Conservation District,
Washington, at a special open public meeting thereof, and effective this 8th day of August, 2022.

Kirstin Haugen, Chair

CERTIFICATE

I, _____, Auditor of the Board of Supervisors, King County, Washington, do hereby certify that the foregoing resolution is a true and correct copy of Resolution No. [] - [] of such Board, duly adopted at a regular meeting thereof held on [], 20[].

Chris Porter, Vice Chair

**KING CONSERVATION DISTRICT
KING COUNTY, WASHINGTON**

RESOLUTION NO. 18-003

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE KING CONSERVATION DISTRICT, KING COUNTY, WASHINGTON, AUTHORIZING THE BOARD SECRETARY/AUDITOR TO TRANSFER FUNDS FOR ADMINISTRATIVE AND EFFICIENCY PURPOSES AND TO MAKE ADDITIONAL TRANSFERS OF FUNDS CONSISTENT WITH THE 2018 BUDGET AND BOARD DIRECTION.

WHEREAS, the King Conservation District ("District") has a desire to simplify its current bank account structure for administrative and efficiency purposes and to make such transfers of funds as are necessary for that purpose; and

WHEREAS, the District desires to make additional transfers of funds consistent with the 2018 budget and Board of Supervisors direction, now therefore;

BE IT RESOLVED by the Board of Supervisors of the King Conservation District, as follows:

Section 1. The recitals set forth above are incorporated herein in full by this reference.

Section 2. For the purposes described herein, the District authorizes and directs the Board Secretary/Auditor Bill Knutsen to take the following actions:

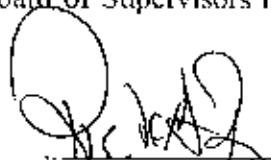
1. Close out the US Bank account number ending in 0152. All funds in this account at the time of closing shall be transferred and deposited into the District's Operating Account currently maintained with Bank of America (account number ending in 0408). The funds may be transferred via wire transfer, certified check, or such other means as determined by the District's Chief Operating Officer as being appropriate under the circumstances.

2. All funds currently on deposit in US Bank account number ending in 2328 shall be deposited into the District's Operating Account with Bank of America (account number ending in 0408). The funds may be transferred via wire transfer, certified check, or such other means as determined by the District's Chief Operating Officer as being appropriate under the circumstances.

3. Authorize and direct the District's Chief Operating Officer to make a journal entry showing a transfer of \$496,248.00 (or other amount as may be in such account at the time of the journal entry) from the contingency reserve in the Local Government Investment Pool (LGIP) and into the LGIP current operating account. The effect of this journal entry is to make a total of

\$1,278,656.00 available in the Operating Account with Bank of America available to cover approved 2018 expenses.

ADOPTED by the Board of Supervisors at a Board of Supervisors meeting open to the public held on November 19, 2018.



Dick Ryon, Chair

CERTIFICATE

I, Bill Knutsen, Secretary of the Board of Supervisors, King County, Washington, do hereby certify that the foregoing resolution is a true and correct copy of Resolution No. 18-003 of such Board, duly adopted at a special meeting thereof held on the 19th day of November, 2018, by the members of such Board in attendance at such meeting and attested by myself in authentication of such adoption.


Bill Knutsen, Secretary/Auditor

King Conservation District Balance Sheet

As of 9/30/2018
(In Whole Numbers)

	Current Operating	Contingency Reserve	Working Lands Initiative	Working Lands Breakout	Member Jurisdiction	All Other Reserve	LIP	Regional Food Reserve	Total
Assets									
Current Assets									
Cash & Cash Equivalents									
Cash (Checking Ops / BoFA / x0408)	60,263	0	0	0	0	0	0	0	60,263
Cash (US Bank- 2012 Assessment- 2328)	24,764	0	50,313	1,302,586	0	0	0	0	1,377,664
Cash (US Bank- Rate Payer Funds- 0152)	325,790	0	206,631	0	0	0	0	0	532,421
Time Value Investments - Bond Purchase	496,248	0	0	0	0	0	0	0	496,248
Cash (Local Government Investment Pool)	199,674	1,600,000	0	0	3,721,690	157,736	1,142,042	1,375,025	8,196,167
Cash (Pay Pal)	0	0	0	0	0	0	0	0	0
Total Cash & Cash Equivalents	1,106,739	1,600,000	256,944	1,302,586	3,721,690	157,736	1,142,042	1,375,025	10,662,763
Total Current Assets	1,106,739	1,600,000	256,944	1,302,586	3,721,690	157,736	1,142,042	1,375,025	10,662,763
Total Assets	1,106,739	1,600,000	256,944	1,302,586	3,721,690	157,736	1,142,042	1,375,025	10,662,763

1,103,752.00

532,421 #1) 325,790 close US Bank 0152
206,631 cashiers check for \$ 532,421

50,313 #2) 50,313 US Bank cashiers check
for \$ 50,313

199,674 #3) 199,674 = will automatically reduce wire transfer
money in the next check run, to BoFA 0408

496,248 #4. 1,600,000 = Need to J/E @ 496,248 from contingency reserve
- 496,248 to LIP current operating. So we can transfer to BoFA 0408
for checks
\$ 1,278,656 1,103,752.00 bal in contingency reserve

Board of Supervisors

Meeting MinutesNovember 19th, 2018

Supervisors Present: Dick Ryon – Chair, Burr Mosby – Vice Chair, Bill Knutsen – Auditor, Jim Haack (via video conference), Max Prinsen

Associate Supervisors Present: Nancy Tosta (via video conference).

Guests Present: Allison Halpern (Washington State Conservation Commission), Eric Frimodt (Inslee Best), Kristen Haugen

Staff Present: Bea Covington, Ava Souza, Josh Monaghan, Deirdre Grace, Jessica Saavedra, Laura Redmond, Lindsey Davidson, Gwen Vernon, Emily Carlson

Preliminary Matters: Meeting called to order at 5:00 pm by Dick Ryon. All attendees introduced themselves. Ryon asked for additions or corrections to the current agenda. It was noted that an updated agenda was circulated.

Ryon added the WSCC update to the agenda for 15 minutes under the title New Business.

It was noted that an updated Finance Packet was circulated. It was noted that Resolution 18-001 was circulated at this meeting.

Knutsen moved; Prinsen seconded passed unanimously a motion to approve the agenda as amended (5 ayes, 0 nays)

Consent Agenda:

Ryon read the consent agenda items aloud and all items were voted on.

a) Board Minutes: None.

b) KCD LIP Applications:

1) AI 18-083 LIP App – Goldbloom: Waste Storage Facility

c) Member Jurisdiction Grant Applications:

1) AI 18-084: City of Kirkland – 2019 Implementation of 20-Year Forest and Natural Areas Restoration Plan

2) AI 18-085: University of Washington – Seahurst Park, 2019 Benthic Invertebrate Monitoring

Knutsen moved; Mosby seconded, a motion to remove AI 18-083 from the consent agenda (5 ayes, 0 nays)

Prinsen moved, Knutsen seconded passed unanimously a motion to approve the consent agenda as amended (5 ayes, 0 nays)

Pulled Consent Agenda Items:

Knutsen asked about the waterbody on the property. There is a typo within the application; Knutsen updated it to strike Ames Creek from the application document.

Ryon noted that the initials on the document have been typed into the document. Redmond commented that these are electronic signatures; KCD has used these in the past. Ryon asked that the documents be initialed in pen and ink rather than electronically. Ryon asked that we confer with legal council as to whether or not electronic signatures and initials posed a legal issue. If not, the board will accept this as an electronic signature.

Knutsen moved; Prinsen seconded a motion to approve AI 18-083 LIP Application for Goldbloom: Waste Storage Facility (5 ayes, 0 nays)

Public Comment period: Opened at 5:10pm, closed at 5:15pm.

Presentations: None.

Finance:

AI 18-086: A motion to approve check numbers 21086 through 21168 for a total of \$416,487.30; non-payroll EFT's totaling \$7,540.58; Bank Fees of \$93.00; and October 2018 payroll for \$228,856.33 – Souza

Souza presented the finance report. There is an updated and corrected finance package which has been distributed. Souza explained how the check register is created and exactly what it shows. The document shows exactly each outgoing expense for the month. There are two check-runs per month coinciding with the Board Meeting and the Grant Sub-Committee Meetings each month. This creates consistency and allows for payment of bills and better enables anticipation of expenses. It was noted that the monthly checks are not strictly from the operating fund; checks may draw funds from other sources like reserve funds of encumbered LIP funds.

Souza explained each section of the finance motion. Souza noted that the EFTs in this month included tax payments, resulting in a higher amount of expenses. She noted that the payroll expenses include the cost of doing supporting staff (insurance, vacation accrual etc.).

Souza noted that this report shows the details necessary for the Board to understand how KCD is handling its funds. Two board members have been designated to approve all checks; they sign off on each check as an individual or a pair. This policy can be changed by the Board to include more Board members in the approval process.

A question was raised about how the board approves checks and how approval is incorporated into the process before the checks are released. It was commented that there are a series of checks,

balances, and approvals in place before the checks are released. It was noted that all checks could be pulled from the group and supplementary documentation could be provided about any single check even within a Board meeting. The Board reviewed the check procedure with auditing processes in mind; the Board seeks the most transparent, efficient, and accountable procedures for KCD.

Souza noted that all accounting procedures have been presented to the Auditor and Chair. It was noted that while all Board members are oriented to this process when they take office, it would be valuable piece to add to an annual Board member training process.

Souza noted that there is a check to Commercial Office Interiors (check 2113) and this should be the final payment for the move process. Third quarter taxes were paid in October.

The end of month summary shows that KCD has not yet received the rates and charges account funds. These will be forthcoming.

Knutsen moved; Prinsen seconded, passed unanimously a motion to approve AI 18-086: A motion to approve check numbers 21086 through 21168 for a total of \$416,487.30; non-payroll EFT's totaling \$7,540.58; Bank Fees of \$93.00; and October 2018 payroll for \$228,856.33 – Souza (5 ayes, 0 nays)

AI 18-087; 2019 Budget Approval – Covington

Covington distributed the document to the Board for their review. The operating reserve is protected in the 2019 budget to provide approximately three months of coverage on monthly expenses. Efficiencies and savings were identified by staff to trim the costs throughout a revisions process. This still leaves a deficit. Staff have identified a number of potential grant sources that will be pursued to close this funding gap.

If there is a significant failure on the grant initiatives then KCD would need to draw on funds in the operating reserve. Accounting is creating reports on budget to actual processes to show monthly reports to the Board. Grant funding reports will be given to the Board to keep members updated on this work.

A question was raised about what additional cuts could be made. The primary source of savings will come from staggering staff hires or not filling vacancies. A note was raised about cost-share and how those funds could be reabsorbed, if necessary. It was noted that as the rates and charges negotiations move forward, more information may become available. A question was raised about the pursuit of grant funds; pursuing grant funding will be a responsibility of the operations team.

A question was raised about how the grant fund revenues were estimated; KCD is anticipating a 30% success rate for grants. It was noted that many of these grant programs have not released the details of the grant requirements. It was noted that the structure of receiving grant funds is not

98 always simple. It was noted that grants are being written with the goal of supporting current
99 programs of work.

100 Differences between expenses outlined in the draft budget will be offset with a combination of
101 grant funds, and efficiencies.

102 Knutsen requested that this discussion be continued after the executive session concludes.

103 Nancy Tosta left the meeting at 6:18pm.

104 Executive Session to discuss pending litigation pursuant to RCW 42.30.110(1)(i).

105 Ryon called the executive session was called at 6:18 pm; the purpose is to discuss actual, pending
106 litigation regarding KCD business. The executive session will last 20 minutes. Ryon called the
107 board to regular session at 6:38 pm.

108 Prinsen moved, Knutsen seconded passed unanimously a motion to authorize Mr. Frimodt
109 to proceed with the negotiation of the purchase and sale agreement consistent with the
110 discussions in executive session (5 ayes, 0 nays).

111 Dinner break was called from 6:45pm to 7:00pm.

112 The regular meeting resumed at 7:00pm.

113 2019 Budget Discussion Continued

114 Ryon inquired about the Board's sentiment on the proposed budget. There was concern that the
115 proposed grant revenue stream was too uncertain to rely on it to balance the budget. It was
116 requested that the minutes reflect that there would be no hiring action until February, depending
117 on the outcome of pending grant requests.

118 Souza noted that a budget must be approved and entered into MIP in order for the District to
119 continue to do business on 1 January 2019.

120 The Board requested staff to develop an alternative budget proposal that did not rely on revenue
121 from new grant sources to offset expenses and to delay further hiring until funding could be
122 identified that does not rely on grant revenue.

123 Souza recognized the accounting team, Lindsey Davidson and Yuliy Makhovitskiy, for their
124 work on these items.

125 The Board took no action on the King Conservation District 2019 budget as presented.

126 Unfinished Business

A motion to approve AI 18-088, Resolution 18-001: A resolution of the Board of Supervisors of the King Conservation District King County, Washington, establishing the 2019 election of the Board of Supervisors- Souza

Souza presented the election resolution from the previous meeting. The election will be held from March 18th to March 29th; the method of election will be the same as 2018; a mail-in election where ballots must be requested by the voter and an open poll-site election.

Knutsen moved; Mosby seconded passed unanimously a motion to approve AI 18-088, Resolution 18-001: A resolution of the Board of Supervisors of the King Conservation District King County, Washington, establishing the 2019 election of the Board of Supervisors (5 ayes, 0 nays)

New Business

AI 18-089: LIP Cost Share Practice: Pasture Health Management – Monaghan/Redmond

Redmond and Monaghan presented these items to the Board of Supervisors. The review process included a board task force, staff input, and WSCC input on these items. Monaghan explained that pasture management has been a difficult practice for landowners to master, although it is critical for water quality and healthy soils.

This proposed approach would combine multiple practices into a single, wholistic practice with the intention of improving pasture management throughout King County. Redmond added that this practice is intended to create a comprehensive tool for pasture management. This allows staff to assess if pasture management is successful throughout a maintenance period during which the pasture management practices are monitored by staff.

It was noted that this does not require cooperators to undertake all the outlined practices to receive cost share. A question was raised about the prescriptive nature of the practices. Redmond clarified that the Best Management Practices will include specific guidelines for landowners on management issues.

Halpern commented that, as a horse owner, she has personally noted that pasture management is about changing behavior and assisting individuals through time. This assists land managers with making changes over time.

Knutsen moved; Mosby seconded passed unanimously AI 18-089; a motion to replace existing individual eligible Best Management Practices (BMP) of animal trails and walkways, cross fencing, and pasture and hay planting within the KCD Landowner Incentive Program (LIP) with a Pasture and Forage Health Management BMP (5 ayes, 0 nays)

AI 18-090: Resolution 18-002: A resolution of the Board of Supervisors of the King Conservation District, King County, Washington, authorizing certain officials and employees of the district to sign checks – Souza

Currently, the Board Chair and Board Auditor are authorized to sign checks. Most checks require two signatures. It has become problematic to have both signatories available to timely process the volume of checks being processed by the District. Under the direction of the Board Auditor, Souza presented this resolution.

Mosby moved; Prinsen seconded passed unanimously a motion to approve AI 18-090: Resolution 18-002: be it resolved that the Board of Supervisors of the King Conservation District, King county, Washington authorizes the Board Chair, Auditor, a third supervisor to be named as appropriate, and the Executive Director of the District the authority to sign checks on behalf of the District (5 ayes, 0 nays).

AI 18-091; Resolution 18-003: A resolution of the Board of Supervisors of the King Conservation District, King County, Washington, authorizing the Board Secretary/Auditor to transfer funds for administrative and efficiency purposes and to make additional transfers of funds consistent with the 2018 budget and Board direction – Souza

Souza presented this resolution to the Board and explained that the 2018 budget was funded in part by using funds that are located in several existing reserve accounts. The actual balances in the accounts have shifted since the resolution was drafted, that is why the language is not specific as to the dollar amount to be transferred.

A question was raised regarding using language like, "not to exceed" a specific amount. The motion was tabled without any action.

The Board took no action on AI 18-091; Resolution 18-003.

WSCC Update – Halpern

Halpern presented an award to Bea Covington. She was recognized as the Conservation District Manager of the Year by the Washington State Conservation Commission and was recognized for her excellent work and leadership.

Halpern noted that next week is the WACD annual conference. There will be a public hearing on December 7th to consider the removal of two supervisors on the Thurston Conservation District Board of Supervisors.

The Executive Director position within the WSCC office will be opening as the current ED is retiring. The hiring process will be taking place over the next few months.

Halpern recognized that she went for a site-visit with the KCD forestry team and she is impressed with KCD's support for Firewise communities and practices. Halpern also noted that there is a forthcoming list of contract language updates which Enduris, WSCC's insurance company, recommends be implemented in all conservation district contracts.

Executive Director Update – Covington

Covington noted that the Board has received materials that have been given to the Advisory Committee in support of the Road to 2020 process. Three webinars will be held tomorrow to explain the materials and how to use them; supervisors are welcome to attend.

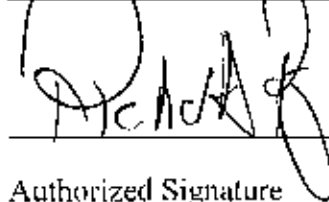
Phone calls are going out to local officials to explain KCD's role in the conservation landscape.

January 12th and February 9th will be day-long workshops within the office to flesh out the work of the road to 2020; these will be open public meetings.

Mosby, Reed, and Knutsen are headed to the WACD meeting to represent KCD at that event.

Knutsen commented that mycological restoration and stormwater management were both interesting topics at the Focus on Farming conference.

Knutsen moved; Prinsen seconded passed unanimously a motion to adjourn the meeting at 8:00 pm (5 ayes, 0 nays)



11/19/2018

Authorized Signature

Date

Summary of Motions

Knutsen moved; Prinsen seconded passed unanimously a motion to approve the agenda as amended (5 ayes, 0 nays)

Knutsen moved; Mosby seconded, a motion to remove AI 18-083 from the consent agenda (5 ayes, 0 nays)

Prinsen moved, Knutsen seconded passed unanimously a motion to approve the consent agenda as amended (5 ayes, 0 nays)

Knutsen moved; Prinsen seconded a motion to approve AI 18-083 LIP Application for Goldbloom: Waste Storage Facility (5 ayes, 0 nays)

Knutsen moved; Prinsen seconded, passed unanimously a motion to approve AI 18-086: A motion to approve check numbers 21086 through 21168 for a total of \$416,487.30; non-payroll EFT's totaling \$7,540.58; Bank Fees of \$93.00; and October 2018 payroll for \$228,856.33 – Souza (5 ayes, 0 nays)

Prinsen moved, Knutsen seconded a motion to authorize Mr Frimodt to proceed with the negotiation of the purchase and sale agreement consistent with the discussions in executive session.

- 226 Knutsen moved; Mosby seconded passed unanimously a motion to approve AI 18-088,
227 Resolution 18-001: A resolution of the Board of Supervisors of the King Conservation
228 District King County, Washington, establishing the 2019 election of the Board of
229 Supervisors- Souza (5 ayes, 0 nays)
- 230 Knutsen moved; Mosby seconded passed unanimously AI 18-089: A motion to replace
231 existing individual eligible Best Management Practices (BMP) of animal trails and walkways,
232 cross fencing, and pasture and hay planting within the KCD Landowner Incentive Program
233 (LIP) with a Pasture and Forage Health Management BMP (5 ayes, 0 nays)
- 234 Mosby moved; Prinsen seconded passed unanimously a motion to approve AI 18-090:
235 Resolution 18-002: be it resolved that the Board of Supervisors of the King Conservation
236 District, King county, Washington authorizes the Board Chair, Auditor, a third supervisor
237 to be named as appropriate, and the Executive Director of the District the authority to sign
238 checks on behalf of the District (5 ayes, 0 nays).
- 239 Knutsen moved; Prinsen seconded passed unanimously a motion to adjourn the meeting at
240 8:00 pm (5 ayes, 0 nays)

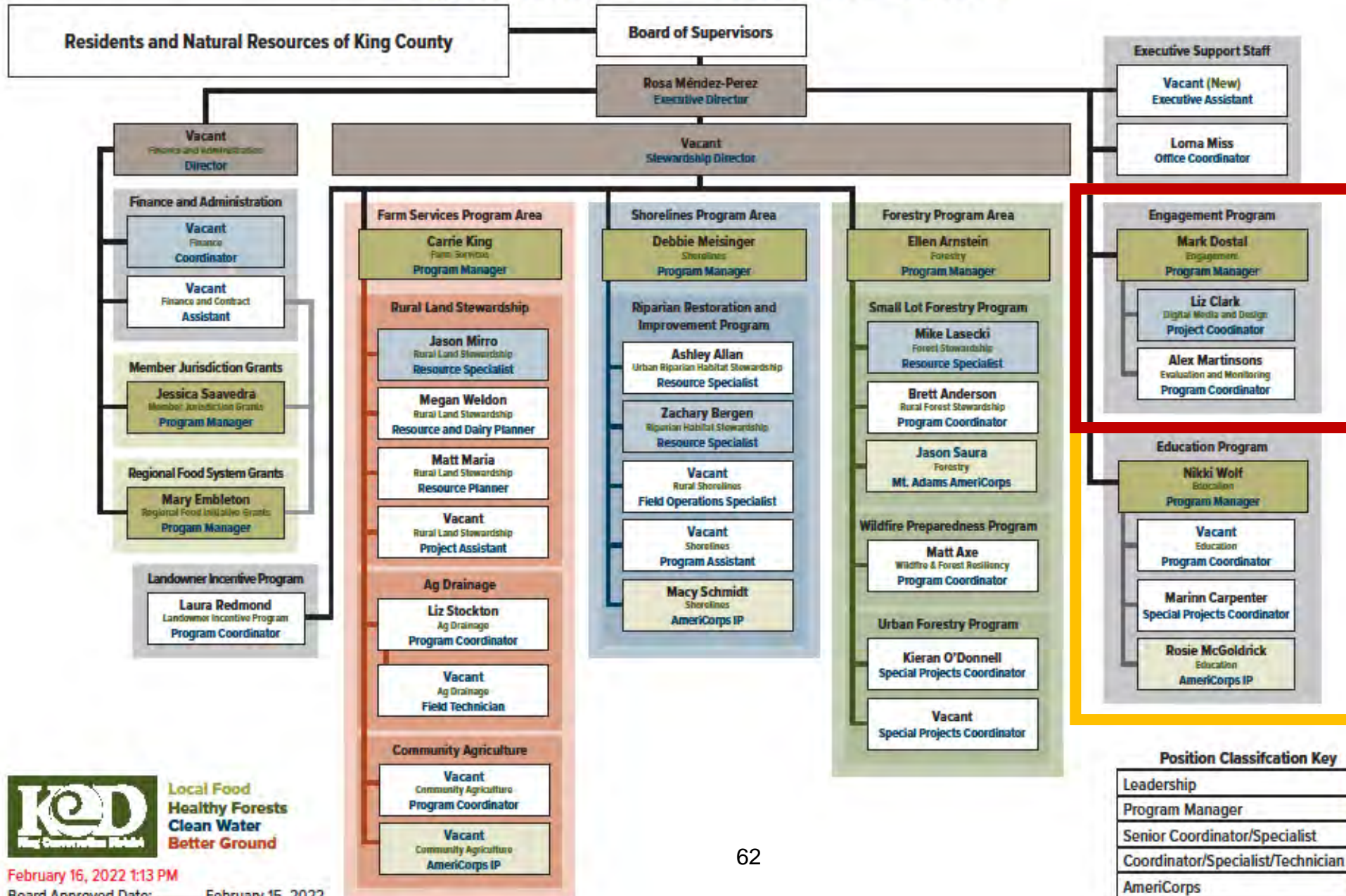
Presentations

OUTREACH AND COMMUNICATIONS



Local Food
Healthy Forests
Clean Water
Better Ground

Organizational Structure Chart



**Local Food
Healthy Forests
Clean Water
Better Ground**

February 16, 2022 1:13 PM

Board Approved Date: _____ February 15, 2022

ENGAGEMENT & EDUCATION TEAMS

Mark Dostal

Program Manager
Engagement

Liz Clark

Digital Media & Design
Project Coordinator

VACANT

Evaluation & Monitoring
Program Coordinator

Nikki Wolf

Program Manager
Education

VACANT

Education
Program Coordinator

Rosie McGoldrick

Education
AmeriCorps IP

Marinn Carpenter

Special Projects
Coordinator - Trees for
Rail

ARC OF ENGAGEMENT

OUTREACH -> EDUCATION -> TECHNICAL ASSISTANCE -> IMPLEMENTATION
+ COST-SHARE

500 REACHED -> 30 ATTEND WORKSHOP -> 7 ASK FOR ASSISTANCE -> 2 NEW MARINE SHORELINE PROJECTS GET IMPLEMENTED

KCD DIGITAL COMMUNICATION METRICS

	2019	2021	Percentage Increase
Website	279,000 pages viewed 55,000 new visitors 11,000 returning visitors	271,000 pages viewed 75,000 new visitors 14,000 returning visitors	+0% +36% +27%
Newsletter	~2000 opens/month	~3,500 opens/month	+75%
Facebook	3,500	4,000	+14%
Instagram	<100	2,248 followers	+2,148%
YouTube	516 views	4,489 views	+770%

KCD GOOGLE SEARCH ENGINE OPTIMIZATION

☒ Total clicks

9.34K

Last 3 months (2022)

8.85K

Last 3 months (2021)



☒ Total impressions

653K

Last 3 months (2022)

292K

Last 3 months (2021)



☐ Average CTR

1.4%

Last 3 months (2022)

3%

Last 3 months (2021)



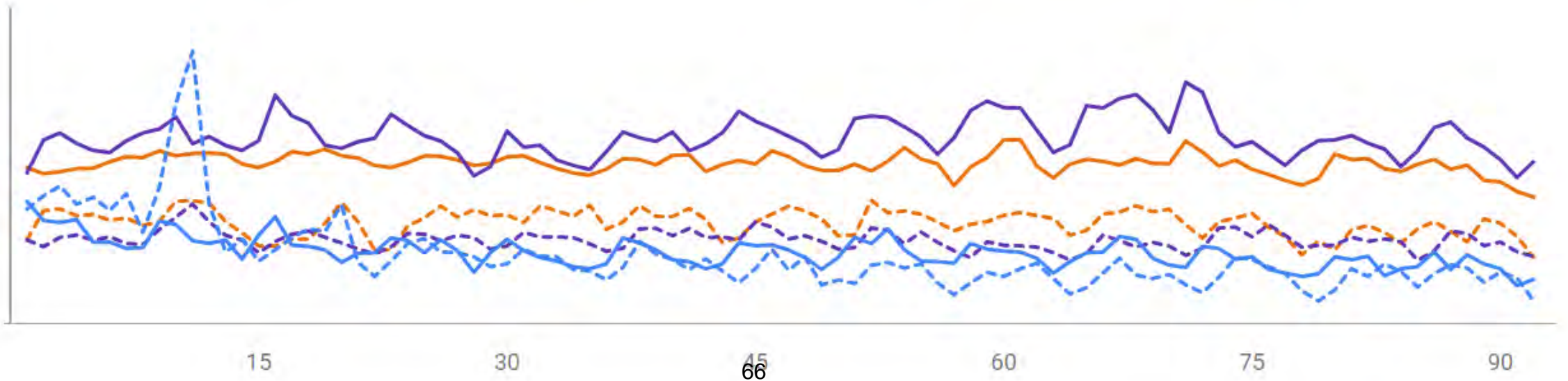
☒ Average position

22.1

Last 3 months (2022)

30.6

Last 3 months (2021)



GOOGLE SEARCHES (MAY 2022) + RANKINGS

Most searched queries ▾

1	king conservation district	Avg. position: 1 🏆 Top 5 results	194 clicks
2	king county conservation district	Avg. position: 1 🏆 Top 5 results	80 clicks
3	compost manure	Avg. position: 8.4	41 clicks
4	king county soil test	Avg. position: 1 🏆 Top 5 results	39 clicks
5	weed wrench	Avg. position: 10.4	31 clicks

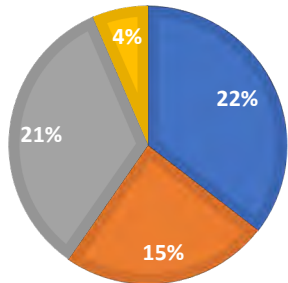
6	how to compost manure	Avg. position: 6.4	19 clicks
7	kcd	Avg. position: 12.2	15 clicks
8	king conservation district soil testing	Avg. position: 1 🏆 Top 5 results	14 clicks
9	king county soil testing	Avg. position: 1 🏆 Top 5 results	12 clicks
10	king county native plant sale	Avg. position: 1 🏆 Top 5 results	10 clicks

KCD SPRING EDUCATION EVENTS - 2021

	Number of Registered People	Number of Attendees	Percentage Attended
Beautify Streamside Property, 4/28	62	34	55%
Managing Wildfire Risk to Your Western WA Home, 5/6	108	54	50%
WTWB, 5/8	57	35	62%
WTWB, 5/22	28	16	57%
WTWB, 6/4	46	35	76%

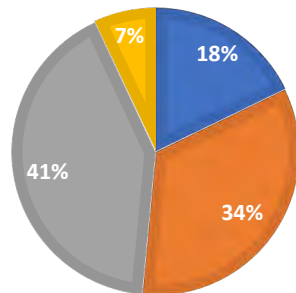
BEAUTIFY, 4/28

■ KCD Newsletter ■ Other
■ Social Media ■ Word of Mouth



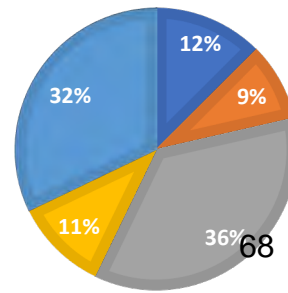
MANAGING WILDFIRE RISK, 5/6

■ KCD Newsletter ■ Other
■ Social Media ■ Word of Mouth



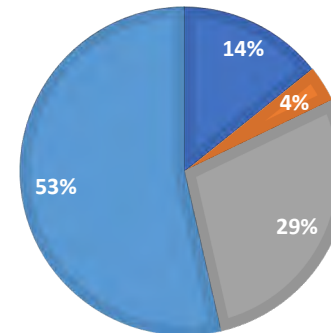
WTWB, 5/8

■ KCD Newsletter
■ Other
■ Social Media
■ Word of Mouth
■ Post Card



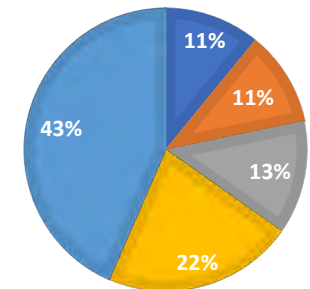
WTWB, 5/22

■ KCD Newsletter
■ Other
■ Social Media
■ Post Card



WTWB, 6/4

■ KCD Newsletter
■ Other
■ Social Media
■ Word of Mouth
■ Postcard



TARGETED ADVERTISING

Ads


☒ Completed

...

View results

Post engagements

Did you know more than 25% of the Puget sound shoreline...



1,704	225	\$60.00
Reach	Post Engagements	Spent of \$60.00

KCD OUTREACH TOOLS AND APPROACHES

- Postcards and direct mail
- Targeted digital advertising and traditional print advertising
- Earned Media
- Canvassing
- Tabling (Farmers Markets, etc.)
- Peer-to-Peer Education
- Relationship building
- Partnerships
- Sponsorships

KING CONSERVATION DISTRICT

Local Food • Healthy Forests
Clean Water • Better Ground

THORNTON CREEK BACKYARD OASIS EMERGES FROM IVY'S GRASP

by King Conservation District Staff | May 25, 2022 | Community News, Featured Projects, Riparian Restoration, What's New at KCD?



In April, King Conservation District worked with a north Seattle homeowner to restore 3,300 square feet of streamside habitat along the north fork of Thornton Creek. The ravine was covered from top to bottom in ivy and other invasive weeds, including laurel, holly, and Himalayan blackberry. In just a weeks' time, the hard work of two KCD-sponsored Washington Conservation Corps crews helped transform an ivy-carpeted streamside property into a native backyard oasis.



Before



After

During the first stage of hand pulling the ivy, a duck's nest was spotted when a female mallard landed in an area near the top of the slope. It was a wonderful discovery for the crews and homeowners. In an effort to

KCD-SEATTLE COMMUNITY PARTNERSHIP PROGRAM AWARDS \$761,000 TO 13 ORGANIZATIONS

by Jessica Saavedra | May 27, 2022 | Board of Supervisors, Community News, Grants, Seattle Community Partnership Grants, What's New at KCD?



King Conservation District (KCD) and the City of Seattle are continuing their longstanding collaboration to invest in natural resource improvements that are led by or in deep partnership with Black, Indigenous, and People of Color (BIPOC) communities.

KCD received 35 applications from amazing community organizations requesting over \$2.4 million dollars in funding, though the program had only \$761,000 available to award this year. Proposed projects represented a range of activities and ideas including community education and empowerment, green career pathways, youth leadership, food justice, habitat conservation, composting and soil health, urban forest restoration, watershed health, and many more.

The focus of this funding opportunity and the 2022 awards continues to be investments in natural resource improvements that are co-created, led by, or in deep partnership with communities disproportionately impacted by environmental injustice, climate change, and systematic racism: Black, Indigenous, People of Color, immigrants, refugees, people with low incomes, youth and elders.

This year, King Conservation District and the City of Seattle are thrilled to announce awards to the following community organizations:

2022 King Conservation District (KCD)-Seattle Community Partnership Grant Program Awardees

\$25,000	Hip Hop Is Green	Cherry Street Farm and Lab: Youth Excellence Program (Y.E.P) Phase II
----------	------------------	---

CONFERENCES

Puget Sound Urban Tree Canopy and Stormwater Management



A Collaboration to Compare i-Tree Hydro and Western Washington Hydrology Model
2019 Municipal Stormwater Conference

KCD WORKSHOPS + TOURS

PEER-TO-PEER MODEL



SOCIAL MEDIA



King Conservation District

Published by Elizabeth Clark · May 20 at 11:15 AM ·



Did you know Snowberry is a wonderful species for erosion control? Snowberry has a tremendous root system and easily spreads by rhizomes meaning it can inhabit tricky locations like your marine shoreline bluff.

Learn about more natural options that will protect your marine shoreline and improve habitat by joining us in Federal Way tomorrow at 9:00AM to learn ways to manage your property safely while improving the environment.

Geology, ecology and vegetation management exper... [See more](#)



75



BENEFITS OF NATIVE PLANTS

By planting native species, you can:

Build habitat for native animals and pollinators



COMPOST AWARENESS WEEK



MANURE MATCH

EVENTS + EARNED MEDIA

How this garden, with native plants and canoe planters, can help save salmon, orcas

Feb. 26, 2020 at 6:00 am | Updated Feb. 26, 2020 at 1:30 pm



1 of 4 | Natalie Quist, with the King Conservation District, puts some finishing touches on this garden, designed by Jessi Bloom, which has been planted and designed with orca recovery in mind. Native plants, woody m... and a rock rain garden is a new way to think... (Mike Siegel / The Seattle Times) [More](#)

By Lynda V. Mapes

KCD NATIVE PLANT SALE



ORCA RECOVERY DAY



BOARD ELECTIONS

POSTCARD



EARNED MEDIA



DIGITAL OUTREACH



YOUTUBE



Discovery Farms® Virtual Farm Tour

261 views • 1 year ago

CC



Piper Creek Spawning Salmon

37 views • 1 year ago



Beautify and Care for Your Stream or Lakeside Property

163 views • 1 year ago



Community Conversations: Food Sovereignty and...

59 views • 1 year ago



Managing Wildfire Risk in Western Washington...

147 views • 2 years ago



A Fire Safety Assessment Walk

240 views • 2 years ago



Better Ground Ambassador Training Webinar

80

11 views • 2 years ago



KCD Manure Spreader

97 views • 2 years ago

MONTHLY NEWSLETTER

King Conservation District Monthly Newsletter

June 2022



Local Food
Healthy Forests
Clean Water
Better Ground

[Board of Supervisors](#) | [Programs & Services](#) | [News](#) | [Events](#) | [Volunteer](#)



News & Highlights



Keep an eye on our [Events](#) page and upcoming newsletters for details about these events. Dates and times will be announced soon!



Streamside Restoration Webinar

FACTSHEETS AND INFORMATION




Rural Services

KCD offers a wide range of programs and services to support rural residents' natural resources stewardship throughout KCD's service area.* All landowners/lessees within the boundaries are entitled to free information and technical assistance to help:

- Protect water quality
- Enhance wildlife habitat
- Develop farm conservation plan
- Stabilize slopes
- Improve soil quality
- Use native plants
- Find manure for their farm or garden
- Find volunteer opportunities
- Restore streams and other waterways
- Learn about many other natural resource topics



Farm Conservation Technical Assistance Request

* KCD's service area includes 34 cities and all of unincorporated King County. The cities of Everett, Federal Way, Skykomish, Milton, and Puyallup are outside KCD boundaries, but residents of these cities can have samples processed for a fee.

What we offer

Visit www.kingcd.org for detailed descriptions or to request assistance.

Farm Conservation Technical Assistance



KCD resource planners and technicians help residents develop conservation plans that meet their land use goals and protect the natural resources on their property. Planning assistance is offered free of charge to both crop producers and livestock owners.

Soil Testing



Soil nutrient testing guides the proper application of compost and fertilizer, allowing optimization of plant uptake and minimizing water pollution. Each KCD service area* resident is eligible for five free soil nutrient tests for properties they either own or rent. Additional soil tests can be ordered for a small fee.

Landowner Incentive Program (LIP)



KCD provides financial cost-share for implementation of conservation practices on private property. Pre-approved best management practices* (BMPs) expenses are matched with KCD cost-share funds for: Aquatic Area Buffer Planting, Building Relocation from Aquatic Area/Buffer, Bulkhead Removal, Buffer Fencing, Cover Crops, Forest Health Management, Heavy Use Protection Area, Pasture Health Management, Roof Run-off Structure, Stream Crossing, Subsurface Drain, Waste Storage Facility, Off-Channel Watering Facility.

Distributed by King Conservation District • Seattle, WA 98107 • 425-282-1900 • www.kingcd.org

6/15/2016, 10:00 AM - New Design Farm Planning Rural Services Fact Sheet (1/16)




MUD MANAGEMENT OVERVIEW

Why Manage Mud?

Muddy conditions can make chores more difficult and expose livestock to skin and hoof diseases that often bring higher feed and veterinarian bills. Mud is also damaging to the environment—runoff of sediment contaminates surface water and is detrimental to fish and aquatic wildlife.



Mud harbors bacteria, fungal organisms and other pathogens that cause livestock diseases such as abscesses, scratches, rain scald or thrush.

TIPS



Install Gutters & Downspouts

Install gutters and downspouts on barns and shelters to collect and divert clean rain water away from animal confinement areas, stall entryways and other high traffic areas. Ideally the outlet for the gutters will be in a well-vegetated area that does not receive a lot of use, such as an unused section of pasture. Clean water can also be diverted to stock watering tanks, rain barrels or dry wells.

1" of rainfall on a 12' x 12' roof produces 90 gallons of runoff.

Create A Confinement Area

A confinement area is a gravel or hogfuel area that is used to contain animals and keep them off pasture from late fall through early spring (October through March). During the rainy months, soils become soggy and easily compacted by the weight of livestock. This causes plant roots to suffocate and reduces the soil's capacity for holding water. Keeping livestock off pastures during the wet winter months will keep grass healthy and prevent mud.



Distributed by King Conservation District • 1107 SW Grady Way, Suite 130 • Renton, WA 98057 • 425-282-1900 • www.kingcd.org

TABLING



TREES FOR RAIL (OUTREACH)

FREE Trees and Plants for Shoreline Residents

You are eligible for trees and plants to replace the trees lost from the light rail construction in 2019.

- ◆ Trees are important for our health and environment
- ◆ Keep our houses and streets cool in the summer
- ◆ Bring shade and beauty to a residential landscape
- ◆ Clean the air
- ◆ Provide habitat for birds and wildlife

Contact
Info@ecoss.org



to learn more

Or visit
[kingcd.org/
ShorelineTrees](http://kingcd.org/ShorelineTrees)



to sign up.



Photo Credit: Sam Le



Local Food
Healthy Forests
Clean Water
Better Ground



QUESTIONS?

mark.dostal@kingcd.org

425-282-1955 office

425-773-1668 cell



Local Food
Healthy Forests
Clean Water
Better Ground

New Business



Regional Food System Grant Program Agreement Amendment Request

Instructions: To request an amendment to your Grant Award, complete this form and submit it to the King Conservation District. You will receive a written response back from the District either approving or denying the request. Attach any supporting documents you think will aid the review of your request.

Grantee: Neighborhood Farmers Markets

Project Title: Streamlined Farmers Market Vendor Application and Management Systems (King County Pilot) (FF00049)

Agreement Year: 2017

Request to Amend Grant Award in the following manner (*check all applicable categories and provide details in space provided below or attachments where indicated*):

Change the Project Completion Date from 12/31/2021 to 12/31/2022

- ☐ Extend project up to 90 days past original completion date
- ☒ Extend project in excess of 90 days past original completion date
- ☐ Extend project due to permit and/or construction delays
- ☐ Other (e.g., matching funds delayed)

Change the Project Scope of Work (*attach completed Scope of Work Revision Detail form*)

- ☐ Increase scope of work at same funding level
- ☒ Decrease scope of work at same funding level
- ☐ Other (*describe and provide explanation below*)

Change the Project Budget (*attach completed Budget Revision Detail Form*)

- ☐ Reallocate funds among awarded budget item(s) within 10% of total grant award
- ☒ Reallocate funds to new budget item(s) within 10% of total award
- ☐ Revise budget in excess of 10% of total grant award
- ☐ Other (*describe*)

Other Category of Revision

- ☐ Change applicant/principle partners without change in scope of work and funding level
- ☐ Other (*describe and provide explanation below*)

Describe the proposed amendment, identify how the new proposal differs from the awarded grant, and provide the reason/justification for the request (attach additional pages if more space is needed).

The proposed amendment is to extend the time to December 31, 2022 to complete the core objective of this project. The project has been unable to proceed as planned due to COVID-19 and the resulting emergence of more urgent demands and priorities for the Advisory Team and farmers markets. The consultant working with us in 2021 decided to dedicate her time to her farm and family in 2022, meaning core support was lost.

The proposed change of Scope is to focus on successfully completing the most important cornerstone of this project which is the Standard Vendor Application. Due to input and feedback from farmers markets managers, there are now two versions in development: one for Farmers, Processors, and Resellers; and one for Artisans/Crafters and Prepared Food Vendors. Our goal is to have this ready for farmers markets to pilot in 2023. The need for such a tool has never been stronger and the best window to share, promote, and train people on its usage is August to December. The scope maintains the legal review and translation into Spanish and up to two other languages, depending on the demand.

Based on lessons learned from experimenting with online platforms and increased awareness of policy needs to protect vendor data, we have opted to start with a standard fillable form created by a

professional form designer. This way the vendor will control who gets their information, and the will still be able to complete one application instead of many different applications.

The workplan has added travel to visit 5 farms in Central and Western WA and 5 farmers markets to meet with users, get feedback and field test application.

The online "Direct Application" table with King County Farmers Markets will be updated and upgraded so that markets' direct links are live instead of simply listed.

The revised Scope of Work proposes to eliminate the development of an information flow model and an outreach and marketing campaign. We have learned that this is beyond our current capacity and strongly prefer to focus on getting the Standard Application launched!

Jennifer Antos

6/23/2022

Authorized Signature, Grantee

Date

Secondary Authorized Signature (as needed)

Date

- ☐ Request approved
- ☐ Request denied (see *attached for explanation*)
- ☐ Additional information requested (see *attached for requested information*)

Authorized Signature, King Conservation District

Date



Regional Food System Grant Program Budget Revision Detail Form

Revised Project Budget: Use the tables below to compare the awarded project budget to the proposed revised project budget.

Project Name: Streamlined Farmers Market Vendor Application and Management Systems (King County Pilot)
Grantee: Neighborhood Farmers Market Alliance
Awarded Project Budget (same as grant application budget)

	KCD Funds	Other Funds (specify)	Other Funds (specify)	Total (by line item)
Salaries and Benefits				0.00
Travel/Meals/Mileage				0.00
Project Supplies	\$500.00			500.00
Contracted/Professional Services				
Colleen Donovan	\$35,500.00			35,500.00
Hmong Farmer Liaison	\$2,000.00			2,000.00
Legal Review	\$2,000.00			2,000.00
Other (Pilot Market Stipend)	\$7,500.00			\$7,500.00
Indirect Costs/Overhead	\$2,500.00			\$2,500.00
TOTAL (by source)	\$50,000.00	0.00	0.00	50,000.00

Revised Budget (December 2019)

	KCD Funds	Other Funds (specify)	Other Funds (specify)	Total (by line item)
Salaries and Benefits				0.00
Travel/Meals/Mileage				0.00
Project Supplies	\$500.00			500.00
Contracted/Professional Services				
Colleen Donovan	\$20,500.00			20,500.00
Hmong Farmer Liaison	\$2,000.00			2,000.00
Legal Review	\$2,000.00			2,000.00
Project Assistant	\$15,000.00			15,000.00
Other (Event rental)	\$7,500.00			\$7,500.00
Indirect Costs/Overhead	\$2,500.00			\$2,500.00
TOTAL (by source)	\$50,000.00	0.00	0.00	50,000.00

Proposed Revised Budget (November 2018)

	KCD Funds	Other Funds (specify)	Other Funds (specify)	Total (by line item)
Salaries and Benefits				0.00
Travel/Meals/Mileage				0.00
Project Supplies	\$500.00			500.00
Contracted/Professional Services				
Colleen Donovan	\$32,500.00			32,500.00
Hmong Farmer Liaison	\$2,000.00			2,000.00
Legal Review	\$2,000.00			2,000.00
Leigh Newman-Bell	\$2,000.00			2,000.00
Assistant (TBD)	\$1,000.00			1,000.00
Other (Event rental)	\$7,500.00			\$7,500.00
Indirect Costs/Overhead	\$2,500.00			\$2,500.00
TOTAL (by source)	\$50,000.00	0.00	0.00	50,000.00

Proposed Revised Budget (January 2021)

	KCD Funds	Other Funds (specify)	Other Funds (specify)	Total (by line item)
Salaries and Benefits	\$0.00			0.00
Travel/Meals/Mileage	\$0.00			0.00
Project Supplies	\$2,750.00			2,750.00
Contracted/Professional Services				
Colleen Donovan	\$8,000.00			8,000.00
Stacy DeKoekkoek	\$17,500.00			17,500.00
Hmong Farmer Liaison	\$1,000.00			1,000.00
Legal Review	\$1,000.00			1,000.00
Graphic Design	\$2,500.00			2,500.00
WSFMA	\$5,000.00			5,000.00
Other (Event rental)	\$5,250.00			\$5,250.00
Indirect Costs/Overhead	\$7,000.00			\$7,000.00
TOTAL (by source)	\$50,000.00	0.00	0.00	50,000.00

Proposed Revised Budget (June 2022)

	KCD Funds	Other Funds (specify)	Other Funds (specify)	Total (by line item)
Salaries and Benefits	\$ -			\$ -
Travel/Meals/Mileage	\$ 2,000			\$ 2,000
Project Supplies	\$ 250			\$ 250
Contracted/Professional Services	\$ 34,500			\$ 34,500
Other (Event rental)	\$ 6,250			\$ 6,250
Indirect Costs/Overhead	\$ 7,000			\$ 7,000
TOTAL (by source)	\$ 50,000	\$ -	\$ -	\$ 50,000

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

SUBJECT:

A motion to approve a small public works contract for the Agricultural Drainage Project on the Pepka/Stiles farm in Cherry Valley Duvall.

BACKGROUND:

The purpose of King CD's Agricultural Drainage Program is to help farmers and farm managers navigate the complexities of maintaining drainage systems on farmland and implement drainage projects through the KCD Ag Drainage cost share program. King CD works with King County's Agricultural Drainage Assistance Program (ADAP) to implement these programs. Typically, funding for the construction costs associated with drainage projects comes from an annual grant via the King County Flood Control District. However, the 2022 construction season will fund projects through a combination of KCD Working Lands funds, the KCD Landowner Incentive Program, and KCD Ag Drainage funding supported through the Interlocal Agreement with King County.

Currently, a drainage project is proposed to support three farms in the Cherry Valley/Duvall area. A drainage project was completed here in 2016 where approx. 2000' of agricultural ditches were maintained. At the time, a farm bridge was approved for installation, however, the manufacturer built the bridge decking incorrectly and the bridge was not completed then. Now, King County ADAP engineers have identified this crossing and one additional crossing on the same farm access road to be replaced in 2022. The bridge will replace a fish passage barrier and provide safer access to approximately 200 acres of farmland. The additional crossing will remove another fish passage barrier and replace it with a 4' culvert. There will also be approx. 600' of ag ditch maintained to match the grade of the new culvert. This ditch will receive a 9' native buffer along its banks by 2023 per the HPA permit requirements.

The Cherry Valley area has received extensive flooding due to an avulsion (when a creek pushes sediment and water out from its banks) of Cherry Creek that started in 2018. This avulsion was fixed in 2020, but without the ability to maintain agricultural ditches for many years, there has been a net loss of farmland productivity of approximately 200 acres. A couple of farmers have moved from the area and new land occupiers have moved into start small farming operations. The Pepka family purchased their farm in 2019 with plans to rehabilitate their 100-acre farm as soon as possible. Unfortunately, the Cherry Creek avulsion and repeated flooding from beaver dams have made the pastureland inaccessible for at least 8 months of the year. This does not provide time to plant, harvest, or safely begin to build livestock herds. The Stiles family has operated a farm for many decades in the Cherry Valley that produces hay and small crops to sell to local farmers. The

King Conservation District Board of Supervisors Meeting

Agenda Action Briefing/Report

Meeting Date: August 8th, 2022

Svedberg family is also a part of this project site and will benefit from reduced flooding on their pasture where they have limited ability to make hay due to extensive flooding. In total, the proposed project will improve farmland on approx. 150 acres of farmland.

This proposed project is great for salmon recovery efforts as the unnamed tributary receiving the farm bridge is known to provide habitat for juvenile chinook and coho. During the 2016 ADAP project, about 20 juvenile Chinook and approx. 100 coho salmonids were safely removed and relocated to Cherry creek. Chinook salmon in the Puget sound region are currently listed as 'Threatened' under the Endangered Species Act (ESA). If current conditions continue, then Chinook could be stranded in the pasturelands due to the undersized culvert. Additionally, salmon will continue to struggle to swim through this tributary due to scouring at the downside end of the existing culvert.

This project will improve fish, farms, and flooding in the Cherry valley agricultural area. Three farmers will receive direct benefit, but farmers to the east and west will also receive benefit from reduced flooding impacts.

The request for bids was submitted through the Small Public Works process by submitting the RFB to the Builders Exchange website. Only one bid was received by Southworth & Sons at \$61,966.87. We have worked with this contractor in the past and they have done a good job. Furthermore, there is already a KCD Landowner Incentive Program (LIP) cost share agreement in place to cover \$36,000 maximum reimbursement for the new bridge (stream crossing practice). The HPA permit has been applied for and expect to be received by August 15, 2022. Construction will be ready to begin as soon as the permit is received.

Below is an image of the farm access road under water due to clogged culvert and repeated flooding:

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022



King Conservation District Board of Supervisors Meeting

Agenda Action Briefing/Report

Meeting Date: August 8th, 2022

RECOMMENDATION:

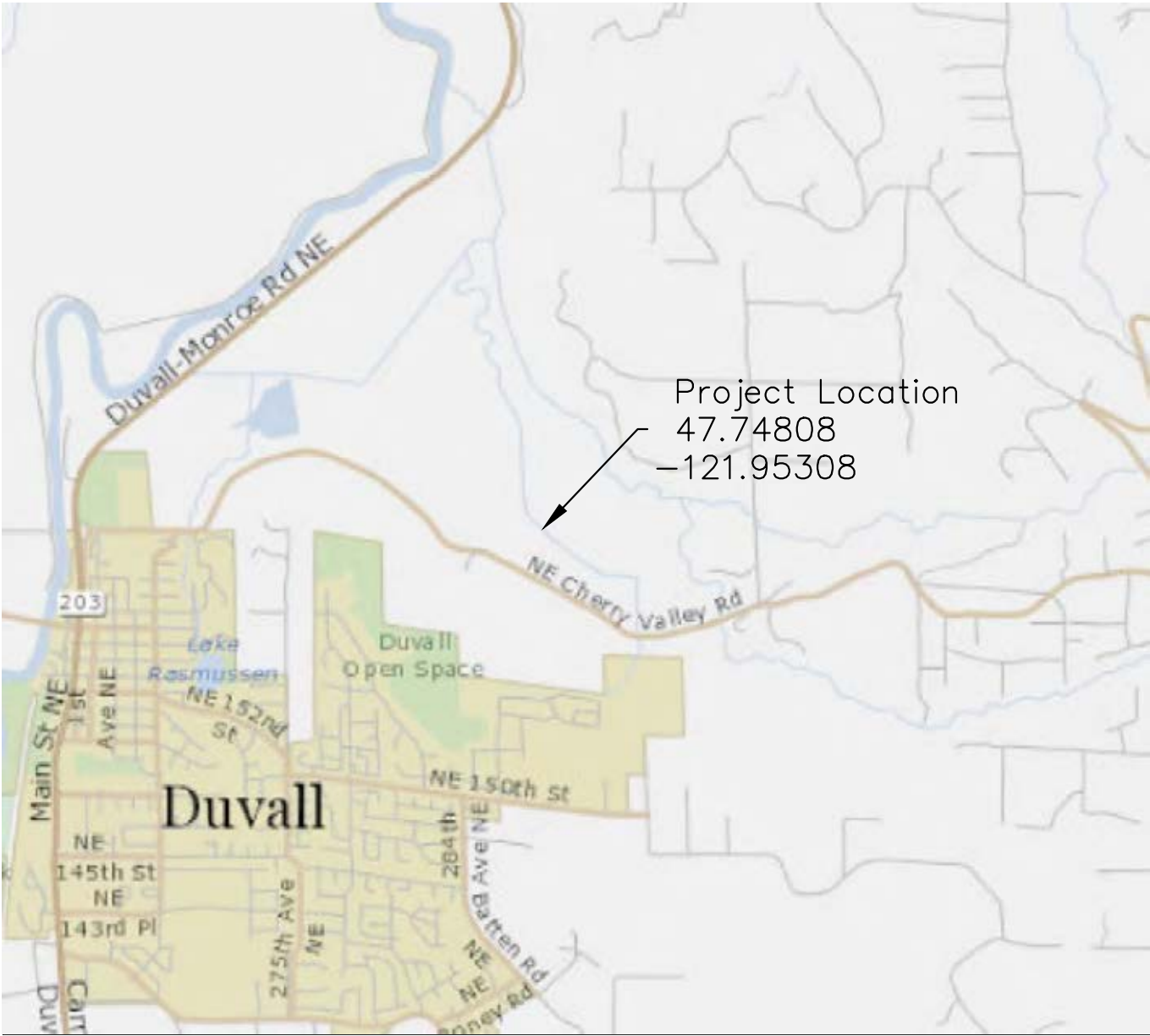
District staff recommends that Board approve and sign a Contract with Southworth & Sons to allow work to proceed this season. This work meets the goals of KCD's Ag Drainage program and ILA with King County. King County ADAP is in support of this project and there are three farmers ready to commit cost share funding.

<u>ALTERNATIVES NOT SELECTED</u>	REASON
Do not approve and sign contract, Do not complete this project.	Project is of high value to all goals – helping KCD meet ILA goals, benefit to multiple farmers, bringing food production acreage back to production, cost to acreage is lower than average, Farmers, Tenants, and ADAP are invested in completing the project

PEPKA AGRICULTURAL WATERWAY MAINTENANCE PLAN
KING COUNTY AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM

VICINITY MAP

INDEX



SHEET TITLE

SHEET NUMBER

Cover Page
Notes
Plan Map
Profile View
Section View
Culvert Detail
Planting Plan

1
2–3
4
5
6
7
8

FIELD BOOK: _____						APPROVED: _____	 Know what's below. Call before you dig.	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i>	COVER PAGE	SHEET 1 OF 8 SHEETS
SURVEYED: <u>FLB</u>	<u>APR 2022</u>					PROJECT MANAGER: _____			PEPKA ADAP	
SURVEY BASE MAP: _____						DESIGNED: <u>Frederick L. Beck, PE</u>			Cherry Valley	
CHECKED: _____						DRAINAGE INVESTIGATION NO.: _____			28716 NE Cherry Valley Rd Duvall, WA 98019	
		NUM.	REVISION	BY	DATE					

Notes:

The maintenance length to be included in this project includes the main channel and the road ditch. The proposed work for this project will be as follows:

<u>Waterway Classification</u>	<u>Length</u>	<u>Note</u>
Main Channel	100 ft	Remove the existing 30” diameter culvert and replace with a 12ftx20ft concrete bridge. Blend the channel under the bridge to match upstream and downstream channel contours.
Road Ditch	600 ft	Replace two existing 12” diameter culverts with a 4ft. diameter no-slope culvert. Dredge roadside ditch

The proposed bridge is shown on these plans, however the bridge design titled "Pepka Bridge Plan" will control the design, installation and specifications of the bridge crossing. The actual length of maintenance may be more or less than total listed, and will be based on assessments made onsite at the time of excavation. The landowner is under no obligation to perform the work shown in this plan in part or whole, except that the obligatory planting detailed in this plan must be installed, corresponding to any section of waterways that are maintained.

1. Estimated excavation volume: approximately 476 cubic yards (yd³)
2. Estimated fill volume for bridge and culvert installation: 313 cubic yards (yd³)
3. All work shall be performed in accordance with King County’s agreement for best management practices for maintenance of agricultural waterways (BMPs), the Washington Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA), and the King Conservation District (KCD) farm plan.
4. In-channel work will occur within the time frame allowed by the HPA.
5. Spoils may be spread on farm fields to a depth no greater than 6 inches or removed from the site and disposed of in a legal manner.
6. Fish relocation may be performed by King County, at the direction of the KC ADAP representative and with coordination by the maintenance contractor or landowner. Staffing shortages, health restrictions and other conditions may extend the timeline the county can reasonably provide resources.
7. A 1-hour pre-construction meeting, including the landowner or landowner’s representative, the maintenance contractor and a King County ADAP employee, is required prior to the start of any maintenance activities.
8. It is the contractor’s responsibility to monitor excavation elevations and ensure that maintenance dredging does not exceed historical-channel extents.
9. Native vegetation should be protected to the extent practicable.
10. The landowner is responsible for protecting the installed planting from livestock grazing and all farm activities.
11. No utilities have been located. It is the responsibility of the excavator contractor (or landowner, if no contractor is used) to locate utilities.

Legend

Plan Views

- ADAP Channel Class (CL)
- High Modified
- Moderate Modified
- Agricultural Waterway (Class not shown)
- Existing Farm Road
- Proposed Farm Road
- Overbank Flood Extent
- T/DO Sample Site (approx.)
- Turbidity Sample Site (approx.)
- Turbidity Sample Site Offset to Distance (approx.)
- Fish Relocation Release Site (approx.)
- Parcel Boundary (Approximate from KC GIS Data)

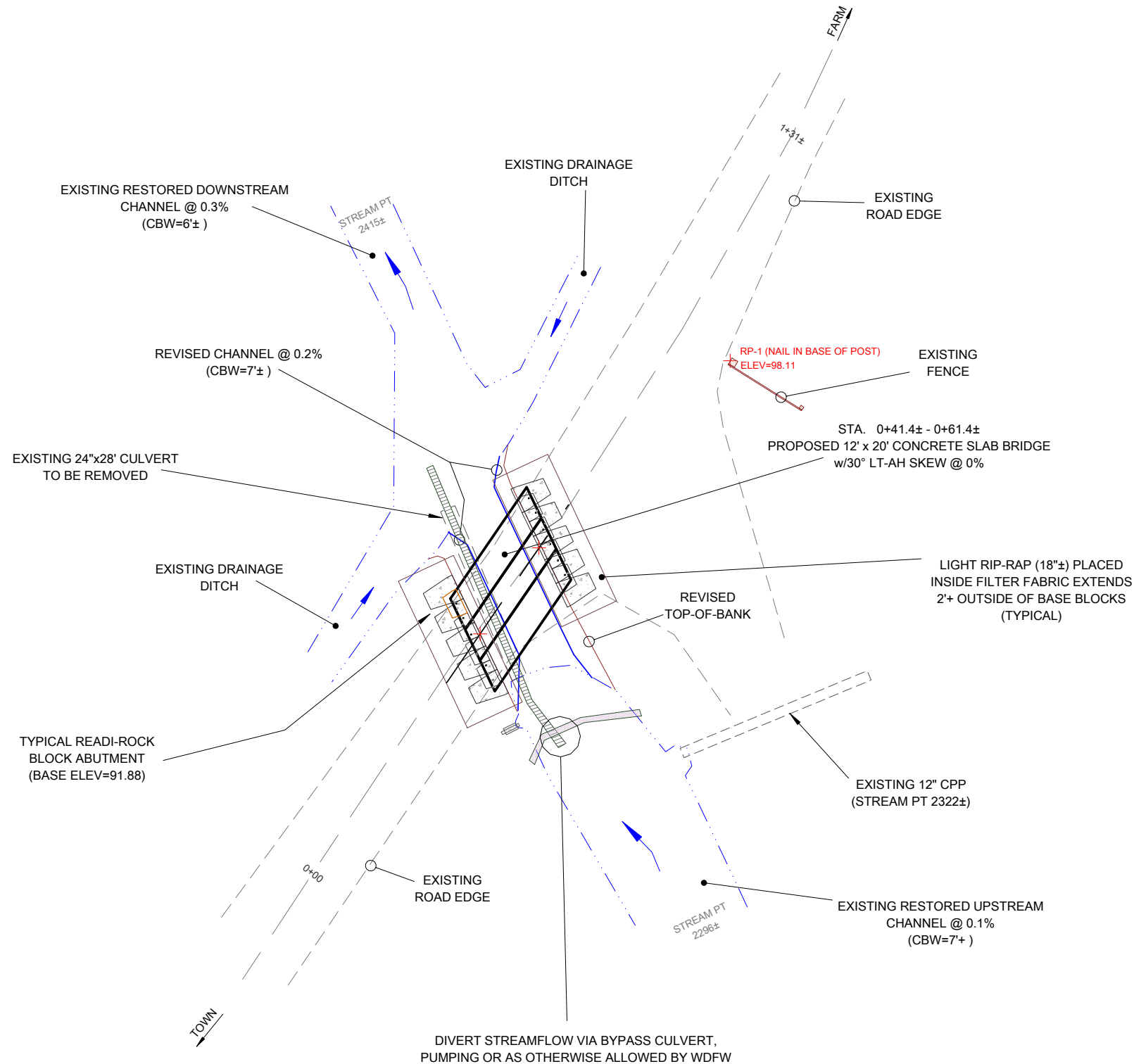
Profile and Section Views

- Existing Ground
- Existing Farm Road
- Existing Culvert
- Water Surface (Ordinary High Water)
- Approximate Dredge Extent
- Proposed Farm Road
- Proposed Culvert
- NOTE: Items specific to one sheet may not be included on this legend. See sheet specific legend

FIELD BOOK: _____		APR 2022		APPROVED: _____		<div><p>Know what's below. Call before you dig.</p></div>	<div><p>King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i></p></div>	<div>Notes (1 of 2)</div> <div>PEPKA ADAP</div> <div>Cherry Valley</div> <div>28716 NE Cherry Valley Rd</div> <div>Duvall, WA 98019</div>	<div>SHEET 2 OF 8 SHEETS</div> <div>6/11/22</div>
SURVEYED: <u>FLB</u>				PROJECT MANAGER: _____					
SURVEY BASE MAP: _____				DESIGNED: <u>Frederick L. Beck, PE</u>					
CHECKED: _____				DRAINAGE INVESTIGATION NO.: _____					
NUM.	REVISION	BY	DATE						

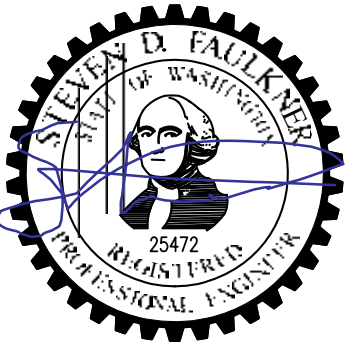
PEPKA BRIDGE PROJECT
KING CONSERVATION DISTRICT (ADAP)

PLAN VIEW



INDEX TO SHEETS	
PLAN VIEW	1
PROF. VIEWS	2
ABUTMENT DETAIL	3
DECK DETAIL	4
STAKING DETAIL	5

CALL BEFORE YOU DIG
1-800-424-5555 (or 811)



6-21-22

PROJECT AREA

LATITUDE: N 47.747372°
LONGITUDE: W 121.953325°

KING CO TAX PARCEL
0726079005

GENERAL NOTES:
SURVEY INFORMATION BASED ON 2018 COMPASS AND LASER SURVEY; MERIDIAN ASSUMED; ELEVATION APPROXIMATED FROM 2015 KCD DRAINAGE PLANS.



PEPKA BRIDGE PROJECT

KING CONSERVATION DISTRICT
AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM

DATE FEBRUARY 17, 2022	DRAWN PACIFIC FOREST RESOURCES ENUMCLAW, WA	DATE 6/21/2022
SCALE 1" = 20'	29318 NE CHERRY VALLEY RD DUVAL, WASHINGTON 98019	SHEET 1 of 5

1.04 BIDDER INFORMATION

Proper Name of Bidder: SOUTHWORTH & SONS, INC.
Mailing Address: 70620 CAUMICIAO CHANOE HWY CAUMICIAO 98002
Contractor's License No.: SOUTH 11212D UBI No: 600 313 802
City of [***] Business License No.: _____
Phone Number: 360 663 2415 Fax Number: 360 663 2511
Email Address: Southworth_rose@msn.com

SCHEDULE OF UNIT PRICES

Description	Est. Quantity	Unit	Unit Price	Extension
Mobilization	1	LS	5000 -	5000 -
Site Preparation	1	LS	3200 -	3200 -
Water bypass set up	2	EA	2500 -	5000 -
Removal of existing culverts	3	EA	300 -	900 -
Install 48" dia. culvert	1	LS	8000 -	8000 -
Unload & Install 20' concrete bridge w/ footings	1	LS	20500 -	20500 -
Ballast/pit run (delivered) (for bridge only)	90	CY	40 -	3600 -
Abutment Bedding (5/8" delivered)	10	CY	45 -	450 -
Base Reinforcement (light rip-rap) (for bridge only)	30	CY	52 -	1560 -
Surfacing (1 1/4" delivered) (for bridge only)	60	CY	45 -	2700 -
Regrade gravel farm access road	300	LF	13 -	4000 -
WA Tax 8.7%	1	LS	4959.81	4959.81

ADDENDUM #1

600 LF 3 - 2100 -

BASE BID Subtotal 57,010 -

W.S.S.T (8.7%) 4,959.81

BASE BID TOTAL (Subtotal with Sales Tax) 61,969.81

Addendum #1

KCD Pepka Drainage Project 2022

1. Extending bid due date out until July 27th, 2022 by 5pm
2. Adding dredging of the 'roadside ditch' per engineer's plans of 600 Linear feet to the Unit Price table:

Description	Est. Quantity	Unit	Unit Price	Extension
Dredging Road Ditch	600	LF	3 -	2,100 -

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

AI 22-067

SUBJECT:

Approval is needed for a public works contract to complete the Griffin Creek Drainage project for a total of \$300,000.

FISCAL IMPACT:

Typically, construction costs associated with KCD's Ag drainage projects comes from an annual grant via the King County Flood Control District. However, the FCD grant was not awarded to KCD in 2021. For the proposed Griffin Creek Drainage Project, construction costs will be funded through a combination of KCD Working Lands funds, KCD Landowner Incentive Program, KCD Ag Drainage funding supported through the Interlocal Agreement with King County, King County ADAP (Stormwater Services), and the Washington State Conservation Commission Salmon Recovery Fund (SRF).

Funding Strategy		
Source	Task	Amount
KCD-LIP	1st Bridge Install	\$ 36,000.00
KCD-WLI	1st Bridge materials	\$ 30,000.00
Cooperator	2nd bridge Install/materials	\$ 60,000.00
Cooperator	Cost share 25% match	\$ 14,000.00
WSSC- SRF	Large Wood for restoration	\$ 50,000.00
KCD-Ag Drainage	Dredging	\$ 30,000.00
KC- ADAP	Dredging- Pilot Project	\$ 80,000.00
Total		\$300,000.00

POLICY CONSIDERATION

The proposed small public works contract has been vetted by King County ADAP engineers, farm operators, KCD farm planners, WDFW biologists, King County biologists, Snoqualmie tribe biologists, and Tulalip tribe biologists. This project has the support of all the above technical service providers.

STAKEHOLDER INTERESTS

- District cooperators and farm managers
- King CD Board members and staff
- Snoqualmie & Tulalip Tribes
- King County ADAP staff

BACKGROUND

The Griffin Creek Drainage project includes improvements for fish, farm, and floods on two farms in the Snoqualmie Valley APD. This project came to KCD

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

staff's attention due to an avulsion in Griffin Creek in 2020. The avulsion was caused due to an alluvial fan system in the upper reach of Griffin creek. This alluvium material broke through a bank of Griffin Creek and led to water dumping out over adjacent farmland in all directions. Approximately 50 acres were too wet to farm immediately, but since 2020, the organically certified farm to the south of Griffin creek has become unsalvageable with over 80 acres of lost production. The farmer has since moved all production to Monroe due to repeated flood events well into the spring planting season.

Griffin Creek provides significant habitat for a number of salmonids including coho and steelhead as well as some of the most concentrated coho spawning densities in the Snoqualmie River system. In the fall of 2021, several fish biologists from the WDFW, Snoqualmie and Tulalip tribes, and the Snoqualmie Valley Watershed Improvement District met at the Griffin site to review fish habitat conditions. The unfortunate situation that they witnessed involved the loss of hundreds of migrating salmon spilling out into farmland and becoming stranded in their search to swim to their spawning grounds. The consensus by all fish biologists was that the avulsion in Griffin creek needs to be fixed to prevent the loss of more salmon.

Griffin creek provides significant habitat for a number of salmonids including coho and steelhead as well as some of the most concentrated coho spawning densities in the Snoqualmie River system. Griffin creek is part of the Snohomish watershed originating at the foothills of the cascades and running west where it drains into the Snoqualmie river. Griffin creek is classified as a modified agricultural drainage ditch by King County Agricultural Drainage Assistance Program (ADAP). This classification system is based on aerial map evidence that demonstrates a history of manmade changes to the watercourse where the historical creek has become straightened for ag purposes.

In 2021, King County ADAP staff Lou Beck and King County WLRD staff Eric Beach began their important work of finding a way to address the avulsion to prevent future floods, create better fish habitat, and restore productive farmland. This project is not a streamlined ADAP project. This project requires multiple permits through various regulatory agencies.

The final plan set includes restoration dredging of Griffin creek, replacing two derelict farm bridges, placing large wood in the creek for fish habitat, and planting a seven-acre riparian buffer along Griffin creek. King County staff are working hard to move all permits forward and have requested that KCD staff, Liz Stockton, manage the public works contract like any ADAP project. KCD and King County will have a technical services agreement in place to facilitate funding this project prior to the project start date. Both King County staff and KCD staff intend on completing this project before September 30th, 2022, with a possibility of extending the permit through to October 15th if weather conditions are favorable.

EFFECTIVE DATE:

King Conservation District Board of Supervisors Meeting

Agenda Action Briefing/Report

Meeting Date: August 8th, 2022

The small public works contract will become effective upon approval by the Board of Supervisors and the signature by a Board representative.

OPTIONS

Do not move forward with the drainage project this year. Risk loss of native salmon, risk loss of 80 acres of high value organic crops for another growing season, and loss of over 40 acres of pasture.

RECOMMENDATION

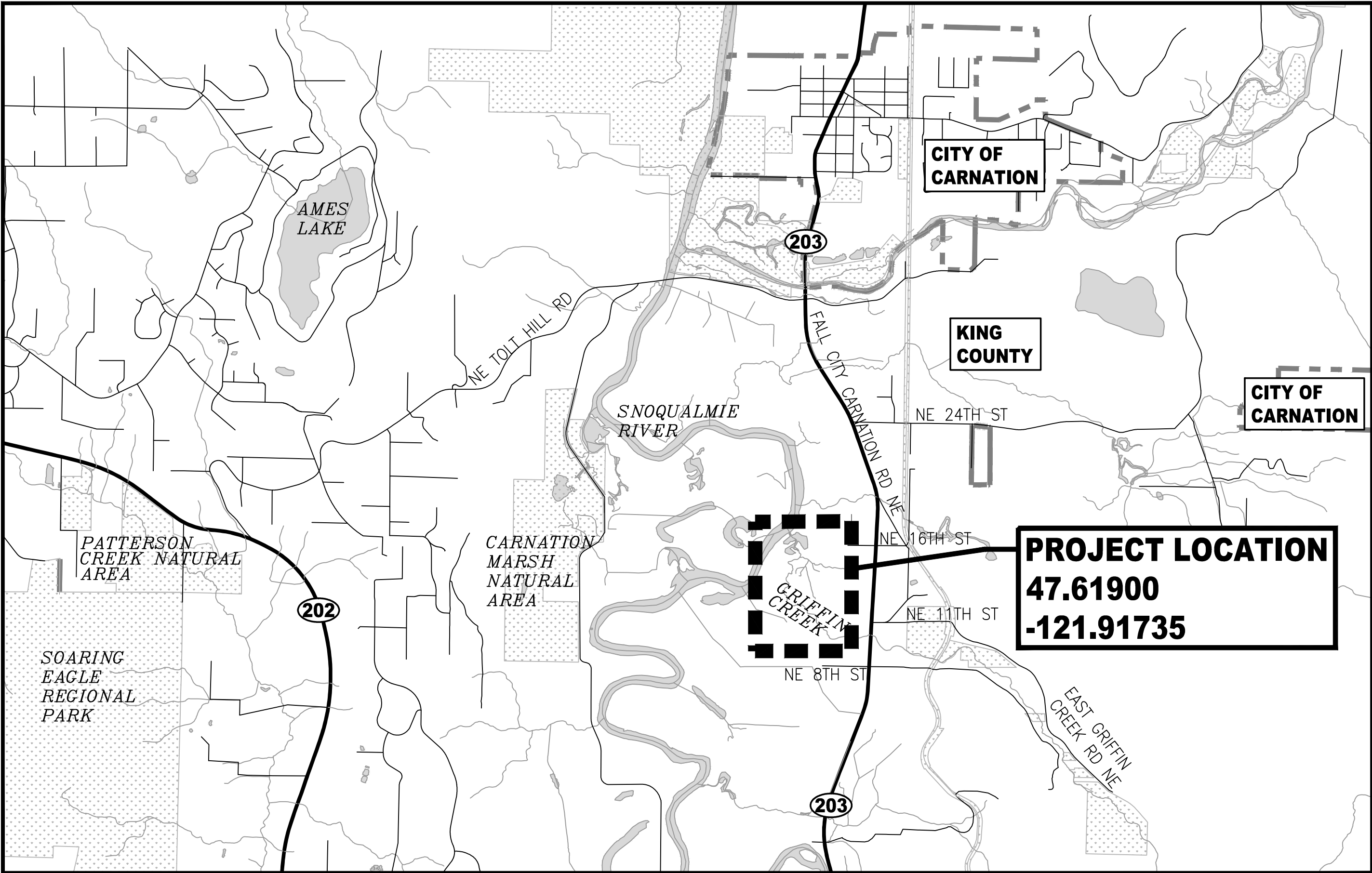
Staff seeks Board approval of the public works project for the Griffin Creek Drainage project in the amount of \$300,000.

MOTION

_____ Moved, _____ Seconded; *Passed a motion to approve the King Conservation public works project for the Griffin Creek Drainage project in the amount of \$300,000.*

VICINITY MAP

SW & SE SEC. 28, TWN. 25, R. 07 E, W.M.



SHEET INDEX

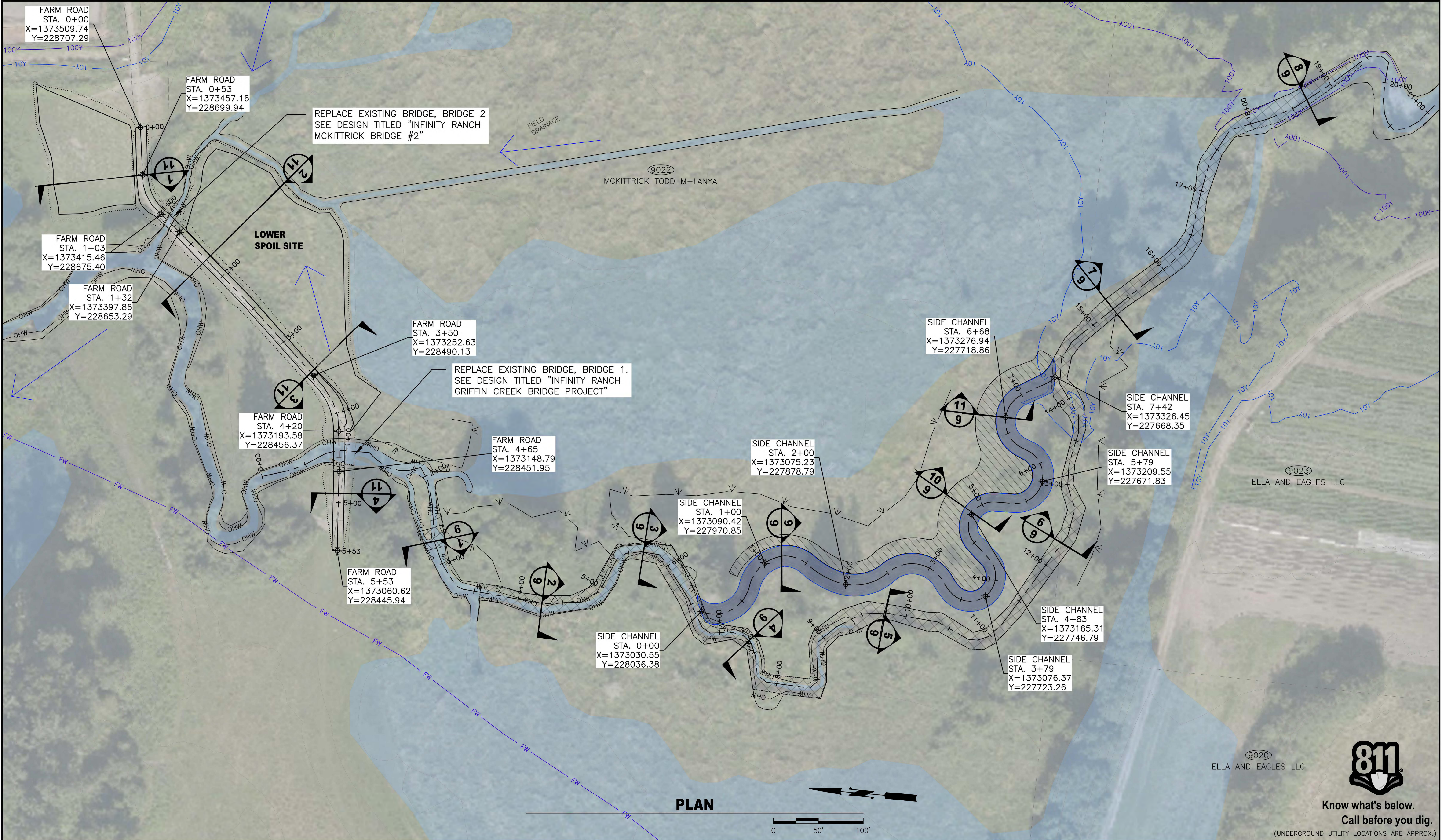
SHEET	DESCRIPTION
1	COVER SHEET, SHEET INDEX & VICINITY MAP
2	NOTES—1
3	LEGEND & NOTES—2
4	SUMMARY OF QUANTITIES
5	EXISTING CONDITION PLAN
6	EXISTING CONDITION PROFILE
7	EXCAVATION & GRADING PLAN
8	EXCAVATION PROFILE (CHANNEL/ SIDE CHANNEL)
9	EXCAVATION SECTIONS (CHANNEL/ SIDE CHANNEL)
10	EXCAVATION PROFILE (FARM ROAD)
11	EXCAVATION SECTIONS (FARM ROAD & SPOIL SITES)
12	DETAILS
13	WOOD PLACEMENT PLAN
14	PLANTING PLAN
15	CSWPP, DE-WATER & SITE ACCESS PLAN





Know what's below.
Call before you dig.

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

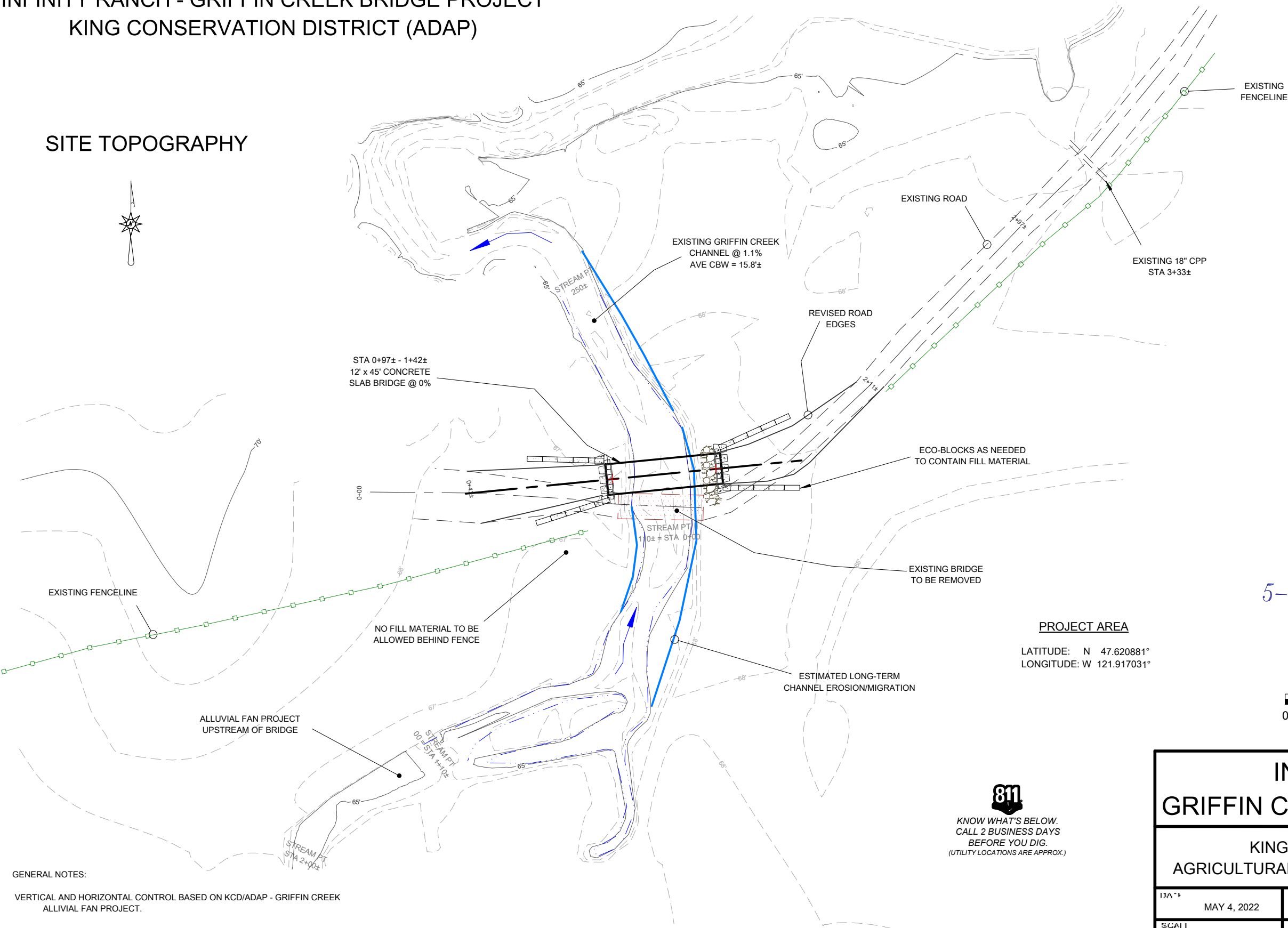
FIELD BOOK:		NUM.	REVISION	BY	DATE	APPROVED:	FREDERICK L. BECK, PE	7/2022	PROJECT No. 1136626	CONTRACT No.		 Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section Engineering Support and Response Services Unit <i>Christie True, Director</i>	GRIFFIN CREEK ALLUVIAL FAN PILOT PROJECT 31904 NE 8TH ST./ 31919 NE 16TH ST. CARNATION, WA 98014 COVER SHEET, SHEET INDEX & VICINITY MAP	SHEET 1 OF 15 SHEETS
						PROJECT MANAGER:	FREDERICK L. BECK, PE	7/2022						
						DESIGNED:	FREDERICK L. BECK, PE	7/2022						
						CAD DESIGN:	FLB/ MO/ KK	7/2022						
SURVEYED: FLB	Jan/Feb/Dec 2021													
FLB	Apr/May 2022													
SURVEY BASE MAP:														
CHECKED:		NUM.	RECORD CHANGES APPROVED	BY	DATE									



FIELD BOOK: SURVEYED: FLB Jan/Feb/Dec 2021 FLB Apr/May 2022 SURVEY BASE MAP: CHECKED:		NUM.	REVISION	BY	DATE	APPROVED: FREDERICK L. BECK, PE	7/2022	PROJECT No. 1136626 CONTRACT No.			GRIFFIN CREEK ALLUVIAL FAN PILOT PROJECT 31904 NE 8TH ST./ 31919 NE 16TH ST. CARNATION, WA 98014 EXCAVATION & GRADING PLAN	SHEET 7 OF 15 SHEETS
						PROJECT MANAGER: FREDERICK L. BECK, PE	7/2022					
						DESIGNED: FREDERICK L. BECK, PE	7/2022					
		NUM.	RECORD CHANGES APPROVED	BY	DATE	CAD DESIGN: FLB/ MO/ KK	7/2022					

INFINITY RANCH - GRIFFIN CREEK BRIDGE PROJECT
KING CONSERVATION DISTRICT (ADAP)

SITE TOPOGRAPHY



INDEX TO SHEETS	
SITE TOPOGRAPHY	1
PLAN VIEW	2
PROFILE VIEWS	3
ABUTMENT DETAIL	4
DECK DETAIL	5



5-12-22

PROJECT AREA

LATITUDE: N 47.620881°
LONGITUDE: W 121.917031°



KNOW WHAT'S BELOW.
CALL 2 BUSINESS DAYS
BEFORE YOU DIG.
(UTILITY LOCATIONS ARE APPROX.)

GENERAL NOTES:
VERTICAL AND HORIZONTAL CONTROL BASED ON KCD/ADAP - GRIFFIN CREEK
ALLUVIAL FAN PROJECT.
CHANNEL DESIGN BY KING COUNTY ADAP.

INFINITY RANCH GRIFFIN CREEK BRIDGE PROJECT		
KING CONSERVATION DISTRICT AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM		
DATE MAY 4, 2022	DRAWN BY PACIFIC FOREST RESOURCES ENUMCLAW, WA	DATE 5/12/2022
SCALE 1" = 40'	31919 NE 16th STREET CARNATION, WASHINGTON 98014	SHEET 1 of 5

1.04 BIDDER INFORMATION

Proper Name of Bidder: SOUTHWORTH & SONS, INC.
Mailing Address: 50620 GRUNDY CRAW. CHANOOK HWY., GRUNDY WA 98028
Contractor's License No.: SOUTH*217TD UBI No: 000313802
City of [***] Business License No.: _____
Phone Number: 360 463 2715 Fax Number: 360 463 2371
Email Address: southworth-rose@msn.com

SCHEDULE OF UNIT PRICES

Description	Est. Quantity	Unit	Unit Price	Extension
Mobilization/Demobilization	1	LS	20,000-	20,000-
Site Preparation (Clearing & Grubbing)	1	LS	7,160-	7,160-
Prepare and implement CSWPP per King County permit requirements	1	LS	5,000-	5,000-
Set up and maintain flowing water from Griffin Creek	1	LS	10,000-	10,000-
Dredging material from Griffin Creek	1607	LF	20 03	32,183 21
Farm road construction	553	LF	12 95	7,161 35
Dredging new side channel	743	LF	19 21	14,317 4
Purchase and install large wood per plans	47	EA	723-	33,981-
Excavation and grading of side channel and side channel bank	1	LS	10,740 10	10,740 10
Surfacing (11/4" delivered) (farm road only)	106	CY	48 30	5,119 30
Bridge Install #1 Only (12'x45')				
IMPORTED FILL / BALLAST	70±	CY	68 30	4,781-
1 1/2" ROAD SURFACING	550±	CY	68 30	37,565-
3/4" LEVELING ROCK	10±	CY	68 30	683-
BASE REINFORCEMENT	40±	CY	104 -	4,160-
RIP-RAP	20±	CY	106 45	2,129 -
4x4x5' RAIL POSTS	16	CY	40 -	640 -
POST FASTENERS	32	CY	30 -	960 -
ECO-BLOCKS (2'x2'x6')	36±	CY	75 -	2,700 -
Unloading of bridge #1 decking	1	LS	2000-	2,000-
Installation of 12'x45' bridge including abutments and decking	1	LS	24,640-	24,640-
Bridge Install #2 Only (12'x28')				

IMPORTED FILL	100±	CY	68 ³⁰	6830-
1½" ROAD SURFACING	60±	CY	68 ³⁰	4,098-
¾" - LEVELING ROCK	10±	CY	68 ³⁰	685-
BASE REINFORCEMENT	30±	CY	104-	3,170-
4x4x5' RAIL POSTS	10	EA	40-	400-
POST FASTENERS	20	EA	30-	600-
Unloading bridge #2 decking	1	LS	3,000-	3,000-
Installation of 12'x28' bridge including abutments and decking	1	LS	29,160-	29,160-
WA Tax 8.7%	1	LS	23,822 ⁰⁹	23,822 ⁰⁹

BASE BID Subtotal 273,817 07

W.S.S.T (8.7%) 23,822 09

BASE BID TOTAL (Subtotal with Sales Tax) 297,639 16

ACK ADD #1
ACK ADD #2

1.05 BID SUMMARY

Amount Bid 273,817 07

Washington State Sales Tax @ [8.7]% 23,822 09

GRAND TOTAL in figures, including tax 297,639 16

GRAND TOTAL in words, including tax TWO HUNDRED NINETY SEVEN THOUSAND SIX HUNDRED THIRTY NINE 16/100 -

By: Rosemarie Southworth
Signature
ROSEMARIE SOUTHWORTH
Printed
SECRETARY
Title

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

SUBJECT:

Approval is needed for a small public works contract to complete the VonDolin Drainage project for a total of \$18,388.

FISCAL IMPACT:

Typically, funding for the construction costs associated with KCD's Ag drainage projects comes from an annual grant via the King County Flood Control District. However, the FCD grant was not awarded to KCD in 2021. For the 2022 construction season, construction costs will be funded through a combination of KCD Working Lands funds, the KCD Landowner Incentive Program, and KCD Ag Drainage funding supported through the Interlocal Agreement with King County.

POLICY CONSIDERATION

The proposed small public works contract has been vetted by King County ADAP, farm operators, and KCD farm planners.

STAKEHOLDER INTERESTS

- District cooperators and farm managers
- King CD Board members and staff
- King County ADAP staff

BACKGROUND

The VonDolin Drainage project includes drainage improvements for four farmers for a total of 3000 linear feet of dredging maintenance of a dry modified agricultural ditch in Enumclaw. Additionally, one farmer will receive a 48" farm access stream crossing via an already approved LIP cost share contract. The VonDolin's came to KCD originally in 2020 seeking assistance with drainage issues on their property. They worked with their neighbors to the north to implement a much larger project to improve a larger portion of the drainage system. Farmland to the north and west consists of pasture and cropland to sustain their livestock and provide feed for other neighboring farmers.

The unnamed dry ditch running through these parcels is a tributary of Pussyfoot creek that runs dry from July through September. This ditch will be planted with a 9' buffer of native plants after ditch maintenance occurs. The HPA permit has been applied for and is expected to be received by August 20th, 2022.

Construction can begin as soon as the permit is issued but must end by the permit closing permit date of September 30th, 2022.

This project has the support of King County ADAP, KCD farm team staff, and all participating land occupants. This project meets goals and objectives outlined in the KCD ILA.

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

EFFECTIVE DATE:

The small public works contract will become effective upon approval by the Board of Supervisors and the signature by a Board representative.

OPTIONS

Do not move forward with the drainage project this year. Risk not meeting ILA goals.

RECOMMENDATION

Staff seeks Board approval of the small public works project for the VonDolin Drainage project in the amount of \$18,388.

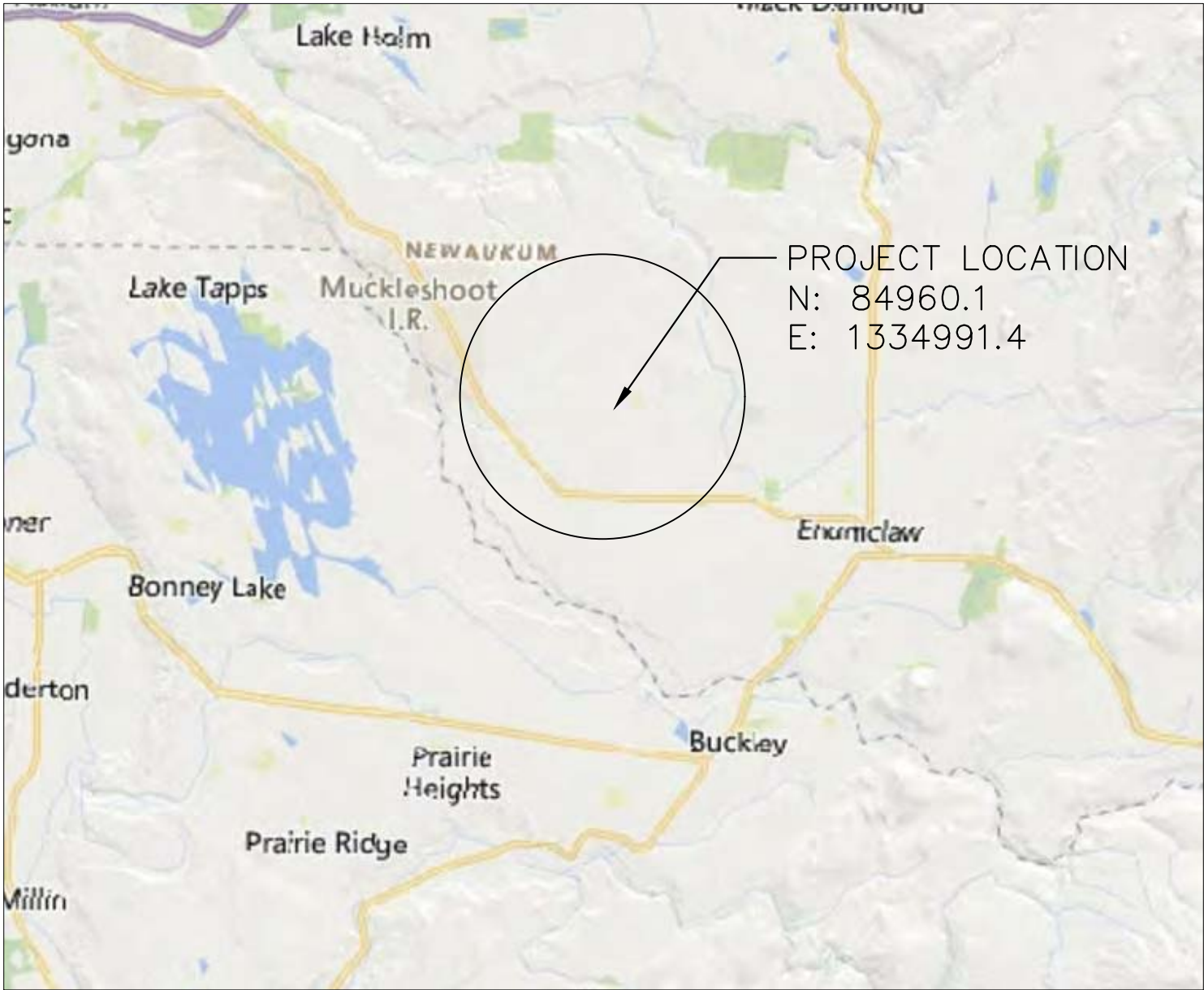
MOTION

_____ *Moved*, _____ *Seconded*; *Passed a motion to approve the King Conservation small public works project for the VonDolin Drainage project in the amount of \$18,388.*

VONDOLIN AGRICULTURAL WATERWAY MAINTENANCE PLAN
KING COUNTY AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM

VICINITY MAP

INDEX



SHEET TITLE

SHEET NUMBER

Cover Page
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Profile View
Section View
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FIELD BOOK: _____				APPROVED: Frederick L. Beck, P.E.		 Know what's below. Call before you dig.	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i>	COVER PAGE Vondolin ADAP 20825 SE 416th ST 20520 SE 416TH ST Enumclaw, WA 98022	SHEET 1 OF 9 SHEETS 7/7/22
SURVEYED: FLB/MS		Mar 22		PROJECT MANAGER: Medha Sinha					
SURVEY BASE MAP: _____				DESIGNED: Medha Sinha					
CHECKED: _____				DRAINAGE INVESTIGATION NO.: _____					
NUM.	REVISION	BY	DATE						

Notes:

Total maintenance length to be included in this project is the entire length of Channel. The majority of the proposed work for this project will be as follows:

Waterway Classification	Length	Note
High Modified (DRY)	1,755	This channel is known to dry up seasonally.
Moderate Modified (DRY)	330	This channel is known to dry up seasonally.
Low Artificial	120	This channel is known to dry up seasonally.

One in-stream ford crossing will be replaced with a fish passable culvert crossing as part of this project. One existing, damaged culvert will be removed and not replaced. After completion of the identified maintenance on this plan, follow up spot dredging, vegetation removal and beaver dam removal may occur during within the over-all timing limitations of the HPA.

Actual length may be more or less than total listed, and will be based on assessments made onsite at the time of excavation. The landowner is under no obligation to perform the work shown in this plan in part or whole, except for planting work that must be completed for any portion of channel actually maintained.

1. Estimated dredge volume: approximately 440 cubic yards (yd³)
2. All work shall be performed in accordance with King County’s agreement for best management practices for maintenance of agricultural waterways (BMPs), the Washington Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA), and the King Conservation District (KCD) farm plan.
3. In-channel work will occur within the time frame allowed by the HPA.
4. Spoils may be spread on farm fields to a depth no greater than 6 inches or removed from the site and disposed of in a legal manner.
5. Fish relocation may be performed by King County, at the direction of the KC ADAP representative and with coordination by the maintenance contractor or landowner. Staffing shortages, health restrictions and other conditions may extend the timeline the county can reasonably provide resources.
6. A 1-hour pre-construction meeting, including the landowner or landowner’s representative, the maintenance contractor and a King County ADAP employee, is required prior to the start of any maintenance activities.
7. It is the contractor’s responsibility to monitor excavation elevations and ensure that maintenance dredging does not exceed historical-channel extents.
8. Native vegetation should be protected to the extent practicable.
9. The landowner is responsible for protecting the installed planting from livestock grazing and all farm activities.
10. No utilities have been located. It is the responsibility of the excavator contractor (or landowner, if no contractor is used) to locate utilities.

Legend

Plan Views

ADAP Channel Class (CL)	
	High Modified
	Moderate Modified
	Low Artificial
	Agricultural Waterway (Class not shown)
	Existing Farm Road
	Existing Bridge
	Overbank Flood Extent
	T/D0 Sample Site (approx.)
	Turbidity Sample Site (approx.)
	Turbidity Sample Site Offset to Distance (approx.)
	Fish Relocation Release Site (approx.)
	Parcel Boundary (KC GIS Data)

Profile and Section Views

	Existing Ground
	Existing Farm Road
	Existing Culvert
	Water Surface
	Approximate Dredge Extent
	Proposed Farm Road
	Proposed Culvert

NOTE: Items specific to one sheet may not be included on this legend. See sheet specific legend

FIELD BOOK: _____		APPROVED: Frederick L. Beck, P.E.		 Know what's below. Call before you dig.	 Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section Christie True, Director	NOTES (1 OF 2) Vondolin ADAP 20825 SE 416th ST 20520 SE 416TH ST Enumclaw, WA 98022	SHEET 2 OF 9 SHEETS 7/7/22
SURVEYED: FLB/MS Mar 22		PROJECT MANAGER: Medha Sinha					
SURVEY BASE MAP: _____		DESIGNED: Medha Sinha					
CHECKED: _____		DRAINAGE INVESTIGATION NO.: _____					
NUM.	REVISION	BY	DATE				

Site History: The King County Agricultural Drainage Assistance Program has no previous knowledge of the site.

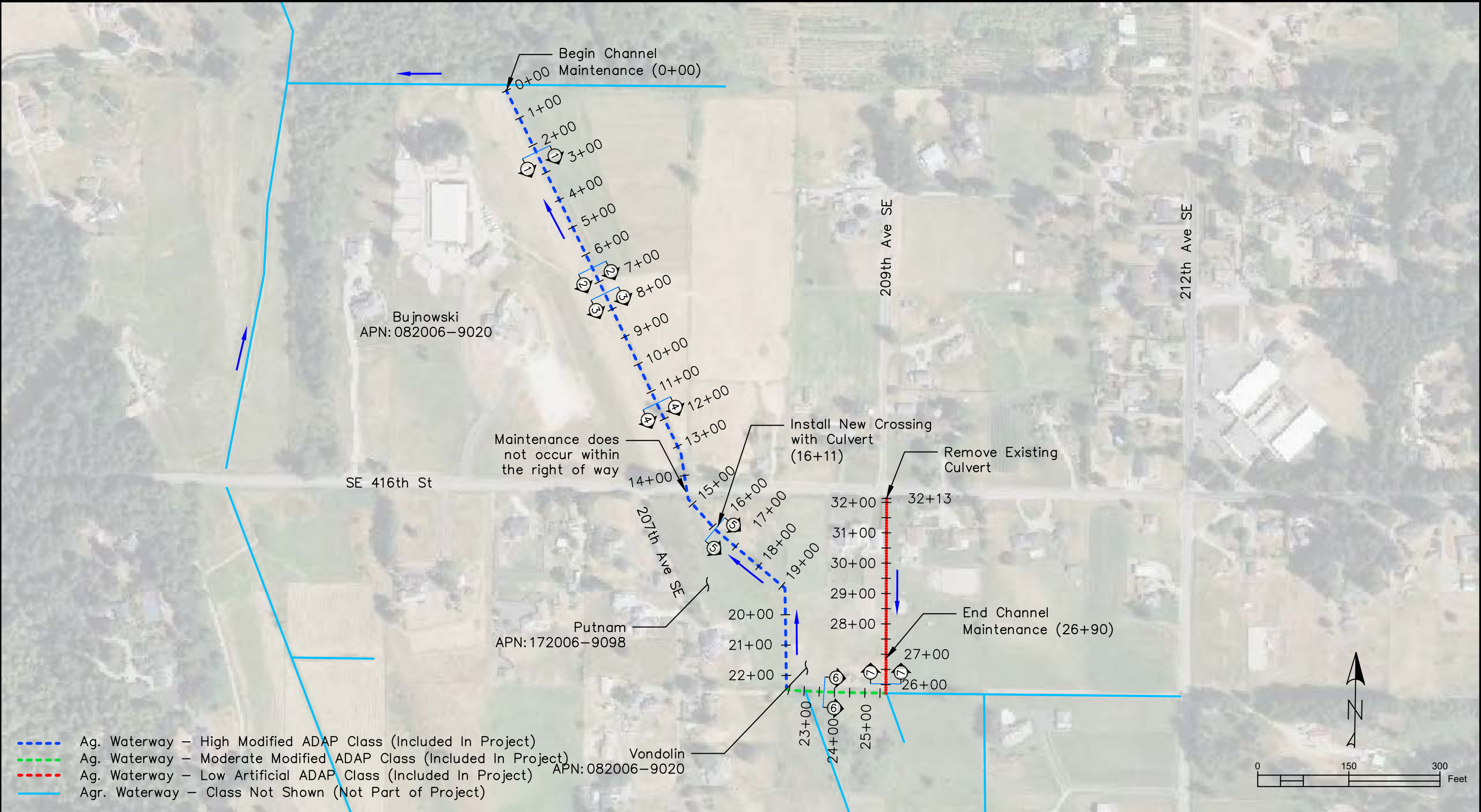
Fish Relocation: This channel is known to dry up in the summer time, during the construction fish window. If for some reason, water were present within the window of maintenance, all ADAP fish relocation and site isolation protocols would be followed. As such, this would be the order of preference for release sites of re-located fish:

Fish relocation will occur in these locations, listed in orde of preferences: upstream (of project), adjacent tributary, nearby stream, river, downstream. Olympic Mudminnow, if found, will only be relocated within the same system. Resilient fish species, such as Stickleback and Sculpin, amy be captured and released into conditions that would not be deemed acceptable for capture/release of salmonoids, with oversight by the ADAP fish relocation lead fish expert.

Expected Hydrology

Segment	Length (ft)	DRY?	Hydrology	Mapped Classification	Expected Fish Use
Channel 1	2,250	yes	Flow dries up in summer. The channel will dry out when there is no water flow. The current mapped classification shows this stretch as high-modified. Given that the channel dries up during the summer, the actual classification of the site is expected to be a low-modified.	High Modified	There is no expected fish use when the waterway dries out in the summer. If water were to be onsite during this time of year, the temperatures and dissolved oxygen levels are not expected to be conducive to allow salmonoids to survive at this site through the summer.
Channel 1	330	yes	Flow dries up in summer. The channel will dry out when there is no water flow, and the actual classification of the site is expected to be a low-modified.	Moderate Modified	There is no expected fish use when the waterway dries out in the summer.
Channel 1	120	yes	Flow dries up in the summer and was observed to be dry in March.	Low Artificial	There is no expected fish use when the waterway dries out in the summer.

FIELD BOOK: _____						APPROVED: <u>Frederick L. Beck, P.E.</u>	 Know what's below. Call before you dig.	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i>	NOTES (2 OF 2) Vondolin ADAP 20825 SE 416th ST 20520 SE 416TH ST Enumclaw, WA 98022	SHEET 3 OF 9 SHEETS 7/7/22
SURVEYED: <u>FLB/MS</u>	<u>Mar 22</u>					PROJECT MANAGER: <u>Medha Sinha</u>				
SURVEY BASE MAP: _____						DESIGNED: <u>Medha Sinha</u>				
CHECKED: _____						DRAINAGE INVESTIGATION NO.: _____				
		NUM.	REVISION	BY	DATE					



FIELD BOOK: _____		APPROVED: <u>Frederick L. Beck, P.E.</u>		 Know what's below. Call before you dig.	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i>	PLAN Vondolin ADAP 20825 SE 416th ST 20520 SE 416TH ST Enumclaw, WA 98022	SHEET 4 OF 9 SHEETS 7/7/22
SURVEYED: <u>FLB/MS</u>	<u>Mar 22</u>	PROJECT MANAGER: <u>Medha Sinha</u>					
SURVEY BASE MAP: _____		DESIGNED: <u>Medha Sinha</u>					
CHECKED: _____		DRAINAGE INVESTIGATION NO.: _____					
		NUM.	REVISION	BY	DATE		

SMALL PUBLIC WORKS BID PROPOSAL

PROJECT NAME: KCD Drainage Maintenance VonDolin 2022

BID SUBMITTAL DEADLINE: June 24th, 2022 by 5pm

ATTENTION: Liz Stockton

PART 1 - GENERAL

1.01 Bids should be emailed to:

Email: Liz.stockton@kingcd.org

Copies of Bids in a PDF file format can be emailed to the email address listed above.

1.02 PROPOSAL

The undersigned Bidder hereby certifies that the Bidder has examined the location and construction details of work, is familiar with the local conditions at the place where the work is to be done, and has read and thoroughly understands the Project Documents governing the work and the method by which payment will be made for said work and hereby propose to undertake and complete the work in accordance with said Project Documents and that the Bidder will take in full payment therefor the sums set forth in the following Bid Schedule.

1.03 BIDDER INFORMATION

Proper Name of Bidder: SOUTHWORTH & SONS, INC.
Mailing Address: 50130 EUNICLAW CHNOCK HWY EUNICLAW 98022
Contractor's License No.: SOUTH 1X21740 UBL No: 000 313 802
City of [***] Business License No.: _____
Phone Number: 360 463 2415 Fax Number: 360 463 2571
Email Address: southworth-rose@msn.com

SCHEDULE OF UNIT PRICES

Description	Est. Quantity	Unit	Unit Price	Extension
Mobilization	1	LS	750-	750-
Dredging sediment from an agricultural ditch	2900	LF	2 ⁷⁵	7917-
Excavation of new 48" culvert site	300	LF	3 ⁰⁰	960-

Purchase and delivery of 48" x 20' LCPE	3	EA	2640-	7930-
Install 48: x 20' LCPE	3	EA	3900-	11700-
Demobilization	1	LS	150-	150-
Wa State Tax (King County 8.7%)		LS	2609 ⁷⁴	2609 ⁷⁴

BASE BID Subtotal 24997-
 W.S.S.T (8.7%) 2609.74
 BASE BID TOTAL (Subtotal with Sales Tax) 32606.74

From: [rosemarie southworth](#)
To: [Liz Stockton](#)
Subject: Re: New Bid for King Conservation District- VonDolin
Date: Thursday, June 30, 2022 9:55:59 PM
Attachments: [image001.png](#)

No problem just reducing the quantity. I think you have the right to do it, and we're fine with it.

From: Liz Stockton <liz.stockton@Kingcd.org>
Sent: Thursday, June 30, 2022 9:52 PM
To: rosemarie southworth <southworth_rose@msn.com>; john southworth <johnsouthworth@outlook.com>
Subject: RE: New Bid for King Conservation District- VonDolin

Hi again,

I just reviewed my original bid document for VonDolin and realized I did not edit the amount of culverts needed for this site. There will only be one 48" culvert installed and not three. Is it OK to reduce the cost of the bid using the unit price table or would you like to toss out the entire bid and I can resubmit the request for bids? Sorry for the goof up.

Using the unit price table and reducing the quantities of culverts to just one, I have a new base bid amount of \$16,917. How would you like to proceed?

Thank you,

Liz Stockton - Agricultural Drainage Program Coordinator
Cell: 425-336-8817 || Fax: (425) 282-1898 | Liz.Stockton@kingcd.org

Legal Disclaimer: The contents of all e-mail transmissions to and from this office may be considered public information and subject to the provisions of the State of Washington Public Records Act.

From: Liz Stockton
Sent: Monday, June 27, 2022 8:11 AM
To: rosemarie southworth <southworth_rose@msn.com>; john southworth <johnsouthworth@outlook.com>
Subject: RE: New Bid for King Conservation District- Ag Drainage

Good morning Southworth's,

You have won this bid. Stay tuned for more coming this week

Thank you,

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

SUBJECT:

Approval is needed for a public works contract to complete the Wallace Drainage project for a total of \$40,000.

FISCAL IMPACT:

Typically, construction costs associated with KCD's Ag drainage projects comes from an annual grant via the King County Flood Control District. However, the FCD grant was not awarded to KCD in 2021. For the 2022 construction season, construction costs will be funded through a combination of KCD Working Lands funds, KCD Landowner Incentive Program, and KCD Ag Drainage funding supported through the Interlocal Agreement with King County.

POLICY CONSIDERATION

The proposed small public works contract has been vetted by King County ADAP engineers, farm operators, and KCD farm planners.

STAKEHOLDER INTERESTS

- District cooperators and farm managers
- King CD Board members and staff
- King County ADAP staff

BACKGROUND

The Wallace Drainage project includes improving drainage on two farms in the Enumclaw APD. The proposed project will provide maintenance dredging of a dry ditch on the Wallace farm and the VanHoof Dairy for a total of 4000'. There are also three culverts being proposed for installation to replace three fords. This project has the potential to restore 40 acres of productive farmland that provides feed for local beef and dairy operations. The Wallace family has been unable to use at least 30 acres of their farmland due to pastures being too wet to farm in recent years.

The Wallace farm includes about 3000' of a seasonal drainage ditch that borders their pasture and then heads east to the VanHoof dairy before draining into the

White River about one mile away. This ditch runs dry from July through September typically. The drainage ditch is proposed to receive a native buffer planting on the Wallace farm in 2023 as part of the requirements to receive an HPA permit through the streamlined ADAP agreement. The VanHoof dairy received ADAP in 2018 and has an open HPA permit until 2023 to complete maintenance dredging. King County ADAP is in support of maintaining the drainage ditch on both properties. The permit has been submitted for the Wallace farm. If the small public works contract is approved, work can begin on the

King Conservation District Board of Supervisors Meeting**Agenda Action Briefing/Report****Meeting Date: August 8th, 2022**

Wallace farm as soon as the Wallace HPA permit is issued. The HPA is expected by August 25th, 2022 and work must be completed by September 30th, 2022.

EFFECTIVE DATE:

The small public works contract will become effective upon approval by the Board of Supervisors and the signature by a Board representative.

OPTIONS

Do not move forward with the drainage project this year. Risk loss of native salmon, risk loss of 80 acres of high value organic crops for another growing season, and loss of over 40 acres of pasture.

RECOMMENDATION

Staff seeks Board approval of the public works project for the Griffin Creek Drainage project in the amount of \$300,000.

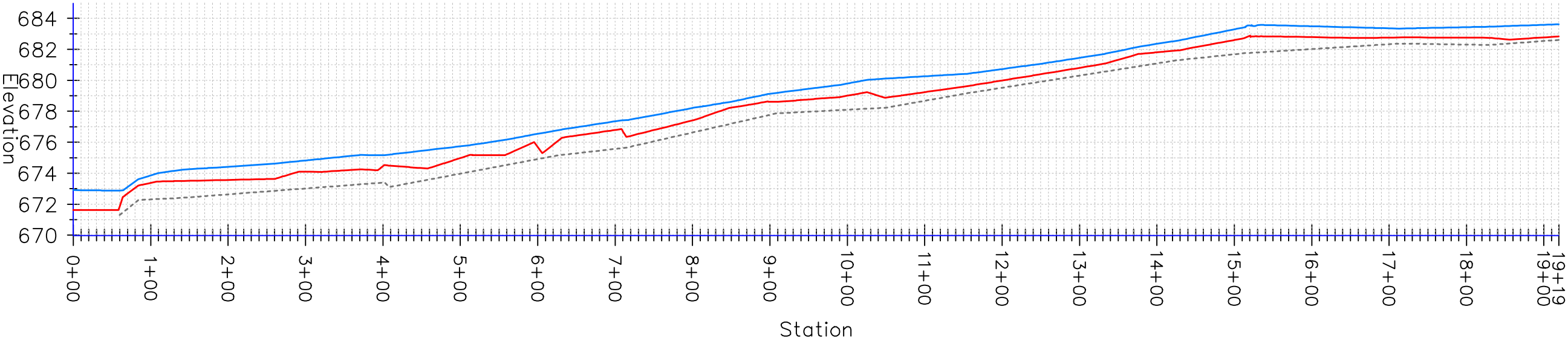
MOTION

_____ Moved, _____ Seconded; Passed a motion to approve the King Conservation public works project for the Wallace Drainage project in the amount of \$300,000.

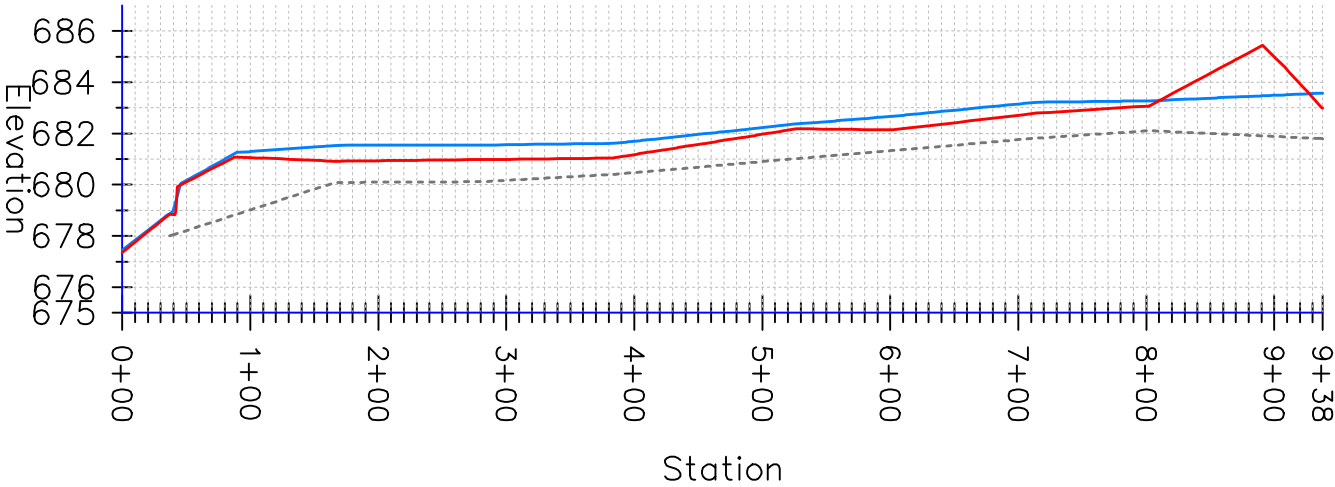


FIELD BOOK: _____						APPROVED: _____		<div><p>Know what's below. Call before you dig.</p></div>	<div><p>King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i></p></div>	<p>PLAN MAP Wallace ADAP XXXX Farm 22005 SE 456th WAY Enumclaw, WA 98022</p>	<p>SHEET 1 OF XX SHEETS 4/29/22</p>
SURVEYED: <u>FLB/CEC</u>		<u>MAR 2022</u>				PROJECT MANAGER: _____					
SURVEY BASE MAP: _____						DESIGNED: _____					
CHECKED: _____						DRAINAGE INVESTIGATION NO.: _____					
NUM.	REVISION	BY	DATE								

Channel Centerline A Profile



Channel Centerline B Profile



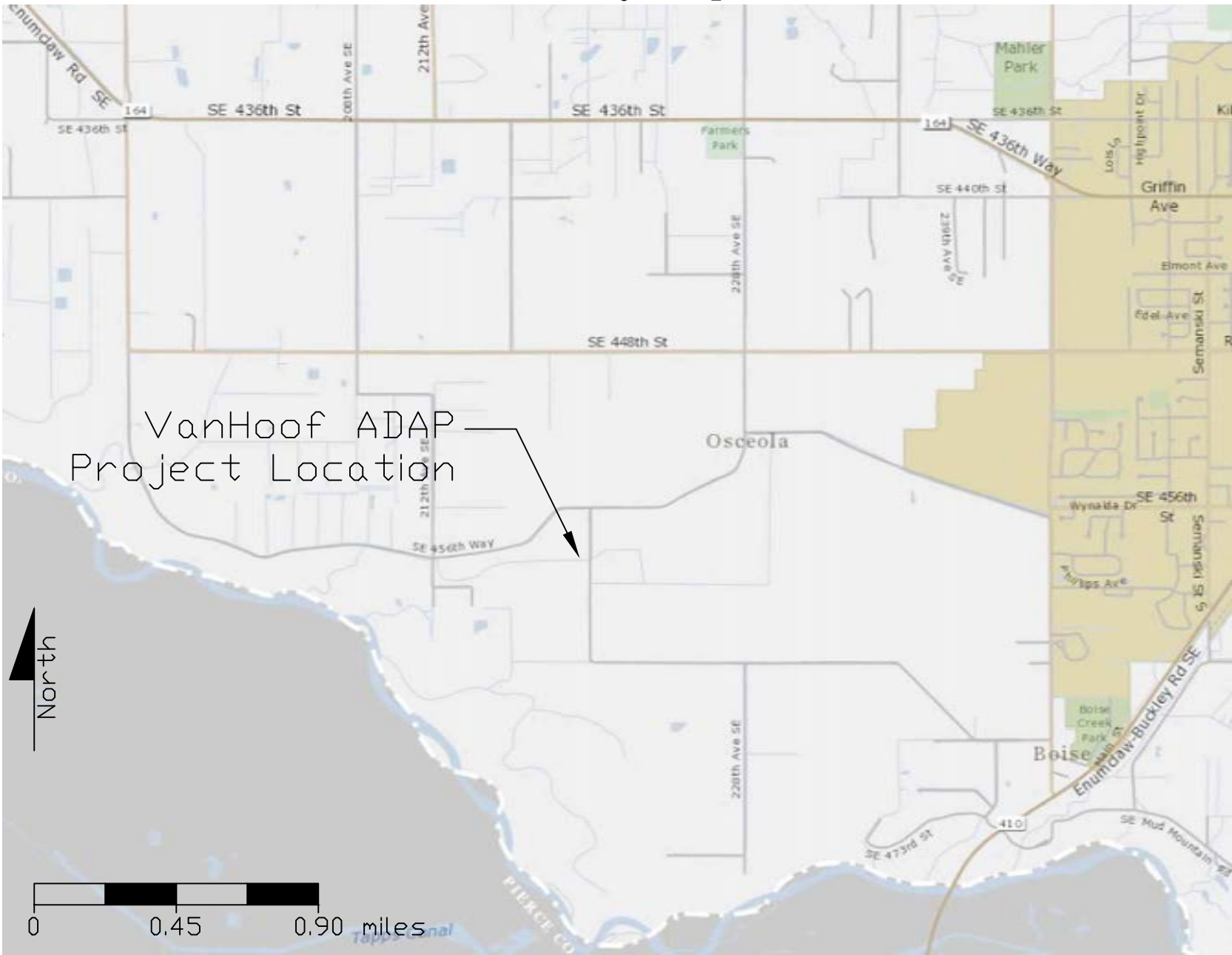
- Existing Channel Bottom
- Approximate Dredge Extents
- Water Surface (3/18/2022)
- X Sediment depth at probe resistance

FIELD BOOK: _____						APPROVED: _____	 Know what's below. Call before you dig.	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i>	PROFILE VIEW Wallace ADAP XXXX Farm 22005 SE 456th WAY Enumclaw, WA 98022	SHEET 2 OF XX SHEETS
SURVEYED: <u>FLB/CEC</u>	<u>MAR 2022</u>					PROJECT MANAGER: _____				
SURVEY BASE MAP: _____						DESIGNED: _____				
CHECKED: _____						DRAINAGE INVESTIGATION NO.: _____				
		NUM.	REVISION	BY	DATE					

VanHoof ADAP

Agricultural Waterway Maintenance Plan

Vicinity Map



Notes:

1. Total proposed maintenance length is up to 1,300 feet. Actual completed dredge distance may be less per landowner maintenance discretion.
2. Estimated dredge volume is 200 cy.
3. All work shall be performed in accordance with King County's "Best Management Practices for Maintenance of Agricultural Waterways" (BMPs), the Washington Department of Fish and Wildlife Hydraulic Project Approval (HPA) stipulations, and the King Conservation District (KCD) farm plan.
4. Spoils may be spread on site to a depth no greater than 6 inches or removed from the site and disposed of in a legal manner.
5. A pre-construction meeting, including the landowner or landowner's representative, the equipment operator, a KCD employee, and a King County ADAP employee, is required prior to the start of any maintenance activities.
6. It is the landowner and contractor's responsibility to monitor excavation and ensure that maintenance dredging does not exceed historical-channel extents.
7. Existing native vegetation should be protected to the extent practicable. The landowner is responsible for protecting the installed planting from livestock grazing and all farm activities.
8. No utilities have been located. It is the responsibility of the landowner and operator to locate utilities.

FIELD BOOK: _____		APPROVED: BRIAN SLEIGHT, PE		 Know what's below. Call before you dig. 120	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section Christie True, Director	VanHoof ADAP 45717 220th Ave SE & 21531 se 456th Way Enumclaw, WA	SHEET 1 OF 4 SHEETS	
SURVEYED: LB, EW		5/3/18	PROJECT MANAGER: LOU BECK, PE					
SURVEY BASE MAP: _____			DESIGNED: LOU BECK, PE					
CHECKED: _____			DRAINAGE INVESTIGATION NO.: 2018-XXXX					
NUM.	REVISION	BY	DATE					

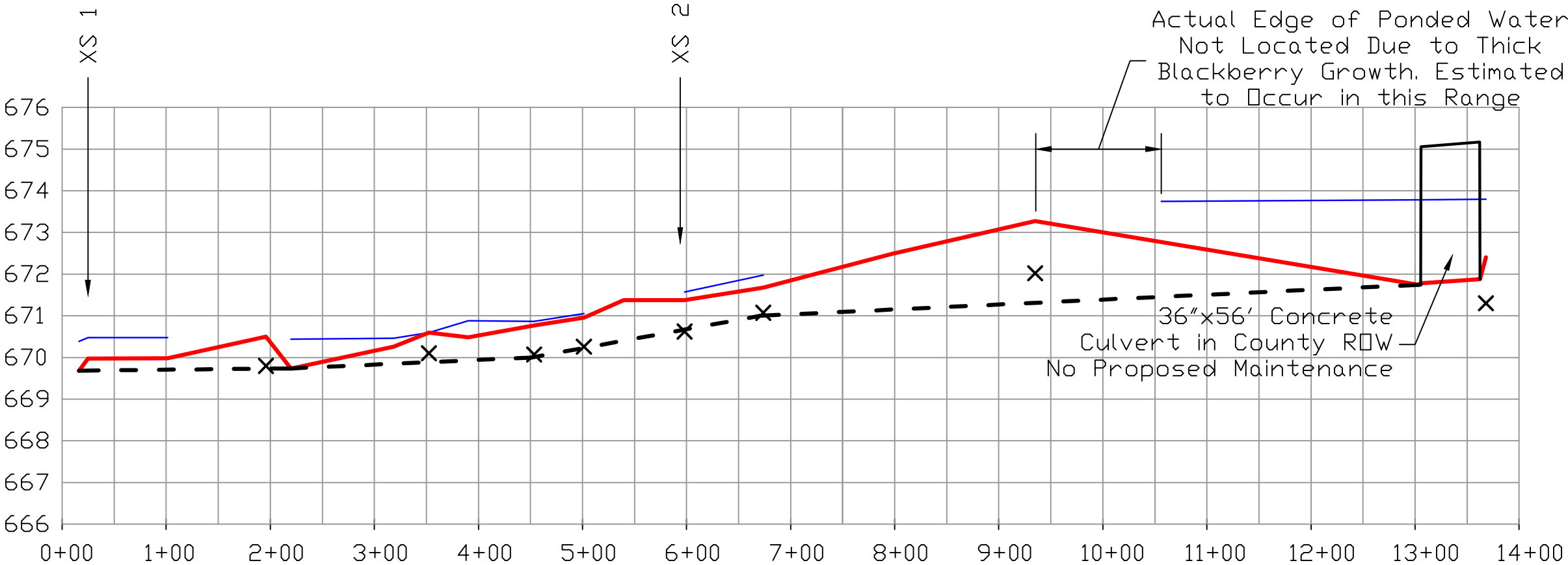
VanHoof ADAP

Agricultural Waterway Maintenance Plan

[illegible]

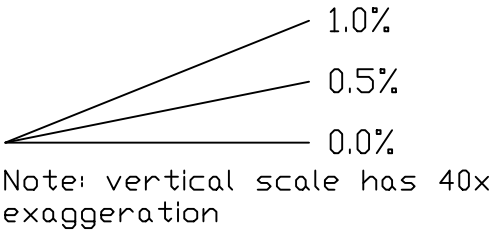
VanHoof ADAP
Agricultural Waterway Maintenance Plan

Profile View
40x Vertical Exaggeration



- Water Surface (5/3/2018)
- Existing Channel Bottom
- Proposed Dredge Extent
- X Sediment at Resistance

Note: Water was ponded without flow at the time of survey. The profile indicates where water was found. All other areas along the channel centerline were dry.

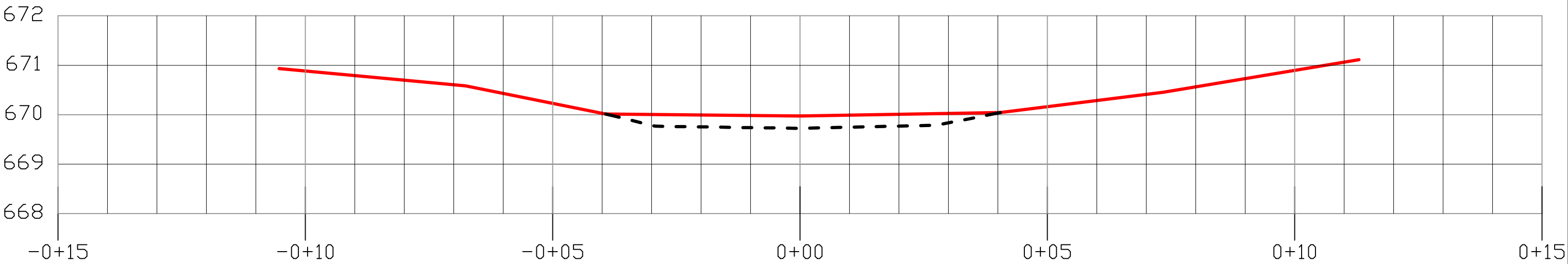


FIELD BOOK: _____		APPROVED: BRIAN SLEIGHT, PE		 Know what's below. Call before you dig. 122	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section Christie True, Director	VanHoof ADAP 45717 220th Ave SE & 21531 se 456th Way Enumclaw, WA	SHEET 3 OF 4 SHEETS	
SURVEYED: LB, EW		PROJECT MANAGER: LOU BECK, PE						
SURVEY BASE MAP: _____		DESIGNED: LOU BECK, PE						
CHECKED: _____		DRAINAGE INVESTIGATION NO.: 2018-XXXX						
NUM.	REVISION	BY	DATE					

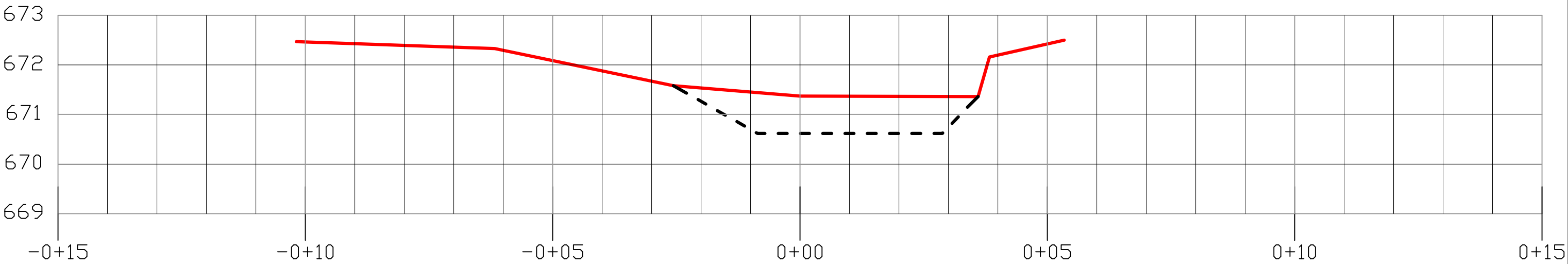
VanHoof ADAP

Agricultural Waterway Maintenance Plan

Cross Section 1
Station 0+25



Cross Section 2
Station 5+94



— Existing Channel Bottom
- - - Proposed Dredge Extent

FIELD BOOK: _____						APPROVED: <u>BRIAN SLEIGHT, PE</u>	 Know what's below. Call before you dig.	 King County Department of Natural Resources and Parks Water and Land Resources Division Stormwater Services Section <i>Christie True, Director</i>	VanHoof ADAP 45717 220th Ave SE & 21531 se 456th Way Enumclaw, WA	SHEET 4 OF 4 SHEETS
SURVEYED: <u>LB, EW</u>	<u>5/3/18</u>					PROJECT MANAGER: <u>LOU BECK, PE</u>				
SURVEY BASE MAP: _____						DESIGNED: <u>LOU BECK, PE</u>				
CHECKED: _____						DRAINAGE INVESTIGATION NO.: <u>2018-XXXX</u>				
		NUM.	REVISION	BY	DATE					

King Conservation District Board of Supervisors Meeting 08/08/2022**Agenda Action Briefing/Report AI 22- 070****SUBJECT:**

Review for Approval KCD Landowner Incentive Program cost-share application from Susan Sullivan, for Aquatic Area Enhancement / Buffer, in the amount of \$36,000.00.

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$115,208.01
Current Request	\$36,000.00
Balance Remaining	\$79,208.01

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

The Sullivan's own a property which borders over 150 feet of shoreline along Lake Washington. project is the critical area planting component of a bulkhead removal and soft shore stabilization project that was completed in spring of 2022. The project aims to restore much of the shoreline's natural features and functions of the nearshore environment by removing large sections of bulkhead and replacing it with riparian plantings, shoreline gravel, boulders, and logs. Cumulatively, 101 linear feet of bulkhead removal occurred. The current condition of the proposed planting area is newly graded as a result of the bulkhead removal project and is relatively uniform and flat and is planted with an erosion control cover-crop. The bulkhead removal project resulted in the placement of shoreline gravel, anchored logs, and keystone boulders.

The proposed project includes 6,400 square feet of critical area plantings along 150 feet of shoreline (up to the 50' shoreline setback). The planting plan includes emergent plants near OHWM and a robust shoreline community of grasses, forbs and groundcovers (3,177), shrubs (386), and trees (6). In addition, 1,180 square feet will be covered with a native seed mix.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION

Staff seeks Board approval of Landowner Incentive Program cost-share application from Susan Sullivan, for Aquatic Area Buffer in the amount of \$36,000.00.

King Conservation District Board of Supervisors Meeting 08/08/2022

Agenda Action Briefing/Report AI 22- 070

MOTION

_____ Moved, _____ Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Susan Sullivan, for Riparian Forest Buffer, in the amount of \$36,000.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Susan Sullivan		Farm/Business Name:	
Mailing Address: 1645 Rambling Lane Medina, WA 98039		Project Address: 444/438 Overlake Dr E Medina, WA 98039	
Phone (home): 425-941-1268		Phone (work/mobile):	
Email Address: sullhenn@msn.com		KCD Staff: Debbie Meisinger	
Parcel #(s): 3835502356 & 938910	<input checked="" type="checkbox"/> Incorporated <input type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 0.78 (total combined of both)	<input checked="" type="checkbox"/> T.A. <input type="checkbox"/> Farm Plan <input type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Aquatic Area Buffer Planting
Project Completion Date (month and year): 12/25
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP; also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>This project is the critical area planting component of a bulkhead removal and soft shore stabilization project that was completed in spring of 2022. The project aims to restore much of the shoreline's natural features and functions of the nearshore environment by removing large sections of bulkhead and replacing it with riparian plantings, shoreline gravel, boulders, and logs. A basalt angled rock bulkhead was located along most the immediate shoreline area, with a 44-foot-long degraded log bulkhead situated along the remainder of the shoreline from the middle of the south property running south to the property line. Substrate waterward of the bulkhead included medium-sized rounded cobble with no small gravels present waterward of the bulkhead, indicating the bulkhead was focusing wave energy down into the nearshore environment and dispersing fine sediments from the</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>The proposed project includes 6,400 square feet of critical area plantings along 150 feet of shoreline (up to the 50' shoreline setback). The planting plan includes emergent plants near OHWM and a robust shoreline community of grasses, forbs and groundcovers (3,177), shrubs (386), and trees (6). In addition, 1,180 square feet will be covered with a native seed mix. This planting will complement the bulkhead removal project described above.</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>Per HPA approval, shoreline plants will be maintained for at least 3 years, ensuring 80% survival by year 3. The homeowner will continually monitor shoreline gravel and placement of logs and boulders, as well as fulfill the requirements of maintenance and monitoring as outlined in the Jobsheet.</p>

Permits <i>(List all permits required to complete this project):</i> JARPA, HPA, City of Medina Building Permit, City of Medina Demo Permit, SEPA Exemption
Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)? ☒ Yes ☐ No
If yes, please list contract number and BMP below:
2021-35 Sullivan, S BHR

B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs? ☐ Yes ☒ No
Please describe below:
1. King County Cost-share
Please list practices and date installed below:

2. NRCS EQIP (Natural Resources Conservation Service’s Environmental Quality Incentive Program)
Please list practices and date installed below:

3. Other
Please list agency and describe project:

Other Cost-Share History/Notes:
Will simultaneously apply for WSCC Salmon Recovery Biennium funding and will use that first if award date coincides with work window.

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant’s statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

☐ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☐ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

- ☐ A. I understand the lifetime of the BMP is 15 years.
- ☐ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.
- ☐ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I agree to ensure that all applicable local, state, and federal permits are obtained for installation of the BMP for which funds are requested. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details. _____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon installing the BMP to the minimum standard provided by KCD, and that KCD will verify standard compliance. Furthermore, I understand that changes to the installation details (attached *Job Sheet and Map*) must be approved through a *Scope of Work Revision Process*. Unapproved changes will not be eligible for reimbursement. _____ (Initial Here)

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Susan Sullivan

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
------------------------	------	---	------

FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:



Landowner Incentive Program

Applicant Budget Worksheet

Cooperator: _____ Sustainer: _____

Budget Items	Units	Cost
Plants (Shoreline 50' Setback)		\$33,778.99
Labor		\$23,040.00
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$56,818.99

In-Kind Labor/Machinery	# hours	Cost
Manual labor		\$
Person with power equipment (i.e. chainsaw)		\$
Small Tractor (up to 40 hp)		\$
Medium Tractor (40-70 hp)		\$
Large Tractor (71 or above hp)		\$
Excavator (up to 100 hp)		\$
Excavator (over 100 hp)		\$
D-4 Cat or equivalent		\$
D-6 Cat or equivalent		\$
D-7 Cat or equivalent		\$
Backhoe		\$
Truck (under 2 tons)		\$
Truck (2 tons or over)		\$
Bobcat		\$
4-wheeler or side-by-side		\$
Subtotal	0.00	\$

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$56,818.99
Units	Linear Feet	
Cost/Unit		\$

Conservation Practice	select BMP (x)	Cost \$
Animal Trails & Walkways		
Aquatic Area Buffer	x	\$
Aquatic Area Buffer (WCC)		
Buffer Fencing		
Building Relocation for Aquatic Area/Buffer		
Bulkhead Removal (Freshwater, Marine)		
Cover Crops		

BMPs	Units	cost/unit	%	reimbursement rate	
Animal Trails & Walkways	sq ft	\$ 0.75	0.5	\$ 0.38	Ac.
Aquatic Area Buffer	project	\$ 30,000.00	0.9	\$ 27,000.00	AUE
Buffer Fencing	ft	\$ 12.00	0.75	\$ 9.00	Ft.
Building Relocation for Aquatic Area/Buffer	project	\$ 50,000.00	0.5	\$ 25,000.00	Sq. Ft.
Bulkhead Removal (Freshwater, Marine)	project	\$ 50,000.00	0.75	\$ 37,500.00	Project
Cover Crops	acre	\$ 150.00	0.9	\$ 135.00	
Cross Fencing	ft	\$ 6.00	0.5	\$ 3.00	
Forest Health Management	project	\$ 30,000.00	0.75	\$ 22,500.00	
Heavy Use Area Protection	AUE	\$ 1,400.00	0.5	\$ 700.00	
Pasture & Hay Planting	acre	\$ 325.00	0.5	\$ 162.50	
Roof Runoff Management	ft	\$ 7.00	0.5	\$ 3.50	
Stream Crossing	ft	\$ 1,100.00	0.75	\$ 825.00	
Subsurface Drain	ft	\$ 20.00	0.5	\$ 10.00	
Upland Wildlife Habitat Management	project	\$ 20,000.00	0.75	\$ 15,000.00	
Waste Storage Facility	AUE	\$ 1,000.00	0.75	\$ 750.00	
Watering Facility	project	\$ 50,000.00	0.5	\$ 25,000.00	



JOB SHEET

Aquatic Area Buffer Planting

Landowner: Susan Sullivan	Lifetime of Practice: 15
---------------------------	--------------------------

Purpose (check all that apply)	
<input checked="" type="checkbox"/> Create shade to lower or maintain water temperatures to improve habitat for aquatic organisms	<input type="checkbox"/> Improve forest health reducing the potential of damage from pests and moisture stress
<input checked="" type="checkbox"/> Create or improve riparian habitat and provide a source of detritus and large woody debris	<input checked="" type="checkbox"/> Restore natural riparian plant communities
<input type="checkbox"/> Reduce excess amounts of pollutants in surface runoff and reduce excess nutrients and chemicals in shallow groundwater flow	<input checked="" type="checkbox"/> Improve wildlife habitat
<input type="checkbox"/> Reduce pesticide drift entering water body	<input type="checkbox"/> Increase carbon storage in vegetation and soils, and increase biomass in soils

Current Site Conditions *Provide a summary of the resource management problems addressed by the BMP. Also note any other current conditions pertinent to the project (slopes, erosion, flow, drainage)*

The site is made up of 2 residential lots in the City of Medina that combined contain 150 feet of Lake Washington shoreline. Prior to a bulkhead removal and soft shore stabilization project, the site was entirely lawn all the way up to the edge of a concrete bulkhead. The substrate waterward of the bulkhead included medium-sized rounded cobble with no small gravels present, indicating the bulkhead was focusing wave energy down into the nearshore environment and dispersing fine sediments from the project area. A 26-foot long in-water groin existed perpendicular to the shoreline within the north portion of the property. Areas of lawn and ornamental hedges were situated between the shoreline and the existing single-family residences. The site is post construction now, with 101 feet of bulkhead removed and shoreline gravel, anchored logs, and keystone boulders placed for beach creation. In addition, a 26-foot groin was removed. The current condition of the proposed planting area is a newly graded, relatively flat, gently slope with established cover crop.

Riparian Forest Buffer Practice and Details *Provide the following:*

- 1) a basic description of the proposed planting area
- 2) calculate and record the square footage (acreage) of the planting area, the number of trees and shrubs to be planted, the linear footage of stream enhanced, the average and minimum width of the buffer:
- 3) list any native plant species currently existing on site
- 4) list native trees and shrubs selected for the project
- 5) please attach your proposed planting plan

- 1) Post construction the planting area has been stabilized with a cover crop. There is more grading work to be done prior to planting and planting bed amendments are described in attached plan.
- 2) The proposed planting area will is approximately 6,400 square feet, 50 feet wide along 150 linear feet of shoreline, excluding 1,100 square feet that will be planted and maintained as lawn. The planting includes emergent plants near OHWM and a robust shoreline community of grasses, forbs and groundcovers (3,177), shrubs (386), and trees (6). In addition, 1,180 square feet will be covered with a native seed mix. Additional planting will occur our outside of this 50' but this application is limited to the 50' and is complementary to the bulkhead removal project.
- 3) There are no existing native plants with in the project area. There are mature Western red cedar and Douglas fir and assorted native shrubs in the upland landscape outside of the project area.
- 4) Shore pine, Western red cedar, serviceberry, oceanspray, red osier dogwood, P wac myrtle, mock orange, snowberry, salal

5)See attached

Permits *Are there any permits necessary for the project? If so, please list below and include a copy of the permit*

JARPA, HPA, City of Medina Building Permit, City of Medina Demo Permit, SEPA Exemption

Type and Source of Plant Material *Will you use potted plants, bareroot plants, b&b plants or a combination? Where will you get the plants from and when?*

Plant material will be native species adapted to the site to minimize maintenance and care.

The contractor, will plant 1 and 2 gallon containers, live stakes, and/or bareroot and seed material that have been sourced from the Puget Sound region. If additional plant material is purchased to augment the initial planting, that material can be bareroot, live stake, or potted nursery stock.

Site Preparation *List what method(s) of site preparation will be used, who will be doing the work, when will the work be done.*

See attached plan for detailed site preparation plans from the Watershed Company.

Specific weed control prescriptions are detailed below. If brush and debris are removed from the stand, all material will be hauled off-site or masticated /chipped in a staging area. If masticated material is intended for use as mulch on the site, invasive species should not be included in the masticating/chipping process.

Bohemian Knotweed/Japanese Knotweed Control –

- *Chemical Control:* Herbicide can be applied by foliar spray, wick wipe, cut and pour, or stem injection. Please see attached King County Knotweed Best Management Practice Factsheet for full details. **Always follow label rates and instructions.**

Care and Temporary Storage of Purchased Plant Material *Upon receiving the plant material, where will you store it and how will you care for it?*

All plant material should be stored in a cool location and well watered prior to planting. In the case of bare root plants, inventory should be held in the source refrigerated facility as long as possible prior to planting. Bare root plants can be stored in the field for up to one to three weeks prior to planting by placing them in a shaded location where they will remain cool. Such a location should prevent freezing as well as exposure to warm temperatures. Additionally, bareroot inventory should be covered with a tarp to prevent drying. Bareroot stock that is expected to emerge from dormancy prior to planting should be “healed” into a soil bed. To heal-in, dig a v-shaped trench to a depth that accommodates covering the seedling roots when back-filled with soil.

Installation *Provide the following details: 1) Plant Installation Prescription: 2)Plant Protection Prescription: 3) Weed Suppression Prescription: 4)Erosion Control Prescription*

See attached plan for detailed Installation plans from the Watershed Company.

1) Plant Installation Prescription:

Live Stake Inventory: Live Stakes and whips should be planted using a planting bar. Stakes and whips are to be 3 to 4 feet long, and a minimum of ½ inch in diameter. Stakes should be stored in a bucket of water until planted. Buds should face up in the bucket. Soaking before planting greatly increases the survival of live stakes and whips. Refer also to the attached planting instructions in *Planting Live Hardwood Stakes*.

Potted & Plug Inventory: Potted plant material should be shovel planted to the same depth that they grew in the pot. Plants will be well watered prior to planting. Prior to digging a hole for the plant, prepare the planting location by removing a grass sod within a 1.5 foot diameter circle, being careful to remove roots as well as above ground portions of the plant. Dig a hole for the container in the center of this cleared circle twice the size of the plant's pot. Backfill the hole with soil while using care to avoid leaving air pockets in the soil. Refer also to the attached planting instructions in *Planting Container Trees and Shrubs*.

Bareroot Inventory: Bare root seedlings should be shovel planted to the same depth that they grew in the nursery fields. Roots will remain moist once they are removed from the shipping bundles until they are planted. Roots will be placed in a natural position in the soil without being crowded or turned up. Soil will be packed firmly around the root system, leaving no air pockets. Prior to digging a hole for the plant, prepare the planting location by removing all grass sod within a 1.5-foot diameter circle, being careful to remove roots as well as above ground grass. Dig a hole for the bare root plant in the center of this cleared circle. Refer also to the attached planting instructions in *Planting Bare Root Trees and Shrubs*.

2) Plant Protection Prescription:

See attached plan for detailed Plant Protection Prescription in the plan from the Watershed Company.

Tree Protectors (for sites where deer/elk browse is anticipated): Install fencing, 3 foot diameter and 5 feet high, on newly planted Western Red Cedar to protect trees from deer browsing. Weave 6 foot bamboo stakes fencing and shove at least 8 inches into the ground in order to stabilize.

Basal Wrapping & Tree Protectors (for sites where vole/mouse herbivory is anticipated): Voles, mouse-like animals, are especially present in meadow and pasture areas and target trees and shrubs primarily in the winter when other food sources are scarce. They will readily girdle small trees and shrubs and tunnel through and eat root systems. Vole damage is hard to catch before it occurs. If voles or vole activity have been seen at a site, steps must be taken to protect young plants directly after they are planted. Start by managing other vegetation near the plant by weeding or mowing and not leaving vegetation as thatch. Be sure that mulch is not too close to the base of the plant as loose mulch may encourage voles. Plant protectors and basal wrappings may also be installed. These protectors can plastic, mesh, or galvanized steel hardware cloth (1/4 or 3/8 inch). Circle the base of the plant with the material and create a tube by securing the material to itself. Be sure to leave room for growth. Then bury the bottom a few inches into the soil. Recommended height is 12 inches.

3) Weed Suppression Prescription

Mulching: In locations where ongoing weed suppression is a concern, prepare the area around each plant by placing a barrier of cardboard around the plant. After placing the barrier, apply a layer of mulch over the weed barrier to a depth of 4-6 inches. Mulching options include wood chips, fully composted organic material such as a commercial compost product, or weed free straw. Mulch should be weed free, if possible, to avoid introducing new weeds to the project site. Mulch is not necessary in the emergent plant zones.

Weed Mats or Fabric: In locations where weed/grass suppression is a concern, install fabric squares around each installed plant. There are a variety of brands available. If a non-biodegradable fabric is used, then it MUST be removed from the plants within five years.

4) Erosion Control Prescription

Mulch: In addition to weed suppression mulch products are effective for preventing soil erosion. Mulch may be used in areas with exposed soil that will need protection for less than 30 days (before plants are installed). Materials

may include straw, wood fiber cellulose, compost, arborist chips, or chipped site vegetation (must not include live invasive plant material). Product will be applied 2 inches thick at a minimum.

Nets & Blankets: Nets and blankets are suitable for areas expected to have higher velocity or channelized run-off. This applies to slopes greater than 2:1 or with more than 10 feet of vertical relief. Jute matting, woven straw blankets, and coir blankets may be used. Products may vary, thus **follow manufacturers installation techniques**.

Wattles: Wattles are erosion and sediment barriers consisting of straw wrapped in a tubular encasing material. Wattles are placed in shallow trenches and staked along the contour of disturbed or newly constructed slopes.

- 1) Wattles are installed perpendicular to the flow direction and parallel to the slope contour.
- 2) Narrow trenches should be dug across the slope, on contour, to a depth of 3 to 5 inches on clay soils and soils with gradual slopes. On loose soils, steep slopes, and during high rainfall events, the trenches should be dug to a depth of 5 to 7 inches, or $\frac{1}{2}$ to $\frac{2}{3}$ of the thickness of the wattle.
- 3) Start construction of trenches and installing wattles from the base of the slope and work uphill. Excavated material should be spread evenly along the uphill slope and compacted using hand tamping or other method. Construct trenches at contour intervals of 3 to 30 feet apart depending on the steepness of the slope, soil type, and rainfall. The steeper the slope the closer together the trenches should be constructed.
- 4) Install the wattles snugly in to the trenches and abut tightly end to end. Do no overlap the ends.
- 5) Install stakes at each end of the wattle, and at 4 foot centers along the entire length of the wattle.
- 6) If required, install pilot holes for the stakes using a straight bar to drive holes through the wattle and into the soil.
- 7) At a minimum, wooden stakes should be approximately $\frac{3}{4}$ x $\frac{3}{4}$ x 24 inches. Willow cuttings or $\frac{3}{8}$ inch rebar can also be used for stakes.
- 8) Stakes should be driven through the middle of the wattle, leaving 2 to 3 inches of the stake protruding above the wattle.

Seeding: In areas that will not be planted immediately seeding with an erosion control seed mix will prevent soil erosion. A sterile wheat product called ®Regreen or a native seed mix may be used. ®Regreen is a commercial brand of sterile wheat that will form a cover crop and die back within approximately one year to three years. ®Regreen shall be applied a rate of 60 lbs per acre when hydro seeded, and 120 lbs per acre when broadcast seeded. The best time to seed is April 1 to June 30 and September 1 through October 15; however irrigation may be required to grow adequate cover.

Fencing *Is fencing going to be installed? If so, what type, who will install it and when?*

No fencing will be installed

Planting Project Maintenance and Monitoring *The planting must be inspected periodically and protected from damage so proper function is maintained. The goal for the project is to reach 80% survival after 3 years. Please describe the maintenance and monitoring plan.*

The contractor will maintain the project for 3-5 growing seasons. Maintenance activities will include control of invasive species and replanting if survivorship falls below 80%. The landowner is responsible for maintaining the project and providing photo documentation of practice maintenance. Photos must be submitted by 9/1 of each year.

Treatments must be inspected periodically and protected from damage so proper function is maintained and resource damage is minimized, including assessment of insects, disease and other pests, storm damage, and damage by trespass. The results of inspections shall determine the need for additional treatment under this practice.

Replace dead or dying trees and shrubs and control competing vegetation to support successful establishment. Periodic application of mulch may be needed to maintain plant vigor. Periodic harvest of trees and shrubs (thinning and brushing) may be necessary to maintain the health and vigor of the stand and support its development toward

more mature stand conditions. Keep large dead and dying trees for cavity nesting wildlife and bird species and as a source of downed wood in the forest understory and in adjacent or interior aquatic habitats.

If areas were brushed in order to plant trees, maintain these openings until the leader of the tree surpasses the height of the surrounding vegetation.

Where droughty soils and hot growing conditions are anticipated, supplemental watering is recommended. In such cases the District recommends watering planted nursery stock for a minimum of 3 summers following planting. Young bare root, container, and ball/burlap plants have a reduced root system that hampers their ability to survive during the dry summer months (July through October). Watering a minimum of once every two weeks during the dry summer will promote greater rates of survival. Watering once per week is preferable.

Monitor treatment areas for re-growth of non-native/invasive species and control accordingly. Utilize weed control techniques prescribed in the Site Preparation section of the Job Sheet. Species to monitor include KNOTWEED

All plant protection materials as well as any other non-biodegradable materials installed on-site will be removed within the 3-5 year project maintenance window.

Additional Specifications and Notes:




Legend

 Urban Project Area

Planting Zones

Label

 50' Buffer



Sullivan
438/444 Overlake Dr E
Medina, WA 98039

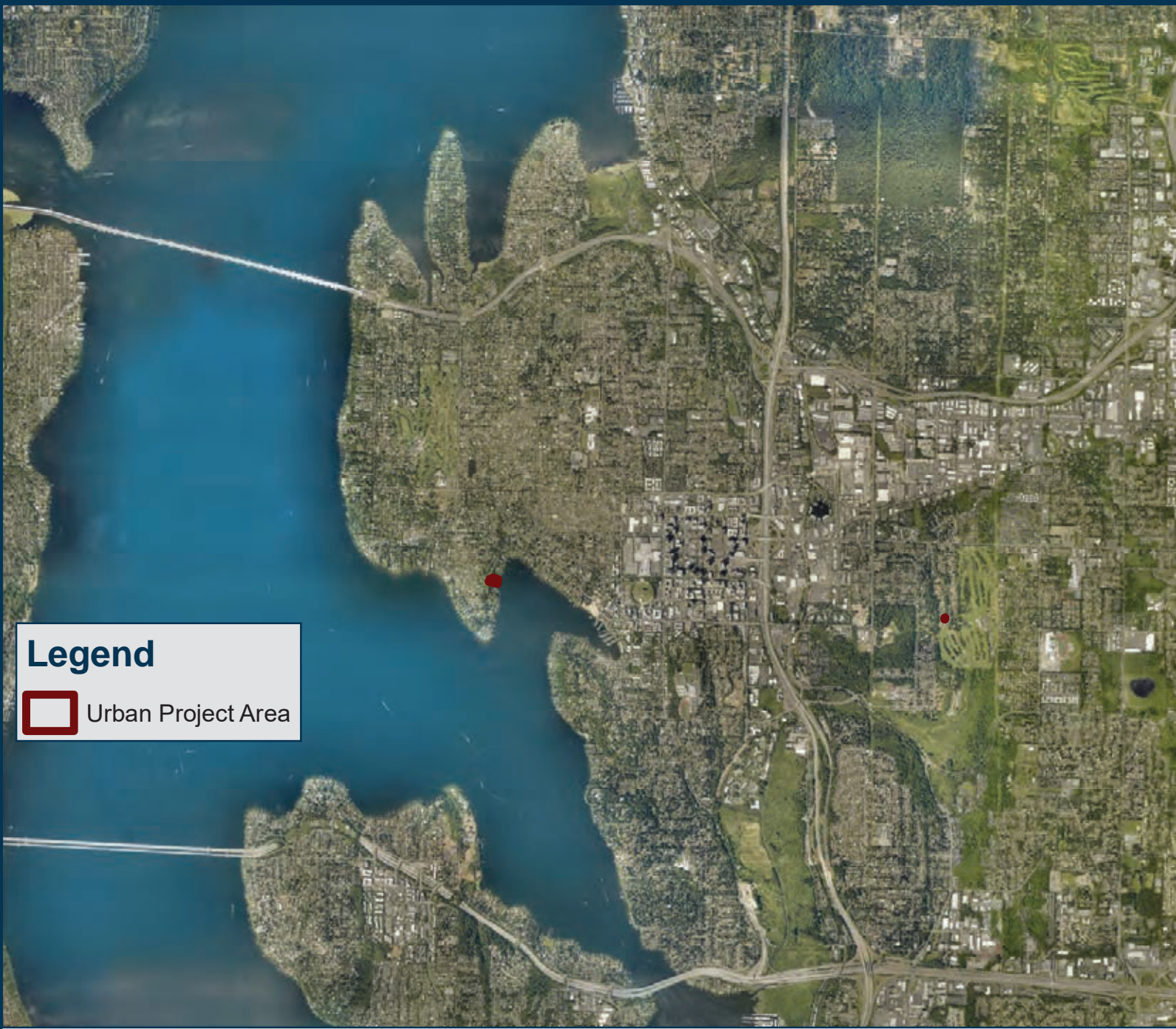


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Sullivan
438/444 Overlake Dr E
Medina, WA 98039



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July 13, 2021

Laura Redmond
Landowner Incentive Program Coordinator
King Conservation District
800 SW 39th St., Suite 150
Renton, WA 98057

I am writing on behalf of Mid Sound Fisheries Enhancement Group in support of the shoreline restoration project at 438 and 444 Overlake Drive East in Medina on Lake Washington. Based on our review of the project plans and details, this project aligns with our goals of bulkhead removal and shoreline restoration on Lake Washington for the benefit of water quality, migratory salmon, and other wildlife.

We support this application for funding assistance through the bulkhead removal category of the King Conservation District Landowner Incentive Program because of the following notable project characteristics:

- The proposed project includes removal of 102 linear feet of bulkhead and a 26 linear foot concrete groin on Lake Washington.
- Shoreline gravel, anchored logs, and rounded keystone boulders will be used for beach creation which aims to restore much of the shoreline's natural features and functions.
- This project occurs on Lake Washington where chinook, coho, steelhead, sockeye, and kokanee salmon are known to occur; and, this project is located within a documented lake sockeye spawning area according to WDFW.

In addition to the items above, this project may also serve as an example of the potential of bulkhead removal for achieving aesthetic and water access improvements, which may inspire other landowners to take restorative actions at their own shorelines.

Sincerely,



Sarah Heerhartz, Executive Director
sarah@midsoundfisheries.org

LANDSCAPE SPECIFICATIONS

GENERAL ITEMS:

1. SHORELINE PRE-CONSTRUCTION CONFERENCE: SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER'S REPRESENTATIVE, ARCHITECT, AND LANDSCAPE ARCHITECT BEFORE BEGINNING WORK TO REVIEW ANY QUESTIONS THE CONTRACTOR MAY HAVE, WORK, ADMINISTRATIVE PROCEDURES DURING CONSTRUCTION, AND THE PROJECT. THE FOLLOWING CONTRACTORS SHALL ATTEND THE PRECONSTRUCTION CONFERENCE:

- A. GENERAL CONTRACTOR
- B. CONSULTING ARBORIST
- C. SUBCONTRACTOR ASSIGNED TO INSTALL TREE AND PLANT PROTECTION
- D. EARTHWORK CONTRACTOR
- E. ALL SITE UTILITY CONTRACTORS THAT MAY BE REQUIRED TO DIG OR INSTALL UTILITIES
- F. SHORELINE SUBCONTRACTOR
- G. IRRIGATION SUBCONTRACTOR

PRIOR TO THIS MEETING, MARK ALL TREES AND PLANTS TO REMAIN AND TO BE REMOVED.

- i. FLAG ALL TREES AND SHRUBS TO BE REMOVED BY WRAPPING ORANGE PLASTIC AROUND THE TRUNK AND OBTAIN THE OWNER'S REPRESENTATIVE'S APPROVAL. FLAG ALL TREES AND SHRUBS TO BE REMOVED WITH ORANGE PAINT IN A BAND AROUND THE BASE OF THE TREE OR SHRUB 4.5 FEET ABOVE THE GROUND.
- ii. FLAG ALL TREES AND SHRUBS TO REMAIN WITH WHITE PLASTIC RIBBON AROUND THE TRUNK OR EACH TREE AND ON A PROMINENT BRANCH FOR THE OWNER'S REPRESENTATIVE'S APPROVAL OF ALL TREES AND SHRUBS TO REMAIN. AFTER APPROVAL, INSTALL TREE PROTECTION MEASURES ON ALL TREES TO BE REMOVED; SEE DETAILS AND SPECIFICATIONS.

2. ALTERNATES AND SUBSTITUTIONS: FOR ALL MATERIALS SPECIFIED IN THE LANDSCAPE CONTRACT DOCUMENTS, THE CONTRACTOR MAY SUBMIT ALTERNATES AND ACCEPTANCE BY SHORELINE LANDSCAPE ARCHITECT. TO PROPOSE AN ALTERNATE SUBSTITUTION, CONTRACTOR SHALL PROVIDE THE FOLLOWING FOR REVIEW:

- A. DOCUMENTATION: CONTRACTOR SHALL FURNISH PRODUCT SPECIFICATIONS, PRODUCT LABEL, INSTRUCTIONS, INGREDIENT LIST; TECHNICAL INFORMATION, PERFORMANCE REPORTS; CONSTRUCTION SPECIFICATIONS, SHOP DRAWINGS, BROCHURES AND PHOTOGRAPHS; MANUFACTURER AND/OR VENDOR CONTACT INFORMATION. PROVIDE RELEVANT MATERIALS THAT ARE NECESSARY TO DETERMINE SUITABILITY OF PROPOSED MATERIALS OR AS REQUESTED BY THE SHORELINE LANDSCAPE ARCHITECT.

SULLIVAN SHORELINE

NOTES

1. SURVEY CONDUCTED BY TERRANE ON DECEMBER 8, 2016, AND RECEIVED BY THE WATERSHED COMPANY ON OCTOBER 21, 2019. TERRANE 10801 MAIN STREET, SUITE 102, BELLEVUE, WA 98004.
2. OHWL SHOWN ON PLANS IS 18.6 NAVD 88 AND CORPS OF ENGINEERS DATUM IS EQUIVALENT TO 21.8.
3. IN-WATER WORK WINDOW IS JULY 16 - SEPTEMBER 30, PER WDFW.

SHEET INDEX

- 1 TITLE PAGE
- 2 EXISTING CONDITIONS
- 3 DEMO AND TESC PLAN
- 4 SITE PLAN
- 5 SITE SECTIONS
- 6 PLANTING PLAN AND SCHEDULE
- 7 PLANT SCHEDULES



VICINITY MAPS



PURPOSE: NEARSHORE RESTORATION

DATUM: NAVD88

ADJACENT PROPERTY OWNERS:
SEE JARPA APPLICATION

APPLICANT: SUSAN SULLIVAN

REFERENCE #: NWS-2020-398

SITE LOCATION ADDRESS: 444 & 438 OVERLAKE
DR. E , MEDINA, WA 98039

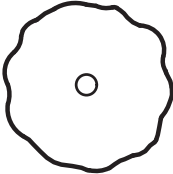
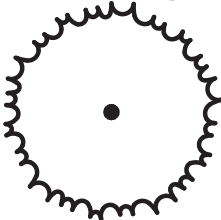
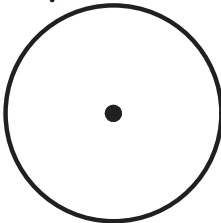
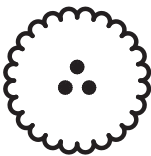

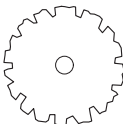





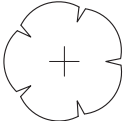


PROPOSED: BULKHEAD REMOVAL, LWD PLACEMENT,
AND BEACH NOURISHMENT






























NEAR: LK WASHINGTON AT: MEDINA
COUNTY: KING







SHEET: I

DATE: 10/23/2020

PLANT SCHEDULE SHORELINE SETBACK

TREES	BOTANICAL / COMMON NAME	SIZE		QTY	REMARKS
	ARBUTUS UNEDO / STRAWBERRY TREE MULTI-TRUNK	MIN 6` TALL		2	
	PINUS CONTORTA VAR. CONTORTA / SHORE PINE	3" CAL.		3	
	THUJA PLICATA / WESTERN RED CEDAR	MIN 6` TALL		1	
SHRUBS	BOTANICAL / COMMON NAME	SIZE	SPACING	QTY	REMARKS
	AMELANCHIER ALNIFOLIA / SERVICEBERRY	6-8 FT TALL	72" o.c.	4	MULTI-STEMMED
	ARCTOSTAPHYLOS X MEDIA / HYBRID MANZANITA	2 GALLON	36" o.c.	4	
	CEANOTHUS VELUTINUS / SNOWBRUSH CEANOTHUS	5 GALLON	60" o.c.	3	
	CORNUS SANGUINEA `MIDWINTER FIRE` / BLOODTWIG DOGWOOD	1 GALLON	36" o.c.	13	
	CORNUS STOLONIFERA / RED-OSIER DOGWOOD	1 GALLON	72" o.c.	6	
	ERICA CARNEA `NATHALIE` / NATHALIE WINTER HEATH	4" POT	24" o.c.	23	
	ERICA X DARLEYENSIS `ALBA` / WHITE DARLEY HEATH	4" POT	24" o.c.	20	
	GAULTHERIA SHALLON / SALAL	1 GALLON	18" o.c.	27	
	HOLODISCUS DISCOLOR / OCEANSPRAY	5 GALLON	60" o.c.	4	
	MAHONIA REPENS / CREEPING OREGON-GRAPE	1 GALLON	18" o.c.	112	
	MYRICA CALIFORNICA / PACIFIC WAX MYRTLE	5 GALLON	48" o.c.	5	

	MYRICA GALE / SWEETGALE	1 GALLON	36" o.c.	8	
	PHILADELPHUS LEWISII / MOCK ORANGE	5 GALLON	60" o.c.	6	
	SPIRAEA LUCIDA / SHINYLEAF SPIRAEA	1 GALLON	24" o.c.	30	
	SYMPHORICARPOS ALBUS / COMMON SNOWBERRY	1 GALLON	36" o.c.	3	
	VACCINIUM CESPITOSUM / DWARF HUCKLEBERRY	40 CI POT	12" o.c.	75	
	VACCINIUM MEMBRANACEUM / THIN-LEAVED HUCKLEBERRY	1 GALLON	24" o.c.	43	
<u>BULBS/TUBERS</u>	<u>BOTANICAL / COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>	<u>QTY</u>	<u>REMARKS</u>
	ALLIUM CERNUUM / NODDING ONION	10 CI POT	7" o.c.	25	
	BRODIAEA CORONARIA / HARVEST BRODIAEA	BULB	7" o.c.	16	
	ERYTHRONIUM OREGONUM / FAWN LILY	BULB	7" o.c.	6	
	FRITILLARIA AFFINIS / CHECKER LILY	BULB	7" o.c.	4	
	LILIUM COLUMBIANUM / COLUMBIA LILY	19 CI POT	12" o.c.	23	
	SAGITTARIA LATIFOLIA / WAPATO	BULB/TUBER	12" o.c.	12	
<u>PERENNIALS</u>	<u>BOTANICAL / COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>	<u>QTY</u>	<u>REMARKS</u>
	ACHILLEA MILLEFOLIUM / YARROW	27 CI POT	12" o.c.	135	
	ANAPHALIS MARGARITACEA / PEARLY EVERLASTING	27 CI POT	12" o.c.	75	
	AQUILEGIA FORMOSA / WESTERN COLUMBINE	40 CI POT	12" o.c.	63	
	CAREX OBNUPTA / SLOUGH SEDGE	40 CI POT	18" o.c.	23	
	CAREX PACHYSTACHYA / THICK-HEAD SEDGE	40 CI POT	12" o.c.	362	
	DANTHONIA CALIFORNICA / CALIFORNIA OATGRASS	40 CI POT	12" o.c.	124	
	DESCHAMPSIA CESPITOSA / TUFTED HAIR GRASS	40 CI POT	12" o.c.	483	
	DODECATHEON HENDERSONII / HENDERSON'S SHOOTING STAR	19 CI POT	12" o.c.	27	
	ELEOCHARIS PALUSTRIS / COMMON SPIKERUSH	40 CI POT	12" o.c.	44	
	ELYMUS GLAUCUS / BLUE WILD-RYE	40 CI POT	12" o.c.	47	
	ERIGERON SPECIOSUS / SHOWY FLEABANE	19 CI POT	12" o.c.	50	
	ERIOPHYLLUM LANATUM / OREGON SUNSHINE	27 CI POT	12" o.c.	86	
	ERYTHRANTHE GUTTATA / YELLOW MONKEYFLOWER	27 CI POT	12" o.c.	6	
	FESTUCA ROEMERI / ROEMER'S FESCUE	40 CI POT	12" o.c.	715	
	HEUCHERA MICRANTHA / ALUMROOT	19 CI POT	12" o.c.	21	
	IRIS TENAX / OREGON IRIS	19 CI POT	12" o.c.	146	
	LOMATIUM UTRICULATUM / SPRING GOLD	19 CI POT	12" o.c.	47	

	LUPINUS ALBICAULIS / SICKLEKEEL LUPINE	27 CI POT	12" o.c.	100
	PENSTEMON SERRULATUS / COAST PENSTEMON	19 CI POT	12" o.c.	24
	SCHOENOPLECTUS ACUTUS / HARDSTEM BULRUSH	40 CI POT	12" o.c.	44
	SCIRPUS MICROCARPUS / SMALL-FRUITED BULRUSH	40 CI POT	12" o.c.	28
	SIDALCEA HENDERSONII / HENDERSON'S CHECKER-MALLOW	27 CI POT	12" o.c.	79
	SISYRINCHIUM IDAHOENSE / IDAHO BLUE-EYED GRASS	19 CI POT	12" o.c.	30
	SYMPHYOTRICHUM SUBSPICATUM / DOUGLAS' ASTER	40 CI POT	12" o.c.	20
	XEROPHYLLUM TENAX / BEARGRASS	27 CI POT	12" o.c.	122

<u>GROUND COVERS</u>	<u>BOTANICAL / COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>	<u>QTY</u>	<u>REMARKS</u>
	MEADOW SEEDING CLARKIA AMOENA / FAREWELL TO SPRING COLLOMIA GRANDIFLORA / LARGE-FLOWERED COLLOMIA COREOPSIS TINCTORIA / COLUMBIA COREOPSIS GILIA CAPITATA / GLOBE GILLIA PLECTRITIS CONGESTA / SEA-BLUSH	SEED MIX SEED MIX SEED MIX SEED MIX SEED MIX		1,182 SF 236 SF 236 SF 236 SF 236 SF 236 SF	
	CAMASS CAMASSIA LEICHTLINII / GREAT CAMASS CAMASSIA QUAMASH / COMMON CAMASS	BULB BULB	40% @ 12" o.c. 60% @ 12" o.c.	200 SF 84 125	
	SEDUM SEDUM OREGANUM / OREGON STONECROP SEDUM SPATHULIFOLIUM / BROADLEAF STONECROP	4" CONTAINER 4" CONTAINER	60% @ 12" o.c. 40% @ 12" o.c.	46 SF 29 20	
	UPLAND GROUNDCOVER ARCTOSTAPHYLOS UVA-URSI / KINNIKINNIK FRAGARIA VIRGINIANA / MOUNTAIN STRAWBERRY	4" CONTAINER 4" CONTAINER	50% @ 36" o.c. 50% @ 36" o.c.	32 SF 2 2	
	LOWLAND GROUNDCOVER FRAGARIA VESCA / WOODLAND STRAWBERRY	4" CONTAINER	36" o.c.	1,182 SF 137	



Sullivan Residence

(Shoreline buffer area)



Scott Newsome
425.359.7544
scott@alliancelandscapeservices.com
www.alliancelandscapeservices.com

By submitting a bid, Contractor agrees as follows:

QUALIFICATIONS:

Contractor is Licensed, Bonded, and Insured as required by applicable law.
Contractor is fully qualified to provide all work required.
Contractor provides at least a 1-year warranty on Contractor's workmanship and all products provided by or purchased by Contractor.

SITE CONDITIONS:

The site is to be cleaned daily before leaving the site. This includes pick up of all tools and garbage.
All materials / equipment to be kept in a designated staging area specified by the owner or designer.

SUB GRADE SPECS:

Estimate is based on the assumption sub grade will be at specified depth to allow for topsoil and mulch per design specification.

PLANT WARRANTY:

Null and void without irrigation: includes a one-year limited warranty. Once payment is received in full, warranty of workmanship and materials will take effect (warranty is for one year from the date of completion of project). It is understood that plants are living entities that require water, fertilizer, and regular care. Alliance will not be responsible for any warranty of plant material due to lack of water, excess water, or any other mistreatment. Alliance will not be held responsible for damage due to acts of nature.



Scott Newsome - 425.359.7544

scott@alliancelandscapeservices.com

<http://www.alliancelandscapeservices.com/>

Residence: Sullivan - Shoreline (for KCD grant)
 Email:
 Address: 438 & 444 Overlake Drive E., Medina, WA 98039

Task	Estimated Cost	Optional Items	Description
Plants	\$33,778.95		Only plants in 50 foot shoreline buffer. Includes a one year limited warranty.
Soil	\$13,300.00		Premium soil blend throughout 50 foot shoreline buffer area - as per specifications.
Labor to install soil	\$16,600.00		Labor for soil and final grading.
Barging	\$5,000.00		Barging for importing of soil and machinery to lakefront.
Mulch	\$7,950.00		Includes dark fine mulch by Pacific Topsoils in 50 foot shoreline buffer area - as per plan.
Maintenance (3 years)	\$36,720.00		Includes maintenance of newly installed landscape in 50 foot shoreline buffer area for 3 years.
Equipment	\$11,200.00		Includes all equipment required to complete 50 foot shoreline buffer area of project.
Labor	\$23,040.00		Includes labor not listed above for plant installation and mulch installation for 50 foot shoreline buffer area if required per plan.

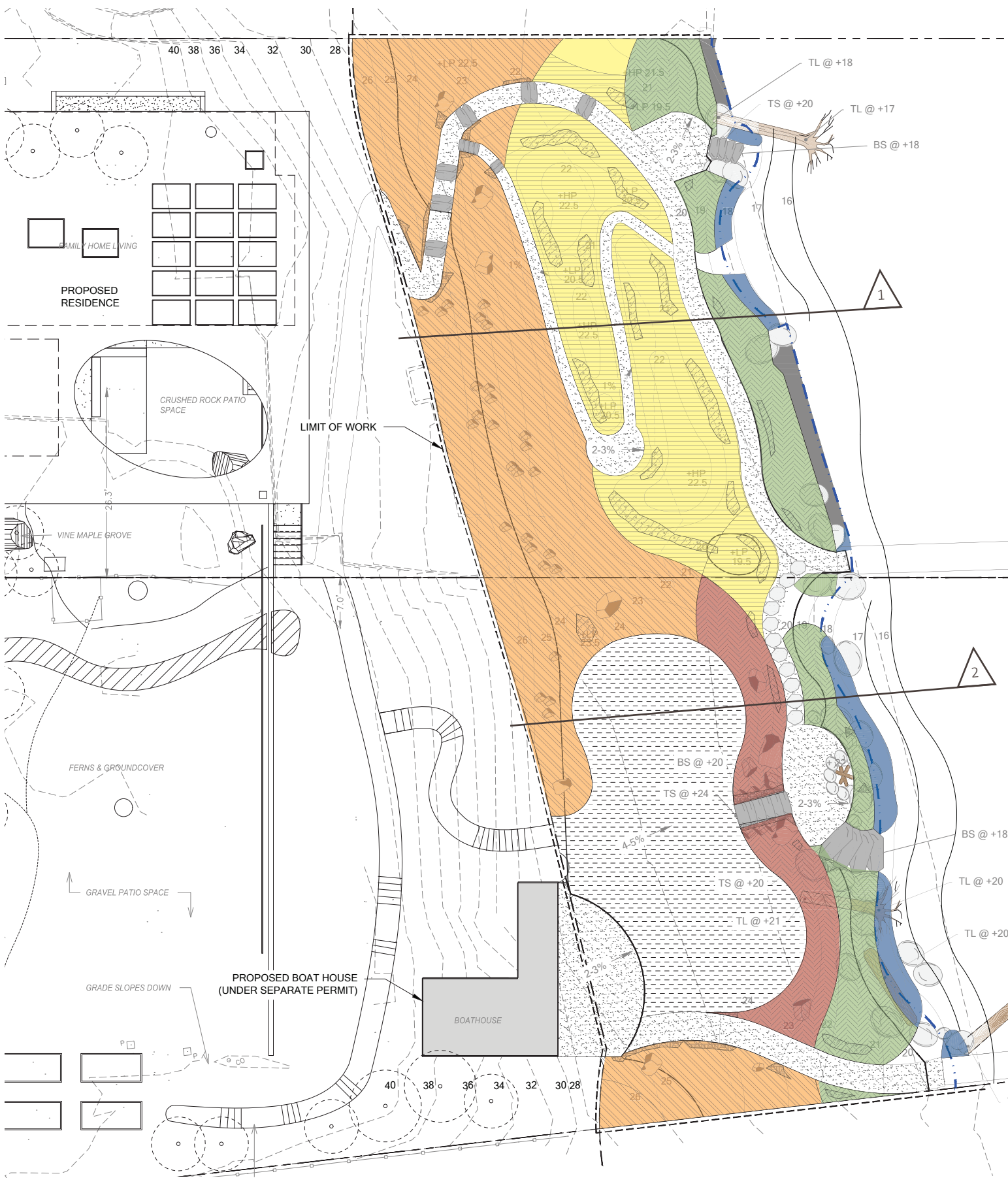
Total: **\$147,588.95**
 (total does not include local
 and state sales tax)

Alliance NW will furnish materials and labor - complete in accordance with the above specifications for the identified sum. All materials are guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from specifications involving extra costs will be executed only upon written orders and will become an extra over and above the original proposal. All agreements contingent upon strikes, accidents, or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by workman's compensation insurance.



SULLIVAN SHORES

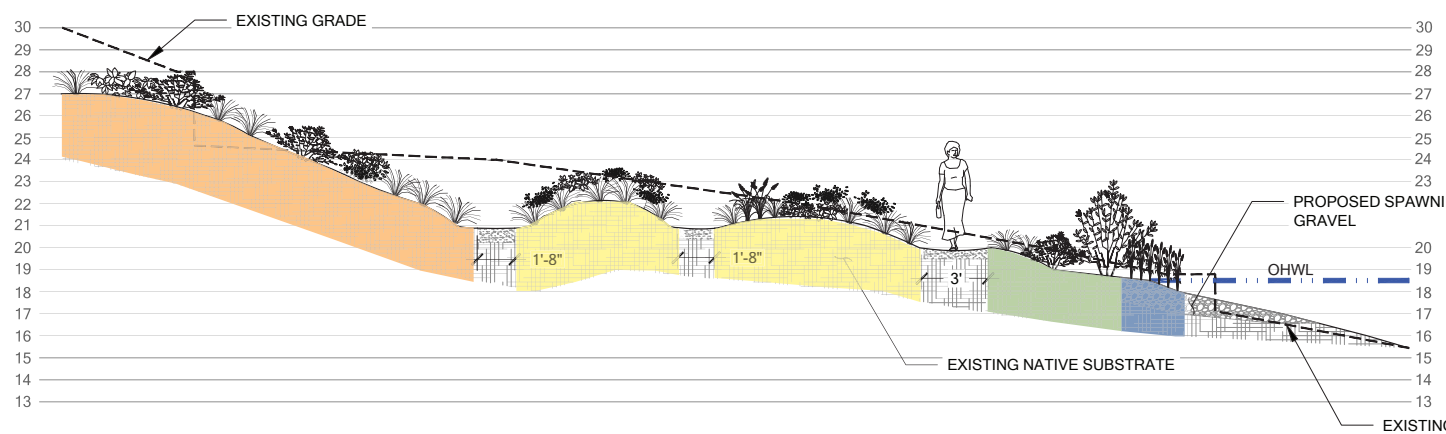
TREES, SHRUBS, AND



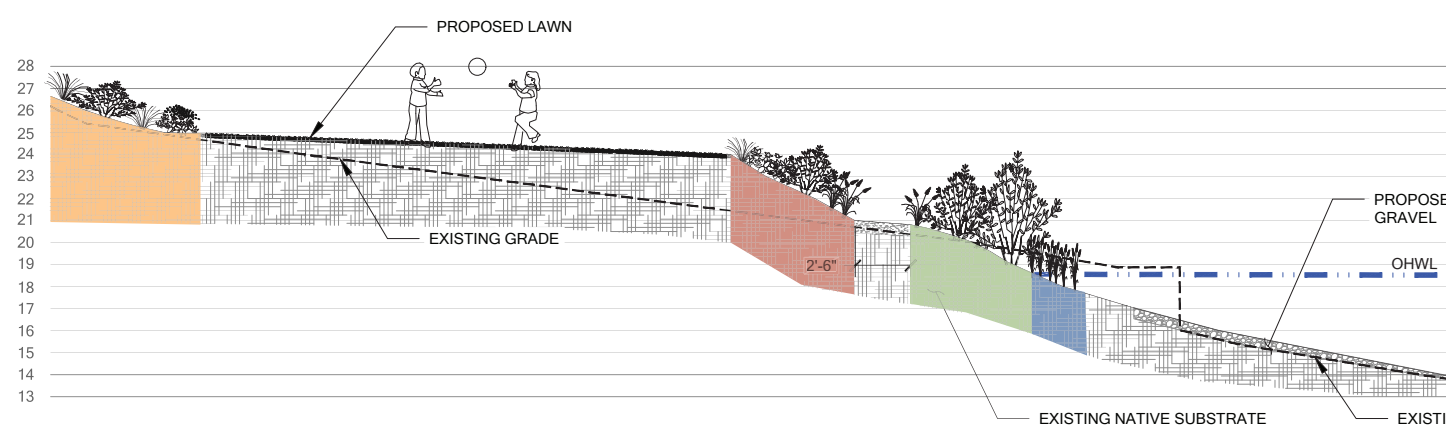
SULLIVAN SHORES

GROUNDCOVER PROJECT

SECTION 1 - NORTH PROPERTY LOOKING NORTH

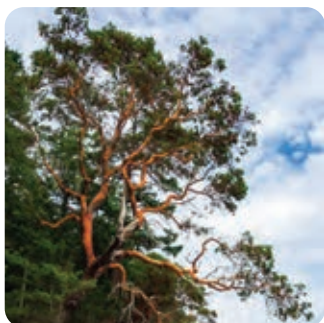


SECTION 2 - SOUTH PROPERTY LOOKING NORTH

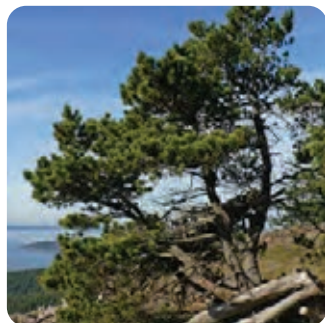


DRY HILLSIDE

TREES



Pacific Madrone
Arbutus menziesii



Shore Pine
Pinus contorta var. *contorta*

SHRUBS



White Darley Heath
Erica x darleyensis 'Alba'



Salal
Gaultheria shallon



Oceanspray
Holodiscus discolor

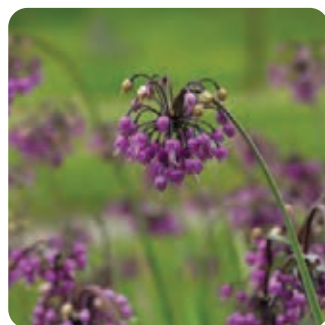


Creeping Oregon-grape
Mahonia repens

HERBACEOUS



Yarrow
Achillea millefolium



Nodding Onion
Allium cernuum



Pearly Everlasting
Anaphalis margaritacea



Harvest Brodiaea
Brodiaea coronaria

HERBACEOUS



Checker Lily
Fritillaria affinis



Spring Gold
Lomatium utriculatum



Sicklekeel Lupine
Lupinus albicaulis



Beargrass
Xerophyllum tenax

MEADOW

SHRUBS

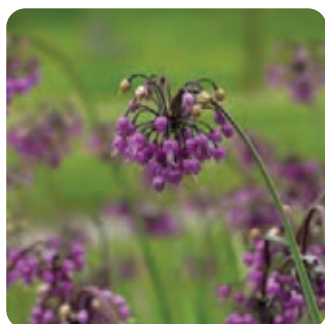


Nootka Rose
Rosa nutkana

HERBACEOUS



Yarrow
Achillea millefolium



Nodding Onion
Allium cernuum



Western Columbine
Aquilegia formosa



Great Camas
Camassia leichtlinii

HERBACEOUS



Columbia Coreopsis
Coreopsis tinctoria



California Oatgrass
Danthonia californica



Tufted Hair Grass
Deschampsia cespitosa



Henderson's Shooting Star
Dodecatheon hendersonii

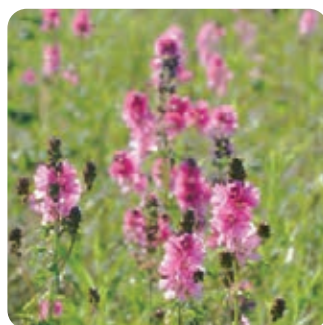
HERBACEOUS



Columbia Lily
Lilium columbianum



Sea-blush
Plectritis congesta



Henderson's Checker-mallow
Sidalcea hendersonii



Idaho Blue-eyed Grass
Sisyrinchium idahoense

SULLIVAN SHORT

PLANT P

SHRUBS



Shinyleaf Spiraea
Spiraea lucida



Dwarf Huckleberry
Vaccinium cespitosum



Thin-leaved Huckleberry
Vaccinium membranaceum

HERBACEOUS



Yarrow
Achillea millefolium



Western Columbine
Aquilegia formosa



Thick-head Sedge
Carex pachystachya



Tufted Hair Grass
Deschampsia cespitosa

HERBACEOUS



Coast Penstemon
Penstemon serrulatus

GROUNDCOVERS



Woodland Strawberry
Fragaria vesca



Stonecrop
Sedum oreganum, S. spathulifolium

SHORELINE

TREES



Shore Pine
Pinus contorta var. *contorta*



Western Red Cedar
Thuja plicata

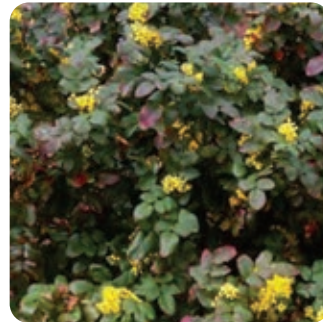
SHRUBS



Bloodtwig Dogwood
Cornus sanguinea 'Midwinter Fire'



Red-osier Dogwood
Cornus stolonifera



Creeping Oregon-grape
Mahonia repens



Sweetgale
Myrica gale

HERBACEOUS



Great Camas
Camassia leichtlinii



Common Camas
Camassia quamash



Slough Sedge
Carex obnupta



Thick-head Sedge
Carex pachystachya

HERBACEOUS



Henderson's Checker-mallow
Sidalcea hendersonii



Idaho Blue-eyed Grass
Sisyrinchium idahoense



Douglas' Aster
Symphyotrichum subspicatum

EMERGENT

HERBACEOUS



Common Spikerush
Eleocharis palustris



Wapato
Sagittaria latifolia



Hardstem Bulrush
Schoenoplectus acutus



Small-fruited Bulrush
Scirpus microcarpus

PLANT SCHEDULE

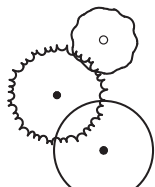
TREES

BOTANICAL / COMMON NAME

SIZE

QTY

SHRUBS



ARBUTUS MENZIESII / PACIFIC MADRONE

MIN 6' TALL

6

PINUS CONTORTA VAR. CONTORTA / SHORE PINE

MIN 6' TALL

2

THUJA PLICATA / WESTERN RED CEDAR

MIN 6' TALL

1

SHRUBS

BOTANICAL / COMMON NAME

SIZE

SPACING

QTY



ACHILLEA MILLEFOLIUM / YARROW

27 CI POT

12" o.c.

129



AMELANCHIER ALNIFOLIA / SERVICEBERRY

1 GALLON

72" o.c.

4



ANAPHALIS MARGARITACEA / PEARLY EVERLASTING

27 CI POT

12" o.c.

71



AQUILEGIA FORMOSA / WESTERN COLUMBINE

40 CI POT

12" o.c.

63



ARCTOSTAPHYLOS X MEDIA / HYBRID MANZANITA

2 GALLON

36" o.c.

6



CAREX OBNUPTA / SLOUGH SEDGE

40 CI POT

12" o.c.

23



CAREX PACHYSTACHYA / THICK-HEAD SEDGE

40 CI POT

12" o.c.

362



CEANOTHUS VELUTINUS / SNOWBRUSH CEANOTHUS

1 GALLON

72" o.c.

2



CORNUS SANGUINEA 'MIDWINTER FIRE' / BLOODTWIG DOGWOOD

1 GALLON

36" o.c.

12



CORNUS STOLONIFERA / RED-OSIER DOGWOOD

1 GALLON

72" o.c.

6



DANTHONIA CALIFORNICA / CALIFORNIA OATGRASS

40 CI POT

12" o.c.

128



DESCHAMPSIA CESPITOSA / TUFTED HAIR GRASS

40 CI POT

12" o.c.

462



DODECATHEON HENDERSONII / HENDERSON'S SHOOTING STAR

19 CI POT

12" o.c.

27



ELEOCHARIS PALUSTRIS / COMMON SPIKERUSH

40 CI POT

12" o.c.

44



ELYMUS GLAUCUS / BLUE WILD-RYE

40 CI POT

12" o.c.

44



ERICA CARNEA 'NATHALIE' / NATHALIE WINTER HEATH

4" POT

24" o.c.

28



ERICA X DARLEYENSIS 'ALBA' / WHITE DARLEY HEATH

4" POT

24" o.c.

17



ERIGERON SPECIOSUS / SHOWY FLEABANE

19 CI POT

12" o.c.

42



ERIOPHYLLUM LANATUM / OREGON SUNSHINE

27 CI POT

12" o.c.

82



ERYTHRANTHE GUTTATA / YELLOW MONKEYFLOWER

27 CI POT

12" o.c.

6



FESTUCA ROEMERI / ROEMER'S FESCUE

40 CI POT

12" o.c.

698



GAULTHERIA SHALLON / SALAL

1 GALLON

36" o.c.

23



HEUCHERA MICRANTHA / ALUMROOT

19 CI POT

12" o.c.

21



HOLODISCUS DISCOLOR / OCEANSPRAY

1 GALLON

72" o.c.

1



IRIS TENAX / OREGON IRIS

19 CI POT

12" o.c.

147



LOMATIUM UTRICULATUM / SPRING GOLD

19 CI POT

12" o.c.

43



LUPINUS ALBICAULIS / SICKLEKEEL LUPINE

27 CI POT

12" o.c.

82



MAHONIA REPENS / CREEPING OREGON-GRAPE

1 GALLON

24" o.c.

26



BULBS/TUBERS



GROUND COVERS





















Lake Washington/Cedar/Sammamish (WRIA 8) Watershed

201 S. Jackson Street, Suite 600
Seattle, WA 98104-3855

August 17, 2021

Laura Redmond
Landowner Incentive Program Coordinator
King Conservation District
800 SW 39th St., Suite 150
Renton, WA 98057

Re: Landowner Incentive Program proposed bulkhead removal and shoreline restoration at 438 and 444 Overlake Drive East in Medina on Lake Washington

Dear Ms. Redmond,

I am writing in support of the bulkhead removal and shoreline restoration project at 438 and 444 Overlake Drive East in Medina on Lake Washington. The Lake Washington/Cedar/Sammamish Watershed (aka "WRIA 8") is a collaborative body focused on recovering sustainable, harvestable runs of Chinook salmon. Our membership is comprised of 28 local government partners, state and federal agencies, non-profit organizations, and other stakeholders with an interest in salmon recovery and watershed health. Removing shoreline armoring and restoring gently sloping sandy beaches on Lake Washington is a key salmon habitat restoration strategy in the *WRIA 8 Chinook Salmon Conservation Plan* (WRIA 8 Plan). Restoring lakeshore habitat supports rearing juvenile salmon outmigrating to Puget Sound, and can help provide refuge from predators.

Recognizing that much of the Lake Washington shoreline is in private ownership, restoration opportunities are limited. Programs that promote and incentivize private shoreline property owners to remove shoreline armoring and restore beaches and emergent and riparian vegetation are critical for building on restoration completed on public shorelines and to provide examples of best practices for other property owners. King Conservation District's Landowner Incentive Program provides this important service, helping support property owners to "do the right thing" for the land, water, and wildlife.

By removing 104 linear feet of bulkhead and 26 linear feet of concrete groin structure and replacing them with appropriately sloped sandy beach with gravel and large wood, and replanted riparian vegetation, the project supports WRIA 8's salmon habitat restoration strategies and goals for lakeshore restoration. Furthermore, we hope the project can serve as a model for softer, more natural alternatives to bulkheads for consideration by other private lakeshore property owners.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jason Mulvihill-Kuntz".

Jason Mulvihill-Kuntz
Salmon Recovery Manager
Lake Washington/Cedar/Sammamish Watershed (WRIA 8)

King Conservation District Board of Supervisors Meeting 08/08/2022**Agenda Action Briefing/Report AI 22- 071****SUBJECT:**

Review for Approval KCD Landowner Incentive Program cost-share application from Nora Hightower, for Forest Health Management, in the amount of \$12,675.00.

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$152,033.01
Current Request	\$12,675.00
Balance Remaining	\$139,358.01

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

The Hightower's own a 51.12 acre property is located on the western flanks for the Cascade foothills east of Enumclaw, WA in the Duwamish – Green River watershed. The property contains approximately 49 acres of forest to be managed as open space. The property contains five distinct stands of trees and has a natural mix of tree species typical of the western Cascades.: Douglas fir, western redcedar, western hemlock, red alder, bigleaf maple, vine maple, black cottonwood, Sitka spruce (occasional), cascara, and bitter cherry.

This project scope of work will include the treatment of approximately 1 acre of forest in Stand 3 that's currently dominated by invasive blackberry (approximately 80% cover). This area is labeled as project Zone A and is bisected by an access road as depicted in the associated project map. The forest management activities will include the control of invasive blackberry, the replanting of around 300 native conifer tree seedlings once blackberry has been controlled sufficiently and protection of the trees planted with wire cages to prevent deer and elk rub/browse damage.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION

Staff seeks Board approval of Landowner Incentive Program cost-share application from Nora Hightower, for Forest Health Management in the amount of \$12,675.00.

MOTION

 Moved, Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Nora Hightower, for Forest Health Management, in the amount of \$12,675.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Nora Hightower		Farm/Business Name: Johnson Sisters LLC	
Mailing Address: 31404 SE 392nd St, Enumclaw, WA 98022		Project Address: 31404 SE 392nd St, Enumclaw, WA 98022	
Phone (home): (206) 618-4019		Phone (work/mobile): (206) 618-4019	
Email Address: norateamhightower@gmail.com		KCD Staff: Michael Lasecki	
Parcel #(s): 0420079029	<input type="checkbox"/> Incorporated <input checked="" type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 49	<input type="checkbox"/> T.A. <input type="checkbox"/> Farm Plan <input checked="" type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Forest Health Management
Project Completion Date (month and year): December 2026
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP: also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>This 51.12 acre property is located on the western flanks for the Cascade foothills east of Enumclaw, WA in the Duwamish – Green River watershed. The property contains approximately 49 acres of forest to be managed as open space. The property has a natural mix of tree species typical of the western Cascades: Douglas fir, western redcedar, western hemlock, red alder, bigleaf maple, vine maple, black cottonwood, Sitka spruce (occasional), cascara, and bitter cherry. The property's forest contains five distinct stands of trees, a description of each stand and the 20-year framework for forest management activities the landowners intend to implement can be found in the property's King County approved Forest Stewardship Plan.</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>This project scope of work will include the treatment of approximately 1 acre of forest in Stand 3 that's currently dominated by invasive blackberry (approximately 80% cover). This area is labeled as project Zone A and is bisected by an access road as depicted in the associated project map. The forest management activities will include the control of invasive blackberry, the replanting of around 300 native conifer tree seedlings once blackberry has been controlled sufficiently and protection of the trees planted with wire cages to prevent deer and elk rub/browse damage.</p> <p>The end goals of this forest health management project are to reduce the plant pest pressure in forest stand 3 caused by invasive plant species and improve the resilience of forest stand 3.</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>Contractor will perform follow up invasive species control and tree seedling maintenance for 3 growing seasons after completion of initial tree seedling planting and protection installation. Thereafter landowners will be responsible for mechanically and manually controlling competitive vegetation. KCD staff will conduct monitoring visits to project and provide technical assistance to landowner and contractor as needed on a to be determined schedule over the 15 year lifetime of project</p>

Permits (List all permits required to complete this project):

All project activities are part of implementing a county-approved forest stewardship plan and are classified as Class I forest practices; thus, no permits are needed.

Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

- A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)? ☐ Yes ☒ No
If yes, please list contract number and BMP below:

- B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs? ☐ Yes ☒ No
Please describe below:

1. King County Cost-share

Please list practices and date installed below:

2. NRCS EQIP (Natural Resources Conservation Service's Environmental Quality Incentive Program)

Please list practices and date installed below:

3. Other

Please list agency and describe project:

Other Cost-Share History/Notes:

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant's statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

- ☒ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☒ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

- ☐ A. I understand the lifetime of the BMP is 15 years.
- ☐ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.
- ☐ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I agree to ensure that all applicable local, state, and federal permits are obtained for installation of the BMP for which funds are requested. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details. _____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon installing the BMP to the minimum standard provided by KCD, and that KCD will verify standard compliance. Furthermore, I understand that changes to the installation details (attached *Job Sheet and Map*) must be approved through a *Scope of Work Revision Process*. Unapproved changes will not be eligible for reimbursement. _____ (Initial Here)

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Nora Hightower

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
------------------------	------	---	------

FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:



Landowner Incentive Program

Applicant Information

Cooperator: _____ No

Budget Items	Units	
Site Prep	1.00	\$2,000.00
Tree Planting and Protection	1.00	\$9,900.00
3 years of contractor maintenance	1.00	\$5,000.00
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$16,900.00

In-Kind Labor/Machinery	# hours	
Manual labor		\$
Person with power equipment (i.e. chainsaw)		\$
Small Tractor (up to 40 hp)		\$
Medium Tractor (40-70 hp)		\$
Large Tractor (71 or above hp)		\$
Excavator (up to 100 hp)		\$
Excavator (over 100 hp)		\$
D-4 Cat or equivalent		\$
D-6 Cat or equivalent		\$
D-7 Cat or equivalent		\$
Backhoe		\$
Truck (under 2 tons)		\$
Truck (2 tons or over)		\$
Bobcat		\$
4-wheeler or side-by-side		\$
Subtotal	0.00	\$

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$
Units		
Cost/Unit		#DIV/0!

Conservation Practice	select BMP (x)	Cost
Animal Trails & Walkways		
Aquatic Area Buffer		
Aquatic Area Buffer (WCD 71)		
Buffer Fencing		
Building Relocation for Aquatic Area Buffer		

BMPs	Units	cost/unit	%	reimbursement rate	
Animal Trails & Walkways	sq ft	\$ 0.75	0.5	\$ 0.38	Ac.
Aquatic Area Buffer	project	\$ 30,000.00	0.9	\$ 27,000.00	AUE
Buffer Fencing	ft	\$ 12.00	0.75	\$ 9.00	Ft.
Building Relocation for Aquatic Area/Buffer	project	\$ 50,000.00	0.5	\$ 25,000.00	Sq. Ft.
Bulkhead Removal (Freshwater, Marine)	project	\$ 40,000.00	0.75	\$ 30,000.00	Project
Cover Crops	acre	\$ 150.00	0.9	\$ 135.00	acre
Cross Fencing	ft	\$ 6.00	0.5	\$ 3.00	
Forest Health Management	project	\$ 30,000.00	0.75	\$ 22,500.00	
Heavy Use Area Protection	AUE	\$ 1,400.00	0.5	\$ 700.00	
Pasture & Hay Planting	acre	\$ 325.00	0.5	\$ 162.50	
Roof Runoff Management	ft	\$ 7.00	0.5	\$ 3.50	
Stream Crossing	ft	\$ 1,100.00	0.75	\$ 825.00	
Subsurface Drain	ft	\$ 20.00	0.5	\$ 10.00	
Upland Wildlife Habitat Management	project	\$ 20,000.00	0.75	\$ 15,000.00	
Waste Storage Facility	AUE	\$ 1,000.00	0.75	\$ 750.00	
Watering Facility	project	\$ 50,000.00	0.5	\$ 25,000.00	



JOB SHEET

Forest Stand Improvement

(Forest Health Management)

Landowner: JM Johnson Trust, Johnson Sisters LLC	Lifetime of Practice: 15 years
--	--------------------------------

***This Job sheet must be attached to your completed application**

Purpose (check all that apply)	
<input checked="" type="checkbox"/> Site preparation	<input checked="" type="checkbox"/> Tree/Shrub establishment
<input checked="" type="checkbox"/> Tree/Shrub stand improvement	<input checked="" type="checkbox"/> Restore native plant communities
<input type="checkbox"/> Long-term erosion control and improvement of water quality	<input checked="" type="checkbox"/> Increase the quantity and quality of forest products
<input checked="" type="checkbox"/> Wildlife habitat enhancement	<input type="checkbox"/> Other

Forest Management Practice and Details *Provide the following: 1) attach a map delineating prescription area and sub-treatment areas if applicable; provide name and acreage features for treatment areas 2) descriptions of current stand location and conditions, stand treatment plan, plant species to be used, plant spacing, and site preparation; 3) a project management timeline from your approved Forest Stewardship Plan.*

- 1) See attached map
Zone A: 1.0 acres
- 2, 3) See attached Scope of Work and Forest Stewardship Plan management implementation timeline.

Permits *Are there any permits necessary for the project? If so, please list below and include a copy of the permit.*

All activities are part of a county-approved forest stewardship plan and classified as Class I forest practices; thus, no permits are needed.

Landowner must comply with local, state and federal regulations and permitting requirements.

1) Forest landowners may need a permit from the WA State DNR for forest management activities

<http://www.dnr.wa.gov/businesspermits/forestpractices/Pages/Home.aspx>

Or

From through the Forest Practices Rules, see the King County specifics here:

<http://www.co.king.wa.us/property/permits/info/SiteSpecific/forest.aspx>

2) There may be permits needed to apply herbicide near aquatic areas of their buffer. See the WA State Department of Ecology website for further details: <http://www.ecy.wa.gov/programs/wq/pesticides/>

Type and Source of Plant Material *Will you use potted plants, bareroot plants, b&b plants or a combination? Where will you get the plants from and when?*

Plant material will be native species adapted to the site to minimize maintenance and care.

Timberline Silvics, the contractor, will plant 1-gallon potted tree seedlings that have been sourced from the Puget Sound. If additional plant material is purchased to augment the Spring 2024 planting, that material can be bareroot, live stake, potted nursery stock or ball and burlap inventory. There are a number of local native plant nurseries where native trees, shrubs and emergents can be purchased. Refer to the KCD list of native

plant nurseries for local King County sources of native plant material as well as sources in the greater Puget Sound region, <https://kingcd.org/wp-content/uploads/2019/11/KCD-Native-Plant-Nurseries-List-2020.pdf>

Site Preparation *List what method(s) of site preparation will be used, who will be doing the work, when will the work be done.*

Site preparation will include two rounds of herbicide treatment of invasive blackberry in fall of 2022 and fall of 2023 by hired contractor, Timberline Silvics.

Weed Control Prescriptions:

Himalayan & Evergreen Blackberry Control –

- *Chemical Control:* Primary control method will be multiple targeted foliar applications of aquatic approved herbicide followed by a manual/mechanical treatment as part of re-planting phase. Timing of herbicide applications will be in the early fall prior to the start of rainy season. Avoid spraying native vegetation. Adhere to [King County Noxious Weeds BMPs](#) and **always follow label rates and instructions.**
- *Manual control:* Mow or cut the blackberry canes to less than 1 foot in height, then grub/dig out the roots attached to the cut canes. Thorough removal of blackberry roots in this manner, while labor intensive can reduce the blackberry population and cover in the prepared area by 90 – 95%. Monitor for re-growth in the following growing seasons; dig up any re-growth

Care and Temporary Storage of Purchased Plant Material *Upon receiving the plant material, where will you store it and how will you care for it?*

All plant material should be stored in a cool location and well watered prior to planting. In the case of bare root plants, inventory should be held in the source refrigerated facility as long as possible prior to planting. Bare root plants can be stored in the field for up to one to three weeks prior to planting by placing them in a shaded location where they will remain cool. Such a location should prevent freezing as well as exposure to warm temperatures. Additionally, bareroot inventory should be covered with a tarp to prevent drying. Bareroot stock that is expected to emerge from dormancy prior to planting should be “healed” into a soil bed. To heal-in, dig a v-shaped trench to a depth that accommodates covering the seedling roots when back-filled with soil.

Installation *Provide the following details: 1) Plant Installation Prescription: 2) Plant Protection Prescription: 3) Weed Suppression Prescription: 4) Erosion Control Prescription*

1) Plant Installation Prescription:

Potted & Plug Inventory: Potted plant material should be shovel planted to the same depth that they grew in the pot. Plants will be well watered prior to planting. Prior to digging a hole for the plant, prepare the planting location by removing any competitive vegetation within 2 feet of planting hole, being careful to remove roots as well as above ground portions of competitive vegetation. Dig a hole for the container in the center of this cleared circle twice the size of the plant’s pot. Backfill the hole with soil while using care to avoid leaving air pockets in the soil.

2) Plant Protection Prescription:

Tree Protectors (for sites where deer/elk browse/rub is anticipated): Each tree seeding installed will be protected from deer and elk damage with a 2.5 foot diameter by 4+ foot high metal welded wire fencing cage installed with appropriate anchoring stakes.

3) *Weed Suppression Prescription*

Weed suppression will be achieved with contractor follow up maintenance for 3 years after plant installation and by landowner manual/mechanical control thereafter.

4) *Erosion Control Prescription*

Erosion is not a concern for this project.

Planting Project Maintenance and Monitoring *The planting must be inspected periodically and protected from damage so proper function is maintained. The goal for the project is to reach 80% survival after 3 years. Please describe the maintenance and monitoring plan.*

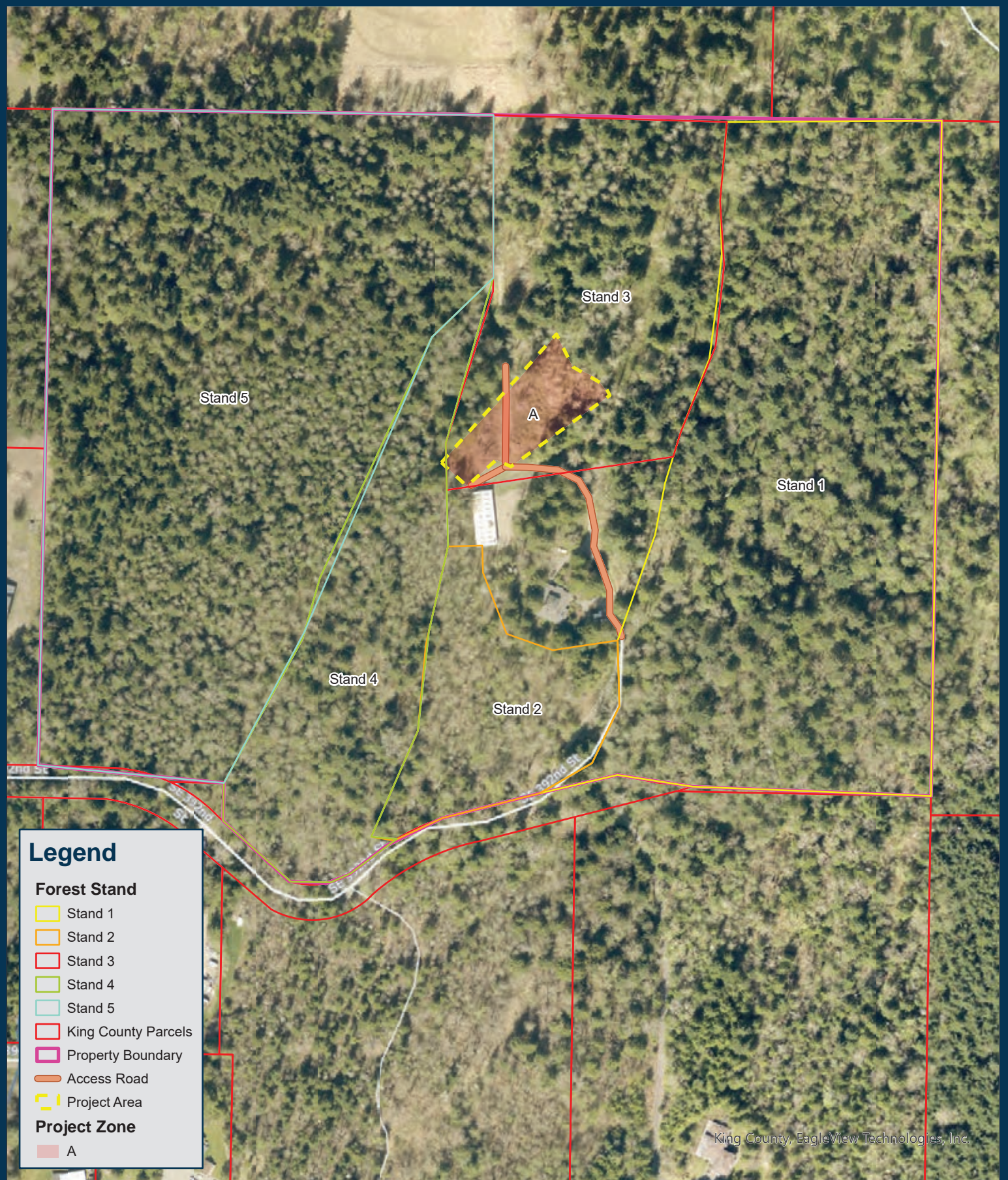
Treatments must be inspected periodically and protected from damage so proper function is maintained and resource damage is minimized, including assessment of insects, disease and other pests, storm damage, and damage by trespass. The results of inspections shall determine the need for additional treatment under this practice.

Replace dead or dying trees if more than 20% of initial planting fails and control competing vegetation to support successful establishment. Periodic harvest of trees and shrubs (thinning and brushing) may be necessary to maintain the health and vigor of the stand and support its development toward more mature stand conditions. Keep large dead and dying trees for cavity nesting wildlife and bird species and as a source of downed wood in the forest understory and in adjacent or interior aquatic habitats.

Project zone will be monitored for re-growth of non-native/invasive species and controlled accordingly by contractor for 3 years after initial tree seedling planting and thereafter by landowner.

Utilize weed control techniques prescribed in the Site Preparation section of the Job Sheet. Species to monitor for include invasive blackberry and any listed King County Noxious weeds.

<https://kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/laws/list.aspx>

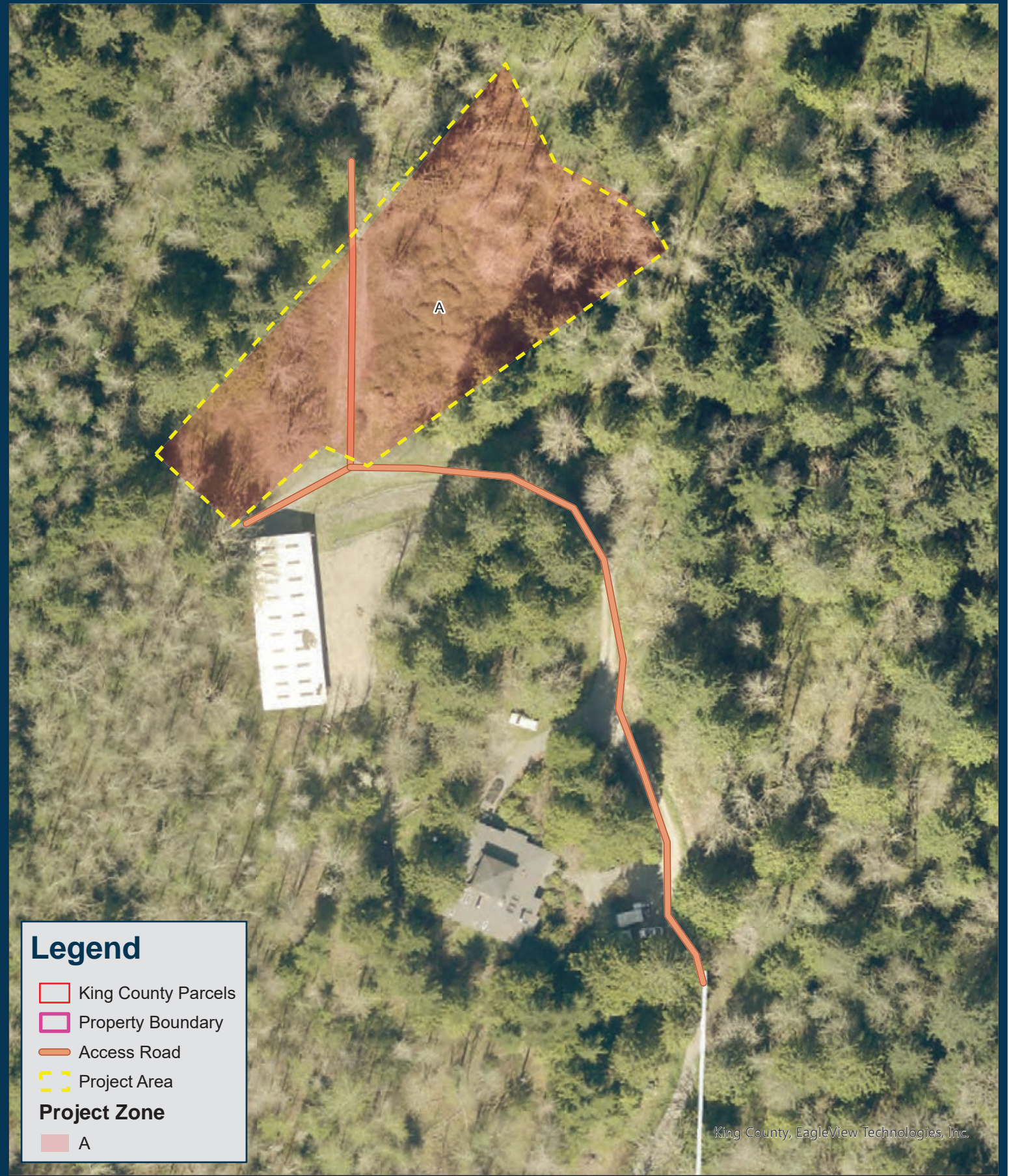


JM Johnson Trust/Johnson Sisters LLC **Property Map** **31404 SE 392nd St, Enumclaw, WA 98022**








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KCD Planner: Mike Lasecki
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 April 18, 2022



Legend

-  King County Parcels
-  Property Boundary
-  Access Road
-  Project Area
- Project Zone**
-  A

King County, EagleView Technologies, Inc.



JM Johnson Trust/Johnson Sisters LLC Property Map 31404 SE 392nd St, Enumclaw, WA 98022



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KCD Planner: Mike Lasecki
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April 18, 2022

Nora,

Sorry to be so slow , but it just a really busy period for us and like everyone else it is difficult to find help in the way of workers.

I did look at your property and notice fence lines and wire scatted in the area to be treated. Mowing or masticating the area would be difficult. Also it has been my experience that it promotes blackberries from the soil being disturbed. Herbicides are the best means of controlling them, aquatics herbicides are not a problem. I doubt it would be any worse for the amphibian's that may be living on the site.

My recommendation would be to use aquatic herbicides this fall 2022 and again next year in the fall 2023. Cost would be \$1000/ trip to control the blackberries. Labor and herbicides included. Snow will usually push the dead vines to the ground so unit is plantable in spring of 2024.

In spring of 2024 are could be planted with shade tolerant western red cedar, a few Douglas Fir and possibly a few Grand Fir. I would suggest 1 or 2 gallon plants to increase the chance of survival due to deer and elk... approximately 300 trees.

Today's cost for these trees planted would be 1 gallon at \$18/tree and a 2 gallon plant at \$26/tree.

1 gallon trees [300@\\$18.00.....\\$5400.00](#)

2 gallon trees [300@\\$26.00....\\$7800.00](#)

These trees would also need 5 ft meshed wire installed around them. To protect from deer and elk eating and rubbing their horns on them, which will occur with out them.

Cost to install these protectors would be \$15.00/tree or \$4500.00

Joe Greenhaw
Timberline Silvics Inc.
206-799-6133

VII. Management Plan Implementation Timetable

Below are the stewardship management activities that we hope to implement over the next ten years. Those in bold are the ones which we feel are the most important and intend to make a priority of accomplishing them.

<u>Year</u>	<u>Management Practice or Activity</u>	<u>Location</u> (Stand #)
2021	Control Himalayan blackberries	3
2021	Complete Forest Stewardship Plan to support PBRS Application	all
2022	*Annual progress monitoring report to King County PBRS staff briefly detailing PBRS forest plan implementation successes and any challenges Online link to Monitoring Report Form: https://www.kingcounty.gov/services/environment/stewardship/sustainable-building/resource-protection-incentives/pbrs-monitoring-report.aspx	all
2022	Plant areas where blackberry has been removed; consider planting Douglas-fir in sunnier areas and shade tolerant conifer in shady areas	3
2022	Check for Himalayan blackberries and other invasive species; remove as needed	3
2023	Check for Himalayan blackberries and other invasive species; remove as needed	All
2024	Harvest trees as needed to maintain thickets for wildlife	2
2025	Check for invasive species; remove as needed	All
2026	Harvest trees as needed to maintain thickets for wildlife	2
2027	Check for invasive species; remove as needed	All
2028	Harvest trees as needed to maintain thickets for wildlife	2
2029	Check for invasive species; remove as needed	All
2030	Harvest trees as needed to maintain thickets for wildlife	2
2031	Reevaluate goals and stand conditions and update plan	all
2031-41	Monitor all stands for health and invasive plants	all
2041	Reevaluate goals and stand conditions and update plan	all

*** KCC 20.36.190 F(3) An owner of property receiving credit for farm and agricultural conservation land, forest stewardship land, or rural stewardship land, all of which require a stewardship or management plan, must annually provide a monitoring report that describes progress of implementing the plan. The owner must submit this report, which must include a brief description of activities taken to implement the plan and photographs from established points on the property, to the department by email or by other mutually agreed upon method. An environmental consultant need not prepare this report.**

Forest Health Management Project Scope of Work – Johnson Sisters LLC, Nora Hightower

Landowner: JM Johnson Trust, Johnson Sisters LLC, Nora Hightower, (206) 618-4019, norateamhightower@gmail.com

Project Address: Parcel# 0420079029, 31404 SE 392nd St, Enumclaw, WA 98022

Scope of Work Preparer: Mike Lasecki, King Conservation District, Senior Resource Specialist

Contact Information: michael.lasecki@kingcd.org, 425-529-4812

Project Description:

This 51.12 acre property is located on the western flanks for the Cascade foothills east of Enumclaw, WA in the Duwamish – Green River watershed. The property contains approximately 49 acres of forest to be managed as open space. The property has a natural mix of tree species typical of the western Cascades: Douglas fir, western redcedar, western hemlock, red alder, bigleaf maple, vine maple, black cottonwood, Sitka spruce (occasional), cascara, and bitter cherry. The understory includes salmonberry, thimbleberry, blackcap raspberry, red huckleberry, native wild blackberry, Oregon grape, salal, many species of ferns, and a variety of herbaceous plants. The property's forest contains five distinct stands of trees, a description of each stand and the 20-year framework for forest management activities the landowners intend to implement can be found in the property's King County approved Forest Stewardship Plan. Of special note for this property is the presence of locally rare amphibians on the property including western toad and Pacific giant salamander.

This project scope of work will include the treatment of approximately 1 acre of forest in Stand 3 that's currently dominated by invasive blackberry (approximately 80% cover). This area is labeled as project Zone A and is bisected by an access road as depicted in the associated project map. The forest management activities will include the control of invasive blackberry, the replanting of around 300 native conifer tree seedlings once blackberry has been controlled sufficiently and protection of the trees planted with wire cages to prevent deer and elk rub/browse damage.

The end goals of this forest health management project are to reduce the plant pest pressure in forest stand 3 caused by invasive plant species and improve the resilience of forest stand 3.

Due to presence of sensitive amphibian species on property, aquatic approved herbicides shall be used to control invasive noxious weeds in project area. Invasive plant control methods will follow King County Noxious Weeds BMPs or recommended control practices, <https://kingcounty.gov/services/environment/animals-and-plants/noxious-weeds.aspx>

Soil type: Everett gravelly sandy loam, 5-15% slopes

Project Zones	Amount	Target Invasive Species	Season and year	Project Work
INVASIVE SPECIES CONTROL				
Zone A	~1.0 acre	Invasive Blackberry	Fall 2022	Invasive Blackberry Control -Initial treatment will be a targeted aquatic herbicide spraying of blackberry in project zone.

Disclaimer: The owner/operator is responsible for obtaining all permits, right of ways, and/or easements that are needed to implement this scope of work. The owner/operator is responsible for contacting utilities and assuring the work does not harm their facilities. The owner/operator is responsible for compliance with all federal, state, and local laws, ordinances, codes, and regulations. This document should not be construed as a cost-share contract. It is for planning purposes only. Work may not begin until a contract is awarded.

			Fall 2023	<p>-A second targeted aquatic herbicide spraying of regrown blackberry by contractor will be completed in fall 2023.</p> <p>All invasive species control treatments performed should follow King County Noxious Weeds Best Management Practices when available.</p> <p>https://www.kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/weed-control-practices/bmp.aspx</p>
TREE SEEDLING PLANTING				
Zones	Amount	Tree Species	Season and year	Project Work
Zone A	~1 acre, 300 tree seedlings	Western Redcedar, Grand fir, Douglas-fir	Spring 2024	<p>Native Conifer Seedling Planting:</p> <p>-Zone will be replanted by contractor with native conifer tree species adapted to partial-shade to shady conditions and spaced approximately 12 feet between seedlings and from established trees growing in Zone.</p> <p>-Tree seedlings planted will be primarily western redcedar, with some Grand-fir and a few Douglas-fir where there are appropriate microsites for species.</p> <p>-Approximately 300 tree seedlings will be installed to replant this project zone.</p>
Zone A	~300 wire fencing cages	Western Red cedar, Grand fir, Douglas-fir	Spring or Summer 2024	<p>Tree Seedling Protection:</p> <p>-Each tree seeding installed will be protected from wildlife damage with a 2.5-3 foot diameter by 4+ foot high metal wire fencing cage installed with appropriate anchoring to ground.</p>
PROJECT MAINTENANCE – 3 Years				
Zones	Amount		Season and year	Project Work
Zone A	~1.0 acre		Summer / Fall for 3 years after replanting (2024,2025, 2026)	<p>Contractor will perform follow up invasive species control and tree seedling maintenance for 3 growing seasons after completion of tree replanting in Zone A.</p> <p>Work should include follow up treatment of any regrown target invasive species or newly discovered noxious weed species in Zone A, adjustment of tree seedling protection and replanting of tree seedlings if more than 20% of planted seedlings die.</p>

Disclaimer: The owner/operator is responsible for obtaining all permits, right of ways, and/or easements that are needed to implement this scope of work. The owner/operator is responsible for contacting utilities and assuring the work does not harm their facilities. The owner/operator is responsible for compliance with all federal, state, and local laws, ordinances, codes, and regulations. This document should not be construed as a cost-share contract. It is for planning purposes only. Work may not begin until a contract is awarded.





Agenda Action Briefing/Report AI 22- 072**SUBJECT:**

Review for Approval KCD Landowner Incentive Program cost-share application from Lisa Holland, for a Waste Storage Facility, in the amount of \$24,150.00.

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$139,358.01
Current Request	\$24,150.00
Balance Remaining	\$115,208.01

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

The Holland's own a 20 acre property in Fall City that houses up to 15 horses, including mares and foals and Lisa operates a breeding operation. Lisa currently manages two large manure compost piles in the southern corner of her property, as a temporary solution for manure management. She plans to build a roofed three-stalled aerated compost bin to store and compost manure, which will be applied to fields at agronomic rates. These bins will be located 35 feet from the property line and approximately 80 feet away from an area that drains water towards the east of the property. (unmapped as a waterway or swale). The bins will be covered and part of an active composting system, per KC code, for bins within 50-100 feet from a waterway as additional precautions to protect water quality.

There will be three bins installed at dimensions of 12ft.(l) x. 8ft.(w) x 4ft.(h) with a concrete apron that is 25ft.(w) x 8ft.(l). Bins will hold 42 cubic yards. The back and side walls will be poured concrete with a concrete base. The bins will be covered with a sloped shed roof and will have an aeration system.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION

Staff seeks Board approval of Landowner Incentive Program cost-share application from Lisa Holland, for a Waste Storage Facility, in the amount of \$25,150.00.

MOTION

_____ Moved, _____ Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Lisa Holland, for a Waste Storage Facility, in the amount of \$24,150.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Lisa Holland		Farm/Business Name: Holland Legacy LLC	
Mailing Address: 31021 SE 40th St Fall City, WA 98024		Project Address: same	
Phone (home): 425-652-1326		Phone (work/mobile): same	
Email Address: lisauholland@msn.com		KCD Staff: Megan Weldon	
Parcel #(s): 1624079118	<input type="checkbox"/> Incorporated <input checked="" type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 20	<input checked="" type="checkbox"/> T.A. <input type="checkbox"/> Farm Plan <input type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Waste Storage Facility
Project Completion Date (month and year): 06/2023
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP: also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>This is an equestrian property that houses up to 15 horses. There are also mares and foals and Lisa operates a breeding operation. Lisa currently manages two large manure compost piles in the southern corner of her property, as a temporary solution for manure management. She plans to build a roofed three-stalled aerated compost bin to store and compost manure, which will be applied to fields at agronomic rates. These bins will be located 35 feet from the property line and approximately 80 feet away from an area that drains water towards the east of the property. (unmapped as a waterway or swale). The bins will be covered and part of an active composting system, per KC code, for bins within 50-100 feet from a waterway as additional precautions to protect water quality.</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>There will be three bins installed at dimensions of 12ft.(l) x 8ft.(w) x 4ft.(h) with a concrete apron that is 25ft.(w) x 8ft.(l). Bins will hold 42 cubic yards. The back and side walls will be poured concrete with a concrete base. The bins will be covered with a sloped shed roof and will have an aeration system.</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>Regularly inspect bins to ensure that there is no nutrient leaching from manure. Repair bins and aeration system, as needed, to ensure bins are fully functional.</p>

Permits <i>(List all permits required to complete this project):</i> A permit is required if roof dimensions exceed 200 square feet.
Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)? ☐ Yes ☒ No
If yes, please list contract number and BMP below:

B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs? ☐ Yes ☒ No
Please describe below:

1. **King County Cost-share**

Please list practices and date installed below:

2. **NRCS EQIP (Natural Resources Conservation Service’s Environmental Quality Incentive Program**

Please list practices and date installed below:

3. **Other**

Please list agency and describe project:

Other Cost-Share History/Notes:

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant’s statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

☐ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☐ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

☐ A. I understand the lifetime of the BMP is 15 years.

☐ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.

☐ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I agree to ensure that all applicable local, state, and federal permits are obtained for installation of the BMP for which funds are requested. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details. _____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon installing the BMP to the minimum standard provided by KCD, and that KCD will verify standard compliance. Furthermore, I understand that changes to the installation details (attached *Job Sheet and Map*) must be approved through a *Scope of Work Revision Process*. Unapproved changes will not be eligible for reimbursement. _____ (Initial Here)

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Lisa Holland

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
------------------------	------	---	------

FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:

Landowner Incentive Program Applicant Budget

Cooperator: Holland

Budget Items	Units	Cost
Waste Storage Facility	16.10	\$32,200.00
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$32,200.00

In-Kind Labor/Machinery	# hours	Cost
Manual labor		\$ -
Person with power equipment (i.e. chainsaw)		\$ -
Small Tractor (up to 40 hp)		\$ -
Medium Tractor (40-70 hp)		\$ -
Large Tractor (71 or above hp)		\$ -
Excavator (up to 100 hp)		\$ -
Excavator (over 100 hp)		\$ -
D-4 Cat or equivalent		\$ -
D-6 Cat or equivalent		\$ -
D-7 Cat or equivalent		\$ -
Backhoe		\$ -
Truck (under 2 tons)		\$ -
Truck (2 tons or over)		\$ -
Bobcat		\$ -
4-wheeler or side-by-side		\$ -
Subtotal	0.00	\$ -

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$ 32,200.00
Units	AUE	16.10
Cost/Unit		\$ 2,000.00

Conservation Practice	select BMP (x)	Cost Share Amount
Animal Trails & Walkways		
Aquatic Area Buffer		
Aquatic Area Buffer (WCC)		
Buffer Fencing		
Building Relocation for Aquatic Area/Buffer		
Bulkhead Removal (Freshwater, Marine)		
Cover Crops		
Cross Fencing		
Forest Health Management		
Heavy Use Area Protection		
Pasture & Hay Planting		
Roof Runoff Management		
Stream Crossing		
Subsurface Drain		
Upland Wildlife Habitat Management		
Waste Storage Facility	x	\$ 24,150.00
Watering Facility		

Amount eligible for reimbursement
(based on 2015 rates)

\$24,150.00



Local Food
Healthy Forests
Clean Water
Better Ground

Job Sheet

Waste Storage Facility

Cooperator: Lisa Holland	Lifetime of Practice: 15 years
--------------------------	--------------------------------

Purpose (check all that apply)	
<input checked="" type="checkbox"/> Temporarily store manure in a dry stack.	<input checked="" type="checkbox"/> Improve soil fertility, tilth and water holding capacity.
<input checked="" type="checkbox"/> Reduce the pollution potential of organic agricultural wastes to surface and ground water.	<input checked="" type="checkbox"/> Reduce odor, fly and other vector problems.
<input checked="" type="checkbox"/> Reduce bulk of organic material to be spread	<input checked="" type="checkbox"/> Destroy weed seed and pathogens.

Proximity of facility to sensitive areas, wells, and property boundary (distance in feet)
Proximity to sensitive areas: The bins will be approximately 80 feet away from a depression that drains water eastward. Will the manure bins be located in the floodplain? No

Number of AUEs the facility is planned for.
AUEs: 16.1 AUEs (15 horses) Waste volume: The projected yearly volume is 84 cubic yards. Total bin capacity is 42 cubic yards. How many months of storage is this planned for? The bins are planned for approximately 6 months.

Specifics of facility (number of bins, type of construction material). <i>*Please attach a drawing of an approved design.</i>
Number of bins, bin dimensions: Three bins- 12ft.(l) x 8ft.(w) x 4ft.(h) Construction materials: Concrete and wood Compost bin design: 02 Compost design How will manure be covered? Bins will be covered with a shed roof.

Permits. *Are there permits necessary for the project? A permit is required if bin roof exceeds 200 square feet. See reference below.*

If so, please list below. If applying for KCD cost-share include a copy of the permit.

Common circumstances that trigger a [King County Clearing and Grading Permit](#) include, but are not limited to:

Grading: King County code requires that in general, any grading within a sensitive area, or any excavation greater than 5' in depth or over 100 cubic yards, or any fill greater than 3' in depth or greater than 100 cubic yards, or creation of more than 2,000 square feet of new impervious surface, requires a permit.

Clearing: King County Code states that in general, a clearing permit is required for any removal of trees or vegetation from a critical area or from properties subject to urban clearing standards or clearing restrictions in a special district overlay defined in [21A.38](#) of the [King County Code](#). Clearing over 7,000 square feet on RA-zoned properties or removal of 5,000 board feet of merchantable timber also requires a permit. A separate Forest Practice Permit may also be required.

Roof: If the compost facility is under 200 square feet, it does not need a permit to cover with a roof. Above 200 square feet would require a King County permit to roof the structure. The roof overhang of a 200 square foot structure may not exceed 24", measured horizontally from exterior wall.

****Landowners must follow all local, state, and federal laws.**

Contact the Permitting Office with questions.

Operation and Maintenance

Manage the compost piles for temperature, odors, moisture, and oxygen, as appropriate. Appropriate equipment for managing the composting temperature should include a long stem thermometer. Make adjustments throughout the composting period to insure proper composting processes.

Closely monitor temperatures above 165°F. Take immediate action to cool piles that have reached temperatures above 185°F.

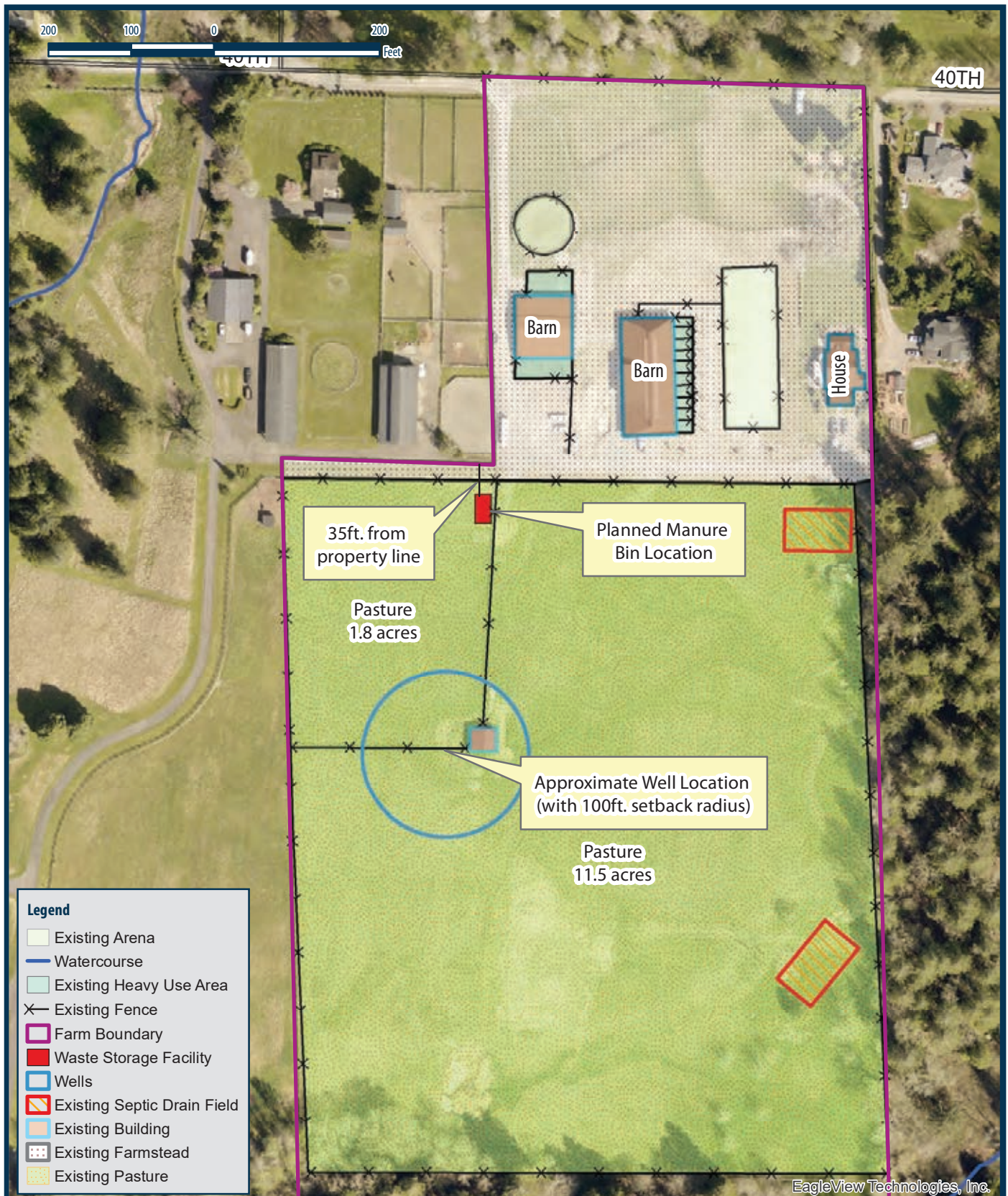
Moisture content can be determined by the "squeeze test," a non-quantitative method of estimating moisture. In this test, a handful of the material is squeezed together in the fist. If water actively drips out while the compost is squeezed, the material is too wet. If the material does not release water, and crumbles apart when the fist is opened, the material is too dry. Only if the material does not release water and stays compacted when the fist is opened, is the moisture content "just right." (Mountain Organic Materials)

In order to maintain appropriate moisture content, compost piles in western Washington must be covered year-round.

Additional Specifications and Notes:

Pursuant to King County Code, manure storage should be covered, 35' from property boundary, 100' from wells, and 100' from areas of open water.

If the facility is in a floodplain, a permit must be acquired from King County, mitigation may be required, including providing compensatory storage at the same elevation, equivalent to the volume of the facility that is in the 100-year flood plain.



Landowner Name: Lisa Holland		Map Type: Planned Manure Bin Map	Directional: NW
Address: 31021 SE 40th St		KCD Staff Name: Megan Weldon	Section: 16
Fall City, WA 98024		Map Date: July 11, 2022	Township: 24
Acres: 20.2	Parcel #(s): 1624079118		Range: 07



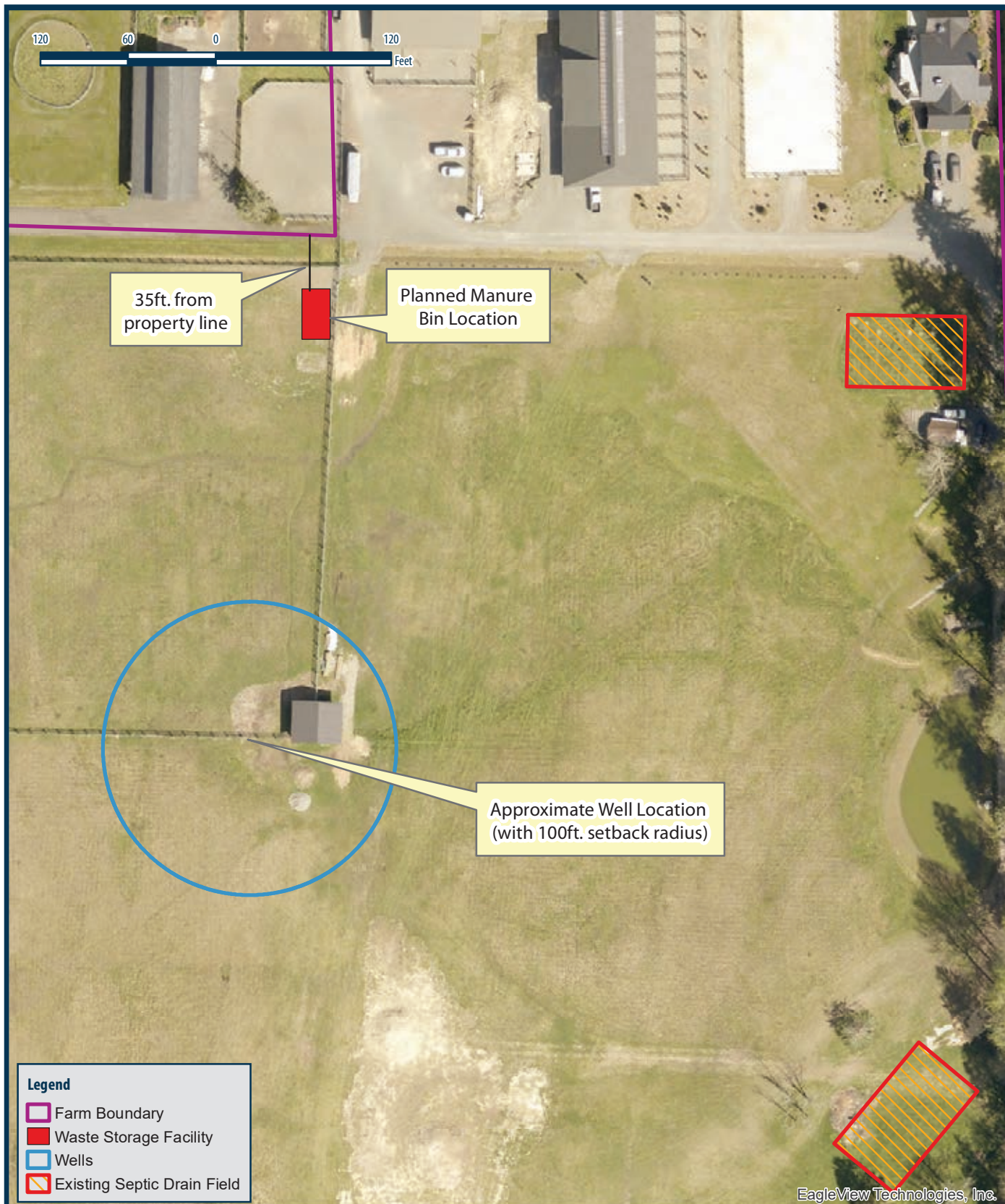
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1:2,000



EagleView Technologies, Inc.

Landowner Name: Lisa Holland		Map Type: Planned Manure Bin Map	Directional: NW
Address: 31021 SE 40th St		KCD Staff Name: Megan Weldon	Section: 16
Fall City, WA 98024		Map Date: April 25, 2022	Township: 24
Acres: 20.2	Parcel #(s): 1624079118		Range: 07



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1:1,140







O₂Compost Aerated C

Design Basis Memorandum

Number of horses:	6 - 12
Projected monthly volume	12 - 24 cubic yards
Design building code	IBC 2005
Approximate concrete apron area	25' x 8' (recommended)
Structure materials	Concrete base, concrete walls, wood roof
On-grade design: Flat Ground	Yes
Top-down: Built into hillside	No
Site grading required	Remove organic topsoil
Min. estimated depth to groundwater	2-feet; if high water table, 4-feet
Roof height sufficient; front	Owner to determine
Structure dimensions; dripline	25'-6" x 14'-6"
Number of bins	4 with aeration
Aproximate bin width	8'
Aproximate bin length	12'
Aproximate bin height	4' (Optional 2' of lumbar)
Aproximate volume per bin	14 cubic yards (21 cubic yards)
Time to fill each bin	2-4 weeks
Aproximate total volume	42 cubic yards; at one time
Back and side walls	Concrete, poured-in-place
Dividing walls	Concrete, poured-in-place
Back wall drainage	None
Base Construction	3 aeration bins with 12" Ø manifold with 4" Ø
Aeration System	6" Ø manifold with 4" Ø
Shed roof	Yes; sloped to back of structure
Roofing material	Owner to specify, exact
Gutter and roof drains	Recommended
Design wind load	90mph (Check local code)
Design snow load	30 psf (Check local code)
Compost cycle time	30 days per bin Active
Compost receiving	Directly into aerated bins
Compost curing	Cure in separate area
Electrical	Facility requires single phase 240V

CONTENTS:

Cover Sheet

Materials List & Contractor Bid Sheet

Schematic Renderings

Site Preparation and Slab

Rendered View

Site Preparation and Post Installation

Aeration Plenum Channels

Slab Rebar Layout

Lower Aeration Manifold

Walls

Rendered View

Poured-In-Place Wall

Poured-In-Place Wall (continued)

Gates

Roof Structure

Perspective View

Beams

Rafters

Purlins

Upper Aeration Manifold



Water

Item #	✓	Material	Quantity	Bid Amount
1		1x8x8' fascia board	4	
2		1x8x10' fascia board	6	
3		1x6x8' T&G	30	
4		2x4x8'	18	
5		2x4x10'	9	
6		2x6x8'	22	
7		2x6x12'	15	
8		4x6x8'	2	
9		4x4x8' PTP	3	
10		6x6x8' PTP rough-cut	2	
11		6x6x14' PTP rough-cut	5	
12		4x6x8'	2	
13		4x6x10'	4	
14		3/8" x 4'x8' pressure-treated plywood	3	
15		Cubic yards of 5/8" minus crushed rocks	6	
16		Cubic yards of concrete	23	
17		8"x8"x16" Grade N CMU block	4	
18		Linear feet of concrete expansion joint	42	
19		Linear feet of #4 rebar	1140	
20		1" hot-dipped galvanized lag screw	240	
21		1" hot-dipped galvanized washer	240	
22		Heavy duty gate hinge	12	
23		Barn door stopper	12	
24		SW60	8	
25		Roofing	387 sq. ft	
26		Linear feet of flashing	53'	
27		Linear feet of gutter	27'	
28		Linear feet of Simpson WB metal strapping	54'	
29		Simpson H1	28	
30		Simpson PC46	8	
31		1.5" diameter long sweep schd40 PVC elbow	3	
32		1.5" diameter schd40 PVC sanitary tee	3	
33		1.5" diameter schd40 PVC end cap or valve	3	
34		4" diameter schd40 PVC elbow	6	
35		4" diameter schd40 PVC tee	3	
36		4" diameter gate valve	3	Provided by O2Compost
37		6" diameter PVC elbow	1	
38		6" diameter 45 degree PVC elbow	2	
39		6" diameter PVC end cap	1	
40		6" x 4" sanitary PVC tee	199 3	

41
42
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54

Owner's Information

Name: _____

Address: _____

City: _____

Home Phone: _____

Email: _____

Company Information

Company Name: _____

Physical Address: _____

Mailing Address: _____

City: _____

Office Phone: _____

Email: _____

Website: _____

References

1) Name: _____

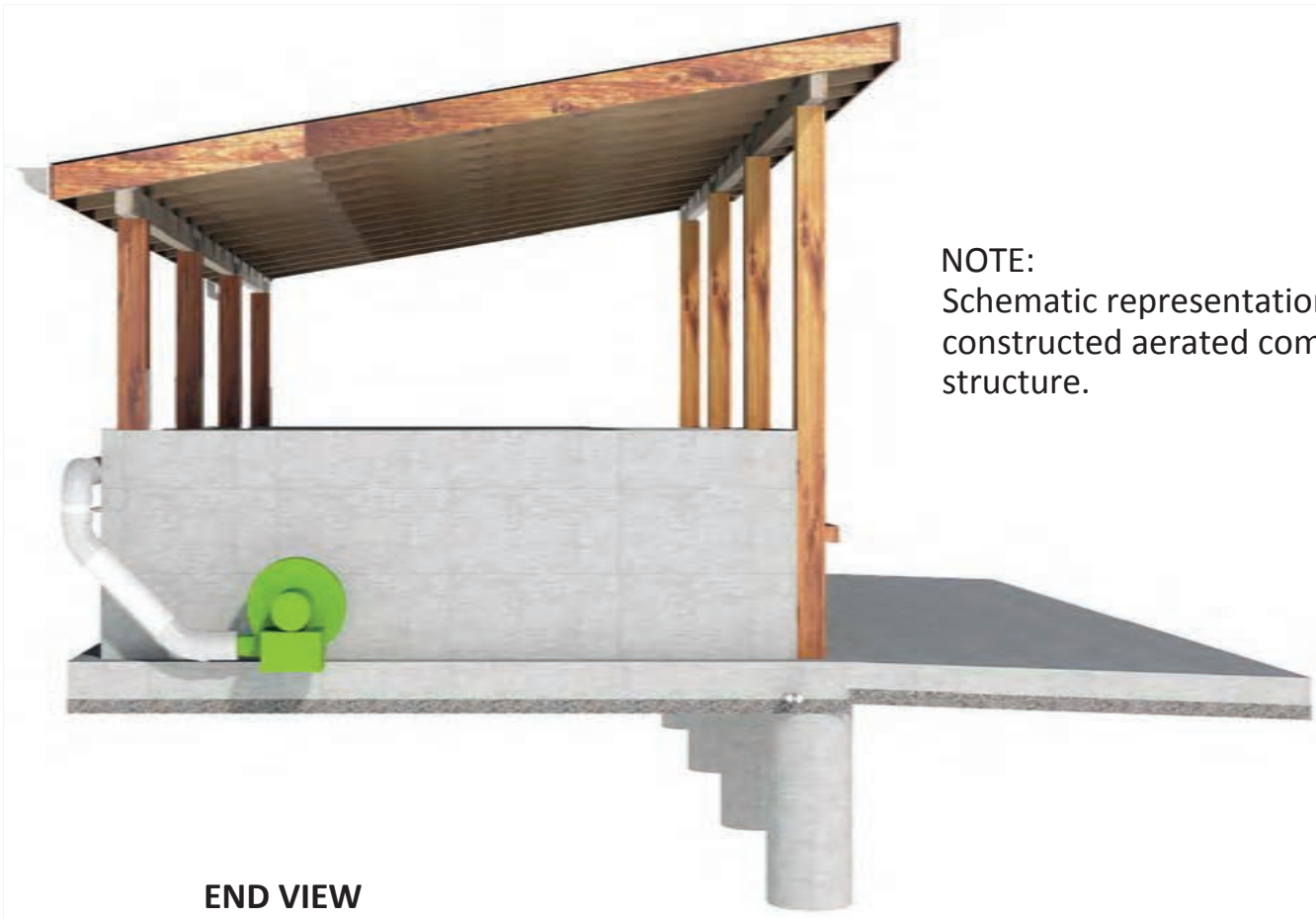
Address: _____

City: _____

Phone Number: _____

Email: _____

Brief Project Descri

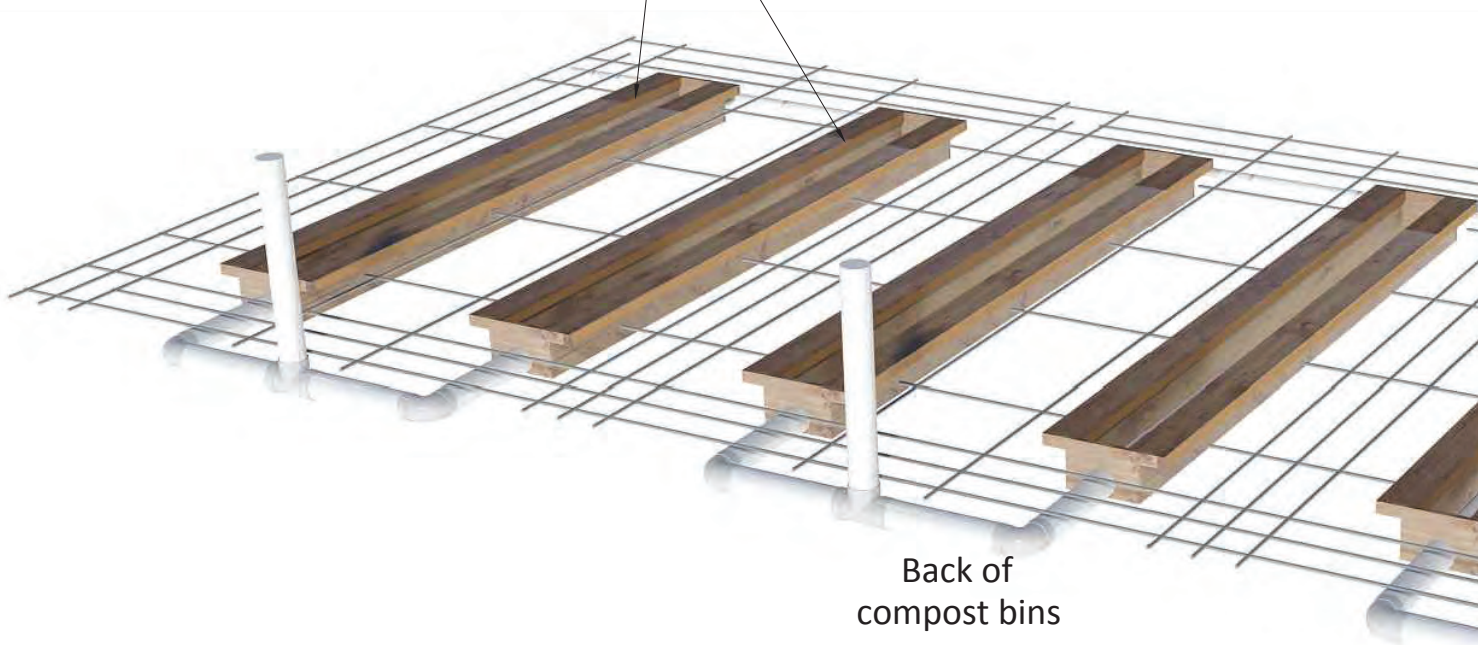
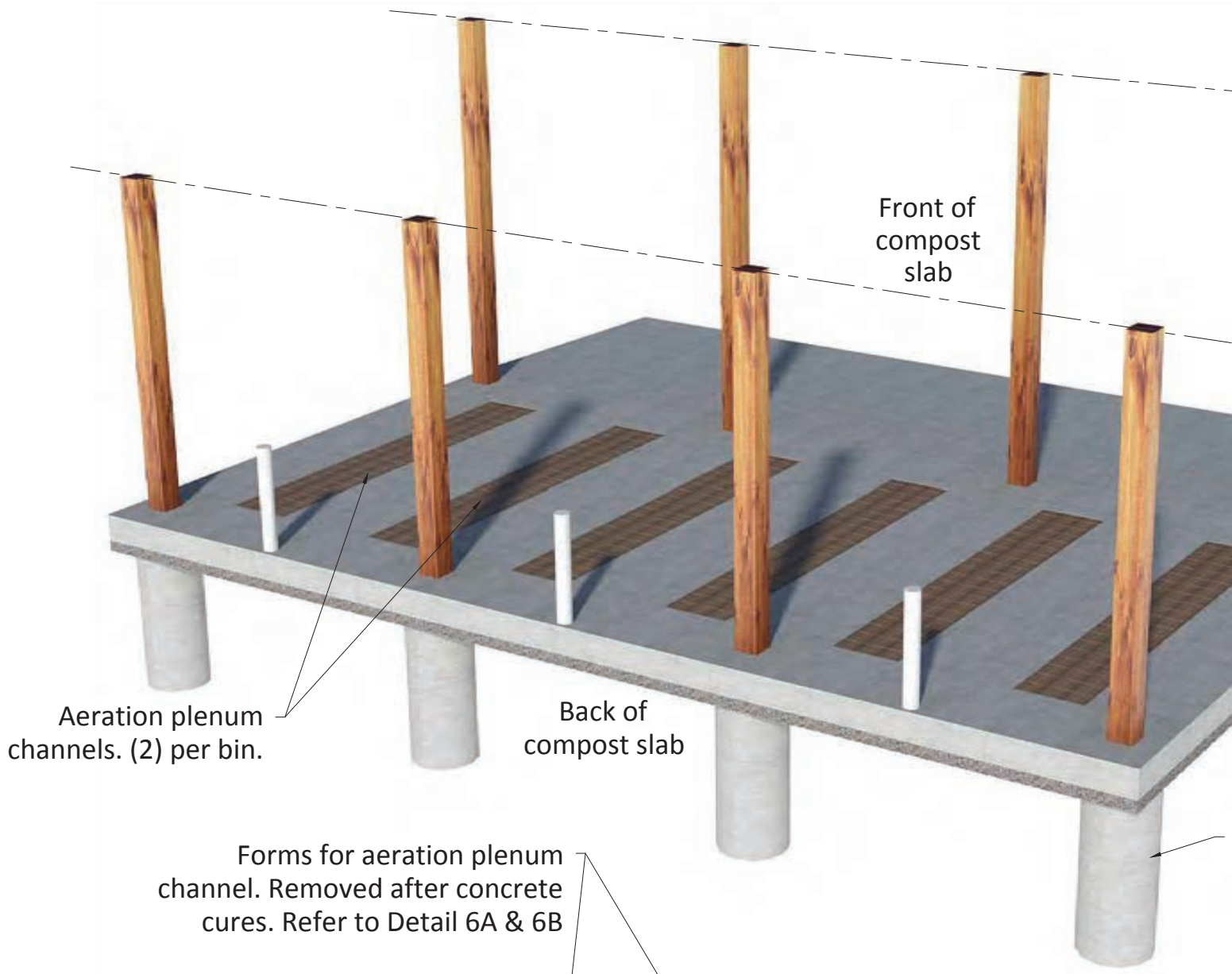


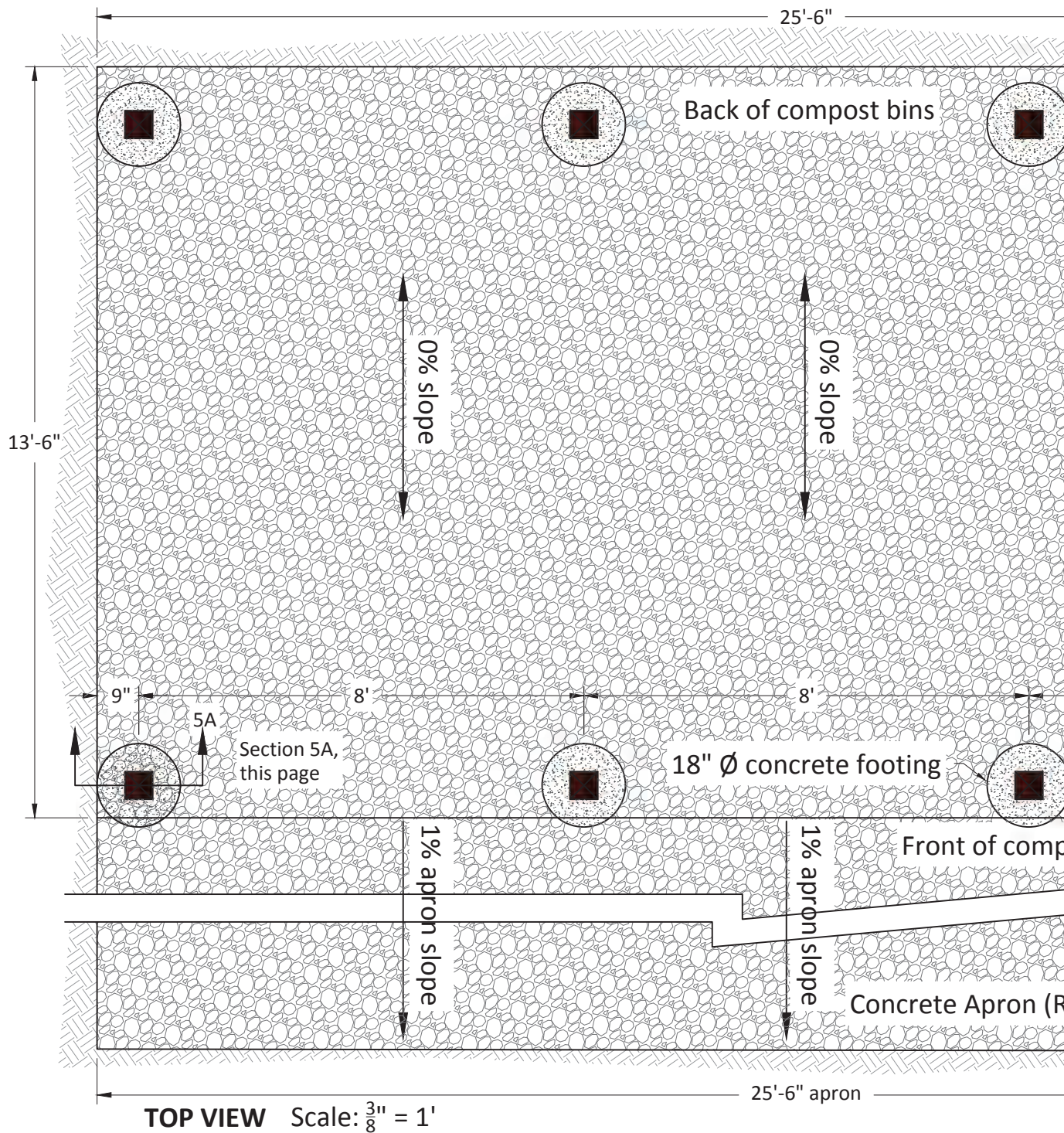
NOTE:
Schematic representation of fully
constructed aerated compost
structure.

END VIEW



FRONT VIEW





LEGEND:



Crushed Rock



Concrete



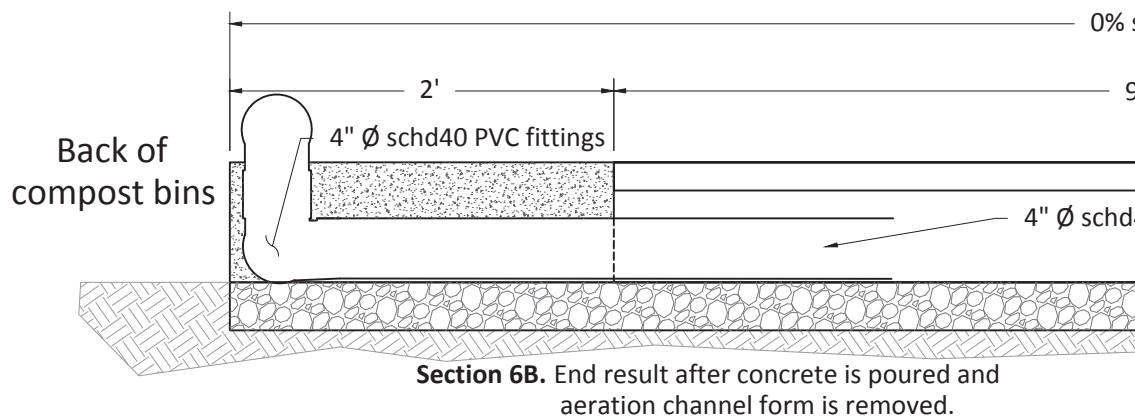
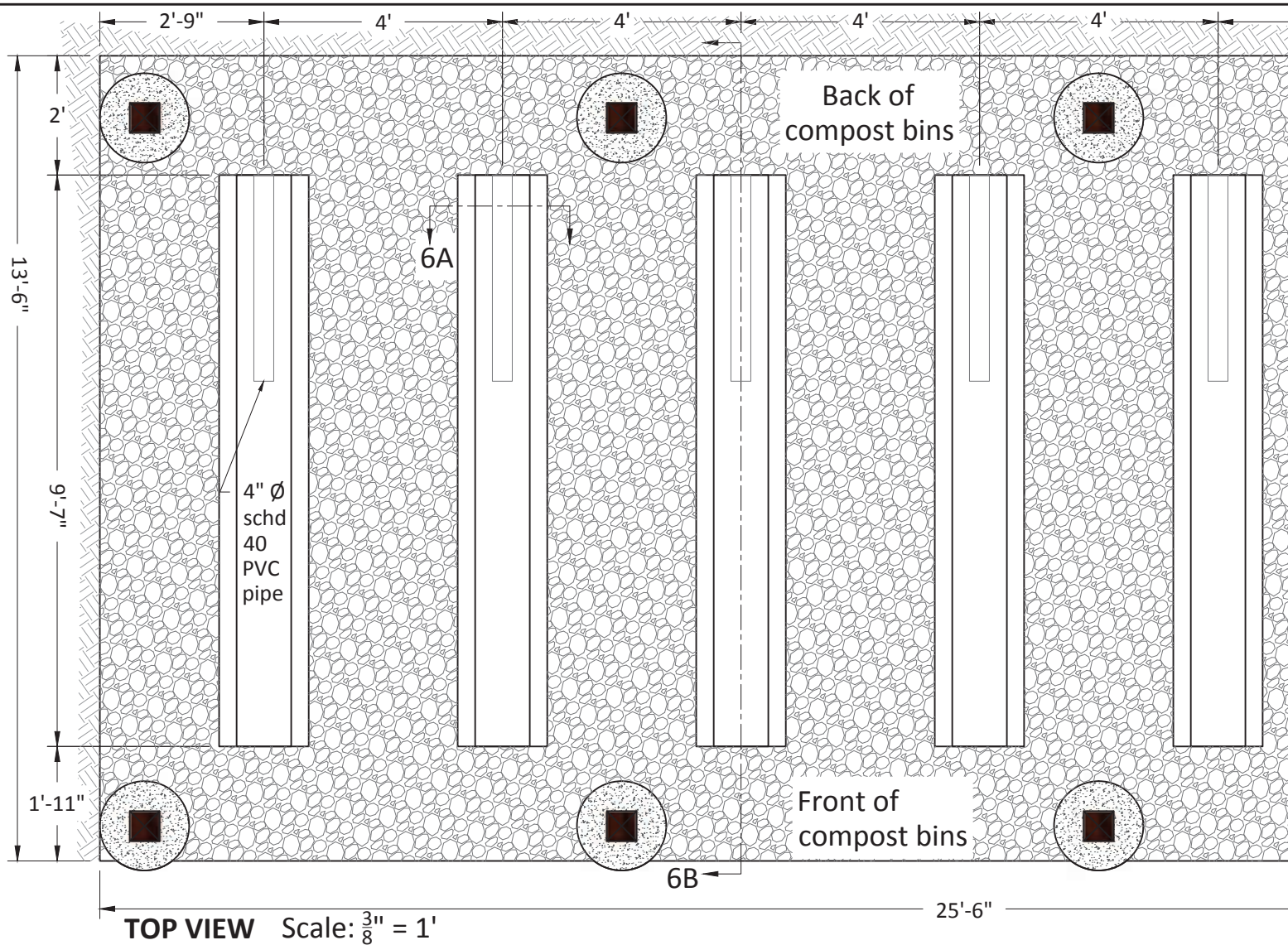
Native Soil

SUGGESTED CONSTRUCTION SEQUENCE: Subgrade preparation, crushed rock, and front posts.




1. Remove organic top soil and perform any necessary cut & fill to expose underlying mineral soil. The area for the compost bins needs to have a 0% slope. The area for the apron requires a minimum 1% slope away from bins.
2. Compact native soil to a non-yielding surface.
3. Place a 3" layer of $\frac{5}{8}"$ minus crushed rock on top of compacted native soil and compact to 90% modified proctor (ASTM D:1557).
4. Excavate holes to the specified depth, at minimum. Excavated holes for concrete footing shall be undisturbed native soil.

NOTE: Rear concrete footings are to be placed on pressure-treated posts or wooden walls. Disregard any existing concrete footings and rear 6x6 round posts if systems designed with c

5. Place an 8" Grade N CMU block on top of posts and sit on.
6. Secure all posts in place and backfill with concrete to a minimum.
7. Fill holes with concrete to a minimum.



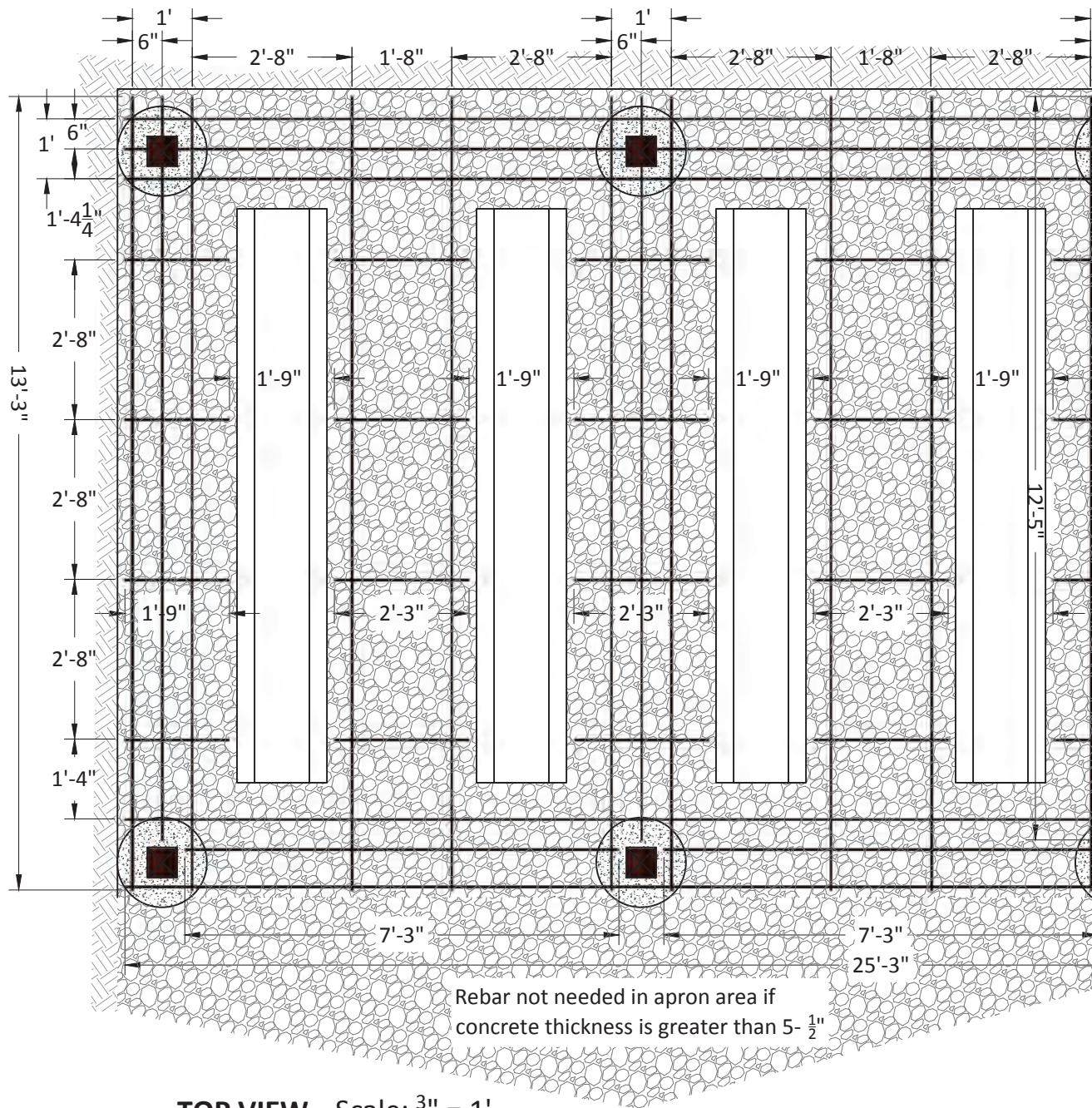
LEGEND:

-  Crushed Rock
-  Concrete
-  Native Soil

SUGGESTED CONSTRUCTION SEQUENCE: Place forms for aeration plenum boxes.

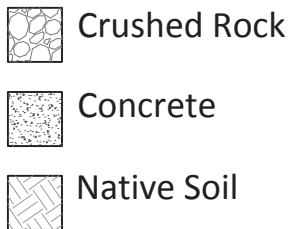
1. Construct a 13' 6" x 25' 6" x 7' $\frac{1}{2}$ " high perimeter form which will enclose the concrete slab.
2. Construct a 25' 6" x 8' x 5' $\frac{1}{2}$ " high perimeter form which will enclose the apron area. A minimum 1% and 2% maximum slope away from the compost bins is required. Rebar in apron not needed if concrete thickness is 5' $\frac{1}{2}$ " or greater
3. Construct 6 aeration plenum box forms, as suggested in Details 6A & 6B.
4. Oil the outside of the aeration plenum box forms and the inside of the perimeter forms.
5. Place the aeration plenum boxes at the specified locations with the 4" Ø bored hole towards the back of the compost bin.

$\frac{3}{4}"$ thick plywood



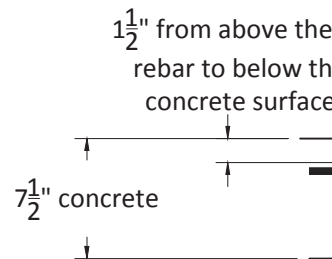
TOP VIEW Scale: $\frac{3}{8}$ " = 1'

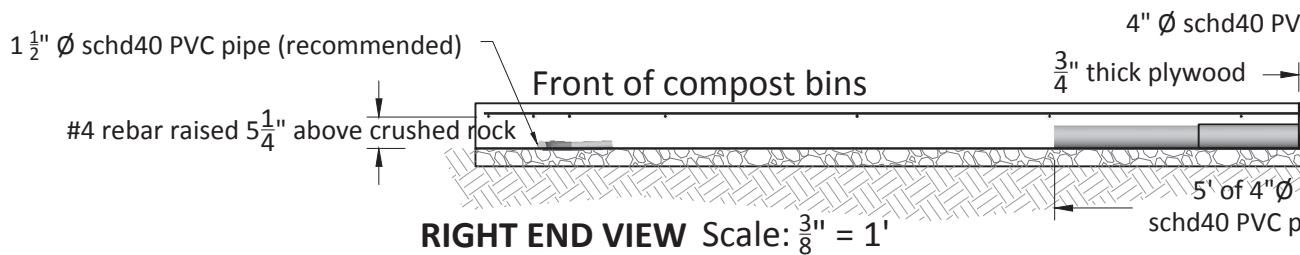
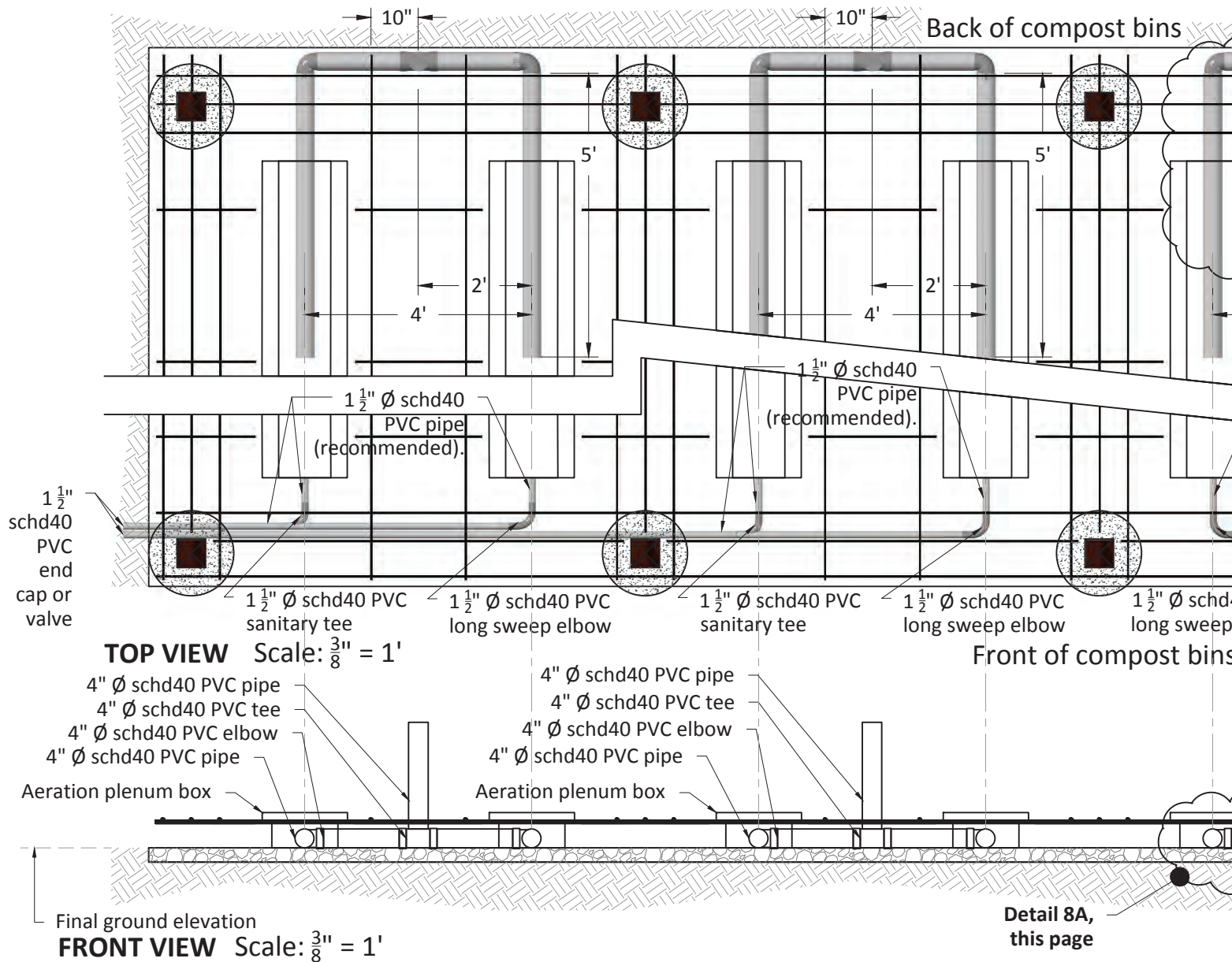
LEGEND:







SUGGESTED CONSTRUCTION SEQUENCE: Place rebar.

1. The 25' 3" long rebar placed 1 $\frac{1}{2}$ " away from the 6x6 post shall establish the first rebar location at the specified height above the crushed rock, shown in Section 7A.
2. Place the remaining rebar using the first established rebar as a reference line and using the dimensions shown.
3. Maintain a minimum 1 $\frac{1}{2}$ " of distance from the ends of the rebar to the edge of the perimeter form and all aeration plenum boxes. The rebar requires a minimum 1 $\frac{1}{2}$ " concrete coverage in all directions.
4. Rebar is not required for the apron if concrete thickness is 5 $\frac{1}{2}$ " thick or thicker.





LEGEND:

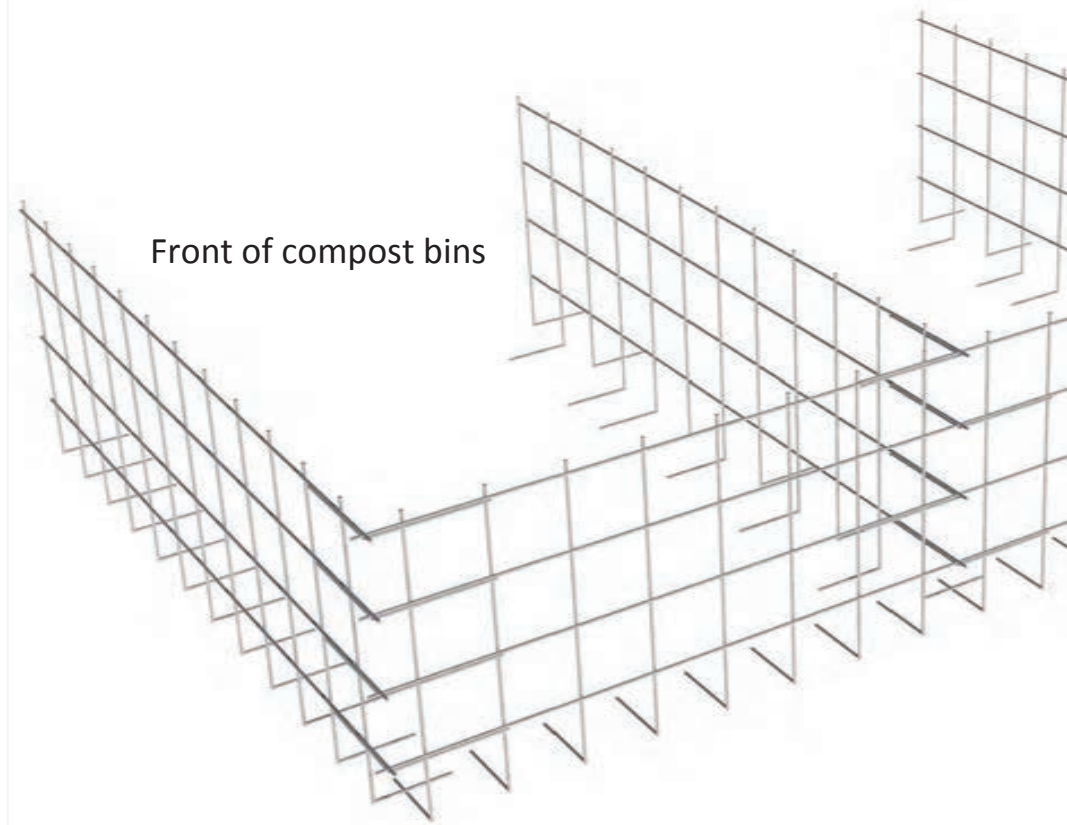
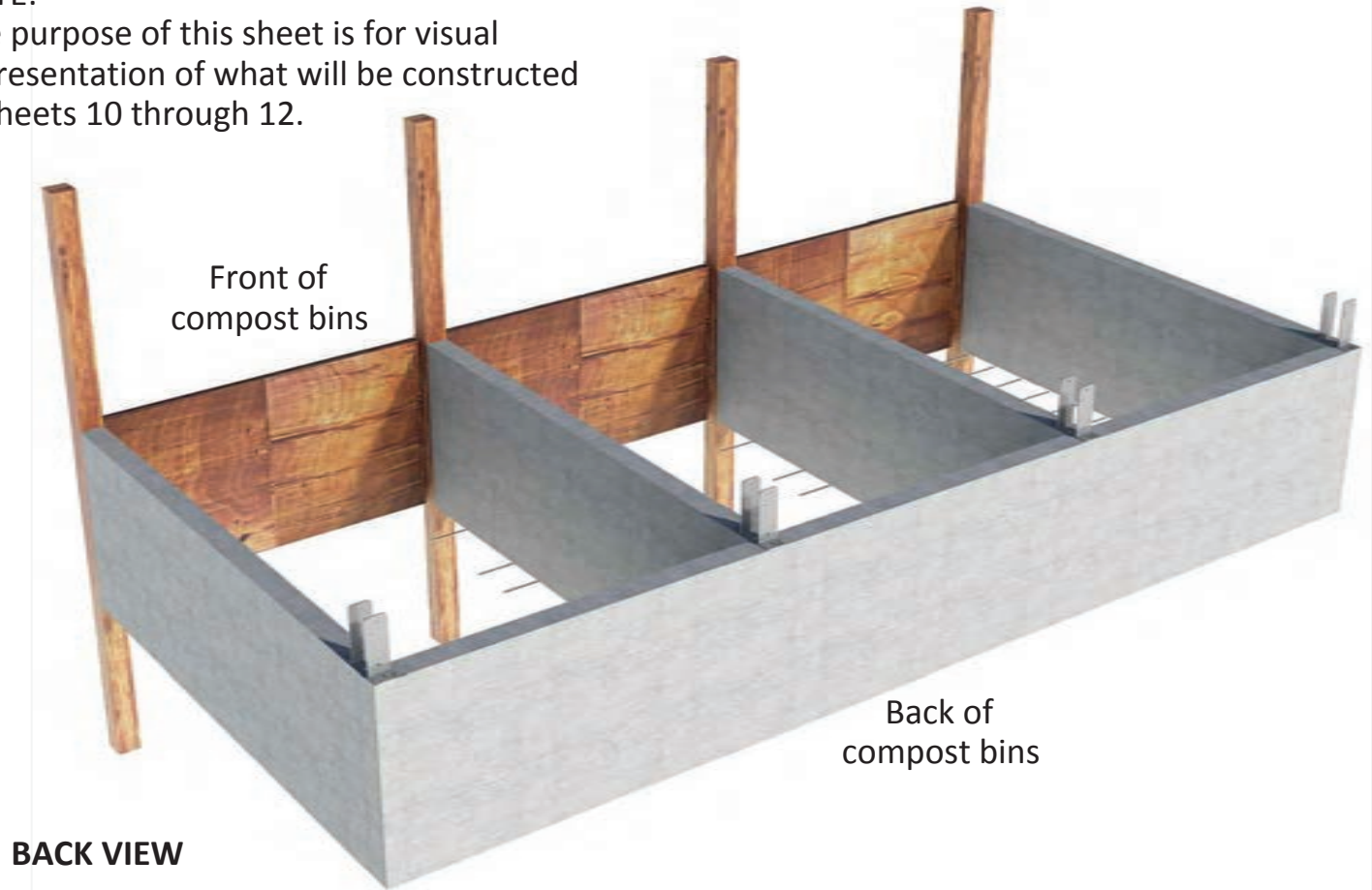
-  Crushed Rock
-  Concrete
-  Native Earth
-  Centerline

SUGGESTED CONSTRUCTION SEQUENCE: Lower aeration manifold and plenum boards.

1. All fittings and pipes shall be oriented in the same direction as shown.
2. Insert the 4"Ø x 5' long schd40 PVC pipe through the hole in the 3/4" thick plywood of the plenum box.
3. Assemble the remaining pipes and fittings and glue with PVC solvent.
4. Temporarily cap the vertical 4"Ø schd40 PVC pipe to prevent concrete from falling in.
5. Place the lower aeration manifold approximately 1" away from the perimeter form.
6. Place the 1 1/2" Ø schd40 PVC pipe at the specified location and daylight to drain.
7. Place an unglued cap on the ends of the 1 1/2" Ø schd40 PVC pipe when completed.
8. Pre-assemble the plenum box and aeration manifold. Place the plenum box washers, one towards the front of the bin. This is to create a 3/8" gap between the plenum box and the bin. Cut the 2x6 plenum board to fit.

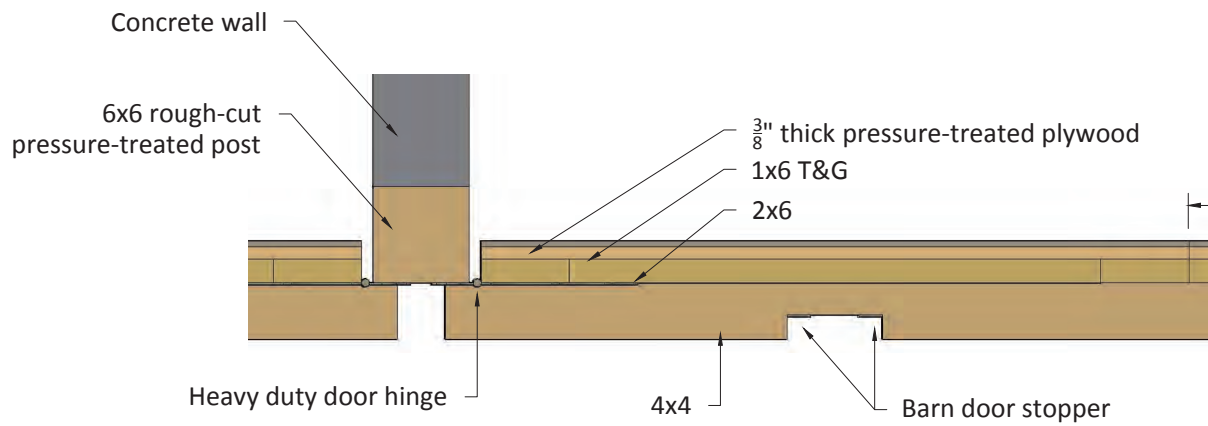
NOTE:

The purpose of this sheet is for visual representation of what will be constructed in sheets 10 through 12.

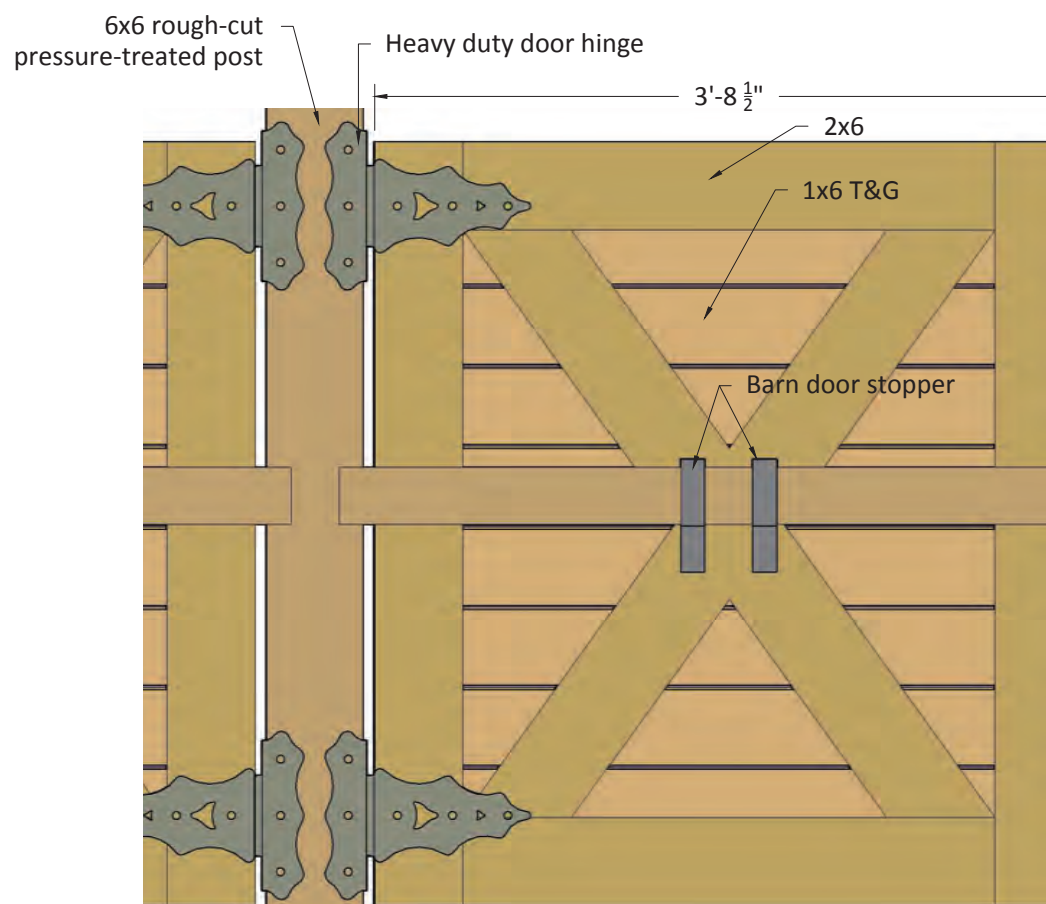


**Back view of rebar &
Perma-Column SW60**





TOP VIEW Scale: 1" = 1'



FRONT VIEW Scale: 1" = 1'

SUGGESTED CONSTRUCTION SEQUENCE: Double gate

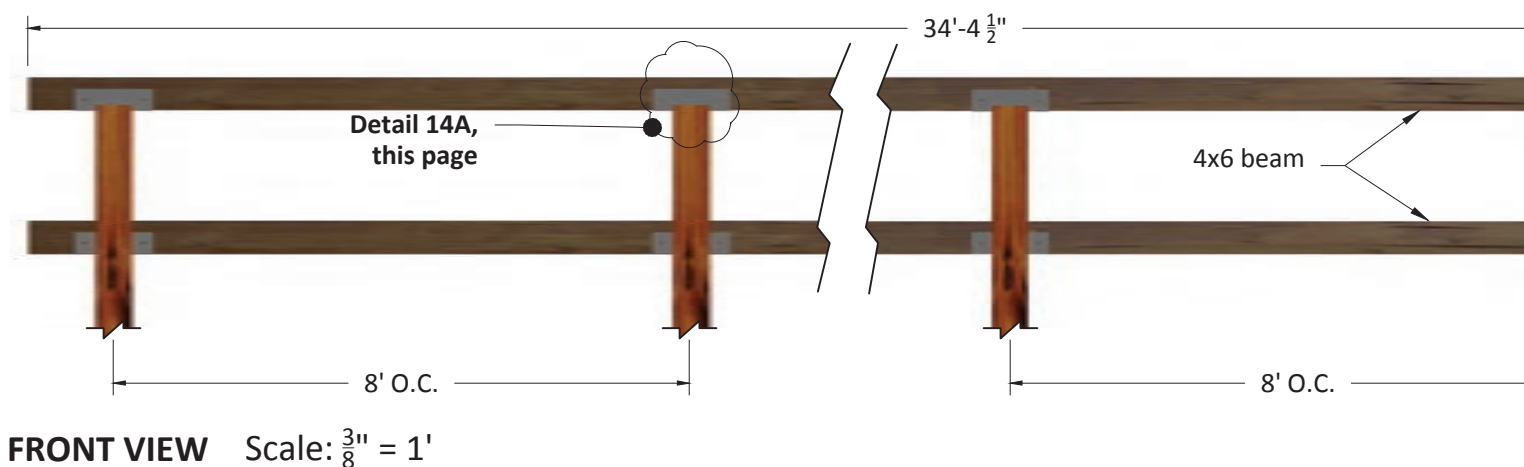
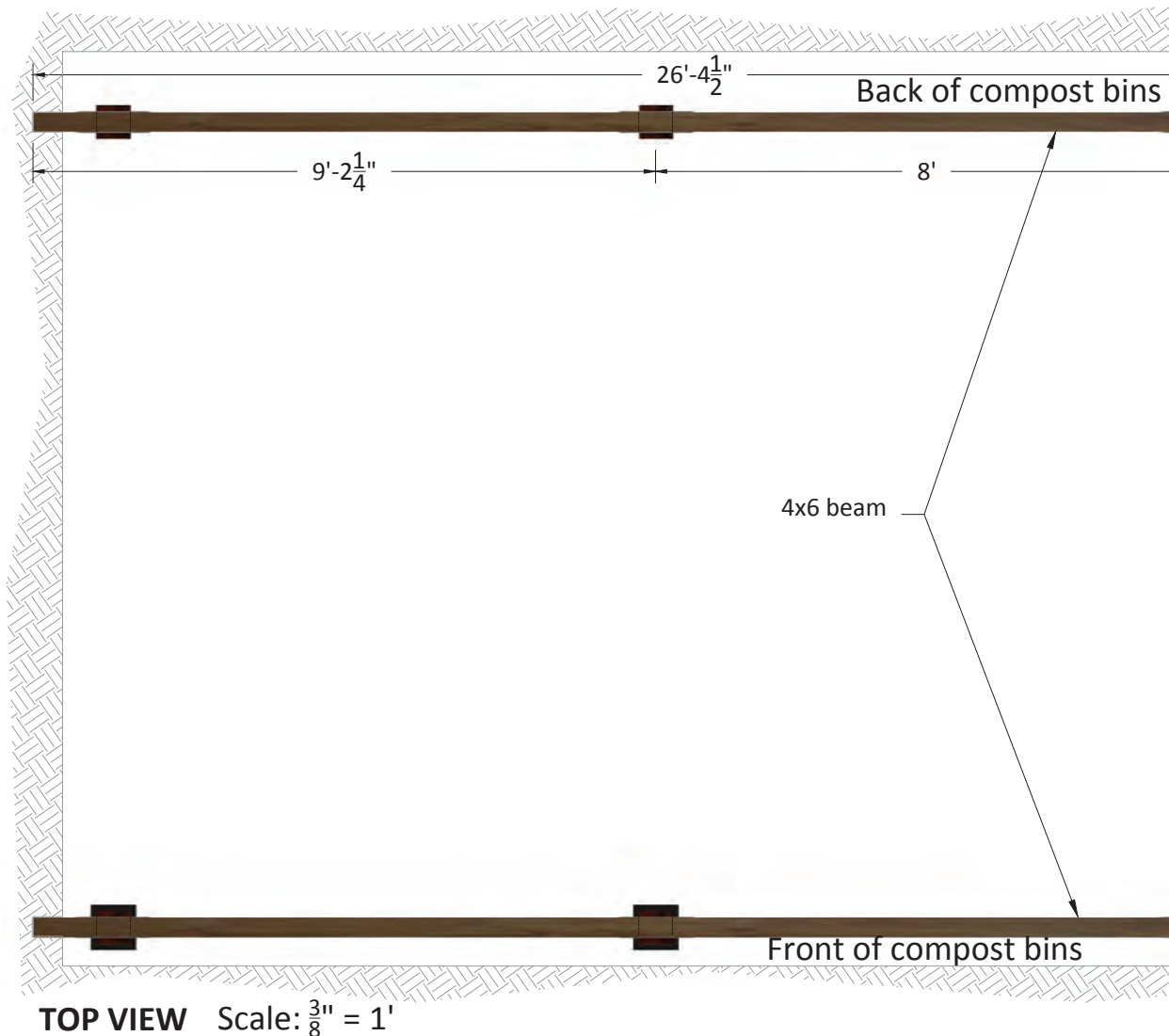
1. Construct the 4' x 3' 8 1/2" 1x6 T&G assembly.
2. Construct the "X" frame and border and nail/screw onto the 1x6 T&G.
3. Flip the assembly over and nail/screw the 3/8" pressure-treated plywood onto the 1x6 T&G.
4. Install a strip of 3/8" thick pressure-treated plywood on the underside of the gate.
5. Install the barn door stopper and cut out a portion of 4x4 where the barn door stopper is located.

6. Install heavy-duty door hinges.
7. Elevate the gate by placing a 4x4 post between the gate and the wall to prevent the rough-cut post from settling into the ground.
8. Insert the 4x4 post into the ground.
9. Repeat for the second gate.

NOTE:

The purpose of this sheet is for visual representation of what will be constructed from sheets 14 through 17.
Not shown: roofing material.





LEGEND:



Crushed Rock



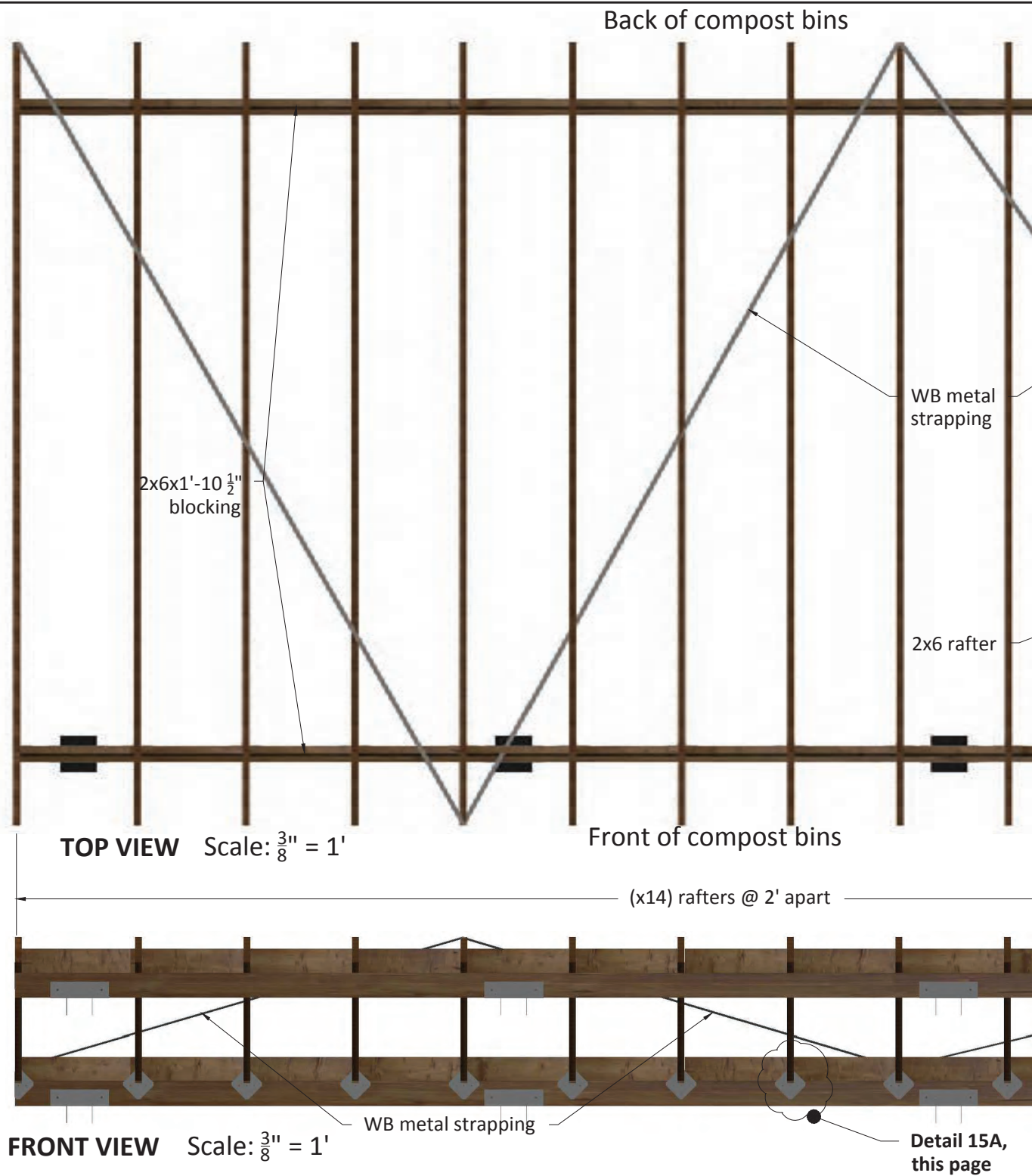
Concrete



Native Soil

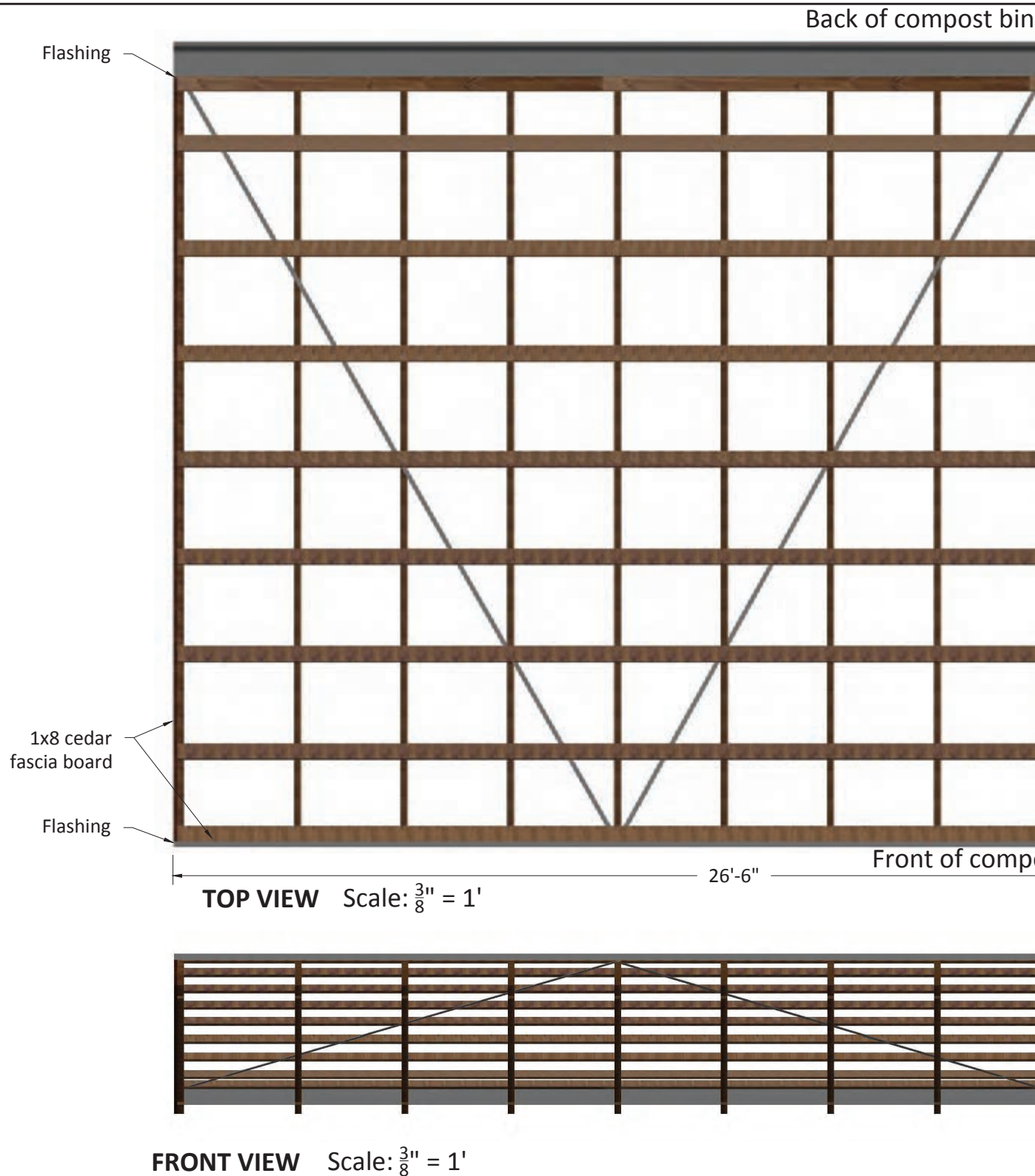
SUGGESTED CONSTRUCTION SEQUENCE:

1. Cut the front 6x6 rough-cut pressure-treated post to a minimum height of 9' from the top of the concrete slab.
2. Cut the rear 6x6 rough-cut pressure-treated post to maintain a $\frac{2}{12}$ roof pitch.
3. Install the Simpson PC46 hanger as per manufacturer's specification on all 10 posts. It may be necessary to shave the 6x6 rough-cut pressure-treated post to fit the Simpson PC46.
4. Install the 6x6 rough-cut pressure-treated post to the SW60 as per manufacturer's specification. The Simpson PC46 oriented in the same direction to hold the 4x6 beam.
5. Place the 4x6 dimensional lumber in the Simpson PC46 hanger as per manufacturer's specification.



SUGGESTED CONSTRUCTION SEQUENCE :

1. Cut out a notch on the 2x6 rafters to flush the rafter on top of the 4x6 beams.
2. Anchor 2x6 rafters onto the 4x6 beam with Simpson H1 hangers as per manufacturer's specification.
3. Allow a 1' overhang from the 4x6 beam to the ends of the rafters.
4. Install 2x6 blocking between each rafter and nail in place
5. Install WB metal strapping and nail on top of the rafters as per manufacturer's recommendation.

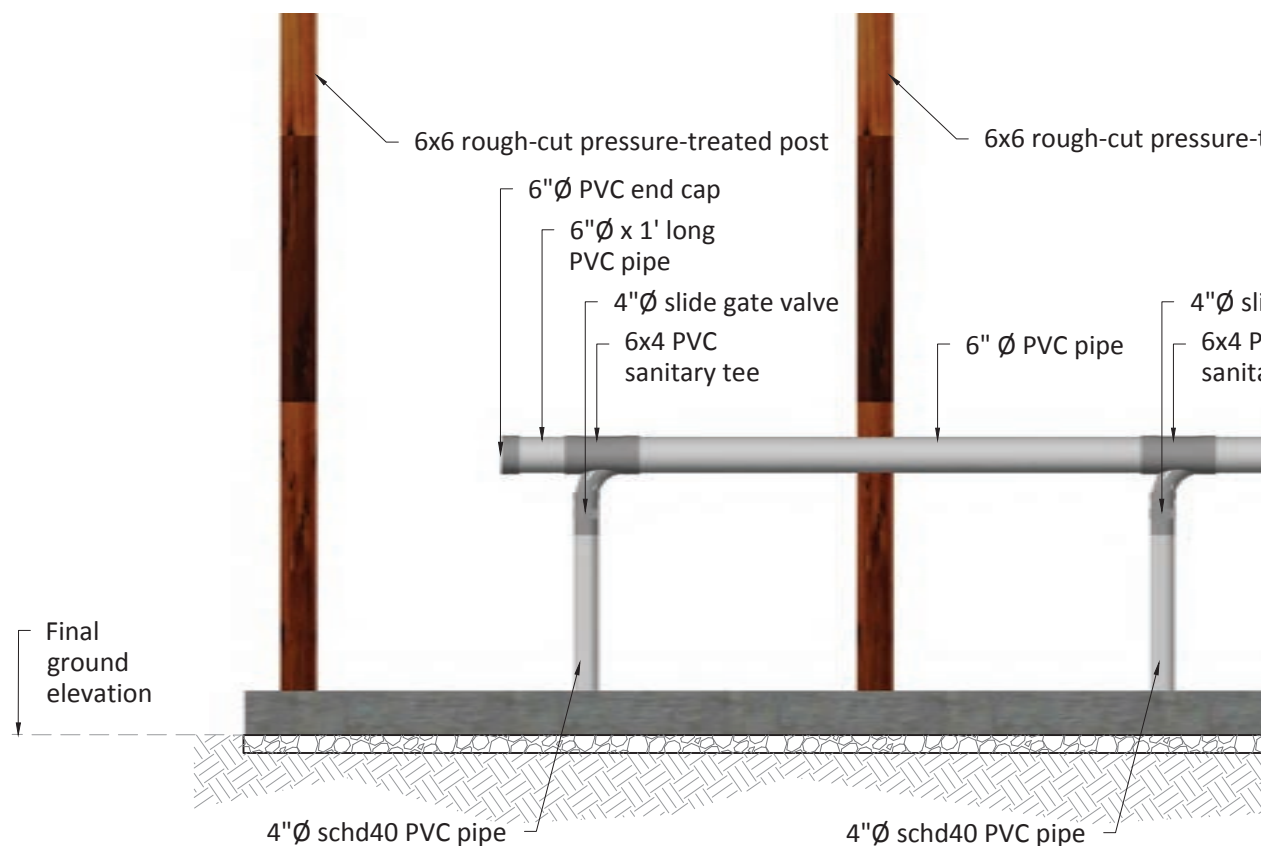


SUGGESTED CONSTRUCTION SEQUENCE:

1. Install purlins at 2' apart.
2. Install fascia board all around.
3. Install flashing.
4. Install roofing, per manufacturer's specification.
5. Install gutter and downspout and drain to the side away from any concrete pad and opposite end of where the blower will be installed.
6. Install roofing as requested by owner.

NOTE: Post and roof design with snow loads as specified on cover sheet. If deviation from these design specifications are deemed necessary for local conditions, the design should be reviewed and modified by a licensed civil-structural engineer. If using metal roofing, use 26 gauge corrugated roofing and screw to purlins per manufacturer's specifications.

Nail WB strapping to top of rafters, below purlins. Metal strapping is not needed if roof is sheeted with OSB or plywood.



BACK VIEW Scale: $\frac{3}{8}" = 1'$

LEGEND:



Crushed Rock



Drain Rock



Native Soil

SUGGESTED CONSTRUCTION SEQUENCE:

1. Use PVC primer and cement at every fitting & pipe connection.
2. Anchor the pipes and fittings to the wall.
3. Starting with the 4" Ø schd40 PVC pipe that is vertically set in the concrete on the left backside of the wall, insert a 4" Ø gate valve approximately 3' up.
4. Install a 6x4 sanitary tee as oriented in the **Back View**.
5. Install a length of 6" Ø schd40 PVC pipe to reach the next sanitary tee.
6. To the left end, install a 6" Ø x 1' long schd40 PVC pipe and cap with an end cap. This is necessary for uniform air flow and for future expansion.
7. Repeat Steps 3 - 5 for each bin.
8. Follow the right most 6x4 sanitary tee with a 6" Ø elbow.
9. Follow with a short piece of 6" Ø PVC pipe.
10. Follow with a 6" Ø 45° schd40 PVC elbow.
11. Follow with a length of 6" Ø schd40 PVC pipe to a length so it almost reaches the concrete slab.
12. Follow with another 6" Ø 45° schd40 PVC elbow.
13. Connect the blower assembly and rubber fitting to the 6" Ø 45° schd40 PVC elbow. A length of 6" Ø schd40 PVC pipe may be used to extend the location of the blower. Secure the blower to a sturdy platform.
14. Plug the blower to the timer and the timer to the installed electrical source specified on the **Cover Sheet**.
15. Follow instructions found in the Training Manual to test the system prior to starting the first compost batch.

**KING CONSERVATION DISTRICT
KING COUNTY, WASHINGTON**

RESOLUTION NO. 22-002

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE KING CONSERVATION DISTRICT, KING COUNTY, WASHINGTON, ESTABLISHING BOARD ELECTION ZONES.

WHEREAS, King Conservation District is committed to reforming conservation district board of supervisor elections to be more representative;

WHEREAS, King Conservation District serves all communities within the service area of King County; and

WHEREAS, board of supervisors are elected county-wide, with disproportionate representation from the City of Seattle where all current elected supervisors reside; and

WHEREAS, Washington State Law allows for dividing the district into three zones when requested by the board of supervisors and approved by the Washington State Conservation Commission per RCW 89.08.190; now, therefore

BE IT RESOLVED by the Board of Supervisors of the King Conservation District, King County, Washington, as follows:

- 1) King Conservation District supports creating three geographical zones for elected board of supervisor elections to ensure representation of all parts of King County:
 - a. Having roughly equal population, and
 - b. Being contiguous, compact and convenient, and
 - c. Following existing natural geographic and political subdivision boundaries; and
- 2) King Conservation District will hire a consultant to develop three zones; and
- 3) King Conservation District will conduct an inclusive community engagement process to receive input and feedback on the zone proposal.

ADOPTED BY THE BOARD OF SUPERVISORS of the King Conservation District, Washington, at an open public meeting thereof, and effective this 8th day of August, 2022.

Kirstin Haugen, Chair

CERTIFICATE

I, Chris Porter, Vice Chair of the Board of Supervisors, King County, Washington, do hereby certify that the foregoing resolution is a true and correct copy of Resolution No. 22-002 of such Board, duly adopted at a regular meeting thereof held on August 8th, 2022.

Chris Porter, Vice Chair

AI 22-074

King Conservation District Board of Supervisors Meeting
Action/ Agenda Briefing Report AI 22-074
Meeting Date: August 8th, 2022

SUBJECT: Waive the imposition and collection of any unpaid rates and charges or assessments imposed by King County for the benefit of King Conservation District against federally owned parcels.

FISCAL IMPACT

There are there are approximately 2270 property accounts that appear to be Federally-owned property. Assuming a rate and charge of \$12 per year, that would be approximately \$27,240 in annual revenue.

POLICY CONSIDERATION

KCD rates and charges and the current County Ordinance exempts properties owned by Native American tribes. If the Board moves to waive imposition and collection of any unpaid rates and charges or assessments against federally owned parcels, the next step would be to similarly exempt Federally-owned lands in the future.

STAKEHOLDER INTERESTS

- Staff and board members of the King Conservation District
- Federal parcel holders
- King County

BACKGROUND

For many years, KCD discussed with King County's Treasury Department about problems in collecting rates and charges on properties that are owned by the Federal Government. The Federal Government takes the position that since it is exempt from state and local taxes, that it does not have to pay the rates and charges imposed against Federally-owned property.

KCD proposes a system of rates and charges but the actual authority to impose a system of rates and charges rests with King County pursuant to Chapter 89.08 RCW. Neither KCD's proposed system of rates and charges nor the County's Ordinance adopting a system of rates and charges specifically exempts federally-owned lands from the rates and charges.

KCD rates and charges and the current County Ordinance exempts properties owned by Native American tribes. If the Board moves to waive imposition and collection of any unpaid rates and charges or assessments against federally owned parcels, the next step would be to similarly exempt Federally-owned lands in the future.

RECOMMENDATIONS

Staff recommends the board submit the following motion:

Motion: I move to waive the imposition and collection of any unpaid rates and charges or assessments imposed by King County for the benefit of King Conservation District against federally owned parcels.

MOTION

_____ Moved, _____ Seconded;

Unfinished Business

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

SUBJECT:

Approval is needed for a small public works contract to complete the NRI funded Foster Irrigation Well project in Carnation for \$45,000.

FISCAL IMPACT:

Washington State Conservation Commission NRI funding was awarded to KCD in the amount of \$35,000 for the Foster Irrigation Well project in 2021. In 2022, an additional award of NRI funding was granted of \$10,000. The land occupier and/or Snoqualmie Valley Watershed Improvement District (WID) will provide any other necessary funds to complete this project. KCD is contributing via staff time.

POLICY CONSIDERATION

The proposed small public works contract has been vetted by KCD's farm team and was selected to move forward as a NRI project in 2021.

STAKEHOLDER INTERESTS

- District cooperators and farm managers
- King CD Board members and staff
- WSCC

BACKGROUND*Application Information & Details*

The Foster's have been leasing water from the Snoqualmie Valley Watershed Improvement District (SVWID) water bank, which is seeded with a large senior water right. Claire is leasing a very small amount of water (Qi 58 GPM and QA 5 acre-ft/yr) to irrigate 8-9 acres of mixed vegetables farms (3 farms total) at the Stuart's Landing site on the Snoqualmie River in Carnation. This land supports three small farmer businesses. To access the existing irrigation pump in the Snoqualmie River, the operator must repel down an extremely steep bank (~25ft), that is eroding in order to access the intake screen and pump whenever they need to irrigate. The steep bank issues pose such significant safety hazards to the farmers that they have decided it is too dangerous to use and have been unable to use the pump at all.

The best alternative is to install a shallow groundwater well that would be hydrologically connected to the river and still eligible for lease of irrigation water from the SVWID's water bank. The proposed shallow groundwater well would likely hit water at approximately 80ft below the surface and will be installed with a 20 GPM pump. While hydrologically connected to the Snoqualmie River, there is a "re-timing" of when the water withdrawal is realized. The withdrawal of water directly from the river using a surface water diversion has immediate impacts to instream flow, while the withdrawal of water from a hydrologically connected well does not have an immediate impact but is delayed. The best course of action is to drill an irrigation well to service the 8–10 acre row crop farm.

King Conservation District Board of Supervisors Meeting
Agenda Action Briefing/Report
Meeting Date: August 8th, 2022

This project was brought to KCD via the SVWID in 2021 and proposed as a 'shovel ready' project for WSCC NRI funding. In 2021, a bid estimate was received for \$21,000 to receive well drilling services plus the cost of the well pump was an additional \$14,000. In 2021, NRI funds were approved for \$35,000 to cover the costs on the well drilling and the well pump. In 2022, a new estimate showed that due to inflation, the well drilling cost rose to \$31,000 plus the well pump for \$15,000. Due to inflation, the WSCC made additional funds available for \$10,000 in 2022 for this project. Bid requests were sent out using the small public works policy in May of 2022 with only one bid received from JKA Well Drilling for approx. \$30,338. This estimate is based on drilling a well that is 80' deep, however, the exact depth will be unknown until the time of drilling. Due to the placement of the irrigation well that does not have a nearby source of power, the Snohomish Conservation District engineer assisting KCD with this project suggested that we wait to see where the ground water level is to determine which type of pump to purchase. KCD staff has chosen to only drill the well before the rainy season begins again at this time and will select the correct well pump after the groundwater depth is known.

EFFECTIVE DATE:

The small public works contract will become effective upon approval by the Board of Supervisors and the signature by a Board representative.

OPTIONS

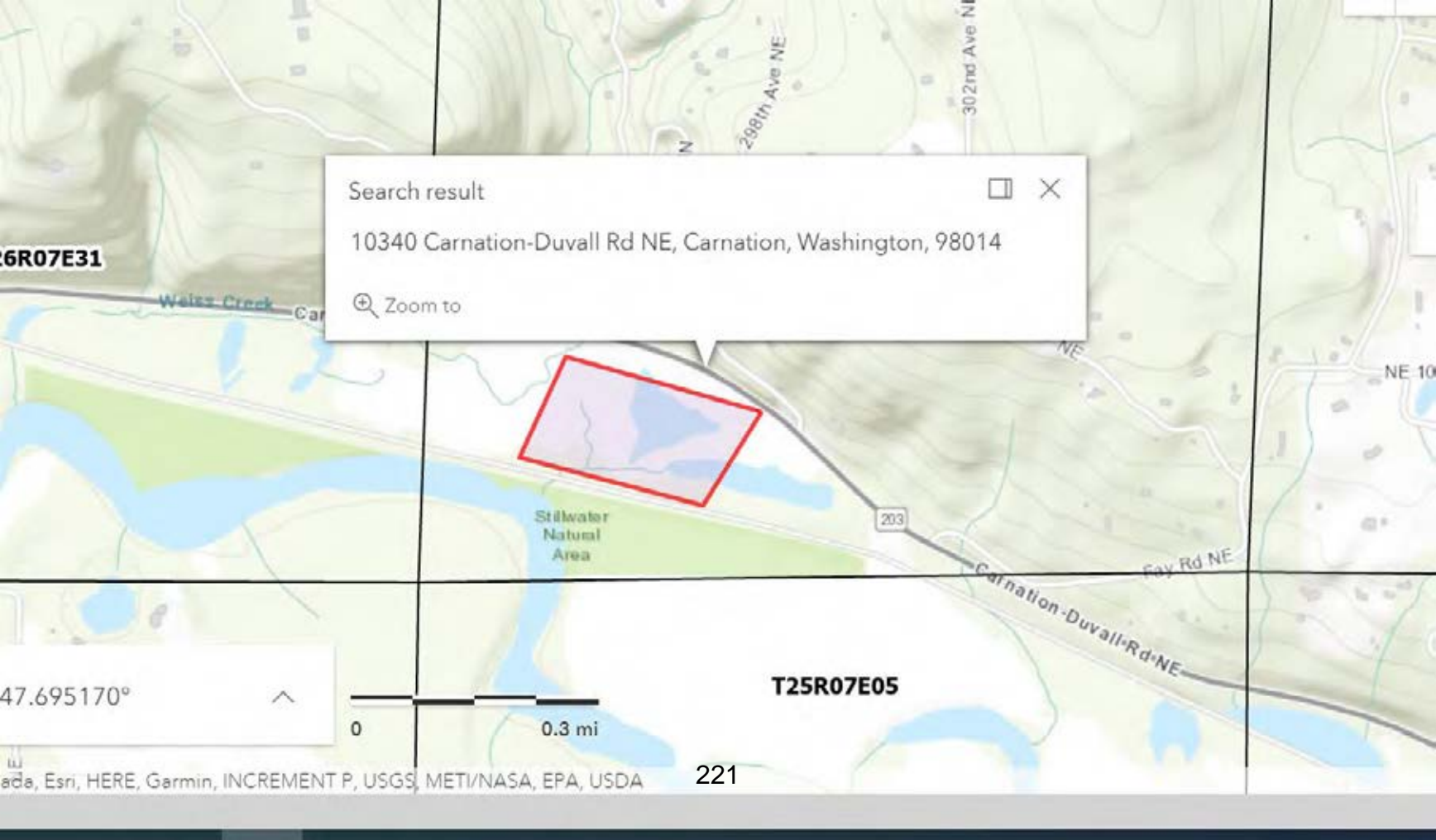
Do not move forward with the well drilling project and lose another growing season.

RECOMMENDATION

Staff seeks Board approval of the small public works project for the Foster Irrigation well project in the amount of \$45,000.

MOTION

_____ Moved, _____ Seconded; *Passed a motion to approve the King Conservation small public works project for the Foster Irrigation well project in the amount of \$45,000.*



Search result



10340 Carnation-Duvall Rd NE, Carnation, Washington, 98014

Zoom to

6R07E31

47.695170°

T25R07E05

0 0.3 mi





JKA Well Drilling & Pumps
27115 Old Owen RD
PO BOX 310
Monroe, WA 98272
(360) 794-7300

BILL TO

Claire Foster
10721 296th Avenue Northeast
Carnation, WA 98014 USA

ESTIMATE
53762047

ESTIMATE DATE
Jul 06, 2022

JOB ADDRESS

Irrigation well
10301 Carnation Duvall Road
Duvall, WA 98019 USA

Job: 51346687

ESTIMATE DETAILS

Drilling, 6-IN Screened Well, 240-FT: Provide drilling & services to complete a drilled water well with steel well casing (in unconsolidated material, such as sand, gravel, or clay), or PVC well casing where able (in rock, such as sandstone, shale, or basalt). Minimum additional work to include drilling rig mobilization, surface/'Ecology' seal to 18-FT, installation of a drive shoe, well tagging, and well capping.

All of the pricing/costs for the above works are based on the line items detailed below. Additional costs, while unlikely during the drilling process, may apply due to unknown subsurface conditions.

IF DRILLING IS COMPLETED IN UNCONSOLIDATED MATERIAL WHERE THE DRILLER DEEMS IT IS REQUIRED, Company shall install & develop a stainless steel sand screen in unconsolidated formations, or PVC screens in consolidated formations.

Total does NOT include pumping tests, water testing, permanent well pumps, water filters, well house, water treatment, etc. Excess materials will be hauled off site unless Owner specifically requests to keep the materials, prior to being removed from site.

TASK	DESCRIPTION	QTY	PRICE	TOTAL
Mobilization, Surface Sealing, Drive Shoe & Well Cap	Mobilization, Surface Sealing, Drive Shoe & Well Cap: Mobilization includes driving rigs under their own power, setting jack pads, and towering up - additional towing/winchng/dunnage/blocking is NOT included. Access for drill tender/support truck and daily driver truck must also be allowed for per provided site plans, including ingress/egress during progression of work. Overages for rig/crew due to inadequate access/site prep will be billed per Standby Time/Rig Time hourly rates as outlined in the Terms and Conditions. Provide and install 6-IN FP Style USA/Canada Made Casing Shoe. 'Ecology Seal' or WA State Surface Seal, 4-IN Annular Seal to 18-FT of Depth per WAC, including up to 14 sacks of Bentonite Chip clay.	1.00	\$2,558.82	\$2,558.82

Installation of 6-IN ABS Well Cap and Unique Ecology ID Tag.
JKA shall acquire a Notice of Intent to Drill a water well on behalf of the property owner.

1306NC Drilling Footage	Drilling, 6-IN Footage: 6-IN Drilling Footage, price per lineal foot, plus or minus, 80-FT minimum charge. Casing sold separately. 5-7/8-IN, 6-IN Nominal, drilling in typical formations includes sand, gravels, clay, silts, till, followed by consolidated bedrock if necessary (shale, sandstone, etc). JKA Well Drilling and Pumps uses Dual Rotary drilling to drill through tough overburden, but there still exists the chance that boulders, rock shelves, or adverse conditions may cause casing refusal or deflection and necessitate the creation of change order to complete drilling.	240.00	\$50.42	\$12,100.80
WellCasing-STL66250	Steel Well Casing, 6-IN x 20-FT Lengths: 6-IN Steel Well Casing, 0.250-IN Wall, 20-FT Lengths, Price Per Foot	240.00	\$44.88	\$10,771.20
SSScreenAssembly	Stainless Sand Screen Assembly: Stainless Steel Sand Screen Assembly, including 5-FT length of Stainless Steel V Wire Screen, Screen Bottom, and K Packer (8-IN or 2-FT Length). Stainless steel screens will be substituted for PVC Screen and Liner Assemblies in rock wells.	1.00	\$811.91	\$811.91
RigTime-ScreenInstall-HRLY	Screen Installation & Well Development: Sand Screen Installation and Development, price per hour, one hour minimum	2.50	\$630.35	\$1,575.88

SUB-TOTAL	\$27,818.61
TAX	\$2,420.22
TOTAL	\$30,238.83
EST. FINANCING	\$426.37

Thank you for your business!

CUSTOMER AUTHORIZATION

Pricing is valid for seven (7) days from date of estimate transmittal. Any Optional Items shown are included only at the Quantity listed, unless specifically requested in writing by Owner prior to date of service. THIS IS AN ESTIMATE FOR INFORMATIONAL PURPOSES ONLY, FINAL AMOUNT BILLED WILL BE BASED ON WORK COMPLETED.

Work shall start on a mutually agreed upon future date, or as soon thereafter as prior arrangements allow. Acceptance of an estimate does not constitute an agreement as to schedule or timeliness.

Signing of this Estimate Authorization is for a total estimated amount of \$30,238.83, but this amount is exclusive of any other estimated or invoiced amount otherwise agreed upon. A detailed estimate showing the scope of work(s) and task(s) to be completed, if not included above, will be emailed to the Customer on record (mailed via USPS upon request), and will be considered part of this agreement.

Cancellation Fees may apply if this agreement is canceled by the Customer, see Termination Clause in [Terms & Conditions](#).

King Conservation District Board of Supervisors Meeting 07/11/2022**Agenda Action Briefing/Report AI 22-0 55****SUBJECT:**

Review for Approval KCD Landowner Incentive Program cost-share application from Gretchen Garth and AnnMarie Stickney, for a *Waste Storage Facility*, in the amount of \$36,000.00 and a *Roof Runoff Structure* in the amount of \$10,500.00

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$212,640.41
Current Request – Waste Storage	\$36,000.00
Current Request – Roof Runoff	\$10,500.00
Balance Remaining	\$165,629.16

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

Gretchen Garth and AnnMarie Stickney own and manage Cherry Valley Dairy Farm. The farm is located in Duvall and totals over 100 acres. Rassmusen Creek (which is a tributary to the Snoqualmie river) flows south-north along the eastern side of the property dairy plans to improve their overall manure management system. The property slopes in a way that much of the rainwater and dairy manure pools in a central area between the barns. This liquid is currently directed into the lagoon, which also creates a capacity issue. The dairy currently is not able to access the covered area in order to store solids. Curbing and a diversion is also needed to prevent leaching when managing manure. New gutters and outlets are needed to redirect roof water runoff and to prevent water from mixing with manure.

This project will install 1920 linear feet of gutters, downspouts and underground outlets on four barns. Gutter, downspout and outlet sizes are specified in NRCS plans, per each building and roof line. This project will also install three waste transfer slabs, with curbing and a diversion in order to keep manure contained and to prevent leaching when scraping and collecting manure from confinement areas.

This project is in collaboration with NRCS, who is also providing design and cost-share support.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION

King Conservation District Board of Supervisors Meeting 07/11/2022

Agenda Action Briefing/Report AI 22-0

Staff seeks Board approval of Landowner Incentive Program cost-share application from Gretchen Garth and AnnMarie Stickney, for a *Waste Storage Facility*, in the amount of \$36,000.00 and a *Roof Runoff Structure* in the amount of \$10,500.00

MOTION

_____ Moved, _____ Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Gretchen Garth and AnnMarie Stickney, for a *Waste Storage Facility*, in the amount of \$36,000.00 and a *Roof Runoff Structure* in the amount of \$10,500.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Gretchen Garth, AnnMarie Stickney		Farm/Business Name: Cherry Valley Farms Dairy	
Mailing Address: 27102 NE Cherry Valley Rd Duvall, WA 98019		Project Address: same	
Phone (home): 425-327-5715 (AnnMarie)		Phone (work/mobile):	
Email Address: ajstickney@gmail.com, gretchen@gr		KCD Staff: Megan Weldon	
Parcel #(s): 1226069023	<input type="checkbox"/> Incorporated <input checked="" type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 104	<input type="checkbox"/> T.A. <input checked="" type="checkbox"/> Farm Plan <input type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Roof Run-off Structure & Waste Storage Facility
Project Completion Date (month and year): 07/2023
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP: also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>The dairy plans to improve their overall manure management system. The property slopes in a way that much of the rainwater and dairy manure pools in a central area between the barns. This liquid is currently directed into the lagoon, which also creates a capacity issue. The dairy currently is not able to access the covered area in order to store solids. Curbing and a diversion is also needed to prevent leaching when managing manure. New gutters and outlets are needed to redirect roof water runoff and to prevent water from mixing with manure. Rassmusen Creek (which is a tributary to the Snoqualmie river) flows south-north along the eastern side of the property.</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>This project will install 1920 linear feet of gutters, downspouts and underground outlets on four barns. Gutter, downspout and outlet sizes are specified in NRCS plans, per each building and roof line. This project will also install three waste transfer slabs, with curbing and a diversion in order to keep manure contained and to prevent leaching when scraping and collecting manure from confinement areas. See NRCS site plan and design.</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>Monitor and repair damaged gutters and downspouts when needed. Monitor concrete curbing and slabs for cracks and damage and repair as needed. It is important to repair cracks and damage in order to prevent manure seepage.</p>

Permits <i>(List all permits required to complete this project):</i> N/A
Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

- A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)? ☒ Yes ☐ No

If yes, please list contract number and BMP below:

Riparian Forest Buffer- 2015-88

- B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs? ☐ Yes ☒ No

Please describe below:

1. King County Cost-share

Please list practices and date installed below:

2. NRCS EQIP (Natural Resources Conservation Service's Environmental Quality Incentive Program)

Please list practices and date installed below:

All projects listed on practice codes will be funded by NRCS (outlets, gutters, waste transfer systems, agitator pump). See list on NRCS payment estimator.

3. Other

Please list agency and describe project:

Other Cost-Share History/Notes:

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant's statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

- ☐ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☐ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

- ☐ A. I understand the lifetime of the BMP is 15 years.
- ☐ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.
- ☐ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I agree to ensure that all applicable local, state, and federal permits are obtained for installation of the BMP for which funds are requested. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details. _____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon verification by the design engineer of the BMP that the BMP was installed as designed. This verification should be provided as written documentation directly from the design engineer. As this practice is co-funded with Natural Resource Conservation Services (NRCS), a copy of the NRCS reimbursement close-out and practice implementation verification can be utilized in lieu of the design engineer verification. Furthermore, I understand that changes to the installation details (attached Job Sheet and Map) must be approved through a Scope of Work Revision Process. Unapproved changes will not be eligible for reimbursement. _____ (Initial Here)

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Gretchen Garth, AnnMarie

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
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FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:



Local Food
Healthy Forests
Clean Water
Better Ground

Job Sheet

Roof Runoff Structure

Cooperator: Cherry Valley Dairy	Lifetime of Practice: 15 years
---------------------------------	--------------------------------

Purpose (check all that apply)	
<input checked="" type="checkbox"/> Improve water quality.	<input checked="" type="checkbox"/> Reduce soil erosion.
<input checked="" type="checkbox"/> Increase infiltration.	<input type="checkbox"/> Protect structures.
<input type="checkbox"/> Increase water quantity.	<input type="checkbox"/> Other. Specify:

Size, length, and type of gutters, and downspouts
Total Length of Gutters, Downspouts, and Outlet Piping: 1920 total feet
<u>Barn 1:</u>
Size of building (sq. ft.): 20,000sq. ft.
Size/Type of gutter: 6k gutters
Length of gutter: 420ft.
Size/Type and Number of downspouts: 6- 4" pvc pipes
Length of downspouts: 15ft. per downspout
<u>Roof 6:</u>
Size of building (sq. ft.): 8,000sq. ft.
Size/Type of gutter: 6k gutters
Length of gutter: 252ft.
Size/Type and Number of downspouts: 6- 4" pvc pipes
Length of downspouts: 16ft. per downspout
<u>Roof 8:</u>
Size of building (sq. ft.): 2,000sq. ft.
Size/Type of gutter: 6k gutters
Length of gutter: 55ft.
Downspout protection plan: All downspouts will be located out of areas where animals can access and damage pipes.
Snow/wind load considerations: N/A

Details of Outlet

Outlet Piping (size, type, length):

Barn 1: Two 6" PVC outlets- 520"

Roof 6: Two 6" PVC outlets- 240"

Roof 8: 4" conveyance pipe 48ft.

Outlet piping must be buried at least 1' (12") underground if buried outlet piping

The outer edge of a vegetated flowpath segment must not overlap with other flowpath segments.

Vegetated Flowpath

Describe vegetation around and downslope of outlet: Vegetation around planned outlets is a mix of forage grasses and Himalayan blackberry.

Length of vegetated flowpath: The minimum length for an outlet flowpath is 50ft.

Does this practice meet the design standards set forth in Appendix C: Small Project Drainage Requirements of the King County Surface Water Design Manual for Basic Dispersion? ☐ YES ☒ N/A

Permits. Are there clearing or grading permits necessary for the project? If so, please list below and include a copy of the permit.

N/A

Operation and Maintenance

- Repair damaged gutters and downspouts immediately
- Keep discharge areas clear of debris

Additional Specifications and Notes:

- Install screens on gutters to keep debris out. Protect downspouts from livestock and machinery
- Install gutters well enough so they are not sheared off by sliding ice or snow
- Do not allow roof runoff to come in contact with manure or any area where livestock have access
- Maintain a vegetative buffer around the barn, this will act as a natural filter
- Outlet roof water downhill from where livestock are confined or manure is stockpiled
- Contact your local utilities before excavation begins
- Slope outlet pipe at a minimum of 6" for every 100'

Landowner Incentive Program Applicant Budget

Cooperator:

Budget Items	Units	Cost
Roof Runoff	1920 feet	\$21,120.00
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$21,120.00

In-Kind Labor/Machinery	# hours	Cost
Manual labor		\$ -
Person with power equipment (i.e. chainsaw)		\$ -
Small Tractor (up to 40 hp)		\$ -
Medium Tractor (40-70 hp)		\$ -
Large Tractor (71 or above hp)		\$ -
Excavator (up to 100 hp)		\$ -
Excavator (over 100 hp)		\$ -
D-4 Cat or equivalent		\$ -
D-6 Cat or equivalent		\$ -
D-7 Cat or equivalent		\$ -
Backhoe		\$ -
Truck (under 2 tons)		\$ -
Truck (2 tons or over)		\$ -
Bobcat		\$ -
4-wheeler or side-by-side		\$ -
Subtotal	0.00	\$ -

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$ 21,120.00
Units	Linear Feet	1,920.00
Cost/Unit		\$ 11.00

Conservation Practice	select BMP (x)	Cost Share Amount
Animal Trails & Walkways		
Aquatic Area Buffer		
Aquatic Area Buffer (WCC)		
Buffer Fencing		
Building Relocation for Aquatic Area/Buffer		
Bulkhead Removal (Freshwater, Marine)		
Cover Crops		
Cross Fencing		
Forest Health Management		
Heavy Use Area Protection		
Pasture & Hay Planting		
Roof Runoff Management	x	\$ 10,560.00
Stream Crossing		
Subsurface Drain		
Upland Wildlife Habitat Management		
Waste Storage Facility		
Watering Facility		

Amount eligible for reimbursement
(based on 2015 rates)

\$10,560.00

Cherry Valley Dairy Projects

Roof Runoff Project

NRCS cost estimator = \$14,561.56

A 66% reimbursement= \$9,610.63

*KCD amount eligible for reimbursement= \$10,560

**This amount is based on the total linear footage (including downspouts and outlet piping)*

Total reimbursement (NRCS and KCD combined)= **\$20,170.63**

Waste Transfer/Storage Project

NRCS cost estimator = \$8,879.41

A 66% reimbursement= \$5,860.41

*KCD amount eligible for reimbursement= \$36,000

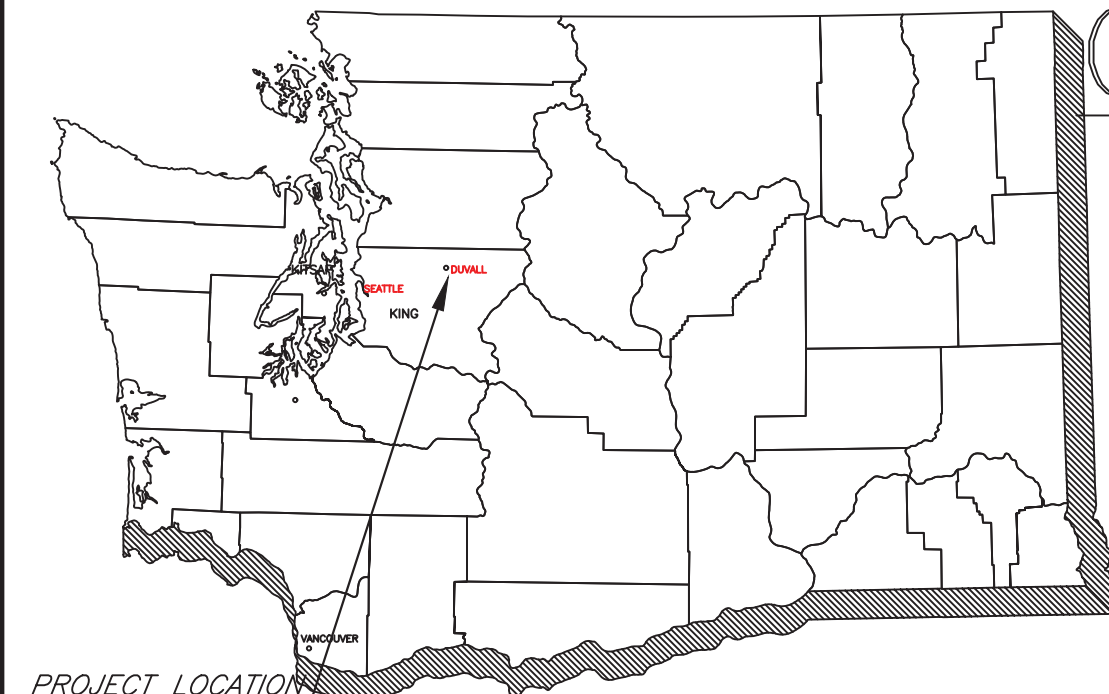
**This amount is based on the animals in operation, with a maximum of 24 cows)*

Total reimbursement (NRCS and KCD combined)= **\$41,860.41**

CHERRY

ROOF

UNITED
NATURAL



PROJECT LOCATION
Sec 12, T26N., R06E

WASHINGTON

PROJECT LOCATION

INDEX OF DRAWINGS

SHEET NO. TITLE

1. COVER SHEET
2. PLAN VIEW
3. LAYOUT

GENERAL NOTES

1. The attached NRCS Construction and Material Specifications are part of this plan and shall govern the installation of this project.
2. This project shall be constructed to the lines and grades shown in the drawings and detailed in the Construction Specifications.
3. The project will be operated and maintained as described in the Operation and Maintenance Plan prepared for this project.



PROJECT LOCATION
26808 Cherry Valley Rd.
Duvall, WA 98019
Parcel Number: 122606923
47.74885/-121.97848

Roof 1
 1. Install 6" K-Line Gutters - 420'
 2. Install 6 - 4" PVC Downspouts - 90'
 3. Install 2 - 6" PVC Underground Outlets - 520'

Barn 1 Slab
 Install Waste Transfer Slab - Re-grade - 525 ft2

Barn 8 Slab
 Install- Waste Transfer Curb 6" w/ footing
 Concrete Speed Bump - 50'

Roof 8 East
 Install 6" K-Line Gutter - 55' (East)
 Install 4" PVC Conveyance Pipe - 48'

Roof 6 West
 1. Install 6" K-Line Gutters - 126'
 2. Install 3 - 4" PVC Downspouts - 60'
 3. Install 4" PVC Conveyance - 25'
 4. Install 6" PVC Underground Outlet - Regular Install - 140'
 5. Install 6" PVC Underground Outlet - Difficult Install - 100'

Barn 6 Slab
 1. Waste Transfer Slab/Re-grade - 425 ft2
 2. Waste Transfer Pipe - 4" PVC Pipe - 120' (168lb)
 3. Waste Transfer Pipe-Complex Installation - 92' (129lb)

LEGEND

6" K-Line Gutter - - - - -
 4" PVC Conveyance Line - - - - -
 4" PVC Waste Transfer Pipe - - - - -
 6" PVC Underground Outlet Regular Installation - - - - -
 6" PVC Underground Outlet Difficult Installation Gravel - - - - -
 6" PVC Underground Outlet Difficult Installation Concrete - - - - -
 Waste Transfer Concrete Slab or Curb New - - - - -
 Waste Transfer Concrete Slab Re-grade - - - - -
 Diversion - - - - -

Roof 1
 1. Install 6" K-Line Gutters - 420'
 2. Install 6 - 4" PVC Downspouts - 90'
 3. Install 2 - 6" PVC Underground Outlets - 520'

Barn 1 Waste Transfer Slab
 Install Waste Transfer Slab - Re-grade- 525 ft2










Barn 8 Waste Transfer Curb
 Install- Waste Transfer Curb 6" w/ footing
 Concrete Speed Bump- 50'

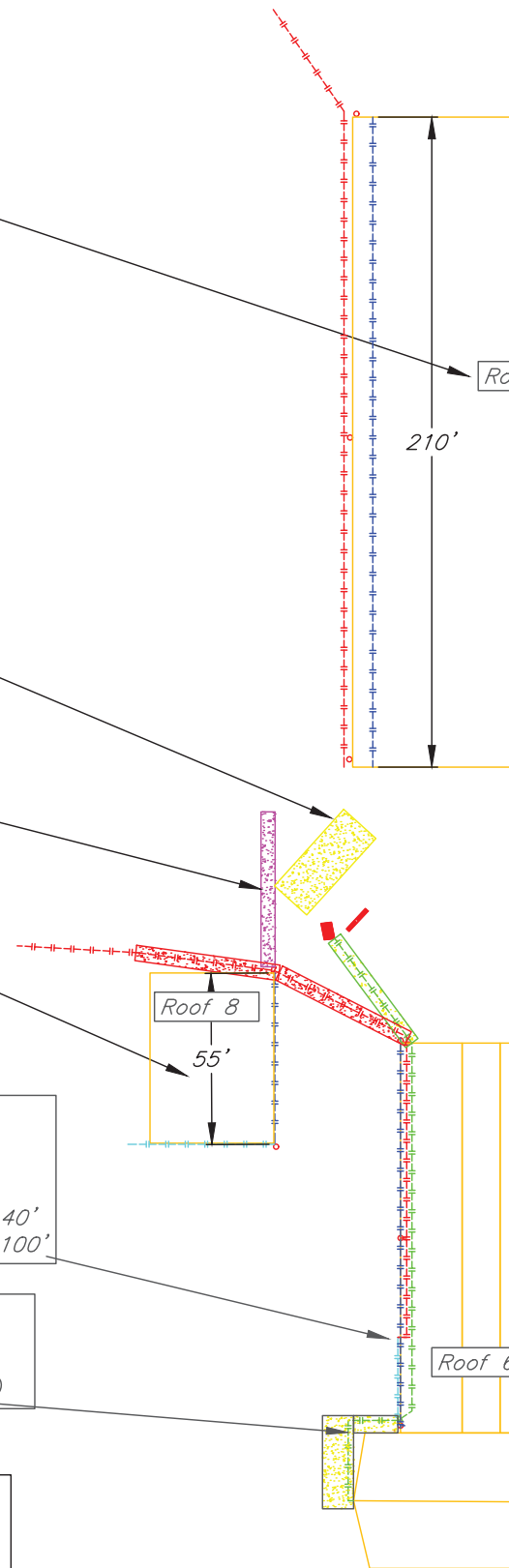
Roof 8 East
 Install 6" K-Line Gutter - 55' (East)
 Install 4" PVC Conveyance Pipe - 48'

Roof 6 West
 1. Install 6" K-Line Gutters- 126'
 2. Install 3 - 4" PVC Downspouts - 60'
 3. Install 4" PVC Conveyance - 25'
 4. Install 6" PVC Underground Outlet - Regular Install - 140'
 5. Install 6" PVC Underground Outlet - Complex Install - 100'

Barn 6 Slab
 1. Waste Transfer Slab/Re-grade - 425 ft2
 2. Waste Transfer Pipe- 4" PVC Pipe - 120' (168lb)
 3. Waste Transfer Pipe-Complex Installation - 92' (129lb)

LEGEND

6" K-Line Gutter 
 4" PVC Conveyance Line 
 4" PVC Waste Transfer Pipe 
 6" PVC Underground Outlet Regular Installation 
 6" PVC Underground Outlet Complex Installation Gravel 
 6" PVC Underground Outlet Complex Installation Concrete 
 Waste Transfer Concrete Slab or Curb New 
 Waste Transfer Concrete Slab Re-grade 
 Diversion 



Practice Code	Program	Practice Name	Practice Component	Scenario #	Units	Payment/ Unit	Planned (amount)	Year	DRAFT Max Incentive Dollars	
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	90.0		\$ 587.70	Bar
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	470.0		\$ 3,069.10	Bar
558		Roof Runoff Structure	Roof Gutter, small		Ft	9.01	420.0		\$ 3,784.20	Bar
									\$ -	
									\$ -	
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	35.0		\$ 228.55	Bar
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	45.0		\$ 293.85	Bar
620		Underground Outlet	Outlet Pipe <=6 inch, Complex Install		Ft	7.38	80.0		\$ 590.40	Bar
620		Underground Outlet	Outlet Pipe <=6 inch, Complex Install		Ft	7.38	80.0		\$ 590.40	Bar Cor
558		Roof Runoff Structure	Roof Gutter, small		Ft	9.01	126.0		\$ 1,135.26	Bar
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	35.0		\$ 228.55	Bar
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	60.0		\$ 391.80	Bar
620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	150.0		\$ 979.50	Bar
620		Underground Outlet	Outlet Pipe <=6 inch, Complex Install		Ft	7.38	100.0		\$ 738.00	Bar Cor
558		Roof Runoff Structure	Roof Gutter, small		Ft	9.01	126.0		\$ 1,135.26	Bar
									\$ -	
558		Roof Runoff Structure	Roof Gutter, small		Ft	9.01	55.0		\$ 495.55	Bar

620		Underground Outlet	Outlet Pipe <=6 inch		Ft	6.53	48.0		\$	313.44	Bar
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1920.0

\$

14,561.56

NRCS reimbursement 66%

\$

9,610.63

KCD Budget

\$10,560

Total eligible reimbursement=

\$

20,170.63

634		Waste Transfer	Transfer Slab		SqFt	5.23	420.0		\$	2,196.60	Bar
634		Waste Transfer	Transfer Slab		SqFt	5.23	476.0		\$	2,489.48	Bar
634		Waste Transfer	Transfer Slab		SqFt	5.23	425.0		\$	2,222.75	Bar
634		Waste Transfer	PVC Pipe, less than or equal to 8 in dia, adverse installation conditions		Lb	7.38	140.0		\$	1,033.20	Bar (10
634		Waste Transfer	PVC Pipe, less than or equal to 8 inch dia		Lb	2.41	168.0		\$	404.88	Bar (12
634		Waste Transfer	Transfer curb, 6 inch tall, with footing		Ft	10.65	50.0		\$	532.50	Bar

\$

8,879.41

NRCS reimbursement 66%

\$

5,860.41

KCD reimbursemen

\$36,000

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MATERIAL SPECIFICATION
MS-201: “CONCRETE AGGREGATE”

201.1 SCOPE

This specification governs the quality of fine aggregate and coarse aggregate used in Portland cement concrete.

201.2 QUALITY

The coarse and fine aggregate shall conform to the durability and gradation requirements of ASTM Specification C-33.

201.3 REACTIVITY WITH ALKALINES

The potential reactivity of aggregates with the alkalis in cement shall conform to the requirement in ASTM Specification C-33, Appendix A1.

201.4 STORING AND HANDLING

Aggregate of each class and size shall be stored and handled by methods that prevent segregation of particle sizes or contamination by intermixing with other materials.

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MATERIAL SPECIFICATION
MS-202: “PORTLAND CEMENT”

202.1 SCOPE

This specification governs the quality of Portland cements.

202.2 QUALITY

Portland cement shall conform to the requirements of ASTM Specification C-150 for the specified types of cement. Type IIA shall be used, unless another type is specified on the drawings.

202.3 STORAGE AT THE CONSTRUCTION SITE

Cement shall be stored so that it is protected from weather, dampness or other destructive agencies. Cement that is partially hydrated or otherwise will be rejected.

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MATERIAL SPECIFICATION

MS-203: "CONCRETE"

203.1 SCOPE

This specification governs the quality of concrete mixes.

203.2 QUALITY

Concrete mixes shall be composed of Portland cement, fine and coarse aggregate and water. An air-entraining admixture may be used.

- a. Portland cement shall conform to the requirements of Material Specification MS-202.
- b. Fine and coarse aggregates shall conform to the requirements of Material Specification MS-201. The aggregates shall be handled in a manner to prevent contamination and segregation.
- c. Water shall be clean and free from harmful chemicals (suitable for drinking).
- d. Air-entraining admixtures shall conform to the requirements of ASTM C-260, Air Entraining Admixtures for Concrete.
- e. Class F fly ash meeting ASTM C-618 may be used in the concrete mix to replace not more than 15% of the cement by weight. An independent testing laboratory shall test pozzolanic materials with test results included with the submittal of design mix.
- f. Water-reducing and set-retarding admixtures may be used upon satisfactory submission of test results using a trial mix design and manufacturer's certification of the admixture. The admixtures shall conform to ASTM C-494.
- g. The concrete mix shall indicate evidence of meeting or exceeding the following criteria unless otherwise shown on the drawings.
 - (1) Minimum strength: 3000 lb.
 - (2) Slump: ASTM C-143, 3-5 inches.
 - (3) Cement: ASTM C-150, Type I, IA, II, IIA, V or VA.
Minimum content: 6 sacks per CY concrete (94 lb. sacks).
 - (4) Water: Clean potable and free of foreign matter.
Maximum water-cement ratio; 0.45 - 0.55 (6 gallons per sack of concrete).

- (5) Aggregates: Clean durable and within the grading limits of ASTM C-33.

Coarse Aggregates; maximum size shall be 3/4 inch unless otherwise stated on the drawing.

Fine Aggregates; fineness module shall be greater than 2.3 but less than 3.1.

Fine to Total Aggregate Ratio; greater than 0.35 but less than 0.45.

- (6) If Air Entrained, concrete mixes shall have 5-8% volume of air using an air entraining admixture.

203.3 INSPECTION AND TESTING

The following is a partial listing of the common American Society for Testing and Materials, ASTM, test requirements for concrete that may be used to verify concrete quality:

- a. ASTM C-31, "Making and Curing Concrete Compressive and Flexure Strength Test Specimens in the Field."
- b. ASTM C-33, "Concrete Aggregates."
- c. ASTM C-39, "Compressive Strength of Cylindrical Concrete Specimens."
- d. ASTM C-94, "Ready-Mix Concrete."
- e. ASTM C-143, "Slump of Portland Cement Concrete."
- f. ASTM C-150, "Portland Cement."
- g. ASTM C-172, "Sampling Freshly Mixed Concrete."
- h. ASTM C-231, "Air Content of Freshly Mixed Concrete by the Pressure Method."
- i. ASTM C-260, "Air Entraining Admixtures for Concrete."
- j. ASTM C-494, "Chemical Admixtures for Concrete."

The technical representative shall have free entry to the plant to review the equipment used for mixing, dispersing, weighing, agitating and delivering concrete. Proper facilities shall be provided for inspecting materials, equipment and processes and to obtain samples of the ingredients and concrete. All tests and inspections will be conducted so as not to unnecessarily interfere with the manufacture and delivery of the concrete.

203.4 HANDLING AND MEASURING MATERIALS

Materials shall be stored and handled in a manner that will prevent degradation, segregation, contamination or intermixing of materials before measurement.

Scales for weighing aggregates and cement shall be beam or springless dial type, clean and operating within 1 percent accuracy for cement and 2 percent accuracy for aggregates.

All materials entering into the concrete shall be mechanically measured by weight except the air entraining admixture and water, which may be measured by volume.

203.5 MIXERS AND MIXING

Concrete may be furnished by batch mixing at the work site or by ready-mix methods.

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

**MATERIAL SPECIFICATION
MS-206: “PLASTIC PIPE”**

206.1 SCOPE

This specification governs the quality of plastic pipe and fittings.

206.2 QUALITY

The pipe shall conform to American Society of Testing Material Specification (ASTM) for the manufacture of this pipe.

<u>Material</u>	<u>SDR¹</u> NRCS or ASTM	<u>SCH 40 & 80</u> ASTM	<u>PIP²</u> NRCS
Acrylonitrile-Butadiene- Styrene, ABS	D-2282 430-DD 430EE	D-1527	430-DD 430-EE
Polyethylene, PE	D-2239 D-3035 430-DD 430-EE	D-2104 D-2247	
Polyvinyl Chloride, PVC	D-2241 430-DD 430-EE	D-1785	430-DD

*For pipelines conveying potable water, the material also requires approval of the National Sanitary Foundation, NSF.

¹ SDR, Standard Dimension Ratio

² PIP, Plastic Irrigation Pipe

206.3 FITTINGS

The fittings shall be of a material, size and pressure rating compatible with the pipe materials and withstand a working pressure equal to or greater than the pipe.

206.4 JOINTS

- a. Solvent welding of joints shall be in accordance with the recommendation of the pipe manufacturer.
- b. Rubber gasket joints and the gasket material shall conform to ASTM D-3139.
- c. All joints and connections shall withstand a working pressure equal to or greater than the pipe.

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

**MATERIAL SPECIFICATION
MS-209: “WOVEN AND NON-WOVEN FABRICS”**

209.1 SCOPE

This specification governs the quality of structural woven and non-woven fabrics.

209.2 FABRIC

The fabric material shall be polypropylene material with long chain polymeric filaments or fibers. The material properties are defined in the following tables and the type of material selected is shown on the drawings

a. Table 1, Non-Woven Fabric Material

Property	Test method	Class I	Class II	Class III	Class IV ^{3/}
Tensile strength (lb) ^{1/}	ASTM D 4632 grab test	180 minimum	120 minimum	90 minimum	115 minimum
Elongation at failure (%) ^{1/}	ASTM D 4632	≥ 50	≥ 50	≥ 50	≥ 50
Puncture (pounds)	ASTM D 4833	80 minimum	60 minimum	40 minimum	40 minimum
Ultraviolet light (% residual tensile strength)	ASTM D 4355 150-hr exposure	70 minimum	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTM D 4751	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}
Permittivity sec ⁻¹	ASTM D 4491	0.70 minimum	0.70 minimum	0.70 minimum	0.10 minimum

1/ Minimum average roll value (weakest principal direction).

2/ U.S. standard sieve size.

3/ Heat-bonded or resin-bonded geotextile may be used for classes III and IV. They are particularly well suited to class IV. Needle-punched geotextiles are required for all other classes.

b. Table 2, Woven Fabric Material

Property	Test method	Class I	Class II & III	Class IV
Tensile strength (pounds) ^{1/} grab test	ASTM D 4632 principal direction	200 minimum in any principal direction	120 minimum in any principal direction	180 minimum in any principal direction
Elongation at failure (percent) ^{1/} grab test	ASTM D 4632	<50	<50	<50
Puncture (pounds) ^{1/}	ASTM D 4833	90 minimum	60 minimum	60 minimum
Ultraviolet light (% residual tensile strength)	ASTM D 4355 150-hr exposure	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTM D 4751 no smaller than 0.212 mm (#70) ^{2/}	As specified, but no smaller than 0.212 mm (#70) ^{2/}	As specified, but no smaller than 0.212 mm (#70) ^{2/}	As specified, but
Percent open area (percent)	CWO-02215-86	4.0 minimum	4.0 minimum	1.0 minimum
Permittivity sec ⁻¹	ASTM D 4491	0.10 minimum	0.10 minimum	0.10 minimum

1/ Minimum average roll value (weakest principal direction).

2/ U.S. standard sieve size.

Note: CWO is a USACE reference.

209.3 ENVIROMENTAL RESISTANCE

The fabric shall be inert to commonly encountered chemicals within a pH range of 4 to 10. The ultra-violet light resistance shall not be less than the percentage shown for the specified fabric. The fabric shall also be resistant to mildew, rot and damage caused by rodents.

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

MATERIAL SPECIFICATION

MS-211: “BEDDING”

211.1 SCOPE

This specification governs the quality of bedding material used in the foundation of pipelines, conduits and structures.

211.2 QUALITY

Soil material, fine gravel or coarse gravel specified as bedding material shall be durable, non-compressible and be within the grading limits of the Unified Soil Classification System, USCS. The ASTM specifications for classifying soils are: ASTM D-2487, Classification of Soils for Engineering Purposes, and ASTM D-2488, Standard Practice for Description and Identification of Soils (Visual Manual Procedure).

211.3 GRADATION

The following table lists some general properties of materials suitable for bedding. Gradation is unique for each soil in the USCS. The bedding requirements are site specific and shall be shown on the drawings using an identification symbol of the USCS.

Material	USCS	S.G. (Min.)	Size (Max.)
Soil	SW,SP,SM,SC,ML,CL	1.75	#10 Sieve
Fine Gravel	SW,SP,SM,SC	2.00	3/4-inch
Coarse Gravel	GW,GP,GM,GC	2.40	3-inch
	SW,SP,SM,SC		

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MATERIAL SPECIFICATION

MS-212: "ROCK"

212.1 SCOPE

This specification governs the quality of rock to be used for rock structures or rock surfacing.

212.2 QUALITY

Individual rock fragments shall be dense, sound and free from cracks, seams and other defects conducive to accelerated weathering. The rock fragments shall be angular to sub-rounded in shape. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment. Rounded river rock is not acceptable for material used as rock riprap.

The rock shall have the following properties:

- a. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.
- b. Absorption not more than 2 percent by weight.

The bulk specific gravity and absorption shall be determined by ASTM Method C-127.

Rock that fails to meet these requirements may be accepted only if similar rock from the same source has been demonstrated to be sound after 5 years or more of service under conditions of weather, wetting and drying, and erosive forces similar to those anticipated.

212.3 GRADATION

The rock shall conform to gradation limits shown on the plan.

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MATERIAL SPECIFICATION
MS-213: “STEEL REINFORCEMENT”

213.1 SCOPE

This specification governs the quality of steel reinforcement for reinforced concrete.

213.2. QUALITY

Reinforcing steel shall be free from rust, oil grease, paint or other deleterious matter.

Steel bars for concrete reinforcement requiring bends shall be deformed billet-steel bars conforming to ASTM Specification A-615, Grade 40 or Grade 60.

Straight steel bars shall be deformed bars conforming to one of the following specifications:

Deformed Billet-Steel Bars for Concrete Reinforcement (Grade 40 or Grade 60) - ASTM Designation A-615.

Rail-Steel Deformed Bars for Concrete Reinforcement (Grade 50 or Grade 60) - ASTM Designation A-616.

Axle-Steel Deformed Bars for Concrete Reinforcement (Grade 40 or Grade 60) - ASTM Designation A-617.

Fabricated steel bar mats shall conform to the requirements of ASTM Specification A-184.

Welded steel wire fabric reinforcement shall conform to the requirements of ASTM Specification A-185.

Welded deformed steel wire fabric for concrete reinforcement shall conform to the requirements of ASTM Specification A0497.

Cold-drawn steel wire reinforcement shall conform to the requirements of ASTM Specification A-82.

Deformed steel wire for concrete reinforcement shall conform to the requirements of ASTM Specification A-496.

213.3 DIMENSION OF WELDED WIRE FABRIC

Gauges, spacing and arrangement of wires in welded steel wire fabric shall be as defined in ACI Standard 315 of the American Concrete Institute for the specified style designations.

213.4 STORAGE

Steel reinforcement stored at the site of the work shall be stored above the ground surface on platforms, skids, or other supports and shall be protected from mechanical injury and corrosion.

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CONSTRUCTION SPECIFICATION
CS-01: "MOBILIZATION & DEMOBILIZATION"

1.1 SCOPE

The work shall consist of mobilizing equipment, supplies and securing bonds and permits necessary to do the work as stated in the contract and/or agreement and demobilization of excess materials and equipment from the work site.

1.2 FORCES AND EQUIPMENT

Mobilization may include costs for transporting personnel, equipment, operating supplies to the site, establishment of necessary facilities for the contractors operation and any permits, insurance and/or bonds required to do the work.

Demobilization may include the removal of equipment and facilities that were necessary to do the work.

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CONSTRUCTION SPECIFICATION
CS-02: "POLLUTION CONTROL"

2.1 SCOPE

The work shall consist of performing work to control soil erosion, sedimentation, petroleum, dust and smoke from becoming air and/or water pollutants during construction.

2.2 MATERIAL SPECIFICATIONS

All permanent works shall meet the requirements of the applicable Washington Material Specifications. Temporary works which are to be removed may be of a lesser quality.

2.3 EROSION AND SEDIMENT CONTROL MEASURES AND WORKS

In addition to the measures shown on the drawings, erosion and sedimentation shall be controlled at the work site by use of a single or a combination of the following measures:

Staging of Earthwork Activities - The excavation and moving of soil materials shall be scheduled so that the smallest possible areas will be unprotected during construction activities.

Seeding - Seedlings to protect all disturbed areas shall be done in a timely manner in accordance with the methods common to the geographic area.

Mulching - Mulching may be used to provide temporary protection to soil surfaces from erosion.

Diversions - Diversions can be used to divert water away from work areas and/or to collect runoff from work areas for treatment and safe disposition.

Stream Crossings - Culverts or bridges shall be used where equipment is not allowed to ford streams.

Sediment Basins - Sediment basins can be used to collect and store sediment from eroding areas to protect properties and streams down slope from the construction site.

Sediment Filters - Straw bale filters or geotextile sediment fences shall be installed to trap sediment on-site from areas subject to soil erosion. Sediment filters shall be anchored with 2x2 stakes and shall have a minimum burial depth of 6 inches to control erosion under or around them. The sediment filters shall be removed when permanent measures are installed.

Burning - Local and state regulations concerning the burning of brush or slash or disposal of other materials shall be adhered to. Fire prevention measures shall be taken to prevent the start or spreading of fires which result from construction activities.

Dust Control - All public access or haul roads used by the contractor during construction activities project shall be sprinkled or otherwise treated to fully suppress dust.

Staging Equipment - All construction equipment shall be staged in a location and manner to minimize air, soil and water pollution.

Storage of Fuel and Lubricants - All fuel and lubricants shall be stored in containers and areas that are in conformance with the Washington State Department of Ecology and local regulations.

Servicing and Refueling Equipment - All fuel and lubricants used in the servicing of construction equipment shall be done in a manner that avoids spills and over filling. The Washington State Department of Ecology shall be notified immediately of any spill and the operator shall contain the spillage.

Sanitary Facilities - Sanitary facilities such as chemical toilets shall be located to prevent contamination of surface or subsurface water.

2.4 MAINTENANCE, REMOVAL AND RESTORATION

All pollution control measures shall be adequately maintained in a functional condition as long as needed during the construction operation. All temporary measures shall be removed and the site restored to the original conditions as practicable.

2.5 PERMITS AND REGULATIONS

All pollution control measures shall be consistent with all permits issues for the practice(s) being installed.

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CONSTRUCTION SPECIFICATION

CS-03: "CLEARING"

3.1 SCOPE

The work shall consist of the clearing and disposal of trees, snags, logs, brush, shrubs, stumps, vegetation or other and rubbish from the designated areas.

3.2 REMOVAL

Unless otherwise shown on the drawings, tree stumps and other woody vegetation shall be cut off so that the remains shall not extend more than 12 inches above natural ground surface.

3.3 SALVAGE

Timber to be salvaged shall be cut to planned lengths and hauled to the loading area.

Brush piles for wildlife shall be established as shown on the drawings.

3.4 DISPOSAL

Where brush piles for wildlife are not specified on the drawings, cleared materials shall be disposed of by burning or burying at selected locations approved by the landowner and the technical representative in accordance with all local, state and federal regulations. Materials to be buried shall be placed at least 2 feet below the surrounding ground line and have a minimum of 2 feet of cover with the finished surface free of depressions and graded to drain.

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CONSTRUCTION SPECIFICATION

CS-06: "STRIPPING"

6.1 SCOPE

The work shall consist of removing vegetation, topsoil and other undesirable materials from borrow areas and foundations for structures and earth fills.

6.2 GENERAL

The stripping shall extend to a depth as shown on the drawings. Excavated earth material deemed satisfactory by the technical representative may be used for earth fill. All waste material shall be disposed of in areas shown on the drawings or as approved by the landowner and technical representative. Stripped material suitable for topsoil shall be stockpiled and spread over disturbed areas as shown on the drawings or as approved by the technical representative.

6.3 STRIPPING FOUNDATIONS

All foundations for structures and/or earthfill shall be stripped of vegetation, roots and unconsolidated soil. The technical representative shall approve all stripped foundations prior to placement of earth fill and/or structures. The stripped surfaces shall be reasonably smooth and free of unconsolidated or loose soil. Unless otherwise shown on the drawings, the side slopes for foundations shall be 1:1, or flatter.

6.4 STRIPPING BORROW AREAS

The areas from which borrow is to be taken shall be stripped of vegetation, roots and other unsuitable material to a sufficient depth to expose material suitable for the earth fill.

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CONSTRUCTION SPECIFICATION

CS-13: "EXCAVATION AND BACKFILL OF TRENCHES FOR CONDUITS AND PIPELINES"

13.1 SCOPE

This specification applies when trench excavation is necessary for installation of a conduit and/or pipeline for spillways, irrigation systems, drainage systems, animal waste systems and other installations where liquid is conveyed and discharged in an underground conduit or pipeline.

13.2 EXCAVATION

The bottom width, side slopes, and gradeline of the trench excavation shall be to the dimensions and lines shown on the drawings.

Excavated trenches shall be within state and local laws and regulations for trenching. Trenches shall be supported as necessary to safeguard the work and workers. Trench supports shall prevent sliding or settling of the adjacent ground and avoid damage to improvements. The width of the excavation shall be increased, if necessary, to provide space for sheeting, bracing, shoring, and other supporting installations.

13.3 BACKFILL

- a. The initial backfill shall be select material, placed and compacted around and above the conduit to the specified depth and density, taking care not to displace or damage the conduit or its protective coating.
- b. The final backfill shall be the material from the trench excavation and shall be compacted to the density of the surrounding material.
- c. Backfill material shall contain no frozen soil, sod, brush, roots, or other perishable material.
- d. Rock fragments greater than 3 inches shall not be placed within 2 feet of the pipe.
- e. The minimum depth of cover on all pipelines shall be as shown on the drawings.

13.4 FINAL GRADING

All disturbed areas shall be graded without surface depressions to blend with the surrounding area.

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CONSTRUCTION SPECIFICATION

CS-16: "EARTH FILL, CLASS U"

16.1 SCOPE

The work shall consist of placing of earth fills where compaction other than which results from hauling and placing is not required.

16.2 GENERAL

The fill may contain rocks, woody and vegetative materials, provided they do not cause voids or excessive settlement. Non-organic material is not permitted. Hard objects such as roots, stumps, brush, and rocks shall be buried to a minimum depth of 2 feet below the finished grade.

16.3 FINAL GRADING

The earth fill surface shall be graded, sloped to drain, without surface depressions and blended with the surrounding area.

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CONSTRUCTION SPECIFICATION

CS-21: "DIVERSION"

21.1 SCOPE

The work shall consist of constructing a channel across the slope, with a supporting ridge on the lower side as shown on the drawings, or as staked in the field by the technical representative.

21.2 MATERIAL

The earth material used in constructing the diversion shall be obtained from the diversion channel, designated borrow areas, or other required excavation. The fill matrix shall contain no frozen earth material, rock fragments greater than 4 inches in diameter, sod, brush, or other foreign material.

21.3 CONSTRUCTION

- a. The foundation of all fill sections shall be prepared so that a good bond is obtained between the base and fill material. Heavy sod shall be stripped a minimum 6-inch depth and the area scarified. Existing banks shall be cleared of all debris and sloped to a 1:1 slope or flatter before fill placement. All dead furrows and gullies to be crossed shall be filled and compacted. All old terraces, fence rows, and obstructions that will interfere with the diversion shall be removed. All trees, brush, stumps, and vegetation shall be removed and disposed at sites shown on the drawings or as approved by the technical representative.
- b. Fill material shall be placed in uncompacted layers of 6 inches or less. Each layer shall be compacted by the construction equipment in such a manner that the entire surface of each fill will be traversed by one wheel tread or track of the equipment.
- c. When stated on the drawing, the topsoil shall be removed, stockpiled, and replaced after initial grading.
- d. The top of the constructed ridge shall not be lower at any point than the design elevation plus 20 percent, but not less than 6 inches above the design elevation for settlement.

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CONSTRUCTION SPECIFICATION
CS-41: “REINFORCED CONCRETE”

41.1 SCOPE

The work shall consist of furnishing, forming, placing, finishing, and curing Portland cement concrete. The structures shall be constructed at the location and to the line and grades as shown in the plan.

41.2 MATERIALS

The materials required for reinforced concrete are detailed in material specification MS-201, Concrete Aggregates; MS-202, Portland Cement; MS-203, Concrete; and MS-213, Steel Reinforcement.

41.3 HANDLING AND STORAGE

Materials shall be stored and handled in a manner that will minimize degradation, segregation, contamination or intermixing of materials.

41.4 MIXERS AND MIXING

Mixers shall be capable of thoroughly mixing the concrete ingredients into a uniform mass within the specified mixing time and discharge without segregation. Each mixer or agitator shall bear a manufacturer's rating plate indicating the rated capacity and recommended speeds of rotation, and shall be operated in accordance with the manufacturer's recommendations.

Concrete shall be uniform and thoroughly mixed when placed.

Water in excess of the amount specified in the mix design shall not be permitted. This includes any water added at the site.

41.5 TRUCK-MIXED CONCRETE

When concrete is mixed in a truck mixer loaded to its maximum capacity, the number of revolutions of the drum or blades at mixing speed shall not be less than 70 nor more than 100 RPM.

The resultant concrete mix must produce a dense and durable concrete during curing. The ready-mix concrete shall be mixed and delivered in accordance to ASTM C-94, "Standard Specification for Ready-Mix Concrete".

41.6 SITE PREPARATION

Prior to placement of concrete, the forms, reinforcing steel, and subgrade shall be free of chips, sawdust, debris, water, ice, snow, extraneous oil, mortar, rust or other harmful substances and/or coatings. Rock surfaces shall be cleaned by wire brushing, wet sand-blasting, air water jets or other means satisfactory to the technical representative. Earth surfaces shall be firm and damp before placing concrete. Placement of concrete on mud, dried earth, uncompacted fill or frozen subgrade will not be permitted.

41.7 SUBGRADE PREPARATION

The foundation area shall be cleared of all vegetation, organic material and rocks with a dimension greater than 2 inches. If fill material is required, it shall be placed in horizontal layers with a maximum lift of 4 inches before compaction. The moisture content of the earth fill material shall be controlled so that a firm dense foundation can be achieved. Earth fill sections with a height of 2 feet or greater will be constructed using the compaction requirements of NRCS Construction Specification CS-14, Earth Fill Class A or CS-15, Earth Fill Class S.

41.8 FORMS

Forms shall be wood, plywood, steel or other approved materials and shall be mortar tight. The forms and associated falsework shall be substantial and unyielding conforming to dimensions of the finished grade. Form surfaces shall be smooth and free from holes, dents, sags, or other irregularities. Forms shall be coated with a nonstaining form release agent before being set into place.

All permanently exposed concrete edges shall be chamfered 3/4" unless otherwise indicated on the drawings.

Items to be embedded in concrete shall be positioned accurately and anchored firmly.

Metal ties or anchorages within the forms shall be equipped with cones, she-bolts or other devices that permit their removal without injury to the concrete. Ties designed to break off below the surface of the concrete shall have removable cones.

Steel tying and form construction adjacent to fresh concrete shall not be started until the concrete has cured at least 12 hours.

41.9 STEEL REINFORCEMENT

The steel reinforcement shall be grade 40 deformed steel bars unless otherwise specified on the drawings. The steel shall be securely tied and positioned to prevent movement during the placement of concrete. The reinforcing steel in slabs on grade shall be supported on blocks or

chairs. All blocks shall have a strength equal to or greater than the 28-day compressive strength of the concrete.

The length of splices shall be 30 diameters of the steel bar unless otherwise specified on the drawings. Welded splices are not permitted.

The bends shall be standard bends with the length and radius as specified by the Concrete Reinforcing Steel Institute, CRSI, and/or the Portland Cement Association, PCA.

41.10 CONVEYING

The maximum length of time between introduction of the cement to the aggregates and placement of the concrete in the forms shall not exceed 1-1/2 hours for concrete temperatures below 85°F or 45 minutes for concrete temperatures above 85°F.

Concrete shall not be dropped more than 5 feet vertically unless suitable equipment is used to prevent segregation.

41.11 PLACING

Concrete shall not be placed until the subgrade, forms, and steel reinforcement have been inspected and approved by the technical representative.

The person responsible for construction shall have all equipment and materials required for proper consolidation and curing, available at the site ready for use before placement of concrete begins.

The technical representative shall be notified a minimum of 24 hours prior to placement to inspect the reinforcing steel, forms, subgrade, curing preparation, vibrating equipment and plans for placement.

The depositing of concrete shall be regulated so that concrete may be consolidated with a minimum of lateral movement, segregation, laitance, or honey-combing. Hoppers and chutes shall be used as necessary to prevent segregation and the splashing to mortar on the forms and reinforcing steel above the placing level. Temporary stays and braces can be removed when no longer needed.

41.12 LAYERS

Slab concrete shall be placed to design thickness in one continuous layer. Formed concrete in walls and columns shall be placed in horizontal layers not to exceed 20 inches.

Successive layers shall be placed at a fast enough rate to prevent the formation of “cold joints”. If a successive layer cannot be placed in a timely manner, a standard type construction joint shall be used between layers.

41.13 CONSOLIDATION

Each concrete layer shall be completely consolidated by spading, hand tamping, or mechanical

vibrators as necessary to ensure smooth, dense concrete along form surfaces, in corners and around embedded items without segregation or laitance. Vibration shall extend into the previously placed layers of fresh concrete and laterally to ensure effective bond between layers.

The use of vibrators to transport concrete in the forms shall not be permitted.

Vibration shall not be applied directly to the reinforcement steel, forms, or to concrete that has begun to set.

41.14 CONSTRUCTION JOINTS

Construction joints shall be made at locations with the dimensions shown on the drawings.

Surfaces of construction joints shall be cleansed of all unsatisfactory concrete, laitance, coatings, stains, or debris by washing and scrubbing with a wire brush or wire broom and kept moist for at least one hour prior to placement of new concrete.

In addition, the top surfaces of walls and columns shall be immediately and carefully protected from any condition that might adversely affect curing of concrete.

Where lap joints are used on horizontal slabs, the width on each side of the joint shall not be less than 6 inches and the depth shall be equal to one-half the slab thickness.

41.15 EXPANSION AND CONTRACTION JOINTS

Expansion and contraction joints shall be made only at locations shown on the drawings. Exposed edges on these joints shall be carefully tooled, chamfered and free of mortar and concrete spillage.

Preformed expansion joint filler shall be held firmly in the correct position as the concrete is placed and shall be left exposed for its full length with clean and true edges.

41.16 REMOVAL OF FORMS

Forms shall not be removed before the expiration of the following minimum time intervals after placement of the concrete, exclusive of days when the minimum temperature of air adjacent to the concrete is below 40 degrees Fahrenheit.

<u>Element</u>	<u>Time</u>
Beams, arches - supporting forms and shoring	14 days
Conduits, deck slabs - supporting (inside forms) and shoring	7 days
Conduits, (outside forms), side of beams, small structures	24 hours
Columns, walls, spillway riser - with side or vertical load	7 days
Concrete supporting not more than 20 feet of wall in place above it	24 hours

Age of stripped concrete shall be at least 7 days before any load is applied other than the weight of forms, scaffolds and succeeding lifts.

41.17 FINISHING FORMED SURFACES

The following shall be done immediately after removal of forms.

- a. Removal of all fins and other surface irregularities which affect appearance or function.
- b. Removal all form bolts and ties to the depth of their cone.
- c. All cavities, holes and honey-combing shall be thoroughly cleaned, wetted and filled with dry pack mortar.
 1. The area to be patched shall be kept damp for three hours immediately prior to patching.
 2. The patching mortar shall be one part cement to three parts sand passing the number 16 sieve.
- d. The patching mortar shall be compacted to form a dense, well-bonded unit that is free from shrinkage cracks.
- e. All patched areas shall be cured as specified in paragraph 41.19.

41.18 FINISHING UNFORMED SURFACES

All exposed surfaces of the concrete shall be accurately screened to grade and then wood float finished, except slip form lining which is finished by travel of the form.

All exposed concrete edges and joints shall be chamfered or finished with molding tools.

Excessive floating or toweling while the concrete is soft shall not be permitted. The addition of dry cement or water to the surface of the screened concrete shall not be permitted.

41.19 CURING

Concrete shall be prevented from drying for a period of at least 7 days after placement.

Exposed surfaces shall be kept continuously moist for the entire period or until curing compound is applied. Formed surfaces shall be kept wet until patching or repairs are made. Curing compound shall not be used on areas that are to be bonded to other concrete or mortar. Curing compound when used shall be sprayed on the moist concrete structure as soon as free water has disappeared, but shall not be applied to any surface until patching, repairs, and finishing of that surface are completed.

Curing compound shall meet the minimum requirements of ASTM C-309, Type 2, unless otherwise specified on the drawing.

The curing compound shall be thoroughly mixed immediately before applying, and shall be applied at a uniform rate of not less than one gallon per 150 square feet of surface. It shall form a uniform, continuous, adherent film over the entire surface.

Curing compound shall not be applied to surfaces requiring bond with concrete remaining to be placed, construction joints, reinforcing steel, and embedded items. These areas shall be wet cured.

Concrete surfaces subjected to heavy rainfall, running water and/or other moisture damage within 3 hours after curing compound has been applied shall receive a second application.

41.20 REMOVAL OR REPAIR

Concrete that is honeycombed, damaged, or otherwise defective, shall be removed or repaired and approved by the technical representative.

41.21 CONCRETING IN HOT WEATHER

The temperature of the concrete shall be less than 90°F during mixing, conveying and placing. Concrete surfaces exposed to the air shall be kept continuously wet for the first 24 hours of the curing period, or until curing compound is applied. White pigmented coloring compound shall be used when the air temperature exceeds 90°F.

41.22 CONCRETING IN COLD WEATHER

- a. Prior to placement of concrete, all ice, snow and frost shall be completely removed from all surfaces to be in contact with the concrete.
- b. The temperature of the concrete at the time of placement shall not be less than 50°F, nor more than 90°F. Heated water of 140°F, or less may be used when cement is added to the mix.
- c. The use of antifreeze or accelerator compounds is not allowed.
- d. When the daily minimum ambient air temperature at the site is less than 40°F, the concrete shall be protected for a minimum of three days following placement with insulated blankets or housing and heating.

41.23 DELIVERY TICKETS

The delivery tickets for the mix delivered to the site shall identify all ingredients by weight except water and admixtures which may be measured by volume.

Delivery Tickets for each load of Ready-Mix concrete shall be furnished to the technical representative.

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CONSTRUCTION SPECIFICATION

CS-42: “REINFORCED CONCRETE FOR MINOR STRUCTURES”

42.1 SCOPE

The work shall consist of proportioning, forming, placing, finishing, and curing Portland cement concrete for minor structures. A minor structure is defined as one of low hazard where strength control is not critical for function and safety.

The structures shall be constructed to the line and grades as shown in the plan.

42.2 MATERIALS

Cement shall be Type II or Type IIA Portland cement. Cement that is partially hydrated or otherwise damaged shall not be used.

Concrete aggregate is defined in Material Specification, MS-201. Fine aggregate shall be between 35 and 45 percent and coarse aggregate shall be between 55 and 65 percent of the total aggregate volume by weight. The aggregate shall not contain more than 1 percent clay lumps and a total of 4 percent of material smaller than the 200 sieve.

Maximum size of the coarse aggregate shall not exceed:

- 1 inch - Concrete thickness of 4 inches or less
- 1-1/2 inch - Concrete thickness of 4 inches or more

Reinforcing steel shall be woven wire fabric or deformed steel bars as described in Material Specification MS 213, Steel Reinforcement.

Water shall be of a potable quality free from harmful chemicals.

42.3 DESIGN OF CONCRETE MIX

The person in charge of construction shall be responsible for designing a high quality concrete mix conforming to this specification. The technical representative prior to placement shall approve the concrete mix.

The mix shall contain no more than 6 gallons of water per 94 pound bag of cement, and at least 6 bags of cement per cubic yard of concrete.

The air entrainment shall be between 4 and 7 percent by volume, and the slump shall be between 3 and 5 inches.

The following table is a guide for developing a satisfactory mix intended to produce approximately 3000 PSI compressive strength for air entrained concrete.

Max. Size Aggregate Inches	Gal. Water per sack of cement	Cement per CY Sacks	Pounds Fine Aggregate per Sack Cement	Pounds Coarse Aggregate per Sack Cement
1	6.0	6.0	190-200	300-310
1-1/2	6.0	6.0	180-190	330-340

Measurement of materials shall be by weight where suitable scales are available. Volume measurements may be used provided volume-weight relationships are carefully determined. Admixtures including calcium chloride or antifreeze compounds shall not be used.

42.4 FORMS

Forms shall be made of wood, plywood, or metal. The form surfaces are to be clean and free from holes and other irregularities. The type, size, shape, quality and strength of forms will be subject to approval by the technical representative. The forms shall be moist when the concrete is placed. Forms shall be mortar tight and non-yielding. All form work shall be in place for at least 24 hours after concrete placement.

Metal ties that break off below the surface of the concrete shall have removable cones that permit their removal without damage to the concrete.

42.5 REINFORCING STEEL

The reinforcement shall be the size and grade shown on the drawings and securely fastened in place to prevent movement during placement of the concrete. The reinforcing steel in slabs on grade shall be supported on blocks or chairs. All blocks shall have a strength equal to or greater than the 28-day compressive strength of the concrete.

42.6 PLACING CONCRETE

The technical representative shall be notified a minimum of 24 hours prior to the placement of concrete to inspect the reinforcing steel, forms, subgrade, preparation for curing, and vibrating equipment.

Concrete shall be placed in final position within one and one-half hours after mixing with cement. Concrete may be consolidated by either hand spading and tamping or mechanical vibration.

All concrete placed on earth shall be placed on clean, damp surface, free of frost, ice, or running water.

Concrete shall not be dropped more than 5 feet vertically unless suitable equipment is used to prevent segregation.

Uniformed exposed surfaces in the completed work shall have a wood float or broomed finish. Concrete edges shall be chamfered 3/4 inch or finished with molding tools.

42.7 CURING CONCRETE

The air temperature shall be between 40 and 90°F. During the curing period, the concrete shall be kept moist or covered for at least 7 days after placement.

An approved curing compound may be used provided it is applied by pressure sprayer at a uniform rate of not less than 150 sq. ft per gallon.

42.8 DEFECTIVE CONCRETE

Honeycombed areas and other voids in concrete will be promptly repaired with mortar patching immediately upon discovery.

Concrete subjected to damage and/or other violations of this specification will be rejected.

42.9 DELIVERY TICKETS

The delivery tickets for the mix delivered to the site shall identify all ingredients by weight except water and admixtures that may be measured by volume.

Delivery Tickets for each load of Ready-Mix concrete shall be furnished to the technical representative.

42.10 ACCEPTANCE

The acceptance of concrete made under this specification will depend upon adherence to the procedures set forth herein and the appearance of the finished structure.

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CONSTRUCTION SPECIFICATION
CS-52: “CONDUITS AND PIPELINES”

52.1 SCOPE

The work shall consist of furnishing and placing circular, arched or elliptical pipe and necessary appurtenances.

52.2 MATERIALS

Pipe and fittings shall conform to the requirements of the applicable NRCS Material Specifications for the type and grade of material being used. Where connecting bands are used, they shall withstand the internal pressure of the installation without leakage.

52.3 MATERIAL HANDLING

The material shall be delivered and handled in a manner that will not damage or reduce its strength or damage the coating. All special handling requirements of the manufacturer shall be adhered to. When handling and placing coated or plastic pipe, care shall be taken to prevent damage resulting from metal surfaces or rocks.

52.4 LAYING AND BEDDING

Unless otherwise specified, the pipe shall be installed in accordance with the manufacturer's recommendations. The pipe shall be laid with bells or the outside laps of circumferential joints pointing upstream.

Perforated pipe shall be laid with the perforations down and oriented symmetrically about a vertical center line. Perforations shall be clear of any obstructions at the time the pipe is laid.

Elliptical pipe and pipe with elliptical or quadrant reinforcement shall be laid so that the vertical axis, as indicated by markings on the pipe, is in the vertical position.

During backfilling the pipe shall be sufficiently loaded around the sides to prevent its separation from the bedding. The pipe shall be laid so the pipeline barrel is uniformly supported, which may require special excavation for bells and/or couplings.

52.5 STRUTTING

When required, struts or horizontal support ties shall be installed as specified on the drawings. Struts and ties shall remain in place until the backfill has been placed to a height of 5 feet above the top of the pipe, or has been completed if the finished height is less.

52.6 JOINTS

Pipe joints shall conform to the details prescribed by the manufacturer and shown on the drawings. Pipe joints shall be sound and watertight at the pressure specified on the drawings. The joints shall be made in a manner so that the inside of the pipe is free from obstructions.

52.7 COATINGS

All coatings shall be inspected after final placement and just prior to backfill. Any pinholes and/or damage shall be repaired with a material that is recommended by the manufacturer.

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CONSTRUCTION SPECIFICATION
CS-57: "ROCK SURFACING"

57.1 SCOPE

The work shall consist of furnishing and installing loose rock surfacing at the locations shown on the drawings.

57.2 SITE PREPARATION

The site shall be prepared by removing all vegetative matter to minimum depth of 6 inches from the surface. When specified, a drainage system shall be installed.

57.3 FOUNDATION

The foundation shall be firm and be able to support the design loads without consolidation or yielding. Where the foundation material is to be removed and replaced, the material shall be compacted to the density specified on the drawings.

57.4 INSTALLATION

The rock surfacing shall be of the material, gradation and be installed to the dimensions shown on the drawings.

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CONSTRUCTION SPECIFICATION

CS-62: "PUMP"

62.1 SCOPE

The work shall consist of installing the pump, motor and power connections as per the manufacturer's instructions.

62.2 MATERIALS

The materials used in the manufacturer of the pump shall be compatible. Special material requirements, where applicable shall be shown on the drawings.

62.3 ELECTRICAL REQUIREMENTS

All electrical service, installation and connections shall be in compliance with the National Electrical Code (NEC) and all local codes or regulations for installation of electrical equipment. All electrical equipment including electrical motors and panels shall be grounded.

62.4 PERFORMANCE

The pump shall be within the rated performance of the manufacturer. The performance shall include; suction head, discharge volume and pressure. The drawings shall specify the discharge and pressure rating at the location of the pump station. A copy of the manufacturer's performance curve for the pump shall be submitted to the technical representative.

62.5 FOUNDATION

The pump platform or foundation shall be of the materials and to the dimensions shown on the drawings. The anchor bolts shall be spaced to securely hold the pumping plant in place without excessive vibration.

62.6 PIPE CONNECTIONS

The inlet and discharge connection shall be sized for pump and be installed to minimize losses through bends, valves and transitions. The pumping schematic shall be reviewed by the technical representative prior to installation.

62.7 POWER SOURCES

The power sources may be internal combustion engines, electrical motors or power takeoffs. The shields or guard from the drive units shall be in place and properly secured. All electrical operated units shall be properly grounded.

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATION
CS-65: "DRAINAGE FILTER"

65.1 SCOPE

The work shall consist of furnishing and installing drainage filter of the location and dimensions shown on the drawings.

65.2 SITE PREPARATION

The site shall be prepared by removing all material that will restrict or reduce the ability of the drainage filter to function.

65.3 INSTALLATION

- (1) Fabric Filters: The foundation shall be unyielding to prevent forces that will elongate, tear or puncture the fabric. All splices shall overlap a minimum of 6 inches unless otherwise shown on the drawings.
- (2) Aggregate Filters: The methods of installation shall prevent segregation and any single layer placement shall not exceed 12 inches.

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATION
CS-67: "CONSTRUCTION FABRICS"

67.1 SCOPE

This construction specification is applicable for furnishing and installation of woven and non-woven construction fabrics to the lines and grades as shown in the drawings.

67.2 MATERIALS

The materials will conform to the type specified on the drawings and shall meet or exceed material specification, MS-209, for the type of fabric to be installed. The bedding and covering shall be of the material quality and depth as shown on the drawing.

67.3 SITE PREPARATION

The final grading of the earthwork shall be completed before installation. The site shall be free from depressions, ridges and rocks greater than 1 inch. The area shall be free from all sharp objects and foreign material such as wood, wire and metal. Bedding shall be in place prior to the installation of fabric material.

67.4 INSTALLATION

If bedding is shown on the drawing, it shall be installed prior to placement of the fabric. In channels, the fabric shall be installed in the direction of flow. On slopes, the fabric may be installed across the slope or perpendicular to the slope. The ends and edges shall be overlapped or shingled a minimum of 4 inches in the direction of flow and anchored. The fabric shall be covered, seeded and/or fertilized as shown on the drawings.

67.5 ANCHORING

Unless otherwise shown on the drawings, the upper and lower ends of fabric on slopes that exceed 5:1 shall be anchored by burial in a twelve-inch deep trench and covered and/or stapled. If the fabric is not covered, it shall be secured by stapling in a diamond pattern with a minimum of two staples per square yard which includes all edges and ends stapled at a maximum spacing of four foot on center.

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATION
CS-70: "CONTRACTOR QUALITY CONTROL"

70.1 SCOPE

The work consists of developing, implementing, and maintaining a quality control system to ensure that the specified quality is achieved for all materials and work performed.

70.2 EQUIPMENT AND MATERIALS

Equipment and material used for quality control shall be of the quality and condition required to meet the test specifications. Testing equipment shall be properly adjusted and calibrated at the start of operations and the calibration maintained at the frequency specified. Records of equipment calibration tests shall be available to the technical representative at all times. Equipment shall be operated and maintained by qualified operators as prescribed in the manufacturer's operating instructions.

All equipment and materials shall be handled and operated in a safe and proper manner and shall comply with all applicable regulations pertaining to their use, operation, handling, storage, and transportation.

70.3 QUALITY CONTROL SYSTEM

The contractor shall develop, implement, and maintain a system adequate to achieve the specified quality of all work performed, material incorporated, and equipment furnished before use. The system established shall be documented in a written plan developed by the contractor. The system activities shall include the material testing and inspection needed to verify the adequacy of completed work and procedures to be followed when corrective action is required. Daily records to substantiate the conduct of the system shall be maintained by the contractor.

The quality control system shall include, but not be limited to, a rigorous examination of construction material, processes, and operation, including testing of material and examination of manufacturer's certifications as required, to verify that work meets contract requirements and is performed in a competent manner.

70.4 QUALITY CONTROL PERSONNEL

Quality control activities shall be accomplished by competent personnel who are separate and apart from line supervision and who report directly to management. A competent person is one who is experienced and capable of identifying, evaluating, and documenting that material and processes being used will result in work that complies with the contract, and who has authorization to take prompt action to remove, replace, or correct such work or products not in

compliance. Offsite testing laboratories shall be certified or inspected by a nationally recognized entity. The contractor shall make available to the technical representative the names, qualifications, authorities, certifications, and availability of the competent personnel who will perform the quality control activities.

70.5 RECORDS

The contractor's quality control records shall document both acceptable and deficient features of the work and corrective actions taken. All records shall be on forms approved by the contracting officer, be legible, and be dated and signed by the competent person creating the record.

Records shall include:

- a. Documentation of shop drawings including date submitted to and date approved by the contracting officer, results of examinations, any need for changes or modifications, manufacturer's recommendations and certifications, if any, and signature of the authorized examiner.
- b. Documentation of material delivered including quantity, storage location, and results of quality control examinations and tests.
- c. Type, number, date, time, and name of individual performing quality control activities.
- d. The material or item inspected and tested, the location and extent of such material or item, and a description of conditions observed and test results obtained during the quality control activity.
- e. The determination that the material or item met the contract provisions and documentation that the engineer was notified.
- f. For deficient work, the nature of the defects, specifications not met, corrective action taken, and results of quality control activities on the corrected material or item.

70.6 REPORTING RESULTS

The results of contractor quality control inspections and tests shall be made available to the technical representative upon request.

70.7 ACCESS

The technical representative shall be given free access to all testing equipment, facilities, sites, and related records.

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATION

CS-71: "Roof Gutters and Downspouts"

71.1 SCOPE

The work shall consist of furnishing and installation of roof gutters and downspouts on existing buildings as shown on the drawings.

71.2 MATERIAL

Roof gutters and downspouts may be made of aluminum or galvanized steel. Aluminum gutters shall have a minimum nominal thickness of 0.027 inches. Aluminum downspouts shall have a minimum nominal thickness of 0.020 inches. Galvanized steel gutters and downspouts shall be at least 28 gage. Dissimilar metals shall not be in contact with each other.

Downspouts may also be made of plastic pipe. Plastic downspouts shall be Schedule 40 PVC, ASTM D-1785, and painted if exposed to direct sunlight.

No used materials shall be installed in this project.

71.3 SUPPORTS

Gutters shall be supported at a maximum spacing of 48 inches for galvanized steel or 32 inches for aluminum.

Gutters supported by spikes and ferrules shall be installed only where the existing rafters and fascia boards are sound and free from rotten wood.

Unsound fascia boards shall be replaced. If unsound wood exists in existing rafters, gussets made from new lumber may be attached to the existing rafters for supporting new fascia boards and the gutters.

Gutters shall be attached by means of hangers if sufficient backing is not available for the use of spikes and ferrules.

Downspouts shall be securely fastened at the top and bottom with intermediate supports that are a maximum of 10 feet apart.

71.4 INSTALLATION

Gutters shall be installed with the minimum fall specified on the drawings. If the minimum fall is not specified on the drawings, gutters shall be installed with sufficient slope so they drain to the downspouts.

Gutters shall have the minimum cross section dimensions as shown on the drawings.

The opening in the gutter into the downspout shall equal the minimum downspout size shown on the drawings.

Where applicable, the connection between the downspouts and underground outlets will prevent contaminated surface water from entering outlet.

71.5 PROTECTION

Gutters and downspouts shall be installed so that they are protected from damage by livestock and equipment.



OPERATION AND MAINTENANCE PLAN

“DRAINAGE DITCH”Landowner/Operator: Cherry Valley Dairy Date: 02/2022Address: 26808 Cherry Valley Rd
Duvall, WA 98019Legal description of practice location: SEC 12 T 26N R 06E**OVERVIEW**

A properly operated and maintained drainage ditch is an asset to your farm. This drainage ditch was designed and installed to remove and safely convey runoff water. The performance life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following recommendations will help you in performing adequate operation and maintenance.

GENERAL RECOMMENDATIONS

- Maintain cross section and gradient by controlling channel erosion and sloughing.
- Immediately remove silt deposits, obstructions, or blockage of the drainage system that includes channel spillways, trash racks, inlets, or outlets.
- Control the growth of vegetative materials by the use of herbicides and/or mowing. Avoid direct drainage water contact with herbicides.
- Remove all foreign debris that hinders system operation.
- Install and maintain fences to control livestock access when adjacent fields are used for pasture.
- Replace weathered or displaced rock riprap to constructed grade.
- Immediately repair any vandalism, vehicular, or livestock damage.

SPECIFIC RECOMMENDATIONS FOR YOUR STRUCTURE

OPERATION AND MAINTENANCE PLAN

“MANURE TRANSFER”

Landowner/Operator: Cherry Valley Dairy **Date:** 02/2022

Address: 26808 Cherry Valley Rd
Duvall, WA 98019

Legal description of practice location: SEC 12 T 26N R 06E

OVERVIEW

A properly operated and maintained waste transfer system is an asset to your farm. This waste transfer system is designed and installed to move wastes from the collection area to storage, treatment or disposal. The performance life of this installation can be assured and will be increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following recommendations will help you in performing adequate operation and maintenance.

GENERAL RECOMMENDATIONS

- Maintain all pumps, agitators, piping, valves, and electrical and mechanical equipment in good operating condition following the manufacture's recommendations.
- Maintain grounding rods and wiring of all electrical equipment in good working condition.
- Maintain all safety shields on pumps, motors, and electrical or mechanical equipment.
- All fencing railings and/or warning signs shall be maintained to prevent unauthorized human or livestock entry.
- Immediately repair any vandalism, vehicular or livestock damage to the system.
- It is advisable to flush the system with clean water after each use.
- Drain all system components in areas that are subject to freezing. If parts of the system cannot be drained, a non-corrosive anti-freeze solution shall be added
- Repair spalls, cracks and weathered areas in concrete surfaces.
- Repair or replace rusted or damaged metal and paint,
- Apply insecticides for insect control as per the manufactures recommendations and precautions, as needed.
- Operate system in a manner that minimizes odor and air drift

OPERATION AND MAINTENANCE PLAN

“PUMPING PLANT FOR WATER CONTROL”

Landowner/Operator: Cherry Valley Dairy **Date:** 02/2022

Address: 26808 Cherry Valley Rd
Duvall, WA 98019

Legal description of practice location: SEC 12 T 26N R 06E

OVERVIEW

A properly operated and maintained pumping plant is an asset to your farm. This pumping plant was designed and installed to convey water in a pipeline where it can be distributed for use. The performance life of the structure can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following recommendations will help you in performing adequate operation and maintenance.

GENERAL RECOMMENDATIONS

- Maintain all pumps, agitators, piping, valves and other electrical and mechanical equipment in good operating condition following the manufacture's recommendations.
- Maintain grounding rods and wiring of all electrical equipment in good working condition.
- Maintain all safety shields on pumps, motors, or other electrical or mechanical equipment.
- Check all pump bases and mountings for durability and ability to hold the pump in place without vibration, repair when necessary.
- Replace, repack or tighten the seals when leakage is in excess of manufacturer's recommendations.
- Drain all pumps and piping including valves that are subject to freezing. If parts of the system cannot be drained, a noncorrosive anti-freeze solution shall be added.
- Replace weathered or displaced rock riprap to constructed grade.
- Do not allow the operation of any equipment that exceeds the design limit on or within twenty feet of the structure.
- Maintain surface drainage around the pumping plant to avoid ponding of water.
- Immediately repair any vandalism, vehicular or livestock damage to the structure, earthen areas surrounding the structure, or any appurtenances.

OPERATION AND MAINTENANCE PLAN

“ROOF RUNOFF MANAGEMENT”Landowner/Operator: Cherry Valley Dairy Date: 02/2022Address: 26808 Cherry Valley Rd
Duvall, WA 98019Legal description of practice location: SEC 12 T 26N R 06E**OVERVIEW**

A properly operated and maintained roof runoff management system is an asset to your farm. This system was designed and installed to divert roof runoff water before becoming in contact with agriculture wastes. The performance life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following recommendations will help you in performing adequate operation and maintenance.

GENERAL RECOMMENDATIONS

- Maintain all gutters and downspouts free from foreign material that reduces their ability to function.
- Maintain all fasteners to securely hold all gutters and downspouts in place.
- Maintain all underground conveyance lines free from debris and obstructions.
- Maintain all screens and strainers in place and in good working condition.
- Maintain all gutters and downspouts in good working condition and promptly repair if damaged.
- Remove any trees or branches that deposit debris and reduce the capacity of the system.

SPECIFIC RECOMMENDATIONS FOR YOUR STRUCTURE

OPERATION AND MAINTENANCE PLAN

“UNDERGROUND OUTLET”**Landowner/Operator:** Cherry Valley Dairy **Date:** 02/2022**Address:** 26808 Cherry Valley Rd
Duvall, WA 98019**Legal description of practice location:** SEC 12 T 26N R 06E**OVERVIEW**

A properly operated and maintained underground outlet for water is an asset to your farm. This outlet was designed and installed to convey water in a pipeline where it can be released without causing erosion. The performance life of the practice can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following recommendations will help you in performing adequate operation and maintenance.

GENERAL RECOMMENDATIONS

- Check all above ground connections, valves, gates, trash racks, screens, rodent guards, inlets and outlets and repair, if needed, to make sure they are functioning properly.
- Maintain design depth of cover on all pipelines and structures.
- Avoid operation of tillage and subsoiling equipment that could damage any component of the system
- Remove all foreign debris that hinders system operation.
- Limit traffic over pipeline to designated sections that were designed for traffic loads.
- Eradicate or otherwise remove all rodents or burrowing animals. Immediately repair any damage caused by their activity.
- Immediately repair any vandalism, vehicular or livestock damage.





















King Conservation District Board of Supervisors Meeting 07/11/2022**Agenda Action Briefing/Report AI 22-0 56****SUBJECT:**

Review for Approval KCD Landowner Incentive Program cost-share application from Austin Sullivan, for Buffer Fence, in the amount of \$27,405.00.

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$154,829.16
Current Request	\$27,405.00
Balance Remaining	\$127,424.16

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

Austin Sullivan owns horse boarding facility in Enumclaw. The property is approximately 20 acres and a creek which is a tributary of the White River runs through the pastures and farmstead. The tributary flows seasonally and dries out in the late spring and summer. Currently part of the creek is fenced but not at the recommended distance from the creek, and part of the creek is unfenced. There is potential for sediments and nutrients and pathogens to get into the creek from horse access. The tributary is listed on the Department of Ecology's 303d list of impaired waters for low pH and seasonally low dissolved oxygen. The White River is listed for high bacteria levels.

This project will build approximately 2,810 feet of fencing along both sides of the creek. Fence shall be installed at 25 feet away from the high-water mark.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION

Staff seeks Board approval of Landowner Incentive Program cost-share application from Austin Sullivan, for a Buffer Fence in the amount of \$27,405.00.

MOTION

 Moved, Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Austin Sullivan, for Buffer Fence, in the amount of \$27,405.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Dallas Sullivan		Farm/Business Name:	
Mailing Address: 42012 192nd PI Enumclaw, WA 98022		Project Address: 42012 192nd PI Enumclaw, WA 98022	
Phone (home):		Phone (work/mobile): 425-417-8855	
Email Address: forthickory@yahoo.com		KCD Staff: Mirro	
Parcel #(s): 182006-9073 & -9066	<input type="checkbox"/> Incorporated <input checked="" type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 19.9	<input type="checkbox"/> T.A. <input checked="" type="checkbox"/> Farm Plan <input type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Buffer Fencing
Project Completion Date (month and year): 8/2023
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP: also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>The farm is a horse boarding facility. A tributary of the White River runs through the the pastures and farmstead. It flows seasonally and it dries out in the late spring and summer. Part of the creek is fenced and part in not. Livestock have access to creek in certain areas. There is potential for sediments, nutrients and pathogens to get into creek. The tributary is listed on the Department of Ecology's 303d list of impaired waters for low pH and seasonally low dissolved oxygen. The White River is listed for high bacteria.</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>Plan is to build about 2,810 feet of fencing along the both sides of the creek. Fence shall be installed at least 25' away from the high water mark. Fencing in the crossing area will be set as far away from creek as possible. The north section and crossing section of the fence will be 3 rail fence, build with pressure treated 4" x 6" posts and pressure treated 2"x6" rails.</p> <p>The south side will be non climb fence with a top rail, with 6" round pressure treated round posts and a 2"x6" pressure treated top rail.</p> <p>Please Note: Due to budget, north side might same as as south side) This will be determine after LIP award, while Dallas is getting quotes for materials.</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>Fence will be monitored monthly and repaired as needed.</p>

Permits <i>(List all permits required to complete this project):</i> No
Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

- A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)? ☒ Yes ☐ No

If yes, please list contract number and BMP below:

2016-74 Buffer Fence & 2016-75 Cross Fence

- B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs? ☒ Yes ☐ No

Please describe below:

1. King County Cost-share

Please list practices and date installed below:

Landowner is looking to get additional funding from King County for this fence project.

2. NRCS EQIP (Natural Resources Conservation Service's Environmental Quality Incentive Program)

Please list practices and date installed below:

3. Other

Please list agency and describe project:

Other Cost-Share History/Notes:

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant's statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

- ☒ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☐ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

- ☐ A. I understand the lifetime of the BMP is _____ years.
- ☐ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.
- ☐ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I agree to ensure that all applicable local, state, and federal permits are obtained for installation of the BMP for which funds are requested. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details. _____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon installing the BMP to the minimum standard provided by KCD, and that KCD will verify standard compliance. Furthermore, I understand that changes to the installation details (attached *Job Sheet and Map*) must be approved through a *Scope of Work Revision Process*. Unapproved changes will not be eligible for reimbursement. _____ (Initial Here)

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Dallas Sullivan

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
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FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:



Landowner Incentive Program

Applicant Information

Cooperator:

Budget Items	Units	
Buffer Fence	2,610.00	\$36,540
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$36,540

In-Kind Labor/Machinery	# hours	
Manual labor		\$
Person with power equipment (i.e. chainsaw)		\$
Small Tractor (up to 40 hp)		\$
Medium Tractor (40-70 hp)		\$
Large Tractor (71 or above hp)		\$
Excavator (up to 100 hp)		\$
Excavator (over 100 hp)		\$
D-4 Cat or equivalent		\$
D-6 Cat or equivalent		\$
D-7 Cat or equivalent		\$
Backhoe		\$
Truck (under 2 tons)		\$
Truck (2 tons or over)		\$
Bobcat		\$
4-wheeler or side-by-side		\$
Subtotal	0.00	\$

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$
Units	Linear Feet	
Cost/Unit		\$

Conservation Practice	select BMP (x)	Cost
Animal Trails & Walkways		
Aquatic Area Buffer		
Aquatic Area Buffer (WC301)		
Buffer Fencing	X	\$
Building Relocation for Aquatic Area/Buffer		

BMPs	Units	cost/unit	%	reimbursement rate	
Animal Trails & Walkways	sq ft	\$ 1.00	0.5	\$ 0.50	Ac.
Aquatic Area Buffer	project	\$ 36,000.00	0.9	\$ 32,400.00	AUE
Buffer Fencing	ft	\$ 14.00	0.75	\$ 10.50	Ft.
Building Relocation for Aquatic Area/Buffer	project	\$ 50,000.00	0.5	\$ 25,000.00	Sq. Ft.
Bulkhead Removal (Freshwater, Marine)	project	\$ 40,000.00	0.75	\$ 30,000.00	Project
Cover Crops	acre	\$ 200.00	0.9	\$ 180.00	acre
Cross Fencing	ft	\$ 7.00	0.5	\$ 3.50	
Forest Health Management	project	\$ 30,000.00	0.75	\$ 22,500.00	
Heavy Use Area Protection	AUE	\$ 1,900.00	0.5	\$ 950.00	
Pasture & Hay Planting	acre	\$ 400.00	0.5	\$ 200.00	
Roof Runoff Management	ft	\$ 11.00	0.5	\$ 5.50	
Stream Crossing	ft	\$ 1,800.00	0.75	\$ 1,350.00	
Subsurface Drain	ft	\$ 25.00	0.5	\$ 12.50	
Upland Wildlife Habitat Management	project	\$ 20,000.00	0.75	\$ 15,000.00	
Waste Storage Facility	AUE	\$ 200.00	0.75	\$ 150.00	
Watering Facility	project	\$ 50,000.00	0.5	\$ 25,000.00	



Local Food
Healthy Forests
Clean Water
Better Ground

Job Sheet

Fencing

Cooperator: Sullivan	Lifetime of Practice: 20 years
----------------------	--------------------------------

Purpose		
<input type="checkbox"/> Divide pasture for rotational grazing.	<input checked="" type="checkbox"/> Fence livestock out of a riparian area.	<input type="checkbox"/> Perimeter fencing.
<input type="checkbox"/> Heavy use area fence.	<input type="checkbox"/> Animal trail fencing.	

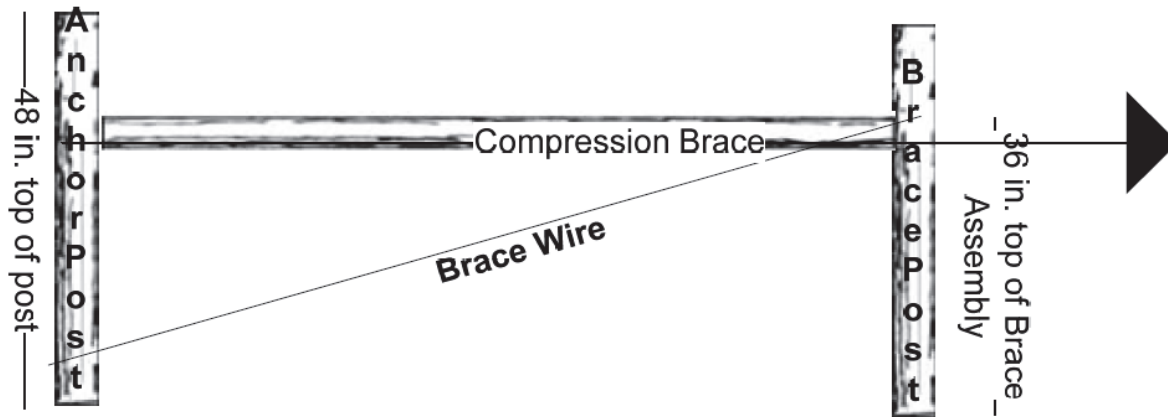
Type of fencing material to be used <i>[please include animal type(s)]</i>
About 1310 feet of 3-rail fence. About 1300 feet of no-climb fence with a top tail. – Horses Please note: Landowner might install all 2610 feet of fence as no-climb due to budget.

Length of Fence
Buffer: 2610 ft

Operation and Maintenance
<ul style="list-style-type: none">• Regularly inspect fences for damage and natural wear as part of an on-going management system.• Maintenance and repairs will be performed as needed to facilitate the intended use of the installed fence.• Fence repairs should be made with materials that equal or exceed the quality of the original materials.• Electric fences need to be inspected periodically to remove grasses and tree limbs that are touching the wire.

Additional Specifications and Notes:
<p><i>Note: LIP fences must be constructed to a 20-year lifetime standard. KCD will require maintenance inspections for the 5-year lifespan of the Pasture and Forage Health Management practice.</i></p> <p>H-Brace</p> <p>H-Brace shall be constructed on segment ends, locations to support gates and corners with angles larger than 20°. Angles between 20° and 60° require a 4-post, double H-brace that does not share a common post. Corners with angles over 60° can use a 3-post double H-Brace. H-brace anchor and brace posts shall be treated wood, minimum 5" to 6" diameter, 8' long, and set 3' into the ground. Concrete is not required. Tamp to compact backfill soil around post in 4" lifts. Compression post shall be treated wood post, minimum 4" to 5" diameter and at least 8' long. Connect via brace pin or 12" galvanized nail. It is recommended not to notch wood, as this reduces structural integrity. Brace wire shall be two loops of 9-gauge smooth wire or 12.5-gauge high-tensile wire. Twist brace wire with twitch stick or use</p>

line strainer or L-shape joint clamp to add tension to H-brace. Wire shall be installed from the bottom of the anchor post to the top of the brace post.



Woven Wire

Inline posts shall be treated wood posts, minimum 3.5" diameter, at least 6' long and set a minimum of 24" deep into the ground. Standard T-posts may be used as line posts; T-posts must be at least 1.25 pounds per foot exclusive of anchor plates, a minimum of 5.5' tall, and set 18" deep; T-posts must be galvanized or painted. Posts shall be spaced a maximum of 15' apart. If metal posts are used, substitute a minimum 3.5" diameter treated wood posts every 50' to 75'. For long runs of fence, install H-braces every 330'. Follow details in fence standard for stapling of wire into post. See standard for more details about H-braces.

Top and bottom wires should be 10 gauge, with 12.5 gauge intermediate and stay wires. Fence should be at least 4' high with wire spacing not more than 6" apart in standard woven wire fence or not greater than 2" by 4" spacing in no-climb fencing.

Woven wire fences should have h-braces at end of runs, gates and corners as described standard. Fences with continuous top rails don't require h-braces.

Barbed Wire, Smooth Wire, or Similar

Install a combination of wooden and metal line posts. Use pressure-treated wood posts on segment ends, at gates, and every 50' to 75' as line posts. Wood posts must be at least 6' long and set a minimum of 24" deep. Standard T-posts may be used as line posts; T-posts must be at least 1.25 pounds per foot exclusive of anchor plates, a minimum of 5.5', and set 18" deep; T-posts must be galvanized or painted. For long runs of fence, install H-braces every 330'.

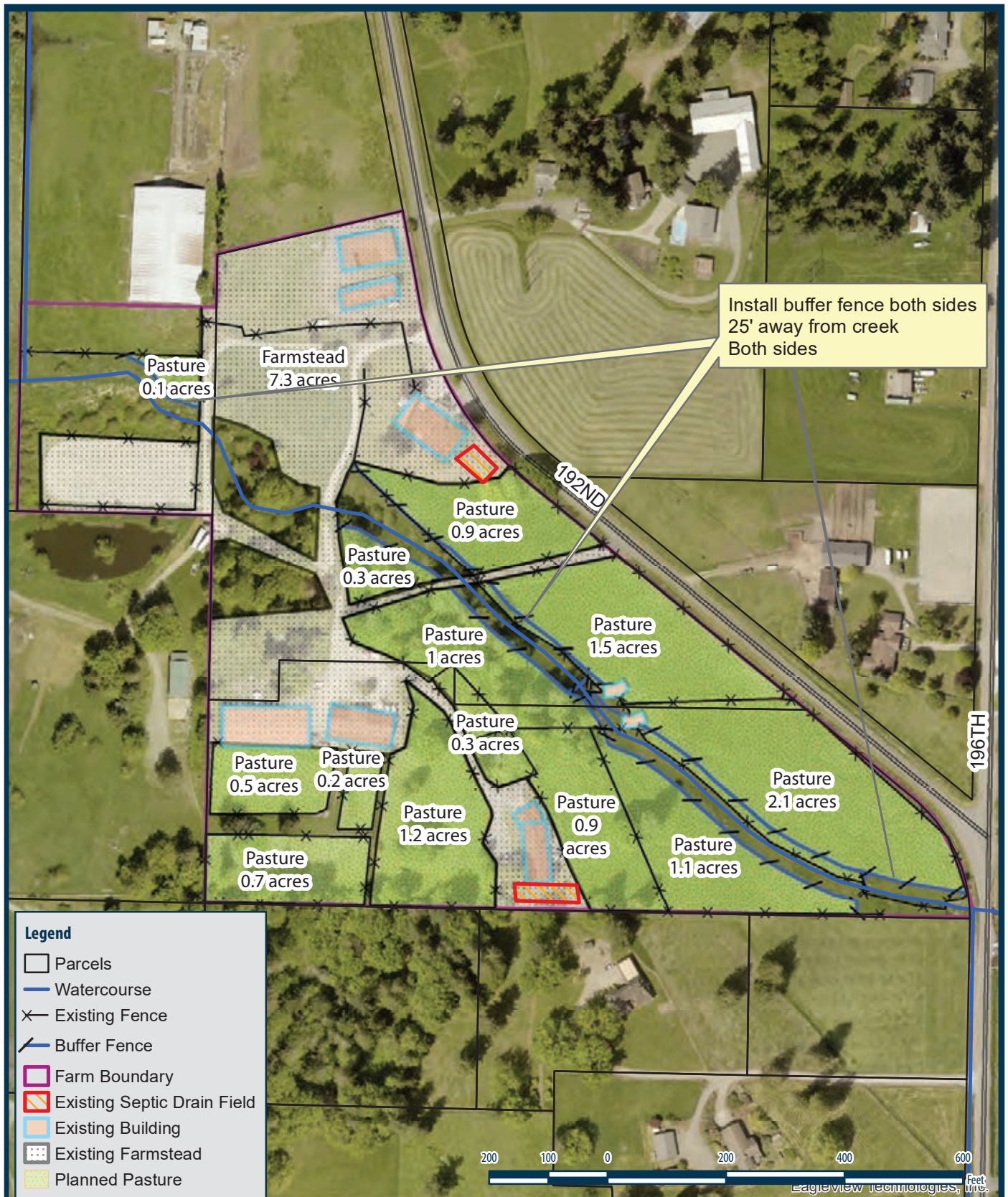
Four-strand fences may have a maximum line post interval of 20' without stays, 25' with one stay mid-way between line posts, or 30' with two stays at equal intervals between posts. Stays must be wood and at least 2.5" in diameter. Stays must be at least 2" taller than the fence height.

Use standard galvanized double strand barbed wire, a minimum size of 12.5 gauge with 14 gauge or heavier two-point barbs spaced not more than 5" apart. Strand breaking strength must be at least 950 pounds or 70,000 pounds per square inch.

Set wires at above ground heights of 14", 22", 32", and 42".

Post and Rail

Install 4" by 6" pressure-treated wood posts, set 2.5' to 3' into the ground. Concrete is not required. Tamp to compact backfill soil around post in 4" lifts. Posts shall be spaced 8' to 10' on center. Connect posts with at least three 2" by 6" pressure-treated wood rails. Galvanized screws are ideal to prevent boards from being pushed out.



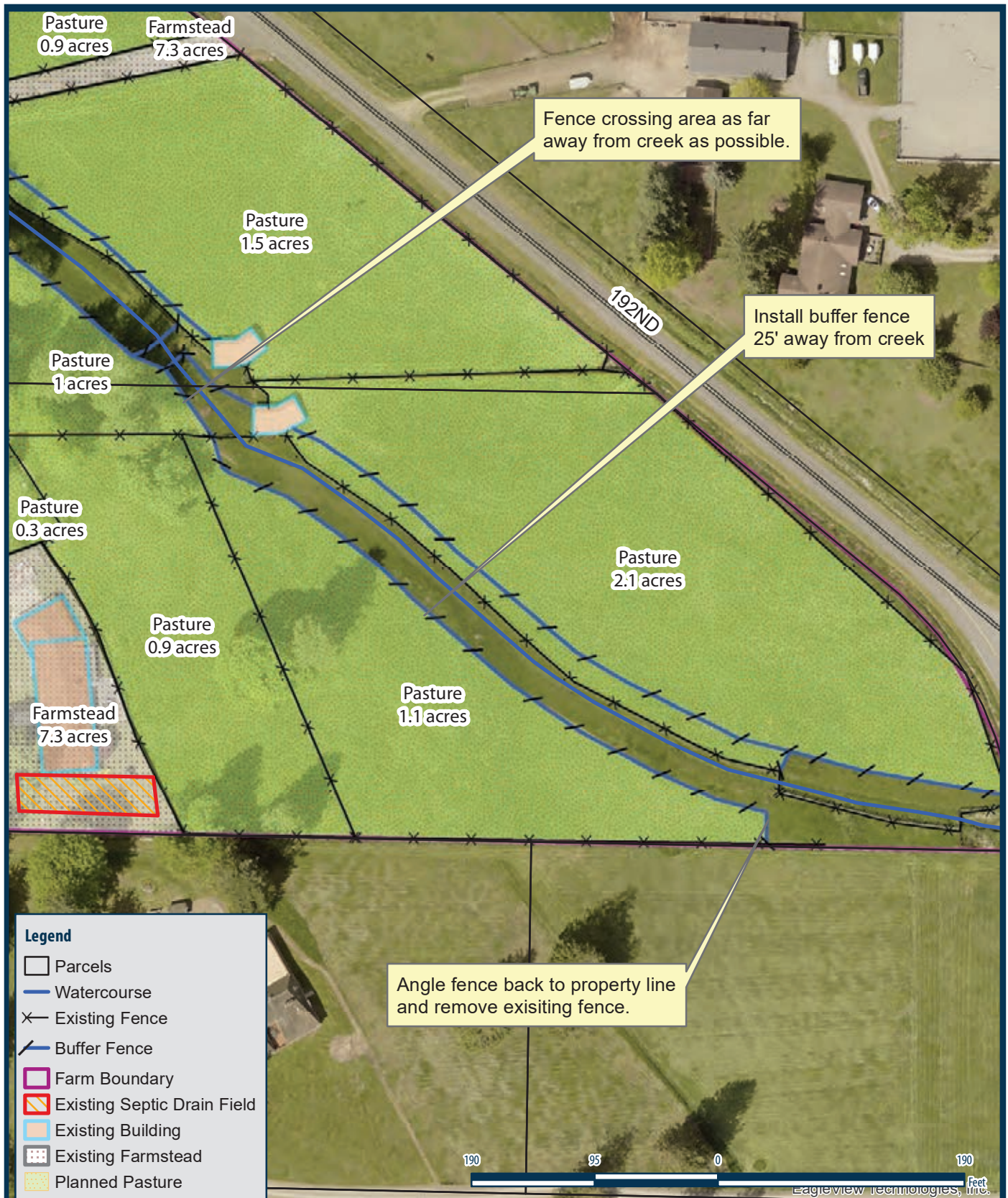
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Address: 42015 192nd Pl		KCD Staff Name: Jay Mirro	Section: 18
Enumclaw, WA 98022		Map Date: June 13, 2022	Township: 20
Acres: 19.9	Parcel #(s): 182006-9073 & 9066		Range: 06



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Landowner Name: Dallas Sullivan	Map Type: LIP Buffer Fence CS Zoom Map	Directional: NE
Address: 42015 192nd Pl	KCD Staff Name: Jay Mirro	Section: 18
Enumclaw, WA 98022	Map Date: June 13, 2022	Township: 20
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Fence

Woven Wire

Conservation Practice Job Sheet

RI- 382(b)



Definition

A constructed barrier to livestock, wildlife or people.

Purpose

This job sheet is provided as a component of a resource conservation plan. This practice may be applied to contain and control livestock and wildlife movement, facilitate a prescribed grazing system, protect sensitive areas from grazing livestock, and to eliminate access to unsafe areas.

Conditions where practice applies

This practice may be used on any area

where a fence is needed to control access, movement and containment of livestock and wildlife and where people safety and movement is of concern. This job sheet is provided as a component of a resource conservation plan. Conservation plan maps showing the approximate fence location, complementary conservation practices, grazing schedule, other relevant information, and additional specifications may be included.

General Criteria and Specifications

All fence construction shall comply with federal, state, and local fencing codes. **Practice Lifespan is 20 years.**

Fence line clearing

Fence lines will be cleared of brush and trees; gullies and steep banks may require grading. Clearing along stream banks will be held to a minimum and no vegetation may be removed within the buffer area, except as required for stream crossings.

Fencing materials shall be of a quality and durability that meets the intended management objectives. Construction shall be performed in a manner that meets the intended management objective. Wire and hardware will be new, galvanized material.

Line post

Maximum spacing between posts is 16.5 feet. All wooden line posts shall be set at least 30 inches into the ground.

Suitable line posts

3½" in diameter wooden posts of black locust, red cedar (mostly heartwood), redwood, and pressure treated pine or other wood of equal life and strength. Pressure treatment shall meet the requirements for ground contact.

Steel posts must be new and be painted or galvanized and weigh a minimum of 1.25 pounds per one foot of length. Post will be driven 18" inches in the ground or as specified by manufacturer. Every 50 feet or 4th post will be wooden.

The following steel posts are acceptable for line posts:

Style 1 – "T" Section 1- 3/8" x 1-3/8" x 1/8" thick

Style 2 – "U" Section 2" x 1-1/4" x 3/32"

Style 3 – "L" Section 2" x 2" x 1/4"

Lightweight stamped-steel posts are not allowed.

Brace post: Posts shall be set and maintained in a vertical position. All wooden brace posts are to be 5" minimum diameter and set 3 feet into the ground. Horizontal rail brace posts are to be 4" minimum diameter by 8 ft. long and be installed 8" – 12" below the top of the vertical brace post.

Corners and braces: Refer to drawings on pages 7-9 for fence brace configurations and spacing.

Single H Braces: Single H Brace corners and end braces may only be installed at the ends of straight fence spans of 165 feet or less.

Double H Braces: All corners, fence line ends and gate openings require Double H Brace assemblies, except that Single H Braces may be substituted in straight fence spans of 165 feet or less.

Double H Brace Pull Assemblies: Double H Brace pull assemblies are required in straight fence spans at a maximum spacing of 660 feet.

Brace wire shall be high tensile, galvanized steel, or 9 gauge soft wire.

Adjoining Fences: A fence adjoining an existing fence must terminate in a brace assembly as required above.

Corners: A bend in the fence tighter than 20 degrees is considered a corner and not a "straight" pull brace. (In an 8-foot long brace section, 20 degrees is approx. 3 feet off the straight line. Refer to drawings). The above H brace rules apply to corners considering each wire-pull direction from the corner post. Combination single and double H corners are permitted.

If hand set, all backfilled material shall be thoroughly tamped in 4" layers. Post holes shall be at least 6" larger than the diameter or side dimension of the posts. Synthetic posts are to be installed as specified by the manufacturer.

If concrete backfill is used, the concrete must be pre-mixed, and worked into place up to the ground surface. No stress shall be applied to posts set in concrete for at least 24 hours after the concrete has set.

Wire

Wire shall have a minimum Class 3 zinc coating and shall meet the requirements of ASTM A116 or Class I zinc coating with 0.27 ounces of zinc per ft² meeting the requirements of ASTM A116.

For Cattle, fencing shall be 1047 woven wire, which has 10 line wires, with stays (the vertical wires) on 9" spacing. Top and Bottom line wires shall be at least 10 gauge (medium weight) and the filler wires (the remainder of the fence wires) will be a minimum of 12½ gauge.

For Horses, use “square knot mesh” which has 2” horizontal by 4” vertical openings, or “V-mesh” (diamond mesh) style horse fencing with triangular openings 2” wide by 4” tall. The mesh must be fastened by wire wrapping with no sharp wire ends. Horse fences should be 47” to 50” high. Horizontal wires must be 12½ gauge steel, or 14 gauge high tensile. Vertical wires are to be at least 14 gauge steel.

For other Animals, a mesh and fence height that is appropriate to the species as recommended by the manufacturer.

High tensile woven wire 12½ gauge may be used for all animals as specified by manufacturer.

Welded mesh is prone to failure, and therefore is not recommended or allowed.

Fence top Deterrent

Barbed wire: At least one strand of barbed wire is to be placed no more than 6” above the woven wire. Additional strands may be added above the first at the same spacing. The barbed wire shall consist of 2 strands of wire with class 3 galvanized 4-point barbs spaced not more than 5” apart. Galvanized barbed wire shall be fabricated from 12½ gauge class 1 galvanized or high tensile class 3 barbed 15 ½ gauge galvanized strand wire or meeting the requirements of ASTM A121.

Barbed wire should not be electrified.

Electrified Wire: In lieu of barbed wire, the same number of 12½ gauge galvanized wires may be installed electrified on the spacing needed for barbed wire. The wire must be mounted and energized as required by the high tensile electric fence job sheet. Electric and barbed wire fence top deterrents may not be combined.

Wood Rail: A wood top rail may be installed no more than 6” above the woven wire to strengthen the fence in lieu of top wires, or a single electric wire with stand-off insulators may be included. The fencing may be stapled to the rail for added stiffness. With top rails, no post bracing assemblies are needed, but gate posts must be 5” in diameter and be set 3 feet in the ground.

Wire placement

Fencing and top deterrent (barb wire) should be installed according to Figure 3.

Stretching wire

Woven wire shall be stretched tight with no sags or waves in the material when viewed along the fence line. Wire at the end posts and corner posts shall be wrapped and attached to itself with 3 twists.

For barbed wire at the fence top, pull taut. A stretch of 100 feet (prior to attachment to posts) should sag no more than in the middle 4” in warm weather and not more than 2” in cold weather.

Attaching fencing to post

The fencing wire shall be placed on the livestock side of line posts and on the outside of corners and posts in bends and braces in bends.

Woven wire fencing shall be attached to post on alternate horizontal strands as a minimum. Each strand of barbed wire used shall be attached to each post using a 9-gauge galvanized 1½” staple driven diagonally with the grain of the wood and at a slight downward angle (except in dips). Staples shall be driven tight to the post.

Fasten fencing to steel line post with either two turns of 14 gauge galvanized steel wire or the post manufacturer’s special wire clips.

Wire shall be spliced with a figure-eight knot, or twisted with 8 wraps of each end about the other (western union splice), or by suitable splice sleeves applied with a tool designed for the purpose.

Other Considerations

Fences across gullies or streams require special braces and design. Breakaway fences or swinging water gaps allow debris and water to flow past the fence line without destroying the adjacent fence.

Any permanent fencing for grazing livestock should allow flexibility to facilitate implementation of the grazing plan and permit land management activities such as nutrient application, pest control, forage harvest, and other appropriate practices.

Follow all manufacturers' safety precautions for handling and installing fencing materials.

Locate fences to facilitate maintenance. Where applicable, clear right of ways should be established and maintained to facilitate fence construction and maintenance.

When possible, install fences across slopes to improve grazing distribution, rainfall infiltration, and reduce soil erosion.

Locate fences to facilitate livestock management, handling, watering, and feeding.

Consider placing permanent riparian stream fencing at the edge of the protected buffer or at least 2 times the active channel width from the top of the stream bank but never less than 10 feet. It is recommended that the stream fence have a maintenance gate installed. Woven wire fencing is not recommended for use in riparian areas due to flooding damage.

Approved alternative fence systems include "Common Sense Fence" or equivalent. Other fencing systems may be approved by an NRCS Resource Conservationist (RC), and installed to manufacturer's recommendation as approved by NRCS Resource Conservationist (RC).

Alternative fencing and bracing systems: Alternative fencing and bracing systems must be pre-approved by an NRCS Resource Conservationist (RC), and must be installed according to manufacturer's recommendations as approved by NRCS Resource Conservationist (RC).

Specifications Worksheet

Site-specific requirements are listed on the specifications sheet. Additional provisions may be contained in the conservation plan or other acceptable form of documentation. Specifications are prepared in accordance with the NRCS Field Office Technical Guide. See Conservation Practice Standard *Fence* (382)

Client:	Farm #:
Field(s):	Tract #:
Planned By:	Location:
Date:	Length of Fence:
Landowner Objectives:	

Purpose (check all that apply)	
<input type="checkbox"/> Reduce erosion and improve water quality by controlling livestock access to streams, springs, wetlands, and ponds.	<input type="checkbox"/> Protect sensitive environmental areas and the flora from vehicular, pedestrian, or animal traffic use.
<input type="checkbox"/> Protect newly planted areas from disturbance until established.	<input type="checkbox"/> Protect the safety of people, livestock, and wildlife by limiting or denying access to hazardous areas.
<input type="checkbox"/> Facilitate handling, movement, and feeding of livestock in the pasture environment.	<input type="checkbox"/> Improve distribution and timing of livestock grazing.
<input type="checkbox"/> Other (specify) _____	

Type of Fence - Woven Wire	
Fence Height: _____ inches	Number of wire: _____
Wire spacing: _____ inches	
Woven Wire Type: _____	
Top Deterrent Type: _____	

Posts		
Type Black Locust OR Eastern red cedar OR pressure treated pine or other preservative treated wood OR standard steel line posts w/4 th post being a wooden post	Size Line posts are wood 8 feet or longer 4" minimum diameter OR Standard steel line post 1 ³ / ₈ " x 1 ³ / ₈ " x 1 ¹ / ₈ " with anchor plate	Spacing Wood line posts spaced a maximum of 16½ feet apart set 2.5 feet deep minimum OR Steel line posts spaced a maximum of 16½ feet apart set to top of anchor plate or 18"

Braces	
Wooden Braces (8 feet minimum length) 4" diameter at small end	Brace Wire High Tensile, Galvanized Steel, 9 Gauge OR 12½ Gauge High Tensile, Galvanized, Double Wrapped

Operation and Maintenance

Inspections and maintenance are required to achieve the intended function, benefits, and life of the practice. The landowner/operator is responsible to establish and implement an inspection and maintenance program. Regular inspection of fences should be part of an ongoing maintenance program. Items to inspect and maintain during the 20-year design life of the practice include, but are not limited to, the following:

1. Inspection of fences after storm events is necessary to ensure the continued proper function of the fence. Promptly repair or replace damaged or broken fencing.
2. Retain and properly discard all broken fencing material and hardware to prevent ingestion by animals or injury to equipment, people, or animals.
3. Remove debris collected in the fencing.
4. Clear the brush from fence lines to reduce voltage loss. Vegetative control can be achieved by herbicides applied per the manufacturer's label.
5. Remove fallen limbs and maintain proper tension on the fence wires. Overhanging trees and limbs should be trimmed or removed as needed.
6. Maintain proper tension on the fence wires.
7. Follow your grazing plan, where appropriate.
8. All necessary precautions should be taken to ensure the safety of construction and maintenance crews.

Other:

For information regarding this practice contact:

_____ at _____.

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Specification Guide Sheet for Fencing 382 (b)

STRAIGHT FENCES ON FLAT LAND

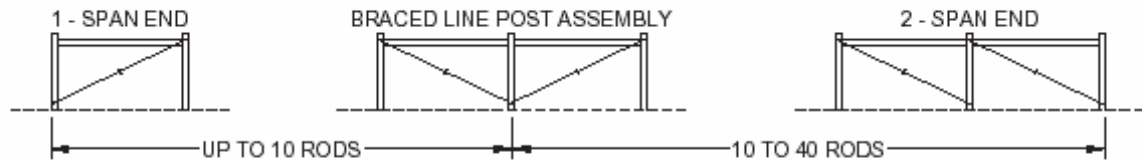
(a)



(b)

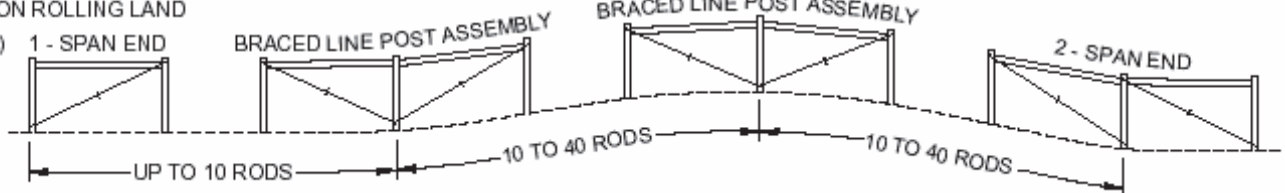


(c)



STRAIGHT FENCES ON ROLLING LAND

(d)



CURVED FENCES

(e)



Types of anchor and brace assemblies and where to locate them: (a) For fence lengths of 10 rods (165 feet) or less, use single-span end construction. (b) For fence lengths of 10 to 40 rods (165 to 660 feet), use double span end construction. (c) For fences more than 40 rods (660 feet) long use a braced-line-post assembly to divide the fence lengths. (d) On rolling land, fence stretching is easier if braced line-post assemblies are located at the foot and top of each hill. (e) Contour fences, more than 20 rods (330 feet) long, should have a braced-line-post assembly installed to keep the stretches to 20 rods (330 feet) or less. Install in straight section at least one post span away from a curve. Do not install on a curve.

Note: One rod equals 16½ feet.

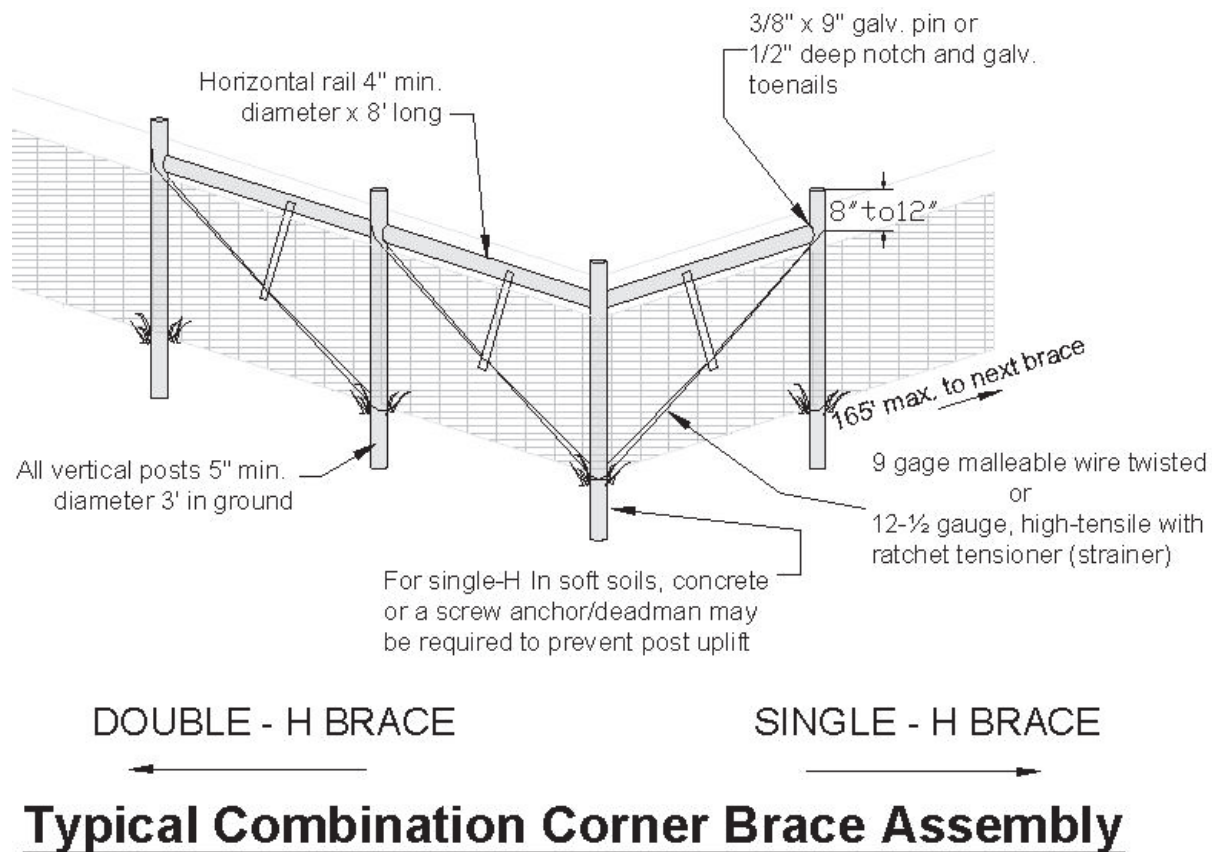
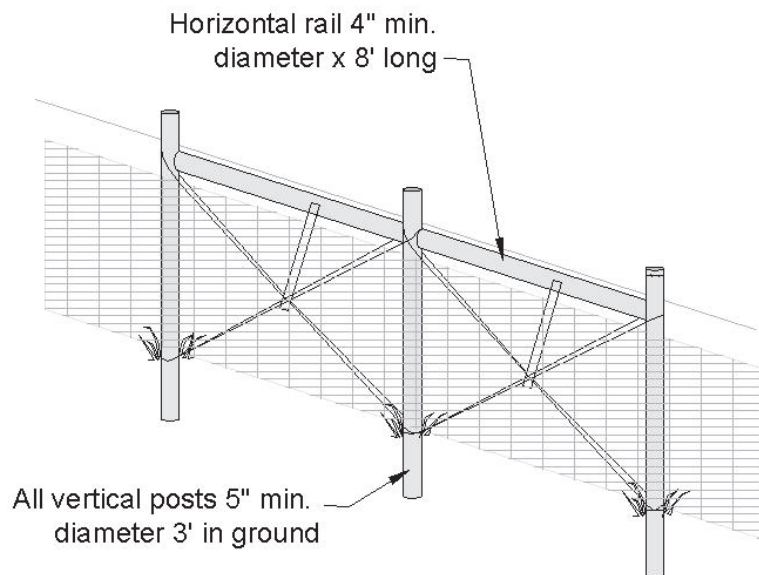


Figure 1



Double - H Brace Pull Assembly

Figure 2

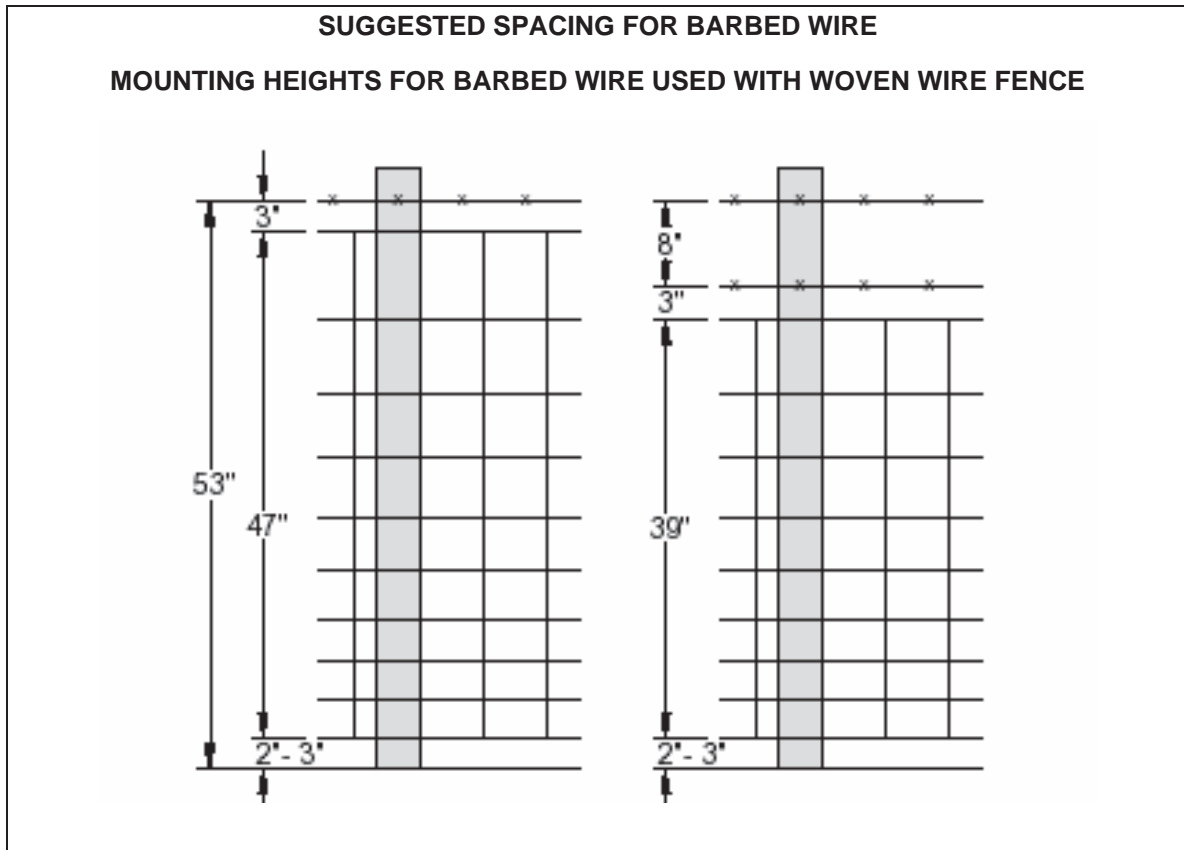
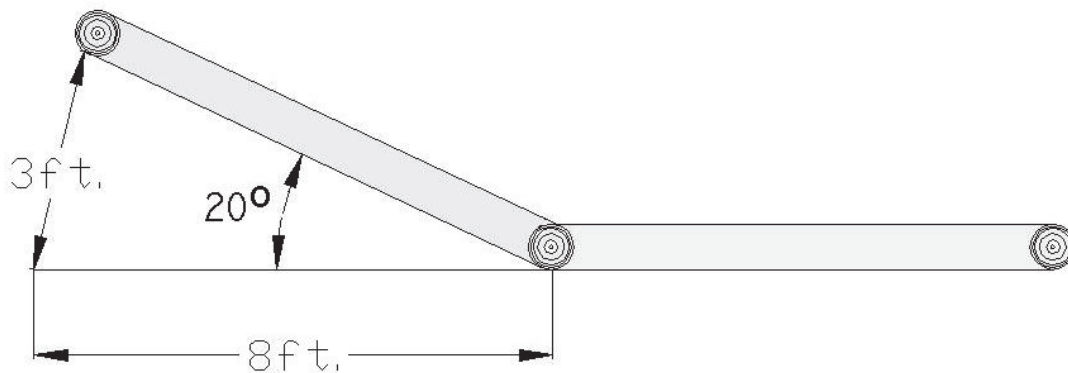


Figure 3

The first barbed wire above woven wire fence should be within 3" of top line wire. This reduces the possibility of animals getting their head between woven wire and barbed wire, and mashing down the fence.



**Top View of Fence Brace Showing
Minimum Angle to be Considered a Corner**

Figure 4

RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD FENCE (382)

Criteria

ction must meet the minimum requirements for controlling specific animal types.

Fence type	Purpose of Fence				Spacing Inches above ground level ww fences start 2-3 " above the ground
	Perimeter (boundary) prohibited areas	Access lanes & stream crossings	Interior subdivision	Stream exclusion	
	Minimum Criteria				Inches
	NO	NO	Meets	Meets	18, 30, 42
	NO	Meets	Exceeds	Exceeds	16 to 48 evenly spaced
	Meets	Exceeds	Exceeds	Exceeds	14 to 48 evenly spaced
ire high tensile smooth			Exceeds	Meets	12 to 42 evenly spaced
ire high tensile smooth	No	Meets	Exceeds	Exceeds	12 to 44 evenly spaced
ire high tensile smooth	Meets	Exceeds	Exceeds	Exceeds	12 to 44 evenly spaced
gh tensile smooth	NO	NO	Meets	NO	32
gh tensile smooth	NO	Meets	Exceeds	Meets	20, 32
gh tensile smooth	NO	Exceeds	Exceeds	Exceeds	18, 30, 42
gh tensile smooth	Meets	Exceeds	Exceeds	Exceeds	12 to 42 evenly spaced
gh tensile smooth	Exceeds	Exceeds	Exceeds	Exceeds	12 to 44 evenly spaced
polywire or Polytape (1hot wire)	NO	NO	Meets	NO	32
polywire or Polytape (2 hot wires)	NO	Meets	Exceeds	Meets	20, 32
one or more top wire	Exceeds	Exceeds	Exceeds	Exceeds	47 min, 6 max between top wires
sition boards (6" wide)	Exceeds	Exceeds	Exceeds	Exceeds	6 , 6, 8, 10 between boards
olus one or more top wires	Exceeds	Exceeds	Exceeds	Exceeds	47 min, 6 max between top wires
	NO	NO	Meets	Meets	6 to 32 evenly spaced
	NO	Meets	Exceeds	Exceeds	6 to 36 evenly spaced
	Meets	Exceeds	Exceeds	Exceeds	6 to 48 evenly spaced
ire high tensile smooth	NO	NO	Meets	Meets	6 to 32 evenly spaced
ire high tensile smooth	NO	Meets	Exceeds	Exceeds	6 to 36 evenly spaced
ire high tensile smooth	Meets	Exceeds	Exceeds	Exceeds	6 to 42 evenly spaced
gh tensile smooth	NO	NO	Meets	Meets	8, 18, 30
gh tensile smooth	NO	Meets	Exceeds	Exceeds	6 to 36 evenly spaced
gh tensile smooth	Meets	Exceeds	Exceeds	Exceeds	6 to 38 evenly spaced
one or more top wire	Exceeds	Exceeds	Exceeds	Exceeds	32 min, 6" max between top wires
sition boards (6" wide)	Exceeds	Exceeds	Exceeds	Exceeds	6, 6, 8, 10 between boards
olus one or more top wires	Exceeds	Exceeds	Exceeds	Exceeds	35 min, 6" max between top wires

re)

Fence type	Purpose of Fence				Spacing Inches above ground level ww fences start 2-3 " above the ground
	Perimeter (boundary) prohibited areas	Access lanes & stream crossings	Interior subdivision	Stream exclusion	
	Minimum Criteria				Inches
gh tensile smooth	NO	Meets	Meets	Meets	28, 38
gh tensile smooth	NO	Exceeds	Exceeds	Exceeds	28, 38, 48
gh tensile smooth	Meets	Exceeds	Exceeds	Exceeds	18 to 54 evenly spaced
gh tensile smooth	Exceeds	Exceeds	Exceeds	Exceeds	18 to 54 evenly spaced
polywire or Polytape	NO	NO	Meets	NO	34
polywire or Polytape	NO	Meets	Meets	Meets	28, 48
wire HT on top	Exceeds	Exceeds	Exceeds	Exceeds	48 + HT at 54
2"x4" spacing	Exceeds	Exceeds	Exceeds	Exceeds	48 + HT at 54"
sition boards (6" wide)	Exceeds	Exceeds	Exceeds	Exceeds	18 min. 12 max. between boards
gh tensile smooth	NO	NO	Meets	Meets	8, 16
gh tensile smooth	NO	Meets	Exceeds	Exceeds	8, 16, 24
w/ 1 wire barb or HT	Exceeds	Exceeds	Exceeds	Exceeds	32 + barb or HT at 38
w/ 1 Ht electric inside	Meets	Meets	Meets	Meets	32 + 1 electric wire 8 off ground, 8 inside of fence.
tall w/2 strands of smooth wire	Meets	Meets	Meets	Meets	96" w/smooth wire at 9' and 10'
gh tensile smooth	NO	NO	Meets	Meets	16 to 42 evenly spaced
gh tensile smooth	NO	Meets	Exceeds	Exceeds	16 to 48 evenly spaced
gh tensile smooth	Meets	Exceeds	Exceeds	Exceeds	12 to 52 evenly spaced
4" 1 wire HT or barb above	Exceeds	Exceeds	Exceeds	Exceeds	72
6" 1 wire HT or barb above	Exceeds	Exceeds	Exceeds	Exceeds	72
2"x4" 1 wire HT or barb above	Exceeds	Exceeds	Exceeds	Exceeds	72
6"x6" 1 wire HT or barb above	Exceeds	Exceeds	Exceeds	Exceeds	72
	Meets	Preferred option			60 with 1 barb above
	Meets				12 to 60 evenly spaced
ch plus 1 or 2 barbed wires or HT	Meets				47 min. HT or barb at 6 spacing to 48. HT may be electrified

may be approved by the Resource Conservationist, i.e. *common sense fence, horseguard or equivalent*.

Fencing – Job sheet

RI - JS 382

Practice Installation Guidelines

It shall be the responsibility of the landowner to obtain all necessary permits and/or rights, and to comply with all ordinances and laws pertaining to this installation.

Practice designs and specifications shall be reviewed by NRCS planner with the landowner prior to start of work for practice installation.

Contact the NRCS planner _____ at 401- _____ prior to installation. Keep NRCS planner updated throughout the installation process.

Contact the NRCS planner _____ at 401- _____ upon completion of practice.

Practice specifications and special requirements

Installation shall be in accordance with the following specifications and special requirements.

NO CHANGES ARE TO BE MADE IN THE DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR APPROVAL OF THE NRCS.

1. Use Practice Specifications: **Fencing specifications worksheet**
Specification Guide Sheet for Fencing (382)

The landowner/operator acknowledges that:

A) He/she has received a copy of the practice specifications, and Operation and Maintenance plan, and that he/she has an understanding of the contents and the requirements.

B) He/she has or will obtain all of the necessary permits prior to construction.

C) No changes will be made in the installation of the job without prior concurrence of the NRCS technician.

D) This practice has a lifespan of 20 years.

E) Adherence to the Operation and Maintenance plan of the installed work is necessary for proper performance during the practice lifespan.

F) NRCS planner shall be contacted prior to installation for a review of the practice installation and at completion for practice certification.

Accepted by :

Date:

Address :

Practice design approval

Lead Discipline for this practice: **Biological Conservation Sciences Division**

Job Classification:

☐ No design changes were made. ☐ Design changes were approved and are included

Design approved by:

Date:

Practice certification

I have made an on-site inspection and have determined that the practice has been installed according to practice standard and specifications.

Certified by:

Date:

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION**

FENCE

(feet)

CODE 382

WOVEN WIRE FENCE

SCOPE

This specification establishes the technical details, workmanship, quality and extent of materials required to install the line assemblies in accordance with the Conservation Practice Standard. Specifications for braces and other line assemblies are contained in separate documents.

The NRCS Washington Jobsheet for Woven Wire Fence shall be used to document the site-specific requirements for installing, operating, and maintaining the practice on a specific field or treatment unit. The work shall consist of furnishing materials and installing materials for the specified design at the location(s) shown on the plan map, drawings, or as staked in the field.

Fencing includes brace assemblies, line assemblies, gates, cattle guards, and other components required for meeting site conditions and achieving the objectives of the practice application. Other documents (worksheets, maps, drawings, and narrative statements in the conservation plan) may be used to document site specifications, plan or design the practice. If a fence is being planned that is not provided for in the following specifications, contact the Washington State Range Management Specialist for approval at the beginning of the planning process and prior to construction.

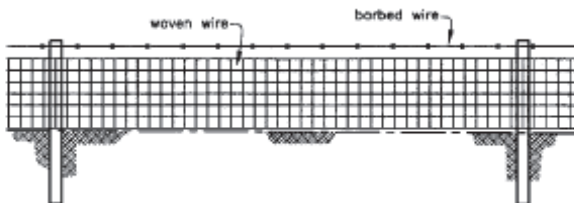
The fence will be installed in accordance with proper safety procedures. The completed job shall be workmanlike and present a good appearance.

If brush or rock clearing, grading or other land work is to be done in conjunction with the fence installation, appropriate grading and erosion control measures shall be undertaken or installed. Specifications for all measures to be installed in conjunction with the fence should be attached to the Jobsheet.

TYPE OF FENCES

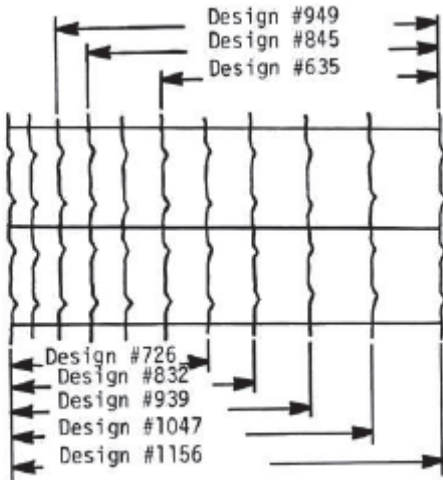
Woven-wire

Woven-wire fence is best used in areas where tight control is necessary: sheep, goats, horses, hogs, people, wildlife depredation, or predator control. Woven-wire fences consist of woven-wire stretched between line posts. The spacing of the mesh of the woven-wire differs, depending on the kind of animals the fence is designed to control. Woven-wire fences can be adapted to most terrain, but are not well suited to areas of heavy snow loads or subject to frequent ponding and flooding.



Each woven-wire fence type has a fence tag with a design number that accurately describes the configuration of the fencing material. In the "Design No."

- first one or two numbers relate the number of line wires;
- next two numbers to the right specify the height of the wire in inches;
- next to last number grouping (either the number 6 or the number 12) identifies the spacing of vertical stay wires; and
- the final one or two numbers give the gauge of intermediate wires.

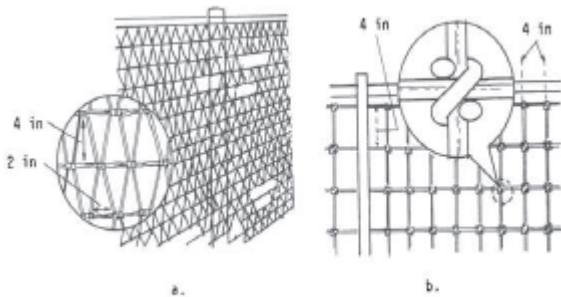


For example, woven wire with "Design No. 726-12-11", has 7 line wires, is 26 inches high, the vertical stays are spaced 12 inches apart, and the intermediate wires are No. 11 gauge. Intermediate or filler wires include the horizontal line wires and all the vertical stay wires between the top and bottom wires.

Woven wire is not safe for wildlife.

Mesh Fence

Mesh fences, such as horse-no-climb, is used for confinement fencing-corral, feed lots, and small acreage areas. No-Climb types of configurations are used for camelids and horses to prevent fence damage and potential injury to the animal.



MATERIAL SPECIFICATIONS

All materials used in the construction of fences shall have a minimum life expectancy of ten (10) years. Fences will be constructed that equal or exceed the strength and durability of one built in accordance with the materials specifications in the following tables.

If a fence is to have improved longevity and reduced maintenance use one of more of the following concepts:

- a. Larger diameter wooden posts or heavier weight line posts (1.33 lb/ft. instead of 1.25 lb/ft.)
- b. Deeper setting of longer posts
- c. Closer spacing of posts and braces, and/or
- d. Using a stronger line post periodically.

Line Posts

Steel line posts can be used in moderate to low snowfall areas, or in rocky areas where posts must be pounded or drilled to be set. One main disadvantage of using steel posts is that they are likely to be bent or forced out of line by livestock or heavy weed pressure. Wooden posts are preferred for use in areas with high snowfall, high livestock pressure (e.g., intensive grazing systems, riparian fences, or areas adjacent to cropland with high expected weed loads). Using wood posts every 50 to 75 feet can help keep steel posts from bending and improve the strength of the fence. A combination of wood and steel line posts (e.g., 1 in 3 or 1 in 5 posts being wood) can significantly increase the strength of the fence but even as few as (1 in 7 or 1 in 10) can be helpful.

Wood line posts do not need to be new materials (Railroad Ties and Power Poles are adequate); however, all posts shall meet the minimum criteria for durability and protective coating. Wood posts need to be sound and free from decay, with all limbs trimmed substantially flush with the body. Post shall be sufficient length to meet buried depth, fence height requirement plus 3 inches. Lengths listed below are based on a 42-inch top wire height.

Line posts set in muck, peat, or soils on which water stands, shall be wooden - 8 ft long and set a minimum of 4 ft. deep.

Table 1 Line Post Requirements

LINE POST TYPE	MINIMUM DIAMETER	MINIMUM SETTING DEPTHS	MINIMUM LENGTHS	MINIMUM PROTECTIVE COATING, OTHER
Wood-juniper, cedar	3-1/2 inches	24 inches	6 feet	None
Wood other than above	3-1/2 inches	24 inches	6 feet	Complete penetration of the sapwood with approved treatment materials. Pressure-treated, entire length of post. See note below.
Standard "T", "Y" or "U" section steel rolled with high carbon steel and studded, embossed, or punched for wire attachment with anchor plate.	1.25 pounds per foot of length, exclusive of anchor plates	18 inches Top of the spade + 2 knobs – minimum of 18"	5.5 feet	The coating may be either galvanized by the hot dip process or painted in accordance with Commercial Standard 184 with one or more coats of high-grade, weather-resistant steel paint or enamel applied and baked.
Live trees	6 inches at top wire	Wire not wrapped or stapled directly to tree. A wood slat is nailed to the side of the tree and the wires stapled to the slat.		

NOTE: Chromated Copper Arsenate (CCA)-treated wood posts should not be used where treated wood may come into contact with water sources (wetlands, streams, high water tables, etc.). Other chemically-treated and pressure-treated wood posts may be used in these areas. (EPA 2002)

Figure 1 Standard Metal Posts

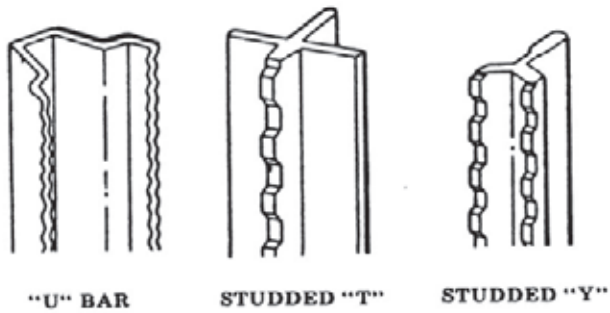


Table 2 Wire Type and Size

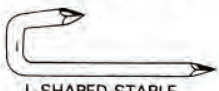
Wire Type	Minimum Wire Size	Minimum Protective Coating	Strand-breaking strength	Other
Standard Woven Wire	Top & Bottom wires: 10 gauge. Intermediate & Stay Wires: 12-1/2 gauge	Class I zinc coating or greater	32 inches minimum to 42-inch maximum height with 6 inch spacing between stay wires.	The label shall indicate the wire meets ASTM A-116 or ASTM A-584 standards.
High Tensile Woven Wire	14 1/2 gauge	Class III zinc coating or equivalent	32 inches minimum to 42-inch maximum height with 6 inch spacing between stay wires.	
Mesh Wire; such as Horse-No-Climb	Top & Bottom wires: 10 gauge. Intermediate & Stay Wires: 12-1/2 gauge	Class I zinc coating or greater.	At least 48 inch high, less than or equal to 2 inch x 4-inch mesh spacing.	

At least one strand of barbed or other wire will be added at the top spaced 2-6 inches above the woven wire.

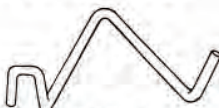
STAPLES AND FASTENER MATERIAL REQUIREMENTS



U-SHAPED STAPLE



L-SHAPED STAPLE



WIRE CLIP

U-shaped staple, conventional wire: No. 9 gauge galvanized wire or bright hard wire; at least 1 and 3/4-inch long.

L-shaped deformed shank staple: No. 9 gauge galvanized wire or bright hard wire; at least 1 and 1/2-inch long.

Fence wire shall be fastened to steel posts using steel clips manufactured for the purpose of attaching wires, or 9 gauge smooth wires.

Other post types will use fasteners and methods recommended by the manufacturer.

INSTALLATION SPECIFICATIONS

LINE POST SPACING AND SETTING

All posts shall be placed to the required depth and shall be firmly embedded. Posts shall be set to the minimum depths listed in **TABLE 1–Line Post Requirements**.

Wood posts shall be driven or set in holes and backfilled with compacted earth or poured concrete. Where postholes are dug, the holes shall be at least six (6) inches larger than the diameter of side dimensions of the posts. Earth backfill around posts shall be thoroughly tamped in layers not thicker than 4 inches and shall completely fill the posthole to the ground surface. Concrete backfill around posts shall be rodded into place in layers not thicker than 12 inches and shall completely fill the posthole to ground surface. Backfill, either earth or concrete shall be crowned up around posts at the ground surface.

Concrete shall be class 3000 in accordance with Washington NRCS Construction Specification CS-42, Concrete for Minor Structures. Concrete shall be allowed to set for ten days before tension is applied to the line assemblies through tightening of wire.

Steel line posts shall be driven solidly into the ground until the plate is covered plus 2 knobs, minimum of 18 inches. If soil conditions prevent firmly settling line posts in the ground, Figure-4 (WA-Standard Drawing Isk-260) or wire cribs (WA-Standard Drawing Isk-253) may be used.

Post spacing in areas shallow to rock may vary based on availability of post sites. Probe with a rock probe to determine desirable post sites. Steel pipe and steel post are recommended to use in cracks between rocks. Concrete in the post where possible. Rock bits are available in some areas for drilling rock. Use stays to maintain wire spacing. A post set in a 5 gallon bucket of concrete may be used as a line post. Bury bucket as deep as possible.

Where rock occur within the required embedment depth for posts, a hole of a diameter slightly larger than the largest dimension of the post shall be drilled in the rock and the post grouted in. The depth of post embedment shown on the Jobsheet will not be required and the post may be shortened as necessary, provided the line post is embedded within the rock for a minimum depth of 12 inches or the required embedment depth of the post is attained. Grouting will be required on the portion of the post in solid rock.

Where solid rock is encountered without an overburden of soil, line posts shall be set into the solid rock a minimum depth of 12 inches. The posts shall be cut before installation to lengths which give the required height of post above ground.

After the post is set and plumbed, the hole shall be filled with grout consisting of one part Portland cement and three parts clean, well graded sand. The grout shall be thoroughly worked into the hole so as to leave no voids. The grout shall be crowned to carry water from the post.

FENCE HEIGHT and WIRE SPACING

Fence height is measured from the ground at post locations

Wire Type	Minimum Wire Size	Minimum Protective Coating	Strand-breaking strength	Other
Standard Woven Wire	Top & Bottom wires: 10 gauge Intermediate & Stay Wires: 12-1/2 gauge	Class I zinc coating or equivalent	meets ASTM A-116 or ASTM A-584 standards.	At least one strand of barbed or other wire will be added at the top spaced 2-6 inches above the woven wire.
High Tensile Woven Wire	14 1/2 gauge	Class III zinc coating or equivalent		
Mesh Wire; such as Horse-No-Climb	Top & Bottom wires: 10 gauge Intermediate & Stay Wires: 12-1/2 gauge At least 48 inch high, less than or equal to 2 inch x 4-inch mesh spacing.	Class I zinc coating or equivalent	.	

Provisions must be made for identified crossings for wildlife movement; both over and under the fence.

These areas will not exceed 1/4-mile apart and there must be a minimum of one per fence. The fence in these designated crossing locations will not exceed 42 inches at the top wire and must include a minimum of one alternative to allow for wildlife movement (*see Range Technical Note 102 - Riparian And Other Tight Fence - Wildlife Considerations).

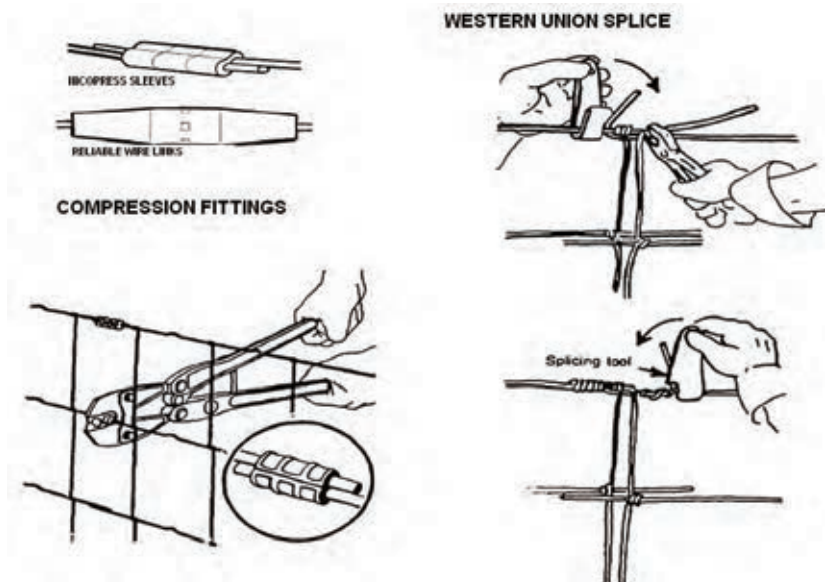
SPLICING INSTALLATION REQUIREMENTS

Non-High Tensile Wire

When splicing of wire is necessary use "Western Union" splice or compression fittings.

High Tensile Wire

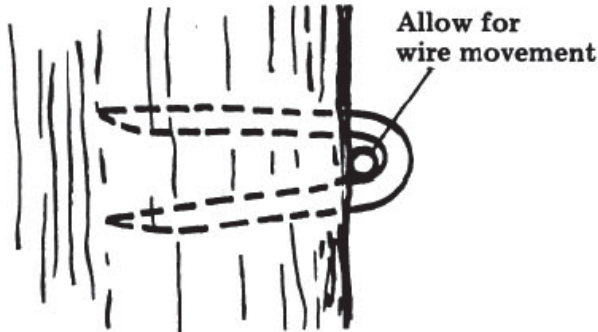
When splicing of wire is necessary, use compression fittings.



STAPLES AND FASTENER INSTALLATION REQUIREMENTS

Staples shall be driven into the post at a 45-degree angle. Staples shall be driven just deep enough to snug the line wire without bending it.

* Reference Standard Drawing LSK-0001 Staples and Wire Attachment

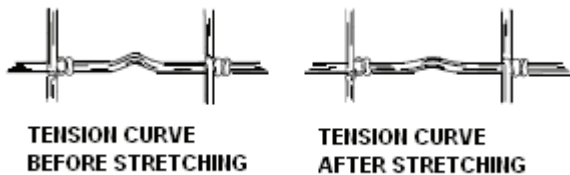


Staples should hold wire close to fence, but allow for expansion and movement of the wire.

FENCE WIRE TENSION

Woven Wire

Temperature variations must be considered when setting the tension on line wires (wire will tighten in cold weather and expand in hot weather). All line wires shall be dead-ended on gate, corner, or the anchor posts (pull posts) of in-line brace units.



To attach woven-wire to posts at wire end points, first determine the approximate length of wire that is needed to wrap the wire around the post two times. Remove enough vertical stay wires to provide the needed amount of line wire. Cut the vertical stay wires between the horizontal line wires. If the woven-wire has hinge joints, loosen the hinge joints and slip them off the end of line wires. Wire ends are then double wrapped around the anchor posts or (pull posts), stapled, and twisted back on the stretched line wire with at least six tight wraps. A spring action is built into most woven-wire by using tension curves configured as a "U"-shaped crimp in the line wire. Stretch woven-wire so that about one-third of the wire tension curve is removed.

Mesh Wire

Per Manufacturer's recommendations

CORNER, BRACE AND GATE POSTS

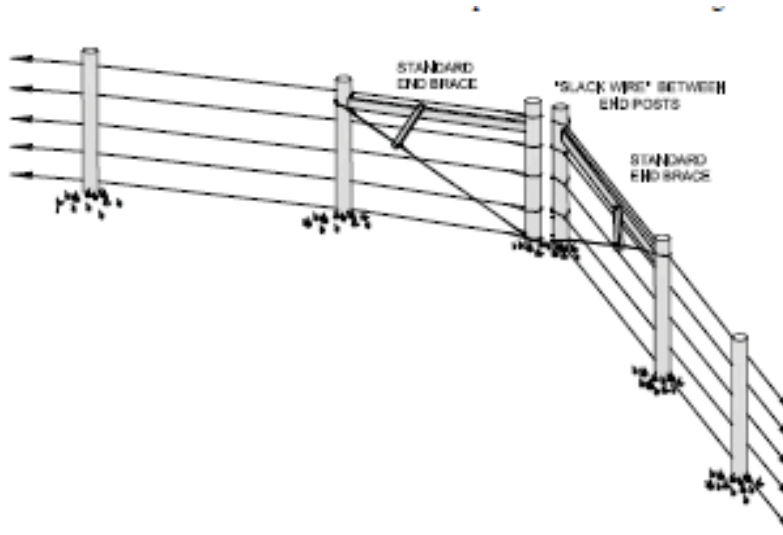
BRACING AND ALIGNMENT

Bracing is the key determinant to the structural soundness and longevity of wire fences. In straight sections on moderate terrain, in-line brace units are required at intervals not to exceed 330 feet but spacing shall be such as to use standard rolls of wire mesh with a minimum of cutting and waste.

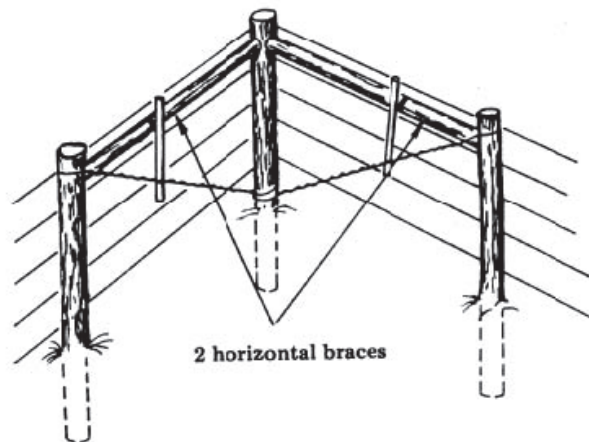
Brace posts shall not be set in muck, peat, or soils on which water stands.

Braces are required at all end corners, gates and definite angles of change (horizontal and vertical) greater than 5 degrees if bearing on a metal line posts, greater than 20 degrees if bearing on a sound wood post a minimum of 4 inches in diameter and embedded a minimum of 3 feet.

- Between 20 and 60 degrees angle of change use a 4 post brace (which is a double H that does not share a common post like the 3 post Standard H-brace) or a double diagonal floating or steel diagonal brace



- Greater than 60 degrees angle of change a 3 post brace – horizontal (Standard H-brace) or a diagonal brace may be used

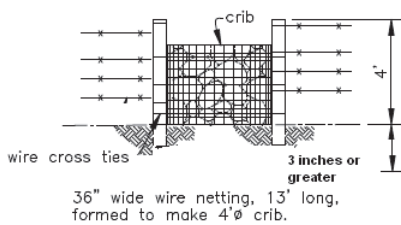
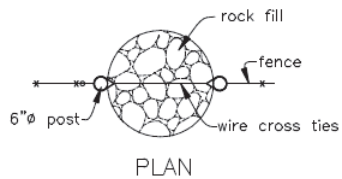


At any angle of change the following alternatives may also be used:

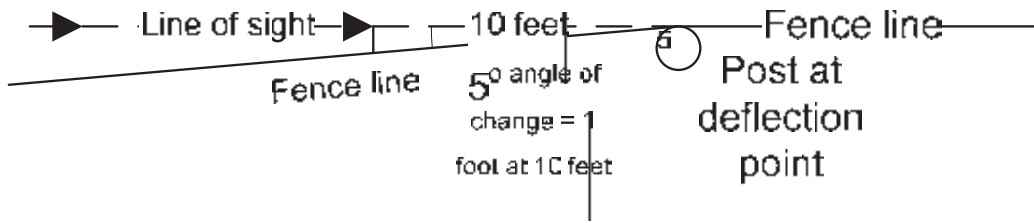
- Standard H-Brace
- Diagonal Steel Brace
- Diagonal Floating Brace
- Rock Cribs –see NRCS-WA Standard Drawing Isk-0253



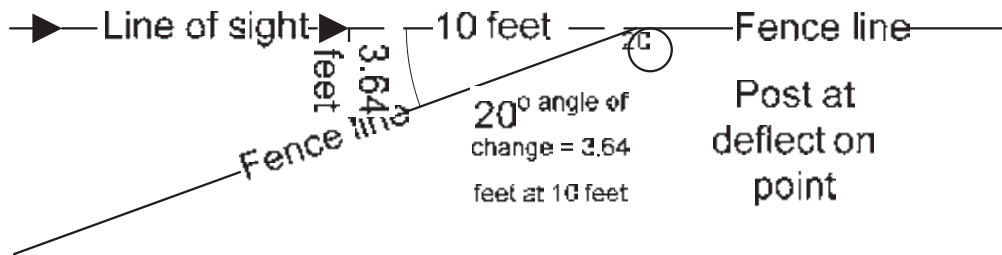
- Rock jack – see NRCS-WA Standard Drawing Isk-0260



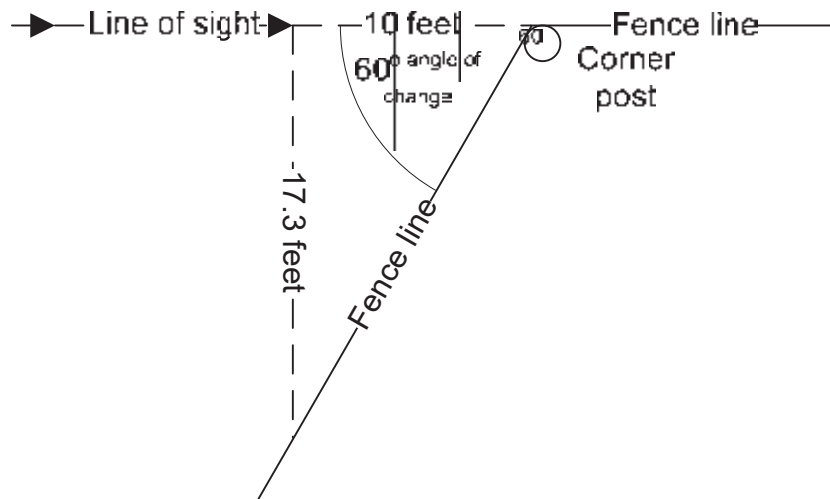
How to estimate a 5° angle

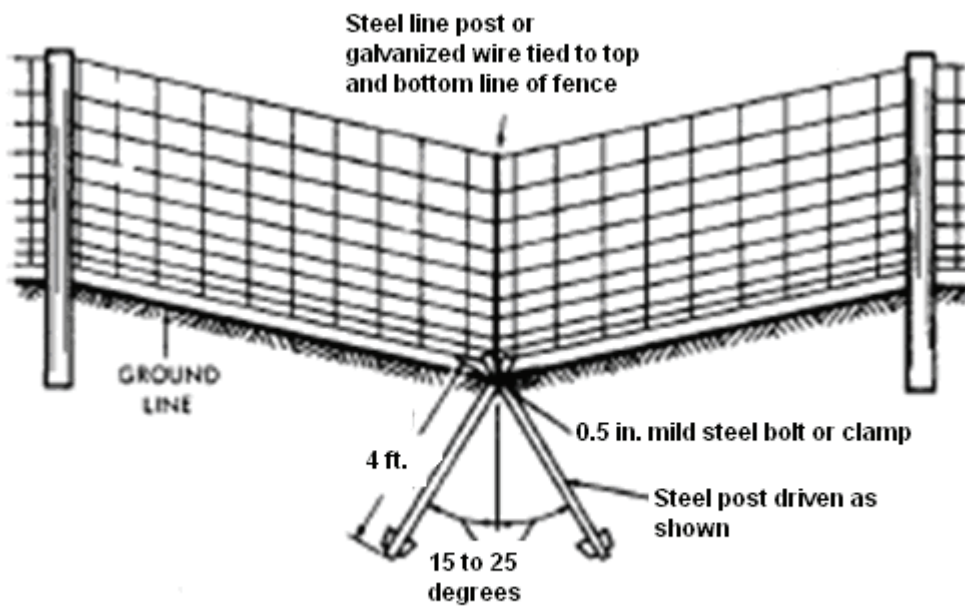


How to estimate a 20° angle

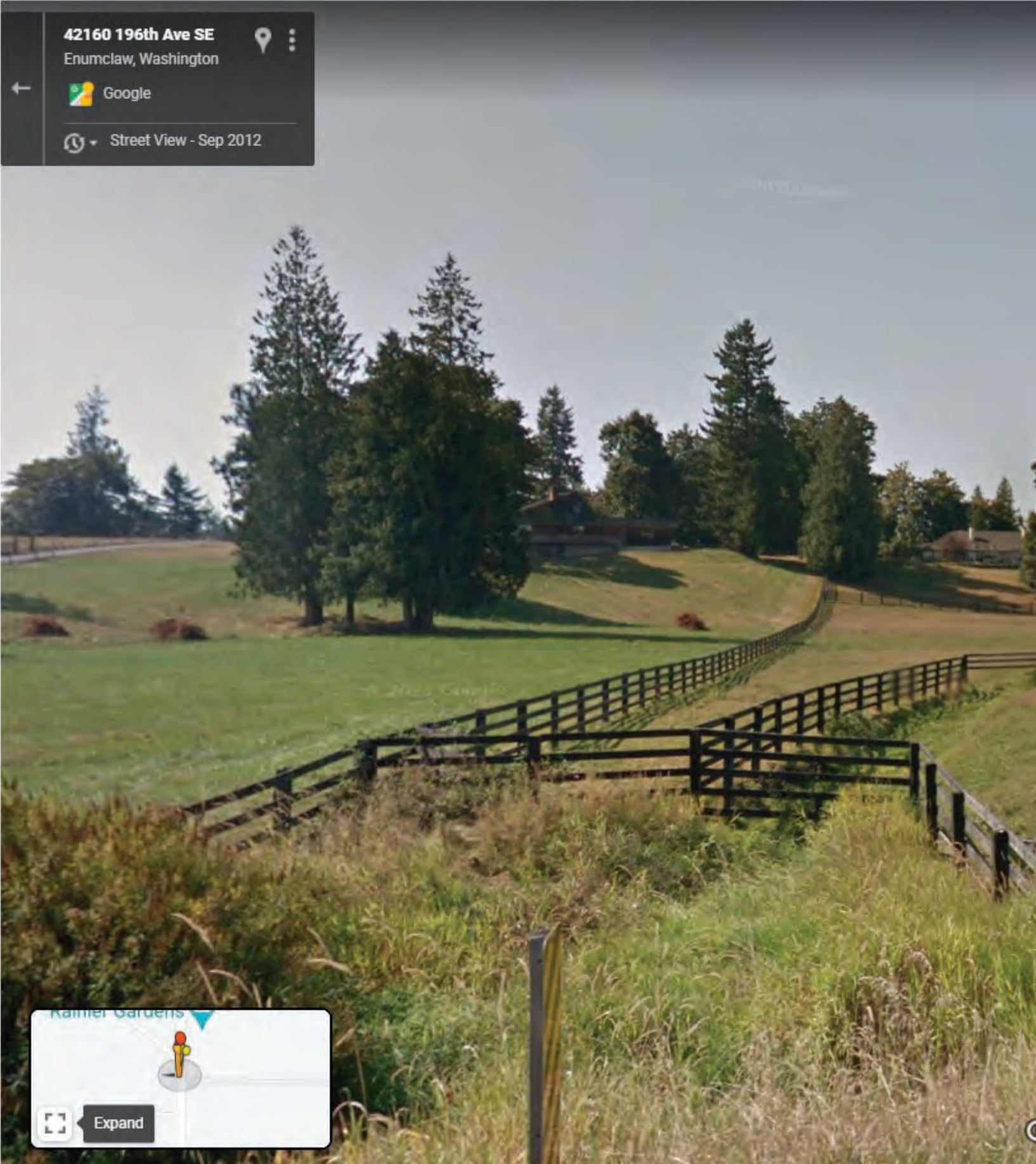


How to estimate a 60° angle

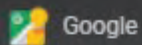




Assembly at change in vertical alignment



42160 196th Ave SE
Enumclaw, Washington



Street View - Sep 2012

Rainier Gardens



Expand



King Conservation District Board of Supervisors Meeting 07/11/2022
Agenda Action Briefing/Report AI 22-0 ⁵⁷

SUBJECT:

Review for Approval KCD Landowner Incentive Program cost-share application from Robert Pepka, for Stream Crossing, in the amount of \$36,000.00.

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$127,424.16
Current Request	\$36,000.00
Balance Remaining	\$91,424.16

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

Robert Pepka owns a 28 acre property in Duvall which they purchased around 2018 with the intention to farm. Since purchasing their property it has experienced significant flooding due to an avulsion in Cherry Creek in 2018 which flooded theirs and neighboring fields. The avulsion was repaired in 2020, however a partially crushed culvert is acting as a fish passage barrier and continually becomes blocked with debris and sediment both naturally and from beavers, and flooding is continuing to be an issue in their fields. The culvert occurs along a drive-way that the Pepka's use to bring farm equipment to their fields, this historic farm access driveway acts as an artificial barrier to downstream flow and has rendered the pastures unusable.

This project will replace the old, partially crushed culvert with a bridge that will allow for more surface water to flow and reduce the beaver activity. The goal is to reduce ponding and flooding around the farm access road and in associated fields.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION

Staff seeks Board approval of Landowner Incentive Program cost-share application from Robert Pepka, for a Stream Crossing, in the amount of \$36,000.00.

MOTION

 Moved, Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Robert Pepka, for Stream Crossing, in the amount of \$36,000.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Robert Pepka		Farm/Business Name: Pepka Farm	
Mailing Address: 28716 NE Cherry Valley Rd Duvall, WA 98019		Project Address: 28716 NE Cherry Valley Rd Duvall, WA 98019	
Phone (home):		Phone (work/mobile):	
Email Address: pepkaro@gmail.com		KCD Staff: pepkaro@gmail.com	
Parcel #(s): 072607-9005	<input type="checkbox"/> Incorporated <input checked="" type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 28.1	<input type="checkbox"/> T.A. <input checked="" type="checkbox"/> Farm Plan <input type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Stream Crossings
Project Completion Date (month and year): 08/08/2023
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP: also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>The proposed bridge project will include removal of a fish passage barrier that is a partially crushed 24" culvert. This watercourse had ADAP done in 2016 where salmonids were captured and released including Coho and some ESA listed Chinook (listed as 'threatened'). Other resource concerns are that heavy rainfall running downhill from southern slopes is filled with sediment and clogs the already undersized culvert quickly. This cooperator and his neighbors have been continually cleaning this culvert to remove sediment and debris that is dangerous for them in high flow times. Significant amount of surface water flow has caused scouring at the outlet of the culvert and erosion of ditch banks. Additionally, beavers are continuously drawn to this culvert because it easy to dam up. In 2021, WCC crew helped to remove 5 dams around this culvert during an emergency flood event. The culvert</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>The Cherry Valley in Duvall is notorious for extensive seasonal flooding that can last between October through April. This situation became more serious in 2018 after Cherry creek experienced an avulsion and significant amounts of surface water poured over several farms in the valley for two winters. The Pepkas purchased this property in 2018 from the Hartley family. ADAP recently completed a project in 2016 to support the Hartley family where KCD staff worked with ADAP to purchase a bridge at that time. The bridge was not ordered correctly in 2016 and was not installed. Since then, the farm went up for sale for two years and new cooperators moved in. The Pepkas are very much interested in working their pastures but have been unable to do so due to extensive flooding. By removing this undersized culvert, surface water should not pool around this site as much or for as long as it currently does. If surface water has a wider opening to pass through, then less scouring and erosion will occur when water has less velocity. When surface water slows down, this reduces stress on fish where they can now</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>The farm owners and/or managers will need to review the bridge annually for structural integrity.</p>

Permits <i>(List all permits required to complete this project):</i> HPA in progress through King County ADAP
Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)?

☒ Yes
☐ No

If yes, please list contract number and BMP below:

LIP Contract 2020-15 Sub-surface drain. Did not use as there was a change in project design. In process of cancellation to allow for new application.

B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs?

☐ Yes
☒ No

Please describe below:

1. King County Cost-share

Please list practices and date installed below:

2. NRCS EQIP (Natural Resources Conservation Service’s Environmental Quality Incentive Program)

Please list practices and date installed below:

3. Other

Please list agency and describe project:

KCD's Agricultural drainage program will be cost-sharing on ditch maintenance project for up to \$36,000.

Other Cost-Share History/Notes:

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant’s statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

☐ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☐ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

- ☒ A. I understand the lifetime of the BMP is 10 years.
- ☒ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.
- ☒ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I understand that all applicable local, state, and federal permits must be obtained for installation of the BMP for which funds are requested, and I agree to work cooperatively to obtain these permits. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details.
_____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon verification that the BMP was installed as designed. This verification should be provided as written documentation from the design engineer. The design engineer may provide in writing for another authorized individual to provide the verification. Furthermore, I understand that changes to the installation details (attached Job Sheet and Map) must be approved through a Scope of Work Revision Process. Unapproved changes will not be eligible for reimbursement.
_____ (Initial Here)

Robert Pepka

Page 3 of 4

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Robert Pepka

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
------------------------	------	---	------

FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:

I understand that if my property is approved for funding that the installation of this Stream Crossing BMP will be coordinated by KCD staff. _____ (Initial Here)



Landowner Incentive Program

Applicant Information

Cooperator:

Budget Items	Units	
Stream Crossing bridge	20.00	\$65,473
Approach entrance of bridge	5.00	
Approach exit bridge	5.00	
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$65,473

In-Kind Labor/Machinery	# hours	
Manual labor		\$
Person with power equipment (i.e. chainsaw)		\$
Small Tractor (up to 40 hp)		\$
Medium Tractor (40-70 hp)		\$
Large Tractor (71 or above hp)		\$
Excavator (up to 100 hp)		\$
Excavator (over 100 hp)		\$
D-4 Cat or equivalent		\$
D-6 Cat or equivalent		\$
D-7 Cat or equivalent		\$
Backhoe		\$
Truck (under 2 tons)		\$
Truck (2 tons or over)		\$
Bobcat		\$
4-wheeler or side-by-side		\$
Subtotal	0.00	\$

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$
Units	Linear Feet	
Cost/Unit		\$

Conservation Practice	select BMP (x)	Cost
Animal Trails & Walkways		
Aquatic Area Buffer		
Aquatic Area Buffer (WC337)		
Buffer Fencing		
Building Relocation for Aquatic Area/Buffer		

BMPs	Units	cost/unit	%	reimbursement rate	
Animal Trails & Walkways	sq ft	\$ 0.75	0.5	\$ 0.38	Ac.
Aquatic Area Buffer	project	\$ 30,000.00	0.9	\$ 27,000.00	AUE
Buffer Fencing	ft	\$ 12.00	0.75	\$ 9.00	Ft.
Building Relocation for Aquatic Area/Buffer	project	\$ 50,000.00	0.5	\$ 25,000.00	Sq. Ft.
Bulkhead Removal (Freshwater, Marine)	project	\$ 40,000.00	0.75	\$ 30,000.00	Project
Cover Crops	acre	\$ 150.00	0.9	\$ 135.00	acre
Cross Fencing	ft	\$ 6.00	0.5	\$ 3.00	
Forest Health Management	project	\$ 30,000.00	0.75	\$ 22,500.00	
Heavy Use Area Protection	AUE	\$ 1,400.00	0.5	\$ 700.00	
Pasture & Hay Planting	acre	\$ 325.00	0.5	\$ 162.50	
Roof Runoff Management	ft	\$ 7.00	0.5	\$ 3.50	
Stream Crossing	ft	\$ 1,800.00	0.75	\$ 1,350.00	
Subsurface Drain	ft	\$ 20.00	0.5	\$ 10.00	
Upland Wildlife Habitat Management	project	\$ 20,000.00	0.75	\$ 15,000.00	
Waste Storage Facility	AUE	\$ 1,000.00	0.75	\$ 750.00	
Watering Facility	project	\$ 50,000.00	0.5	\$ 25,000.00	



Local Food
Healthy Forests
Clean Water
Better Ground

Job Sheet

Stream Crossing

Cooperator: Pepka	Lifetime of Practice: 10 years
-------------------	--------------------------------

Purpose (check all that apply)	
<input checked="" type="checkbox"/> Reduce streambank and streambed erosion.	<input checked="" type="checkbox"/> Provide crossing for access to another land unit.
<input checked="" type="checkbox"/> Improve water quality by reducing sediment, nutrient, organic, and inorganic loading of the stream.	<input checked="" type="checkbox"/> Remove a fish passage barrier in combination with installing fish passable crossing structure.

Summarize the Project Proposal. *Provide the following: 1) describe project activities, including permitting, site prep, installation, and maintenance and monitoring; 2) describe the anticipated project outcome (e.g. fish and wildlife benefits, other environmental benefits); and 3) outline the project implementation timeline.*

1) This project is part of KC ADAP project from 2016 where a bridge was scheduled to be installed but the wrong bridge size was ordered and then the farm went up for sale. There will be no dredging of the modified ag ditch as a part of this project. The original 5 year HPA has expired and an extension HPA application has been submitted. Project activities will include removing and replacing a partially crushed 24" concrete structure that is blocking conveyance of surface water and impeding fish passage. During the 2016 ADAP project, captured and released salmonid included coho and ESA listed Chinook. A new 12' x 20' long concrete bridge will be installed with concrete block abutments. Maintenance and monitoring of this bridge is recommended annually or as needed on private property.

2) The bridge replacement is necessary because the current bridge is undersized and is causing significant fish passage issues. During seasonal flooding or heavy rain, this modified ditch carries all surface water from adjacent steep slopes and is forced through a partially crushed 24" culvert which has caused extensive scouring of the ditch and prolonged flooding of adjacent pastures. Flood waters are also dispersing out and around the bridge and washing out the farm road. The recent avulsion project helped to reduce overland flooding of pastures to the northeast but upland surface flows continue to increase in sediment load as development of upland properties continues. Removal of this fish barrier will help to slow the velocity of this watercourse and improve salmonid health as well as provide access to more spawning areas upstream. Removal of this culvert will also reduce beaver dams that have been sighted as blocking fish passage as well. This system received a native buffer planting in 2017 as part of the original ADAP project. Additional plants will be installed if any damage occurs to the existing buffer.

3) This project is currently waiting for approval by WDFW for HPA extension from 2016 ADAP. The bridge structure will be delivered to the site by September 2022. Two coffer dams will be placed on upstream and downstream ends of the existing culvert, water will be pumped down, fish will be removed, and the existing culvert will be removed. All work below the OHWM will be completed by Sept. 30th, 2022. Bridge decking work can continue past this deadline if anything else needs to be done.

Describe Project Area. *Provide the following: 1) extent of project area above and below ordinary high water mark; 2) dimensions of site; and 3) briefly describe the existing vegetation and habitat conditions.*

- 1) All work to remove the fish barrier culvert will be done below the OHWM. Bridge Decking work will be out of the OHWM.
- 2) The new bridge will be 12' wide by 20' long concrete slab that is a part of an existing farm access road.
- 3) Existing vegetation consists mostly native trees and shrubs that were planted in 2017.

Name and type (S, F or N, wetland I, II, or III) of waterway to be crossed.

This modified ag ditch is a salmon bearing watercourse.

Land Uses and Associated Impacts. *Provide the following: 1) describe how the property is used (e.g., residential, commercial, recreational); 2) describe adjacent properties, including land uses and any potential adverse impacts to adjacent properties associated with the proposed project.*

- 1) This property is used as farmland primarily.
- 2) Adjacent properties include horse boarding operation and two hobby farms. Current loss of farmland is estimated at 40 acres of pasture due to prolonged flooding from the avulsion and this blocked culvert. The farm access road is also a barrier for surface water that prevented surface water from draining in a timely manner.

List the intended use (people, livestock, equipment, or vehicles). *Also include the stream crossing dimensions and project materials. Please attach an engineer approved design.*

Livestock, cars, trucks, tractors. This bridge is load-rated as HL-93 ('HL stand for Highway load via AASHTO) Concrete bridge will be 45'x12'. Footing will be made of Redi-blocks that are concrete.

Grading and Demolition Activities. *Describe the plan to remove structures (failing culvert, etc.) and grade project areas, including specific construction methods and equipment to be used.*

An excavator will remove old culvert after site is dewatered and defished. New concrete abutments will be installed as footings. Bridge entrance and exit will be graded per engineer's plans. Excavator with thumb implement will pick up bridge decking to be placed and attached to abutments using rebar. Livestock guardrails will be installed.

Habitat Restoration Activities. *Provide the following that apply: 1) describe site preparation activities (e.g. weed control, substrate to be applied, soil amendment to used); 2) identify the type and source of plant materials (e.g. potted, bareroot, ball and burlap and native plant nurseries providing plant material; 3) describe the care and temporary storage of plant materials; 4) describe installation plan (e.g. planting plan, installation techniques, sheet mulching, etc.); 5) describe maintenance and monitoring plan (e.g. number of years to be conducted, survival data collection, etc.).*

1) Restoring habitat will be removing the partially crushed 24" culvert. The ADAP buffer planting was already installed in 2017. Any damaged plants in the buffer will be replaced and maintained accordingly.

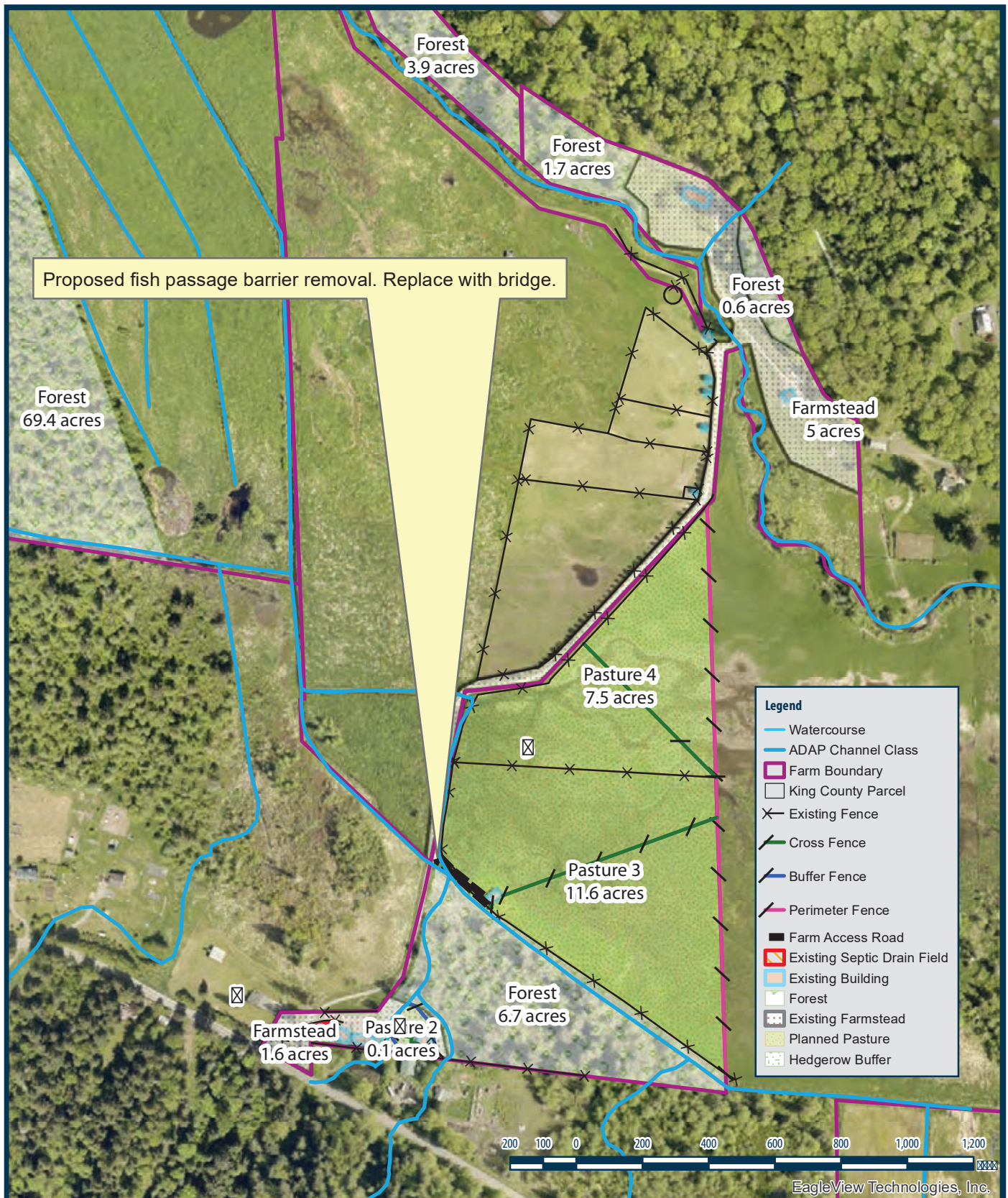
Permits. *Provide the following: 1) a list of all permits necessary for approval of project; 2) copies of all permits secured to date.*

1. HPA in process 2) none

Operation and Maintenance. *According to the following Washington State laws, WAC 220-110-070 and RCW 77.55.060, the owner of a road culvert, or ford that is a fish passage facility is responsible for maintaining its fish passage functions as well as maintenance of the structure. For example, The stream crossing, appurtenances, and associated fence should be inspected after each major storm event, with repairs made as needed.*

KCD recommends annual inspection or inspection after high flow events of the bridge by cooperators to look for any structural damage or build up of material in the watercourse underneath the structure.

Additional Specifications and Notes:



Bobby & Alayna Pepka		LIP Map for Stream Crossing Practice		SE
28716 NE Cherry Valley Rd		Stockton		07
Duvall, WA 98019		June 16, 2022		26
28.1	072607-9005			07

2022 1107 130 98057 425-282-1900

Document Path: \\KING-FS1\gis-data\GIS_Data\KCD_GIS_Data\Farm\MXDs\Projects\Farm_Pepka_7072\KCD_FRM_Pepka_7072_SC.mxd



King Conservation District - Pepka Bridge Project

Install 12' x 20' Slab Bridge (w/29° Lt-Ah skew)

Cost Estimate 1/13/21 (Standard Wages)

Item	Units	Qty	Rate	Cost
Materials				
12' x 20' Slab Bridge (Rapid-Span)	LS			\$ 21,500
Redi-Rock Blocks (60" Base Blocks)	Each	10	\$120	\$ 1,200
60" 1/2-base block	Each	4	\$65	\$ 260
41" Mid block	Each	22	\$99	\$ 2,178
23" Flat-Top	Each	8	\$85	\$ 680
Freight	Each	2	\$850	\$ 1,700
Ballast/pit-run (delivered)	CY	60	\$35.00	\$ 2,100
Abutment Bedding (5/8" delivered)	CY	12	\$55.00	\$ 660
Base Reinforcement (light rip-rap)	CY	20	\$50.00	\$ 1,000
Surfacing (1 1/4" delivered)	CY	60	\$55.00	\$ 3,300
Rip-Rap	CY	0	\$0.00	\$ -
Materials Sub-Total				\$ 34,578
WSST				8.6% \$ 2,974
Total Estimated Material Cost				\$ 37,552
Installation				
Clear & Grub (inc waste area)	ac	0.1	\$2,000	\$ 200
Sediment Control & Water Bypass	LS			\$ 5,000
Bridge Installation				
Labor	5 days x 3 men	15	\$440	\$ 6,600
Excavator (300 size)	1 @ 4 days	2	\$1,376	\$ 2,752
Excavator (200 size)	1 @ 4 days	0.5	\$1,376	\$ 688
Waste truck (<100 cy)	1 x 1 days	1	\$920	\$ 920
Spread Cat	1/2 days	0.5	\$920	\$ 460
Welder	1 days	1	\$920	\$ 920
Misc				
Misc. Equipment (compactors, pumps, etc)	LS			\$ 2,000
Hydroseeding (Seed & Mulch)	LS			\$ 500
Mobilization & Travel	LS			\$ 4,500
Misc Materials (rebar, fasteners, etc.)	LS			\$ 250
Contractor Materials Mark-up		12%		\$ 920
Labor Sub-Total				\$ 25,710
WSST				8.6% \$ 2,211
Estimated Installation Cost				\$ 27,921
Total Estimated Project Cost (non-prevailing wages)				\$ 65,473
KCD Supplied Materials				\$ 29,885
Contractor Est Bid				\$ 35,588

PEPKA BRIDGE PROJECT
KING CONSERVATION DISTRICT (ADAP)

PLAN VIEW

EXISTING
ROAD EDGE

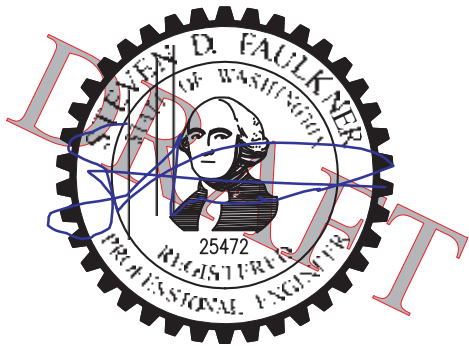


INDEX TO SHEETS	
PLAN VIEW	1
PROFILE VIEWS	2
ABUTMENT DETAIL	3
DECK DETAIL	4
STAKING DETAIL	5

EXISTING
FENCE

STA. 0+41.3 - 0+61.3
ED 12' x 20' CONCRETE SLAB BRIDGE
w/30° LT-AH SKEW @ 0%

CALL BEFORE YOU DIG
1-800-424-5555 (or 811)



EXISTING 12" CPP
REAM PT 2322±)

PROJECT AREA

LATITUDE: N 47.747372°
LONGITUDE: W 121.953325°

KING CO TAX PARCEL
0726079005

2-17-22

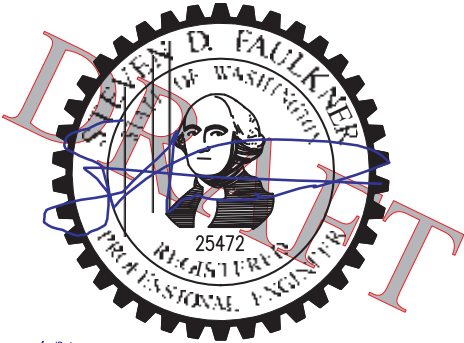
NG RESTORED UPSTREAM
CHANNEL @ 0.1%
(CBW=7'+)



PEPKA BRIDGE PROJECT		
KING CONSERVATION DISTRICT AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM		
DATE FEBRUARY 17, 2022	DRAWN PACIFIC FOREST RESOURCES ENUMCLAW, WA	DATE 2/17/22
SCALE 1" = 20'	29318 NE CHERRY VALLEY RD DUVAL, WASHINGTON 98019	SHEET 1 of 5

PEPKA BRIDGE PROJECT
KING CONSERVATION DISTRICT (ADAP)

PROFILE VIEWS



2-17-22

"READI-ROCK" CONCRETE BLOCK ABUTMENTS



TO BE CROWNED AT 2%.

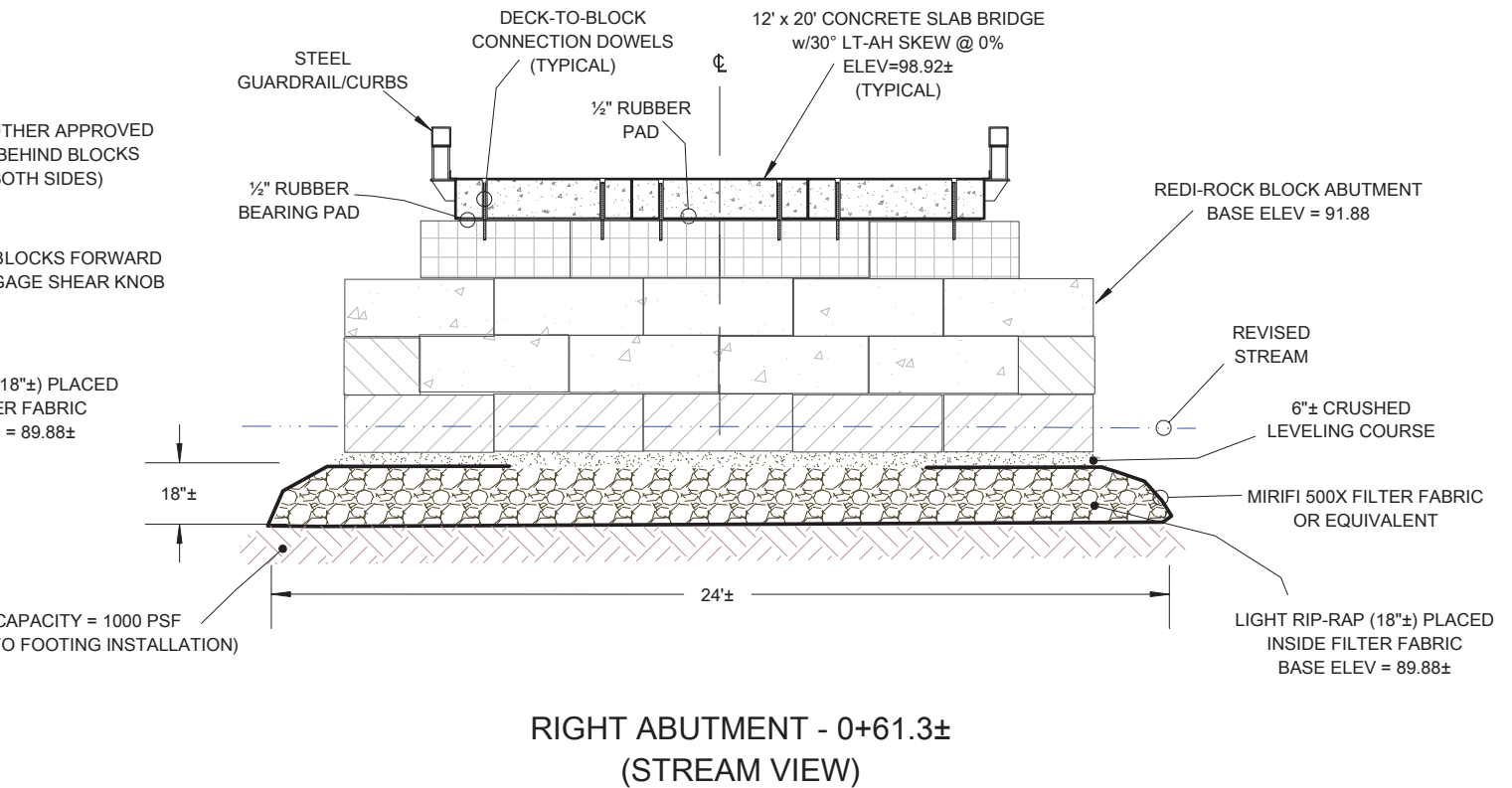
BE COMPACTED WITH CONSTRUCTION EQUIPMENT.

LOCAL SUPPLIERS.

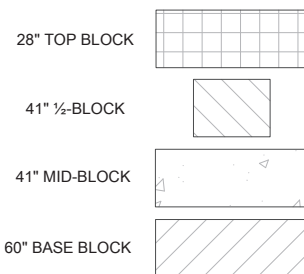
AND 8.1' (STREAMSTATS, BIEGER, ET AL, 2015).

PEPKA BRIDGE PROJECT		
KING CONSERVATION DISTRICT AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM		
DATE FEBRUARY 17, 2022	DRAWN BY PACIFIC FOREST RESOURCES ENUMCLAW, WA	DESIGNED BY
SCALE 1" = 20'	29318 NE CHERRY VALLEY RD DUVAL, WASHINGTON 98019	SHEET 2 of 5

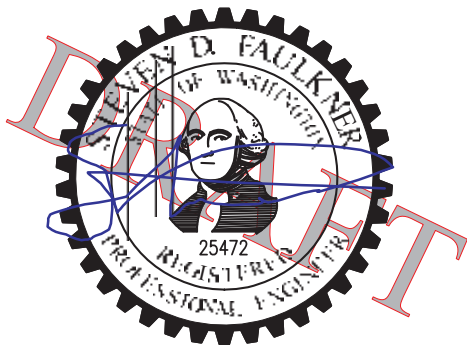
PEP PROJECT N DISTRICT (ADAP)



INSTALLATION DETAILS



TYPICAL REDI-ROCK BLOCKS



2-17-22



PEPKA BRIDGE PROJECT

KING CONSERVATION DISTRICT AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM

DATE: FEBRUARY 17, 2022

DRAWN BY: PACIFIC FOREST RESOURCES
ENUMCLAW, WA

SCALE:

SCALE: 1" = 5'

29318 NE CHERRY VALLEY RD
DUVAL, WASHINGTON 98019

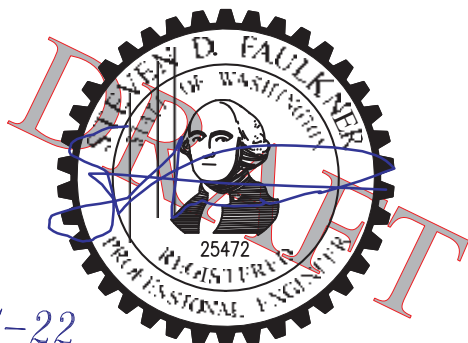
SHEET: 3 of 5

PEPKA BRIDGE PROJECT KING CONSERVATION DISTRICT (ADAP) DECK/GUARDRAIL INSTALLATION DETAILS

LIGHT RIP-RAP (18"±) PLACED
INSIDE FILTER FABRIC EXTENDS
2'+ OUTSIDE OF BASE BLOCKS
(TYPICAL)

GENERAL INSTALLATION NOTES

- 1) DECK IS COMPOSED OF THREE 4.0-FOOT WIDE x 20-FOOT LONG SKEWED PANELS, EACH WEIGHING APPROXIMATELY 12,000 LBS. LIFTING POINTS ARE CONFIGURED FOR STANDARD LIFTING CLUTCHES.
- 2) ½-INCH RUBBER PAD TO BE PLACED BETWEEN TOP BLOCK AND DECK SLABS.
- 3) HOLE SHALL BE DRILLED INTO TOP BLOCK SO THAT 1-INCH DOWEL (OR THREADED ROD) CAN BE EPOXIED INTO TOP BLOCK FOR USE AS DECK-TO-BLOCK CONNECTION. NO FASTENER ON TOP IS REQUIRED.
- 4) DOWELS/RODS TO BE GROUTED TO SLAB.
- 5) STEEL GUARDRAIL/CURB TO BE BOLTED TO EDGES OF OUTSIDE DECK PANELS AS SHOWN IN MANUFACTURER'S PLANS.
- 6) CAULKING (I.E., SIKAFLEX) SHALL BE PLACED BETWEEN STEEL ANGLE (CURB) AND DECK PANEL.
- 7) LIGHT RIP-RAP REINFORCEMENT INSTALLED BENEATH ABUTMENTS AS SHOWN ON SHEET 3.



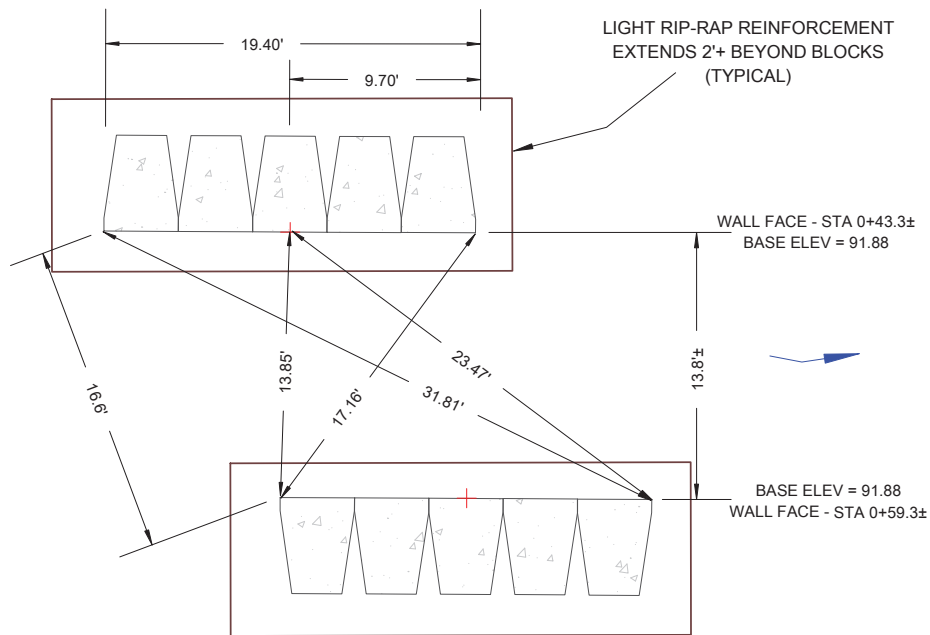
PEPKA BRIDGE PROJECT

KING CONSERVATION DISTRICT AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM

DATE FEBRUARY 17, 2022	DRAWN BY PACIFIC FOREST RESOURCES ENUMCLAW, WA	DATE 2-17-22
SCALE 1" = 5'	29318 NE CHERRY VALLEY RD DUVAL, WASHINGTON 98019	SHEET 4 of 5

PEPKA BRIDGE PROJECT KING CONSERVATION DISTRICT (ADAP)

STAKE-OUT DETAIL



BLOCK STAKE-OUT SKETCH
FACE CL POINTS

NOTE:
ABUTMENT CENTERS ARE NOT ON ROAD CENTERLINE
LEFT ABUT CL IS 7½" UPSTREAM OF ROAD CL
RIGHT ABUT CL IS 7½" DOWNSTREAM OF ROAD CL



PEPKA BRIDGE PROJECT

KING CONSERVATION DISTRICT AGRICULTURAL DRAINAGE ASSISTANCE PROGRAM

DATE: FEBRUARY 17, 2022

DRAWN BY: PACIFIC FOREST RESOURCES
ENUMCLAW, WA

1/2" = 1'

SCALE: 1" = 10'

29318 NE CHERRY VALLEY RD
DUVAL, WASHINGTON 98019

SHEET: 5 of 5

Pepka (Laird) Block Bridge

Bridge Footing Loads

Soil Bearing Capacity:	1.000 ksf
Less DL	0.523 ksf
LL Available	0.477 ksf

Loadings:

HS 20-44	Use eccentric loading @	100%
DL + LL =	109.36 +	33.68
	=	143.04 k
	Soil Bearing =	684 psf
	FS =	1.46

HS 25-44	Use eccentric loading @	100%
DL + LL =	109.36 +	42.11
	=	151.47 k
	Soil Bearing =	725 psf
	FS =	1.38

U-80	Use eccentric loading @	100%	(centered)
DL + LL =	109.36 +	66.21	
	=	175.57 k	
	Soil Bearing =	840 psf	
	FS =	1.19	

L-50	Use eccentric loading @	100%	(centered)
DL + LL =	109.36 +	65.79	
	=	175.15 k	
	Soil Bearing =	838 psf	
	FS =	1.19	



2-14-22

Pepka (Laird) Block Bridge

Bridge Live Load Calcs

Bridge Length: 20 ft

Clearspan: 19 ft

U-80 Loading:

 $R_1 \triangleleft \leftarrow \quad 19 \rightarrow \triangle R_2$

HS 25-44 Loading:

 $R_1 \triangleleft \leftarrow \quad 19 \rightarrow \triangle R_2$

HS 20-44 Loading:

 $R_1 \triangleleft \leftarrow \quad 19 \rightarrow \triangle R_2$

L-50 Loading:

 $R_1 \triangleleft \leftarrow \quad 13 \rightarrow \triangle R_2$

U-80 $R_1 = \sum M_1 / \text{Clearspan} = \frac{37(4.5+18.5)}{CS} = 44.79 \text{ Kips}$
 $R_2 = 74 \text{ k} = R_1$ $R_2 = 66.21 \text{ Kips}$

L-50 $R_1 = \sum M_1 / \text{Clearspan} = \frac{100(13/2)}{CS} = 34.21 \text{ Kips}$
 $R_2 = 100 \text{ k} = R_1$ $R_2 = 65.79 \text{ Kips}$

HS 25-44 $R_1 = \sum M_1 / \text{Clearspan} = \frac{(20(4+14+18))}{CS} = 37.89 \text{ Kips}$
 $R_2 = 40 \text{ k} = R_1$ $R_2 = 42.11 \text{ Kips}$

HS 20-44 $R_1 = \sum M_1 / \text{Clearspan} = \frac{(16(4+14+18))}{CS} = 30.32 \text{ Kips}$
 $R_2 = 32 \text{ k} = R_1$ $R_2 = 33.68 \text{ Kips}$

Pepka (Laird) Block Bridge Bridge Dead Load Calcs

Assumptions:

	Total wt (k)	One side	Wt / end (k)
Bridge	24.588		12.294
Deck	0		0
Backwall			0
Bent/Sill		45.233	45.233
Soil		15.22	15.22
24 " Reinforcement		36.6096	36.6096
Total Dead Load			109.36 k 0.52 k/ft²

Footing Size: (Base Block)

ht = 6 ft
width = 19.22 ft
depth = 5 ft

Area (each block)= 15.06 ft² each

Total pieces per end 5

75.30 ft² per end

Soil Load on Footing:

Max Area = 22.9 ft² (# blocks x A diff)

Soil height = 5.54 ft (top -> base block)

Effective volume 126.9 cft per end

Soil wt/ft² 0.12 k/ft²

Total soil Load on Footing

15.22 k
0.20 k/ft²





King Conservation District Board of Supervisors Meeting 07/11/2022**Agenda Action Briefing/Report AI 22-0 58****SUBJECT:**

Review for Approval KCD Landowner Incentive Program cost-share application from Jake Devaney, for Cover Crops, in the amount of \$10,800.00.

FISCAL IMPACT

The current balance of cost-share funding for KCD LIP 2022 is summarized in the following table:

2022 LIP Cost-share Available	\$165,629.16
Current Request	\$10,800.00
Balance Remaining	\$154,829.16

POLICY CONSIDERATION

This proposed cost-share contract has been vetted through a staff approval committee and meets NRCS standards for the applicable best management practice (BMP). The application has been advanced for due pass by the Board of Supervisors.

STAKEHOLDER INTERESTS

- District cooperators working with District farm management, forestry and aquatic area enhancement programs
- King CD Board members and staff
- NRCS

BACKGROUND

Jake Devaney will be planting corn on the Ritter Dairy farm in Enumclaw. The dairy rotates corn with grass. For the next three years they will plant corn, and a cover crop will be planted in the winter to protect the soil from erosion and nutrient runoff. The corn fields will be terminated in early to mid -September, depending on weather. This project will support planting cover crop after the corn termination on 20 acres for the next three years. The field this project is cost-sharing on has two ditches that drain into the White River.

EFFECTIVE DATE

The cost-share award will become effective upon approval by the Board of Supervisors and the LIP contract will become effective upon signature by a Board representative.

RECOMMENDATION


Staff seeks Board approval of Landowner Incentive Program cost-share application from Jake Devaney, for Cover Crops in the amount of \$10,800.00.

MOTION

_____ Moved, _____ Seconded; Passed a motion to Approve KCD Landowner Incentive Program cost-share application from Jake Devaney, for Cover Crops, in the amount of \$10,800.00.

KING CONSERVATION DISTRICT (KCD) LANDOWNER INCENTIVE PROGRAM APPLICATION

Section 1. Applicant (If applicant is not the landowner, then landowner must also sign the agreement)

Applicant Name: Jake Devaney		Farm/Business Name: Ritter Dairy	
Mailing Address: 42923 212th Ave SE Enumclaw, WA 98022		Project Address: Ritter Dairy 19916 SE 436TH ST. Enumclaw, WA 98022 	
Phone (home): 206-550-2787		Phone (work/mobile): same	
Email Address: jdevaney.enterprises@gmail.com		KCD Staff: Megan Weldon	
Parcel #(s): 2020069011	<input checked="" type="checkbox"/> Incorporated <input type="checkbox"/> Unincorporated	Total Farm/Land Acreage: 20 acres	<input checked="" type="checkbox"/> T.A. <input type="checkbox"/> Farm Plan <input type="checkbox"/> Forest Plan
Is email an acceptable primary form of communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Would you like to be added to our newsletter list?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Section 2. Project Information

Best Management Practice (BMP): Cover Crops
Project Completion Date (month and year): 10/2024
<p>Current Site Conditions (Provide a brief summary of resource management problem addressed by BMP: also note if streams, wetlands, and steep slopes are near or within the project area):</p> <p>All of these fields are currently growing corn which will be terminated in early/mid September. The exact corn termination date depends on seasonal weather patterns. Triticale will be planted after termination as a cover crop to protect from soil erosion and nutrient runoff during the winter. This dairy rotates fields with corn and grass. While these fields are in corn a cover crop will be planted to protect soil health in the winter. There are ditches along the southwest and north side of the 13 acre field. These ditches drain into the White River.</p>
<p>Project Details (Provide a brief summary of the project. Include acres treated, length of fence, dimensions of compost bin, types and numbers of plants, etc.):</p> <p>Jake will be planting triticale as a cover crop over 20 acres of corn for the next three years. It will then be chopped and converted back to corn in the following summer. Jake Devaney will be doing all of the field prep, conversion, planting and harvesting.</p> <p>Jake Devaney is the primary point of contact for this project. Jim Ritter is the owner of the property.</p>
<p>Maintenance Plan (Summarize your plan to maintain the practice. Include frequency and scope of inspections, repairs anticipated, etc.):</p> <p>Ensure seed is planted in early fall, no later than October 15th. Avoid applying fertilizer before large rain events to prevent nutrient runoff and do not apply fertilizer after October 31st or prior to April 1st. If spreading manure, abide by setback requirements.</p>

Permits <i>(List all permits required to complete this project):</i> No
Photos: Before photos must be submitted with this application.

Section 3. Cost-share Programs

- A. Have you previously applied for cost-share through the KCD Landowner Incentive Program (LIP)? ☒ Yes ☐ No
 If yes, please list contract number and BMP below:
 Cover Crops 2019-19, 2019-23

- B. Are you applying for (or received) funding (cost-share or grants) through other agencies or programs? ☐ Yes ☒ No
 Please describe below:
 1. **King County Cost-share**
 Please list practices and date installed below:

2. **NRCS EQIP (Natural Resources Conservation Service's Environmental Quality Incentive Program)**
 Please list practices and date installed below:

3. **Other**
 Please list agency and describe project:

Other Cost-Share History/Notes:

Section 4. Budget (attached as Exhibit A)

The cost-share application budget is the applicant's statement for how the KCD cost-share funds will be spent. Use the attached Excel document to detail the budget for the project. Reimbursement values are restricted by unit maximums as well as practice maximums. KCD will be unable to provide a budget that exceeds either maximum. The cost differential for practices installed at a higher standard or cost shall be the responsibility of the applicant. In cases where a budget for a cost-share award needs to be updated, submit a budget revision request for approval. In the absence of an approved budget revision, the cost differential shall be the responsibility of the applicant. Furthermore, receiving financial assistance for an approved Best Management Practices will be subject to inspection by KCD planners. Approval for reimbursement will be based on the satisfactory completion of the project to the minimum specifications detailed in this application.

Partial reimbursements are available on a limited basis and must be requested in advance. They will only be considered when the installation of a project can be phased to achieve the standard described in the attached job sheet when reimbursement is requested.

- ☐ Select this box if you intend to request partial reimbursement as the project is installed.

Section 5. Education and Outreach

KCD encourages public education through demonstration projects. Demonstration projects are used to educate other landowners about innovative ways to address natural resource concerns. A demonstration project may be showcased in a guided tour, or featured in presentations or written fact sheets.

- Will you consider becoming a demonstration project?

☐ Yes ☐ No

Section 6. Maintenance and Monitoring Expectations

The applicant is responsible to maintain the Best Management Practice (BMP) to standard as detailed in the attached Job Sheet for the lifetime of the BMP.

- ☐ A. I understand the lifetime of the BMP is 1 years.
- ☐ B. I understand KCD will work with me to verify proper maintenance of the installed BMP, which will include a combination of site visits with KCD staff and/or annual photo documentation submitted by me for the lifetime listed in Section 7A.
- ☐ C. I understand I am obligated to maintain and monitor the BMP **for the lifetime listed in Section 6A.**

Section 7. Application and Agreement

I request financial assistance (cost-share) under the KCD LIP to install the Best Management Practice (BMP) described in this application and detailed in the attached *Job Sheet and Map*. This practice is needed to solve the natural resource problems described in Section 2 of this application. This Agreement expires if the project is not completed by the specified completion date in Section 2 or in an approved timeline revision request. _____ (Initial Here)

I agree to ensure that all applicable local, state, and federal permits are obtained for installation of the BMP for which funds are requested. Furthermore, I understand that KCD must receive a copy of any applicable permit to process my cost-share reimbursement. _____ (Initial Here)

I agree to work cooperatively with KCD to ensure the funded BMP is maintained consistent with the design life identified in the attached Job Sheet and in Section 6 of this application. _____ (Initial Here)

I agree to indemnify, defend, and hold harmless KCD, its elected or appointed officials, employees and agents, from all claims, alleged liability, damages, losses to or death of person or damage to property allegedly resulting from the negligent or intentional acts of the applicant or any of its employees, agents, contractors or subcontractors in connection with this Agreement. _____ (Initial Here)

I represent that the information provided in Section 3 of this application is a full disclosure of all other natural resource financial cost-share relationships in which I have or am participating. Furthermore, I agree to disclose if I am applying for or receive funding (cost-share or grants) for the BMP described in this application through other agencies or programs and to provide KCD with written documentation detailing this funding support. This may include copies of reimbursement checks or letters showing value of provided contribution. I understand that I must provide proof of reimbursement for alternate funding prior to receiving reimbursement through the KCD LIP. I acknowledge that KCD LIP funds cannot be used in combination with other funding sources to exceed 100% of project costs. I agree to allow communication between KCD and any other agency regarding the details of the project as well as funding details. _____ (Initial Here)

I understand that LIP cost-share reimbursement is contingent upon installing the BMP to the minimum standard provided by KCD, and that KCD will verify standard compliance. Furthermore, I understand that changes to the installation details (attached *Job Sheet and Map*) must be approved through a *Scope of Work Revision Process*. Unapproved changes will not be eligible for reimbursement. _____ (Initial Here)

I understand that there may be federal tax liability associated with a LIP cost-share reimbursement, and that KCD will issue a 1099-G for reimbursements made through the LIP. Furthermore, I understand that KCD cannot provide advice with respect to the tax liability associated with LIP cost-share reimbursements and that I have been advised to consult with my own tax professional.
_____ (Initial Here)

I understand that I am applying for public funding and am responsible for notifying a buyer upon sale or loss of the property of the installed BMP. If I sell or lose control of the property covered by this Agreement and the new owner or transferee does not assume responsibility for maintaining the installed BMP as required by this Agreement, I may be required to refund all or a portion of the cost-share received through this Agreement. In the event of litigation arising from or related to this Agreement, attorney’s fees and costs incurred by the prevailing party shall be paid by the non-prevailing party. _____ (Initial Here)

I give permission to KCD to photograph my property to document the site conditions and/or the implementation and maintenance of the funded practice. In the event that I or any of my family members or dependents choose to be photographed in a setting that reflects the assistance provided by KCD, I give KCD permission to publish such photographs in KCD promotional literature, advertising, social media, and other public displays. The photographs will be the property of KCD and may be used by KCD at any time, in the manner described above, without my additional consent. _____ (Initial Here)

I understand that this Agreement is subject to disclosure under the Public Records Act, Chapter 42.56 RCW. _____ (Initial Here)

- I understand that I will no longer be eligible for KCD cost-share funds if one or more of the following occurs: _____ (Initial Here)
- a. The KCD funded BMP fails within its design life due to circumstances within my control (e.g., neglect, failure to maintain the BMP, destruction of the BMP before expiration of the design life, or other actions which cause the KCD funded BMP to become non-viable). *Note: Landowners are not responsible for BMP failure caused by circumstances beyond their control (e.g. fire, flood, storm damage, etc.).*
 - b. I relinquish or lose ownership of equipment purchased with KCD cost-share.
 - c. The KCD funded BMP is not being used for the intended purpose (e.g. cross fencing purchased with KCD funding, but no animals on property).
 - d. I cancel 2 cost-share contracts awarded through the KCD Landowner Incentive Program.
 - e. I deny KCD staff access to my property to verify BMP installation and maintenance.

- I understand KCD will provide a sign free of charge after completion of a project, and I agree that: _____ (Initial Here)
- a. I will select a visible location on my property for display of the sign and will install it.
 - b. I will maintain the sign and keep it free of visual barriers for at least five years after installation.
 - c. I am not responsible for damage to the sign that is beyond my control (e.g. auto accident, storm damage, vandalism, etc.)

Jake Devaney

Signature of applicant	Date	Signature of Landowner (if applicant if Lessee)	Date
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FOR KCD OFFICE USE

Approved for Award (KCD LIP Coordinator)	Date	
Approved for Funding (KCD Management)	Date	LIP ID:



Landowner Incentive Program Applicant Budget

Cooperator: Devaney

Budget Items	Units	Cost
Cover Crops 2022	20 acres	\$4,000.00
Cover Crops 2023	20 acres	\$4,000.00
Cover Crops 2024	20 acres	\$4,000.00
Machinery Rental (not personally owned equipment)		\$0.00
	Subtotal	\$12,000.00

In-Kind Labor/Machinery	# hours	Cost
Manual labor		\$ -
Person with power equipment (i.e. chainsaw)		\$ -
Small Tractor (up to 40 hp)		\$ -
Medium Tractor (40-70 hp)		\$ -
Large Tractor (71 or above hp)		\$ -
Excavator (up to 100 hp)		\$ -
Excavator (over 100 hp)		\$ -
D-4 Cat or equivalent		\$ -
D-6 Cat or equivalent		\$ -
D-7 Cat or equivalent		\$ -
Backhoe		\$ -
Truck (under 2 tons)		\$ -
Truck (2 tons or over)		\$ -
Bobcat		\$ -
4-wheeler or side-by-side		\$ -
Subtotal	0.00	\$ -

Project Totals		
Total Cost (Budget Items + In Kind Labor/Machinery)		\$ 12,000.00
Units	Acres	60.00
Cost/Unit		200.00

Conservation Practice	select BMP (x)	Cost Share Amount
Animal Trails & Walkways		
Aquatic Area Buffer		
Aquatic Area Buffer (WCC)		
Buffer Fencing		
Building Relocation for Aquatic Area/Buffer		
Bulkhead Removal (Freshwater, Marine)		
Cover Crops	x	\$ 10,800.00
Cross Fencing		
Forest Health Management		
Heavy Use Area Protection		
Pasture & Hay Planting		
Roof Runoff Management		
Stream Crossing		
Subsurface Drain		
Upland Wildlife Habitat Management		
Waste Storage Facility		
Watering Facility		

Amount eligible for reimbursement
(based on 2015 rates)

\$10,800.00



Local Food
Healthy Forests
Clean Water
Better Ground

Job Sheet

Winter Cover Crop

Cooperator: Jake Devaney	Lifetime of Practice: 1 year
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Primary Purpose (at least one must apply)	
<input checked="" type="checkbox"/> Reduce erosion from wind and water.	<input checked="" type="checkbox"/> Increase soil organic matter content.
<input checked="" type="checkbox"/> Capture and recycle or redistribute nutrients in the soil profile.	<input type="checkbox"/> Promote biological nitrogen fixation and reduce energy use.
Secondary Purpose (check all that apply)	
<input type="checkbox"/> Increase biodiversity.	<input checked="" type="checkbox"/> Suppress Weeds.
<input checked="" type="checkbox"/> Manage soil moisture.	<input checked="" type="checkbox"/> Minimize and reduce soil compaction.

Plans and Specifications
Acres: 20 acres Species: Triticale Application Technique (broadcast, drill, etc.) & Establishment Procedure (soil amendments, seedbed preparation etc.): Seed drill (wheel drill) Seeding Rate: 100lbs per acre Seeding Date (no later than Oct. 15th): October 15th Planned Termination Date: Triticale is grazed through mid-April and then terminated before corn is planted in late April/mid May

Management Considerations:
Ensure that seed is planted in early fall to allow for adequate seed germination before winter. Minimize the window of when fields are with bare soil to prevent soil erosion. If fertilizing fields prior to or at start of seeding, do not spread before large rain events, to prevent nutrient runoff. Follow setback requirements for fertilizing fields.

Operation and Maintenance:

Additional Specifications and Notes:



