

**CLARK COUNTY  
STAFF REPORT**

**DEPARTMENT/DIVISION:** Department of Public Works / Transportation Program

**DATE:** December 16, 2014

**REQUEST:** Acknowledge the Section 4(f) de minimis use of public park and recreation area for construction of Big Tree Creek Bridge #120, CRP 330022.

**CHECK ONE:**  Consent  Hearing  Chief Administrative Officer

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**PUBLIC WORKS GOALS:**

- Provide safe and efficient transportation systems within Clark County
- Continue responsible stewardship of public funds
- Promote family-wage job creation and economic development to support a thriving community
- Maintain a desirable quality of life
- Improve environmental stewardship and protection of natural resources
- Increase partnerships and foster an engaged, informed community
- Make Public Works a great place to work

**BACKGROUND:** Clark County Public Works received a federal grant to perform preventative maintenance on Big Tree Creek Bridge #120 on NE Lucia Falls Road. The installation of bank stabilization for the protection of the bridge abutments will require permanently impacting 864 sq. feet of the Moulton Falls Regional Park, owned and maintained by Clark County. The project will also temporarily impact 1770 sq. feet of park property for access roads and erosion/sediment control measures. All temporarily disturbed areas will be reseeded or replanted with native plant species. Moulton Falls Regional Park is considered a public recreational facility and a Section 4(f) resource land.

Section 4(f) of the U.S. Department of Transportation Act of 1966 requires all potential impacts on Section 4(f) lands to be analyzed for prudent alternatives prior to implementation of a project. Bank stabilization measures associated with the Big Tree Creek Bridge #120 project are considered a de minimis use. Section 4(f) of the Transportation Act requires that de minimis use of resource lands be approved following a formal opportunity for public comment.

**COMMUNITY OUTREACH:** All adjacent property owners have been notified by mail and/or direct communication about the project. A public notification and comment period was provided through the SEPA process. A public comment period for the required County Shoreline Permit will end on January 5<sup>th</sup>, 2015.

**BUDGET AND POLICY IMPLICATIONS:** No budget or policy implications will result from this approval. The Big Tree Creek Bridge #120 project was approved as part of the 2014-2019 TIP. Construction will also have to be approved by the BOCC at the time of contract solicitation. A letter of support from the Clark County Parks Division of Public Works has also been obtained for this de minimis use.

**FISCAL IMPACTS:**  Yes (see Fiscal Impacts Attachment)  No

**ACTION REQUESTED:** By approval of this staff report, please acknowledge the de minimis use of public park property for the Big Tree Creek Bridge #120 project.

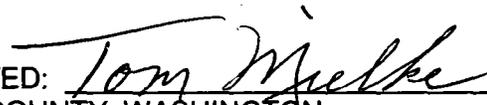


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OK  
N*

PW14-136

**DISTRIBUTION:** Please return an originally signed duplicate of the approved staff report to the Department of Public Works – Transportation Programming, attention Michael Derleth.

  
\_\_\_\_\_  
William Wright, P.E.  
Transportation Programming Manager

APPROVED:   
\_\_\_\_\_  
CLARK COUNTY, WASHINGTON  
BOARD OF COMMISSIONERS

  
\_\_\_\_\_  
Heath H. Henderson, P.E.  
Public Works Director/County Engineer

DATE: Dec. 16, 2014

SR#: 301-14

BW/HH/MD

Attachments: Section 4f De Minimis 4(f) Exemption Determination, Parks Division Support Letter, 4(f) Figures

c: Lisa Hemesath, Environmental Services  
Jean Singer, Project Manager  
Heath Henderson, Public Works  
Michael Derleth, Public Works

**Section 4(f) De Minimis Impact Determination (per 23 CFR 774)**

<b>Date:</b>	December 2, 2014
<b>Lead Agency:</b>	Clark County
<b>Project Number:</b>	BHS-A068(004)
<b>Project:</b>	Big Tree Creek Bridge #120
<b>Project Description:</b>	<p>The Clark County Department of Public Works is proposing a seismic retrofit and installation of scour repair at Big Tree Creek Bridge #120 on NE Lucia Falls Road, Clark County, Washington. The Big Tree Creek Bridge ranks #6 on the Clark County's 2012 Seismic Vulnerability Screening Assessment/Evaluation. The Bridge also ranked as a #2 priority on Clark County's 2007 Scour Critical Bridge Review. The project is located on NE Lucia Falls Road less than ¼ mile west of the Sunset Falls Road intersection in Clark County, WA. T4N R3E Section 13 NW ¼. See Figure 1.</p> <p>Big Tree Creek Bridge supports an ADT of 2255 and is positioned along NE Lucia Falls Road. This location services the Moulton Falls Regional Park which consists of several miles of trails, picnic areas and fishing spots. The detour route is 14 miles long and there would be no other way to access the park if the bridge had to be closed for high flows or seismic damage. The roadway bridge abutments also support a pedestrian bridge that is part of Moulton Falls Regional Park's trail system (Figure 2).</p> <p>The seismic retrofit will consist of structural reinforcements of existing bridge structures. Proposed structural reinforcements will include steel seat extensions, transverse restraints, and pier wall strengthening. The center pier wall will be strengthened by widening the existing wall with concrete and steel reinforcement.</p> <p>The proposed scour repair includes installation of a riprap revetment, installation of a new gabion wall, and extension of an existing wing wall. The new gabion wall will be constructed adjacent to the upstream wing wall of the west abutment and will be 9 feet long. The existing upstream east abutment wing wall will be extended by 10 feet eastward. Riprap revetment overlain with native streambed material will be installed around the center pier, abutments, wing walls and gabion wall for scour protection.</p> <p>Impacts to riparian habitat along Big Tree Creek and the E. Fork Lewis River will be mitigated on-site by planting native shrubs and herbaceous plants in areas temporarily disturbed by construction activity.</p> <p>Scour repairs at the bridge abutments on the northwest and northeast corners of the bridge will require approximately 864 sq. feet of permanent impacts to Moulton Falls Regional Park (Figure 3). The project will require an additional 1770 sq. feet of temporary impact for the installation of erosion control measures and the</p>

	<p>construction of three short access roads (Figure 4) for heavy equipment access to the northeast, northwest, and southwest bridge abutments. Temporarily disturbed areas will be replanted with native shrubs and herbaceous vegetation (Figure 5).</p> <p>Temporary and permanent uses, as described above, of a publicly-owned recreational area are subject to the requirements of Section 4(f) of the Department of Transportation Act of 1966.</p>
<b>Section 4(f) Resource</b>	Moulton Falls Regional Park
<b>Type of 4(f) Resource</b>	<input checked="" type="checkbox"/> Public Park or Recreational Area <input type="checkbox"/> National Register-Eligible Historic Site <input type="checkbox"/> Publicly-owned Wildlife or Waterfowl Sanctuary
<b>Size of the <i>de minimis</i> use of the 4(f) Resource in acres</b>	The project will permanently impact 0.02 acres (864 sq. feet) of a 387-acre park.
<b>Official With Jurisdiction</b>	Clark County Parks Division of Public Works

***De minimis* Documentation**

- 1. Describe the Section 4(f) property and the attributes and features that qualify it for Section 4(f) protection, attach a map with shows the boundary of the resource, the locations of key features (e.g. ball fields, structures) and shows the area to be used;**

The project is located on NE Lucia Falls Road less than ¼ mile west of the Sunset Falls Road intersection in Clark County, WA. T4N R3E Section 13 NW ¼. See Figure 1. NE Lucia Falls Road bisects the county-owned Moulton Falls Regional Park. This 387-acre park, at the confluence of the East Fork of the Lewis River and Big Tree Creek, features two waterfalls and an arch bridge more than three stories high crossing the E. Fork Lewis River. The park is heavily forested. Facilities at the park include a parking lot, picnic tables, a barbeque grill, trails, pedestrian bridges, and a restroom (Figure 6). The area is also a popular swimming spot.

- 2. Describe the impacts to the Section 4(f) property, and any avoidance, minimization and mitigation or enhancement measures, and why they are considered *de minimis* as defined in 23 CFR 774.17;**

Clark County plans to install a riprap revetment and a new gabion wall, and extend an existing wing wall in order to protect Big Creek Tree Bridge from on-going scour that could further undermine the bridge abutments and center pier. To provide sufficient protection, these scour protection measures need to extend on to Moulton Falls Regional Park. Area of permanent impact is approximately 864 sq. feet. The impacted area would still be accessible to park users after construction.

Access to three corners of the bridge abutments will require the construction of temporary access roads. Installation of the access roads and erosion control measures will require the removal of about 1770 sq. feet of understory vegetation consisting of native shrubs and herbaceous vegetation on park property. The access roads and erosion control measures will be removed and the site returned to pre-existing conditions, using native plant species, after work is completed. There are no anticipated permanent adverse physical impacts associated with the construction and removal of the access road and erosion control measures. The amount of temporary disturbance is a fraction of the 387-acre park. Use of the park by the public will not be interrupted during or after construction, nor will the proposed project change the purpose of the park or its recreational amenities. Scour repair on the northwest abutment and center pier, may cause temporary closure of a trailhead (Figure 7); however, the trail will still be accessible at an alternate trailhead located further east on NE Lucia Falls Road. Closure of the trailhead will be in short duration and will be less than the time needed for construction of the entire project.

Clark County has avoided impacts to the Section 4(f) resource and the riparian habitat of Big Tree Creek and the E. Fork Lewis River by minimizing ground disturbance. All permanent and temporary impacts are adjacent to the current road right-of-way. Permanent impacts are the minimal necessary to repair scour adjacent to the bridge abutments and center pier. These impacts only extend at a maximum of 40 feet into the park from the road right-of-way. Access roads were designed to avoid tree removal and keep within the road right-of-way as much as feasible. Temporary impacts resulting from the construction of access roads and installation of erosion control measures, measuring approximately 1770 sq. feet, will be mitigated by replanting with native shrubs and herbaceous vegetation. Replanting will help maintain a healthy understory and quickly restore the natural scenery as viewed from the bridge and nearby trails. Mitigation on a Section 4(f) property is considered a non-transportation use if the official who has jurisdiction over the property agrees that the proposed work is consistent with the function of that property and is an enhancement of the 4(f) resource.

**3. For parks, recreational facilities, and wildlife and waterfowl sanctuaries:**

**a. Describe the Public Outreach that has been or is being conducted (leave blank for historic sites);**

All adjacent property owners have been notified by mail and/or direct communication about the project. Public notification and comment periods were provided through the SEPA and Clark County Shoreline permit processes. In addition, the County has provided the public the opportunity to comment on the proposed use of the Moulton Falls Regional Park for the repair of Big Tree Creek Bridge #120 by placing this item on the Board of County Commissioner's Consent Agenda on 12/16/2014.

**b. Include written concurrence of the official with jurisdiction over to 4(f) resource with the de minimis determination.;**

The Moulton Falls Regional Park is managed by the Clark County Parks Division of Public Works. Clark County Public Works, the department lead on the bridge project, has been coordinating with the Parks Division on this project. The Parks Division concurred with the de minimis take on 10/28/2014 (see attached letter). The county will continue to coordinate with the Parks Division during bridge repairs and

replanting. Clark County Public Works will be responsible for planting, maintaining and monitoring the riparian plantings.

4. ***For historic resources, attach Section 106 Documentation (Include SHPO concurrence in project-level findings (DOEs and or FOEs) and Programmatic Agreement Memos for archaeological resources); and***

No historic resources will be impacted by this project. SHPO concurred with the finding on 1/22/2014.

### **Request for Approval**

Based upon this analysis we request FHWA approval that the use of the Section 4(f) resource described above is *de minimis* as defined in 23 CFR 774.17.

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Melanie Vance, Environmental Engineer  
WSDOT Local Programs

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Date

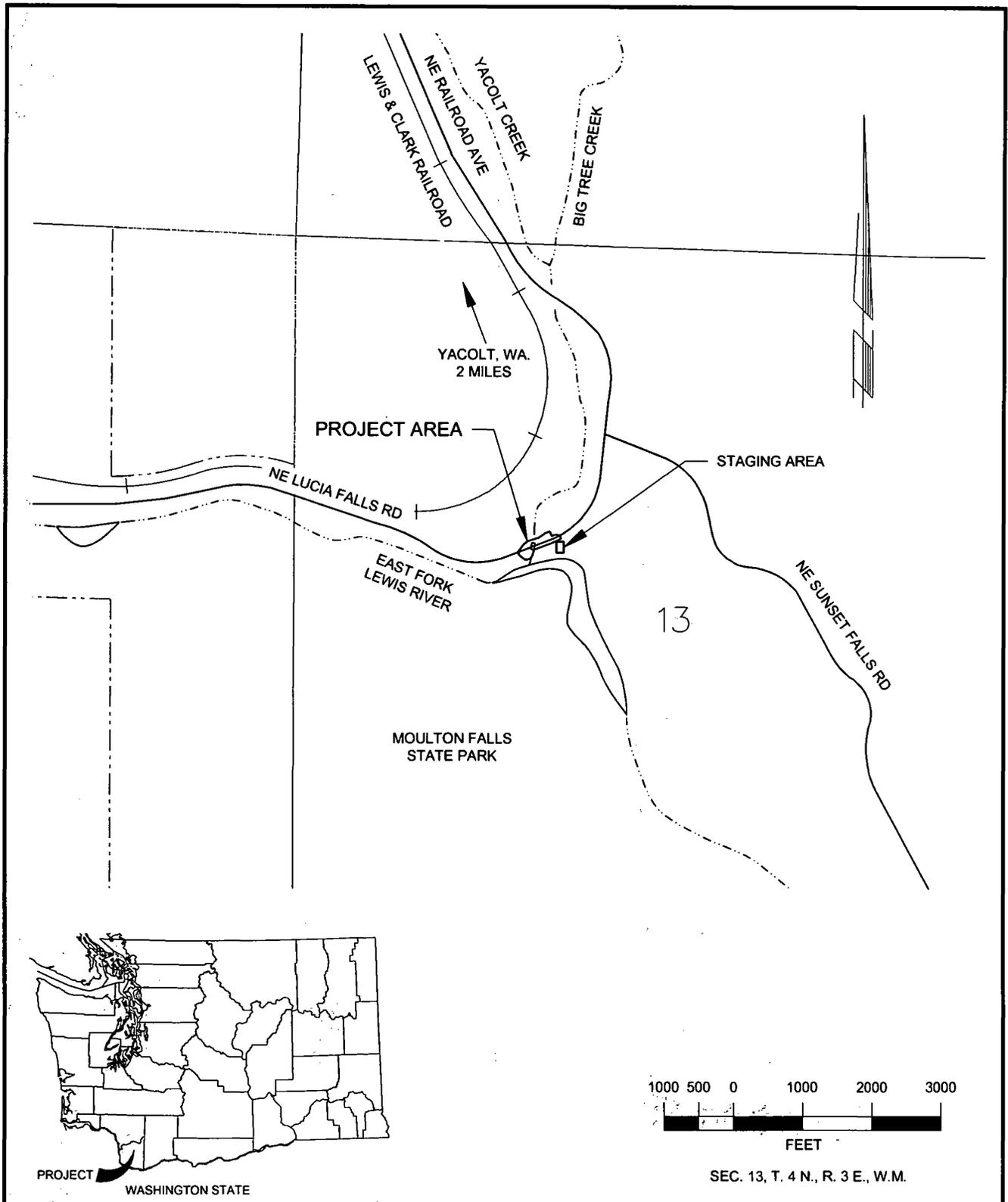
### **FHWA Approval**

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Liana Liu, P.E, Area Engineer  
FHWA Washington Division

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Date



REFERENCE #:  
 APPLICANT: CLARK COUNTY ENVIRONMENTAL SERVICES  
 ADJACENT PROPERTY OWNERS:  
 1. CLARK COUNTY / PARCEL #232010-000  
 2. CLARK COUNTY / PARCEL #232019-000

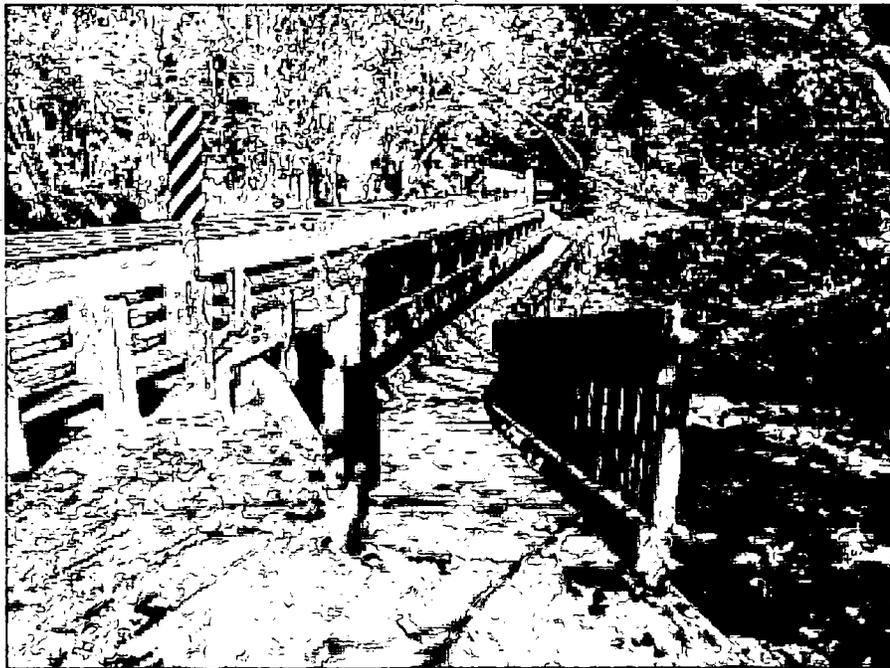
LOCATION: NE LUCIA FALLS RD AT BIG TREE CREEK BRIDGE/ PARCEL #232010-000  
 LAT / LONG: 45.831944 N / -122.387222 W

PROPOSED PROJECT: SEISMIC RETROFIT OF EXISTING BRIDGE STRUCTURE AND INSTALLATION OF SCOUR MITIGATION AND COUNTERMEASURES.

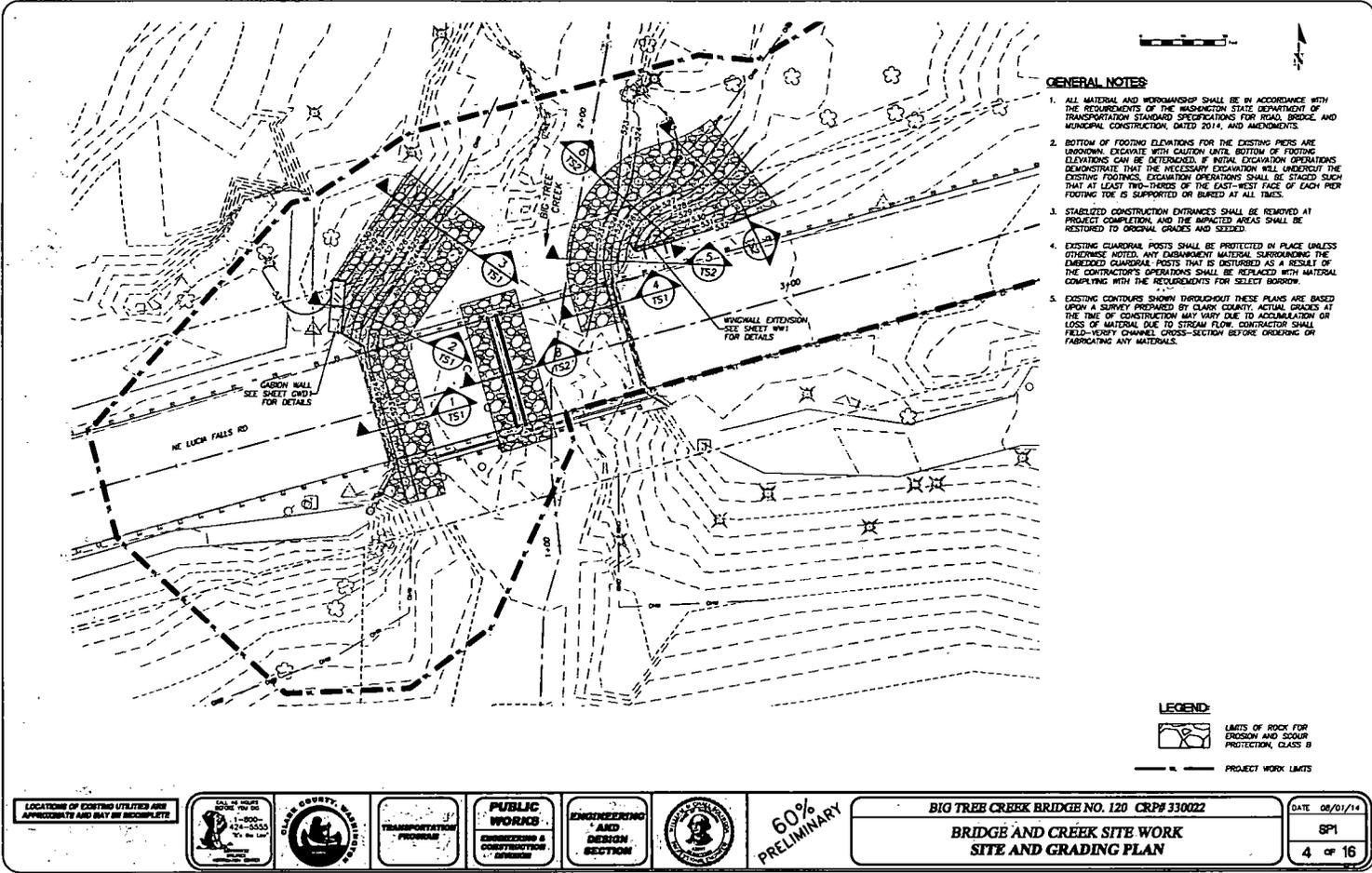
IN: BIG TREE CREEK AT CONFLUENCE WITH EAST FORK LEWIS RIVER  
 NEAR: YACOLT, WA  
 COUNTY: CLARK  
 STATE: WASHINGTON

**FIG. 1**

Figure 2. Big Tree Creek Bridge: Roadway and Pedestrian Crossing\*



\*Pedestrian bridge is part of the Moulton Falls Regional Park Trail system



- GENERAL NOTES**
1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, DATED 2014, AND AMENDMENTS.
  2. BOTTOM OF FOOTING ELEVATIONS FOR THE EXISTING PIERS ARE UNKNOWN. EXCAVATE WITH CAUTION UNTIL BOTTOM OF FOOTING ELEVATIONS CAN BE DETERMINED. IF INITIAL EXCAVATION OPERATIONS DEMONSTRATE THAT THE NECESSARY EXCAVATION WILL UNDERCUT THE EXISTING FOOTINGS, EXCAVATION OPERATIONS SHALL BE STAGED SUCH THAT AT LEAST TWO-THIRDS OF THE EAST-WEST FACE OF EACH PIER FOOTING TOE IS SUPPORTED OR BURIED AT ALL TIMES.
  3. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REINSTATED AT PROJECT COMPLETION AND THE IMPACTED AREAS SHALL BE RESTORED TO ORIGINAL GRADES AND SEEDING.
  4. EXISTING GUARDRAIL POSTS SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED. ANY ENHANCEMENT MATERIAL SURROUNDING THE EXISTING GUARDRAIL POSTS THAT IS DISTURBED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH MATERIAL COMPLYING WITH THE REQUIREMENTS FOR SELECT BORROW.
  5. EXISTING CONTOURS SHOWN THROUGHOUT THESE PLANS ARE BASED UPON A SURVEY PREPARED BY CLATSOP COUNTY. ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION MAY VARY DUE TO ACCUMULATION OR LOSS OF MATERIAL DUE TO STREAM FLOW. CONTRACTOR SHALL FIELD-VERIFY CHANNEL CROSS-SECTION BEFORE ORDERING OR FABRICATING ANY MATERIALS.

**LEGEND**

LIMITS OF ROCK FOR EROSION AND SCOUR PROTECTION, CLASS B

PROJECT WORK LIMITS

LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MAY BE INCOMPLETE



60% PRELIMINARY

BIG TREE CREEK BRIDGE NO. 120 CRP# 330022

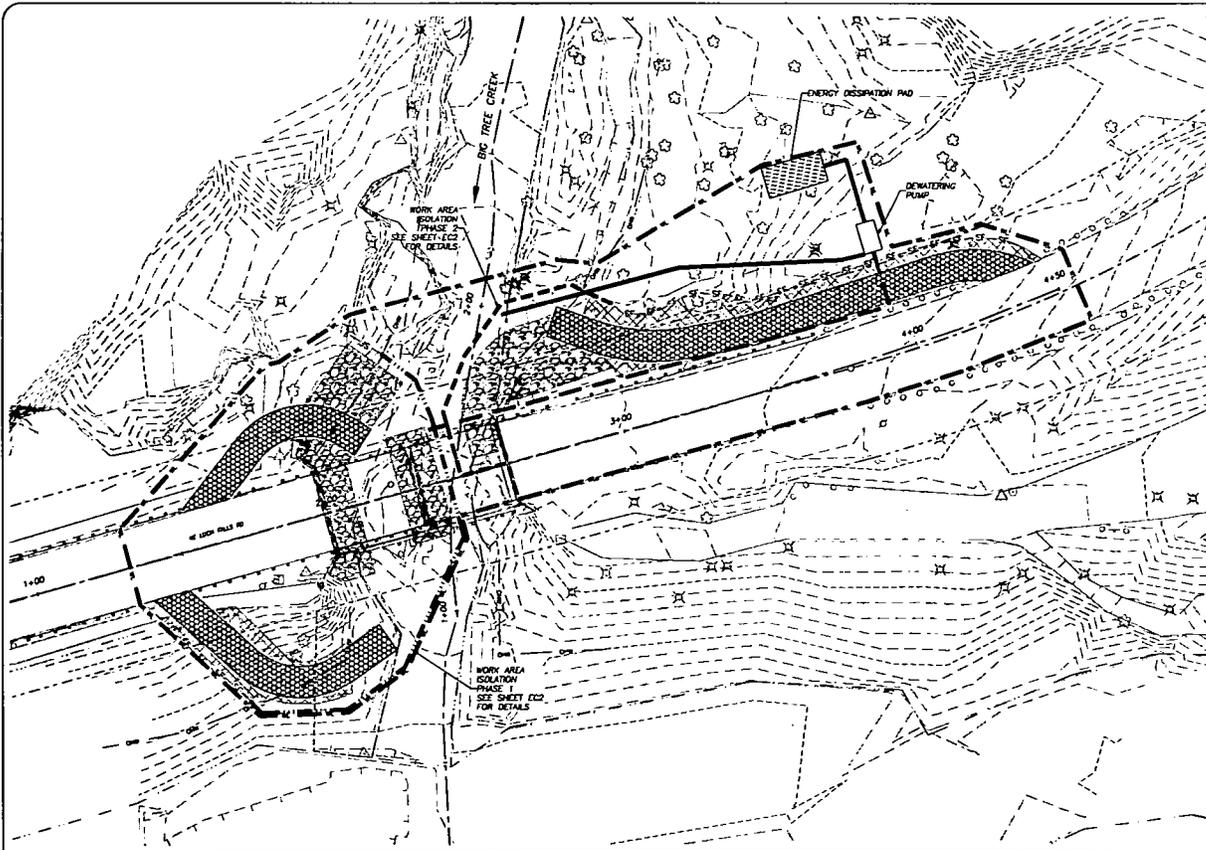
BRIDGE AND CREEK SITE WORK

SITE AND GRADING PLAN

DATE 06/01/14

SP1

4 of 16



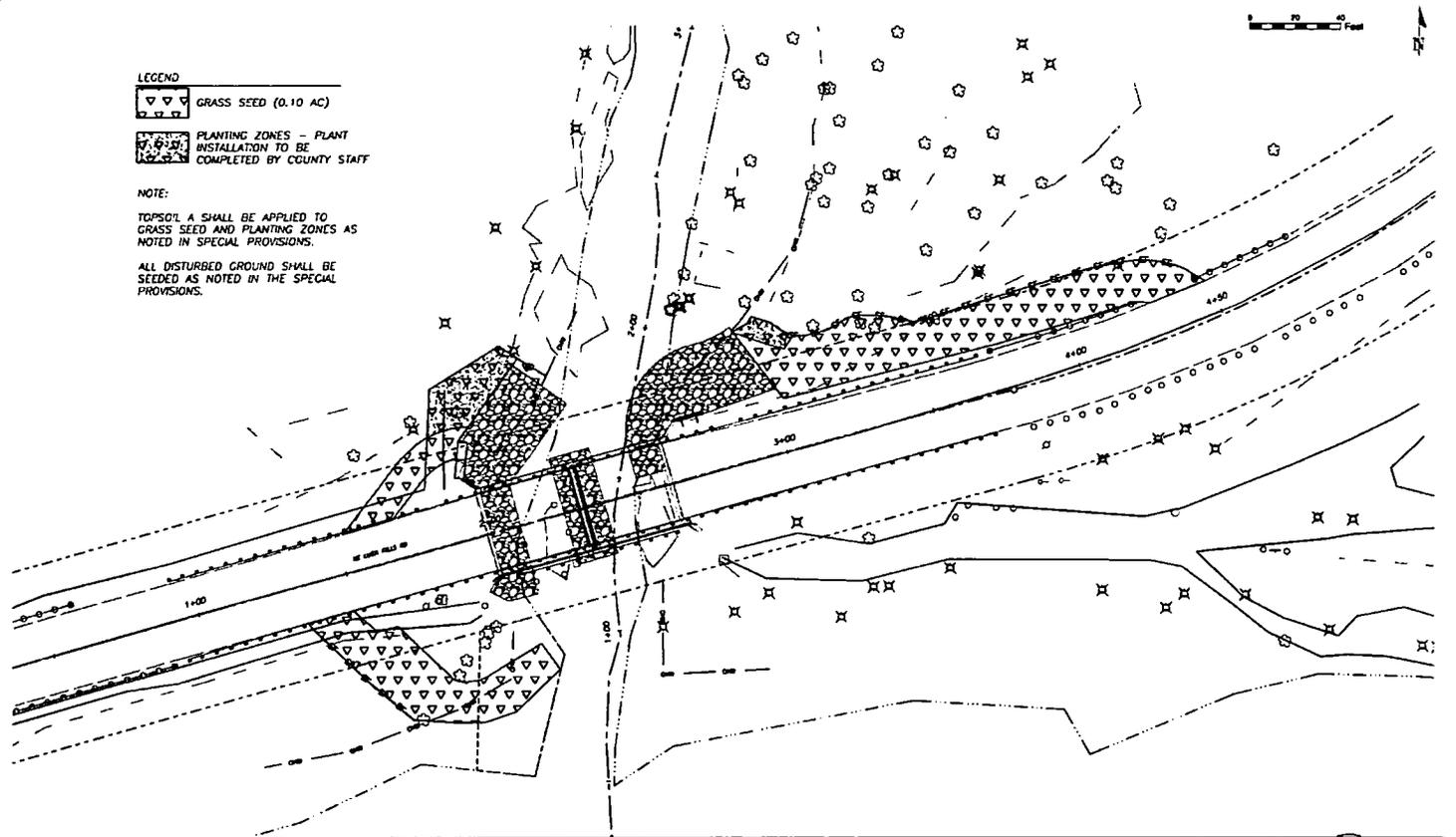
- NOTES:**
1. THIS LAYOUT DEPICTS A POTENTIAL IN-WATER WORK ISOLATION CONFIGURATION. FINAL IN-WATER WORK ISOLATION PLAN TO BE DEVELOPED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL NOT WORK DIRECTLY WITHIN CEDAR CREEK WITHOUT AN APPROVED IN-WATER WORK ISOLATION PLAN.
  2. ONLY ONE BANK SHALL BE DEWATERED AT ANY GIVEN TIME UNLESS OTHERWISE APPROVED BY THE ENGINEER.
  3. DEWATERING PUMPS SHALL HAVE FISH SCREENS.
  4. SEDIMENTING ASSOCIATED WITH THE IN-WATER WORK ISOLATION CONFIGURATION DESCRIBED ON THIS SHEET IS AS FOLLOWS:
    - 4.1. INSTALL TEMPORARY DIVERSION DAM TO ISOLATE PHASE 1 WORK AREA. SALVAGE FISH, DEWATER, AND PERFORM WORK.
    - 4.2. MODIFY TEMPORARY DIVERSION DAM TO ISOLATE PHASE 2 WORK AREA. SALVAGE FISH, DEWATER, AND PERFORM WORK.
  5. AT THE CONCLUSION OF EACH PHASE, REMOVE/PREDICATE TEMPORARY DIVERSION DAMS BEGINNING FROM THE DOWNSTREAM END. ALLOW THE ISOLATION AREA TO FLOOD GRADUALLY TO AVOID STIRRING UP EXCESSIVE VOLUMES OF STREAMBED MATERIAL.
  6. ALL SEDIMENT-LOADED WATER REMOVED FROM THE PHASE 1 AND PHASE 2 WORK AREAS SHALL ONLY BE DISCHARGED AT THE LOCATION OF THE VELOCITY/ENERGY DISSIPATOR SHOWN ON THIS SHEET.
  7. CONTRACTOR-SUPPLIED VELOCITY/ENERGY DISSIPATOR SHALL SLOW AND DECONCENTRATE DYPRESSSED STREAM FLOW TO A LEVEL THAT WILL NOT CAUSE EROSION OF THE CHANNEL BANK OR BED.
  8. EROSION CONTROL SHALL COMPLY WITH ALL REQUIREMENTS OF THE CLARK COUNTY STORMWATER MANUAL.
  9. DURING NON-WORKING HOURS, ALL EQUIPMENT THAT IS NOT OPERATING SHALL BE MOVED AT LEAST 100 FEET INLAND FROM THE O&W LIMITS.
  10. SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.

- LEGEND**
- S—S— SILT FENCE
  - TEMPORARY DIVERSION DAM PHASE 1
  - TEMPORARY DIVERSION DAM PHASE 2
  - DISCHARGE PIPE
  - PROJECT WORK LIMITS
  - PROJECT CONSTRUCTION ACCESS ROAD
  - TEMPORARY EROSION CONTROL BLANKET

LOCATIONS OF EXISTING UTILITIES AND APPROXIMATE DEPTH ARE INCOMPLETE	 CLARK COUNTY 1-900-555-5555 24 HOURS	TRANSPORTATION PROGRAM	<b>PUBLIC WORKS</b> PERMITTING & CONSTRUCTION DIVISION	<b>ENGINEERING AND DESIGN SECTION</b>	 <b>60% PRELIMINARY</b>	<b>BIG TREE CREEK BRIDGE NO. 120 CRP# 330022</b> <b>IN-WATER WORK ISOLATION AND EROSION CONTROL</b> <b>EROSION CONTROL PLAN</b>	DATE 06/01/14 EC1 5 of 16
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- LEGEND**
-  GRASS SEED (0.10 AC)
  -  PLANTING ZONES - PLANT INSTALLATION TO BE COMPLETED BY COUNTY STAFF

**NOTE:**  
 TOPSOIL A SHALL BE APPLIED TO GRASS SEED AND PLANTING ZONES AS NOTED IN SPECIAL PROVISIONS.  
 ALL DISTURBED GROUND SHALL BE SEEDED AS NOTED IN THE SPECIAL PROVISIONS.



LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MAY BE INCOMPLETE.



**TRANSPORTATION PROGRAM**

**PUBLIC WORKS**  
 ENGINEERING & CONSTRUCTION DIVISION

**ENGINEERING AND DESIGN SECTION**

30% PRELIMINARY

PLAN-PROD-BASE CRP-123456

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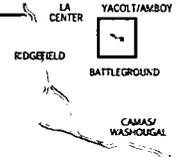
DATE 01/01/07  
 ###  
 ### or XXX

# Lucia Falls and Moulton Falls Trails

EAST FORK LEWIS RIVER

2.6 miles

EASY **MODERATE** DIFFICULT



27781 LUCIA FALLS ROAD, YACOLT

Moulton Falls and Lucia Falls Parks together encompass 325 acres of older-growth forest, three separate waterfalls and miles of shared use and primitive trail. Other points of interest include volcanic rock formations from early lava flows, a beautiful arch bridge over three stories high. Swimming is not allowed at Lucia Falls, in order to protect sensitive fish habitat. A 2.5-mile, barrier-free trail runs from the Hantwick Road trailhead to Moulton Falls Park. The primitive, 9-mile Bells Mountain Trail also begins here, and will eventually link southward to the Rock Creek Campground and the Tarbell and Larch Mountain Trails.

**FACILITIES**

Picnicking, toilets, swimming, fishing, viewpoints

**DIRECTIONS**

By car:  
5 miles northeast of Battleground on Lucia Falls Road

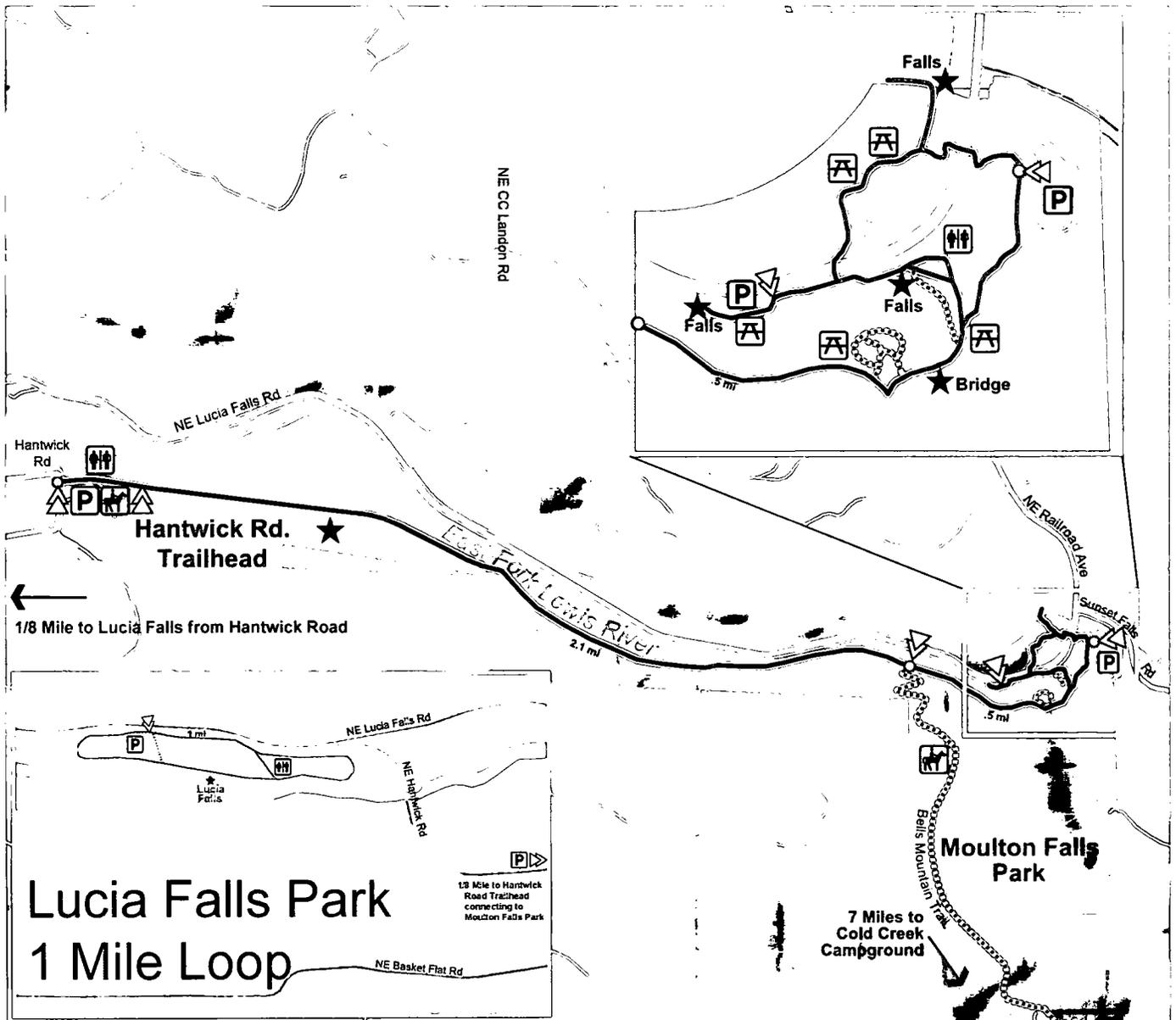
By bus:  
No bus service within one mile

**FEES**

Parking fees were eliminated in 2013.

**HOURS**

7 a.m. to dusk

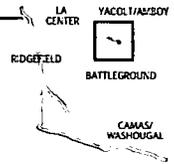


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**FACILITIES**

Picnicking, toilets, swimming, fishing, viewpoints

**DIRECTIONS**

By car: 5 miles northeast of Battle Ground on Lucia Falls Road

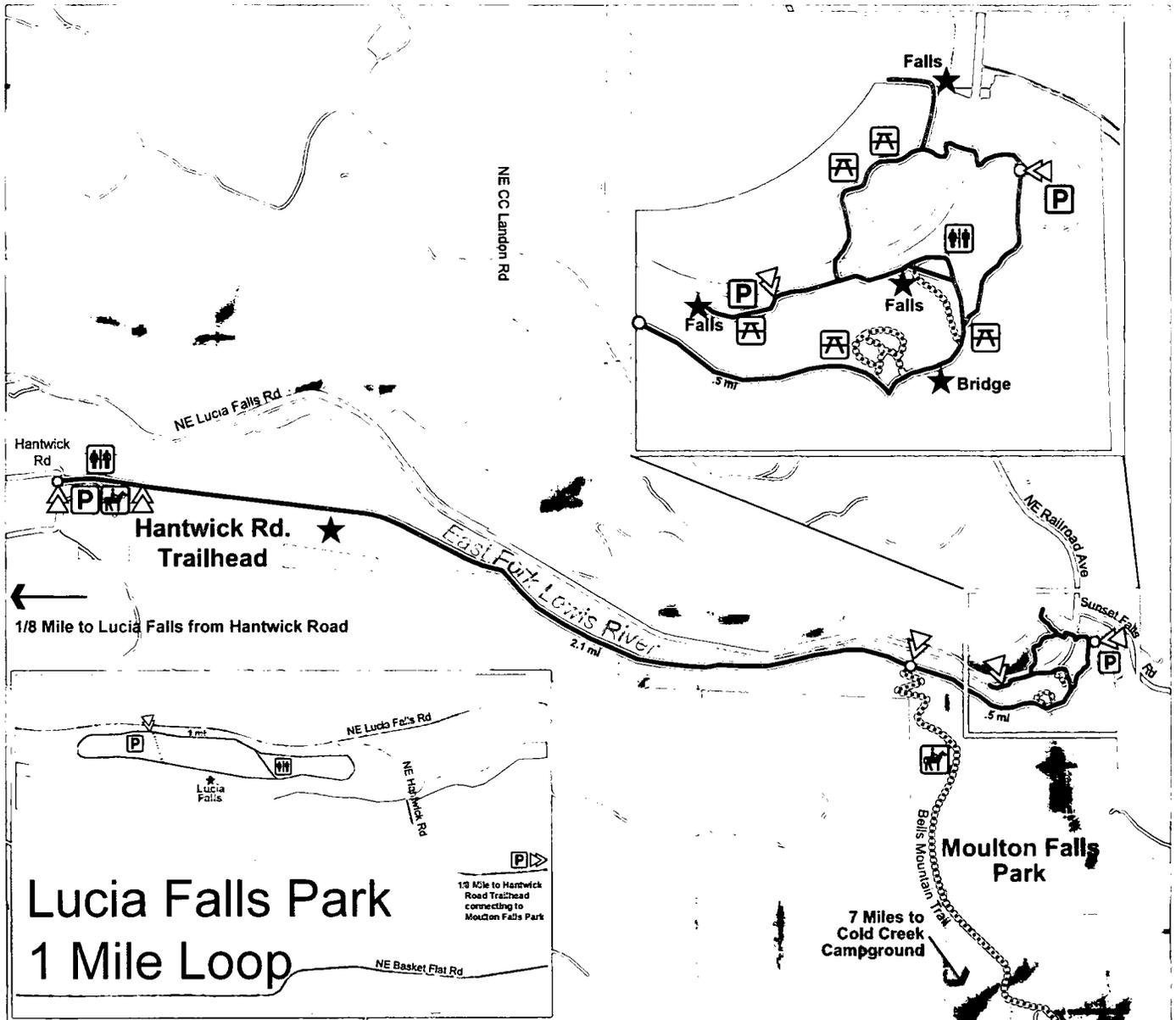
By bus: No bus service within one mile

**FEES**

Parking fees were eliminated in 2013.

**HOURS**

7 a.m. to dusk



**PUBLIC WORKS**

Parks



proud past, promising future

**CLARK COUNTY**  
WASHINGTON

October 28, 2014

Heath Henderson  
Director  
Clark County Public Works  
P.O. Box 9810  
Vancouver, WA 98666-9810

RE: Moulton Falls Regional Park and Clark County's Big Tree Creek Bridge #120 Repair Project

The Clark County Department of Public Works is proposing a seismic retrofit and installation of scour protection at Big Tree Creek Bridge on NE Lucia Falls Road. This project will impact the 387-acre Moulton Falls Regional Park. The impacts include 864 sq. feet of permanent impact and 1770 sq. feet of temporary impact. All land temporarily disturbed will be reseeded or replanted with native species.

The permanent impacts are due to the placement of bank stabilization necessary for the protection of bridge abutments. The bank stabilization will be placed immediately adjacent to the existing bridge where scour is occurring. Due to the minor amount of park land impacted and the added benefit of preventing further bank erosion, **the proposed 4(f) use is de minimis in nature and will not adversely affect the features, attributes or activities qualifying the Moulton Falls Regional Park for protection under Section 4(f).**

The proposed temporary impacts are a minor impact in nature and magnitude to the Moulton Falls Regional Park. Because Clark County Public Works has agreed to restore the temporary impact area to pre-existing conditions, the County does not anticipate permanent adverse physical impacts to the park. In addition, the temporary impacts to trail access will not interfere with the activities or purpose of the park as access will still be provided at an alternative trailhead.

The proposed mitigation, replanting temporarily disturbed areas, is a non-transportation use of Moulton Falls Regional Park. The mitigation is consistent with the function of the existing park and considered an enhancement to fish and wildlife resources on the site. The Clark County Parks Division plans to protect and encourage the survival of the riparian plantings.

In conclusion, the proposed Big Tree Creek Bridge #120 repair project will have **no adverse effect to activities, features or attributes to the Moulton Falls Regional Park**, and thus will have a **de minimis impact to this Section 4(f) resource.**

Sincerely,

Bill Bjerke  
Manager  
Clark County Parks Division of Public Works