



**US Army Corps
of Engineers®**
Seattle District

Notice of Preparation / Clean Water Act Public Notice

Planning and Project Management Division
Environmental Resources Branch
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: Amanda Ogden (PM-PL-ER)

Public Notice Date: 8 February 2011
Expiration Date: 22 February 2011
Reference: PL-11-02
Name: Rock Creek Levee Rehabilitation

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Seattle District (Corps) plans to prepare, pursuant to the National Environmental Policy Act (NEPA), an environmental assessment (EA) for proposed and previously completed levee repairs on the Naches River at the Rock Creek Levee near the community of Rock Creek, Yakima County, Washington. Repairs are intended to address damage caused during the January 2009 flood event when the Naches River exceeded the flood stage. Emergency work was completed in April 2009 and additional preventative work was conducted during flood stage conditions in January 2011; further repair is expected to be constructed in 2011.

AUTHORITY

The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code Section 701n). Corps rehabilitation and restoration work under this authority is limited to flood control works damaged or destroyed by floods. The statute authorizes rehabilitation to the level of protection exhibited by the flood control work prior to the damaging event. Yakima County is the local sponsor for this project.

NEED

In January 2009, flood waters damaged the levee along an 875 linear foot (LF) section. Additionally, 550 LF of the downstream end of the levee was breached and lost. Also the riprap armor on the riverward face of the remaining levee launched leaving an unarmored and oversteepened slope. The levee is located on the left bank of the Naches River from river mile 33.60 to river mile 33.0 in Section 17, Township 16 North, Range 15 East of the Willamette Meridian. The pre-damaged levee commenced at the Highway 410 embankment and terminated about 2,140 LF downstream. Prior to the 2009 flood, Rock Creek had approached and followed along the landward side of the levee for several hundred feet before turning back to the east, flowing along the highway, and entering the Naches River some distance below the downstream end of the levee. During the 2009 flood event, the lower section of the levee was breached and lost. Rock Creek now flows into the Naches River at this breach, shortening the creek by about 0.5 mile. Following the 2009 damage, the levee offered only an annual level of flood protection. With repair, the levee would return to a 30-year level of protection.

In January 2011, the Naches River reached flood stage in the project area. Flood fight activities were initiated by the Corps of Engineers. The flood fight consisted of placing stockpiled riprap on the riverward toe of the levee to prevent erosion and potential failure. Rock placement was initiated at the upstream end of the levee and continued for a total length of 340 LF.

PURPOSE

The purpose of the project is to repair the damaged levee and return it to the level of flood protection found prior to the January 2009 flood event in order to protect lives and property from subsequent flooding.

PROPOSED ACTION

Emergency placement of rock on the top of the levee was completed in 2009, and a portion of this rock was placed along an upstream portion of the damaged toe. Current work is expected to be completed during approved work windows and would utilize the remainder of this rock to recreate the levee toe and armor the levee face.

Multiple alternatives for the summer 2011 repair will be considered as follows:

- No Action. No levee repairs would be done. Further damage or failure of the levee is likely to transpire with the occurrence of even an annual flood. The results of a failure would include damages to homes, business and infrastructure including Highway 410. This alternative does not fulfill project goals.
- Repair In-Kind Alternative. Repairs to the Rock Creek levee would restore levee to its original footprint, thereby restoring the 30-year level of protection that pre-existed the flood event.
- Repair In-Kind plus Partial Setback Alternative. This alternative is being evaluated as the current preferred alternative. Expedited initial repairs, completed in April 2009, provided risk reduction for the spring flood season. Initial repair effort involved stockpiles of riprap at the upstream end for approximately 300 LF and for approximately 375 LF at the downstream end. Stockpiled rock was placed on top of the levee prism, completely out of the water, in case spring flood conditions at the levee segments made vulnerable by the 2009 event warranted deployment directly on the levee slopes. The January 2011 flood event presented a risk of imminent toe damage and warranted placement of the stockpiled riprap along the upstream portion of the levee to armor the riverward toe. Material was placed using an excavator to armor the toe of the levee from the upstream end for a length of 340 LF. The presently preferred permanent repair project for construction during the summer 2011 would reestablish reliable flood protection for the future flood seasons, and restore the 28-year level of protection that existed prior to the flood event. The lower, breached section of the levee would be abandoned, retaining the current post-flood confluence. At the post-flood confluence the levee would be armored on both the riverward and landward sides and widened to allow for a vehicle turnaround. A 400 LF segment of the middle section of the levee would be setback 20 LF from the river at the widest point. At the upstream end, a 150 LF segment would restore the pre-flood toe and provide a re-compacted levee backslope with integrated seepage berm.
- Non-Structural Alternative. This alternative would relocate all existing structures, utilities and other infrastructure within the damage area protected by this section of levee. The costs associated with this alternative were deemed too high for the level of benefit.

Final selection of the preferred alternative and finalization of the design, including any additional environmental measures, would occur during the NEPA process and before construction.

ANTICIPATED IMPACTS

Impacts anticipated at this point are as follows:

Wetlands. The proposed project would be designed to limit wetland impacts. The January 2011 repair construction work has occurred, and the summer 2011 work would occur, within the footprint of the pre-existing levee, with the exception of the partial setback. Construction access and staging areas would be along the existing levee. A small area of modified and degraded wetlands may be located within the proposed setback levee footprint. A wetland delineation will be necessary to define any potential wetland impacts. The setback and potential wetland impacts have been discussed with the Department of Ecology and it is anticipated that the benefits of the setback would be concluded to outweigh the wetland loss. Further impact analysis, consideration of mitigation for any wetland loss, and coordination will occur during the engineering and design phase.

Biological Resources. The following species listed as threatened (T) and their associated critical habitat (CH) is located in the project area:

- Steelhead (T) (CH)
- Bull trout (T) (CH)

Bull trout and steelhead are known to occur in the Naches River. The project area contains prime habitat for listed bull trout and listed steelhead which are known to be present in the construction area. The spawning season runs from late February through May. Juvenile steelhead will emerge from redds starting in July. There are approximately 500-1000 steelhead trout in the system so an impact to the fish (at any life stage) or their habitat is very critical. The river area adjacent to the proposed repairs consists of spawning gravels and deep pools. Steelhead spawning and bull trout migration occur here. Spawning redds survive all but the most severe flood flows (Scott Hofer NMFS pers. comm.). All remaining in-water construction would occur within the approved fish window (June 1 – August 15) using best management practices to limit impacts. Narrowing the toe placement in areas where there are deep pools would reduce impacts to the aquatic habitat. Riparian vegetation loss would be minimal. The riverward face of the levee did not include appreciable vegetation prior to the initial repair. Some trees over 4 inches diameter at breast height (DBH) did exist on the landward face of the levee as noted in the 2008 inspection report, however these trees had been removed prior to the March 2009 site visit. Several trees would need to be removed to accommodate the levee setback, however it is expected that the setback benefit would also compensate for the tree loss. Abandonment of the lower section of the levee would allow for restoration of natural bank.

A biological evaluation is being prepared pursuant to Sec. 7 of the Endangered Species Act to determine whether the completed or proposed actions are likely to adversely affect these species or their designated critical habitat.

Although Bald Eagle was delisted on June 28, 2007, they continue to be protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. These Acts require some measures to continue to prevent bald eagle “take” resulting from human activities. Impacts to bald and golden eagles will be considered as a part of the NEPA process.

When completed, this levee repair is not intended or expected to generate appreciable change in habitat conditions as compared with conditions pre-existing the flood event. Repair construction work may result in short-term impacts to fish and wildlife. If present, adult and juvenile salmonids may be temporarily displaced from the project area. Construction noise may temporarily disturb any wildlife in the project area. Long-term effects would include greater conveyance of the river and greater access to floodplain due to the setback of the levee from the river.

Water Quality. There may be a temporary increase in turbidity due to construction and fill placement. Turbidity would be monitored during construction. If turbidity exceeds water quality maximum standards, construction would be halted, and would recommence when turbidity returns to acceptable levels. Some loss of stream bank habitat complexity, grassy vegetation, and organic matter inputs into Rock Creek and/or Naches River may occur.

Cultural Resources. Prior to permanent repairs, a Corps archeologist will conduct a cultural resources survey of the project area to determine whether there is a potential for the proposed repairs to cause effects to historic properties. National Historic Preservation Act Section 106 compliance reports will be prepared for all proposed levee repairs. The report will include the findings of the investigations for each repair site, recommendations for archaeological monitoring during construction, and a determination of effects to archaeological and historic properties. If archaeological monitoring is recommended at some repair locations, the report will include a monitoring plan and protocols to be followed. The protocols will include an inadvertent discovery clause that will apply when an archaeological monitor is not present. The Corps' determinations of effects to historic properties, the investigation report, and monitoring plan will be reviewed by the Washington State Historic Preservation Officer (SHPO) and the appropriate tribes prior to construction.

Air Quality. Construction vehicles and heavy equipment would temporarily and locally generate gasoline and diesel exhaust fumes, carbon dioxide (CO₂), carbon monoxide, and dust on roadways. These emissions would be exempt from the conformity requirements under the Clean Air Act, because the project constitutes a routine facility repair activity generating an increase in emissions that is clearly *de minimis*, under 40 CFR 93.153(c)(2)(iv). Unquantifiable but insignificant exacerbation of effects of CO₂ emissions on global climate change is also anticipated.

Noise. Temporary increases in noise would occur as a result of rock delivery and placement. All the proposed projects are in or near the community of Rock Creek. Private residences are very close to the work sites. Work would be done during daylight hours to minimize the adverse effects of noise on businesses and residents.

Traffic. Construction-related traffic would cause minor temporary increases to, and disruption of, local traffic. Efforts would be made to minimize disturbances to traffic patterns during construction through appropriate work hours, signage and notifications and proper traffic controls.

Cumulative Effects. The currently preferred alternative includes a setback which would restore approximately 15,000 sq ft of floodplain. The current plans also include abandonment of the lower 550 LF of levee that was breached and lost during the flood. The abandoned levee had curved around behind a vegetated bench. Abandonment of this section would allow restoration of a natural bank with natural vegetative growth and recruitment with no future need for vegetation maintenance or rock placement.

EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposal can be adequately evaluated under the NEPA through preparation of an EA. Preparation of an EA addressing potential environmental impacts associated with the levee rehabilitation project is currently underway.

The project would involve a discharge of fill material into waters of the United States that will be evaluated for substantive compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the Clean Water Act.

The Corps will request certification that the project provides reasonable assurance of compliance with the Water Quality Standards of Washington State, under Section 401 of the Clean Water Act.

In accordance with Section 7(a)(2) of the Endangered Species Act, the Corps will draft a Biological Evaluation and will seek consultation with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service, regarding the impact of the project on listed species and/or designated critical habitat.

The Corps has reviewed the latest published version of the National Register of Historic Places (NRHP), lists of properties deemed eligible, and other sources of information. The Corps will document the current state of knowledge regarding the presence or absence of historic properties and the effects of the undertaking upon the properties.

In preparation of the environmental documentation for this project, coordination has been conducted or is ongoing with the following public agencies:

- (1) U.S. Fish and Wildlife Service
- (2) NOAA Fisheries;
- (3) Environmental Protection Agency;
- (4) Washington Department of Fish and Wildlife;
- (5) Washington Department of Ecology;
- (6) Yakama Nation;
- (7) State Historic Preservation Office.

Any person who has an interest that may be affected by this disposal of fill or dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this notice, and must clearly set forth the following: the interest that may be affected, the manner in which the interest may be affected by this activity, and the particular reason for holding a public hearing regarding this activity.

The decision whether to conduct the project will be based on an evaluation of the probable impact on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered; among these are: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality,

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energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

The Corps invites submission of factual comment on the environmental impact of the proposal. Comments will also be considered in determining whether it would be in the best public interest to proceed with the proposed project. The Corps will consider all submissions received before the expiration date of this notice. The nature or scope of the proposal may be changed upon consideration of the comments received. The Corps will initiate an Environmental Impact Statement (EIS), and afford the appropriate public participation opportunities attendant to an EIS, if significant effects on the quality of the human environment are identified and cannot be mitigated.

Submit comments to this office, Attn: Environmental Resources Section, no later than *15 days after the date of this notice* to ensure consideration. In addition to sending comments via mail, comments may be e-mailed to amanda.ogden@usace.army.mil. This Notice of Preparation can be found at the following website: http://www.nws.usace.army.mil/ers/doc_table.cfm under "Rock Creek Levee Rehabilitation." Requests for additional information should be directed to Ms. Amanda Ogden at 206-764-3628 or the above e-mail address.

PROJECT LOCATION MAP AND DESIGNS

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 Date: 13 Jan 2009
 Vertical Datum: NAVD83
 Imagery Date: 2007

ROCK CREEK



Legend

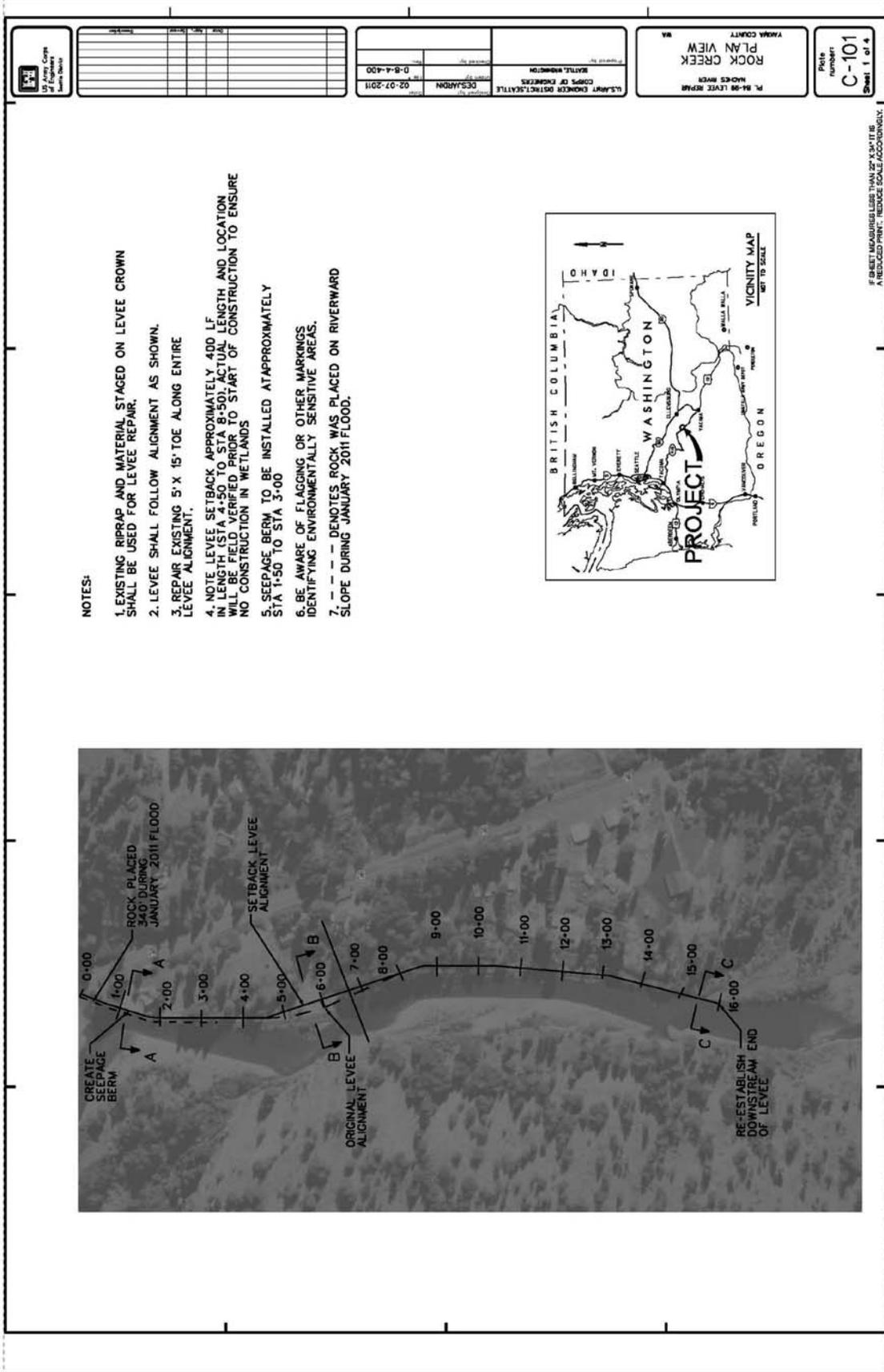
- Levee
- Highways
- Streets
- Lakes
- Cities
- State Boundaries

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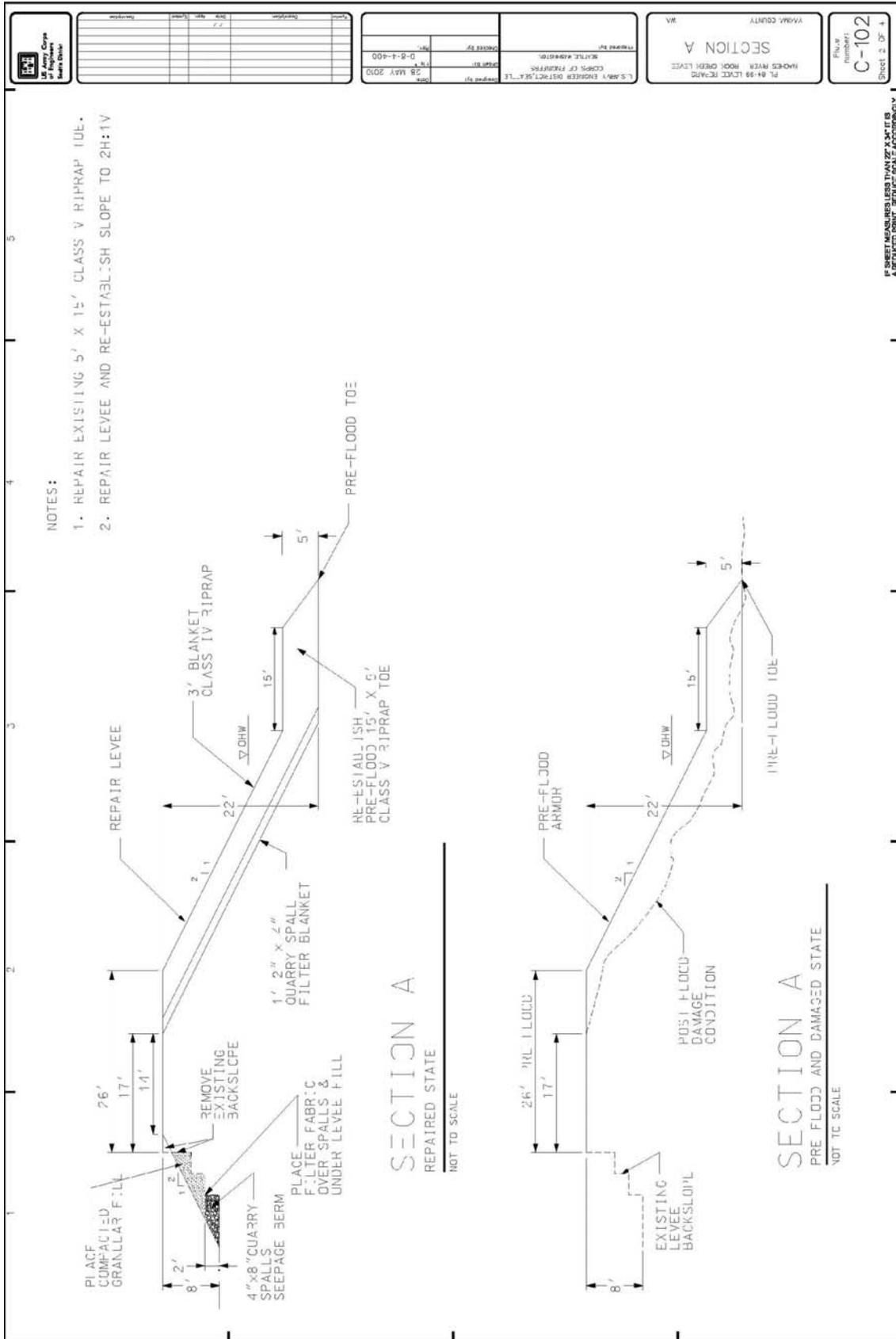
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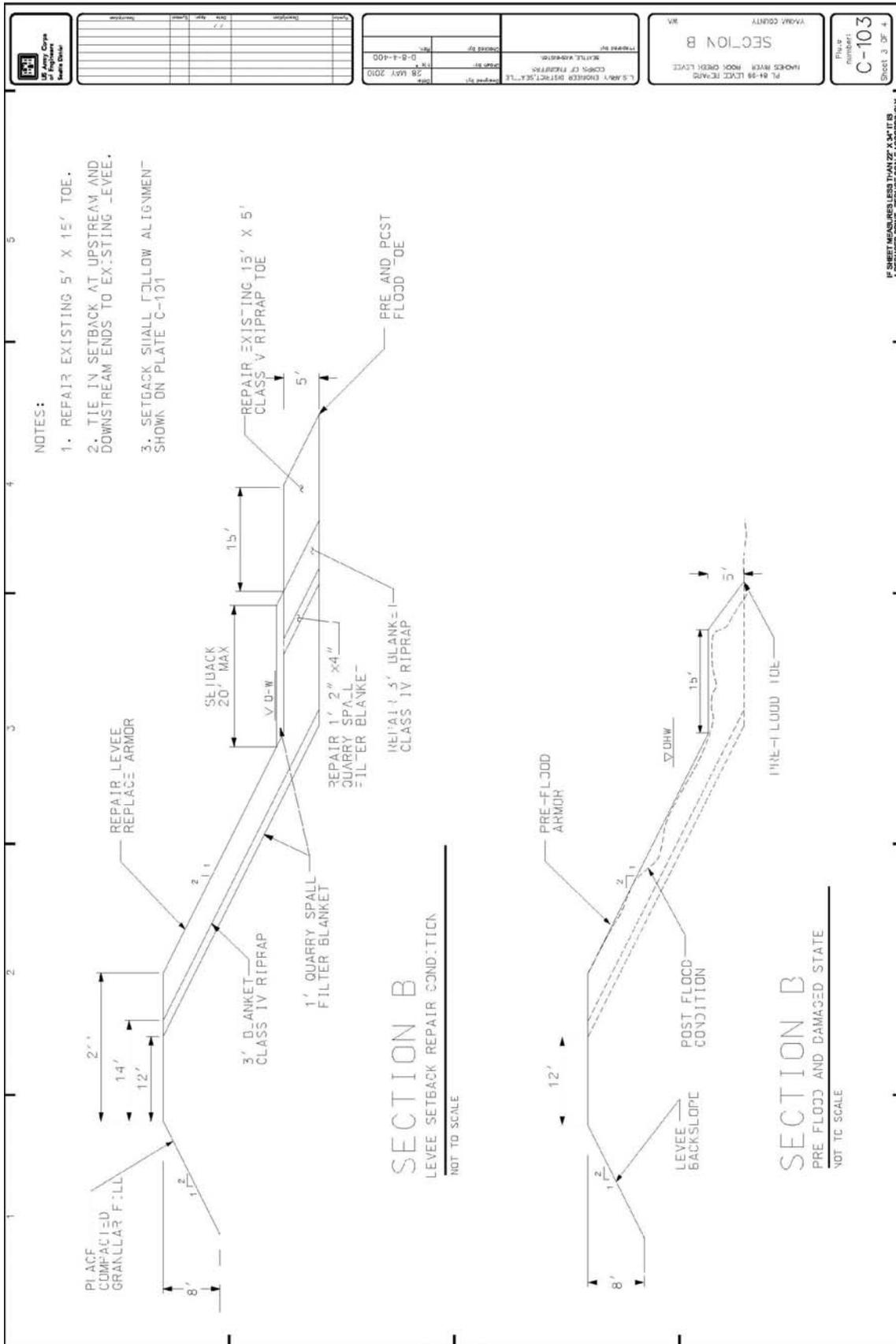


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NO.	REV.	DATE	BY	CHKD.	DESCRIPTION

DATE	26 MAR 2010
PROJECT	ROCK CREEK LEVEE REHABILITATION
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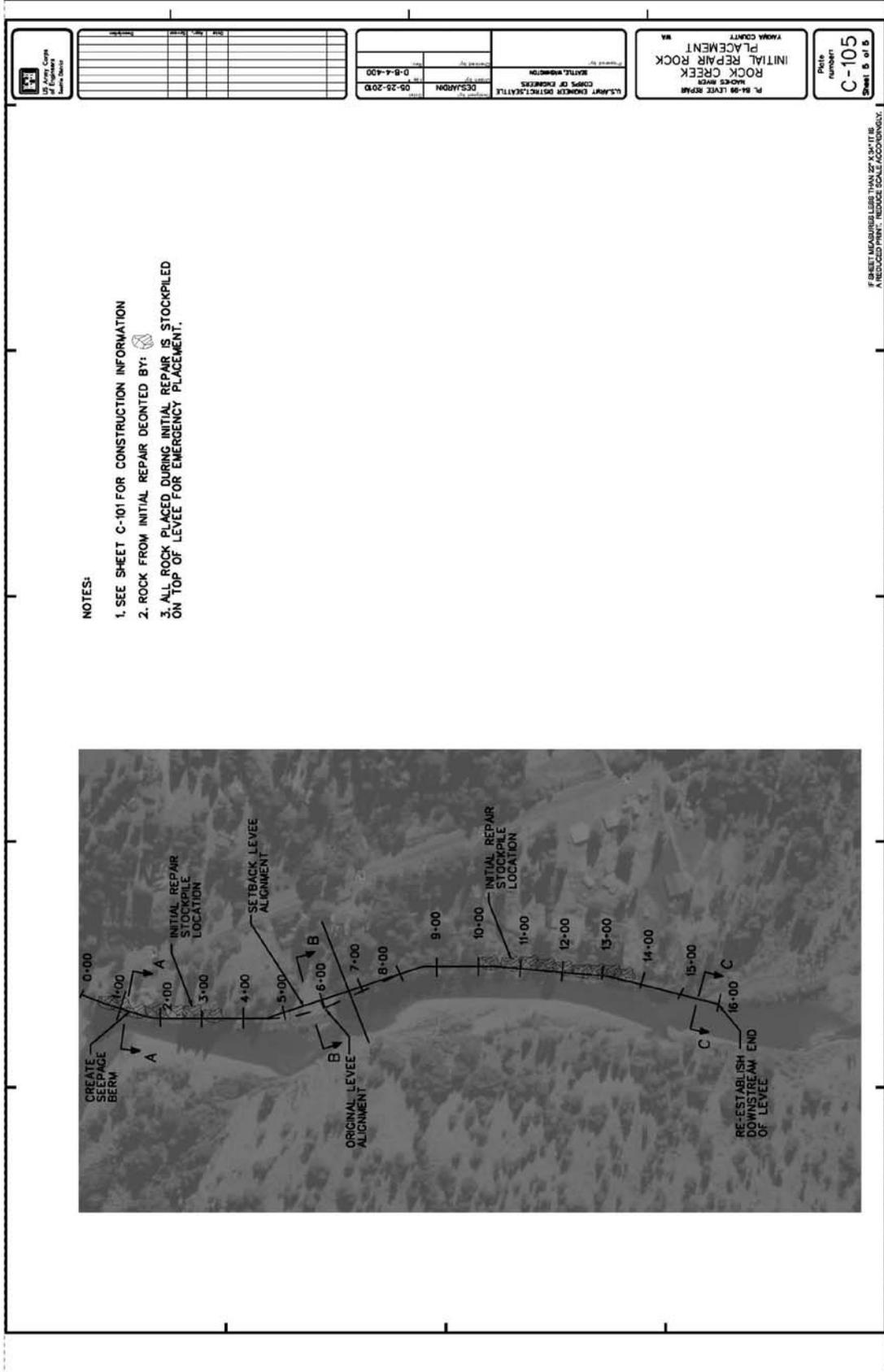
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PL 84-99 LEVEE REPAIR AND MAINTENANCE ACT
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PROJECT PHOTOS

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Photo 1. Levee at the upstream end looking downstream, showing stockpiled rock on the top of the levee, August 2010.



Photo 2. View looking upstream towards the 150 LF upstream repair site, August 2010.



Photo 3. Landward looking downstream from the upper end of the proposed levee setback location, August 2010.



Photo 4. Looking downstream to the end of the post-flood levee segment with stockpiled rock, August 2010.