

Environmental Assessment
for
Macks Canyon Boat Ramp Improvements
DOI-BLM-OR-P060-2012-0013-EA

U.S. Department of the Interior
Bureau of Land Management
Prineville District
3050 NE Third Street, Prineville OR 97754

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This Environmental Assessment (EA) considers the environmental consequences of a proposed action or alternatives to the proposed action (described in detail in Chapter 2) to determine if there would be potentially significant impacts. Potentially significant effects would preclude issuance of a Finding of No Significant Impact (FONSI) and require preparation of an environmental impact statement. "Significance" is defined by the National Environmental Policy Act (NEPA) and is found in regulation 40 CFR 1508.27. If a FONSI can be issued after this EA, it may be followed by a decision record (with public appeal period) and implementation of the project. While the BLM has identified a "proposed action" alternative in the EA, the final decision on this project may include parts of several of the alternatives.

The BLM will accept written comments postmarked or received at the BLM office by March 1, 2014. Deliver comments by hand, postal service, Email or FAX to Molly Brown, Field Manager, Prineville District BLM, 3050 NE Third Street, Prineville, Oregon, 97754, FAX 541-416-6798, Email BLM_OR_PR_Mail@blm.gov. Direct questions to the project lead, Heidi Mottl, 541-416-6718.

To be most helpful, comments should be as specific as possible. A substantive comment provides new information about the Proposed Action, an alternative or the analysis; identifies a different way to meet the purpose and need; points out a specific flaw in the analysis; suggests alternate methodologies and the reason(s) why they should be used; makes factual corrections; or identifies a different source of credible research which, if used in the analysis, could result in different effects.

Before including your address, phone number, e-mail address, or other personal identifying information in your comments on the EA and FONSI, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

In keeping with Bureau of Land Management policy, the Prineville District posts Environmental Assessments, Findings of No Significant Impact, and Decision Records on the district web page under Plans & Projects at <http://www.blm.gov/or/districts/prineville/plans/index.php>. Individuals desiring a paper copy of such documents will be provided one upon request.

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Chapter 1 Introduction

Proposed Action

The Prineville District of the Bureau of Land Management (BLM) is proposing to construct a new concrete boat ramp at Macks Canyon Recreation Site within the Lower Deschutes River Recreation Area. The new boat ramp would be located approximately 300 feet downstream of the existing concrete boat ramp and would provide access to the Lower Deschutes River for motorized boats. The existing concrete boat ramp would remain open and would be designated for non-motorized boat access. A small, user-created launch area would be closed and re-vegetated. The existing parking lot at the boat launch area would be re-designed to improve the traffic flow, one group day-use site would be closed and converted to a parking area for vehicles pulling trailers, and a vehicle turnaround loop would be added. Accessible design pathways for use by persons with disabilities would be constructed between the parking lot, the new boat ramp, and the existing rest room, and one new campsite, designed specifically to be accessible for persons with disabilities, would be added to the adjacent campground. Macks Canyon Recreation Site is located approximately 20 air miles northeast of the city of Maupin, Oregon, at River Mile 24 on the Deschutes River.

Need

The motorized boat access currently provided by the BLM at Macks Canyon Recreation Site is not functioning well for recreation users or for fish. The existing concrete boat ramp was constructed by the BLM in 1974, and was functioning adequately until high water events of 2005/2006 caused changes to the river channel. The river current now regularly deposits sediment at the end of the boat ramp. An accumulation of sediment has reduced the water depth at the end of the ramp, making it too shallow for launching motorized boats.

To attain the water depth necessary to launch or retrieve a motorized boat, a current user typically backs their boat trailer diagonally across the concrete ramp and out an unsafe distance into the active river channel. This maneuver requires a user to have a 4x4 truck with good traction tires, and excellent backing and 4X4 driving skills. Once launched, users typically tie their boat to a tree upstream of the boat ramp while parking their vehicle. A swift current in this tie-up area tends to push boats into the active launch area, where they create congestion for other boat ramp users. Also, the practice of tying boats to trees is damaging tree trunks and threatening the health of the trees.

Fall Chinook use the waters around the existing boat ramp for spawning. Engine turbulence from motorized boat launching and landing is causing disturbance to the spawning area.

The existing parking lot at the Macks Canyon boat launch area is often congested on popular use days, and does not provide enough parking spaces to accommodate current use levels. Parking spaces are not delineated, leaving drivers to park in an unstructured manner. Access to parking and to the existing vault toilets does not meet the revised regulations for Title III of the Americans with Disabilities Act of 1990 (ADA).

Purpose

The purpose of this project is to provide safe motorized and non-motorized boat launching facilities at Macks Canyon Recreation Site while protecting nearby fish spawning areas, wildlife habitat and riparian

vegetation; to enhance watercraft safety, improve parking area efficiencies, and upgrade access for visitors with disabilities.

The proposed project would meet the following objectives outlined in 1993 Lower Deschutes River Management Plan Record of Decision:

“The launch sites at ...[other Lower Deschutes recreation sites]... and Macks Canyon Campground will be improved to provide better bank protection and to enhance watercraft safety. “ (p.47)

“If needed and where feasible, existing parking and roadside pullouts outside of riparian areas or other sensitive wildlife habitats will be redesigned/reconstructed to better accommodate vehicle parking, reduce congestion, protect resources, disperse recreation use and improve public safety.” (p.46)

Issues for analysis

An issue is a point of disagreement, debate, or dispute with an action based on an anticipated effect. While many issues may be identified during scoping, the BLM only analyzes issues in an EA when analysis is necessary to make a reasoned choice between alternatives, or where analysis is necessary to determine the significance of impacts. To warrant detailed analysis, the issue must also be within the scope of the analysis, be amenable to scientific analysis rather than conjecture, and not have already been decided by law, regulation, or previous decision. Significant effects are those that occur in several contexts (e.g., local and regional) and are intense (e.g., have impacts on public health or unique areas).

Issues considered in detail

The following issues were raised by federal, state or local government agencies, or by BLM staff or permittees, and are considered in detail in this EA.

How would the recreation experience (including scenery) and opportunities be affected by **constructing a new boat ramp for motorized use, designating the existing boat ramp for non-motorized use, closing a user-created launch area, redesigning a parking area, converting a group day-use site to additional parking and adding facilities to meet accessible design standards?**

What would be the effect on Mid-Columbia River (MCR) summer steelhead and fall Chinook of **constructing a new boat ramp for motorized use away from fish spawning beds, designating the existing boat ramp for non-motorized use, and closing a user-created launch area?**

What would be the effect on golden eagles, American kestrels and migratory birds of **constructing a new boat ramp for motorized use, closing a user-created launch area, and constructing the project between the dates of July 15 and mid-September?**

While several other issues were raised during the scoping period, not all of them warranted detailed analysis to make a reasoned choice between alternatives or to determine the significance of impacts. Chapter 3 briefly discusses these issues.

Chapter 2 Alternatives

This chapter describes a no action alternative that would continue existing management, and one action alternative. The proposed action would meet the purpose and need described in Chapter 1. A number of actions would continue in the area regardless of the alternative selected, including: a) the activities allowed at Macks Canyon Recreation Sites would remain unchanged, b) all of the campsites in the campground would remain open, c) the group campsites would remain open, d) the restroom facilities would remain unchanged.

Alternative 1, No Action

In the No Action alternative the BLM would allow the present situation at Macks Canyon Recreation Site boat launch and parking area to continue. The BLM would not construct a new boat ramp or modify the parking area or campsites.

Alternative 2, Proposed Action

The proposed action is to construct a new concrete boat ramp at Macks Canyon Recreation Site for motorized boat launching that would be located and designed to help protect spawning fish and enhance watercraft safety for recreation users. The existing deteriorating concrete ramp would be converted to a gravel ramp above the water line, and designated for non-motorized boat launching. The existing user-created launch area would be closed and the riparian area re-vegetated with white alder trees. The existing parking area would be redesigned, a day-use site would be converted to additional parking, a vehicle turnaround would be added, a new accessible campsite would be added, and access to parking and restroom facilities would be upgraded to meet current ADA regulations.

Boat ramps: A new 90 by 20 foot concrete boat ramp would be constructed approximately 300 feet downstream of the existing concrete ramp, and would provide access to the Lower Deschutes River for motorized boats. The ramp would be designed in cooperation with OSMB and would meet OSMB standards, including a minimum water depth at the toe (end) of the ramp of 4 feet below the ordinary low water level. The existing 28 by 20 foot deteriorating concrete boat ramp would be removed and the area would be converted to a gravel ramp designated for non-motorized boat access, thus providing separate motorized and non-motorized launch areas. A 47 by 30 foot user-created non-motorized launch area located 50 feet downstream of the old concrete ramp would be closed and the riparian area re-vegetated with white alder trees. Construction of the new concrete boat ramp would require the removal of about 100 cubic yards of dirt and river cobble that is naturally occurring at the site. This dirt and cobble material would be re-used at the same location as fill material, and about 200 cubic yards of new fill material including concrete, subgrade material, and riprap would be brought in from off-site. Three native alder (two of these trees are dead) and 12 invasive tree-of-heaven trees (a species on the Oregon Department of Agriculture Noxious Weed B List) would be removed during construction.

Parking: Access to the new boat ramp would be provided from the existing gravel parking area. The traffic pattern in the existing parking area would be re-designed to allow users to back straight down the boat ramp, and specific parking spaces would be designated for cars and vehicles pulling trailers. The redesigned parking lot would be approximately 275 by 275 feet in size. One group day-use site located along a two-way

access road would be converted to a 230 by 50 foot parking area and designated for vehicles pulling boat trailers

Accessible facilities: One new ADA accessible campsite for use by persons with disabilities would be constructed in the existing campground loop and accessible pathways would be constructed between the new campsite, new boat ramp, and existing rest room and parking area.

Work period: Work taking place above the ordinary high water (OHW) line would begin in mid-July and continue into September. In-water work on the new boat ramp would be completed during the work period approved by the Oregon Department of Fish and Wildlife (ODFW), from August 1 to August 15. The ODFW has granted the BLM an exception to the normal winter in-water work dates in order to allow in-water work to be completed at the lowest water flows possible.

Public access during construction: The existing concrete boat ramp and the user-created launch area would remain open during the construction period. Public access to the new launch ramp and the existing parking area would be closed during construction. The new boat trailer parking area would be constructed first, and would serve the public during the construction period, and passenger car parking would be allowed alongside the two-way access road. . The campground would remain open during construction. The construction work schedule would be posted on the BLM's Boater Pass website and at on-site bulletin boards, so that users could plan to use a different recreation site during the construction period, if desired.

Construction equipment and methods

Note: Construction methods would not include pile drivers or blasting.

Equipment: For above-water work, typical heavy equipment would be used including: excavator, backhoe, vibratory roller compactor, skid steer, dump truck, and water truck.

For in-water work, an excavator would be used in no more than 3 feet of water depth and no more than 25 feet from shore. The gas tank and hydraulic equipment of the excavator would be maintained above the water level at all times. This equipment would be thoroughly inspected prior to work to ensure that it had no leaks and was weed-free. The back of the excavator bucket would be used for compaction of materials.

New boat ramp: Access to the construction site would be through the existing parking area. One live alder, 2 dead alder and 12 invasive tree-of-heaven trees would be removed, as well as all vegetation and topsoil within the limits of the permitted cut and fill lines. Temporary concrete barriers would be placed on the bottom of the river in a semicircle to establish a partial ring around the in-water work area. A temporary sediment fence would be placed on each side of the ramp area to prevent sediment in the runoff in the construction area from entering the river. Approximately 150 cubic yards of existing material would be excavated and 300 cubic yards of materials added in order to establish a 15% grade for the ramp that transitions to edge of the staging and maneuvering area Rip rap rock would be placed along the edges, and the toe of the ramp, and aggregate would be used to create a firm, smooth base directly under the concrete surfacing. A steel rail system would be constructed to accommodate the interlocking precast planks, which would be lowered and slid into place. The out-of-water portion of the ramp would be a 46 foot X 20 foot concrete slab, reinforced with re-bar and poured on site. Eight 10-inch untreated juniper anchor posts would be placed along the bank, upstream and downstream of the ramp between the existing trees. The

temporary jersey barriers would be removed upon completion of the in-water portion of the work. Upon completion of all work, the temporary sediment fencing would be removed. To help prevent noxious weeds from becoming established, areas disturbed by construction would be monitored and treated for weeds for 3 years after construction, under existing authorizations.

Existing boat ramp and user-created launch area: The out of water portion of the decaying concrete ramp would be removed and replaced with aggregate. Boulders would be placed at the edge of the user-created launch area to block vehicle access to the riparian area to allow vegetation to become re-established. To increase shade cover, fifteen white alder trees would be planted along the water line near the closed launch area and protected with wire caging.

Parking areas and vehicle turnaround: New surface aggregate would be placed for vehicle access to the launch ramp and the existing parking area. Parking areas would be defined with boulders, and parking spaces would be defined using wooden signage and concrete parking stops. One group day-use site would be closed and surface aggregate would be placed over the group site to create a new boat trailer parking area. A new vehicle turnaround would be constructed and graveled in the vicinity of the existing interpretive kiosk about sheep. Directional signing would be installed in compliance with BLM standards, constructed of wood and primarily brown with white lettering.

Accessibility improvements: One new ADA accessible campsite would be constructed in the existing campground loop, near the existing restroom, and would include an accessible picnic table, fire grate, and parking pad. Concrete or asphalt ADA accessible pathways would be constructed between the new campsite, new boat ramp, and existing rest room and parking area.

Alternatives considered but not analyzed in detail

Dredge the channel to remove the sediment at the end of the existing boat ramp, rather than constructing a new boat ramp. The BLM considered this alternative, but it is not analyzed in detail in this EA because it would not fully address the purpose and need for action. Dredging the sediment from the end of the existing boat ramp would provide a safer launch facility, but it would not protect the fish spawning area near the boat ramp from engine turbulence. In addition, the river's current is expected to continue to deposit sediment at the end of the existing boat ramp, resulting in the need to dredge the accumulated sediment from the end of the ramp every few years, in order to maintain the water depth necessary for launching motorized boats. The cost of dredging on an on-going basis would make this alternative economically infeasible.

Conformance

The proposed action would be in conformance with the 1993 Lower Deschutes River Management Plan Record of Decision, page 47, which states the management goal for Segment 4 (Macks Canyon to mouth) as "This area will be managed primarily for fishing and will provide access for motorized and non-motorized boats, with opportunities for hiking, mountain bike and horseback riding. Management will be toward dispersed recreational opportunities. Management actions will reduce social conflicts among users." (p.18)

The no action alternative would not be in conformance with the 1993 Lower Deschutes River Management Plan, as taking no action would allow the safety issues with the existing boat ramp to continue, and would not adequately protect fish. The location of the existing boat ramp requires users to back their boat trailers an unsafe distance out into the swift river channel. In addition, a fish spawning area is located near the end of the existing boat ramp, and launching motorized boats in this location can disturb fish.

The BLM would comply with all federal, state, and local consultation, permitting and construction requirements that apply to the proposed project, including requirements of the following agencies: Sherman County Planning Department, Oregon State Marine Board, Oregon Department of State Lands, Oregon Department of Fish and Wildlife, Oregon Parks and Recreation Department, Oregon Department of Environmental Quality, U.S. Fish and Wildlife Service, and National Marine Fisheries Service.

Chapter 3 Affected Environment and Environmental Effects

Introduction

This section describes the affected environment and anticipated effects for each of the four issues introduced in Chapter 1. The issues are discussed in the following order: Recreational experience and opportunities; fish; riparian vegetation; and golden eagles and American kestrels.

The affected environment describes the present condition and trend of issue-related elements of the human environment that may be affected by implementing the proposed action or an alternative. It describes past and ongoing actions that contribute to present conditions, and provides a baseline for analyzing cumulative effects.

The effects are the known and predicted effects from implementation of the actions, limited to the issues identified in Chapter 1. Direct effects are those caused by the action and occurring at the same time and place. Indirect effects are those caused by the action but occurring later or in a different location. Cumulative effects result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The cumulative effects analysis includes other BLM actions, other federal actions, and non-federal (including private) actions. Reasonably foreseeable future actions are those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends.

In 1988, the Deschutes River was included in the National Wild and Scenic Rivers System under the federal Wild & Scenic Rivers Act (WSRA) in order to preserve the river's Outstandingly Remarkable Values (ORV). The ORVs for which the river was designated include scenery, recreation, fish, wildlife, geological, archaeological, historical, and botanical, the free-flowing condition of the river, and water quality. Congress classified the 100-mile segment of the Deschutes River from Pelton Reregulating Dam to its confluence with the Columbia River as a recreational river, and directed it to be administered by the Secretary of the Interior through a cooperative management agreement between the Confederated Tribes of the Warm Springs Reservation, and the State of Oregon.

Macks Canyon is one of many developed recreation sites managed by the BLM within the Lower Deschutes River Special Recreation Area. The recreation site is located on BLM land, approximately 20 miles northeast of the City of Maupin, and can be accessed by paved road from Maupin, or by boat. Macks Canyon Recreation Site includes a campground, concrete boat ramp, two vault toilets, and interpretive and informational kiosks. The campground contains 20 designated campsites, including 2 campsites designed for group use. The concrete boat ramp, located upstream of the campground, is used as a put-in (launching) and take-out (retrieval) point for both motorized and non-motorized boats. A dirt, user-created launch area located just downstream of the concrete ramp, is often used as a launch and take-out point by non-motorized boaters. Anglers fish along the river banks here for steelhead, trout, and salmon.

Boaters use Macks Canyon Recreation Site to access the river year-round. Boating use levels on this section of the river are controlled through an on-line permit system in accordance with the 1993 Lower Deschutes River Plan (USDI BLM, 1993) and 1997 Supplement (USDI BLM, 1997). In 2013, daily boating use was limited to 203 individuals in Segment 3 (upstream of Macks Canyon), and 238 individuals in Segment 4 (downstream of Macks Canyon). The boating use limits apply to all boating trips, both non-motorized and motorized. Motorized boating use is allowed every day during fall, winter, and spring months, and on scheduled dates during summer months. BLM boater use data indicates that over 7,000 persons launched and/or retrieved boats at Macks Canyon in 2012, with 88 percent of this use taking place over a four month period from July through October. These use figures include non-guided boaters, commercial guides, and commercial clients. About half of the boats using the launch facilities at Macks Canyon are motorized, and half are non-motorized. Annual increases in use are expected to continue within the allowable limits specified by the management plan. The BLM estimates that over 3,000 people used the camping facilities during 2011, with campground use typically highest between the months of May and October.

Recreation Opportunity and Experience (ORV)

This section describes the affected environment of and effects on four aspects of the recreation experience and recreation opportunities: safety at boat launch sites, amount of parking, ADA access to recreation facilities, and scenery.

Recreation is an ORV identified for the Deschutes Wild & Scenic River (WSR), which offers diverse opportunities for recreation which attract visitors from many states and abroad. The native fishery has been internationally known for many years, and whitewater boating participation has grown rapidly also. The river provides a stable, high-volume flow, available for recreation all year long. Within its 100-mile length, there are distinct segments favored for relaxed, overnight camping and fishing floats, one-day whitewater adventures, and guided or non-guided fishing trips. The climate cooperates by offering generally sunny weather during the high-use season.

Safety at boat launch sites

Currently, boaters have a difficult time launching motorized boats at Macks Canyon because the water depth at the toe (end) of the boat ramp is about 2.5 feet deep below the ordinary low water level, which is too shallow to float the average motorized boat free of its trailer. In order to attain the water depth necessary to launch or retrieve a boat, users must back their boat trailers an unsafe distance out into the swift river channel, where they risk getting their vehicle stuck in the current. This maneuver requires the user to have a 4x4 truck with good traction tires, and excellent backing and 4X4 driving skills. Once

launched, boaters tie their boats upstream of the boat ramp while they park their vehicles, only to have the swift current push the boats back into the active launch area, creating congestion for other users.

Constructing a new concrete boat ramp in a location with deeper and slower water near the shore would improve the safety of boat launching for users. Meeting OSMB design standards, with a water depth at the toe (end) of the ramp of 4.2 feet below the ordinary low water level, would provide adequate depth to float the average boat free of its trailer. The water would be deep enough near shore to launch or retrieve a boat without backing into the active river channel, thus reducing the safety risk of getting a vehicle stuck in the current. The calmer water on each side of the new boat ramp would provide a more suitable location to anchor boats, where boats would be less likely to be pushed around by the current.

Currently, non-motorized boaters either share the existing concrete ramp with motorized boaters, or launch at a user-created area just downstream of the existing concrete boat ramp. When the existing ramp is shared by both non-motorized and motorized boat users, both efficiency and safety can be compromised. In general, motorized boat users require less staging time as they generally arrive at the ramp ready to back down the boat ramp to launch their boat. Many non-motorized boat users require time and space for staging and loading their boating equipment; to inflate watercraft, attach frames and oars, and load coolers, boating bags, and other equipment. Staging for an overnight trip may take an hour or more and involve constant activity by the group members at the ramp or staging area. Ramp congestion is common when user groups are on different time schedules – a group that arrives ready to launch gets behind a group that requires more time to prepare. Also, a safety issue arises when motorized boat users must back a boat trailer through a busy staging area, especially when the staging group includes children.

Designating the existing boat ramp area for non-motorized boat access and the new ramp area for motorized boat access would improve ramp efficiency and safety. Separate launch ramps and signed staging areas for motorized and non-motorized users would mean that motorized boaters who often arrive ready to launch would not need to wait for non-motorized groups who may need more preparation time. Separate launch areas would also improve safety as there would be less need to back a vehicle through a crowded staging area.

The current use of a user-created dirt launch area for non-motorized boat launching helps reduce congestion at the existing concrete ramp, but the riparian vegetation along the water line has been trampled, leaving the river bank bare, muddy in wet conditions, and prone to erosion.

Closing and rehabilitating the user-created dirt launch area, and designating the existing boat ramp for non-motorized boat access, would provide users with a graveled area that would not be prone to mud in wet conditions.

Parking

Currently, boaters park boat trailers and passenger cars in a gravel parking lot provided on an elevated bench near the existing restroom. The parking area is often congested, as it does not provide enough parking spaces to accommodate current boating use levels. Space that is available for parking is often not used efficiently, because parking spaces are not delineated, leaving drivers to park in an unstructured manner. When the parking lot is full, boaters and shuttle drivers parallel-park vehicles along both sides of

the two-way gravel access road that leads to the recreation site exit, using it as an overflow parking area. A group day-use site is located along the two-way gravel access road, and according to anecdotal information from BLM maintenance staff, the site is used about one day each year, perhaps because the site offers no shade. Currently, to change the direction of travel, drivers often use the campground loops as a vehicle turnaround.

If the available space is used efficiently, the existing parking lot can hold approximately 14 boat trailers and 8 passenger cars, for a total of 22 vehicles. In September 2012, BLM staff counted the vehicles parked at Macks Canyon boat launch parking lot and overflow area during the busy fall fishing season and observed the following:

Sunday 9/16/12 @ 10 AM: 24 boat trailers + 17 cars = 41 vehicles total

Tuesday 9/25/12 @ noon: 42 vehicles total (# of boat trailers vs. cars was not specified)

Re-designing the existing gravel parking lot, expanding the boat trailer parking, and delineating parking spaces for 31 boat trailers and 14 passenger vehicles would improve traffic flow, maximize efficient use of available space, and provide adequate parking spaces to meet current use levels on most days. Closing the group day-use site to convert this space for boat trailer parking would reduce the need to park overflow vehicles along the two-way access road. The loss of the group day-use site would be unlikely to create a hardship for recreation users, as the site is rarely used. Constructing a new vehicle turnaround in the vicinity of the existing interpretive kiosk about sheep would reduce the number of vehicles passing through the campground loops, improving the recreation experience for campers.

ADA access to facilities

Current recreation facilities at Macks Canyon meeting ADA standards consist of two accessible vault toilets, one in the campground, and one at the boat launch parking area. ADA access is not available from the existing parking area to the boat ramp, and the campground does not contain universal access camping facilities. Campsites that are designed to meet ADA standards typically contain a parking spur, table and fire ring that are wheelchair accessible, and a surfacing material that can be negotiated in a wheelchair or walker. The ADA requires the BLM to incorporate such access into the design plan for new or upgraded facilities, wherever such accommodations are feasible.

Providing concrete ADA accessible parking spaces and accessible pathways that connect the existing parking area to the new boat ramp, ADA campsite, and the existing rest room would improve access to recreation opportunities at Macks Canyon for persons with disabilities.

Scenery (ORV)

Part of the recreational experience relates to scenery, and the presence of visual intrusions (structures, development, signs) as viewed from the river.

Scenery is an ORV identified for the Deschutes WSR, which is described in the Lower Deschutes River Management Plan (USDI BLM, 1993) as "... a canyon containing a diversity of landforms, vegetation and color. The river, having carved a canyon nearly 2,000 feet deep in many locations out of rugged Columbia River basalt flows, provides a dramatic and diverse landscape. The clear water of the river framed by the green riparian vegetative fringe creates a stark contrast to the often barren and broken reddish and brown

cliffs, and hillsides of the canyon. The river provides a boater with a moving platform for viewing the ever-changing scene.”

Also, the proposed project is located within the boundaries of the Lower Deschutes State Scenic Waterway. This river segment is classified by the Oregon Parks and Recreation Department (OPRD) as an Accessible Natural River Area. The OPRD’s management goal for this segment is to preserve and protect the primitive, undeveloped character of the river corridor.

The BLM uses the Visual Resource Management (VRM) system to classify scenery and provide a framework for managing visual impacts of activities occurring on BLM-administered lands. As directed by BLM’s VRM policy (USDI BLM, 1984), the BLM completed VRM inventories for the Lower Deschutes. The inventory showed several Areas of High Visual Quality which were documented in the Two Rivers Resource Management Plan (RMP) and Record of Decision (USDI BLM, 1986).

The RMP identified the visual management objectives for the public lands within the Lower Deschutes River canyon as VRM Class II, which BLM’s VRM policy (USDI BLM, 1986) defines as:

“Class II Objective. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color and texture found in the predominant natural features of the characteristic landscape.”

The proposed action to construct a new concrete boat ramp would remove about 30 feet of riparian vegetation along the bank making the new ramp and a portion of the existing parking area visible from the river when viewed from immediately in front of the ramp. The visibility of the new boat ramp from the river would be partially mitigated by tinting the concrete used to construct the ramp to blend with the natural soil color at the site. The change in the characteristic landscape would also be mitigated by closing a 30 foot user-created launch area and re-planting this area with trees to allow trampled riparian vegetation to recover, resulting in no net loss of riparian vegetation for screening recreation facilities from the river. The majority of the proposed actions would not be visible from the river, including converting an existing concrete ramp to a graveled surface, converting a group day-use site to additional parking and upgrading universal access, due to their location away from the river’s edge and/or screening from natural vegetation. Planting alder trees, and seeding and planting of shrubs would further screen the site activities from view of the river. For the first five years following construction, until vegetation recovers and becomes established, it is likely that VRM Class II objectives would not be met. It is expected that the VRM Class II objectives would be met in approximately five years, after the riparian vegetation at the user-created launch area recovers and trees, grasses and shrubs planted at the project site become well established.

Fish (ORV)

This section describes the affected environment of and expected effects on fish relative to two indicators: turbulence caused by boat engines during launching and landing; and turbidity caused by construction.

The Lower Deschutes River has an internationally-known fishery for resident redband trout, MCR summer steelhead and both fall and spring Chinook salmon. Also, the runs of the anadromous fish (steelhead and salmon) are large enough to sustain an important subsistence fishery for the local Native Americans. The

river (including the project area) provides extensive spawning and rearing areas for both resident and anadromous species. The high water quality contributes significantly to the condition of the fishery.

The fish habitat at the project site appears to be in good condition based on the following observations: 1) riparian vegetation is comprised of white alder, torrent sedge, and reed canary grass which are the dominant species and provide shade and cover; 2) except for the user created boat ramp, the stream banks are stable and well vegetated; and 3) there are no observations of excess sediment.

Turbulence from boat engines

The existing concrete boat ramp is located in the vicinity of a known fish spawning area. Turbulence (or wash) from boat engines during launching and landing can cause disturbance to the spawning area as sediments are churned up and water turbidity increases. Constructing a new motorized boat ramp away from known fall Chinook spawning areas would be expected to have a positive effect on fish by reducing the effect of engine turbulence on spawning fish.

Turbidity from construction

The water quality at Macks Canyon Recreation Site is generally clear, except when turbidity caused by glacial sediments from the White River (22 miles upstream) turn the water a chalky white during summer and fall precipitation events.

Turbidity is a measure of water clarity and a key test of water quality. Increased turbidity occurs when individual particles of sediment on the river bed are stirred up, leaving the water cloudy instead of clear. Increased turbidity can harm fish by increasing the water temperature, reducing dissolved oxygen, clogging fish gills, and smothering fish eggs if sediments settle out during spawning periods.

Some of the proposed construction activities would be expected to cause an increase in sediments entering the river, leading to a temporary increase in turbidity during the approved in-water work period of August 1-15. These activities include: 1) the placement of the Jersey barriers; 2) removal of 147 cubic yards of material; and 3) placement of 88 cubic yards of riprap and 16 cubic yards of back fill (clean materials will be used for both the riprap and the back fill). The effects to fish of increased turbidity caused by construction are expected to take place over a period of less than two weeks, with the turbidity completely dissipating within 300 feet downstream of the new boat ramp where the channel velocities increase causing a mixing zone. Sensitive fish species would not be spawning during the in-water work window, and there is high quality habitat up and down stream of the project area that individual fish can utilize during construction. The water quality would be expected to quickly return to pre-construction conditions shortly after the in-water construction ceased. No fine sediments are expected to be deposited in channel due to the velocities in the project area. The expected effects are based on past observations and measurements during previous bank and streambed-disturbing projects along the Lower Deschutes River (e.g. Trout Creek Boat Ramp Expansion, Lower Deschutes Access Road Repair and Riprap, etc.).

The BLM expects that there would be no measurable effects of construction turbidity on fish because of the following: 1) turbidity would be less than what fish in the area experience when the river is inundated with glacial till from White River; 2) the turbidity area would be isolated to river right (the right river bank) allowing fish to avoid the area during construction; 3) there are no eggs or pre-emergent fry in the gravels

immediately downstream of the construction site at this time of year that could be effected by turbidity; and 4) it is expected that disturbance to individuals due to the construction would cause fish to temporarily move out of the area avoiding the turbidity all together.

Wildlife (ORV)

This section describes the affected environment of and expected effects on wildlife relative to two indicators: disturbance from human noise and activity during bird breeding seasons, and amount of riparian habitat for breeding and foraging migratory birds.

The Lower Deschutes river canyon provides habitat for approximately 30 different species of wildlife, with most of these utilizing riparian habitats adjacent to the river. This provides outstanding opportunities for viewing many species of wildlife including songbirds, waterfowl, heron, mink, mule deer and many reptiles, amphibians and other small and large mammals.

The proposed project area is within riparian and flood plain wildlife habitats, and a wide variety of native wildlife lives in, breeds in, or uses these habitats in some way. The BLM's wildlife survey of the proposed project area and its surroundings found no threatened or endangered species of wildlife or their signs, however, two species of special interest were noted in the survey. A golden eagle nests about one mile from the proposed project site and an American kestrel nests on cliffs across from the proposed project site. In addition to the kestrel, there are likely other migrant birds nesting in the area of the proposed project. The golden eagle is protected under the Bald and Golden Eagle Protection Act of 1940, as amended. The American kestrel and other migratory birds are protected under the Migratory Bird Treaty Act of 1918, as amended.

Construction noise and activity

The breeding period for the golden eagle extends from February 1 thru August 31. The nearby nest site is not visible from the project site. This eagle nests in a section of the river that receives relatively high use by motorized boaters, rafters, hikers, and trains traveling the adjacent track, and is therefore likely to be acclimated to human presence. The breeding period for the American kestrel extends from March 1 to August 15. The nest location indicates that these individuals are also well acclimated to human presence. In addition to the American kestrel, there are likely neotropical migrant birds nesting in the area of the proposed project. These birds are acclimated to human presence and for the most part, breed in late spring.

Although the proposed construction dates would overlap the breeding period for the golden eagle and American kestrel for approximately 6 weeks between the dates of July 15 and August 31, these individuals are likely to be well acclimated to human presence, and the effect on golden eagles and American kestrels from the additional noise of construction activities is expected to be unmeasurably small. Breeding and nesting habitat for most of the neotropical migrant species is available nearby and birds that may be disturbed by construction activities would likely relocate and still reproduce successfully.

Riparian habitat

Riparian vegetation at the proposed project site occurs in a 15-foot band above the water line. This community contains native species of sedges, rushes, willows and alder, among others. Neotropical migrant

birds use riparian vegetation along the Deschutes River for breeding and foraging habitat. A number of weed species including tree of heaven (*Ailanthus altissima*), reed canarygrass (*Phalaris arundinacea*) and Canada thistle (*Cirsium arvense*) are found in or near the project area.

The proposed project would remove approximately 30 linear feet of riparian vegetation to make room for the new boat ramp, including three native alder trees (two of the trees are dead) and 12 invasive tree-of-heaven trees, reducing the breeding and foraging habitat available to migrant birds. To mitigate the loss of alder trees at the site of the new boat ramp, 15 white alder trees would be planted and maintained along the riverbank in the project area to replace those that were removed (as specified in the State Scenic Waterway Approval for this proposed project). The new trees would be caged and watered until they become established.

While approximately 30 linear feet of established riparian vegetation would be removed by the installation of the boat ramp, 30 linear feet of riparian area would be allowed to naturally re-vegetate when the user-created launch ramp is closed, resulting in no long term loss of riparian vegetation. The linear feet of available riparian vegetation at the project site would be reduced for the first one to two years after construction, as the user-created boat ramp naturally re-vegetates and trees planted following construction become established. The long-term effect of removing invasive trees, closing a user-created boat launch, and replanting native tree species along the river is expected to be an increase in available breeding and foraging habitat for migratory birds.

Summary of affects to Wild & Scenic River values

Section 7 of the WSRA requires the managing agency to determine whether a project proposed for the waterway would likely result in an adverse effect to the river's free-flowing condition, water quality or ORVs. The BLM completed a Section 7 analysis and determined that with the exception of short-term construction-related turbidity in the immediate area of the new boat ramp site, the proposed project would either have a positive effect or no effect on the ORVs of the Deschutes River. (For a discussion of construction turbidity, see pg. 15 of this EA.) The proposed boat ramp project would not be expected to affect the free flowing nature of the Deschutes WSR, water quality, riparian areas and floodplain conditions, or result in "direct and adverse effects" to the values for which the river was added to the National Wild and Scenic Rivers System. Navigation of the river would not be affected by the proposed project. (A copy of the WSRA Section 7 Determination, Macks Canyon Boat Ramp Proposal for the Lower Deschutes River is on file in the administrative record, available in the Prineville District Office.) With the exception of temporary effects to water quality from construction-related turbidity, positive affects to the ORVs of recreation (see pg. 11) and fish (see pg. 14), and mitigated affects to wildlife (see pg. 16), implementation of the proposed project would not affect the ORVs of the Deschutes River.

Issues considered but not analyzed in detail

What would be the effect of the proposed project on special status plants? The proposed project would have no effect on special status plants as no special status plants have been found or are expected to occur in the project area.

What would be the effect of the proposed project on any ORVs that are not analyzed in detail in this EA, specifically the ORVs of cultural resources and geology? The proposed project is not located within any cultural sites. The area would be monitored during excavation, however, due to previous flooding/deposition events in the past, it is unlikely that anything would be discovered at the river's edge where the project is to occur. The District Archaeologist has updated the site form for the Macks Canyon site located to the north of the project and updated the GIS spatial location and boundary of the site. All new site and GIS information has been sent to the State Historic Preservation Office. The proposed project would have "No Effect" to known or expected cultural resources.

How would the proposed project affect the hydrology of the site? The Lower Deschutes River is very stable within this reach, with average flows ranging from 4,370 cubic feet per second (cfs) to 7,660 cfs within the project area. The river runs at the bottom of a box canyon and does not meander outside of the existing profile. The river's banks are rocky with sparse vegetation, and the stream substrate is cobble. The channel geometry is stable.

The BLM, in consultation with the Army Corps of Engineers, has assessed the possible effects of the proposed project on the hydrology of the site and determined that the project would not affect the channel location, geometry, slope or form, nor would it affect floodplain conditions.

Summary of effects

Table 1. Comparison of effects.

	Indicator	Alternative 1 – No Action	Alternative 2 – Proposed Action
Recreation Opportunity & Experience	Water depth at toe of motorized boat ramp meets or exceeds OSMB design standard of 4 feet below ordinary low water level	Standard not met; 2.5 feet of water depth at toe of existing ramp	Standard met; 4.2 feet of water depth at toe of new ramp
	Parking to accommodate current use levels of 42 vehicles, including at least 24 boat trailers	No; parking spaces not delineated; room for about 22 vehicles, including 14 boat trailers	Parking spaces delineated for 45 vehicles, including 31 boat trailers
	Access to recreation facilities meets ADA standards for Accessible Design	No ADA access provided	ADA access to parking, restroom, new boat ramp, and one campsite
	Scenery: Number of boat ramps/launch areas visible from the river	Two ramps/launch areas: existing & user-created	Short term of 1-4 yrs. = 3 ramps/launch areas: existing, user-created, & new; Long term of 5 or more yrs. = 2 ramps/launch areas: existing & new
Fish	Boat engine turbulence at spawning area	Engine turbulence occurs near spawning area	Engine turbulence occurs away from known spawning areas
Wildlife	Disturbance from human noise and activity during nesting period for eagle (2/1 - 8/31) and Kestrel (3/1 - 8/15)	Noise/activity from motorized boats, adjacent railroad, boating and camping year-round	Noise/activity from motorized boats, adjacent railroad, boating, and camping year-round; additional construction noise/activity from 7/ 15 – 8/31
	Available riparian vegetation for breeding and foraging habitat for migratory birds	340 linear feet	Short term of 1-2 yrs. = 310 linear feet; Long term of 3 or more yrs. = 340 linear feet

Cumulative Effects

The BLM is not aware of ongoing or proposed actions that would be expected to produce measurable effects on recreational experience or opportunities, fish or birds when combined with the effects of the current action.

Chapter 4 Public and other involvement

Tribes, individuals, organizations, or agencies consulted

Prior to the release of this EA, the BLM consulted with federal, state, and local government agencies about engineering, funding, resource protection, permits, and timeframes related to the proposed project. We worked at length with the Oregon State Marine Board on engineering design. We contacted the Burns Paiute Tribe, the Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes of the Warm Springs Reservation, regarding tribal outreach about the proposed project. We consulted with local law enforcement personnel regarding boating safety concerns, and BLM staff and permittees regarding recreation use of Macks Canyon.

Preparers and reviewers

BLM

Dana Cork	Engineering
John Lulich	Engineering
Heidi Mottl	Recreation, Wild and Scenic Rivers and visual resources
Jimmy Eisner	Fisheries and riparian vegetation
Richard Demmer	Wildlife, botany and special status plants
Sarah Canham	Noxious weeds, botany
Henry Goodman	Cultural resources
Patrick Kollodge	Recreation
Anna Smith	Hydrology
Michael Tripp	Geographic information systems
Teal Purrington	Environmental coordination

Appendix 1 References

US Department of Interior Bureau of Land Management, Prineville District. 1993. Lower Deschutes River Management Plan Record of Decision.

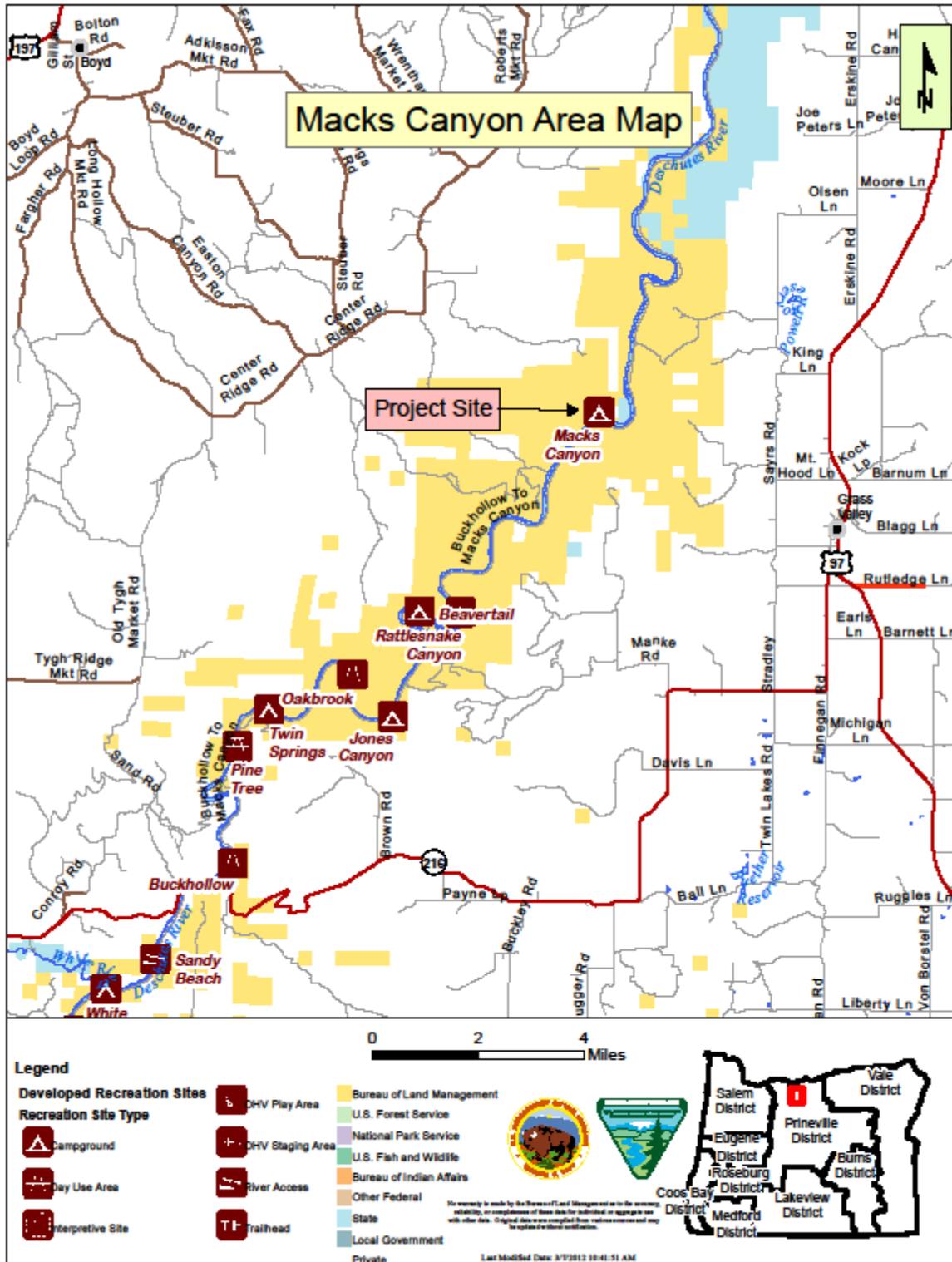
US Department of Interior Bureau of Land Management, Prineville District. 1993. Lower Deschutes River Management Plan Final Environmental Impact Statement – Volume 1.

US Department of Interior Bureau of Land Management, Prineville District. 1997. Lower Deschutes River Management Plan Amendment.

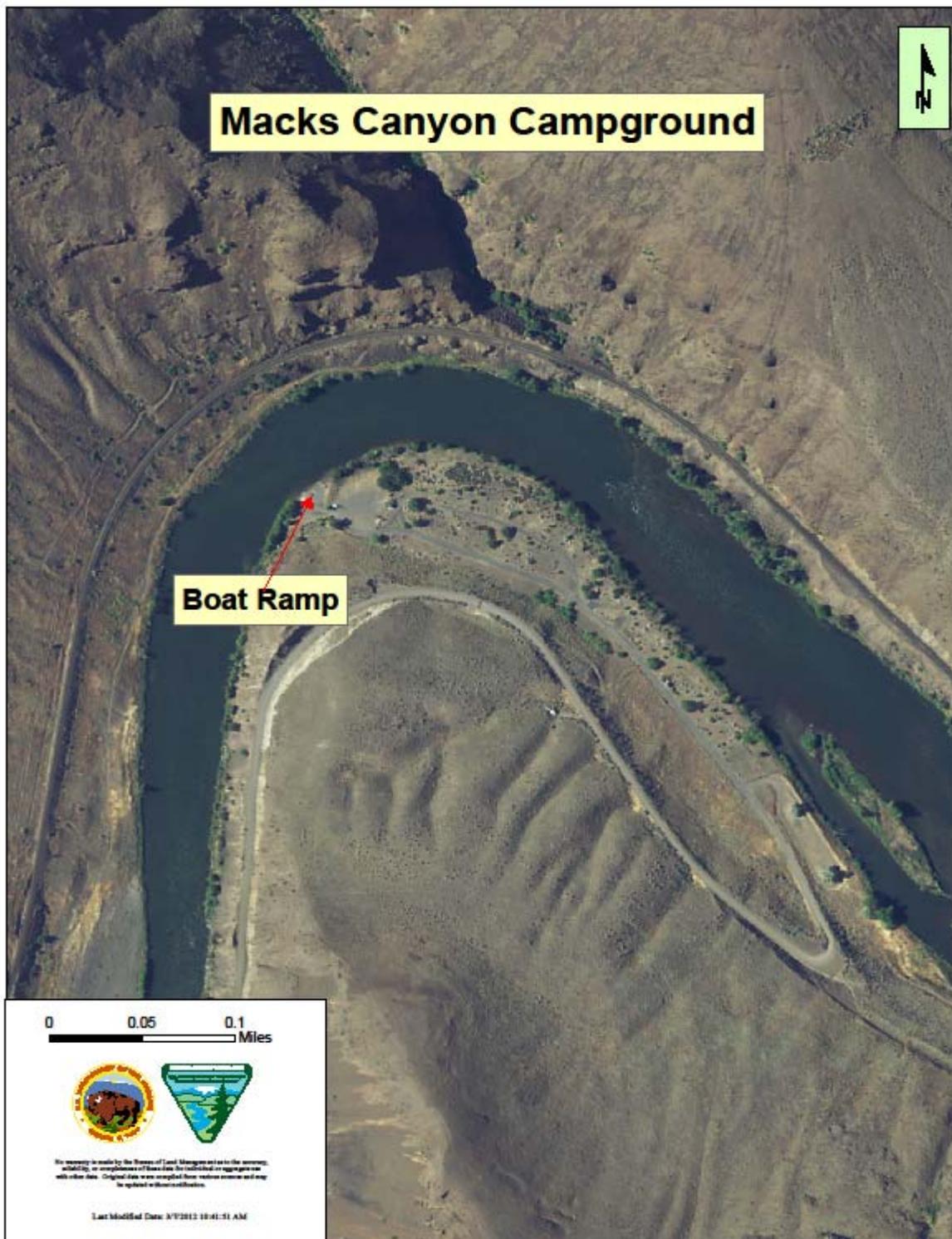
US Department of Interior Bureau of Land Management, Prineville District. 1986. Two Rivers Resource Management Plan and Record of Decision.

US Department of Interior Bureau of Land Management, 1984. Manual 8400 - Visual Resource Management.

Appendix 2 Maps



Map 1 showing location of Macks Canyon Campground



Map 2 - showing location of the existing boat ramp in Macks Canyon Recreation Site



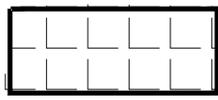
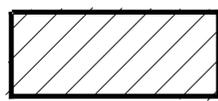
Overflow Parking each side of access Road, No Surface Treatment

Curb Stops and Boulders at overflow parking

Return Route to Boat Ramp



1 **AERIAL SITE PLAN**
 SCALE: 1" = 40'
 40' 20' 0 40' 80'

-  Indicates 4" deep Surface Course Aggregate
-  Indicates 2" deep Surface Course Aggregate over reconditioned Aggregate Surface
-  Indicates option for Concrete or Asphalt Surfacing

©2012 Google
 Date: 7/4/2012 1994 lat 45.391874° lon -120.880587° elev 501 ft Eye alt 1406 ft

 **BUREAU OF LAND MANAGEMENT**
PRINEVILLE DISTRICT - OREGON
 PRINEVILLE, OREGON

No.		_____	Date	_____	Initials	_____
No.		_____	Date	_____	Initials	_____
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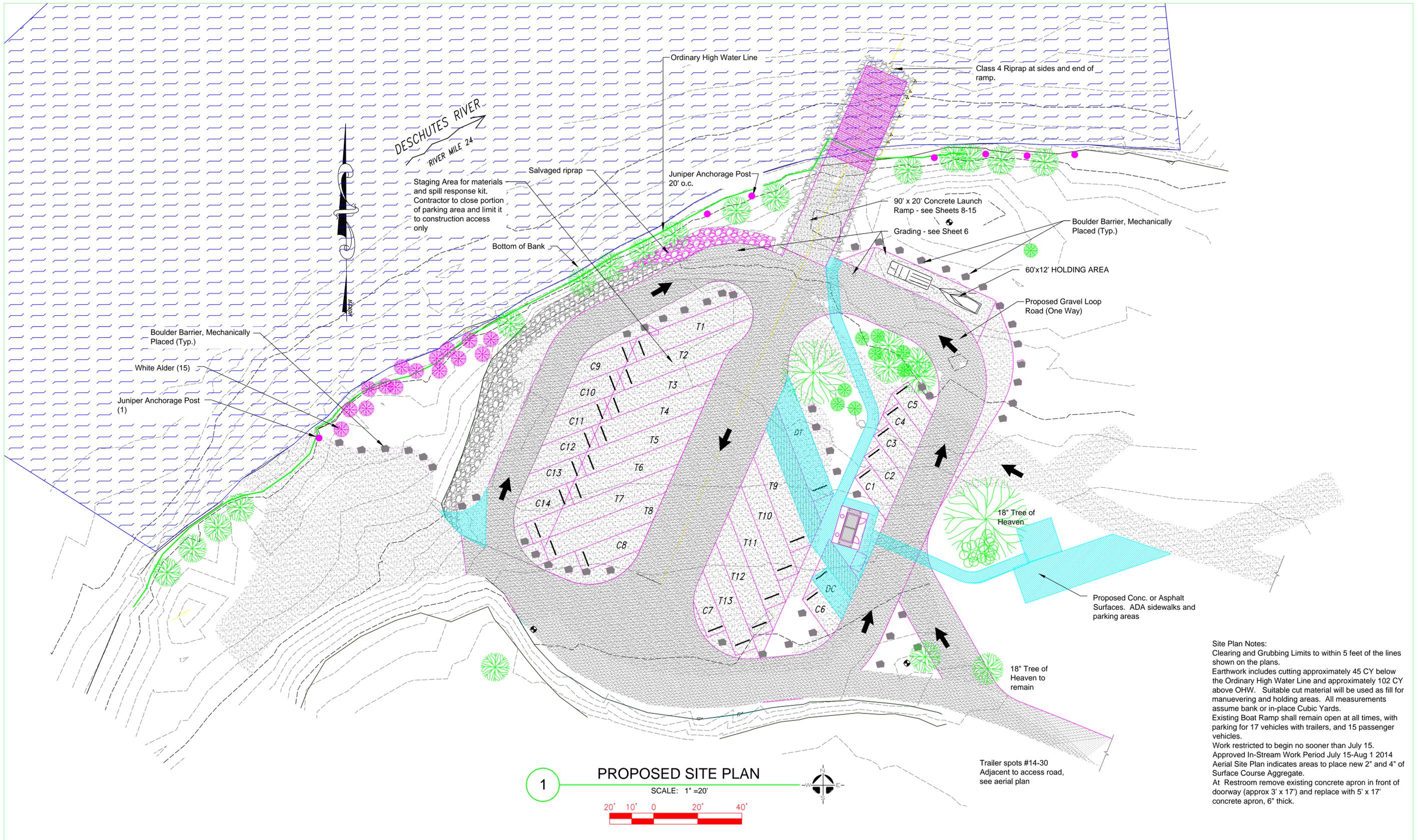


Design: John Lulich
 Drawn: John Lulich
 Checked: Dana Cork
 Date: 12/11/2013

Sheet Title
Aerial Site Plan

Discipline
C4

Drawing No.
 LDDMHR9M0000-FP03-100-MCBR-002-05
 Sheet **5** OF **19**



Site Plan Notes:
 Clearing and Grubbing Limits to within 5 feet of the lines shown on the plans.
 Earthwork includes cutting approximately 45 CY below the Ordinary High Water Line and approximately 102 CY above OHW. Suitable cut material will be used as fill for maneuvering and holding areas. All measurements assume bank or in-place Cubic Yards.
 Existing Boat Ramp shall remain open at all times, with parking for 17 vehicles with trailers, and 15 passenger vehicles.
 Work restricted to begin no sooner than July 15.
 Approved In-Stream Work Period July 15-Aug 1 2014
 Aerial Site Plan indicates areas to place new 2" and 4" of Surface Course Aggregate.
 At Restroom remove existing concrete apron in front of doorway (approx 3' x 17') and replace with 5' x 17' concrete apron, 6" thick.

PROPOSED SITE PLAN

SCALE: 1" = 20'



1

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PRINEVILLE DISTRICT - OREGON
 PRINEVILLE, OREGON

No.	△	_____	Date	Initials
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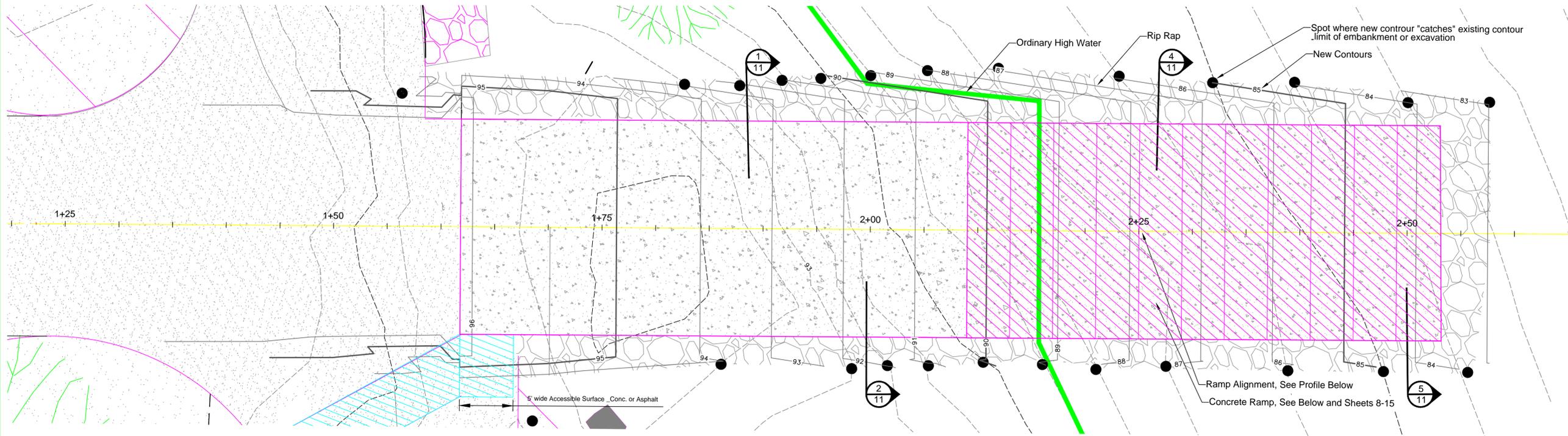


Design: John Lulich
 Drawn: John Lulich
 Checked: Dana Cork
 Date: 11/27/2013

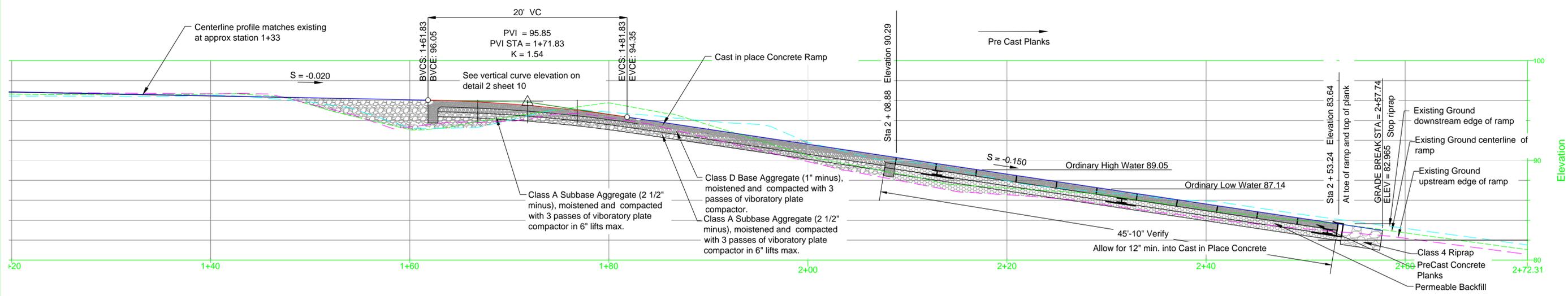
Sheet Title
Proposed Site Plan

Discipline
C3

Drawing No.
 LDDMHR9M0000-FP03-100-MCBR-002-04
 Sheet **4** OF **19**



1 RAMP PLAN
 SCALE: 1" = 5'-0"
 5' 2.5' 0 5' 10'



2 LAUNCH RAMP PROFILE
 SCALE: 1" = 5'-0"
 5' 2.5' 0 5' 10'