UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Klamath River Renewal Corporation **PacifiCorp**	**Project Nos. 14803-001;** **2082-063**

AMENDED APPLICATION FOR SURRENDER OF LICENSE FOR MAJOR PROJECT AND REMOVAL OF PROJECT WORKS

EXHIBIT C
Erosion and Sediment Control Plan
(Amended December 15, 2021)

KLAMATH RIVER RENEWAL CORPORATION

Lower Klamath Project
FERC Project No. 14803

Erosion and Sediment Control Plan

Klamath River Renewal Corporation
2001 Addison Street, Suite 317
Berkeley, CA 94704

December 2021

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1.0 Introduction

The Lower Klamath Project (FERC No. 14803) consists of four hydroelectric developments on the Klamath River: J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate (Figure 1-1). Specifically, the reach between J.C. Boyle dam and Iron Gate dam is known as the Hydroelectric Reach. In September of 2016, the Klamath River Renewal Corporation (Renewal Corporation) filed an *Application for Surrender of License for Major Project and Removal of Project Works,* FERC Project Nos. 2082-063 & 14803-001 (License Surrender). The Renewal Corporation filed the License Surrender Application as the dam removal entity for the purpose of implementing the Klamath River Hydroelectric Settlement (KHSA). In November of 2020, the Renewal Corporation filed its Definite Decommissioning Plan (DDP) as Exhibits A-1 and A-2 to its Amended License Surrender Application (ALSA). The DDP is the Renewal Corporation's comprehensive plan to physically remove the Lower Klamath Project and achieve a free-flowing condition and volitional fish passage, site remediation and restoration, and avoidance of adverse downstream impacts (Proposed Action). The Limits of Work is a geographic area that encompasses dam removal and restoration related activities associated with the Proposed Action. The Limits of Work may extend beyond the Federal Energy Regulatory Commission (Commission) boundary associated with the Lower Klamath Project where specifically noted.

The Proposed Action includes the deconstruction of the J.C. Boyle Dam and Powerhouse (Figure 1-2), Copco No. 1 Dam and Powerhouse (Figure 1-3), Copco No. 2 Dam and Powerhouse (Figure 1-4), and Iron Gate Dam and Powerhouse (Figure 1-5), as well as associated features. Associated features vary by development, but generally include powerhouse intake structures, embankments and sidewalls, penstocks and supports, decks, piers, gatehouses, fish ladders and holding facilities, pipes and pipe cradles, spillway gates and structures, diversion control structures, aprons, sills, tailrace channels, footbridges, powerhouse equipment, distribution lines, transmission lines, switchyards, original cofferdams, portions of the Iron Gate Fish Hatchery, residential facilities, and warehouses. Facility removal will be completed within an approximately 20-month period.

The Erosion and Sediment Control Plan identifies best management practices (BMPs) to address potential impacts associated with implementing the Proposed Action. The Renewal Corporation has established, and will implement, erosion and sediment control BMPs to minimize pollution from sediment erosion caused by facilities removal and restoration activities. The Renewal Corporation has prepared 16 Management Plans for the Commission's review and approval as conditions of a License Surrender Order. These Management Plans were developed in consultation with federal, state and county governments and tribes.

In February 2021, the Renewal Corporation filed the 16 Management Plans with the Commission. Since that time, the Renewal Corporation has undertaken further consultation, resulting in material revisions. Table 2.2 herein shows the material revisions to the February 2021 version of this Erosion and Sediment Control Plan. An updated Consultation Record for the Erosion and Sediment Control Plan is included as Appendix B.

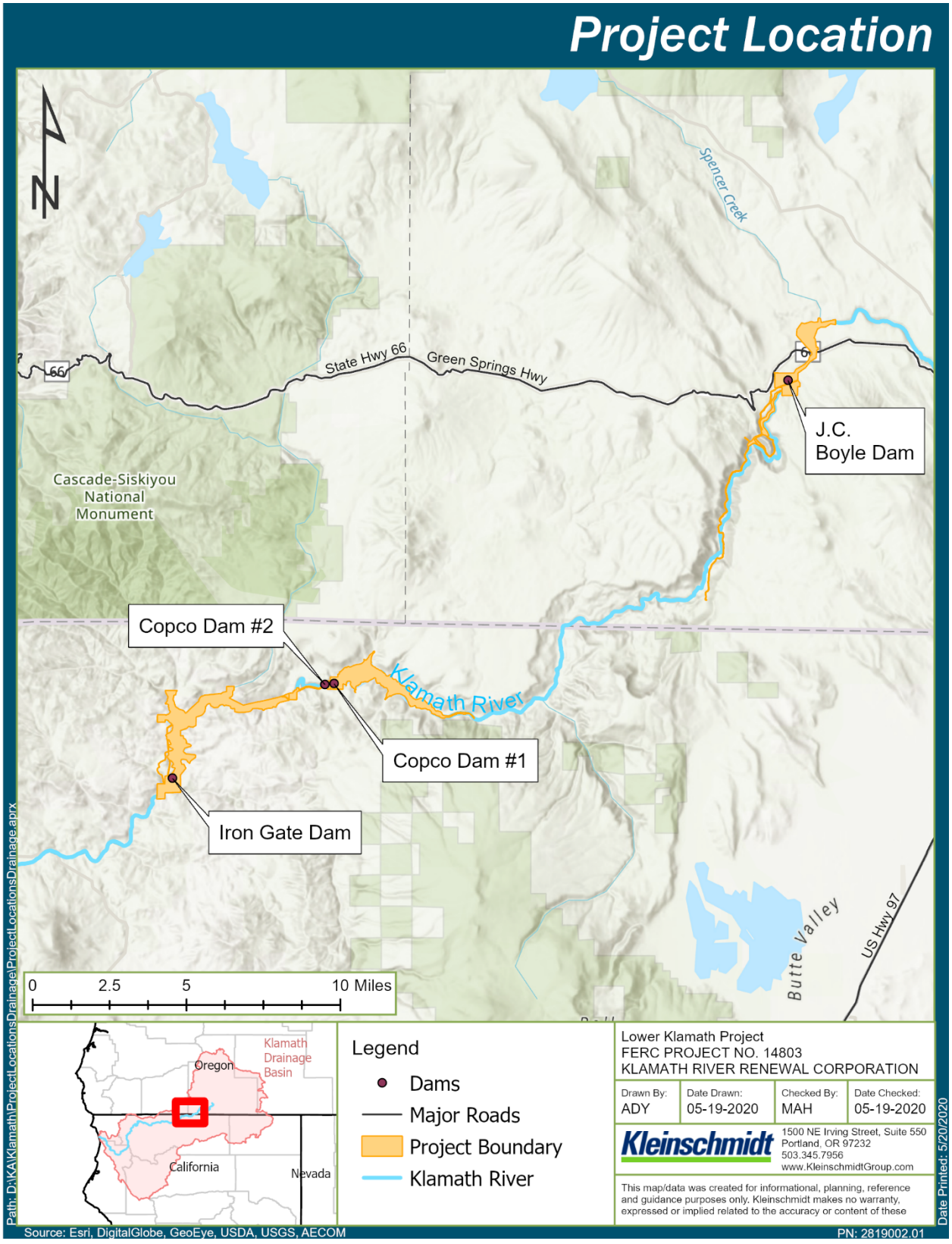

Figure 1-1. Lower Klamath Project Location

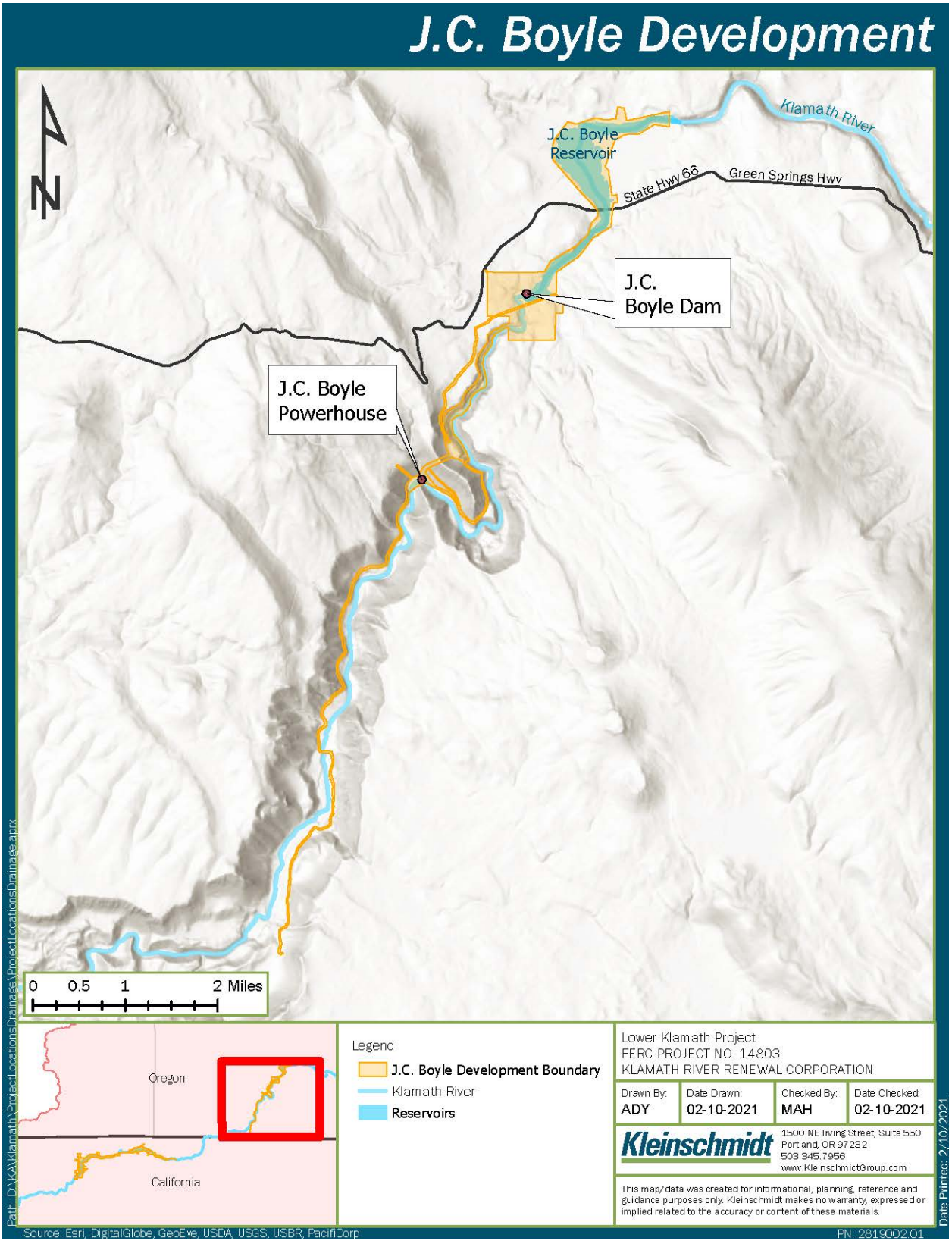

Figure 1-2. J.C. Boyle Development Facility Details

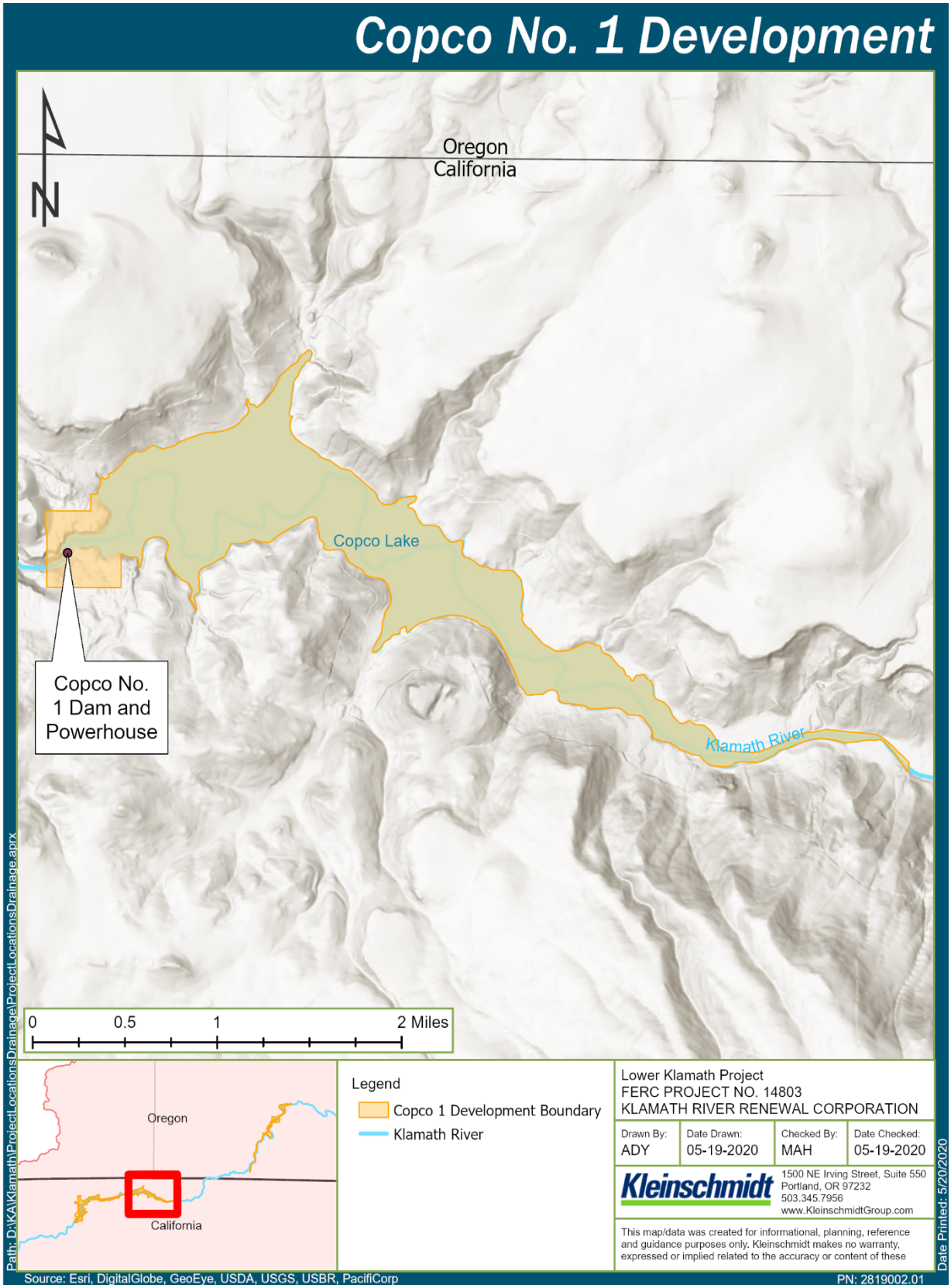

Figure 1-3. Copco No.1 Development Facility Details

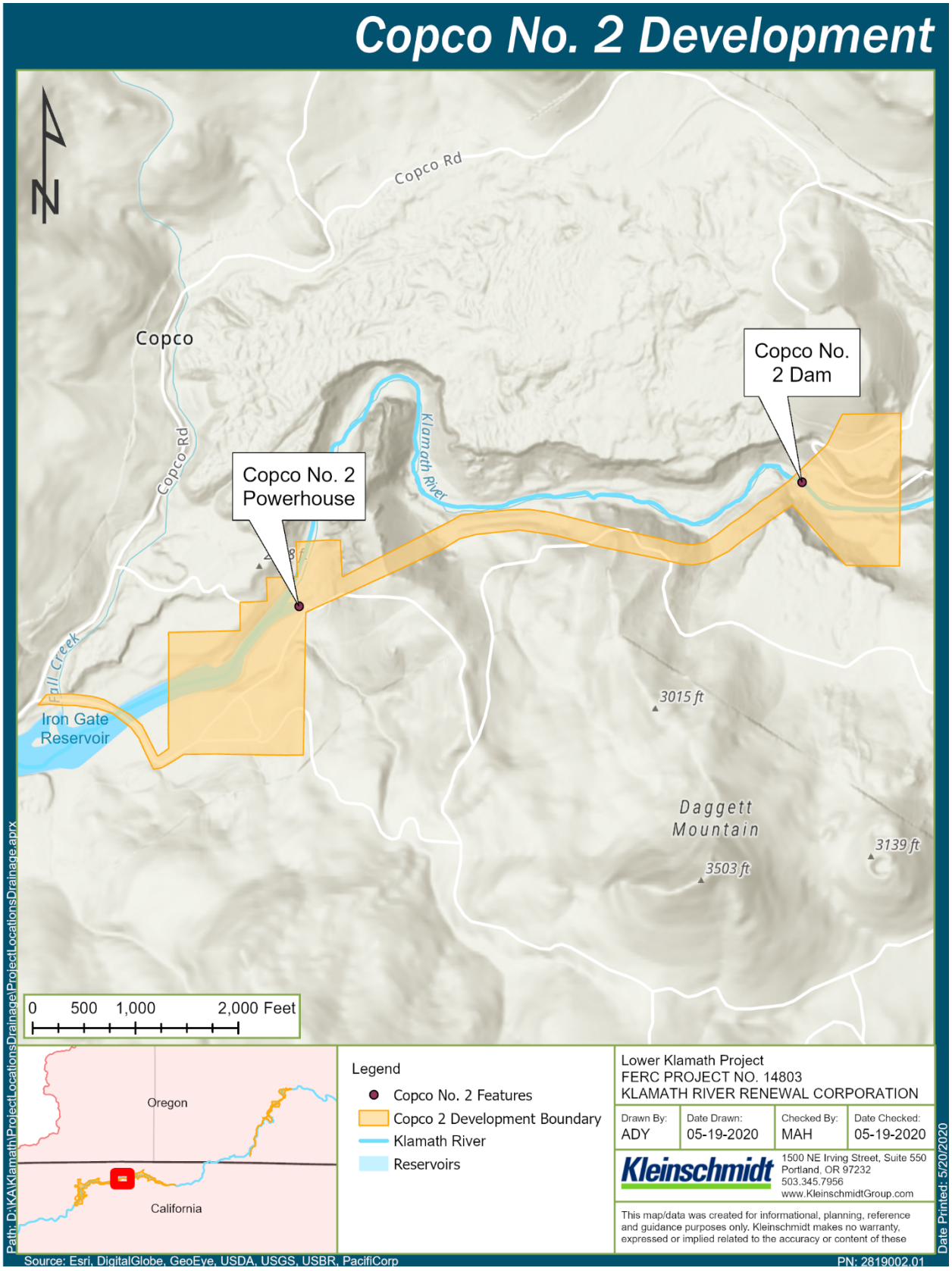

Figure 1-4. Copco No.2 Development Facility Details

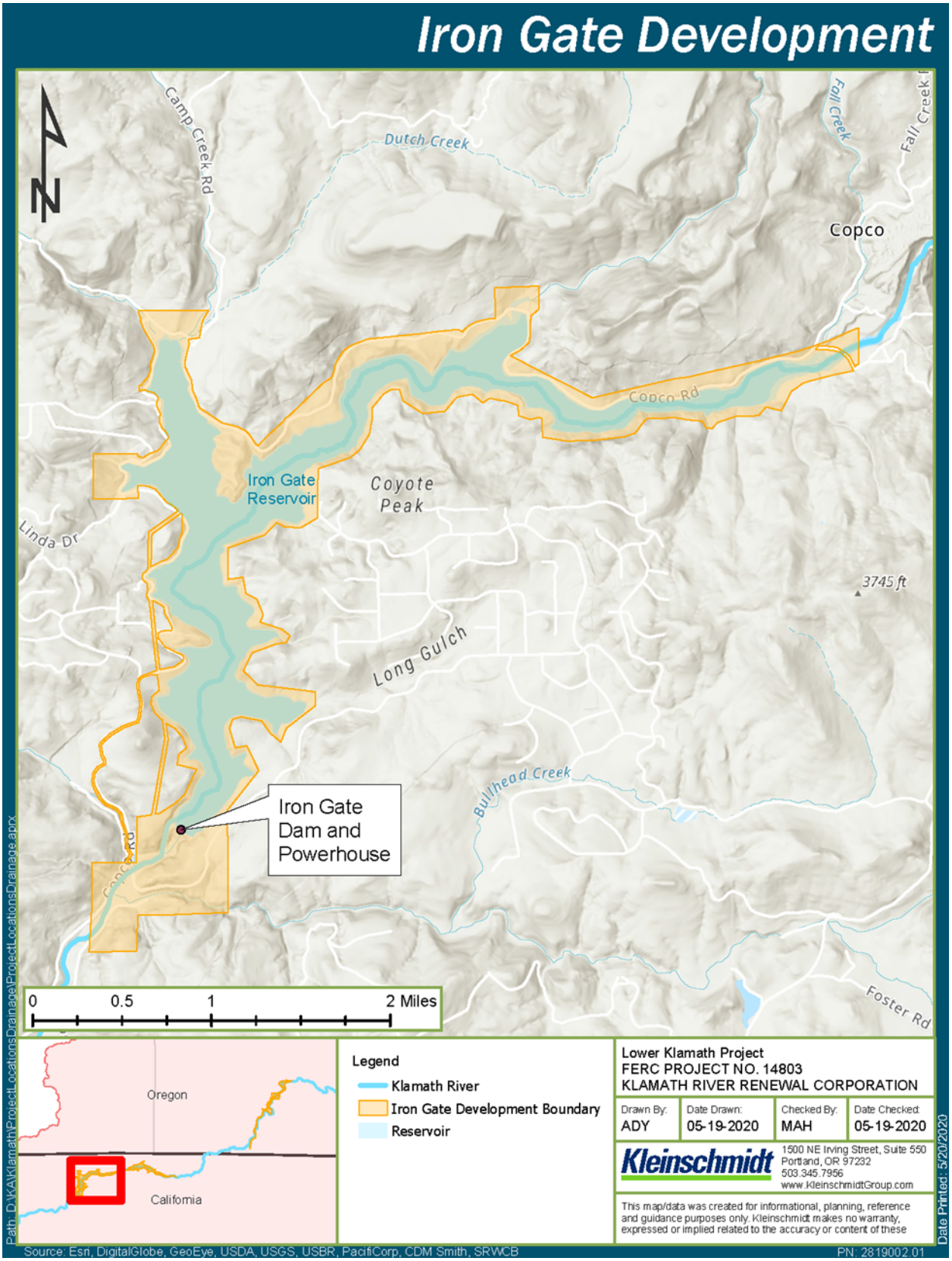

Figure 1-5. Iron Gate Development Facility Details

2.0 Regulatory Context

As described in Table 2-1, the Erosion and Sediment Control Plan is one of 16 Management Plans implementing the DDP.

Table 2-1. Lower Klamath River Management Plans

1. Aquatic Resources Management Plan	9. Remaining Facilities Plan
2. Construction Management Plan	10. Reservoir Area Management Plan
3. Erosion and Sediment Control Plan	11. Reservoir Drawdown and Diversion Plan
4. Hatcheries Management and Operations Plan	12. Sediment Deposit Remediation Plan
5. Health and Safety Plan	13. Terrestrial and Wildlife Management Plan
6. Historic Properties Management Plan	14. Waste Disposal and Hazardous Materials Management Plan
7. Interim Hydropower Operations Plan	15. Water Quality Monitoring and Management Plan
8. Recreation Facilities Plan	16. Water Supply Management Plan

2.1 Organizational Structure

The Erosion and Sediment Control Plan identifies measures that the Renewal Corporation will implement to minimize erosion and sediment runoff throughout implementation of the Proposed Action. The Plan describes relevant measures the Renewal Corporation will implement as part of permitting under the California and Oregon National Pollutant Discharge Elimination System (NPDES) processes. Specifically, the Erosion and Sediment Control Plan includes an updated Consultation Record and one sub-plan, included amongst the Appendices identified below.

- Appendix A: Oregon Erosion and Sediment Control Plan
- Appendix B: Consultation Record

2.2 Specific Regulatory Interests

The Renewal Corporation considered the following regulatory interests in the development of the Erosion and Sediment Control Plan:

- California Section 401 Water Quality Certification
- California Department of Fish and Wildlife
- Oregon Section 401 Water Quality Certification
- Oregon MOU

2.2.1 Oregon NPDES Stormwater Construction General Permit No. 1200-C

Aside from specified disposal sites outlined in Appendix A Oregon Erosion and Sediment Control Plan, the Renewal Corporation will apply for, obtain and comply with the Oregon Department of Environmental Quality (DEQ) NPDES General Permit No. 1200-C (1200-C Permit). The 1200-C Permit includes temporary and permanent best management practices and monitoring to regulate stormwater runoff to surface waters. As part of the 1200-C Permit, an Erosion and Sediment Control Plan (1200-C ESCP) will be submitted and approved by DEQ.

2.2.2 California NPDES Construction General Permit

The Renewal Corporation will apply for, obtain, and comply with the California NPDES Construction General Permit (CGP). The CGP includes temporary and permanent best management practices and monitoring to regulate stormwater runoff to surface waters. As part of the CGP, the Renewal Corporation will develop a Stormwater Pollution Prevention Plan.

2.3 Results of Consultation since February 2021

The Renewal Corporation has revised the February 2021 version of this plan, on the basis of further consultation, in the following material respects.

Table 2-2. Results of Consultation

SUB-PLAN	CHANGES TO FEBRUARY 2021 VERSION
Appendix A: Oregon Erosion and Sediment Control Plan	• Additional control measures and limitations that are primarily reflective of a 1200-C were added to this plan to ensure protection of water quality. • Final stabilization is subject to native rock placement or further consultation with the State of Oregon. • Instead of annual monitoring, the DEQ will approve that final stabilization has been achieved. • Final stabilization methods for Bureau of Land Management (BLM)-owned land will be included in the Use and Occupancy Plan for Bureau of Land Management Lands (Appendix D of the Construction Management Plan).

2.4 Regulatory Approval

The Renewal Corporation will implement the Erosion and Sediment Control Plan as approved by the Commission in the License Surrender Order. The Renewal Corporation will obtain and report to the Commission any required approvals from other agencies.

2.5 Reporting

The Renewal Corporation will prepare and submit to the Commission an Annual Report by April 15th of each year which will include information pertaining to implementation of the Erosion and Sediment Control Plan.

Appendix A

Oregon Erosion Sediment Control Plan

KLAMATH RIVER RENEWAL CORPORATION

Lower Klamath Project
FERC Project No. 14803

Oregon Erosion and Sediment Control

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December 2021

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Appendices

1.0 Introduction

The Oregon Erosion and Sediment Control Plan is a subplan of the Erosion and Sediment Control Plan that will be implemented as part of the Proposed Action for the Lower Klamath Project.

1.1 Purpose of Management Plan

The purpose of the Oregon Erosion and Sediment Control Plan is to state measures the Renewal Corporation will implement to minimize erosion and sediment runoff to protect water quality at disposal sites. The Oregon Erosion and Sediment Control Plan measures are limited to the disposal sites listed below:

- Scour Hole Disposal Site
- Left Bank Disposal Site
- Right Bank Disposal Site
- J.C. Boyle Powerhouse and Tailrace Disposal Site

Figures showing the locations of the disposal sites are included in Appendix A.

Through consultation with the Oregon Department of Environmental Quality (DEQ), the Renewal Corporation determined the erosion and sediment control measures to be implemented for the disposal sites will be managed through this plan consistent with the 2018 Oregon Section 401 Water Quality Certification. This Oregon Erosion and Sediment Control Plan generally includes the terms and conditions outlined in the National Pollutant Discharge Elimination System Stormwater Construction (NPDES) General Permit No. 1200-C (NPDES 1200-C) to minimize erosion and sediment runoff to protect water quality.

The Renewal Corporation will apply for, obtain, and comply with the NPDES 1200-C for upland land disturbance activities of more than one acre that are not included within this Oregon Erosion and Sediment Control Plan. A copy of the Oregon Erosion and Sediment Control Plan will be kept on-site during Project implementation.

The Bureau of Land Management (BLM) owns a portion of the Scour Hole Disposal Site and the J.C. Boyle Powerhouse and Tailrace Disposal Site. Final stabilization methods for erosion and sediment control for these areas are included in the Use and Occupancy Plan for Bureau of Land Management Lands (Appendix D of the Construction Management Plan).

1.2 Relationship to Other Management Plan Plans

The Oregon Erosion and Sediment Control Plan is supported by elements of the following management plans for effective implementation: Waste Disposal and Hazardous Materials Management Plan and the Construction Management Plan. So as to not duplicate information, elements from these plans are not repeated herein but are, where appropriate, referred to in this Oregon Erosion and Sediment Control Plan.

2.0 Land Disturbing Activities

The Oregon Erosion and Sediment Control Plan includes erosion and sediment control measures to be implemented during the following land disturbing activities.

- Site preparation for disposal sites (e.g., site clearing, grubbing etc.).
- Placement of material within disposal sites.
- Final stabilization.

Details regarding the location, construction, size, and disposal materials for each of the disposal sites is included in the Oregon Waste Disposal and Hazardous Materials Management Plan (Appendix C of the Waste Disposal and Hazardous Materials Management Plan).

3.0 Authorized Stormwater and Non-Stormwater Discharge

The Oregon Erosion and Sediment Control Plan addresses procedures to minimize the discharge of sediment from stormwater and non-stormwater discharge events. The following authorized stormwater and non-stormwater discharges associated with the disposal sites include:

Stormwater

- Stormwater associated with the construction of the disposal sites.
- Stormwater from support disposal site activities at the construction site (construction access, staging etc.).

Non-Stormwater

- Water used to control dust.
- Construction dewatering activities.

The following discharges are not authorized by the Oregon Erosion and Sediment Control Plan:

- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
- Soaps or solvents used in vehicle and equipment washing.

4.0 Erosion and Sediment Control Measures

The Renewal Corporation will implement control measures and limitations for the disposal site land disturbing activities. Installation of erosion and sediment control measures will be overseen by a Certified Professional in Erosion and Sediment Control (CPESC).

4.1 Control Measures and Limitations

The Renewal Corporation will implement the following measures and limitations to reduce erosion and sediment runoff:

Erosion Prevention

- Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion.
- Use water trucks to reduce wind-blown soil.
- Temporarily stabilize soils at the end of the shift before periods of inactivity (holidays and weekends), if needed, and during rain events at all times of the year.
- Avoid or minimize excavation and bare ground activities during wet weather.
- Temporary sediment control practices cannot be removed until permanent vegetation or other cover of exposed areas is established.
- Preserve existing vegetation when practical.
- Stabilize or cover soil stockpiles based on weather conditions at the end of each workday or implement other best management practices (BMPs) to prevent discharges to surface waters or conveyance systems leading to surface waters.

Natural Buffer Zone

- Flag or fence off Non-Reservoir Dependent wetlands not specifically authorized to be impacted to protect from disturbance and/or erosion.
- Use removable pads or mats to reduce soil compaction at construction access points and staging areas in riparian or wetland areas.

Runoff Control

- Control peak flow rates and total stormwater volume to minimize erosion at outlets and downstream channels and streambanks.

Sediment Control

- Control sediment discharge as needed along the site perimeter during construction, both internally and at the site boundary.
- Prevent tracking of sediment onto public or private roads.

Pollution Prevention and Control

- Follow BMPs included in the Oregon Spill Prevention, Control, and Countermeasure Plan (Appendix D of the Waste Disposal and Hazardous Materials Management Plan) to prevent or minimize stormwater exposure to pollutants from spills; vehicle and equipment fueling, maintenance, and storage; other cleaning and maintenance activities; and waste handling activities.
- Use BMPs to prevent or minimize pollution of stormwater or to treat flow from dewatering or ponded water.
- Stabilize or cover soil stockpiles based on weather conditions at the end of each workday or implement other BMPs to prevent discharges to surface waters or conveyance systems leading to surface waters.

Inactive Periods

- If all construction activities cease at the disposal sites for thirty (30) calendar days or more, the disposal site must be stabilized using temporary seeding, vegetation, a heavy mulch layer, or another method.
- On any significant portion of the site, if construction activities cease for fourteen (14) calendar days or more, install temporary covering such as blown straw and a tackifier, loose straw, compost mulch, temporary vegetative cover, crushed rock or gravel base.

4.2 Implementation of Control Measures

The Renewal Corporation will implement the control measures and limitations described in Section 4.1 in accordance with the following sequence:

Prior to Construction

1. Identify, mark, and protect (with construction fencing or other means) critical riparian areas and vegetation areas to be preserved.
2. Identify, mark and protect vegetative buffer zones between the site and sensitive areas and other areas to be preserved.
3. Hold a pre-construction meeting of project construction personnel that includes the inspector to discuss erosion and sediment control measures and construction limits.
4. Stabilize site entrances and access roads.
5. Install perimeter sediment control.
6. Establish a specific area for construction and waste storage materials, and other non-stormwater controls if within the disposal sites.

During Construction

1. Land Clearing, Grading and Roadways.
    a. Begin land clearing, excavation, trenching, cutting or grading after installing applicable sediment and runoff control measures.

   b. Provide appropriate erosion and sediment control BMPs for all ingress and egress routes at the disposal areas.
   c. Install additional control measures as work progresses as needed.
   d. Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion.
2. Apply temporary stabilization measures or permanent stabilization measures immediately on all disturbed areas when work is completed. Stabilization of disturbed areas must be initiated immediately whenever any earth disturbing activities have permanently ceased on any portion of the site.

Post Construction Final Stabilization

1. Provide final vegetative cover or permanent stabilization (i.e., native rock) measures on all exposed areas (See Section 6.0 for additional details).
2. Remove and properly dispose of construction materials and waste, including sediment retained by temporary BMPs.
3. Remove all temporary control measures as areas are stabilized, unless doing so conflicts with local requirements.

If temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated or do not require stabilization following construction, measures will be put in place to eliminate or minimize erosion.

4.2.1 Temporary and Permanent BMPs

Temporary and permanent erosion and sediment control drawings are included as Appendix B.

4.2.2 BMP Maintenance

The Renewal Corporation will implement the following procedures for maintenance and repair of erosion and sediment control measures.

General Site Maintenance

- Sediment that migrates beyond the boundaries of the work area will be returned to the construction area to the extent practicable. Additional BMPs will be applied, as warranted, to prevent future escape of sediments during construction operations.
- Sediment will not be intentionally washed into drainage ways.

Maintenance of Erosion and Sediment Controls

- Sediment fence: remove trapped sediment before it reaches one third of the above-ground fence height.
- Other sediment barriers (such as biobags): remove sediment.

4.2.3 Corrective Actions

The Renewal Corporation will implement corrective actions to prevent or control the discharge of significant amounts of sediment or turbidity to surface waters or to conveyance systems that discharge to surface waters. If corrective actions are required, the source of sediment will be controlled within 48 hours to prevent continued or additional discharges. The corrective action will be documented per Section 5.1, below.

5.0 Monitoring

The disposal sites will be monitored for erosion and sediment runoff by a qualified inspector. The inspector will have one or more of the following certifications:

- Certified Professional in Erosion and Sediment Control (CPESC)
- Certified Professional in Storm Water Quality (CPSWQ)
- Washington Department of Ecology's Certified Erosion and Sediment Control Lead (CESCL) Certification
- Certified Inspector of Sediment and Erosion Control
- Rogue Valley Sewer Services Erosion and Sediment Control Certification

A copy of the inspector's certificate will be included with the on-site Oregon Erosion and Sediment Control Plan.

5.1 Visual Monitoring

The Renewal Corporation's designated certified inspector will visually monitor the following:

- All areas of the disposal sites disturbed by construction activity to ensure that BMPs are in proper working order.
- Discharge point(s) identified in the Oregon Erosion and Sediment Control drawings (Appendix B) for evidence of or the potential for the discharge of pollutants and to ascertain whether erosion and sediment control measures are effective in preventing adverse impacts to surface waters. Where discharge points are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practical.
- BMPs to assess whether they are functioning properly.
- Locations where vehicles enter or exit the disposal sites for evidence of off-site sediment tracking.
- Areas used for storage of materials that are exposed to precipitation for evidence of spillage or other potential to contaminate stormwater runoff.

The erosion and sediment controls and practices will be monitored in accordance with the following schedule:

Table 5-1. Monitoring Frequency

SITE CONDITION	MINIMUM FREQUENCY
1. Active period	Daily when stormwater runoff, including runoff from snow melt, is occurring. At least once every fourteen (14) calendar days, regardless of whether stormwater runoff is occurring.
2. Prior to the site becoming inactive or in anticipation of site inaccessibility	Once to ensure that erosion and sediment control measure(s) are in working order. Any necessary maintenance and repair will be made prior to leaving the site.
3. Inactive periods greater than fourteen (14) consecutive calendar days	Once every month.
4. Periods during which the site is inaccessible due to inclement weather	If practical, inspections will occur daily at a relevant and accessible discharge point or downstream location.
5. Periods during which discharge is unlikely due to frozen conditions.	Once every month.

Documentation of visual monitoring will include the following information:

- Visual monitoring date and inspector's name.
- Disposal site name.
- Weather conditions during the inspection.
- Observations for each discharge location. If a discharge location is inaccessible due to safety hazard, document the hazard and record the inspections noted at a relevant discharge point or downstream location if practical.
- Location(s) of BMPs in need of maintenance and inspections of all BMPs.
- Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location.
- Location(s) where additional BMPs are needed that did not exist at the time of inspection.
- Corrective action required and implementation dates.

6.0 Stabilization

The Renewal Corporation will achieve final stabilization at each of the disposal sites. Please see Table 6-1 Stabilization Methods for details pertaining to stabilization for each disposal site.

Table 6-1 Stabilization Methods

DISPOSAL SITE	STABLIZATION METHOD
Scour Hole	Final stabilization methods are included in the Use and Occupancy Plan for Bureau of Land Management Lands (Appendix D of the Construction Management Plan).
Left Bank Disposal Site	The Renewal Corporation will stabilize this site with native rock borrowed from within the Limits of Work. The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of Oregon.
Right Bank Disposal Site	The Renewal Corporation will stabilize this site with native rock borrowed from within the Limits of Work. The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of Oregon.
Powerhouse and Tailrace Disposal Site	Final stabilization methods are included in the Use and Occupancy Plan for Bureau of Land Management Lands (Appendix D of the Construction Management Plan).

6.1 Final Stabilization Criteria

The Renewal Corporation will determine final stabilization has been achieved by satisfying the following criteria:

- There is no reasonable potential for discharge of a significant amount of construction related sediment or turbidity to surface waters.
- Construction materials and waste have been removed and disposed of properly. This includes any sediment that was being retained by the temporary erosion and sediment controls.
- All temporary erosion and sediment controls have been removed and disposed of properly, unless doing so conflicts with local requirements.
- All soil disturbance activities have stopped and all stormwater discharges from construction activities have ceased.
- All disturbed or exposed areas of the disposal site are covered by either final vegetative stabilization or permanent stabilization measures.
- If temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated or do not require stabilization following construction, measures will be put in place to eliminate or minimize erosion.

Aside from BLM-owned land, upon completion of construction and final stabilization of the disposal sites, the Renewal Corporation will notify DEQ via email with appropriate design documents and photographic evidence that the abovementioned criteria have been achieved. At DEQ's discretion, the DEQ may approve if final stabilization has been achieved based on the

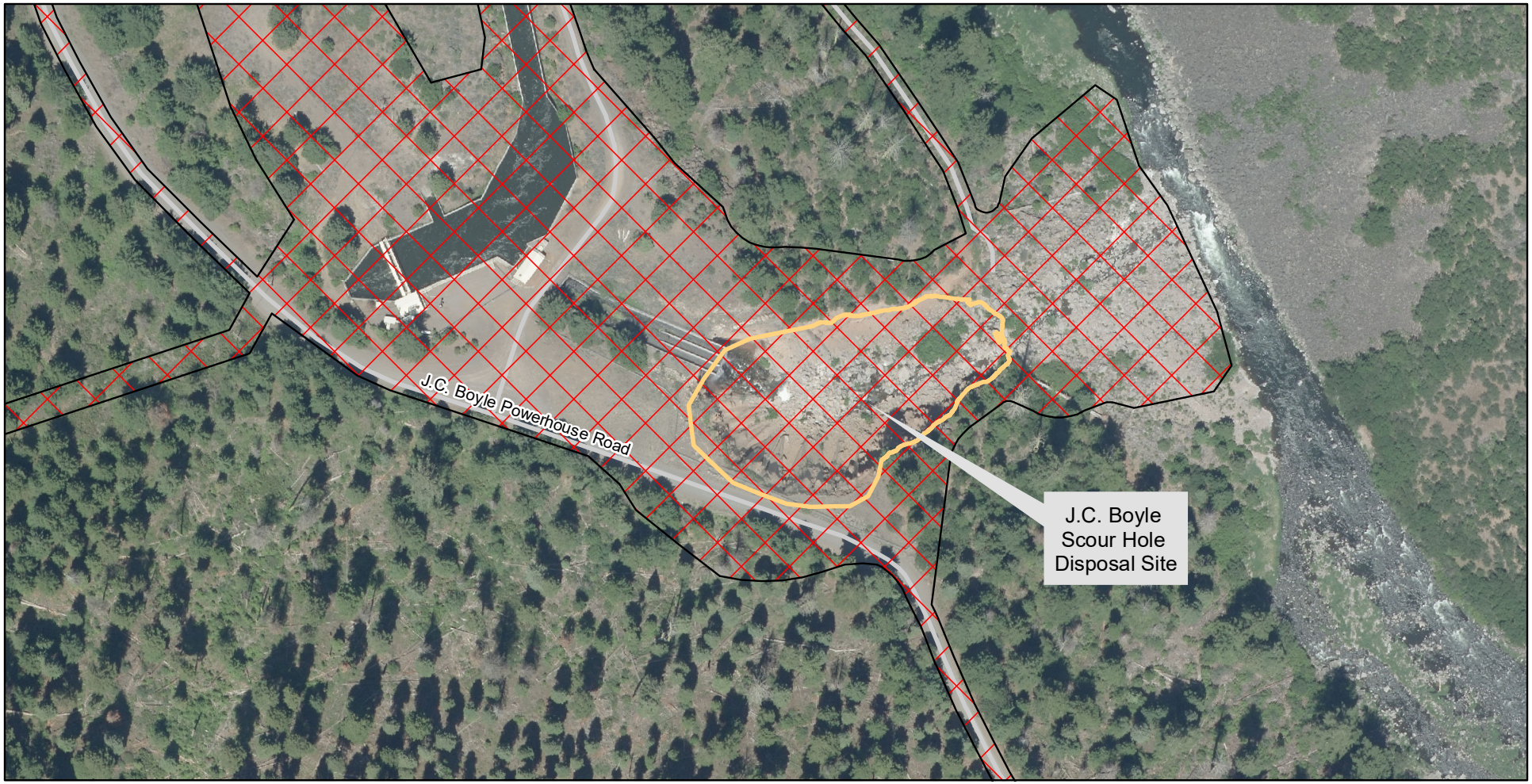
documentation provided or request a meeting or site inspection to determine whether final stabilization measures have been achieved and, thereby, terminate coverage.

7.0 Reporting

Visual monitoring and final stabilization documentation will be included in an Annual Compliance Report submitted to the DEQ and the Federal Energy Regulatory Commission by April 1 and April 15, respectively, for the preceding year in which activities are performed.

Appendix A

Figures



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Notes

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2. Data Sources: Disposal sites, Limits of Work and Access Roads: Knight Piesold 100 design.

3. Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Legend

Disposal Sites

Limits of Work

Roads

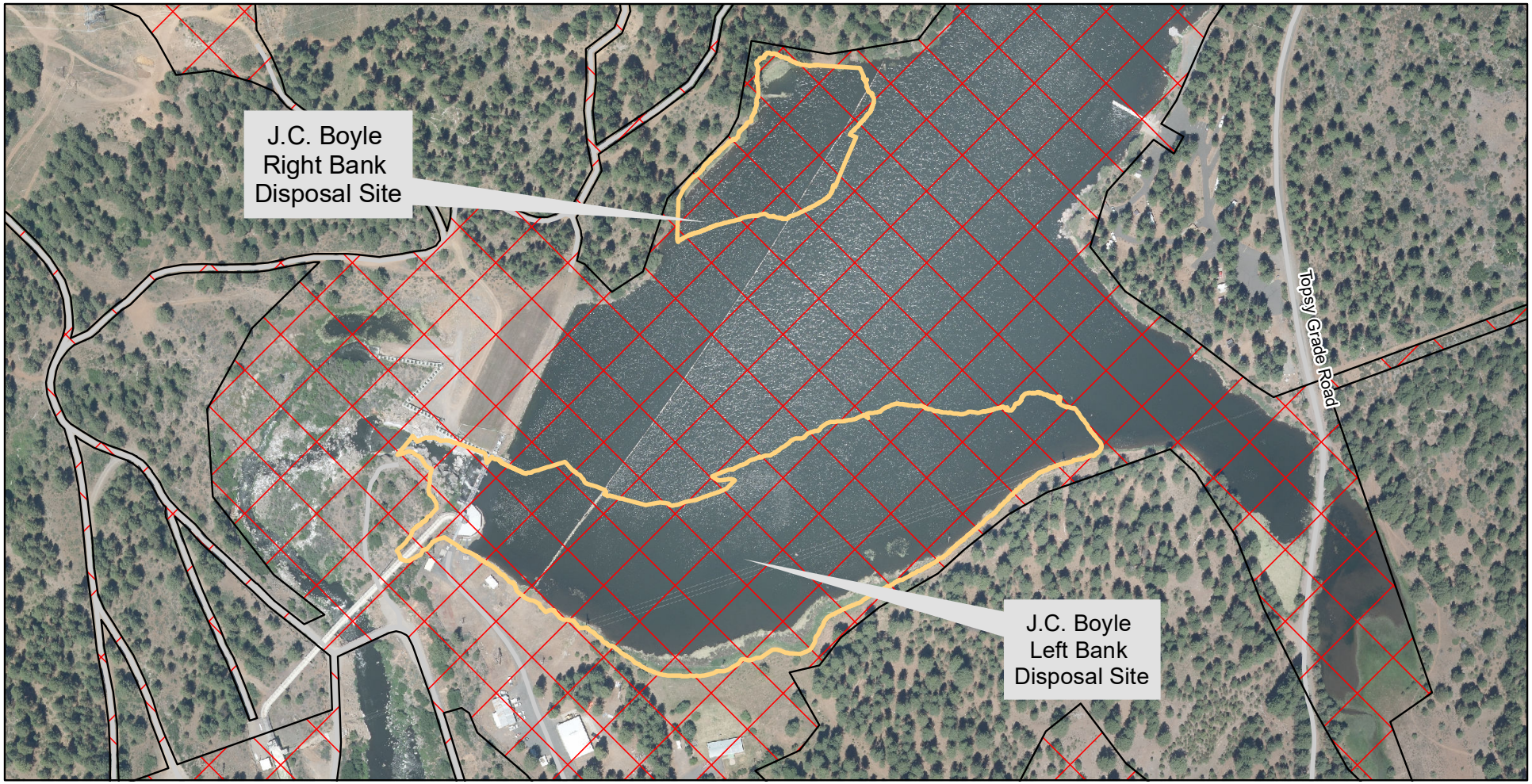
Lower Klamath Project

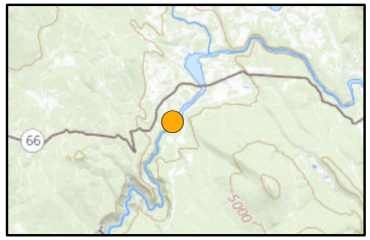
Figure A-1: J.C. Boyle Disposal Site Scour Hole

October, 2021

KLAMATH RIVER RENEWAL CORPORATION

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)





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3. Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Legend

- Disposal Sites
- Limits of Work
- Roads

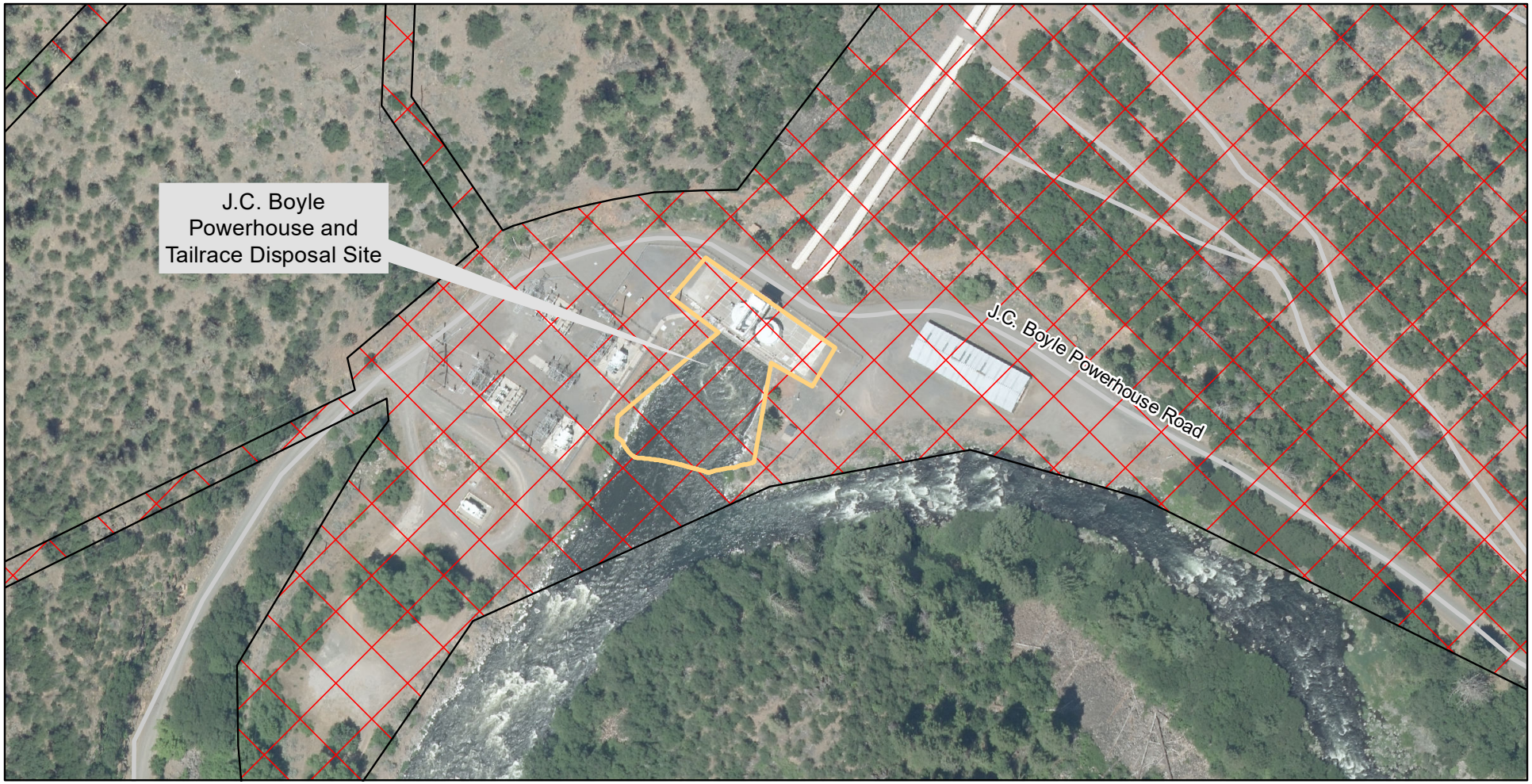
Lower Klamath Project

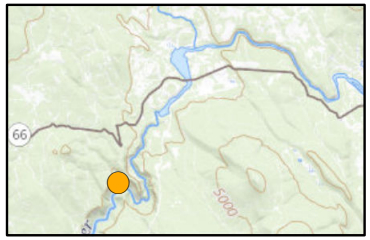
Figure A-2 J.C. Boyle Left and Right Bank Disposal Sites

October, 2021

KLAMATH RIVER RENEWAL CORPORATION

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)





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1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet

2. Data Sources: Disposal Sites, Limits of Work, Access Roads: Knight Piesold 100 design.

3. Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Legend

- Disposal Sites
- Limits of Work
- Roads

Lower Klamath Project

Figure A-3: J.C. Boyle Disposal Site Powerhouse and Tailrace

KLAMATH RIVER RENEWAL CORPORATION

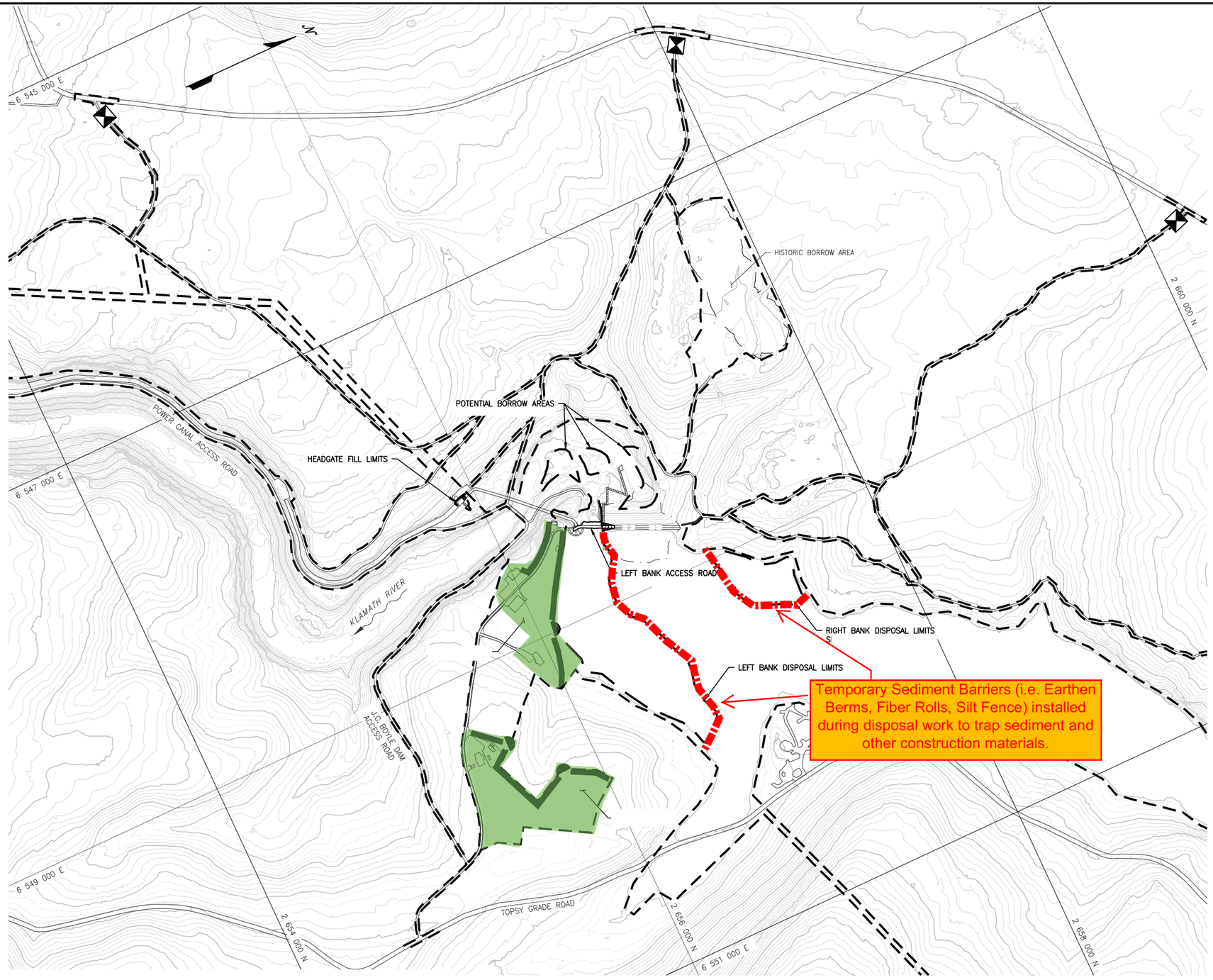
October, 2021

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

Appendix B

Erosion and Sediment Control Drawings

FOR INFORMATION ONLY



LEGEND:

- AREAS COVERED BY 1200C PERMIT
- CONSTRUCTION ENTRANCE
- CHECK DAM
- STABILIZED BERM
- FILL LIMITS
- TEMPORARY SEDIMENT BARRIER

PLAN
1" = 300'

0 300 600 900
1" = 300'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CB	NSR	M 11/13/20
A	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CB	NSR	M 10/07/20

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PREPARED BY: Knight Piésold CONSULTING / Kiewit

DESIGNED	L. BUETIKOFER
DRAWN	R.MARTIN
REVIEWED	C. NIAMIR
IN CHARGE	N. BISHOP
APPROVED	S. MOTTRAM

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT
PROJ # VA103-640/1
DATE 11/13/2020

SHEET TITLE: J.C. BOYLE FACILITY
TEMPORARY EROSION AND SEDIMENT CONTROL
LEFT AND RIGHT DISPOSAL SITES BANKS

DWG C1600

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PLAN
1" = 60'

FOR INFORMATION ONLY

0 60 120 180
1" = 60'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	11/13/20
A	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	10/07/20

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PREPARED BY
Knight Piésold CONSULTING
Kiewit

DESIGNED	L. BUETIKOFER
DRAWN	R. MARTIN
REVIEWED	C. NIAMIR
IN CHARGE	N. BISHOP
APPROVED	S. MOTTRAM

PREPARED FOR
KLAMATH RIVER RENEWAL CORPORATION

PROJECT
KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE
J.C. BOYLE FACILITY
TEMPORARY EROSION AND SEDIMENT CONTROL
SCOUR HOLE

PROJ #	VA103-640/1
DATE	11/13/2020
DWG	C1601

schizar Nov 10, 2020 - 3:52pm
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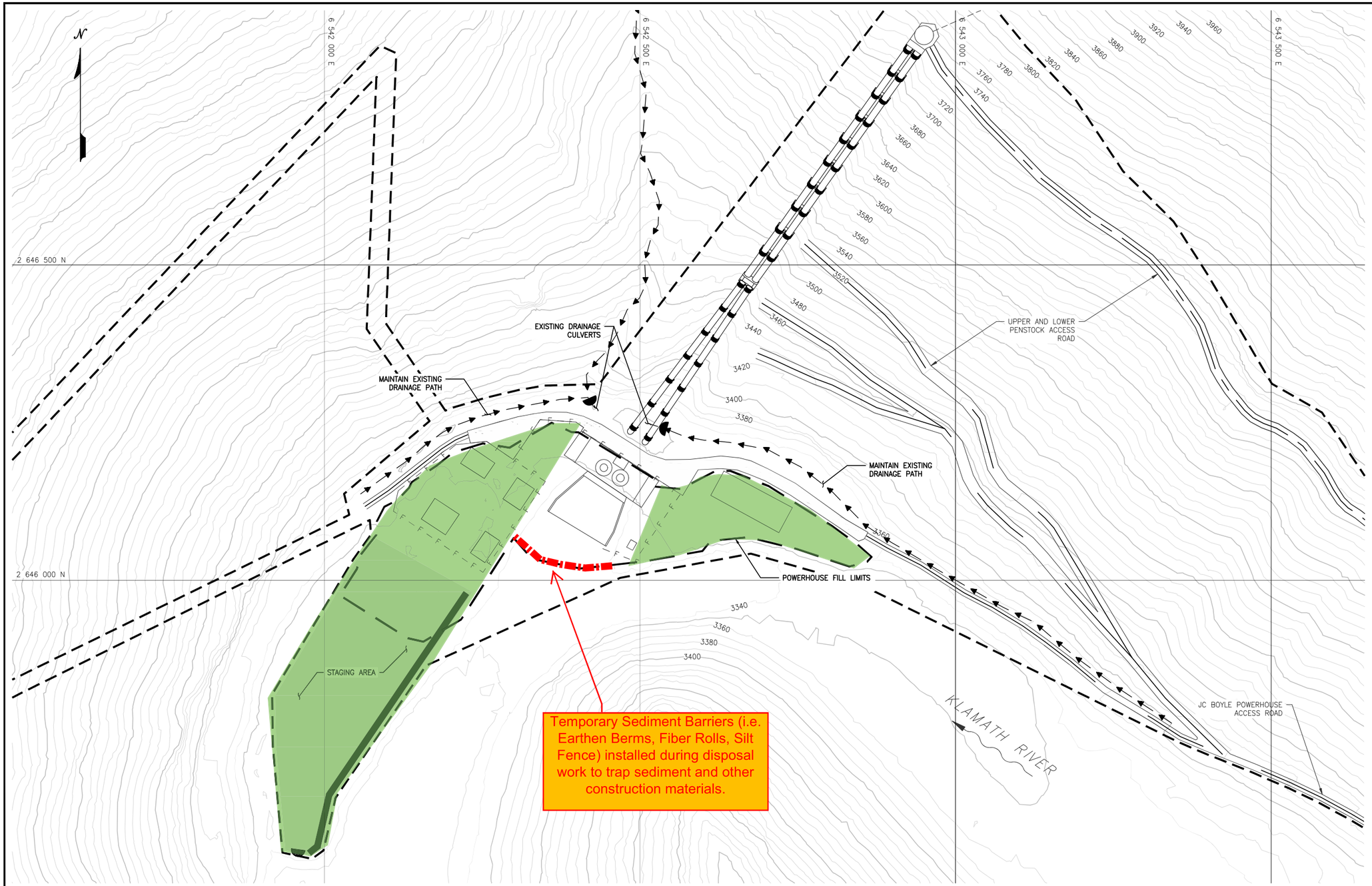

PLAN
1" = 80'

FOR INFORMATION ONLY

0 80 160 240
1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	11/13/20
A	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	10/07/20

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PREPARED BY
Knight Piésold CONSULTING
Kiewit

DESIGNED	L. BUETIKOFER
DRAWN	R. MARTIN
REVIEWED	C. NIAMIR
IN CHARGE	N. BISHOP
APPROVED	S. MOTTRAM

PREPARED FOR
KLAMATH RIVER RENEWAL CORPORATION

PROJECT	KLAMATH RIVER RENEWAL PROJECT
PROJ #	VA103-640/1
DATE	11/13/2020
SHEET TITLE	J.C. BOYLE FACILITY TEMPORARY EROSION AND SEDIMENT CONTROL POWERHOUSE
DWG	C1602

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Temporary Sediment Barriers (i.e. Earthen Berms, Fiber Rolls, Silt Fence) installed during disposal work to trap sediment and other construction materials.

SWALE UNLINED AND HYDROSEEDED AS PART OF FINAL STABILIZATION

MIN 1% GRADE

~4%

5H:1V

RIGHT BANK DISPOSAL AREA

3840

3820

3800

3790

3780

2 657 000 N

RIVER CHANNEL ROCK PROTECTION

EMBANKMENT CENTERLINE

EMBANKMENT EXCAVATION LIMIT

KLAMATH RIVER

3.5H:1V

LEFT BANK DISPOSAL AREA

4H:1V

SWALE LINED WITH EROSION PROTECTION (E7a)

INTAKE / SPILLWAY COVER AREA

SWALE UNLINED AND HYDROSEEDED AS PART OF FINAL STABILIZATION

6 548 000 E

2 656 000 N

6 549 000 E

6 550 000 E

LEGEND:

- FINAL STABILIZATION
- EROSION PROTECTION (E7)
- STABILIZED BERM
- TYPE 2 DRAINAGE SWALE
- TYPE 3 DRAINAGE SWALE
- ENERGY DISSIPATER
- CHECK DAM
- AREAS COVERED BY 1200C PERMIT
- TEMPORARY SEDIMENT BARRIER

PLAN

1" = 100'

0 100 200 300

1" = 100'

FOR INFORMATION ONLY

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
C	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	11/13/20
B	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	10/07/20
A	ISSUED WITH 90% DESIGN REPORT	CBN	NB	SRM	08/05/20

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PREPARED BY: Knight Piésold CONSULTING; Kiewit

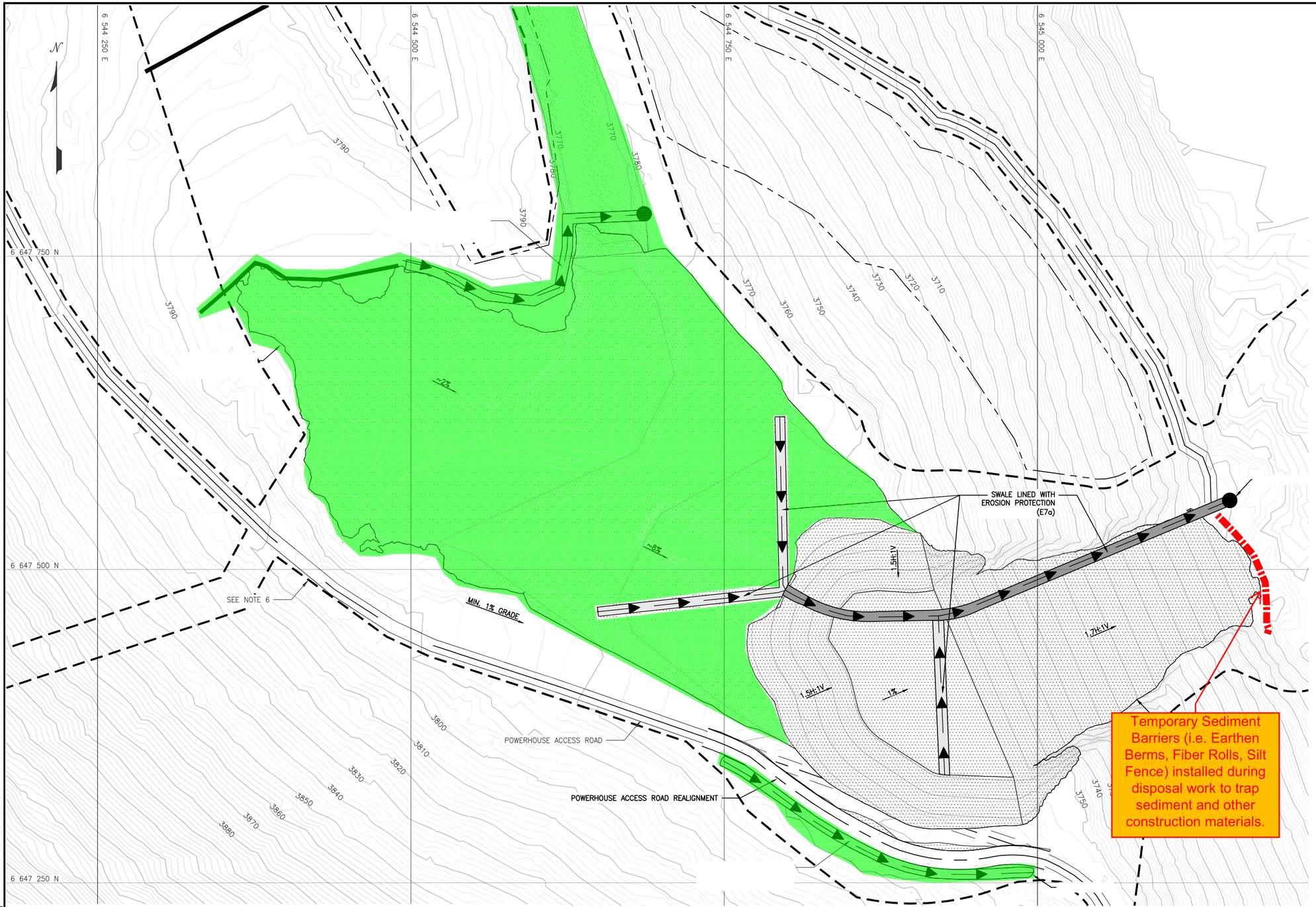
DESIGNED	L. BUETIKOFER
DRAWN	R. MARTIN
REVIEWED	C. NIAMIR
IN CHARGE	N. BISHOP
APPROVED	S. MOTTRAM

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: J.C. BOYLE FACILITY
FINAL EROSION AND SEDIMENT CONTROL
DISPOSAL SITES

PROJ #	VA103-640/1
DATE	11/13/2020
DWG	C1620



LEGEND:

- FINAL STABILIZATION
- DRAINAGE CONCENTRATION POINT LARGE CULVERT
- ENERGY DISSIPATER
- STABILIZED BERM
- TYPE 2 DRAINAGE SWALE
- TYPE 3 DRAINAGE SWALE
- SAFETY ZONE
- AREAS COVERED BY 1200C PERMIT
- TEMPORARY SEDIMENT BARRIER

PLAN
1" = 40'

FOR INFORMATION ONLY

0 40 80 120
1" = 40'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
C	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	11/13/20
B	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	10/07/20
A	ISSUED WITH 90% DESIGN REPORT	CBN	NB	SRM	08/05/20

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PREPARED BY
Knight Piésold CONSULTING
Kiewit

DESIGNED	L. BUETIKOFER
DRAWN	R. MARTIN
REVIEWED	C. NIAMIR
IN CHARGE	N. BISHOP
APPROVED	S. MOTTRAM

PREPARED FOR
KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT
PROJ #: VA103-640/1
DATE: 11/13/2020
SHEET TITLE: J.C. BOYLE FACILITY
FINAL EROSION AND SEDIMENT CONTROL
SCOUR HOLE
DWG: C1623

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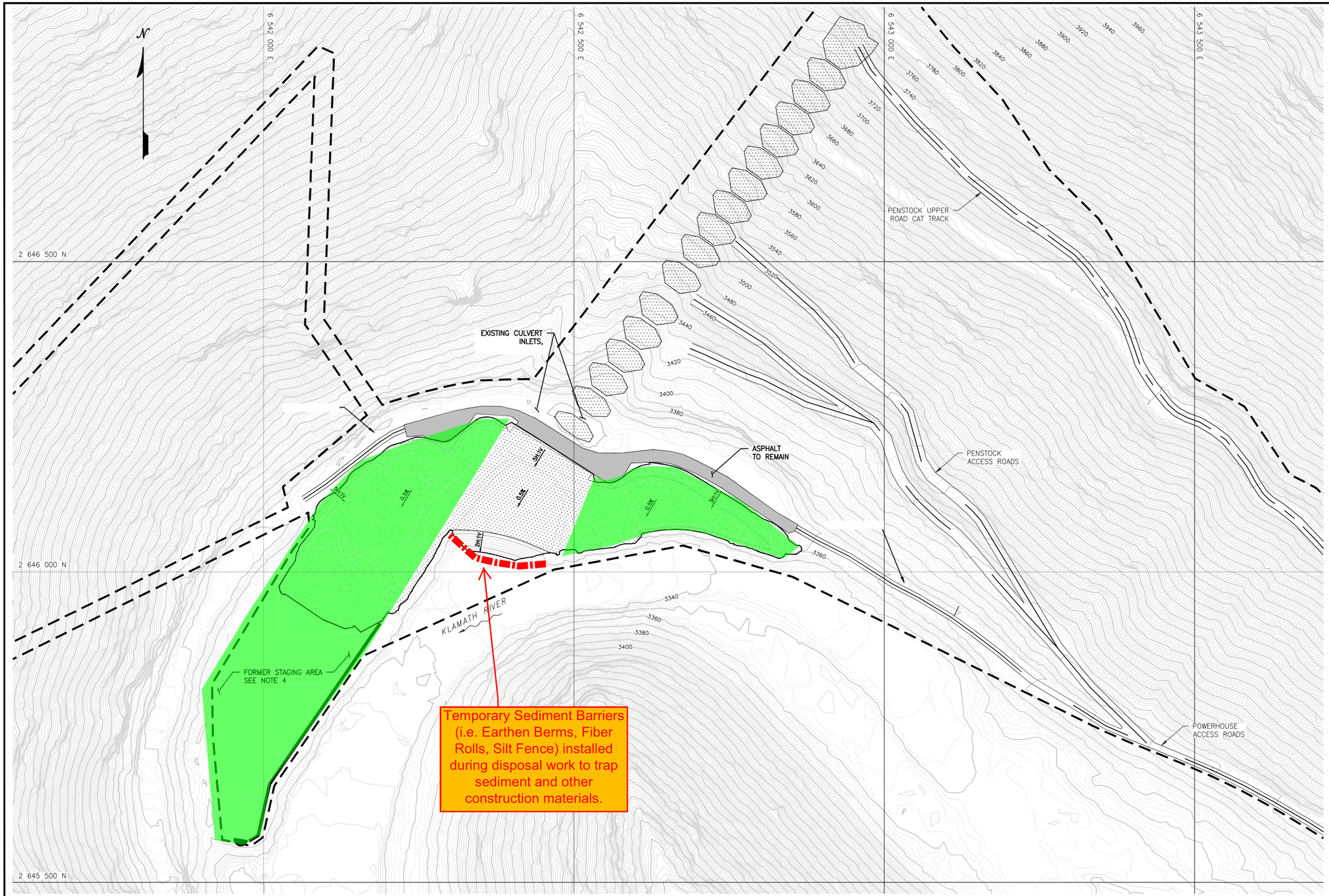

LEGEND:

- FINAL STABILIZATION
- EXISTING ASPHALT
- STABILIZED BERM
- CHECK DAM
- TYPE 2 DRAINAGE SWALE
- AREAS COVERED BY 1200C PERMIT
- TEMPORARY SEDIMENT BARRIER

PLAN
1" = 80'

0 80 160 240
1" = 80'

FOR INFORMATION ONLY

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
C	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	11/13/20
B	ISSUED WITH DRAFT 100% DESIGN REPORT	LB	CBN	SRM	10/07/20
A	ISSUED WITH 90% DESIGN REPORT	CBN	NB	SRM	08/05/20

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PREPARED BY
Knight Piésold CONSULTING
Kiewit

DESIGNED L. BUETIKOFER
DRAWN R. MARTIN
REVIEWED C. NIAMIR
IN CHARGE N. BISHOP
APPROVED S. MOTTRAM

PREPARED FOR
KLAMATH RIVER RENEWAL CORPORATION

PROJECT
KLAMATH RIVER RENEWAL PROJECT

PROJ # VA103-640/1
DATE 11/13/2020

SHEET TITLE
J.C. BOYLE FACILITY
FINAL EROSION AND SEDIMENT CONTROL
POWERHOUSE

DWG C1624

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Appendix B

Consultation Record

Consultation Record

Erosion and Sediment Control Plan			
Sub-Plan	**Agency**	**Date of Agency Plan Submittal**	**Agency Comments Received Date**
Oregon Erosion and Sediment Control Plan	Oregon Department of Environmental Quality	January 26, 2021 August 9, 2021	No Comments Received September 7, 2021
	Oregon Department of Fish and Wildlife	January 26, 2021	No Comments Received No Comments Received
	Bureau of Land Management – Klamath Falls	Unknown August 9, 2021	April 15, 2021 No Comments Received