MATCH LINE SEE SHEET R2702

COPCO UNNAMED TRIBUTARY 1

SPANNAUS GULCH

KLAMATH RIVER

KLAMATH RIVER

KLAMATH RIVER

COPCO RD

COPCO RD

ACER BESWICK RD

ACER BESWICK RD

ACER BESWICK RD

LONG PRAIRIE CREEK

QUAIL LN

OH-E

E

FERC

LEGEND

OH-E — OVERHEAD ELECTRIC	E — E — ELECTRIC	EDGE OF WATER
PALUSTRINE FORESTED	PALUSTRINE EMERGENT	RIPARIAN MIXED DECIDUOUS CONIFEROUS
RIPARIAN DECIDUOUS	RIPARIAN SHRUB	COPCO UPLAND
RIPARIAN SEED		

N

NOTES:
1. SEE SHEET R0805 REVEGETATION NOTES, QUANTITIES, AND SEED MIXES.
2. SEE SHEET R0806 FOR REVEGETATION DETAILS.
3. INSTALL IRRIGATION IN RIPARIAN PLANTING ZONES.

0 400 800 1200

HORIZ 1" = 400'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

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

PREPARED BY: Stantec / res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT	KLAMATH RIVER RENEWAL PROJECT
PROJ #	VA103-640/1
DATE	2020.07.02
SHEET TITLE	COPCO DAM-PLANTING 2
DWG	R2703

sshelton Jun 16, 2022 - 12:35pm
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POTENTIAL RESIDUAL SEDIMENT DEPTH POST-DRAWDOWN

OVERHEAD ELECTRIC
ELECTRIC
EDGE OF WATER

0-1 FT
1-2 FT
2-3 FT
3-4 FT
4-5 FT
5-6 FT

PRIORITY ASSISTED EVACUATION AREA

NOTES:

1. SEDIMENT DEPTHS SHOWN ARE INTENDED TO PROVIDE POSSIBLE VOLUMETRIC ESTIMATES OF RESIDUAL DEPOSITS POST-DRAWDOWN WITH LITTLE EVACUATION (I.E. DRAWDOWN OCCURS IN A DRY YEAR).
2. RESIDUAL SEDIMENT THICKNESS ESTIMATED FROM SEDIMENT CONSOLIDATION SURFACES OR A POST-DRAWDOWN CONDITION. BASE DATA ARE GEOREFERENCED SEDIMENT DEPTH ISOLINE MAPS TAKEN FROM US BUREAU OF RECLAMATION 2011 HYDROLOGY, HYDRAULICS, AND SEDIMENT TRANSPORT STUDIES FOR THE SECRETARY'S DETERMINATION ON KLAMATH RIVER DAM REMOVAL AND BASIN RESTORATION (TECHNICAL REPORT NO. SRH-2011-02). A SEDIMENT SHRINKAGE FACTOR OF 0.4, BASED ON SEDIMENT MATERIAL PROPERTIES DESCRIBED IN THE DEFINITE PLAN, WAS APPLIED TO THE SEDIMENT THICKNESS DATA TO ACCOUNT FOR VOLUMETRIC CHANGES FROM DRYING POST-DRAWDOWN.
3. LATERAL EXTENT OF POTENTIAL RESIDUAL SEDIMENT DEPOSITS ARE SHOWN TO THE MODELED 100-YEAR FLOOD LIMITS.
4. PRIORITY AREAS FOR TARGETED ASSISTED SEDIMENT EVACUATION ARE SHOWN WERE POTENTIAL RESIDUAL SEDIMENT DEPOSITS COULD PRESENT A BARRIER TO VOLITIONAL FISH PASSAGE IN THE KLAMATH RIVER AND SELECT TRIBUTARIES WITHIN THE PROJECT AREA.
5. ASSISTED EVACUATION TO BE CONDUCTED DURING JANUARY 1 TO MARCH 15 DRAWDOWN WINDOW.
6. ASSISTED SEDIMENT EVACUATION ACTIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, EXCAVATION WITH BOAT MOUNTED WATER CANNONS, ACTIVE REMOVAL UTILIZING BOAT WAKES AND/OR PROP WASH DURING DRAWDOWN, AND MANUAL, HYDRAULIC, OR MECHANICAL EXCAVATION POST-DRAWDOWN.

N

BC1
DC1
COPCO RD
KLAMATH RIVER
BEAVER CREEK
DEER CREEK
PATRICIA RD
AGER BESWICK RD
MALLARD COVE
RAYMOND GULCH
SPANNAUS GULCH
COPCO UNNAMED TRIBUTARY 1
COPCO DAM
LONG PRAIRIE CREEK

0 800 1600 2400
HORIZ 1" = 800'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

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

PREPARED BY: Stantec, res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT
PROJ # VA103-640/1
DATE 2020.07.02
SHEET TITLE: COPCO DAM-POTENTIAL ASSISTED SEDIMENT EVACUATION AREAS
DWG R2704

sshelton Jun 16, 2022 - 12:38pm
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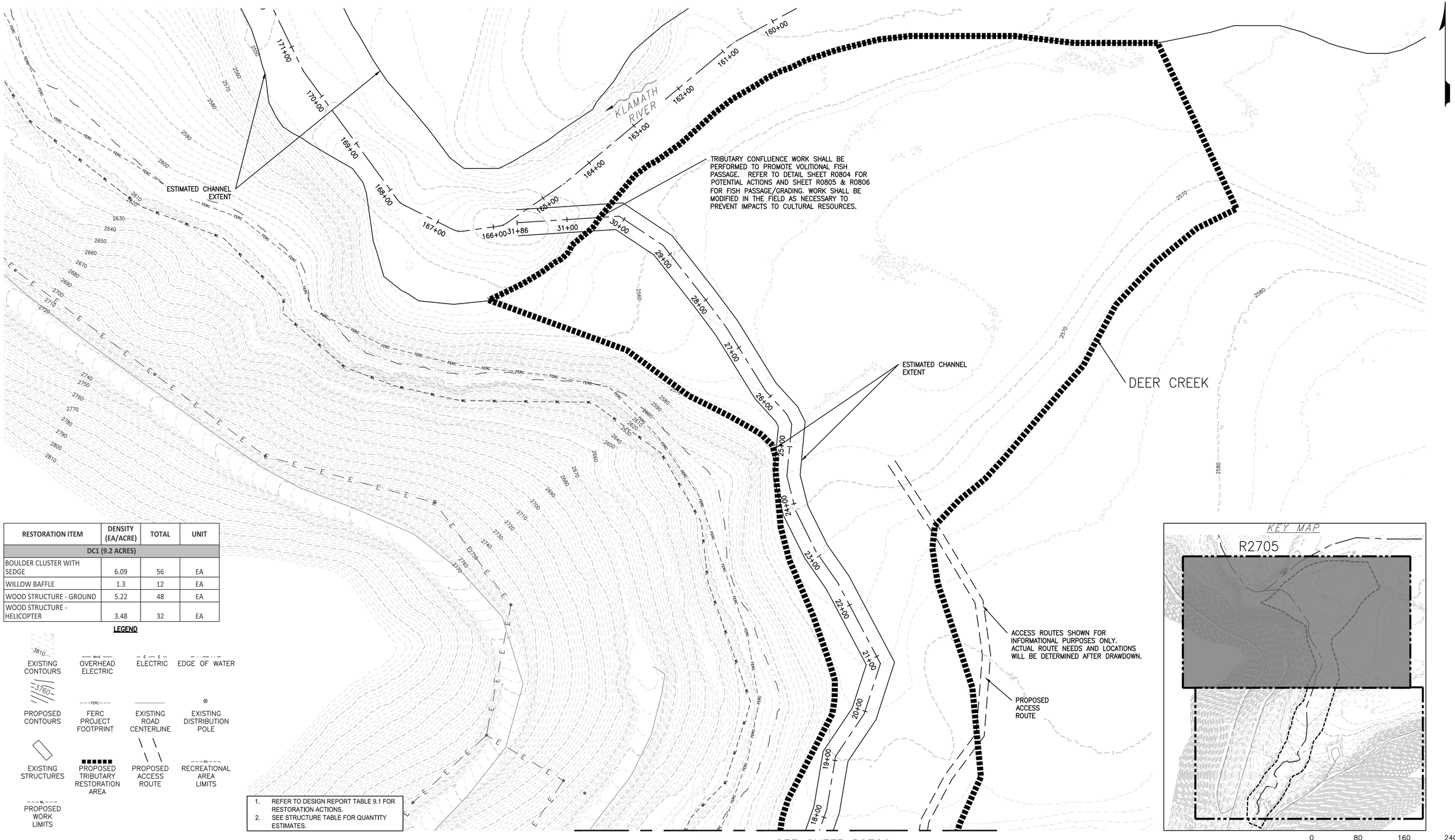

RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
DC1 (9.2 ACRES)			
BOULDER CLUSTER WITH SEDGE	6.09	56	EA
WILLOW BAFFLE	1.3	12	EA
WOOD STRUCTURE - GROUND	5.22	48	EA
WOOD STRUCTURE - HELICOPTER	3.48	32	EA

LEGEND

EXISTING CONTOURS (3810) · OVERHEAD ELECTRIC · ELECTRIC · EDGE OF WATER
PROPOSED CONTOURS (3760) · FERC PROJECT FOOTPRINT · EXISTING ROAD CENTERLINE · EXISTING DISTRIBUTION POLE
EXISTING STRUCTURES · PROPOSED TRIBUTARY RESTORATION AREA · PROPOSED ACCESS ROUTE · RECREATIONAL AREA LIMITS
PROPOSED WORK LIMITS

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

MATCH LINE SEE SHEET R2706

0 80 160 240
HORIZ 1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

WARNING
0 1/2 1
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PREPARED BY: Stantec, res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT
PROJ # VA103-640/1
DATE 2020.07.02
SHEET TITLE: COPCO DAM-DEER CREEK PLAN
DWG R2705

sshelton Jun 16, 2022 - 12:51pm
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MATCH LINE SEE SHEET R2705

N

LEGEND

- EXISTING CONTOURS
- OVERHEAD ELECTRIC
- ELECTRIC
- EDGE OF WATER
- PROPOSED CONTOURS
- FERC PROJECT FOOTPRINT
- EXISTING ROAD CENTERLINE
- EXISTING DISTRIBUTION POLE
- EXISTING STRUCTURES
- PROPOSED TRIBUTARY RESTORATION AREA
- PROPOSED ACCESS ROUTE
- RECREATIONAL AREA LIMITS
- PROPOSED WORK LIMITS

PROPOSED ACCESS ROUTE

ESTIMATED CHANNEL EXTENT

ACCESS ROUTES SHOWN FOR INFORMATIONAL PURPOSES ONLY. ACTUAL ROUTE NEEDS AND LOCATIONS WILL BE DETERMINED AFTER DRAWDOWN.

DEER CREEK

RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
DC1 (9.2 ACRES)			
BOULDER CLUSTER WITH SEDGE	6.09	56	EA
WILLOW BAFFLE	1.3	12	EA
WOOD STRUCTURE - GROUND	5.22	48	EA
WOOD STRUCTURE - HELICOPTER	3.48	32	EA

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

KEY MAP

R2706

0 80 160 240

HORIZ 1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

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

PREPARED BY: Stantec / res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: COPCO DAM-DEER CREEK PLAN

PROJ #	VA103-640/1
DATE	2020.07.02
DWG	R2706

sshelton Jun 16, 2022 - 12:53pm
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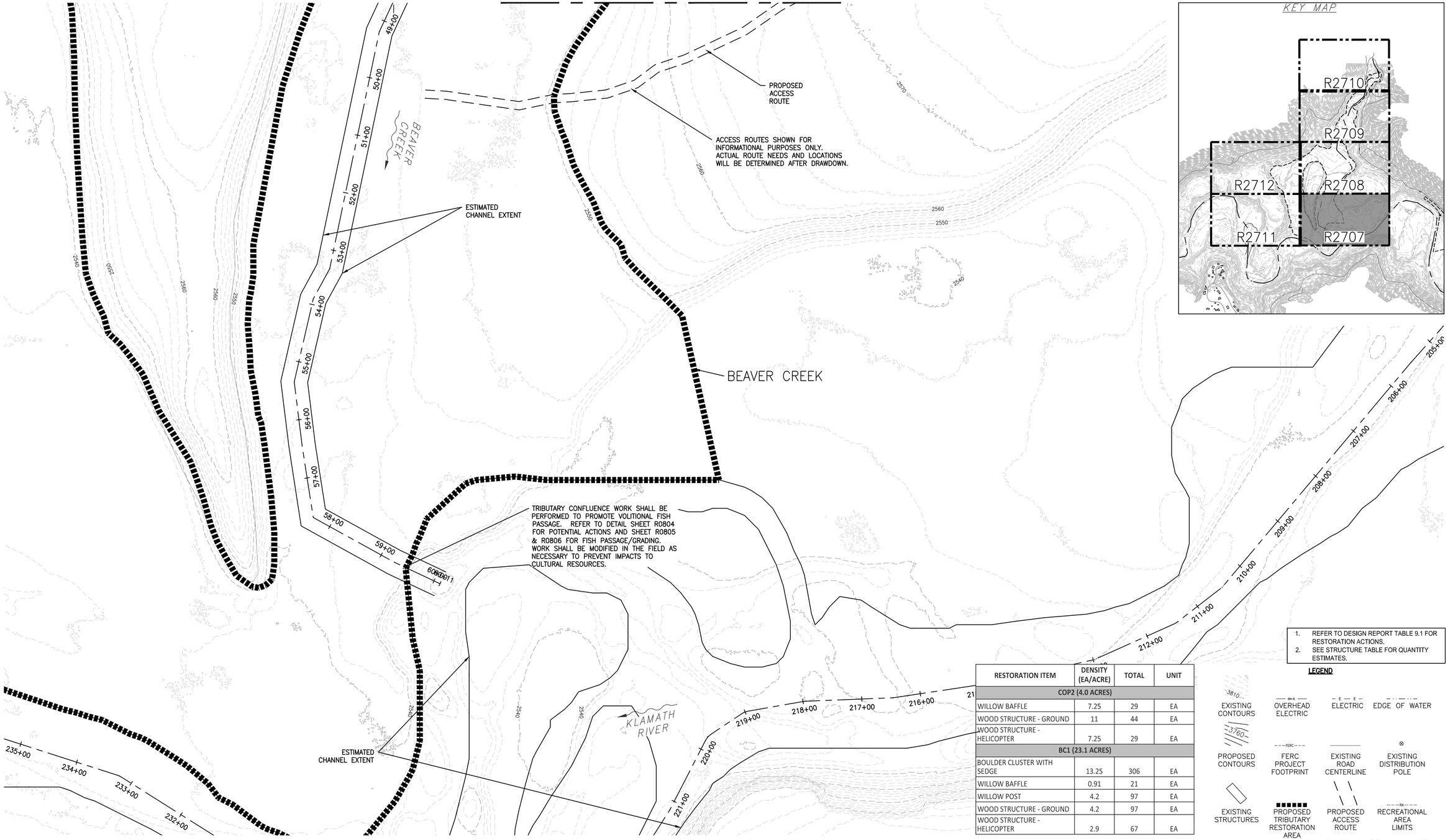
MATCH LINE SEE SHEET R2708



KEY MAP

RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
COP2 (4.0 ACRES)			
WILLOW BAFFLE	7.25	29	EA
WOOD STRUCTURE - GROUND	11	44	EA
WOOD STRUCTURE - HELICOPTER	7.25	29	EA
BC1 (23.1 ACRES)			
BOULDER CLUSTER WITH SEDGE	13.25	306	EA
WILLOW BAFFLE	0.91	21	EA
WILLOW POST	4.2	97	EA
WOOD STRUCTURE - GROUND	4.2	97	EA
WOOD STRUCTURE - HELICOPTER	2.9	67	EA

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

LEGEND

EXISTING CONTOURS · OVERHEAD ELECTRIC · ELECTRIC · EDGE OF WATER
PROPOSED CONTOURS · FERC PROJECT FOOTPRINT · EXISTING ROAD CENTERLINE · EXISTING DISTRIBUTION POLE
EXISTING STRUCTURES · PROPOSED TRIBUTARY RESTORATION AREA · PROPOSED ACCESS ROUTE · RECREATIONAL AREA LIMITS
PROPOSED WORK LIMITS

0 80 160 240
HORIZ 1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

WARNING
0 1/2 1
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PREPARED BY: Stantec / res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT
PROJ # VA103-640/1
DATE 2020.07.02
SHEET TITLE: COPCO DAM-BEAVER CREEK PLAN
DWG R2707

sshelton Jun 16, 2022 - 12:56pm
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MATCH LINE SEE SHEET R2709

MATCH LINE SEE SHEET R2712

MATCH LINE SEE SHEET R2707

BEAVER CREEK

ESTIMATED CHANNEL EXTENT

COPCO RD

PROPOSED ACCESS ROUTE

BEAVER CREEK

ACCESS ROUTES SHOWN FOR INFORMATIONAL PURPOSES ONLY. ACTUAL ROUTE NEEDS AND LOCATIONS WILL BE DETERMINED AFTER DRAWDOWN.

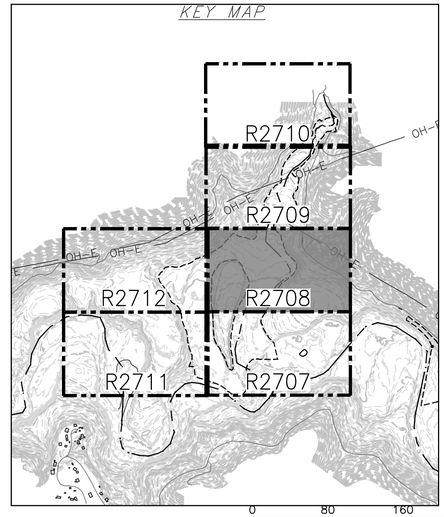
LEGEND

- EXISTING CONTOURS
- OVERHEAD ELECTRIC
- ELECTRIC
- EDGE OF WATER
- PROPOSED CONTOURS
- FERC PROJECT FOOTPRINT
- EXISTING ROAD CENTERLINE
- EXISTING DISTRIBUTION POLE
- EXISTING STRUCTURES
- PROPOSED TRIBUTARY RESTORATION AREA
- PROPOSED ACCESS ROUTE
- RECREATIONAL AREA LIMITS
- PROPOSED WORK LIMITS

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
COP2 (4.0 ACRES)			
WILLOW BAFFLE	7.25	29	EA
WOOD STRUCTURE - GROUND	11	44	EA
WOOD STRUCTURE - HELICOPTER	7.25	29	EA
BC1 (23.1 ACRES)			
BOULDER CLUSTER WITH SEDGE	13.25	306	EA
WILLOW BAFFLE	0.91	21	EA
WILLOW POST	4.2	97	EA
WOOD STRUCTURE - GROUND	4.2	97	EA
WOOD STRUCTURE - HELICOPTER	2.9	67	EA

KEY MAP



0 80 160 240

HORIZ 1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

WARNING
0 1/2 1
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PREPARED BY: Stantec, res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: COPCO DAM-BEAVER CREEK PLAN

PROJ # VA103-640/1

DATE 2020.07.02

DWG R2708

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MATCH LINE SEE SHEET R2710

RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
BC1 (23.1 ACRES)			
BOULDER CLUSTER WITH SEDGE	13.25	306	EA
WILLOW BAFFLE	0.91	21	EA
WILLOW POST	4.2	97	EA
WOOD STRUCTURE - GROUND	4.2	97	EA
WOOD STRUCTURE - HELICOPTER	2.9	67	EA

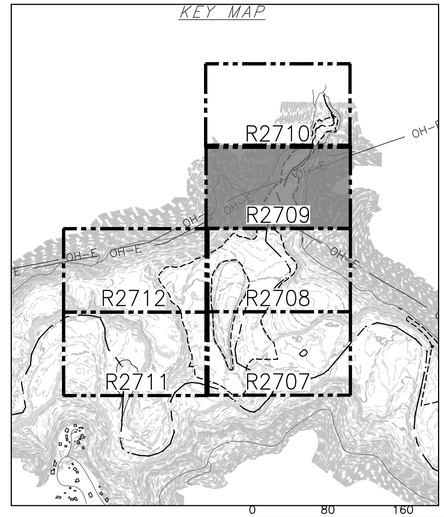
MATCH LINE SEE SHEET R2708

LEGEND

- EXISTING CONTOURS (3810)
- OVERHEAD ELECTRIC (OH-E)
- ELECTRIC (E)
- EDGE OF WATER
- PROPOSED CONTOURS (3760)
- FERC PROJECT FOOTPRINT (FERC)
- EXISTING ROAD CENTERLINE
- EXISTING DISTRIBUTION POLE
- EXISTING STRUCTURES
- PROPOSED TRIBUTARY RESTORATION AREA
- PROPOSED ACCESS ROUTE
- RECREATIONAL AREA LIMITS (RA)
- PROPOSED WORK LIMITS (WL)

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

KEY MAP



0 80 160 240

HORIZ 1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

WARNING
0 1/2 1
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PREPARED BY: Stantec / res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: COPCO DAM-BEAVER CREEK PLAN

PROJ #	VA103-640/1
DATE	2020.07.02
DWG	R2709

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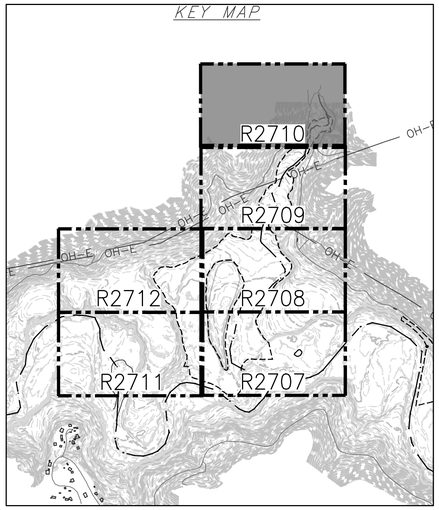
KEY MAP

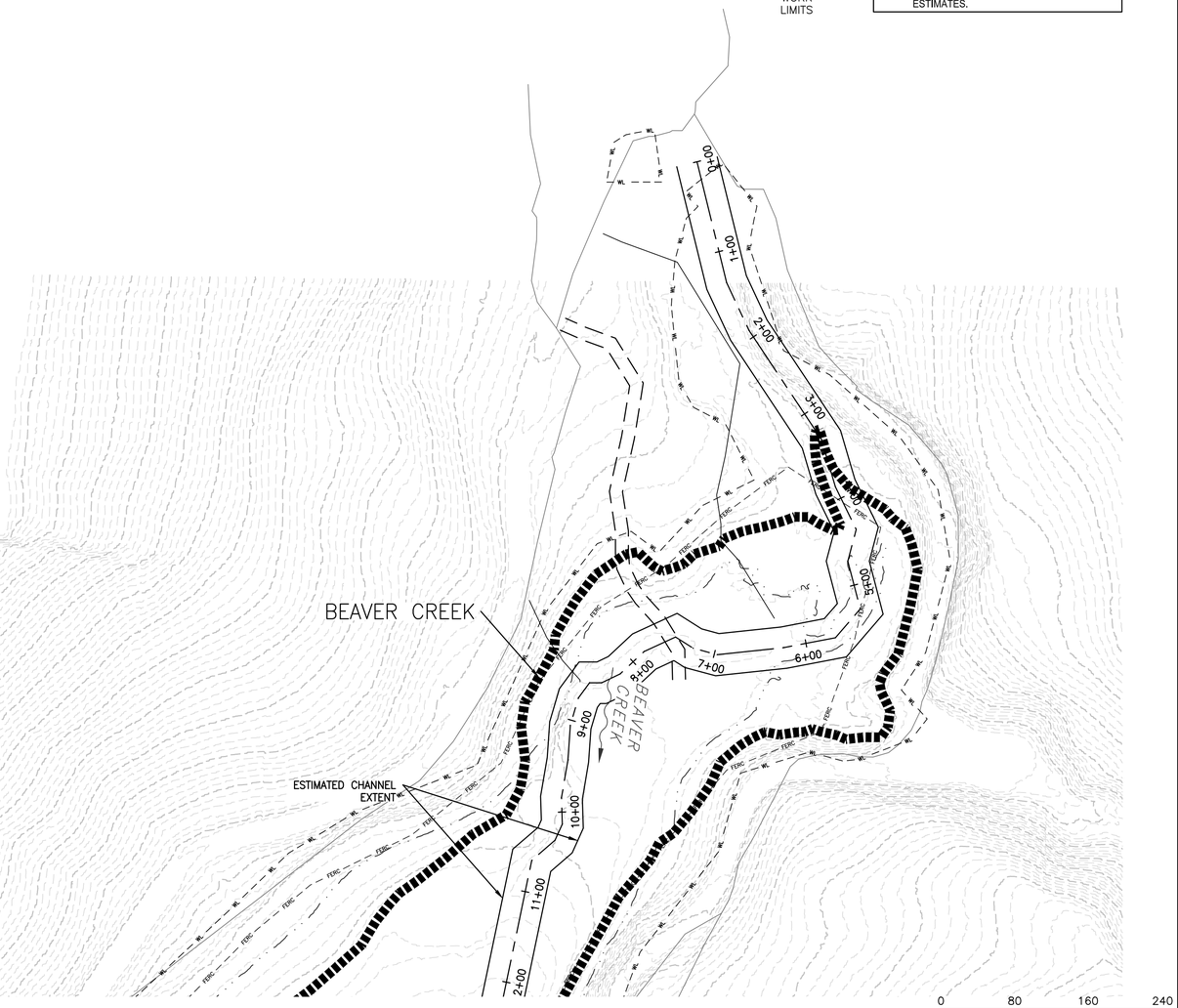


RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
BC1 (23.1 ACRES)			
BOULDER CLUSTER WITH SEDGE	13.25	306	EA
WILLOW BAFFLE	0.91	21	EA
WILLOW POST	4.2	97	EA
WOOD STRUCTURE - GROUND	4.2	97	EA
WOOD STRUCTURE - HELICOPTER	2.9	67	EA

LEGEND

- EXISTING CONTOURS (3810)
- OVERHEAD ELECTRIC (OH-E)
- ELECTRIC (E)
- EDGE OF WATER
- PROPOSED CONTOURS (3760)
- FERC PROJECT FOOTPRINT (FERC)
- EXISTING ROAD CENTERLINE
- EXISTING DISTRIBUTION POLE
- EXISTING STRUCTURES
- PROPOSED TRIBUTARY RESTORATION AREA
- PROPOSED ACCESS ROUTE
- RECREATIONAL AREA LIMITS (RA)
- PROPOSED WORK LIMITS (WL)

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.



0 80 160 240

HORIZ 1" = 80'

MATCH LINE SEE SHEET R2709

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

WARNING
0 1/2 1
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PREPARED BY: Stantec, res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: COPCO DAM-BEAVER CREEK PLAN

PROJ #	VA103-640/1
DATE	2020.07.02
DWG	R2710

sshelton Jun 16, 2022 - 1:04pm
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MATCH LINE SEE SHEET R4712

Restoration Item	Density (ea/acre)	Total	Unit
COP1 (18.6 acres)			
Willow Baffle	3.9	73	EA
Wood Structure - Ground	5.3	99	EA
Wood Structure - Helicopter	3.4	63	EA
BC1 (23.1 acres)			
Boulder Cluster with Sedge	13.25	306	EA
Willow Baffle	0.91	21	EA
Willow Post	4.2	97	EA
Wood Structure - Ground	4.2	97	EA
Wood Structure - Helicopter	2.9	67	EA

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

KLAMATH RIVER

BEAVER CREEK

TENT

ESTIMATED CHANNEL EXTENT

TRIBUTARY CONFLUENCE WORK SHALL BE PERFORMED TO PROMOTE VOLITIONAL FISH PASSAGE. REFER TO DETAIL SHEET R0804 FOR POTENTIAL ACTIONS. WORK SHALL BE MODIFIED IN THE FIELD AS NECESSARY TO PREVENT IMPACTS TO CULTURAL RESOURCES.

MATCH LINE SEE SHEET R2707

LEGEND

- EXISTING CONTOURS
- OVERHEAD ELECTRIC
- ELECTRIC
- EDGE OF WATER
- PROPOSED CONTOURS
- FERC PROJECT FOOTPRINT
- EXISTING ROAD CENTERLINE
- EXISTING DISTRIBUTION POLE
- EXISTING STRUCTURES
- PROPOSED TRIBUTARY RESTORATION AREA
- PROPOSED ACCESS ROUTE
- RECREATIONAL AREA LIMITS
- PROPOSED WORK LIMITS

0 80 160 240

HORIZ 1" = 80'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

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PREPARED BY: Stantec, res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT	KLAMATH RIVER RENEWAL PROJECT
SHEET TITLE	COPCO DAM-BEAVER CREEK PLAN
PROJ #	VA103-640/1
DATE	2020.07.02
DWG	R2711

sbelton Jun 16, 2022 - 1:05pm
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LEGEND

EXISTING CONTOURS (3810) · OVERHEAD ELECTRIC (OH-E) · ELECTRIC (E) · EDGE OF WATER

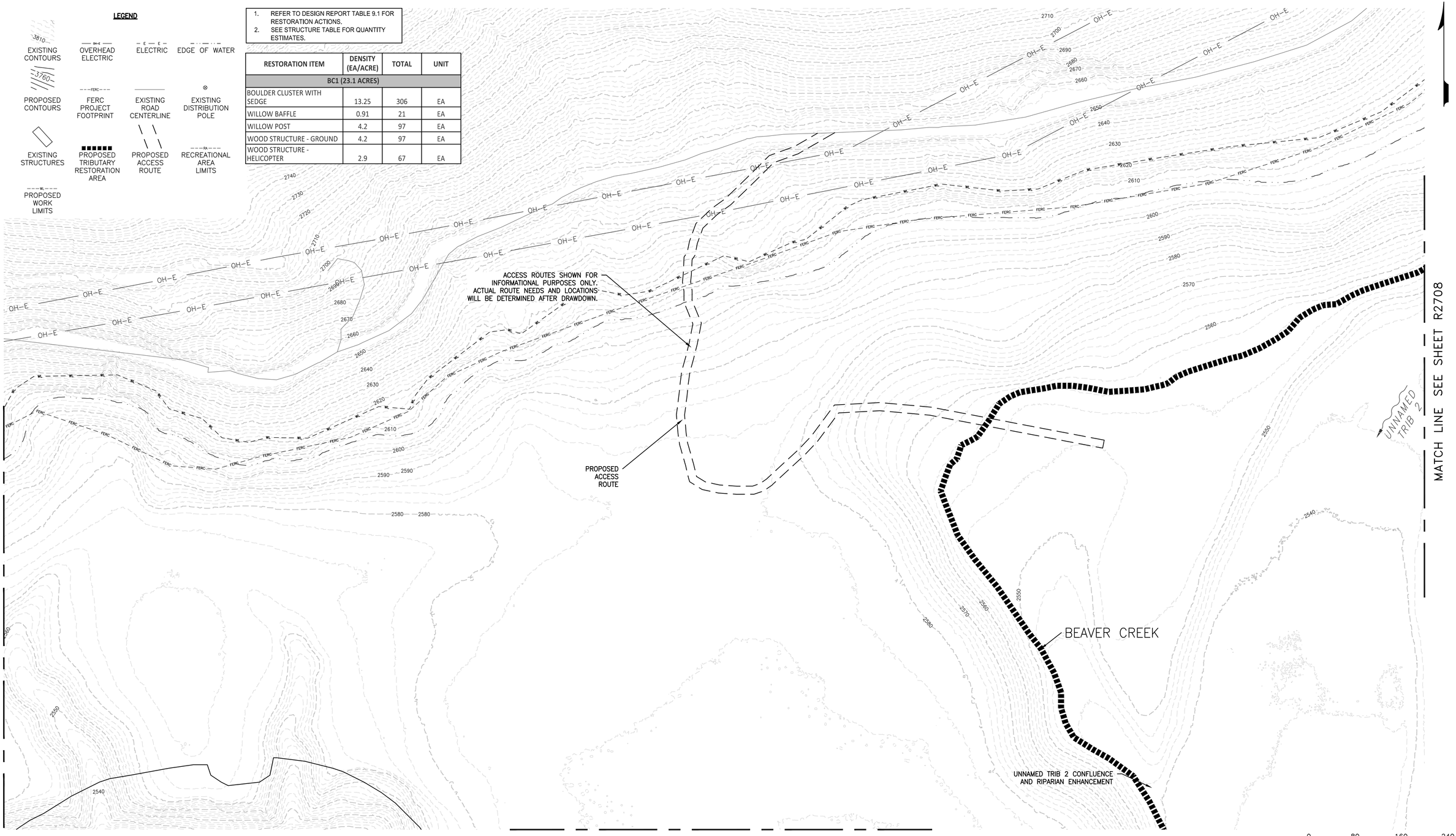
PROPOSED CONTOURS (3760) · FERC PROJECT FOOTPRINT (FERC) · EXISTING ROAD CENTERLINE · EXISTING DISTRIBUTION POLE

EXISTING STRUCTURES · PROPOSED TRIBUTARY RESTORATION AREA · PROPOSED ACCESS ROUTE · RECREATIONAL AREA LIMITS (RA)

PROPOSED WORK LIMITS (WL)

1. REFER TO DESIGN REPORT TABLE 9.1 FOR RESTORATION ACTIONS.
2. SEE STRUCTURE TABLE FOR QUANTITY ESTIMATES.

RESTORATION ITEM	DENSITY (EA/ACRE)	TOTAL	UNIT
BC1 (23.1 ACRES)			
BOULDER CLUSTER WITH SEDGE	13.25	306	EA
WILLOW BAFFLE	0.91	21	EA
WILLOW POST	4.2	97	EA
WOOD STRUCTURE - GROUND	4.2	97	EA
WOOD STRUCTURE - HELICOPTER	2.9	67	EA



PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

WARNING
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PREPARED BY: Stantec / res

DESIGNED	GH
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: COPCO DAM-BEAVER CREEK PLAN

PROJ # VA103-640/1

DATE 2020.07.02

DWG R2712

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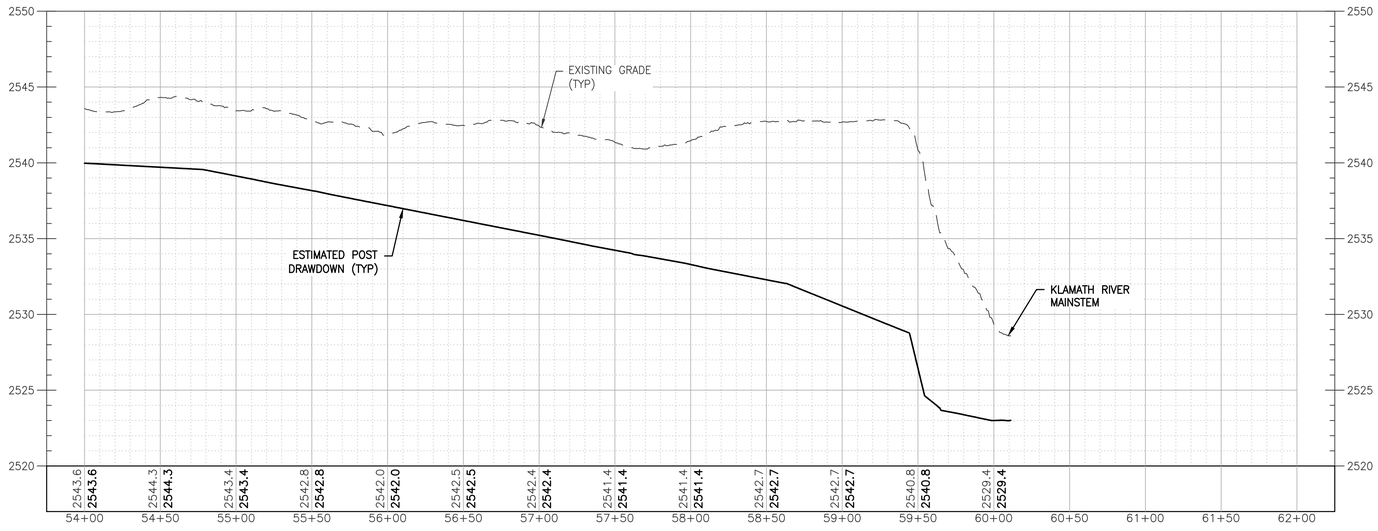

BEAVER CREEK PROFILE

HORZ 1"=50', VERT 1"=25'

DEER CREEK PROFILE

HORZ 1"=50', VERT 1"=25'

NOTES:

1. EXISTING GRADE PROFILES ARE TAKEN FROM THE COMBINED 2018 BATHYMETRY AND LIDAR SURFACES PROVIDED TO KIEWIT BY KRRC.
2. POST DRAWDOWN PROFILES ARE INTENDED TO REPRESENT A PLAUSIBLE ENDPOINT FOR BASIN SEDIMENTS AFTER DAM REMOVAL, RESERVOIR DRAWDOWN, AND SEDIMENT EVACUATION IN A TYPICAL YEAR.
3. POST DRAWDOWN PROFILES ARE NOT INTENDED TO PROVIDE A GRADING TARGET ELEVATION; HOWEVER, POST-DRAWDOWN GRADING OF RESIDUAL SEDIMENT MAY BE REQUIRED TO PROMOTE VOLITIONAL FISH PASSAGE IN CERTAIN TRIBUTARIES AND AT THEIR CONFLUENCES WITH THE KLAMATH RIVER.
4. POST DRAWDOWN SURFACES WERE GENERATED BY ESTIMATING MATERIAL CONSOLIDATION AFTER RESERVOIR DRAWDOWN, SUBTRACTING THE ESTIMATED CONSOLIDATION FROM THE 2018 EXISTING GROUND SURFACE, AND THEN SUBTRACTING ESTIMATED EVACUATION VOLUME WITHIN THE KLAMATH RIVER AND ITS TRIBUTARIES FROM THE RESULTANT SURFACE.
5. FULL SEDIMENT EVACUATION WAS ASSUMED WITHIN CHANNEL SECTIONS. FOR THE COPCO BASIN, REASONABLE PRE-DAM DATA WERE AVAILABLE TO ESTIMATE HISTORIC CONDITIONS. THESE DATA WERE USED TO SET POST-DRAWDOWN THALWEG ELEVATIONS OF THE KLAMATH RIVER AND ITS TRIBUTARIES. CHANNEL DIMENSIONS OF THE KLAMATH RIVER WERE TAKEN FROM THE EXISTING AECOM POST-DAM MODEL, AND CHANNEL SECTIONS OF THE TRIBUTARIES WERE GENERATED FROM HYDRAULIC GEOMETRY OF SECTIONS CUT FROM 2018 EXISTING GROUND SURFACE.
6. CHANNEL CORRIDORS WERE DAYLIGHTED TO THE EXISTING GROUND SURFACE USING THE ESTIMATED ANGLE OF REPOSE FOR RESIDUAL SEDIMENT.
7. POST DRAWDOWN SECTION DIMENSIONS REPRESENT GENERALIZED CHANNEL MORPHOLOGY BASED ON HYDRAULIC GEOMETRY AND MAY REQUIRE LOCALIZED WORK TO ALLOW VOLITIONAL FISH PASSAGE. REFER TO SHEETS R0804 THROUGH R0804 FOR ADAPTIVE MANAGEMENT ACTIONS AND GRADING APPROACHES.

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
A	ISSUED - 30% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	10/11/19

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

PREPARED BY: Stantec

DESIGNED	JMR
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT	KLAMATH RIVER RENEWAL PROJECT
PROJ #	VA103-640/1
DATE	2020.07.02
SHEET TITLE	COPCO DAM-PROFILES
DWG	R2713

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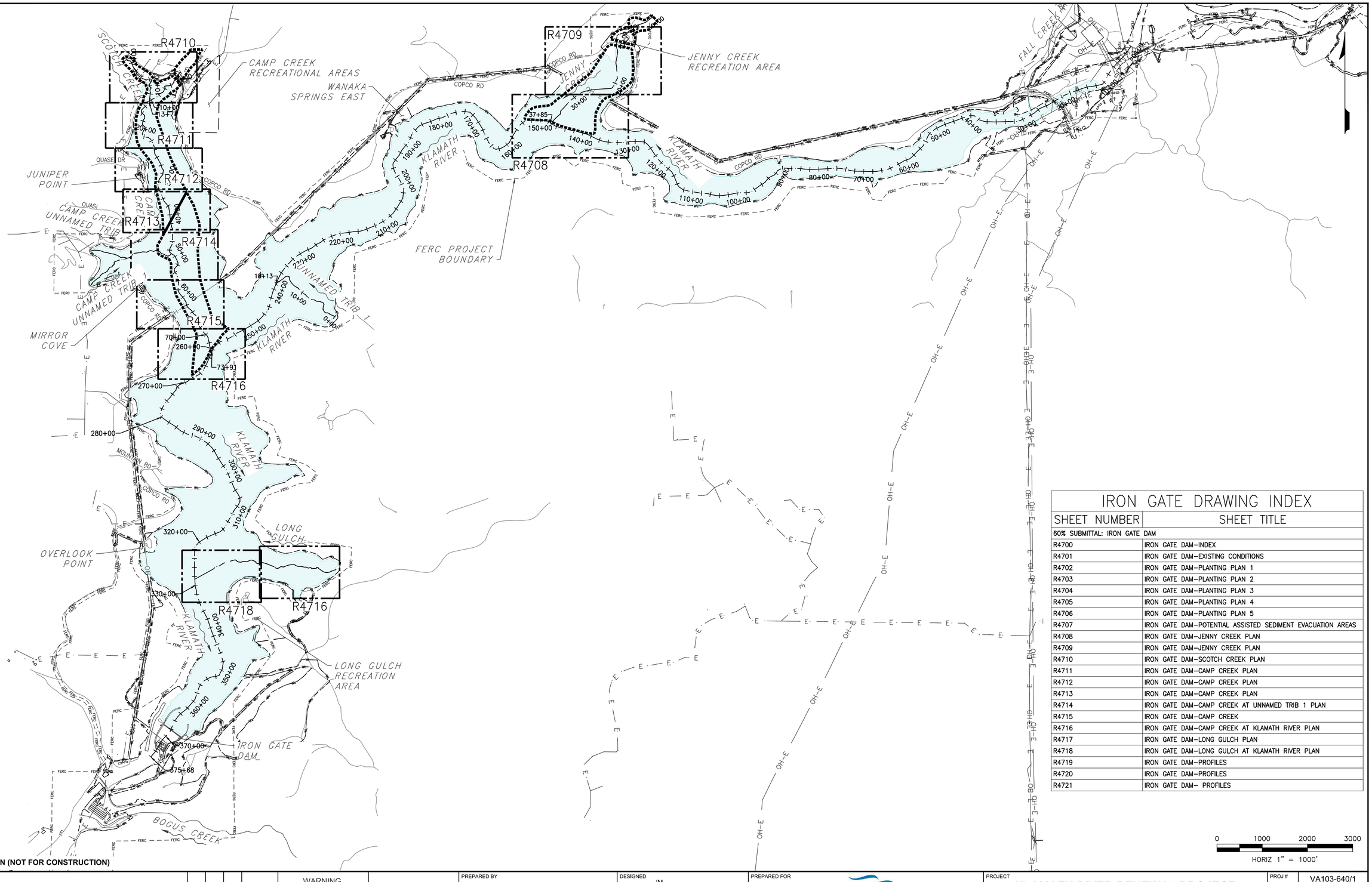

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

IRON GATE DRAWING INDEX

SHEET NUMBER	SHEET TITLE
60% SUBMITTAL: IRON GATE DAM	
R4700	IRON GATE DAM–INDEX
R4701	IRON GATE DAM–EXISTING CONDITIONS
R4702	IRON GATE DAM–PLANTING PLAN 1
R4703	IRON GATE DAM–PLANTING PLAN 2
R4704	IRON GATE DAM–PLANTING PLAN 3
R4705	IRON GATE DAM–PLANTING PLAN 4
R4706	IRON GATE DAM–PLANTING PLAN 5
R4707	IRON GATE DAM–POTENTIAL ASSISTED SEDIMENT EVACUATION AREAS
R4708	IRON GATE DAM–JENNY CREEK PLAN
R4709	IRON GATE DAM–JENNY CREEK PLAN
R4710	IRON GATE DAM–SCOTCH CREEK PLAN
R4711	IRON GATE DAM–CAMP CREEK PLAN
R4712	IRON GATE DAM–CAMP CREEK PLAN
R4713	IRON GATE DAM–CAMP CREEK PLAN
R4714	IRON GATE DAM–CAMP CREEK AT UNNAMED TRIB 1 PLAN
R4715	IRON GATE DAM–CAMP CREEK
R4716	IRON GATE DAM–CAMP CREEK AT KLAMATH RIVER PLAN
R4717	IRON GATE DAM–LONG GULCH PLAN
R4718	IRON GATE DAM–LONG GULCH AT KLAMATH RIVER PLAN
R4719	IRON GATE DAM–PROFILES
R4720	IRON GATE DAM–PROFILES
R4721	IRON GATE DAM– PROFILES

0 1000 2000 3000

HORIZ 1" = 1000'

REV	DESCRIPTION	BY	CHK	APP	DATE
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PREPARED BY: Stantec / res

DESIGNED	JM
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

PROJ # VA103-640/1

DATE 2020.07.02

SHEET TITLE: IRON GATE DAM-INDEX

DWG R4700

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N

CAMP CREEK RECREATIONAL AREAS

WANAKA SPRINGS EAST

JENNY CREEK RECREATION AREA

TAIL CREEK

SCOTCH CREEK

JUNIPER POINT

CAMP CREEK

CAMP CREEK UNNAMED TRIB 2

CAMP CREEK UNNAMED TRIB 1

UNNAMED TRIB 1

JENNY CREEK

KLAMATH RIVER

COPCO RD

QUASE DR

MIRROR COVE

OVERLOOK POINT

LONG GULCH

MOUNTAIN RD

LONG GULCH RECREATION AREA

SAFETY ZONE LIMITS

IRON GATE DAM

BOGUS CREEK

10+00 60+00 13+70 70+00 20+00 30+00 40+00 21+42 60+00 0+00 8+18 10+00 20+00 0+00 18+13 60+00 70+00 250+00 240+00 10+00 0+00 73+91 260+00 270+00 280+00 290+00 300+00 310+00 320+00 330+00 340+00 350+00 360+00 370+00 375+88 20+00 30+00 37+85 150+00 140+00 160+00 170+00 180+00 190+00 200+00 210+00 220+00 230+00 120+00 130+00 110+00 100+00 90+00 80+00 70+00 60+00 50+00 40+00 30+00 20+00

NOTES:

1. FOLLOWING PROJECT STANDARDS ESTABLISHED BY KRRC, HORIZONTAL DATUM IS CALIFORNIA NAD83 HARN CALIFORNIA STATE PLANE, ZONE 1, US SURVEY FOOT (HARN.CA.CA–IF). VERTICAL DATUM IS NAVD88.
2. EXISTING GROUND CONTOURS WERE GENERATED FROM COMBINED 2018 BATHYMETERY AND LIDAR PROVIDED TO KIEWIT BY KRRC.
3. EXISTING CONDITIONS PLANIMETRICS, INCLUDING UTILITIES, EXISTING STRUCTURES, ROADWAYS, BOUNDARIES, AND PLACE NAMES ARE TAKEN FROM GIS DATA PROVIDED TO KIEWIT BY KRRC.
4. HISTORIC ROAD CROSSINGS AND PIERS SHOWN WITHIN THE CURRENT RESERVOIR LIMITS ARE TAKEN FROM HISTORIC DOCUMENTATION PROVIDED TO KIEWIT BY KRRC.
5. ANTICIPATED POST DRAWDOWN CHANNELS ARE BASED ON POST–REMOVAL HYDRAULIC MODELING PROVIDED TO KIEWIT BY KRRC AND INTERPRETATION OF 2018 BATHYMETRY.
6. AERIAL PHOTOGRAPHY PROVIDED BY BING IMAGES.
7. STORED SEDIMENT WILL BE EVACUATED FROM THE EXISTING RESERVOIR DURING DRAWDOWN AS DESCRIBED IN THE DESIGN REPORT AND ON SHEET R4707.
8. ALL AREAS EXPOSED POST–DRAWDOWN WILL BE PLANTED WITH NATIVE VEGETATION AS DESCRIBED IN SHEETS R4702 THROUGH R4706.
9. ACTIVE RESTORATION ACTIONS, AS DESCRIBED IN TABLE 9.1 OF THE DESIGN REPORT, WILL BE PERFORMED IN THE TRIBUTARY RESTORATION AREAS SHOWN IN THE PLANS. SPECIFIC LOCATIONS OF STRUCTURES AND GRADING WILL BE DETERMINED IN THE FIELD POST–DRAWDOWN. QUANTITIES ASSOCIATED WITH THESE ACTIONS ARE SHOWN FOR EACH TRIBUTARY RESTORATION AREA.
10. DETAILS OF ACTIVE RESTORATION ACTIONS ARE SHOWN ON SHEETS R0801 TO R0806.

HORIZONTAL 1" = 900'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

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PREPARED BY: Stantec, res

DESIGNED	JM
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: IRON GATE DAM-EXISTING CONDITIONS

PROJ # VA103-640/1

DATE 2020.07.02

DWG R4701

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LEGEND

- OH-E — OVERHEAD ELECTRIC
- E — E — ELECTRIC
- EDGE OF WATER
- PALUSTRINE FORESTED
- PALUSTRINE EMERGENT
- PALUSTRINE SCRUB SHRUB
- RIPARIAN DECIDUOUS
- RIPARIAN SHRUB
- COPCO UPLAND

MATCH LINE SEE SHEET R4703

COPCO RD

KLAMATH RIVER

0 300 600 900

HORIZ 1" = 300'

PRELIMINARY DESIGN (NOT FOR CONSTRUCTION)

REV	DESCRIPTION	BY	CHK	APP	DATE
B	ISSUED - 60% RESTORATION DESIGN SUBMITTAL	SMS	JFS	MFA	02/07/20
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PREPARED BY: Stantec / res

DESIGNED	JM
DRAWN	SMS
REVIEWED	JFS
IN CHARGE	SDP
APPROVED	MFA

PREPARED FOR: KLAMATH RIVER RENEWAL CORPORATION

PROJECT: KLAMATH RIVER RENEWAL PROJECT

SHEET TITLE: IRON GATE DAM-PLANTING PLAN 1

PROJ #	VA103-640/1
DATE	2020.07.02
DWG	R4702

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