

ATTACHMENT B

Guaranteed Maximum Price Report

GMP - SUMMARY

DESCRIPTION	TOTAL
Klamath River Renewal Project (GMP) - COST ESTIMATE	\$173,343,343
PROJECT COMPANY FEE (10% OF ALL NON-GENERAL CONDITION COSTS)	\$16,139,301
TOTAL GMP ESTIMATE - INCLUDING FEE	\$189,482,645
PROJECT COMPANY CONTINGENCY (5% OF TOTAL ESTIMATE)	\$9,474,132
TOTAL GMP ESTIMATE - INCLUDING FEE & CONTINGENCY	\$198,956,777

Within this cost estimate, Kiewit has included all materials, labor, equipment, subcontractors, management, overhead, insurance, and fee to complete civil, infrastructure, and dam removal aspects of the project scope. This estimate is compiled consistent with the Project Agreement and Kiewit’s standard industry practice.

Kiewit’s GMP estimate was compiled within InEight HardDollar Estimating software with an accompanying CPM schedule developed in Primavera P6. The estimate and corresponding schedule were structured to logically group similarly scoped items together for ease of review and convey construction sequence, logic, and approach.

The graphic below describes how to read our estimate format.

Our HardDollar Estimating System provides an estimate including parent (summary) and subordinate cost lines that sum upward. As an example, in the graphic below, line items 1.1.1 through 1.1.7 sum upward to line 1.1. Line items 1.1 through 1.4 (only 1.1 shown below), sum upward to line 1.

DAM REMOVAL	4.00	PLS	\$107,180,642.74	4.00	PLS	\$68,321,220.58
.1 JC BOYLE DAM REMOVAL	1.00	PLS	\$32,325,054.60	1.00	PLS	\$11,186,839.70
.1.1 ACCESS / SITE WORK	1.00	PLS	\$12,333,516.73	1.00	PLS	\$6,303,795.55
.1.1.1 SITE PREP / SITE SET UP	1.00	PLS	\$2,862,807.85	1.00	PLS	\$1,532,606.87
.1.1.2 ACCESS ROADS	1.00	PLS	\$3,971,370.59	1.00	PLS	\$856,107.35
.1.1.3 TEMP DAMS	1.00	PLS	\$3,302,863.50	1.00	PLS	\$3,197,863.56
.1.1.4 EROSION CONTROL	1.00	PLS	\$865,904.37	1.00	PLS	\$136,646.35
.1.1.5 DEWATERING	35.00	Wk	\$530,471.95	35.00	Wk	\$530,471.95
.1.1.6 MISC. SUBCONTRACTOR SUPPORT (16 MONTHS)(4MH/WK)	70.00	Wk	\$50,098.48	70.00	Wk	\$50,098.48
.1.1.7 WATER TREATMENT SYSTEM - TREAT PROCESS WATER	1.00	PLS	\$750,000.00	1.00	PLS	\$1.00

Addressing Board of Consultant Questions/Comments

In the paragraphs below, Kiewit addresses the five (5) BOC questions and comments as drafted relating to KRRC's 7/29/19 FERC filing. The comments below provide information related specifically to Kiewit's estimate or scope of work on the project, but may not address all project aspects as separately managed by KRRC. It is Kiewit's intent that this information be added or used to supplement any broader response KRRC provides to each of the BOC's inquiries.

QUESTION 1 – “The updated maximum and probable cost estimate, and the probability that each will occur”

Estimate

Kiewit has provided a cost estimate in support of all civil, infrastructure, and dam removal operations required by the project.

This estimate is based upon a 60% design deliverable produced by Knight Piesold, Kiewit's Engineer of Record. Kiewit produced this estimate consistent with its standard practices of estimating similar large and complex dam and infrastructure projects. This process includes breaking down the project into many small scopes, deriving quantities of work for each scope, then assigning labor, equipment, and material resources as appropriate to complete each scope. Constructibility, development of safe access, and addressing a preferred work sequence were also addressed as part of the estimating process. Lastly, Kiewit solicited and received material and subcontract quotes for particular scopes of work. Applicable quotes were incorporated into the estimate. The project price also includes onsite supervision and management necessary to complete the work and includes anticipated cost escalation corresponding to our CPM schedule.

We are confident in the cost as detailed and that we will achieve completion of all civil, infrastructure, and dam removal scopes included in our estimate.

Schedule

Kiewit has developed a CPM schedule concurrent with its estimating effort. This schedule takes into account anticipated permitting timelines, and details activities for pre-drawdown, drawdown, and dam removal. The schedule is compiled using Kiewit's standard scheduling processes and achieves a level of detail consistent with projects we undertake of this magnitude and complexity.

Schedule generally:

2021

- Infrastructure improvements and required pre-drawdown modifications, access roads, office/facilities setup, and mobilization.
- Work Period: May through December

2022

- Reservoir Drawdown
- Removal of dams and features at JC Boyle, Copco 1, Copco 1, and Irongate sites
- Work Period: January through December

QUESTION 2 – “The updated project contingency reserve based on updated project costs”

In coordination with the Klamath River Renewal Corporation, Kiewit has included a 5% contingency within our GMP estimate. This contingency covers risks that Kiewit anticipates will be carried by the Project Company contractually. This contingency covers common issues we face in similarly complex construction project, including but not limited to above normal escalation of sub and material prices, material and labor availability, labor productivity, fuel escalation, certain scope growth, construction permitting, and etc.

QUESTION 3 – “The types and amounts of insurance policies and surety arrangements anticipated to be secured by the Renewal Corporation”

Insurance

Kiewit will be providing all required insurances to limits consistent with Appendix 9 of our Project Agreement. At this time, a consolidated insurance approach utilizing Kiewit’s corporate program is priced within our estimate. We conclude this offers the most comprehensive and cost competitive insurance approach for the project. A Contractor Controlled Insurance Program (CCIP) has not been included in our pricing at this time, but coverage limits equal to those specified within the CCIP language in Appendix 9 are included as part of Kiewit’s corporate program. Kiewit has consulted with Aon, KRRC’s insurance advisor, who concurs in this approach. We understand that Aon will be updating it’s own documentation in an Updated Insurance Plan.

Surety

Kiewit will be providing 100% Payment and Performance bonds covering all our project work.

QUESTION 4 – “The risk register and risk management plan”

For the duration of design, estimating, and permitting support to date, Kiewit has collaboratively taken part in risk planning and mitigation with KRRC. A project risk register has been created and used as a tool to focus on mitigating risk through design and planning. Risks remaining have been assigned and are anticipated to be carried contractually by the project entity (KRRC, Kiewit, or RES) which is most able to manage and mitigate those risks. The GMP covers all risks that are anticipated to be assigned contractually to Kiewit.

QUESTION 5 – “The adequacy of funds and the funding mechanism described in the data package”

Kiewit not addressing funding in this report as funding is a KRRC responsibility.

Explanation of Estimate

This section of the report describes the summary cost estimate inclusions in greater detail, providing a brief narrative on estimate scope carried within summary (or rollup) line items.

	Description	TOTAL COST
1	DAM REMOVAL	\$76,505,075.17
1.1	JC BOYLE DAM REMOVAL	\$20,370,922.23
1.2	COPCO 1 DAM REMOVAL	\$24,994,785.39
1.3	COPCO 2 DAM REMOVAL	\$7,841,958.99
1.4	IRON GATE DAM REMOVAL	\$23,297,408.55
2	RESTORATION WORK	\$0.00
3	TRANSPORTATION	\$23,905,217.95
3.1	BRIDGES	\$9,820,120.74
3.2	CIVIL IMPROVEMENTS	\$9,856,097.19
3.3	RECREATION IMPROVEMENTS	\$0.02
3.4	YREKA WATERLINE REPLACEMENT	\$4,229,000.00
4	FIRE MANAGEMENT	\$1,385,000.00
5	DESIGN & CONSULTING	\$3,000,000.06
6	PROJECT SPECIFIC INSURANCE & TAX	\$3,813,960.00
7	QUALITY CONTROL, ENVIRONMENTAL, SURVEY	\$8,356,776.37
8	MOBILIZATION / DEMOBILIZATION	\$4,307,277.58
9	SITE SECURITY	\$2,820,000.00
10	SHOP & MAINTENANCE EQUIPMENT	\$3,960,280.29
11	CAMP FACILITY	\$8,235,027.04
12	SITE SERVICES / SUPPORT	\$6,167,204.60
13	INDIRECT	\$28,367,705.78
13.2	Job Related Overhead	\$19,466,936.37
13.3	Operational Support	\$8,900,763.41

ITEM 1 – DAM REMOVAL

This item includes costs for all four dam locations: JC Boyle, Copco 1, Copco 2, and Irongate.

Access and Sitework – Includes development/improvement of access roads needed to facilitate safe removal of site features, provide for haul roads, construct and maintain temporary cofferdams for water management, temporary and permanent erosion control and dewatering of construction areas.

Dam Modification – Includes preparing the dams for safe drawdown and plugging/abandoning features once drawdown is complete. Scope at JC Boyle will consist of blasting out existing stop logs below the concrete spillway and plugging the ends of the existing penstock tunnel. Scope at Copco 1 includes



excavating adit(s) through the dam and blasting the remaining plug at the upstream end of the adit to allow low level water to drain from the reservoir and for passage of sediment. Once drawdown is complete, the existing water diversion tunnel and penstock tunnels will be plugged and abandoned. Scope at Copco 2 consists of removal of one of the five existing bays of the concrete spillway monolith to allow for drawdown. Once the dam is removed, concrete or steel plugs will be used to close off and abandon (with the exception of bat access as required), existing penstock tunnels. Lastly, work at Irongate will include necessary modifications to ensure safe drawdown through the existing low-level outlet diversion tunnel. Once drawdown and river diversion are complete, plugs will be placed to close off and abandon the existing tunnel.

Dam Removal – Includes removing concrete and earthen embankments at all sites, powerhouse features, mechanical and electrical equipment, structural steel, and hazardous materials. Line also includes removal of miscellaneous site features such as asphalt, fencing, residential and commercial buildings, and tanks. Sites will be re-seeded and stabilized upon completion of the removal scopes listed.

ITEM 2 – RESTORATION

Restoration – No costs included – Kiewit understands Resource Environmental Solutions (RES) will complete all project restoration required through a separate contract with KRRC.

ITEM 3 – TRANSPORTATION

Bridges / Roads / Culverts – Includes temporary bridges and infrastructure improvements to Copco Road and project access road so that heavy loads may be transported to and from the project site. Also, in coordination with Siskiyou County to date, Kiewit has included costs to maintain portions of Copco Road due to the poor existing condition and potential of additional asphalt surfacing degradation from the numerous loads the road will see during construction.

City of Yreka, CA waterline upgrade – Includes allowance to realign the Yreka waterline as needed to protect the utility post drawdown and in the final Klamath River condition.

ITEM 4 – FIRE MANAGEMENT

Fire Management – Includes an allowance amount as coordinated with KRRC to cover anticipated and potential costs in providing additional fire management capability the area including building riverine pools and installing detection and monitoring equipment.

ITEM 5 – DESIGN & CONSULTING

Design – Includes engineering services for temporary construction needs such as maintenance of traffic, work platforms, support of excavation, and etc. Also includes maintaining a presence during construction of Kiewit's Engineer of Record Knight Piesold to support the project.

Consulting – Includes services from outside consultants for California QSD/QSD certifications and inspections, legal reviews, blasting, and etc.

ITEM 6 – PROJECT SPECIFIC INSURANCE & TAX

Insurance – Includes estimated cost to implement Builders Risk insurance coverage to a Probable Maximum Loss (PML) utilizing Kiewit's corporate program. Also includes purchase of a project specific professional liability policy as a supplement to Kiewit's practice policy



Tax – Includes 0.57% Oregon Corporate Activity Tax for any revenues for work at the JC Boyle site.

ITEM 7 – QUALITY CONTROL / ENVIRONMENTAL / SURVEY

Quality Control – Includes setting up and managing an onsite quality control program to assure compliance with project specifications and standards. Quality management programs and processes will be established, and estimate includes numerous QC technicians at each site to facilitate and complete necessary inspections and documentation.

Environmental – Includes project staff to manage and document inspections and ensure environmental compliance. Best Management Practices (BMP's) for erosion control and monitoring are completed within this item.

Survey – Includes onsite survey, creating of three-dimensional models, utilization of automatic machine control, and setting of hard survey stakes/limits to assure project is completed within limits specified and to lines and grades established in the design plans.

ITEM 8 – MOBILIZATION / DEMOBILIZATION

Mobilization and Demobilization – Includes bringing, setting up, dismantling and removing large equipment fleet that will be required to complete the project. Equipment will be brought to several individual construction sites, moved between sites as work progresses, and removed once no longer necessary to complete the work.

ITEM 9 – SITE SECURITY

Site Security – Includes multiple posted guards at each project site, installation of gates to control traffic and jobsite personnel, and to provide protection against non-authorized entry into the project site. Security is provided at each site for both the 2021 and 2022 construction seasons.

ITEM 10 – SHOP AND MAINTENANCE EQUIPMENT

Maintenance Shop and Facilities – Includes setup of temporary enclosure/covering, connexes, and tooling to provide onsite maintenance shops at multiple project sites. Maintenance shops will be able to support the equipment fleet needed for the project and ensure productive operations.

ITEM 11 – CAMP FACILITY

Camp Facility – Includes setting up and maintaining a worker camp facility at the Copco work site to house and feed personnel working at the remote Copco location.

ITEM 12 – SITE SERVICES / SUPPORT

Support Services – Includes many ancillary operations and cost that will be incurred by the project that do not fall within a particular demolition or construction effort. For example, snow removal, temporary lighting for night shift operations, providing heaters for work in winter months, and specialty equipment modifications.

Craft Labor Support – Includes subsistence needed to mobilize key craftsmen to the area to manage crews and field operations. Also carries craft incentive costs and anticipated pay over area wage scale to assure adequate labor can be supplied to the project.

ITEM 13 – INDIRECT

Onsite Project Management - Includes onsite staff supervision and costs associated with mobilizing a management team to the project and staffing for the duration of the project schedule. This includes coordination with RES and KRRC to assure related works and the project as a whole, are aligned.

Onsite Construction Offices – Includes setting up and providing equipment to maintain onsite project offices at multiple dam locations for the duration of the project schedule.

Escalation – Includes anticipated escalations to Labor, Equipment, Fuel, and Materials purchases commensurate with developing an estimate in 2020 for work in 2021/2022.