



CHELAN COUNTY

HYDRO SUPPORT FACILITIES

BOARD OF COMMISSIONERS BRIEFING

March 19, 2018





Agenda-Purpose

Randy Cook - TCF Architecture

Update on Planning, Design, and Permitting for the Rock Island and Rocky Reach Support Facilities

Jim Dugan - Parametrix

Review “GC/CM” Construction Delivery Method for the upcoming work at Rock Island and Rocky Reach.

Board Action

Discussion and questions only





“Shaping our utility to do the best, for the most, for the longest”

Core Goals

Productivity

Maximize efficiency potential at all operational levels

Service Levels

Optimize level of service delivery and customer experience

Financial Value

Produce lowest long term spending

Cost Predictability

Create financial stability with predictable cost forecasting

Safety

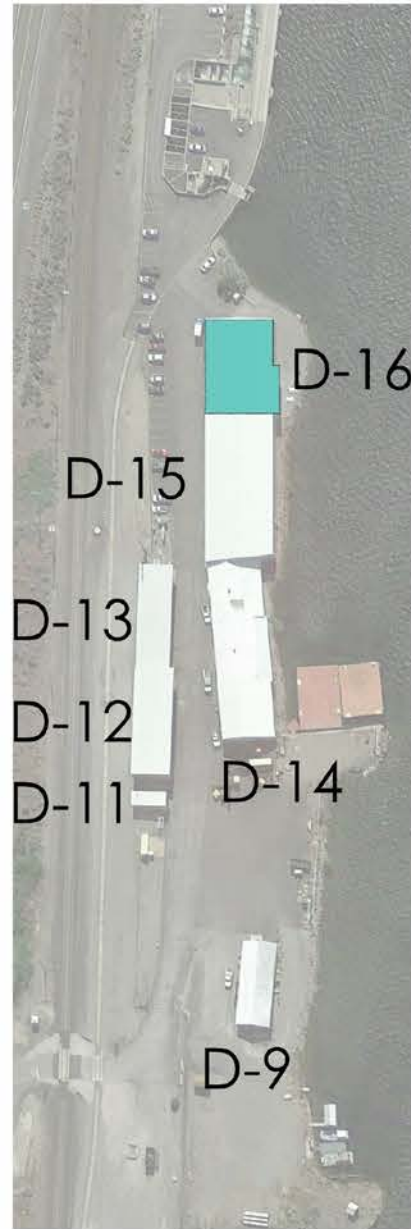
Enhance public and employee safety



CHELAN COUNTY

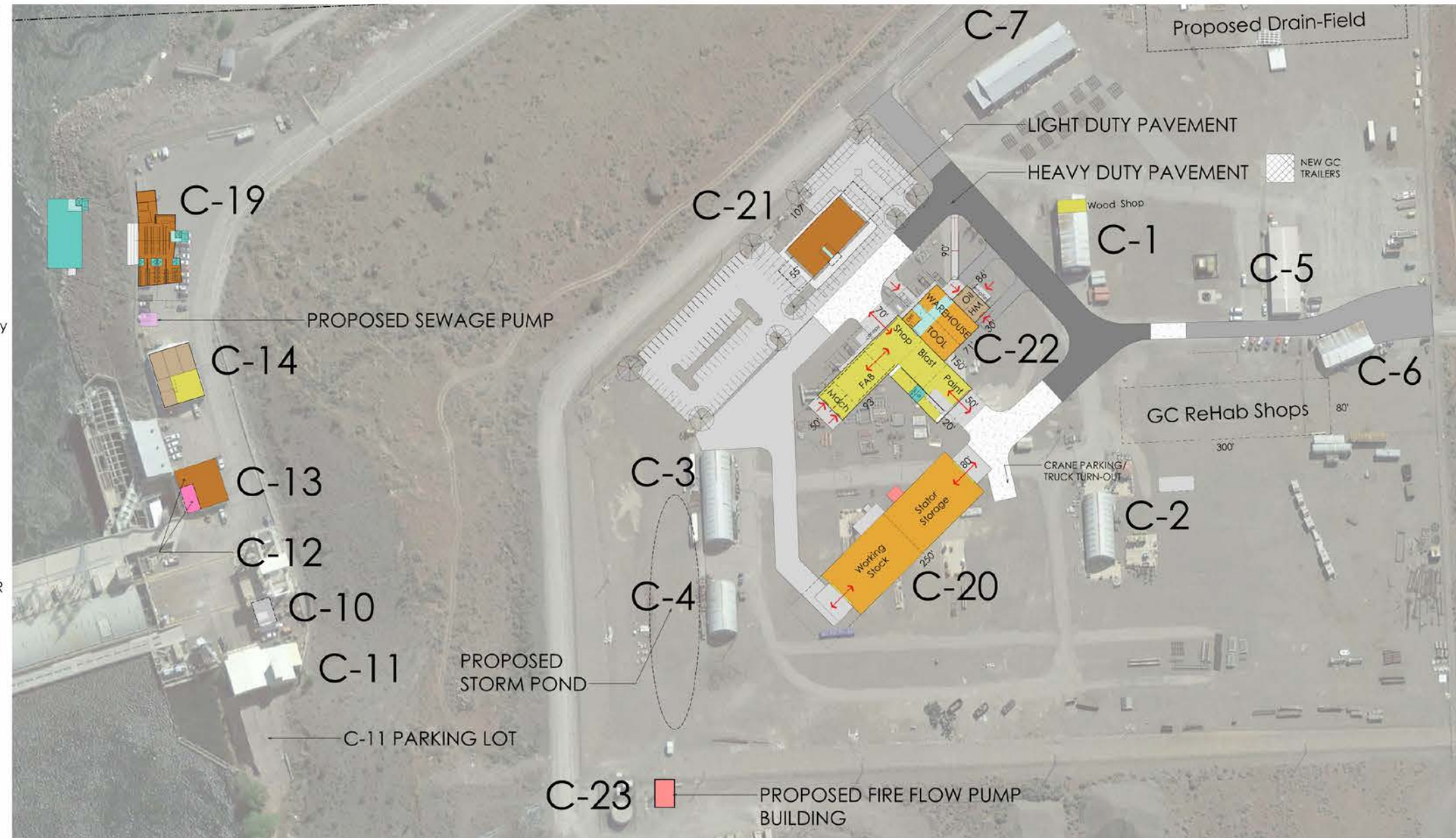
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Site Plan Rock Island



"Douglas"

- C-1** EXISTING STORAGE BUILDING (Wood Shop)
- C-2 thru C-4** EXISTING STORAGE BUILDINGS (Storage to remain or Demolish per plan)
- C-5** EXISTING "STONE & WEBSTER" CREW BLDG (Provide to Rehab GCs)
- C-6** EXISTING FLEET SERVICES BLDG (to remain)
- C-7** EXISTING "COBRA" BUILDING (Storage to remain)
- C-10** EXISTING HEALTH BUILDING (Demolish)
- C-11** EXISTING MEDIA BLAST BLDG (No work, Provide to Rehab GC)
- C-12** EXISTING FISH TAGGING BUILDING (Facility & Offices to remain)
- C-13** EXISTING CREW BLDG (Provide to GC)
- C-14** EXISTING ELECTRICAL SHOP & STORAGE BUILDING (Remodel to add foremen storage spaces)
- C-19** NEW ENGINEERING OFFICES & CREW BREAK ROOMS (2nd Floor & 1st Floors respectively)
- C-20** NEW HEATED STORAGE BUILDING
- C-21** NEW CREW BUILDING SHOWERS, LOCKER ROOM, BREAK & HEALTH FACILITY
- C-22** NEW SHOPS/STORAGE BUILDING: BLAST/PAINT/SHOP & MACHINE SHOPS, WAREHOUSE/TOOL & HAZMAT/OIL STORAGE
- D-9** EXISTING STORAGE (Provide to Rehab GC)
- D-11** EXISTING FUEL STATION & TANK STORAGE (to remain)
- D-12 & 13** EXISTING STORAGE (to remain)
- D-14** EXISTING SHOP BUILDING (to remain)
- D-15** EXISTING WAREHOUSE (to remain)
- D-16** EXISTING OFFICES (2-Story Remodel)



"Lower Chelan"

"Upper Chelan"



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Site Plan Rocky Reach



DIVE

D

CM-13

CM-11

A

F

CM-7

CM-8

FLEET

X

E

Existing Tent Structure

A EXISTING CM-17 (Rehab/Remodel)

DIVE DIVE SHOP (Relocate into existing warehouse)

B NEW PAINT & BLAST BUILDING

CM-7 INTERIM TOOL ROOM (during CM-17 Rehab)

C NEW STORAGE BUILDING

CM-8 INTERIM ELECTRICAL CLEAN ROOM (during CM-17 Rehab)

D NEW OFFICE BUILDING

E NEW HAZ-MAT BUILDING

CM-11 INTERIM MACHINE SHOP (during CM-17 Rehab)

F NEW CREW BUILDING

X NEW FUEL ISLAND

CM-13 INTERIM FABRICATION SHOPS & CNC (during CM-17 Rehab)

(E) Power Sub-Station

B

BLDG C

C



Project Schedules

Rock Island

2018	2019	2020 – 2030
<ul style="list-style-type: none"> • Complete Underground Utilities, fire protection and stormwater systems. • Complete Heated Storage Building Construction. • Design and secure Permits for all Support Buildings. 	<ul style="list-style-type: none"> • Construction of all new and remodeled Rock Island support buildings on Chelan Side. • Final Chelan side Site Finishing Work 	<ul style="list-style-type: none"> • Power House 2 Rehab contractor arrives January , 2020 • Support Facilities Contractor exits Chelan Side Dec, 2019 • Support Facilities Contractor completes Douglas Side remodel work in early 2020.

Rocky Reach

2018	2019	2020	2021
<ul style="list-style-type: none"> • Initiate Predesign Programming for Rocky Reach Support Facilities • Initiate early Site Utilities investigations 	<ul style="list-style-type: none"> • Complete all Planning, Design and Permitting for Rocky Reach Support Facilities. 	<ul style="list-style-type: none"> • Phase 1 Construction • Final Phasing Approach to be determined 	<ul style="list-style-type: none"> • Phase 2 Construction



Cost Analysis

Rock Island

Current Estimate Range (Predesign Phase)	Projected Cost Savings Compared to Status Quo Alternative	Next Steps
\$38.7 - \$39.5 Million	\$3.7 Million	Prepare detailed cost estimate at 30% Design Phase (May, 2018)

Rocky Reach

Current Estimate Range (Predesign Phase)	Projected Cost Savings Compared to Status Quo Alternative	Next Steps
\$40 – 41.5 Million	\$1.36 Million	Prepare detailed cost estimate at 30% Design Phase (Early 2019)



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 **Alternative Project
Delivery**

**General Contractor/Construction Manager
“GC/CM”**

**Alternative Project Delivery
RCW 39.10**

**Jim Dugan
Parametrix**



Alternate Delivery Why?

- **Market Conditions - Cost**
 - Market saturation in the \$30 M to \$50 M range=Fewer contractors
 - \$13B in school bonds 2011-2018
 - Unprecedented cost increases in the bid market
 - Rapid material costs escalation (steel, drywall, concrete, glass)
- **Project Coordination**
 - Critical facilities remaining operational during construction
 - Impacts to Hydro generation projects



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■ Alternate Delivery What is it?

- APD is authorized by the Revised Codes of Washington (RCW) 39.10
- Developed for just these kinds of conditions
- Use of GC/CM requires approval
 - Capital Project Advisory Review Board (CPARB)
 - Project Review Committee (PRC)
- Provides tools in the tool belt ...(DB, PDB, GC/CM)
 - Team approach (owner, general contractor (GC), design team)
 - GC selected on qualifications
 - Integration and collaboration fundamental to execution



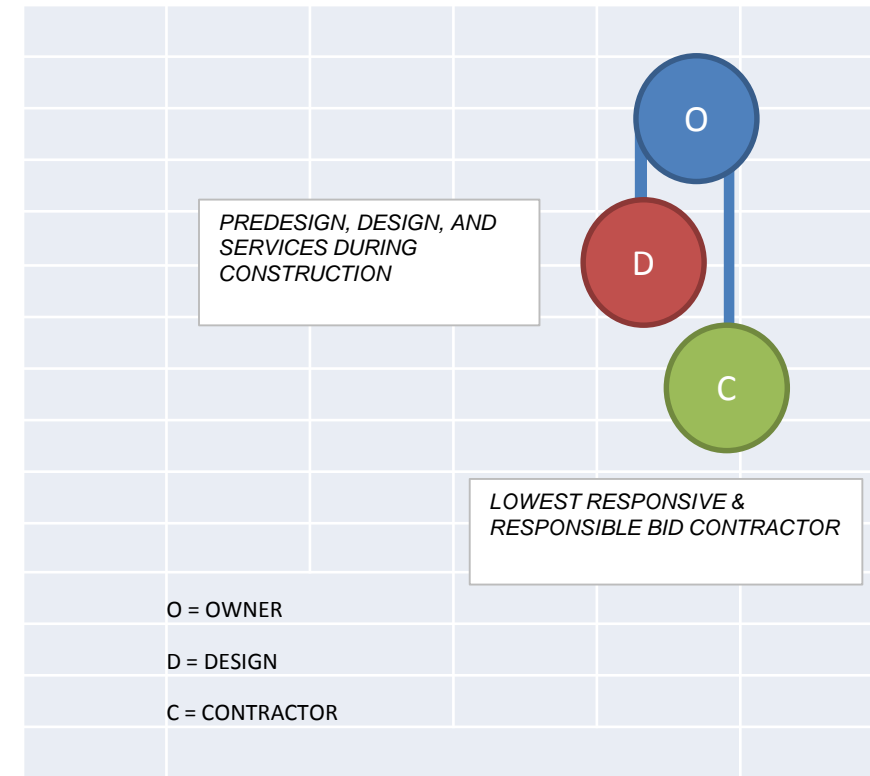
Alternate Delivery Design-Bid-Build

DBB Pro's:

- Familiar method
- Design control
- 100% competitively bid
- Accepted by the public

DBB Con's:

- Owner warrants the design
- Lowest bid does not equal lowest cost
- Adversarial relationship with contractor
- Cost estimates done by an engineer not the contractor
- Not a collaborative method
- Risks mostly borne by the Owner





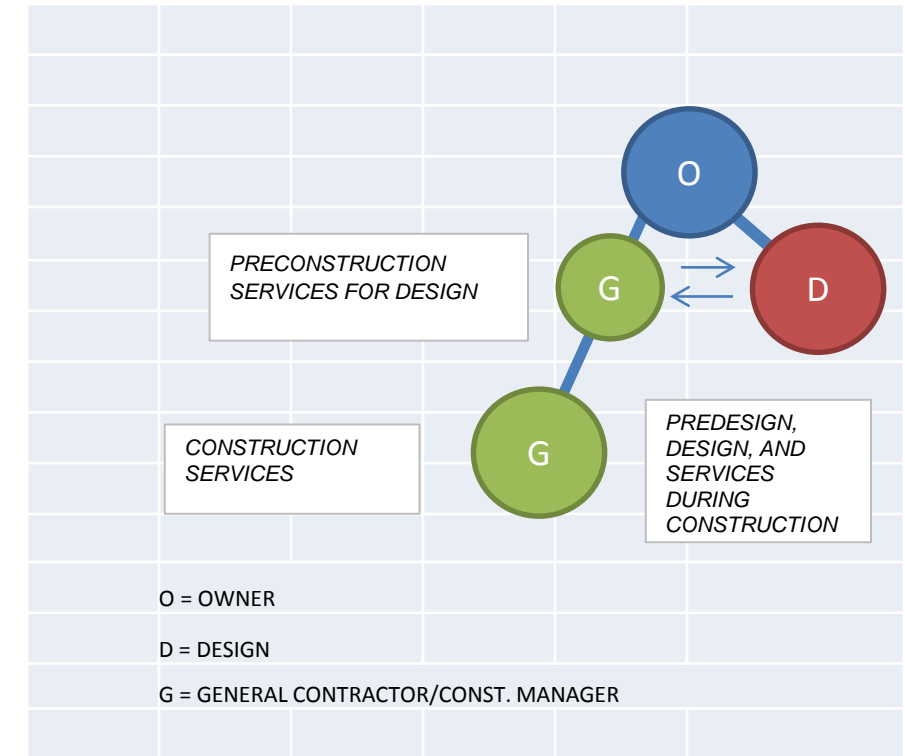
Alternate Delivery GC/CM

GC/CM Pro's:

- Designer and contractor selected on qualifications
- Early contractor involvement in design
- Iterative cost control process until occupancy
- “Dial In” scope and costs to budget
- Off ramp to DBB if needed
- Greater collaboration on subcontractor qualification, monitoring and control
- All work competitively bid

GC/CM Con's:

- Owner warrants the design
- Three contracts with owner
- Lack of single point of contact for design and construction
- Owner to GC/CM contract is performance based





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Alternate Delivery GC/CM

General Contractor/Construction Manager (GC/CM)

- Additional Benefits
 - “Partner” Versus “Contractor”
 - Contractor Warrants Design at Final Pricing
 - Mitigates Market Risk to Price Increases
 - Most efficient use of PUD resources (PCS, EPM, Legal, Permitting)
 - Scheduling control; project completion certainty



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GC/CM Delivery
Procurement Process

2018

GC/CM Application

February 20

PRC Presentation

March 22

Request for Proposal (RFP)

April 12

GC/CM Interviews

April 26

Request for Final Price (RFFP)

May 11

Early Assistance Services

May 16

Pre-Con Work Plan

May 24

Board Approval of Selected GC/CM

June 5

GC/CM Contract Executed

June 11

Questions

