

Case Study: Upgrading Four Sanitary Sewer Pump Stations Funded by Three Agencies

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Outline

- Planning
- Funding Application
- Funder Coordination
- Environmental & Cultural Resources
- Preparation of Plans & Specifications
- Construction
- Lessons Learned



Planning

- General Sewer Plan
 - Identify the issue
 - Propose planning-level solutions & costs
 - Consider funding pathways
- Pre-Design Report
 - Detailed approach to solution & costs
- Collaboration – Owner & Engineer
 - Make sure Owner gets what they want & need
 - Standard Design of Controls



Funding Application

- CDBG
- PWB
- Ecology
- GH County 0.09 Fund
- Tips & Tricks
 - Attend trainings
 - Read application
 - Be thorough & complete
 - Keep the reader in mind
 - Support with documentation & clear narrative



Coordination with Funders

- Be aware of deadlines
- Ask questions & talk to them
- Bundle the three projects into one bid package
 - Economy of Scale
 - Bigger project, more attractive to bidders



Cultural and Environmental Resources

- CDBG
 - Section 106
 - Consultation
 - DAHP
 - Tribes
 - NEPA
 - NMFS HUD Programmatic
- Ecology
 - SERP
- PWB
 - 21-02



Construction

- Monitoring
 - Wage Interviews
 - Inspection
 - Quarterly Reporting
- Coordination with Contractor
 - Supply chain issues require flexibility



Pump Station 8



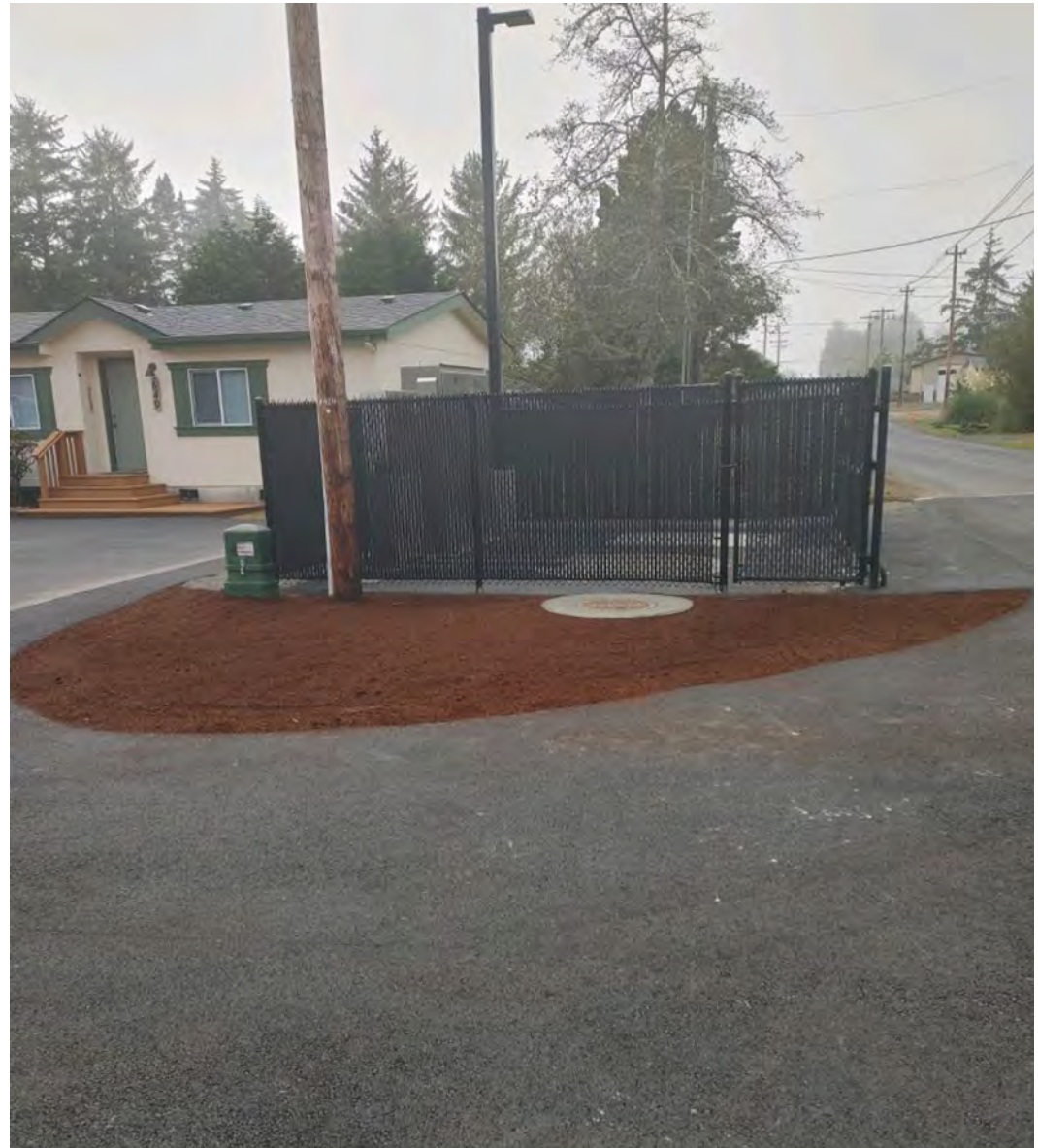
Pump Station 8



Pump Station 8



Pump Station 8



Pump Station 9



Pump Station 9



Pump Station 11



Pump Station 11



Pump Station 11



Pump Station 11



Pump Station 11 Valve Vault



Pump Station 11

Flow Diversion Vault



Pump Station 11



Pump Station 11



Pump Station 12



Pump Station 12



Pump Station 12



Pump Station 12



Pump Station 12



Lessons Learned

– Communication & Coordination

- City Staff/Elected Officials
- City/Engineer/Contractor
- City/Local Agency Coordination
- City/Engineer/Funding Agencies

– Flexibility

- Material availability

– Quality Plans & Specs

- Less confusion by contractor
 - Fewer RFI's & Change Orders
 - Contractor's efficiency by having familiarity

QUESTIONS - CONCLUSION

