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# Alder PS Upgrade

## PTE Contract 30003063

### Proposed Amendment 2

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Bureau of Environmental Services

DATE 2014-08-13



ENVIRONMENTAL SERVICES  
CITY OF PORTLAND

NICK FISH, COMMISSIONER | DEAN MARRIOTT, DIRECTOR



ACOR  
Pump Station  
068051



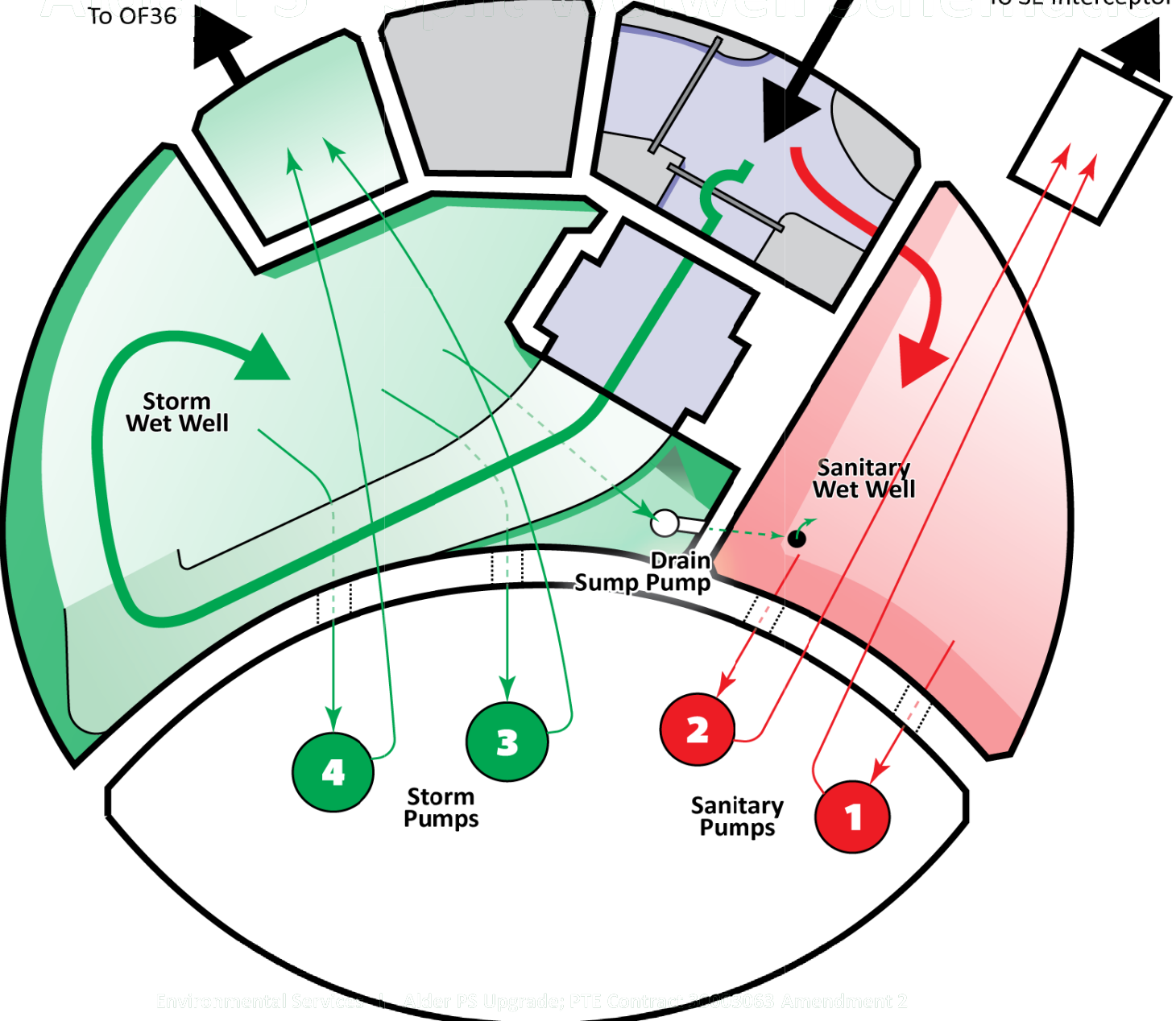
# Alder Pump Station – Basic Information

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- Original construction in 1952
- Two existing and separate pumping systems:
  - Sanitary system with a firm pumping capacity of 750-gpm that discharges to the SE interceptor sewer with flow conveyed to the Sullivan PS
  - Storm system with a firm pumping capacity of 1,500-gpm that discharges to Outfall 36
- Complicated split sanitary and storm system wetwell configuration



# Alder PS - Split Wetwell System





# E10359 Alder Pump Station Upgrade

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- Upgrade the PS to accommodate future projected flows:
    - Sanitary Pumps: 2,100-gpm firm capacity
    - Storm Pumps: 900-gpm firm capacity
  - Integrate PS operation with the Eastside CSO System
  - Improve O&M access to the PS
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- Planning Level Construction Est.: \$1,158,000



# Key Issues Developed in Predesign Phase

- Floodplain constraints severely impact O&M access, and must be accommodated while meeting ADA access requirements
- Poor soil conditions complicate foundation design
- Existing space in the pump room (drywell) is insufficient to accommodate upgraded pumping equipment, and meet current code requirements





# Key Issues Developed in Predesign Phase

- Significant interior structural modification of the wetwell separation walls and control gates would be required to meet influent flow hydraulic criteria for the increased firm pumping capacity of the sanitary system.
- It is not possible to meet current Hydraulic Institute influent flow criteria within the existing caisson structure in a wetwell/drywell configuration.



# Recommended Alternative Project

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- Proceed with the final design and construction of an alternative project to convert the Alder PS to a submersible pump station equipped with both duplex sanitary and storm pumping systems in a common wetwell
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- Estimated construction cost for the recommended alternative is \$2,300,000



# Proposed Amendment 2 – Potential Issues

- Original PTE contract amount of \$357,693 is 30.9% of the planning level construction cost estimate of \$1,158,000
- Proposed amended contract amount of \$710,022 is 30.9% of the recommended design alternative construction cost estimate of \$2,300,000
- Proposed Amendment 2 adds one additional DBE/MBE firm



# Proposed Amendment 2 – Potential Issues

- Proposed M/W/ESB participation amount, if amendment 2 is authorized, increases from \$151,501 to \$234,689
- Proposed M/W/ESB percentage participation of the total amended contract amount decreases from 42.3% to 33.1%.

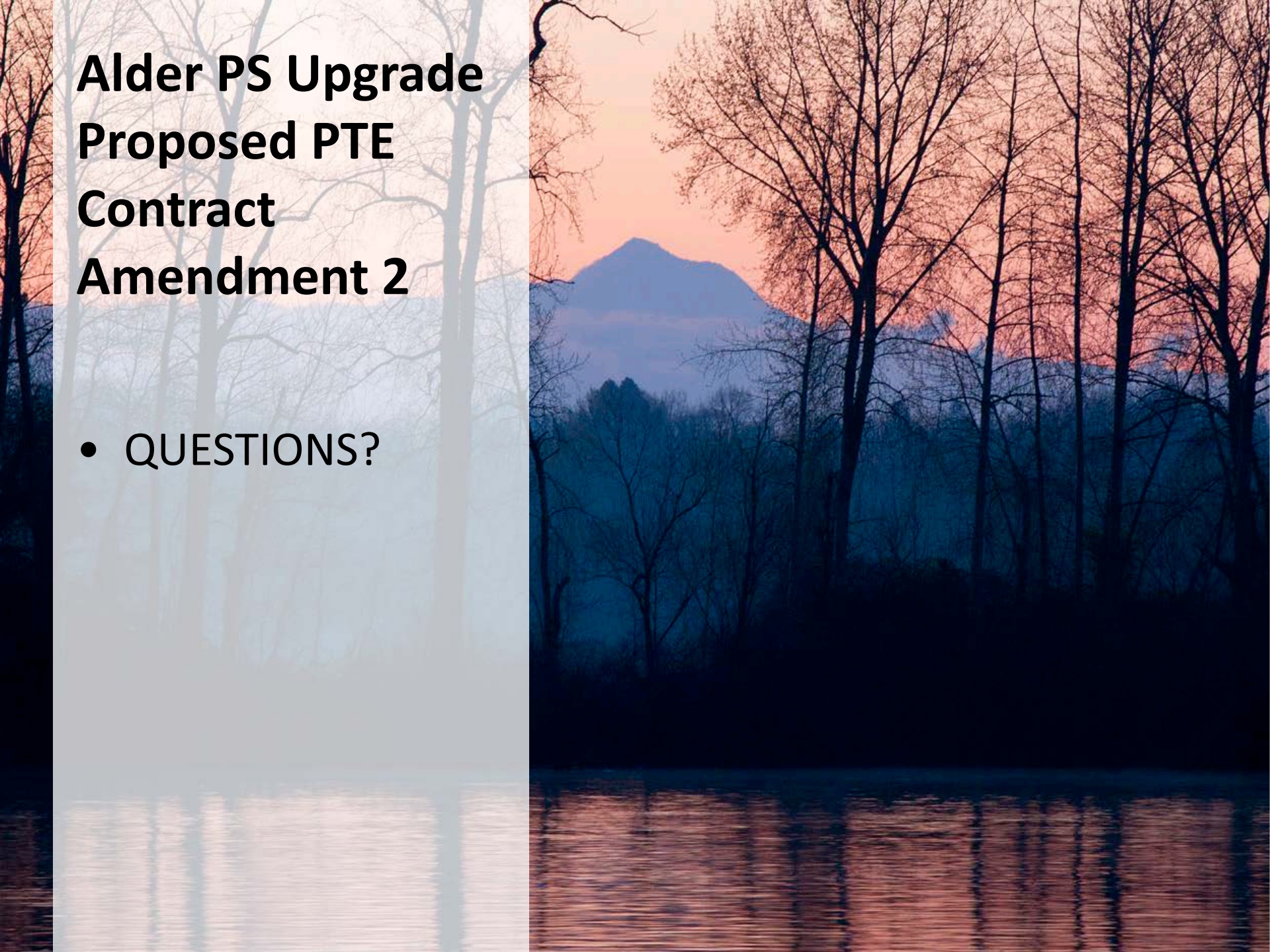


# Next Steps

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- Complete design in March 2015
- Procure a construction contract from March to June 2015
- An Ordinance to authorize execution of a construction contract will be presented for consideration during the procurement time
- Estimated construction period will be July 2015 through July 2016





# **Alder PS Upgrade Proposed PTE Contract Amendment 2**

- QUESTIONS?