CITY OF COOS BAY
CITY COUNCIL & URA BOARD
JOINT WORK SESSION

January 23, 2024 – 6:00 PM

Coos Bay Fire Department Community Room, 450 Elrod Avenue, Coos Bay

---

REVISED

Zoom Teams Remote Attendance Link & YouTube Link

1. Public Comment
   a. Public Comment
2. Review of the Upcoming City Council and URA Board Action Items
   a. Presentation by Wastewater Rate Consultant Steve Donovan
   b. Quarterly Update on the Coordinated Homeless Pilot Project
   c. Discussion Regarding Formation of Ad-Hoc Committee in Response to Increased Garbage and Crime
   d. Discussion Regarding Repeal of the City's Current Sidewalk Maintenance Policy
   e. Presentation of Drainage Issues Along the Highway 101 Corridor in the Downtown Area
   f. Quarterly Update of 2023-2025 Council Goals
3. Executive Session

   The City Council/URA Board will now meet in executive session pursuant to ORS 192.660 (2) (e) for the purpose of discussing real property transactions.
4. Adjourn

CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	1.a

TO: Mayor Benetti, Council President DiNovo and City Councilors

FROM: Christine Sylvester, Executive Coordinator

THROUGH: Nichole Rutherford, City Manager

ISSUE: Public Comment

ACTION REQUESTED:

No Action Required

ATTACHMENT(S):

- CC Public Comment Form.pdf

City of Coos Bay
PUBLIC COMMENT FORM

The City of Coos Bay values our citizen's input and participation in our various councils, boards, and commissions. In an effort to encourage access to participation, we have established a process by which the public can provide written comments in advance which allows for potential timely addition to the agenda topics of interest to the public. Each council meeting provides for a public comment period, as well as when a public hearing is held. Public comment is an opportunity to share information or concern with the council. Public comment is limited to three (3) minutes, per individual.

If you wish to provide public comment at an upcoming meeting, please fill out this form and submit to publiccomment@coosbayor.gov. You may also mail or hand deliver your completed form to 500 Central Avenue, Coos Bay, OR 97420; fax to 541-267-5912; or leave in the drop box at the front doors at City Hall. Completed forms must be received by 1:00 pm the day of the meeting to be added to Public Comment List.

Public Comment Rules:

- Public Comment Form must be completed before speaking.
- Limited to three (3) minutes per speaker.
- Coos Bay residents and business will be given preference for addressing the council during the time allotted for public comment.
- Speakers may not convey/donate their time to another speaker.
- Council cannot engage in question/answer conversations with the speaker.
- Questions/concerns about operations should be handled by city staff during regular business hours.
- The presiding officer has responsibility of enforcement of these rules, and may alter the order of speakers for efficiency.

Name:_____

Address:_____

Phone:_____ Email: _____

☐ I wish to speak to the City Council on the following agenda item/issue:

_____

☐ I have previously addressed the City Council on this issue.

☐ In lieu of speaking, I request the City Recorder to include my written comments into the public record (comment area provided on page two).

By signing below, I acknowledge the above public comment rules. Pursuant to ORS 192.420, this document is considered a public record and disclosure may be required upon request.

SIGNATURE REQUIRED **DATE**

_____ _____

Written Public Comment Area

CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	2.a

TO: Mayor Benetti, Council President DiNovo and City Councilors

FROM: Christine Sylvester, Executive Coordinator

THROUGH: Nichole Rutherford, City Manager

ISSUE: Presentation by Wastewater Rate Consultant Steve Donovan

SUMMARY:

Steve Donovan, the city's wastewater rate consultant, will provide information and methodology regarding future proposed wastewater user fee rate increases. The user fees are used to operate and maintain the city's two wastewater treatment plants, two dozen pump stations, and 90 miles of sewer/storm lines, in addition, the user fees fund capital improvements to the wastewater system.

ACTION REQUESTED:

No action required.

BACKGROUND:

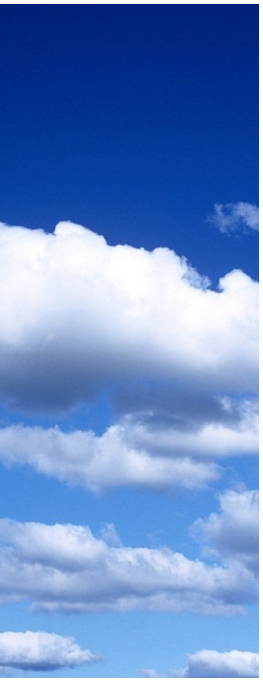
For over a decade, the city has contracted with Steve Donovan, of Donovan Enterprises, to perform annual wastewater user rate analysis. This normally occurs as part of the annual budget process. These efforts have helped to ensure that rates have small annual adjustments to adequately cover both the current period's operations and maintenance costs, but also support necessary capital projects through strategic financing through long-term debt available through state resources, such as Oregon DEQ and Business Oregon. Financing capital projects through long-term debt through state resources, provides for low interest loans that align with intent to maintain minimal user rate increases over time. Over the years, Mr. Donovan has provided an overview of his analysis process, long-term planning, and best practices for financially structuring the costs associated with operating such a large infrastructure asset the city's wastewater system is. As such, he offered to provide an overview in preparation for the upcoming budget process.

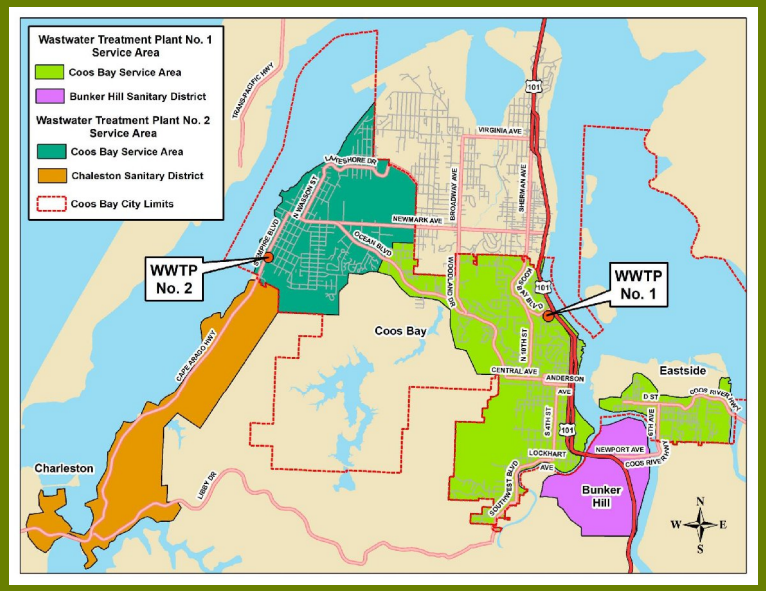
BUDGET IMPLICATIONS:

There will be time costs for this presentation, but the timely delivery of the information assists City Council, Staff and the public in understanding the strategic planning that goes into managing the city's wastewater system.

ATTACHMENT(S):

- Coos Bay City Council sewer rates presentation January 23, 2024 v1.pptx

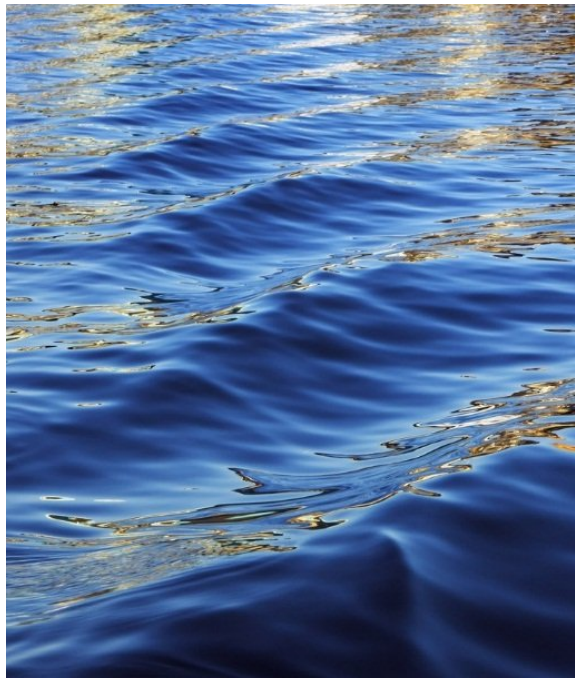




2024 Coos Bay Sewer Rates Review

January 23, 2024, City Council Work Session





Tonight's Agenda



Agenda

- The wastewater utility in brief
- The next challenge – Plant 1
- Wastewater rate profile
- Wastewater reserves profile
- Neighboring Communities' sewer rates
- Conclusions

Water Quality Utility at a Glance



Financial

- $31 million in principal outstanding on WW debt
- $16.5 million in cash on hand
- Single-family sewer bill is ~$79 per month



Operations

- Plant 2 in sixth year of full operations
- City has taken over operations & maintenance of the collection and treatment systems
- Plant 1 rebuild underway



Capital Planning

- $17.6 million capital budget this year (fully funded)
- Two (2) WW treatment plants
- 22 wastewater and 3 stormwater pump stations
- Over 100 miles of wastewater pipe from 8” to 60”; and 50 miles of storm lines

The Next Challenge – Plant 1

History and Background of Plant 1

- Located at 680 Ivy Street
- Originally built in 1950
- Upgraded in 1975
- Upgraded again 1990
- New upgrades scheduled 2023-2026

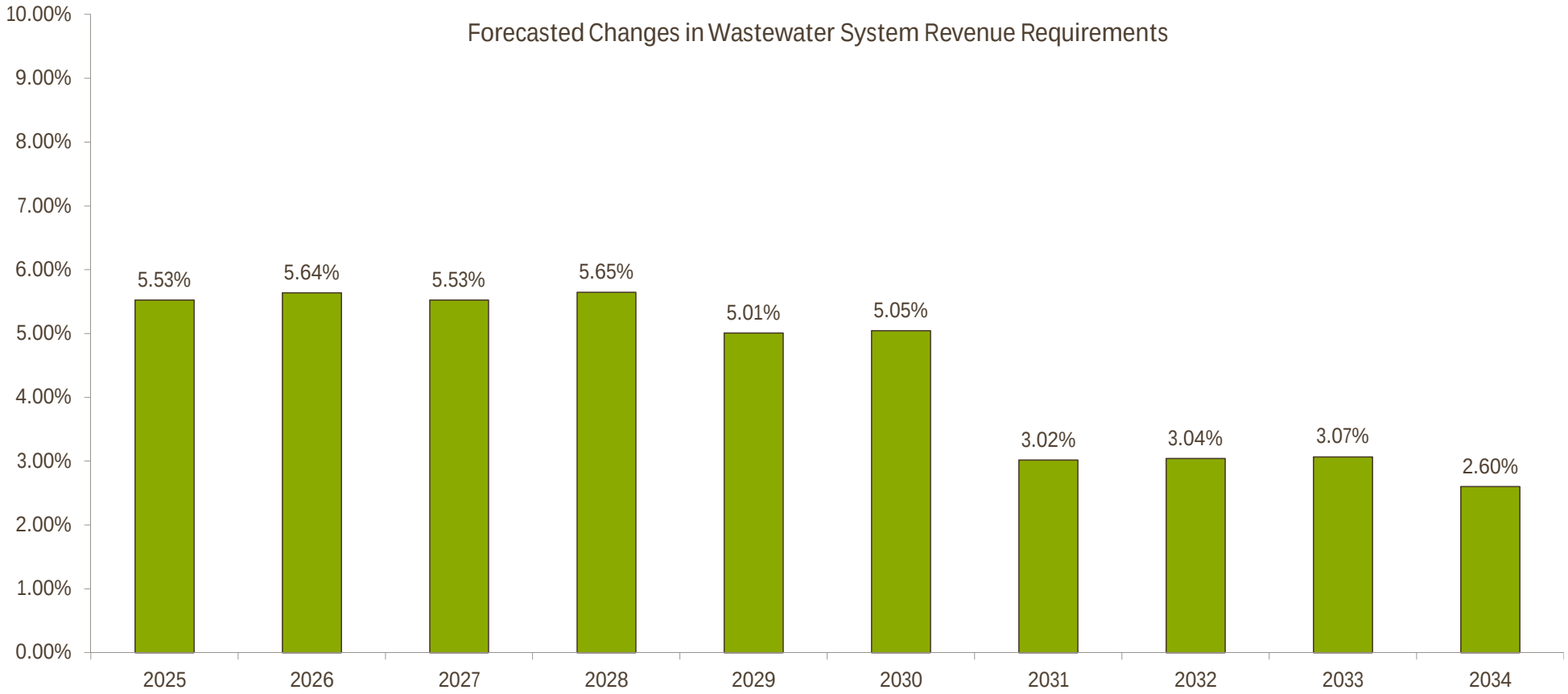
Cost and Funding Strategy

- Current budget is $23,888,180
- Funding through new DEQ SRF $24 million loan (2.79%)
- Rate model has a budget placeholder of $25 million

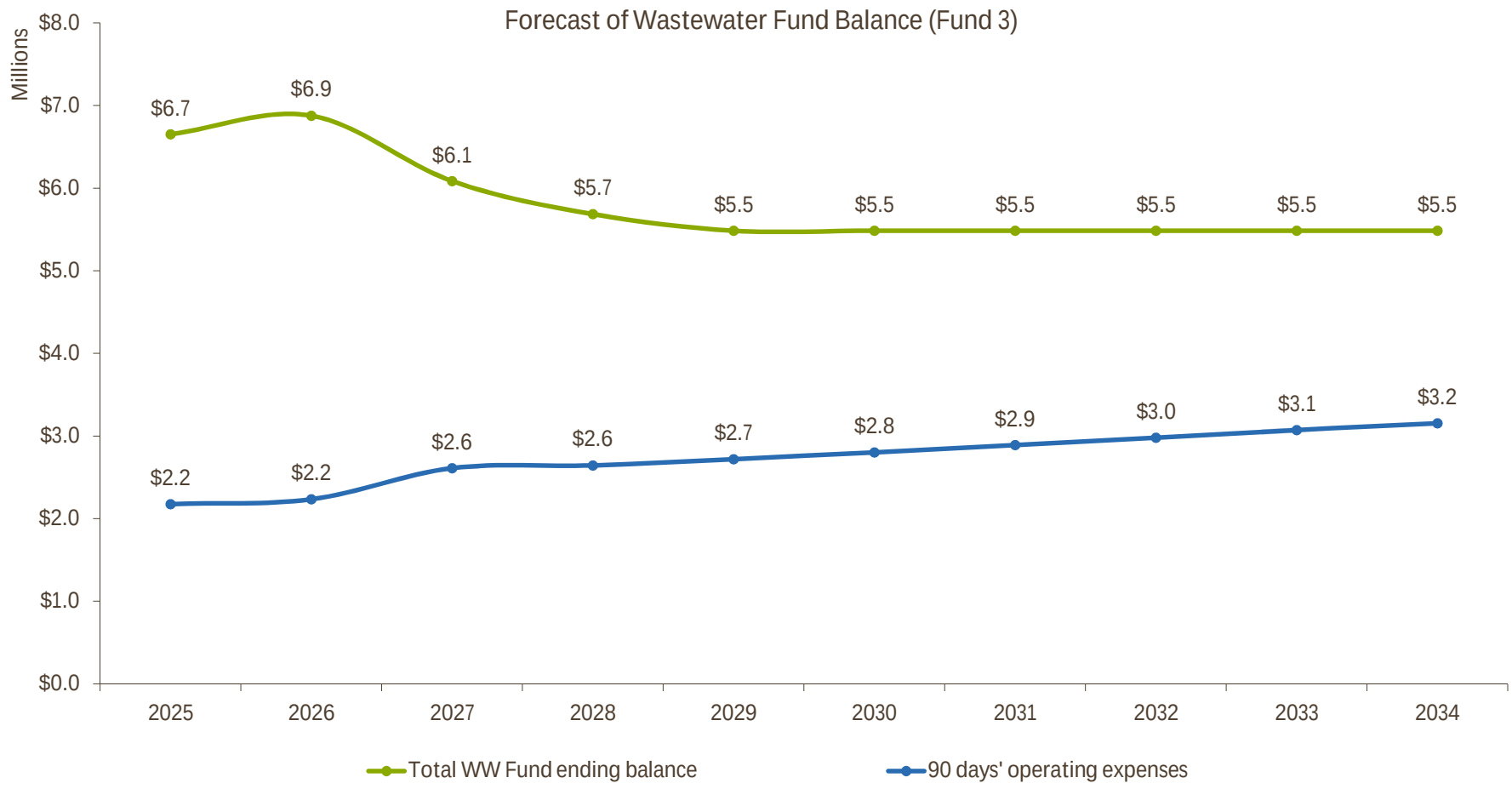
Unknowns

- Time to completion
- Costs are only estimations now
- Scope of project could change

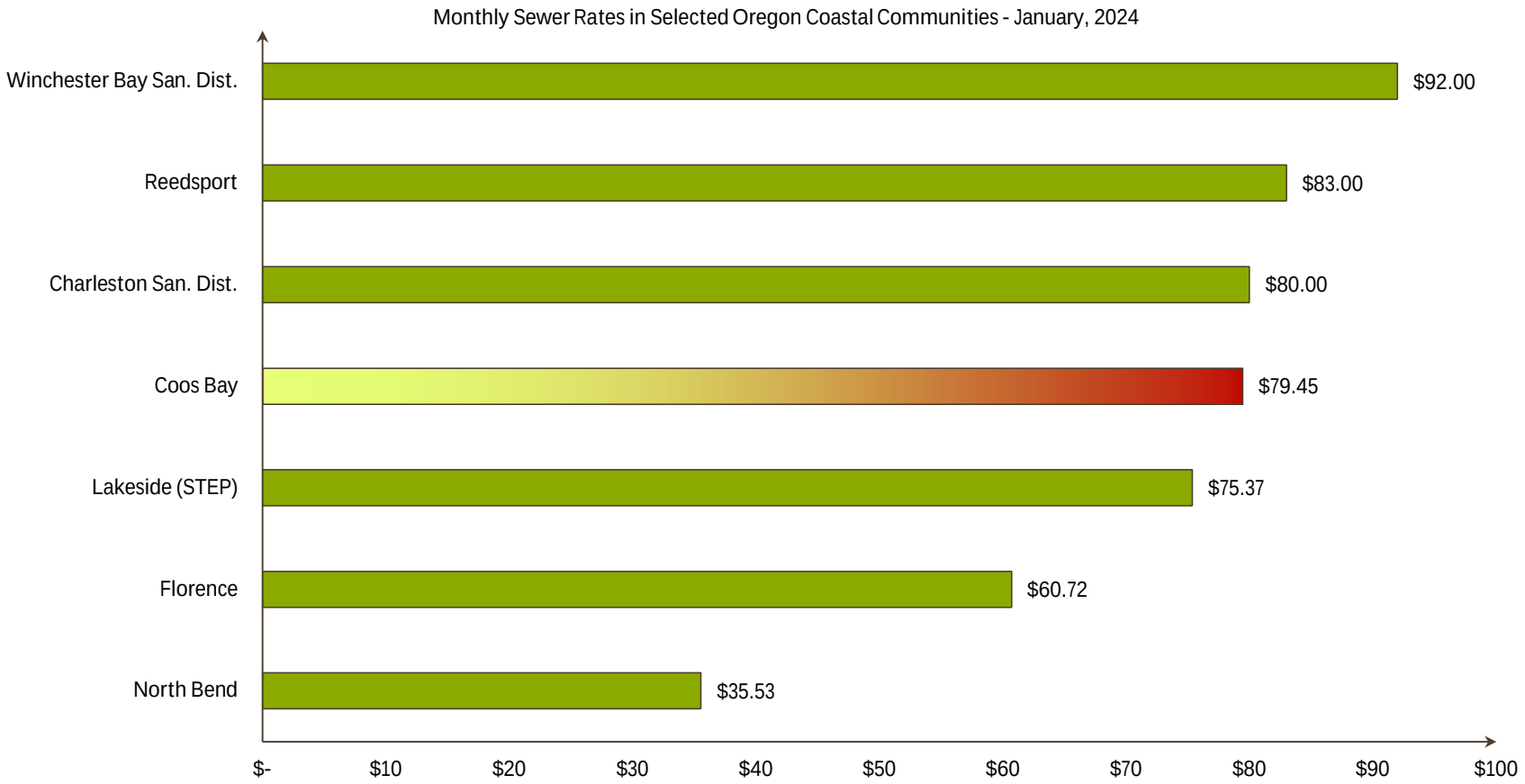
Wastewater Rate Profile



Wastewater Reserves Profile



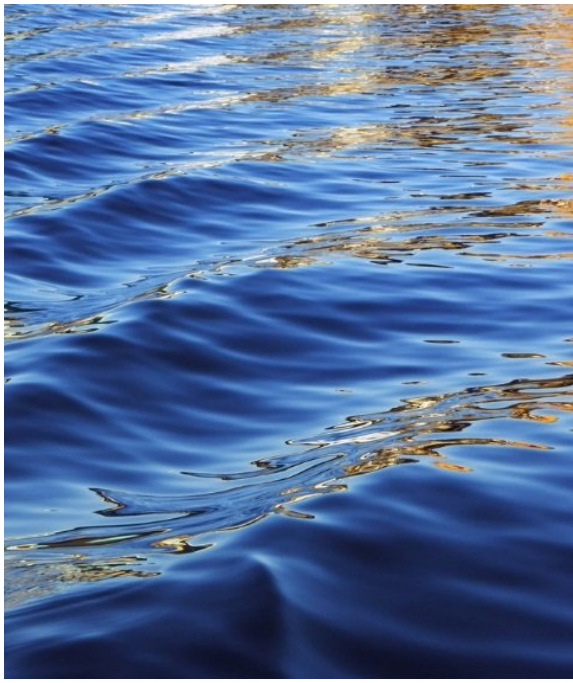
Neighboring Communities' Single Family Sewer Rates





Questions?

https://www.coosbayor.gov/home



CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	2.b

TO: Mayor Benetti, Council President DiNovo and City Councilors

FROM: Christine Sylvester, Executive Coordinator

THROUGH: Nichole Rutherford, City Manager

ISSUE: Quarterly Update on the Coordinated Homeless Pilot Project

SUMMARY:

In the spring of 2022, Coos Bay, North Bend and Coos County worked together to secure funding support through HB 4123. Together, the three entities were awarded $1 million in state funding over a two year period to operationalize a coordinated office to strengthen the community's homeless response. Eight groups throughout were awarded funding, as part of the Coordinated Homeless Pilot Project (Pilot). Each entity appointed two representatives to comprise the Advisory Board for the project. One of the requirements of HB 4123 is the establishment of a five (5) year strategic plan to address homelessness which Rural Development Initiatives (RDI) assisted with development of a strategic plan through community input. The Advisory Board has also hired a Director of the Coordinated Homeless Response Office who has worked to convene regular monthly meetings with each of Stakeholder Focus groups.

ACTION REQUESTED:

None.

BACKGROUND:

Coos County and the cities of Coos Bay and North Bend have come together under HB 4123 to develop a strategic plan to help address homelessness. These efforts began in spring of 2022 with the award of $1 million in state funding, payable over a two year period. Coos County was designated as the fiscal agent and the recipient of the grant funds. These funds were to be the building block of a larger coordination of community services, all focused to making positive impacting improvement in the homeless crisis affecting the larger community. Each of the three governmental entities approved an intergovernmental agreement (IGA), establishing the interest to coordinate efforts within the region, followed by appointing two representatives from each entity to reside on the Advisory Board. HB 4123 includes several requirements, including:

- Establishing a Coordinated Homeless Response Office
- Establishing an Advisory Board
- Developing Advisory Board Roles
- Plans for Coordination with Local Continuum of Care
- Establishment of Centralized Point of Contact for the Office
- Development Five Year Strategic Plan

Several of these steps have been met and regular meetings with the Stakeholder Focus Groups have been occurring monthly. A grant writer has been recruited and is working to identify grant opportunities and begin submitting grant applications. The Focus Groups are working to coordinate efforts and identify capacity concerns, as well as elements within the strategic plan this community could address over the

coming year.

BUDGET IMPLICATIONS:

None for the first two years. Coos County will serve as the fiscal agent and the coordinated pilot was awarded $1 million.

ATTACHMENT(S):

- Strategic Plan Coos County Coordinated Office on Houselessness 4_12_23.pdf

COOS COUNTY COORDINATED OFFICE ON HOUSELESSNESS



Strategic Plan Draft

RURAL DEVELOPMENT INITIATIVES

NONPROFIT CONSULTING

COOS COUNTY COORDINATED OFFICE ON HOUSELESSNESS

STRATEGIC PLAN DRAFT - APRIL 2023

INTRODUCTION

Coos County and the Cities of Coos Bay and North Bend are working to understand how our community can respond to the housing crisis affecting our neighbors and the broader community through interviews, surveys, and meetings. This planning process is stipulated in House Bill 4123 (HB4123), which identified eight pilot regions around the state to receive $1M towards improved coordination of housing services.

To date, a **Coordinated Office on Houselessness** has been created as a clearinghouse and coordination center for current and future services, over 60 people who provide services to the unhoused or are addressing the region's housing shortage have been interviewed, and over 200 people have responded to a survey about community perceptions of the issue. The strategic plan identifies community priorities and actions, will be approved by the elected bodies from each jurisdiction, and will be provided to the Oregon Legislature by May 23, 2023.

COOS COUNTY COMMUNITY VISION

The residents of Coos County will work together to address the root causes of houselessness, understand and support the struggles of our neighbors, and build pathways to ensure the region can provide stable, affordable housing and every resident can contribute to a proud community and a prosperous economy.



STRATEGIC PLAN CONTENTS





Key Stakeholder Analysis	p3
Community Survey	p5
What Problem Are We Trying to Solve?	p8
Community Defined Priorities	p10
Models to Learn From	p22
Glossary of Terms	p24
Plan Contributors	p28
Appendices and Resources	p32



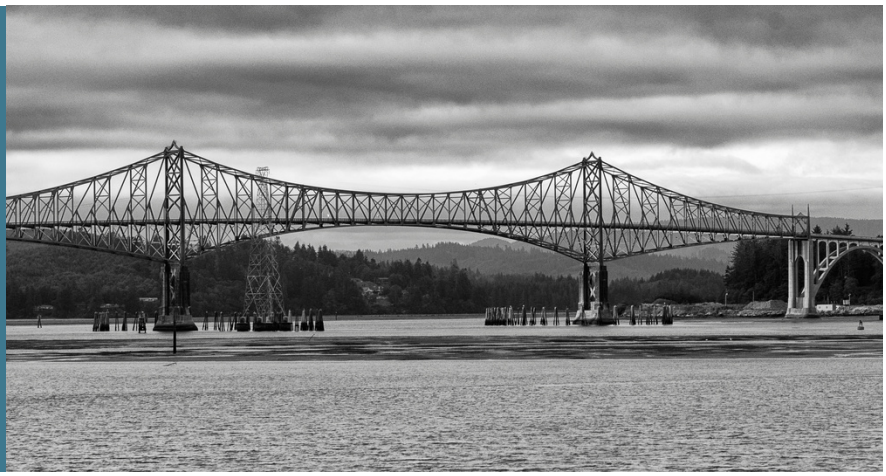
COMMUNITY-DEFINED PRIORITIES: AT A GLANCE

Interviews, workshops, and surveys conducted through the planning process generated the Community Defined Priorities below. The Strategic Plan provides suggestions on how to 1) **Build on what has been accomplished,** 2) **Focus on short-term action,** 3) **Plan for long-term strategies,** 4) **Understand available resources,** and 5) **Measure success** for each of these community-defined priorities:

- **Improve Coordination** of Housing & Houselessness Services among Agencies and Jurisdictions
- **Develop Pathways** to Supported Permanent Housing and Increase Workforce Housing
- Increase **Community Understanding** of the Housing Shortage and Services to the Unhoused
- Explore the **Root Causes** of Houselessness and the **Economic Impact** of the Lack of Affordable Housing
- Address Broader Community Concerns about **Public Safety** and **Trash Accumulation**
- Improve **Mental Health** and **Substance Abuse Services**
- **Advocate for Community Needs** Related to Housing and Homelessness at the State & Federal Level
- Identify and Address **Racial Disparities** in Providing Equitable Pathways to Permanent Housing

COOS COUNTY
COORDINATED OFFICE ON
HOUSELESSNESS
STRATEGIC PLAN DRAFT

KEY STAKEHOLDER ANALYSIS



To understand the full breadth of issues, opportunities and gaps related to housing and houselessness in Coos County, we interviewed and convened workshops with over 60 people who work on housing development, people who serve those who are housing-insecure, and people who are currently unhoused. Some common themes emerged:

- The most frequently identified priority among service providers is the **demand for additional beds** across the housing spectrum (emergency shelter, transitional housing, permanent supportive housing).
- While there is room for improvement, most stakeholders believe **services to the unhoused population are reasonably well-coordinated**. There are regular meetings of service providers, and a feeling that they have good relationships and are well-connected to one another.
- NIMBY sentiment is strong. There is a disconnect between those providing services to the unhoused and the broader community. **The community needs to be more engaged** as part of the solution, "turning frustration into curiosity".
- Some **entities outside of traditional social service agencies** are working on these issues, including public works departments, parks departments, police and fire departments, libraries, schools, youth and adult foster care providers, and faith-based organizations.

> "Most of the people I serve who are either homeless or in danger of becoming homeless are people I went to high school with and their kids. That is what makes this work important for me.
>
> – Drew Farmer, Former Executive Director, Oregon Coast Community Action



- Local leaders and service providers want **better pathways to ensure their success stories, barriers, and resource gaps are communicated to statewide leaders**, so that state elected officials and agency leaders understand the policy priorities and funding needed at the local level to make real change.
- **Efforts to develop more housing in the region seem separate from efforts to address homelessness.**
- Houselessness issues will not be resolved without **robust substance abuse and mental health services alongside housing**.
- **Services for the unhoused need to be tailored** to specific sectors of that population (families with children, senior citizens and disabled people on fixed incomes, veterans, youth exiting the foster care system, and people who are chronically homeless). Most believe services to veteran populations have improved.
- **Services for the unhoused are concentrated in the Coos Bay/North Bend area**, while legal services are in Coquille. CCAT and other transportation options are limited.

> There is a 'window of opportunity' when clients are available and indicate they are ready for services, and service providers need to mobilize quickly. If that window is missed, the situation often deteriorates.
>
> – Megan Ridle, Crisis Services Manager, Coos Health & Wellness

COOS COUNTY
COORDINATED OFFICE ON
HOUSELESSNESS
STRATEGIC PLAN DRAFT

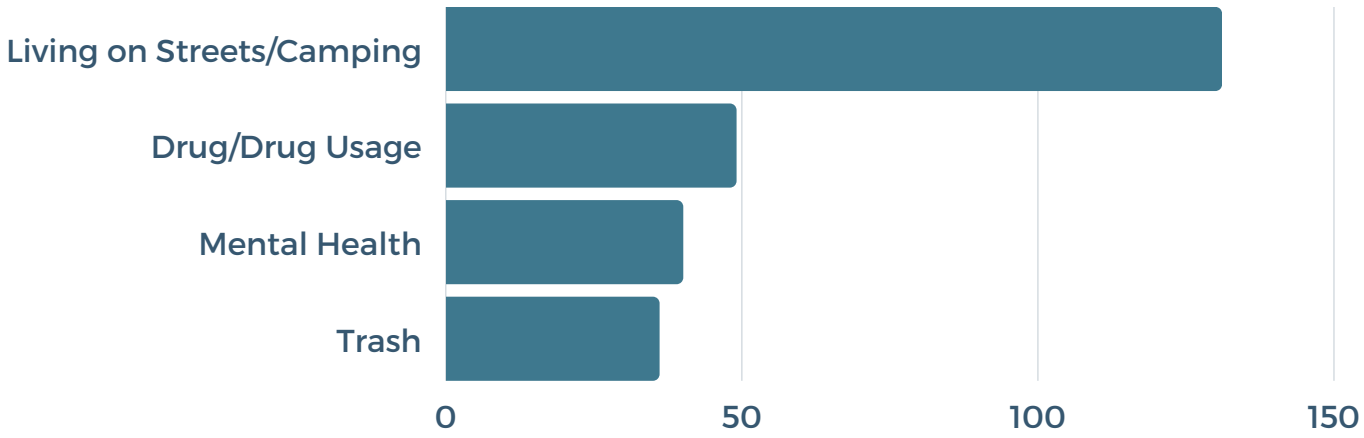
COMMUNITY SURVEY



To elucidate the broader community's understanding of the causes and impacts of the housing shortage and the effectiveness of services to the unhoused, we distributed a community survey online and in paper form. With over 200 respondents to date, an initial analysis of the results yields the following themes:

What does homelessness look like in your community?

Top responses:



Survey quotes

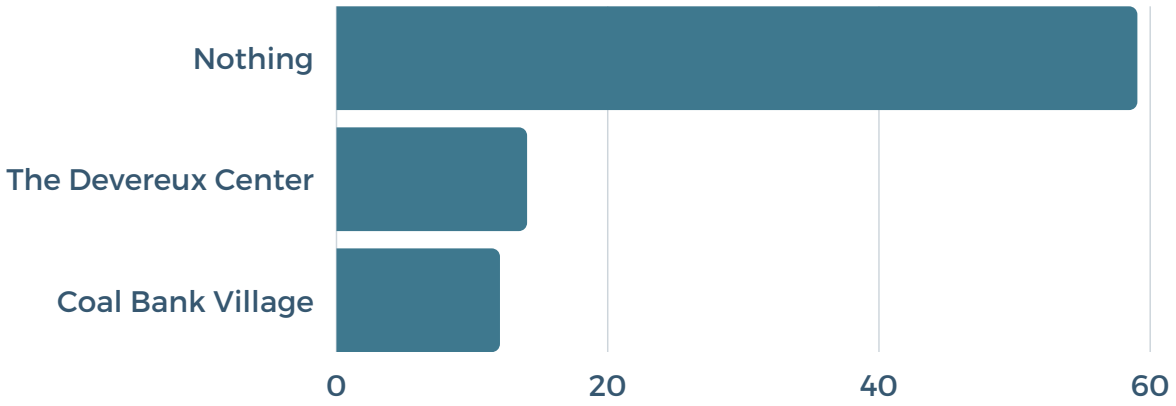
- "Homelessness is very visible! There are many who are living in vehicles, some are living on the streets while others camp in wooded areas around the city."

- "In my small community I have seen the homelessness go up over 50% in the last few years... We do not have the resources necessary to care for the amount of homeless individuals in our area."

> People who are homeless are living in crisis mode; there is a tremendous amount of stress and a focus on just getting through the day. Shelters with support services work as a way to stabilize someone so they can focus on next steps.
>
> – Ed Blackburn, former Executive Director, Central City Concern

What do you think is working well in addressing the housing shortage and services to the unhoused?

Top responses:



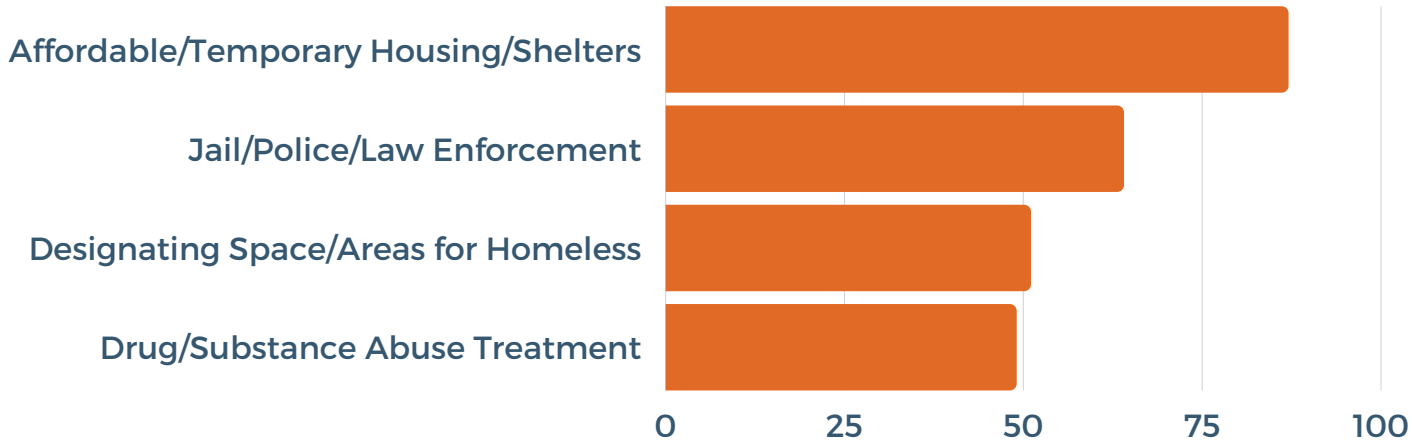
Survey quotes

- "I see nothing has worked well as of yet, but I feel that this is because no one has tried to do anything to fix the problem."
- “AYA - youth housing; BAFS substance use housing that includes all facets of sobriety - emergency to long term sober living; Devereux's pallet housing.”
- "Adding transitional sheltering, Coal Bank Village, is helping."

> The community needs to understand that preventing homelessness is cheaper than providing services after someone has lost their home.
>
> – David Milliron, City Administrator, City of North Bend

How can the region improve its approach to dealing with homelessness?

Top responses:



Survey quotes

- "Mental health, substance abuse—in treatment programs, housing for recovering addicts seeking long-term services. Incentives for the homeless to come and seek help—hand up, not a handout."
- "Peer support, non-denominational shelter, RV parking area, outreach, addressing the housing shortage, enacting legislation to increase affordable housing or restrict vacation rental properties."

How would you like to be involved in developing community solutions?

Top responses:

- Volunteering
- Attending meetings & engagements on an issue
- Joining a Committee
- Donating
- Continuing to pay taxes

> Research shows that the unhoused are more likely to recover from their situation and overcome barriers if they reside in their home community.
>
> – Patty Mulvihill, Executive Director, League of Oregon Cities

COOS COUNTY
COORDINATED OFFICE ON
HOUSELESSNESS
STRATEGIC PLAN DRAFT

WHAT PROBLEM ARE WE TRYING TO SOLVE?



To address the housing crisis we see every day, our community is working to support our neighbors who are at risk of losing their homes, pathways to housing for those who are living in cars, RVs, or on the streets, and affordable workforce housing to grow our economy. While there are many different opinions about how we reached this point and how this crisis can be addressed, **there must be a shared recognition of the complexity of this problem**, the many gaps in information, and the creative tensions in many of the solutions.

- **Demographics:** The population of unhoused in our community includes families with children, senior citizens on fixed incomes, youth exiting foster care, veterans, and the chronically unhoused. The broader community is divided about whether unhoused people are predominantly local or transient and whether homelessness is a choice or a predicament.
- **Data:** Sources such as PIT (Point In Time) Count, HMIS (Homeless Management Information System), ODE School Report Cards, Coos County Health Assessments, and other local stakeholder data can provide some information about the quality and quantity of services offered, but these sources are not integrated and can sometimes understate the problem. The Devereux Center has an interest in coordinating this effort and maintains its own database.
- **Crime:** The broader community would benefit from understanding the intersection between crime and the unhoused population.
- **Measure 110** (Drug Addiction Treatment and Recovery Act): The impacts to law enforcement and substance abuse recovery service providers need to be considered; there is a concern about decriminalization increasing our transient population, and there are also new resources available that benefit those who provide treatment services. HB 2513 proposes to address some concerns about this measure as part of the 2023 Oregon Legislative Session.

- **Economic Factors:** The shortage in both housing and services provided to the unhoused can be attributed to the decline in housing starts since the Great Recession, an increase in housing costs in coastal communities, an increase in vacation rental properties, jobs lost during the pandemic, and an increase in demand for mental health and substance abuse services.
- **Duplication of Services:** We need to identify silos or duplicated services that can be better coordinated.
- **Education:** The broader community must become more aware of and engage in the effort to address houselessness and support pathways to permanent housing.

> Why do people see more homeless on community streets as compared to 5 years ago? Bastendorff Beach Campground was closed by the County, followed by the Walmart parking lot and John Topits Park. Because these are no longer options for the unhoused, the problem has been pushed to more visible locations.
>
> – Tara Johnson, Executive Director, The Devereux Center

> It is imperative we understand poverty. Picking up trash is not important to them. Surviving is. People in poverty do not make any long-range plans. Compare those in poverty to birds – they do not think about anything other than where do they get food and where do they rest. The hope for the homeless is that they will make it through today or tonight. I'll worry about tomorrow, tomorrow. This strategy has to accommodate for that mindset.
>
> - Don Ford, Harmony Methodist Church

COOS COUNTY
COORDINATED OFFICE ON
HOUSELESSNESS
STRATEGIC PLAN DRAFT

COMMUNITY DEFINED PRIORITIES



The interviews, workshops, and surveys conducted to understand the perspectives and experiences of stakeholders and the broader community have generated the following priorities:

1. Improve Coordination of Housing & Houselessness Services among Agencies and Jurisdictions

Build on what has been accomplished:

- In 2017, there was a convening of agencies providing services to the unhoused.
- Many local work groups have been formed to collaborate on solutions, including the Coos Bay Homeless Work Group, the Housing Advisory Council, the Housing Alliance, and the Coos Housing Access Team.
- Those providing housing services report strong informal collaboration among agencies and some formal agreements.
- The Coos Health & Wellness Mobile Crisis Team is responding to mental health emergencies.
- Many churches provide support to at-risk members of their congregations. A subset of local faith-based organizations is meeting regularly to discuss issues, including services to the homeless.
- A Community Engagement Specialist is providing support services at local libraries.
- Coos County, the City of North Bend and the City of Coos Bay have created a Coordinated Office on Houselessness as a clearinghouse and coordination center for current and future services.



Focus on short-term action:

- Fully adopt UniteUs or similar technology to coordinate referrals across agencies.
- Revisit formal agreements to coordinate services that may need to be updated.
- Coordinate faith-based services in the community, and integrate those services with social service providers.
- Create networking opportunities for organizations providing services to veterans.
- Create a support group for service providers to prevent burnout.
- Integrate this strategic plan effort with that of the North Bend/Coos-Curry Housing Authority.



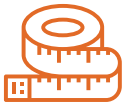
Plan for long-term strategies:

- Increase the capacity of The Devereux Center, including additional low-barrier shelter facilities and staff development for service providers.
- Increase routes and frequency of public transportation options.
- Consider developing support programs tailored to at-risk populations (e.g., teenaged mothers).
- Consider how to manage pets (Gizmo's Angels supports pet boarding), RVs, and other possessions when unhoused people are working toward permanent housing.



Understand available resources:

- HB4123 provides seed funding for improved coordination.
- HUD - Community Planning & Development (CPD) Distressed Cities and Persistent Poverty Technical Assistance Grants
- State of Oregon - OHCS- HOME Investment Partnerships ARP Funds
- HUD - Community Planning & Development (CPD) - Rural Oregon Continuum of Care Program



Measure success:

- Survey stakeholder groups to assess improvements in coordination.
- Establish benchmarks to determine whether better coordination of services has reduced the unhoused population and kept those at risk from losing their homes (PIT count, ODE School Report Cards, Coos County Health Assessments).

2. Develop Pathways to Supported Permanent Housing and Increase Workforce Housing



Build on what has been accomplished:

- Coos County created a 10-Year Plan to End Homelessness in 2009. There have been recent efforts to revisit and update this plan.
- Several Housing Needs Analyses have either been completed or are in process in the region.
- An inventory of surplus land for potential housing development has been created and maintained in Coos Bay.
- The Coos Housing Access Program Housing Trust Fund has been created to support housing development.
- Some emergency, transitional, and permanent supportive housing projects have been completed or are in process, including: Coalbank Village, Bangor School Property, Englewood School Property, Gloria Dei Lutheran Property, Empire Fire Hall Property, Coquille Tiny Homes Village, THE House, Bayview Village, Lakeview Village, Oceanview Transitional Housing, Sheridan Avenue Transitional Housing, Charleston School, Devereux Warming Center, Devereux People's Place, Willow House, Azalea House.
- Ordinances have been enacted to address unhoused issues and reduce barriers to housing development.
- The Homeward Bound Program was developed, and is funded annually, to help reconnect those in our area experiencing homelessness to their families or health support systems, and provide transportation to return them home.



Focus on short-term action:

- Develop flow charts to (1) visually demonstrate the services and initiatives that address prevention, crisis response, and ongoing stability, and (2) show the trajectory and integration of options from emergency shelters to permanent housing.
- Provide clients moving into transitional or permanent supportive housing with necessary supplies and supports, including utility deposits, furniture, toilet paper, and other supplies that go with moving into a new place, in addition to emergency housing vouchers that help cover the rent.

- Provide supports that help people with no rental history or poor credit.
- Create a Housing Production Strategy in response to the Housing Needs Analyses.
- Create a centralized list of available housing.
- Investigate the proliferation of sub-standard housing that has resulted from the housing shortage.
- Consider the impact of vacation rentals on available permanent housing.
- Educate private landlords about voucher programs, other subsidies available, and the support services provided for higher-risk tenants.
- Evaluate the effectiveness of the Homeward Bound Program (the Devereux Center recently assumed responsibility for this program).



Plan for long-term strategies:

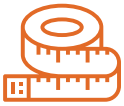
- Increase emergency shelter beds, especially for youth, families, and those needing ADA access.
- Increase capacity for proposal writing and grant administration for organizations that provide housing solutions.
- Create a revolving loan fund for housing developers (South Coast Regional Housing Group).
- Provide funding for payment of back rent, security deposits, and application fees.
- Re-evaluate fair market rental rates used to determine voucher values, to ensure housing vouchers can more effectively be used to find available housing.
- Create a Housing Navigation Center and/or hire staff to coordinate shelter and housing referrals.
- Consider an expungement program to reduce barriers to employment and housing.
- Ensure parks and open space planning are included in affordable housing development.



Understand available resources:

- HB4123 provides seed funding to define pathways to housing.
- COVID-19 Emergency Support
- Rapid Rehousing Vouchers (4-6 months, extensions up to 2 years)
- Housing Choice Vouchers (formerly Section 8)
- VA Supported Housing Vouchers
- HUD - Public & Indian Housing (PIH) - Choice Neighborhoods Planning Grants (Planning)

- HUD - Public & Indian Housing (PIH) - Choice Neighborhoods Implementation Grant (Capital)
- State of Oregon - OHCS- HOME Investment Partnerships ARP Funds
- OHCS - Housing Development Grant Program (Capital)
- USDA Rural Development - Housing Preservation Grant (Capital)



Measure success:

- Establish benchmarks to determine whether services have reduced the unhoused population and kept those at risk from losing their homes (PIT count, HMIS, ODE School Report Cards, Coos County Health Assessments, Devereux Center data).
- Determine if the housing goals outlined in Housing Needs Analyses and the Housing Production Strategy have been met.

3. Increase Community Understanding of the Housing Shortage and Services to the Unhoused



Build on what has been accomplished:

- Town Hall Meetings have been convened to understand the legal landscape, develop ordinances, and hear community input.
- Community Resource Officers, city staff, and service providers regularly speak to community groups and school classes to explain ordinances and services and to answer questions.



Focus on short-term action:

- Coordinate a centralized communications strategy, including a region-wide campaign to increase awareness (listening tours at schools and churches, social media content, neighborhood meetings).
- Consider utilizing law enforcement as a messenger because they are well-respected in the community.

- Create a FAQ page on City/County websites, as city staff often finds themselves answering the same questions from the community. Consider a centralized landing page for information about services to the unhoused and pathways to housing.
- Foster an understanding that many friends and neighbors have experienced housing struggles at some point, but are likely ashamed to share.
- Consider tours of emergency shelters and other facilities for local leaders.



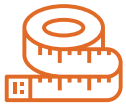
Plan for long-term strategies:

- Develop processes to continuously review a communications plan and make regular website updates to sustain outreach efforts.



Understand available resources:

- HB4123 provides seed funding to facilitate community engagement.
- HHS - Office of Community Services - Community Services Block Grant (CSBG) Federal Anti-Poverty Program
- HUD - Public & Indian Housing (PIH) - Choice Neighborhoods Planning Grants



Measure success:

- Define quantifiable goals for the number of community meetings, social media posts, and other communications tools to track progress and maintain momentum.
- Consider benchmark polling and subsequent surveys to measure changes in attitudes.

4. Explore the Root Causes of Houselessness and the Economic Impact of the Lack of Affordable Housing



Build on what has been accomplished:

- The economic impacts of the housing shortage have been considered as part of housing needs analyses.
- Local elected leaders have partnered with the business community, local service agencies, and faith-based organizations to develop affordable housing and workforce housing.



Focus on short-term action:

- Consider the impact of restrictions on the use of natural resources on (1) the cost of building materials and (2) the availability of family wage jobs in the region. Consider in particular the impact of current forest management practices on the supply of building materials.
- To fully understand the contributing factors, consider seeking funding for an in-depth analysis of the causes of houselessness and insufficient affordable housing and their economic impact in the community.



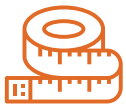
Plan for long-term strategies:

- Develop and implement actions emerging from in-depth economic analysis related to houselessness and housing supply.



Understand available resources:

- HUD - Community Planning & Development (CPD) Distressed Cities and Persistent Poverty Technical Assistance Grants
- U.S. Dept Health & Human Services (HHS) - Basic Center Program (for youth)
- U.S. Dept Health & Human Services (HHS) - Street Outreach Program (runaway and homeless youth)



Measure success:

- Develop and track local economic indicators based on root causes of houselessness to identify trends early.

5. Address Broader Community Concerns about Public Safety and Trash Accumulation



Build on what has been accomplished:

- The Community Resource Officer Program for Coos Bay, North Bend, and Coquille Tribe has successfully supported social service agencies and organizations working on pathways to housing and other support services.

- City and county staff have coordinated the cleanup of accumulated trash from informal camping areas for the unhoused population as resources are available.



Focus on short-term action:

- Consider resources needed to dispose of trash generated by campsites.
- Maximize the number of law enforcement officers trained to handle mental health crises and substance abuse disorders, and ensure coordination and deployment with the Mobile Crisis Team.



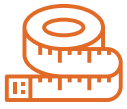
Plan for long-term strategies:

- Add more Community Resource Officers, Mobile Crisis Team professional staff, and/or a community volunteer program that can support their work, with particular attention to extending coverage to evenings and weekends.
- Continue to address understaffing at the Coos County Jail, which makes managing criminal activity in the region difficult.



Understand available resources:

- HHS - Office of Community Services - Community Services Block Grant (CSBG) Federal Anti-Poverty Program
- Office of Violence Against Women (OVW) - Transitional Housing Assistance Grants for Victims of Domestic Violence, Dating Violence, Sexual Assault, and Stalking Solicitation



Measure success:

- Consider benchmark polling and subsequent surveys to measure changes in attitudes.
- Ensure collection and reporting on crime data, including the housing status of the victims and offenders.

6. Improve Mental Health and Substance Abuse Services



Build on what has been accomplished:

- Some service providers meet regularly to discuss case management, with particular attention to people who are chronically homeless.



Focus on short-term action:

- Consider a plan to recruit community volunteers to understand and support services to the unhoused population.
- If VI-SPDAT or another assessment tool is being used to evaluate and prioritize candidates for emergency or transitional housing, consider a review to ensure that clients with substance abuse and mental health challenges are not prioritized lower if they are accessing services.



Plan for long-term strategies:

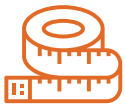
- Increase mental health and substance abuse services, emphasizing peer mentors for substance abuse treatment and mental health service providers.
- Change the parameters around involuntary commitment for mental health; provide more transitional housing for patients in Bay Area Hospital's psychiatric unit awaiting placement.
- Increase funding for supportive life skills (parenting, financial literacy, etc.) and workforce training programs to help people rejoin the workforce.
- Ensure clinical diagnoses for both mental health and substance abuse conditions reflect a tiered level of severity, and are "crosswalked" to appropriate services for each level.
- Add sobering and/or detox centers to support existing substance abuse support services.



Understand available resources:

- Oregon Department of Education - Youth Development Division (YDD) (Community Investment / Future Ready / Youth Workforce Readiness)

- Advanced Health - Health Related Services
- OHCS - Co-Location of Early Childhood Services and Affordable Housing RFP
- U.S. Dept Health & Human Services (HHS) - Grants for the Benefits of Homeless Individuals - Substance Abuse & Mental Health Services
- Substance Abuse and Mental Health Services Administration (SAMHSA) - Treatment for Individuals with Serious Mental Illness, Serious Emotional Disturbance, or Co-Occurring Disorders Experiencing Homelessness Program



Measure success:

- Utilize existing data to set benchmarks and goals related to providing support services in mental health and substance abuse to the unhoused population.

7. Advocate for Community Needs Related to Housing and Homelessness at the State & Federal Level



Build on what has been accomplished:

- Local officials have advocated for legislation at the state level that will help alleviate the housing crisis locally and provide resources for housing development and support services for the unhoused.



Focus on short-term action:

- Advocate to address delays in state funding related to capacity issues that adversely impact Community Action Agencies' ability to provide services to low-income populations.
- Improve Coos County agencies' relationship with the Rural Continuum of Care, part of the Community Action Partnership of Oregon.
- Communicate the unique needs of small communities, and an understanding that rural communities often work as a regional collaborative rather than as silos.
- Utilize Technical Assistance that the Department of Housing and Community Services (OHCS) provides.



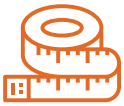
Plan for long-term strategies:

- Continue participating in associations and coalitions that advance public policy related to housing and houselessness to ensure local challenges and priorities are communicated to state leaders and to increase knowledge of available resources (League of Oregon Cities, Association of Oregon Counties, Oregon Mayors Association).
- Advocate for changes to state and local permitting and planning processes to reduce barriers to housing development.



Understand available resources:

- State of Oregon - OHCS- HOME Investment Partnerships ARP Funds
- Advanced Health - SHARE Initiative
- USDA Rural Development - Rural Community Development Initiative



Measure success:

- Develop a region-wide platform and track legislation related to housing and houselessness at the state level to determine whether local policy priorities are being addressed.

8. Identify and Address Racial Disparities in Providing Equitable Pathways to Permanent Housing



Build on what has been accomplished:

- Local agencies providing services to the unhoused collect and track demographic information related to the unhoused and the population at risk of losing their homes.



Focus on short-term action:

- Research and understand the racial and socioeconomic diversity of Coos County, and the history of inclusion in the region.
- Fully integrate local culturally-specific organizations into the collaborative work, including Coos Hispanic Alliance, the South Coast Equity Coalition, the Coquille Tribe Housing Authority, and the Confederated Tribes Housing Department.



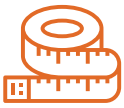
Plan for long-term strategies:

- Increase training in diversity, equity, and inclusion across the continuum of care.



Understand available resources:

- The Collins Foundation
- Oregon Community Foundation (Community-Based Organizations only)



Measure success:

- Utilize current data tracking methods to measure changes in demographics related to services to the unhoused population, as compared to the demographics of the general population.

> In law enforcement, most calls are handled in about five minutes. A Community Resource Officer has the ability to develop relationships and take more time with people. Building this trust is important to getting people the services they need... you need that one person to believe in you.
>
> – Officer Theran Coleman, Community Resource Officer, Coos Bay Police Department

COOS COUNTY
COORDINATED OFFICE ON
HOUSELESSNESS
STRATEGIC PLAN DRAFT

MODELS TO LEARN FROM



National models are often based on national aggregate data, which sometimes does not account for local differences in the types of services required in a community and the resources that are available to meet those needs. However, aspects of these models that address specific community needs can be useful to consider to the extent that they may apply to local conditions.

Housing First Model:

This is a labor-intensive model involving support services (e.g., substance abuse treatment, financial skills training, workforce skills training) alongside housing. The approach often fails because communities do not devote the resources they need to make it work - Housing First is ineffective if it's just housing. A few stakeholders mentioned that Seattle is a success story for this model. https://endhomelessness.org/resource/housing-first/

Built for Zero Model:

Built for Zero is a methodology used by over 100 cities and counties that committed to measurably ending homelessness, one population at a time. Using a community-level, data-driven approach, these communities have changed how local homeless response systems work and the impact they can achieve. Fourteen of those communities have ended homelessness for a population by reaching a standard called functional zero. More than half of those cities and counties have achieved reductions in the number of people experiencing chronic and veteran homelessness. https://login.builtforzero.org/our-approach/

Coordinated Access/Coordinated Entry Model:

This model is currently implemented by the Rural Continuum of Care, which includes Coos County. Coordinated entry is a process through which people experiencing or at risk of experiencing homelessness can access the crisis response system in a streamlined way, have their strengths and needs quickly assessed, and quickly connect to appropriate, tailored

housing and mainstream services within the community or designated region. Standardized assessment tools and practices used within local coordinated assessment processes consider the unique needs of children and their families as well as youth. When possible, the assessment allows households to access to the best options to address their needs, incorporating participants' choice, rather than being evaluated for a single program within the system. The most intensive interventions are prioritized for those with the highest needs. https://files.hudexchange.info/resources/documents/Coordinated-Entry-Core-Elements.pdf

VI-SPDAT Service Prioritization Decision Assistance Tool:

The Vulnerability Index-Service Prioritization Decision Assistance Tool (VI-SPDAT) has long been a critical tool in communities' assessments of prioritizing service delivery for people experiencing homelessness. Communities are shifting towards other tools, as the VI-SPDAT is now being phased out – but this leaves a gap in prioritizing people for services. For people dealing with mental health and substance abuse issues, a clinical diagnosis serves as a better assessment tool than the VI-SPDAT approach, as the severity of the diagnosis can be tied to different levels of services. https://endhomelessness.org/wp-content/uploads/2022/08/NextGenTools_VISPDATBrief_08-30-22.pdf

HUD Exchange - Public Information Notices:

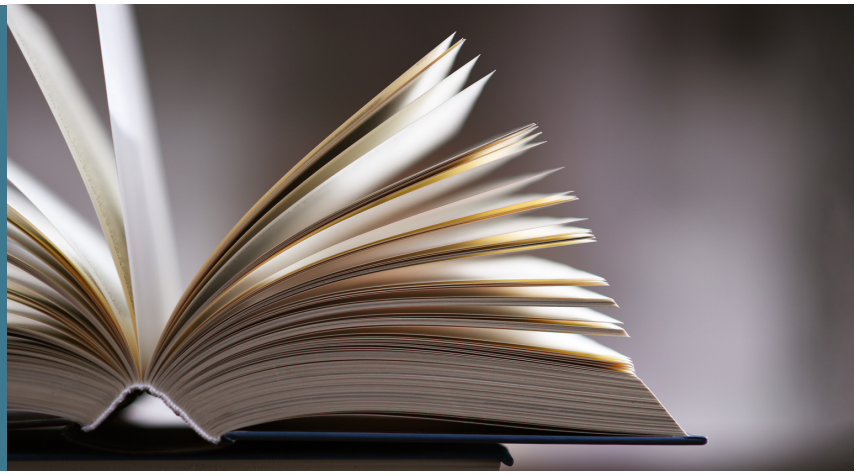
The U.S. Department of Housing and Urban Development administers a central information center for research and best practices related to housing and homelessness that may guide specific situations. Here is an example of information related to recovery housing for people with substance abuse disorders:
https://www.hudexchange.info/resource/4852/recovery-housing-policy-brief/

Housing Navigation Center Model:

New navigation centers began opening this summer to address pressing housing needs across Oregon. In 2021, the Oregon legislature passed HB 2006. The bill targeted resources toward emergency shelters to serve families and individuals who lack permanent housing. With the bill's passage, Oregon Housing and Community Services (OHCS) launched a newly named initiative called "A Path to Home: Navigation Centers of Oregon" that provided grants to community-based navigation centers linking housing to health by delivering trauma-informed "low barrier" supportive services as part of the Navigation Center models.
https://www.myoregon.gov/2022/08/22/navigation-centers-launch-across-oregon-providing-critical-health-and-housing-supports-as-part-of-new-housing-initiative/

COOS COUNTY
COORDINATED OFFICE ON
HOUSELESSNESS
STRATEGIC PLAN DRAFT

GLOSSARY OF TERMS



American Rescue Plan Act:

The American Rescue Plan Act was passed by the federal government to facilitate recovery from the economic and health effects of the COVID-19 pandemic. It includes emergency aid to cover back rent, mortgage payments, and utility costs through the Homeowners Assistance Fund, and it provides additional funding for families and individuals who are recovering from or at risk of homelessness.

ADA (Americans with Disabilities) Act:

The Americans with Disabilities Act was passed by the federal government in 1990 to protect people with disabilities from discrimination. Shelter facilities in Coos County have indicated a demand for more beds that are ADA accessible.

Built for Zero:

An approach to addressing homelessness in a community that utilizes Built for Zero consultants to help develop a data-driven approach with the goal of reducing the homeless population to functional zero: The number of people experiencing homelessness at any time does not exceed the community's proven record of housing at least that many people in a month.

Continuum of Care (CoC):

Continuum of Care (CoC) is a community plan to organize and deliver housing and services to meet the specific needs of people who are homeless as they move to stable housing and maximize self-sufficiency. Coos County works with the Rural Oregon Continuum of Care (managed by Community Action Partnership of Oregon).

Chronically Homeless:

Chronic homelessness describes people who have experienced homelessness for at least a year — or repeatedly — while struggling with a disabling condition such as a serious mental illness, substance use disorder, or physical disability.

Emergency Shelter:

Any facility, the primary purpose of which is to provide a temporary shelter for the homeless in general, or for specific populations of the homeless, and which does not require occupants to sign leases or occupancy agreements.

House Bill 2006:

This legislation was passed in Oregon during 2021 to provide more flexibility to allow for emergency shelters and motor-vehicle camping in response to the housing crisis. The bill includes grants from Oregon Department of Housing and Community Services for community-based Housing Navigation Centers delivering supportive services in addition to housing assistance.

House Bill 2513:

This bill is intended to address issues raised as part of a state audit of Measure 110 (drug decriminalization law) and is currently under consideration in the Oregon legislature. The bill adds oversight and coordination of grants and programs for addiction services.

House Bill 4123:

The 2022 Oregon Legislature passed HB 4123 to establish locally led, regional housing coordination through 8 pilots across the state, one of which is Coos County. Each pilot received $1 million in state funding to set up coordinated offices, with the goal of strengthening homeless response. These pilots are intended to build on and coordinate existing work and identify gaps in partnership with existing service providers.

Housing First:

Housing First is a homeless assistance approach that prioritizes providing permanent housing to people experiencing homelessness, thus ending their homelessness and serving as a platform from which they can pursue personal goals and improve their quality of life. This approach is guided by the belief that people need basic necessities like food and a place to live before attending to anything less critical, such as getting a job, budgeting properly, or attending to substance use issues.

Housing Management Information System (HMIS):

A Homeless Management Information System (HMIS) is as information technology system used to collect client-level data on the provision of housing and services to homeless individuals and families and persons at risk of homelessness. Each Continuum of Care (CoC) is responsible for selecting an HMIS software solution that complies with HUD's data collection, management, and reporting standards. Coos County works with the Rural Oregon Continuum of Care (managed by Community Action Partnership of Oregon) to track and report this information.

HUD (U.S. Department of Housing and Urban Development):

HUD is the federal agency that regulates and funds services related to housing and services to the unhoused, including grants to states and communities to support these services.

Low-Barrier Shelter:

Low Barrier Shelter means an Emergency Shelter that does not require any of the following for a client to stay at the shelter: criminal background checks, credit checks or income verification, program participation, sobriety, or identification. Low Barrier Shelters may enforce safety requirements for self, staff, place, and others.

Measure 110:

In November 2020, Oregon voters passed by referendum Measure 110, or the Drug Addiction Treatment and Recovery Act. The purpose of Measure 110 is to make screening health assessment, treatment and recovery services for drug addiction available to all those who need and want access to those services; and to adopt a health approach to drug addiction by removing criminal penalties for low-level drug possession.

NIMBY (Not in My Backyard):

Opposition to locating something perceived as unpleasant or undesirable in one's neighborhood, despite the fact that it is needed by the larger community.

Oregon Coast Community Action (ORCCA):

Oregon Coast Community Action (ORCCA), is non-profit organization created in 1965.The organization serves as a central clearinghouse for services to low-income individuals, children and families in the region, including Court-Appointed Special Advocates (CASA), Head Start, Energy & Weatherization Assistance, Food Share, and low-income housing.

ODE (Oregon Department of Education) School Report Cards:

In 1999 the Oregon Legislature passed a bill requiring that the Oregon Department of Education produce and issue annual report cards for all schools and districts. These report cards, also known as At-A-Glance School and District Profiles, are designed to collect and report information about demographics, student performance, and other factors. These profiles provide information about the number of homeless students in each school and district.

OHCS (Oregon Department of Housing and Community Services):

Oregon Housing and Community Services provides resources for Oregonians to reduce poverty and increase access to stable housing, including preventing homelessness, providing housing stability supports, financing the building and preservation of affordable housing, and encouraging homeownership.

Permanent Supportive Housing:

Permanent supportive housing combines affordable housing assistance with voluntary support services to address the needs of chronically homeless people. The services are designed to build independent living and tenancy skills and connect people with community-based health care, treatment and employment services.

PIT (Point in Time) Count:

The Point-in-Time (PIT) count is a count of sheltered and unsheltered people experiencing homelessness on a single night in January. HUD requires an annual count of people experiencing homelessness who are sheltered in emergency shelter, transitional housing, and Safe Havens on a single night. Unsheltered people experiencing homelessness are counted every other year (odd numbered years). Each count is planned, coordinated, and carried out locally. Oregon Coast Community Action Agency (ORCCA) coordinates this count in Coos County.

Transitional Housing:

Transitional Housing (TH) provides temporary housing with supportive services to individuals and families experiencing homelessness with the goal of interim stability and support to successfully move to and maintain permanent housing. Housing costs and accompanying supportive services can be provided for up to 24 months.

VI-SPDAT:

The Vulnerability Index – Service Prioritization Decision Assistance Tool (VI-SPDAT) is used by homeless service providers to assess the need to house and support individuals and families who are homeless or at risk of homelessness. The information gathered in the survey help match people to the appropriate housing pathway, healthcare and community services to enable an individual to make choices in line with their personal needs and available resources. Recent research has contributed to efforts to phase out this approach (see p. 23).

Draft plan contributors

Surveys, workshops, and one-on-one interviews were conducted to determine the priorities outlined in this plan, and the actions identified to address those priorities. The input was provided by over 200 community survey respondents, over 60 stakeholders, and includes the perspectives of unhoused people with lived experience. Community and stakeholder input will continue to inform future drafts of this plan.

Advisory Group Members

Name:	**Representing Agency:**
Commissioner John Sweet	Coos County
Jill Rolfe, Planning Director	Coos County
Councilor Drew Farmer	City of Coos Bay
Nichole Rutherford, Asst. City Manager	City of Coos Bay
Mayor Jessica Engelke	City of North Bend
David Milliron, City Administrator	City of North Bend
Andrew Brainard, Director, Office of Houselessness Coordination *(Staff Support for Advisory Committee)*	Coos County

Stakeholder Group Members

(outreach to additional stakeholders is still in process)

Name:	Representing Agency:
Jerry O'Sullivan	Adapt Integrated Health Care
Kera Hood	Advanced Health
Amanda McCarthy	Advanced Health
Anna Warner	Advanced Health
Scott Cooper	Alternative Youth Activities (AYA)
Melinda Torres	ARK Project / Coos Bay & North Bend School Districts
Steve Sanden	Bay Area First Step
Dr. Lee Saltzgaber	Bay Area Hospital
Cathy Salyers	City of Coos Bay Homeless Work Group
Chris Chapanar	City of Coos Bay
Rodger Craddock	City of Coos Bay
Fred Jacquot	City of Coos Bay
Councilor Stephanie Kilmer	City of Coos Bay
Rich Lamar	College Park Church
Theran Coleman	Community Resource Officer, Coos Bay PD
Shane Dunning	Community Resource Officer, North Bend PD
Josh Stevens	Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians

Shasta Pearson	Coos County Board of Realtors
Tina LaMar	Coos Health & Wellness
Renee Menkens	Coos Health & Wellness
Ann Rodriguez	Coos Hispanic Alliance
Bob More	Coquille Indian Housing Authority
Katy Halverson	Coquille Indian Tribe
Wayne Gallagher	Coquille School District
Tanya Sinko	Coquille School District
Jeff Lang	Coquille Valley Hospital
Stacy Farm	Department of Human Services
Pastor Trevor Hefner	Family Life Center Church of God
Mary Jo Jamsgard	First Presbyterian Church
Eric Lindsey	First Presbyterian Church
Dennis Smith	First Presbyterian Church
Yvonne Spooner	First Presbyterian Church
Tom Leahy	Former Coos Bay City Councilor
Pastor Don Ford	Harmony United Methodist Church
Chaplain Bill Moldt	Hauser Community Church / Oregon State Police
Matthew Vorderstrasse	North Bend / Coos-Curry Housing Authority

Haley Lagasse	North Bend Public Library
Tammy Aley	North Bend Public Library / Coos Health & Wellness
Michelle Brix	North Bend School District
Tiffany Rush	North Bend School District
Levahna Denicheko	Operation Rebuild Hope
Russ Shield	Operation Rebuild Hope
Anthony Velasquez	Operation Rebuild Hope
Thomas Lindahl	Police Captain, Coos Bay PD
Captain David Kauffman	Salvation Army
Stephanie Hadley	South Coast Community Housing Action Team
Bonnie Haynes	South Coast Gospel Mission
Joshua Haynes	South Coast Gospel Mission
Patrick Murphy	Southwestern Oregon Veteran Outreach (SOVO)
Stacy Dewater	Star of Hope Activity Center / City of Coos Bay Homeless Work Group
LouAnn Dewater	Star of Hope Activity Center
Tara Johnson	The Devereux Center
Stephanie Blondell	The SAFE Project

APPENDICES

Summary and Analysis of Faith-Based Organization Interviews

As a project volunteer, Barb Milliron interviewed faith-based organizations in the region to understand the services provided and the level of coordination. While the perspectives and experiences of this sector are integrated into the strategic plan goals and actions, we can also give this overview:

Twenty-three churches were contacted during February 2023. All of the churches were from the North Bend/Coos Bay area, except for one from Hauser, one from Powers, and one from Coquille. The Hauser and Coquille churches indicated that there is not really an issue with homelessness in their communities.

All churches are assisting the homeless community in their own way. Without exception, they first care for the needy in their own congregations. Most have benevolence funds set aside but must rely on tithing and offerings for the funding. Depending on the size of the church and the demographics of their congregation, they are providing at least one of the following:

- Toothbrushes, gloves, water
- Gas cards, motel money
- Blankets, clothing, food cupboards

A few of the churches have more structure to their ministries, providing sack lunches six days a week, breakfasts one day a week, and sacks of groceries daily. One church allows tent camping on their premises, and one church has three Pallet shelters and an RV home in its parking lot.

Except for that church, all others are not interested in Pallet shelters on their premises, citing safety concerns. They are also concerned about the impact of pallet shelters or similar on their neighbors. For those that do provide some emergency housing and camping, they require that people in these shelters must leave the premises during the day. The Devereux Center provides van service back to the Center during daylight hours. These churches also enforce rules related to garbage, quiet time, and substance abuse.

Policy Initiatives

- Governor's Executive Orders 2032-2, 2023-3, 2023-4 (https://www.oregon.gov/gov/pages/executive-orders.aspx). These executive orders apply to 7 of 8 Continuums of Care in Oregon; the Rural Continuum of Care was omitted from the orders, which includes Coos County. Coos County stakeholders have indicated they are not well-connected to the RCOC.
- There are over 80 bills that have been introduced as part of the 2023 Regular Session of the Oregon Legislature relating to Housing and Homelessness. Of particular interest: HB 2001/5019 (https://olis.oregonlegislature.gov/liz/2023R1/Downloads/CommitteeMeetingDocument/262335)
- Oregon Legislature Moving on Urgent Homelessness and Housing Priorities as Housing Leaders Announce Package Proposal (https://www.oregonlegislature.gov/housedemocrats/Documents/Oregon%20Legislature%20Moving%20on%20Urgent%20Homelessness%20and%20Housing%20Priorities%20as%20Housing%20Leaders%20Announce%20Package%20Proposal.pdf)
- Oregon Mayor's Association Proposal (https://www.oregonmayors.org/oma/page/oma-taskforce-homelessness)
- How Oregon Can Humanely and Rapidly Address Homelessness – OMA Briefing Book (https://www.oregonmayors.org/sites/default/files/fileattachments/oregon_mayor039s_association/page/4193/oma_briefing_book_2-27-2023.pdf)

Technical Assistance Resources

- ORCCA Pocket Resource Guide for Community Supports
- League of Oregon Cities Guide to Persons Experiencing Homelessness https://www.orcities.org/application/files/2816/5487/7061/LOCHomelessLegalGuide6-8-22.pdf
- Implementing a Regional Housing Needs Analysis Methodology in Oregon https://www.oregon.gov/ohcs/about-us/Documents/RHNA/RHNA-Technical-Report.pdf
- Oregon Housing Needs Analysis https://www.oregon.gov/lcd/UP/Pages/OHNA.aspx
- Oregon Housing and Community Services Technical Assistance Request Form https://app.smartsheet.com/b/form/b8d8efc0bb204567965dc7fd51f8870e
- HUD 2022 Annual Homeless Assessment Report https://www.hud.gov/press/press_releases_media_advisories/HUD_No_22_253

- U.S. Interagency Council on Homelessness Strategic Plan to End Homelessness https://www.usich.gov/fsp
- HUD Exchange (includes current research, evaluation, and best practices for housing issues) https://www.hudexchange.info/resources/
- Resolving Homelessness: The Critical Need for a Substance Use Disorder System of Care (commissioned by Oregon Community Foundation for PDX) https://homelessstrategicinitiatives.org/wp-content/uploads/2023/01/Resolving-Homelessness-SUD-System-of-Care.pdf

Local and Regional Funding Resources

Advanced Health, Arthur B. Dubs Foundation, Bay Area Hospital Foundation, Coos Bay Schools Foundation, Coos Foundation, The Collins Foundation, Coquille Tribal Community Fund, Cow Creek Umpqua Indian Foundation, Eugene & Marlaina Johnston Charitable Foundation, Floyd Ingram Charitable Foundation, Judith Ann Mogan Foundation, MJ Murdock Charitable Trust, North Bend School Foundation, Oregon Community Foundation, Southern Coos Health Foundation, Three Rivers Foundation, Weyerhaeuser Giving Community Fund, Wild Rivers Coast Alliance, The Ford Family Foundation, United Way of Southwestern Oregon.

Additional Government Funding Resources

- A Field Guide to Federal Funding for Affordable Housing in Rural Oregon
- Federal Funding Sources for Addressing Homelessness Tool, National League of Cities
- Federal Programs that Support Individuals Experiencing Homelessness https://www.usich.gov/resources/uploads/asset_library/Federal_Programs_that_Support_Individuals_Experiencing_Homelessness_041720.pdf

Coos County Coordinated Office on Houselessness Project

Strategic Plan - Potential Funding Opportunities

Prepared by: Kelley Nonprofit Consulting

Prepared for: Rural Development Initiatives

Prepared on: March 13, 2023

Prospective Funder Criteria

Geographic Area: Coos County, Oregon

Focus: Federal, state, and local foundation potential funding sources for housing and homelessness services

Funder or Agency Name	Program Name	Mission Alignment	Funder Type	Applicant Type	Support Type	Award Range	Due Date	Strategy and Suggested Preliminary Work	Additional Considerations	Website and RFP Links
Name of federal or state agency, or foundation	*Title of grant program, as applicable*	*Summary of primary funder goal is in alignment with project*	*Funding entity is federal, state, or foundation*	*Eligible application is county or community based organization*	*Current primary funding focus of grantor*	*Estimates are ranges based on currently available information. Please check website for the most up to date information*	*If available and known. Based on most recently released materials or forecasted status.*	*Details to review in advance of preparing application.*	*Further details on funding opportunity.*	*Links for further information.*
HHS- Office of Community Services	Community Services Block Grant	A federal anti-poverty program. To support services and activities for individuals and families with low incomes that alleviate the causes and conditions of poverty in communities.	Federal	County	Program	up to $500,000	2023 (forecast)	States receive funds according to a statutory formula. In turn, states fund a network of local eligible entities with 90 percent of their CSBG grant award. These local eligible entities include, but are not limited to, local governments, migrant and seasonal farm worker organizations, tribes and tribal organizations, and Community Action Agencies (CAAs). • Estimated total program funding: $13,103,823	https://www.acf.hhs.gov/ocs/fact-sheet/csbg-fact-sheet	
HUD - Community Planning & Development (CPD)	Distressed Cities and Persistent Poverty Technical Assistance Grants	Provide technical assistance - build capacity of local governments experiencing economic distress and assist local governments and their nonprofit partners in alleviating persistent poverty in specific areas	Federal	County	Technical Assistance	n/a	2023 (forecast)	Confirmed- Coos Bay is eligible city in Category 1: Economically Distressed and Category 2: Experiencing Persistent Poverty. Most local governments that participate in HUD's DCTA program will complete a capacity needs assessment	Examples of support: develop strategies for leveraging private sector investment, or access existing federal grant programs to finance community development projects. Local government will be lead agency however partner non-profit organizations can also receive direct technical assistance to support and complement the work of local government.	https://www.hud.gov/program_offices/comm_planning/cpdta/dcta
HUD - Public & Indian Housing (PIH)	Choice Neighborhoods Planning Grants	Affordable Housing Development: support locally driven strategies that address struggling neighborhoods with severely distressed public housing and/or HUD-assisted housing through a comprehensive approach to neighborhood transformation	Federal	County	Planning	Up to $500,000	2023 (forecast)	Comprehensive Needs Assessment; development of Transformation Plan (neighborhood revitalization strategy)	Annual grant program - FY23 NOFO coming available soon 2 year project period	https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy22_choice_neighborhood
HUD -PIH	Choice Neighborhoods Implementation Grants	Affordable Housing Development-- Rental Housing New Construction or Rehabilitation - Supports those communities that have undergone a comprehensive local planning process and are ready to implement their plan to redevelop the distressed public and/or assisted housing and neighborhood to create a viable, mixed-income community.	Federal	County	Capital	up to $50,000,000	2023 (forecast)	40-year affordability period for replacement unit; 20-year affordability period for non-replacement unit Needs to be a part of a revitalization plan. 5 percent match requirement	Annual grant program - FY23 NOFO coming available soon	https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy22_choice_neighborhood
HUD- (pass through State of Oregon Housing & Community Services)	HOME Investment Partnerships- HOME ARP	one-time funding for housing and services for chronically homeless populations and to stabilize households most at risk of homelessness	Federal	County	Capital, Program, Rental Assistance	TBD	Late Spring 2023 (forecast)	OHCS to submit allocation plan to HUD by 3/31/2023. Stakeholder consultation is ongoing, framework development underway.	$33m allocated to be spent by 2030 Eligible HOME ARP Activities: Creation/Preservation of Affordable Rental Housing Tenant-Based Rental Assistance Supportive Services, Homeless Prevention Services, and Housing Counseling Purchase and Development of Non-Congregate Shelter.	https://www.oregon.gov/ohcs/development/Documents/Draft%20Oregon%20HOME%20ARP%20Allocation%20Plan.pdf https://www.oregon.gov/ohcs/development/Documents/Oregon%20Homeless%20Housing%20Response%20NOFA%20Proposed%20Framework.pdf
Arthur B. Dubs Foundation		Improve access to basic needs such as food, medical care, and public safety in rural communities. Also emphasis on youth.	Foundation	CBO	Program	up to $100,000	Application period January - April each year	Connect with Foundation staff.	Minimum request of $1,000; average is $17,500; no maximum	https://ardubsfoundation.org/
HUD-Community Planning & Development (CPD)	Rural Oregon Continuum of Care Program	Promotes the community-wide commitment to the goal of ending homelessness. The program provides funding for efforts by nonprofit providers and state and local governments to quickly rehouse individuals and families experiencing homelessness.	Federal	County	Capital, Rental Assistance	up to $300,000	10/1/23	All potential project applicants – new or existing – must be registered in HUD's e-snaps internet-based data reporting/application system with active profiles and authorized representatives prior to beginning competition process. Registration due date March 2, 2023) Intent to apply deadline: September requirement - match/leveraged letters	25% match requirement Has to fall under a specific component type such as Permanent Supportive Housing, Rapid Rehousing, or Transitional Housing	https://oregonbos.org/hud-competition/
Judith Ann Mogan Foundation		Located in Coos Bay. Poverty Alleviating Initiatives: programs that provide a variety of assistance to people in the community who are the most in need such as: initiatives that work towards meeting basic needs including housing, food, healthcare, transportation, and clothing	Foundation	CBO, County	Program	up to $400,000	05/15/2023	Connect with Foundation in advance. Foundation requires LOI prior to full application. Annual grant cycle. Review website for detailed look at projects and funded amounts.	8 Priority Areas identified on an annual basis, subject to change.	https://jamoganfoundation.org/
Oregon Health Authority- Medicaid- Oregon Health Plan	Oregon Health Plan Substance Use Disorder 1115 Waiver DemonstationH	Oregon is expanding federal funding for Medicaid services for individuals with a substance use disorder (SUD) in residential treatment facilities with more than 16 beds.	Federal	County	Program	TBD	TBD	Final waiver approval/ pending. Will be effective through March 2026.	The SUD 1115 waiver would allow Oregon to pay all residential facilities using Medicaid funds. OHA will use these new funds to also provide the supports needed to prevent substance use disorder, identify substance use disorder and sustain long-term recovery.	https://www.oregon.gov/oha/HSD/Medicaid-Policy/Pages/SUD-Waiver.aspx
Office of Violence Against Women (OVW)	FY 2023 Transitional Housing Assistance Grants for Victims of Domestic Violence, Dating Violence, Sexual Assault and Stalking Solicitation	Supports programs that provide 6-24 months of transitional housing with support services for victims who are homeless or in need of transitional housing or other housing assistance as a result of a situation of domestic violence, dating violence, sexual assault or stalking; and for whom emergency shelter services or other crisis intervention services are unavailable or insufficient.	Federal	County	Program	$550,000	4/17/23	May now submit budgets for up to $400,000 for the 36-month period.		https://www.justice.gov/ovw/page/file/1569286/download
Oregon Community Foundation		Organizations that support priority populations, including people who are homeless/unsheltered.	Foundation	CBO	Program, Operating, Capital	up tp $30,000	Spring and Fall cycles annually	Connect with OCF Program Officer for your region to discuss proposal.	Grant Award Range for most applications $5,000-$30,000. Maximum award amount is $40,000	https://oregoncf.org/assets/PDFs-and-Docs/PDFs/Grants/Community-Grants/2023-Community-Grant-Program-RFP-Guidelines.pdf
Oregon Health Authority -(via Advanced Health CCO for Coos County)	SHARE Initiative	The SHARE Initiative- legislative requirement for coordinated care organizations (CCOs) to invest some of their profits back into their communities. Spending areas include: Housing stability/instability (including houselessness)	State	County	Program, Capital	up to $500,000	2023 spending plan to be released Spring 2023	A CCO's SHARE Initiative dollars must: Align with community priorities in the CCO's current community health improvement plan; Include any statewide priorities for SHARE spending that are identified in the contract between CCOs and OHA (currently housing-related services and supports); Include a role for the CCO's community advisory council; Involve community partnerships, with a portion of dollars going to SDOH-E partners (see definitions below); and Fit into one of four SHARE Initiative domains related to the social determinants of health and equity (SDOH-E): economic stability, neighborhood and built environment, education, and social and community health.	Not eligible for SHARE spending Housing or employment supports for members with a substance use disorder (SUD) diagnosis and other qualifying social needs Covered services in Oregon's SUD waiver, effective 2022 Defined housing, food and case management benefits for transition populations Centered benefits in Oregon's 1115 waiver, effective 2024 Helpful document that compares different CCO spending: https://www.oregon.gov/oha/HPA/dsi-tc/Documents/HRS-SHARE-ILOS-Comparison.pdf. https://www.oregon.gov/oha/HPA/dsi-tc/Documents/SHARE-guidance-updates-webinar-1-30-23.pdf	https://www.oregon.gov/oha/HPA/dsi-tc/Pages/SHARE.aspx
Oregon Health Authority -(via Advanced Health CCO for Coos County)	Health Related Services	Community benefit initiatives that align with the Coos County CHIP priorities- Health Equity- includes homelessness	State	County	Program	TBD		Only specific health-related services will be considered. Review details of Health Related Services here: https://www.oregon.gov/oha/HPA/dsi-tc/Documents/OHA-Health-Related-Services-Brief.pdf	https://www.oregon.gov/oha/HPA/dsi-tc/Documents/Health-Related-Services-FAQ.pd	https://advancedhealth.com/community-focus/coos-community-health-improvement-plan/

Oregon Housing and Community Services	Co-Location of Early Childhood Services and Affordable Housing RFP	Support for treatment/services for individuals with substance use disorders (SUDs) or co-occurring mental health conditions and SUDs (CODs) who are experiencing homelessness.	Federal	CBO	Program	up to $500,000	03/21/2023	Further expand opportunities to improve access to and delivery of coordinated, comprehensive services to reduce substance use and improve housing stability.	Up to $15,700,000 total funds available. Length of project period: up to 5 years	https://www.samhsa.gov/sites/default/files/grants/pdf/fy-23-gbhi-nofo.pdf
State of Oregon Housing & Community Services	Housing Development Grant Program ("Trust Fund")	For development of Affordable Housing - expand Oregon's housing supply for low- and very low-income families and individuals by providing funds for new construction or to acquire and/or rehabilitate existing structures.	State	County	Capital	up to $500,000		Contact: Edward Brown, Program Analyst Phone: (971) 218-1519 E-mail: Edward.Brown@oregon.gov	Eligible activities include: new construction, rehabilitation, and/or acquisition of low- and very low-income housing units; pre-development costs, such as pre-construction or pre-rehabilitation, planning, engineering or feasibility studies, appraisals, architectural plans, site acquisition, etc. incurred no more than six months prior to application.	
The Collins Foundation	Responsive Grantmaking	Funding areas include health equity; and a broad range of efforts to enhance community welfare.	Foundation	CBO, County	Program. Capital	up to $750,000	Multiple deadlines per year	Significant focus on DEI- meet with program officer in advance of request. Requires detailed demographic form as part of application submission.	Significant award range: $5,000 for a one-time project at a small organization to $750,000 for a large, three-year capital campaign.	https://www.collinsfoundation.org/responsive-grantmaking-submission-guidelines
The Eugene & Marlaina Johnston Charitable Foundation		Located in Coos Bay. Funding interests include homeless shelters, housing development	Foundation	CBO	Program	up to $100,000	No deadline	Establish initial relationship. 541-888-1005. See 990s for names of officers. Need to request grant application packet from Foundation.	5 year giving summary: 58 grants to 17 organizations totalling $1.275 million. Grant size varies significantly, $2,500 - $95,000.	https://www.guidestar.org/profile/45-3719828
U.S. Dept Health & Human Services (HHS)	FY 2023 Basic Center Program	provides temporary shelter and counseling services for homeless youth.	Federal	County	Program	$50,000 - $250,000	6/22/2023 (forecast)	Encourages grantees to incorporate a positive youth development (PYD) framework and a trauma-informed care (TIC) approach into their program	BCP grant recipients provide youth under 18 years of age with emergency shelter, food, clothing, counseling and referrals for health care. 2023 - Estimated Total Program Funding: $22,414,392	https://www.acf.hhs.gov/fysb/fact-sheet/basic-center-program-fact-sheet
U.S. Dept. HHS	FY 2023 Street Outreach Program	Funds street-based outreach and education for runaway and homeless youth. Under the age of 21, those at risk of sexual exploitation, trafficking.	Federal	County	Program	up to $500,000	6/22/2023 (forecast)	Requires grantees to incorporate a positive youth development (PYD) framework and a trauma-informed care (TIC) approach into their program	Street outreach services include: Street-based education and outreach Access to emergency shelter Survival aid Individual assessments Trauma-informed treatment and counseling Prevention and education activities (alcohol and drug abuse; sexual exploitation; sexually transmitted infections, including HIV; and physical and sexual assault) Information and referrals Crisis intervention Follow-up support	https://www.acf.hhs.gov/fysb/fact-sheet/street-outreach-program-fact-sheet
U.S. Dept. HHS	Grants for the Benefits of Homeless Individuals-Substance Abuse & Mental Health Services	provide comprehensive, coordinated, and evidence-based treatment and services for individuals, including youth, and families with substance use disorders (SUDs) or co-occurring mental health conditions and SUDs (CODs) who are experiencing homelessness.	Federal	County	Program	up to $500,000	3/21/23	Project period can be up to 5 years.	Estimated total project funding: $15,700,000	https://www.samhsa.gov/sites/default/files/grants/pdf/fy-23-gbhi-nofo.pdf
U.S. Dept. HHS - Substance Abuse and Mental Health Services Administration (SAMHSA)	Treatment for Individuals with Serious Mental Illness, Serious Emotional Disturbance or Co-Occurring Disorders Experiencing Homelessness Program	Integrates behavioral health treatment and recovery support services for individuals, youth, and families with a serious mental illness [SMI], serious emotional disturbance [SED], or co-occurring disorder (i.e., a SMI and substance use disorder [SUD] or a SED and SUD) who are experiencing homelessness.	Federal	County	Program	up to $1,000,000	05/03/2023	Program funding available for FY23: $15,842,993	The purpose of this program is to provide comprehensive, coordinated and evidenced-based services for individuals, youth, and families with a serious mental illness, serious emotional disturbance or co-occurring disorder who are experiencing homelessness or at imminent risk of homelessness (e.g., people exiting jail or prison without a place to live). Recipients will be expected to 1) engage and connect the population of focus to behavioral health treatment, case management, and recovery support services; 2) assist with identifying sustainable permanent housing by collaborating with homeless services organizations and housing providers, including public housing agencies; and 3) Provide case management that includes care coordination/service delivery planning and other strategies that support stability across services and housing transitions	https://www.grants.gov/web/grants/view-opportunity.html?oppId=342889
USDA Rural Development	Housing Preservation Grants	Repair or rehabilitation of housing owned or occupied by low-and very-low-income rural citizens.	Federal	County	Capital	up to $200,000	Currently closed	Confirmed- Coos County in property eligible area.	Provide grants or low interest loans to repair or rehabilitate housing for very-low- and low income families Rental and cooperative properties that house very-low and low-income tenants can also get help to repair or rehabilitate those units 2022- awarded $16 million in funding (last funding application cycle ended July 2022)	https://www.rd.usda.gov/programs-services/single-family-housing-programs/housing-preservation-grants
USDA Rural Development	Rural Community Development Initiative	To improve housing, community facilities, and community and economic development projects in rural areas. Can support training and technical assistance to sub-grantees.	Federal	County	Program, Technical Assistance	$50,000 - $250,000	Currently closed	Consult with state RCDI office.	Most recent deadline April 19, 2022 Matching funds required	https://www.rd.usda.gov/programs-services/community-facilities/rural-community-development-initiative-grants/or
Weyerhaeuser Community Giving Fund		Affordable Housing is one of seven priority funding areas	Foundation	CBO, County	Program	Grants vary in scale in relationship to company presence in the community and the philanthropic budget available for the year	6/30/2023	Serves specific counties with business presence. Confirmed Coos County is included in eligible area. We do recommend making a local connection with our employee advisory committee members in your area.	Minimum request of $1,000. Applications are processed throughout the year — but may be submitted at any time during our cycle year. For 2023, the deadline is September 30.	https://www.weyerhaeuser.com/company/values/citizenship/giving-fund/
Bay Area Hospital	Community Foundation	Community Grants each year to organizations working in innovative, collaborative ways with other nonprofits or agencies to foster better health and quality of life for residents of Oregon's South Coast.	Foundation	CBO	Program	up to $250,000	Currently on hold	Need to demonstrate organizational partnerships. Grant history- largest award was $250,000 although most grants are significantly smaller	Bay Area Hospital's Community Foundation awards grants through our Foundation on an annual basis. The annual deadline is March 1. The awards are announced prior to June 30.	https://bayareahospital.org/about-bay-area-hospital/foundation/community-grant-application/
Coquille Tribal Community Fund		Targeted support to North Bend and surrounding area. General giving purposes to strengthen community and improve lives.	Foundation	CBO	Program	$5,000 - $30,000			Annual grant opportunity to be annouced in Sept 2024	https://www.coquilletribe.org/
Floyd Ingram Charitable Foundation		Located in Myrtle Point, OR.	Foundation	CBO	Program	up to $10,000		Located in Myrtle Point, OR. Small grants (under $10,000) to human services	5 year giving summary: 2,200 grants to 1,132 organizations totaling $6.4 million.	

Not A Match - Funding Opportunities

Additional funders not currently a match due to required eligibility, timing, or project timeline.

Funder Name	Purpose	Reason	Revisit in Future?	Additional Considerations	Web Links
	The primary goal of funding agency.	*Explanation of why funding source may not be a fit.*		*Further details on funding opportunity.*	
Oregon Housing & Community Services (OHCS) Permanent Supportive Housing	to expand the state's supply of affordable housing designed to serve households experiencing chronic homelessness. Supports Capital, Rental Assistance, and Service Delivery	The PSH NOFA (#2023-4) is open to teams that have completed one of the three OHCS-sponsored Corporation for Supportive Housing (CSH) Supportive Housing Institutes (2019-20, 2020-21, 2022), and to Developers who were part of a team that went through at least one of the three Supportive Housing Institutes.	Yes. Awarded through an annual PSH NOFA process. (January release, August decision)	PSH Projects must: Utilize project-based rental assistance to ensure PSH units are deeply and sustainably affordable for households with little to no income. Offer on-site comprehensive tenancy support services that are voluntary for residents. PSH teams must complete the Oregon Supportive Housing Institute put on by our partners, Corporation for Supportive Housing. See under "Building PSH Capacity in Oregon" for more information. Projects and teams that have completed the Supportive Housing Institute are prioritized for PSH funding.	https://www.oregon.gov/ohcs/development/Documents/PSH%20Services%20Framework%20Updated%2012.22.22.pdf
USDA: Rural Housing Site Loans	Rural Housing site loans provide two types of loans to purchase and develop housing sites for low- and moderate-income families	Loans only, Non-profits	If applicable for CBOS		https://www.rd.usda.gov/programs-services/single-family-housing-programs/rural-housing-site-loans
HHS: Family Violence Prevention and Services Act (FVPSA) Emerging Issue Resource Center on Safe Housing	Technical assistance is targeted for homelessness service providers, CoCs, and domestic violence service providers.	Technical Assistance only for CBOS working at intersection of homelessness and domestic violence	if applicable for CBOS	Would work collaboratively with technical assistance providers	
HHS: Community Mental Health Services Block Grant	Mental health services for adults or children with serious mental illness	Cannot apply directly. Eligible recipients: State Mental Health Authorities, not housing specific	No	Only State mental health authorities and single state agencies can submit applications. These dollars may be regranted though health subcontract with local governments or providers to provide community mental health services	https://www.samhsa.gov/grants/block-grants/mhbg
Ford Family Foundation	Support rural-based communities, focus on education, children, community	Programming/projects not eligible: Senior centers; Housing, food banks, transportation or other basic needs; Medical facilities when connected to a larger profit-based system; Basic community infrastructure like water treatment, sewage or lighting; Museums without a focus on children or strong outreach programs	No		https://www.tfff.org/how-we-fund/grants
Enterprise/Wells Fargo: 2023 Housing Affordability Breakthrough Challenge	2023 Housing Affordability Breakthrough Challenge	Application period closed, but example of types of competitive national grant programs that comes available	Yes, If renewed in 2024	Quasi-governmental organization, Housing Authority and Housing Finance Agency with 501(c)(3) entity $20 million to be distributed	https://www.enterprisecommunity.org/housing-affordability-breakthrough-challenge/round-1
HUD-PHI	Hope VI Main Street Program	Assist the renovation of a historic or traditional central business district, or "Main Street" area, by replacing unused, obsolete, commercial space in buildings with affordable housing units.	Yes - with the right project for downtown capital revitalization	County. 2 grants distributed ($500,000 each). Future solicitations are anticipated, but there has not been NOFO released since 2021.	https://www.hud.gov/mainstreet

CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	2.c

TO: Mayor Benetti, Council President DiNovo and City Councilors

FROM: Nichole Rutherford, City Manager

THROUGH: Nichole Rutherford, City Manager

ISSUE: Discussion Regarding Formation of Ad-Hoc Committee in Response to Increased Garbage and Crime

SUMMARY:

Staff will present some proposed meeting dates and times, general topics of discussion for inaugural meeting, and composition of the committee.

ACTION REQUESTED:

Discuss the potential meeting time, agenda items, and committee composition.

BACKGROUND:

At the January 16, 2024, following public interest to discuss challenges facing the community regarding increasing amounts of garbage and crime, recommendation was made by the City Council to establish an Ad-Hoc Committee to allow greater time to discuss the challenges and brainstorm solutions. Council President DiNovo and Councilor Kilmer noted interest in sitting on the committees, as did a member of the public who was in attendance, Chris Castleman.

ATTACHMENT(S):

CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	2.d

TO: Mayor Benetti, Council President DiNovo, and City Councilors

FROM: Jim Hossley, Public Works & Community Development Director

THROUGH: Nichole Rutherford, City Manager

ISSUE: Discussion Regarding Repeal of the City's Current Sidewalk Maintenance Policy

SUMMARY:

The city adopted an ambitious sidewalk maintenance policy in February 2014. The city does not have the resources to meet the standards set forth in the policy. The city's insurer has recommended that the city consider repealing the policy.

ACTION REQUESTED:

If it pleases the Council, discuss repeal of the city's adopted sidewalk maintenance policy dated February 18, 2014 and direct staff how you wish to proceed.

BACKGROUND:

The city's adopted sidewalk maintenance policy is a good document. However, based on the city's available resources, it sets unrealistic standards particularly with regard to proactive inspections. The city was recently sued for an injury a person sustained due to tripping on a city sidewalk adjacent to city owned parking lot along Commercial Avenue. The case went to court and the city was ordered to pay approximately $12,000 for medical expenses. The attorney representing the city, along with the city's insurer, believe the plaintiff would not have been awarded the payment had it not been for the sidewalk maintenance policy. The city's insurance company (CIS) recommends the city repeal the policy.

BUDGET IMPLICATIONS:

N/A

ATTACHMENT(S):

- SIDEWALK MAINTENANCE PDF PROGRAM Final Draft approved by council 021814.pdf
- CBMC Chapter 12.10.pdf



City of Coos Bay

Public Works & Development Dept.

500 Central Ave., Coos Bay, Oregon 97420 • Phone (541) 269-8918
Fax (541) 269-8916

Sidewalk Maintenance Policy

Adopted February 18, 2014

Table of Contents

1.0 Overview
1.0 Goal
1.0 Industry Practices for Responsibility of Sidewalk

2.0 Policy
2.1 Sidewalk Maintenance Criteria
2.2 Responsible Party
3.0 Inspection
3.1 Proactive Inspection
3.2 Reactive Inspection

4.0 Levels of Priority

5.0 Reconstruction of Sidewalk

6.0 Volunteer Involvement
6.1 Volunteer Repair Work
6.2 Community Verification

7.0 City Standards

8.0 Sources of Funding

Attachments
Attachment 'A': Sidewalk Trip Hazard Examples
Attachment 'B' Volunteer Agreement
Attachment 'C' Volunteer Authorization
Attachment 'D' Volunteer Authorization & Release Form for Participants under Eighteen & Older
Attachment 'E' Volunteer Sign-in Sheet

1.0 Overview

Over time sidewalks are damaged from weathering, tree roots and regular use. A sidewalk maintenance program to regularly repair or reconstruct damaged sidewalk is important for ensuring pedestrian safety on city sidewalks. The Concrete Sidewalk Maintenance Program for City of Coos Bay is administered by the Public Works Department (PWD) and involves daily field inspection for trip hazards, management of work orders, collaboration with code enforcement to provide immediate short-term repair, and planning to provide timely delivery of long-term repair solutions.

1.1 *Goal*

The goal of the Concrete Sidewalk Maintenance Program is to prevent and repair sidewalk trip hazards in a timely manner in the interest of public safety and welfare.

1.2 *Industry Practices for Responsibility of Sidewalk*

According to the U.S. Department of Transportation, Federal Highway Administration (FHWA), city charters commonly specify that the city cannot be held liable for any accidents or injuries incurred due to sidewalk conditions. The City of Coos Bay code assigns complete responsibility of sidewalk maintenance to the owner of the adjacent property. Many other cities have adopted similar type of sidewalk policy.

Coos Bay Municipal Code, Chapter 12.10 Sidewalk Construction and Repair, assigns sidewalk repair responsibility to the abutting property owner. The City of Coos Bay maintains public sidewalks according to Coos Bay Municipal Code, Chapter 12.10, and this Sidewalk Maintenance Policy.

2.0 Policy

2.1 Sidewalk Maintenance Criteria

Sidewalk trip hazards for the City of Coos Bay are defined by the following criteria:

- Vertical separation greater than ½”
- Horizontal separation greater than ½“
- Vegetative overgrowth encroaching onto the concrete sidewalk area
- Obstructions located within the sidewalk area
- Other defects deemed necessary for repair

These criteria are based on the guidelines provided in Chapter 10 Sidewalk Maintenance and Construction Site Safety, of the U.S. Department of Transportation, Federal Highway Administration as well as on current industry practices by municipalities across the United States.

2.2 Replacement

Any sidewalk that is replaced will match existing surfaces in order to be consistent with the existing sidewalk surface abutting it. For example, for sidewalk where the original brush finish has weathered to expose course aggregate, the surface finish for any new replacement section will be made to match the adjacent weathered surface as closely as possible.

2.3 New Construction

Any new development of sidewalks where there is no current sidewalk, the sidewalk surface is to be brushed. Additional information for sidewalks requirements can be found in the City's engineering design standards.

2.4 Responsibilities

As mentioned previously, per Coos Bay Municipal Code (MCBMC), Chapter 12.10 abutting property owners are responsible for repairing the sidewalk when damage is attributable to actions of the abutting property owner (e.g. landscaping, drainage). Appropriate City of Coos Bay staff will investigate reports of sidewalk damage and determine whether the City or the abutting property owner is responsible for repairing the sidewalk.

3.0 Inspections

The City's Sidewalk Maintenance Policy has two inspection components: 1) **proactive inspection** for sidewalk trip hazards and 2) **reactive inspection** of sidewalk trip hazards from public complaints. Proactive inspection involves Public Works Department (PWD) regularly surveying City sidewalks for damage. Reactive inspection involves investigation by Code Enforcement Division and is done in response to public complaint.

3.1 Proactive Inspection

City staff conducts in-house research and field reconnaissance of potential sidewalk trip hazards on a monthly basis. The in-house research includes mapping, cross-referencing with existing work orders generated through complaints, and checking jurisdiction for sidewalk maintenance. The field reconnaissance involves collecting data such as dimensions, approximate location, likely cause of damage and photographs. The sidewalk maintenance program for the City of Coos Bay is divided into 4 zones.

High-volume pedestrian areas are proactively inspected at least once every 1 year. Neighborhood sidewalks are proactively inspected at least once every 5 years.

The following areas are identified as high-volume pedestrian areas:

Zone 1: Downtown District North (See Attached Map)
Zone 2: Downtown District South (See Attached Map)
Zone 3: Downtown District East (See Attached Map)
Zone 4: Downtown District West (See Attached Map)

Proactive sidewalk inspections in zones 1 thru 4 are performed monthly due to the amount of foot traffic. Upon identification of a sidewalk trip hazard, PWD executes one of the following actions:

- Patch the sidewalk trip hazard; OR

- Alert sidewalk users of the hazard by spray painting in white. Repairs will be made when budget resources are available.

Damaged sidewalk requiring permanent repair (full reconstruction) is noted in the field and a work order for the repair is subsequently generated. If the sidewalk damage is thought to be attributable to actions by the owner of the abutting property, PWD is requested to investigate to determine repair responsibility.

3.2 Reactive Inspection

In response to sidewalk concerns reported from the public, other City agencies, and State agencies, PWD conducts on-site investigations and determines if damage is attributable to the actions of the abutting property owner. Sidewalk trip hazards identified by PWD per Section 1, Sidewalk Maintenance Criteria, are spray painted in white by PWD inspectors to alert sidewalk user of the hazard.

If the abutting property owner is found responsible, PWD issues a Notice of Violation (NOV) and the property owner has 90 days after receipt of the notice to repair or reconstruct the sidewalk per City specifications for sidewalk construction standards. If the sidewalk is not properly repaired or reconstructed before the 90-day deadline, PWD then repairs the sidewalk and the costs are charged to the abutting property owner.

For all other sidewalk damage inspected by PWD that needs to be repaired and is not attributable to actions of the abutting property owner, PWD generates and submits cost to be considered through the annual budget process for consideration and ultimately adopted by the City Council.

4.0 Levels of Priority

Sidewalk repairs are limited by funding and manpower, prompting the need for a prioritizing system. The following priority levels are used for scheduling of repairs:

1. Spray paint of hazards should be consistent, discrete and follow the guidelines attached in Attachment ‘A’: Sidewalk Trip Hazard Examples.

    - Locations where a pedestrian has tripped are top priority for immediate action. PWD remedies the sidewalk trip hazard with short-term repairs within 30 calendar days of being informed of the sidewalk trip hazard unless resources are unavailable in response to unforeseen conditions/events.

- Sidewalk defects that are considered sidewalk trip hazards and are located within a high-volume pedestrian area are second priority.

- Sidewalk defects that are considered as sidewalk trip hazards and are not located within a high-volume pedestrian area are third priority.

- Public complaints on sidewalk defects that are not considered as sidewalk trip hazards and do not involve actual sidewalk trip incidents are fourth priority.

5.0 Reconstruction of Sidewalk

Work orders are entered and managed in a Sidewalk Management Database with a graphical interface. The information is continuously reviewed by PWD. PWD plan sidewalk repair work or reconstruction projects based on priority levels (outlined in Section 4, Levels of Priority), number of sidewalk trip hazards identified in a particular area, in-house capabilities, logistics and funding for contracts to be completed by private vendors.

6.0 Volunteer Services

The City owns several miles of sidewalk, an amount that increases with new subdivision and roadway development. Maintaining all City sidewalks presents a huge challenge. Collaborating with volunteer organizations helps the City in its effort to maintain safe sidewalks and gives the community a significant way to help keep the City of Coos Bay a quality place to live.

The community can participate in the City's sidewalk maintenance program by volunteering to supplement the City's short-term repair activities.

6.1 Volunteer Repair Work

Areas for volunteer involvement are selected based on availability of parking, low volume roads, feasibility and need. PWD conducts field reconnaissance of an area of interest in advance of scheduling a volunteer event. A City staff person is assigned as the Sidewalk Maintenance Volunteer Coordinator. The volunteer coordinator administers the volunteer program and is responsible for such activities as ordering materials and supplies, scheduling volunteer events, conducting safety meetings with key volunteer representatives prior to the volunteer event, obtaining the required signatures on release and authorization forms and overseeing the actual volunteer event. The safety meeting covers proper methods, techniques and protective equipment required to do the work.

The activities expected of the volunteers include: lifting five gallon buckets of material, mixing a cement polymer material with water and adhesive, bending on knees to apply patch material and using tools such as trowels to work the patch material into place. Volunteers will be informed of the expected duties before they sign up for the event. Volunteer representatives are responsible for obtaining permission for minors and for

ensuring that the volunteers are capable of performing the expected activities. All volunteers are required to sign a release form releasing the City from all claims for any damages and/or injuries due to participation in the volunteer event.

6.2 Community Verification

Upon completion of a field reconnaissance and applying short-term patches, follow-up inspection by other volunteer community groups can be coordinated. The follow-up inspection by community groups provides the City with a third-party means for measuring customer satisfaction with the program. The follow-up inspection by volunteer groups involves a cursory review to ensure that all sidewalk trip hazards in a particular area were adequately addressed with short-term repairs.

7.0 City Standards

City standards are updated periodically based on new information and technology. The data collected from the City's Concrete Sidewalk Maintenance Program provides valuable information regarding maintenance requirements. Based on the data and as appropriate, PWD will update sidewalk standards accordingly.

8.0 Sources of Funding

Adequate funding for this program is essential in order to deliver timely repairs. The following is a list of funding sources:

- City operating funds for sidewalk repairs and capital improvement funds for sidewalk reconstruction.
- Federal grants through the Safe Routes to School grant program. Under this grant program sidewalk repairs within a 2 mile radius of a school is eligible for grant money.
- Federal grants through the U.S. Department of Housing and Urban Development, Community Development Block Grant (CDBG) Programs.
- Oregon Lottery Funds; depending on the location of the project these funds are available for new development.

Attachment 'A': Sidewalk Trip Hazard Examples

Sidewalk trip hazards identified in the field are spray painted in white to alert the public. Spray paint markings should be neat, minimal and follow the upper boundary of the sidewalk trip hazard.



Vertical separation at the score line.



Vertical separation along cracks

Attachment 'A': Sidewalk Trip Hazard Examples

Sidewalk trip hazards identified in the field are spray painted in white to alert the public. Spray paint markings should be neat, minimal and follow the upper boundary of the sidewalk trip hazard.



Brick separation along tree wells.



Tree root damage caused to sidewalk

Attachment 'B' Volunteer Agreement

Attachment 'C' Volunteer Authorization & Release Form for Participants over Eighteen

Attachment 'D' Volunteer Authorization & Release Form for Participants under Eighteen

Attachment 'E' Volunteer Sign-in Sheet

Chapter 12.10
SIDEWALK CONSTRUCTION AND REPAIR

Sections:

12.10.010 Definitions.
12.10.020 Maintenance of sidewalks.
12.10.030 Liability for sidewalk injuries.
12.10.040 Standards and specifications.
12.10.050 Construction, alteration, removal or repair of sidewalk.
12.10.060 Penalty.

12.10.010 Definitions.

As used in this chapter, the following mean:

"City manager" means the city manager for the city of Coos Bay, or his or her designee.

"Good repair" means a state of being free of patent and latent defects.

"Safe condition" means a state of being free of snow, ice, obstructions, or any other condition causing a hazard to persons or vehicles using public right-of-way.

"Sidewalk" means any paved area in that part of the public right-of-way located between the curblines or the lateral lines of a roadway and the adjacent property lines; any culvert located in such part of the public right-of-way. [Ord. 249 § 1, 1998; Ord. 69 § 1, 1986].

12.10.020 Maintenance of sidewalks.

The owner of real property abutting a sidewalk shall maintain the sidewalk in good repair and safe condition. [Ord. 249 § 2, 1998; Ord. 69 § 2, 1986].

12.10.030 Liability for sidewalk injuries.

(1) The owner of real property abutting a sidewalk shall be liable to any person injured because of failure by the owner to maintain the sidewalk in good repair and safe condition.

(2) If the city is required to pay damages for an injury to any person caused by the failure of an owner to maintain a sidewalk in good repair or safe condition, the owner shall reimburse the city for the amount of the damages thus paid and for the attorneys' fees and costs of defending against the claim for damages. The city may maintain an action in a court of competent jurisdiction to enforce the provisions of this section. [Ord. 249 § 3, 1998; Ord. 69 § 3, 1986].

12.10.040 Standards and specifications.

Sidewalks shall be constructed, altered, and repaired in accordance with standards and specifications determined by the city. [Ord. 69 § 4, 1986].

12.10.050 Construction, alteration, removal or repair of sidewalk.

(1) Initiation of Proceedings to Place a Sidewalk in Good Repair or in Safe Condition.

(a) When the city manager determines that public health and safety require the construction or removal of a sidewalk, or that as a result of the owner's failure to maintain a sidewalk in good repair or in safe condition an existing sidewalk is in need of alteration, removal or repair, the city manager shall make written findings to support such determination, and shall issue a notice of initiation of proceedings to the owner of the property abutting the sidewalk.

(b) The notice shall contain a statement of the findings supporting the city manager's determination. The notice shall also state that the owner must construct a sidewalk or alter, remove or repair an existing sidewalk; shall state that the owner is required to complete the work within 30 days after service of the notice; and shall state that if the work is not completed by the owner within the 30-day period, then the city may undertake the work and assess the costs against the property abutting the sidewalk. The notice shall also apprise the owner of the owner's right to request reconsideration and right to appeal pursuant to subsections (1)(d) and (e) of this section.

(c) The city manager shall cause a copy of the notice to be served upon the owner of the property abutting the sidewalk by registered or certified mail, return receipt requested, sent to the last known address of the owner. If the owner fails to accept the mailed notice, or if the notice is undeliverable as addressed, the city manager shall order substituted service by causing a copy of the notice to be posted in a conspicuous place on the abutting property.

(d) The owner may file a written request for reconsideration with the city manager. The request for reconsideration shall be filed within 10 days of service of the notice, and shall set forth in reasonable detail the facts and arguments supporting the owner's reasons why he or she should not be responsible for the construction, alteration, removal, or repair of the sidewalk. The city manager shall render a final written determination within 10 days of the receipt of the request for reconsideration. The filing of a request for reconsideration shall be a condition precedent to the right to appeal to the city council pursuant to this section.

(e) If the request for reconsideration is denied, the owner may file a request for appeal, in writing, with the city manager within 10 days of the owner's receipt of his or her final

written determination. A hearing shall be scheduled before the city council as soon as practicable after the receipt of a request for appeal. After the hearing, the city council shall adopt a resolution, affirming, reversing, or modifying the decision of the city manager.

(2) City May Construct, Alter, Remove, or Repair Sidewalk. If the work identified in the notice is not completed within 30 days after service of the notice, or if the owner has not entered into a written agreement with the city to cause such work to be made within a specified period of time, the city council may, by resolution, order the construction, alteration, removal or repair to be made. The resolution shall recite the means whereby notice was provided to the owner, indicate the nature of the work to be performed, and include a legal description of the abutting property. A copy of the resolution shall be mailed to the owner at his or her last known address by registered or certified mail, return receipt requested.

(3) Assessment for Sidewalk Work Done by City. Upon completion of the work, the manager shall submit to the council a report containing an itemized statement of costs. Upon receipt of the report, the council shall by resolution assess the cost of the work against the property abutting the sidewalk. The assessment shall be a lien against the property and may be enforced and collected as provided in ORS 223.505 through 223.650.

(4) Notice of Assessment. A copy of the resolution assessing the cost of the work shall be mailed to the property owner by registered or certified mail, return receipt requested.

(5) Lien Docket – Interest. The recorder shall enter into the city lien docket a statement of the amount assessed against the property; a statement that the lien is for sidewalk construction, alteration, removal, or repair; the name of the property owner; and the date of the assessment resolution. The assessment shall become a lien upon the real property at the time of entry upon the lien docket. The lien shall bear interest at the statutory rate commencing on the date the lien is entered in the city lien docket. [Ord. 249 § 4, 1998; Ord. 69 § 5, 1986].

12.10.060 Penalty.

Violation of a provision of this chapter is punishable by a fine not to exceed $500.00. Each day's violation shall constitute a separate punishable offense. [Ord. 69 § 6, 1986].

CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	2.e

TO: Mayor Benetti, Council President DiNovo, and City Councilors

FROM: Jennifer Wirsing, City Engineer/Deputy Director

THROUGH: Nichole Rutherford, City Manager

ISSUE: Presentation of Drainage Issues Along the Highway 101 Corridor in the Downtown Area

SUMMARY:

Staff will present an overview of the drainage issues in the downtown area.

ACTION REQUESTED:

No action is requested at this time.

BACKGROUND:

At an earlier Council meeting, it was requested that staff present the drainage issues associated with the downtown area. The downtown drainage issues have been identified in studies as early as 2004 in the City's Storm Water Master Plan. Since then there has been several studies of this area and the flooding that this area typically sees. Staff will present an overview of the drainage basins in the downtown area, an overview of the reports, and items to consider.

BUDGET IMPLICATIONS:

Budget implications and impacts to the water quality user rates can be presented at a later meeting should Council direct staff to move forward on the drainage investigation.

ATTACHMENT(S):

- Storm Drain System Report.pdf
- 101 Drainage Projects_Complete.pdf
- Storm Water Master Plan-Limited Area-2004.pdf
- 20240118133635.pdf

TECHNICAL M E M O R A N D U M

Project: City of Coos Bay

Subject: Egyptian Theatre Storm Drain Alternatives

Date: November 8, 2012

Prepared By: Aaron Speakman, P.E.

PURPOSE AND SCOPE

The purpose of this technical memorandum is to evaluate and present four (4) viable alternatives to reduce the impacts of flooding in front of the Egyptian Theatre.

BACKGROUND & EXISTING STORM DRAINAGE

The Egyptian Theatre is located at 229 S. Broadway Street (Highway 101 southbound) and has historically had drainage issues in front of the building. There is a storm drain catch basin located on Highway 101 directly in front of the building. Storm water runoff from the catch basin is then piped in a northerly direction through an 8-inch storm drain pipe for approximately 433 feet. The 8-inch pipe intersects with two other storm drain systems at the intersection of S. Broadway Street and Central Avenue, and then conveys flow in an easterly direction along Central Avenue for approximately 313 feet, and ultimately flows into the Bay.

During storm events, specifically storm events occurring at high tide, ponding occurs and has caused flooding through the front doors of the theatre and along Highway 101 southbound, immediately adjacent to the theatre.

The Egyptian Theatre is located in Storm Drainage Basin No. 11 as described in the Storm Water Master Plan dated September 2004, prepared by The Dyer Partnership Engineers and Planners. As described in the Storm Water Master Plan, Basin No. 11 is approximately 7.7 acres in size, and has a 50-year storm runoff of 8.3 cubic feet per second (cfs).

EXISTING STORM DRAIN MAP

The figures included in the Appendix that accompany this memorandum include existing storm drainage infrastructure serving the Egyptian Theatre and the surrounding area. Figure No. 3 illustrates the existing storm drain system.

EVALUATION OF EXISTING STORM DRAIN INFRASTRUCTURE

Evaluation of the existing storm drain infrastructure was limited to visual inspection of storm drain components directly linked to the Egyptian Theatre drainage issues described as follows:

Storm water outfall: The outfall is named Tidegate No. 14 by the City of Coos Bay Storm Water Master Plan. The outlet pipe is an 18-inch corrugated metal pipe (CMP) with a hinged metal tidegate at the end of the pipe. The tidegate mechanism appears to function as designed, however the existing 18-inch CMP pipe is failing and has holes in the outfall piping allowing water to flow back into the system around the tidegate. See the Appendix for photos of the outfall pipe and tidegate.

Catch Basin in front of Egyptian Theatre: This catch basin does not have a concrete bottom. The bottom of the catch basin is mud and bare earth.

Sidewalk in front of Egyptian Theatre: The sidewalk directly in front of the Egyptian Theatre creates ponding between the entry doors and the curb of Highway 101. The grades are such that any water that overtops or lands on the sidewalk runs back towards the doorway of the theatre. Photos of the sidewalk in front of the Egyptian are located in the Appendix. Figure No. 2 in the Appendix shows the approximate elevations of the sidewalk and entry to the theatre.

DYE TESTING

Dye testing of the storm drain catch basin located in front of the Egyptian Theatre was conducted on July 18th, 2012 with the assistance of the CH2M Hill Collection Crew. The purpose of the dye testing was to confirm that the catch basin located in front of the Egyptian Theatre was connected to the storm water outfall denoted as Tidegate No. 14 in the City of

Coos Bay Storm Water Master Plan. Dye testing confirmed that the catch basin located in front of the Egyptian Theatre was connected to Tidegate No. 14.

An unknown outfall pipe was noted adjacent (north) to Tidegate No. 14. No dye was observed in the outfall pipe, although fluid was witnessed flowing out of the pipe. Since the outfall is not known to connect to the existing storm drain system, this outfall was not further evaluated.

EVALUATION OF CAUSE OF FLOODING/PONDING IN FRONT OF THEATRE

To obtain gravity flow of storm water to the bay, the storm water system must obtain enough head pressure to open the tidegate, overcome friction losses within the pipe, and ultimately discharge to the bay. When high tides and high river levels combine, the head pressure required by the storm drainage system increases. The flooding seen in front of the Egyptian Theatre is the storm water backing up in order to develop the required head pressure to allow the storm water flows to discharge to the bay. The catch basin and area located in front of the Egyptian Theatre appears to be the lowest point within the limits of Basin No.11, and explains why the flooding occurs in this area.

Figure No. 2 is a schematic profile from the Egyptian Theatre to the outfall, and graphically shows the profile elevations in a section view. Figure No. 4 in the Appendix is a large scale excerpt of the Flood Hazard Map (2004 Storm Water Master Plan Figure A-4) for the area surrounding the Egyptian Theatre. This shows that the area is well within the FEMA 100-year flood boundary.

The historical recorded high tide (including increased river levels) in the bay was approximately 11.00 feet as noted in the 2004 Storm Water Master Plan. The mean higher high water (MHHW) is the average of the higher high water height of each tidal day observed over the National Tidal Datum Epoch. In Coos Bay the MHHW is approximately 7.5 feet. The MHHW levels do not adjust or account for higher river levels as a result of significant rainfall events. Historically Coos Bay experiences some of the year's highest high tide events during December and January, which also occur during some of the yearly

peak rainfall events. A schematic of the elevations mentioned above is shown graphically in Figure No. 2 in the Appendix of this memo.

The majority of the area located within Storm Drain Basin No. 11, including the catch basin in front of the Egyptian Theatre, is located below historical high tide levels. The ponding and flooding in front of the Egyptian Theatre is a result of the catch basin's rim elevation being at an elevation of 9.53 feet. This rim elevation is not high enough to allow the storm drain system to generate the required hydraulic head to handle the basins storm water flows. The catch basin is also missing a bottom, potentially allowing groundwater to infiltrate into the storm drain system.

Hydraulic modeling and elevation mapping conducted in the City's Storm Drain Master Plan determined that a pump station would be required to reduce flooding in this area during high tide/high rainfall events.

STORMWATER RUNOFF VOLUMES

As described in the City of Coos Bay Storm Drain Master Plan, Basin No. 11 collects storm water for the area surrounding the Egyptian Theatre. The study calculated the peak storm water runoff for a 50-year storm (6.0 inches of rainfall over a 24-hour period) to be 8.3 cfs or approximately 3,725 gallons per minute (gpm). Runoff calculations from the Storm Water Master Plan for Basin No. 11 are located in the Appendix.

A site survey was conducted to determine elevations and limits of the runoff area draining to the catch basin in front of the Egyptian Theatre. The roof structure of the Egyptian Theatre drains approximately 80 percent of the roof structure to the roadway catch basin, while the back portion of the roof drains to the alley behind the building. It is assumed that the buildings located directly to the north of the Egyptian Theatre also have a large portion of their roofs draining to the front of the buildings. This assumption was made since gutter drains enter the roadway curb in front of the buildings. It should be noted that the portion of the roof that drains to the alley behind the theatre is located within the same drainage basin

(Basin No. 11). Ultimately these flows are conveyed to the same outfall as the flows associated with the portion of roof that drains to the font of the theatre.

The approximate runoff area used in evaluating a local pump station for the area impacting or directly draining to the catch basin in front of the Egyptian Theatre is 45,600 square feet. Utilizing the Rational Equation for storm water runoff calculations, a 50-year storm water event results in a peak runoff for the area contributing to the flooding area of approximately 3.39 cfs or 1,520 gpm. The local pump station runoff calculations are located in the Appendix.

ALTERNATIVES CONSIDERED BUT NOT EVALUATED

Six alternatives were evaluated to alleviate the flooding in front of the Egyptian Theatre. A Summary of Alternatives Analyzed is included within the Appendix. Of the six alternatives analyzed, only four were found to be feasible alternatives that would alleviate the flooding problem in front of the Egyptian Theatre. The two infeasible alternatives evaluated are described below.

Infeasible Alternative 1: Routing Storm Water Runoff to Southern Drainage Basin

Storm Drain Basin No. 12B (Storm Drain Master Plan 2004) is located directly to the south of Basin No. 11. Basin No. 12B is referred to as the Blossom Gulch Drainage Basin and during high tide and rainfall events, the basin experiences flooding similar to that of the Egyptian Theatre and Basin No. 11. The Storm Drain Master Plan indicates that there is no additional capacity within the Basin No. 12B storm drain system due to undersized storm drain infrastructure within the basin. Contributing additional flows from Basin No. 11 to Basin 12B would increase flooding impacts to Basin 12B. Due to the significant costs required to increase the storm drain infrastructure in Basin No. 12B, this alternative was considered infeasible. No project costs were estimated for this alternative.

Infeasible Alternative 2: Re-grading Highway 101 within the Vicinity of the Theatre

Raising the finished grades of the Highway would require replacement or modification to surrounding roadways, intersections, crosswalks, sidewalks, curbs, storm drain manholes,

roof drains, sewer manholes, and many other unforeseen utilities. Most business entryways, storefronts, and foundations would be impacted by the re-grading of Highway 101. Raising of the roadways would increase the ponding of storm water in surrounding areas due to the low elevations within the storm drain basin. Depending on finished grading of a raised roadway, surrounding storm drain basins such as Basin No. 12B could be impacted.

Raising of the sidewalks, while keeping Highway 101 at its current grade, would not eliminate standing water on the Highway, and water would be splashed and conveyed from the roadway to the sidewalks and surrounding businesses. Water that currently ponds on the sidewalk would be added to the ponding water in the roadway if the sidewalk is repaired and the storm drain system not upgraded. This alternative was considered infeasible due to the overall project complexity, project costs, and impacts to surrounding businesses.

FEASIBLE ALTERNATIVES

Four feasible alternatives to reduce flooding impacts in front of the Egyptian Theatre are described below. A plan view schematic of each alternative is included in the Appendix of this memorandum. Each alternative is provided for planning purposes, and is not considered a final design. The number of catch basins, final infrastructure sizing, routing, construction methods, and locations would be determined during final design.

Cost estimates for each feasible alternative are provided within the Appendix of this memo. The cost estimates shown include construction costs, engineering costs, contingencies, legal, permitting, and administrative costs. No land acquisition or easement costs are included within the estimates and it is assumed the pump stations would be placed within City-owned property and/or right-of-way. Each feasible alternative has a cost estimate provided with a range of minus 10% to plus 20% to cover unforeseen costs and/or design changes.

All four of the feasible alternatives analyzed include replacement or rehabilitation of at least one outfall pipe to Coos Bay. Each outfall would involve work within the Port of Coos Bay Railroad right-of-way, Oregon Department of Transportation (ODOT) right-of-way, Division of State Lands (DSL), United States Army Corps of Engineers (USACE), and have potential

impacts to the City Boardwalk and dike system. Significant planning and coordination will be required for these projects, due to the strict construction standards and permits required by the various jurisdictions and agencies.

Railroad crossings typically require special permitting, insurances, and bonding along with locating all pipes under the rails within a steel casing pipe. We anticipate that the rail system is being supported by wood piles as were encountered during the installation of the Koos Bay Boulevard Storm Drain Outfall project in 2007. Installation of a casing pipe under a railroad supported by wood piles significantly increases construction costs.

Alternative 1: Local Pump Station at Egyptian Theatre-New Outfall

This alternative includes a new pump station, catch basins, piping, and infrastructure to reduce flooding in front of the Egyptian Theatre. The existing storm drain catch basin in front of the Egyptian Theatre and the 173 feet of storm drain piping that connects this storm drain catch basin to Basin No. 11 would be abandoned. Five new catch basins located within the vicinity of the Egyptian Theatre would convey storm water across S. Broadway (Highway 101 South) to a new pump station located in the parking lot across the street from the theatre. The pump station would include a new wet well with submersible pump. The submersible-style pump was selected rather than vertical turbine style pumps so that no parking spaces would be eliminated in the existing parking lot. A control panel for the pump station would be placed inside the existing fenced recycling/dumpster area of the parking lot. A new outfall line would exit the proposed pump station and be installed in an easterly direction across Highway 101, the railroad, the dike, and discharge into Coos Bay.

The outfall would serve both as the pump station force main and the gravity storm drain line. During normal rainfall events when pumping is not required, the system would be a gravity storm drain system. If high water events were experienced, floats or level sensors within the wet well would trigger operation of the pump station to lower storm water levels within the area. A check valve in a vault outside of the wet well would prevent the pumped storm water from re-circulating back into the storm drain system and prevent short circuiting of the system.

The pump station would have a capacity of approximately 3.39 cfs or 1,520 gpm. The pump horsepower would be 10 to 12 horsepower. The outfall pipe to the bay would be an 18-inch diameter PVC pipe with a tidegate.

This alternative only addresses the flooding issues directly in front of the Egyptian Theatre and does not address storm water issues in Basin No. 11. In high water events, some catch basins in Basin No. 11 could still overflow and surcharge back into the low point that floods in front of the Egyptian Theatre, exceeding the capacity of the pump station.

Estimated project cost for Alternative 1: $1,060,000 to $1,142,000

Alternative 2: Local Pump Station at Egyptian Theatre-New Outfall and Replacement of Basin No. 11 Outfall

This alternative is the same as Alternative 1 with the addition of replacement of the existing storm drain outfall line serving Basin No. 11 (Tidegate No. 14). Without the replacement of the Basin No. 11 outfall line, storm water backs up into Basin No. 11's storm water system, and during extreme high tides and rainfall events, flooding as a result of surcharging within the basin, could eventually flood into the area in front of the Egyptian Theatre.

The outfall replacement for Basin No. 11 is anticipated to be a 24-inch diameter outfall with new tidegate. The existing outfall is an 18-inch diameter pipe. The increase to a 24-inch diameter pipe is recommended for the basin to accommodate the peak flows within the basin.

The benefit of this alternative is that it addresses the localized flooding issues in front of the Egyptian Theatre and also eliminates outfall issues affecting Basin No. 11. This alternative does not address all storm water issues for Basin No. 11. In high water events, some catch basins in Basin No. 11 could still overflow and surcharge back into the low point that floods in front of the Egyptian Theatre.

Estimated project cost for Alternative 2: $1,114,000 to $1,486,000

Alternative 3: Regional Pump Station for Storm Drain Basin No. 11 (Recommended Alternative)

This alternative includes installation of a new regional pump station with associated piping and manholes from the catch basin in front of the Egyptian Theatre to the pump station, and replacement of the existing Basin No. 11 outfall pipe. The regional pump station would convey Basin No. 11's peak 50-year storm water flows to the bay. The pump station would have a capacity of 8.3 cfs (3,725 gpm), and would significantly reduce flooding within Basin No. 11 and the area in front of the Egyptian Theatre.

The pump station would only pump when high water was detected within the system. During periods of high rainfall and low tides, the system would operate as a gravity flow system. A new manhole or vault would be installed to accommodate the gravity storm drain line and the new pump station force main. A check valve would be installed on the gravity system to prevent short circuiting of the storm drain system when the pump station was in operation. Replacement of the existing outfall would also be conducted and would include a new tidegate on the outfall to prevent debris from entering the system and clogging the outfall manhole.

The existing storm drain lines and infrastructure not directly connected to the catch basin in front of the Egyptian Theatre were not evaluated for capacity or condition. Flooding could still occur if it is determined that a surrounding storm water basin surcharges into Basin No. 11, or if the existing storm water piping in Basin No. 11 is currently undersized or in poor condition.

Significant planning would be required for construction of a regional pump station in Basin No. 11. Portions of the existing storm drain conveyance system and outfall piping are located under concrete sidewalks and artwork adjacent to the new City of Coos Bay Visitors Center. These lines may require replacement or relocation.

Estimated project cost for Alternative 3: $1,613,000 to $2,150,000

Alternative 4: Local Pump Station at Egyptian Theatre -Shared Outfall

This alternative includes a new local pump station for the area in front of the Egyptian Theatre described in Alternatives 1 and 2. Alternative 4 would construct a new outfall that would be shared between the local pump station at the Egyptian Theatre and Basin No. 11. The pump station force main would discharge into a manhole or vault located in Basin No. 11's outfall line. The manhole or vault would be located in the dike and have enough head capacity to allow storm water flows to gravity flow from the manhole to the bay. A check valve would be located on the main Basin No. 11 outfall piping to prevent short circuiting of the storm water from the pump station discharge and back into Basin No. 11. All of the storm water flows from the catch basins in front of the Egyptian Theatre would require full time pumping; there would be no gravity flow from the station to the bay.

In high water events, some catch basins in Basin No. 11 could still overflow and surcharge back into the area that floods in front of the Egyptian Theatre, exceeding the capacity of the pump station. The existing storm drain lines and infrastructure not directly connected to the catch basin in front of the Egyptian Theatre were not evaluated for capacity or condition. Flooding could still occur in front of the Egyptian Theatre if it is determined that a surrounding basin surcharges into Basin No. 11, or if the existing storm water piping in Basin No. 11 is currently undersized or in poor condition.

Estimated project cost for Alternative 4: $1,022,000 to $1,362,000

EVALUATION OF ALTERNATIVES

To obtain gravity flow of storm water to the bay, the storm water in front of the Egyptian Theatre, along with all of the storm water within Basin No. 11, must obtain enough head pressure to open the tidegate, overcome friction losses within the pipe, and ultimately discharge to the bay. The flooding seen in front of the Egyptian Theatre is the storm water within Basin No. 11 backing up in order to develop the required head pressure to allow the storm water flows to discharge to the bay. The catch basin located in front of the Egyptian Theatre is the lowest point within the limits of Basin No. 11.

Construction of a local pump station as described in Alternatives 1, 2, and 4 will reduce some flooding events in front of the Egyptian, but doesn't address the root cause of the flooding, which is that the Egyptian Theatre and surrounding areas of Basin No. 11 are at a lower elevation than high tide. A gravity storm drain system that can't create enough head pressure to drain will surcharge and cause flooding, as is the case with the current storm drain system. Alternatives 1, 2, and 4 will all reduce the flooding impacts, but impacts may still be seen when surrounding areas flood due to the tide being at a higher elevation.

Due to such a large area of Basin No. 11 being within the FEMA 100-year boundary and below the historic high tide elevation, reduction in flooding impacts to the area in front of the Egyptian Theatre is best addressed by installation of a regional pump station as described in Alternative 3. The regional pump station would reduce flooding in a larger area than any of the other alternatives analyzed. The regional pump station should not be assumed to have the capacity to eliminate of all flooding issues with Basin No. 11, because adjacent storm drain basins may flood and contribute additional storm drain flows to Basin No. 11. However a regional pump station would certainly reduce the magnitude of flooding impacts.

The Egyptian Theatre and surrounding businesses could construct on-site property-specific flood prevention infrastructure. For example, the theatre could raise their entry doors and foyer leading into the building; however these types of systems do not eliminate flood impacts and do have high costs to the individual properties. Reconstruction of the sidewalk in front of the theatre to eliminate the negative slopes on the sidewalk would reduce ponding in front of the theatre doors, but again would not prevent all flood impacts.

A Summary of Alternatives Analyzed is located on the next page.

SUMMARY OF ALTERNATIVES ANALYZED

ALTERNATIVE	ADVANTAGES	DISADVANTAGES	ADDITIONAL CONSIDERATIONS	PROJECTED PROBABLE COST
1 Local Pump Station at Theatre and New Outfall	- Reduce flooding at theatre - Underground Pump Station will have no impact on parking - Improves inlet in front of theatre	- Does not eliminate flooding - Requires an additional outfall to be constructed - Does not repair existing outfall - Only addresses flooding issues at the theatre	- Environmental Permitting will be required - Federal permitting will required to install storm drain under railroad tracks - Federal permitting (FEMA, Army Corps of Engineers) will have to be performed to install storm drain under dike - Due to additional permitting, the schedule for completion may be extended. - Additional calculations would have to be performed to determine actual capacity of storm drain system - ODOT coordination will have to be performed - In order to further reduce and/or eliminate flooding the entire downstream storm drain system must be upsized. This will significantly increase costs and most likely make project infeasible	$1,060,000 To $1,142,000
2 Local Pump Station at Theater, New Outfall, and Replacement of Existing Outfall	- Reduce flooding at theatre - Underground Pump Station will have no impact on parking - Improves inlet in front of theatre - Improves existing outfall	- Requires an additional outfall to be constructed - Does not eliminate flooding - Only addresses localized flooding issues at the theatre		$1,114,000 To $1,486,000
3 Regional Pump Station *RECOMMENDED PLAN*	**- Reduce flooding at theatre - Reduce flooding throughout entire basin - Improves inlet in front of theatre - Improves existing outfall - May not require an additional outfall**	**- Does not eliminate flooding - Pump station may impact parking - Highest project cost that was analyzed**		**$1,613,000 To $2,150,000**
4 Local Pump Station at Theatre and a shared Outfall	- Reduce flooding - Underground Pump Station will have no impact on parking - Improves inlet in front of theatre - Improves existing outfall - Does not require an additional outfall	- Does not eliminate flooding - Requires full time pumping because proposed storm drain cannot be gravity flow - Only addresses flooding issues at the theatre		$1,022,000 To $1,362,000
Additional Alternatives That Were Discarded Due To Infeasibility				
Routing Runoff to the Southern Drainage Basin	Not Evaluated			
Re-Grading Highway 101 Within the Vicinity of the Theatre	Not Evaluated			

RECOMMENDED ALTERNATIVE

The sidewalk issues in front of the Egyptian Theatre should be corrected to prevent ponding on the sidewalk. The sidewalk and entry should be reconstructed so that slope is obtained from the entry doors to the curb without creating a location for ponding water. However, correction of the sidewalk without correcting the storm drain system will increase the volume of ponding water in front of the Egyptian Theatre. This additional ponding may adversely impact Highway 101 and adjacent buildings.

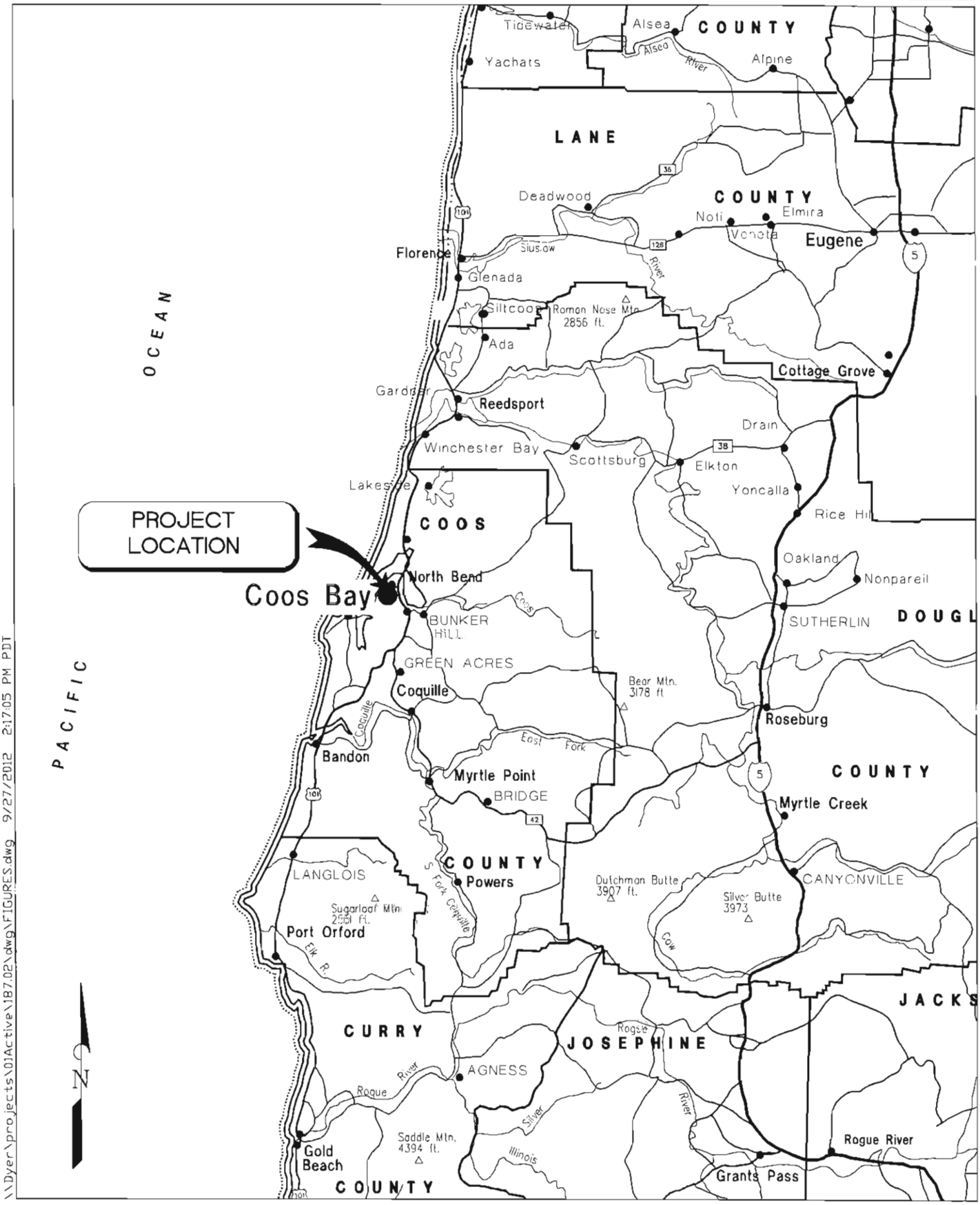
As such, if the City wishes to proceed forward with a solution to minimize the flooding at the Egyptian Theatre, it is recommended that the City further investigate Alternative No. 3 – Regional Pump Station for Storm Drain Basin No. 11. Additionally, the catch basin in front of the Egyptian Theatre would be replaced as part of Alternative No. 3. This will minimize the potential for groundwater and sediment to filter into the storm drain system and further impact the flooding. This alternative has the highest potential to reduce flooding in front of the Egyptian Theatre and also provides a regional solution for Basin No. 11.



City of Coos Bay
Egyptian Theatre Storm Drain Alternatives
Appendix

Table of Contents

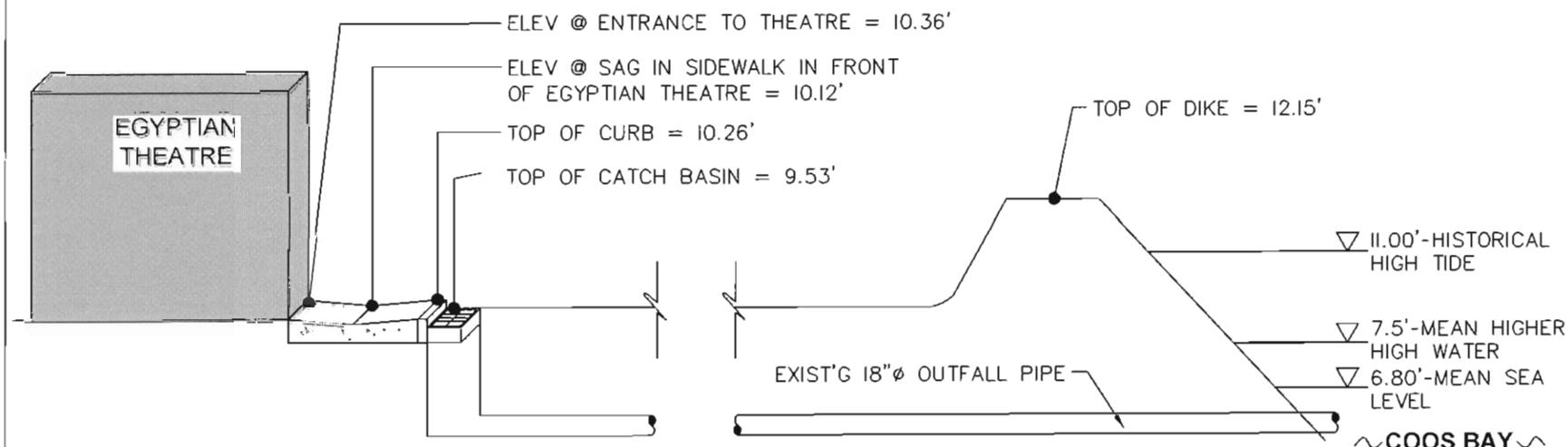
Page Number	Description
2	Figure No. 1: Project Location Map
3	Figure No. 2: Schematic Profile
4	Figure No. 3: Existing Storm Drain System
5	Figure No. 4: Flood Hazard Map
6	Figure No. 5: Alternative 1
7	Figure No. 6: Alternative 2
8	Figure No. 7: Alternative 3
9	Figure No. 8: Alternative 4
10	Cost Estimate for Alternative 1
11	Cost Estimate for Alternative 2
12	Cost Estimate for Alternative 3
13	Cost Estimate for Alternative 4
14	Photo of Tidegate No. 14
15	Photo of Tidegate No. 14
16	Photo of Egyptian Theatre Sidewalk
17	Photo of Egyptian Theatre Sidewalk
18	Basin No. 11 Storm Drain Calculations
19	Basin No. 11 Storm Drain Calculations
20	Local Pump Station Drainage Calculations
21	Local Pump Station Drainage Calculations
22	Local Pump Station Drainage Calculations
23	Local Pump Station Drainage Calculations
24	Local Pump Station Drainage Calculations



\\Dyer\projects\01Active\187.02\dwg\FIGURES.dwg 9/27/2012 2:17:05 PM PDT

THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO. *1*
DATE: SEP, 2012	*PROJECT LOCATION MAP*	
PROJECT NO.: 187.02		

\\Dyer\Projects\01Active\187.02\dwg\FIGURES.dwg 11/26/2012 7:13:55 AM PST



SCHEMATIC PROFILE

NOT TO SCALE

NOTES:
1. ALL ELEVATIONS ARE SHOWN IN NAVD 88 DATUM
2. HISTORICAL HIGH TIDE INFORMATION TAKEN FROM THE STORM WATER MASTER PLAN. DYER, 2004.
3. MEAN HIGHER HIGH WATER AND MEAN SEA LEVEL INFORMATION OBTAINED FROM NOAA CALIFORNIA STREET BOAT RAMP DATA FOR TIDAL DATUMS.
4. ELEVATION OF EXISTING OUTFALL NOT CONFIRMED.

THE DYER PARTNERSHIP
ENGINEERS & PLANNERS, INC.

DATE: SEP, 2012
PROJECT NO.: 187.02

CITY OF COOS BAY
EGYPTIAN THEATRE STORM DRAIN STUDY
SCHEMATIC PROFILE

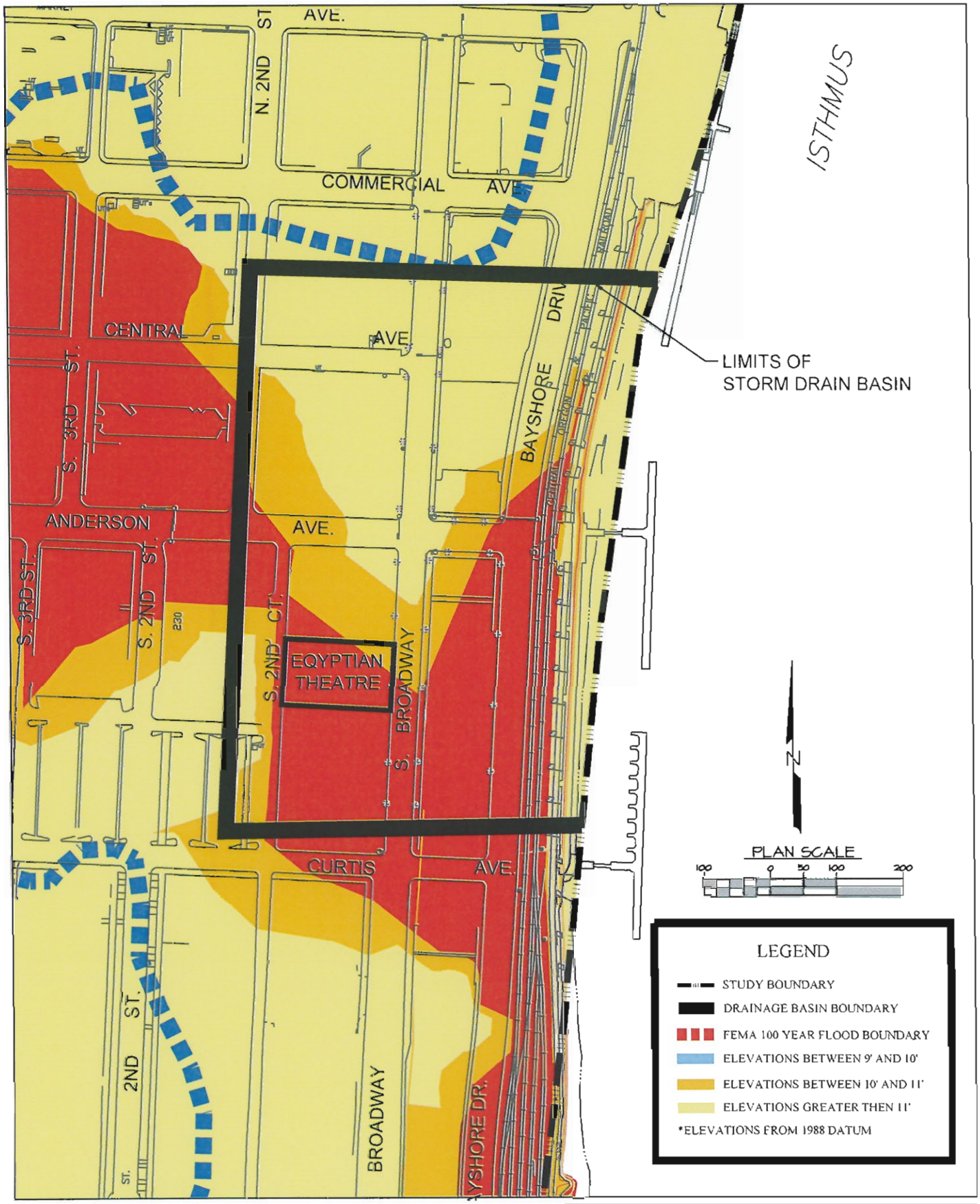
FIGURE NO. 2



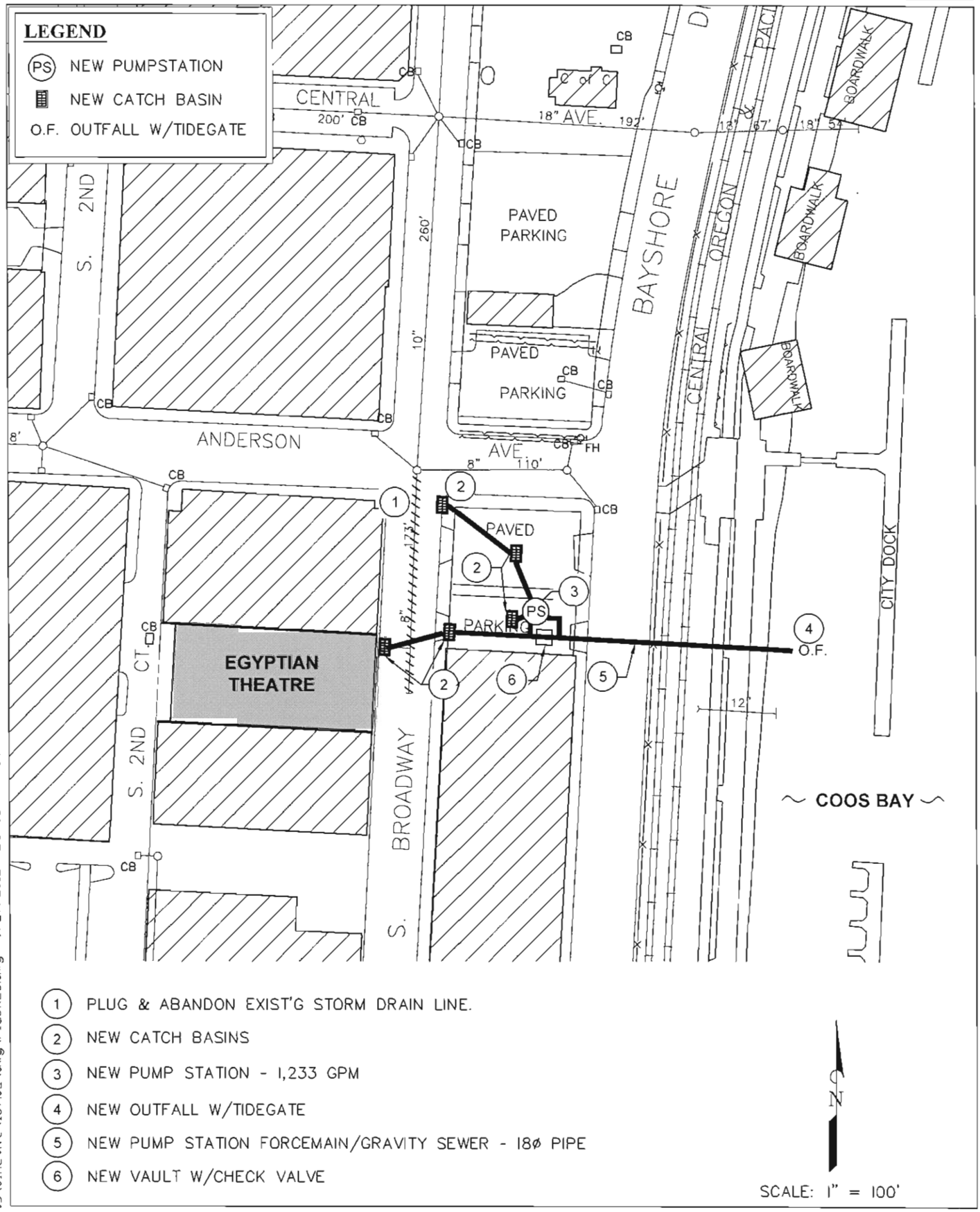
THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO. 3
DATE: SEP, 2012	*EXISTING STORM DRAIN SYSTEM*	
PROJECT NO.: 187.02		

\\Dyer\projects\01Active\187.02\dwg\FIGURES.dwg 9/27/2012 2:17:05 PM PDT

C:\Documents and Settings\rarbuckle\Local Settings\Temp\FIGURE 4_1_1_2834.dwg 11/8/2012 6:32:19 PM PST

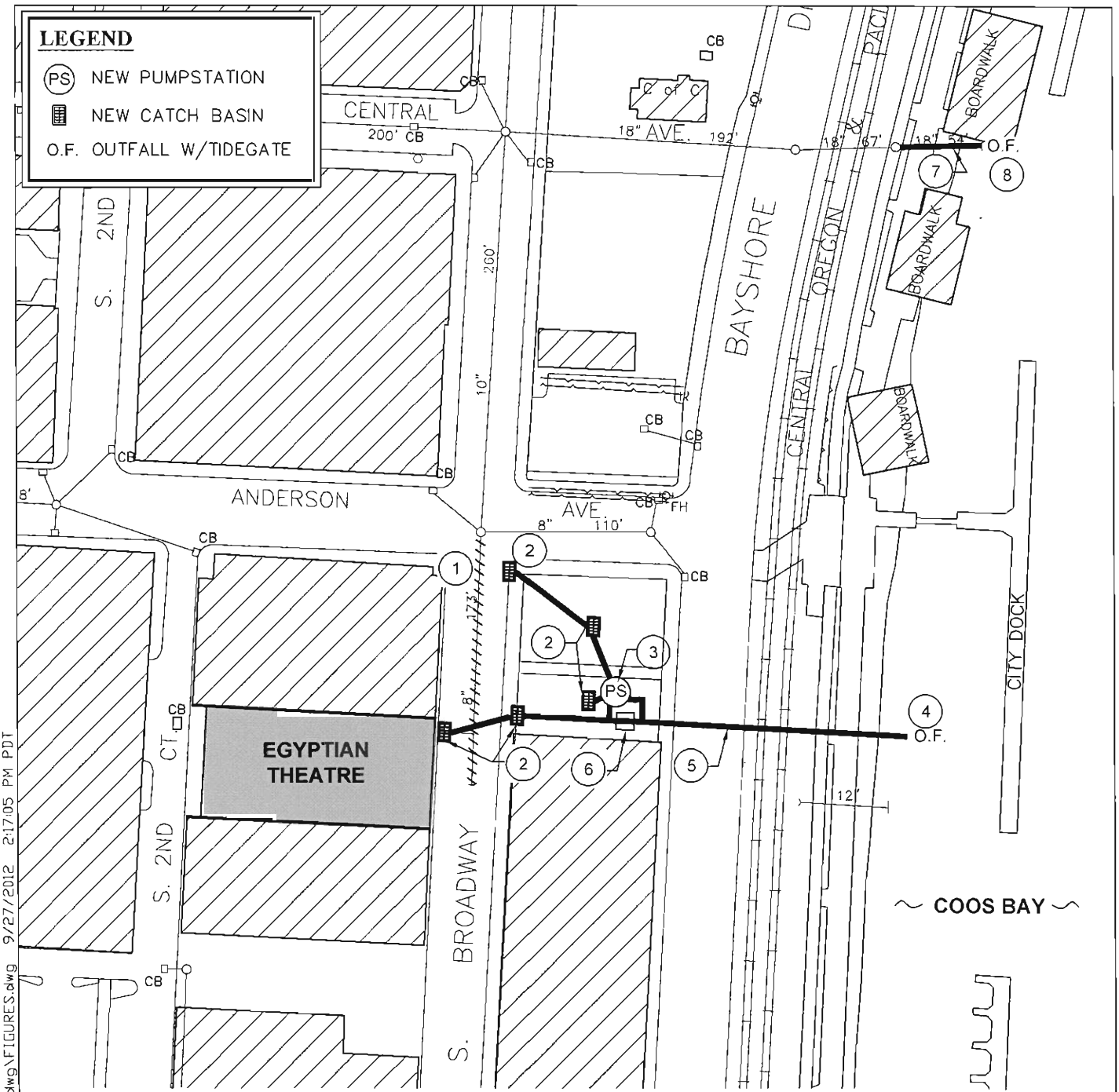


THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	**FIGURE NO.** *4*
DATE: NOVEMBER, 2012 PROJECT NO.: 187.02	*FLOOD HAZARD MAP*	



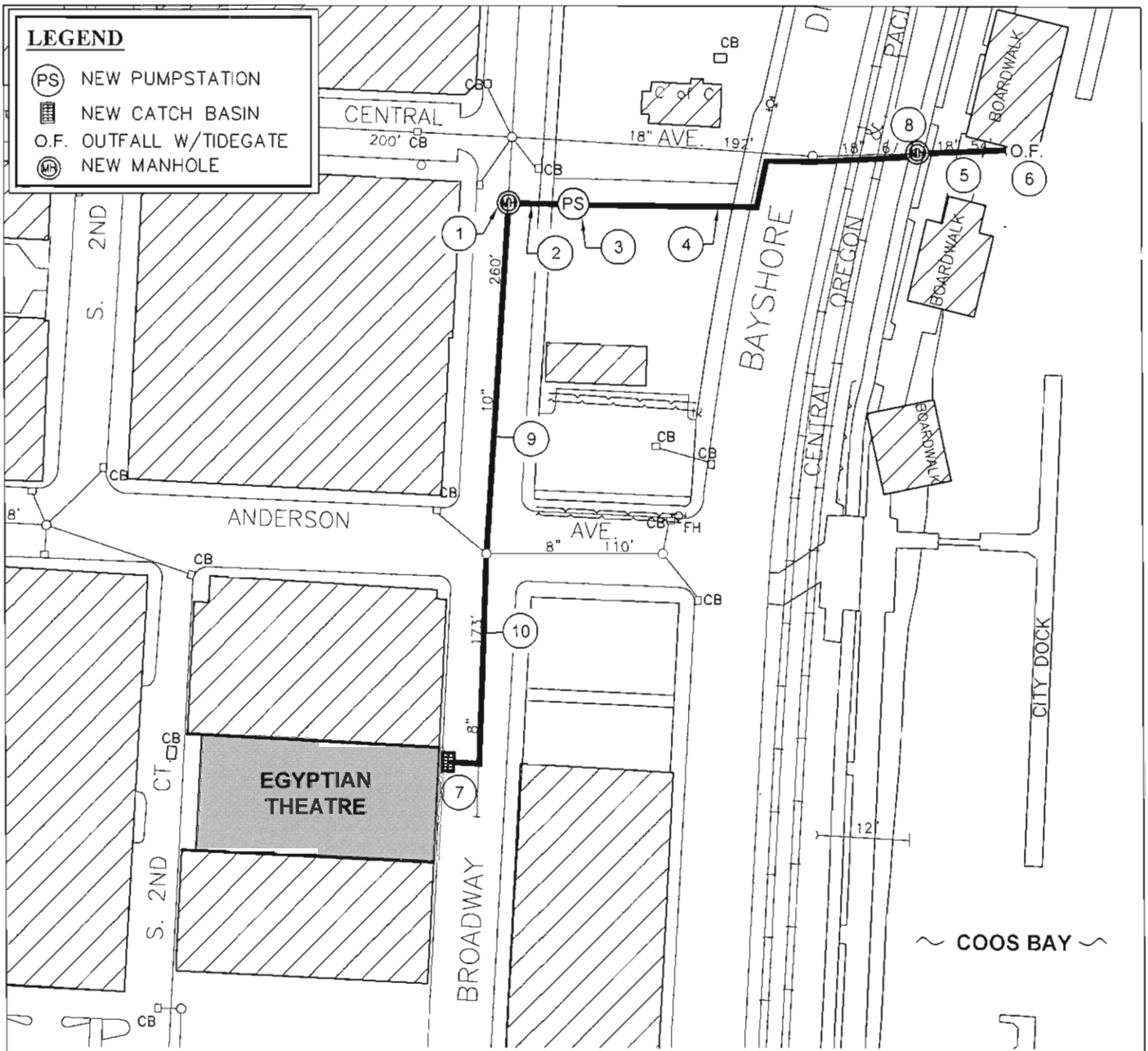
THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO. 5
DATE: SEP, 2012 PROJECT NO.: 187.02	*ALTERNATIVE 1*	

\\Dyer\projects\01Active\187.02\dwg\FIGURES.dwg 9/27/2012 2:17:05 PM PDT



\\Dyer\projects\01Active\187.02\dwg\FIGURES.dwg 9/27/2012 2:17:05 PM PDT

THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO. 6
DATE: SEP, 2012 PROJECT NO.: 187.02	*ALTERNATIVE 2*	



1. NEW STORM DRAIN MANHOLE
2. NEW GRAVITY STORM DRAIN LINE TO 24"ø PUMP STATION
3. NEW REGIONAL STORM DRAIN PUMP STATION - 3,725 GPM
4. PUMP STATION FORCEMAIN - 14"ø
5. NEW OUTFALL PIPE - 24"ø
6. NEW OUTFALL W/TIDEGATE
7. NEW CATCH BASIN
8. NEW STORM DRAIN MANHOLE W/CHECK VALVE ON GRAVITY STORM DRAIN LINE
9. NEW 15"ø
10. NEW 18"ø

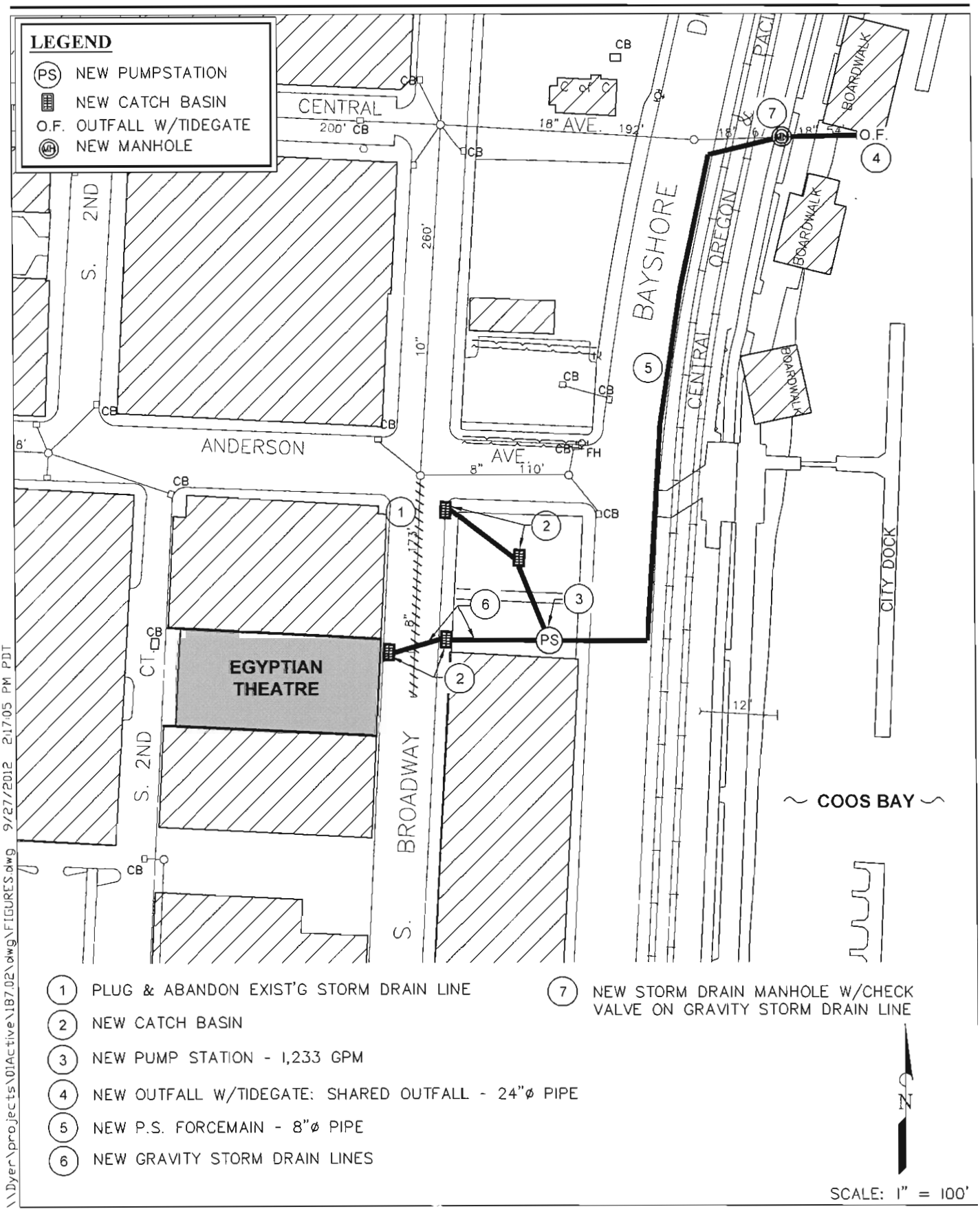
NOTE: FINAL LOCATION AND SIZE/FOOTPRINT OF PUMP STATION TO BE DETERMINED IN DESIGN. CAPACITIES AND CONDITION OF EXIST'G BASIN NO. II STORM DRAIN LINES SHOULD BE FURTHER EVALUATED. THEY WERE NOT EVALUATED IN THIS REPORT.

N

SCALE: 1" = 100'

THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO. 7
DATE: SEP, 2012	*ALTERNATIVE 3*	
PROJECT NO.: 187.02		

\\Dyer\Projects\01Active\187.02\dwg\FIGURES.dwg 11/26/2012 7:13:55 AM PST



\\Dyer\projects\01Active\187.02\dwg\FIGURES.dwg 9/27/2012 2:17:05 PM PDT

THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO. *8*
DATE: SEP, 2012	*ALTERNATIVE 4*	
PROJECT NO.: 187.02		

City of Coos Bay **11/08/12**
Egyptian Theatre Storm Drain Study
Alternative 1: Local Pump Station at Egyptian Theatre

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls	LS	ALL	$78,800.00	$78,800
2	Demolition and Site Preparation	LS	ALL	$63,000.00	$63,000
3	Misc. Appurtenances	LS	ALL	$38,600.00	$38,600
4	Shoring and Piling	LS	ALL	$40,000.00	$40,000
5	Pump Station	EA	1	$225,000.00	$225,000
6	Vault w/ Check Valve	EA	1	$8,000.00	$8,000
7	8" PVC Storm Drain - Class C Backfill	LF	20	$100.00	$2,000
8	12" Storm Drain - Class C Backfill	LF	160	$70.00	$11,200
9	18" Storm Drain - Class C Backfill	LF	80	$75.00	$6,000
10	18" PVC Storm Drain - Bore	LF	100	$300.00	$30,000
11	18" Rail Road Crossing	LF	80	$3,000.00	$240,000
12	18" Outfall w/ Tidegate	EA	1	$15,000.00	$15,000
13	Catch Basin	EA	5	$1,500.00	$7,500
14	Curb and Gutter R&R	LF	20	$30.00	$600
15	Sidewalk R&R	SF	120	$10.00	$1,200
16	AC Pavement R&R	TON	43	$120.00	$5,160

Construction Total	**$772,060**
Engineering	**$154,410**
Geotechnical Enginnering	**$15,000**
Environmental Study/Permitting	**$20,000**
Contingency	**$192,290**
Legal & Administration	**$23,160**
Total Project Cost	**$1,176,920**

Estimated Budget Cost **$1,060,000, to $1,142,000**

This cost estimate is for planning purposes only. Final Design will determine pipe routes, construction methods, and quantity of materials needed.

City of Coos Bay **11/8/12**

Egyptian Theatre Storm Drain Study

Alternative 2: Local Pump Station at Egyptian Theatre - New Outfall and Replace Basin No. 11 Outfall

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls	LS	ALL	$83,000.00	$83,000
2	Demolition and Site Preparation	LS	ALL	$66,400.00	$66,400
3	Misc. Appurtenances	LS	ALL	$40,500.00	$40,500
4	Shoring and Piling	LS	ALL	$45,000.00	$45,000
5	Pump Station	EA	1	$225,000.00	$225,000
6	Vault w/ Check Valve	EA	1	$8,000.00	$8,000
7	8" PVC Storm Drain - Class C Backfill	LF	20	$100.00	$2,000
8	12" Storm Drain - Class C Backfill	LF	160	$70.00	$11,200
9	18" Storm Drain - Class C Backfill	LF	80	$75.00	$6,000
10	18" PVC Storm Drain - Bore	LF	100	$300.00	$30,000
11	18" Rail Road Crossing	LF	80	$3,000.00	$240,000
12	18" Outfall w/ Tidegate	EA	1	$15,000.00	$15,000
13	24" Storm Drain - Class C Backfill	LF	60	$120.00	$7,200
14	24" Outfall w/ Tidegate	EA	1	$20,000.00	$20,000
15	Catch Basin	EA	5	$1,500.00	$7,500
16	Curb and Gutter R&R	LF	20	$30.00	$600
17	Sidewalk R&R	SF	120	$10.00	$1,200
18	AC Pavement R&R	TON	43	$120.00	$5,160

Construction Total	**$813,760**
Engineering	**$162,750**
Geotechnical Enginnering	**$15,000**
Environmental Study/Permitting	**$20,000**
Contingency	**$202,300**
Legal & Administration	**$24,410**
Total Project Cost	**$1,238,220**

Estimated Budget Cost **$1,114,000 to $1,486,000**

This cost estimate is for planning purposes only. Final Design will determine pipe routes, construction methods, and quantity of materials needed.

City of Coos Bay **11/8/12**
Egyptian Theatre Storm Drain Study
Alternative 3: Regional Pump Station for Basin No. 11

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls	LS	ALL	$121,500.00	$121,500
2	Demolition and Site Preparation	LS	ALL	$97,200.00	$97,200
3	Misc. Appurtenances	LS	ALL	$60,300.00	$60,300
4	Shoring and Piling	LS	ALL	$50,000.00	$50,000
5	Pump Station	EA	1	$325,000.00	$325,000
6	Check Valve	EA	1	$3,000.00	$3,000
7	15" Storm Drain - Clacc C Backfill	LF	173	$110.00	$19,030
8	18" Storm Drain - Class C Backfill	LF	260	$115.00	$29,900
9	24" Storm Drain - Class C Backfill	LF	200	$120.00	$24,000
10	24" PVC Storm Drain - Bore	LF	150	$500.00	$75,000
11	24" Outfall w/ Tidegate	EA	1	$25,000.00	$25,000
12	24" Rail Road Crossing	LF	80	$3,500.00	$280,000
13	Standard Storm Drain Manhole	EA	2	$5,500.00	$5,500
14	72" Storm Drain Manhole	EA	2	$7,500.00	$15,000
15	72" Storm Drain Manhole w/ Tidegate	EA	1	$20,000.00	$20,000
16	Catch Basin	EA	1	$1,500.00	$1,500
17	AC Pavement R&R	TON	320	$120.00	$38,400

Construction Total	**$1,190,330**
Engineering	**$238,070**
Geotechnical Enginnering	**$15,000**
Environmental Study/Permitting	**$20,000**
Contingency	**$292,680**
Legal & Administration	**$35,710**
Total Project Cost	**$1,791,790**

Estimated Budget Cost **$1,613,000 to $2,150,000**

This cost estimate is for planning purposes only. Final Design will determine pipe routes, construction methods, and quantity of materials needed.

City of Coos Bay 11/8/12
Egyptian Theatre Storm Drain Study
Alternative 4: Local Pump Station at Egyptian Theatre - Shared Outfall

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls	LS	ALL	$128,600.00	$128,600
2	Demolition and Site Preparation	LS	ALL	$55,900.00	$55,900
3	Misc. Appurtenances	LS	ALL	$33,600.00	$33,600
4	Shoring and Piling	LS	ALL	$45,000.00	$45,000
5	Pump Station	EA	1	$225,000.00	$225,000
6	Check Valve	EA	1	$3,000.00	$3,000
7	8" PVC Storm Drain - Class C Backfill	LF	300	$100.00	$30,000
8	8" PVC Storm Drain - Bore	LF	60	$400.00	$24,000
9	12" Storm Drain - Class C Backfill	LF	240	$70.00	$16,800
10	8" Rail Road Crossing	LF	80	$1,500.00	$120,000
11	24" Outfall w/ Tidegate	EA	1	$20,000.00	$20,000
12	72" Storm Drain Manhole w/ Tidegate	EA	1	$15,000.00	$15,000
13	Catch Basin	EA	5	$1,500.00	$7,500
14	Curb and Gutter R&R	LF	20	$30.00	$600
15	Sidewalk R&R	SF	100	$10.00	$1,000
16	AC Pavement R&R	TON	147	$120.00	$17,640
		Construction Total			**$743,640**
		Engineering			**$148,730**
		Geotechnical Enginnering			**$15,000**
		Environmental Study/Permitting			**$20,000**
		Contingency			**$185,470**
		Legal & Administration			**$22,310**
		Total Project Cost			**$1,135,150**

Estimated Budget Cost **$1,022,000 to $1,362,000**

This cost estimate is for planning purposes only. Final Design will determine pipe routes, construction methods, and quantity of materials needed.

City of Coos Bay
Egyptian Theatre Storm Drain Memo
Photos of Tidegate 14



Notes:

1. Pipe on left of photo is Tidegate No. 14. The pipe is an 18-inch diameter corrugated metal pipe. Tidegate appears to be functional however there are holes in the sides of the pipe. The 2004 Storm Water Master Plan identified an abandoned outfall under the existing outfall. The abandoned manhole cound not be seen and was not evaluated.

2. The pipe shown on the right is an unknown pipe. No dye was observed exiting this pipe.

City of Coos Bay
Egyptian Theatre Storm Drain Memo
Photos of Tidegate 14



Notes: Tidegate No. 14: Hole observed in side of 18-inch corrugated metal pipe, upstream of tidegate.

City of Coos Bay
Egyptian Theatre Storm Drain Memo
Photo No. 1 of Egyptian Theatre Sidewalk



Notes:

1. Photo is taken facing south. The tiled sidewalk slopes from left to right in front of the Egyptian Theatre doors.

City of Coos Bay
Egyptian Theatre Storm Drain Memo
Photo No. 2 of Egyptian Theatre Sidewalk



Notes:

1. Photo is taken facing south. This photo shows the flooding that occurs in front of the theatre. Photo was taken on 12/23/2003 at approximately 1:20 p.m, within an hour of high tide for that day.

Storm Drainage Calculations
Basin No. 11
From 2004 Storm Water Master Plan

Basin No. 11

Basin 11 is approximately 7.7 acres bound to the north by Basin 10A, the east by the Bay, and the south by Curtis.

Soil Type
Udorthents, (Artificial Fill)

Slope
0-1%

Current Land-use
6.19 Acres Commercial
1.51 Acres Industrial

Peak Runoff
25-Year Storm: 7.4 CFS
50-Year Storm: 8.3 CFS
Future 25-Year Storm: 7.4 CFS
Future 50-Year Storm: 8.3 CFS

Existing System
One 18-inch CMP outfall line, on Central Avenue, drains Broadway from Commercial to Bennett Avenues and Central from 4th Street to the Bay. There are two other outfalls within 10-feet of this outfall (Tidegate 14) that do not show on City maps. A 24-inch concrete outfall located a few feet to the north was noted as having considerably higher flows than the 18-inch line on the plans.

Present Day Problems
No problems were reported, although some of the area within the basin is located in the flood plain and Broadway floods in front of the Egyptian Theater during unusually high tides. Modeling of the basin indicates that the existing CMP pipe on Central Avenue has inadequate capacity and needs to be 18" diameter concrete pipe or equivalent to meet a 50-year rainfall event. Without pumping, this area is subject to flooding during high tide high rain events.

Future System
No development is predicted for this basin throughout the planning period.

SUBCATCHMENT 10 Basin 10

PEAK= 27.88 CFS @ 8.15 HRS, VOLUME= 10.52 AF

ACRES	CN	
9.60	92	Comm
.70	88	Ind
23.40	75	Small REs
33.70	80	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=725' s=.31 '/'	Upper	4.4
CURVE NUMBER (LAG) METHOD L=761' s=.024 '/'	Middle	16.5
CURVE NUMBER (LAG) METHOD L=300' s=.027 '/'	Lower	7.4
	Total Length= 1786 ft Total Tc=	28.3

SUBCATCHMENT 11 Basin 11 (Report Basin-DELETED)

PEAK= 4.71 CFS @ 8.01 HRS, VOLUME= 1.58 AF

ACRES	CN	
3.00	92	Commercial
.85	88	Ind
3.85	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=480' s=.004 '/'	Length	18.8

SUBCATCHMENT 13 Basin 13 (Report Basin 11)

PEAK= 8.25 CFS @ 8.22 HRS, VOLUME= 3.15 AF

ACRES	CN	
1.51	88	Industrial
6.19	92	Commercial
7.70	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=440' s=.001 '/'	Length	35.1

Storm Drainage Calculations
Egyptian Theatre – Local Pump Station

Rational Method

The Rational Method is based upon the concept of mass balance and relates rainfall intensity to runoff intensity. The Rational Method incorporates the use of the rational formula, which is generally expressed as:

$$Q_p = CIA$$

Where:
Q_p = peak discharge (cfs)
C = runoff coefficient (dimensionless)
I = rainfall intensity (in/hr)
A = watershed area (ac)

Once values for runoff coefficient, rainfall intensity, and watershed area have been determined, peak discharge (Q_p) values for drainage basins in the area are calculated. Each of the parameters in the formula is described below.

Runoff Coefficients
Values for C, the runoff coefficient, are readily available in most hydrology or engineering handbooks. Some common C values are listed in the table below:

COMMON RUNOFF COEFFICIENTS

AREA DESCRIPTION	RUNOFF COEFFICIENT
Downtown Business	0.70 to 0.95
Neighborhood	0.50 to 0.70
Single Family (Residential)	0.30 to 0.50
Detached Multi-units (Residential)	0.40 to 0.60
Attached Multi-units (Residential)	0.60 to 0.75
Light Industrial	0.50 to 0.80
Parks, Cemeteries	0.10 to 0.25
Unimproved	0.10 to 0.30

For Egyptian Theatre Local Pump Station, a Runoff Coefficient of 0.95 was selected.

Rainfall Intensity
Rainfall intensity (I) is the intensity (inches per hour) of rainfall for a given design storm at a given time in the storm. Intensity is typically determined from Rainfall Intensity, Duration, Frequency (IDF) curves. IDF curves are used to determine rainfall intensity associated a specific storm frequency. The IDF curves for Coos Bay are shown at the end of these calculations.

For Egyptian Theatre Local Pump Station, using a t_c of 5 minutes, the Rainfall Intensity (I) is 3.4 in/hr)

Time of Concentration
Rainfall duration in a drainage basin is computed by determining the time of concentration for that drainage basin. Time of concentration (t_c) is defined as the longest travel time it takes a particle of water to reach a discharge point in a watershed. While traveling towards a discharge point, a water particle may experience sheet flow, shallow concentrated flow, open channel flow, or a combination of these.

For Egyptian Theatre Local Pump Station, the t_c of 5 minutes was used to calculate the rainfall intensity. This is a small basin, which results in a short time of concentration. The flows during this type of rainfall event will be sheet flows.

Area
The final variable in the rational formula is the watershed area (A). Watershed area is determined from topographic maps of the area.

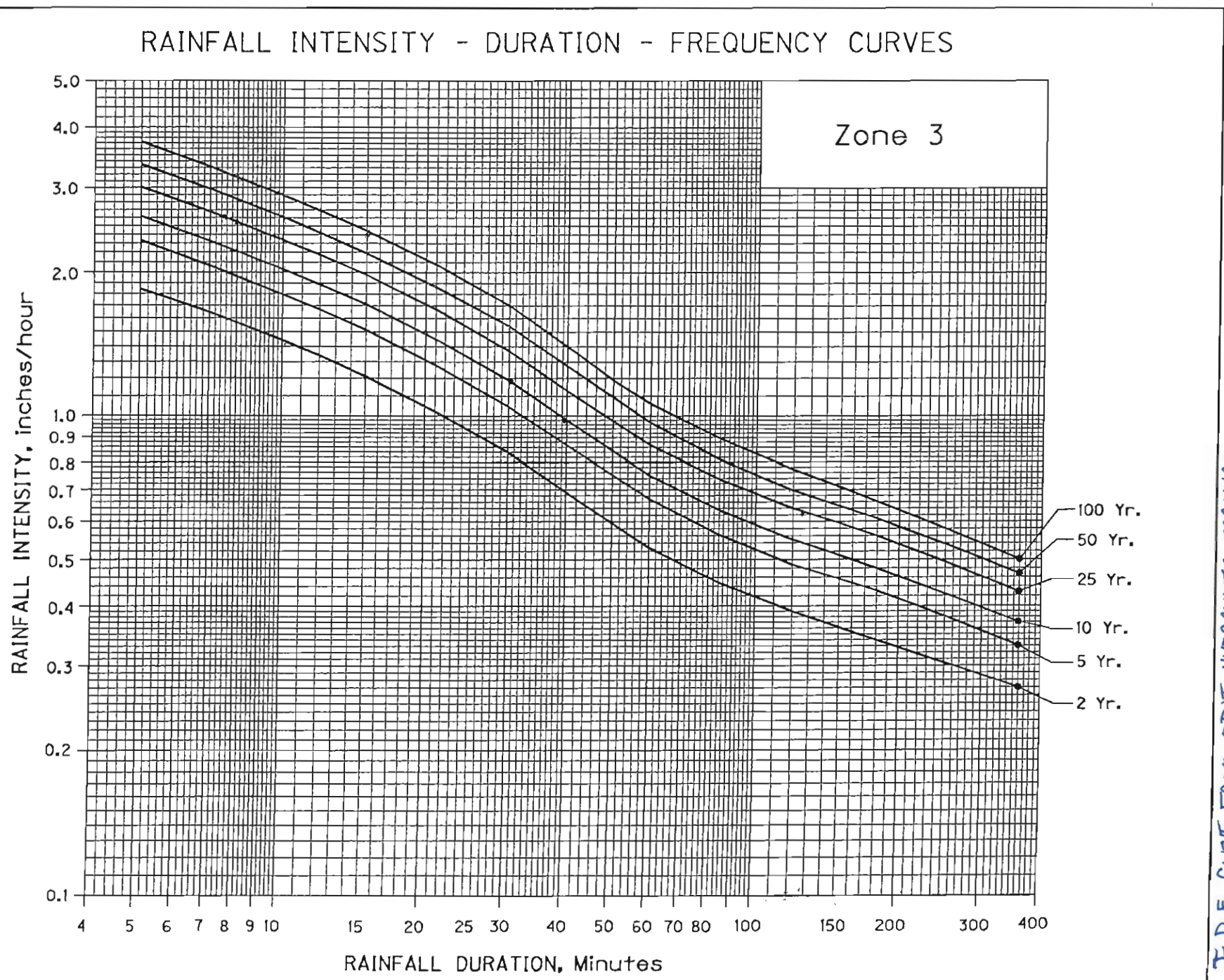
From Figure 9: Storm Water Calculation Area Map, the area for the Egypian Theatre Local Pump Station was 45,600 square feet which is 1.05 acres

$Q_p = CIA$

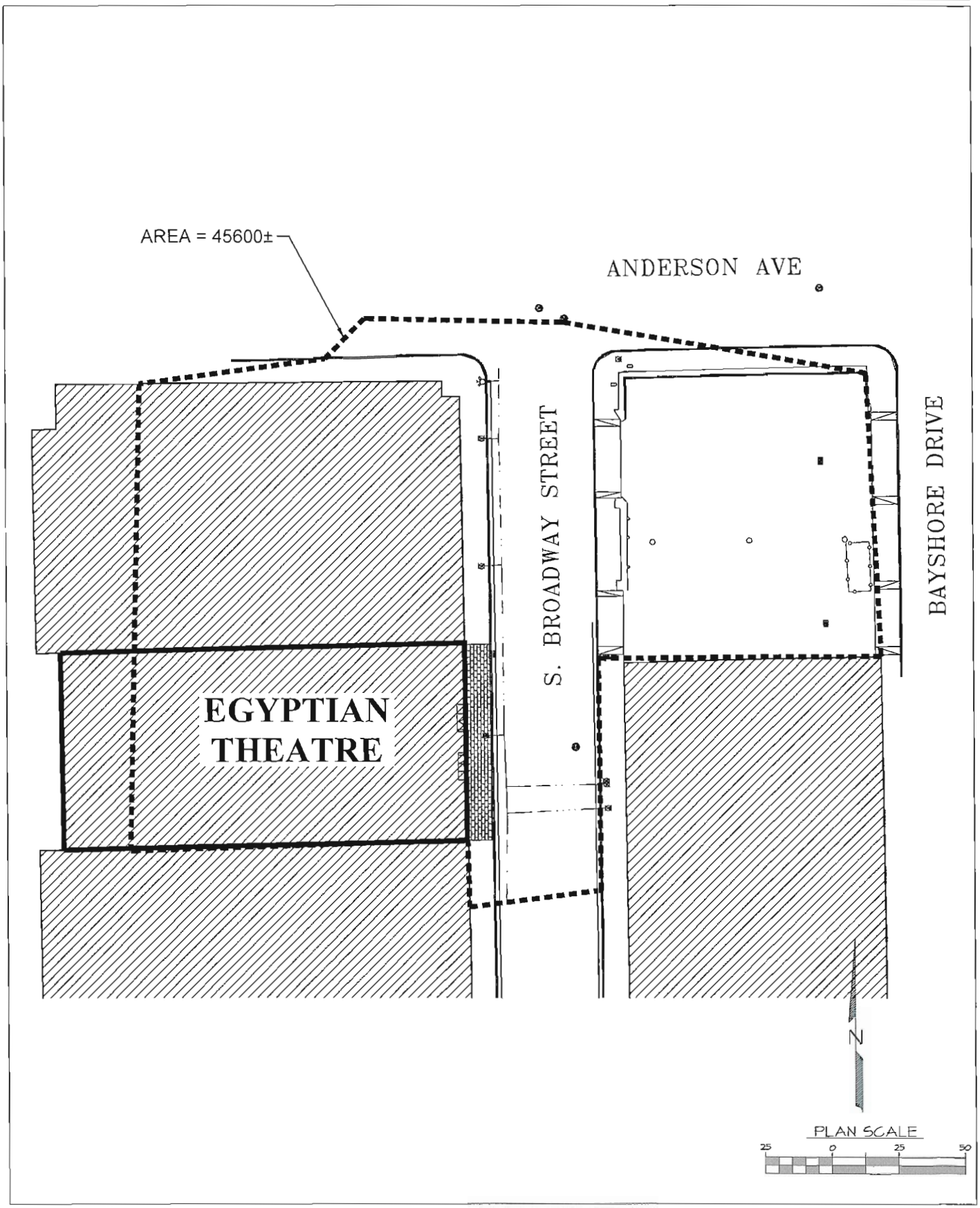
Where:
Q_p = peak discharge (cfs)
C = 0.95
I = 3.4 (in/hr)
A = 1.05(ac)

$Q_p = (0.95)*(3.4 \text{ in/hr})*(1.05 \text{ ac})$

$Q_p = 3.39$ cfs



I.D.F. CURVE FROM ODOT HYDRAULICS MANUAL



THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	*CITY OF COOS BAY* *EGYPTIAN THEATRE STORM DRAIN STUDY*	FIGURE NO.
DATE: NOVEMBER, 2012 PROJECT NO.: 187.02	*STORM WATER CALCULATION AREA MAP*	110

Evaluation of Drainage Issues Along the Highway 101 Corridor and Downtown Area For the City of Coos Bay

January 2013



Prepared By
City of Coos Bay
Public Works – Engineering Division
500 Central Avenue
Coos Bay, Oregon 97420

TABLE OF CONTENTS

1.0 Introduction ……..1
- Background and Need
- Project Study Area
- Sources of Information

2.0 Matrix and Design Parameters……2
- Matrix Parameters
- Average Storm
- Storm Event, River Flooding Event, and Tidal Influences

3.0 Projects……..8
- Alder Outfall
- Pump Station 11 Upgrade
- Drainage Basin 11 Interceptor
- Downtown Pump Station for Drainage Basin 11
- Golden Pump Station and Interceptors

4.0 Prioritization Results……...11

5.0 Additional Considerations……..12
- High Priority Projects That Were Not Analyzed
- Other Priority Projects That were Not Analyzed
- Mitigation for Deferred Maintenance
- Risk Tolerance vs. Risk Capacity
- Funding
- Levee

6.0 Conclusion……...14

Attachments:

Attachment A - Prioritization Criteria

Attachment B - Study Area Boundary & Basin Map

Attachment C - Cost Estimates

Attachment D - Prioritization Matrix

1.0 INTRODUCTION

BACKGROUND AND NEED

The City of Coos Bay's downtown area and the portion of Highway 101 that serves Coos Bay is situated adjacent to the Bay of Coos River, also named Coos Bay (To avoid confusion with the name of the City, the bay formed by Coos River will be referred to as the "Bay" throughout this report.). Stormwater collected from within this developed area is typically captured in catch basins or inlets and conveyed in pipes. The pipes ultimately discharge to the Bay. Because of recent flooding incidents that the City has experienced, City Council tasked staff with investigating the drainage issues that affect the 101 Corridor and the downtown area. The City is steadily growing and still has viable land for development located upstream of this area. With this anticipated growth and the existing drainage issues that the 101 Corridor and the downtown area experiences, the City needs a plan to address current and future drainage issues that impact these areas.

Based on Council's request, staff compiled a list of projects in the subject area and evaluated and rated the projects. Updated cost estimates were also created for the purposes of financial planning. This document contains discussion regarding the preparation of the matrix, a narrative about each project identified and analyzed, the prioritization matrix, a ranking of the projects, and cost estimates.

PROJECT STUDY AREA

The study area focuses on the downtown area of Coos Bay and the Highway 101 Corridor. The downtown area is bounded by 7th Street to the west, the Bay to the east, Golden Avenue to the south, and Market Avenue to the north. The Highway 101 Corridor extends from the North Bend/Coos Bay city limits and continues southerly to the Fred Meyer Retail Store (Johnson Avenue).

SOURCES OF INFORMATION

In order to prioritize the drainage projects, Staff utilized several resources to create a list of drainage issues and proposed projects along the 101 Corridor. The resources included discussions with CH2M HILL-OMI (the City's operation and maintenance contractor for sanitary sewer and stormwater), discussions with the Police Department, and referencing the 2004 plan titled, *Storm Water Master Plan,* prepared by The Dyer Partnership (herein referred to as "Dyer"). The majority of the drainage issues that CH2M HILL-OMI and the Police Department identified were already identified in the 2004 Master Plan. Dyer also created a drainage analysis for the Egyptian Theatre. The purpose of the analysis was to evaluate and present viable alternatives that would reduce the impacts of flooding in front of the theatre. The findings are presented in a technical memorandum titled, *Egyptian Theatre Storm Drain Alternatives*, dated November 8, 2012. Information from the memorandum was also utilized in the preparation of this report.

With the exception of one project, only high priority projects were evaluated for the purposes of this report. High priority projects were identified as projects in areas where there is currently flooding that affects structures or the use of property, the system is significantly undersized for current design flows, or where tidegates or piping are missing or non-operable. Additionally projects were rated a high priority if the existing improvements are past their design life, showing signs of eminent failure, and the failure of these existing improvements would have significant public safety, environmental, and economic impacts. As stated previously, there is one project that was not rated a high priority. This project is titled Downtown Pump Station for Drainage Basin 11. This project is described in more detail in Section 4.0.

2.0 MATRIX AND DESIGN PARAMETERS

City Staff created a prioritization matrix to evaluate the drainage issues. The prioritization matrix was based on categories that directly affected the City. Additionally, while creating the matrix, several other parameters had to be defined. The City had to determine what was an average storm that is typical throughout the rainy season. The City also investigated the difference between storm events, flooding events, and tidal influence. This section discusses the research, findings, and conclusions that were performed in the creation of the matrix.

MATRIX PARAMETERS

Once the projects were identified an evaluation criteria had to be created. In creating the criteria several main categories were utilized. The main categories consisted of public safety impacts, economic impacts, technical criteria, environmental/ecological impacts, and other impacts. Each of these main categories had several subcategories that are discussed in more detail below.

1.0 Public Safety Impacts

1.1 Emergency vehicle access (fire, police, EMT, etc.) - Emergency service vehicles must have adequate access to all areas in the event of emergencies at, within, and through a flooding location. This access will range from general roadway access and including access to individual buildings.

1.2 Vehicular Impacts/Circulation (excluding emergency vehicles) - The school bus route needs to be free and clear. Is public's ability to enter and exit property and/or business compromised by flooding event? Is City staff's ability to exit and enter property and/or business compromised by flooding event? Is City staff's ability to assist during a flooding event compromised because property does not have ingress/egress? Does the velocity of water cause a potentially dangerous situation if a vehicle attempts to pass through?

1.3 Road delineation visibility - Making drivers aware that they are approaching an intersection, through the use of enhanced signing, delineation, and striping. Is the flooding event causing the delineation to be obscure, thus causing the road delineation to become difficult to see? Will the road delineation be compromised in a flooding event?

1.4 ADA Impacts and Special Needs
Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintain independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; or who are transportation disadvantaged. Is flooding event impacting these needs?

2.0 Economic Impacts

2.1 Private property value impact
Property losses are partial or total. A partial loss is one that does not completely destroy the property and the property can be repaired without exceeding the policy limits or the

property value. A total loss occurs when the cost of repairing the property is more than the property's value.

2.2 Public property value impact
Property losses are partial or total. A partial loss is one that does not completely destroy the property and the property can be repaired without exceeding the policy limits or the property value. A total loss occurs when the cost of repairing the property is more than the property's value. Includes streets and public infrastructure.

2.3 Identified in Master Plan
Master plans are prepared by qualified professionals for municipalities and agencies. These plans assist City elected officials and staff in identifying and prioritizing projects that need repair. Additionally the plan presents costs estimates for the project. The cost estimates help with the financial planning to construct the project.

2.4 Enhance growth/development
The City of Coos Bay encourages growth and development within Coos Bay. As such, the City looks for projects that will meet this goal. Does this project meet this goal?

3.0 Technical Criteria

3.1 Frequency of drainage problem occurrence
The frequency in which a drainage issue occurs is significant. If a drainage issue is reoccurring, this should be documented. The documentation should include the status of the tide, the amount of rain occurring in the storm event and other pertinent factors.

3.2 Intensity of flooding caused by average storm
The intensity of a storm is significant. If a drainage issue is occurring, the intensity of a storm and the precipitation should be recorded. This information will help correlate the capacity of the existing drainage improvements (if any) and provide staff with pertinent information related to the level of protection that the drainage improvement provides. Also note if flooding is occurring at High Tides.

3.3 Design standards
Safety can be defined to be the control of recognized hazards to achieve an acceptable level of risk. This can take the form of being protected from the event or from exposure to something that cause physical or economic losses. Can project be designed to meet minimum City's design standards?

3.4 Complexity of solution
Is project solution isolated to a single location or will it involve a regional approach? Will solution involve coordination with other jurisdictions/agencies? For example will solution impact the railroad (Port) or the Levee (Port and Army Corps of Engineers) or DEQ? Will the project be completed in a timely manner or will the project require several months or a year to complete? The duration of design along with construction should be considered in this timeline.

3.5 Site accessibility (easements, permission to access)
Can project be constructed in public right of way? Will a temporary and/or permanent easement be required from private property owners and/or other agencies?

4.0 Environmental/Ecological Impacts

4.1 Habitat impacts from drainage problem
Does drainage issue impact habitat when flooding occurs? Is there endangered species identified?

4.2 Habitat impacts from proposed drainage improvements
Will proposed solution impact habitat during construction? After construction? Is there endangered species identified?

4.3 Permitting
Is there an opportunity to partner with another agency on project? Will resource agency permitting be required for drainage solution?

5.0 Other Impacts

5.1 Agency Impacts - Port of Coos Bay
Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.

5.2 Agency Impacts - Oregon Department of Transportation (ODOT)
Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.

5.3 Agency Impacts - North Bend
Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.

5.4 Access to recreation facilities (e.g. Boardwalk, Museum etc.)
Is access blocked to recreational facilities during a flooding event? Is this blockage extended past the flooding event due to maintenance and repair? Is this flooding having long term adverse impacts to facility?

Once the categories and sub categories were created and defined, evaluation criteria was created and a scoring system was assigned. For the purposes of this study, the projects were prioritized based on high score. In other words, the higher the score a project received indicated that the project was more important and/or higher ranked.

Each subcategory has a maximum of 3 points that can be assigned. However all the categories are not rated equal. It is important to understand that there are certain categories that must be weighted higher than other categories. For instance, public safety should be the City's priority concern and should not be weighted as equally as economic impacts. Attachment A contains the prioritization criteria that define the categories, subcategories, and the evaluation criteria (scoring system). The following table presents the values that were assigned to the major categories and the weighted values:

TABLE 1
SUMMARY OF RANKING VALUES FOR THE MAJOR CATEGORIES

Category	Weighted Percentage	Maximum Value	Maximum Weighted Value
1.0 Public Safety Impacts	30%	12	18.9
2.0 Economic Impacts	20%	12	12.6
3.0 Technical Criteria	20%	15	12.6
4.0 Environmental/Ecological Impacts	20%	9	12.6
5.0 Other Impacts	10%	12	6.3
Total	**100%**	**60**	**60**

AVERAGE STORM

For the purposes of this prioritization matrix, in order to evaluate each project and assign values for each subcategory, it was assumed that flooding was occurring during an "average storm". With that said, the task of defining an average storm was undertaken. Research regarding the National Oceanic and Atmosphere Administration (NOAA) precipitation maps were obtained along with historic precipitation records. The following table presents the 24 hour precipitation values from the NOAA maps:

TABLE 2
SUMMARY OF 24-HOUR PRECIPITATION

Storm Event	Precipitation (inches)
2-Year, 24-hour	3.75
5-Year, 24-Hour	4.50
10-Year, 24 Hour	4.70
25-Year, 24 Hour	5.75
50-Year, 24 Hour	6.40
100-Year, 24 Hour	6.75

The historic precipitation data was obtained for years 2007 through 2012. The information obtained was recorded by the weather station located at the North Bend Airport. Interesting to note, is that over the last 6 years, there is not a recorded storm event that meets or exceeds 2-year, 24 hour levels. The following table summarizes the historic precipitation data:

TABLE 3
HISTORIC PRECIPITATION DATA

Year	Total Annual Rainfall (inches)	Number of Storms Greater than 1- inch	Highest Precipitation(1)	
			Inches	Date
2012	54.1	12	2.5	December 20, 2012
2011	40.1	5	1.7	February 28, 2011
2010	-Data Was Not Complete(2)-			
2009	47.4	4	1.5	December 15, 2009
2008	52.1	8	1.8	January 26, 2008
2007	54.7	10	3.1	November 18, 2007

(1) 2 Year, 24 Hour Storm = 3.75 inches
(2)The information that obtained for 2010 appeared to be erroneous. As such the data was not utilized.

Looking at the total average annual rainfall for the last 6 years, on average, the City receives 49.7 inches of rainfall annual. Additionally, based on the NOAA maps and the historic precipitation data that was compiled, it appears that the City on average receives storms that generate less than 1-inch of rainfall. As you can see from the above table there were a number of storms that did exceed 1-inch however they did not exceed the 2-year, 24-hour levels (3.75 inches). For the purposes of evaluating the projects, it was assumed that flooding was occurring for storm events that were less than a 2-year, 24-hour storm because that is what this area typically experiences.

To put it into perspective, on Thursday December 20, 2012 the City experienced a storm event. In total, 2.5 inches of rainfall occurred in a 24 hour period. The runoff from the storm overtaxed the storm drain system throughout the 101 corridor and downtown area. There were several locations that experienced flooding. Highway 101 northbound was closed to cars and small trucks. This traffic was re-routed through side streets and caused significant delays. Also, due to inflow and infiltration, several sanitary sewer pump stations experienced significant flows and two separate sewer spills occurred as a result. Even though the flooding seemed significant, that storm was less than a 2-year storm event. However, the peak of the storm occurred around high tide, however the tide was not abnormally high that day. The high tide occurred at 7:00 am and was 5.4 feet.

STORM EVENT, RIVER FLOODING EVENT, AND TIDAL INFLUENCES

There are many factors that can affect flooding in the City. These factors involve the time and quantity of a storm event, saturation of the ground, river flooding, and tidal influences. As stated previously, the storm drain system that serves the downtown area and Highway 101 capture runoff in catch basins and culverts and ultimately convey the runoff to the Bay. The majority of the outfalls at the Bay have tidegates, however some of the tidegates are in need of repair. The tidegates, if operating properly, will prevent the Bay water from backing into the system, however if the system is at capacity and an intense storm is occurring there still could be flooding. The outfalls and tidegates cannot relieve the water into the storm drain system until the water in the bay lowers or recedes. The following text discusses the factors that influence the total water level in the Bay.

Storm events occur frequently in our area. On average the city receives approximately 64 inches a year. When a storm occurs there are several factors that can affect flooding. If the ground is dry, infiltration will occur and the runoff from the storm will be less. If the same volume of storm occurred again, but the ground is saturated then the runoff from the storm will be greater. The amount of runoff that a storm generates can impact flooding.

When storm events occur and cause river levels to rise, this is referred to as river flooding. Several rivers empty into the Bay which can raise levels in the Bay. All of the storm drain systems in and around the downtown area and Highway 101 empty into the Bay. Higher water levels in the Bay will not allow storm drain systems to empty into the Bay until the water recedes. This can also impact flooding.

In addition, the Bay is also subject to tidal influences. The Bay's water level rises and lowers as the tide comes in and goes out. If there is a storm event and/or river flooding during a high tide, this will also impact the storm drain system and thus impact flooding in Coos Bay. The following equation sums up the factors that can affect the overall water level in the Bay:

Total Water Level = Storm Event + Rivers (River Flooding) + Tides + Other Factors
(Other factors can include wind, waves, sea level rise, etc.)

3.0 PROJECTS

In total 4 high priority projects were identified in the Dyer master plan along the Highway 101 corridor and downtown area. Additionally, Council requested that the analysis also include the project that addresses flooding at the Egyptian Theatre. As a result 5 projects were analyzed. The projects are located in several drainage basins throughout the study area. Refer to Attachment B for the exhibit titled, *Study Area Boundary & Basin Map*, obtained from the 2004 Master Plan. This exhibit provides the location of the individual drainage basins within the study area. The projects are described in detail in the following text

ALDER OUTFALL

This outfall is located in Drainage Basin 9. Drainage Basin 9 is 14.4 acres. The basin is an "L" shaped basin. The boundary starts at Date Avenue and N. 2nd Street and continues south, following N 2nd Street, to Park Avenue. At Park Avenue the boundary jogs east to Broadway and then south again to Highland Avenue, following Highland Avenue to the Bay. The existing land use is comprised of 2.4 acres of commercial land, 11 acres of industrial land, and 1 acre of residential land. Runoff associated with this drainage basin is collected along roadways and gutters, captured by catch basins and then conveyed in an 8 inch diameter pipe located along Alder avenue. The storm drain pipe ultimately outfalls into the Bay. There is no tidegate installed at this outfall.

The project proposes to upsize approximate 550 feet of 8 inch pipe to a 12 inch pipe to increase the capacity and meet 50-year design levels. The project also encompasses installing a tidegate at the outfall. Based on current land use, this drainage basin is built out and there is no future development predicted for this basin.

The Alder Outfall project has been identified in the 2004 Master Plan as a high priority project because of the undersized pipe and the lack of tidegate at the outfall. This project will require significant Resource Agency permitting due to the levee and outfall. Additionally, permitting will be required through Oregon Department of Transportation (ODOT) Rail. Total Approximate Cost for Project: $671,679. A Detailed cost estimate is located in Attachment C.

PUMP STATION 11 UPGRADE

The existing pump station 11 is located in Drainage Basin 10A. Drainage Basin 10A is 14.4 acres. The basin is bounded to the north by portions of Highland and Commercial Avenues, bounded to the south by portions of Commercial and Anderson Avenues, bounded to the west by N. 5th Street, and bounded to the east by the Bay. During high tides, the pump station not only serves Drainage Basin 10A but also Drainage Basin 12B, which is located immediately to the south. Currently, Drainage Basin 10A is comprised solely of commercial land. In 1969 a storm water pump station was constructed to serve the areas between 2nd and 4th Streets and Commercial and Curtis Avenues. The pump station helps alleviate flooding in this downtown commercial area. However, due to the age of this facility, it is extremely difficult and costly to obtain replacement parts for the pumps and controls that serve the station. Typically pump stations are designed for a life of 20 years. However, this facility is over 40 years old. If this pump station should fail it would cause significant damage to the commercial buildings in the vicinity. Additionally, if failure were to occur, the drainage could not be diverted from Basin 12B and thus overtax the existing drainage improvements and cause flooding in the 101 Corridor. In assessing a ranking for the project it was assumed that the pump station had failed.

The Pump Station 11 Upgrade project has been identified in the 2004 Master Plan as a high priority project. This project will not require Resource Agency permitting, other than the typical

DEQ permits. Total Approximate Cost for Project: $373,609. A Detailed cost estimate is located in Attachment C.

DRAINAGE BASIN 11 INTERCEPTOR

This project is identified as the Egyptian Theatre Interceptor in the 2001 Master Plan, however to avoid confusion with the flooding that is occurring in front of the theatre, this project name has been changed. Drainage Basin 11 is 7.7 acres and currently consists of 6.19 acres of Commercial land and 1.51 acres of Industrial land. There are several locations throughout this basin, along the 101 Corridor, including the area immediately in front of the Egyptian Theatre that is subject to flooding. However, since the theatre is at the low point within this drainage basin the flooding typically only occurs at that location. The storm drain is estimated to be older than 50 years, has significant deficiencies, and is past its design life. This project includes replacing 660 feet of storm drain line along Broadway between Curtis and Commercial Avenues, replacing 315 feet of 18 inch storm drain along Central, and replacing the outfall and tidegate at the Bay. The Master Plan has identified the outfall and tidegate that serves this system as being deficient and in need of repair. There are holes in the outfall that allow water to enter the system. Additionally, the tidegate is past its design life and should be replaced. This project will not remove the flooding occurring immediately in front of the Egyptian Theatre, however there is a potential to alleviate the flooding if the project is constructed.

The Drainage Basin 11 Interceptor project has been identified in the 2004 Master Plan as a high priority project. This project will require significant Resource Agency permitting due to the levee and outfall. Additionally, permitting will be required through ODOT Rail. Total Approximate Cost for Project: $958,606. A Detailed cost estimate is located in Attachment C.

DOWNTOWN PUMP STATION FOR DRAINAGE BASIN 11

This project is also located in Drainage Basin 11. This project was identified by the Dyer Partnership and presented in the memorandum that addressed the flooding in front of the Egyptian Theatre. It should be noted that this project also proposes to replace the outfall and tidegate associated with drainage Basin 11.

This project includes the installation of a new regional pump station with associated piping and manholes from the catch basin in front of the Egyptian Theatre to the pump station, and replacement of the existing Basin No. 11 outfall pipe and tidegate. The pump station reduces flooding within Drainage Basin and the area in front of the Egyptian Theatre.

The pump station would only pump when high water was detected within the system. During periods of high rainfall and low tides, the system would operate as a gravity flow system. A new manhole or vault would be installed to accommodate the gravity storm drain line and the new pump station force main. A check valve would be installed on the gravity system to prevent short circuiting of the storm drain system when the pump station was in operation. Replacement of the existing outfall would also be conducted and would include a new tidegate on the outfall to prevent debris from entering the system and clogging the outfall manhole.

It should be noted that if this project is constructed, flooding may occur if it is determined that a surrounding storm water basin surcharges into Basin No. 11, or if the existing storm water piping in Basin No. 11 is overtaxed by an intense storm and high tide.

The Downtown Pump Station for Drainage Basin 11 project was identified in the 2004 Master Plan, however was not a recommended project. The plan did recognize that there was flooding in from of the Egyptian Theatre, however it also recognized that the only solution would be to

pump the water and, per the plan, since this solution only served one building, it was deemed not cost effective.

The Downtown Pump Station for Drainage Basin 11 project will require significant planning. Portions of the existing storm drain conveyance system and outfall piping are located under concrete sidewalks and artwork adjacent to the new City of Coos Bay Visitors Center. These lines may require replacement or relocation. This project will require significant Resource Agency permitting due to the levee and outfall. Additionally, permitting will be required through ODOT Rail. Total Approximate Cost for Project: $2,431,791. A Detailed cost estimate is located in Attachment C.

GOLDEN PUMP STATION AND INTERCEPTORS

This project is located in Drainage Basin 14. Drainage Basin 14 is 124 acres and is currently comprised of 36 acres of commercial land, 7 acres of industrial land, 33 acres of residential land, 27 acres of forest, and 21 acres of Grassy Fields. Approximately 27 acres of land that is currently forest land is zoned for residential development. Currently there is an existing outfall to the Bay, with a tidegate, at Golden Avenue. However, due to the low elevation in this basin, it is not feasible to have a gravity flow system during a rainfall event coinciding with a high tide. As a result sections of Highway 101 and 2nd Street, south of Golden Avenue, have a tendency to flood during intense storm events that occurs during a high tide. This project consists of constructing a pump station to pump the runoff when flooding occurs. The pump station will have a new outfall and tidegate as well. Additionally, the project also includes construction of 1,150 feet of new storm drain that will redirect flows to the new pump station.

The Golden Pump Station and Interceptors project has been identified in the 2004 Master Plan as a high priority project. This project will require significant Resource Agency permitting due to the levee and outfall. Additionally, permitting will be required through ODOT Rail. Total Approximate Cost for Project: $3,204,666. A Detailed cost estimate is located in Attachment C.

4.0 PRIORITIZATION RESULTS

Each project identified in Section 4.0 was inserted into the Prioritization Matrix and each project was rated against the same categories and subcategories as described in Section 3.0. The detailed results of the project evaluations are located in Attachment D. The results have been summarized below:

Table 4
Summary of Prioritization Results

Project	Total Value	Weighted Value	Ranking	Cost Estimate
Drainage Basin 11 Interceptor	48	54.4	1	$958,606
Pump Station 11 Upgrade	37	41.2	2	$373,609
Golden Pump Station & Interceptors	35	38.5	3	$3,204,666
Alder Outfall	31	29.6	4	$671,679
Downtown Pump Station for Drainage Basin 11	27	26.6	5	$2,431,791
			Total	**$7,640,351**

It is difficult to rate projects with a priority status. When we consider prioritization there are many questions that should be considered and answered:

1. Is there deficiency that could result in total failure causing significant damage to public and/or private property? Could the failure affect public safety?
2. What is the availability and source of funding?
3. Does the project require agency coordination and permitting?
4. Does project enhance/impact development?

With these questions in mind, it should be determined if these five identified projects should be further evaluated. Additionally, should the City perform all the projects, only a portion of the project(s), or none of them? The maximum number of points is 63. The ranking of the five projects were not affected by the weighted value of the categories. However, based on the weighted values, two projects fell below the 50th percentile; Alder Outfall and Downtown Pump station for Drainage Basin 11. The next step is to determine what, if any, of the projects evaluated should be pursued further.

5.0 ADDITIONAL CONSIDERATIONS

This section deals with additional considerations that should be taken into account prior to making any significant decisions. There are many issues to address when taking on a task such as this. Often times the task can evolve into a completely different project. In creating this prioritization matrix and report several items were brought to Staff's attention that was not necessarily considered at the beginning of this project. The items have been discussed in further detail in this section for the reader's consideration.

HIGH PRIORITY PROJECTS THAT WERE NOT ANALYZED

It should be noted that there are numerous other projects and/or drainage issues that will also, at some time, need to be addressed. The City relies on two planning documents for storm Water. The 2004 Master Plan, prepared by Dyer, only addresses the drainage basins tributary to highway 101 and the drainage basins tributary to Coalbank Slough. The other planning document is also titled, Stomwater Master Plan, however it was prepared by HBH Consulting Engineers in March 2006 and covers the remainder portions of Coos Bay. The March 2006 report has $1 million worth of high priority projects. In fact the 2004 Dyer Master Plan identified approximately $8.3 million of high priority projects. Of which, $2.1 million worth of projects have been analyzed in this report because they fell within the study area. In total, only approximate 20% of the projects identified in both reports as high priority are analyzed in this plan. Please note that these dollar amounts reflect the current economic condition at the time the reports were generated and do not include inflation or resource agency permitting.

OTHER PRIORITY PROJECTS THAT WERE NOT ANALYZED

There are many other projects, other than the high priority projects, that were identified in both Master Plans. Because a project was not deemed a "high priority" does not mean that it should be discounted. For the purposes of this type of planning documents, there has to be some order set. If the other projects in the plans are not addressed, at some point they will become an issue and in all likelihood the issue will be larger than what was originally identified. In total, there are an additional $6.8 million worth of projects that are identified in addition to the $9.3 million worth of high priority projects. These dollar amounts do not include environmental and agency processing and they do not reflect any inflation. As such in all likelihood their total amount could increase by up to 50% and those numbers will most likely increase annually as the maintenance is deferred.

MITIGATION FOR DEFERRED MAINTENANCE

Deferred maintenance is the practice of postponing maintenance activities in order to save costs, meet budget funding levels, staffing limitations, or realign available budget monies. The concern with deferred maintenance is that while it may not have long term consequences in some cases because it will be attended to eventually, it can increase the risk of creating a safety hazard, a breakdown, or another problem which could cause a significant increase in costs. Unfortunately the City has deferred maintenance on portions of its storm water system. While it is admirable that the Council is seeking information regarding drainage issues along the 101 Corridor and the downtown area, additional information should be provided city wide. The City is taking on an aggressive project that consists of over $75 million in waste water projects. This huge undertaking is occurring because of deferred maintenance on our waste water system. With that in mind, if deferred maintenance continues to occur on the storm water system, the City will be facing the same situation as they are currently experiencing with wastewater.

Our stormwater system is an asset to the City of Coos Bay. Like a car, if care and maintenance is not taken, the life can be significantly shortened. Because of the intense rains and the

amount of rain that our area receives, the storm drain system is heavily used and needs to be in good working order. Additionally, age, the harsh environmental conditions, salt water intrusion, and high groundwater also contribute to the deterioration of the system. The City has two storm water master plans that together have analyzed the entire city limits. The plans have identified projects and provided preliminary cost estimates. With this information, the City could start implementing these plans today. However if deferred maintenance is continued, the projects identified in the plans can double or triple in cost.

RISK TOLERANCE VS. RISK CAPACITY

When determining the path that the City should take to address the drainage issues, it is important to balance the City's **risk tolerance** with the City's **risk capacity**. As similar as these terms sound, they're actually quite different. The term 'risk' refers to the probability that an action or event will negatively or positively impact your ability to achieve your objectives. Most commonly, this term is associated with negative impacts, however this is not necessarily a negative term. In mathematical terms, risk is defined as the probability of an event occurring times the impact of that event occurring. Risk tolerance reflects your *attitude* toward risk. Are you comfortable with the City's storm drain infrastructure? Are there certain projects that might affect that comfort level? Depending on the answer to these questions there could be positive or adverse risk tolerances.

Unlike risk tolerance, which essentially reflects the amount of risk that you *want* to take, risk capacity reflects the amount of risk that you *need* to take in order to reach your goals. In other words, what does the City need to do in order to protect their storm water assets? Conversely, if failure of a system occurs, and an emergency project must be performed how big of a project could the City withstand? Would the emergency project preclude the City from performing scheduled projects, thus causing more deferred maintenance?

FUNDING

Typically the types of stormwater projects identified in this report are funded by wastewater revenue. However due to the size and cost of all these projects and the deferred maintenance, it may not be possible to budget for these projects in addition to the other projects that the City is currently planning for (wastewater, street, park, etc.). A loan may have to be obtained, similar to the loan that the City recently received to perform a portion of the wastewater projects associated with the $75 million 20 year project discussed previously. Regardless of the funding, the rate payers will be affected. Once the Council has provided direction to staff regarding what projects, if any, should be performed it is recommended that Council request that the City's financial consultant review the budgetary numbers and determine the rate increase that will be required in order to perform the selected projects.

LEVEE

The downtown area is protected by a levee system. The levee system runs north to south and is located between Highway 101 and the bay. A levee can also be referred to as a dike, embankment, floodbank or stopbank. Levees are elongated and artificially constructed although some levels are naturally occurring. However in the case of the levee that protects the downtown area, the levee is artificially constructed of earthen fill. The main purposes of the artificial levee is to prevent flooding of the downtown area.

Artificial levees require substantial engineering and their surface must be protected from erosion. The effects of erosion are countered by planting suitable vegetation or installing stones, boulders, weighted matting or concrete revetments. Typically levees are designed to protect against a 100 year storm event. Additionally, levees require freeboard. Freeboard is the

distance between the water level of the bay and the top of the levee. The freeboard requirement can be dictated by local, state, or even federal requirements. Because a levee is only as strong as its weakest point, the height and standards of construction have to be consistent along its length. Based on a recent survey, the top of levee, adjacent to the downtown area, was recently surveyed. It was discovered that the top of the levee is at an elevation of 12.15 feet. Per the Federal Emergency Management Agency (FEMA) floodplain maps the following water surface elevations for the 100 year and 50 year storm are 12.6 and 12.3 feet, respectively. Based on this information, the levee does not have flood protection for a 50-year storm or greater.

Additional items that also need to be considered is that the levee system is old. There are signs of erosion and there are areas where the freeboard requirements are not met. To add another layer of complexity, the City only owns a small portion of the levee system, the majority of the levee is owned by the Port of Coos Bay.

In conclusion, if the levee is overtopped and if drainage improvements are constructed in the downtown area and 101 corridor the drainage improvements will not be able to handle the additional flow nor will the drainage improvements be able to prevent flooding.

6.0 CONCLUSION

To be completed at a later date once staff has received direction from Council.

ATTACHMENT A

PRIORITIZATION CRITERIA

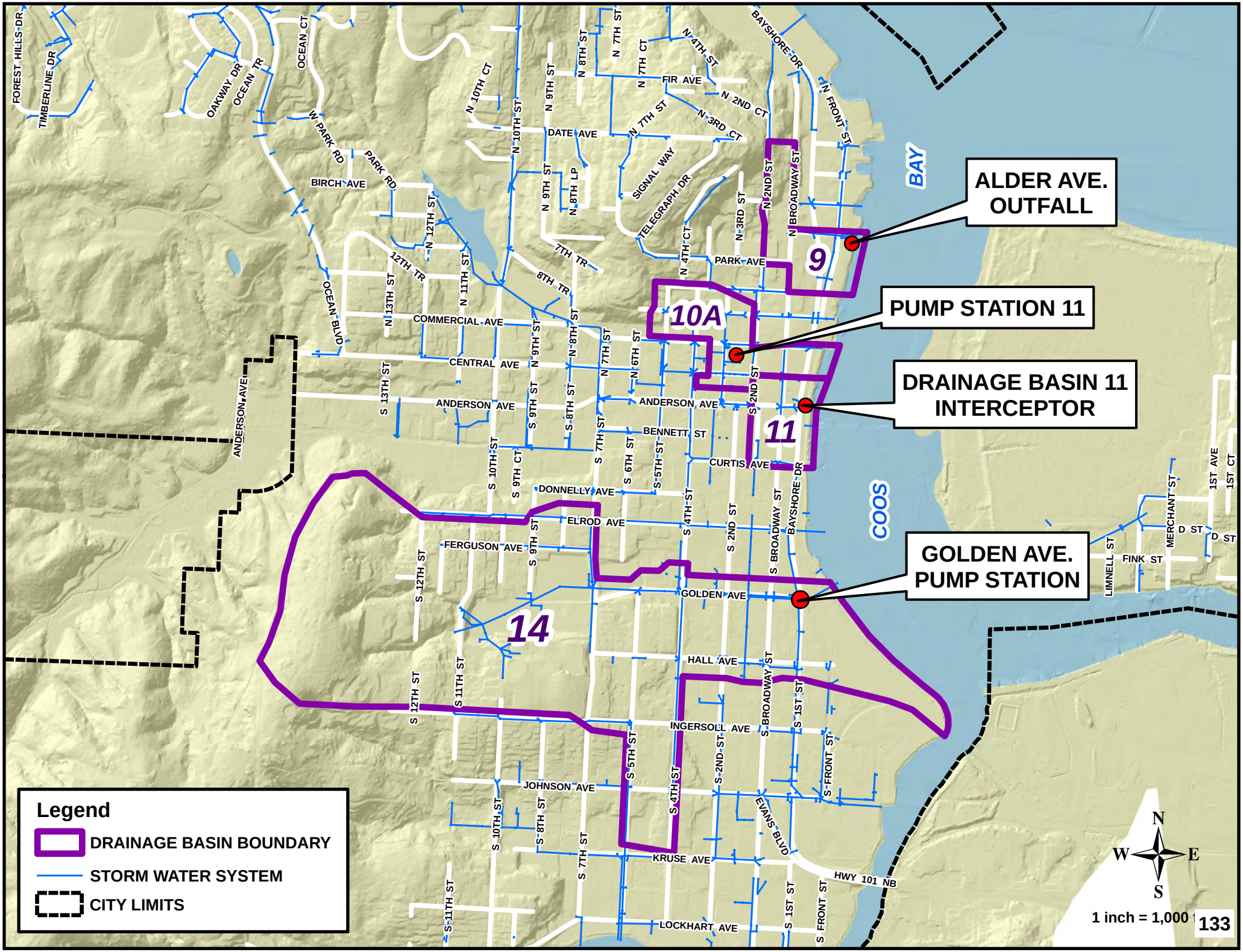
Category	General Description	Score	Evaluation Criteria
1.1 Emergency Vehicle (fire, police, EMT) access	Emergency service vehicles must have adequate access to all areas in the event of emergencies at, within, and through a flooding location. This access will range from general roadway access and including access to individual buildings.	3	Unable to access
		2	Able to access, but not directly causing significant delay
		1	Able to access, but not directly, delay is minor
		0	Able to access
1.2 Vehicular Impacts/Circulation (excluding emergency vehicles)	The school bus route needs to be free and clear. Is public's ability to enter and exit property and/or business compromised by flooding event? Is City staff's ability to exit and enter property and/or business compromised by flooding event? Is City staff's ability to assist during a flooding event compromised because property does not have ingress/egress? Does the velocity of water cause a potentially dangerous situation if a vehicle attempts to pass through?	3	Unable to access
		2	Able to access, but not directly causing significant delay
		1	Able to access, but not directly, delay is minor
		0	Able to access
1.3 Road delineation visibility	Making drivers aware that they are approaching an intersection, through the use of enhanced signing, delineation, and striping. Is the flooding event causing the delineation to be obscure, thus causing the road delineation to become difficult to see? Will the road delineation be compromised in a flooding event?	3	No road visible
		2	Road visible but significantly obscured
		1	Road visible but moderately obscured
		0	Road fully visible
1.4 ADA Impacts and Special Needs	Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintain independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; or who are transportation disadvantaged. Is flooding event impacting these needs?	3	Significantly impacts
		2	Moderately impacts
		1	Minor impacts
		0	No impacts
2.1 Private property value impact	Property losses are partial or total. A partial loss is one that does not completely destroy the property and the property can be repaired without exceeding the policy limits or the property value. A total loss occurs when the cost of repairing the property is more than the property's value.	3	Complete loss of property
		2	Significant loss of property
		1	Minor loss of property
		0	No impact
2.2 Public property value impact	Property losses are partial or total. A partial loss is one that does not completely destroy the property and the property can be repaired without exceeding the policy limits or the property value. A total loss occurs when the cost of repairing the property is more than the property's value. Includes streets and public infrastructure.	3	Complete loss of property
		2	Significant financial damage
		1	Minor financial damage
		0	No impact
2.3 Identified in Master Plan	Master plans are prepared by qualified professionals for municipalities and agencies. These plans assist staff in identifying and prioritizing projects that need repair. Additionally the plan presents costs estimates for the project. The cost estimates help with the financial planning to construct the project.	3	Identified in Master Plan as a high priority project
		2	Identified in Master Plan as a low priority project
		1	Identified in Master Plan but not recommended
		0	Not identified in Master Plan
2.4 Enhance growth/development	The City of Coos Bay encourages growth and development within Coos Bay. As such, the City looks for projects that will meet this goal. Does this project meet this goal?	3	Project will enhance growth/development
		2	Project will have growth/development benefits
		1	Project will have minor positive impacts to growth/dev.
		0	Has not growth/development impacts

Category	General Description	Score	Evaluation Criteria
3.1 Frequency of drainage problem occurrence	The frequency in which a drainage issue occurs is significant. If a drainage issue is reoccurring, this should be documented. The documentation should include the status of the tide, the amount of rain occurring in the storm event and other pertinent factors.	3	3 or more times per year
		2	2 times per year
		1	Once a year
		0	Occurs every other year or less
3.2 Intensity of flooding caused by average storm	The intensity of a storm is significant. If a drainage issue is occurring, the intensity of a storm and the precipitation should be recorded. This information will help correlate the capacity of the existing drainage improvements (if any) and provide staff with pertinent information related to the level of protection that the drainage improvement provides. Also note if flooding is occurring at High Tides.	3	Flooding is widespread
		2	Flooding occurs at several locations throughout basin
		1	Flooding is isolated
		0	Flooding occurs during high tides (no storm event)
3.3 Design standards	Safety can be defined to be the control of recognized hazards to achieve an acceptable level of risk. This can take the form of being protected from the event or from exposure to something that cause physical or economical losses. Can project be designed to meet minimum City's design standards?	3	Currently not being met
		2	Existing improvements meets a small portion of the standards
		1	Existing improvements meets the majority of the standards
		0	Currently being met
3.4 Complexity of solution	Is project solution isolated to a single location or will it involve a regional approach? Will solution involve coordination with other jurisdictions/agencies? For example will solution impact the railroad (Port) or the Levee (Port and Army Corps of Engineers) or DEQ? Will the project be completed in a timely manner or will the project require several months or a year to complete? The duration of design along with construction should be considered in this timeline.	3	Complexity is not an issue with this project
		2	Minor complexity
		1	Moderate complexity
		0	Significant complexity
3.5 Site accessibility (easements, permission to access)	Can project be constructed in public right of way? Will a temporary and/or permanent easement be required from private property owners and/or other agencies?	3	Project site is within right of way
		2	Project site requires easements and considered a minor task
		1	Project site requires easements and considered a major task
		0	Access denied
4.1 Habitat impacts from drainage problem	Does drainage issue impact habitat when flooding occurs? Is there endangered species identified?	3	Habitat is significantly impacted
		2	Habitat is moderately impacted
		1	Habitat has only minor impacts
		0	No habitat is impacted
4.2 Habitat impacts from proposed drainage improvements	Will proposed solution impact habitat during construction? After construction? Is there endangered species identified?	3	Project has positive impact
		2	No adverse impact
		1	Habitat has only minor impacts
		0	Habitat is significantly impacted
4.3 Permitting	Is there an opportunity to partner with another agency on project? Will resource agency permitting be required for drainage solution?	3	No permits required (other than DEQ)
		2	Permits required, however considered minor
		1	Permits required, however considered major
		0	Permitting not viable

Category	General Description	Score	Evaluation Criteria
5.1 Agency Impacts - Port of Coos Bay	Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.	3	No project coordination is required
		2	Project coordination is required but considered minor
		1	Project coordination is required and considered major
		0	Significant project coordination is required
5.2 Agency Impacts - Oregon Department of Transportation (ODOT)	Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.	3	No project coordination is required
		2	Project coordination is required but considered minor
		1	Project coordination is required and considered major
		0	Significant project coordination is required
5.3 Agency Impacts - ODOT Rail	Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.	3	No project coordination is required
		2	Project coordination is required but considered minor
		1	Project coordination is required and considered major
		0	Significant project coordination is required
5.4 Agency Impacts - North Bend	Projects may require coordination with other jurisdictions and/or agencies. This coordination can extend a project timeline and also add another level of complexity to the project. However, this coordination can also lead to an opportunity to partner.	3	No project coordination is required
		2	Project coordination is required but considered minor
		1	Project coordination is required and considered major
		0	Significant project coordination is required
5.5 Access to recreation facilities (e.g. Boardwalk, Museum etc.)	Is access blocked to recreational facilities during a flooding event? Is this blockage extended past the flooding event due to maintenance and repair? Is this flooding having long term adverse impacts to facility?	3	Flooding is having long term adverse impacts
		2	maintenance and/or repair is required after flooding
		1	Facility is accessible after storm event
		0	Not flooded during storm event

ATTACHMENT B

STUDY AREA BOUNDARY & BASIN MAP


ALDER AVE. OUTFALL
PUMP STATION 11
DRAINAGE BASIN 11 INTERCEPTOR
GOLDEN AVE. PUMP STATION
9
10A
11
14
BAY
COOS
Legend
DRAINAGE BASIN BOUNDARY
STORM WATER SYSTEM
CITY LIMITS
N
W
E
S
1 inch = 1,000
133

ATTACHMENT C

COST ESTIMATES

City of Coos Bay
Alder Avenue Outfall (Basin 9)

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls[2]	LS	ALL	$29,806	$29,806
2	Demolition & Site Preparation[3]	LS	ALL	$23,419	$23,419
3	Misc. Appurtenances[4]	LS	ALL	$14,903	$14,903
4	Shoring and Piling[5]	LS	ALL	$10,645	$10,645
5	Foundation Stabilization	CY	20	$50	$1,000
6	12" Storm Drain - Class C Backfill	LF	550	$70	$38,500
7	12" Rail Road Crossing	LF	20	$3,500	$70,000
8	Tidegate -12"	EA	1	$15,000	$15,000
9	Standard Storm Drain Manhole	EA	3	$5,500	$16,500
10	Catch Basin	EA	3	$1,500	$4,500
11	AC Pavement R&R	TON	550	$120	$66,000
12	Rip Rap	TON	20	$70	$1,400
	Construction Total				$291,673
	Civil Engineering[6]				$58,335
	Geotechnical Engineering				$20,000
	Environmental Study				$25,000
	Resource Agency Permitting[9]				$40,000
	Contingency[7]				$72,918
	Legal & Administration[8]				$8,750
	Total Project Cost				$516,676 [1]
	Range:	**$465,008**	**to**		**$671,679**

Notes:

1) Cost estimate does not include permitting through DSL.
2) Constr. Fac. & Temp. Controls = (the sum of Item 5 thru Item 12 multiply by 14%)
3) Demolition & Site preparation = (the sum of item 5 thru item 12 multiply by 11%)
4) Misc. Appurtenances = (the sum of item 5 thru item 12 multiply by 7%)
5) Shoring and Piling = (the sum of item 5 thru item 12 multiply by 5%)
6) Civil Engineering = (Construction total multiply by 20%)
7) Contingency = (Construction total multiply by 25%)
8) Legal & Administration = (Construction total multiply by 2%)
9) Resource Agency permitting (ODOT, ODOT RAIL, COE, DEQ)

City of Coos Bay
Pump Station 11 Upgrade (Basin 10A)

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls[2]	LS	ALL	$15,075	$15,075
2	Demolition & Site Preparation[3]	LS	ALL	$11,845	$11,845
3	Misc. Appurtenances[8]	LS	ALL	$2,154	$2,154
4	New 15hp Pumps	EA	2	$19,000	$38,000
5	Catch Basin Backflow Preventers	EA	10	$2,534	$25,340
6	Wetwell Retrofit	LS	ALL	$12,668	$12,668
7	Electrical Controls and Panels	LS	ALL	$31,670	$31,670
			Construction Total		$136,751
			Civil Engineering[4]		$27,350
			Geotechnical Engineering		$20,000
			Environmental Study		$25,000
			Resource Agency Permitting[7]		$40,000
			Contingency[5]		$34,188
			Legal & Administration[6]		$4,103
			Total Project Cost		$287,392 [1]
			Range:	**$258,652** **to**	**$373,609**

Notes:

1) Cost estimate does not include permitting through DSL.
2) Constr. Fac. & Temp. Controls = (the sum of Item 4 thru Item 7 multiply by 14%)
3) Demolition & Site preparation = (the sum of item 4 thru item 7 multiply by 11%)
4) Civil Engineering = (Construction total multiply by 20%)
5) Contingency = (Construction total multiply by 25%)
6) Legal & Administration = (Construction total multiply by 2%)
7) Resource Agency permitting (ODOT, ODOT RAIL, COE, DEQ)
8) Misc. Appurtenances = (the sum of Item 4 thru 7 multiply by 2%)

City of Coos Bay
Drainage Basin 11 Interceptor (Basin 11)

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls[2]	LS	ALL	$44,398	$44,398
2	Demolition & Site Preparation[3]	LS	ALL	$34,884	$34,884
3	Misc. Appurtenances[4]	LS	ALL	$22,199	$22,199
4	Shoring and Piling[5]	LS	ALL	$15,856	$15,856
5	Foundation Stabilization	CY	40	$50	$2,000
6	12" Storm Drain - Class C Backfill	LF	660	$105	$69,300
7	18" Storm Drain Piping - Class C Backfill	LF	315	$115	$36,225
8	18" Rail Road Crossing	LF	20	$3,500	$70,000
9	Tidegate - 18"	EA	1	$20,000	$20,000
10	Catch Basin	EA	2	$1,500	$3,000
11	AC Pavement R&R	TON	960	$120	$115,200
12	Rip Rap	TON	20	$70	$1,400
13	Dewatering[10]	LS	ALL	$6,343	$6,343
	Construction Total				$440,804
	Civil Engineering[6]				$88,161
	Geotechnical Engineering				$20,000
	Environmental Study				$25,000
	Resource Agency Permitting[9]				$40,000
	Contingency[7]				$110,201
	Legal & Administration[8]				$13,224
	Total Project Cost				$737,390 [1]
	Range:	**$663,651**	**to**		**$958,606**

Notes:

1) Cost estimate does not include permitting through DSL.
2) Constr. Fac. & Temp. Controls = (the sum of Item 5 thru Item 12 multiply by 14%)
3) Demolition & Site preparation = (the sum of item 5 thru item 12 multiply by 11%)
4) Misc. Appurtenances = (the sum of item 5 thru item 12 multiply by 7%)
5) Shoring and Piling = (the sum of item 5 thru item 12 multiply by 5%)
6) Civil Engineering = (Construction total multiply by 20%)
7) Contingency = (Construction total multiply by 25%)
8) Legal & Administration = (Construction total multiply by 2%)
9) Resource Agency permitting (ODOT, ODOT RAIL, COE, DEQ)
10) Dewatering = (the sum of Item 5 thru 12 multiply by 2%)

City of Coos Bay

Golden Pump Station/Interceptor (Basin 14)[1]

Item	Description	Unit	Quantity	Unit Cost	Subtotal
	Golden Pump Station				
1	Const. Fac. & Temp. Controls[3]	LS	ALL	$157,006	$157,006
2	Misc. Appurtenances[11]	LS	ALL	$78,502.83	$78,503
3	Dewatering	LS	ALL	$19,000	$19,000
	Storm Drain Piping				
4	AC Pavement R&R	LF	40	$120	$4,800
5	36" Strom Drain Pipe, Dike Xing	LF	50	$255	$12,750
6	36" Storm Drain Pipe, Class B	LF	100	$140	$14,000
	Piling				
7	Furnish Pile Driving Equipment	LS	ALL	$31,670	$31,670
8	Furnish Concrete Piles	LF	800	$38	$30,400
9	Drive Concrete Piles	EA	8	$1,520	$12,160
10	Sheet piling	SF	5000	$38	$190,000
11	Site Excavation	LS	ALL	$38,000	$38,000
12	Manholes	EA	2	$10,135	$20,270
	Interior Manhole Work				
13	Trash Rack/Screens	EA	1	$12,670	$12,670
14	Grouting	EA	1	$5,070	$5,070
	Pump Station Piping				
15	Force Main Piping	LS	ALL	$6,335	$6,335
16	Connections, Fittings	LS	ALL	$12,670	$12,670
17	Supports	LS	ALL	$6,335	$6,335
	Pump Station Backfilling				
18	Material	CY	500	$32	$16,000
	Top Deck/Walls/Etc.				
19	Reinforced Concrete	CY	200	$700	$140,000
20	Grating	LS	ALL	$6,335	$6,335
21	Fencing	LF	200	$32	$6,400
22	Slide Gate	EA	1	$6,335	$6,335
23	Slide Gate installation	EA	1	$1,900	$1,900
	Building				
24	Split Face Block Building	SF	400	$190	$76,000
25	Mechanical Louvers	EA	2	$6,335	$12,670
	Electrical				
26	Materials	LS	ALL	$17,735	$17,735
27	Telemetry/Controls	LS	ALL	$15,200	$15,200
28	Standby Generator	LS	ALL	$76,000	$76,000
	Equipment				
29	Pump	EA	2	$107,675	$215,350
30	Pump Installation	EA	2	$10,135	$20,270
31	Wetwell Level Monitor	EA	1	$6,335	$6,335
32	36" Tide Gate	EA	1	$25,000	$25,000
33	Tide Gate Installation	EA	1	$2,535	$2,535
	Sitework				
34	Site Restoration	LS	ALL	$15,454	$15,454
35	Access Road	LS	ALL	$38,000	$38,000
36	AC Pavement	TON	20	$76	$1,520
37	Rip Rap	CY	100	$63	$6,300
	Golden Interceptor				
38	Const. Fac. & Temp. Controls[8]	LS	ALL	$23,555	$23,555
39	Demolition & Site Preparation[9]	LS	ALL	$18,508	$18,508
40	Misc. Appurtenances[10]	LS	ALL	$11,778	$11,778
41	Foundation Stabilization	CY	42	$50	$2,100
42	18" Storm Drain - Class C Backfill	LF	650	$115	$74,750
43	30" Storm Drain - Class C Backfill	LF	500	$125	$62,500
44	Standard Storm Drain Manhole	EA	4	$5,500	$22,000
45	Catch Basin	EA	6	$1,500	$9,000

Construction Total	$1,581,167
Civil Engineering[4]	$316,233.50
Geotechnical Engineering	$40,000
Structural Engineering	$20,000
Environmental Study	$25,000
Resource Agency Permitting[7]	$40,000
Contingency[5]	$395,291.87
Legal & Administration[6]	$47,435.02
Total Project Cost	$2,465,128 [2]
Range: $2,218,615 to	**$3,204,666**

Notes

1) The pump station and interceptor projects have been broke out separately for this cost estimate
2) Cost estimate does not include permitting through DSL.
3) Constr. Fac. & Temp. Controls = (the sum of Item 3 thru Item 37 multiply by 14%¦
4) Civil Engineering = (Construction total multiply by 20%) This includes both projects.
5) Contingency = (Construction total multiply by 25%) This includes both projects.
6) Legal & Administration = (Construction total times 2%) This includes both projects.
7) Resource Agency permitting (ODOT, ODOT RAIL, COE, DEQ¦
8) Constr. Fac. & Temp. Controls = (the sum of Item 41 thru Item 45 times 14%)
9) Demolition & Site preparation = (the sum of item 41 thru item 45 multiply by 11%¦
10) Misc. Appurtenances = (the sum of item 41 thru item 45 multiply by 7%)
11) Misc. Appurtenances = (the sum of item 3 thru item 37 multiply by 7%¦

City of Coos Bay
Downtown Pump Station for Basin 11

Item	Description	Unit	Quantity	Unit Cost	Subtotal
1	Const. Fac. & Temp. Controls[2]	LS	ALL	$121,517	$121,517
2	Demolition & Site Preparation[3]	LS	ALL	$95,478	$95,478
3	Misc. Appurtenances[4]	LS	ALL	$60,759	$60,759
4	Shoring and Piling[5]	LS	ALL	$43,399	$43,399
5	Pump Station	EA	1	$325,000	$325,000
6	Check Valve	EA	1	$3,000	$3,000
7	15" Storm Drain - Class C Backfill	LF	173	$110	$19,030
8	18" Storm Drain - Class C Backfill	LF	260	$115	$29,900
9	24" Storm Drain - Class C Backfill	LF	200	$120	$24,000
10	24" PVC Storm Drain - Bore	LF	150	$500	$75,000
11	24" Outfall w/Tidegate	EA	1	$25,000	$25,000
12	24" Rail Road Crossing	LF	80	$3,500	$280,000
13	Standard Storm Drain Manhole	EA	2	$5,500	$11,000
14	72" Storm Drain Manhole	EA	2	$7,500	$15,000
15	72" Storm Drain Manhole w/Tidegate	EA	1	$20,000	$20,000
16	Catch Basin	EA	1	$1,500	$1,500
17	AC Pavement R&R	TON	320	$120	$38,400
18	Foundation Stabilization	CY	23	$50	$1,150
19	Dewatering[10]	LS	ALL	$17,360	$17,360
	Construction Total				$1,206,492
	Civil Engineering[6]				$241,298
	Geotechnical Engineering				$20,000
	Environmental Study				$25,000
	Resource Agency Permitting[9]				$40,000
	Contingency[7]				$301,623
	Legal & Administration[8]				$36,195
	Total Project Cost				$1,870,608 [1]
	Range:	**$1,683,548**	**to**		**$2,431,791**

Notes:

1) Cost Estimate does not include permitting through DSL.
2) Constr. Fac. & Temp. Controls = (the sum of Item 5 thru Item 18 multiply by 14%)
3) Demolition & Site preparation = (the sum of item 5 thru item 18 multiply by 11%)
4) Misc. Appurtenances = (the sum of item 5 thru item 18 multiply by 7%)
5) Shoring and Piling = (the sum of item 5 thru item 18 multiply by 5%)
6) Civil Engineering = (Construction total multiply by 20%)
7) Contingency = (Construction total multiply by 25%)
8) Legal & Administration = (Construction total multiply by 2%)
9) Resource Agency permitting (ODOT, ODOT RAIL, COE, DEQ)
10) Dewatering = (the sum of Item 5 thru 18 multiply by 2%)

ATTACHMENT D

PRIORITIZATION MATRIX

Drainage Project Prioritization Matrix			Alder Outfall $671,679		Pump Station 11 Upgrade[1] $373,609		Drainage Basin 11 Interceptor[1,2] $958,606		Golden Pump Station & Interceptors $3,204,666		Downtown Pump Station for Basin 11 (Egyptian Theatre Flooding) $2,431,791	
			Score		Score		Score		Score		Score	
Criteria	**Weighted Value**	**Total Score**	**Actual**	**Weighted**	**Actual**	**Weighted**	**Actual**	**Weighted**	**Actual**	**Weighted**	**Actual**	**Weighted**
1.0 - PUBLIC SAFETY IMPACTS	**30%**											
1.1 Emergency Vehicle (fire, police, EMT) access	4.725	3	1	1.6	1	1.6	3	4.7	2	3.2	1	1.6
1.2 Vehicular Impacts/Circulation (excluding emergency vehicles)	4.725	3	1	1.6	3	4.7	3	4.7	3	4.7	2	3.2
1.3 Road delineation visibility	4.725	3	1	1.6	2	3.2	3	4.7	3	4.7	1	1.6
1.4 ADA Impacts and Special Needs	4.725	3	1	1.6	2	3.2	3	4.7	3	4.7	1	1.6
Subtotal	**18.9**	**12**	**4**	**6.3**	**4**	**12.6**	**12**	**18.9**	**11**	**17.3**	**5**	**7.9**
2.0 - ECONOMIC IMPACTS	**20%**											
2.1 Private property value impact	3.15	3	1	1.1	2	2.1	1	1.1	1	1.1	1	1.1
2.2 Public property value impact	3.15	3	1	1.1	1	1.1	3	3.2	1	1.1	1	1.1
2.3 Identified in Master Plan	3.15	3	3	3.2	3	3.2	3	3.2	3	3.2	1	1.1
2.4 Enhance growth/development	3.15	3	2	2.1	2	2.1	2	2.1	2	2.1	2	2.1
Subtotal	**12.6**	**12**	**7**	**7.4**	**8**	**8.4**	**9**	**9.5**	**7**	**7.4**	**5**	**5.3**
3.0 - TECHNICAL CRITERIA	**20%**											
3.1 Frequency of drainage problem occurrence	2.52	3	2	1.7	3	2.5	3	2.5	2	1.7	3	2.5
3.2 Intensity of flooding caused by average storm	2.52	3	2	1.7	3	2.5	3	2.5	3	2.5	1	0.8
3.3 Design standards	2.52	3	3	2.5	2	1.7	1	0.8	3	2.5	3	2.5
3.4 Complexity of solution	2.52	3	3	2.5	3	2.5	1	0.8	0	0.0	0	0.0
3.5 Site accessibility (easements, permission to access)	2.52	3	1	0.8	2	1.7	3	2.5	1	0.8	1	0.8
Subtotal	**12.6**	**15**	**11**	**9.2**	**13**	**10.9**	**11**	**9.2**	**9**	**7.6**	**8**	**6.7**
4.0 - ENVIRONMENTAL/ECOLOGICAL IMPACTS	**20%**											
4.1 Habitat impacts from drainage problem	4.2	3	0	0.0	0	0.0	3	4.2	0	0.0	0	0.0
4.2 Habitat impacts from proposed drainage improvements	4.2	3	1	1.4	0	0.0	3	4.2	1	1.4	1	1.4
4.3 Permitting	4.2	3	2	2.8	3	4.2	3	4.2	2	2.8	2	2.8
Subtotal	**12.6**	**9**	**3**	**4.2**	**3**	**4.2**	**9**	**12.6**	**3**	**4.2**	**3**	**4.2**
5.0 - OTHER IMPACTS	**10%**											
5.1 Agency Impacts - Port of Coos Bay	1.26	3	0	0.0	3	1.3	3	1.3	0	0.0	0	0.0
5.2 Agency Impacts - Oregon Department of Transportation (ODOT)	1.26	3	3	1.3	3	1.3	0	0.0	1	0.4	2	0.8
5.3 Agency Impacts - ODOT Rail	1.26	3	0	0.0	3	1.3	3	1.3	0	0.0	0	0.0
5.4 Agency Impacts - North Bend	1.26	3	3	1.3	3	1.3	3	1.3	3	1.3	3	1.3
5.5 Access to recreation facilities (e.g. Boardwalk, Museum etc.)	1.26	3	0	0.0	0	0.0	1	0.4	1	0.4	1	0.4
Subtotal	**6.3**	**15**	**6**	**2.5**	**12**	**5.0**	**10**	**4.2**	**5**	**2.1**	**6**	**2.5**
Total	**63**	**63**	**31**	**29.6**	**40**	**41.2**	**51**	**54.4**	**35**	**38.5**	**27**	**26.6**

(1) This project was evaluated based on the fact the failure of the existing improvement had occurred.

(2) This project is identified as "Egyptian Interceptor" in 2004 Master Plan. To avoid confusion with the Egyptian Theatre flooding the name was changed.

Multiple files are bound together in this PDF Package.

Adobe recommends using Adobe Reader or Adobe Acrobat version 8 or later to work with documents contained within a PDF Package. By updating to the latest version, you'll enjoy the following benefits:

- Efficient, integrated PDF viewing
- Easy printing
- Quick searches

Don't have the latest version of Adobe Reader?

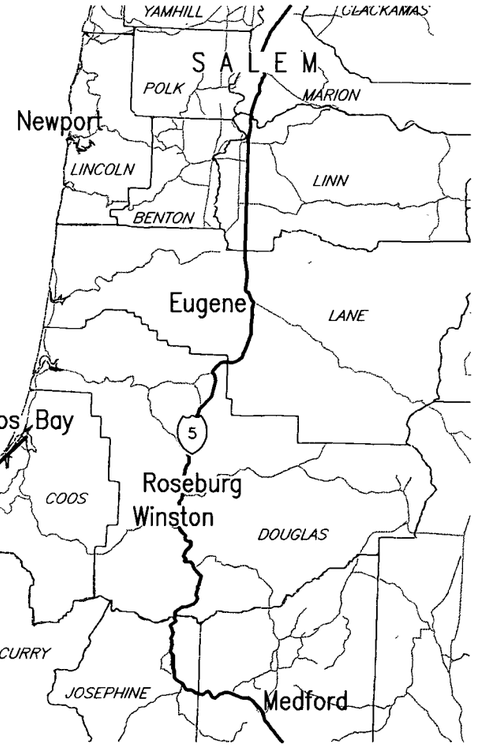
Click here to download the latest version of Adobe Reader

**If you already have Adobe Reader 8,
click a file in this PDF Package to view it.**

CITY OF COOS BAY

DOWNTOWN TIDEGATE UPDATE PROJECT

COOS BAY, OREGON



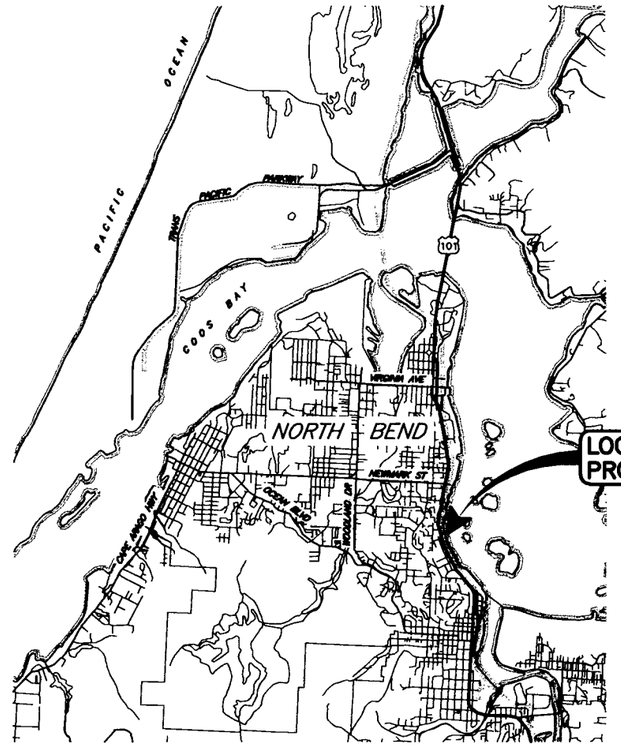
LOCATION MAP
NTS

PREPARED BY:

JULY 2022

INDEX OF SHEETS

SEQ	SHEET	TITLE
1	G-1	COVER
2	G-2	STANDARD ABBREVIATIONS AND LEGENDS
3	G-3	GENERAL NOTES
4	C-1	TG-13 PLAN AND PROFILE
5	C-2	TG-16 PLAN AND PROFILE
6	C-3	TG-19 & TG-20 PLAN AND PROFILE
7	C-4	TG-27 PLAN AND PROFILE
8	C-5	TG-31 PLAN AND PROFILE
9	C-6	TG-35 PLAN AND PROFILE
10	C-7	DETAILS
11	C-8	DETAILS
12	C-9	DETAILS



VICINITY MAP
NTS

30% DESIGN

PRELIMINARY

SAVED: 6/1/2022 2:14 PM CNEWELL PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2021\622034-Tidegates\Dwgs\622034-COVER.dwg

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

DSGN TB
DR SA
CHK CHMR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

COVER

SHEET G-1
SEQ
DATE 07/2022
PROJ. NO. 622034

ABBREVIATIONS

A

ABN — ABANDON
ABS — ACRYLONITRILE–BUTADIENE–STYRENE
AB — ANCHOR BOLT, AGGREGATE BASE
ABD — ABANDON
AC — ASPHALTIC CONCRETE
ACP — ASBESTOS CEMENT PIPE
ACI — AMERICAN CONCRETE INSTITUTE
ADJ — ADJUSTABLE
AGGR — AGGREGATE
AISC — AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AL — ALUMINUM
ALT — ALTERNATE
AP — ANGLE POINT
APPROX — APPROXIMATELY
ARCH — ARCHITECTURAL
ASTM — AMERICAN SOCIETY FOR TESTING & MATERIALS
AUX — AUXILIARY
@ — AT

B

BC — BEGIN CURVE
BCR — BEGIN CURB RETURN
BD — BOARD
BF — BLIND FLANGE
BFV — BUTTERFLY VALVE
BK — BOOK OR BACK
BLDG — BUILDING
BM — BENCH MARK, BEAM
BMP — BEST MANAGEMENT PRACTICE
BO — BLOW OFF
BOT — BOTTOM
BRG — BEARING
BTWN — BETWEEN
BV — BALL VALVE
BVC — BEGINNING OF VERTICAL CURVE
BW — BACK OF WALK
BWV — BACKWATER VALVE

C

C — CHANNEL (STRUCTURAL SHAPE)
CARV — COMBINATION AIR AND VACUUM RELEASE VALVE
CATV — CABLE TELEVISION
CB — CATCH BASIN
CEIL — CEILING
CFM — CUBIC FEET PER MINUTE
CFS — CUBIC FEET PER SECOND
CHEM — CHEMICAL
CI — CAST IRON
CIP — CAST IRON PIPE
C.I.P. — CAST IN PLACE
CJ — CONSTRUCTION JOINT
CLR — CLEAR
℄/CL — CENTERLINE
CMP — CORRUGATED METAL PIPE
CMU — CONCRETE MASONRY UNIT
CTSK — COUNTERSINK
CO — CLEANOUT
COL — COLUMN
CONC — CONCRETE
CONT — CONTINUOUS OR CONTINUED
COORD — COORDINATE
CPLG — COUPLING
CRS — COLD ROLLED STEEL
CTR — CENTER
CTS — COPPER TUBE SIZE
CU — CUBIC
CU FT — CUBIC FEET
CV — CHECK VALVE
CW — COLD WATER
CY — CUBIC YARD

D

° — DEGREE (ANGLE)
d — PENNY (NAIL SIZE)
D — STORM DRAIN
DB — DISTRIBUTION BOX
DBL — DOUBLE
DF — DOUGLAS FIR
DI — DROP INLET OR DUCTILE IRON
DIA — DIAMETER
DIAG — DIAGONAL
DIM — DIMENSION
DIMJ — DUCTILE IRON MECHANICAL JOINT
DIP — DUCTILE IRON PIPE
DET — DETAIL
DWG — DRAWING
DW — DRIVEWAY

E

(E) — EXISTING
E — EASTING OR EAST
EA — EACH
EC — END CURVE
ECR — END CURB RETURN
EF — EACH FACE
EFL — EFFLUENT
EG — EXISTING GRADE/GROUND
EL — ELBOW
ELEC — ELECTRIC OR ELECTRICAL
ELEV — ELEVATION
ENGR — ENGINEER
EP — EDGE OF PAVING
EQ — EQUAL
EQUIP — EQUIPMENT
ER — EDGE OF ROAD
EVC — END OF VERTICAL CURVE
EW — EACH WAY
EWEF — EACH WAY, EACH FACE
EXC — EXCAVATE
EXP — EXPOSED OR EXPANSION
EXP JT — EXPANSION JOINT
EXST — EXISTING
EXT — EXTERIOR

F

F — FLANGE
FC — FLEXIBLE COUPLING OR FACE OF CURB
FCA — FLANGED COUPLING ADAPTER
FD — FLOOR DRAIN
FDC — FIRE DEPARTMENT CONNECTION
FDN — FOUNDATION
FF — FINISH FLOOR
FG — FINISHED GRADE
FH — FIRE HYDRANT
FIG — FIGURE
FIN — FINISH
FIP — FEMALE IRON PIPE
FL — FLOW LINE
FLG — FLANGE
FLR — FLOOR
FLTR — FILTER
FO — FIBER OPTIC
FOC — FACE OF CONCRETE
FT — FOOT OR FEET
FT^2 — SQUARE FEET
FT^3 — CUBIC FEET
FTG — FOOTING
FUT — FUTURE

G

G — GAS
GA — GAGE
GALV — GALVANIZED
GB — GRADE BREAK
GIP — GALVANIZED IRON PIPE
GM — GAS METER
GPD — GALLONS PER DAY
GPH — GALLONS PER HOUR
GPM — GALLONS PER MINUTE
GRD — GRADE OR GROUND
GSP — GALVANIZED STEEL PIPE
GV — GATE VALVE
GYP — GYPSUM

H

HB — HOSE BIBB
HDPE — HIGH DENSITY POLYETHYLENE
HDR — HEADER
HDW — HARDWARE
HMA — HOT MIX ASPHALT
HOR — HORIZONTAL
HP — HORSEPOWER, HIGH POINT
HR — HOUR
HT — HEIGHT
HW — HOT WATER
HWR — HOT WATER RETURN
HWS — HOT WATER SUPPLY

I

ID — INSIDE DIAMETER
IN — INCH
INFL — INFLUENT
INSUL — INSULATE OR INSULATION
INT — INTERIOR
INV — INVERT
IPS — IRON PIPE SIZE

J

JT — JOINT
JP — JOINT POLE

K

KIP — THOUSAND POUNDS
KW — KILOWATT

L

∠ — ANGLE (DEGREES)
L — ANGLE (STRUCTURAL SHAPE)
LAT — LATERAL
LB — POUND
LF — LINEAR FEET
LG — LONG
LH — LEFT HAND
LONG — LONGITUDINAL
LP — LOW POINT
LPG — LIQUIFIED PETROLEUM GAS
LRP — LEGALLY RESPONSIBLE PARTY
LR — LONG RADIUS
LT — LEFT
LVC — LENGTH OF VERTICAL CURVE

M

MATL — MATERIAL
MAX — MAXIMUM
MECH — MECHANICAL
MF — MEGA–FLANGE PIPE JOINT
MFR — MANUFACTURER
MGD — MILLION GALLONS PER DAY
MH — MANHOLE
MIN — MINIMUM OR MINUTE
MIP — MALE IRON PIPE
MISC — MISCELLANEOUS
MJ — MECHANICAL JOINT
MNPT — MALE NATIONAL PIPE THREAD
MTL — METAL
MWS — MAXIMUM WATER SURFACE

N

(N) — NEW
N — NORTHING OR NORTH
NC — NORMALLY CLOSED
NIC — NOT IN CONTRACT
NF — NON–FREEZE
NO — NUMBER OR NORMALLY OPEN
NOM — NOMINAL
NP — NEW PAVEMENT
NPT — NATIONAL PIPE THREAD
NTS — NOT TO SCALE
— NUMBER

O

OC — ON CENTER
OD — OUTSIDE DIAMETER
OG — ORIGINAL GROUND
OVFL — OVERFLOW
OZ — OUNCE
OH — OVERHEAD

P

PC — POINT OF CURVE
PCC — PORTLAND CEMENT CONCRETE
PCF — POUNDS PER CUBIC FOOT
PE — PLAIN END
PERF — PERFORATED
PEP — POLYETHELENE PIPE
PI — POINT OF INTERSECTION
PL — PLATE
PL — PROPERTY LINE
PLCS — PLACES
PLYWD — PLYWOOD
PMP — PERFORATED METAL PIPE
POC — POINT ON CURVE
POT — POINT OF TANGENT
PP — POWER POLE
PRC — POINT OF REVERSE CURVE
PREFAB — PREFABRICATED
PRELIM — PRELIMINARY
PRESS — PRESSURE
PROP — PROPERTY
PRV — PRIVATE
PSF — POUNDS PER SQUARE FOOT
PSI — POUNDS PER SQUARE INCH
PSIG — POUNDS PER SQUARE INCH, GAUGE
PT — POINT OF TANGENCY, POINT
PUE — PUBLIC UTILITY EASEMENT
PV — PLUG VALVE
PVC — POLYVINYL CHLORIDE PLASTIC
PVI — POINT OF VERTICAL INTERSECTION
PVMT — PAVEMENT

Q

QTY — QUANTITY

R

R — RADIUS
RC — RELATIVE COMPACTION
RCP — REINFORCED CONCRETE PIPE
RD — ROAD
RDCR — REDUCER
RWD — REDWOOD
REF — REFER OR REFERENCE
REINF — REINFORCED, REINFORCING OR REINFORCE
REQD — REQUIRED
RET — RETURN
RH — RIGHT HAND
RM — ROOM
RO — ROUGH OPENING
RSP — ROCK SLOPE PROTECTION
RT — RIGHT OR RING TIGHT
R/W — RIGHT OF WAY
RWL — RAIN WATER LEADER

S

S — SEWER
SL — SLOPE
SCHED — SCHEDULE
SCSD — SCOTIA COMMUNITY SERVICES DISTRICT
SD — STORM DRAIN
SDMH — STORM DRAIN MANHOLE
SECT — SECTION
SF — SQUARE FOOT/FEET
SHT — SHEET
SIM — SIMILAR
SP — SPACE OR SPACES
SPEC — SPECIFICATIONS
SQ — SQUARE
SQ FT — SQUARE FOOT
SQ IN — SQUARE INCH
SS — SANITARY SEWER
SSCO — SANITARY SEWER CLEAN OUT
SSMH — SANITARY SEWER MANHOLE
SST — STAINLESS STEEL
STA — STATION
STD — STANDARD
STL — STEEL
STR — STRUCTURAL
STRUCT — STRUCTURE
SUSP — SUSPENDED
SW — SIDEWALK
SWPPP — STORM WATER POLLUTION PREVENTION PLAN
SYMM — SYMMETRICAL

T

TAN — TANGENT
T&B — TOP AND BOTTOM
T&G — TONGUE AND GROOVE
TBC — TOP BACK CURB
TBM — TEMPORARY BENCH MARK
TBW — TOP BACK WALK
TC — TOP OF CURB
TCE — TEMPORARY CONSTRUCTION EASEMENT
TEL — TELEPHONE
TELEM — TELEMETRY
TEMP — TEMPERATURE OR TEMPORARY
TFC — TOP FACE CURB
THD — THREAD
TOC — TOP OF CONCRETE
TOG — TOP OF GRATE
TOS — TOWN OF SCOTIA
TOW — TOP OF WALL
TP — TURNING POINT, TOP OF PAVEMENT OR TELEPHONE POLE
TRANSV — TRANSVERSE
TS — TUBE, STRUCTURAL
TYP — TYPICAL

U

UBC — UNIFORM BUILDING CODE
UOS — UNLESS OTHERWISE SPECIFIED
UG — UNDERGROUND
UTIL — UTILITY

V

V — VOLT
VAC — VACUUM
VAR — VARIES
VC — VERTICAL CURVE
VCP — VITRIFIED CLAY PIPE
VERT — VERTICAL
VG — VALLEY GUTTER
VPI — VERTICAL POINT OF INTERSECTION

W

W — WATER OR WIDE FLANGE
W/ — WITH
W/O — WITHOUT
WM — WATER METER
WP — WORK POINT
WS — WATER SURFACE, WATER STOP
WWF — WELDED WIRE FABRIC

X

XFMR — TRANSFORMER

Y

YD_2 — SQUARE YARD
YD_3 — CUBIC YARD

UTILITIES LEGEND

PROPOSED	EXISTING	
	⊗	GATE VALVE
	⊗PV	PLUG VALVE
	⊗BV	BALL VALVE
	⊗BFV	BUTTERFLY VALVE
		AUTOMATICALLY OPERATED VALVE (P= PNEUMATIC, E= ELECTRIC, S= SOLENOID, H= HYDRAULIC, D= DIAPHRAGM ACTUATOR)
		3–WAY VALVE
		GLOBE VALVE
		ANGLE VALVE
		PRESSURE REGULATING VALVE
		PRESSURE RELIEF VALVE
		CHECK VALVE
		AIR OR VACUUM RELEASE VALVE
AV	AV	AIR AND VACUUM VALVE
CA	CA	COMBINATION AIR VALVE
		FLOW METER
	NF	HOSE BIBB (NF= NON–FREEZE)
		REDUCER
		FIRE HYDRANT
		DROP INLET
		MANHOLE
		SEWER CLEAN OUT OR SEWER LATERAL
E	E	UNDERGROUND ELECTRICAL
OH E	OH E	OVERHEAD ELECTRICAL
FO	FO	FIBER OPTIC LINE
TV	TV	CABLE TELEVISION
J	J	JOINT UTILITIES
TM	TM	UNDERGROUND TELEMETRY LINE
OH TM	OH TN	OVERHEAD TELEMETRY LINE
T	T	UNDERGROUND TELEPHONE LINE
OH T	OH T	OVERHEAD TELEPHONE LINE
FW	FW	FIRE WATER LINE
ST	ST	STEAM LINE
W	W	WATER LINE
SS	SS	SANITARY SEWER LINE
SD	SD	STORM DRAIN LINE
G	G	GAS LINE
FM	FM	FORCE MAIN AND DIRECTION OF FLOW

SIZE AND MATERIAL OF EXISTING PIPING MAY BE SHOWN WHEN KNOWN. SIZE AND MATERIAL OF NEW PIPING MAY BE SHOWN ON PLAN OR IN PROFILE.

		CULVERT
		POLE MOUNTED ROADWAY LUMINAIRE
	NOT USED	ITEM TO BE REMOVED
		ITEM TO BE ABANDONED IN PLACE
		WATER SERVICE– WM–1= SINGLE WM–2= DUAL
	PB	PULL BOX AND DESIGNATION
R4–4		SIGN AND DESIGNATION

CURVE DATA

R (RADIUS)
L (LENGTH)
Δ (DELTA)
T (TANGENT)

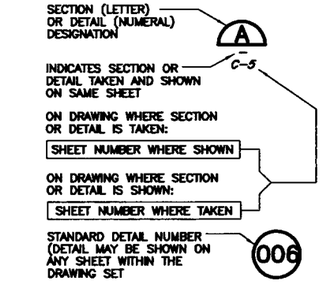
NOTES

1. CONTACT THE ENGINEER FOR SYMBOLS NOT LISTED.
2. THIS IS A STANDARD SHEET, THEREFORE, SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET WHICH DO NOT APPEAR ON THE PLANS.
3. SITE AND UTILITY SYMBOLS SHOWN ON THIS SHEET ARE NOT INTENDED TO REPRESENT THE PHYSICAL SCALE OR SHAPE OF ANY ITEMS. WHERE LARGE–SCALE PLANS ARE PRESENTED, THE SYMBOLS SHOWN HEREON MAY BE REPLACED BY DETAILS MORE SUITED TO THE DRAWING SCALE.

TOPOGRAPHIC LEGEND

PROPOSED	EXISTING	
		P.I. (POINT OF INTERSECTION)
NOT USED		TEMPORARY BENCH MARK
47.55	NOT USED	FINISH GRADE ELEVATON
NOT USED	42.6 X	ELEVATION OF ORIGINAL GROUND
		RADIAL POINT
		FLOW LINE AND DIRECTION
		TOP OF CUT
		TOP OF FILL
		TOE OF CUT OR FILL
200	180	CONTOUR LINE
		CONCRETE (IN PLAN)
		CONCRETE (IN SECTION)
		PAVEMENT
NOT USED		ROCKS
NOT USED		STUMPS
		TREES
		ROADS
	TP	UTILITY POLE (PP=POWER POLE, TP= TEL POLE, JP=JOINT POLE)
		GUY WIRE
		FENCE
		BOUNDARY LIMITS, W/DESIGNATION
		CENTERLINE
NOT USED		MARSH
		WETLAND
NOT USED		SPRING
TP–4	TP–4	TEST PIT AND DESIGNATION
		EXPLORATION BORE HOLE
		PROPERTY CORNER
		SURVEY MONUMENT
		CONTROL POINT
		DRIVEWAY

DETAIL AND SECTION DESIGNATION



30% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN–ENGR.COM
541–266–9880

REVISION	BY	DATE	NO.

DSGN TB | DR SA | CHK CHKR | APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

STANDARD ABBREVIATIONS AND LEGENDS

SHEET G–2
SEQ
DATE 07/2022
PROJ. NO. 622034

SAVED: 7/19/2022 9:23 AM JFOSTER, PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-STND-ABBV.dwg

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO CURRENT CALIFORNIA BUILDING CODE.
2. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF EXCAVATION SHALL BE VERIFIED AS TO CONDITION, SIZE AND LOCATION BY UNCOVERING, PROVIDED SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
4. THE CONTRACTOR SHALL PROVIDE A COPY OF THE TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE EXCAVATION OF ANY TRENCH OVER FIVE FEET IN DEPTH.
5. CONTRACTOR SHALL PERFORM TRENCH WORK IN CONFORMANCE WITH THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY REQUIREMENTS AND SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH STANDARDS, RULES, REGULATIONS AND ORDERS ESTABLISHED BY THE STATE OF CALIFORNIA AND OTHER APPLICABLE AGENCIES.
6. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, GENERAL CONTRACTOR WILL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. ALL WORK AND EQUIPMENT SHALL COMPLY WITH THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY REQUIREMENTS. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY, AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE ENGINEER AND HIS/HER CONSULTANTS.
7. THE CONTRACTOR SHALL INDEPENDENTLY REVIEW GROUND, TOPOGRAPHY AND TREE CONDITIONS THROUGHOUT THE SITE, AND ASSUME THE RISK OF COMPLETING THE WORK SET OUT ON THESE PLANS, REGARDLESS OF ROCK, WATER TABLE OR OTHER CONDITIONS WHICH MAY BE ENCOUNTERED IN THE COURSE OF THE WORK.
8. ANY DISCREPANCY DISCOVERED BY THE CONTRACTOR IN THESE PLANS, OR ANY FIELD CONDITIONS DISCOVERED BY THE CONTRACTOR THAT MAY DELAY OR OBSTRUCT THE PROPER COMPLETION OF THE WORK SHOWN HEREIN SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE ENGINEER IMMEDIATELY UPON DISCOVERY. SAID NOTIFICATION SHALL BE IN WRITING.
9. ALL UNDERGROUND IMPROVEMENTS SHALL BE INSTALLED TESTED AND APPROVED PRIOR TO PAVING.
10. THE CONTRACTOR SHALL NOT BEGIN EXCAVATING UNTIL ALL EXISTING UTILITIES HAVE BEEN MARKED IN THE FIELD. THE CONTRACTOR SHALL NOTIFY EACH APPLICABLE ENTITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. CALL UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS BEFORE DIGGING AT (800) 227-2600 FOR LOCATES.
11. GRADING AND CONSTRUCTION CONTRACTORS SHALL STOP WORK AND NOTIFY THE OWNER AND THE ENGINEER IF CULTURAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION.
13. THE CONTRACTOR SHALL GIVE THE INSPECTOR 48 HOURS ADVANCE NOTICE OF ANY CONSTRUCTION OR REQUIRED TESTING.
14. SHOULD THE CONTRACTOR OR ANY OF HIS AGENTS OR EMPLOYEES ENCOUNTER OR DISCOVER MATERIALS WHICH APPEAR TO BE HAZARDOUS DURING THE PERFORMANCE OF THE WORK, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY AND SUSPEND WORK IN THE AFFECTED AREA UNTIL THE ENGINEER HAS INSPECTED THE LOCATION AND MATERIALS IN QUESTION. SHOULD IT BE NECESSARY TO UNDERTAKE REMEDIATION, THE ENGINEER WILL GIVE WRITTEN NOTICE TO SUSPEND WORK IN THE AFFECTED AREA UNTIL THE PROPER COURSE OF ACTION HAS BEEN DETERMINED. OPERATIONS IN THE AFFECTED AREA SHALL BE RESUMED ONLY UPON WRITTEN NOTICE BY THE ENGINEER.
15. ALL SITE GRADING WILL BE INSPECTED BY THE ENGINEER. COMPACTION TESTING WILL BE CONDUCTED AFTER SUFFICIENT DENSITIES HAVE BEEN ACHIEVED IN THE CONTRACTOR'S OPINION. THE CONTRACTOR SHALL MAKE ALL REQUESTS FOR MATERIALS TESTING AT LEAST 48 HOURS IN ADVANCE. ANY SOILS THAT FAIL TO MEET THE REQUIRED COMPACTION LEVELS SHALL BE REMOVED, AND RECOMPACTED. ALL COSTS ASSOCIATED WITH ACHIEVING COMPACTION STANDARDS SHALL BE INCLUDED IN THE CONTRACTOR'S ORIGINAL BID.
16. THE TOPSOIL SHALL BE REMOVED FROM CUT AND FILL AREAS AND SHALL NOT BE USED FOR ENGINEERED FILL. TOPSOIL SHALL BE STOCKPILED SEPARATELY AND REPLACED OVER AREAS OF EXPOSED SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES.
17. NO CHANGES OR MODIFICATIONS SHALL BE MADE TO THESE PLANS WITHOUT WRITTEN APPROVAL BY THE ENGINEER.

SURVEY NOTES:

BASIS OF BEARINGS
THE BASIS OF BEARINGS OF THIS SURVEY IS IDENTICAL TO THAT MAP OF REDDING AIRPORT BUSINESS PARK SUBDIVISION NO. S-2-92 (21 MAPS 42).

VERTICAL DATUM
THE VERTICAL DATUM IS NGVD29 BASED UPON CITY OF REDDING BENCH MARK #1834. SEE LAYOUT SHEET 1 OF REDDING MUNICIPAL AIRPORT INDUSTRIAL & BUSINESS PARK PLANS DATED JUNE 1992 FOR BENCHMARK "C" DATA.
ELEVATION = 489.20'

EROSION CONTROL NOTES:

1. BMPs SHALL BE INSTALLED PRIOR TO ANY SITE DISTURBANCE AND MAINTAINED SUCH THAT NO VISIBLE SEDIMENT LEAVES THE SITE.
2. TRACKING CONTROLS: ENTRANCE/EXIT BMP.
3. PAVED AREAS AT THE ACCESS POINTS SHALL BE SWEPT OR VACUUMED AS OFTEN AS EACH DAY TO ELIMINATE TRACKING SOIL AND DEBRIS BEYOND THE LIMITS OF THE PROJECT SITE. ANY SOILS AND/OR DEBRIS, ROCK, GRAVEL, ETC. TRACKED BEYOND THE LIMITS OF THE PROJECT SITE AS A RESULT OF THIS PROJECT SHALL BE REMOVED IMMEDIATELY.
4. DISTURBED AREAS PROTECTED TO EXTENT PRACTICAL DURING CONSTRUCTION.
5. STOCKPILE MANAGEMENT TO BE IMPLEMENTED.
6. DISTURBED AREA STABILIZED AS SOON AS POSSIBLE.
7. SEE SHEET C-8 FOR MORE EROSION CONTROL NOTES.
8. THE CONTRACTOR SHALL NOT ALLOW ANY CONSTRUCTION DEBRIS TO ENTER THE STORM DRAIN OR SANITARY SEWER SYSTEMS. THE CONTRACTOR SHALL INSTALL APPROVED PHYSICAL BARRIERS TO ENSURE THAT ALL DEBRIS IS CAPTURED AND REMOVED FROM SURFACE RUNOFF PRIOR TO RELEASING SITE RUNOFF.

PROJECT SPECIFICATIONS:

GENERAL COMPACTION

1. REFER TO THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY MID PACIFIC ENGINEERING, INC., DATED MAY 15, 2015 FOR DETAILED GUIDELINES ON SITE PREPARATION, EXCAVATION, ENGINEERED FILL, AND OTHER GENERAL RECOMMENDATIONS.
2. COMPACTION REQUIREMENTS AS SPECIFIED WILL BE BY PERCENT OF THE MAXIMUM DRY DENSITY AND AS DETERMINED PER ASTM D 1557.
3. PLACE BACKFILL AND FILL SOIL MATERIAL IN LOOSE LIFTS OF NOT MORE THAN 8 INCHES FOR MATERIAL COMPACTED BY HEAVY EQUIPMENT, AND NOT MORE THAN 6 INCHES FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
4. THE GROUND SURFACE IN AREAS TO RECEIVE FILL SHALL BE PREPARED AS FOLLOWS:
   4.1. ALL ORGANIC MATERIAL AND TOPSOIL SHALL BE REMOVED.
   4.2. ON SLOPES GREATER THAN 1V:4H, HORIZONTAL BENCHES SHALL BE CUT INTO THE SOIL TO PROVIDE A LEVEL BEARING SURFACE FOR THE FILL MATERIAL. THE MINIMUM WIDTH OF THE BENCHES SHALL BE FOUR FEET.
5. ALL IMPROVEMENTS SHALL BE GRADED TO DRAIN TO THE APPROVED DRAINAGE COURSE AT A UNIFORM SLOPE OF 2% MINIMUM UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY SHN CONSULTING ENGINEERS AT 707-441-8855 IMMEDIATELY, AND PROVIDE WRITTEN DESCRIPTION OF ANY DIFFERENCES IN TOPOGRAPHY FROM THAT SHOWN ON THESE PLANS WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR AFFECT EARTHWORK QUANTITY.
7. NO CUT OR FILL SLOPES SHALL EXCEED THE SLOPE RATIO OF 2H:1V, UNLESS OTHERWISE NOTED.
8. TOPSOIL SHALL BE REMOVED FROM ALL CUT AND FILL AREAS AND SHALL NOT BE USED FOR ENGINEERED FILL.
9. FILL MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE SOILS REPORT UNLESS OTHERWISE NOTED ON THESE PLANS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR COMPLYING WITH THE FILL MATERIAL REQUIREMENTS OF THE SOILS REPORT.
10. COMPACTION IN TRENCHES SHALL BE TESTED EVERY 50-75 FEET WITH A MINIMUM OF TWO TESTS PER ANY LENGTH OF TRENCHING. THE ENGINEER WILL BE PERMITTED TO COMPLETE TESTING AT ANY BACKFILL ELEVATION DURING THE BACKFILLING PROCESS. THE CONTRACTOR SHALL PROVIDE EQUIPMENT AND AN OPERATOR, FREE OF CHARGE TO FACILITATE THE TESTING REQUIRED BY THE ENGINEER.
11. FILL MATERIALS SHALL BE MECHANICALLY COMPACTED. JETTING WILL NOT BE ALLOWED.
12. CARE SHALL BE TAKEN NOT TO CRUSH THE PIPE OR OTHER COMPONENTS WITH COMPACTION EQUIPMENT.
13. GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE FOOTING EXCAVATIONS PRIOR TO PLACEMENT OF FORMS AND REBAR.

TESTING AND INSPECTION

1. ALL SITE GRADING, SUBGRADE, AND BACKFILLING WILL BE INSPECTED BY THE ENGINEER. CONTRACTOR TO PROVIDE 48 HOUR NOTICE IN ADVANCE OF REQUIRED INSPECTION. FAILURE TO GIVE ADEQUATE NOTICE MAY RESULT IN TESTING DELAYS WHICH WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE ENGINEER WILL MAKE ALL COMPACTION TESTS WHEN ADVISED BY THE CONTRACTOR THAT IN THE OPINION OF THE CONTRACTOR, SUFFICIENT DENSITIES HAVE BEEN ACHIEVED. THE CONTRACTOR SHALL FURNISH A BACKHOE AND OPERATOR UPON REQUEST AT NO COST TO OWNER.
3. THE CONTRACTOR SHALL MAKE ALL NECESSARY EXCAVATIONS FOR COMPACTION TESTS. COSTS OF EXCAVATION, BACKFILLING, AND COMPACTING IN CONNECTION WITH COMPACTION TESTING SHALL BE BORNE BY THE CONTRACTOR. A FAILING COMPACTION TEST INDICATES THAT THE REQUIRED COMPACTION STANDARDS HAVE NOT BEEN ACHIEVED. ANY FILL MATERIAL OR PORTION OF FILL MATERIAL THAT DOES NOT MEET THE SPECIFIED REQUIREMENTS SHALL BE REMOVED AND RECOMPACTED UNTIL THE REQUIREMENTS ARE SATISFIED AT NO ADDITIONAL COST TO THE OWNER. COSTS ASSOCIATED WITH RETESTING PREVIOUSLY FAILED AREAS SHALL BE PAID BY OWNER AND BACK-CHARGED TO THE CONTRACTOR.
4. EXCAVATIONS FOR COMPACTION TESTS SHALL BE BACKFILLED WITH MATERIAL SIMILAR TO THAT EXCAVATED, AND BE COMPACTED TO THE SPECIFIED DENSITY.
5. ALL COSTS ASSOCIATED WITH ACHIEVING COMPACTION STANDARDS SHALL BE INCLUDED IN THE BID PRICES PAID FOR THE BID ITEM INVOLVED AND THEREFORE NO ADDITIONAL COMPENSATION SHALL BE MADE.

PAVING

1. ALL ASPHALT CONCRETE SHALL BE IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 39.
2. ASPHALT MATERIAL SHALL BE HMA TYPE A WITH ½ INCH AGGREGATE GRADATION. ASPHALT BINDER SHALL BE PG64-16.
3. ASPHALT CONCRETE SHALL BE INSTALLED AND TESTED ACCORDING TO THE "STANDARD PROCESS" SPECIFIED IN SECTION 39. ACCEPTANCE CRITERIA PER CALTRANS TEST 309.
4. WHERE NEW PAVING MEETS EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAWCUT.
5. APPLY TACK COAT TO CONTACT SURFACES OF CURBS, GUTTERS AND EXISTING PAVEMENT.
6. PLACE ASPHALT CONCRETE WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT.
7. TACK COAT SHALL BE TYPE SS-1.
8. COMPACT PAVEMENT BY ROLLING TO A MINIMUM OF 95% OF MAXIMUM DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO MECHANICAL ROLLING EQUIPMENT.
9. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE SMOOTH FINISH WITHOUT ROLLER MARKS.
10. AGGREGATE BASE SHALL BE CALTRANS CLASS 2, COMPACTED TO 95% RELATIVE COMPACTION PER ASTM D1557/D6938.
11. IN AREAS TO BE PAVED, MINIMUM TOP 6 INCHES OF SUITABLE NATIVE SOIL SHALL BE SCARIFIED AND RECOMPACTED TO 90% RELATIVE COMPACTION PER ASTM D1557/D6938.
12. UNLESS OTHERWISE SHOWN ON THESE PLANS, NEW ASPHALT CONCRETE SURFACES AND NEW FINISH GRADE SURFACES SHALL BE INSTALLED SO AS TO MAINTAIN EXISTING SURFACE DRAINAGE PATTERNS.

PROJECT SPECIFICATIONS (CONT):

SITE WORK CONCRETE

1. SEE STRUCTURAL SHEETS FOR CONCRETE WITHIN THE BUILDING FOOTPRINT.
2. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19A OF THE CBC AND WITH THE PROVISIONS OF ACI 318. MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONCRETE PLACEMENT.
3. UNLESS OTHERWISE STATED, CONCRETE SHALL BE HARDROCK CONCRETE AND SHALL MEET THE FOLLOWING DESIGN CRITERIA:
   A. MINIMUM 28-DAY COMPRESSIVE STRENGTH = 3,000 PSI
   B. MINIMUM CEMENT CONTENT = 5 SACKS/CUYD
   C. MAXIMUM AGGREGATE SIZE = 3/4"
   D. SLUMP = 4"±1"
4. CONCRETE SHALL BE MIXED, PLACED, AND CURED IN ACCORDANCE WITH ACI 318.
5. REINFORCING SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE."
6. SURFACE OF ALL CONCRETE FLATWORK SHALL BE IN ACCORDANCE WITH CBC REQUIREMENTS FOR ACCESSIBLE ROUTES.
7. ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING DOWELS, BOLTS, ANCHORS, PIPES AND SLEEVES SHALL BE SECURELY POSITIONED IN FORMS BEFORE PLACEMENT OF CONCRETE.
8. WALKWAYS SHALL MEET THE ACCESSIBILITY REQUIREMENTS PROVIDED IN THE CALIFORNIA BUILDING CODE. LONGITUDINAL SLOPES OF WALKWAYS SHALL NOT EXCEED 5%. CROSS SLOPES OF WALKWAYS SHALL NOT EXCEED 2%. LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

SANITARY SEWER

1. THE CONTRACTOR SHALL INSTALL ALL SANITARY SEWER IMPROVEMENTS TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. ALL MATERIALS SHALL BE FROM NEW STOCK AND DELIVERED IN NEW CONDITIONS.
3. PVC SEWER LINES SHALL MEET THE REQUIREMENTS OF ASTM D3034 OR F679 AND SHALL HAVE INTEGRAL BELL AND SPIGOT PUSH-ON ELASTOMERIC GASKETED JOINTS MEETING THE REQUIREMENTS OF ASTM F477.
4. ALL SEWER FITTINGS SHALL BE FACTORY MANUFACTURED AND CONFORM TO THE PLASTIC PIPE SPECIFICATION ABOVE.
5. SEWER LATERALS SHALL CONNECT TO THE SEWER WITH WYE FITTINGS. SADDLE-TYPE FITTINGS SHALL NOT BE USED UNLESS INDICATED ON THE PLANS OR AUTHORIZED BY THE ENGINEER.
6. PIPE ENDS SHALL BE CAREFULLY CLEANED BEFORE PIPE IS JOINED. INTERIOR OF PIPE SHALL BE KEPT FREE OF DIRT AND DEBRIS.
7. INSTALL NO. 10 COPPER WIRE ALONG TOP OF PIPE. WIRE SHALL EXTEND TO SURFACE AT ALL MANHOLES AND CLEANOUTS, AND SHALL TIE TO TRACER WIRE ALONG EXISTING SANITARY SEWER PIPING.
8. INSTALLATION, AND TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF REDDING'S STANDARDS.

WATER SERVICE

1. INSTALL WATER LINES IN ACCORDANCE WITH PLANS, AND WITH THE CITY OF REDDING'S STANDARDS.
2. WATER LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651 PRIOR TO PLACING IN SERVICE. HYDROSTATIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C605. BOTH TESTS SHALL BE PERFORMED IN THE PRESENCE OF AN ENGINEER.
3. FOLLOWING SUCCESSFUL DISINFECTION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE PIPELINE UNTIL THE REPLACEMENT WATER HAS BEEN TESTED AND PROVEN BOTH CHEMICALLY AND BIOLOGICALLY EQUAL TO THE TREATED WATER AT THE POINT OF SUPPLY. DISINFECTION SHALL BE REPEATED IF NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
4. AFTER FLUSHING AND BEFORE PLACING IN SERVICE, WATER LINES SHALL BE SAMPLED AND TESTED BY THE OWNER'S REPRESENTATIVE.
5. INSTALL NO. 10 COPPER WIRE ALONG TOP OF PIPE. WIRE SHALL EXTEND TO SURFACE AT ALL VALVES AND METERS.
6. TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF REDDING'S STANDARDS.

SANITARY SEWER

1. THE CONTRACTOR SHALL INSTALL ALL SANITARY STORM DRAIN IMPROVEMENTS TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. ALL MATERIALS SHALL BE FROM NEW STOCK AND DELIVERED IN NEW CONDITIONS.
3. ALL SEWER FITTINGS SHALL BE FACTORY MANUFACTURED AND CONFORM TO THE PLASTIC PIPE SPECIFICATION ABOVE.
4. PIPE ENDS SHALL BE CAREFULLY CLEANED BEFORE PIPE IS JOINED. INTERIOR OF PIPE SHALL BE KEPT FREE OF DIRT AND DEBRIS.
5. INSTALL NO. 10 COPPER WIRE ALONG TOP OF PIPE. WIRE SHALL EXTEND TO SURFACE AT ALL MANHOLES AND CLEANOUTS, AND SHALL TIE TO TRACER WIRE ALONG EXISTING STORM DRAIN SEWER PIPING.
6. INSTALLATION, AND TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF REDDING'S STANDARDS.

30% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

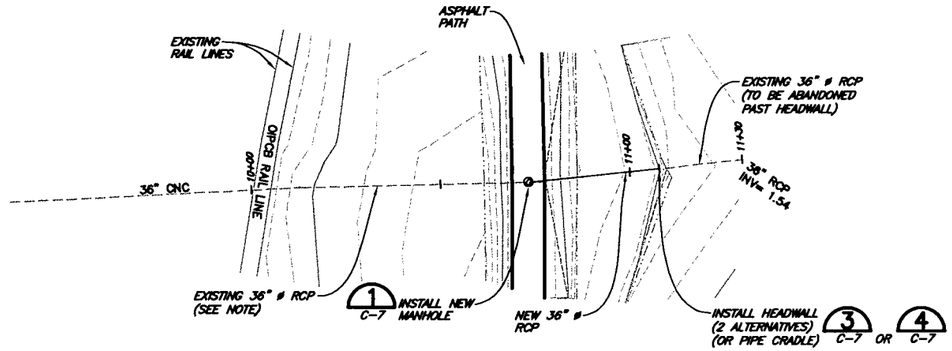
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

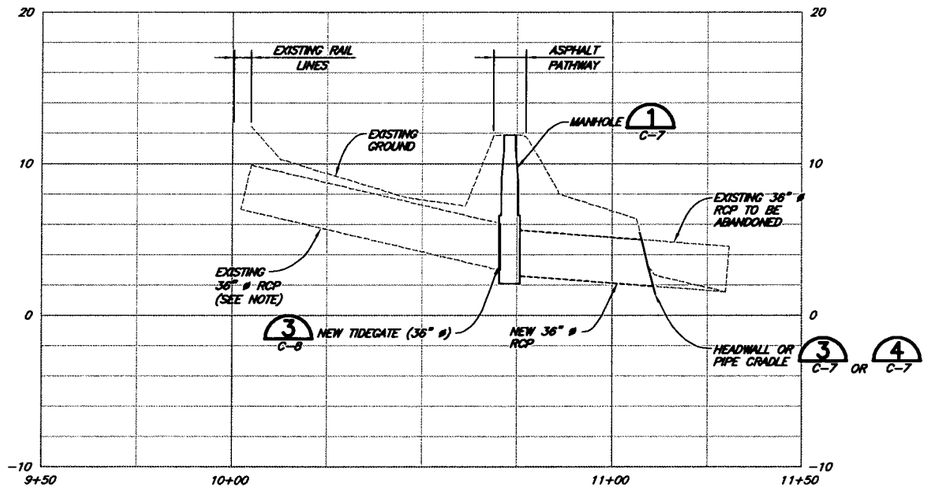
GENERAL NOTES

SHEET G-3
SEQ
DATE 07/2022
PROJ. NO. 622034

SAVED: 7/19/2022 9:21 AM JFOSTER, PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-GEN-NOTES.dwg



PLAN
1"=20'



TG-13 PROFILE
SCALE: 1"=20' H
1"=5' V

NOTE:
DEPTH OF EXISTING PIPE TO BE DETERMINED IN 60% DESIGN PHASE. ONLY INVERT ELEVATION AT END OF PIPE (1.54 FT) IS KNOWN.

30% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-269-9890

NO.	DATE	REVISION	BY

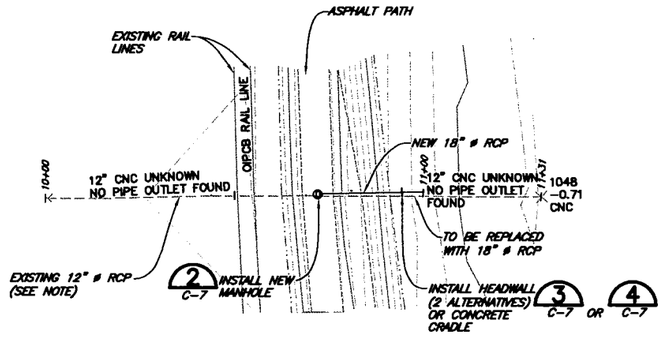
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

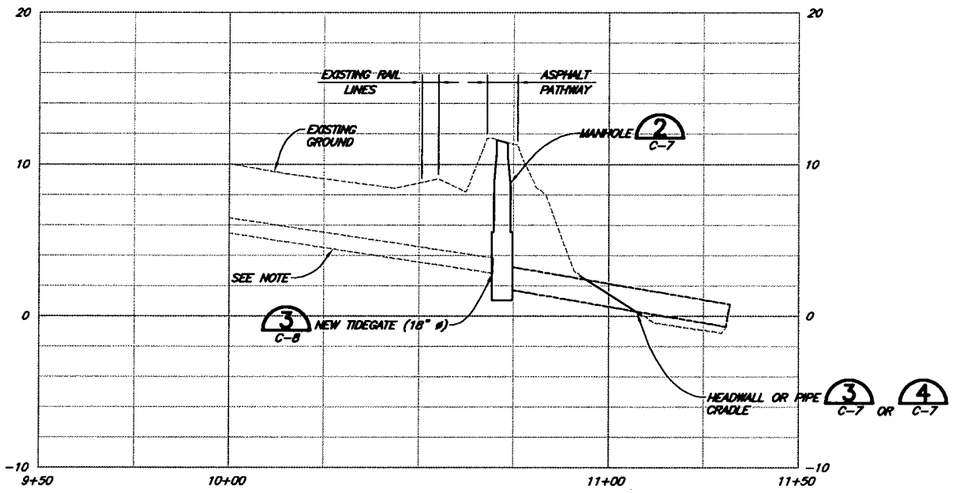
TG-13 PLAN AND PROFILE

SHEET C-1
SEQ
DATE 07/2022
PROJ. NO. 622034

SAVED: 7/19/2022 8:57 AM JFOSTER, PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-SITE.dwg



PLAN
1"=20'



TG-16 PROFILE
SCALE: 1"=20' H
1"=5' V

NOTE:

DEPTH OF EXISTING PIPE TO BE DETERMINED IN 60% DESIGN PHASE. ONLY INVERT ELEVATION AT END OF PIPE (-0.71 FT) IS KNOWN.

60% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	REVISION	BY	DATE

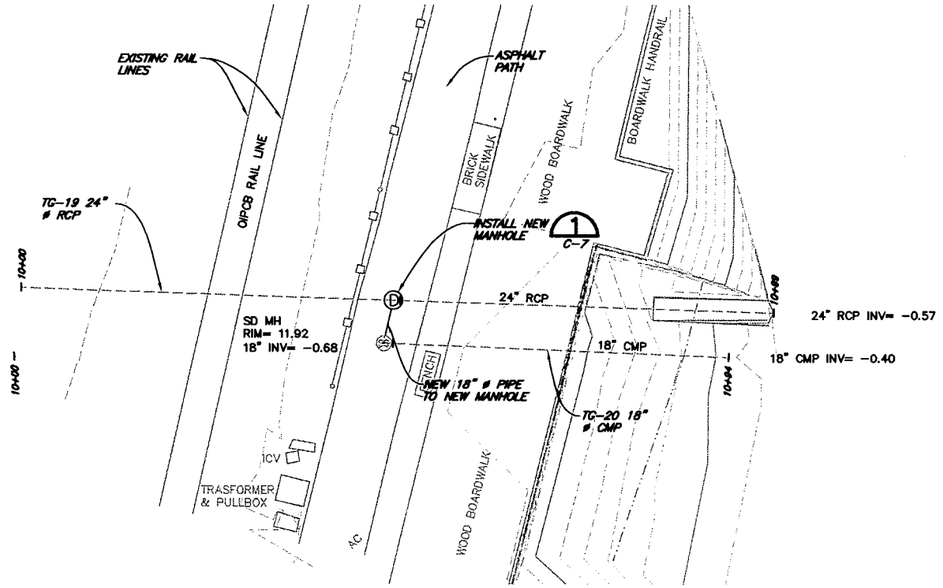
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

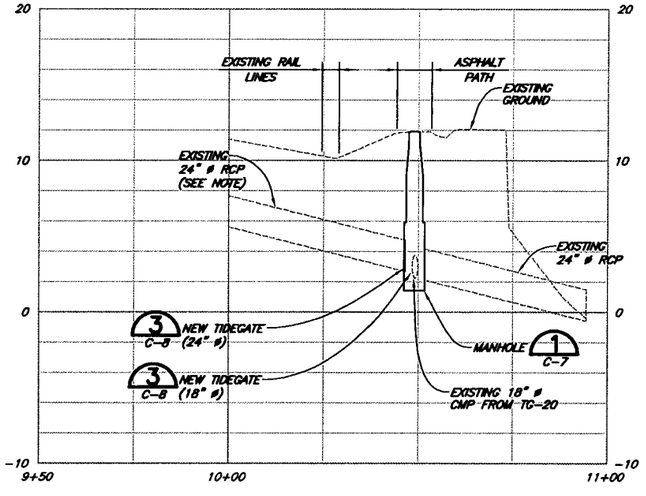
TG-16 PLAN AND PROFILE

SHEET C-2
SEQ
DATE 07/2022
PROJ. NO. 622034

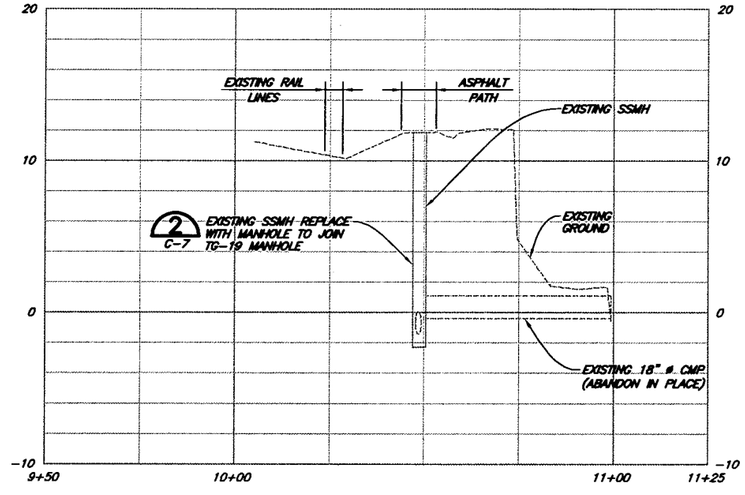
SAVED: 7/19/2022 8:57 AM JFOSTER PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-SITE.dwg



PLAN
1"=10'



TG-19 PROFILE
SCALE: 1"=20' H
1"=5' V



TG-20 PROFILE
SCALE: 1"=20' H
1"=5' V

NOTE:

DEPTH OF EXISTING PIPE TO BE DETERMINED IN 60% DESIGN PHASE. ONLY INERT ELEVATION AT END OF PIPES (-0.57 FT AND -0.40 FT) IS KNOWN.

60% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING 1"
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR 97420
WWW.SHN-ENG.COM
541-266-9890

NO.	DATE	REVISION	BY

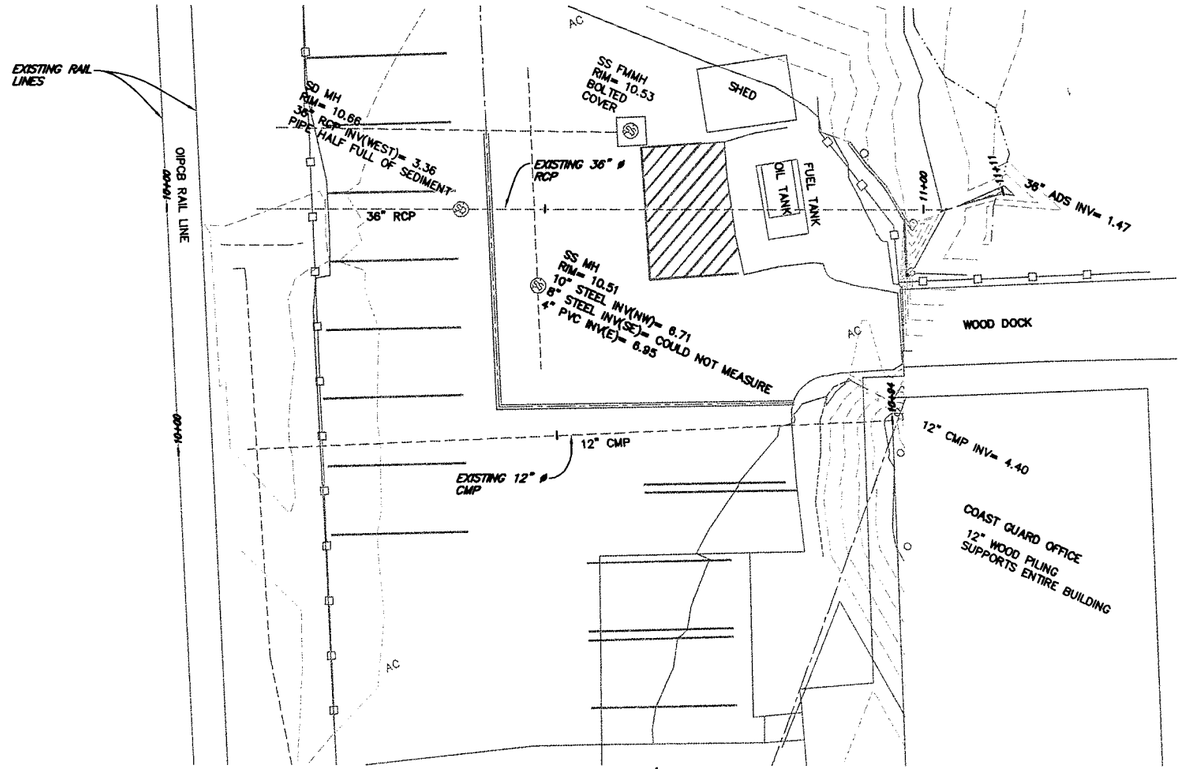
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

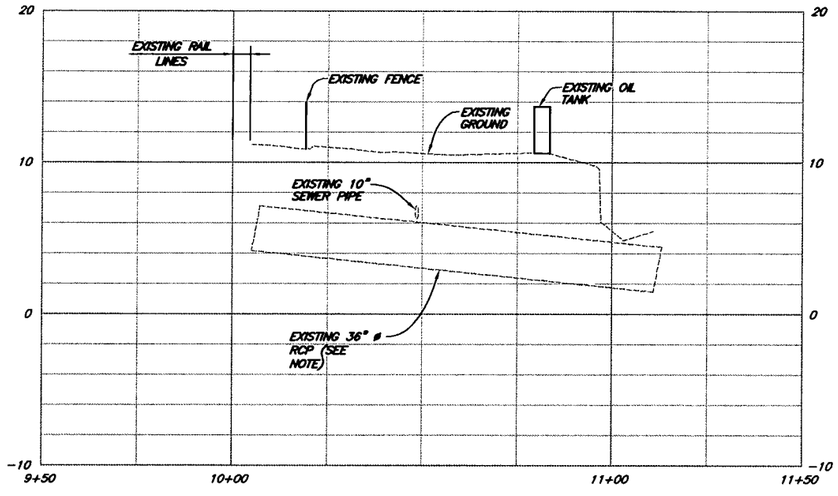
TG-19 & TG-20 PLAN AND PROFILE

SHEET C-3
SEQ
DATE 07/2022
PROJ. NO. 622034

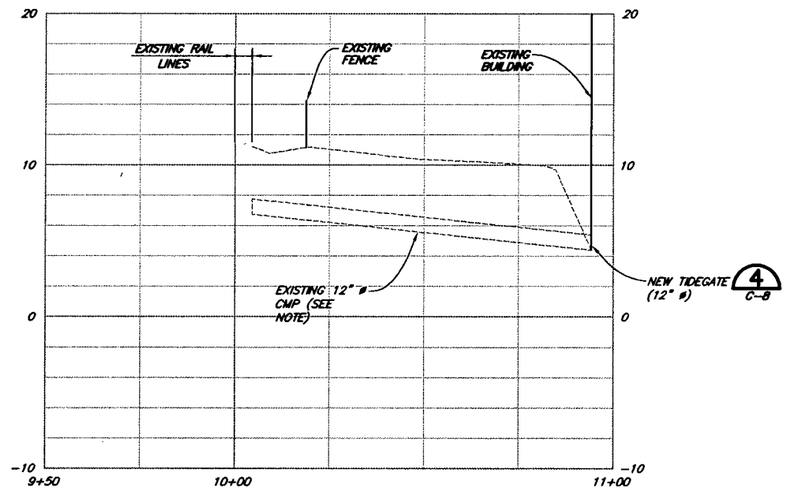
SAVED: 7/19/2022 8:57 AM JFOSTER, PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-SITE.dwg



PLAN
1"=10'



TG-27 PROFILE
SCALE: 1"=20' H
1"=5' V



TG-27-2 PROFILE
SCALE: 1"=20' H
1"=5' V

NOTE:
DEPTH OF EXISTING PIPE TO BE DETERMINED IN 60% DESIGN PHASE. ONLY INERT ELEVATION AT END OF PIPES (1.47 FT AND 4.40 FT) IS KNOWN.

60% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

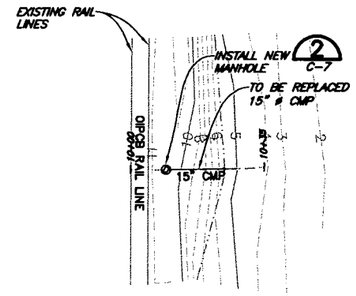
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

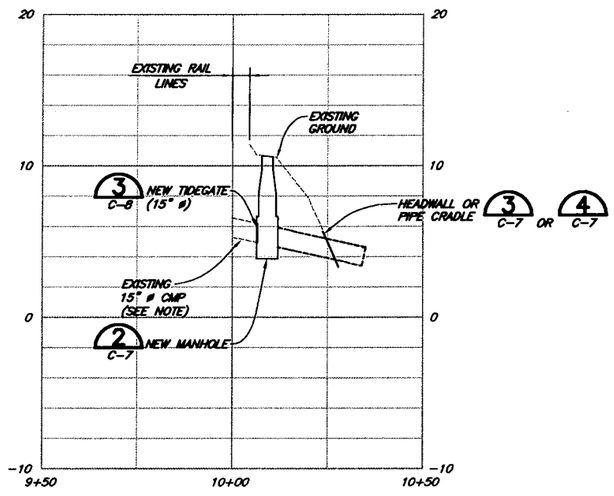
TG-27 PLAN AND PROFILE

SHEET C-4
SEQ
DATE 07/2022
PROJ. NO. 622034

SAVED: 7/19/2022 8:57 AM JFOSTER, PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-SITE.dwg



PLAN
1"=20'



TG-31 PROFILE
SCALE: 1"=20' H
1"=5' V

NOTE:
DEPTH OF EXISTING PIPE TO BE DETERMINED IN 60% DESIGN PHASE. ONLY INERT ELEVATION AT END OF PIPES (-0.57 FT AND -0.40 FT) IS KNOWN.

60% DESIGN

PRELIMINARY

SAVED: 7/19/2022 8:57 AM JFOSTER, PLOTTED: 7/19/2022 9:28 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-SITE.dwg

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

TG-31 PLAN AND PROFILE

SHEET C-5
SEQ
DATE 07/2022
PROJ. NO. 622034

PLAN
1"=20'

TG-35 PROFILE
SCALE: 1"=20' H
1"=5' V

NOTES:
1. DEPTH OF EXISTING PIPE TO BE DETERMINED IN 60% DESIGN PHASE. ONLY INVERT ELEVATION AT END OF PIPES (4.43 FT) IS KNOWN.
2. PIPE SHALL BE CLEANED OF MUD AND ROCK (PIPE FLUSH).

30% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

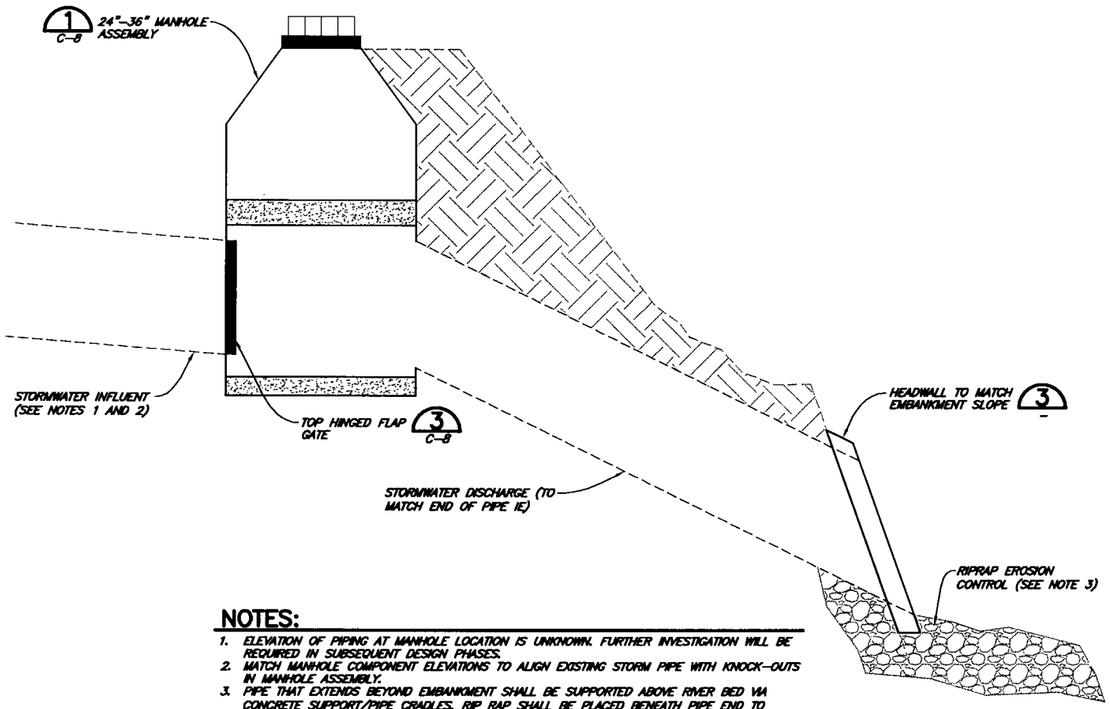
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

TG-35 PLAN AND PROFILE

SHEET C-6
SEQ
DATE 07/2022
PROJ. NO. 622034

SAVED: 7/19/2022 8:57 AM JFOSTER, PLOTTED: 7/19/2022 9:29 AM JOHN FOSTER
I:\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-SITE.dwg

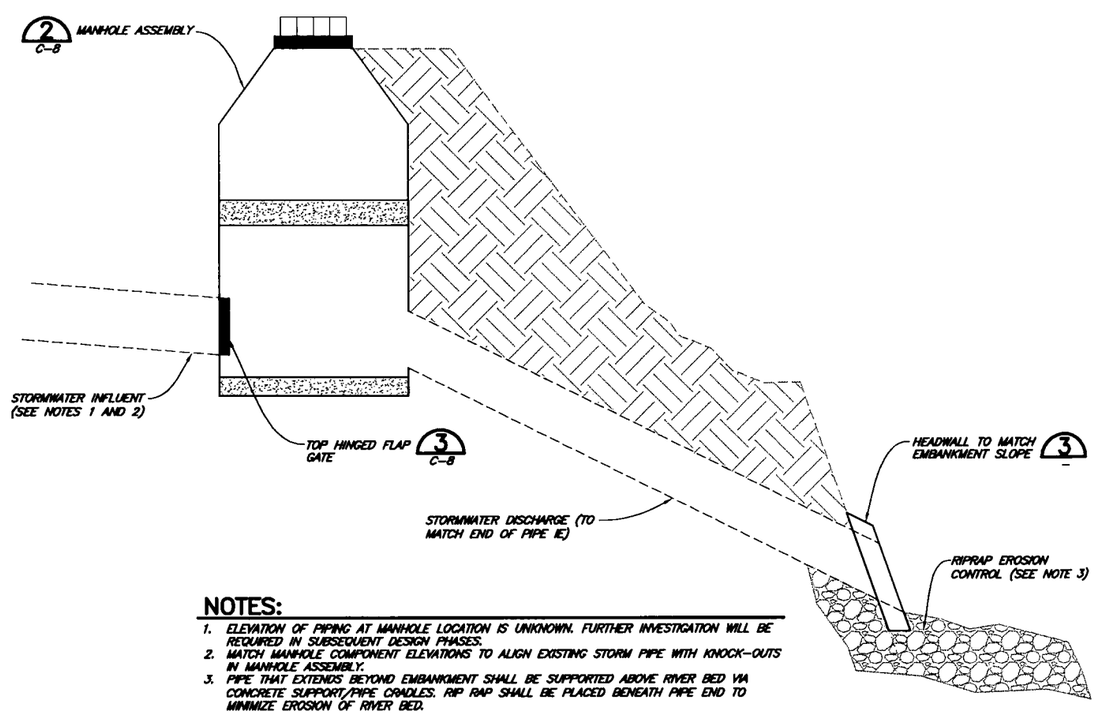


NOTES:

1. ELEVATION OF PIPING AT MANHOLE LOCATION IS UNKNOWN. FURTHER INVESTIGATION WILL BE REQUIRED IN SUBSEQUENT DESIGN PHASES.
2. MATCH MANHOLE COMPONENT ELEVATIONS TO ALIGN EXISTING STORM PIPE WITH KNOCK-OUTS IN MANHOLE ASSEMBLY.
3. PIPE THAT EXTENDS BEYOND EMBANKMENT SHALL BE SUPPORTED ABOVE RIVER BED VIA CONCRETE SUPPORT/PIPE CRADLES. RIP RAP SHALL BE PLACED BENEATH PIPE END TO MINIMIZE EROSION OF RIVER BED.

DETAIL 1 NTS C-1, 2, 3

(24"-36" MANHOLE SECTION)

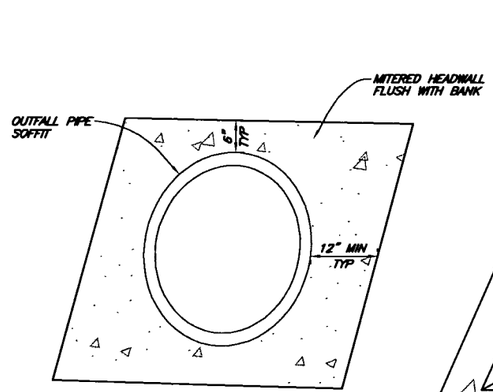


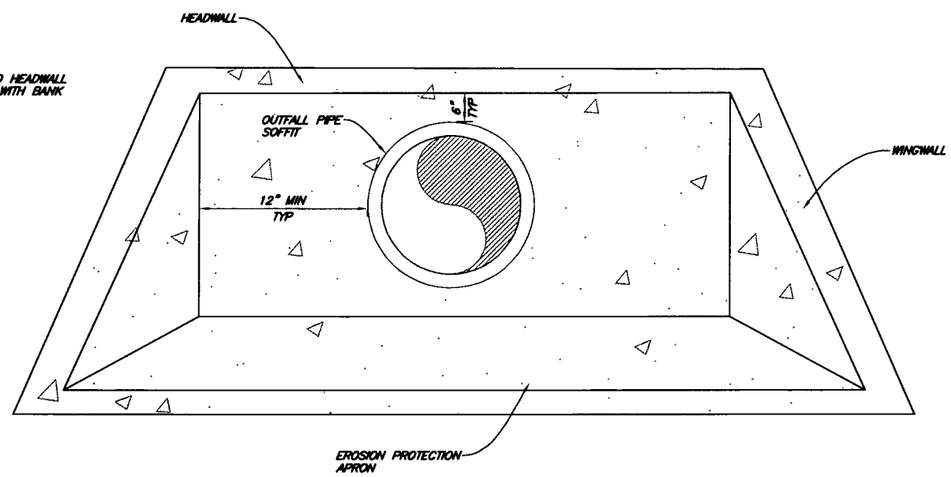
NOTES:

1. ELEVATION OF PIPING AT MANHOLE LOCATION IS UNKNOWN. FURTHER INVESTIGATION WILL BE REQUIRED IN SUBSEQUENT DESIGN PHASES.
2. MATCH MANHOLE COMPONENT ELEVATIONS TO ALIGN EXISTING STORM PIPE WITH KNOCK-OUTS IN MANHOLE ASSEMBLY.
3. PIPE THAT EXTENDS BEYOND EMBANKMENT SHALL BE SUPPORTED ABOVE RIVER BED VIA CONCRETE SUPPORT/PIPE CRADLES. RIP RAP SHALL BE PLACED BENEATH PIPE END TO MINIMIZE EROSION OF RIVER BED.

DETAIL 2 NTS C-3, 5, 6

(24" OR SMALLER MANHOLE SECTION)



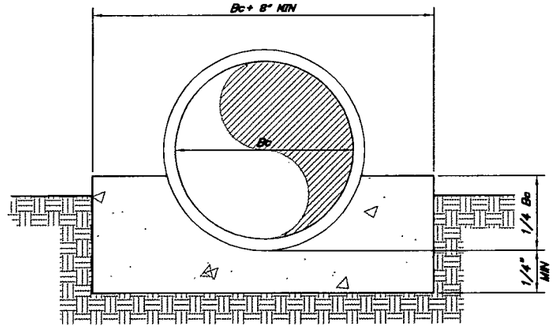


NOTE:

USE THIS FOR TC-13, TC-16, AND TC-31.

DETAIL 3 NTS C-1, 2, 5

(HEADWALL)



NOTES:

1. FOR CLASS B AND C BEDDINGS, SUBGRADES SHOULD BE EXCAVATED OR OVER EXCAVATED, IF NECESSARY, SO A UNIFORM FOUNDATION FREE OF PROTRUDING ROCKS MAY BE PROVIDED.
2. SPECIAL CARE MAY BE NECESSARY WITH CLASS A OR OTHER UNYIELDING FOUNDATIONS TO CUSHION PIPE FROM SHOCK WHEN BLASTING CAN BE ANTICIPATED IN THE AREA.

DETAIL 4 NTS C-1, 2, 5

(PIPE CRADLE)

30% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

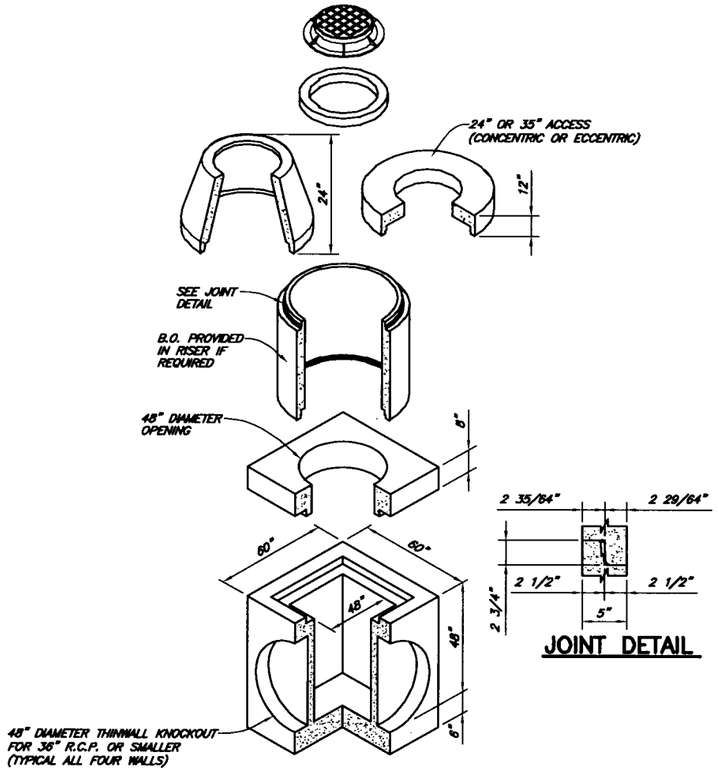
DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

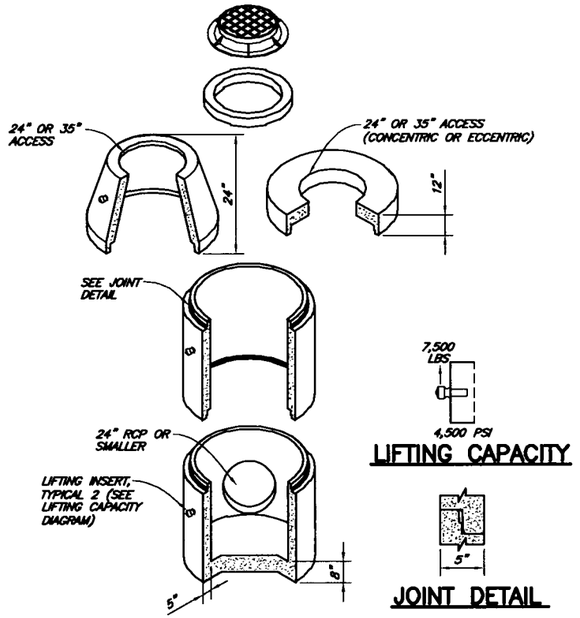
DETAILS

SHEET C-7
SEQ
DATE 07/2022
PROJ. NO. 622034

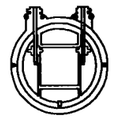
SAVED: 7/19/2022 9:18 AM JFOSTER, PLOTTED: 7/19/2022 9:29 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-DETLS.dwg



DETAIL 1
NTS C-7
(24"–36" MANHOLE ASSEMBLY)

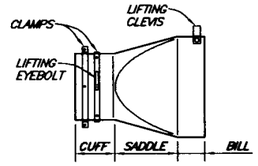


DETAIL 2
NTS C-7
(24" OR SMALLER MANHOLE ASSEMBLY)



NOTE:
USE THIS FOR TC-13, TC-16, TC-19/20, AND TC-31.

DETAIL 3
NTS C-1, 2, 3, 5, 7
(TOP-HINGED TIDE GATE)



NOTE:
USE THIS FOR TC-27 AND TC-35.

DETAIL 4
NTS C-4, 6
(TIDE FLEX GATE VALVE)

30% DESIGN

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

275 MARKET AVENUE
COOS BAY, OR. 97420
WWW.SHN-ENGR.COM
541-266-9890

NO.	DATE	REVISION	BY

DSGN TB
DR SA
CHK CHKR
APVD

CITY OF COOS BAY
DOWNTOWN TIDEGATE UPDATES
COOS BAY, OREGON

DETAILS

SHEET C-8
SEQ
DATE 07/2022
PROJ. NO. 622034

SAVED: 7/19/2022 9:18 AM JFOSTER, PLOTTED: 7/19/2022 9:29 AM JOHN FOSTER
\\CoosBay-FS\Projects\2022\622034-Tidegates\Dwgs\622034-DETLS.dwg

CITY OF COOS BAY JOINT WORK SESSION

Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
January 23, 2024	2.f

TO: Mayor Benetti, Council President DiNovo and City Councilors

FROM: Christine Sylvester, Executive Coordinator

THROUGH: Nichole Rutherford, City Manager

ISSUE: Quarterly Update of 2023-2025 Council Goals

SUMMARY:

Council held a goal setting session on January 21, 2023, followed by review and adoption of the 2023-2025 Council Goals at the February 21, 2023 Council meeting. The adopted 2023-2025 Council Goals include a quarterly update reporting the progress on the goals, as Goal 9b, and a goal tracking document was created to inform the quarterly update.

ACTION REQUESTED:

Review and discuss updates on 2023-2025 Council goals.

BACKGROUND:

Following the January 21, 2023 biennial goal setting work shop, a draft of the 2023-2025 Council Goals was developed for review and refining. After several weeks of refinement, the 2023-2025 Council Goals were presented for adoption at the February 21, 2023 Council meeting. The 2023-2025 goals are comprised of nine main focus areas:

1. Working Well Together
2. Working with Key Partners
3. Maintain and Improve Public Infrastructure
4. Addressing Housing and Homelessness
5. Economic Development
6. Public Safety
7. Communication Between the City and Citizens
8. City Manager Transition Plan
9. Council Goal Tracking

Goal 9b is to "Present Quarterly Progress Updates on Adopted Council Goals". Staff has identified the recurring quarterly reporting to be done on the last work session of each quarter. This is the fourth 2023 quarterly update, as of December 31, 2023, in which staff will provide the goal tracking document and review action taken to date, as well as next steps for each goal.

BUDGET IMPLICATIONS:

None.

ATTACHMENT(S):

- Council Goals - Master Tracking Document thru 12.31.2023.pdf

Council Goals 2023-2025

	Goals	Complete	Assigned	Actions Taken	Next Steps
1.	**Working Well Together**				
a.	Promote Diversity, Equity and Inclusion for a safer, more inclusive community and municipal organization		SP NR/CS	2023 DEI-Centric Proclamations approved to date include Black History Month, Pride Month and Juneteenth. Proclamations are also added to the Website, Facebook and included in the weekly digital newsletters (Friday Update). Staff has developed a proclamation tracking document to timely present proclamations. DEI training was held at the Library during May and June 2023. DEI staff training August 2023 completed. Library staff participated in the Juneteenth Celebration.	Consider proclamation for Indigenous Peoples Day in October 2024, Native American Heritage Month in November 2024, etc. Library continues with programs for all segments of the community and rotating displays for celebrations such as Hispanic Heritage month, world languages, and Pride Month. Exploring an Apprenticeship program, funded by BOLI, that focuses on creating employment opportunities in the fire service for BIPOC, women, and veterans. Applied and awarded Travel Oregon grant to create Tribal history interpretive signs to be placed at the Boardwalk near the Tribal flag display.
b.	Maintain a strong emphasis on beautification of our community		GH RW/NR	Partnered with Oregon's Bay Area Beatification (OBAB) and Bay Area Hospital on community clean up events; partnered with Coos Bay Downtown Association and Community Coalition of Empire on utility art projects. Landscapers under contract to maintain tree wells in downtown area in April, June and September. City participation in Chambers' 101 Cleanup Brigade. Fire Dept partnered with United Way for 2023 Day of Caring 6/10/23. OBAB will held 8 community cleanup events in 2023. Adopt-A-Park pilot program developed by Parks Commission and identified three projects: trail clean-up at John Topits Park, compostable dog waste bag stations at John Topits Park, Boy Scout Cabin rehabilitation.	OBAB will be holding 8 community cleanup events in 2024, working with AYA to do trail clean-ups @ John Topits Park. The Adopt a Park Pilot Program has identified the John Topits Trail System as a project and is working to get doners for that effort.
2.	**Working with Key Partners**				
	Maintain focus on regionalism in our efforts to address a range of issues and opportunities				

	Goals	Complete	Assigned	Actions Taken	Next Steps
a.	Facilitate collaboration with and between local governmental partners to include but not limited to the Coquille Indian Tribe, Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, Coos Bay School District, SWOCC, City of North Bend, Coos County, Port of Coos Bay, Coos Bay–North Bend Water Board, Coos Bay–North Bend–Charleston Visitor & Convention Bureau, etc.		RC/NR	On 2/10/23 RC/NR met w/Port Admin, discussed scheduling recurring quarterly meetings. Meeting with the Port on 03/23/23, will meet quarterly going forward. 8/29/23 met to discuss housing opportunities. Homeless Pilot project coordination (CB-NB-CC and SWOCC). Stakeholder meetings with service providers, faith based organizations, tribes & veterans. Coordinated Tribal support for Travel Oregon grant (interpretive signs)	Working on an agreement with the Port of Coos Bay that would provide fire and EMS response services to Port property in the Bunker Hill area. Continued cooperation with the other bay area fire service agencies to include shared policies, specialty teams and training opportunities. Working with SWOCC and the Fire Service Advisory committee to improve the fire science program and replace the regional training tower.
b.	Encourage and support the Coos Bay Downtown Association, Community Coalition of Empire, South Coast Economic Development Council, and Bay Area Chamber of Commerce in an effort to support businesses and strengthen the local economy		CSc/NR RC/NR	Met w/CBDA and Wayfinding Committee between March and September, implemented a signage solution to include tri-annual maintenance Attended Southwest Oregon Regional Airport ARFF Station ribbon cutting Attended GMA Garnet ribbon cutting Refer to wayfinding committee report. 9/19 - Will ask for Council support and authorization to apply for DLCD Technical Assistance Grant to complete an Economic Opportunities Analysis (EOA) to update the Economic Element of City's Comprehensive Plan.	City, CBDA, VCB coordinating to keep wayfinding maps updated regularly. City printed and posted updated maps for 1st trimester of 2024. Adding a new Economic Revitalization Adminstrator position to help facilitate this goal.
3.	**Maintain and Improve Public Infrastructure**				Submitted infrastructure funding request for 8 large housing projects (public and private).
	Water Quality Utility (Wastewater / Storm Water)				
a.	Upon securing a development agreement, initiate the design process for Pump Station 27 (Timber Cove Housing Project)		JW	Design 20% complete by Dyer Partnership	Staff received development agreement and provided comment back to the developer/attorney
b.	Initiate Phase 1 capital improvements to Wastewater Treatment Plant 1		JW	Design plans completed and project was advertised. Council awarded a construction contract to McClure and Sons Inc. for $20,324,654 on June 20, 2023 Staff to worked with McClure and Sons to execute contract and set up pre-construction meeting. Staff to work with Engineer on the Services During Construction Contract. Pre-con meeting occurred week of September 4th, MSI mobilized the week of September 18, 2023. Staff and Engineer of work are processing submittals. Construction Duration is anticipated to be 2 years.	Construction commenced in October 2023.

	Goals	Complete	Assigned	Actions Taken	Next Steps
c.	Undertake systematic upgrades and or replacements of the City's pump station infrastructure		JW	Council awarded construction contracts for Pump Stations 6 and 9 to Pacific Excavation on October 4, 2022. Planned improvements to Pump Stations 12 & 13 are currently in the design phase with Dyer, final design Winter 2023 PS 6 & 9 - Pac Ex mobilized early in August. They have completed the bypass pumping installation for both pump stations. To be completed summer 2024. PS 12 & 13 - Automatic Transfer Switches for both generators have been delivered. Generators are on schedule to be delivered early next year. Bidding is scheduled for spring of 2024	PS 6 and 9, contractor will re-mobilize in January 2024. Anticipate completion Summer 2024. PS 12 and 13 has been approved by DEQ. Dyer Partnership is finalizing plans and specifications for bid in Spring 2024. PS 15 (storm water) has been identified as the next pump station upgrade. Scope and fee is being developed.
d.	Undertake infiltration and inflow (I&I) reduction projects on the city owned infrastructure		JW	Date St. I&I reduction project in design is scheduled to go out for bids in July 2023. 3rd Street I&I reduction project was awarded by URA on June 20, 2023 to Knife River Materials for $256,495. Date St. project: Open bids in August 2023 and Ask Council to award contract in August / September if appropriate. 3rd St. project: Enter into contract with Knife River for 3rd and set up pre-construction meeting. Construction documents are executed and the contractor is scheduled to mobilize beginning of October. Staff purchased a complete survey system to perform surveys for future I/I projects. The payback on this unit will occur after two normal I/I reduction projects as staff will no longer have to subcontract this work. Identify Spring/Summer/Fall 2024 projects. Ferguson Ave. I&I reduction project in design; project anticipated to include replacement of street/storm collection system; on hold until 2024.	Date Street is anticipated to bid 2024 (design is being completed in-house). 3rd and Highland Sewer Replacement is 90% constructed. N. 14th between Central and Commercial Sewer Replacement (Design is being completed in-house). Sewer Replacement at 11th and Highland. Design is being completed in house.
e.	Continue to research and evaluate current and potential policies aimed at improving and maintaining privately-owned business and residential sewer laterals which connect to the wastewater utility		JW	Potential policy considered by Council in 2022. Currently on hold.	Awaiting implementation by other Oregon local government.
City Streets					
f.	Stabilize the slope east of Koosbay Boulevard between Nutwood Avenue and Pine Drive, including securing project funding and necessary engineering/design plans		GH	Using CCD, applied for grant funding for the project. Grant was unsuccessful.	Working to identify funding source/financing options

	Goals	Complete	Assigned	Actions Taken	Next Steps
g.	Stabilize Coos River Highway, through S-Curves in Eastside, including securing project funding and engineering/design plans		GH	Using CCD, applied for grant funding for the project. Grant was unsuccessful. Temporary repairs made in March 2023	Working to identify funding source/financing options
h.	Complete the engineering design plans to improve the Newmark Avenue/Empire Boulevard intersection. After securing a funding source, implement the improvements		GH	Design is underway; easements acquired, and necessary land purchased	Complete design; Identify funding source/financing options
i.	Explore options and funding sources for making Coos Bay more bike friendly		Engineering /JW	Council directed staff to investigate possible bike routes / sharrows from the downtown area to Mingus Park. Staff has met with transportation engineer. Include in the Traffic Safety Plan review which will begin Summer 2023. Evaluate as part of the Empire Blueprint process	Engineer has completed a draft study and presented to Council Engineer is finalizing study based on Council comments. Staff to provide language for Council consideration for framework of Bike/Ped Committee.
j.	Provide the Council with an annual report listing street maintenance and improvement projects completed, accounting for funds received / used, and list of planned projects for the upcoming fiscal year		GH	FYE 2023 Annual Road Report completed and presented to Council on March 28, 2023. Begin drafting FYE 2024 Annual Road Report in September 2023.	Draft will be complete by the end of January 2024
Parking Lots					
k.	Develop a parking lot on the vacant property located at S 3rd Street and Central Avenue		JW	The Urban Renal Agency awarded a project construction contract to Knife River Materials for $1,392,627 on June 20, 2023. Contractor mobilized in July and project is within budget and on schedule.	Project is over 80% complete. Pavers and landscaping are being installed.
l.	Develop a parking lot on the vacant property on Front Street between Cedar Avenue and Date Avenue		GH	Design complete. Project was open for bids in June but no bids were received. Project was rebid; one bid received/awarded to Knife River. Contractor mobilizing week of Sept 28th; perform remediation over next 60 days; construction parking lot as weather permits; anticipated completion Summer 2024. Anticipate doing design in-house. Staff investigating funding sources for construction.	Soil remediation has been completed. Contractor will remobilize in spring as weather allows.
m.	Demolish the blighted buildings and develop a parking lot on the property formerly known as Franko's Gas Station located at Newmark Avenue and S Wasson Street		JW	Acquired land through donation, deed restriction Staff rekeyed and secured both buildings. 03/15/23 Stantec provided recommendation memo for demo and parking lot construction. Proceed with environmental cleanup as needed, demo schedule for later this year Spring/early Summer 2024 when groundwater levels have receded.	Advertisement for bids anticipated in February/March 2024.

Goals	Complete	Assigned	Actions Taken	Next Steps
n. Redevelop the City's parking lot at the northwest corner of S 2nd Street and Curtis Avenue, including efforts to install EV charging stations	√	JW	EV design is complete and permits have been issued by the city. EV's contractor mobilized/completed majority of construction. Pacific Power to energize the station; no energization schedule provided.	Tesla charging station is complete and online.
o. Explore updating or replacing the shared trash enclosure in the parking lot at the 200 block of Broadway Avenue		JW/GH/JH	Not started	Investigation plan for 2024
p. Explore opportunities to install a shared trash enclosure in the parking lot at the 100 block of N 2nd Street		JW/GH/JH	Not started	Investigation plan for 2024
q. Explore funding options for maintenance and capital improvements for City owned parking lots		GH	A resurfacing/resealing and restriping plan has been completed for the downtown parking lots including the Mingus pool and ball fields. Costs have been projected for the next 5 years and the lots have been prioritized. Two parking lots completed (VIC) in May / June 2023. Procure bids for 4 parking lots (2 parking lots North & South of Anderson & 101, as well as 2 Parking lots between S.2nd & S. 3rd & Curtis) Contracts will be released end of September 2023 to do 4 parking lots.	6 parking lots have been sealed and restriped. Anticipate another 6 to be completed in the summer of 2024
r. Work with the Coos Bay Downtown Association to evaluate possible changes to established parking restrictions and additional signage opportunities		CSc/JH	Initial discussion with DTA in 09/2022; Established Wayfinding Committee (WC) and on 03/07/2023 WC met to discuss updating 3 existing sign kiosks in DT. WC on 04/10/2023 to review (2) preferred sign companies, grant opportunities, and interim options to replace existing signs. The Initial sign products/quotes rejected by committee. VCB finalized interim map - City & CBDA printing two different banner paper copies for consideration. 9/18 - Wayfinding Committee met and confirmed their recommended path forward, which will be presented to the City Council at their 10/3 meeting. The plan consists of the CBDA coordinating with the VCB to update the existing wayfinding signs on a tri-annual basis. The CBDA will coordinate with the City who will print and install the updated maps.	City, CBDA, VCB coordinating to keep wayfinding maps updated regularly. City printed and posted updated maps for 1st trimester of 2024.
Sidewalks				
s. Using URA funds, continue to replace sections of sidewalks damaged by street trees		GH	Council approved contracts for two projects on June 20, 2023 for construction this summer (Commercial between N. 5th & N. 7th ($370,959) and N. 3rd & N. 4th ($295,495)). Staff to executed contracts and set up pre-construction meeting in July.	2 projects have been completed. Project walkthrough is scheduled for 1/11/2024. plans are ready for the next fiscal year for another section of sidewalks to be repaired

	Goals	Complete	Assigned	Actions Taken	Next Steps
Parks					
t.	Seek funding opportunities for identified improvement needs listed within the 2023 Parks Master Plan		GH/JW	$50,000 included in the proposed FYE 2024 budget for grant writing services. RFQ process, selected Intuitive Group (IG) for grant writer for the parks. Working with IG on contract. First grant IG will assist with is for Mingus Park (rewilding old kiddie area, new paths, installing storm drain infrastructure, educational signage, and relocating kiddie area near children's area); Judith Ann Mogan Foundation, due 07/15/23.	City has been awarded the following grants: 1. Judith Ann Mogan, $40,000 Kiddie park relocation, drainage improvements, and rewilding of old kiddie area. 2. The Coquille Tribal Community Fund, $5,000, Scout Cabin Foundation Stabilization. City is currently preparing applications for the following projects: 1. The Ford Family Foundation, $20,000, Scout Cabin Foundation Stabilization. 2. The Kinsman Foundation, $5,000, Scout Cabin Foundation Stabilization. 3. OPRD Local Government Grant Program, $600,000, Scout Cabin Rehabilitation, Mingus Bathroom, Ball Park Bathroom
u.	Establish a Boardwalk improvement and implementation plan		GH	Staff has started plan development. While plan development is underway, the following improvement projects have been undertaken: 1. Installed new lighting 2. Replaced old flag poles 3. Replaced brick work at entrance to Boardwalk 4. Pigeon Spikes Installed Applied and awarded Travel Oregon grant for interpretive signs	Staff has developed the 5 year CIP Plan and will finalize the plan by the end of January 2024. The city was awarded a grant for $65,300.00 from Travel Oregon for interpretive signs.
Work to Realize a New Library Facility					
v.	Explore possible location options and related costs		JW/SP RC/NR	State request for $12M submitted, Federal request for $2M submitted 3/21/23 Hacker Architect presented 4 site analysis	Convene Survey Question Committee, complete survey & education campaign, site selection, bond on ballot
w.	Conduct a scientific survey of Coos Bay citizens to gauge support for a new Library and for potential locations and costs			3/21/23 Probolsky Research Library Bond Survey proposal presented to Council. Survey launched in June.	City contracted with Probolsky Research in August to develop an educational plan for the advisory vote and bond vote. The plan in in progress.
Facilities					
x.	Begin a long-range planning process, needs assessment and identify possible funding sources to relocate the City Shops to a new location outside the FEMA floodplain and the tsunami inundation zone		GH/JW/JH	Not started	Explore FEMA BRIC grant for funding Staff has commenced brainstorming ideas.
y.	Begin a long-range planning process and needs assessment and possible funding sources to replace the Empire Fire Station		MA/RC/NR	Not started	Continue to explore collocating opportunities with SWOCC's Fire Science training program Working with HGE to submit a Business Oregon Seismic Upgrade grant for Eastside fire station

Goals	Complete	Assigned	Actions Taken	Next Steps
z. Expand and update the City's 9-1-1 / Public Safety Dispatch Center		CC	URA approval of funding for upgrades ZCS Engineering contracted to provide engineering plans. Review design plans and advertise bidding process.	Expanded dispatch center, project will be completed at end of January or beginning of February 2024
4. Addressing Housing and Homelessness				Submitted infrastructure funding request for 8 large housing projects (public and private).
Housing				
a. Consider accepting the draft preliminary 2022 Urban Growth Boundary expansion memo and Comprehensive Plan draft Urban Growth Management section 7.9 amendments as informational/advisory for further evaluation. Work to confirm status of the City's Urban Growth Areas (UGA) with Coos County and DLCD.		CSc	Council accepted in Feb 2023 Working with County to review and revise 1987 UGA Agreement. 6/7/23 - County Commissioners approved staff moving forward to update 1987 agreement including reaffirming UGAs, including expansion of City's UGB. Looking into grant funding to help confirm understanding of City-County UGAs and to amend County zoning standards to allow higher resid. densities. 9/18 - City to partner with the County on a DLCD Technical Assistance Grant to complete UGB work (due 10/2). DLCD has suggested they are looking for ways to help the City accomplish a UGB expansion without a showing of need as required under current State rules.	Working with the County and DLCD to complete a regional problem solving project related to our UGB.
b. Implementation of the multi-unity property tax (MUPTE) incentive program		RC/NR/CSy	Council approved MUPTE concept	Schedule overlapping tax district presentations, CBMC amendments

Goals			Complete	Assigned	Actions Taken	Next Steps
	c.	Undertake an audit of the of the City's Development Code in an effort to identify conflicts and to identify opportunities to reduce barriers to housing production		CSc	Staff has already identified some existing code issues. 03/06/2023:asked DEA to provide a scope of work/cost to complete an initial Code audit with Council goals in mind. 2/14 - PC reviewed Front Street/WH District standards. 4/10 - PC reviewed Vacation Rental standards. Further work on identifying issues will continue through spring/summer 2023. Look further into what it would take to hire a consultant to complete code audit, including potential grant opportunities. Look further into what it would take to hire a consultant to complete code audit, including potential grant opportunities. DEA provided SOW and Cost (~$40k) to complete Code Audit. Staff will use this as a basis to solicit informal written quotes from 3+ Consultants. Code Audit Project Underway: 8/26 - Contract for Code Audit & Rewrite Project signed. 9/1 - Kick-Off Mtg. with Consultant. 9/15 - 2nd Mtg with Consultant.	Working with Consultant to complete a Code Audit/Rewrite of the Development Code. Asked Amy L. to look into pre-approved housing plans for building. Looking into ways the City can review our existing permitting procedures for efficiency.
	d.	Explore creation of a rental housing code		AL	Staff has done preliminary exploration and shared the idea with Council	Staff to explore further and develop information for consideration by Council.
Homelessness						
	e.	Seek funding opportunities to create additional emergency and transitional shelters in the community		RC/NR		Meetings scheduled with Advanced Health and Salvation Army
	f.	Working with Coos County and North Bend, to complete the necessary requirements of HB 4123, the Coordinated Homeless Response Pilot		DF/SK/NR	Grant Accepted, Advisory Board appointments, Contract w/RDI, Stakeholder meetings, Hired Homeless Coordinator, identified Office of Homeless Coordinator location	HB4123 funding to be fully spent by May 2024.
	g.	Continue to explore opportunities to reduce homelessness and the impacts of homelessness in our community				Meetings scheduled with Advanced Health and Salvation Army; expanded Warming Center access Request to State for $2.5 capital funds for facility; received partial request.
	h.	Develop options to address the growing issue of abandoned shopping carts on streets, sidewalks and natural areas		CC/TL	Captain Lindahl presented regulation options at the May 23,2023 Work Session Captain Lindahl to present draft ordinance language and possible next steps July 25, 2023	Enacted shopping cart ordinance and implemented a Cart Watch Program Implemented a Cart Watch Program
5.	**Economic Development**					

	Goals	Complete	Assigned	Actions Taken	Next Steps
a.	Evaluate existing zoning, design standards, parking districts, existing Hollering Place Master Plan, etc., as applied to the core Empire business district area and consider possible changes to encourage and incentivize investment, development, and redevelopment		JB/LD/SS JW/CS/NR	Established Empire Blueprint committee URA awarded consultant contract 6/13 - 1st PAC & Planning Commission meetings. Notice went out to all affected owners/occupants within study area. Empire Area Blueprint is underway. 9/12 - 2nd PAC & Planning Commission meetings. Stakeholder interviews majority complete; actively soliciting additional business owner input. 9/21 - Meet with CTCLUSI Leader's Circle 9/25 - Meet with CTCLUSI & Coquille Tribal staff. Dec 2023 tentatively scheduled 3rd PAC & Planning Commission meeting to consider "alternatives".	Consultants working on drafting the "preferred alternative" (mix of industry and housing). Next mtg ~Feb/March with tentative adoption in May 2024. Also, conducting Code Audit/Rewirte of the Development Code.
b.	Continue to fund and implement public infrastructure improvements identified in the Front Street Blueprint		JH/JW/GH	FY24 proposed budget includes $1M funding Exploring potential project with Coos History Museum on walkway extension to Front St. Staff submitted grant through ODOT, but not successful. Staff requested feedback from ODOT. ODOT encouraged city to reapply in 2025.	Preparing contract with local surveyor for land donation from Sause
c.	Work with the Coos Bay Downtown Association and prepare for the City's 150th Anniversary Celebration (September 2024)		SK/LD CSc/NR/KB	3/21/23 Committee formed	Schedule first planning meeting
6.	**Public Safety**				
a.	Explore creation of a fire safety inspection program for businesses and public areas in multi-family complexes		MA/AL	Scheduled to speak with Chamber of Commerce (Legislative Action Team) in July to discuss funding possibilities.	Council has adopted, by resolution, a modification to the business license fee schedule and fire inspection fee to support a self-funded proactive fire inspection program. Next steps include communicating with the business community the need and benefits of the program and train FD staff in inspection procedures.
b.	Promote the goal of 1,200 homes in Coos Bay becoming "two weeks ready" in preparation for disaster		MA	Met with NW Natural to host "Get Ready Coos Bay" disaster fair in September	Completed "Get Ready Coos Bay" event. Participated in a disaster preparedness fair at Pony Village (September 23).
c.	Conduct a "tabletop" exercise to test and improve the City's emergency preparedness		MA	Hosted ICS 300/400 for management staff in June	

	Goals	Complete	Assigned	Actions Taken	Next Steps
d.	Promote the opportunity for reserve officers and volunteer fire fighters		CC/MA	02/23/23 two reserve officers were sworn-in Conducted a recruitment "Fire Camp" with North Bend 4/29/23; Added 3 new Student Firefighters 6/15/23 Begin training process FD Student Academy runs 6/19 to 7/8/23 Fire Participated in a large trades expo (September 25) at Seven Feathers that reaches Coos, Curry, Douglas, Josephine, and Jackson counties to recruit fire science students to our intern program	Continue to expand our Reserve Officer program. .
7.	**Communication Between the City and Citizens**				
a.	Consider adoption of a smart phone app and/or enhancements to the City website to let citizens report concerns		NR/CS	Website includes option for 'feedback' on every page	Develop a citizen concern 'hot button' Demo w/Granicus on other product lines (app?)
b.	Implement improvements in the Council Chambers to enhance live streaming of city meetings and virtual attendance		NR/CS	Audio project complete. Dais laptops ordered and delivered. Laptops formatted and distributed to Council members. Consider video improvements in council chambers.	The necessary modifications have been completed to hold Council/URA Board Work Session at the Fire Hall.
c.	Increase the use of social media and the City's digital newsletter as a method of communicating city and community related news		NR/CS	New platform for Newsletter implemented Added consultant to increase social media posts & platforms Library newsletter available through Granicus - started in July.	Staff continues to educate public about the city's Fats, Oil, and Grease (FOG) program through the Friday Update. Staff is preparing an education campaign regarding the harmful affects of leaves in city streets and storm drain systems.
8.	**City Manager Transition Plan**				
a.	Provide the Council with a proposed transition plan for review and consideration by the end of May 2023	√	RC/NR	3/28/23 presentation to Council 05/2/23 Agreement approved.	
9.	**Council Goal Tracking**				
a.	Include applicable goal(s) in Council / URA staff agenda reports	√	RC/NR	Completed - available option on all staff reports	
b.	Present quarterly progress updates on adopted Council goals		RC/NR	Presentations to Council: 03/28/23, 6/27/23, 10/03/23	01/23/24 presentation to Council
c.	Post the adopted Council Goals and quarterly updates on the City's website		RC/NR/CS	03/29/23 posted; 6/28/23 posted; 10/3/23 posted	01/24/24 posting following 01/23/2024 work session