CONVENE: 8:00 a.m.

PRESENT: Chair Eileen Swarthout and Councilmembers Michael Althauser and Charlie Schneider.

Staff: Water Resources & Sustainability Director Dan Smith, City Attorney Karen Kirkpatrick, Capital Projects Manager Don Carney, Water Resources Specialist David Kangiser, Administrative Assistant Cathy Nielsen, and Department Assistant II Bonnie Hale.

Others: Meridith Greer, Greer Environmental Consulting.

CHANGES TO AGENDA: There were no changes to the agenda.

APPROVAL OF MINUTES: PUBLIC WORKS COMMITTEE, MAY 19, 2022, JUNE 9, 2022, JULY 7, 2022 & JULY 21, 2022

MOTION: **Councilmember Schneider moved, seconded by Councilmember Althauser, to approve the minutes of May 19, 2022, June 9, 2022, July 7, 2022, and July 21, 2022 as published. A voice vote approved the motion unanimously.**

BRIEFING/ACTION:

PRESERVE PARK: Manager Carney reported the request is for authority to solicit construction bids and recommend approval a contract award to the City Council. The park is located within the Preserve subdivision. The park includes a play structure, basketball court, picnic shelter, zipline, and site furnishings. The Council previously approved the purchase and installation of play structures, picnic shelter, and site furnishings totaling $323,000 because of the extended timeline to receive materials. The engineer's estimate for construction is $700,000 to include a 20% project contingency. Once the park is completed, the total cost would exceed $1 million.

The scope of work for the project includes site grading, preparation of planting areas, installation of water and electrical utilities for a water fountain, bottle filling station, picnic shelter, and irrigation. Part of the scope includes irrigation of the drainage pond designed by the contractor. The basketball court and picnic areas will be concrete with ADA accessibility to the zipline area in addition to concrete steps. Plantings include trees, shrubs, grass, and artificial turf on the hillside to prevent erosion from traffic to the zipline area. A new electrical

transformer will be installed.

Based on the committee's authority, staff plans to complete design by early September with an invitation to bid released in September and contract award during October/November. The contract should be executed in November with notice to proceed issued in December. Construction activities are scheduled to begin in December with most of the park completed by January 2023.

Councilmember Schneider asked whether the plantings would be native plants. Manager Carney advised that many of the plants are used by the City for right-of-way landscaping, as well as some of the same species of trees planted along Littlerock Road.

Councilmember Schneider asked about the timing for completion of the project. Manager Carney explained that as materials are received, different components of the park would be installed in conjunction with foundation work. The benches have been received and will be installed by the bench company. Some items will be delayed and are not anticipated to arrive until January. The majority of the park elements will be installed earlier as infrastructure is installed.

Councilmember Schneider asked to receive a copy of the presentation so he can share the information with Preserve neighbors. Manager Carney confirmed the request.

Manager Carney explained that a majority of the equipment would be installed by the equipment companies as part of the purchase agreement. The construction contract is for preparation of the land and installation of infrastructure. In response to questions concerning a restroom, Manager Carney explained that the design includes no restroom because the park is designed to serve the surrounding neighborhood.

Councilmember Schneider added that the community has met several times with the City and residents elected not to include a restroom because of space limitation and the desire to include play equipment. Residents also elected not to include swings because of safety issues and additional spacing requirements.

MOTION: **Councilmember Schneider moved, seconded by Councilmember Althauser, to authorize staff to solicit bids for the Preserve Park construction project and recommend the City Council award and authorize the Mayor to sign a public works contract with the lowest responsible bidder. A voice vote approved the motion unanimously.**

BRIEFING/ACTION:

DESCHUTES RIVER FLOOD REDUCTION STUDY SERVICE PROVIDER AGREEMENT:

Consultant Meridith Greer briefed members on the proposed Deschutes River Flood Reduction Study Service Provider Agreement. The project location is along the Deschutes River between Henderson Boulevard and Tumwater Falls at Brewery Park at Tumwater Falls. The area encompasses Pioneer Park, the golf course, and brewery facilities. The goal is to develop a better understanding of the flooding conditions in the area and potential ways to mitigate those impacts.

Ms. Greer displayed a photograph highlighting areas FEMA has identified as flood zones in the Tumwater Valley area. The Deschutes River is the most flood-prone river in Thurston County with emergency declarations issued 17 times for flooding since 1965. The area typically experiences flooding once a year dependent on annual rainfall. One recent example was flooding earlier in the spring of the golf course, Pioneer Park, and the brewery property.

The study's goals are to identify flooding, erosion risks, and potential measures to help reduce and to determine how those measures would impact the study area. Staff is working with Stantec to complete the study. The ultimate goal is restoring some old wetlands to hold water to alleviate flooding in areas adjacent to the river.

The City of Tumwater received a Washington State Legislature budget proviso of $250,000 to complete the work. The City's Stormwater Utility is contributing another $50,000 to help fund the study. The contract with Stantec will complete the study. The contract is for $275,000. Stantec is one of the foremost leading companies completing similar work throughout the region. The company is also working on the Pioneer Park Riparian Restoration project. The project timeline according to the budget proviso provides the remaining balance of the year to complete the study. Funding became available on July 1, 2022, with staff undertaking grant negotiations with the Department of Ecology and negotiations on the service provider agreement with Stantec. The Public Works Committee is requested to recommend approval of the service provider agreement to the City Council and authorize the Mayor to sign the agreement in September. The kick-off meeting with Stantec representatives is scheduled in mid-September to begin implementation of the study with completion by June 30, 2023.

Councilmember Althauser asked whether the study analysis would include recommendations or an outline of actions rather than enabling a better understanding of the flood zones to afford future decision-making. Ms. Greer said the goal of the study would satisfy several objectives. One goal is to gain a better understanding of the study area and identify the type of mitigation that might be possible as the intent is to understand what might be possible if a development proposal was submitted to the City within the old brewery area. The study could serve to inform the developer of current flood risks and what type of development might be possible, as well as potential mitigation measures

the developer would be required to pursue. It is also important for the City to have the information as the City pursues other public projects throughout the watershed.

Director Smith added that it is also important to provide more information to potential developers interested in developing the brewery areas in terms of costs, timelines, and permitting requirements.

Chair Swarthout asked whether one of the measures includes creating a large water storage area to reduce flooding. Ms. Greer explained that the study will evaluate all measures. When flooding occurs downstream, mitigation identifies upstream storage areas to retain some water during high flows. Staff is working with Stantec representatives to explore storage options northeast of Henderson Boulevard in wetland complexes enabling the metering of water slowly following large storm events to help reduce flooding.

Councilmember Schneider recalled the extensive damage along the shoreline after the recent flooding. He asked whether shoring up the shoreline is part of the study. Ms. Greer said the study includes erosion and identifying areas of severe erosion. The City has identified areas of severe erosion along the river through Pioneer Park and along the golf course. High flows tend to erode riverbanks. The modeling component of the study would identify outcomes if flooding and high flows can be reduced in those areas. The site is not specifically identified in the scope of work for bank armoring; however, much is dependent upon the results of the study and how the City plans to implement any projects or measures.

MOTION: **Councilmember Althauser moved, seconded by Councilmember Schneider, to recommend the City Council approve and authorize the Mayor to sign the Deschutes River Flood Reduction Study Service Provider Agreement. A voice vote approved the motion unanimously.**

DISCUSSION:

EAST LINWOOD BASIN STORMWATER RETROFIT:

Ms. Greer reported the update is on recent efforts by staff on the project. Staff desires feedback from the committee on the project. The project is the City's East Linwood Basin, a 92-acre basin receiving runoff from the Linwood area prior to discharging to the Deschutes River. All stormwater entering the basin currently receives no treatment prior to discharging to the river. The City received some funds in 2013 and completed 90% designs for end of pipe treatment from the stormwater facility. The potential exists to treat all stormwater and discharge treated stormwater within a facility abutting a walking path along Tumwater Valley Drive.

Because the City was unsuccessful in securing construction funding or permitting, the City elected to examine other alternatives in the area.

Additionally, the Department of Ecology was reluctant to fund projects that impact wetlands and wetland buffers and requested the City explore upper basin alternatives for the area. The City received a grant split in two phases with the first phase studying different alternatives in the basin followed by the second phase of moving forward with design on a selected alternative.

After reviewing alternatives analysis with the consultant, JSA Civil, LLC, and after conferring with the Water Resources and the Transportation and Engineering teams, four different project approaches were identified. The first option is 90% design for end of pipe comprised of constructing two stormwater ponds below the existing outfall serving as one settling pond and the one treatment pond. Since 90% of the design has been completed, the option is the only alternative that would treat runoff from Capitol Boulevard and Interstate 5, especially as more is learned about the impacts of tire particles in stormwater causing a quick die-off of Coho salmon. Coho salmon are endangered species within the Deschutes watershed. Another benefit is ownership of the land by the City of Tumwater. The drawback is the inability to receive grants by the Department of Ecology, as it would affect wetland buffers downstream. Construction funding would need to come from another source. Additionally, the option impacts wetlands that would require mitigation requiring extra work the other options did not include.

The second option is constructing a bio-retention basin at Linwood Avenue and Second Avenue on a site that could also include a future multifamily residential development. The site could accommodate 9-10 townhomes with parking affording a site with multi-benefit uses. The option is cost effective in terms of the amount of stormwater treated versus the construction cost. Drawbacks include land acquisition for the project and treatment of only 50% of basin runoff.

The third option is located at Linwood Avenue and Second Avenue on the side of the Fire Station. The proposal includes construction of two bio-retention facilities. One benefit of the project is the view of the facility to the public and an opportunity to install educational signage. One of the drawbacks is the type of an existing stormwater structure in the area, as the bio-retention facility would need to be at least eight feet deep and could potentially create safety issues and require fencing around the facility. The facility would only treat approximately 12% of runoff from the basin and would require negotiations for use of the land in the future.

The last option is installation of mechanical treatment devices in two locations within the basin. The first location is along Barnes Boulevard and H Street with several more installed near H Street and 4th Street. The benefit of the system is easy maintenance as the devices are cartridges and can be replaced easily by maintenance staff in areas along City rights-of-way with no need for property acquisition. However, maintenance costs would be higher as the systems are

proprietary requiring specific filters purchased from a specific company. The filters would only treat approximately 11% of basin stormwater. Installation of the filter systems along the roadways would increase costs because of construction and would equate to the highest treatment cost per acre treated.

Ms. Greer reviewed the costs of each option. Option 1 end of pipe along the walking trail is the preferred alternative by staff and requires the City to seek funding outside of the Department of Ecology. The option enables treatment of most stormwater from the basin cost effectively. Staff is also interested in pursuing the second option because it would enable using the Department of Ecology grant to complete project design at 90%. Staff could begin working on property acquisition and pursuing other sources of funds for construction. Both approaches enable the City to provide more treatment to the basin and size facilities appropriately to handle the increase in rain events caused by climate change. Staff proposes the first two options moving forward. Ms. Greer invited questions and feedback from members.

Councilmember Althauser referred to a vacant lot on 5th Avenue and H Street. The lot has been sold several times over the last several years and none of the owners have managed to submit an affordable development plan. The lot is approximately .3 acres in size. He asked about consideration of the lot as a different location for option 3 as the recent sale of the lot was approximately $50,000. Because of an existing grade, the lot is essentially undevelopable because of a requirement to add a higher height retaining wall. He asked whether the lot was considered as a possible option rather than the property for option 3 because the facility would need to be deeper because of the narrowness of the parcel. Ms. Greer responded that stormwater treatment in the area is a gravity process and the options tie into the system to enable gravity transmission of water for treatment prior to discharging to the river. The grade of the site might make the option too cost prohibitive for installing a system.

Councilmember Althauser asked whether staff is seeking a response from the committee in terms of a preferred option. Ms. Greer advised that briefing is both informative and to seek support for staff moving forward with the Department of Ecology to pursue option 2 design.

Councilmember Althauser said he supports option 2 as it incorporates an affordable housing component. Acquisition of the property by a developer would be a missed opportunity for the City from a housing perspective. The site serves as an ideal location for low- to middle-income housing because of its location to services and transit. He also supports the first option as it treats most of the stormwater. He asked about the possibility of pursuing both options. Ms. Greer advised that both projects combined would be effective. Option 1 treats 91% of the basin based on modeling completed in 2015. With the increase in rainfall and as more is learned about future impacts caused by climate change, treatment would likely be less than 91%. With an additional 50% treatment

higher in the basin, more capacity would be created in lower areas. Staff proposes moving forward with both options working in tandem within the basin understanding that in areas that are built-out it might require multiple options of treatment to achieve improvements in water quality.

Director Smith noted that option 2 located at the corner of Second Avenue and Linwood Avenue is an option that could include the addition of housing in addition to a stormwater treatment facility. Staff is considering ways to improve the facility as a community attraction through artistic stormwater design. Many other parks have been developed around stormwater facilities in the state with different types of amenities and park features. As the location is highly visible within the City it would be important to design a creative facility to support a neighborhood amenity, as well as a functional stormwater facility. Option 1 increases the capacity to treat stormwater. Staff is considering both solutions as potential options to move forward.

Councilmember Schneider supported the first two options. However, for option 1, his concern is securing funding. He supports the option as it treats more stormwater and incorporates walking trails. Option 2 costs are mostly covered and the option affords a park area and housing. He supports both options or either of the options.

Chair Swarthout asked whether the City would be required to acquire the land for option 2. Director Smith explained that as staff begins to move toward with that option, staff plans to engage in discussions with the property owner to learn whether the sale could include a portion or the entire property. Staff will evaluate all options for potential acquisition by the City.

Chair Swarthout commented that it would be intriguing to have a multi-functional use on the property. She questioned whether pursuing options 1 and 2 would result in the ability to treat at least 91% of stormwater. Ms. Greer responded that staff believes with both options, it would be possible to meet water quality goals for the basin. Chair Swarthout inquired about the process of determining costs for each option. Ms. Greer said acquisition costs have not been identified at this time for any of the options that require property.

Director Smith said the cost is based on conceptual designs and as the process proceeds through design, more accurate costs will be calculated for acquisition and construction. Staff will also pursue construction funding for option 2 through the Department of Ecology and an alternative funding source for option 1.

Ms. Greer outlined next steps moving forward with options 1 and 2. Staff plans schedule meetings with Department of Ecology representatives to pursue the current grant to fund phase 2 of the design process. Design work would begin and end by April 2023. At that point, the goal is to achieve 90% designs

followed by permitting, land acquisition, and construction funding identified in 2023. The outfall process follows a similar timeline with mitigation property identified to address wetland buffer impacts. Both projects would be packaged to seek other funding sources for construction. No timeline has been established at this time; however, staff is moving forward on work on the wetlands and seeking construction funds for both projects.

DISCUSSION & ACTION:

FY 2021-2023 WATER QUALITY STORMWATER CAPACITY AGREEMENT:

Director Smith reported the state provides funds to assist communities with implementation of comprehensive stormwater programs, as required by the City's stormwater permit to help improve water quality by reducing stormwater pollutants discharged to state water bodies. The grant requires no matching funds by the City. The funds are intended to fund implementation of National Pollution Discharge Elimination System (NPDES) programs, such as equipment purchases, implementation of programs, public outreach, and supporting incentives. The grant funds $50,000 of the City's stormwater program, from July 1, 2021 through March 31, 2023. An additional $25,000 has been authorized by the state and will be available shortly after an amendment is executed. He reviewed a list of expenditures to date and future expenditures during the current biennium effective July 1, 2021 through March 31, 2023.

To date, staff has worked on the stormwater management action planning process to delineate subbasins within the City's service area. That work has been completed with assistance from Herrera, a consulting firm. Staff is working on the implementation components of that process to include public outreach and surveying to determine baseline understanding by residents of the basin. Another project is the Equity Index spearheaded by Ms. Greer to develop a tool to help identify over-burdened areas that might have various environmental impacts that need further examination or identifying locations for future projects. The ongoing projects are funded by state grant funds. Next year, staff will explore acquiring additional education materials to help update information, explore available training courses for stormwater staff, and began exploring development of a source control inspection program. Future equipment purchases will support field operations. Technology enhancements include mapping, inspecting, and documenting issues in the field. Over the last decade, the City's capacity to evaluate surface water quality has decreased as the county's program has reduced areas to evaluate. Staff is seeking to fill the gap by developing a base water quality monitoring program to evaluate trends and track stormwater projects to determine how outcomes are affected. Staff plans to work with the Department of Ecology and a consultant to develop a quality assurance plan for water quality monitoring to identify the parameters, locations, and schedule of the monitoring program to include the acquisition of additional equipment for collecting water quality samples.

Staff requests the committee recommend the City Council approve and authorize the Mayor to sign the Water Quality Stormwater Capacity Agreement, in substantially similar form as approved by the City Attorney, with the Washington Department of Ecology for $50,000, for stormwater program implementation, and a forthcoming amendment for $25,000 when available from the state.

MOTION: **Councilmember Schneider moved, seconded by Councilmember Althauser, to recommend the City Council approve and authorize the Mayor to sign the Water Quality Stormwater Capacity Agreement, in substantially similar form as approved by the City Attorney, with the Washington Department of Ecology for $50,000, for stormwater program implementation, and a forthcoming amendment for $25,000 when available from the State. A voice vote approved the motion unanimously.**

OTHER BUSINESS: Chair Swarthout inquired as to the increased stress the City' water system might be experiencing because of increased temperatures. Director Smith advised of a recent staff meeting to review water system capacity and additional stress the system is experiencing because of high temperatures. The City typically experiences a demand in water during hot periods of weather. The system has maintained pumping of 6 million gallons of water each day over the last several days. The City's reservoirs are able to recover in late morning following the previous day's water use. The water system experiences the greatest demand from 4 a.m. to 9 a.m. because of irrigation systems and people preparing for work. Peak demands add some stress to the system; however, the operations team is able to manage well pumping and ensure the maximum amount of water is pumped from each system. The City is also prepared with additional parts in stock should a well experience problems. Well 17 in the Palermo Wellfield recently experienced operational issues creating the necessity to remove the well from pumping. The well produces approximately 300 gallons of water per minute. The well should be repaired within the next several days to test pumping capacity and complete a decontamination process. Because of current market pipeline problems, staff has experienced longer delays in receiving equipment and supplies, which is why the City has purchased and added equipment to the inventory to avoid any delays in well productivity.

Chair Swarthout asked whether Well 17 is being considered for conversion to solar. Director Smith affirmed ongoing evaluation of all well facilities for solar conversion. Well 17 is not considered at this time for solar conversion because pumping demands are too high. However, there could be other opportunities in the water system, such as fill stations that have lower power demands that could be offset with solar. No projects for conversion have been identified at this time. Staff evaluated the City's sanitary sewer system for opportunities for pump stations. However, most pump stations are located within valleys with surrounding trees limiting solar abilities.

Chair Swarthout asked about the possibility of the City establishing a water schedule for residents and businesses to preserve water. Director Smith said that at this point, no water scheduling has been considered as the City has sufficient capacity at this time to meet demand. However, the option is included in the water shortage response plan if the City was ever required to implement a watering schedule.

ADJOURNMENT: **With there being no further business, Chair Swarthout adjourned the meeting at 9:00 a.m.**

Prepared by Valerie Gow, Recording Secretary/President
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