Cut/cap the existing 8" storm

catch basin within the gutter

to the catch basin within the

line and re-connect the

sidewalk. [civils, pg 1]

Public and private stormwater runoff is not

allowed to be comingled. Provide a bypass basin WWHM calculation. Remove the

storm connection from 17th Ave SE to the

detention vault. [civils, pg 1]

IE = 105.96' \21 LF 6" PVC @ 2%

PUMP STATION RIM: 100.00'

VAULT CONTROL STRUCTURE

- IE:99.73'

Y PROPOSED LANDSCAPE AREA; SEE LANDSCAPING PLANS

PROPOSED TYPE 1 CB (TYP)

PROPOSED CONCRETE ENTRY PLAZA

PROPOSED WALKWAY; SEE ARCHITECT PLANS

Make a note

to remove the

driveway cut

along South

[civils, pg 1]

Relocate the existing storm

proposed curb per current

city standards. [civils, pg 1]

\6" ROOF DRAIN; SEE PLUMBING PLANS

— PROPOSED 96' X 24' X 7' VAULT; SEE DETAILS THIS SHEET

PROPOSED WALKWAY; SEE ARCHITECT PLANS

— PROPOSED 6" SSCO

main to under the

PROPOSED TYPE 1 CB (TYP)

— PROPOSED TYPE 1 CB (TYP)

STORMFILTER

CB-1 TYPE 1 RIM = 116.20'

\_ IE = 113.20'

----CB-1 TYPE 1 RIM = 117.06

IE = 112.79'

—167 LF 6" PVC @ 4%



Provide 12' walk with 4' street

tree cutouts along 17th Ave

SE. [civils, pg 1]

PROPOSED DRIVEWAY; SEE ARCHITECT PLANS

TRASH &

ENCLOSURE

GARAGE RAMP

JO TRENCH DRAINS; SEE PLUMBING PLANS

O GAL OIL-WATER SEPARATOR

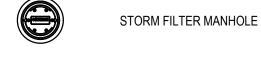
TO FLOOR DRAINS; SEE PLUMBING PLANS



ASPHALT PAVEMENT CONCRETE PAVEMENT

PROPERTY BOUNDARY

- RIGHT-OF-WAY DEDICATION

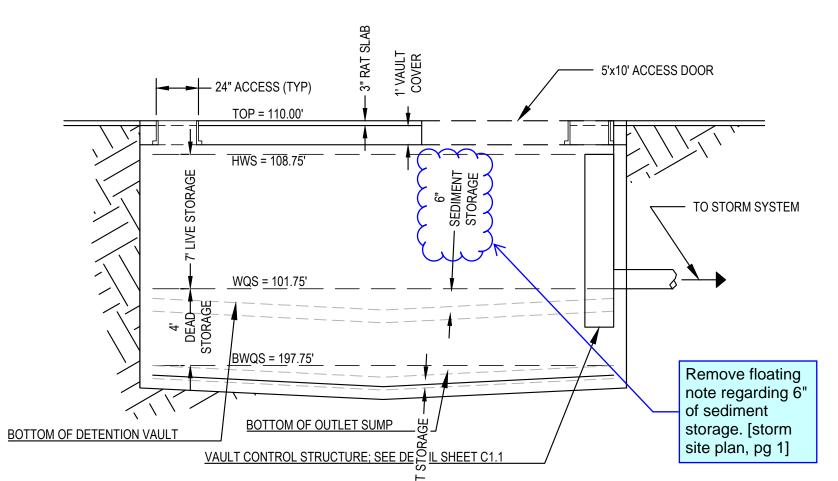


PUMP STATION MANHOLE

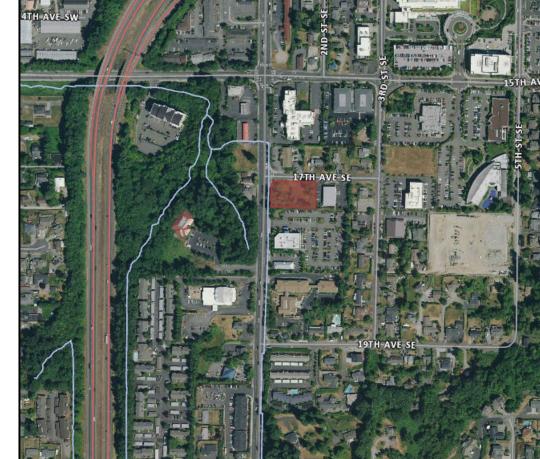




SEWER: CITY OF PUYALLUP WATER: CITY OF PUYALLUP



B DETENTION VAULT 24' CROSS SECTION



VICINITY MAP

1" = 500'



PUYALLUP, WA 98371

XXXX-XXXXXX

### SITE INFORMATION:

PARCEL(S): 1617 S MERIDIAN ADDRESS: PUYALLUP, WA 98371 PARCEL AREA: 30,513 SF (0.78AC)

ZONE: SETBACK: 12 FT. MIN. FRONT MIN. SIDE 0 FT. 0 FT.

MAX IMPERVIOUS:

### PROJECT TEAM:

OWNER/APPLICANT: PFHC PUYALLUP, LLC DR. FADI ALHAFEZ (253) 426-4101

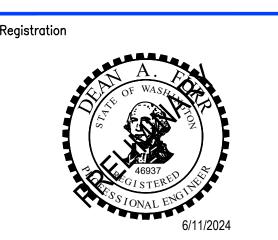
> IHB ARCHITECTS 2160 84TH AVE SOUTH, STE 200 KENT, WA 98032

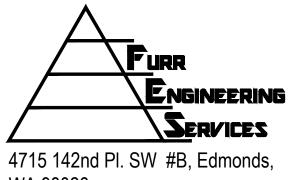
MATTHEW MCKEE, AIA (253) 876-5747 matthew@ihbarchitects.com

CIVIL ENGINEER: FURR ENGINEERING SERVICES PLLC DEAN FURR P.E. 4715 142ND PL SW UNIT#B

EDMONDS, WA 98026 (206) 890-8291 furrengineering@gmail.com SURVEYOR:

SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 THOMAS N WOLDENDORP, P.L.S. (425) 298-4412 sitesurveymapping.com



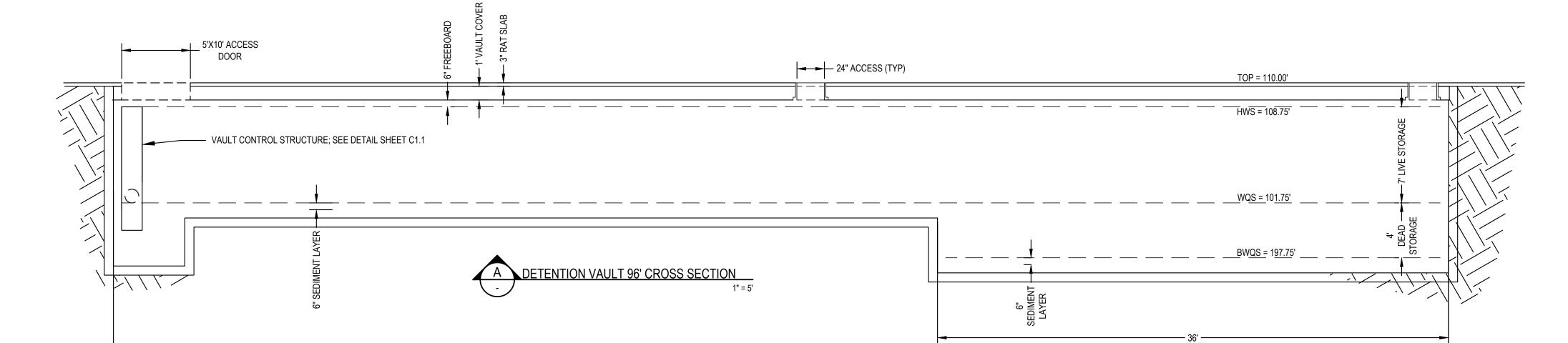


WA 98026 ph 206.890.8291

Sheet Title

# STORMWATER PLAN

1 6/11/24 PER CITY COMMENTS



TOPOGRAPHY, BOUNDARY, AND UTILITIES STATEMENT: FURR ENGINEERING SERVICES PLLC. DOES NOT WARRANT THE TOPOGRAPHY, BOUNDARY, AND/OR EXISTING UTILITIES SHOWN ON THESE PLANS. IT IS THE CONTRACTORS' RESPONSIBILITY TO HAVE ALL EXISTING IMPROVEMENTS FIELD VERIFIED PRIOR TO CONSTRUCTION. ANY SUBSURFACE EXPLORATION OF EXISTING UNDERGROUND UTILITIES (POWER, WATER, SEWER, TELECOM, ETC.) SHALL BE PERFORMED BY THE CONTRACTOR. DISCREPANCIES BETWEEN WHAT IS SHOWN ON THE PLANS AND LOCATED BY THE CONTRACTOR SHALL BE BROUGHT TO THE ATTENTION OF FURR ENGINEERING SERVICES PLLC.. PRIOR TO CONSTRUCTION ACTIVITIES.

DRAWING INDEX

C4.0 STORMWATER PLAN C4.1 STORM DETAILS

Know what's below.

Call before you dig.

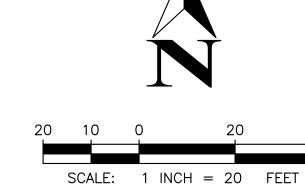
Scale: FES Project No: OCTOBER 20, 2023

Sheet Number

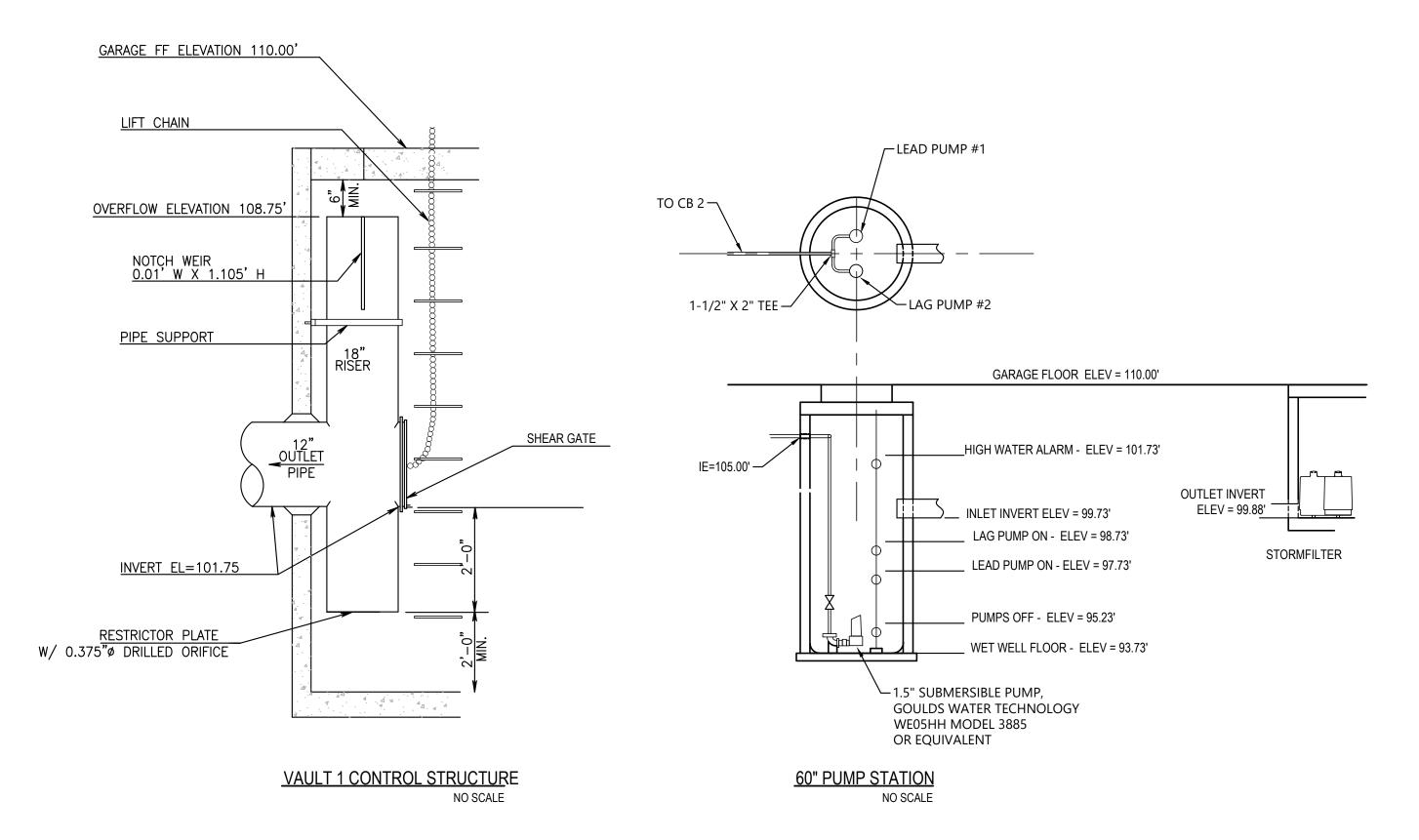
Checked:

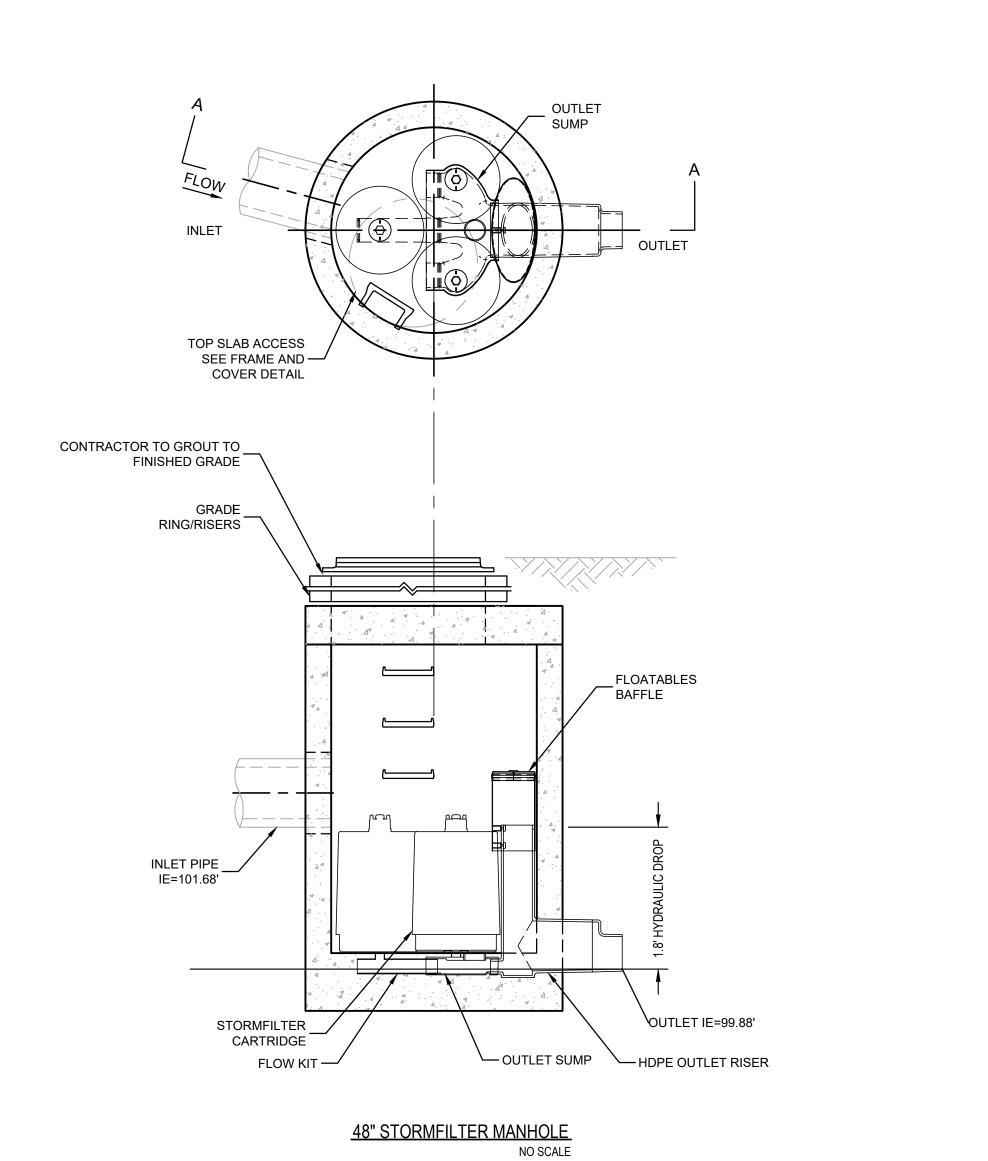
TJW

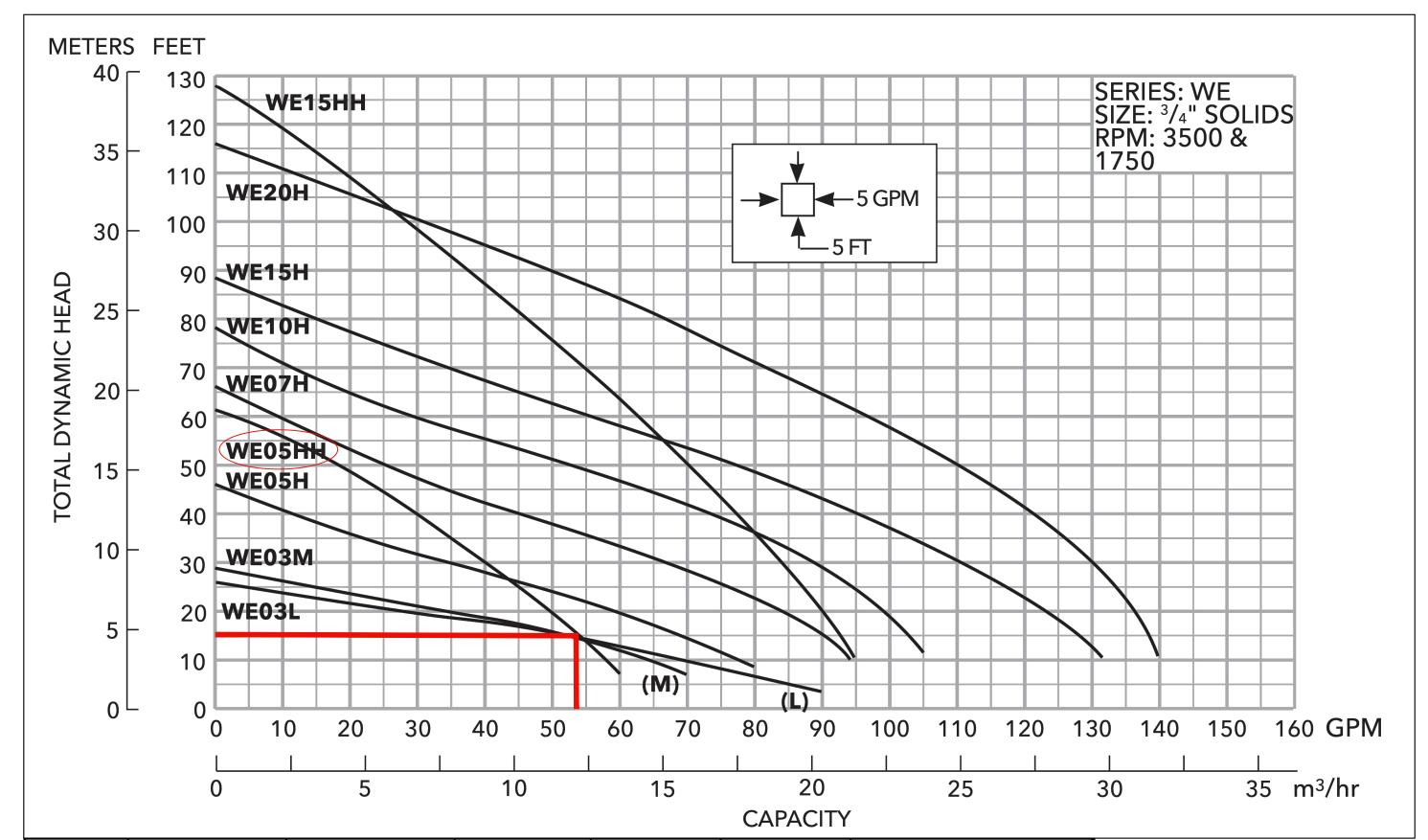
DAF











| Storm<br>Event | (a)<br>Restricted<br>Flowrate | (b) Pump<br>Drawdown<br>Flowrate | (c) Pump<br>Drawdown<br>Time | (d) Wet<br>well Fill<br>Time | (e) Cycle<br>Time | (f) Avg. Flow Rate at Discharge Point Over Cycle Time |
|----------------|-------------------------------|----------------------------------|------------------------------|------------------------------|-------------------|---|
|                | gpm                           | gpm                              | min                          | min                          | min               | gpm   |
| 2 year         | 3.64                          | 49.36                            | 4.46                         | 60.60                        | 109.97            | 2.00  |
| 5 year         | 6.33                          | 46.67                            | 4.72                         | 34.81                        | 81.49             | 2.70  |
| 10 year        | 9.11                          | 43.89                            | 5.02                         | 24.18                        | 68.07             | 3.24  |
| 25 year        | 14.14                         | 38.86                            | 5.67                         | 15.58                        | 54.45             | 4.05  |
| 50 year        | 19.34                         | 33.66                            | 6.55                         | 11.39                        | 45.04             | 4.89  |
| 100 year       | 26.26                         | 26.74                            | 8.24                         | 8.39                         | 35.13             | 6.27  |

## (g) Pump Flowrate (gpm) 53.0 (h) Wet Well Volume (gal) 220.3

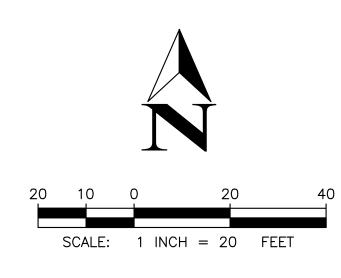
- Restricted Flow Rate: Mitigated (801) flow rates calculated using WWHM converted to gpm
- Pump Drawdown Flow Rate: (g)-(a)
- Pump Drawdown Time: (h)/(b)
- Wet Well Fill Time: (h)/(a)
- Cycle Time: (c)+(d)
- Avg. Flow Rate at Discharge Point Over Cycle Time: [(b)\*(c)]/(e)
- Pump Flow Rate: derived from manufacturer's performance curve based on calculated head
- **Wet Well Volume:**  $V=h_{\pi r}^2 = 29.45 \text{ cf} = 220.32 \text{ gal}$

h= 1.5 ft

*r*= 5ft

TOPOGRAPHY, BOUNDARY, AND UTILITIES STATEMENT: FURR ENGINEERING SERVICES PLLC. DOES NOT WARRANT THE TOPOGRAPHY, BOUNDARY, AND/OR EXISTING UTILITIES SHOWN ON THESE PLANS. IT IS THE CONTRACTORS' RESPONSIBILITY TO HAVE ALL EXISTING IMPROVEMENTS FIELD VERIFIED PRIOR TO CONSTRUCTION. ANY SUBSURFACE EXPLORATION OF EXISTING UNDERGROUND UTILITIES (POWER, WATER, SEWER, TELECOM, ETC.) SHALL BE PERFORMED BY THE CONTRACTOR. DISCREPANCIES BETWEEN WHAT IS SHOWN ON THE PLANS AND LOCATED BY THE CONTRACTOR SHALL BE BROUGHT TO THE ATTENTION OF FURR ENGINEERING SERVICES PLLC.. PRIOR TO CONSTRUCTION ACTIVITIES.



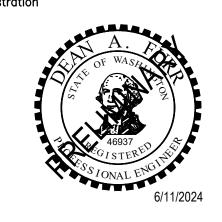


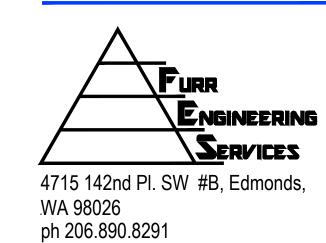


1617 S MERIDIAN PUYALLUP, WA 98371

XXXX-XXXXXX







Sheet Title

## STORM DETAILS

| Revisions |         |                   |  |  |  |
|-----------|---------|-------------------|--|--|--|
| 1         | 6/11/24 | PER CITY COMMENTS |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |
|           |         |                   |  |  |  |

| ale:          |                  |
|---------------|------------------|
| S Project No: | 23062            |
| e:            | OCTOBER 20, 2023 |
| signed:       | DAF              |
| ıwn:          | TJW              |
| ecked:        | DAF              |
|               |                  |