

# Bradley Heights

Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington

**PROJECT DESCRIPTION**  
SITE DEVELOPMENT IMPROVEMENTS, INCLUDING CLEARING, GRADING, RETAINING WALLS, PARKING LOT, STORM DRAINAGE, SANITARY SEWER MAIN, WATER MAIN FOR 236 UNIT MULTI-FAMILY DEVELOPMENT.

**SITE ADDRESS:** 202 27TH AVE SE  
**PARCEL NUMBER:** 041903-6-006

**ZONING**  
RM-CORE

**ENGINEER/SURVEYOR**  
AZURE GREEN CONSULTANTS  
409 EAST PIONEER  
PUYALLUP, WA 98372  
PHONE: 253.770.3144

**OWNER:**  
BRADLEY HEIGHTS SS, LLC  
614 BOYLSTON AVE E  
SEATTLE, WA 98102

**EROSION & SEDIMENT INSPECTION**  
PRIOR TO STARTING SITE WORK, REQUEST AN INSPECTION FOR EROSION AND SEDIMENT. INSPECTION CODE THROUGH THE PERMIT PORTAL OR BY CONTACTING THE INSPECTOR DIRECTLY.

**BROKEN CURB, GUTTER, OR SIDEWALK**  
ANY PUBLIC CURB, GUTTER, OR SIDEWALK BROKEN NOW OR DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED AND REPLACED PER CITY STANDARDS.

CALL BEFORE YOU DIG  
IT IS THE LAW  
**811**

## GENERAL NOTES

1. All work in City right-of-way requires a permit from the City of Puyallup. Prior to any work commencing, the general contractor shall arrange for a preconstruction meeting at the Development Services Center to be attended by all contractors that will perform work shown on the approved engineering plans, representatives from all applicable utility companies, the project owner and appropriate city staff. Contact Engineering Services at (253-841-5568) to schedule the meeting. The contractor is responsible to have their own set of approved plans at the meeting.

2. After completion of all items shown on these plans and before acceptance of the project the contractor shall obtain a "punch list" prepared by the City's inspector detailing remaining items of work to be completed. All items of work shown on these plans shall be completed to the satisfaction of the City prior to acceptance of the water system and provision of sanitary sewer service.

3. All materials and workmanship shall conform to the Standard Specifications for Road, Bridge, and Municipal Construction (hereinafter referred to as the "Standard Specifications"), Washington State Department of Transportation and American Public Works Association, Washington State Chapter, latest edition, unless superseded or amended by the City of Puyallup City Standards for Public Works Engineering and Construction (hereinafter referred to as the "City Standards").

4. A copy of these approved plans and applicable city developer specifications and details shall be on site during construction.

5. Any revisions made to these plans must be reviewed and approved by the developer's engineer and the City prior to any implementation in the field. The City shall not be responsible for any errors and/or omissions on these plans.

6. The contractor shall have all utilities verified on the ground prior to any construction. Call (811) at least two working days in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.

7. Any structure and/or obstruction that requires removal or relocation relating to this project shall be done so at the developer's expense.

8. Locations of existing utilities are approximate. It shall be the contractor's responsibility to determine the true elevations and locations of hidden utilities. All visible items shall be the engineer's responsibility.

9. The contractor shall install, replace, or relocate all signs, as shown on the plans or as affected by construction, per City Standards.

10. Power, street light, cable, and telephone lines shall be in a trench located within a 10-foot utility easement adjacent to public right-of-way. Right-of-way crossings shall have a minimum horizontal separation from other utilities (sewer, water, and storm) of 5 feet.

11. All construction surveying for extensions of public facilities shall be done under the direction of a Washington State licensed land surveyor or a Washington State licensed professional civil engineer.

12. During construction, all public streets adjacent to this project shall be kept clean of all material deposits resulting from on-site construction, and existing structures shall be protected as directed by the City.

13. Certified record drawings are required prior to project acceptance.

14. A NPDES Stormwater General Permit may be required by the Department of Ecology for this project. For information contact the Department of Ecology, Southwest Region Office at (360)407-6300.

15. Any disturbance or damage to Critical Areas and associated buffers, or significant trees designated for preservation and protection shall be mitigated in accordance with a Mitigation Plan reviewed and approved by the City's Planning Division. Preparation and implementation of the Mitigation Plan shall be at the developer's expense.

## SURVEY MONUMENTS

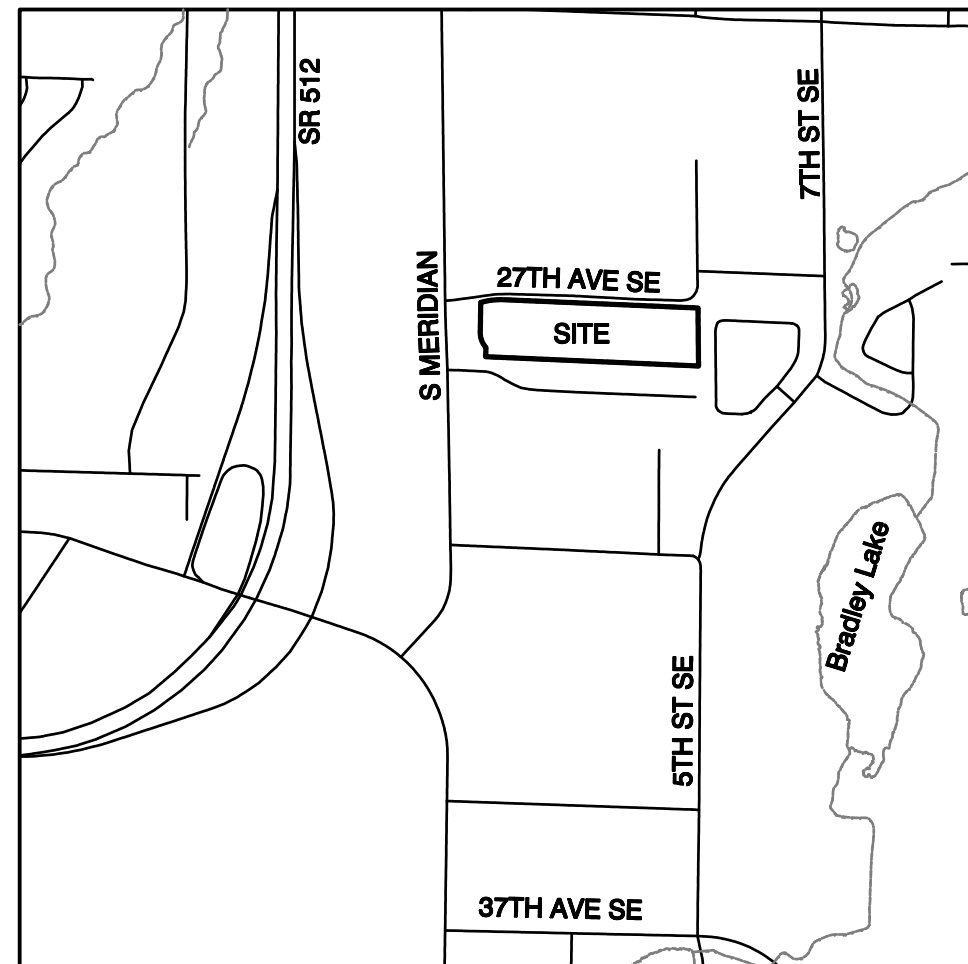
Contractor is responsible for protecting all survey monuments within the area of work. If it is necessary to disturb a survey monument, a permit must be requested in advance from the Department of Natural Resources. The developer must pay the cost of repairing or replacing the survey monument and is responsible for all contractors working for them. Reference WAC 332-120.

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EX. CONTOUR	EX. HYDRANT
DESIGN CONTOUR	EX. STORM MANHOLE
LEGAL ROAD CENTERLINE	WATER VALVE
RIGHT-OF-WAY LINE	EX. POWER LINE
EX. PLAIN EDGE OF ASPHALT	EX. COMM. LINE
PROPOSED PLAIN EDGE OF ASPHALT	PROPOSED FIRE HYDRANT OR FDC
EX. DITCH	WATER METER
PROJECT BOUNDARY	BACKFLOW PREVENTER
LOT LINE	AIR/VAC ASSEMBLY
EX. CATCH BASIN	PIV
EX. STORM	NEW ASPHALT PAVING
PROPOSED CB-TYPE 1	NEW CONCRETE
PROPOSED CB-TYPE 2	
PROPOSED STORM	
WATER MAIN	
SANITARY SEWER	
SANITARY SEWER MANHOLE	
STANDARD MONUMENT	
POWER POLE	

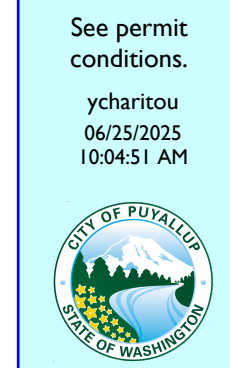


VICINITY MAP  
SCALE: 1"=1000'

## LEGEND

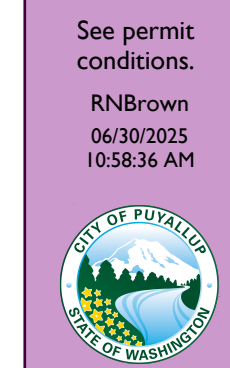
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STANDARD MONUMENT	
POWER POLE	

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT  
See permit conditions.  
ycharitov  
06/25/2025  
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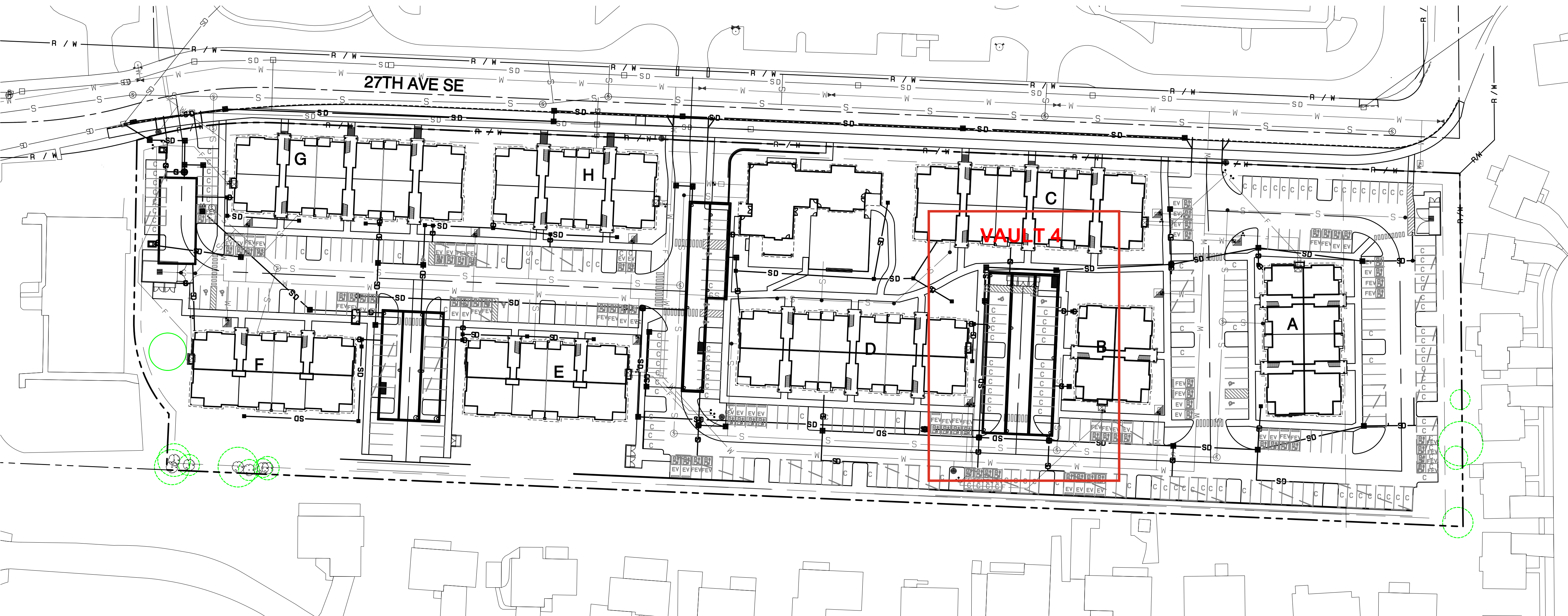
Refer to civil plan PRCCP20240845 for approved stormwater plans and methods of control.

City of Puyallup  
Planning Division  
APPROVED  
See permit conditions.  
RNBrown  
06/30/2025  
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Building	Planning
Engineering	Public Works
Fire	Traffic

APPROVED  
BY: CITY OF PUYALLUP  
DEVELOPMENT SERVICES  
DATE: \_\_\_\_\_  
NOTE:  
THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICES MANAGER.



PRRWF20250237

Cover Sheet

Bradley Heights

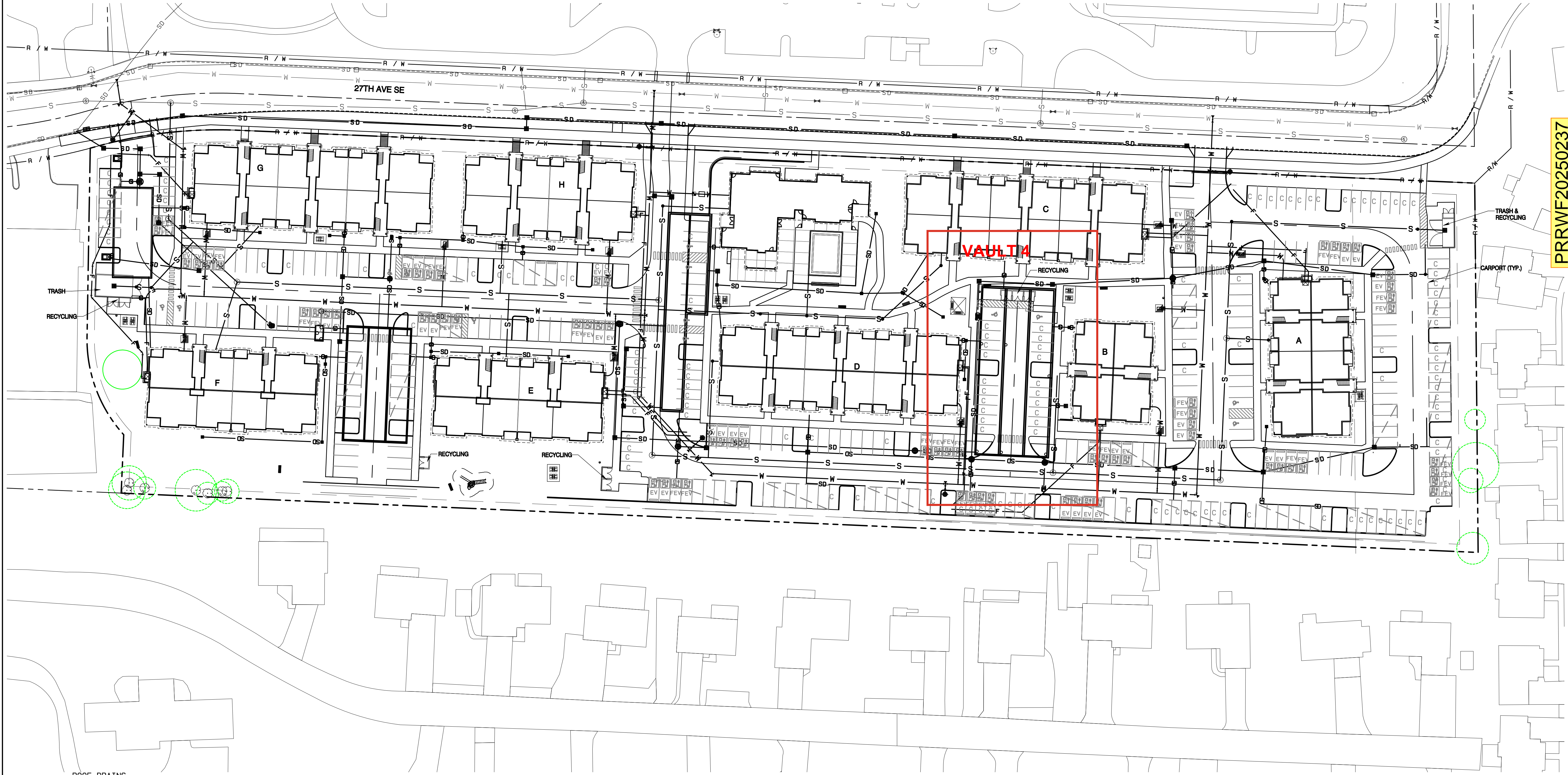
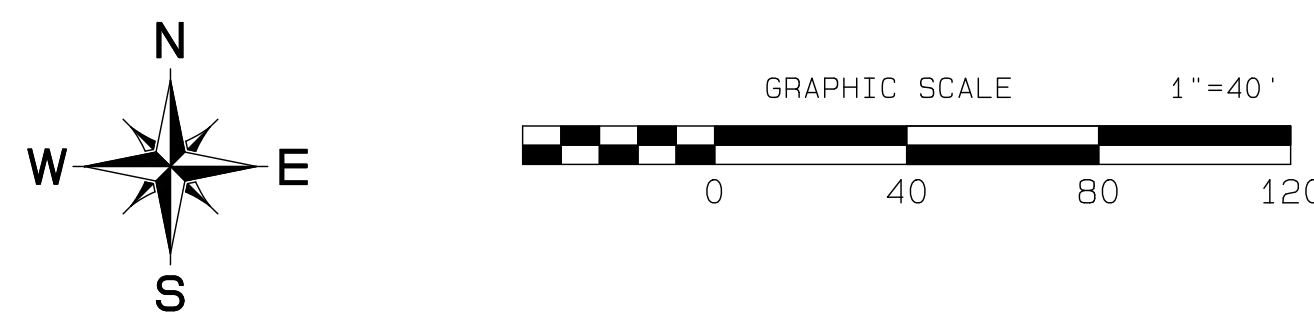
**AZURE GREEN**  
CONSULTANTS  
+feasibility +planning +engineering +surveying  
409 East Pioneer, Suite A - Puyallup, WA 98372  
Phone: 253.770.3144, Fax: 253.770.3142

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone: 509.899.0326  
Fax: jordan@timberlanepartners.com

DRAWING  
**G-1**  
SHEET OF 160



Bradley Heights  
Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



ROOF DRAINS  
ALL BUILDINGS WILL HAVE PERIMETER ROOF DRAINS CONNECTED TO DOWNSPOUTS ROUTED TO THE ROOF DRAIN LEADERS SHOWN ON THIS PLAN. PERIMETER ROOF DRAINS SHALL BE MINIMUM 4" PVC SDR-35 WITH MIN. SLOPE OF 0.5% FOR UP TO TWO DOWNSPOUTS ON A SINGLE RUN. ONCE MORE THAN TWO DOWNSPOUTS ARE CONNECTED TO A RUN, DRAINS SHALL BE PER TABLE BELOW, UNLESS OTHERWISE DIRECTED/DESIGNED BY MEP.

BUILDING	MIN. SLOPE	MIN. SLOPE	MATERIAL
REC.	0.5%	0.5%	PVC SDR-35
A	0.5%	0.5%	PVC SDR-35
B	1.0%	0.5%	PVC SDR-35
C	0.5%	0.5%	PVC SDR-35
D	0.5%	0.5%	PVC SDR-35
E	0.5%	0.5%	PVC SDR-35
F	0.5%	0.5%	PVC SDR-35
G	0.5%	0.5%	PVC SDR-35
H	0.5%	0.5%	PVC SDR-35
I	0.5%	0.5%	PVC SDR-35
CARPORT	4.0%	0.5%	DI IN DRIVING AREAS ELSE, PVC SDR-35

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

APPROVED  
BY: CITY OF PUYALLUP  
DEVELOPMENT SERVICES  
DATE: \_\_\_\_\_  
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PRWF20250237

**Civil Composite**

**Bradley Heights**

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone 509.886.0326  
Fax jordan@timberlanepartners.com

**City of Puyallup**  
Development & Permitting Services  
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

**SD-1**

SHEET 15  
OF 60

**REVISIONS**

NO.	DATE	DESCRIPTION
1	11/26/24	1. Revised per City Review and Mail A adjustment.
2	3/4/25	2. Revised per City Review.
3	4/21/25	3. Revised per City & Public Review.
4		4. Revised per City & Public Review.
5		5. Revised per City & Public Review.
6		6. Revised per City & Public Review.
7		7. Revised per City & Public Review.
8		8. Revised per City & Public Review.
9		9. Revised per City & Public Review.
10		10. Revised per City & Public Review.

**PROFESSIONAL ENGINEER**  
ROBERT A. TRIVITT  
P.E.  
43715  
PUE  
4/24/2025

**DESIGNED BY:** Rob Trivitt  
**DRAWN BY:** Rob Trivitt  
**CHECKED BY:** Rob Trivitt  
**APPROVED BY:** Rob Trivitt

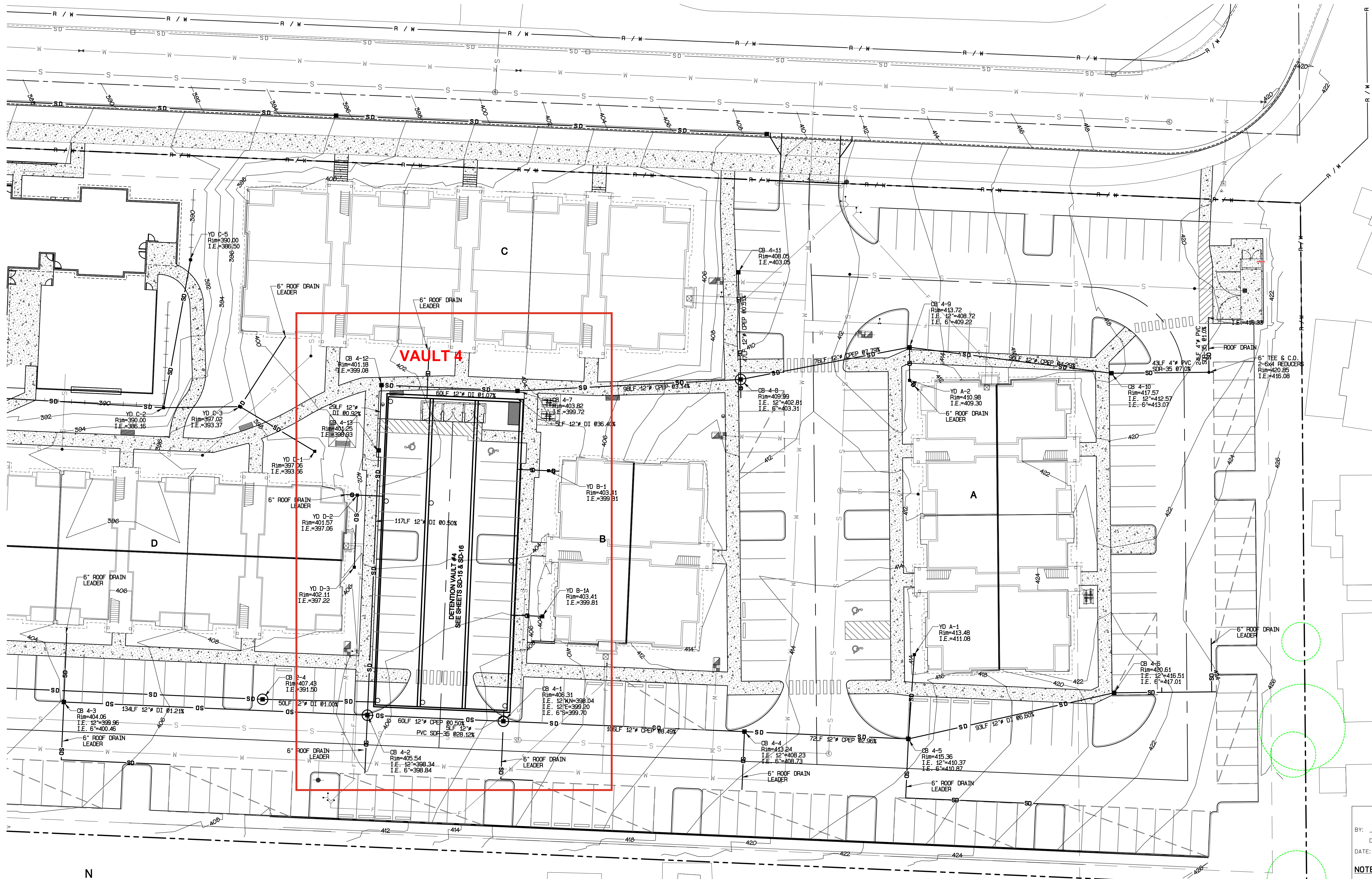
**Job No.** 3227  
**Date:** May 14, 2024  
**Designed by:** Rob Trivitt  
**Drawn by:** Rob Trivitt  
**Checked by:** Rob Trivitt  
**Approved by:** Rob Trivitt

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# Bradley Heights

Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



City of Puyallup Development & Permitting Services ISSUED PERMIT			
Building	Planning	Engineering	Public Works
Fire	Traffic		

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DEVELOPMENT SERVICES

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PRRWF20250237

**Storm Plan**

**Bradley Heights**

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone 509.886.0326  
Fax jordan@timberlanepartners.com

**DRAWING**

**SD-6**

SHEET 20 OF 60

**AZURE GREEN CONSULTANTS**

feasibility • planning • engineering • surveying

409 East Pioneer, Suite A - Puyallup, WA 98372  
Phone 253.770.3144 fax 253.770.3142

**Robert A. Trivitt**

Professional Engineer

43715  
Pierce County, WA

REVISIONS

NO.	DATE	DESCRIPTION
1	11/20/24	1. Revised per City review and Neil A. adjustment.
2	3/4/25	2. Revised per City review.
3	4/21/25	3. Revised per City & Paul Green review.
4		4. Revised per City & Paul Green review.
5		5. Revised per City & Paul Green review.
6		6. Revised per City & Paul Green review.
7		7. Revised per City & Paul Green review.
8		8. Revised per City & Paul Green review.
9		9. Revised per City & Paul Green review.
10		10. Revised per City & Paul Green review.

DATE: May 14, 2024  
DESIGNED BY: Rob Trivitt  
DRAWN BY: Rob Trivitt  
CHECKED BY: Rob Trivitt  
APPROVED BY: Paul Green

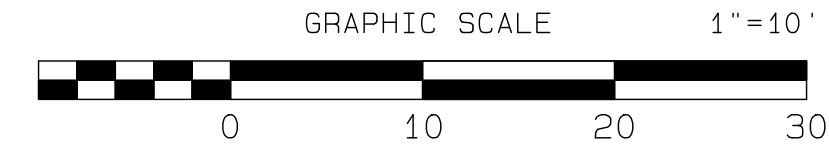
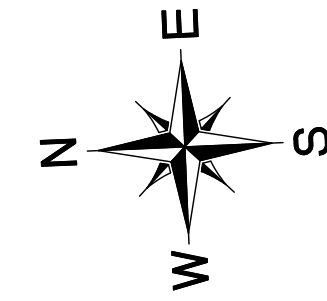
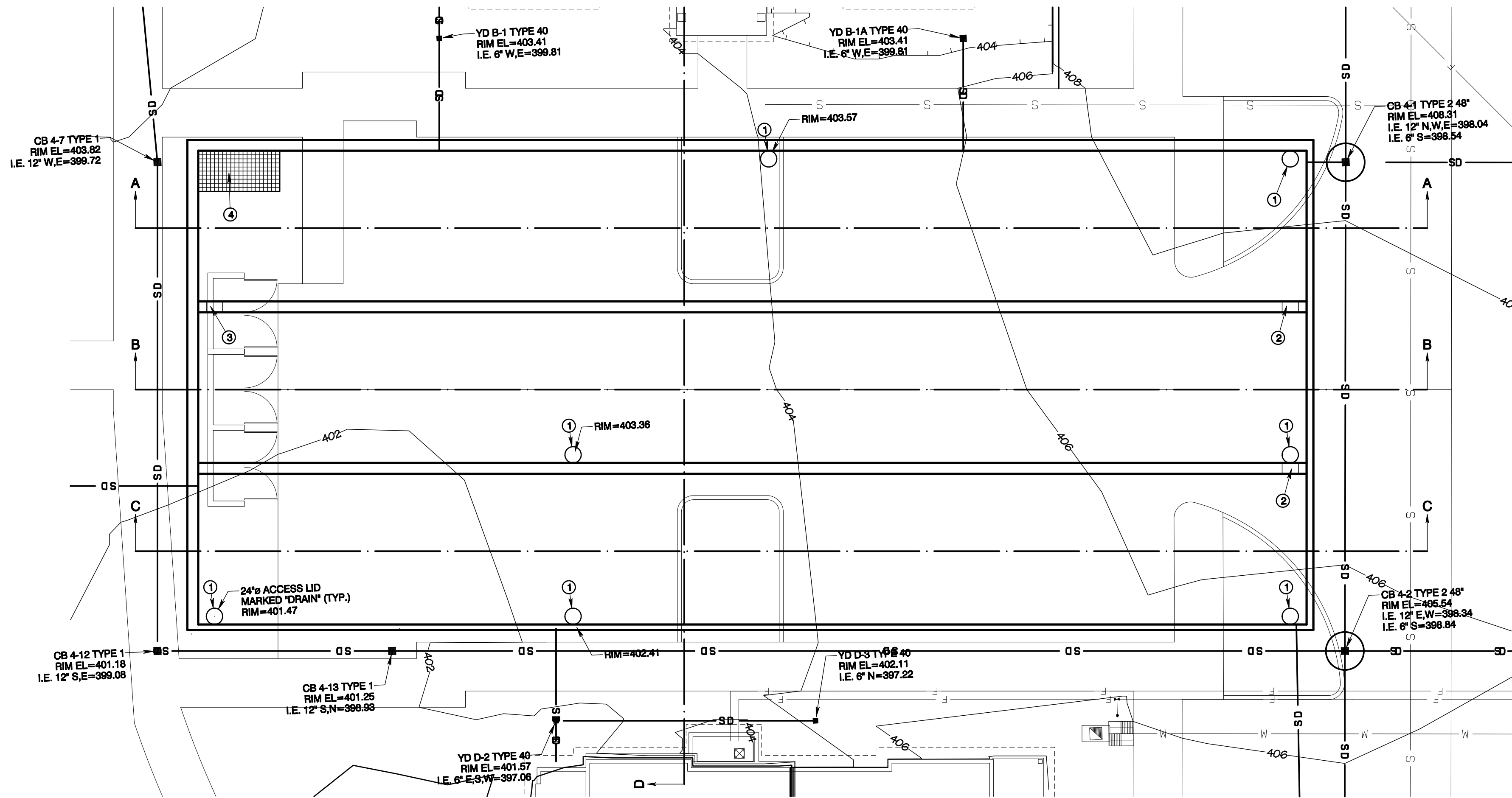
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Project Desc.: Bradley Heights  
Drawn By: F. Woods/3227 - Bradley Heights  
Date: 4/25/2025  
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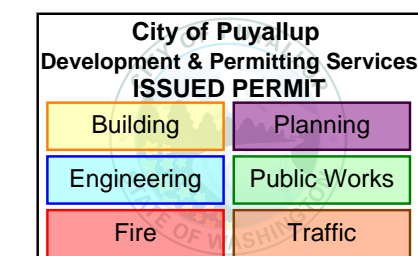
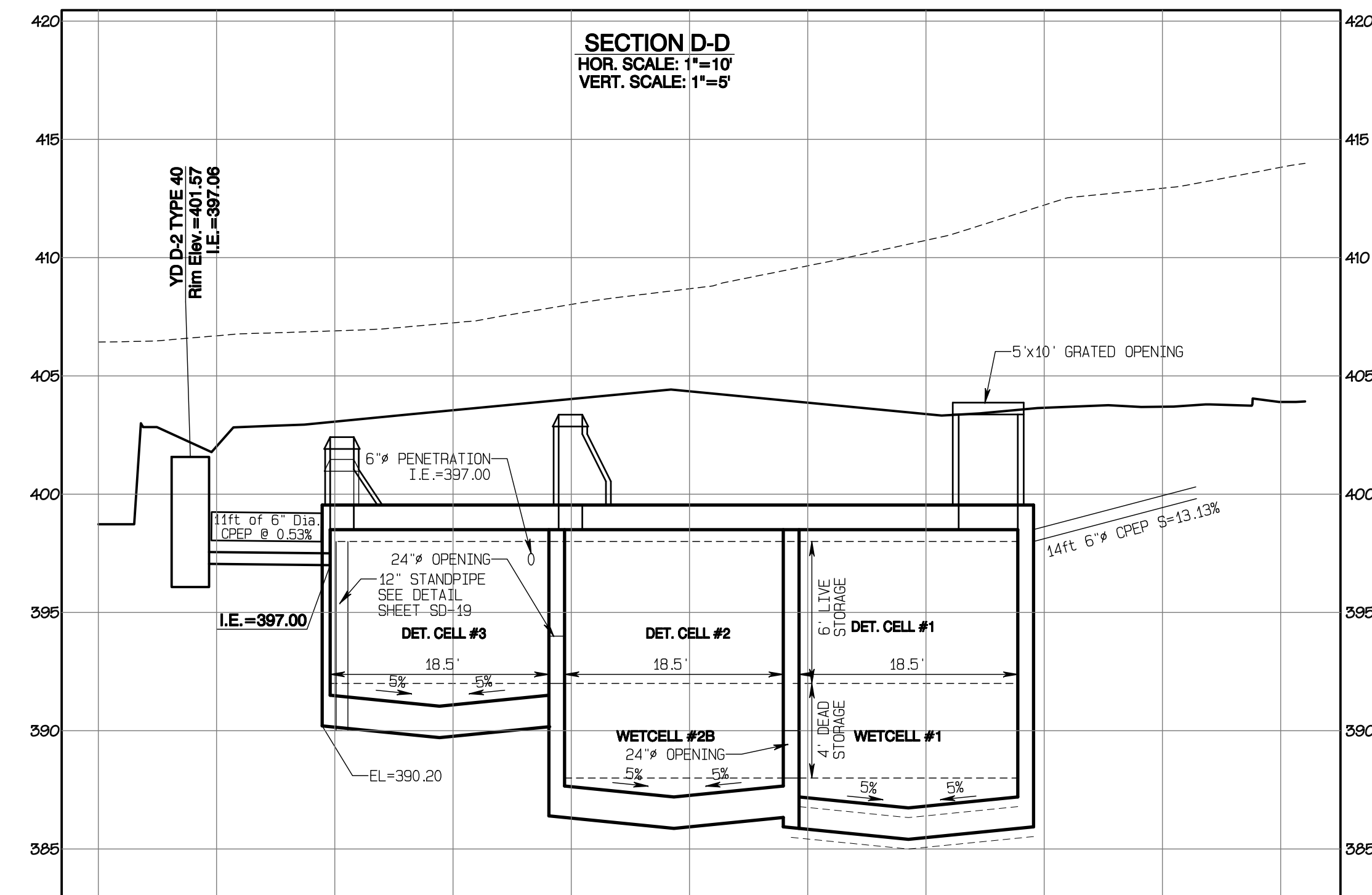
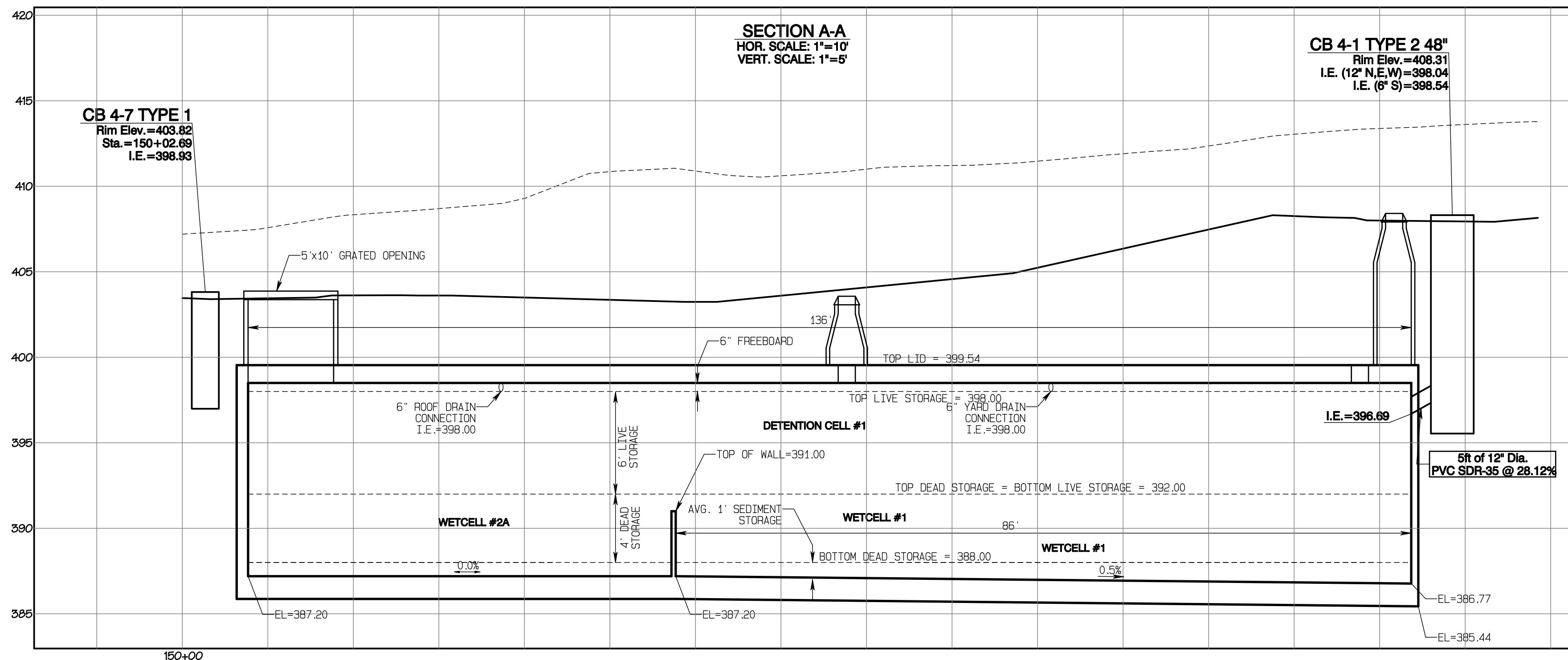
# Bradley Heights

Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



## CONSTRUCTION KEY NOTES

- 24" ACCESS LID MARKED "DRAIN" (TYP.) W/LADDER PER STD. 06.01.04, SHEET SD-22 & W/OSHA CONFINED ENTRY WARNING SIGN
- 24" CONNECTION BETWEEN CELLS I.E. = 392.00
- 24" CONNECTION BETWEEN CELLS I.E. = 398.00
- 5'x10' GRATED OPENING W/LADDER PER STD. 06.01.04, SHEET SD-22 & W/STILOD LADDER-UP & W/OSHA CONFINED ENTRY WARNING SIGN



APPROVED

BY: CITY OF PUYALLUP  
DEVELOPMENT SERVICES

DATE:

NOTE:

THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.

THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.

FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICES MANAGER.

PRRWF20250237

Vault #4 Plan

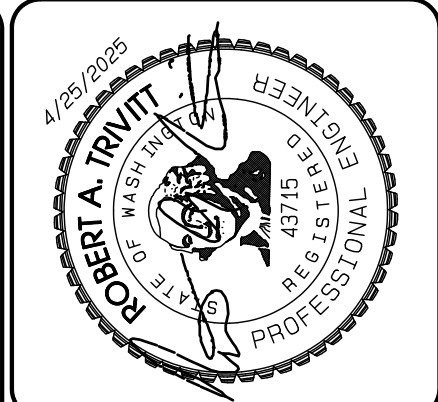
Bradley Heights

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone 509.898.0326  
Fax jordan@timberlanepartners.com



JOB NO. 3227  
DATE: May 14, 2024  
DESIGNED BY: Rob Trivitt  
DRAWN BY: Rob Trivitt  
CHECKED BY: Rob Trivitt  
APPROVED BY: Paul Green

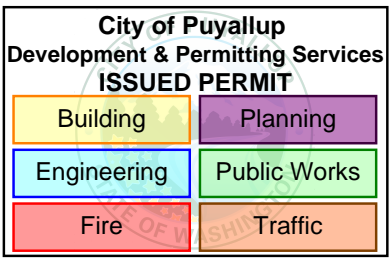
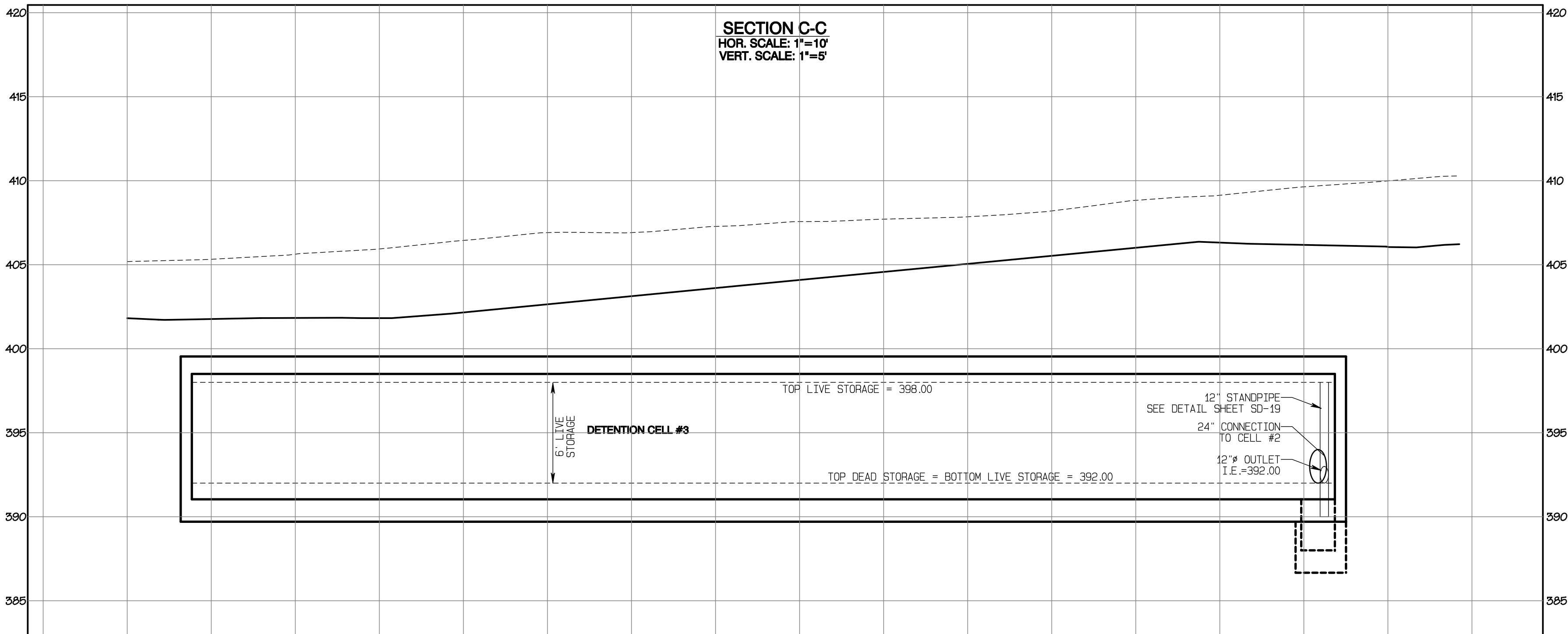
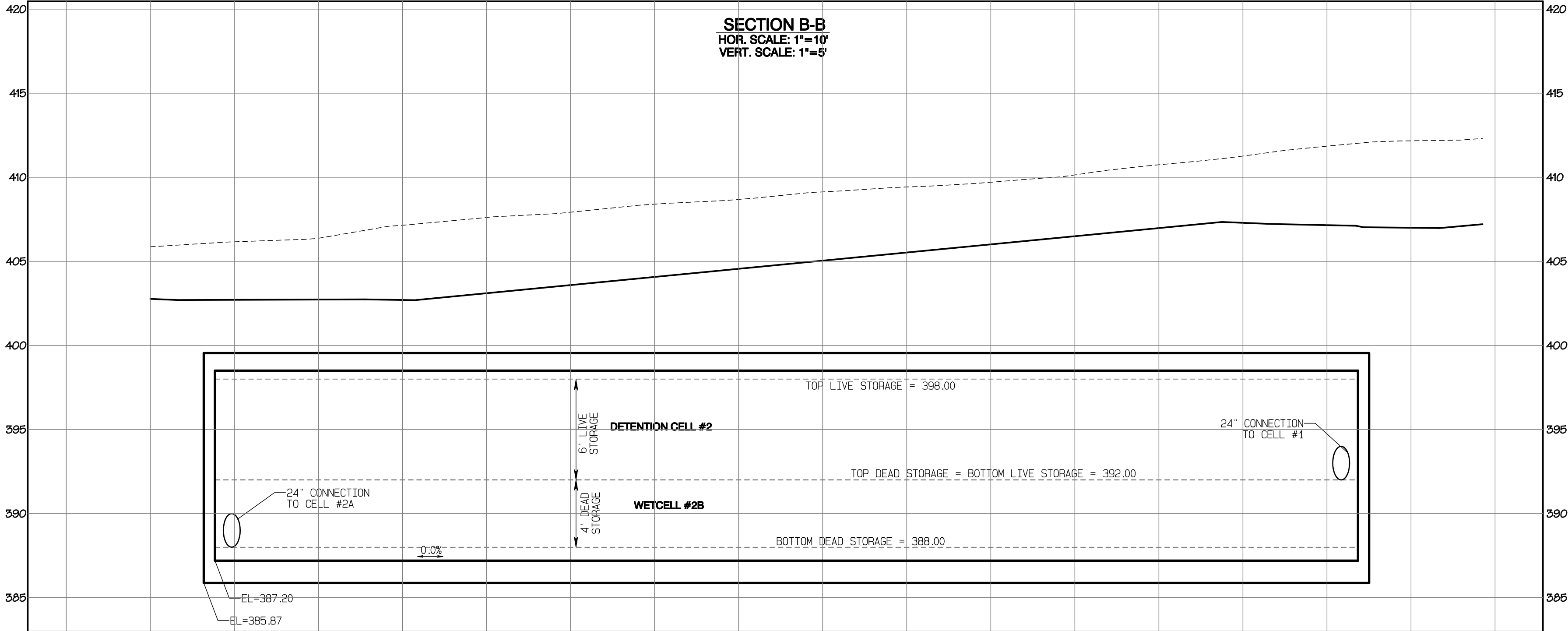
REVISION	DATE
1 Revised per City review and Mail A adjustment.	11/29/24
2 Revised per City review.	3/4/25
3 Revised per City & Paul Green.	4/21/25
4 Revised per City & Paul Green.	4/21/25
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DRAWING  
**SD-15**  
SHEET 29  
OF 60



Bradley Heights  
Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



APPROVED

BY: \_\_\_\_\_ CITY OF PUYALLUP  
DEVELOPMENT SERVICES

DATE: \_\_\_\_\_

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PRRWF20250237

Vault #4 Cross-Sections

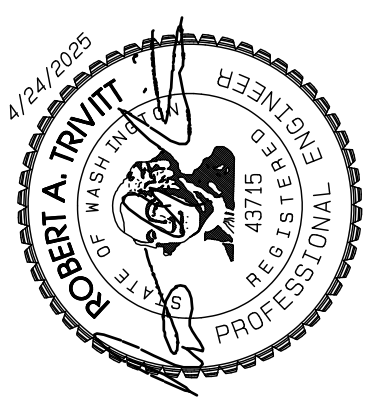
Bradley Heights

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone 509.886.0326  
Fax jordan@timberlanepartners.com



JOB NO. 3827  
DATE: May 14, 2024  
DESIGNED BY: Rob Trivitt  
DRAWN BY: Rob Trivitt  
CHECKED BY: Paul Green  
APPROVED BY: Paul Green

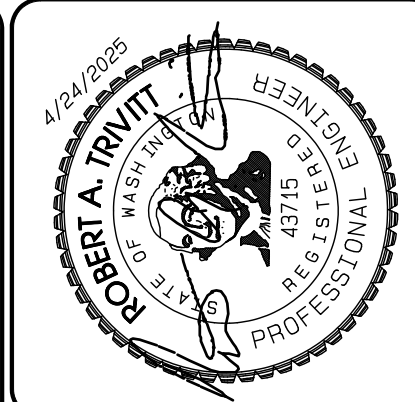
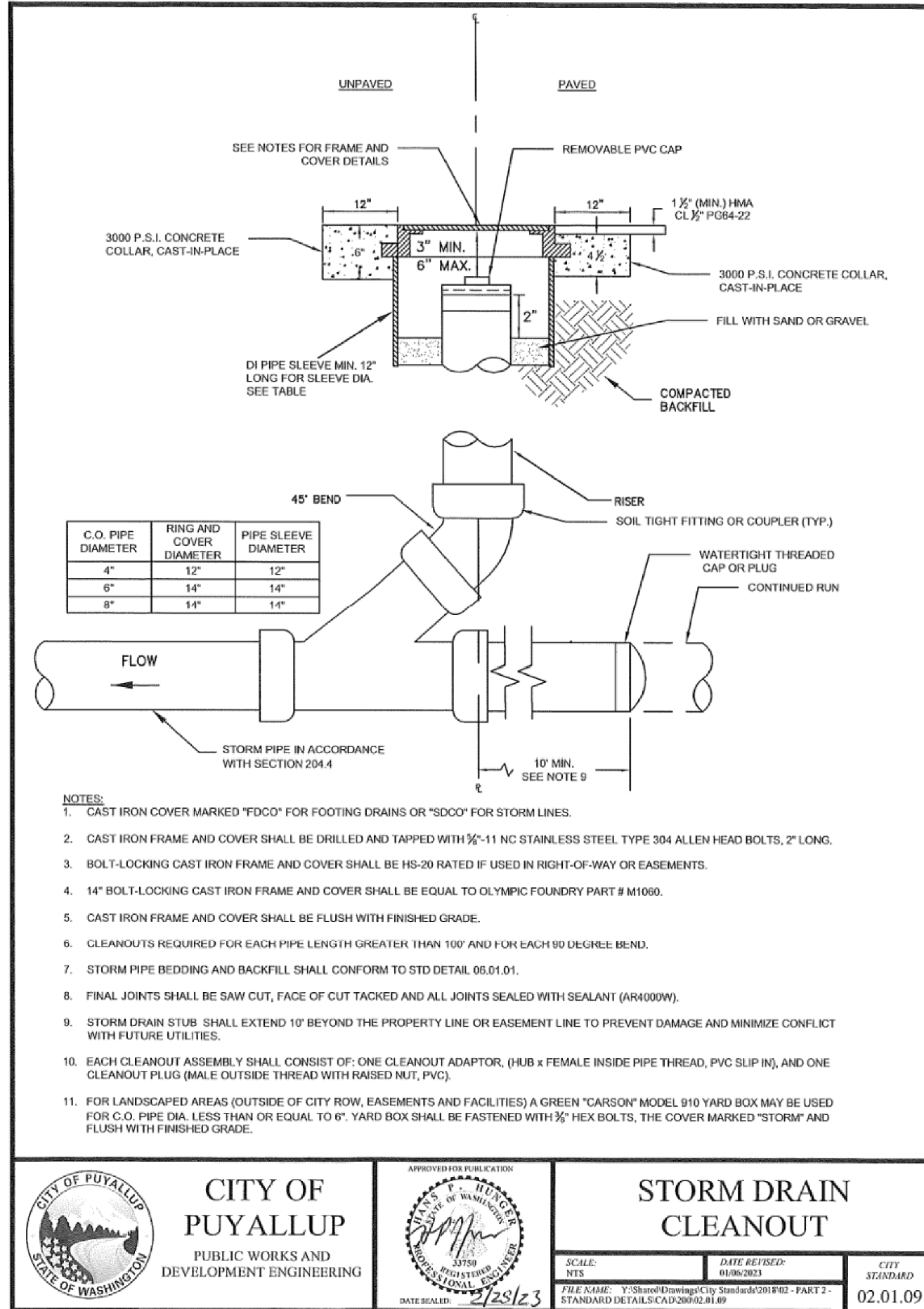
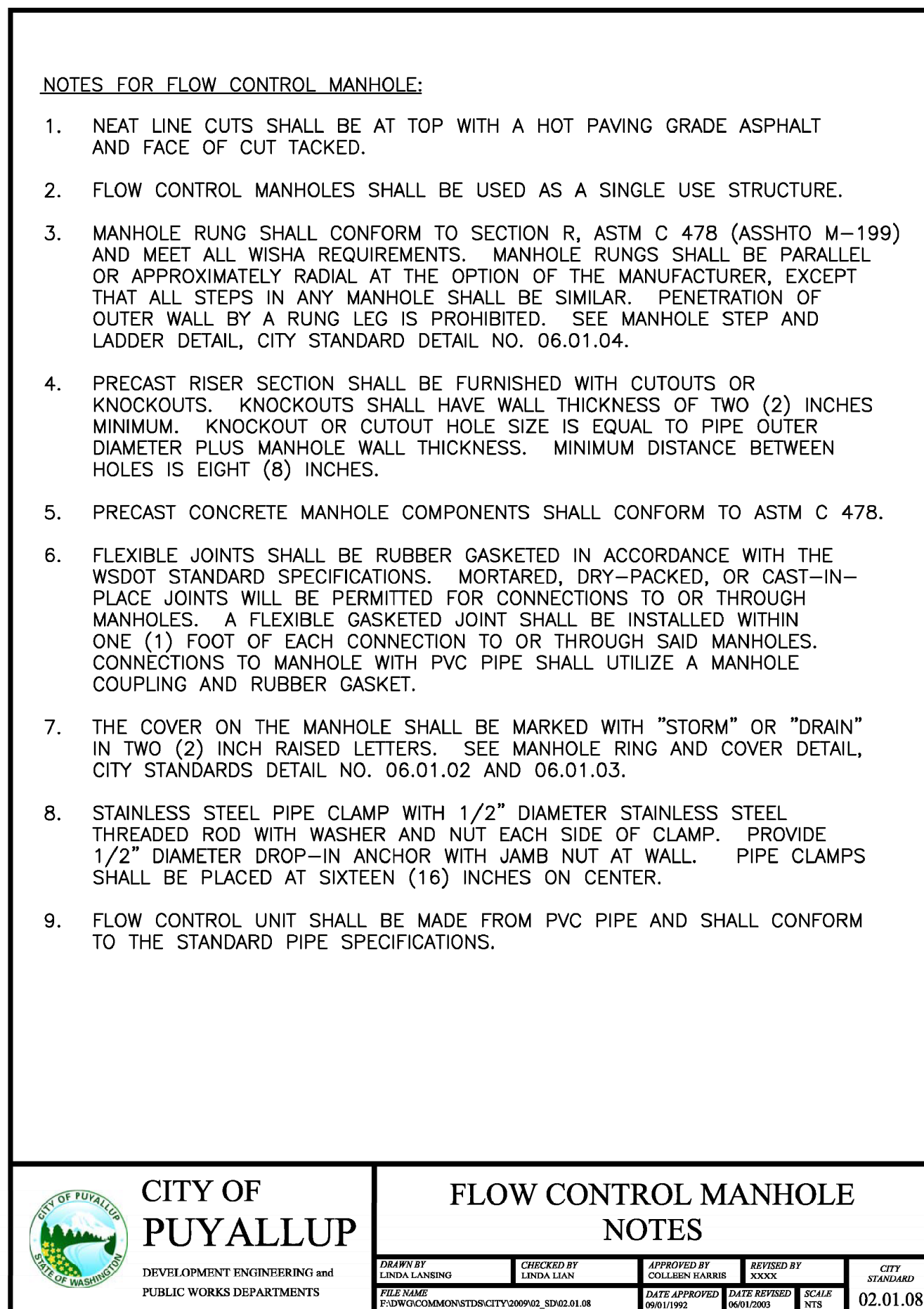
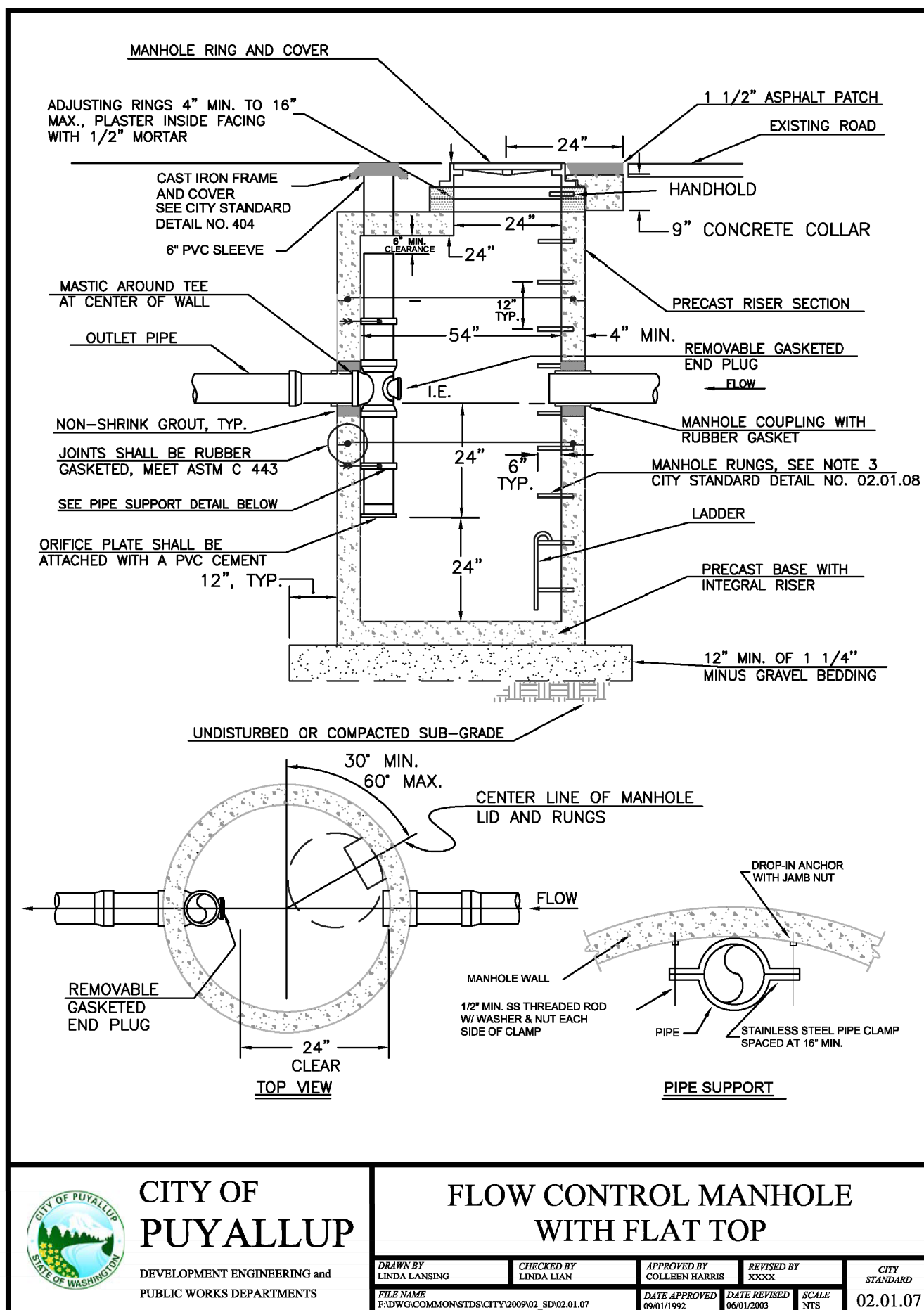
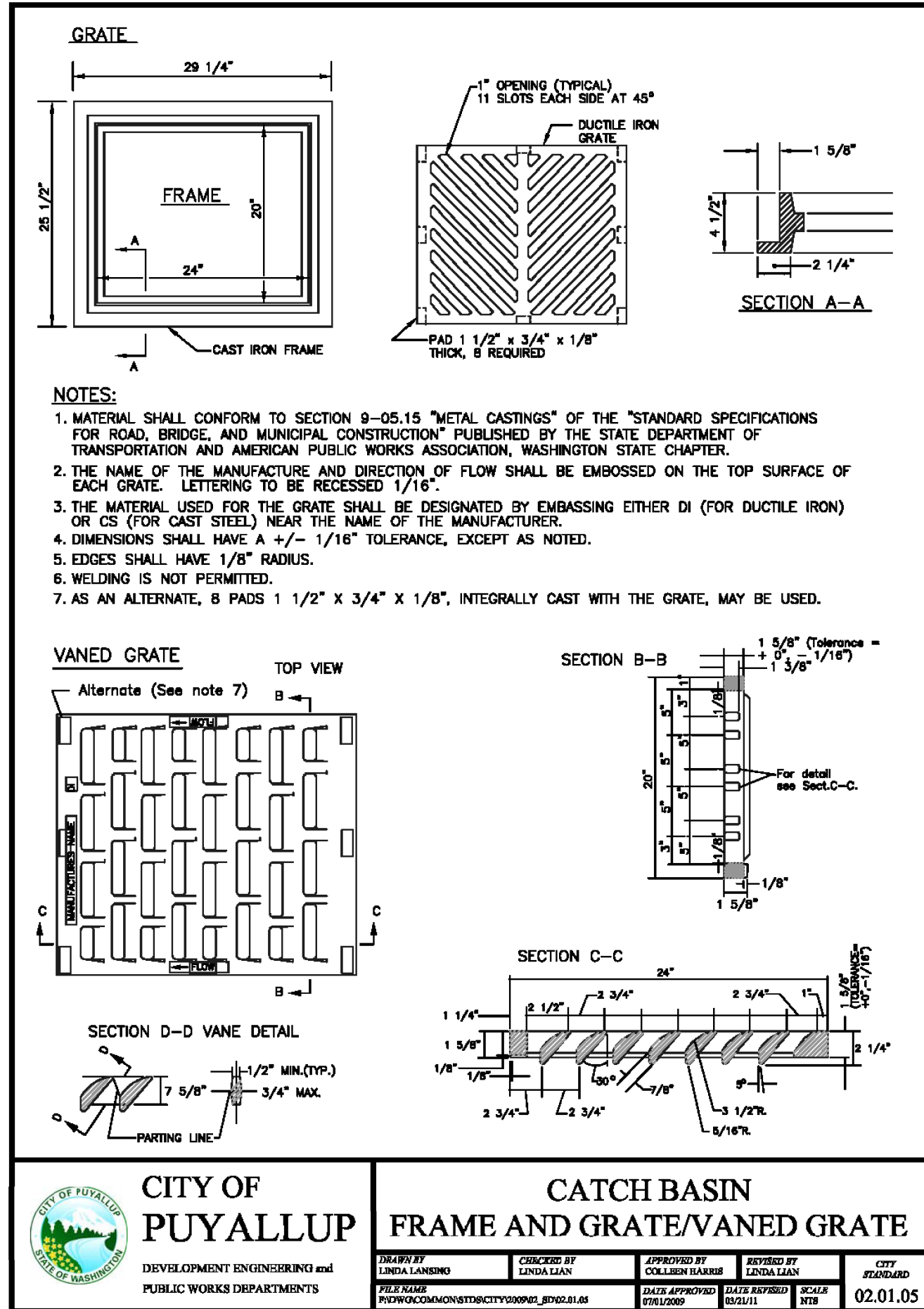
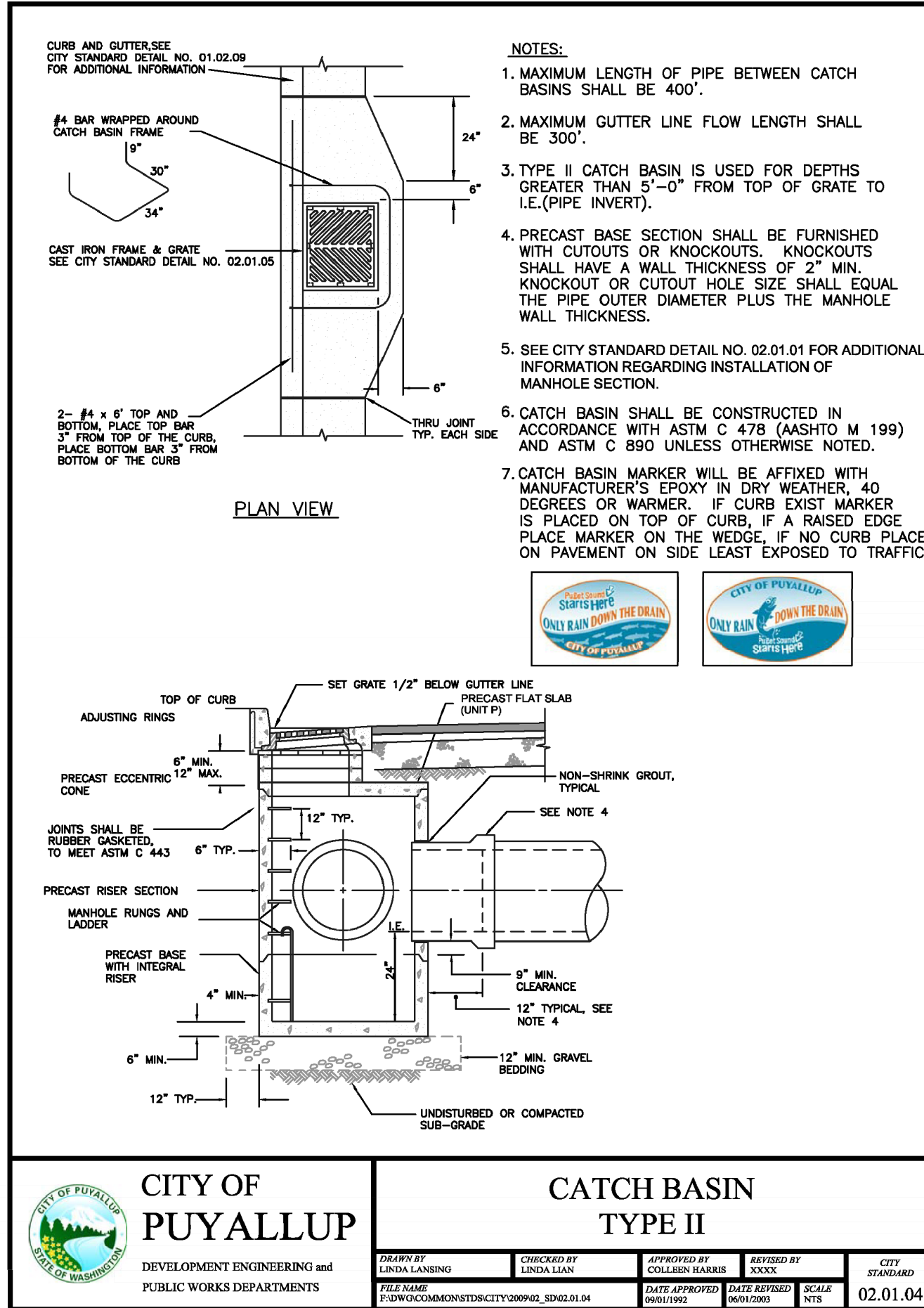
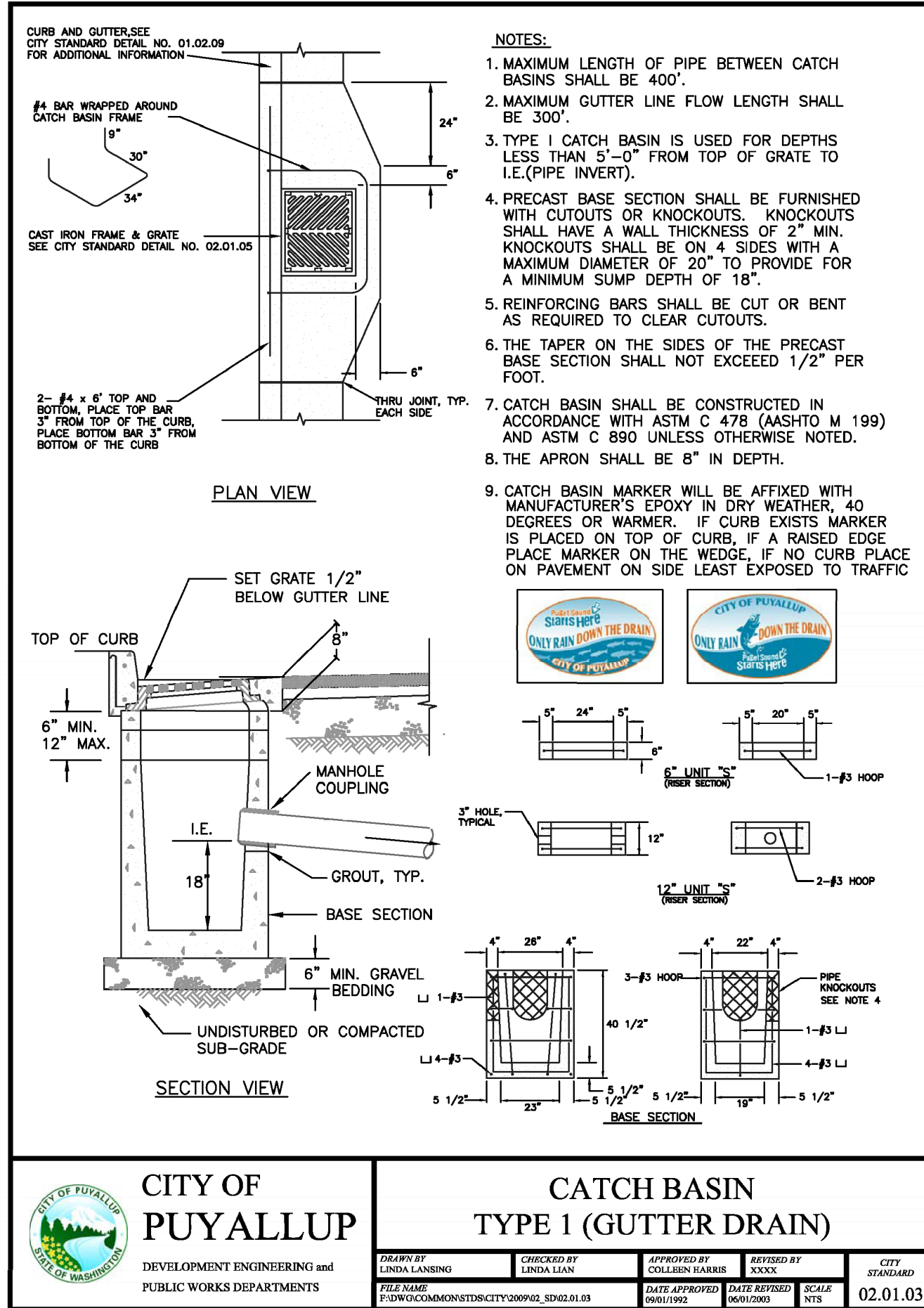
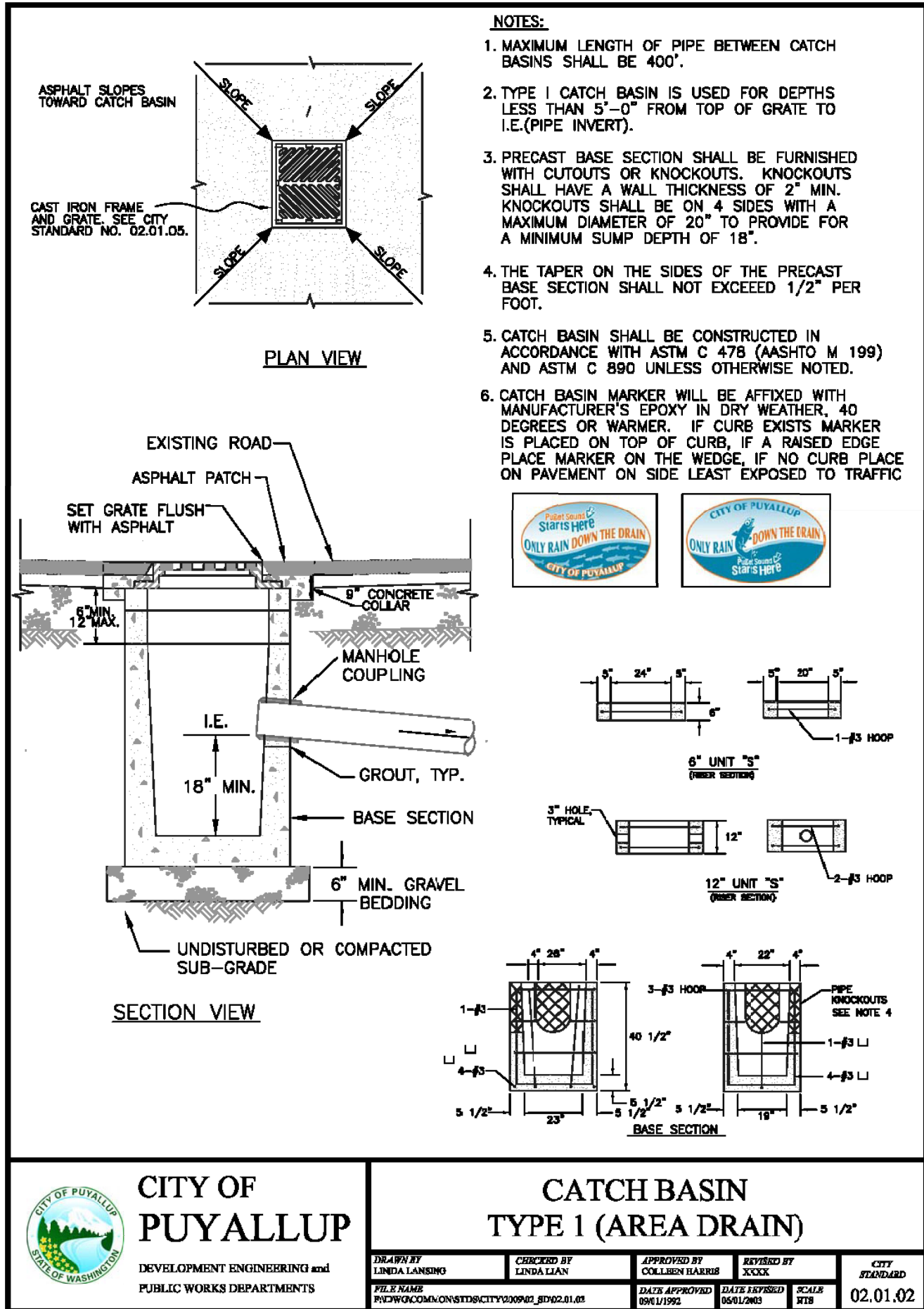
REVISION	DATE
1 Revised per City review and Mail A adjustment.	11/26/24
2 Revised per City review.	3/4/25
3 Revised per City & Pugh review.	4/27/25
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# Bradley Heights

## Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



REVISION	DATE	BY	FOR
1	11/26/24	PRRWF20250237	REVISED PER CITY REVIEW AND MAIL A REVISION.
2	3/4/25	PRRWF20250237	REVISED PER CITY REVIEW.
3	4/21/25	PRRWF20250237	REVISED PER CITY & RUSH REVIEW.
4		PRRWF20250237	
5		PRRWF20250237	
6		PRRWF20250237	
7		PRRWF20250237	
8		PRRWF20250237	
9		PRRWF20250237	
10		PRRWF20250237	

JOB NO. 3237	DATE: MAY 14, 2024
DESIGNED BY: R.D. TRIVITT	DRAWN BY: R.D. TRIVITT
CHECKED BY: R.D. TRIVITT	APPROVED BY: PAUL GREEN

**AZURE GREEN CONSULTANTS**

409 East Pioneer, Suite A - Puyallup, WA 98372

phone: 253.770.3144 fax: 253.770.3142

feasibility • planning • engineering • surveying

**Storm Details**

**Bradley Heights**

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone 509.896.0326  
Fax jordan@timberlanepartners.com

**DRAWING**

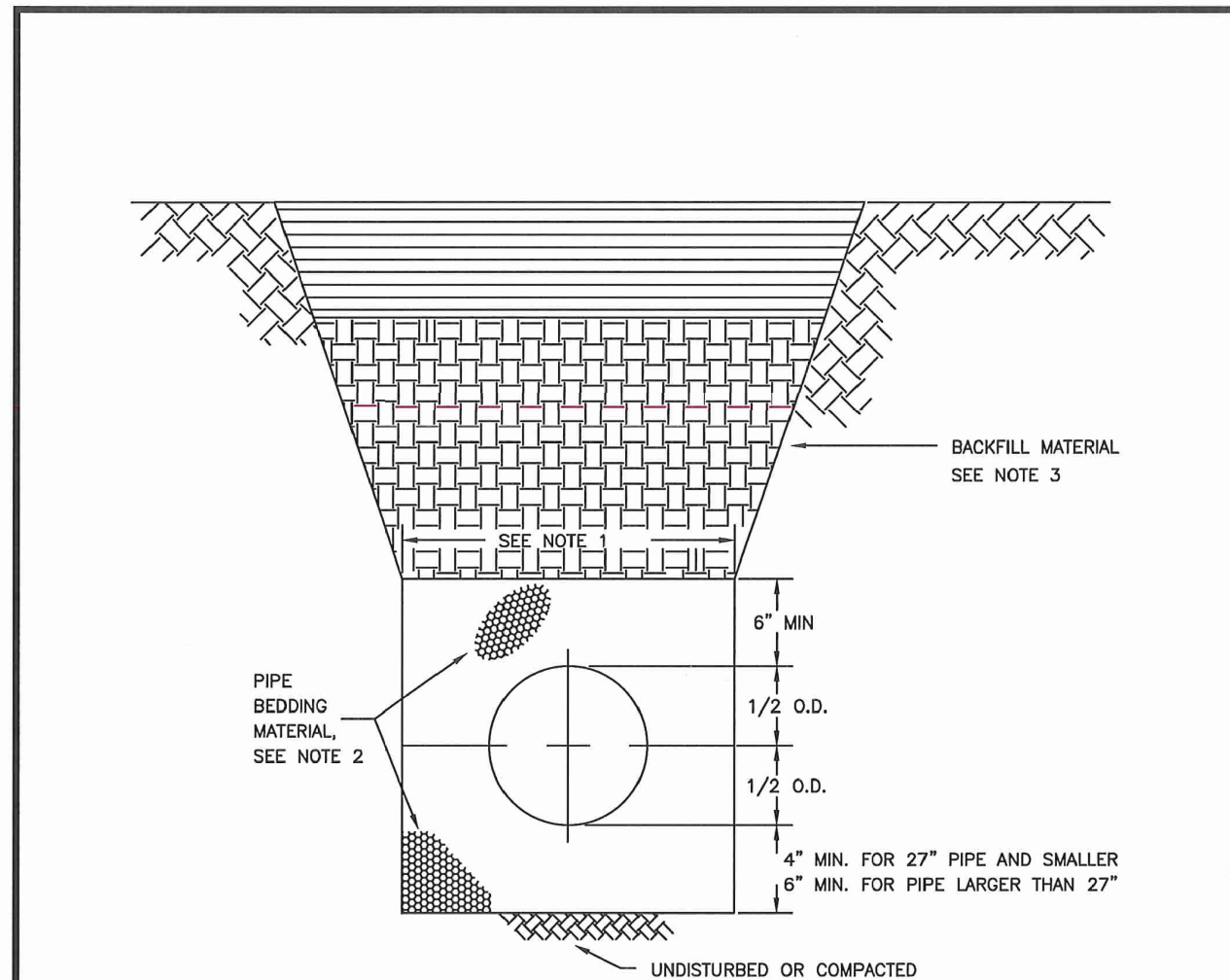
**SD-18**

**SHEET 32 OF 60**



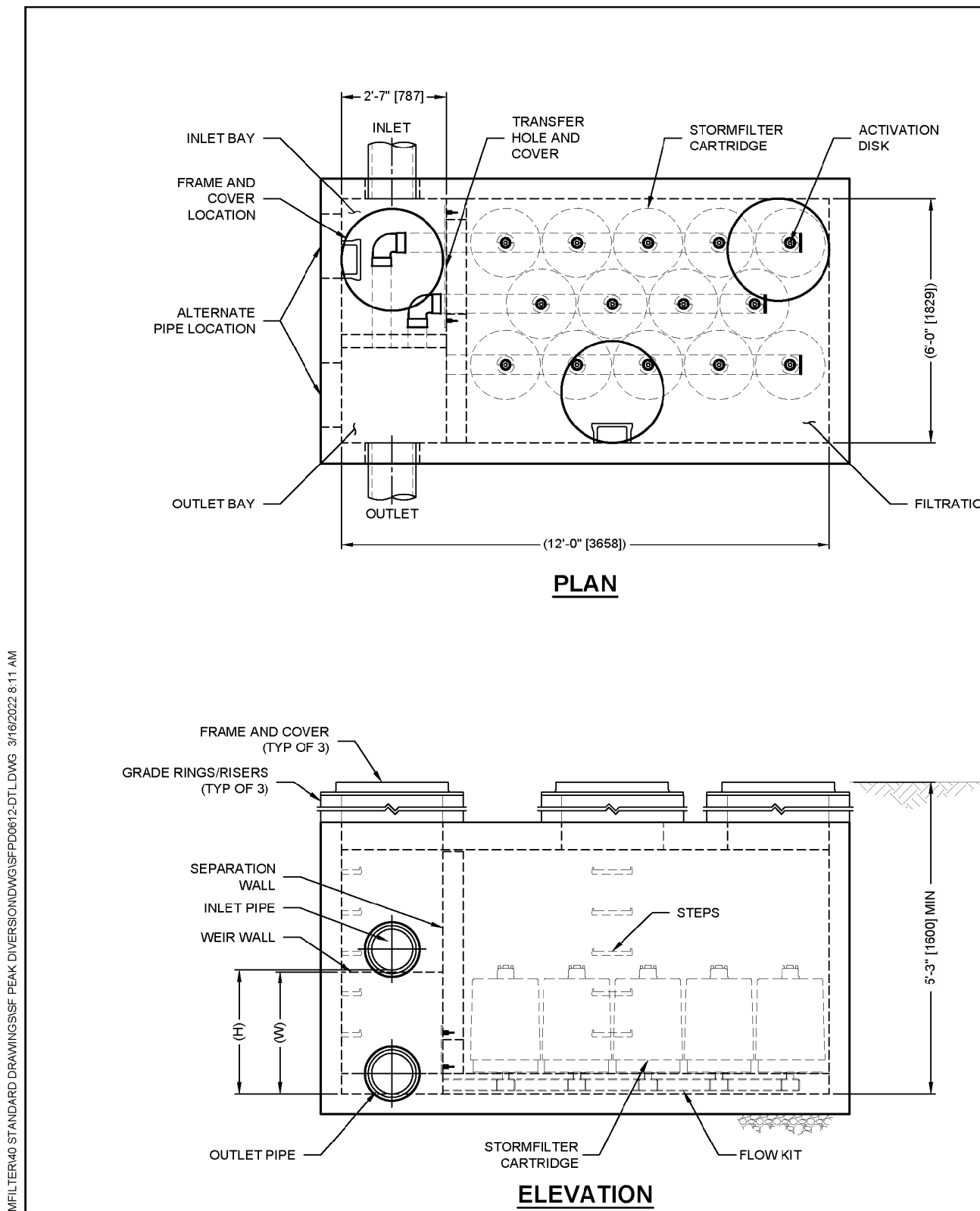
# Bradley Heights

## Section 3, Township 19 N, Range 4 E, Willamette Meridian, Pierce County, Washington



- TRENCHING SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3(1)A AND 2-06.3(1) OF THE WSDOT SPECIFICATIONS.
- BEDDING MATERIAL SHALL CONFORM TO 9-03.12(3) GRAVEL BACKFILL FOR PIPE ZONE BEDDING.
- GRAVEL BACKFILL SHALL CONFORM TO 9-03.12(1)A GRAVEL BACKFILL FOR FOUNDATIONS, CLASS A.

	CITY OF PUYALLUP OFFICE OF THE CITY ENGINEER	PIPE TRENCHING BEDDING AND BACKFILL			
		DESIGNED BY TOD HILL	APPROVED BY MARK PALMER	DESIGNED BY TOD HILL	CITY STANDARD 06.01.01



### STORMFILTER DESIGN NOTES

- STORMFILTER TREATMENT CAPACITY VARIES BY CARTRIDGE COUNT AND LOCALLY APPROVED SURFACE AREA SPECIFIC FLOW RATE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.
- A 6" x 12" (1820 x 3048) PEAK DIVERSION STYLE STORMFILTER IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (14) AND IS AVAILABLE IN A LEFT INLET (AS SHOWN) OR A RIGHT INLET CONFIGURATION.
- ALL PARTS AND INTERNAL ASSEMBLY PROVIDED BY CONTECH UNLESS NOTED OTHERWISE.

CARTRIDGE SIZE (in. [mm])	27 (686)	18 (457)	LOW DROP
RECOMMENDED HYDRAULIC DROP (ft) (m)	2.05 (0.30)	2.3 (0.71)	1.8 (0.48)
HEIGHT OF WEIR WALL (in. [mm])	2 (51)	2 (51)	2 (51)
SPECIFIC FLOW RATE (gpm/sq ft) (L/min/m²)	2 (1.36)	1.67 (1.13)	1.67 (1.13)
CARTRIDGE FLOW RATE (gpm) (L/min)	22 (1.42)	18 (1.19)	11.25 (0.78)
CARTRIDGE FLOW RATE (gpm) (L/min)	22 (1.42)	18 (1.19)	11.25 (0.78)

\* 1.67 gpm/sq ft (1.13 L/min/m²) SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORBS® (PSORB) MEDIA ONLY.

### SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (cfs) (L/s)	0.2872
PEAK FLOW RATE (cfs) (L/s)	1.5844
RETURN PERIOD OF PEAK FLOW (yrs)	100
CARTRIDGE FLOW RATE	12.53
CARTRIDGE SIZE (27, 18, LOW DROP (LD))	18
MEDIA TYPE (PERLITE, ZPG, PSORB)	PSORB
NUMBER OF CARTRIDGES REQUIRED	11
INLET BAY RIM ELEVATION	383.59
FILTER BAY RIM ELEVATION	383.87

### PERFORMANCE SPECIFICATION

FILTER CARTRIDGES SHALL BE MEDIA FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7" (178). FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS. SPECIFIC FLOW RATE SHALL BE 2 GPM/SF (1.36 L/MIN) (MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUME FLOW RATE SHALL BE 6 GPM/CFT (1.13 L/MIN) OF MEDIA (MAXIMUM).

### GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH (1) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- ALTERNATE DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. [www.contechES.com](http://www.contechES.com)
- STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO H20.10 LOAD RATING, ASSUMING EARTH COVER OF 0' - 10' [3048] AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M208 AND BE CAST WITH THE CONTECH LOGO.

### INSTALLATION NOTES

- ANY SUBBASE BACKFILL DEPTH AND/OR ANTI-FLOTATION PROVISIONS ARE SITE SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- CONTRACTOR TO REMOVE THE TRANSFER OPENING COVER WHEN THE SYSTEM IS BROUGHT ONLINE.

### CONTECH ENGINEERED SOLUTIONS LLC

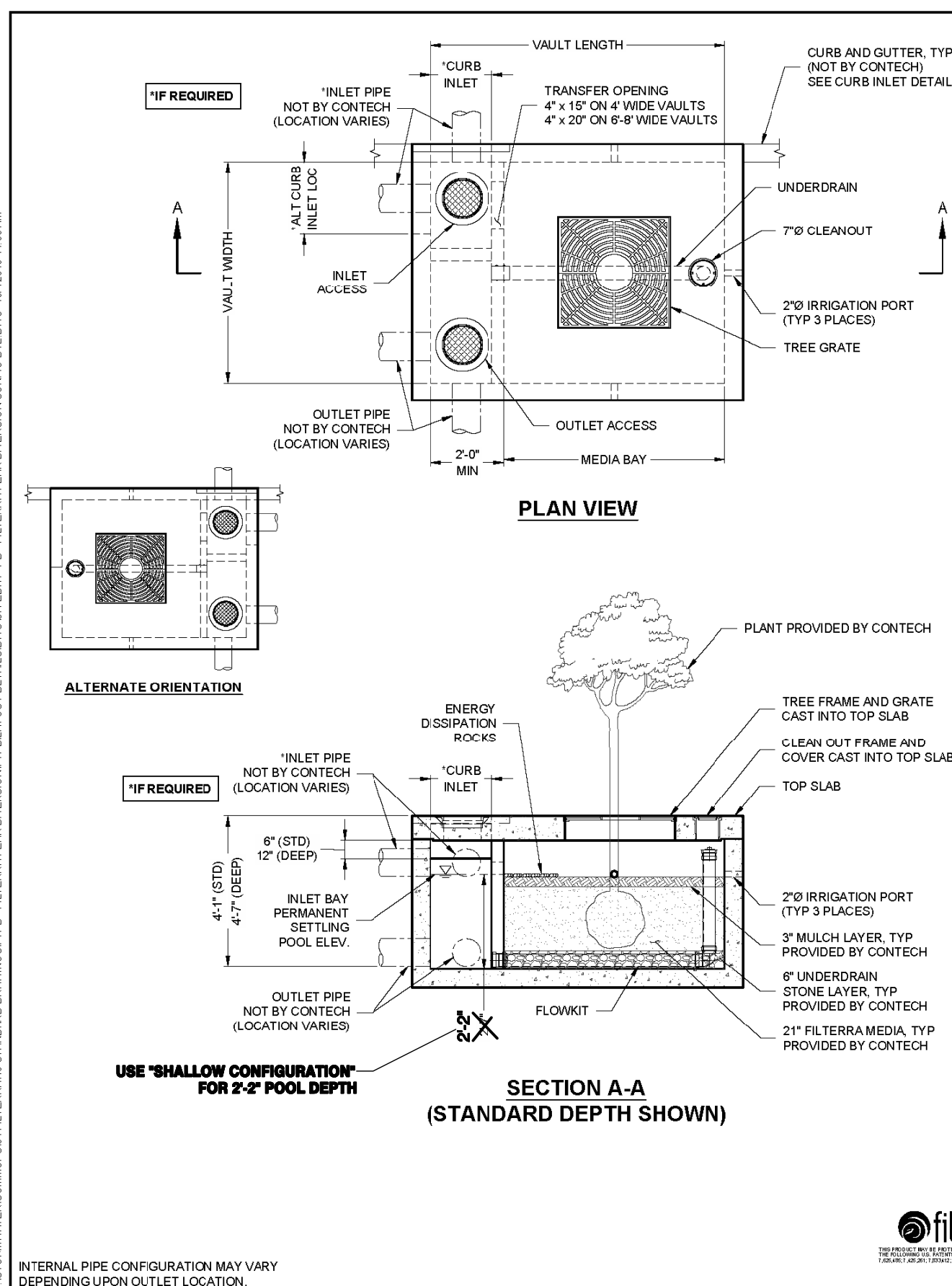
3025 Central Expressway, Suite 400, West Chester, OH 45399  
www.contechES.com  
800-526-3989 313-645-7000 513-645-7993 FAX

SFPD0612 (6" x 12")  
PEAK DIVERSION STORMFILTER  
STANDARD DETAIL

### STORMWATER NOTES:

- All work in City right-of-way requires a permit from the City of Puyallup. Prior to any work commencing, the general contractor shall arrange for a preconstruction meeting at the Development Services Center to be attended by all contractors that will perform work shown on the engineering plans, representatives from all applicable utility companies, the project owner and appropriate City staff. Contact Engineering Services to schedule the meeting (253) 841-5568. The contractor is responsible to have their own approved set of plans at the meeting.
- After completion of all items shown on these plans and before acceptance of the project, the contractor shall obtain a "punch list" prepared by the City's inspector detailing remaining items of work to be completed. All items of work shown on these plans shall be completed to the satisfaction of the City prior to acceptance of the water system and provision of sanitary sewer service.
- All materials and workmanship shall conform to the Standard Specifications for Road, Bridge, and Municipal Construction (hereinafter referred to as the "Standard Specifications"), Washington State Department of Transportation and American Public Works Association, Washington State Chapter, latest edition, unless superseded or amended by the City of Puyallup City Standards for Public Works Engineering and Construction (hereinafter referred to as the "City Standards").
- A copy of these approved plans and applicable city developer specifications and details shall be on site during construction.
- Any revisions made to these plans must be reviewed and approved by the developer's engineer and the Engineering Services Staff prior to any implementation in the field. The City shall not be responsible for any errors and/or omissions on these plans.
- The contractor shall have all utilities verified on the ground prior to any construction. Call (811) at least two working days in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.
- Any structure and/or obstruction which require removal or relocation relating to this project, shall be done so at the developer's expense.
- During construction, all existing and newly installed drainage structures shall be protected from sediments.
- All storm manholes shall conform to City Standard Detail No. 02.01.01. Flow control manhole/oil water separator shall conform to City Standard Detail No. 02.01.06 and 02.01.07.
- Manhole ring and cover shall conform to City Standard Detail 06.01.02.
- Catch basins Type I shall conform to City Standard Detail No.02.01.02 and shall be used only for depths less than 5 feet from top of the grate to the invert of the storm pipe.
- Catch basins Type II shall conform to City Standard Detail No.02.01.04 and shall be used for depths greater than 5 feet from top of the grate to the invert of the storm pipe.
- Cast iron or ductile iron frame and grate shall conform to City Standard Detail No.02.01.05. Grate shall be marked with drains to stream. Solid catch basin lids (square unless noted as round) shall conform to WSDOT Standard Plan B-30-20-04 (Olympic Foundry No. SM60 or equal). Vented grates shall conform to WSDOT Standard Plan B-30-30-03 (Olympic Foundry No. SM60V or equal).
- Stormwater pipe shall be only PVC, concrete, ductile iron pipe, or dual walled Polypropylene pipe.
  - The use of any other type shall be reviewed and approved by the Engineering Services Staff prior to installation.
  - PVC pipe shall be per ASTM D3034, SDR 35 for pipe size 15-inch and smaller and F679 for pipe sizes 18 to 27 inch. Minimum cover on PVC pipe shall be 3.0 feet.
  - Concrete pipe shall conform to the WSDOT Standard Specifications for concrete underdrain pipe. Minimum cover on concrete pipe shall not less than 3.0 feet.
  - Ductile iron pipe shall be Class 50, conforming to AWWA C151. Minimum cover on ductile iron pipe shall be 1.0 foot.
  - Polypropylene pipe (PP) shall be dual walled, have a smooth interior and exterior corrugations and meet WSDOT 9-05.24(d). 12-inch through 30-inch pipe shall meet or exceed ASTM F2736 and AASHTO M330, Type S, or Type D. 36-inch through 60-inch pipe shall meet or exceed ASTM F2684 and AASHTO M330, Type S, or Type D. Testing shall be per ASTM F1447. Minimum cover over Polypropylene pipe shall be 3-feet.
- Trenching, bedding, and backfill for pipe shall conform to City Standard Detail No. 06.01.01.
- Storm pipe shall be a minimum of 10 feet away from building foundations and/or roof lines.
- All storm drain mains shall be tested and inspected for acceptance as outlined in Section 406 of the City of Puyallup Sanitary Sewer System Standards.
- All temporary sedimentation and erosion control measures, and protective measures for critical areas and significant trees shall be installed prior to initiating any construction activities.

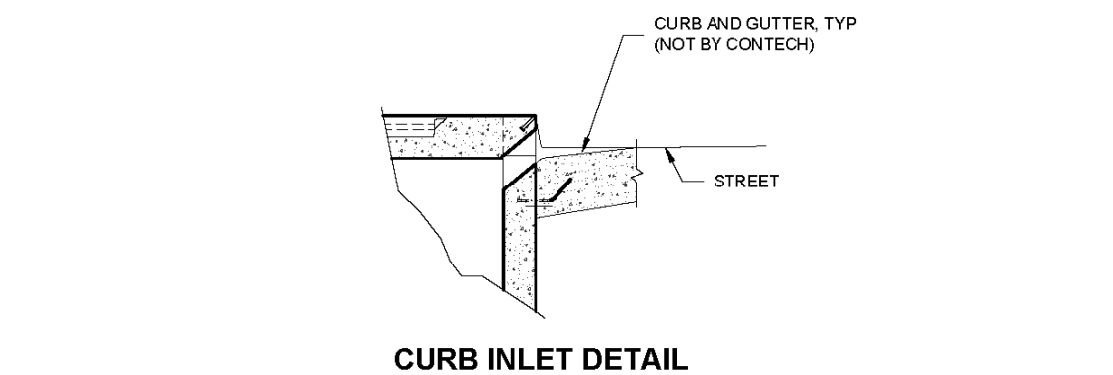
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FTPD STANDARD HEIGHT CONFIGURATION						
DESIGNATION (OPTIONS: P, T, PT)	AVAILABILITY	MEDIA BAY SIZE	VAULT SIZE (W x L)	WEIR LENGTH/ MAX CURB OPENING	*MAX BYPASS FLOW (CFS)	INLET/ OUTLET ACCESS DIA. & SIZE
FTPD0604	N/A CA	4 x 4	4 x 6	1'-8"	1.4	12\"/>
FTPD0606	CA ONLY	6 x 6	6 x 8	1'-8"	1.4	12\"/>
FTPD0608	N/A MID-ATL	4 x 6	4 x 8	1'-8"	1.4	12\"/>
FTPD0608-D	MID-ATL ONLY	4.5 x 5.83	4.5 x 7.83	1'-8"	1.4	12\"/>
FTPD0604	ALL	6 x 6	6 x 8	1'-8"	1.4	12\"/>
FTPD0606	ALL	6 x 6	6 x 8	1'-8"	1.4	12\"/>
FTPD0608	ALL	6 x 8	6 x 10	1'-8"	1.4	12\"/>
FTPD0610	ALL	6 x 10	6 x 12	1'-8"	1.4	12\"/>
FTPD0710	ALL	7 x 10	7 x 13	2'-0"	2.1	24\"/>
FTPD0810S	ALL	8 x 10.5	8 x 14	3'-0"	2.5	24\"/>
FTPD0812S	ALL	8 x 12.5	8 x 16	3'-0"	2.5	24\"/>

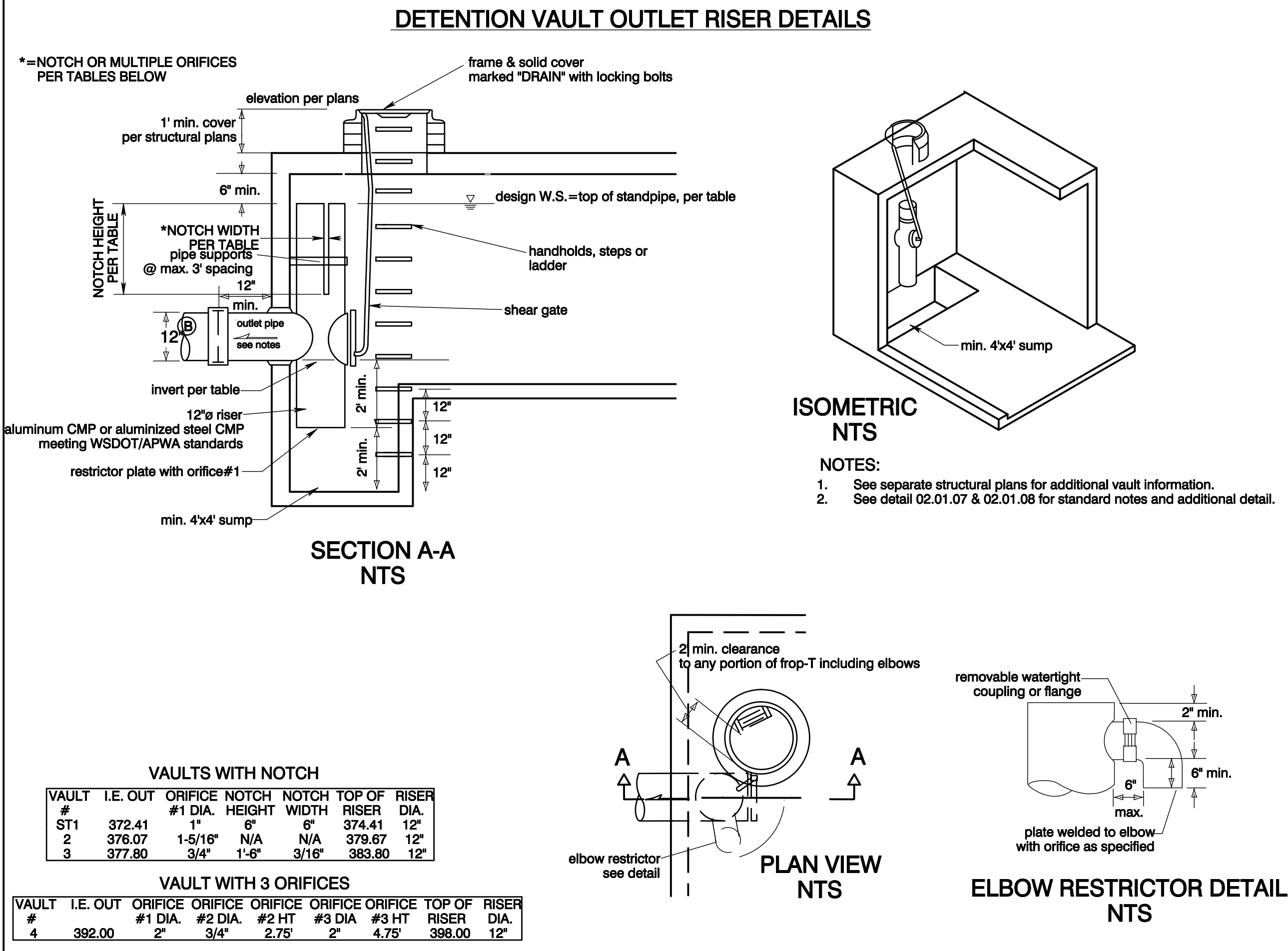
FTPD-D DEEP OPTION CONFIGURATION						
DESIGNATION (OPTIONS: P, T, PT)	AVAILABILITY	MEDIA BAY SIZE	VAULT SIZE (W x L)	WEIR LENGTH/ MAX CURB OPENING	*MAX BYPASS FLOW (CFS)	INLET/ OUTLET ACCESS DIA. & SIZE
FTPD0604-D	N/A CA	4 x 4	4 x 6	1'-8"	4.6	12\"/>
FTPD0604S-D	CA ONLY	4 x 4.5	4 x 6	1'-8"	4.6	12\"/>
FTPD0606-D	N/A MID-ATL	4 x 6	4 x 8	1'-8"	4.6	12\"/>
FTPD0608-D	MID-ATL ONLY	4.5 x 5.83	4.5 x 7.83	1'-8"	4.6	12\"/>
FTPD0604D	ALL	6 x 6	6 x 8	1'-8"	4.6	12\"/>
FTPD0606D	ALL	6 x 8	6 x 10	1'-8"	4.6	12\"/>
FTPD0608D	ALL	6 x 8	6 x 10	1'-8"	4.6	12\"/>
FTPD0610D	ALL	6 x 10	6 x 12	1'-8"	4.6	12\"/>
FTPD0710D	ALL	7 x 10	7 x 13	2'-0"	8.8	24\"/>
FTPD0810S-D	ALL	8 x 10.5	8 x 14	3'-0"	8.2	24\"/>
FTPD0812S-D	ALL	8 x 12.5	8 x 16	3'-0"	8.2	24\"/>

\*MAX BYPASS FLOW IS INTERNAL WEIR FLOW. SITE SPECIFIC ANALYSIS IS REQUIRED TO DETERMINE CURB INLET FLOW CAPACITY



	CONTECH ENGINEERED SOLUTIONS LLC	
	3025 Central Expressway, Suite 400, West Chester, OH 45399 800-526-3989 313-645-7000 513-645-7993 FAX	

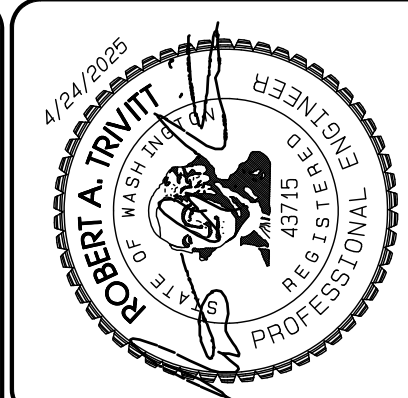
FILTERRA PEAK DIVERSION (FTPD)  
CONFIGURATION DETAIL



City of Puyallup Development & Permitting Services ISSUED PERMIT	
Building	Planning
Engineering	Public Works
Fire	Traffic

- NOTES:
- See separate structural plans for additional vault information.
  - See detail 02.01.07 & 02.01.08 for standard notes and additional detail.

APPROVED
BY: CITY OF PUYALLUP DEVELOPMENT SERVICES
DATE: _____
NOTE:
THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICES MANAGER.



REVISION	DATE	DESCRIPTION
1	11/26/24	Revised per City Review and Mail A adjustment.
2	3/4/25	Revised per City Review.
3	4/21/25	Revised per City & Rush Review.
4	7/1/25	Revised per City & Rush Review.
5	7/1/25	Revised per City & Rush Review.
6	7/1/25	Revised per City & Rush Review.
7	7/1/25	Revised per City & Rush Review.
8	7/1/25	Revised per City & Rush Review.
9	7/1/25	Revised per City & Rush Review.
10	7/1/25	Revised per City & Rush Review.

JOB NO.	3327
DATE:	May 14, 2024
DESIGNED BY:	Rob Trivitt
DRAWN BY:	Rob Trivitt
CHECKED BY:	Paul Green
APPROVED BY:	Paul Green

**Azure Green Consultants**

409 East Pioneer, Suite A - Puyallup, WA 98372  
phone: 253.770.3144 fax: 253.770.3142

feasibility • planning • engineering • surveying

**Storm Details**

Bradley Heights

Timberlane Partners  
1816 11th Ave Unit C  
Seattle, WA 98122  
Phone: 509.898.0326  
Fax: jordan@timberlanepartners.com

**DRAWING**

**SD-19**

SHEET 33  
OF 60