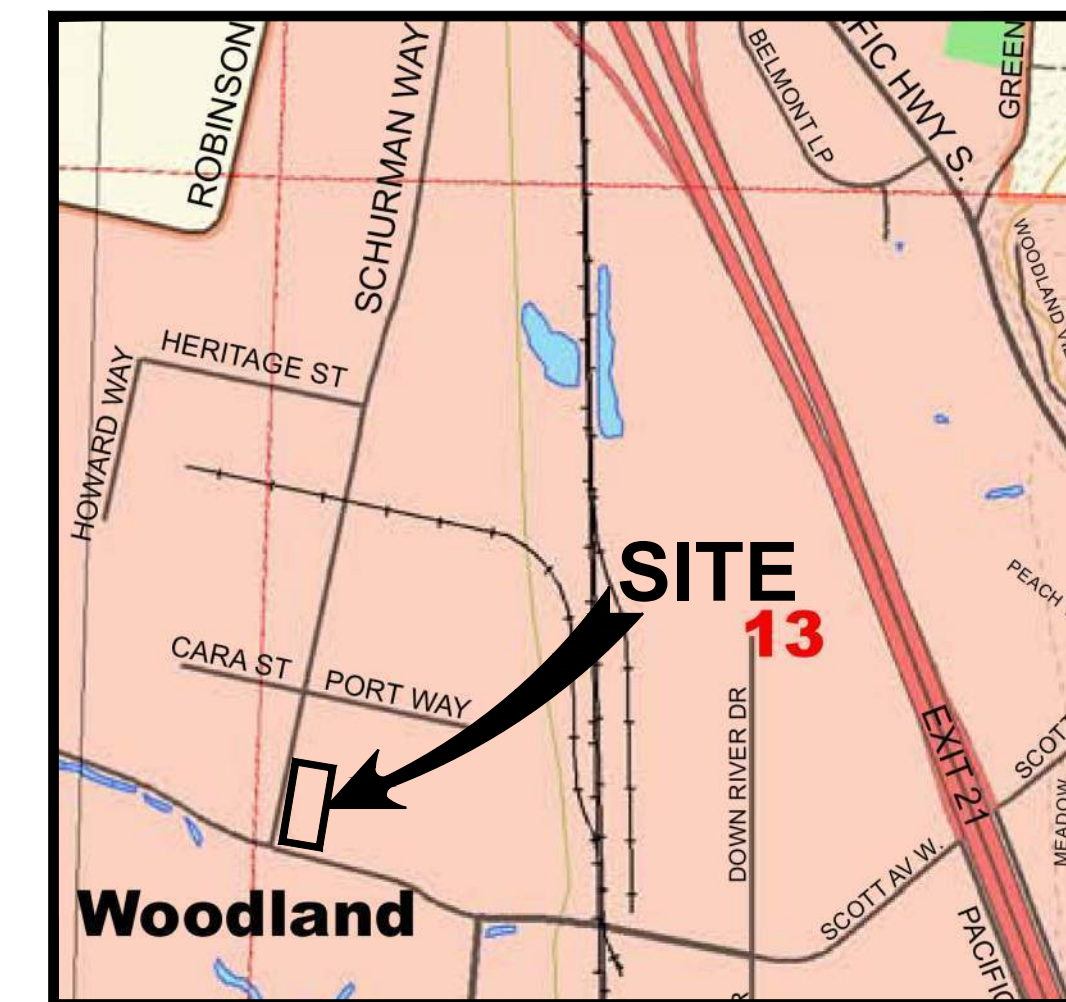


Schurman Way Site Plan

SPR-21-012

LOCATED IN THE NW ¼ OF THE SW ¼ OF SECTION 13, T. 5 N., R. 1 W., W.M.,
CITY OF WOODLAND, WASHINGTON

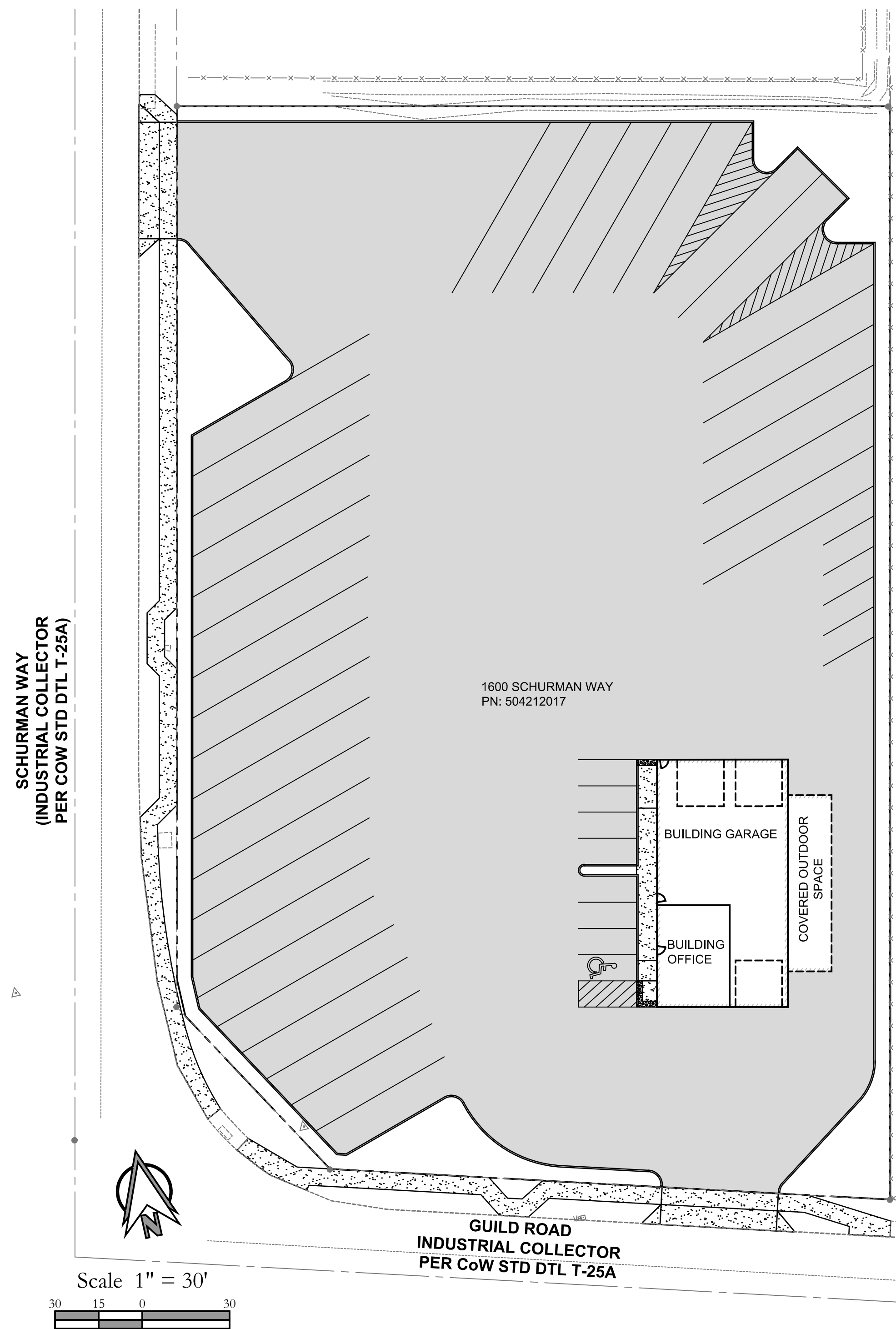


VICINITY MAP
NOT TO SCALE

Hatching Legend	
Proposed Asphalt Concrete	
Proposed Cement Concrete	

Symbol Legend	
Existing Water Valve	
Existing Fire Hydrant	
Existing Power Pole	
Existing Water Meter	
Existing Electrical Pedestal	
Existing Sanitary Manhole	
Existing Storm Manhole	
Existing Catch Basin	
Existing Vertical Pipe	
Existing Street Luminaire	
Existing Telephone Pad	
Existing Cleanout	
Existing Irrigation Meter	
Proposed Storm Manhole	
Proposed Sanitary Cleanout	
Proposed Sanitary Manhole	
Proposed Water Meter	
Proposed Water Backflow Device	
Proposed Water Valve	
Proposed Water Bend Tee W/valve	
Proposed Water Bend Tee W/tb	
Proposed 2" Blow Off Assembly	
Proposed Water 45° Bend W/tb	
Proposed Water 90° Bend W/tb	
Proposed Monument	
Proposed Irrigation Valve	
Proposed Irrigation Bend Tee W/valve	
Proposed Electrical Vault	
Proposed Electrical Junction	
Proposed Irrigation Meter	
Proposed Irrigation Bend W/tb	
Proposed Street Luminaire	
Proposed Electrical Disconnect	
Proposed Catch Basin	
Proposed Fire Hydrant	

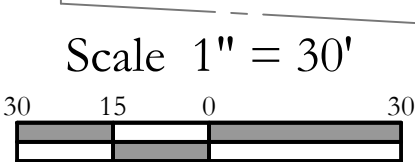
Linetype Legend	
Extg Sanitary Sewer Pipe	
Extg Storm Sewer Pipe	
Extg Water Pipe	
Extg Cable Tv Line	
Extg Electric Line	
Extg Gas Line	
Extg Irrigation Line	
Extg Telephone Line	
Existing Centerline	
Existing Curb	
Existing Lot Line	
Existing Gravel road	
Existing Right-of-way	
Existing Fence	
Existing Property Line	
Existing Utility Easement	
Existing Contour	
Proposed Sanitary Sewer Pipe	
Proposed Storm Rain Drain	
Proposed Storm Pipe	
Proposed Water Lateral	
Proposed Water Pipe	
Proposed Lot Line	
Proposed Centerline	
Proposed Right-of-way	
Proposed Sawcut Line	
Proposed Easement	
Proposed Curb & Gutter	
Future Sidewalk	
Proposed Sidewalk	
Proposed Property Line	
Proposed Contour	
Proposed Irrigation Pipe	
Proposed Irrigation Lateral	



SCHURMAN WAY
(INDUSTRIAL COLLECTOR
PER COW STD DTL T-25A)

1600 SCHURMAN WAY
PN: 504212017

GUILD ROAD
INDUSTRIAL COLLECTOR
PER COW STD DTL T-25A



GENERAL NOTES

OWNER:
MML Enterprises LLC
7416 NE 101st St
Vancouver, WA 98662

APPLICANT:
MML Enterprises LLC
7416 NE 101st St
Vancouver, WA 98662

CIVIL ENGINEER:
PLS Engineering
Contact: Travis Johnson, PE
604 W Evergreen Blvd
Vancouver, WA 98660
PH: (360) 944-6519
pm@plsengineering.com

SITE LOCATION:
Parcel: 504202017
Address: 1600 Schurman Way
Woodland, WA 98674

Public Water Purveyor = COW

Public Sewer Purveyor = COW

Boundary and topographic survey data shown on the plan was prepared by PLS Engineering.

Horizontal Datum:
NAD 83 2011 (2010.00 EPOCH), Washington State Plane, South Zone, U.S. survey feet, derived from RTK ties utilizing the Washington State reference network (WSRN)

Vertical Datum:
NAVD88 derived from RTK ties utilizing the Washington State reference network (WSRN)

If any cultural or historical resources are discovered during construction activity, construction shall cease until a qualified archaeologist assesses the find.

Sheet Index	
1.	Cover Sheet
2.	General Notes
3.	Existing Conditions Plan
4.	Final Site Plan
5.	Mass Grading and Erosion Control Plan
6.	Detailed Grading Plan
7.	Utility Plan
8.	Schurman Way Plan and Profile
9.	Guild Road Plan and Profile
10.	Miscellaneous Details
11.	City of Woodland Erosion Control Details
12.	City of Woodland Drainage Details
13.	City of Woodland Sanitary Sewer Details
14.	City of Woodland Water and Transportation Details
15.	City of Woodland Transportation Details
16.	Site Illumination & Photometric Plan
17.	Landscaping Plan L1

UTILITY COMPANY AND EMERGENCY CONTACTS:

City of Woodland	(360) 225-7999
Woodland Public Works	(360) 225-7999
Woodland Police Department	(360) 225-6965
Frontier Communications NW	(800) 788-9140
Cowlitz County PUD (Electric)	(360) 577-7546
Clark County Fire and Rescue	(360) 887-4609
City of Woodland (Water & Sewer)	(360) 225-8281
Cascade Natural Gas-Longview	(360) 423-1598
Utility Locates	(800) 424-5555

City Of Woodland	
Water, Sewer, Street & Storm Drainage	
Approved _____	Date _____



Cover Sheet For:
Schurman Way Site Plan
 A Site Located In The City Of Woodland, Washington
 Engineering - Surveying - Planning - 604 W. Evergreen Blvd., Vancouver, WA 98660
 PH: (360) 944-6519
 Fax: (360) 944-6539
PLS ENGINEERING

Revisions	
1	
2	
3	
4	
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6	



Project No. 3264
SCALE: H: 1"=30'
V: N/A
DESIGNED BY: SWG
DRAFTED BY: SWG
REVIEWED BY: TGJ

GENERAL NOTES

Boundary and topographic information prepared by PLS Engineering. Actual location of existing infrastructure to be verified by Contractor. Vertical Datum NAVD 88 (GEOID 2012B) based on real time kinematic corrections from the Washington State Reference Network.

Existing utilities shown on the plans are based on available information, and no guarantee is implied as to location accuracy and the existence or nonexistence of other utilities. Contractor shall field locate all existing utilities prior to construction.

All construction, materials, and workmanship shall conform to the latest edition of "Standard Specifications for Road, Bridge and Municipal Construction" prepared by WSDOT/APWA, and the standards and practices of Woodland (grading and drainage, water & sewer).

All pavement shall be straight cut prior to paving. Existing pavement shall be removed as necessary to provide a smooth transition for both ride and drainage.

A minimum of 2 working days prior to beginning construction the Contractor shall call 1-800-424-5555 (Northwest Utility Coordinating Center) and the City of Woodland for markup of existing utilities.

Any significant deviations from the plans will require a request from the applicant's engineer and approval by the City of Woodland Public Works.

The applicant may be required to provide flagging, signs, and other traffic control devices for safe truck access onto public and private streets. All such devices shall conform to the standards established in the latest adopted edition of the "Manual on Uniform Traffic Control Devices"(MUTCD) published by the U.S. Department of Transportation and the Modifications to the MUTCD for Streets and Highways for the State of Washington.

A traffic control plan shall be submitted to the City of Woodland for review 10 days prior to implementation.

The contractor shall be responsible for obtaining all applicable permits including but not limited to permits for hydrostatic tests and dewatering discharges prior to commencing construction.

A Woodland permit is required prior to beginning construction activities.

The contractor shall keep a legible, approved set of plans on the project site at all times. Deviations from the plans will require a request from the applicant's engineer and approval from the City of Woodland.

If any cultural resources are discovered in the course of undertaking a development activity, the Office of Archeology and Historic Preservation (DAHP) in Olympia and the City Inspector shall be notified. Failure to comply with these requirements may constitute a Class C felony, subject to imprisonment and/or fine. Construction in the immediate vicinity of the resources shall be stopped until further direction is provided by the City and/or the State DAHP.

See the detail sheets in this plan set for additional standard City of Woodland construction notes and requirements.

STORM

Material certification for all storm manholes, catch basins, and curb inlets to be provided to the City of Woodland inspector.

Roof drain piping shall be D-3034 PVC pipe or as approved by the Project Engineer.

Storm pipes shall be per size and slope specified on drawings.

Materials for storm sewer pipes shall be Corrugated Polyethylene Storm Sewer Pipe unless otherwise specified.

Trench excavation shall meet the requirements of WSDOT Standard Specifications Section 7-08.3(1).

STREET

Contractor shall provide certificate of compliance per 2016 WSDOT Standard Specifications 6-02.3(5)A & B to City of Woodland inspector.

All utilities are to be located out of sidewalk section and are to be underground where possible.

WATER

Contractor to contact City of Woodland Operations Department at (360) 225-7999 for fire flow test prior to engineering acceptance.

The City of Woodland requires water meters to be purchased from and installed by the Public Works Department and installed with the City's inspector present. Call (360) 225-7999 to purchase a meter.

SANITARY SEWER

See City of Woodland Sanitary Sewer Details S-01 and S-02 located on Sheet 13 for construction requirements.

SITE GRADING

All excavations should be made in accordance with applicable Federal and State Occupational Safety and Health Administration regulations.

For general site grading; contour lines, spot elevations and general drainage flow defined by slopes and swales have been shown. The elevations shown are minimum elevations required to promote drainage in a controlled drainage pattern. Any deviation from this grading plan shall first be coordinated with the Engineer.

Contractor shall comply with all Woodland requirements such as; a drainage erosion control plan, a schedule of construction operations and any other pertinent data relative to site earth work.

The Contractor shall notify Woodland five (5) business days prior to starting any grubbing, grading or stockpiling work.

Vegetated areas slated for construction are to be stripped to remove all grass, roots, organic soil, and construction fill debris prior to the beginning of any grading operations. The contractor shall salvage and stockpile enough select top soil to accommodate landscaping needs.

Exposed subgrade soils on areas to receive structural fill should be scarified to a depth of 8 inches.

Fill areas shall be structurally filled with surplus suitable materials from cut areas or imported structural fill. Select materials shall be placed and compacted in fill areas in lifts not to exceed 12".

Imported materials, if needed, shall be inspected by a soils engineer prior to their use as fill material.

All compaction testing shall be done per the City of Woodland Standard Specifications. In addition, all work to be completed within the Woodland right-of-way shall conform to Woodland requirements.

At the end of the grading operation, the stockpiled strippings shall be distributed on the landscape areas in a compacted depth not to exceed 12".

All deleterious materials generated during site grading and strippings not utilized in the final ground cover operation shall be hauled from the site to a contractor provided legal and permitted waste/dump site.

All surfaces shall be graded smooth and free of irregularities that might accumulate surface water.

All grading operations and disturbed surface stabilization shall be in accordance with the project Grading and Erosion Control Plan.

The contractor shall remove all silt and debris resulting from this work which has been deposited in drainage facilities, roadways and other areas immediately after each rainfall event. The cost incurred for any necessary remedial action shall be payable by the contractor.

Best management practices (BMP) shall be employed at all times to the maximum extent practicable to prevent damage by sedimentation, erosion or dust to streams, water courses, natural areas and the property of others.

EROSION AND SEDIMENT CONTROL

This approval is based on the City of Woodland's requirements only. The developer/contractor is responsible for acquiring and complying with any necessary State and Federal permits prior to beginning any construction on the site.

It is the contractor's responsibility to comply with the Construction Stormwater NPDES Permit issued by the Washington Dept. of Ecology for this project including inspection & reporting requirements.

Approval of this Erosion and Sediment Control (ESC) plan does not constitute an approval of permanent road or drainage design.

The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of the ESC facilities is the responsibility of the contractor until all construction is completed and approved, and vegetation is established.

The ESC facilities shown on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to ensure that sediment and sediment laden water do not enter the drainage system or roadways or violate applicable water standards.

Care should be taken to not disturb more area than needed for construction requirements. All disturbed soils surfaces are to be stabilized. Stabilization of disturbed soil areas will consist of: hydroseeding or handseeding, mulching, placing of erosion control blankets or plastic in landscaping soil areas. It will also consist of paving and concrete work in driving, parking and sidewalk areas. All seeded areas are to be fertilized, watered and maintained to enhance the immediate regrowth of vegetation.

Material stockpiles are to be protected from precipitation by the following means:

Temporary - cover piles with tarps or plastic sheeting weighted with tires, lumber or concrete blocks.

Permanent - cover piles with tarps or plastic, or reseed. Perimeter areas around piles are to be surrounded with erosion control filter fabric fences until soils surface is stabilized with reseeded.

The ESC facilities shall be inspected daily by the contractor and maintained as necessary to ensure continuous functioning. Inspection and maintenance shall include, but not be limited to:

Removal of trapped silts at silt barriers, silt traps, or points of accumulation. Additional protective measures, as required, due to job site conditions.

Monitoring of vehicles leaving the site to minimize transmission of loose soils to the adjacent public roadways and private pavement areas. The contractor shall actively work to minimize travel between unstabilized areas and adjacent road and parking areas to minimize the likelihood of sediment transport to existing paved surfaces.

If sediment is transported onto a paved surface, the surface is to be cleaned thoroughly at the end of each day during dry weather and immediately during rain events.

The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month or within the 24 hours following a storm event.

At no time shall more than one foot of sediment be allowed to accumulate within a trapped catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.

This sedimentation and erosion control plan is intended to be utilized as a guide to control the transportation of loose soils from the property that cause water quality and nuisance problems outside of the construction area.

Depending upon the Contractor's construction practices, some portions of the proposed erosion control plan may be varied according to the job site condition. All changes to the plan must be reviewed and approved by the Engineer prior to adjustment.

Schurman Way Site Plan
A Site Located In The City Of Woodland, Washington

General Notes For:

Revisions

1					
2					
3					
4					
5					
6					



Project No.	3264
SCALE:	H: N/A V: N/A
DESIGNED BY:	SWG
DRAFTED BY:	SWG
REVIEWED BY:	TGJ

02

17

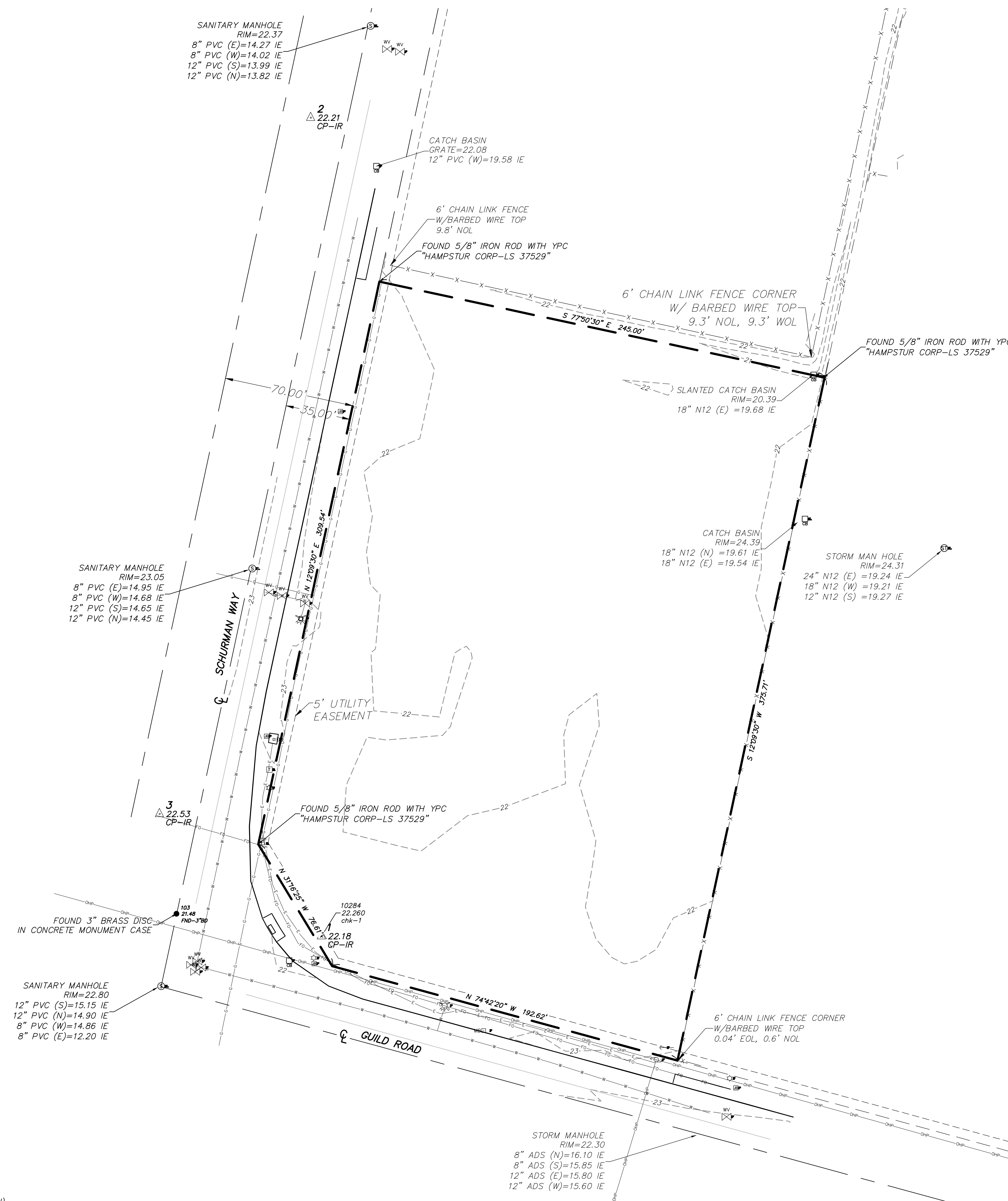


Know what's below.
Call before you dig.

EXISTING CONDITIONS SURVEY

IN THE NW 1/4 OF THE SW 1/4
OF SECTION 13, T. 5 N., R. 1 W., WM
CITY OF WOODLAND

JOB NO.: 3264
DATA COLLECT: 05-13-2021
DRAWING DATE: 06-18-2021
SHEET 3 OF 17



LEGEND:

- INDICATES WATER VALVE
- INDICATES FIRE HYDRANT
- INDICATES WATER MANHOLE
- INDICATES MAIL BOX
- INDICATES SANITARY SEWER MANHOLE
- INDICATES CATCH BASIN
- INDICATES JUNCTION BOX
- INDICATES ELECTRIC METER
- INDICATES TRANSFORMER
- INDICATES LIGHT POLE
- INDICATES POWER POLE
- INDICATES GUY ANCHOR
- INDICATES FENCE LINE
- INDICATES BOUNDARY
- INDICATES EDGE OF CONCRETE
- INDICATES 5 FOOT INTERVAL CONTOUR
- INDICATES 1 FOOT INTERVAL CONTOUR

NOTES:

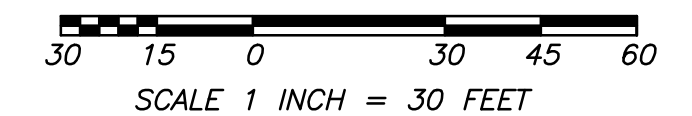
1. BOUNDARIES WERE DRAWN PER PLAT, SURVEY RECORDS AND MONUMENTS FOUND. THIS IS NOT INTENDED TO BE A BOUNDARY SURVEY. NO PROPERTY CORNERS WERE SET IN THIS SURVEY.
2. NO WARRANTIES ARE MADE AS TO MATTERS OF UNWRITTEN TITLE, SUCH AS ADVERSE POSSESSION, ESTOPPEL, ACQUIESCENCE, ETC.
3. UTILITY LOCATES WERE CALLED FOR ON 6-08-2021 UNDER TICKET NUMBER 21258552. THE UNDERGROUND UTILITIES AS SHOWN HEREON ARE AS MARKED AT THE TIME OF THIS SURVEY. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN SURFACE LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. SOME UNDERGROUND LOCATIONS HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. P.L.S. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS.

HORIZONTAL DATUM:

NAD 83 (2011.00 EPOCH), WASHINGTON STATE PLANE, SOUTH ZONE, U.S. SURVEY FEET, DERIVED FROM RTK TIES UTILIZING THE WASHINGTON STATE REFERENCE NETWORK (WSRN)

VERTICAL DATUM:

NAVD88 DERIVED FROM RTK TIES UTILIZING THE WASHINGTON STATE REFERENCE NETWORK (WSRN)



PLS ENGINEERING

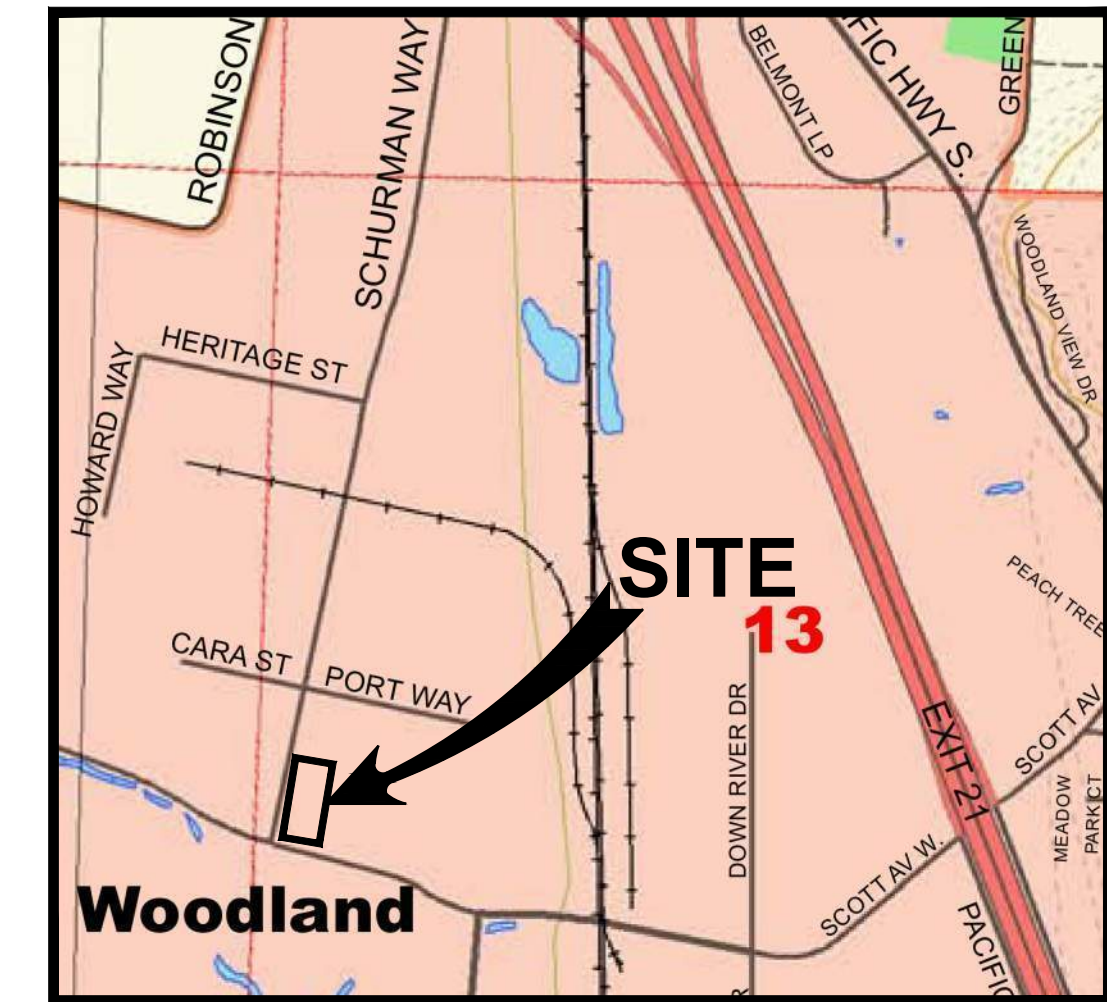
Engineering - Surveying - Planning
604 W. Evergreen Blvd., Vancouver, WA 98660
PH: (360) 944-6519 Fax: (360) 944-6539

SOUTH PARCEL STATISTICS		
ZONE: Light Industrial		
Gross Site Area	89,001 SQ FT	2.04 AC
Critical Areas	0 SQ FT	0 AC
	REQUIRED	PROPOSED
Density (N/A)	-	-
Maximum Lot Coverage (N/A)	-	-
Setbacks		
North	10'	10'
South	25'	25'
East	10'	10'
West	25'	25'
Maximum Building Height	55'	55'
Landscape Area	10%	10%
Total Parking Spaces	4 (1/1400 SF Office) 2 (1/1250 SF Warehouse)	
Standard Parking Spaces	6	12
Truck Storage Areas*	-	33
ADA Spaces (ADA)	1	1
Spaces with Electric Vehicle Charging Infrastructure (E)	-	-
ADA Spaces with Electric Vehicle Charging Infrastructure (ADA E)	-	-

*Note: Truck Storage Areas are not parking stalls and do not count towards required ADA parking.

Schurman Way Site Plan

LOCATED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 13, T. 5 N., R. 1 W., W.M., CITY OF WOODLAND, WASHINGTON



VICINITY MAP
NOT TO SCALE

BUILDING LEGEND			
BUILDING	FLOORS	SQ FT	UNITS
BUILDING A	2 - Story	4,700	1

GENERAL NOTES

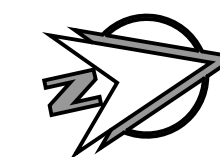
OWNER:
MML Enterprises LLC
7416 NE 101st St
Vancouver, WA 98662

APPLICANT:
MML Enterprises LLC
7416 NE 101st St
Vancouver, WA 98662

CIVIL ENGINEER:
PLS Engineering
Contact: Travis Johnson, PE
604 W Evergreen Blvd
Vancouver, WA 98660
PH: (360) 944-6519
travis@plsengineering.com

SITE LOCATION:
Parcel: 504202017
Address: 1600 Schurman Way
Woodland, WA 98674

SITE AREA:
Extg Site Area: 89,015.50 SF (2.04 Acres)
ROW Dedication: 14.37 SF (0.00 Acres)
Developed Site Area: 89,015.50 SF (2.04 Acres)

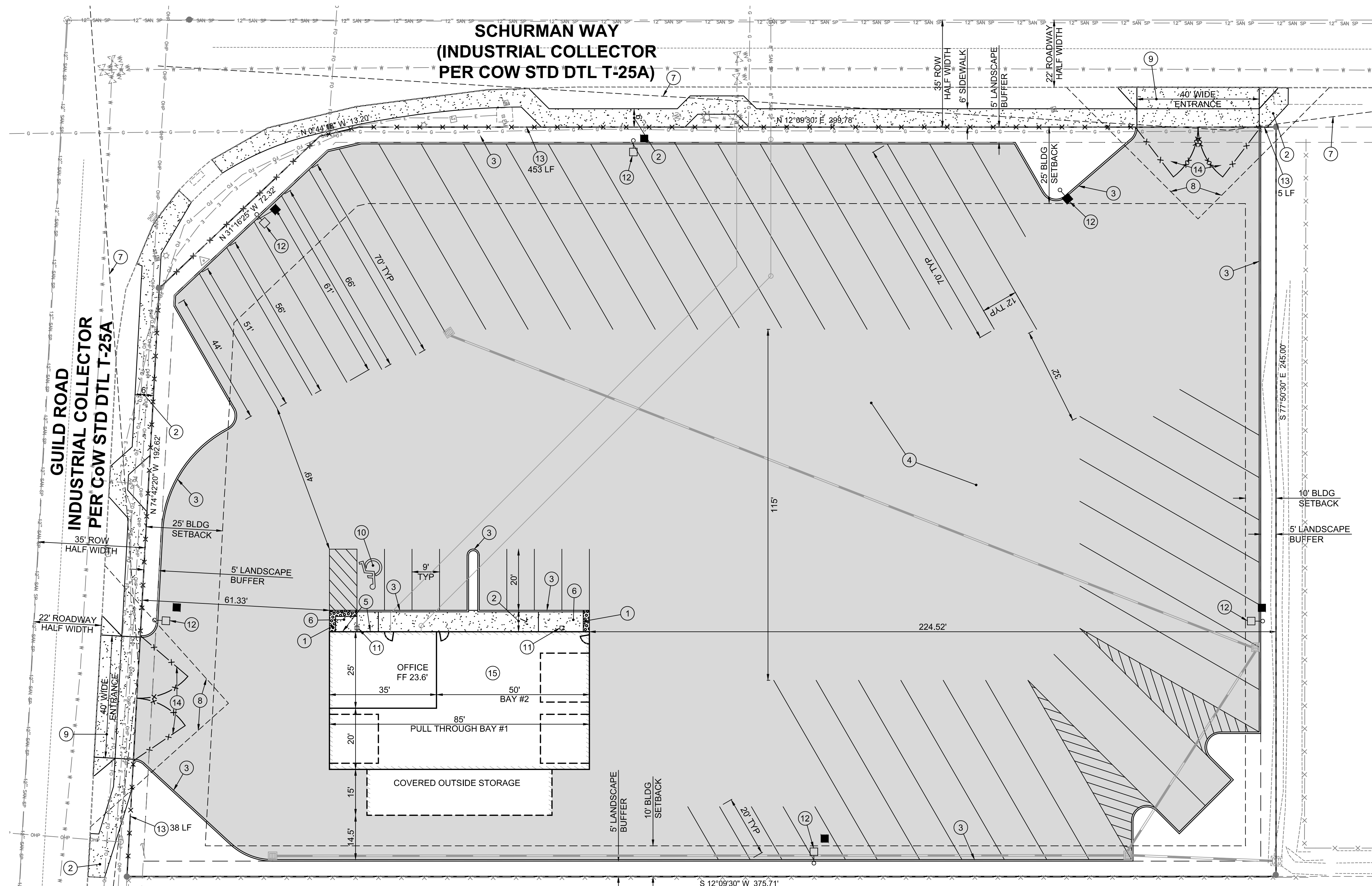


Scale 1" = 20'
20 10 0 20

Legend	
Proposed Asphalt Concrete	
Proposed Cement Concrete	

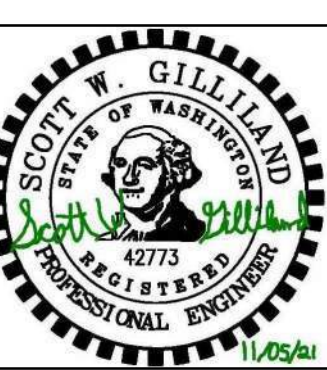
SITE KEY NOTES

- 1 DETECTABLE WARNING PATTERN PER COW STD PLAN T-21 88296*
- 2 SIDEWALK DETAIL PER COW STD PLAN T-07
- 3 TYPE E-1 CURB PER COW STD PLAN T-01
- 4 SEE TYPICAL ASPHALT SECTION SHEET 10
- 5 PROPOSED ADA SIGN PER DETAIL SHEET 10
- 6 ADA RAMP PER COW STD PLAN T-18
- 7 SIGHT DISTANCE TRIANGLE PER COW STD PLAN T-28
- 8 VISION CLEARANCE TRIANGLE PER COW STD PLAN T-29
- 9 DRIVEWAY WITH DETACHED SIDEWALK PER COW STD PLAN T-03
- 10 ADA PARKING SPACES, PER DETAIL SHT 10
- 11 WALL MOUNTED LIGHT, SEE PHOTOMETRIC PLAN ON SHT 16
- 12 POLE MOUNTED LIGHT, SEE PHOTOMETRIC PLAN ON SHT 16
- 13 SEE THROUGH FENCE COORDINATE WITH DEVELOPER ON FENCE TYPE SELECTION
- 14 GATE W/KNOXBOX COORDINATE WITH DEVELOPER ON GATE TYPE SELECTION
- 15 GARBAGE BIN LOCATED INSIDE OF THE BUILDING



Final Site Plan For:

Revisions	1	2	3	4	5	6



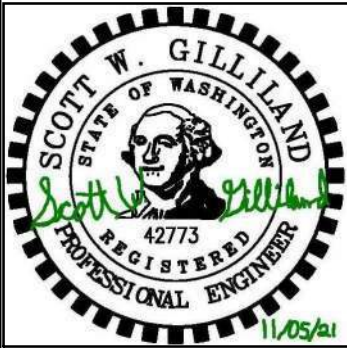
Project No. 3264
SCALE: H: N/A
V: N/A
DESIGNED BY: SWG
DRAFTED BY: SWG
REVIEWED BY: TGJ



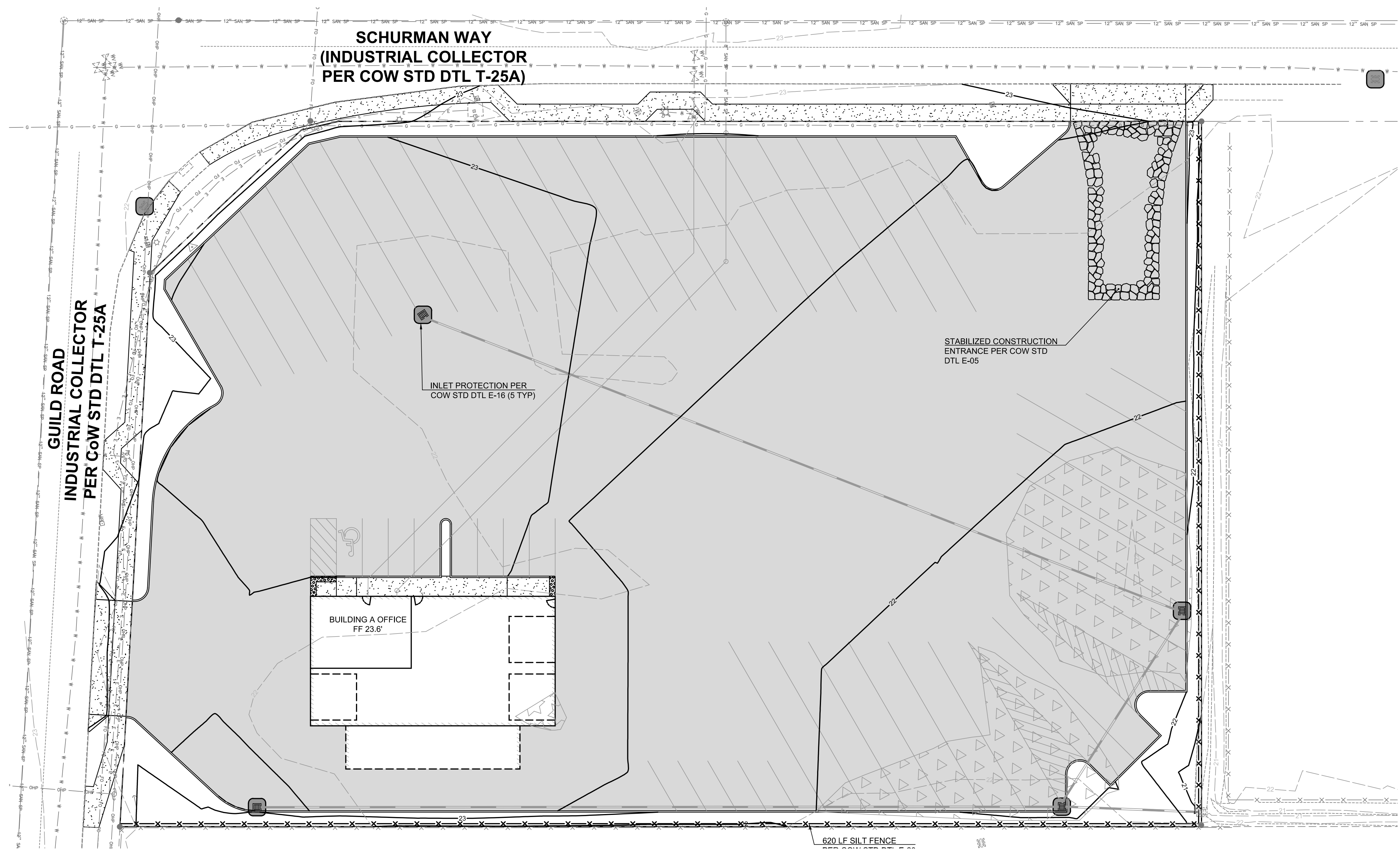
Schurman Way Site Plan

Mass Grading and Erosion Control Plan For:
A Site Located In The City Of Woodland, Washington

Revisions	
No.	Description
1	
2	
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4	
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6	



Project No.	3264
SCALE:	H: N/A V: N/A
DESIGNED BY:	SWG
DRAFTED BY:	SWG
REVIEWED BY:	TGJ



Hatching Legend

- Proposed Asphalt Concrete
- Proposed Cement Concrete
- Existing Flow Arrows
- Proposed Flow Arrows

Erosion Control Legend

- Std Catch Basin Inlet Silt Barrier
- Silt Fence

- GRADING NOTES:**
- ALL TOP OF CURB ELEVATIONS ARE 0.5' ABOVE PAVEMENT FINISH GRADE (FG) ELEVATION SHOWN UNLESS OTHERWISE INDICATED.
 - SIDEWALK CROSS-SLOPES SHALL NORMALLY BE 1.5% TOWARD ADJACENT PAVEMENT (AWAY FROM THE BUILDING) UNLESS OTHERWISE INDICATED ON THIS PLAN BY SPOT GRADES.
 - EXCEPT WHERE OTHERWISE NOTED BY FG ELEVATIONS, FINISH GRADE EXTERNAL TO THE BUILDING IS EQUAL TO BLDG FINISH FLOOR.
 - ADA PARKING SPACES AND THEIR ADJACENT LOADING AREAS SHALL HAVE MAXIMUM ALLOWABLE SLOPES OF 2% IN ANY DIRECTION
 - CONTRACTOR SHALL REVIEW AND COMPLY WITH THE RECOMMENDATIONS IN THE January 18, 2002 GEOTECHNICAL REPORT PREPARED FOR THIS SITE BY GEOENGINEERS.
 - ALL SLOPES SHALL BE 2:1 OR FLATTER.
 - CONTRACTOR SHALL COMPLETE GRADING DURING THE DRY SEASON. IF CONSTRUCTION OCCURS DURING THE WET SEASON, THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND ENGINEER TO INSTALL APPROPRIATE BMP'S SUCH AS A SEDIMENT POND (E-2.41 &/OR A SEDIMENT TRAP (E-2.40).
 - CONCRETE WASHOUT AND DISPOSAL WILL BE HANDLED IN AN APPROVED OFF-SITE LOCATION OR ON-SITE AS SHOWN OR AT A LOCATION APPROVED BY THE INSPECTOR.
 - SITE STRIPPINGS ESTIMATED AT 900 CY ASSUMING 3" REMOVAL ACROSS THE SITE.
 - TRENCH SPOILS ESTIMATED AT 160 CY.

GRADING SPOT ELEVATION ABBREVIATIONS

TC = TOP OF CURB ELEVATION
 FG = FINISH GRADE AT TOP OF PAV'T OR ANY SURFACE
 EG = EXTG GRADE AT EDGE OF PAV'T (FOR REFERENCE)
 TS = TOP OF STAIR ELEVATION
 BS = BOTTOM OF STAIR ELEVATION

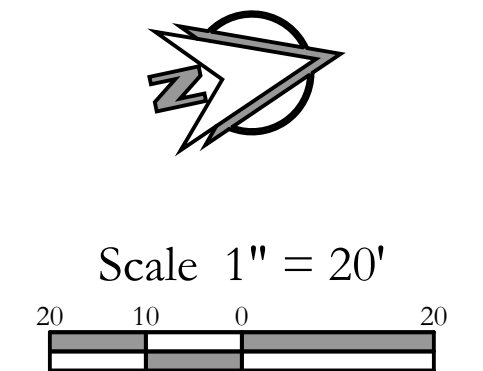
CONSTRUCTION ENTRANCE NOTE:
 A STABILIZED CONSTRUCTION ENTRANCE PER CITY STANDARD DETAIL E-1.05 WILL BE REQUIRED IF CONSTRUCTION VEHICLES WILL BE TRAVELING FROM ANY UNSTABILIZED (NOT PAVED OR GRAVELED) AREA ADJACENT ROADS OR PARKING AREAS.

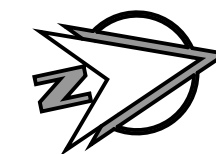
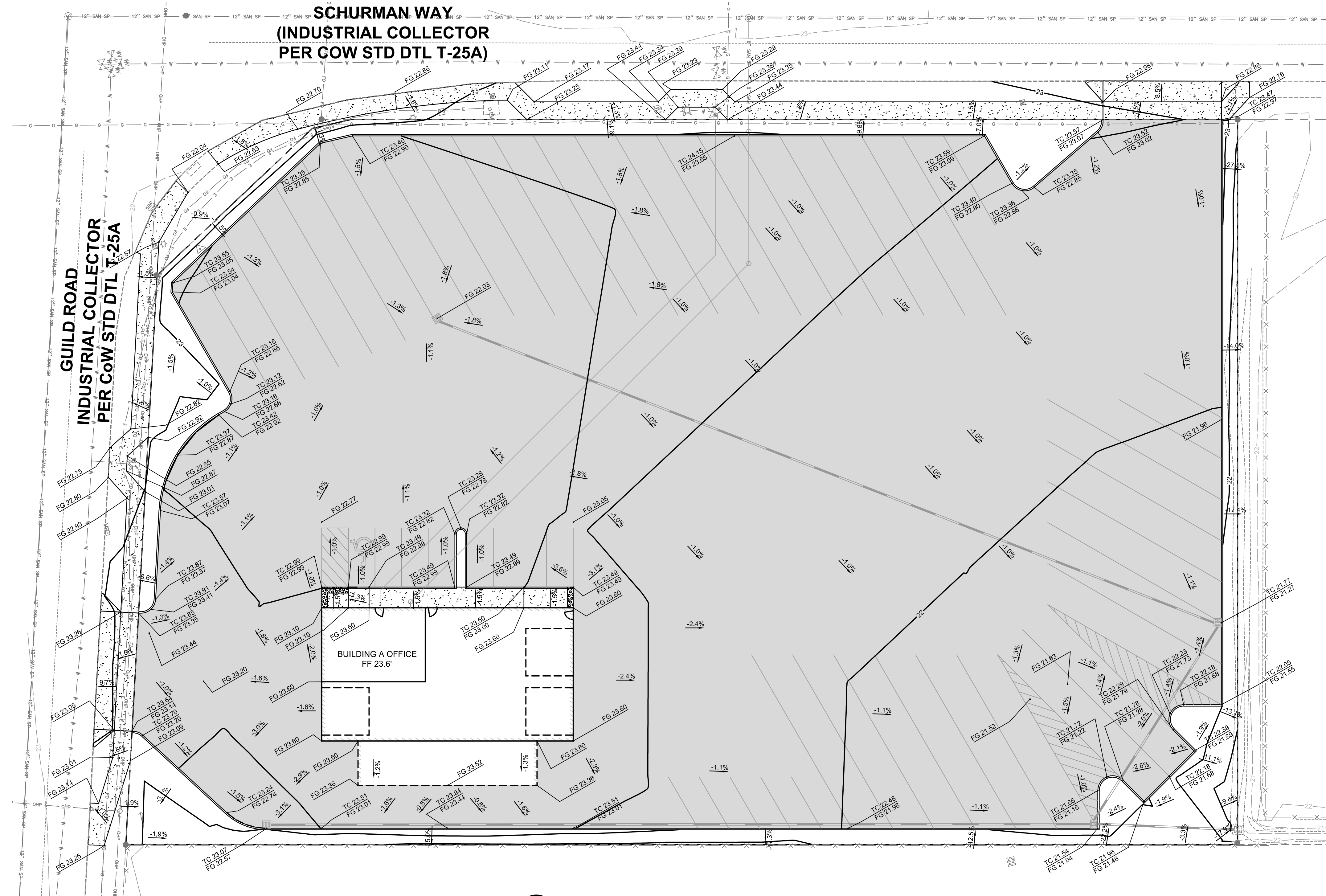
UNADJUSTED VOLUMES

CUT VOLUME = 710 CUBIC YARDS
 FILL VOLUME = 820 CUBIC YARDS

UNADJUSTED VOLUMES

Approximate Areas of CUT Greater Than 1'	
Approximate Areas of FILL Greater Than 1'	





Scale 1" = 20'



Hatching Legend	
	Proposed Asphalt Concrete
	Proposed Cement Concrete

Detailed Grading Plan For:

Schurman Way Site Plan

A Site Located In The City Of Woodland, Washington

Engineering - Surveying - Planning - 604 W. Evergreen Blvd., Vancouver, WA 98660 | PH (360) 944-6519 | Fax (360) 944-6539

PLS

ENGINEERING

Revisions

No.	Description
1	
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Project No. 3264

SCALE: H: 1" = 20'
V: 1" = 4'

DESIGNED BY: SWG

DRAFTED BY: SWG

REVIEWED BY: TGJ

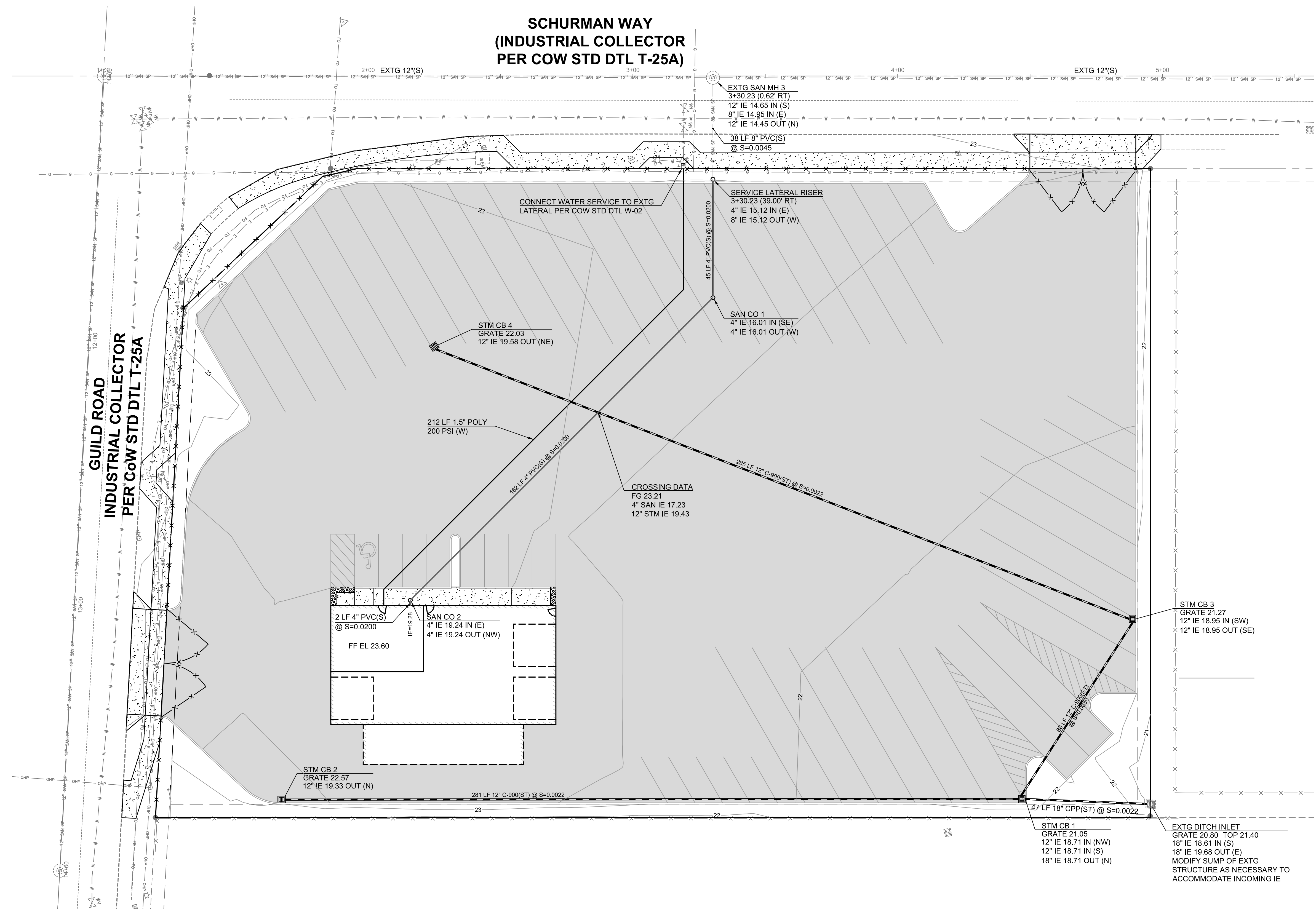
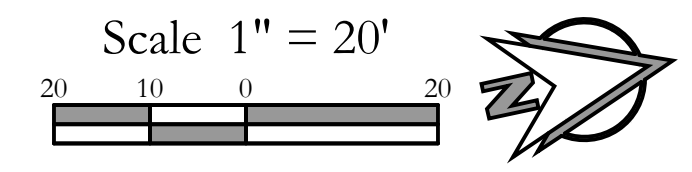
06

17



Know what's below.
Call before you dig.

**SCHURMAN WAY
(INDUSTRIAL COLLECTOR
PER COW STD DTL T-25A)**



Legend	
Proposed Asphalt Concrete	
Proposed Cement Concrete	

UNDERGROUND UTILITY NOTE:
Underground utility locations are estimated based on Asbuilts and standard construction practice. The design shall be adjusted to accommodate any variations from what is shown on these plans. If there are significant discrepancies the contractor shall notify the City and the Engineer.

Utility Plan For:

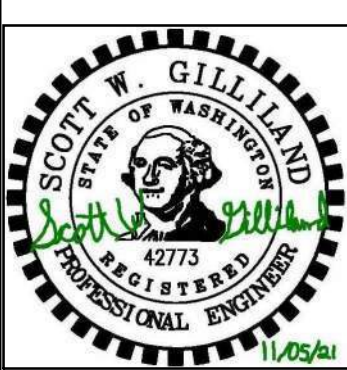
Schurman Way Site Plan
A Site Located In The City Of Woodland, Washington

Engineering - Surveying - Planning | 604 W. Evergreen Blvd., Vancouver, WA 98660 | PH (360) 944-6519 | Fax (360) 944-6539

PLS ENGINEERING

Revisions

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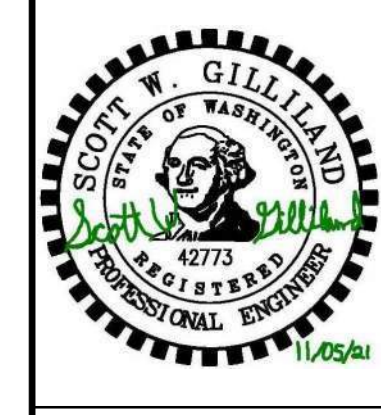
Project No. 3264
SCALE: H: 1" = 20'
V: N/A
DESIGNED BY: SWG
DRAFTED BY: SWG
REVIEWED BY: TGJ

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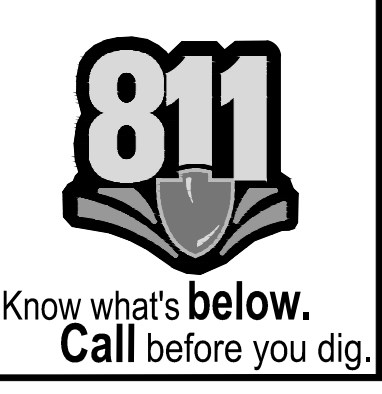
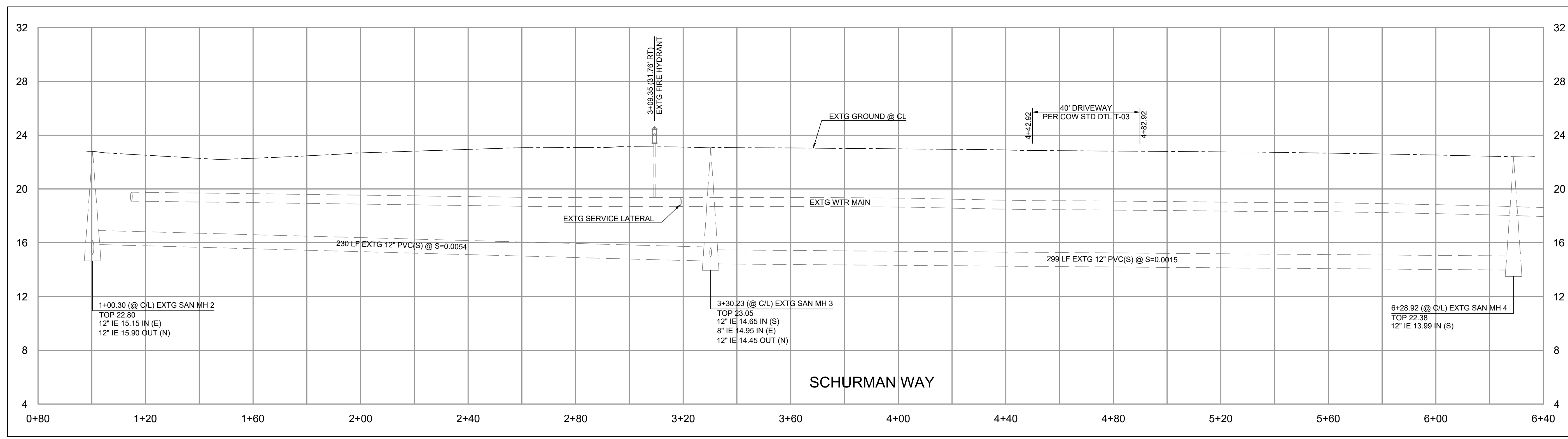
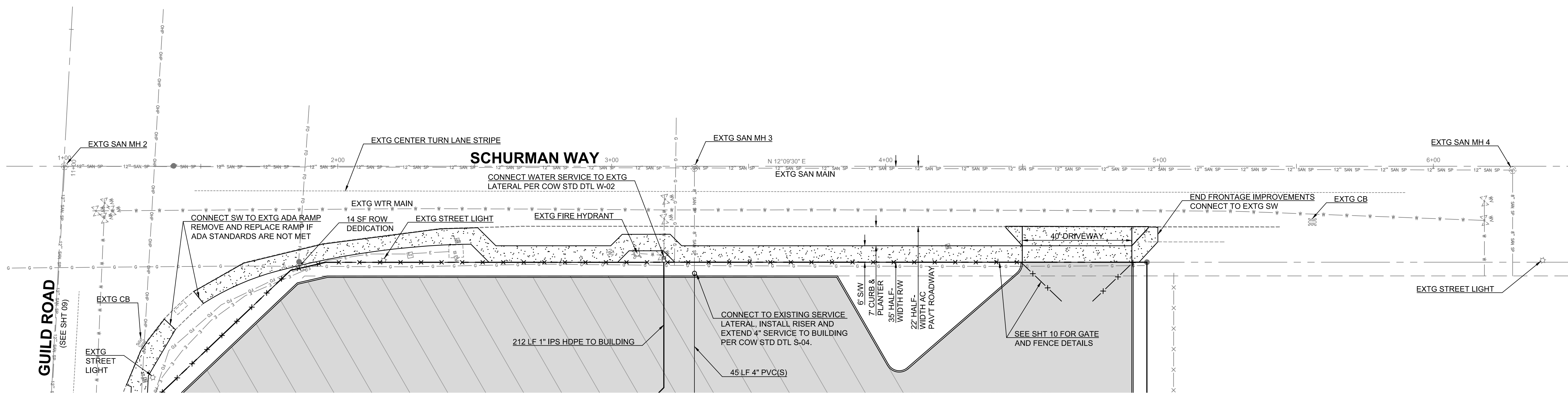


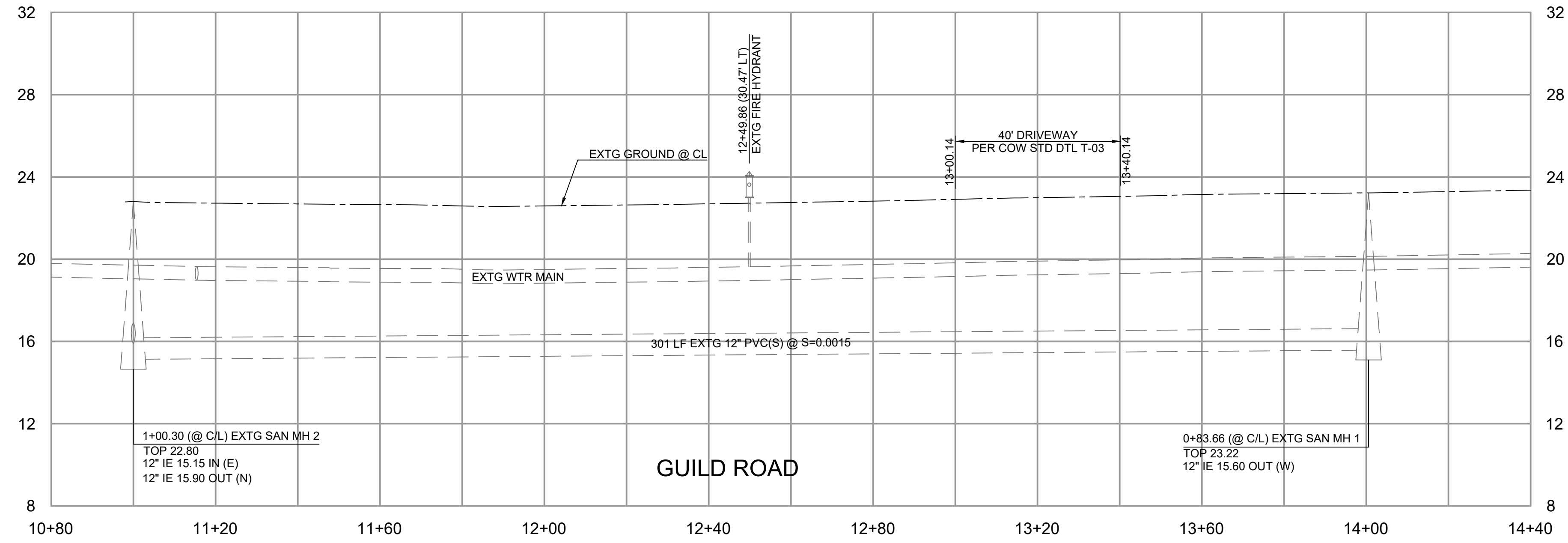
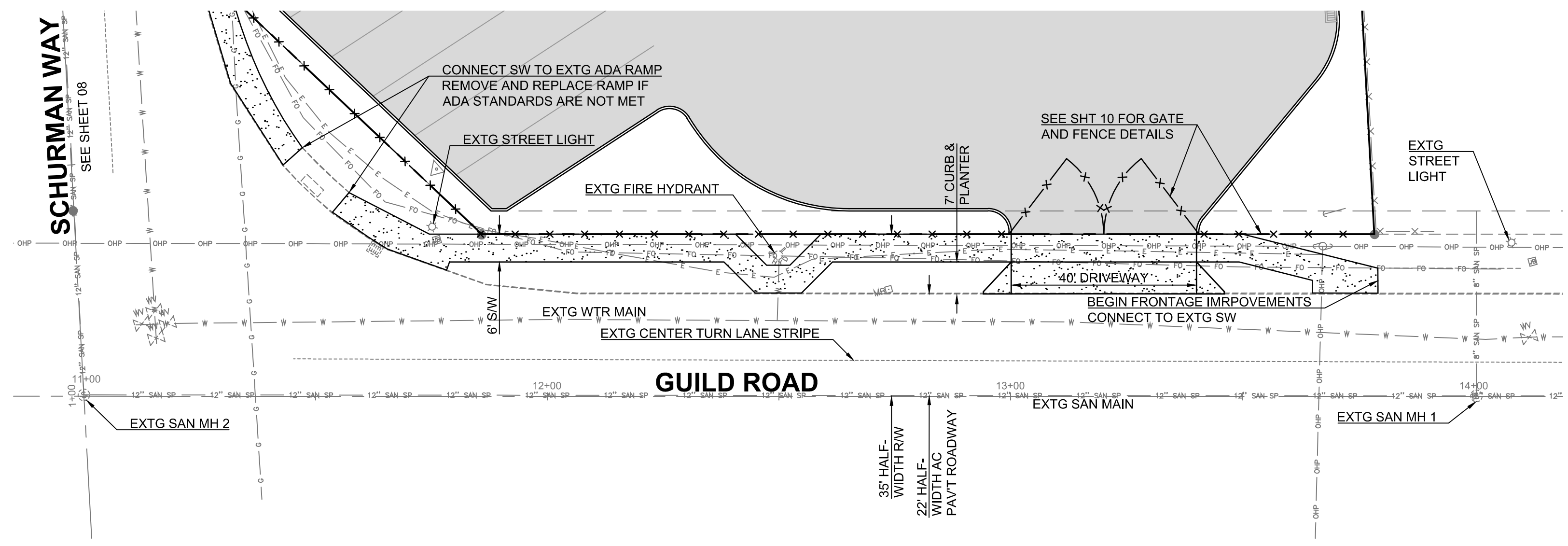
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Revisions					
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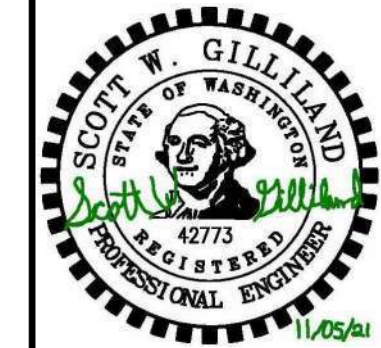


Project No. 3264
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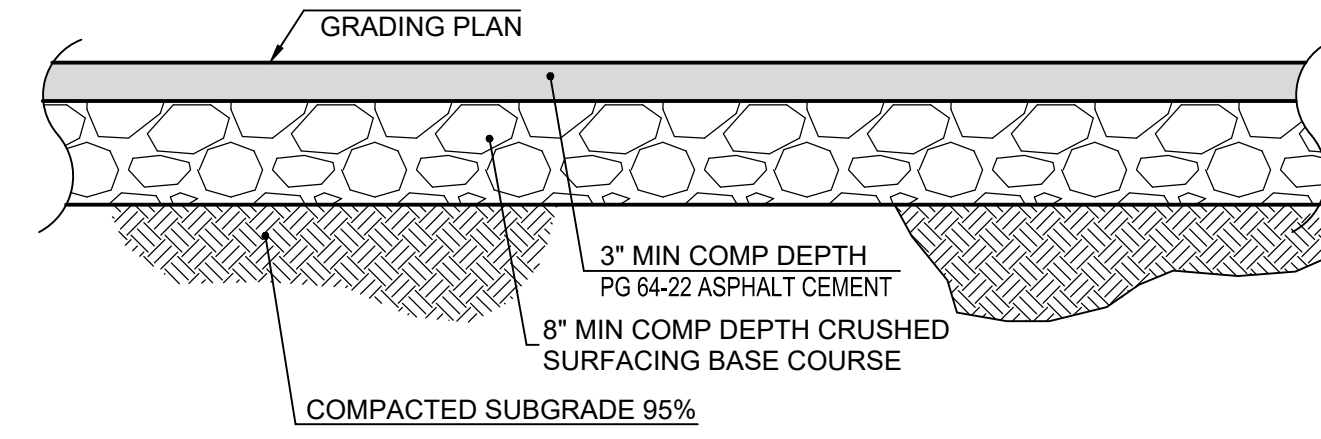


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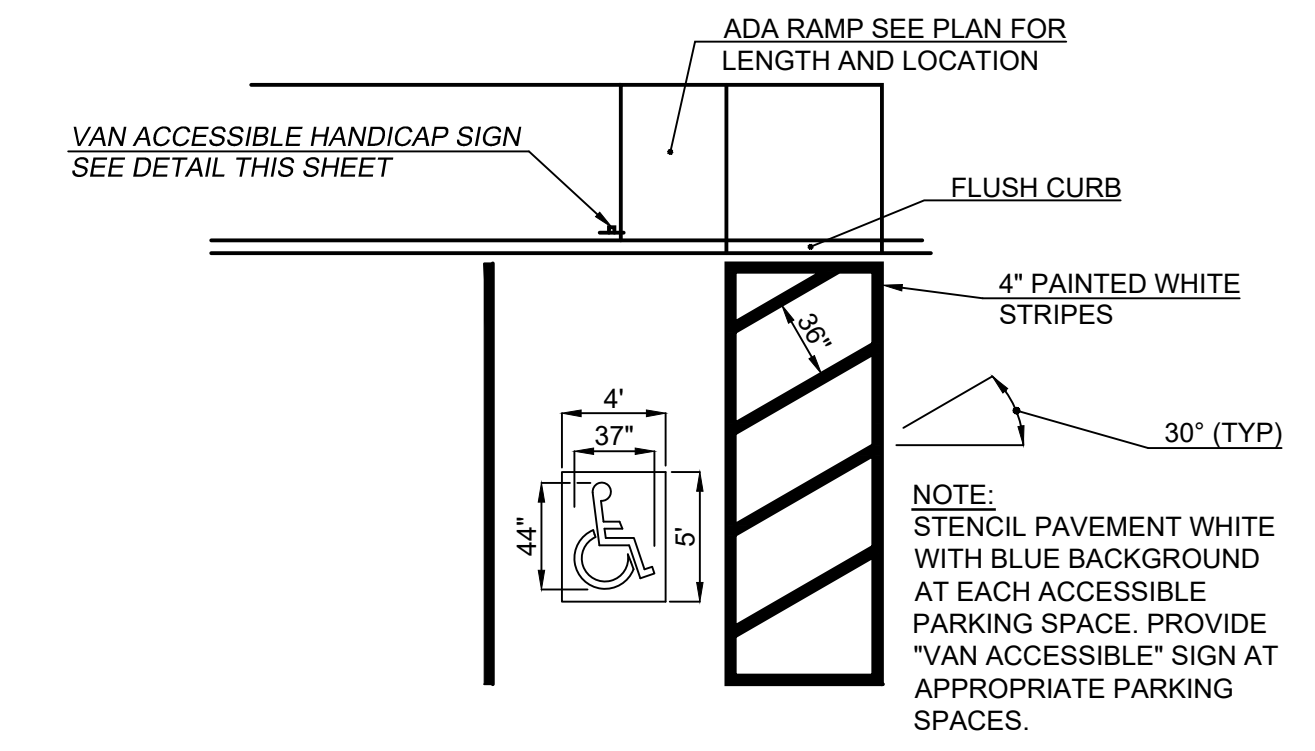


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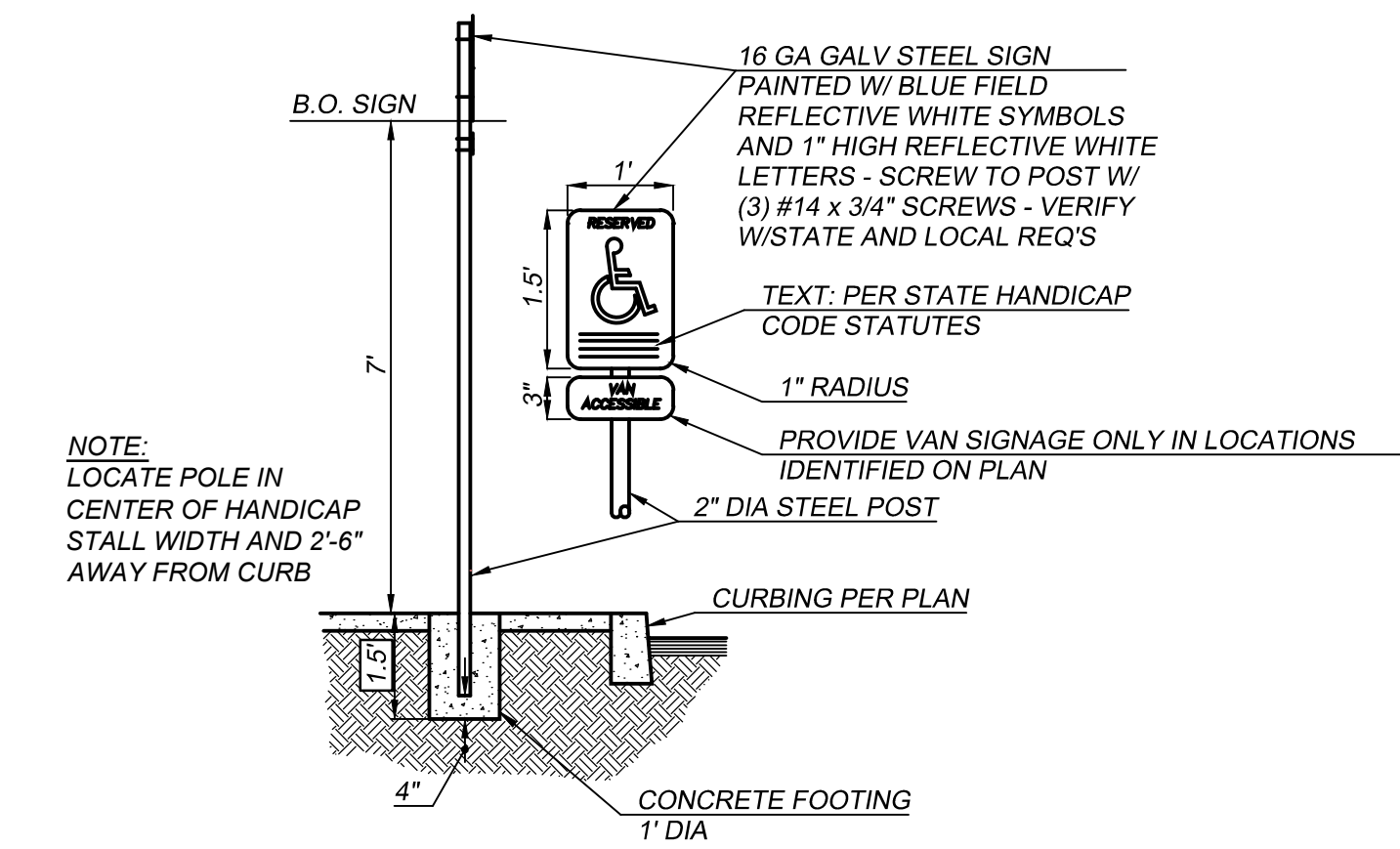




Typical Asphalt Section
NTS



Handicap Space
NTS



Handicap Sign
NTS

Miscellaneous Details For:

Schurman Way Site Plan

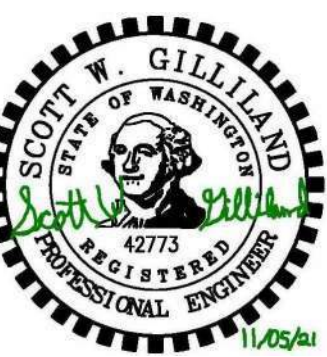
A Site Located In The City Of Woodland, Washington

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PLS ENGINEERING

Revisions

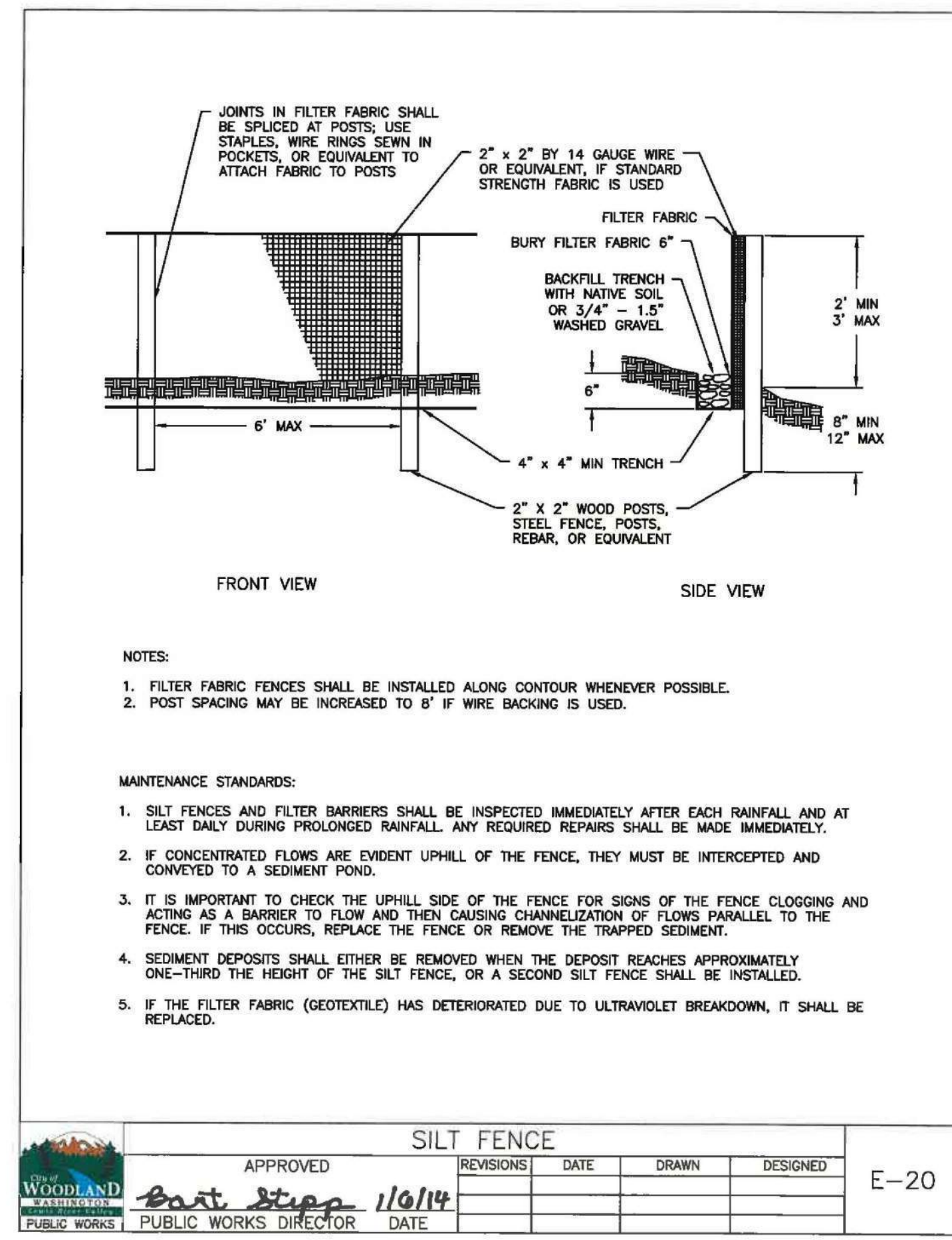
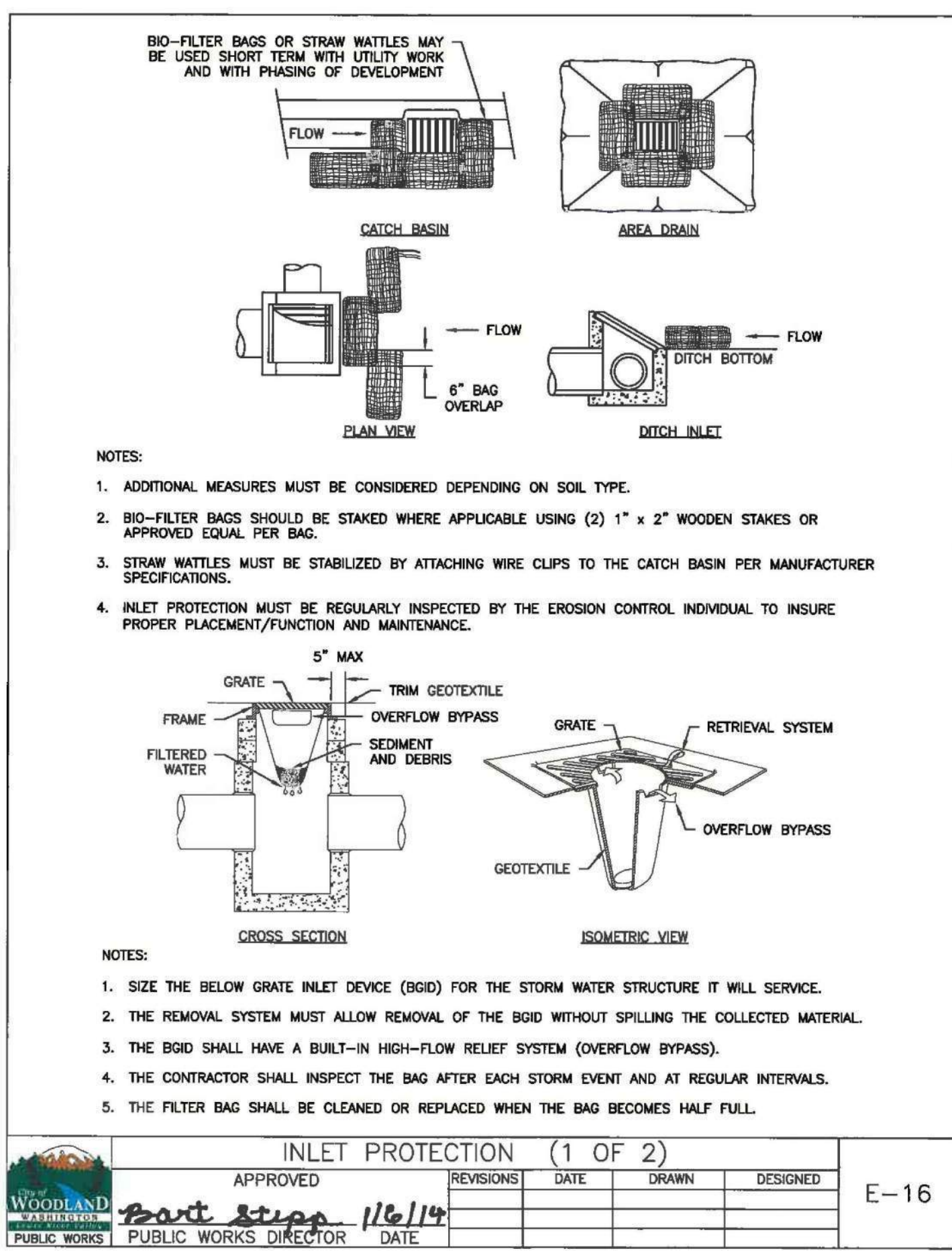
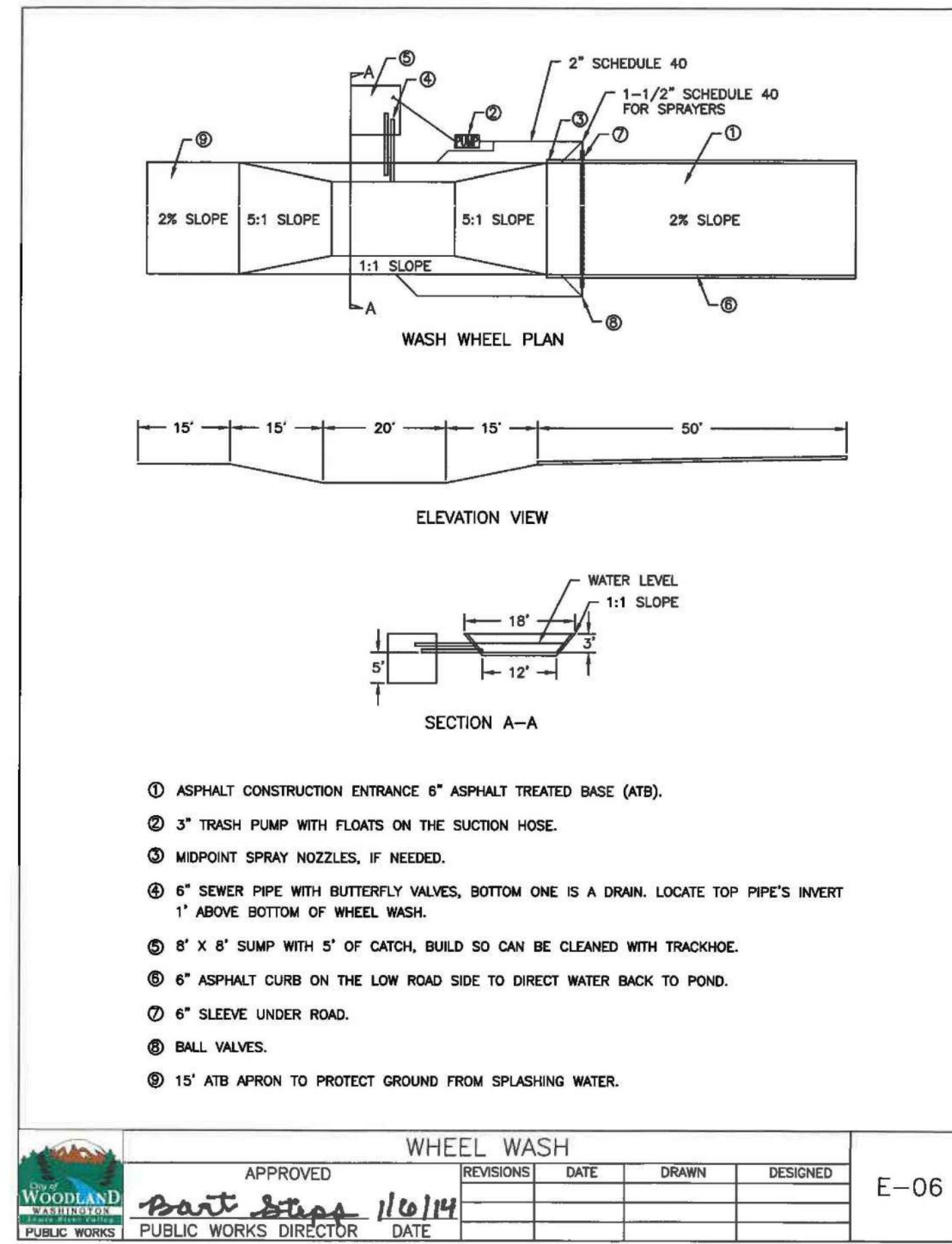
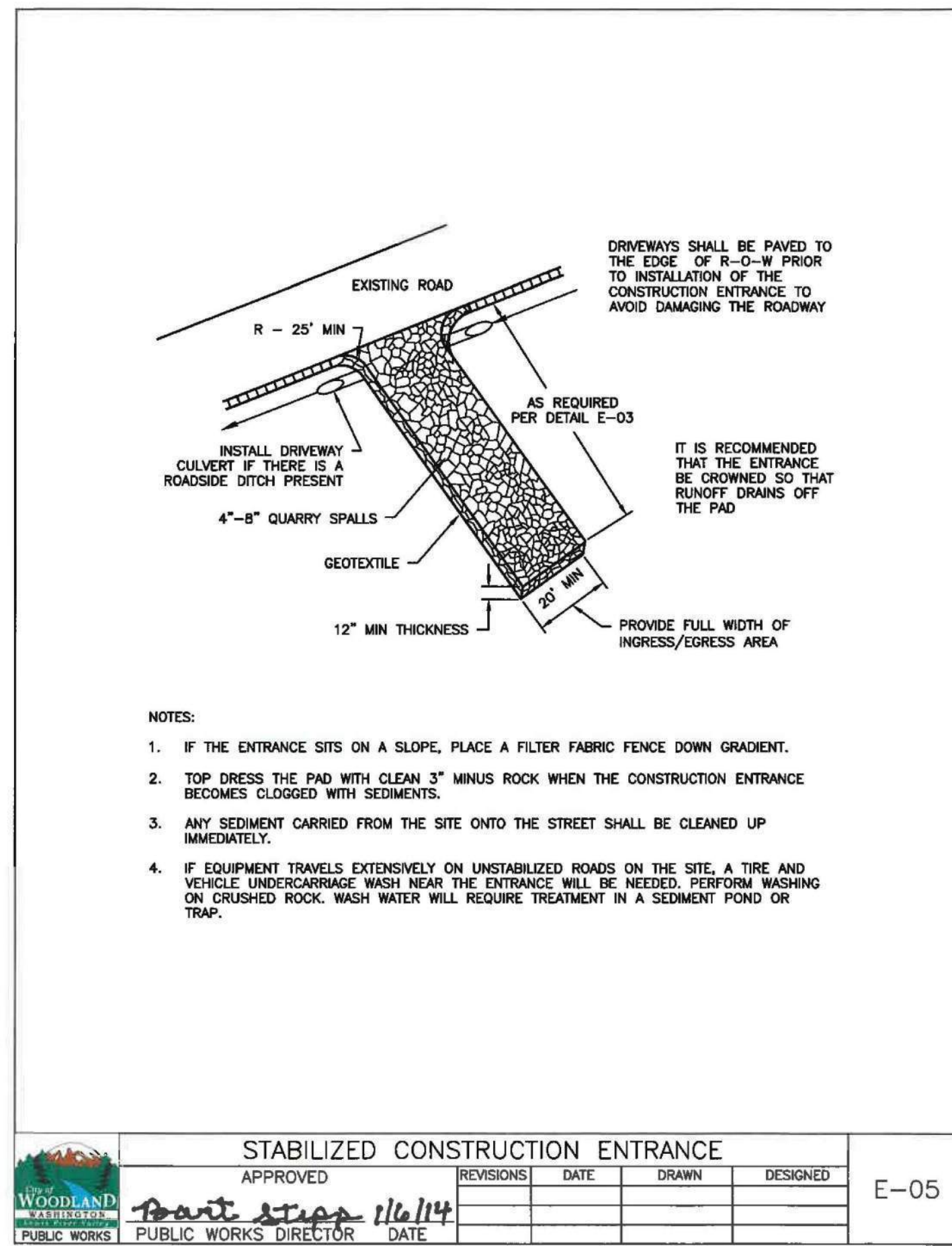
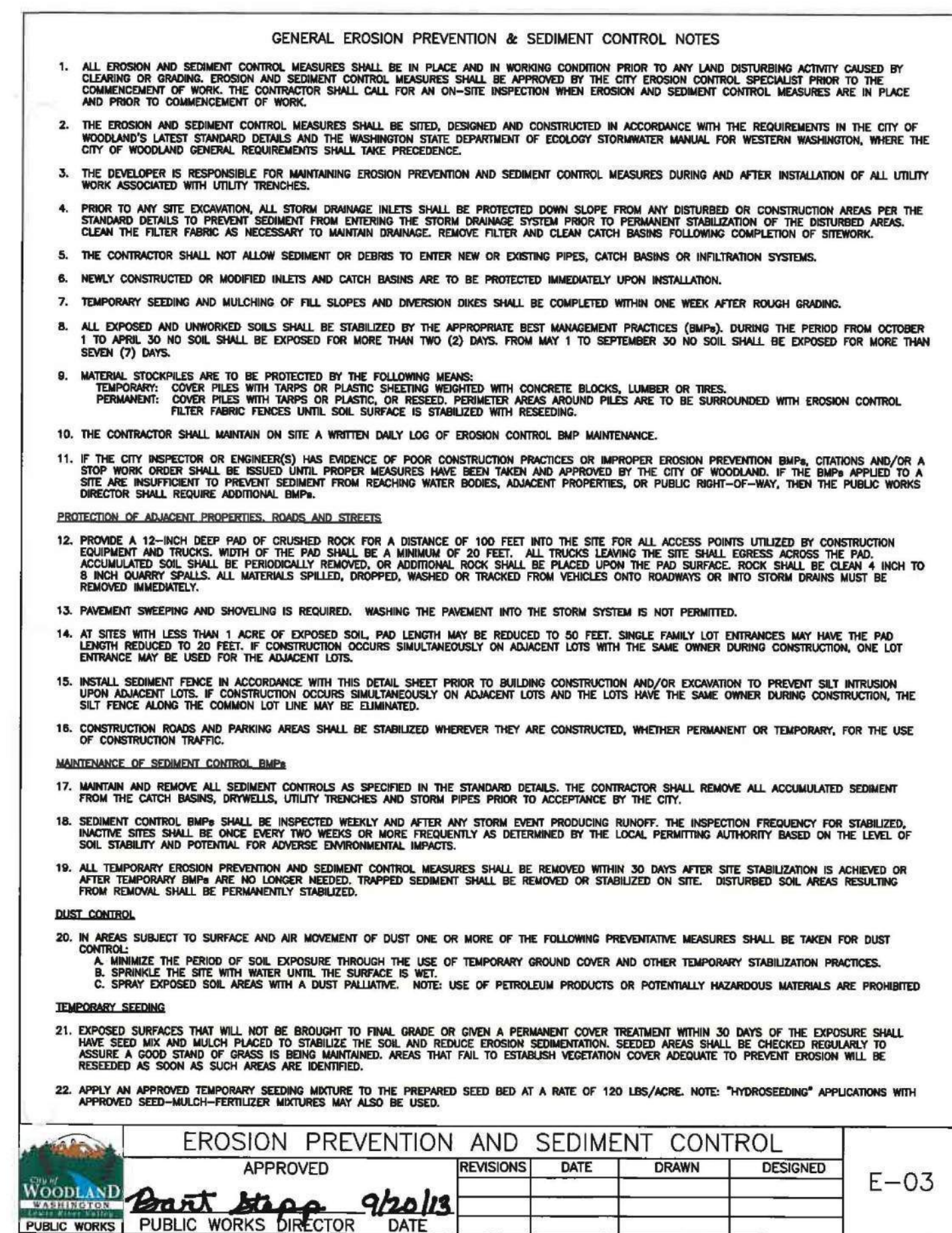
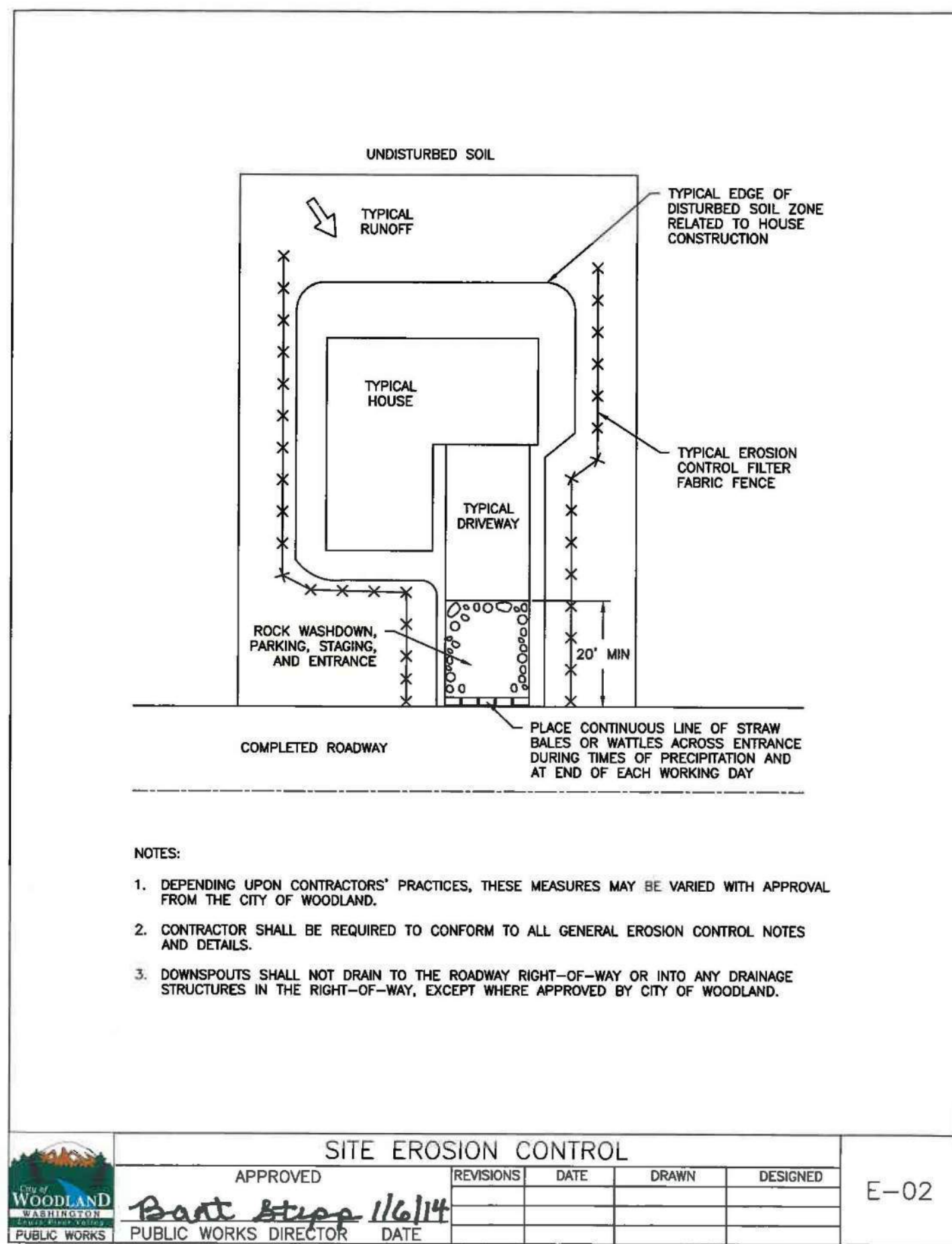
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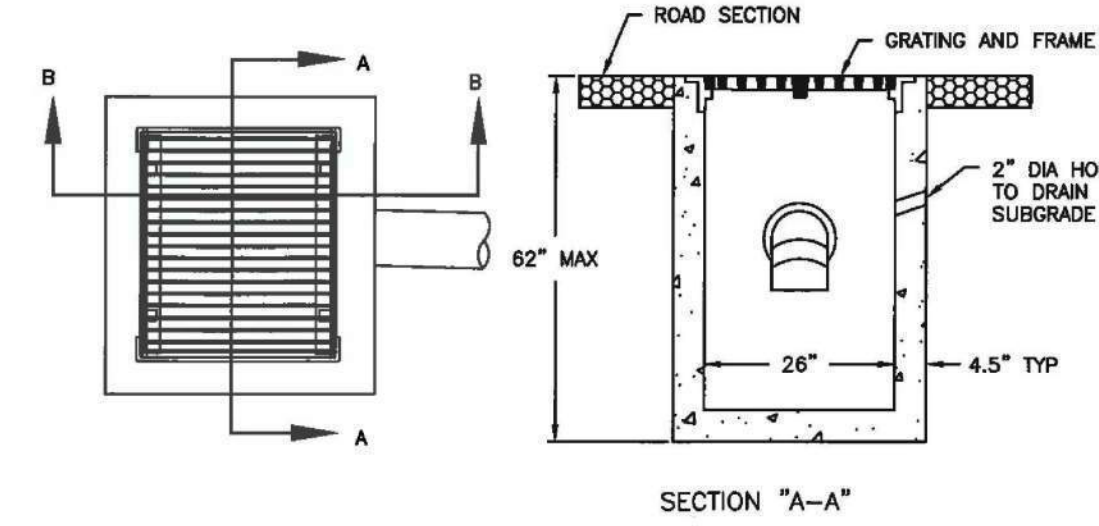


GENERAL NOTES FOR STORM SEWERS

- ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS IN THE CITY OF WOODLAND'S LATEST VERSION OF STANDARD DETAILS AND THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, WHERE THE CITY OF WOODLAND REQUIREMENTS SHALL TAKE PRECEDENCE. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE OWNER AS EITHER THE "STATE" OR "SECRETARY" OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "CITY".
- ALL STORM SEWER AND DRAINAGE SYSTEM CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF WOODLAND'S PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS OFFICE (360) 225-7999 AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION. THE CITY MAY REQUIRE THAT A PRECONSTRUCTION CONFERENCE BE HELD.
- THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MAY CONTACT THE NORTHWEST UTILITY NOTIFICATION CENTER AT 1-800-424-5555 IN LIEU OF CONTACTING INDIVIDUAL UTILITIES.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROCURE AND COMPLY WITH THE PROVISIONS OF ALL APPLICABLE PERMITS, EASEMENTS, LICENSES AND CERTIFICATES IN CONJUNCTION WITH THE CONSTRUCTION OF STORM SEWERS AND DRAINAGE SYSTEMS. COMPLIANCE SHALL BE AT ALL LEVELS: FEDERAL, STATE, AND CITY, RELATING TO THE PERFORMANCE OF THIS WORK. THE CONTRACTOR SHALL OBTAIN A STREET CUT PERMIT FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL OBTAIN AND SUBMIT AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO BEGINNING CONSTRUCTION. THE PLAN SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR.
- ALL EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND EROSION CONTROL DETAILS, PRIOR TO START OF ANY CONSTRUCTION OR LAND DISTURBING ACTIVITY.
- THE CONTRACTOR SHALL OBTAIN ALL OFFSITE CONSTRUCTION EASEMENTS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THAT ALL OFFSITE UTILITIES EASEMENTS HAVE BEEN OBTAINED BY THE OWNER PRIOR TO THE COMMENCEMENT OF ANY OFFSITE CONSTRUCTION.
- THE CONTRACTOR IS TO VERIFY AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. ITEMS TO VERIFY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- INVERT AND TOP ELEVATIONS OF EXISTING STORM SEWERS
- CENTERLINE AND TOP OF CURB ELEVATIONS
- WATER QUALITY DEVICES WILL BE INSTALLED AND FUNCTIONING PRIOR TO COMMENCING WITH INSTALLATION OF PAVEMENT FOR ALL AREAS DRAINING INTO THE WATER QUALITY SYSTEM. VEGETATION IN BIO-FILTRATION SWALE AND POND SYSTEMS SHALL BE ESTABLISHED AND MECHANICAL DEVICES AND FILTER MEDIA SHALL BE INSTALLED. SWALES AND FILTER STRIPS WILL BE SEEDS WITH AN APPROVED SEED MIX, PER THE WESTERN WASHINGTON MANUAL. TURF IS ALLOWED FOR VEGETATED FILTERS PROVIDED THE TURF AREA IS OVERSEEDS WITH THE EQUIVALENT GRASS SEED MIX.
- ALL CATCH BASINS SHALL BE STENCILED: "PROTECT STREAMS" OR "PROTECT GROUNDWATER."
- ROOF DOWNSPOUT RUNOFF MUST BE RETAINED ON EACH SPECIFIC SITE. DOWNSPOUTS SHALL NOT DRAIN TO THE STREET OR ANY ADJACENT PROPERTIES UNLESS SPECIFIC APPROVAL HAS BEEN OBTAINED.
- THE CONTRACTOR WILL PROVIDE A TELEVISION REPORT, TAPE, AND TABULAR AS-BUILT OF ALL PUBLIC WORK MAINS AND LATERALS PRIOR TO PAVING. THIS INFORMATION WILL BE SUBMITTED TO THE CITY INSPECTOR FOR REVIEW. APPROVAL AND ACCEPTANCE OF THE TV INSPECTION WILL BE BASED UPON MANUFACTURING AND INSTALLATION DEFECTS, AS WELL AS DEBRIS IN THE LINES. FINAL ACCEPTANCE AND CONSTRUCTION OF STORM SEWERS ARE SUBJECT TO INSPECTION AND TESTING IN ACCORDANCE WITH SECTIONS 1-05.11, 1-05.12, AND 7-04.3 OF THE STANDARD SPECIFICATIONS.

GENERAL NOTES FOR STORM SEWERS

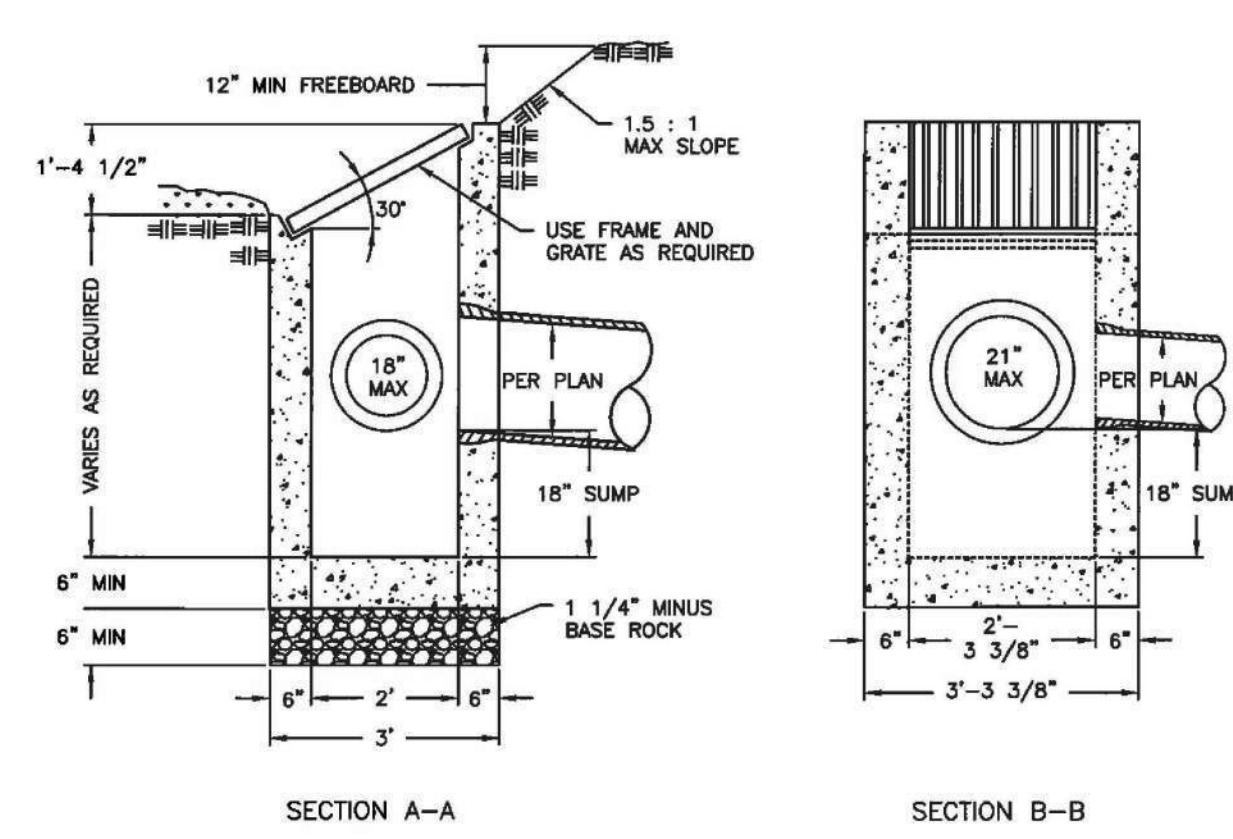
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<i>Best Step</i> 12/16/13					D-01
PUBLIC WORKS DIRECTOR	DATE				



- NOTES:**
- LATERALS WILL BE CONSTRUCTED TO ENTER THE BASIN PERPENDICULAR TO THE BASIN WALL. THE LATERAL WILL ENTER ONLY AT THE FRONT OR SIDE OF THE BASIN WITH NO LATERALS ALLOWED TO ENTER THE CATCH BASIN AT THE CORNERS. IF NEEDED, A BEND MAY BE USED AS THE FIRST SECTION OF PIPE OUTSIDE THE BASIN WALL. THE MAXIMUM BEND ALLOWED IS 45 DEGREES.
 - ALL REINFORCED STEEL SHALL HAVE A 1-1/2" CLEAR COVER UNLESS OTHERWISE NOTED, AND SHALL BE GRADE 40 OR GRADE 60 (ASTM A-615).
 - ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUDED.
 - THE METAL FRAME AND GRATE SHALL BE SET TO A SLOPE TO CONFORM TO THE PARTICULAR DRAINAGE AREA (SEE DETAIL D-09).
 - ELBOW SECTION SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES USING A BELL AND SPIGOT JOINT.
 - ALL PRECAST OR CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.

STANDARD CATCH BASIN

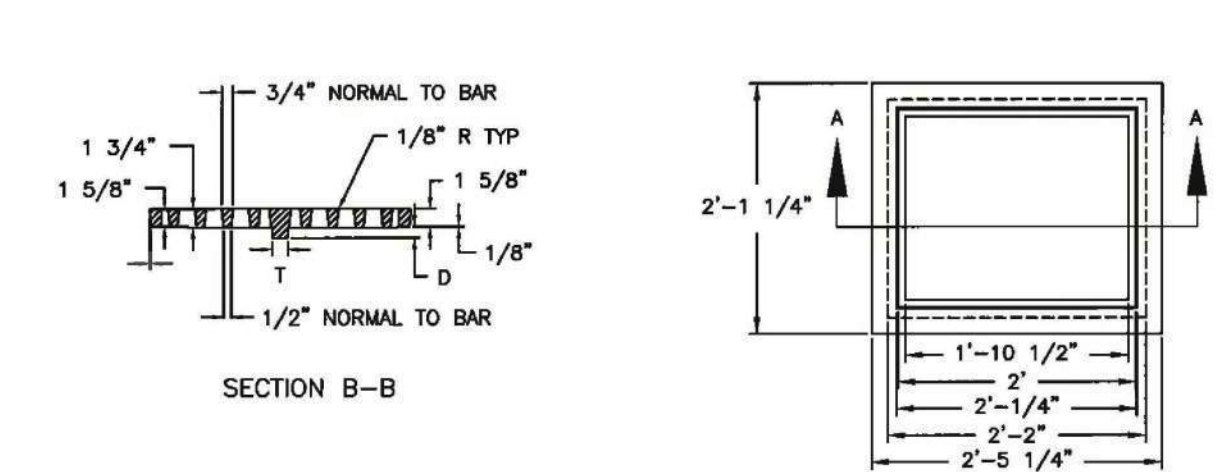
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PUBLIC WORKS DIRECTOR	DATE				



- NOTES:**
- ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
 - ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 4,000 P.S.I. AND 2" TO 4" SLUMP.
 - STEEL TO BE NEW STRUCTURAL STEEL, ASTM A-7, A-36, OR A-373.
 - USE SLANTED OR BOX FRAME AND GRATE AS REQUIRED BY CITY.

SLOPED FIELD INLET

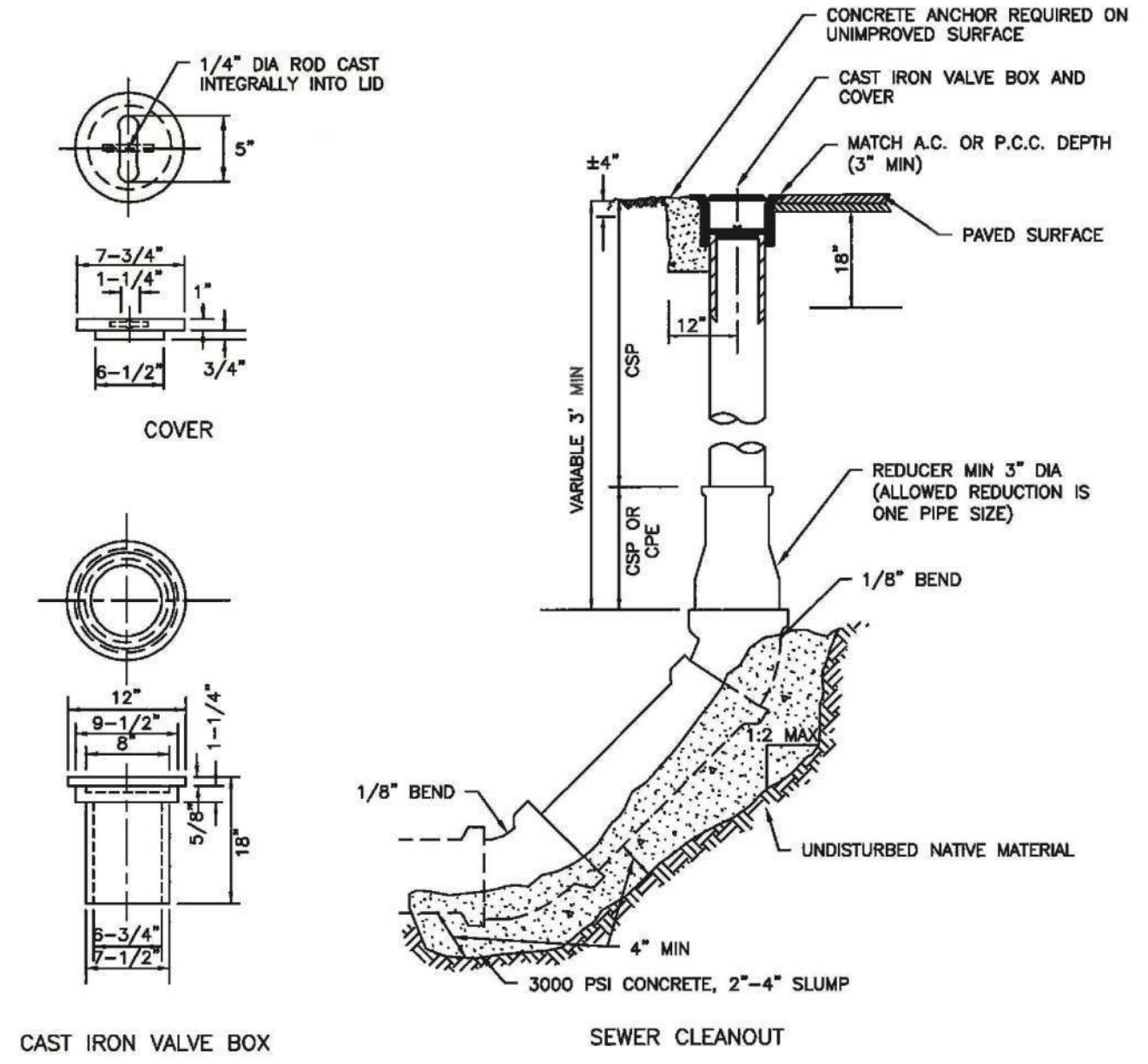
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PUBLIC WORKS DIRECTOR	DATE				



- NOTES:**
- WELDING NOT PERMITTED.
 - USE VANE GRATE WHERE LONGITUDINAL SLOPE EXCEEDS 4%.
 - SEATING OF GRATE SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING:
- ALTERNATE A SHALL BE 8 PADS 1-1/2" x 3/4" x 1/8" INTEGRALLY CAST WITH THE SURFACE OUTSIDE A 17" CIRCLE, BOTTOM ONLY.
- ALTERNATE B SHALL BE A MACHINED SURFACE OUTSIDE A 17" CIRCLE, BOTTOM ONLY.
- | DIMENSIONS | | | |
|------------|--------|-----|--------|
| W1 & W2 | T | R | D |
| 1" MIN | 1 3/4" | 26" | 1 5/8" |
| 1 3/4" MAX | | | |
| 1" MIN | 1 1/2" | 21" | 2 3/4" |
| 1 3/4" MAX | | | |
- * 1 5/8" (+0", -1/16")

HERRINGBONE GRATE

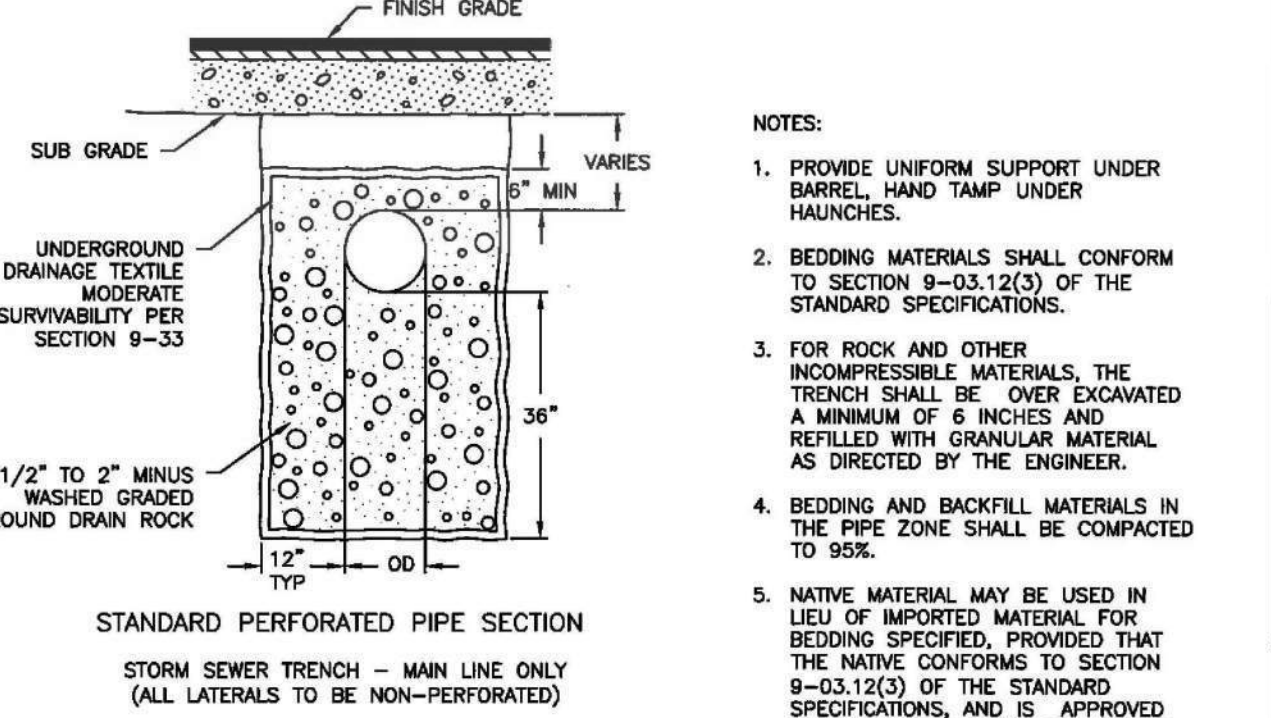
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<i>Best Step</i> 12/16/13					D-08
PUBLIC WORKS DIRECTOR	DATE				



- NOTES:**
- VALVE BOX SHALL BE FORT VANCOUVER PATTERN NO. 910 CAST IRON OR APPROVED EQUAL.
 - MATERIAL TO BE GRAY CAST IRON CONFORMING TO ASTM A-46 CLASS 30.
 - LID TO HAVE "S" CAST IN OR STAMPED ON. "W" CASTING NOT ALLOWED.
 - TOLERANCE = 1/8".
 - SEWER CLEANOUT TO BE 8" DIAMETER.

STORM SEWER CLEANOUT

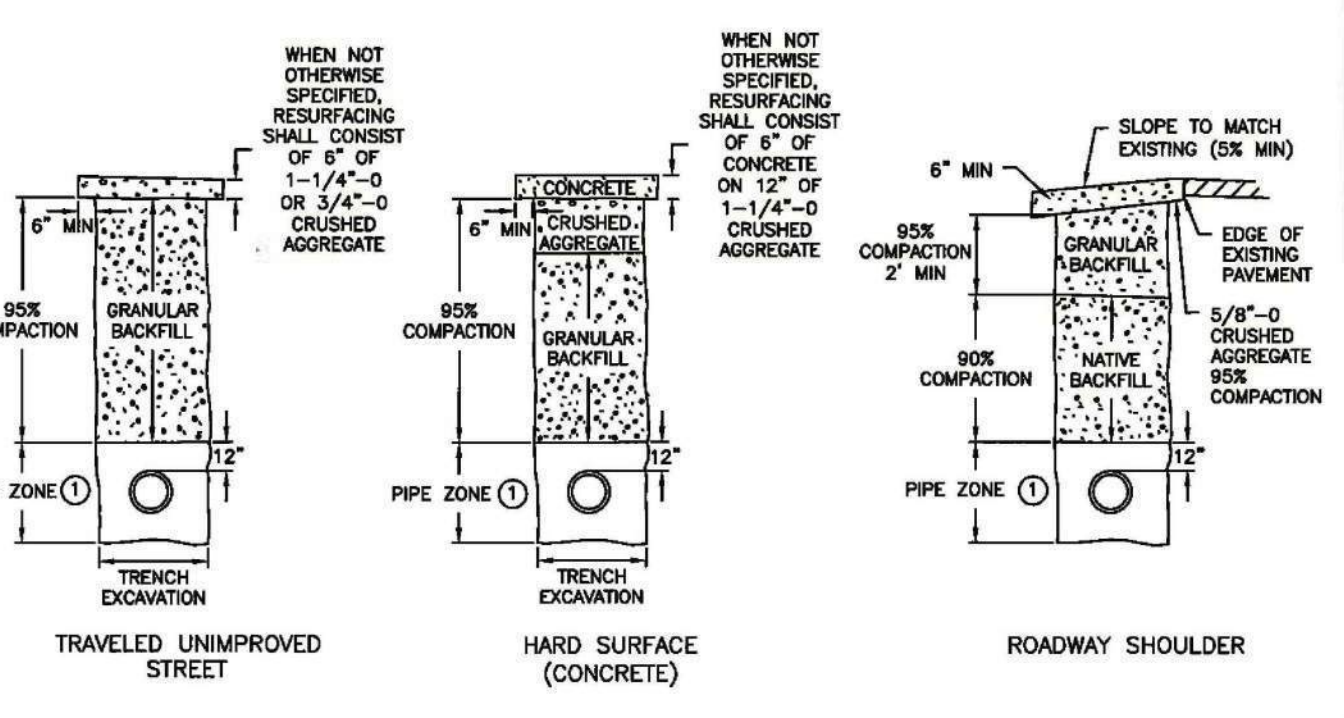
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PUBLIC WORKS DIRECTOR	DATE				



- NOTES:**
- PROVIDE UNIFORM SUPPORT UNDER BARREL, HAND TAMP UNDER HAUNCHES.
 - BEDDING MATERIALS SHALL CONFORM TO SECTION 9-03.12(3) OF THE STANDARD SPECIFICATIONS.
 - FOR ROCK AND OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVER EXCAVATED A MINIMUM OF 6 INCHES AND REFILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER.
 - BEDDING AND BACKFILL MATERIALS IN THE PIPE ZONE SHALL BE COMPACTED TO 95%.
 - NATIVE MATERIAL MAY BE USED IN LIEU OF IMPORTED MATERIAL FOR BEDDING SPECIFIED, PROVIDED THAT THE NATIVE CONFORMS TO SECTION 9-03.12(3) OF THE STANDARD SPECIFICATIONS, AND IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE MATERIAL TO THE ENGINEER AT LEAST 72 HOURS PRIOR TO USE. THE ENGINEER MAY APPROVE, REJECT OR REQUIRE LAB TESTING OF THE MATERIAL.
 - TRENCH WIDTH SHALL NOT EXCEED 1-1/2 TIMES THE ID OF THE PIPE, PLUS 18 INCHES AT THE TOP OF THE PIPE ZONE.
 - ALL JOINTS SHALL BE AIR-TIGHT FOR NON-PERFORATED PIPE. THE ENGINEER MAY REQUIRE TESTING OF ANY OR ALL JOINTS AND CONNECTIONS.
- | DEPTH OF BEDDING MATERIAL BELOW PIPE | |
|--------------------------------------|---------|
| OD | d (MIN) |
| 27" & SMALLER | 4" |
| LARGER THAN 27" | 6" |

PIPE BEDDING

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Best Step</i> 12/16/13					D-15
PUBLIC WORKS DIRECTOR	DATE				



- NOTES:**
- FOR PIPE ZONE BEDDING, BACKFILL AND COMPACTON REQUIREMENTS, SEE STANDARD DETAIL D-15.
 - COMPACTON PERCENTAGES REFER TO RELATIVE DRY DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM D 698).
 - CONTRACTOR MAY USE UP TO 2-1/2" OF 5/8" OR 3/4" CRUSHED AGGREGATE IN LIEU OF 1-1/4" BASE ROCK UNDER SURFACING FOR LEVELING COURSE.
 - ALL EXISTING PAVED SURFACES SHALL BE SAW CUT A MINIMUM OF 6" OUTSIDE OF EDGE OF TRENCH TO PROVIDE A NEAT STRAIGHT EDGE.
 - THE EDGES OF ALL EXISTING ASPHALT SURFACES SHALL BE CLEANED AND A TACK COAT SHALL BE APPLIED PER STD. SECTION 8-04.3(5). ALL JOINTS SHALL BE SEALED WITH AR-4000 AND SANDED.
 - ALL BACKFILL SHALL BE MECHANICALLY COMPACTED IN LIFTS WHICH DO NOT EXCEED RATED CAPABILITY OF EQUIPMENT USED, BUT IN NO CASE EXCEED 12" UNLESS OTHERWISE SPECIFIED.
 - GRANULAR BACKFILL SHALL MEET REQUIREMENTS OF SECTION 9-30.7(3) UNLESS OTHERWISE SPECIFIED.

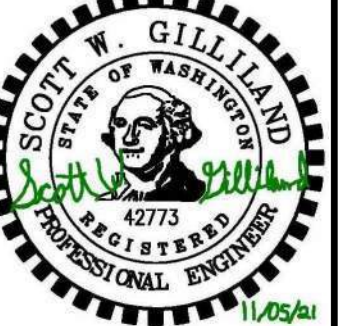
TRENCH BACKFILL

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<i>Best Step</i> 12/16/13					D-16
PUBLIC WORKS DIRECTOR	DATE				

City of Woodland Drainage Details For:

Schurman Way Site Plan
A Site Located In The City Of Woodland, Washington

Revisions	1	2	3	4	5	6



Project No.	3264
SCALE:	H: N/A V: N/A
DESIGNED BY:	SWG
DRAFTED BY:	SWG
REVIEWED BY:	TGJ



CONSTRUCTION SPECIFICATIONS FOR SANITARY SEWER

ALL MATERIALS AND INSTALLATION OF SANITARY SEWERS SHALL BE IN CONFORMANCE WITH THE MOST CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, HERINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS", PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, EXCEPT AS NOTED HEREIN OR ON THE STANDARD PLANS. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE OWNER AS EITHER THE "STATE" OR "SECRETARY" OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "CITY".

ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE CITY AT (360) 225-7999 AT LEAST 48-HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION CONFERENCE MAY BE REQUIRED.

THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MUST CONTACT THE UNDERGROUND UTILITY NOTIFICATION CENTER "CALL BEFORE YOU DIG" AT (800) 424-5555 OR "811".

FINAL ACCEPTANCE OF SANITARY SEWERS ARE SUBJECT TO SECTIONS 1-05.11, 1-05.12, 7-17.3(2)(E), 7-17.3(2)(F), 7-17.3(2)(G) AND 7-17.3(2)(H) OF THE APWA STANDARD SPECIFICATIONS. TELEVISION INSPECTION SHALL INCLUDE VIDEO OF ALL MANHOLES IN ADDITION TO THE PIPE. THE CONTRACTOR SHALL WARRANTY ALL WORK DONE UNDER CITY CONTRACT FOR A PERIOD OF TWO (2) YEARS AS PER OF THE CITY OF WOODLAND GENERAL PROVISIONS FOR MUNICIPAL CONSTRUCTION.

LOCAL VARIATIONS IN SLOPE (I.E. "BELLETS") MUST BE NO MORE THAN 1/2" MAXIMUM. VARIATIONS IN EXCESS OF THESE TOLERANCES MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CITY.

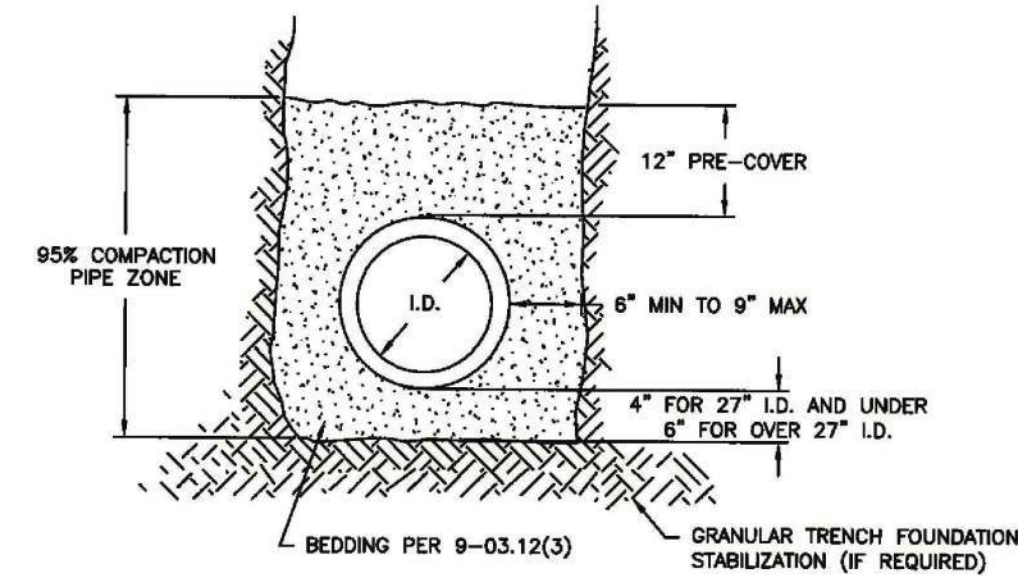
ALL PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING:
 A. POLYVINYL CHLORIDE (PVC) SEWER PIPE 15" DIAMETER OR LESS SHALL CONFORM TO ASTM D3034, SDR 35. IT SHALL HAVE A MINIMUM PIPE STIFFNESS OF 48 PSL. PVC PIPE 18" DIAMETER SHALL CONFORM TO ASTM F 679. ALL PVC PIPE SHALL HAVE AN INTEGRAL BELL GASKETED JOINT WITH ELASTOMERIC GASKET AND SHALL BE FINISHED IN 12-1/2 FOOT LAYING LENGTHS.
 B. DUCTILE IRON (DI) PIPE SHALL CONFORM TO ANSI A21.51 OR AWWA C151, WITH PUSH-ON JOINTS, CLASS 52, UNLESS OTHERWISE NOTED.

INSTALLATION OF PIPE AND MANHOLES SHALL CONFORM TO THE FOLLOWING:
 A. PIPE SHALL BE INSTALLED IN CONFORMANCE WITH PIPE DETAIL S-02 AND TRENCHING DETAIL S-03.
 B. MANHOLES SHALL CONFORM WITH STANDARD DETAILS S-07 THROUGH S-14.

MANHOLES, CLEANOUTS, SERVICE LATERAL CONNECTIONS, TRENCH EXCAVATION, PIPE BEDDING AND STREET RESTORATION, AND APPURTENANCES SHALL CONFORM TO THE DETAILS SHOWN ON THE STANDARD PLANS. ALL OTHER CONSTRUCTION SHALL CONFORM TO THE STANDARD DETAILS CONTAINED IN THE STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.

THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS ISSUED OR EASEMENTS GRANTED TO THE CITY IN CONJUNCTION WITH THE CONSTRUCTION OF SANITARY SEWERS. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

THE CONTRACTOR SHALL SUBMIT AN APPROVED TRAFFIC CONTROL PLAN. APPROVAL SHALL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.

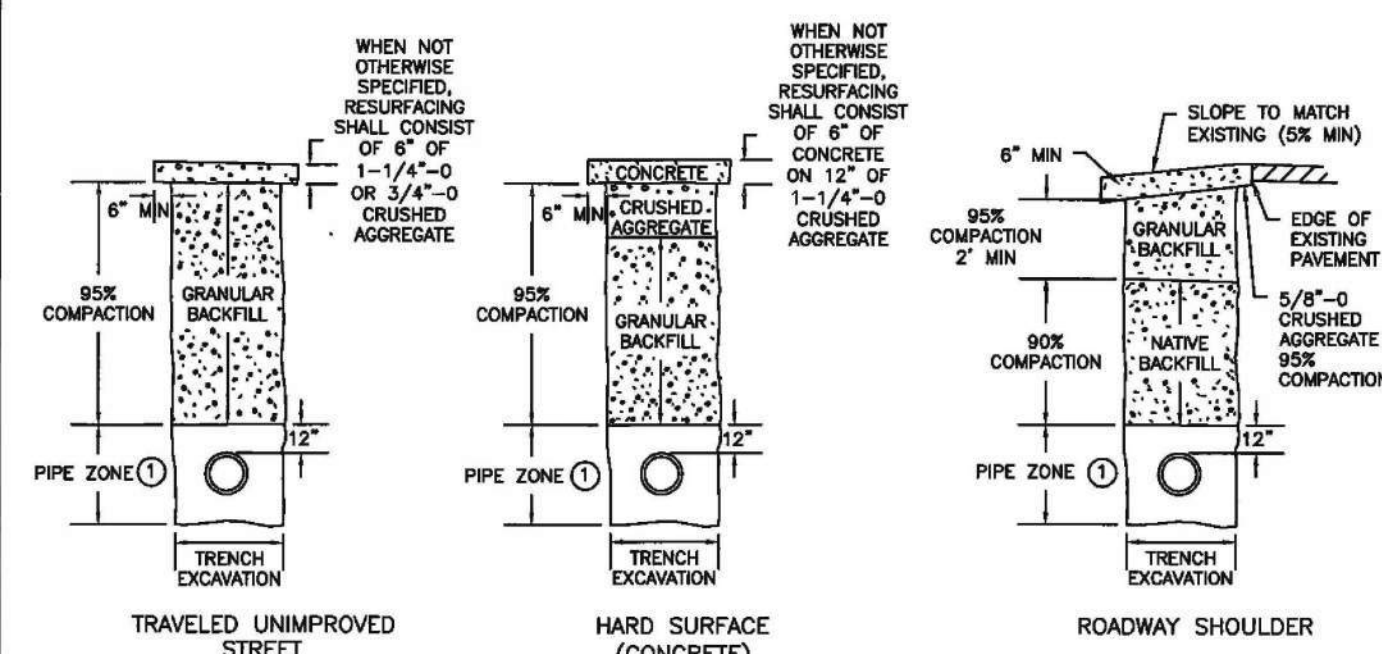


- NOTES:
- WHERE DIRECTED BY THE ENGINEER GRANULAR TRENCH FOUNDATION STABILIZATION SHALL BE PLACED PRIOR TO PLACEMENT OF THE BEDDING. SIZE AND DEPTH ARE DEPENDENT ON SOIL CONDITIONS.
 - BEDDING AND BACKFILL MATERIALS IN THE PIPE ZONE SHALL BE COMPACTED AS SPECIFIED PRIOR TO BACKFILLING THE REMAINDER OF THE TRENCH.
 - FOR ROCK AND OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVER-EXCAVATED A MINIMUM OF 6" AND REFILLED WITH GRANULAR MATERIALS AS DIRECTED BY THE ENGINEER.
 - BACKFILL AND COMPACTON ABOVE THE PIPE ZONE SHALL BE AS SHOWN IN TRENCHING DETAIL S-03.
 - PVC PIPE INSTALLATION SHALL CONFORM TO UNIBELL PLASTIC PIPE ASSOCIATION STANDARD SPEC. UNI-B-5 (LATEST EDITION) EXCEPT AS NOTED.
 - FINAL INSTALLATION TO BE TESTED PER SECTION 7-17.3(2)(G) OF THE STANDARD SPECIFICATIONS.
 - ALTERNATE PRE-COVER MATERIALS ARE ALLOWABLE FROM PIPE CENTERLINE TO ONE FOOT ABOVE THE TOP OF PIPE, ALTERNATE PRE-COVER MATERIALS MUST BE PRE-APPROVED BY THE INSPECTOR AND MAY BE SAND, CRUSHER SCREENINGS, GRAVEL, OR OTHER CLEAN GRANULAR MATERIAL CONTAINING NO ROCK LARGER THAN 1-1/4" IN LENGTH.
 - APPROVAL FOR ALTERNATE MATERIALS WILL BE GRANTED UPON CONFIRMATION BY TEST OF ITS COMPLIANCE WITH THESE REQUIREMENTS. SUBMIT 50 LB SAMPLE FOR TESTING TO THE CITY INSPECTOR AND OBTAIN MATERIAL PRIOR TO STARTING PIPE INSTALLATION WORK. THE TEST REQUIRES A MINIMUM OF FIVE BUSINESS DAYS TO COMPLETE.
 - TRENCH WIDTH SHALL NOT EXCEED ONE AND ONE-HALF THE INSIDE DIAMETER OF THE PIPE PLUS 18" AT THE TOP OF THE PIPE ZONE. ANY SUBSIDENCE OF SURROUNDING PAVEMENT DUE TO TRENCHING SHALL BE EXCAVATED BEYOND ORIGINAL PAVEMENT OR TRENCH LIMITS AND REPAIRED TO SATISFACTION OF THE CITY OF WOODLAND.
 - NATIVE MATERIAL MAY BE USED, OUTSIDE OF THE ROAD PRISM FOR DUCTILE IRON IN LIEU OF IMPORTED MATERIAL FOR BEDDING SPECIFIED, PROVIDED THAT THE NATIVE MATERIAL CONFORMS TO SECTION 9-03.15 OF THE STANDARD SPECIFICATIONS, AND AS APPROVED BY THE CITY OF WOODLAND. THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE NATIVE MATERIAL TO THE CITY OF WOODLAND AT LEAST 72-HOURS PRIOR TO USE. THE CITY MAY APPROVE, REJECT, OR REQUIRE LABORATORY TESTING OF THE MATERIAL.

PIPE BEDDING

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stipp</i>		3/4/14		

WOODLAND PUBLIC WORKS PUBLIC WORKS DIRECTOR DATE

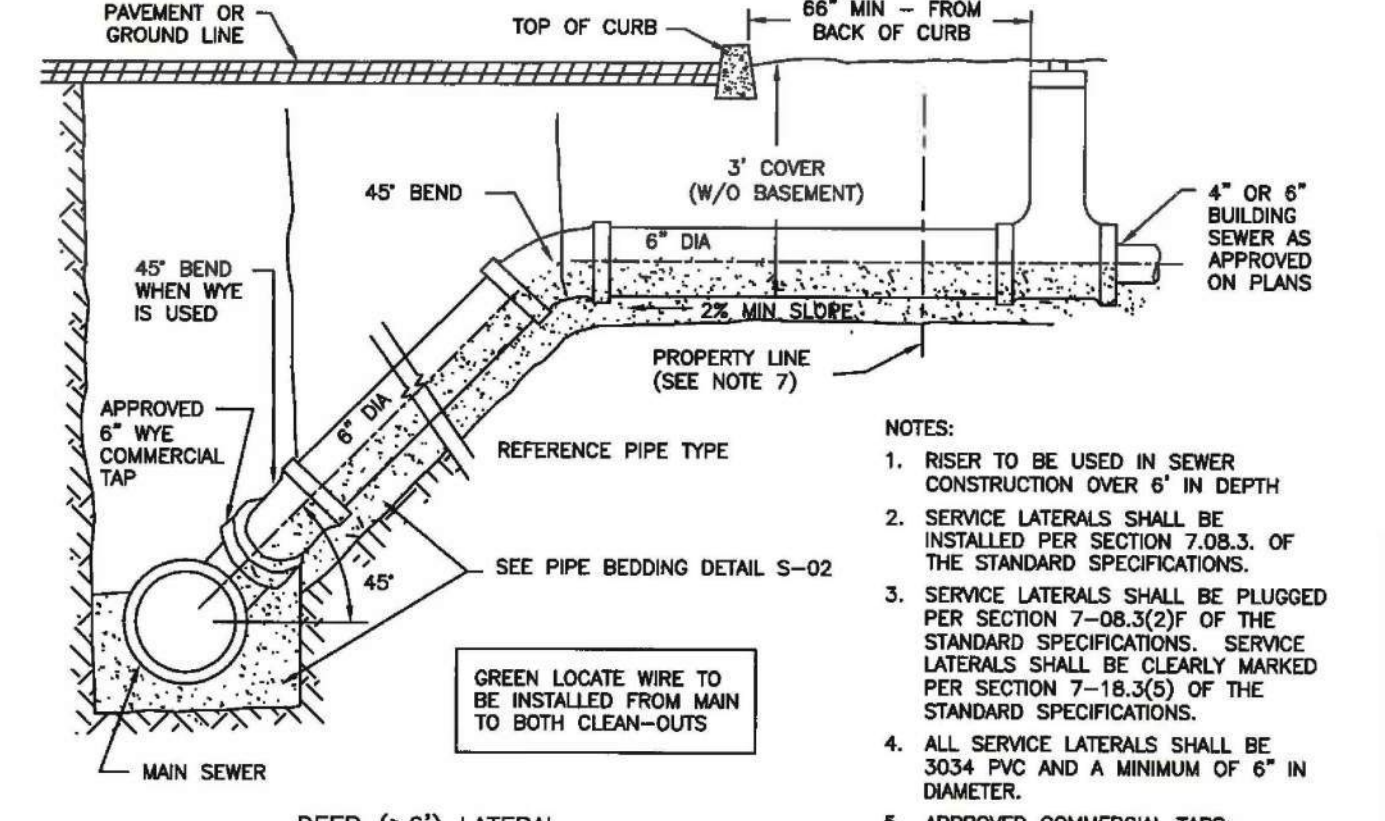


- NOTES:
- FOR PIPE ZONE BEDDING, BACKFILL AND COMPACTON REQUIREMENTS, SEE PIPE BEDDING DETAIL S-02.
 - COMPACTON PERCENTAGES REFER TO RELATIVE DRY DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM D 698).
 - CONTRACTOR MAY USE UP TO 2-1/2" OF 5/8"-0 OR 3/4"-0 CRUSHED AGGREGATE IN LIEU OF 1-1/4"-0 BASE ROCK UNDER SURFACING FOR LEVELING COURSE.
 - ALL EXISTING PAVED SURFACES SHALL BE SAW CUT A MINIMUM OF 6" OUTSIDE OF EDGE OF TRENCH TO PROVIDE A NEAT STRAIGHT EDGE.
 - THE EDGES OF ALL EXISTING ASPHALT SURFACES SHALL BE CLEANED AND A TACK COAT SHALL BE APPLIED PER STD. SECTION 5-04.3(3). ALL JOINTS SHALL BE SEALED WITH TACK AND SAND.
 - ALL BACKFILL SHALL BE MECHANICALLY COMPACTED IN LITS WHICH DO NOT EXCEED RATED CAPABILITY OF EQUIPMENT USED, BUT IN NO CASE EXCEED 12" UNLESS OTHERWISE SPECIFIED.
 - GRANULAR BACKFILL SHALL MEET REQUIREMENTS OF SECTION 8-03.10 UNLESS OTHERWISE SPECIFIED.

TRENCH: RESTORE, BACKFILL, BEDDING, SURFACING

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stipp</i>		3/4/14		

WOODLAND PUBLIC WORKS PUBLIC WORKS DIRECTOR DATE



- NOTES:
- RISER TO BE USED IN SEWER CONSTRUCTION OVER 6" IN DEPTH.
 - SERVICE LATERALS SHALL BE INSTALLED PER SECTION 7.08.3 OF THE STANDARD SPECIFICATIONS.
 - SERVICE LATERALS SHALL BE PLUGGED PER SECTION 7-08.3(3)(F) OF THE STANDARD SPECIFICATIONS. SERVICE LATERALS SHALL BE CLEARLY MARKED PER SECTION 7-18.3(5) OF THE STANDARD SPECIFICATIONS.
 - ALL SERVICE LATERALS SHALL BE 3034 PVC AND A MINIMUM OF 6" IN DIAMETER.
 - APPROVED COMMERCIAL TAPS:
 - SEALTIGHT TYPE "C" OR "D" SEWER SADDLE
 - FOWLER QUIK-WAY SEWER TAP
 - FOWLER "T & L" SEWER TEE
 - FOWLER "INSERTA TEE"
 - "TAP TITE" SEWER TEE
 - TRANSITIONS BETWEEN DISSIMILAR PIPE MATERIALS OR SIZES SHALL BE MADE WITH APPROVED ADAPTORS (FERRO, CAULDER, OR APPROVED EQUIV.).
 - IN NEW SUBDIVISIONS AND OTHER CONSTRUCTION INVOLVING NEW ROADS, INSTALL LATERALS TO 6" BEHIND PROPERTY LINE FOR SEWERS IN STREET RIGHT-OF-WAY. INSTALL TWO WAY CLEANOUT BEHIND SIDEWALK.
 - FOLLOWING TAPPING OF MAINS FOR LATERALS, CONTRACTOR SHALL TYP. THE MAIN TO VERIFY THAT THE TAP WAS PROPERLY MADE AND IS NOT PROTRUDING INTO THE PIPE. A VIDEO TAPE OR DVD/CD OF THE TAP SHALL BE SUBMITTED TO THE CITY FOR APPROVAL OF THE TAP.

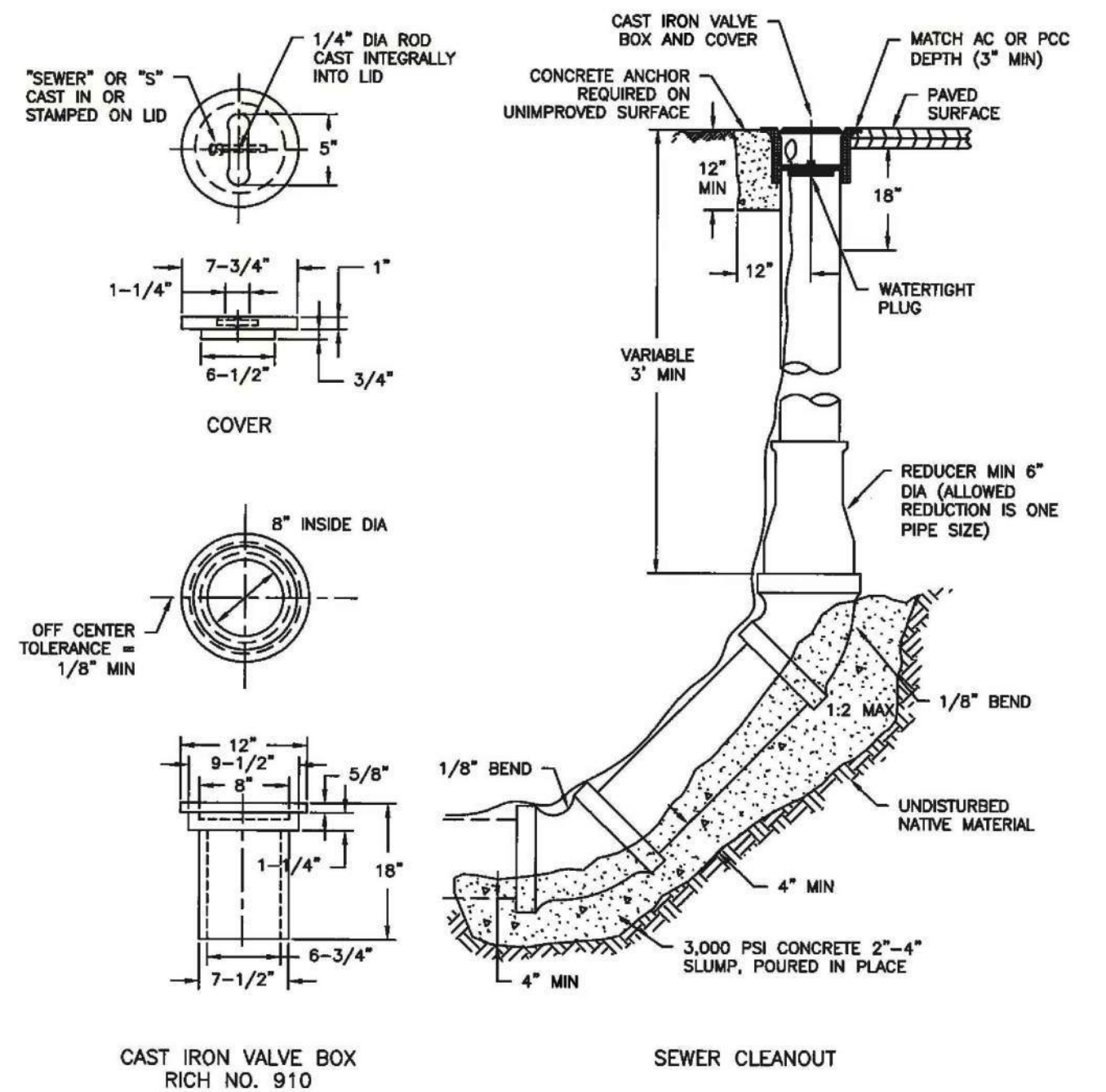
SERVICE LATERAL CONNECTIONS

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stipp</i>		3/4/14		

WOODLAND PUBLIC WORKS PUBLIC WORKS DIRECTOR DATE

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stipp</i>		3/4/14		

WOODLAND PUBLIC WORKS PUBLIC WORKS DIRECTOR DATE



SEWER CLEANOUT

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stipp</i>		3/4/14		

WOODLAND PUBLIC WORKS PUBLIC WORKS DIRECTOR DATE

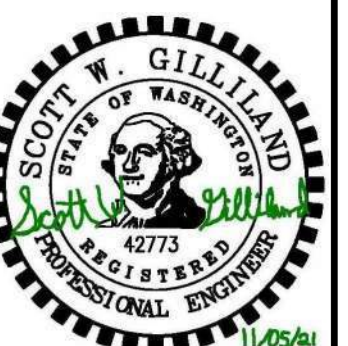
City of Woodland Sanitary Sewer Details For:

Schurman Way Site Plan

A Site Located In The City Of Woodland, Washington

Revisions

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		



Project No. 3264
 SCALE: H: N/A
 V: N/A
 DESIGNED BY: SWG
 DRAFTED BY: SWG
 REVIEWED BY: TGJ

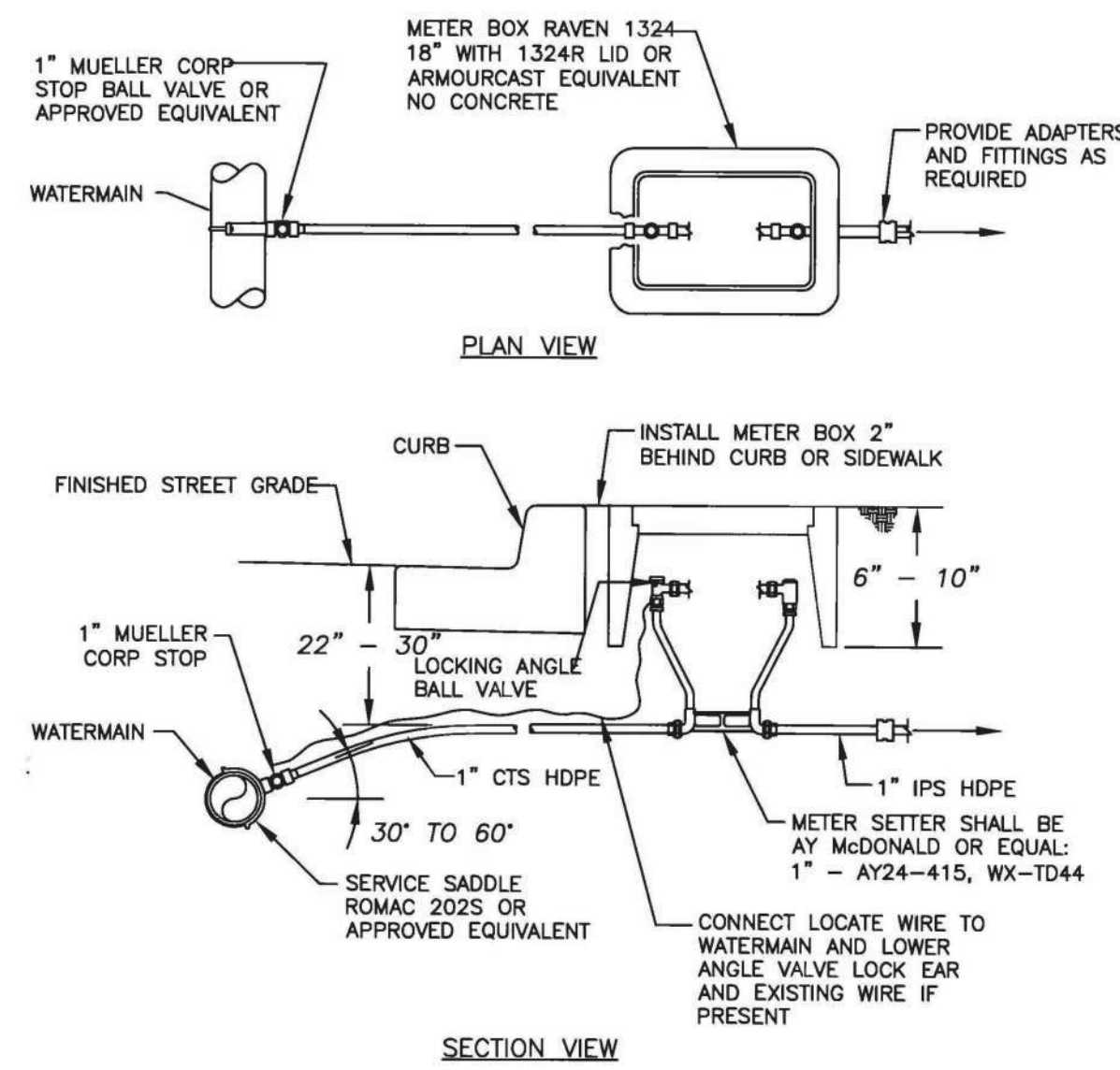


Know what's below. Call before you dig.

GENERAL NOTES FOR WATER MAIN INSTALLATION

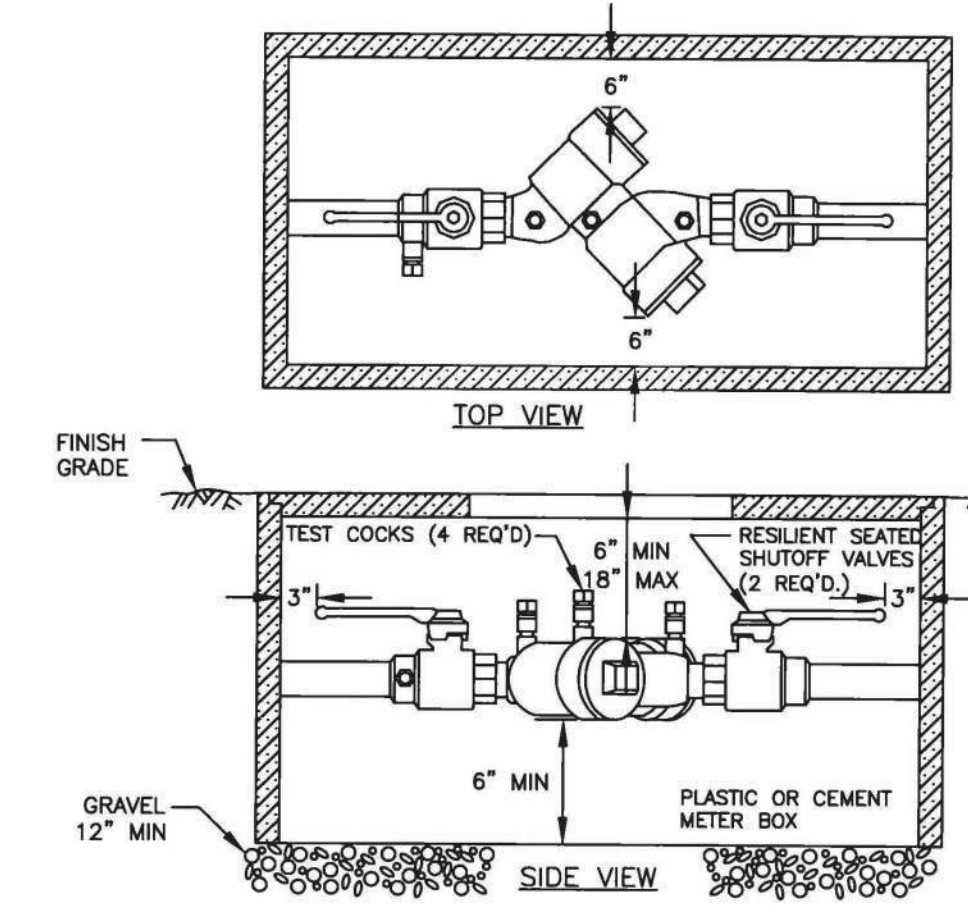
1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION HEREIN IDENTIFIED AS THE "STANDARD SPECIFICATIONS", AND AWWA SPECIFICATIONS, EXCEPT AS MODIFIED BELOW OR BY CITY OF WOODLAND STANDARD DETAILS.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH CITY OF WOODLAND AT LEAST 48-HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SCHEDULES AND TRAFFIC CONTROL PLANS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. PROPOSED "EQUIVALENTS" MUST BE SUBMITTED TO THE CITY OF WOODLAND FOR APPROVAL.
3. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (360) 225-7999, 48-HOURS PRIOR TO LIVE TAPS OR OTHER CONNECTIONS TO EXISTING WATERMANS. WHERE CONNECTIONS REQUIRE SHUT-DOWN OF SERVICE, CONNECTION POINTS WILL BE EXPOSED FOR "FIELD VERIFICATION" BY CONTRACTOR AND CONNECTION DETAILS SHALL BE VERIFIED 48 HOURS PRIOR TO DISTRIBUTING SHUT-DOWN NOTICES.
4. CALL UNDERGROUND LOCATE AT 811 A MINIMUM OF 48-HOURS PRIOR TO ANY EXCAVATIONS.
5. UNLESS OTHERWISE ESTABLISHED IN WRITING BY THE CITY, ALL WATER MAINS SHALL BE STAKED FOR GRADES AND ALIGNMENT BY AN ENGINEER OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK.
6. EXISTING VALVES AND ANY VALVES INSTALLED DIRECTLY TO AND CONNECTED TO A PORTION OF ACTIVE WATER SYSTEM ARE TO BE OPERATED BY CITY OF WOODLAND REPRESENTATIVES ONLY.
7. WATER MAINS SHALL BE PVC IN ACCORDANCE WITH AWWA C900, PRESSURE CLASS AS SPECIFIED ON DRAWINGS OR DUCTILE IRON PRESSURE CLASS 50 OR AS NOTED ON DRAWING.
8. ALL LINES SHALL BE CHLORINATED AND TESTED IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS PRIOR TO USE.
9. HARD COPY AND ELECTRONIC "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO CITY OF WOODLAND UPON COMPLETION OF THE WORK.
10. ALL WATERMANS, FIRE HYDRANTS, BLOW OFF ASSEMBLIES, VACUUM BREAKERS, AND WATER SERVICES MUST HAVE LOCATE WIRE INSTALLED.

GENERAL NOTES FOR WATER MAIN INSTALL					W-01
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		11/21/13			
PUBLIC WORKS DIRECTOR		DATE			



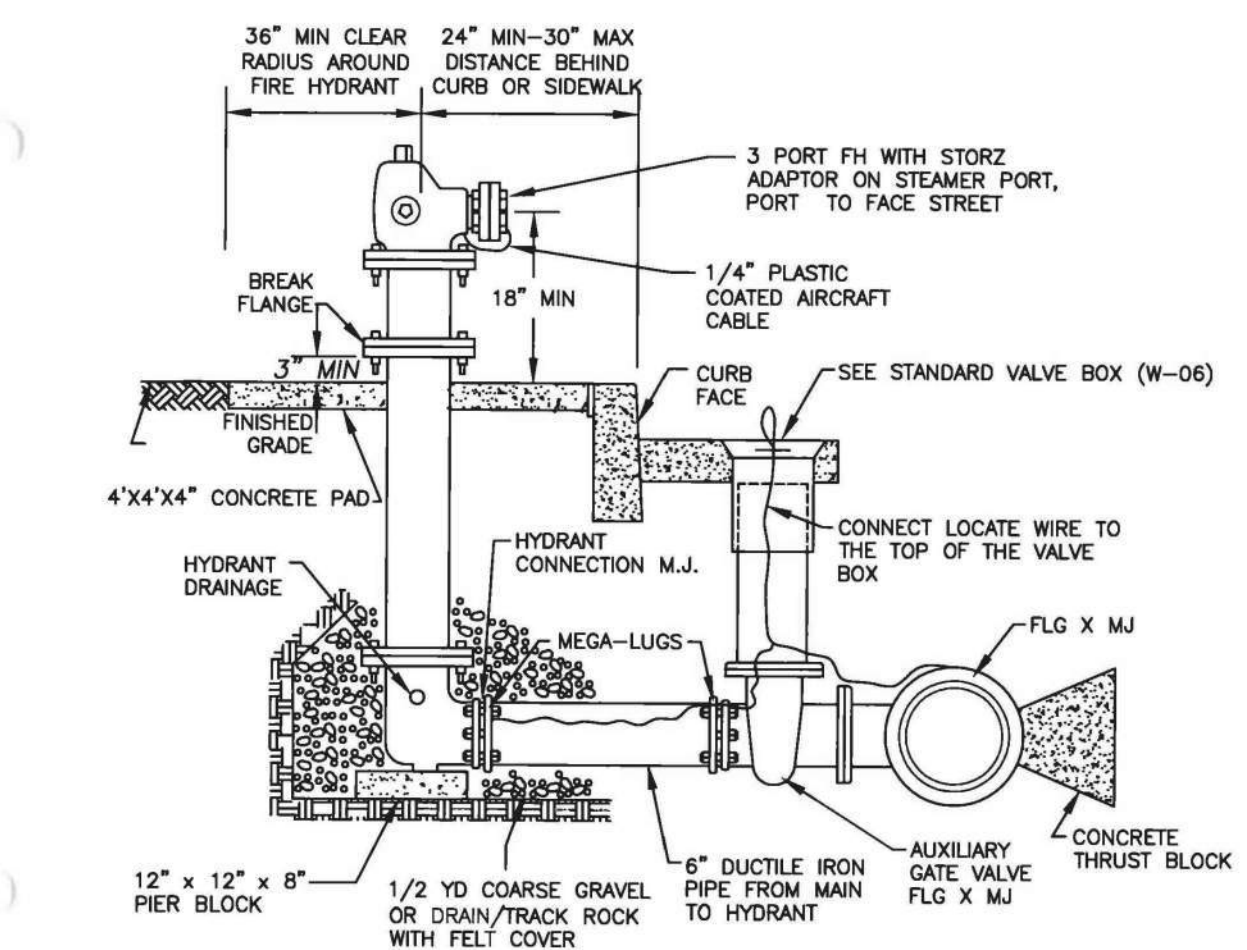
- NOTES:
1. SERVICE LINES ON NEW WATERMANS SHALL BE PRESSURE TESTED UP TO THE LOCKING ANGLE BALL VALVE AS PART OF THE WATERMAIN TESTING.
 2. METER BOXES SHALL HAVE A 4' WOOD STAKE WITH BLUE PAINT BEHIND THE BOX.
 3. ALL DOMESTIC AND IRRIGATION METERS SHALL BE SUPPLIED, OWNED, AND INSTALLED BY THE CITY OF WOODLAND.

3/4" AND 1" WATER SERVICE					W-02
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		11/21/13			
PUBLIC WORKS DIRECTOR		DATE			



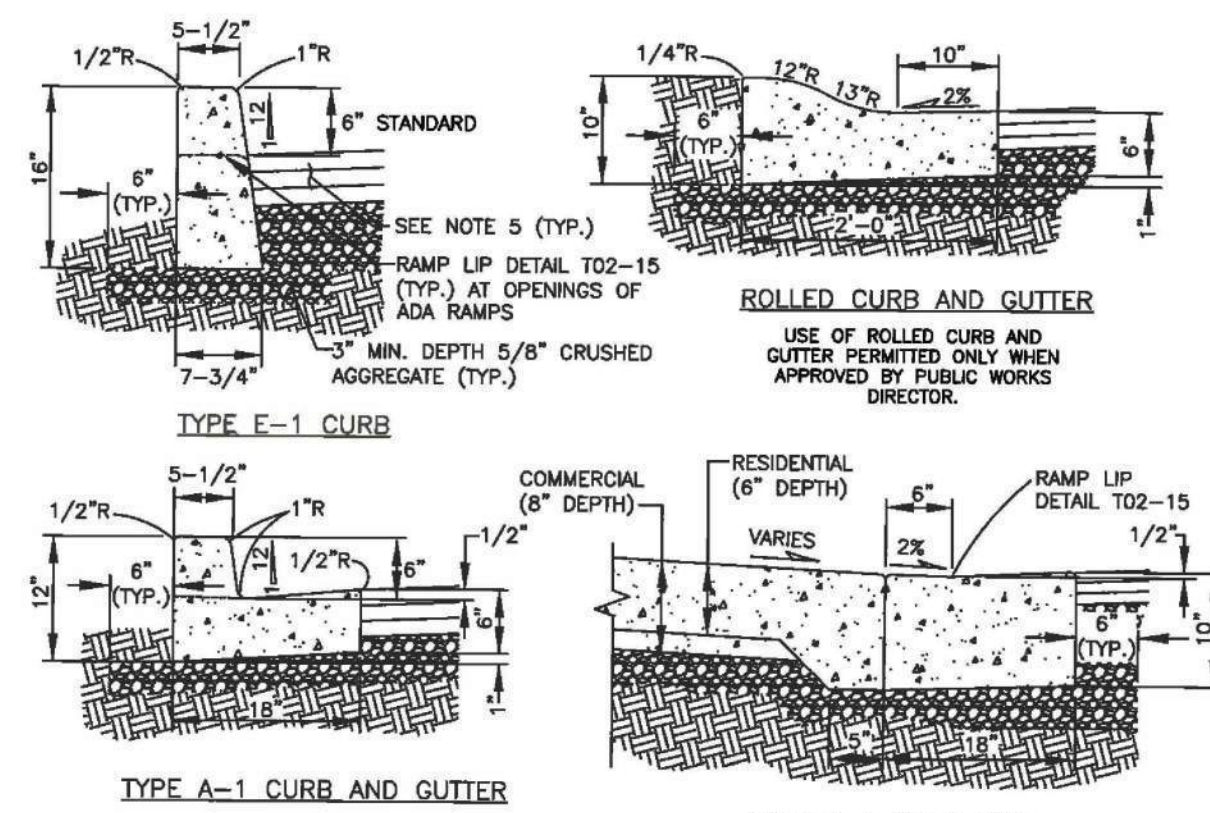
- NOTES:
1. APPROVED DOUBLE CHECK VALVE ASSEMBLY (DCVA) TO LAY HORIZONTAL WITH GROUND. (VERTICAL ALLOWED IF APPROVED BY WASHINGTON STATE DEPARTMENT OF HEALTH)
 2. DCVA MAY BE INSTALLED ABOVE OR BELOW GROUND PROVIDED ALL CLEARANCES ARE MET.
 3. DESIGN FOR BACK SIPHONAGE AND BACK PRESSURE.
 4. UNIONIZED ASSEMBLIES REQUIRED.
 5. TEST COCKS TO EITHER FACE OUTWARDS OR UPWARDS FROM ASSEMBLY.
 6. THOROUGHLY FLUSH LINES PRIOR TO INSTALLATION OF BACKFLOW PREVENTER.
 7. DO NOT INSTALL IN AN AREA SUBJECT TO FLOODING.
 8. DCVA MUST BE ACCESSIBLE.
 9. PROTECT DCVA FROM FREEZING.
 10. DCVA SHALL BE APPROVED BY THE STATE OF WASHINGTON
 11. PLUMBING PERMIT IS REQUIRED. CONTACT CITY BUILDING DEPARTMENT AT (360) 225-7299.
 12. DCVA MUST BE TESTED AFTER INSTALLATION, THEN ANNUALLY BY A WASHINGTON STATE CERTIFIED BACKFLOW TESTER. RESULTS SHALL BE SENT TO THE CITY PUBLIC WORKS DEPARTMENT.

DOUBLE CHECK VALVE ASSEMBLY 2" & SMALLER					W-08
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		11/21/13			
PUBLIC WORKS DIRECTOR		DATE			



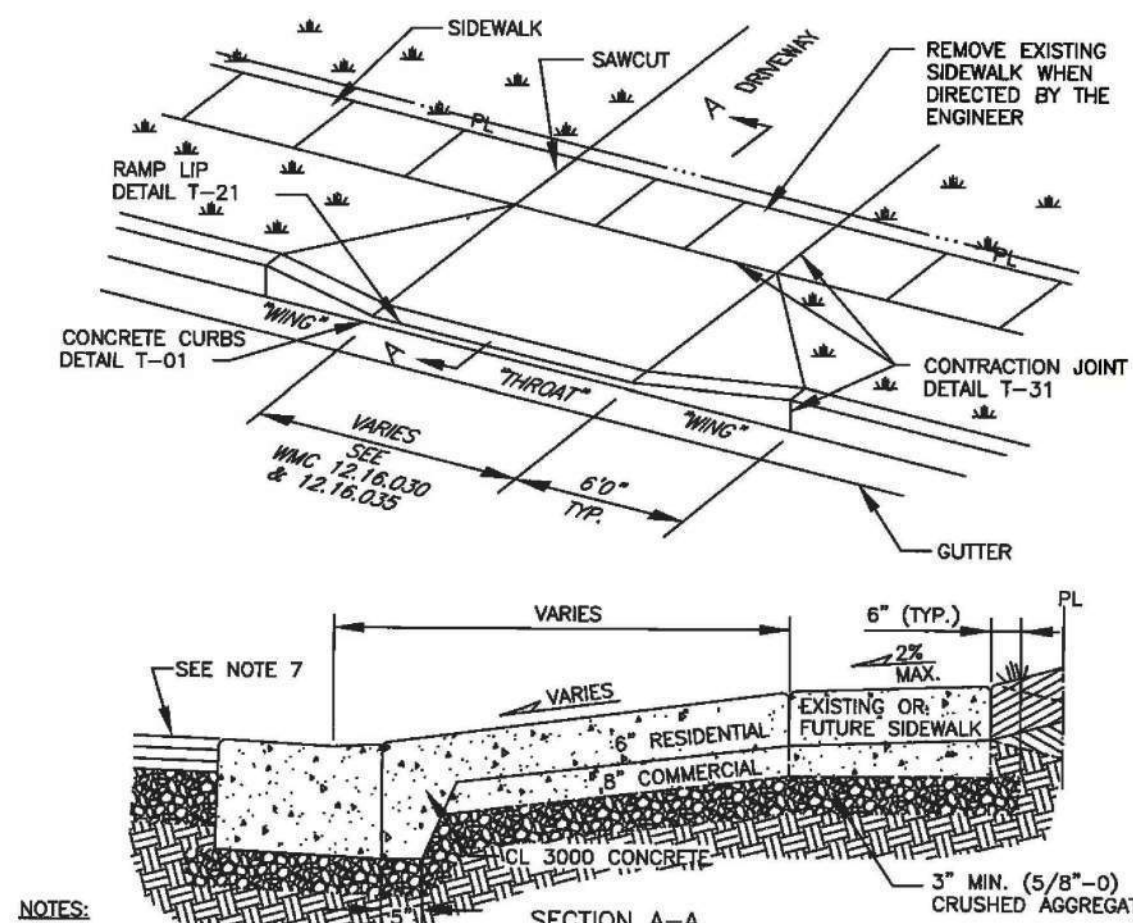
- NOTES:
1. HYDRANT TO BE WATEROUS WB67 CLASS 250.
 2. HYDRANT TO BE 5-1/4" COMMERCIAL W/ (2) 2-1/2" NST, (1) 4-1/2" NST THREADED PORT(S) WITH (1) 5" TWO LUG QUARTER TURN STORZ OR APPROVED EQUAL PUMPER PORT CONNECTION.
 3. STORZ ADAPTORS ARE REQUIRED.
 4. FOUR (4) GUARD POSTS TO BE INSTALLED IN UNPROTECTED AREAS (4' RADIUS).
 5. FIRE HYDRANT INSTALLATION SHALL BE APPROVED BY THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT PRIOR TO BACKFILLING.
 6. HYDRANTS SHALL NOT BE SET UNTIL LOCATION AND DEPTH ARE APPROVED BY THE CITY OF WOODLAND.
 7. FIRE HYDRANTS SHALL BE SHOP PAINTED PRIOR TO INSTALLATION W/ SAFETY YELLOW (RODDA NO. QD81) HIGH GLOSS EQUIPMENT ENAMEL.
 8. HYDRANT STANDARD BURY IS 4' UNLESS OTHERWISE NOTED ON THE PLANS, OR WHEN BREAKAWAY JOINT IS STALLED 7" ABOVE FINISHED GRADE.
 9. HYDRANT LOCATIONS SHALL BE AS SHOWN ON THE PLANS.
 10. JOINT RESTRAINT SYSTEM MAY BE USED FOR INSTALLATIONS OF NOT MORE THAN 18' (ONE PIPE LENGTH).
 11. INSTALL LOCATING WIRE AND CONNECT TO EXISTING WIRE IF PRESENT.

FIRE HYDRANT					W-14
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		11/21/13			
PUBLIC WORKS DIRECTOR		DATE			



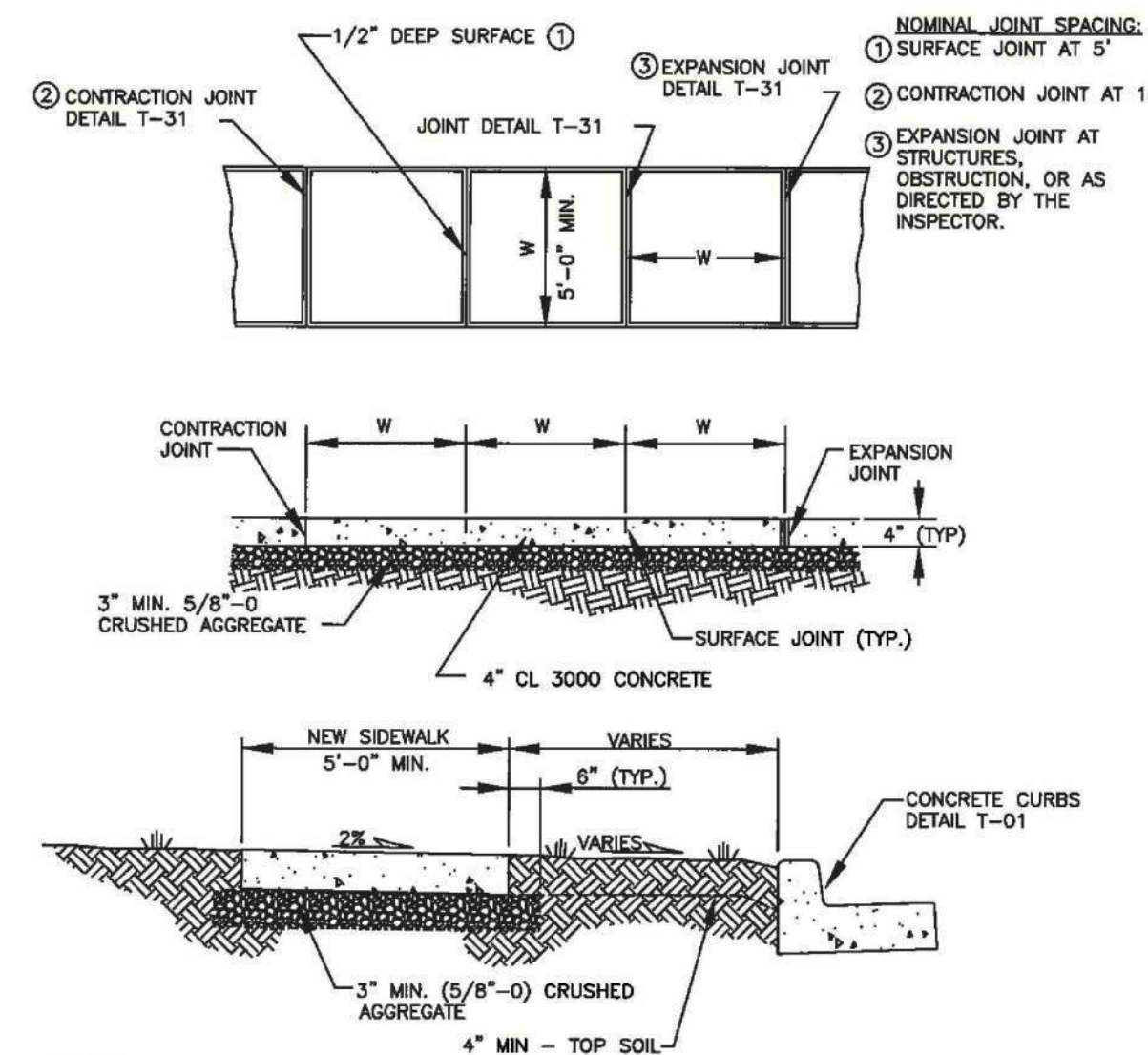
- NOTES:
1. CONCRETE SHALL BE 3000 PSI MIN. (CL 3000), 3-1/2" SLUMP (MAX).
 2. CURBS ADJACENT TO PAVEMENT OR SIDEWALK SHALL HAVE CONSTRUCTION JOINTS TO MATCH EXISTING PATTERNS. 3/8" EXPANSION JOINTS SHALL BE PLACED ON BOTH SIDES OF CATCH BASINS, AT TOPS OF DRIVEWAYS, ALL CHANGES IN DIRECTION, AND AS DIRECTED BY THE INSPECTOR. CONTRACTION JOINTS TO BE PLACED AT 15' MAXIMUM SPACING.
 3. FOR CURB DROPS AT ADA RAMPS, SEE RAMP LIP DETAIL T-21.
 4. COMPACT SUBGRADE AND AGGREGATE TO 95% MAXIMUM DRY DENSITY (3" MIN. DEPTH).
 5. SEE PAVEMENT RESTORATION/WIDENING AT CURBS DETAIL T-30.
 6. CURB TO BE MEDIUM BROOM FINISHED, PARALLEL TO GUTTER LINE.
 7. WHERE MATCHING EXISTING CURBS, ALL EXISTING EDGES SHALL BE SAWCUT.
 8. WHEN ATTACHED SIDEWALKS ARE USED WITH ROLLED CURB AND GUTTER, THICKENED SIDEWALKS (6" MIN) SHALL BE CONSTRUCTED UNDER THE SAME CONSTRUCTION CONTRACT.

CONCRETE CURBS					T-01
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		5/8/13			
PUBLIC WORKS DIRECTOR		DATE			



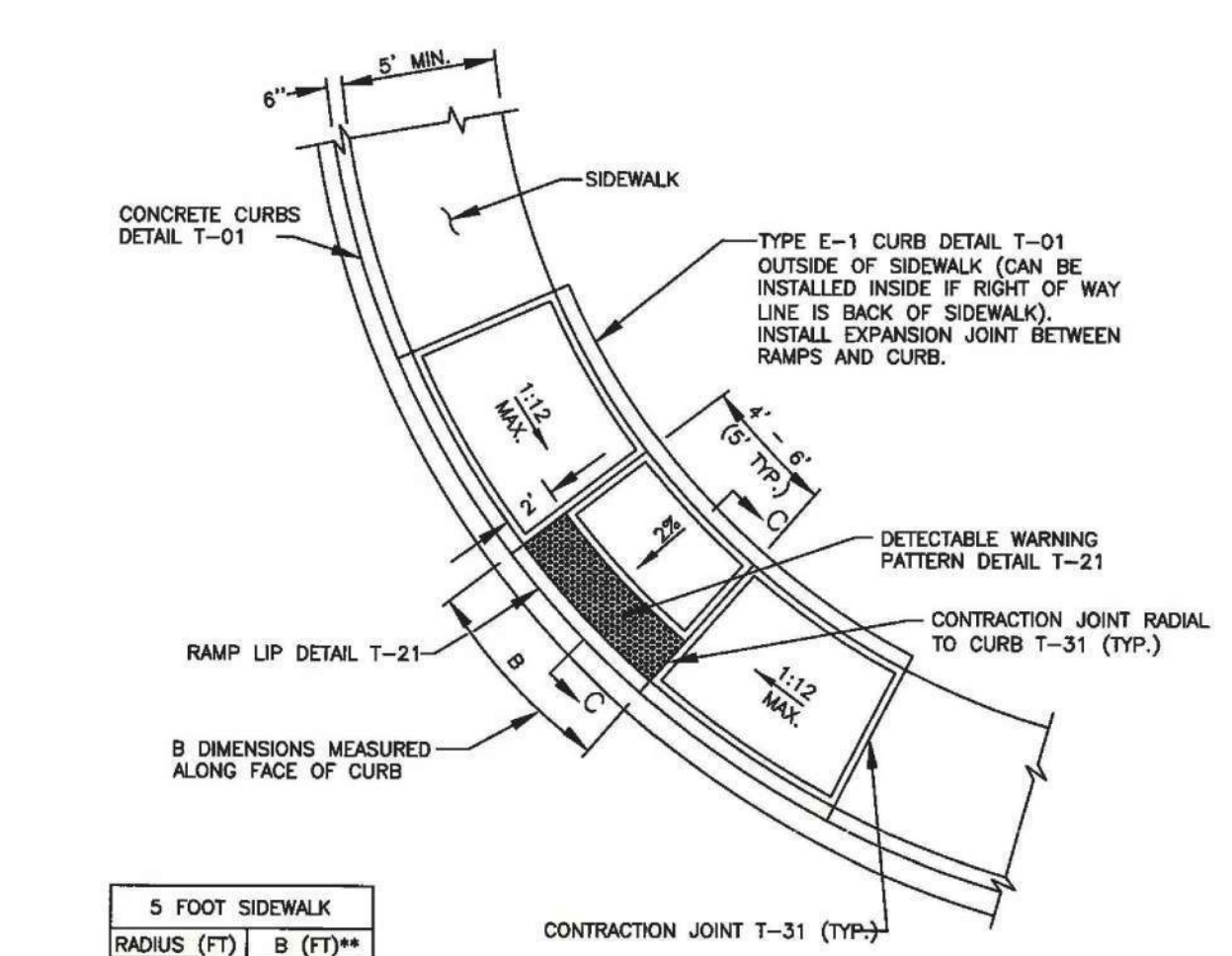
- NOTES:
1. CONCRETE SHALL BE 3000 PSI MIN. (CL 3000), 3-1/2" SLUMP (MAX), MEDIUM BROOM FINISH PARALLEL TO DRIVEWAY CENTERLINE.
 2. TO BE USED WHERE CURB AND SIDEWALK ARE SEPARATED BY A PLANTER STRIP.
 3. COMMERCIAL DRIVEWAYS REQUIRE 6" CONCRETE WITH REINFORCING STEEL (6x8 - W2.9xW2.9 WWF, MIN.), 1 1/2" COVER FROM BOTTOM OF SLAB. RESIDENTIAL DRIVEWAYS REQUIRE 6" CONCRETE.
 4. COMPACT SUBGRADE AND AGGREGATE TO 95% OF MAXIMUM DRY DENSITY (3" MIN. DEPTH).
 5. DRIVEWAYS EXCEEDING 15' IN TOTAL WIDTH SHALL HAVE ADDITIONAL LONGITUDINAL JOINTS AS DIRECTED. JOINT SPACING SHALL NOT EXCEED 15'. SEE CONCRETE JOINTS DETAIL T-31.
 6. EXISTING CURB SHALL BE REMOVED TO EXISTING JOINT OR SAWCUT SUCH THAT 3" MIN. OF NEW CURB IS CONSTRUCTED ADJACENT TO NEW DRIVEWAY. HORIZONTAL CUTTING OF EXISTING CONCRETE ALLOWED SUBJECT TO PUBLIC WORKS DIRECTOR APPROVAL.
 7. SEE PAVEMENT RESTORATION/WIDENING AT CURB DETAIL T-30 WHEN CUTTING EXISTING CURB.
 8. ALL EXISTING EDGES SHALL BE SAWCUT.
 9. STRUCTURAL SECTION OF DRIVEWAY TO BE EXTENDED THROUGH SIDEWALK AREA.
 10. 3" WING MIN. FOR RESIDENTIAL STREET.
 11. 45° ANGLE FOR WINGS ON ARTERIAL STREETS.
 12. NO WATER METERS IN DRIVEWAY APPROACH OR WING.

DRIVEWAY WITH DETACHED SIDEWALK					T-03
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		5/8/13			
PUBLIC WORKS DIRECTOR		DATE			



- NOTES:
1. CONCRETE SHALL BE 3000 PSI MIN. (CL 3000), 3 1/2" SLUMP (MAX).
 2. COMPACT SUBGRADE AND AGGREGATE TO 95% OF MAXIMUM DRY DENSITY (3" MIN).
 3. FINISH SHALL BE MEDIUM BROOM PERPENDICULAR TO PEDESTRIAN TRAFFIC UNLESS OTHERWISE DIRECTED.
 4. MATCH EXISTING BORDER.
 5. SEE CONCRETE JOINTS DETAIL T-31 FOR SURFACE, CONTRACTION, AND EXPANSION JOINTS.
 6. ALL EXISTING EDGES SHALL BE SAWCUT.
 7. CROSS SLOPE OF PLANTER STRIP SHALL BE 2% (TYP.) AND 4:1 (MAX).

SIDEWALK DETAIL					T-07
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		5/8/13			
PUBLIC WORKS DIRECTOR		DATE			



- NOTES:
1. RAMPS SHALL HAVE A MAXIMUM 1:12 SLOPE.
 2. EXISTING CURB AND SIDEWALK TO BE SAWCUT AND REMOVED FOR INSTALLATION OF NEW RAMP.
 3. RAMP MAY BE USED MID-BLOCK OR ON INTERSECTION RADIUS.
 4. RAMP TO BE CENTERED IN CROSSWALK.
 5. RAMPS TO BE CONSTRUCTED SEPARATELY FROM SIDEWALK.
 6. SEE STANDARD LANDING CROSS SECTIONS - C-C AND D-D DETAIL T-20 FOR SECTION C-C.
 7. IF THE AREA BEHIND THE SIDEWALK IS VEGETATED, THE BACK CURB MAY BE REPLACED WITH A SLOPE NO STEEPER THAN 4:1.
 8. IF THE MAXIMUM SLOPE OF 1:12 CANNOT BE ACHIEVED DUE TO THE SLOPE OF THE EXISTING SIDEWALK, THE LENGTH OF THE CURB RAMP SHALL NOT BE REQUIRED TO BE LONGER THAN 15 FEET REGARDLESS OF THE RESULTING RAMP SLOPE.

PARALLEL RAMP					T-16
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Bart Stepp</i>		5/8/13			
PUBLIC WORKS DIRECTOR		DATE			

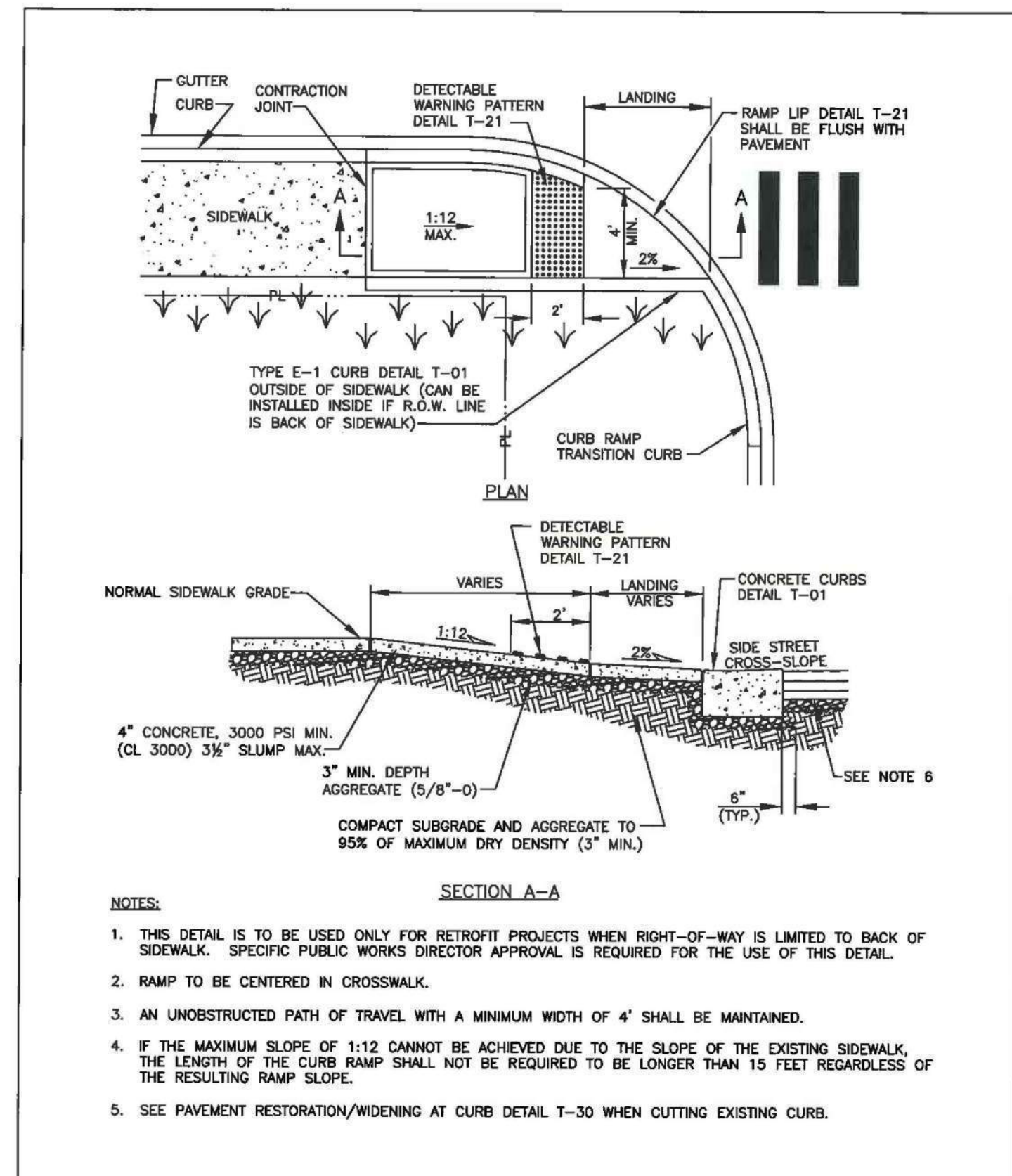
City of Woodland Water and Transportation Details For: **Schurman Way Site Plan**
 A Site Located In The City Of Woodland, Washington
 Engineering - Surveying - Planning - 604 W. Evergreen Blvd., Vancouver, WA 98660
 PH (360) 944-6519
 Fax (360) 944-6539
PLS ENGINEERING

Revisions	1	2	3	4	5	6

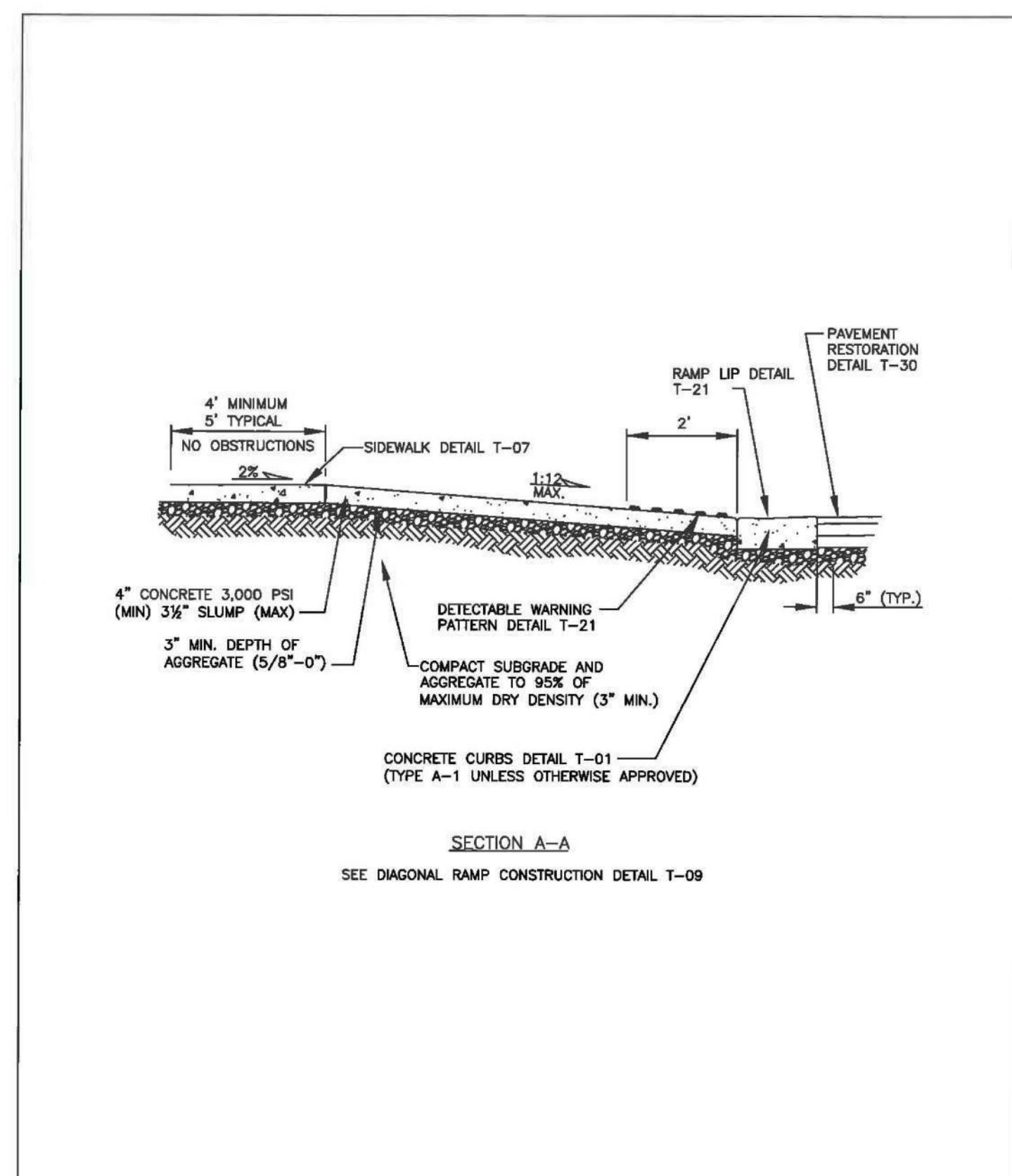
Project No. 3264
 SCALE: H: N/A
 V: N/A
 DESIGNED BY: SWG
 DRAFTED BY: SWG
 REVIEWED BY: TGJ

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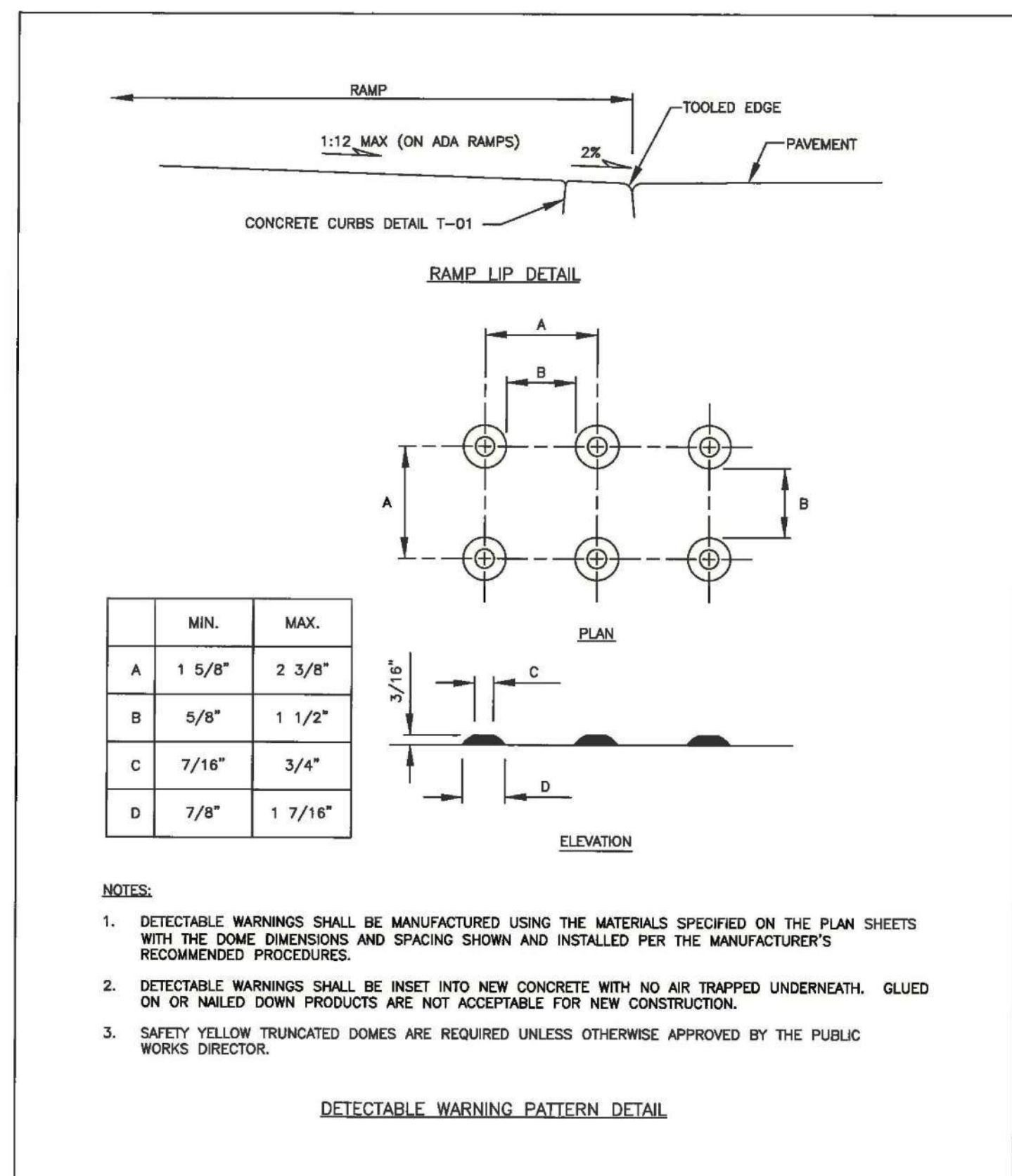
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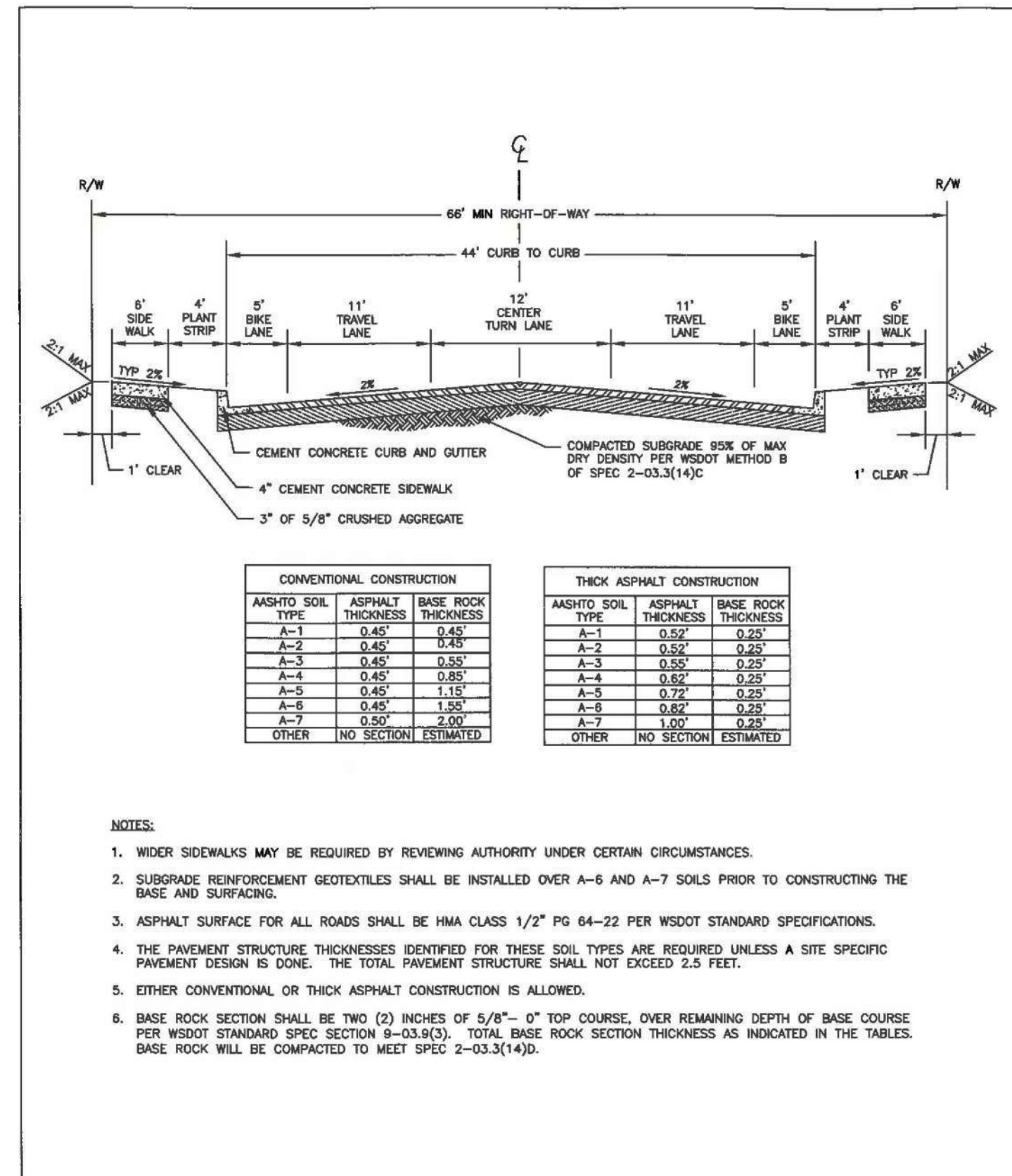
CURB RAMP FOR LIMITED R.O.W. AREAS					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-18
<i>Bart Stupp 5/8/13</i>					
PUBLIC WORKS DIRECTOR	DATE				



STANDARD LANDING CROSS SECTIONS A-A					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-19
<i>Bart Stupp 5/8/13</i>					
PUBLIC WORKS DIRECTOR	DATE				



RAMP LIP AND DETECTABLE WARNING PATTERN					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-21
<i>Bart Stupp 5/8/13</i>					
PUBLIC WORKS DIRECTOR	DATE				

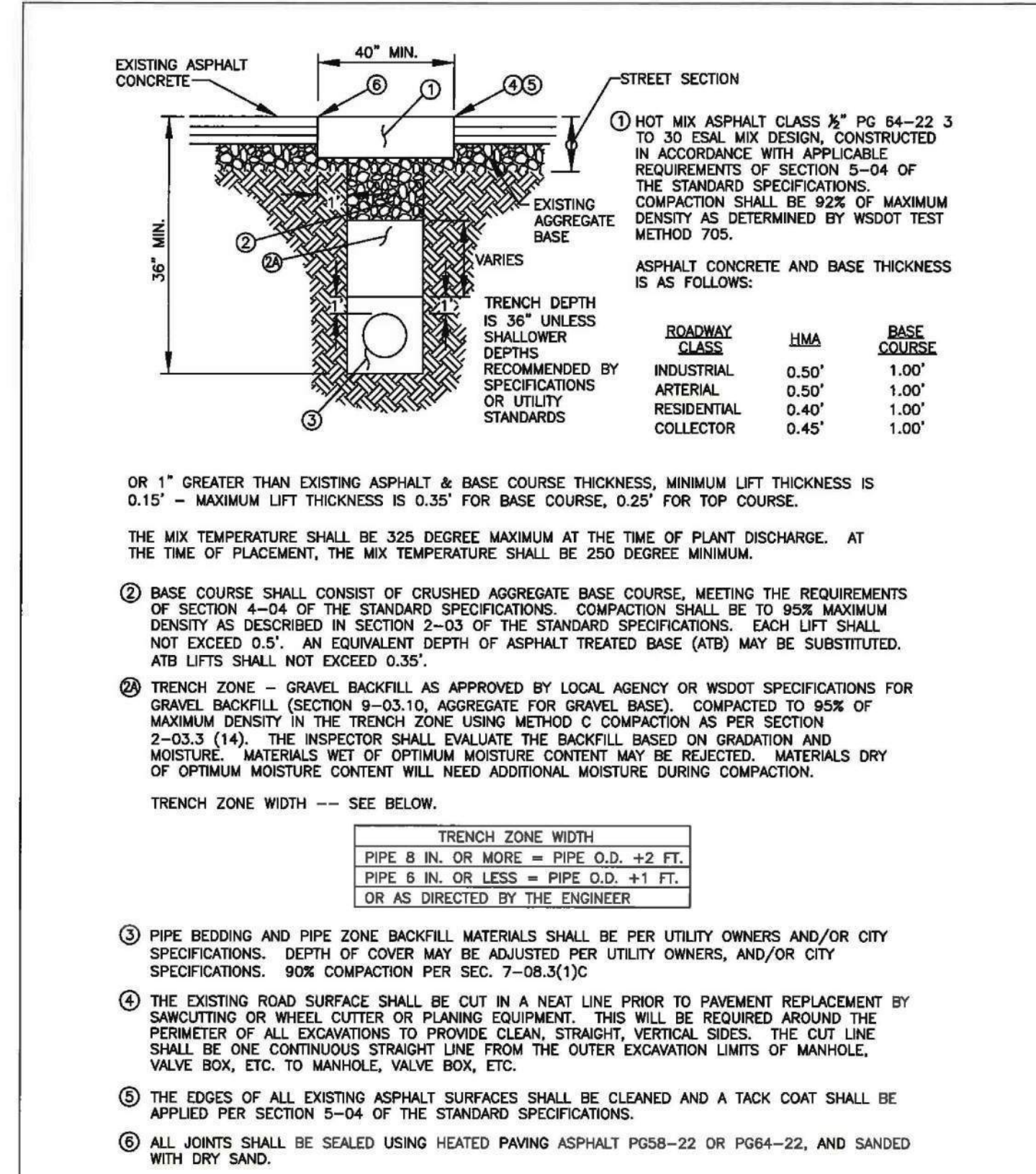


COMMERCIAL/INDUSTRIAL COLLECTOR					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-25A
<i>Bart Stupp 2/24/15</i>					
PUBLIC WORKS DIRECTOR	DATE				

GENERAL NOTES:

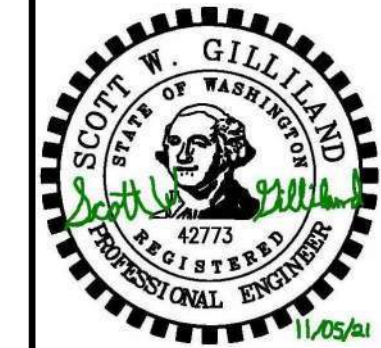
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, EXCEPT WHERE OTHERWISE NOTED IN THESE STANDARDS. MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AND SHALL COMPLY WITH THE CURRENT EDITION.
- TRENCH BACKFILL AND RESURFACING SHALL BE AS SHOWN IN THE STANDARD DETAILS, UNLESS MODIFIED BY THE RIGHT OF WAY USE PERMIT. SURFACING DEPTHS AND PAVING LIMITS SHOWN IN THE STANDARD DETAILS ARE MINIMUMS AND MAY BE INCREASED BY THE DIRECTOR TO MEET TRAFFIC LOADINGS OR SITE CONDITIONS.
- THE DIRECTOR MAY REQUIRE MATERIALS COMPACTION AND MOISTURE TESTING. TESTING SHALL BE PERFORMED BY A LAB PRE-APPROVED BY THE CITY WITH THE RESULTS BEING SUPPLIED TO THE DIRECTOR. THE TESTING IS NOT INTENDED TO RELIEVE THE CONTRACTOR FROM ANY LIABILITY FOR THE TRENCH RESTORATION. IT IS INTENDED TO SHOW THE INSPECTOR AND THE CITY THAT THE RESTORATION MEETS THIS SPECIFICATION.
- THE FINAL PAVEMENT PATCH SHALL BE COMPLETED AS SOON AS POSSIBLE AND SHALL BE COMPLETED WITHIN THIRTY (30) DAYS AFTER FIRST OPENING THE TRENCH. THIS TIME FRAME MAY BE ADJUSTED IF DELAYS ARE DUE TO UNCLEMANT WEATHER, OR OTHER ADVERSE CONDITIONS. HOWEVER, DELAYING OF FINAL PATCH OR OVERLAY WORK IS ALLOWABLE ONLY SUBJECT TO THE DIRECTOR'S APPROVAL. THE DIRECTOR MAY DEEM IT NECESSARY TO COMPLETE THE WORK WITHIN THIRTY (30) DAYS TIME FRAME AND NOT ALLOW ANY TIME EXTENSION. IF THIS OCCURS, THE CONTRACTOR SHALL PERFORM THE NECESSARY WORK AS DIRECTED. PATCHES, REPAIRS, OR OVERLAYS SHALL ONLY BE INSTALLED NEXT TO A CLEAN, NEAT SAWCUT LINE.
- WHEN TRENCHING WITHIN THE ROADWAY SHOULDERS, THE SHOULDER SHALL BE RESTORED TO ITS ORIGINAL OR BETTER CONDITION. LONGITUDINAL TRENCH RESTORATION REQUIRING A HALF LANE WIDTH OR MORE SHALL BE REQUIRED TO RESTORE THE ENTIRE LANE TO CENTERLINE. UNDERMINED PAVEMENT SHALL BE CUT BACK, REMOVED, AND RESTORED TO LIMITS AS REQUIRED BY THE DIRECTOR TO ALLOW COMPACTION AND BACKFILL OF DISTURBED AREAS. LIMITS OF TRENCH RESTORATION SHALL BE IDENTIFIED PRIOR TO TRENCH BACKFILL.
- ANY PATCH OR OVERLAY ON ARTERIAL STREETS OR AREAS ZONED COMMERCIAL SHALL BE PERMANENT AND COMPLETED AS SOON AS POSSIBLE.
- IF A PAVEMENT CUT IS PROPOSED IN A STREET THAT WAS CONSTRUCTED OR RE-PAVED WITHIN THE PAST FIVE YEARS, A DISRUPTION FEE WILL BE CHARGED IN ACCORDANCE WITH WMC 12.04.060. TRENCHLESS CONSTRUCTION METHODS MUST BE EXPLORED ON ALL PAVED ROAD CROSSINGS REGARDLESS OF THE PAVEMENT CONDITION.
- CONTROL DUSTY FILL IS REQUIRED WHEN TRENCHING IN ARTERIAL STREETS, AND STREETS LOCATED IN THE CENTRAL BUSINESS DISTRICT. FOR LONGITUDINAL TRENCHES ALTERNATIVE METHODS OF RESTORATION MAY BE CONSIDERED.
- THE OWNER SHALL WARRANT THE RESTORATION WORK FOR A PERIOD OF 2 YEARS ON RESIDENTIAL, LOCAL, AND UNCLASSIFIED STREETS AND 5 YEARS ON COLLECTOR AND ARTERIAL STREETS. FRANCHISE UTILITIES SHALL WARRANT THEIR WORK FOR THE LIFE OF THE RESTORATION. THE OWNER SHALL REPAIR ANY OF THE FOLLOWING DEFICIENCIES WHICH OCCUR DURING THIS TIME PERIOD.
 - SETTLEMENT OR BUMP: ANY SETTLEMENT OR BUMP MORE THAN 1/4 INCH LOWER OR HIGHER THAN THE ORIGINAL PAVEMENT SHALL BE REPAIRED. REPAIR MAY INCLUDE REMOVAL AND REPLACEMENT OR SKIN PATCHING AND WILL BE DETERMINED BY THE DIRECTOR.
 - EDGE SEPARATION: ANY SEPARATION OF THE TRENCH FROM SURROUNDING ROADWAY GREATER THAN 1/4 INCH SHALL BE CRACK SEALED PER WSDOT STANDARD SPECIFICATIONS SECTION 5-04.
 - ALLIGATOR CRACKING: ANY TRENCH PAVEMENT WHICH EXHIBITS ALLIGATOR CRACKING SHALL BE REPLACED. THE REPLACEMENT SHALL BE IN CONFORMANCE WITH THE PAVEMENT REPAIR SECTION OF THE STANDARD SPECIFICATIONS.
 - RAVELING: RAVELING IS DEFINED AS SURFACE DETERIORATION THAT OCCURS WHEN AGGREGATE PARTICLES ARE DISLOADED OR OXIDATION CAUSES LOSS OF ASPHALT BINDER. THE ASPHALT CONCRETE PAVEMENT LOSES ITS SMOOTH SURFACE AND BEGINS TO APPEAR VERY OPEN AND ROUGH. MEDIUM SEVERITY RAVELING AS DEFINED BY THE "PAVEMENT SURFACE CONDITION FIELD RATING MANUAL FOR ASPHALT PAVEMENT" DEVELOPED BY THE NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION SHALL BE PLANNED AND REPAVED.
- PAVEMENT REMOVAL SHALL ONLY BE ACCOMPLISHED BY USE OF SAWCUTTING, PLANING, OR GRINDING EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PURPOSE. TO ACCOMPLISH A NEAT STRAIGHT CUT LINE. USE OF PAVEMENT RIPPER IS PROHIBITED.
- ALL PAVEMENT, CURB, GUTTER, OR SIDEWALK DAMAGED AS A RESULT OF CONTRACTOR ACTIVITY SHALL BE RESTORED TO ORIGINAL CONDITION. PAVEMENT SHALL BE RESTORED TO NOT LESS THAN THE ORIGINAL CROSS SECTION AND STRENGTH. WHERE PAVEMENT, CURB, GUTTER, OR SIDEWALK HAVE BEEN UNDERMINED BY TRENCHING, IT SHALL BE REMOVED. THE SUBGRADE RESTORED AND SURFACES REPLACED TO LIMITS AS APPROVED BY THE CITY.

STANDARD TRENCH RESTORATION NOTES					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-32
<i>Bart Stupp 5/8/13</i>					
PUBLIC WORKS DIRECTOR	DATE				



STD TRENCH RESTORATION GRANULAR BACKFILL-HMA OR BEST SURFACE					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-33
<i>Bart Stupp 5/8/13</i>					
PUBLIC WORKS DIRECTOR	DATE				

Revisions	1	2	3	4	5	6

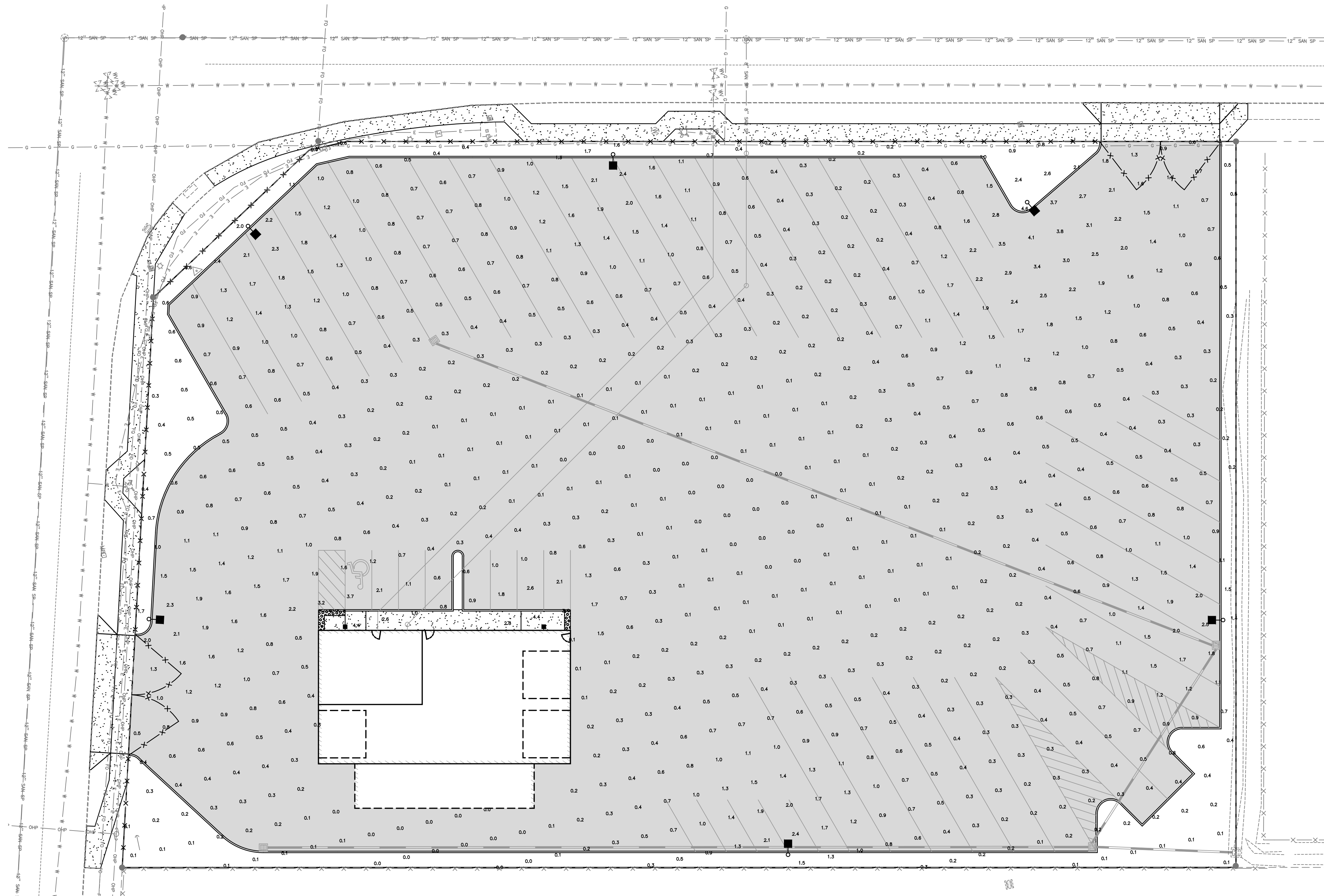
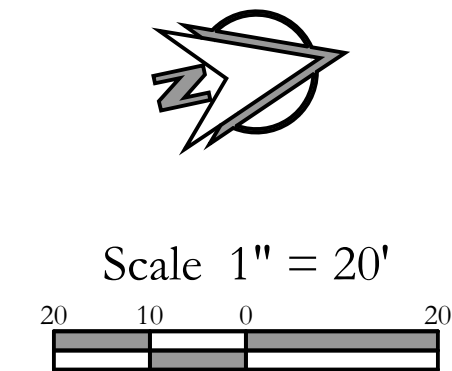


Project No. 3264
 SCALE: H: N/A
 V: N/A
 DESIGNED BY: SWG
 DRAFTED BY: SWG
 REVIEWED BY: TGJ



MANUFACTURER AND CATALOG NUMBER	SYMBOL	QTY	WATTAGE
LITHONIA DSX1-LED-P2-40K-T4M-MVOLT LED POLE LIGHT		6	70
WILLIAMS VVPH-L60-730-T3-SDGL-DIM-UNV LED WALL PACK LIGHT		2	70

Legend	
Proposed Asphalt Concrete	
Proposed Cement Concrete	



VWP LED
Voltaire Architectural Wall Pack

Williams

CATALOG #:
TYPE:
PROJECT:

ORDERING EXAMPLE: VWP H - L30/740 - T3 - DBZ - SDGL - OPTIONS - DIM - UNV

ORDERING INFO

SERIES	TYPE	LUMENS ⁽¹⁾	CR1	CCT	DISTRIBUTION ⁽²⁾
VWP	H Horizontal	130,000lm	7	30 3000K	T3 Type III
	V Vertical	6,000lm	40	4000K	TFT Type forward throw
					50 5000K

FEATURES

- Designed to illuminate sidewalks, entryways, perimeters or facades
- Intended for use in both wet and dry applications
- Savings of up to 85% energy compared to HID systems
- Blends seamlessly with a variety of architectural styles
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** - Die-cast aluminum enclosure.
- THERMAL MANAGEMENT** - Integral die-cast aluminum heat sink and LED assembly provide passive thermal management. Rated 30°C to 40°C ambient operating temperature (20°C to 40°C with EMWVC, 0°C to 40°C with EMWV).
- OPTICAL SYSTEM** - Precision, injection-molded, reflective acrylic lensing provides standard IES distributions.
- LED ASSEMBLY** - ANSI 3000K, 4000K, or 5000K CCT, minimum 100 CR1 LEDs.
- LED DRIVER** - 0-10V dimming.
- VOLTAIRE** - 50,000 hour life expectancy.
- ELECTRICAL** - 120-277V, 5A, and 480VAC input range. 50/60Hz power factor > 90. THD < 20% at full load. FCC Class A compliant. 50A/100A surge protection standard. Quick disconnect wiring provided. 175-50,000 hours use IES TM-21.
- FINISH** - Super durable polyester powder coat finished to phosphate-free, multi-stage pretreated metal, meets and exceeds AIAA 2504 specifications for outdoor durability.
- MOUNTING** - Surface mounts directly over a 4" maximum outlet box. Must be anchored by adequate steel support. Must safely support fixture weight (VVPH = 15 lbs, VWP = 23 lbs).
- LISTINGS** - cULus certified as luminaire suitable for wet locations.
- DesignLight Consortium qualified product. Not all versions of the product may be DLC qualified, see the DLC Qualified Products List at www.designlight.org/DLC.
- UL 924 listed for outdoor lighting applications only.
- Basic complete.
- IM60 rated.
- UL 24 compliant with OCCWSP 21L, option.
- WARRANTY - 5-year limited warranty, see www.williams.com/warranty.

FINISH OPTIONS⁽¹⁾

FINISH	DESCRIPTION
BLK	Black (RAL #9004)
DBZ	Dark bronze
DBR	Medium bronze
GRY	Standard gray
SLV	Satin aluminum (RAL #9005)
WHT	White (RAL #9003)

SHIELDING

SHIELDING	DESCRIPTION
SDGL	SDGL Solite® diffused textured tempered glass lens
CDL	Clear tempered glass lens

OPTIONS

OPTION	DESCRIPTION	DRIVER	VOLTAGE
EM4W	4-watt integral emergency LED driver ⁽⁴⁾	DM	120V
SE	Single face ⁽⁵⁾	0-10V	208
DF	Double face ⁽⁵⁾		240
PC	Factory installed photocell button-style photocell ⁽⁷⁾		277
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.		UNV 120-277V
			347
			480 480V ⁽¹⁶⁾

CONDUIT ENTRY⁽⁶⁾

CONDUIT ENTRY	DESCRIPTION
CR	CR Right side conduit entry ⁽⁸⁾
CL	CL Left side conduit entry ⁽⁸⁾
CD	CD Conduit entry

VVPH ONLY

OPTION	DESCRIPTION
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

NOTES

- Lumen output based on 7500 CRI. Actual lumens may vary ±5%, see page 2 for FUTURE PERFORMANCE DATA.
- Additional options, including housing extension increases fixture depth. 120-277V only, not available with CR and CD options. See page 3 for FUTURE DETAILS.
- 120-277V only, VWP includes housing extension, increases fixture depth. See page 2 for FUTURE DETAILS.
- 120V, 277V, or 347V only, must specify voltage.
- 208V, 240V, or 480V only, must specify voltage.
- 120V, 208V, or 277V only, must specify voltage. See page 3 for FUTURE DETAILS. Right side when viewed from behind fixture.
- Fixtures require housing extension when specified with conduit entry. Increases fixture depth. Conduit entry provided with 1/2" NPT tapered pipe thread and gasket. Increases fixture weight. Conduit fitting to be supplied by others. Left and right when viewed from behind fixture.
- Left and right when viewed from behind fixture.
- Left and right when viewed from behind fixture.
- Includes housing extension (increases fixture depth), must specify lens. Optional FSR-100 remote controller available, ordered separately. See page 3 for OCCUPANCY SENSOR DETAILS.
- Includes stepdown transformer.
- Includes stepdown transformer.

H.E. Williams, Inc. • Carthage, Missouri • www.williams.com • 417-358-4065 • Designed and Manufactured in the USA
Information contained herein is subject to change without notice. REV090409

Wall
Page 1 of 3

d-series

D-Series Size 1 LED Area Luminaire

Color:
Finish:
Type:

Specifications

EPA: 1.01 ft² (0.09m²)

Length: 33" (843mm)

Width: 13" (330mm)

Height H1: 7-1/2" (190mm)

Height H2: 3-1/2" (89mm)

Weight (max): 27 lbs (12.2kg)

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high-performance, high efficiency, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTART PIRH N DBZDB

SERIES	LED	COLOR TEMPERATURE	DISTRIBUTION	FINISH	MOUNTING
DSX1 LED	Forward optics	30K 3000K	T15 Type I short	TSV5 Type V very short	MVOLT ¹
	P1 P4 P7	40K 4000K	T25 Type II short	T55 Type V short	T3M ²
	P2 P5 P8	5000K	T35 Type III medium	T55 Type V medium	30M ³
	P3 P6 P9		T55 Type III short	TSW Type V wide	24M ⁴
	RETARDED OPTICS		T3M Type III medium	BLC Backlight control ⁵	27T ⁶
	P10 P12		T4M Type IV medium	LCCL Left corner cutoff ⁷	34T ⁸
	P11 P13		T15M Type I medium	RCO Right corner cutoff ⁹	48T ¹⁰

Shipped installed

SHIPPED INSTALLED	DESCRIPTION	SHIPPED INSTALLED	DESCRIPTION
HS	High flow, medium ambient sensor, 8-15' mounting height, ambient sensor enabled at 16"	DBZDB	Dark bronze
PER	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBLDB	Black
PERFCW	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBWDB	Natural aluminum
PERFCV	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBWDB	White
PERFCV	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBDDB	Dark dark bronze
PERFCV	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBLDB	Dark dark black
PERFCV	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBWDB	Natural natural aluminum
PERFCV	High flow, medium ambient sensor, 15-30' mounting height, ambient sensor enabled at 16"	DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
DBZDB	Dark bronze
DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
DBZDB	Dark bronze
DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
DBZDB	Dark bronze
DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
DBZDB	Dark bronze
DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
DBZDB	Dark bronze
DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
DBZDB	Dark bronze
DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
EM4W	4-watt integral emergency LED driver ⁽⁴⁾
SE	Single face ⁽⁵⁾
DF	Double face (208, 240, 480V) ⁽⁵⁾
PC	Factory installed photocell button-style photocell ⁽⁷⁾
HSXK	Empty housing extension used to match units with EM, FCC, or conduit entry options.
EM10WVC	10-watt emergency LED driver ⁽¹¹⁾
OCCWSP 21L	Factory installed occupancy sensor ⁽¹²⁾
FSR-100	Remote controller for occupancy sensor

Shipped separately

SHIPPED SEPARATELY	DESCRIPTION
IS	IS Bid spikes ¹⁴
ES	ES External glare shield ¹⁵

Shipped separately

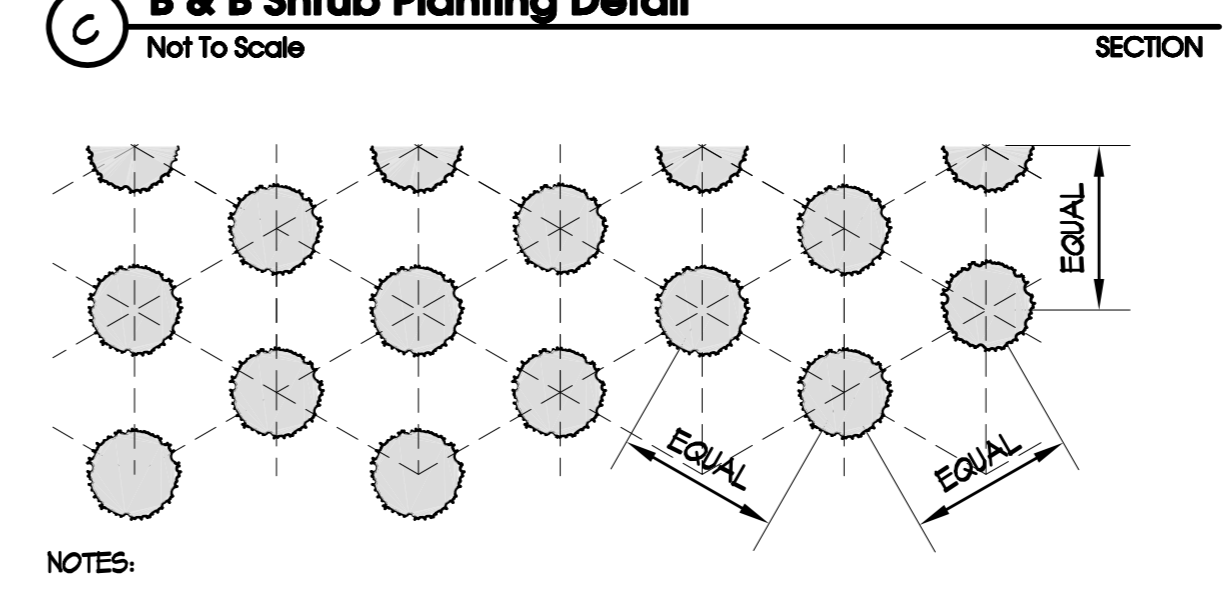
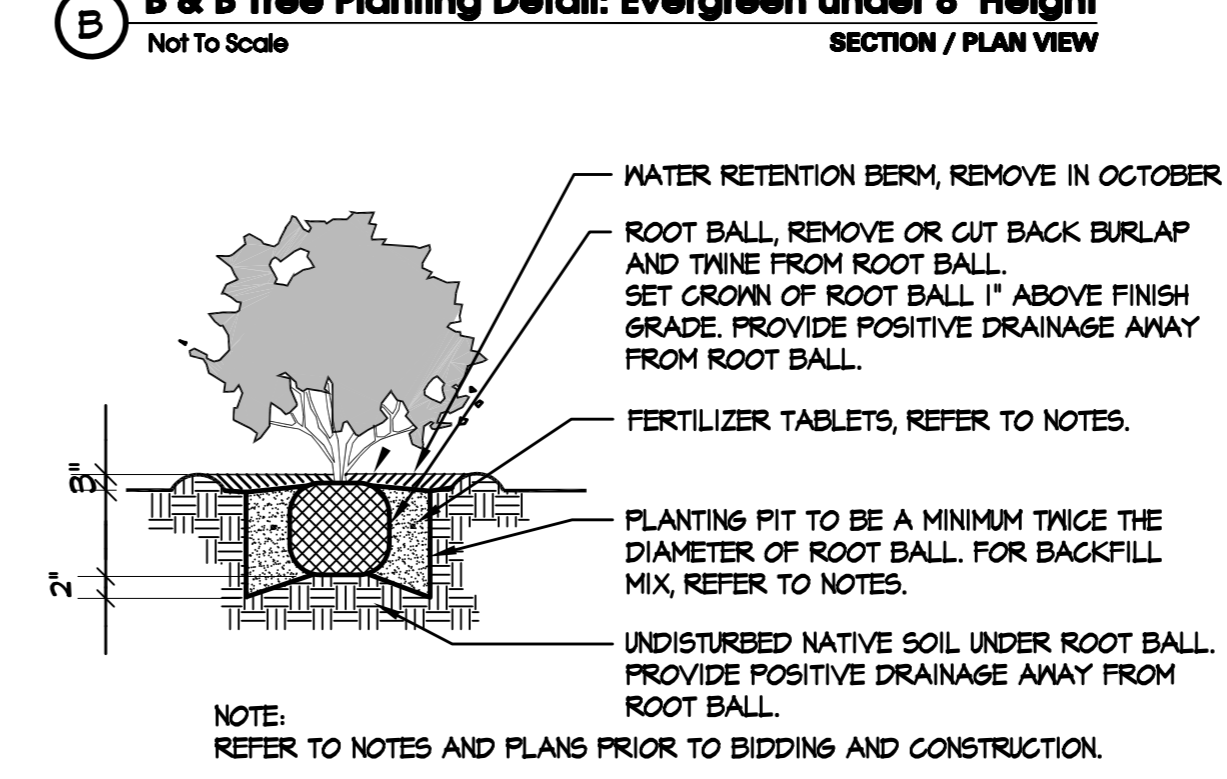
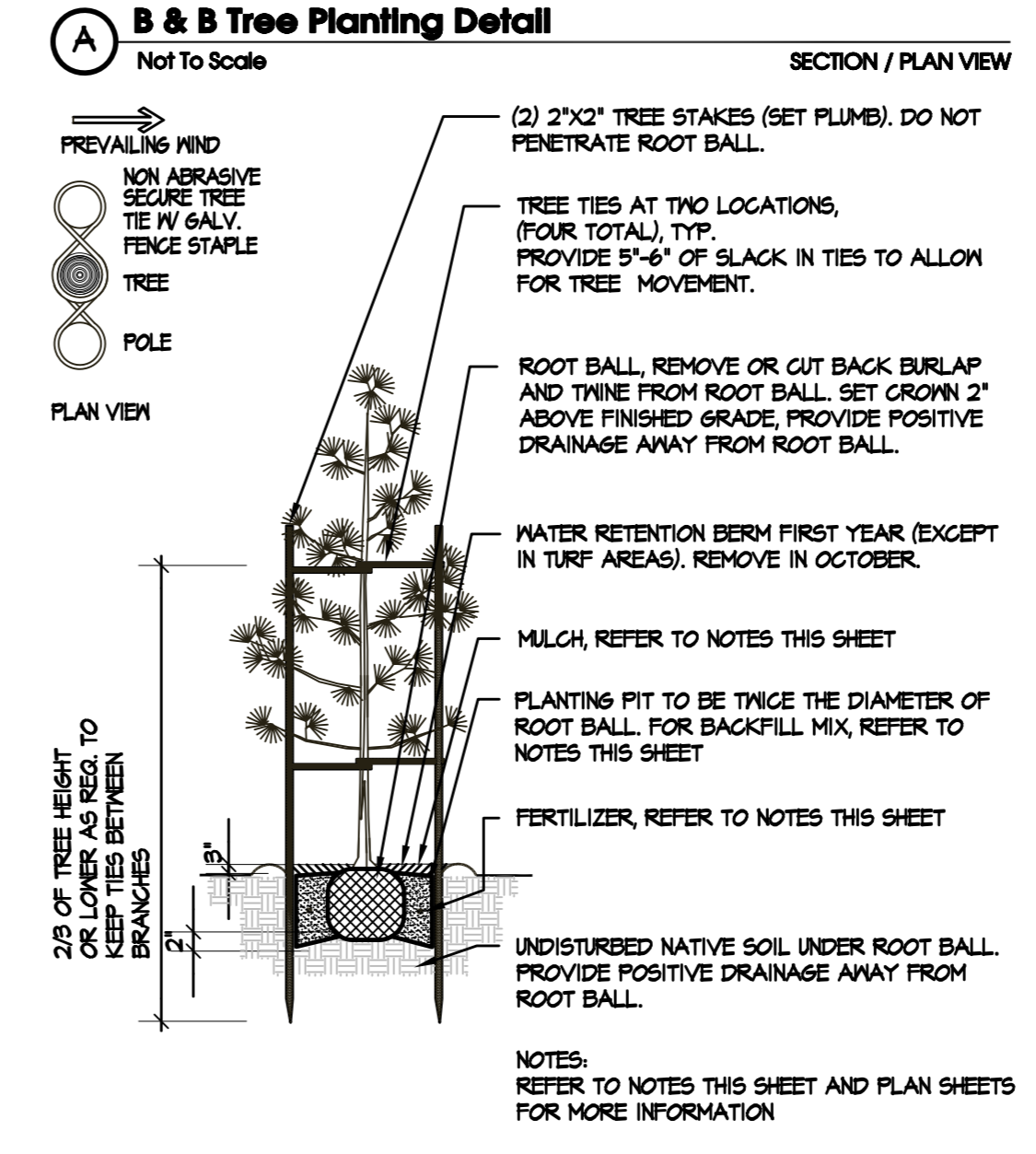
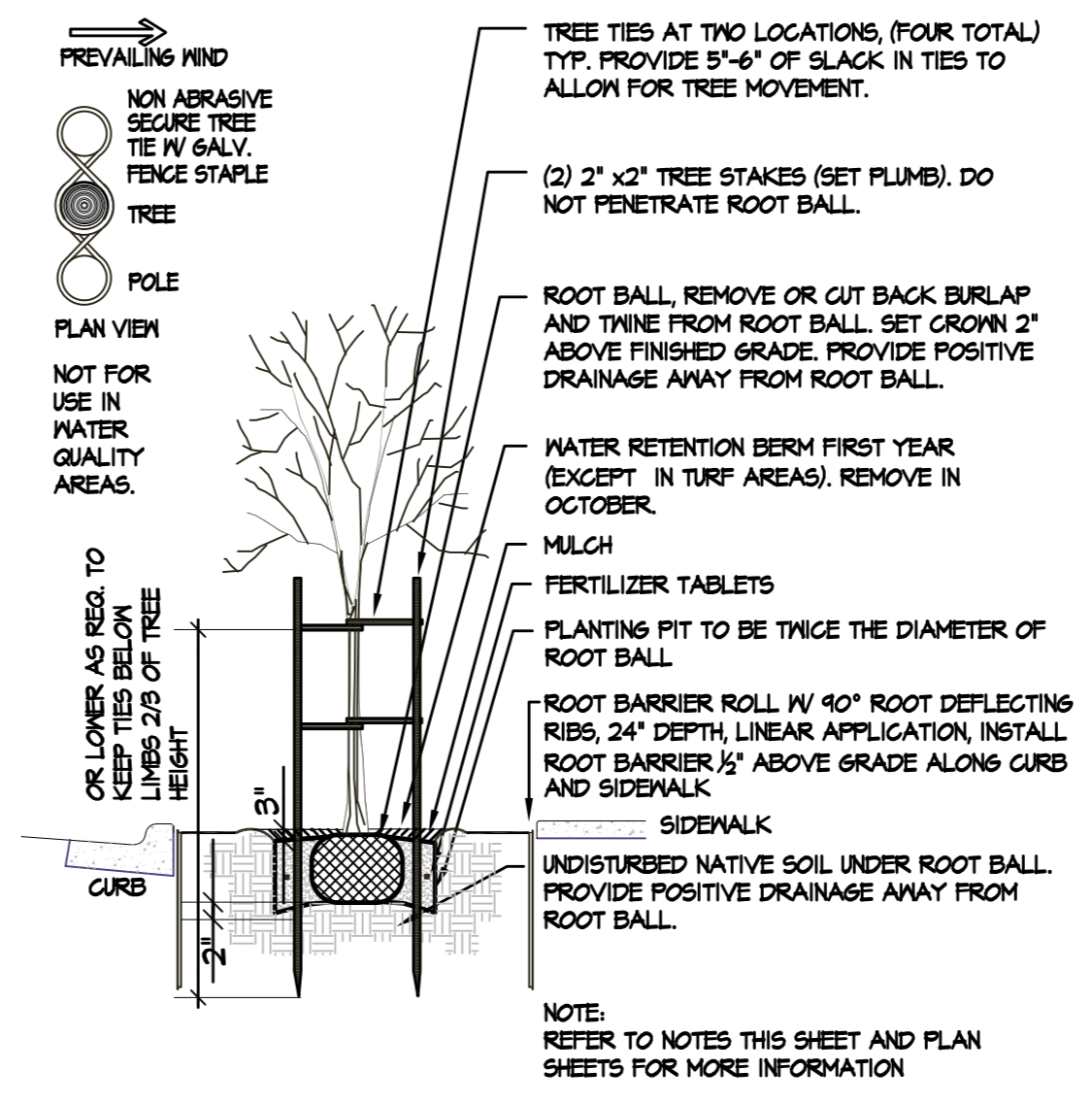
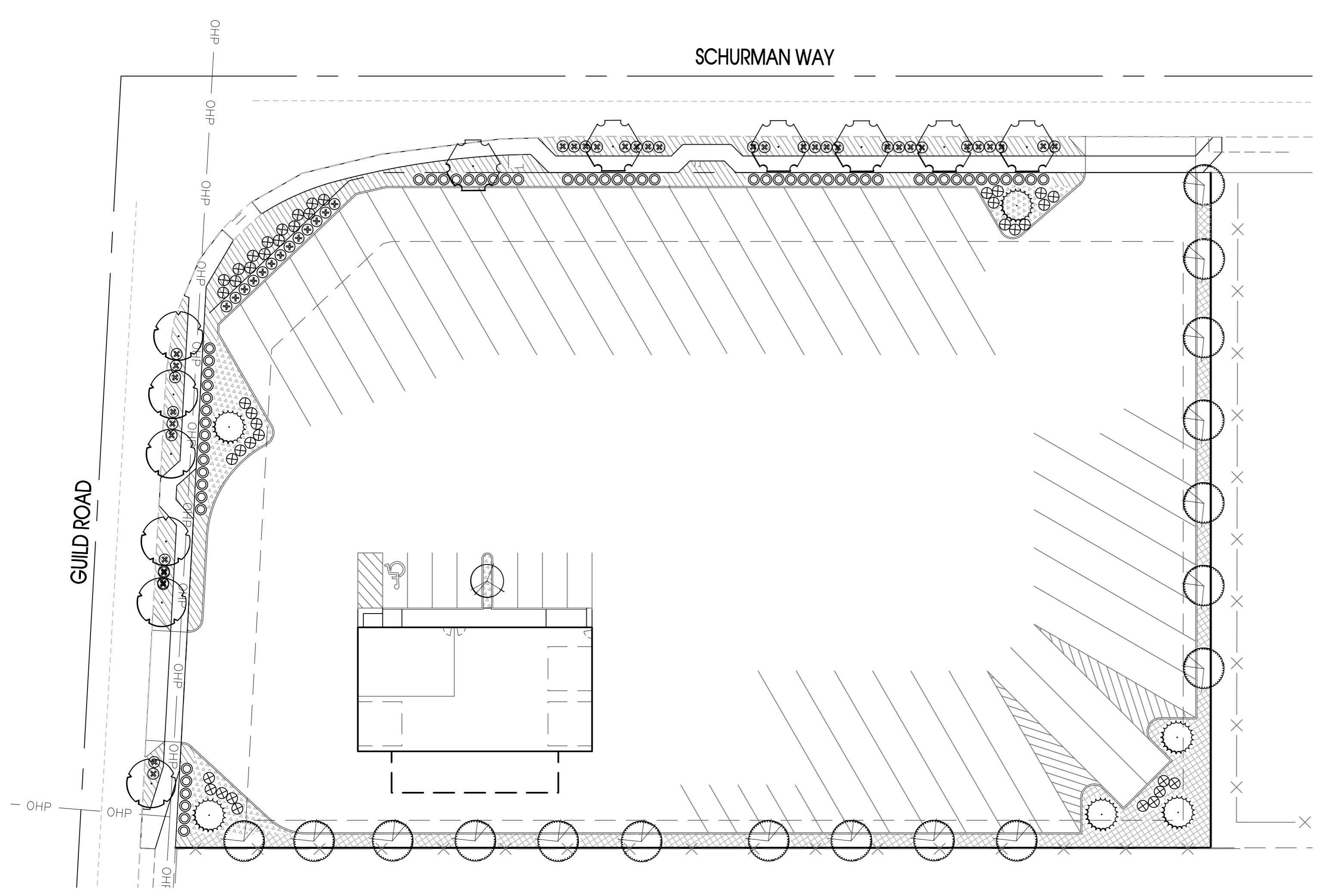
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DBLDB	Black
DBWDB	Natural aluminum
DBWDB	White
DBDDB	Dark dark bronze
DBLDB	Dark dark black
DBWDB	Natural natural aluminum
DBWDB	White

Control options

Shipped installed: High flow, medium ambient sensor¹; High flow, medium ambient sensor²; High flow, medium ambient sensor only (controls outdoor sensors)³; High flow, medium ambient sensor only (controls outdoor sensors)⁴; High flow, medium ambient sensor only (controls outdoor sensors)⁵; High flow, medium ambient sensor only (controls outdoor sensors)⁶; High flow, medium ambient sensor only (controls outdoor sensors)⁷; High flow, medium ambient sensor only (controls outdoor sensors)⁸; High flow, medium ambient sensor only (controls outdoor sensors)⁹; High flow, medium ambient sensor only (controls outdoor sensors)¹⁰.

Shipped separately

SHIPPED SEPARATELY



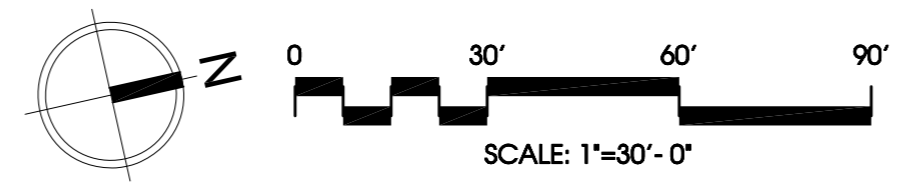
PLANT LEGEND			
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QUANTITY
TREES			
	ACER RUBRUM 'ARMSTRONG'S' ARMSTRONG MAPLE	2" cal. min.	17
	ACER GRANDIDENTATUM 'SCHMIDT' ROCKY MOUNTAIN GLOW MAPLE	2" cal. min.	6
	CALOCEDRUS DECURRENS INCENSE CEDAR	6' ht. min.	6
	CARPINUS BETULUS 'FASTIGIATA' EUROPEAN HORNBEAM	2" cal. min.	6
	PYRUS CALLERYANA 'CAPITAL' CAPITAL ORNAMENTAL PEAR	2" cal. min.	1
SHRUBS			
	ILEX X MESERVEAE 'BLUE BOY' BLUE BOY HOLLY	5 GAL.	48
	PRUNUS LAURACER 'OTTO LUYKEN' OTTO LUYKEN'S LAUREL	5 GAL.	54
	VIBURNUM DAVIDII DAVID VIBURNUM	5 GAL.	41
GROUNDCOVERS*			
	ARCTOSTAPHYLOS UVA URSI 'MASS.' MASSACHUSETTS KINICKINICK	1 GAL.	30' O.C.
	RUBUS CALYCINOSUS CREEPING RASPBERRY	1 GAL.	30' O.C.
	ARCTOSTAPHYLOS COTONEASTER DAMMERI, OR TURF PER OWNER	1 GAL.	30' O.C.

LANDSCAPE STATISTICS	
GROSS LOT AREA	89,001 +/- SF
TOTAL LANDSCAPE AREA	8,928 +/- SF (10%)
GROUNDCOVER AREA	4,965 +/- SF
TREE CANOPY AND SHRUB AREA	3,963 +/- SF
SETBACK AREA	5,475 +/- SF
TOTAL PARKING AREA	1,440 +/- SF
PARKING AREA LANDSCAPE	57.5 +/- SF

IRRIGATION NOTE

ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC DRIP AND/OR SPRAY IRRIGATION SYSTEM. REFER TO CIVIL ENGINEERING PLANS FOR WATER SOURCE.

- PLANTING NOTES**
- ALL BOUNDARIES, EASEMENTS, UTILITIES AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH OWNER PRIOR TO BEGINNING WORK. PROPERTY LINES AND SURVEY INFORMATION PROVIDED BY PLS ENGINEERING INC.
 - IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL PROPERTY.
 - THE LANDSCAPE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BOUNDARIES, UTILITIES AND WETLANDS.
 - THIS PLAN SHALL BE INSTALLED TO MEET ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES.
 - THIS PLAN SHALL BE CONSIDERED PRELIMINARY UNTIL APPROVED BY ALL GOVERNING AGENCIES. IMPLEMENTATION OF THIS PLAN SHALL NOT PROCEED UNTIL ISSUANCE OF ALL RELATED PERMITS.
 - PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY, THE PLAN SHALL GOVERN.
 - ALL WORK IS TO BE PERFORMED BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS.
 - THE CONTRACTOR IS TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S WORK AT NO ADDITIONAL COST TO THE OWNER. CONTACT ALL UTILITY PROVIDERS SERVING THE SITE AREA 48 HOURS PRIOR TO ANY EXCAVATION.
 - ALL PLANT MATERIALS SHALL MATCH SPECIFICATIONS PER SPECIES AND SHALL COMPLY WITH ANSI Z60.1 STANDARD FOR NURSERY STOCK.
 - THE CONTRACTOR SHALL ADHERE TO THE WASHINGTON ASSOCIATION OF NURSERYMEN'S GUIDELINES FOR PLANTING PRACTICES.
 - THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ELEMENTS ON AND OFF SITE, RESULTING FROM THE CONTRACTOR'S WORK.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR 2 YEARS AFTER COMPLETION OF PLANTING. DISEASE, DYING, OR DEAD PLANT MATERIAL SHALL BE REPLACED BY THE CONTRACTOR DURING THE TWO YEAR PERIOD AND MAINTAINED FOR AN ADDITIONAL 2 YEAR PERIOD.
 - IMMEDIATELY UPON BID AWARD, CONTRACTOR SHALL SECURE THE PLANT MATERIALS AS SPECIFIED FROM AVAILABLE SOURCES. IN THE EVENT THAT PLANT MATERIALS ARE NOT AVAILABLE, CONTACT LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTION FOR PLANT MATERIAL WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
 - TOP DRESS ALL SHRUB AND GROUND COVER AREAS (NOT LAWN) WITH 3" OF FIR BARK MULCH. SUBMIT SAMPLE TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION.
 - TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.
 - THE CONTRACTOR SHALL ENSURE THAT ALL EXCAVATED PLANTING PITS HAVE POSITIVE DRAINAGE. PLANT PITS FULLY FLOODED WITH WATER SHALL DRAIN WITHIN (12) HOURS OF FILLING.
 - FINISH GRADE SHALL BE SET TO ALLOW POSITIVE DRAINAGE.
 - ROTTILL 2" OF COMPOST INTO ALL PLANTED AREAS.
 - INCORPORATE PEAT INTO THE ROOT ZONE OF RHODODENDRONS, AZALEAS AND OTHER ACID LOVING PLANTS.
 - INCORPORATE 10-20-20 FERTILIZER INTO THE ROOT ZONE OF ALL NEW PLANTINGS.
 - RONSTAR, OR APPROVED EQUAL, PREEMERGENT HERBICIDE TO BE APPLIED TO ALL PLANTED AREAS PER MANUFACTURER'S INSTRUCTIONS.
 - EXISTING VEGETATION TO BE SPRAYED WITH ROUNDUP OR APPROVED EQUAL, PER MANUFACTURER'S INSTRUCTIONS. SUFFICIENT TIME SHALL BE GIVEN TO ALLOW EXISTING MATERIAL TO DIE. REMOVE EXISTING 27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.
 - CROWN LAWN AREAS AND GRADE TO PROVIDE POSITIVE DRAINAGE.
 - ROLL LAWN AREA TO INSURE PROPER COMPACTION TO MINIMIZE SETTLING.
 - AMEND SOIL IN LAWN AREAS WITH 80 LBS. OF DOLOMITE LIME AND 40 LBS. OF 10-20-20 SLOW RELEASE FERTILIZER OR EQUIVALENT. PROVIDE A 3" LAYER OF SANDY LOAM TOPSOIL FOR LAWN AND BED AREA.
 - SEED LAWN AREAS WITH GRASS SEED MANUFACTURER'S RECOMMENDATIONS. COVER SEED WITH FINE MULCH APPLIED WITH ROLLER OR HYDROSEED.
 - THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.
 - PLANT MATERIAL SHALL BE PLANTED W/ ROOT CROWN 1" ABOVE FINISHED GRADE TO ALLOW POSITIVE DRAINAGE AWAY FROM CROWN.
 - STAKE ALL TREES OVER 6 FT. IN HEIGHT PER DETAILS ON THIS SHEET.
 - REFER TO DETAILS FOR ADDITIONAL INFORMATION.
 - ALL PLANTING SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM.
 - ALL PLANT MATERIALS FURNISHED ARE TO BE HEALTHY, UNIFORMLY BRANCHED AND WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS.
 - ALL PLANT MATERIALS FURNISHED ARE TO BE FREE FROM DEAD OR BROKEN BRANCHES, LICHENS, SCARS, BROKEN BARK OR WOUNDS. ALL PLANT MATERIALS WILL BE INSECT FREE, AND DISEASE FREE ACCORDING TO THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE FOR NURSERY PLANT MATERIALS SOLD FOR WHOLESALE OR RETAIL. ALL PRUNING WOUNDS MUST BE WELL HEALED WITH NO EVIDENCE OF DECAY.
 - FIELD CONFIRM ALL SITE CONDITIONS, AREAS AND SIZES PRIOR TO BIDDING & CONSTRUCTION. DO NOT SCALE FROM PLANS.



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PRELIMINARY
NOT FOR CONSTRUCTION
SUBJECT TO APPROVAL

SCHURMAN WAY SITE PLAN

1600 Schurman Way
Woodland, Washington

DRAWN: VJH CHECKED: CB
SCALE: 1" = 30'-0" DATE: 01-05-22
JOB #:

ISSUED FOR: PLR

REVISIONS:

SHEET NAME:
PRELIMINARY LANDSCAPE PLAN

SHEET #:
L1

SHEET 17 OF 17