Project No. 3400 SCALE: H: 1" = 80' V: N/A DESIGNED BY: ORAFTED BY: REVIEWED BY:

Lewis River Subdivison

Located in the NE $\frac{1}{4}$ of Section 18, T5N, R1E W.M.

Woodland, Washington

UTILITY COMPANY AND EMERGENCY CONTACTS:

Clark-Cowlitz Fire Rescue

City of Woodland

Public Works Department

PO Box 9

236 Ste B Davidson

Woodland, WA 98674

www.ci.woodland.wa.us

Plans reviewed for compliance with

City Standards and Policies

Signed By

City of Woodland Woodland Public Works Woodland Police Department Frontier Communications NW Cowlitz County PUD (Electric)

Permit Number:

Recommended for Approval:

PUBLIC WORKS DIRECTOR

Improvement Summary: STREET IMPROVEMENTS WATER MAIN FOOTAGE SEWER MAIN FOOTAGE

SEPTIC SYSTEM DECOMMISSIONED

TOTAL IMPRERVIOUS SURFACE PRIVATE IMPERVIOUS SURFACE

TRENCHING WITHIN CITY RIGHT-OF-WAY

(360) 225-8281 Clark-Cowlitz Fire and Rescue (360) 225-7999 City of Woodland (Water & Sewer) (360) 225-8981 Cascade Natural Gas- Kelso (866) 699-4759 Utility Locates (360) 423-2210

DATE

(360) 225-7999

(360) 225-7476 fax

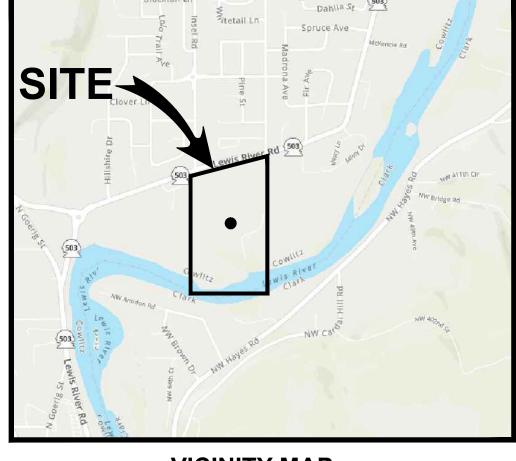
(360) 887-6229 (360) 225-8281 (888) 522-1130

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 netwrok (WSRN)



VICINITY MAP NOT TO SCALE

Sheet Index

- 01. Cover Sheet **General Notes**
 - **Existing Conditions Plan**
- **Preliminary Plat North**
- **Preliminary Plat South Grading and Erosion Control Plan North**
- **Grading and Erosion Control Plan South**
- ADA Ramps and Shared Driveway 1 and 2 Details
- Shared Driveway 3 and 4 Details
- Retaining Wall 1, 2, 3 & 4
- **Master Utlities Plan**
- **Lewis River Road Plan and Profile STA 49+20 53+40** Lewis River Road Plan and Profile STA 53+40 - 57+40
- **Brady Road Plan and Profile**
- Sasse Loop Plan and Profile STA 1+00 3+40
- Sasse Loop Plan and Profile STA 3+40 7+20
- Sasse Loop Plan and Profile STA 7+20 10+80 Sasse Loop Plan and Profile STA 10+80 - 15+10
- **Shared Driveway 1 and 4 Plan and Profile**
- 20. Rain Drain Plan
- **Miscellaneous Details**
- **City of Woodland Standard Erosion Control Details**
- **City of Woodland Standard Transportation Details**
- **City of Woodland Standard Transportation Details**
- **City of Woodland Standard Transportation Details**
- **City of Woodland Standard Drainage Details City of Woodland Standard Water Details**
- **City of Woodland Standard Water Details**
- City of Woodland Standard Sanitary Sewer Details Signing, Striping, and Lighting Plan
- Landscaping Plan
- Landscaping Plan
- Landscaping Plan

PROJECT NOTES:

APPLICANT/ OWNER: Luke Sasse 9321 NE 72nd Ave Bldg C #7 Vancouver, WA 98665 Ph (360) 907-0226

CIVIL ENGINEER: PLS Engineering Contact: Travis Johnson, PE 604 W Evergreen Blvd Vancouver, WA 98660

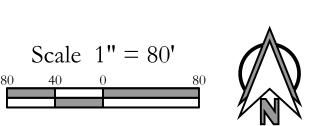
PH: (360) 944-6519 luke@timberlandinc.com pm@plsengineering.com

GENERAL NOTES

SITE LOCATION: Near 1950 Lewis River Rd, Woodland, WA 98674 Parcel #'s: 50650, 5065201, 506520100, 506520300, 506520400, 506520500

Construction shall conform to the requirements of the City of Woodland Engineering Standards for Construction

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



| | 11 |
|-------------------------|---------|
| Legend | |
| Proposed Asphalt | |
| Proposed Concrete | |
| Future Concrete | • • • • |
| Proposed Retaining Wall | |
| Proposed Gravel | |



Project No. 3400 SCALE: H: N/A V: N/A DESIGNED BY: ORAFTED BY: REVIEWED BY:

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 or Corrugated Polyethylene 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 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 2024 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.

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 29 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

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 reseeding.

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

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

Legend Proposed Asphalt **Proposed Concrete Future Concrete** Proposed Retaining Wall Proposed Gravel

PROPOSED LINETYPE & SYMBOL LEGEND

LINETYPES SYMBOLS CATCH BASIN — EDGE OF PAVEMENT OVERFLOW DRAIN PROPOSED SIDEWALK AREA DRAIN W/SUMP EDGE OF GRAVEL ---- PAVEMENT SAWCUT ROOF DRAIN — — — — SETBACK SANITARY CLEANOUT LOT LINE SANITARY MANHOLE STORM LINE FIRE HYDRANT WATER METER WATER MAIN LINE ------ WATER SERVICE LINE WATER BACKFLOW DEVICE SAN SEWER LATERAL I TEE W/TB SAN SEWER MAIN |⊗| GATE VALVE — ROAD CENTERLINE CAP W/TB RIGHT-OF-WAY ——— EASEMENT LINE WATER BEND W/TB

FXISTING LINFTYPE & SYMBOL LEGEND

| LXIOTII | 10 LINETH E & OTMBO |
|---------|--|
| LINE | OVER HEAD POWER LINE WATER LINE LOCATE SANITARY SEWER PIPE TELECOMM UTILITY |
| | CENTERLINE RIGHT OF WAY EDGE OF PAVEMENT CURB LINE EDGE OF GRAVEL SIDEWALK PAVEMENT STRIPING |

DRAINAGE FLOW LINE

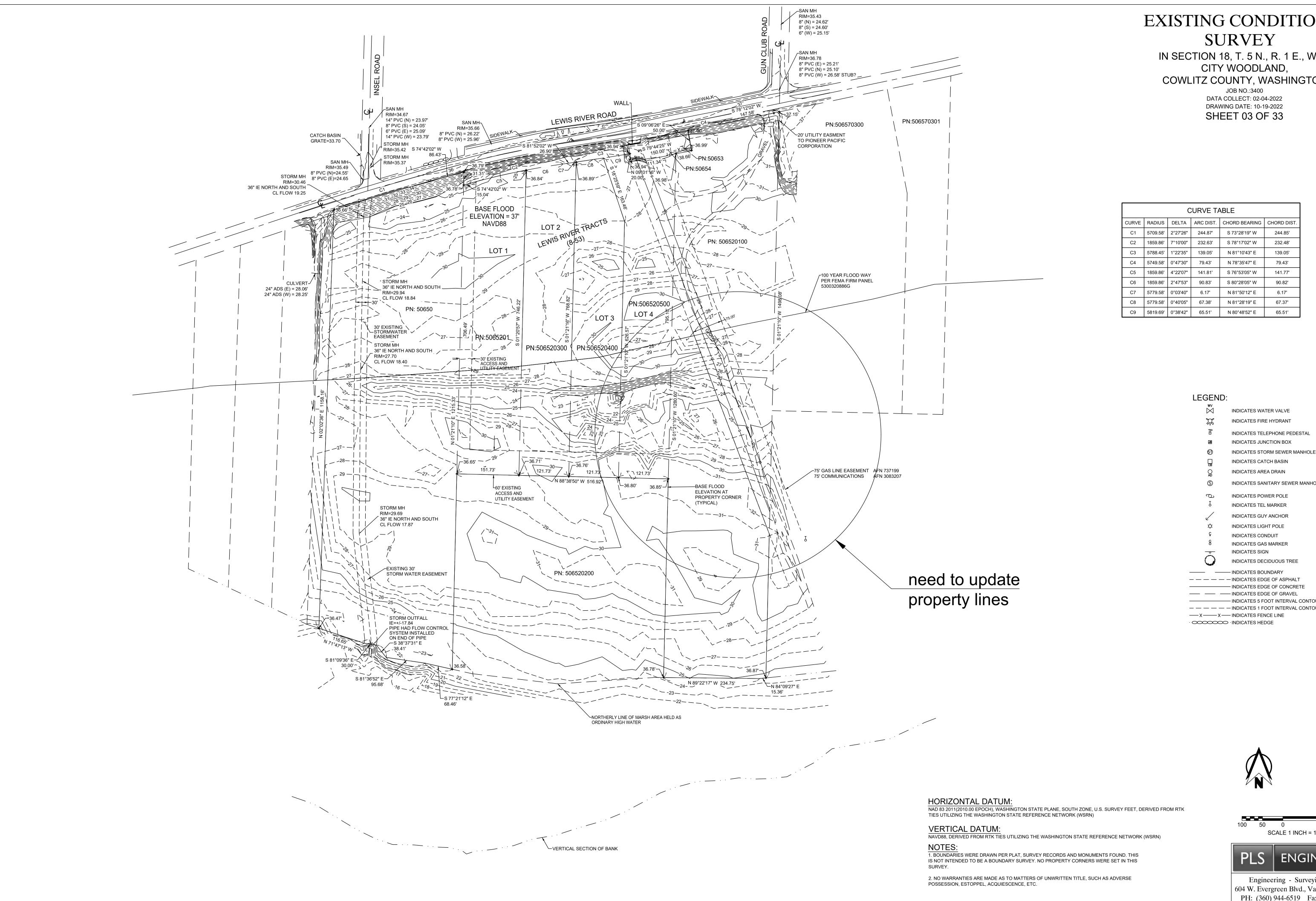
SYMBOLS

CATCH BASIN STORM MANHOLE CURB INLET FIRE HYDRANT WATER VALVE SAN SEWER MH UTILITY POLE EXTG WELL TEL PEDESTAL

> ← GUY WIRE MAILBOX **EXTG TREES**



Know what's below. **Call** before you dig



EXISTING CONDITIONS SURVEY

IN SECTION 18, T. 5 N., R. 1 E., W.M. CITY WOODLAND, COWLITZ COUNTY, WASHINGTON

> DATA COLLECT: 02-04-2022 DRAWING DATE: 10-19-2022 **SHEET 03 OF 33**

| CURVE TABLE | | | | | |
|-------------|--------------------|----------|-----------|---------------|-------------|
| CURVE | CURVE RADIUS DELTA | | ARC DIST. | CHORD BEARING | CHORD DIST. |
| C1 | 5709.58' | 2°27'26" | 244.87' | S 73°28'19" W | 244.85' |
| C2 | 1859.86' | 7°10'00" | 232.63' | S 78°17'02" W | 232.48' |
| C3 | 5788.45' | 1°22'35" | 139.05' | N 81°10'43" E | 139.05' |
| C4 | 5749.58' | 0°47'30" | 79.43' | N 78°35'47" E | 79.43' |
| C5 | 1859.86' | 4°22'07" | 141.81' | S 76°53'05" W | 141.77' |
| C6 | 1859.86' | 2°47'53" | 90.83' | S 80°28'05" W | 90.82' |
| C7 | 5779.58' | 0°03'40" | 6.17' | N 81°50'12" E | 6.17' |
| C8 | 5779.58' | 0°40'05" | 67.38' | N 81°28'19" E | 67.37' |
| C9 | 5819.69' | 0°38'42" | 65.51' | N 80°48'52" E | 65.51' |

INDICATES WATER VALVE

INDICATES TELEPHONE PEDESTAL

INDICATES JUNCTION BOX

INDICATES CATCH BASIN

INDICATES AREA DRAIN

INDICATES SANITARY SEWER MANHOLE

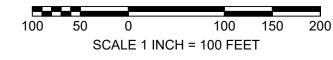
INDICATES POWER POLE

INDICATES TEL MARKER

INDICATES DECIDUOUS TREE

---- — — INDICATES EDGE OF ASPHALT -----INDICATES EDGE OF CONCRETE

--- INDICATES 5 FOOT INTERVAL CONTOUR — — — — — INDICATES 1 FOOT INTERVAL CONTOUR





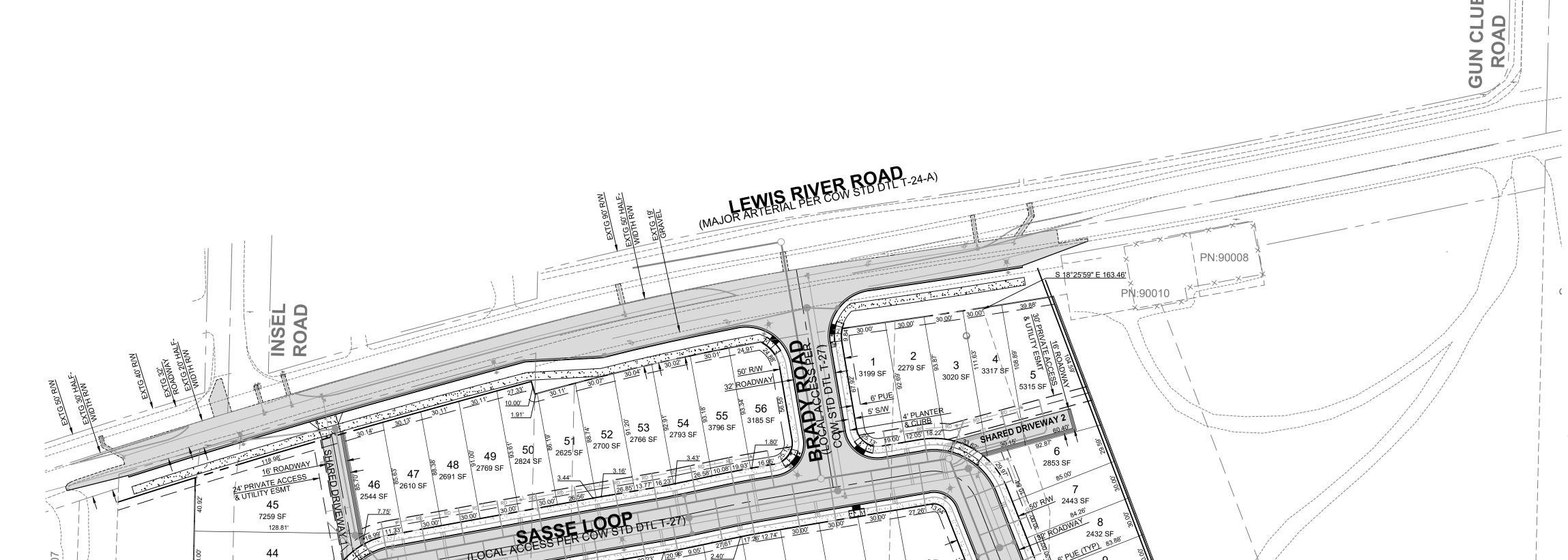
Engineering - Surveying - Planning 604 W. Evergreen Blvd., Vancouver, WA 98660 PH: (360) 944-6519 Fax: (360) 944-6539

REVIEWED BY:

Lewis River Subdivison Located in the NE $\frac{1}{4}$ of Section 18, T5N, R1E W.M. Woodland, Washington

20 3989 SF

3278 SF



43 4022 SF

42 4010 SF

100.37'

41 4020 SF 100.63'

4030 SF

4069 SF

4207 SF

36

30' EXTG STORM ESMT

72

SASSE LOOP (LOCAL ACCESS PER COW STD DTL T-27)

30 significant states and states are states as a second state and states are states as a second state and states are states as a second state are states are states as a second state are states are states as a second state are states are states are

3160 SF

32 3063 SF

34 5 33

3098 SF 2875 SF 2966 SF

6"x8" OUTFALL

⁼ 28 3448 SF

29 3354 SF

30' EXT ACCESS & UTILITY ESMT

3521 SF

MATCH LINE - SEE SHEET 05

VICINITY MAP NOT TO SCALE

PROJECT NOTES:

APPLICANT/ OWNER:

9321 NE 72nd Ave Bldg C #7 Vancouver, WA 98665 Ph (360) 907-0226 luke@timberlandinc.com

Vancouver, WA 98660

PH: (360) 944-6519 pm@plsengineering.com **GENERAL NOTES SITE LOCATION:** Near 1950 Lewis River Rd, Woodland, WA 98674

Parcel #'s: 50650, 5065201, 506520100, 506520300, 506520400,

CIVIL ENGINEER:

Contact: Travis Johnson, PE

604 W Evergreen Blvd

PLS Engineering

Construction shall conform to the requirements of the City of Woodland Engineering Standards for Construction

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

Horizontal Datum:

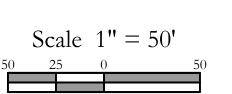
NAD 83 2011 (2010.00 EPOCH), Washington State Plane, South Zone, U.S. survey feet, derived from RTK ties utilizing the Washington State reference network (WSRN)

Vertical Datum:

NAVD88 derived from RTK ties utilizing the Washington State reference netwrok (WSRN)

SHORELINE IMPACT NOTE:

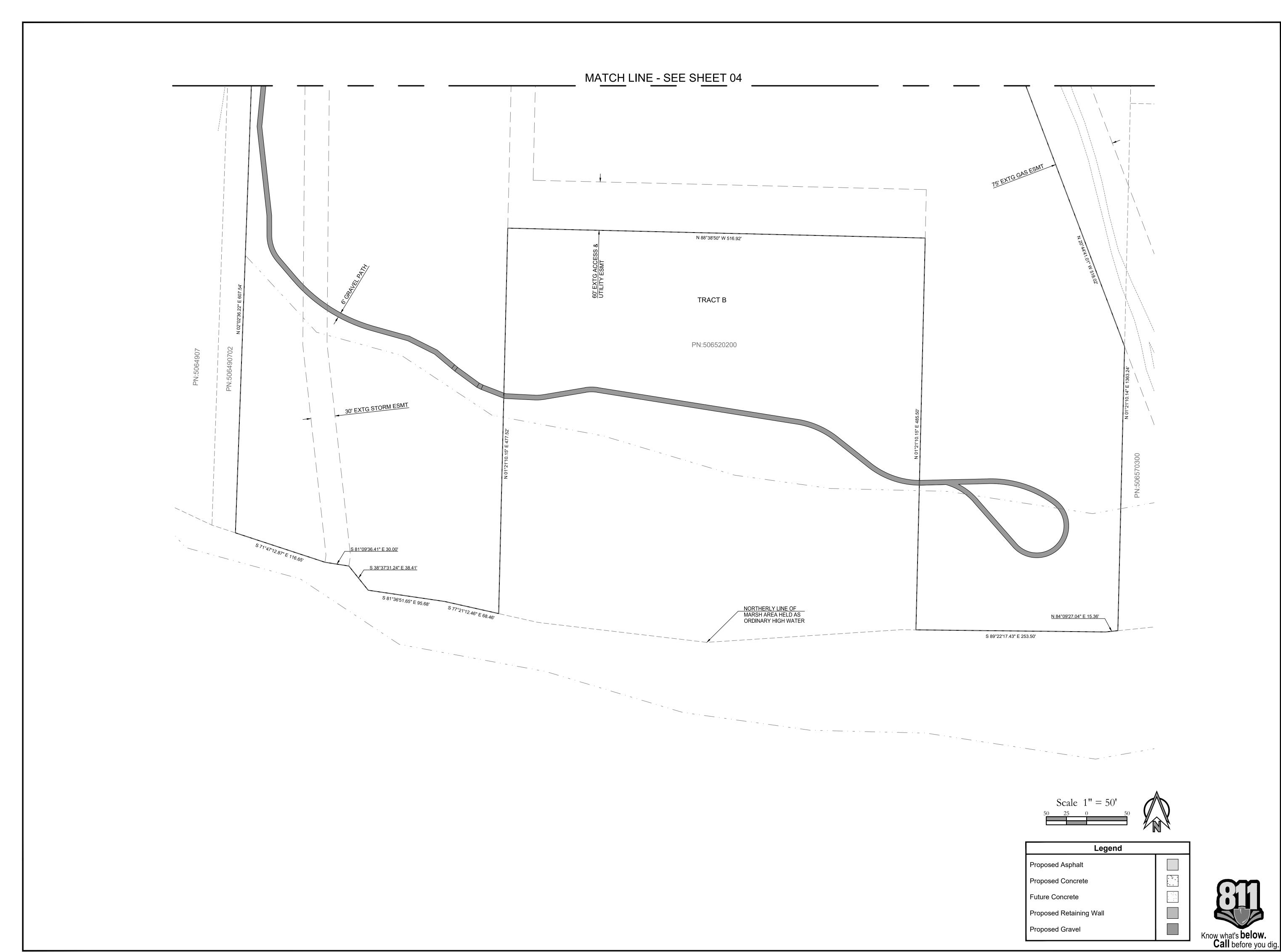
The site is within the residential and urban conservancy shoreline districts of the City of Woodland Shoreline Master Program. The site also falls within an established floodway and floodplain. The site is impacted by riparian habitat areas and buffers from an offsite wetland.



| Legend | |
|-------------------------|--|
| Proposed Asphalt | |
| Proposed Concrete | |
| Future Concrete | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 |
| Proposed Retaining Wall | |

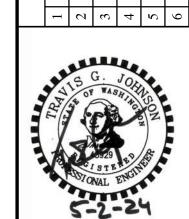


Proposed Gravel



Lewis River Subdivision Located In The City Of Woodland, Washington

Engineering - Surveying - Planning | 604 W. Evergreen Blvd., Vancouver, WA 9866



| | 55 |
|-----------------------|----|
| Project No. 3400 | |
| SCALE: H: 1" = V: N/A | 5(|
| DESIGNED BY: | |
| DRAFTED BY: | |
| REVIEWED BY: | |
| 05 | / |



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1 0 0 4 V C

Project No. 3400 SCALE: H: 1'' = 50'V: N/ADESIGNED BY: ORAFTED BY: REVIEWED BY:

Know what's **below. Call** before you dig

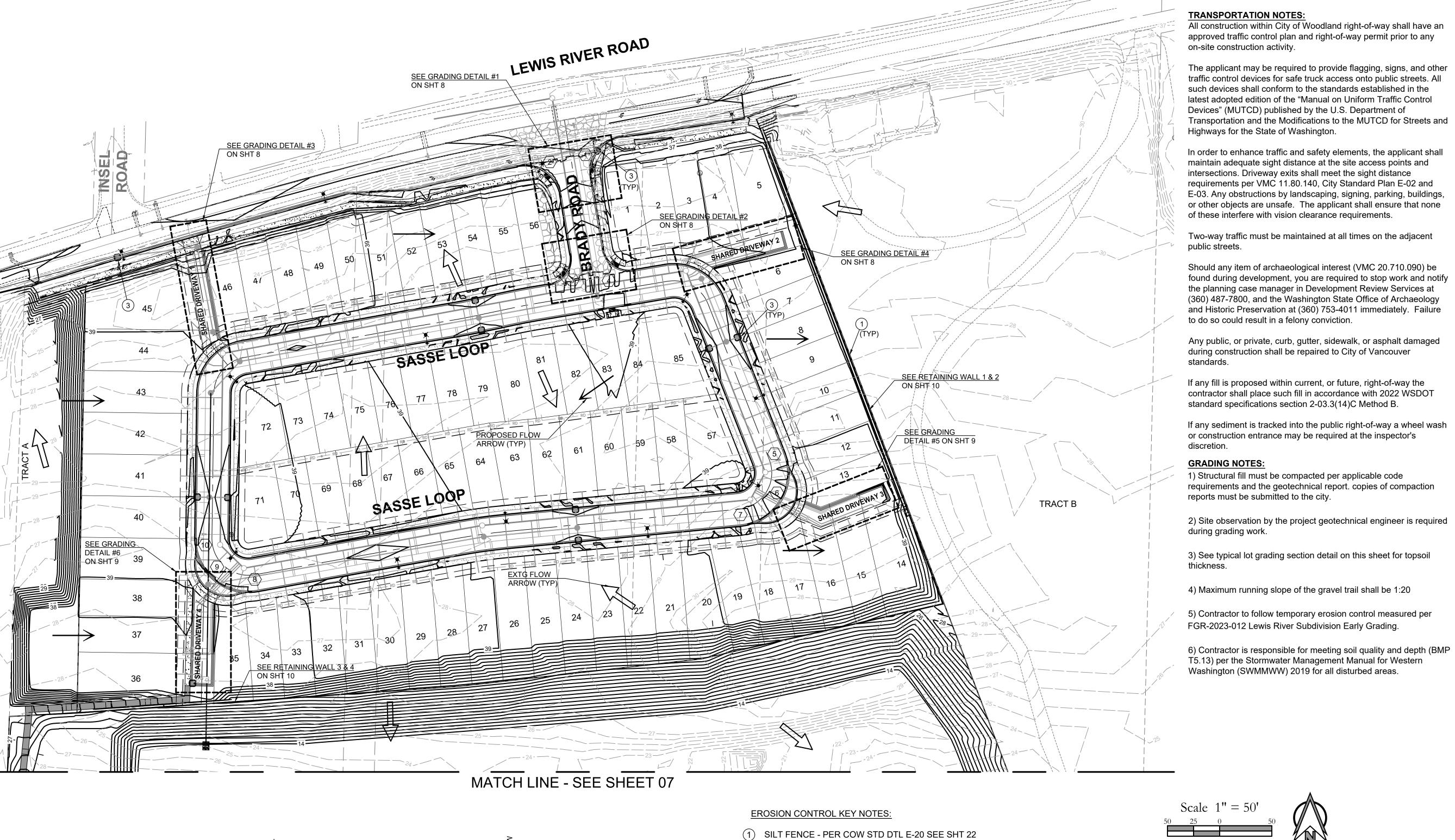
Legend

Proposed Concrete

Proposed Retaining Wall

Future Concrete

Proposed Gravel



LOT GRADING CROSS SECTION NOTES:

7" BELOW FINISH GRADE CONTOURS

1) MATERIAL SHALL BE STRUCTURAL UP TO

7" MAX TOPSOIL

Typical Lot Grading Section

FINISH GRADE ELEVATIONS

SHOWN IN PLAN

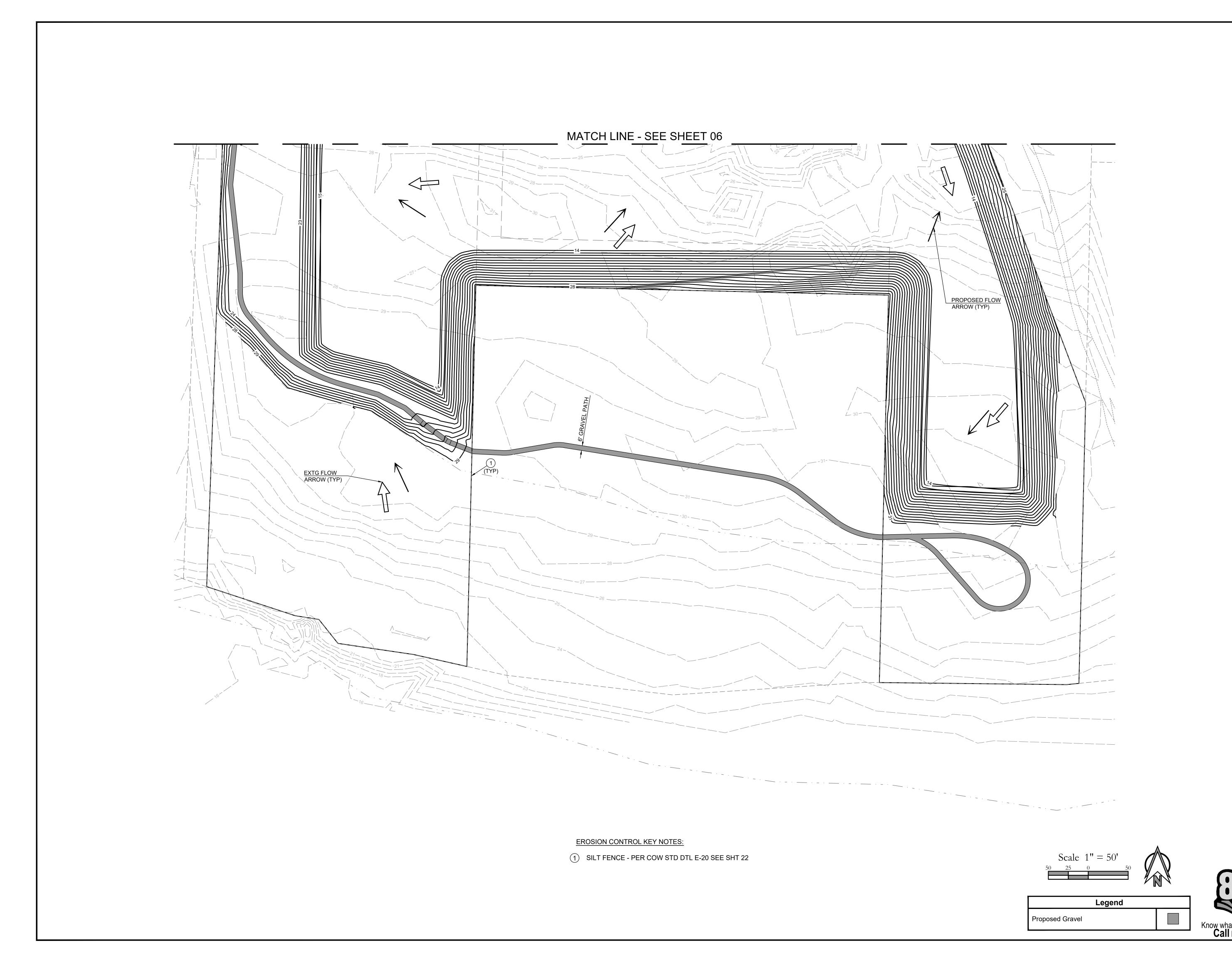
(2) STABILIZED CONSTRUCTION ENTRANCE PER COW STD DTL E-05 SEE SHT 22

3 INLET PROTECTION PER COW STD DTL E-16 OR E-16 SEE SHT 22

UNADJUSTED VOLUMES

CUT = 140,000 CY

FILL = 140,000 CY



Lewis River Subdivision Located In The City Of Woodland, Washington

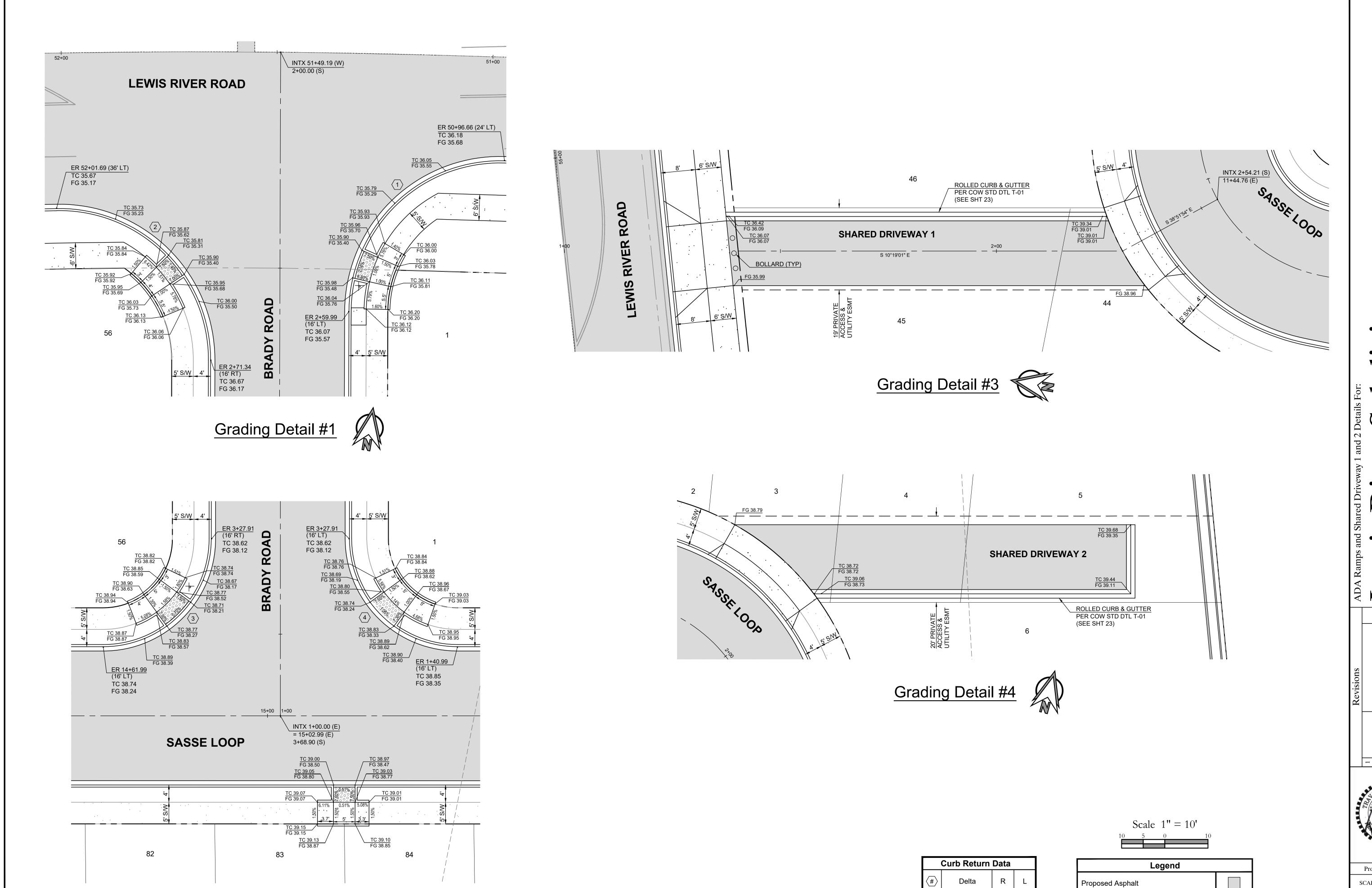
Project No. 3400

SCALE: H: 1" = 50'
V: N/A

DESIGNED BY: TO

SCALE: H: 1" = V: N/A
DESIGNED BY:
DRAFTED BY:
REVIEWED BY:

t's below.



Grading Detail #2

91°27'50"

90°00'00"

90°00'00"

Proposed Concrete

Proposed Retaining Wall

Future Concrete

Proposed Gravel

T Subdivison

Woodland, Washington

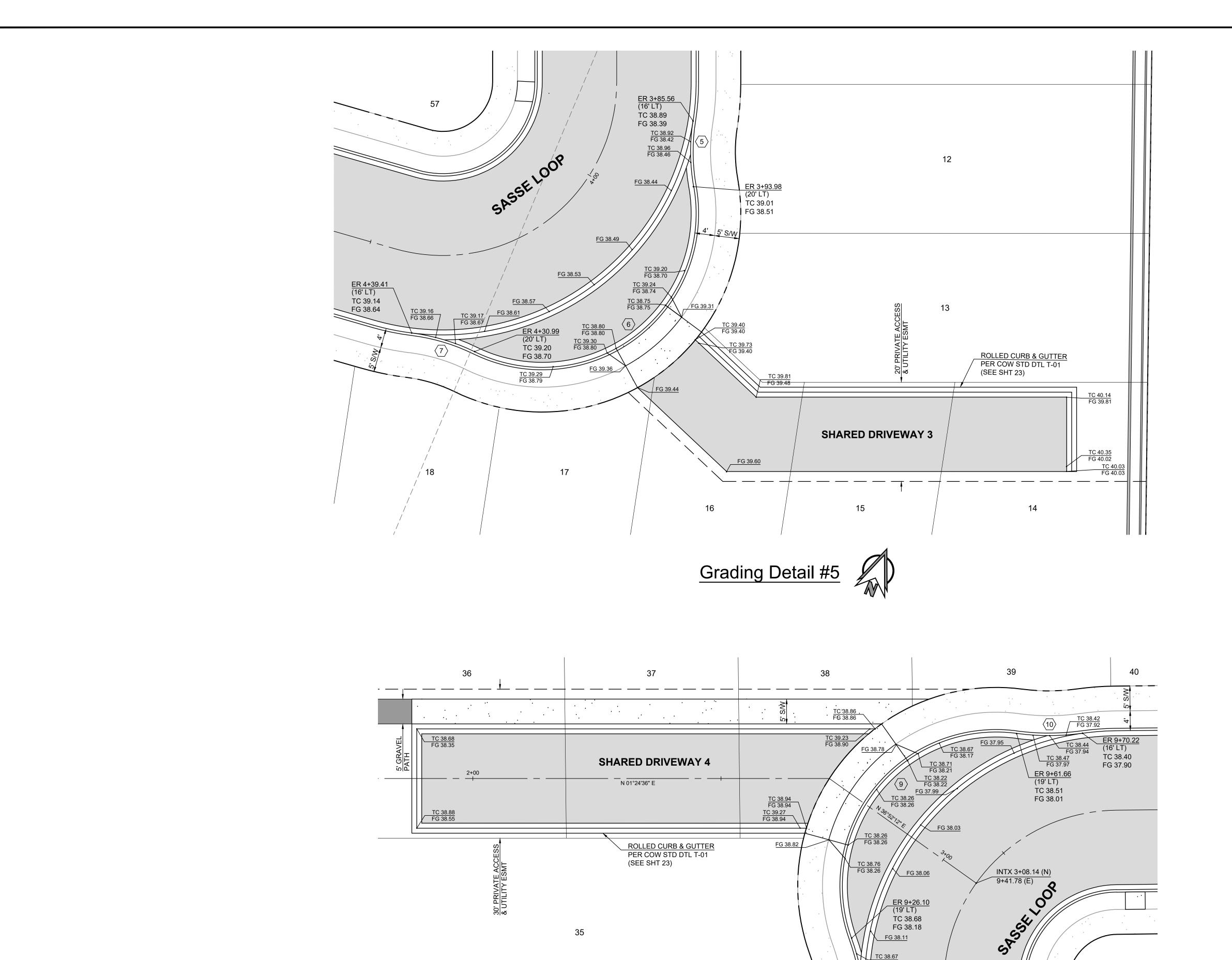
TOTAL ENGINEER

Project No. 3400

SCALE: H: 1" = 10'
V: N/A

DESIGNED BY: TO DRAFTED BY: TO REVIEWED BY: TO DRAFTED BY: TO DRAF

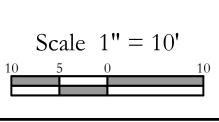
33



ER 9+17.54 (16' LT) TC 38.64 FG 38.14

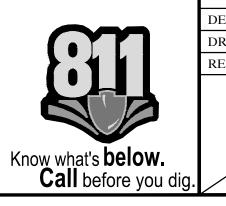
Grading Detail #6

| | Curb Return Data | | | | | | |
|-----|------------------|--------|--------|--|--|--|--|
| (#) | Delta | R | L | | | | |
| 5 | 19°00'06" | 40.00' | 13.27' | | | | |
| 6 | 126°10'12" | 31.00' | 68.26' | | | | |
| 7 | 19°00'06" | 40.00' | 13.27' | | | | |
| 8 | 15°34'46" | 49.00' | 13.32' | | | | |
| 9 | 117°24'39" | 31.00' | 63.53' | | | | |
| 10 | 15°34'46" | 49.00' | 13.32' | | | | |



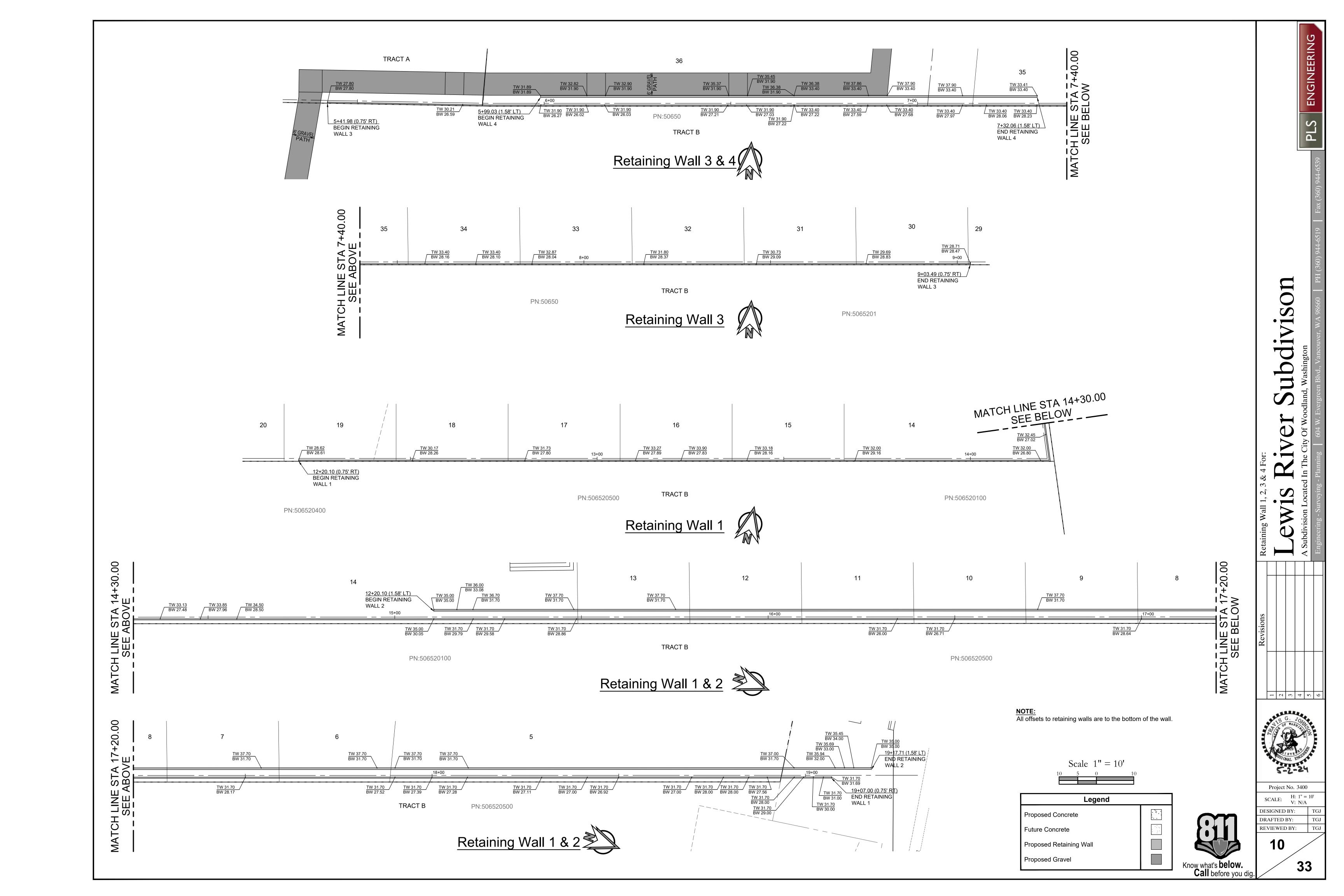
71

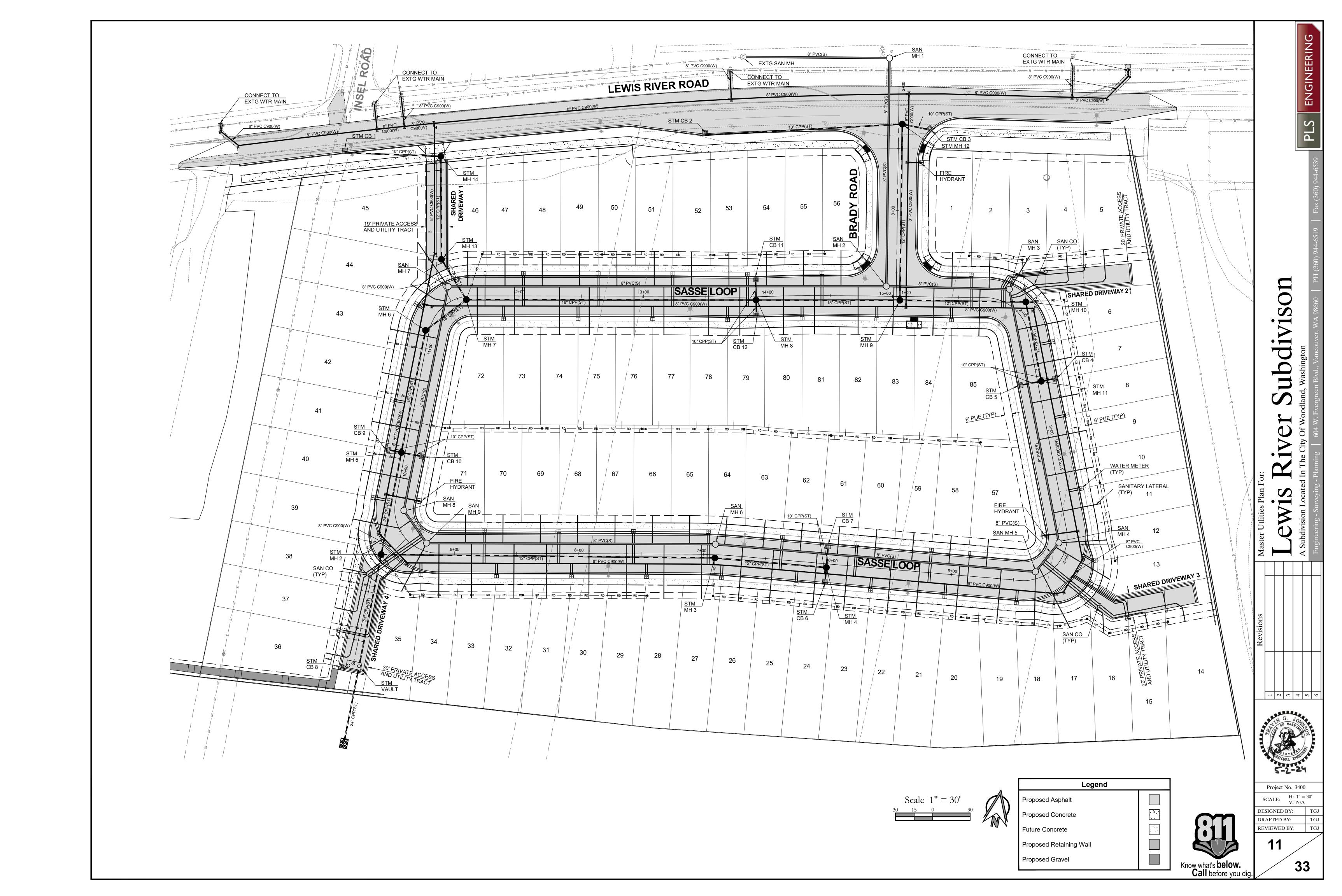
| | | _ | | | |
|-------------------------|---------|---|--|--|--|
| Legend | | | | | |
| Proposed Asphalt | | | | | |
| Proposed Concrete | | | | | |
| Future Concrete | • • • • | | | | |
| Proposed Retaining Wall | | | | | |
| Proposed Gravel | | | | | |



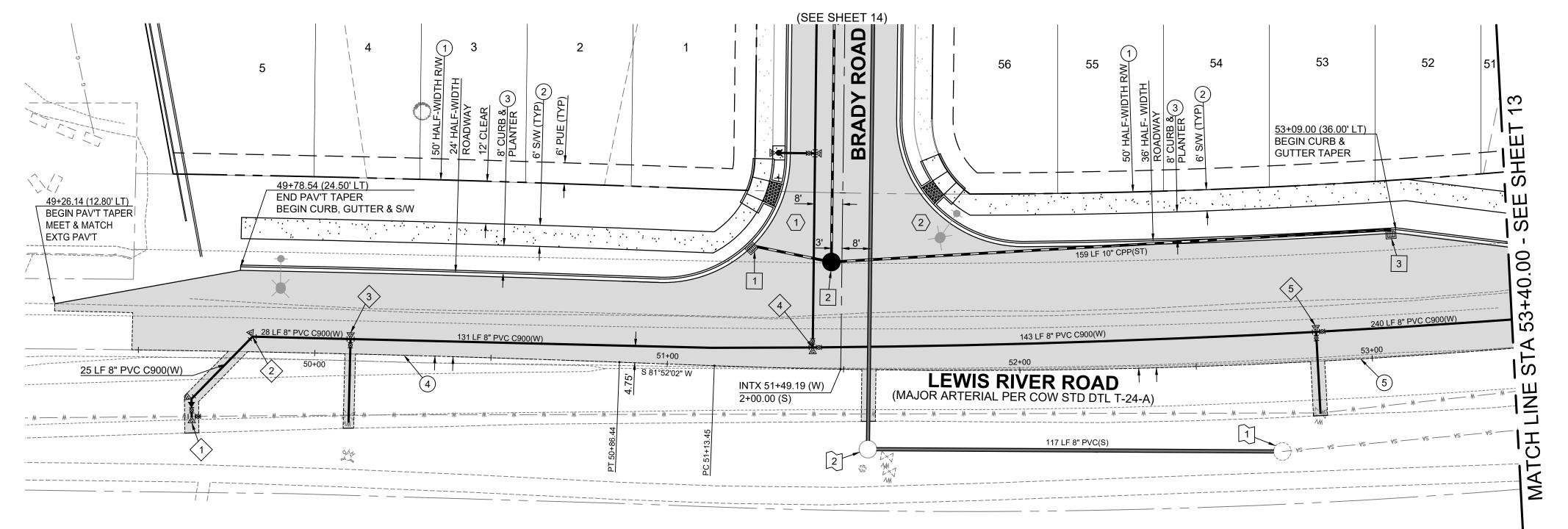
| | Project No. 3400 | |
|--|-----------------------|-----|
| | SCALE: H: 1" = V: N/A | 10' |
| | DESIGNED BY: | TGJ |
| | DRAFTED BY: | TGJ |
| | REVIEWED BY: | TGJ |
| | 09 | |
| Know what's below. Call before you dia. | 33 | 3 |

1 7 K 4 V 0

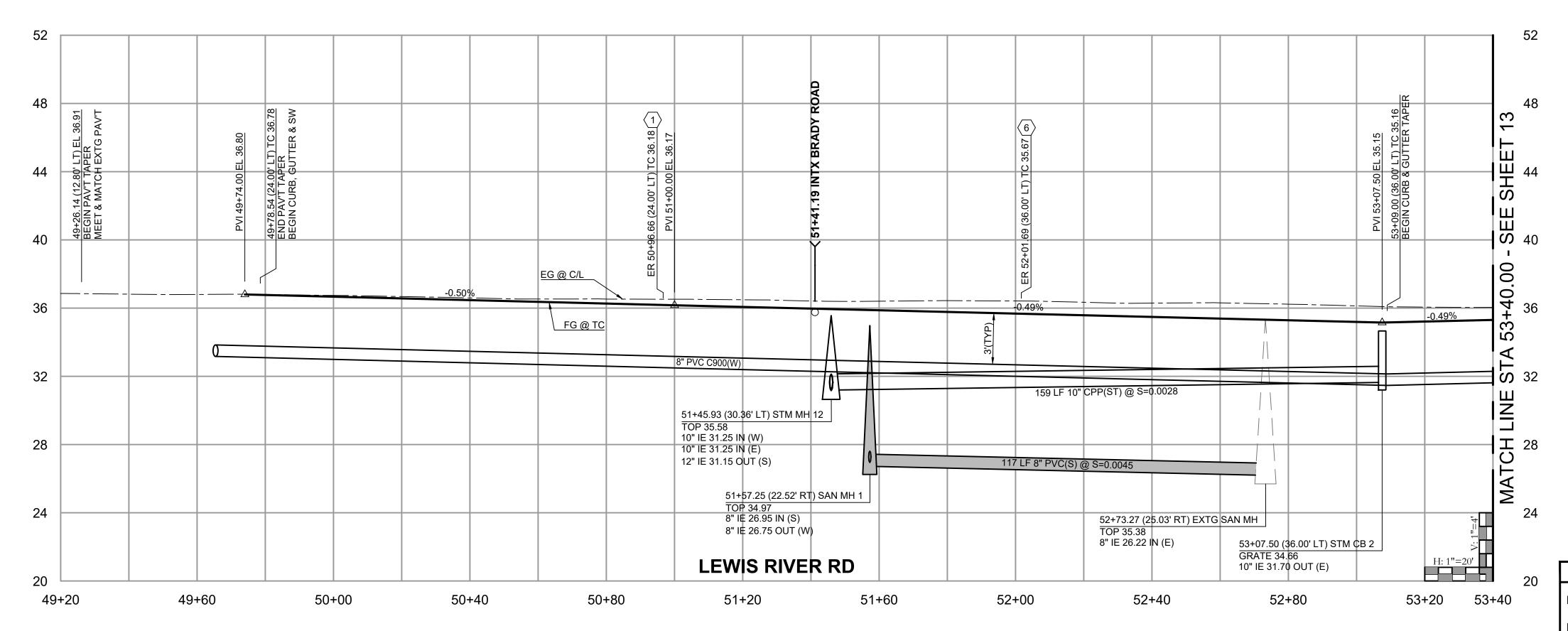




Project No. 3400 SCALE: H: 1'' = 20'V: 1'' = 4'DESIGNED BY: DRAFTED BY: REVIEWED BY:



| Stormwater Inlet Table | | | | | | | |
|------------------------|----------------------|------|-------------|----------------|----------------|------------------|-------------------|
| # | Location | Туре | Rim Elev | Outlet Elev | Outlet Size | Lateral Slope | Lateral Length |
| 1 | 51+21.89 (34.55' LT) | СВ | 35.55 | 31.32 | 10 in | 0.28% | 24 ft |
| 3 | 53+07.50 (36.00' LT) | СВ | 34.66 | 32.08 | 10 in | 0.28% | 159 ft |



CONSTRUCTION NOTES:

- 1. CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION.
- 2. CURB RETURN DATA (#) AND ADA RAMP GRADING -SEE SHT 08
- 3. CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES.
- 4. ROTATE MANHOLE CONES AWAY FROM CURB.
- 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.

STREET & SITE KEY NOTES:

- (1) SR-503 ARTERIAL (PER COW STD DTL T-24A SEE SHT 24)
- (2) SIDEWALK (PER COW STD DTL T-07 SEE SHT 23)
- (3) TYPE A1 CURB & GUTTER (PER COW STD DTL T-01-01A SEE SHT 23)
- 4 CENTERLINE CURVE DATA Δ = 3°40′00″, R = 5729.58′, L = 366.66′, T = 183.39′
- (5) CENTERLINE CURVE DATA Δ = 7°10′00″, R = 1909.86′, L = 238.89′, T = 119.60′

SANITARY SEWER KEY NOTES

- 1 52+73.27 (25.03' RT) EXTG SAN MH
- 2 51+57.25 (22.52' RT) SAN MH 1 (PER COW STD DTL S-07 SEE SHT 29)

STORMWATER KEY NOTES

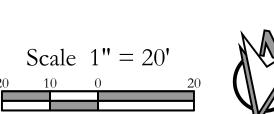
- 51+21.89 (34.55' LT) STM CB 3 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)
- 2 51+45.93 (30.36' LT) STM MH 12 (PER COW STD DTL D-10 SEE SHT 26)
- 53+07.50 (36.00' LT) STM CB 2 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)

WATER KEY NOTES

ALL THRUST BLOCKS SHALL BE INSTALLED PER COW DETAIL W-17, W-18 & W-19

- 6" FLG TEE W/TB 6" FLG x MJ VALVE W/VB $\langle 1 \rangle$ 6" FLG VALVE W/VB 6" FLG x MJ ADAPTER 6" x 8" FLG REDUCER
- 8" 45° FLG x MJ BEND W/TB AFTER TESTING & APPROVAL BY COW CONNECT TO EXTG 6"(W)
- 2 8" 45° MJ BEND W/TB
- 8" x 6" MJ x FLG TEE W/TB 6" FLG x MJ VALVE W/VB
- 3 24 LF 6" DI(W) AFTER TESTING & APPROVAL BY COW CONNECT TO EXTG 6"(W)
- 8" FLG TEE W/TB $\langle 4 \rangle$ (2) 8" FLG x MJ VALVE W/VB 8" FLG x MJ ADAPTER
- 8" x 6" MJ x FLG TEE W/TB 8" MJ VALVE W/VB 6" FLG x MJ VALVE W/VB 23 LF 6" DI AFTER TESTING & APPROVAL BY COW

CONNECT TO EXTG 6"(W))



| Legend | |
|-----------------|----|
| pposed Asphalt | |
| pposed Concrete | .% |
| | |

Future Concrete

Proposed Gravel

Proposed Retaining Wall

| Know what's below. |
|-----------------------------|
| Call before you dig. |

Project No. 3400 SCALE: H: 1'' = 20'V: 1' = 4'DESIGNED BY: DRAFTED BY: REVIEWED BY:

CONSTRUCTION NOTES: CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION. 2. CURB RETURN DATA ((#)) AND ADA RAMP GRADING -SEE SHT 08 CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES. ROTATE MANHOLE CONES AWAY FROM CURB. 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.

STREET & SITE KEY NOTES:

- (1) SR-503 ARTERIAL (PER COW STD DTL T-24A SEE SHT 24)
- 2 SIDEWALK (PER COW STD DTL T-07 SEE SHT 23)
- (3) TYPE A1 CURB & GUTTER (PER COW STD DTL T-01-01A SEE SHT 23)
- (4) 55+26.00 (24.00' LT) CENTER OF DRIVEWAY (PER COW STD DTL T-03 SEE SHT 23)
- (5) CENTERLINE CURVE DATA Δ = 7°10'00", R = 1909.86', L = 238.89', T = 119.60'
- (6) CENTERLINE CURVE DATA Δ = 3°40'00", R = 5729.58', L = 366.66', T = 183.39'

STORMWATER KEY NOTES:

- 1 55+21.61 (34.90' LT) STM MH 14 (PER COW STD DTL D-10 SEE SHT 26)
- 55+98.00 (24.00' LT) STM CB 1 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)

WATER KEY NOTES:

ALL THRUST BLOCKS SHALL BE INSTALLED PER COW DETAIL W-17, W-18 & W-19

8" FLG TEE W/TB
(2) 8" FLG x MJ VALVE W/VB

2 8" 11-1/4° MJ x FLG BEND W/TB

8" x 6" MJ x FLG TEE W/TB 6" FLG x MJ VALVE W/VB (3) 24 LF 6" DI(W) AFTER TESTING & APPROVAL BY COW CONNECT TO EXTG 6"(W)

8" x 6" MJ x FLG TEE W/TB 8" MJ VALVE W/VB 6" FLG x MJ VALVE W/VB 20 LF 6" DI(W)

AFTER TESTING & APPROVAL BY COW CONNECT TO EXTG 6"(W)

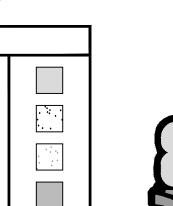
(2) 8" 45° MJ BEND W/TB

6" FLG TEE W/TB 6" FLG x MJ VALVE W/VB 6" FLG VALVE W/VB 6 6" FLG x MJ ADAPTER 6" x 8" FLG REDUCER 8" 45° FLG x MJ BEND W/TB AFTER TESTING & APPROVAL BY COW CONNECT TO EXTG 6"(W)

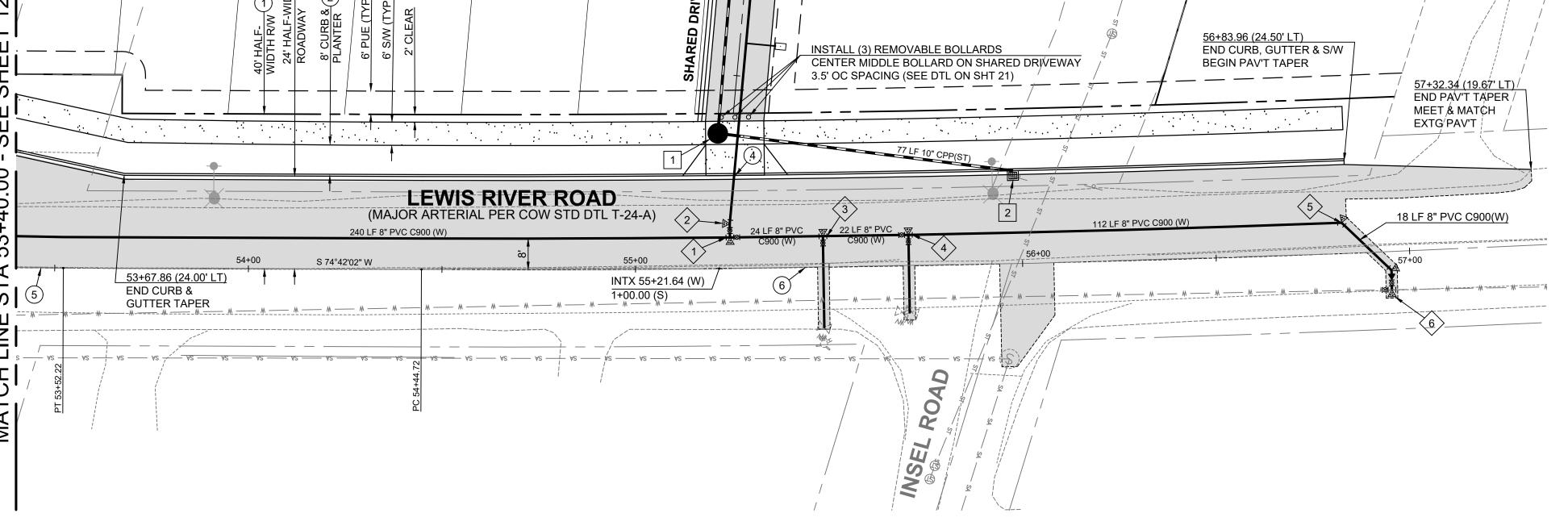
| | V |
|-------------------------|--|
| Legend | |
| Proposed Asphalt | |
| Proposed Concrete | |
| Future Concrete | : :: :-:::::::::::::::::::::::::::::::: |
| Proposed Retaining Wall | |

Proposed Gravel





Know what's **below. Call** before you dig.

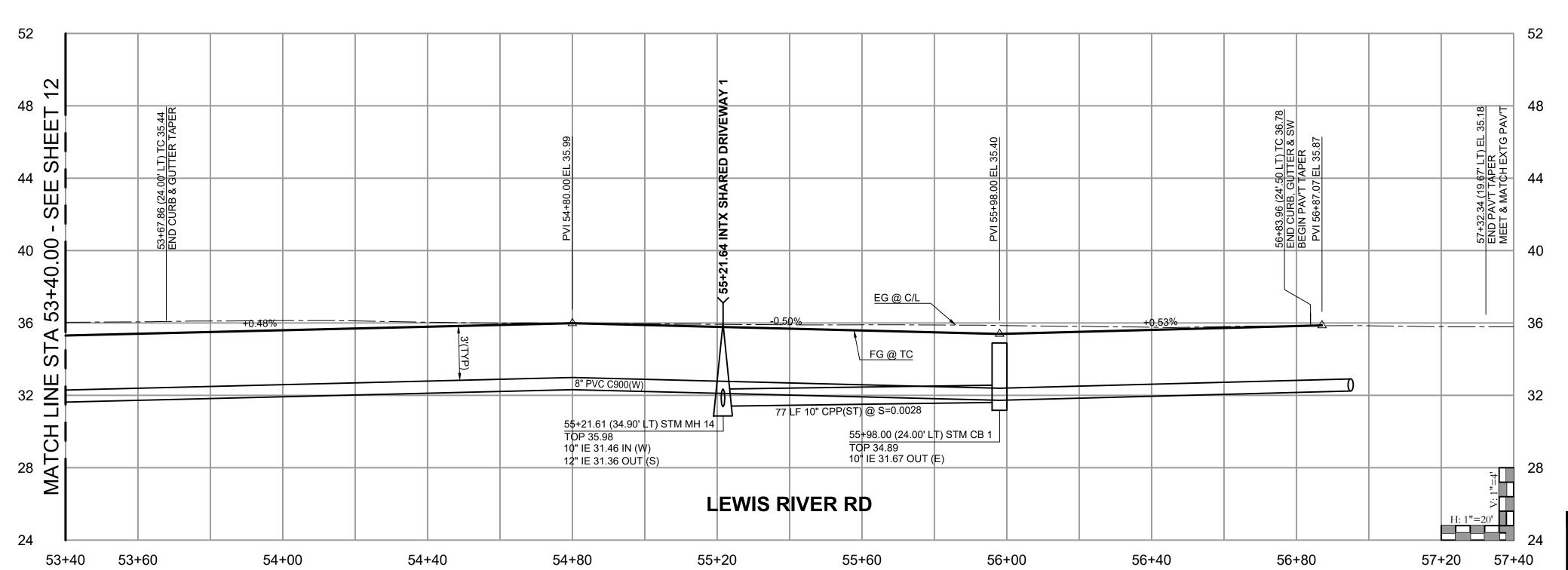


(SEE SHEET 19)

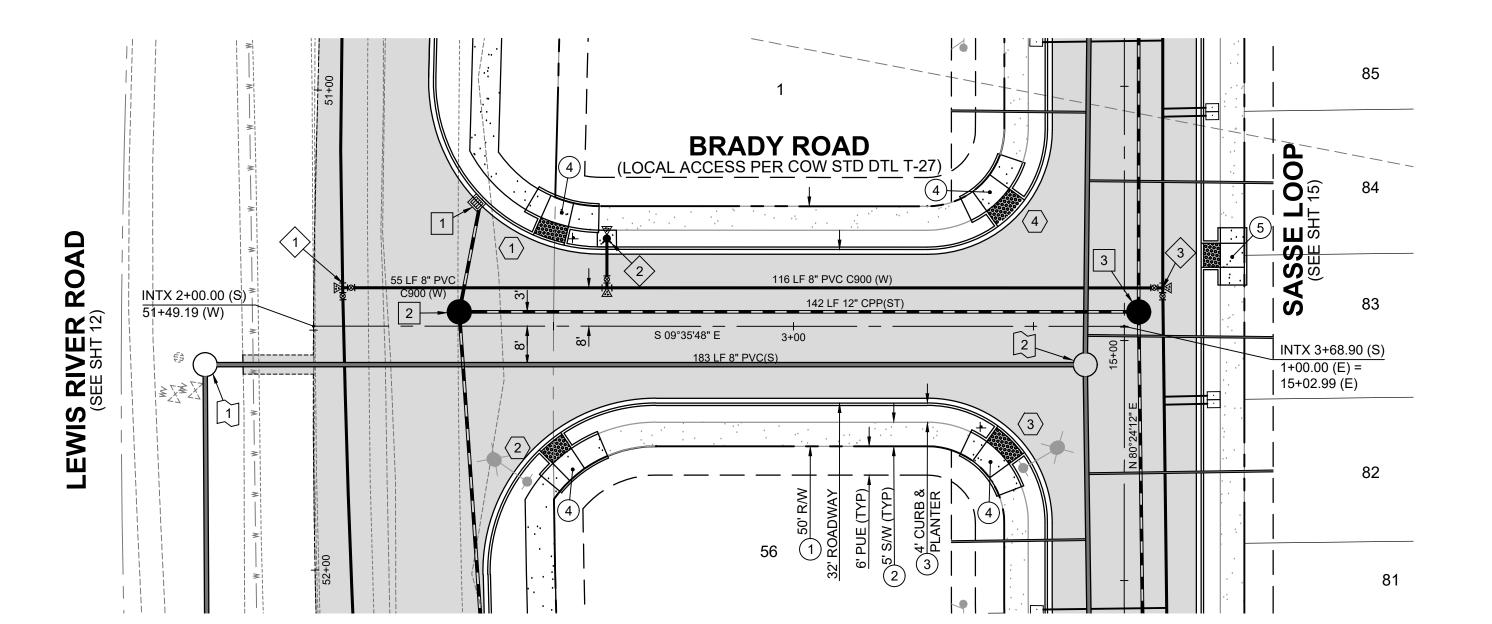
47

48

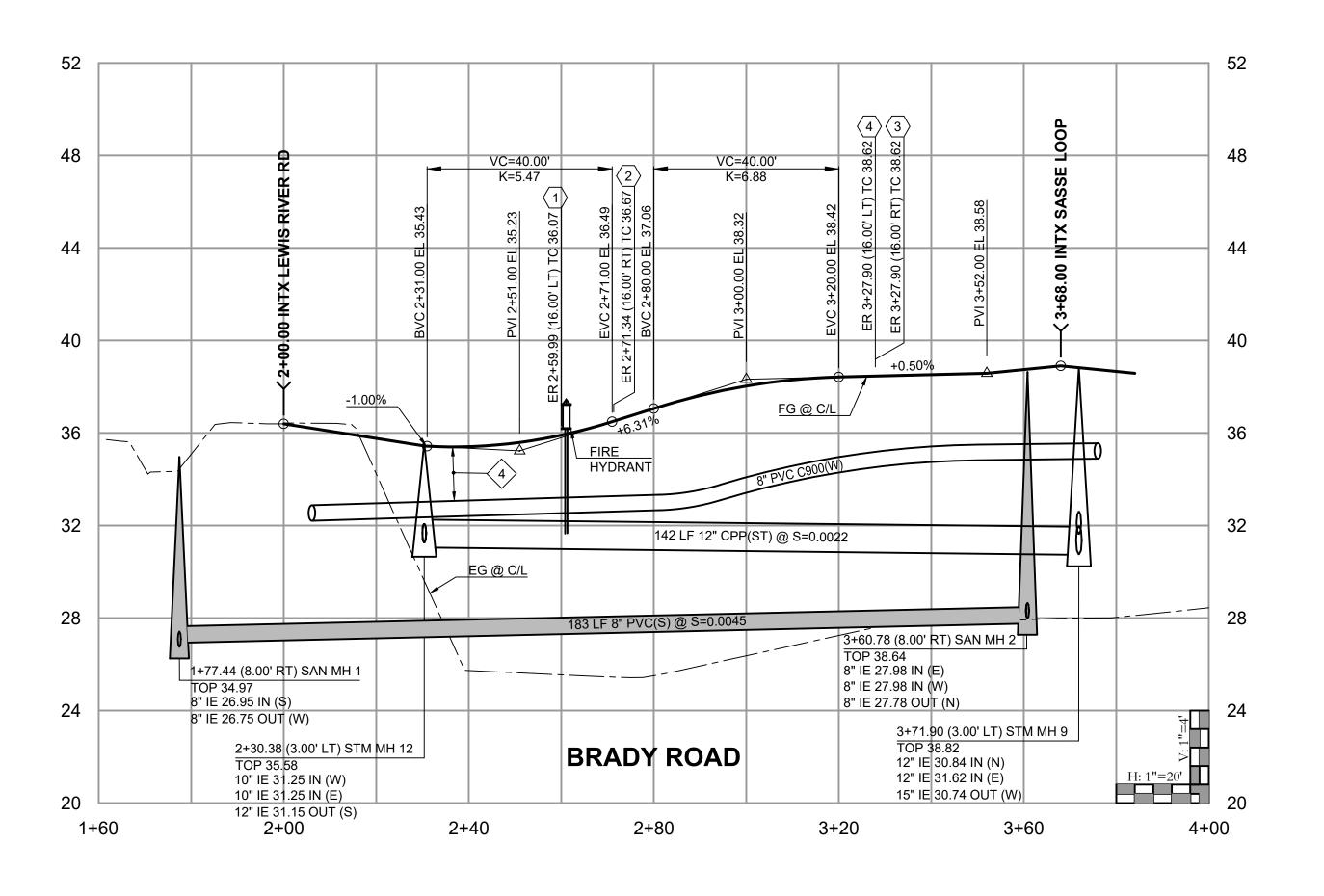
| | | Storm | water In | let Table |) | | |
|---|----------------------|-------|-------------|----------------|----------------|------------------|-------------------|
| # | Location | Туре | Rim Elev | Outlet Elev | Outlet Size | Lateral Slope | Lateral Length |
| 2 | 55+98.00 (36.00' LT) | СВ | 34.89 | 31.68 | 10 in | 0.28% | 77 ft |



| Project 1 | No. 3400 | |
|-----------|--------------------|-----|
| SCALE: | H: 1" = V: 1" = | |
| DESIGNED | BY: | TGJ |
| DRAFTED I | BY: | TGJ |
| REVIEWED | BY: | TGJ |
| 14 | | |



| | | Storm | water In | let Table |) | | |
|---|---------------------|-------|-------------|----------------|----------------|------------------|-------------------|
| # | Location | Туре | Rim Elev | Outlet Elev | Outlet Size | Lateral Slope | Lateral Length |
| 1 | 2+34.92 (26.57' LT) | СВ | 35.55 | 31.32 | 10 in | 0.28% | 24 ft |



CONSTRUCTION NOTES:

- CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION.
- 2. CURB RETURN DATA (#) AND ADA RAMP GRADING SEE SHT 08
- 3. CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES.
- 4. ROTATE MANHOLE CONES AWAY FROM CURB.
- 5. 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.

STREET & SITE KEY NOTES:

- 1 LOCAL ACCESS (PER COW STD DTL T-27 SEE SHT 24)
- 2 SIDEWALK (PER COW STD DTL T-07 SEE SHT 23)
- 3 TYPE A1 CURB & GUTTER (PER COW STD DTL T-01-01A SEE SHT 23)
- 4 COMBINATION RAMP (PER COW STD DTL T-13 SEE SHT 23)
- 5 PERPENDICULAR RAMP (PER COW STD DTL T-17 SEE SHT 23)

STORMWATER KEY NOTES

- 2+34.92 (26.57' LT) STM CB 3 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)
- 2 2+30.38 (3.00' LT) STM MH 12 (PER COW STD DTL D-10 SEE SHT 26)
- 3 3+71.90 (3.00' LT) STM MH 9 (PER COW STD DTL D-10 SEE SHT 26)

SANITARY SEWER KEY NOTES:

- 1+77.44 (8.00' RT) SAN MH 1 (PER COW STD DTL S-07 SEE SHT 29)
- 2 3+60.78 (8.00' RT) SAN MH 2 (PER COW STD DTL S-07 SEE SHT 29)

WATER KEY NOTES:

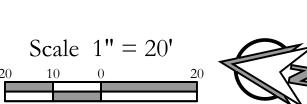
ALL THRUST BLOCKS SHALL BE INSTALLED PER COW DETAIL W-17, W-18 & W-19

8" FLG TEE W/TB
(2) 8" FLG x MJ VALVE W/VB
8" FLG x MJ ADAPTER

2+61.12 (18.25' LT)
(1) 8" x 6" FLG x MJ TEE
(1) 6" FLG x MJ GATE VALVE W/ VB
11 LF 6" DI(W)
STANDARD FH ASS'Y W/ 4'x4'x4"
CONCRETE PAD PER COW STD PLAN W-14

8" FLG TEE W/TB
(2) 8" FLG x MJ VALVE W/VB
8" FLG x MJ ADAPTER

WATER SHALLOWS UP TO 2.1' DEEP TO CROSS OVER STORM PIPE TYPICAL DEPTH SHALL BE 3'



| Legend | |
|-------------------------|---------------|
| Proposed Asphalt | |
| Proposed Concrete | . 3. |
| Future Concrete | : :: : ::: |
| Proposed Retaining Wall | |
| | 1 — |

Proposed Gravel



| 3-6 |
|------------------------|
| Project No. 3400 |
| SCALE: H: 1" = V: 1" = |
| DESIGNED BY: |
| DRAFTED BY: |
| REVIEWED BY: |
| 15 |

CONSTRUCTION NOTES:

Stormwater Inlet Table

37.74

37.74

CB

CB

6.00' 32.98'

6.00' 32.85'

6.00' 32.87'

6.00' 33.09'

6.00' 33.30'

6.00' 32.66'

6.00' 32.51'

6.00' 32.41'

6.00' 32.63'

6.00' 32.78'

6.00' 33.05'

6.00' 32.82'

28'

102'

39'

38'

Elev

32.51

Sanitary Lateral Construction Data

32.63

Outlet Outlet Lateral Lateral

10 in

10 in

As Built

Size | Slope | Length

2.00%

2.00%

- 1. CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION.
- 2. CURB RETURN DATA (#)) AND ADA RAMP GRADING -SEE SHT 08
- CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES.
- 4. ROTATE MANHOLE CONES AWAY FROM CURB.
- 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.

STREET & SITE KEY NOTES:

- 1) LOCAL ACCESS (PER COW STD DTL T-27 SEE SHT 24)
- 2 SIDEWALK (PER COW STD DTL T-07 SEE SHT 23)
- (3) TYPE A1 CURB & GUTTER (PER COW STD DTL T-01, A-1 SEE SHT 23)
- (4) COMBINATION RAMP (PER COW STD DTL T-13 SEE SHT 23
- 5 PERPENDICULAR RAMP PER COW STD DTL T-17 SEE SHT 23
- (6) CENTERLINE CURVE DATA Δ = 78°07'44", R = 35.00', L = 47.73', T = 28.41'

STORMWATER KEY NOTES:

- 1 1+03.00 (3.00' RT) STM MH 9 (PER COW STD DTL D-10 SEE SHT 26)
- 2 1+99.60 (10.33' LT) STM MH 10 (PER COW STD DTL D-10 SEE SHT 26)
- 3 2+59.95 (3.00' LT) STM MH 11 (PER COW STD DTL D-10 SEE SHT 26)
- 2+59.95 (16.00' LT) STM CB 4 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)
- 2+59.95 (16.00' RT) STM CB 5 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)

SANITARY SEWER KEY NOTES

- 1 14+94.99 (8.13' LT) SAN MH 2 (PER COW STD DTL S-07 SEE SHT 29)
- 2 1+86.75 (11.01' LT) SAN MH 3 (PER COW STD DTL S-07 SEE SHT 29)
- 4" PVC(S) STANDARD SERVICE LATERAL W/ MIN 2% SLOPE (PER COW STD DTL S-04 SEE SHT 29) (SEE LATERAL TABLE ON THIS SHT)

WATER KEY NOTES:

ALL THRUST BLOCKS SHALL BE INSTALLED PER COW DETAIL W-17, W-18 & W-19

8" FLG TEE W/TB
(2) 8" FLG x MJ VALVE W/VB
8" FLG x MJ ADAPTER

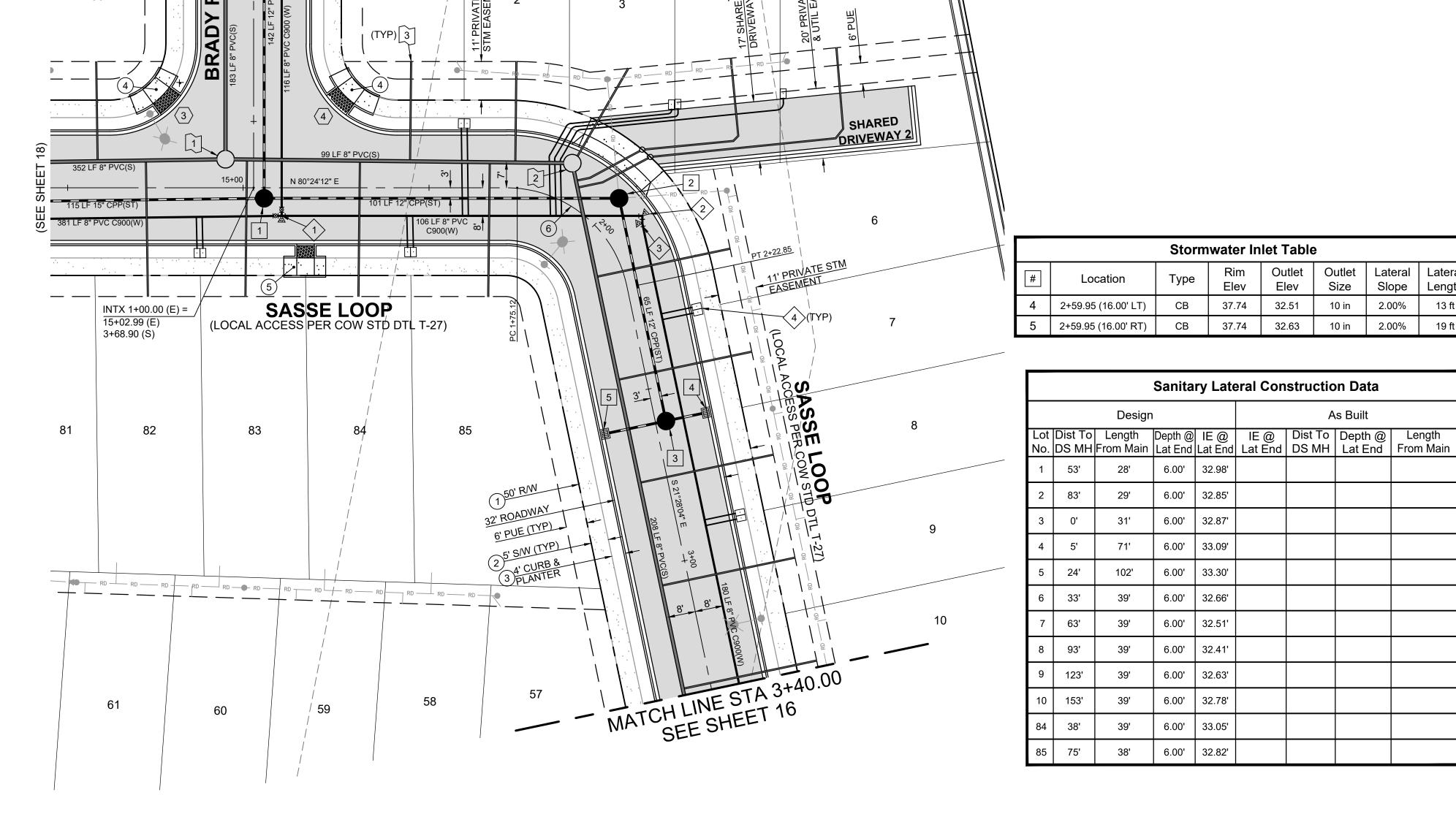
2 8" 90° MJ BEND W/TB

3 8" 11-1/4° MJ BEND W/TB

(13) STD 1" WATER SERVICE PER COW STD PLAN W-02

| | • |
|-------------------------|---|
| Legend | |
| Proposed Asphalt | |
| Proposed Concrete | |
| Future Concrete | * |
| Proposed Retaining Wall | |
| Proposed Gravel | |





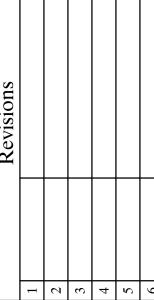
(SEE SHEET 14)

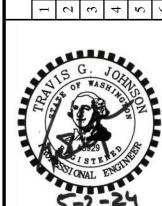
| 52 | | | | | | | 52 |
|------|--|---|---|-----------------------|--|--------------------|---------------------------|
| | SOAD | 4 | | | | | |
| 48 | T | LT) TC 38.85 | | | | | 9 1 1 |
| 44 | 1+00.00 EL | 1+41.01 (16.00' LT) | | 28 O8 E | | | Ш Н Н Н С |
| 40 | 0.66% | -0.51% | 6 | 0 + C X Q | <u> </u> | .0.50% | Ш Ш У - О |
| 36 | | FG @ C/L | | 8" PVC C900(W) | | | 3+40.00 |
| 32 | 101 LF | 12" CPP(ST) @ S=0.0022 | 65 LF 1 | 2" CPP(ST) @ S=0.0022 | | | NE STA |
| 28 | 99 LF 8" PVC(S | | 1+00 60 (10 3 | 2' T) STM MH 10 | 208 LF 8" PVC(S) @ S= | 0.0045 FG @ C/I | コ エ O ²⁸ |
| 24 | 1+03.00 (3.00' RT) STM MI TOP 38.82 12" IE 30.84 IN (N) 12" IE 31.62 IN (E) | 1+86.75 (11.01' LT) SAN MH (19 TOP 38.24 8" IE 28.64 IN (S) 8" IE 28.44 OUT (W) | TOP 38.19 6" IE 35.15 IN 6" IE 33.55 IN 12" IE 31.94 I | (E) N (S) | 2+59.95 (3.00° LT) STM MH 11° TOP 38.03 10" IE 32.25 IN (E) 10" IE 32.25 IN (W) 12" IE 32.08 OUT (N) | | L Y Y 24 |
| | 15" IE 30.74 OUT (W) | | SASSE LC | | | H: 1"=20' | |
| 0+80 | 1+20 | 1+60 | 2+00 | 2+40 | 2+80 | 3+20 3+4 | 20 10 |



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Project No. 3400 SCALE: H: 1'' = 20'V: 1'' = 4'DESIGNED BY: DRAFTED BY: REVIEWED BY: 16

1. CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION.

CONSTRUCTION NOTES:

2. CURB RETURN DATA (#) AND ADA RAMP GRADING -

3. CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES.

4. ROTATE MANHOLE CONES AWAY FROM CURB.

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.

STREET & SITE KEY NOTES:

(1) LOCAL ACCESS - (PER COW STD DTL T-27 - SEE SHT 24)

(2) SIDEWALK - (PER COW STD DTL T-07 - SEE SHT 23)

(3) TYPE A1 CURB & GUTTER - (PER COW STD DTL T-01-01A - SEE SHT 23)

(4) CENTERLINE CURVE DATA - Δ = 105°59'18", R = 35.00', L = 64.74', T = 46.44'

(5) CENTERLINE CURVE DATA - Δ = 4°41'43", R = 500.00', L = 40.97', T = 20.50'

STORMWATER KEY NOTES:

1 6+00.60 (3.00' LT) STM MH 4 - (PER COW STD DTL D-10 - SEE SHT 26)

6+00.60 (16.00' LT) STM CB 6 - (PER COW STD DTL D-02 - SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)

6+00.60 (16.00' RT) STM CB 7 - (PER COW STD DTL D-02 - SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)

4 6+90.65 (2.58' LT) STM MH 3 - (PER COW STD DTL D-10 - SEE SHT 26)

SANITARY SEWER KEY NOTES

3+92.55 (6.20' RT) SAN MH 4 - (PER COW STD DTL S-07 - SEE SHT 29)

2 4+30.34 (5.50' RT) SAN MH 5 - (PER COW STD DTL S-07 - SEE SHT 29)

3 6+90.65 (8.43' RT) SAN MH 6 - (PER COW STD DTL S-07 - SEE SHT 29)

4" PVC(S) STANDARD SERVICE LATERAL W/ MIN 2% SLOPE (PER COW STD DTL S-04 - SEE SHT 29) (SEE LATERAL TABLE ON THIS SHT)

WATER KEY NOTES:

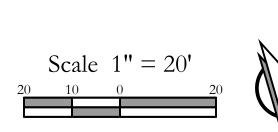
ALL THRUST BLOCKS SHALL BE INSTALLED PER COW DETAIL W-17, W-18 & W-19

3+84.16 (18.25' RT)
(1) 8" x 6" FLG x MJ TEE
(1) 6" FLG x MJ GATE VALVE W/ VB 27 LF 6" DI(W) STANDARD FH ASS'Y W/ 4'x4'x4" CONCRETE PAD PER COW STD PLAN W-14

(2) (2) 8" 45° MJ BEND W/TB

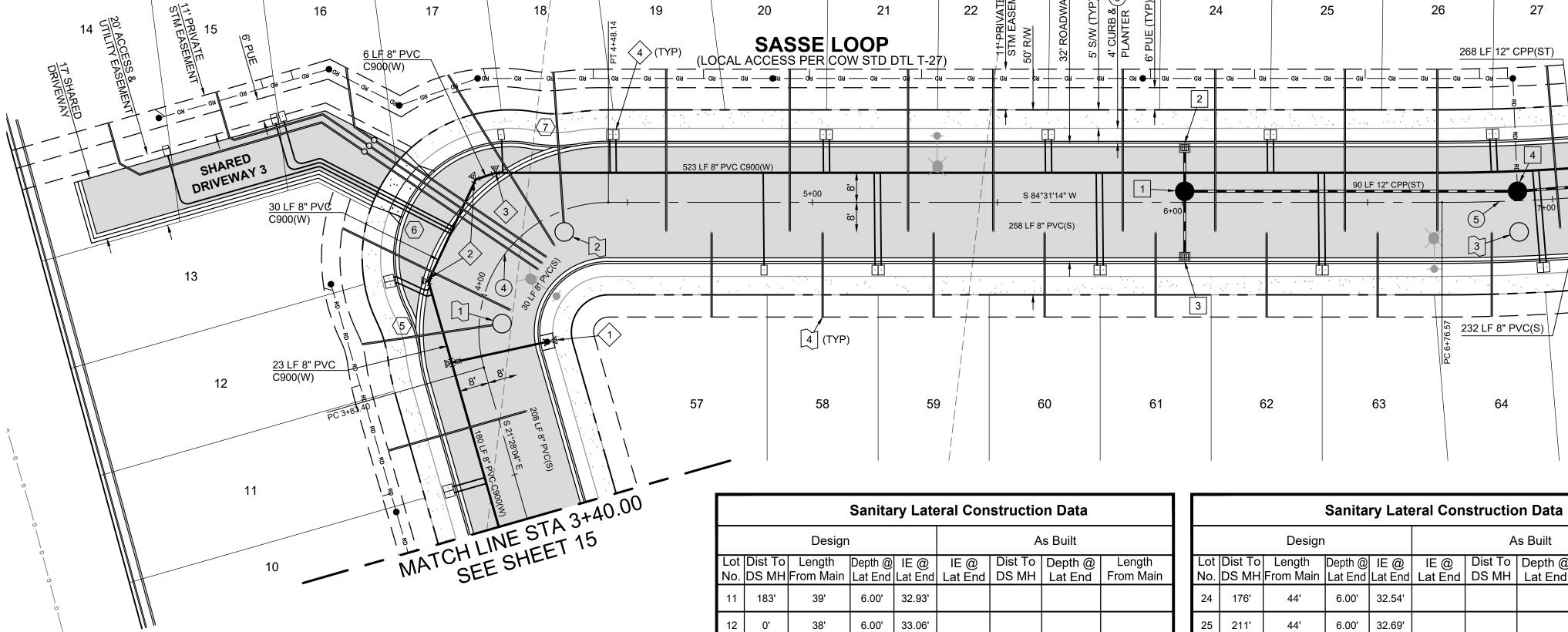
(3) 8" 22-1/2° MJ BEND W/TB

(27) STD 1" WATER SERVICE PER COW STD PLAN W-02



| Legend | |
|-------------------------|------|
| Proposed Asphalt | |
| Proposed Concrete | |
| Future Concrete | : :: |
| Proposed Retaining Wall | |
| Proposed Gravel | |





Stormwater Inlet Table

37.79

37.79 33.61

CB

CB

Elev

33.55

Location

2 6+00.60 (16.00' LT)

3 | 6+00.60 (16.00' RT)

Rim | Outlet | Outlet | Lateral | Lateral

Size | Slope | Length

10 in 1.00%

10 in 1.00%

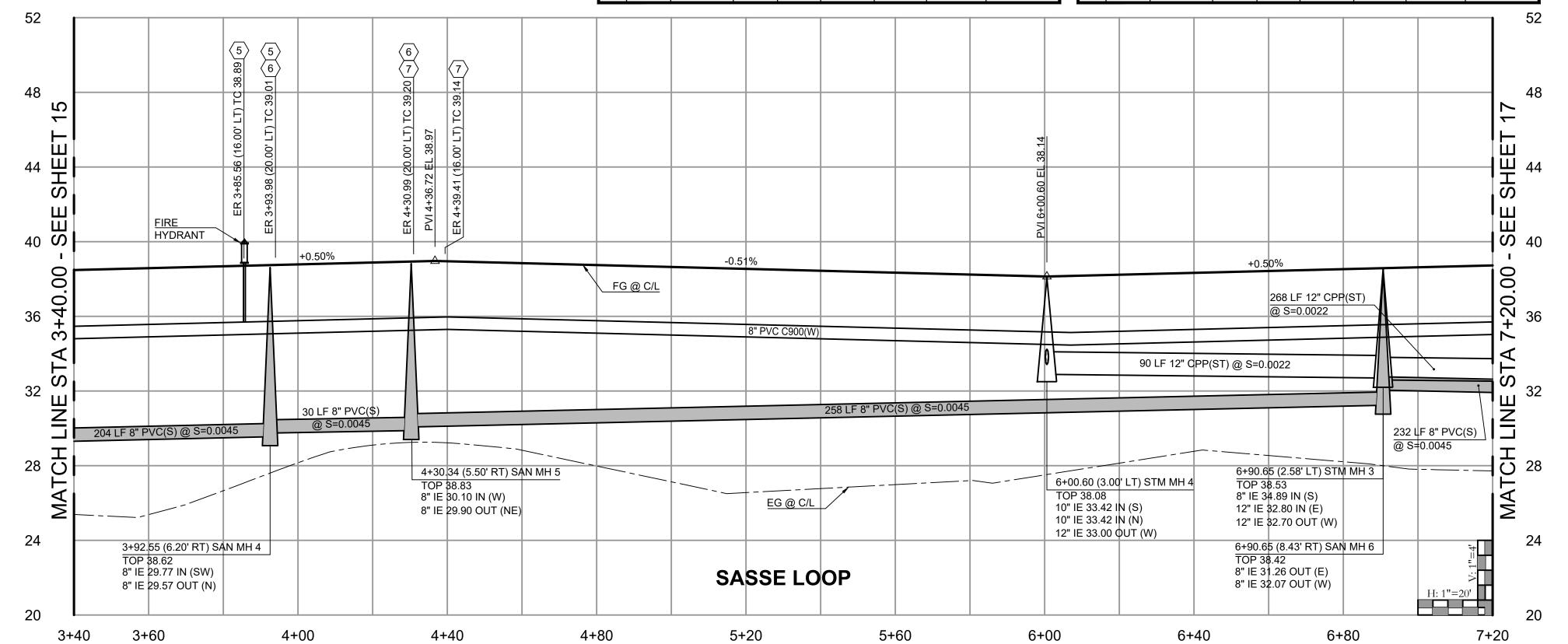
SASSE LOOP

| | | Design | • | | | , | o Danc | | |
|----|------------------|--------|--------------------|--------|-----------------|------------------|--------------------|---------------------|--|
| | Dist To DS MH | | Depth @ Lat End | | IE @ Lat End | Dist To DS MH | Depth @ Lat End | Length From Main | |
| 11 | 183' | 39' | 6.00' | 32.93' | | | | | |
| 12 | 0' | 38' | 6.00' | 33.06' | | | | | |
| 13 | 4' | 51' | 6.00' | 33.33' | | | | | |
| 14 | 18' | 140' | 6.00' | 33.51' | | | | | |
| 15 | 20' | 111' | 6.00' | 33.70' | | | | | |
| 16 | 22' | 79' | 6.00' | 33.54' | | | | | |
| 17 | 25' | 55' | 6.00' | 33.40' | | | | | |
| 18 | 0' | 43' | 6.00' | 33.28' | | | | | |
| 19 | 28' | 44' | 6.00' | 33.15' | | | | | |
| 20 | 61' | 44' | 6.00' | 33.01' | | | | | |

| | Design | | | | A | s Built | | | | | Design | | | | A | s Built | |
|----------------|---------------------|--------------------|-----------------|-----------------|------------------|--------------------|---------------------|----------|----------------|----------------|---------------------|--------------------|-----------------|-----------------|------------------|--------------------|---------------------|
| ist To S MH | Length From Main | Depth @ Lat End | IE @ Lat End | IE @ Lat End | Dist To DS MH | Depth @ Lat End | Length From Main | Lo No | ot Di o. Di | ist To S MH | Length From Main | Depth @ Lat End | IE @ Lat End | IE @ Lat End | Dist To DS MH | Depth @ Lat End | Length From Main |
| 183' | 39' | 6.00' | 32.93' | | | | | 2 | | 176' | 44' | 6.00' | 32.54' | | | | |
| 0' | 38' | 6.00' | 33.06' | | | | | 2 | 5 | 211' | 44' | 6.00' | 32.69' | | | | |
| 4' | 51' | 6.00' | 33.33' | | | | | 2 | 6 | 236' | 44' | 6.00' | 32.83' | | | | |
| 18' | 140' | 6.00' | 33.51' | | | | | 2 | 7 | 221' | 44' | 6.00' | 32.99' | | | | |
| 20' | 111' | 6.00' | 33.70' | | | | | 5 | 7 | 40' | 23' | 6.00' | 33.07' | | | | |
| 22' | 79' | 6.00' | 33.54' | | | | | 5 | 3 | 70' | 23' | 6.00' | 32.93' | | | | |
| 25' | 55' | 6.00' | 33.40' | | | | | 5 | 9 | 100' | 23' | 6.00' | 32.78' | | | | |
| 0' | 43' | 6.00' | 33.28' | | | | | 6 | | 130' | 23' | 6.00' | 32.68' | | | | |
| 28' | 44' | 6.00' | 33.15' | | | | | 6 | 1 | 160' | 23' | 6.00' | 32.52' | | | | |
| 61' | 44' | 6.00' | 33.01' | | | | | 6 | 2 | 190' | 23' | 6.00' | 32.58' | | | | |
| 93' | 44' | 6.00' | 32.85' | | | | | 6 | 3 | 220' | 23' | 6.00' | 32.72' | | | | |
| 116' | 44' | 6.00' | 32.82' | _ | _ | | | 6 | 1 | 251' | 23' | 6.00' | 32.87' | _ | _ | | |
| 151' | 44' | 6.00' | 32.55' | | | | | 6 | 5 | 211' | 23' | 6.00' | 33.01' | | | | |

25

26



Project No. 3400 SCALE: H: 1'' = 20'V: 1'' = 4'DESIGNED BY: DRAFTED BY: REVIEWED BY:

Know what's **below. Call** before you dig.

CONSTRUCTION NOTES:

Sanitary Lateral Construction Data

Lot Dist To Length Depth @ IE @ Dist To Depth @ Length

6.00' 33.14'

6.00' 33.29'

6.00' | 33.40'

6.00' 33.31'

6.00' 33.11

6.00' 32.96'

6.00' 32.80'

6.00' 32.87'

6.00' 32.78'

6.00' 32.94'

6.00' 33.19'

6.00' 32.75'

6.00' 32.44'

6.00' 32.41'

6.00' | 33.16'

6.00' | 33.31'

6.00' 33.39'

6.00' | 33.24'

6.00' 33.06'

6.00' 32.88'

44'

44'

44'

139'

103'

73'

49'

39'

23'

23'

23'

23'

23'

23'

28 191'

161'

131'

70'

33 36'

38 24'

10'

158'

118'

181'

151'

121'

31'

Ш

 $\overset{\circ}{\Phi}$ 36

ഗ 32

11.1 -->

10+80

+0.50%

183 LF 8" PVC(S) @ S=0.0045

100 LF 18" CPP(ST) @ S=0.0022

10+13.99 (3.00' LT) STM MH 5

10+40

TOP 37.94

10" IE 32.00 IN (W)

10" IE 32.00 IN (E)

18" IE 27.39 IN (N)

24" IE 27.29 OUT (S)

No. DS MH From Main Lat End Lat End Lat End DS MH Lat End From Main

(SEE SHEET 19)

30 LF 8" PVC C900 (W)

42

PT 9+81.13

, 32' ROADWAY

9 (10) (10)

32 LF 8" PVC(S)

TOP 38.17

6" IE 33.70 IN (SE)

12" IE 32.11 IN (E) 24" IE 27.11 IN (N)

24" IE 27.00 OUT (S)

9+60

84 LF 24" CPP(ST)

TOP 38.09

9+44.55 (23.38' LT) STM MH 2

@ S=0.0022

8" IE 30.79 IN (SE)

8" IE 30.59 OUT (N)

9+66.93 (7.32' RT) SAN MH 8

10+00

MATCH LINE STA 10+80.00

SEE SHEET 18

33

9+00

INTX 9+41.78 (E)

3+08.14 (N)

32 LF 8" PVC(S)

SASSE LOOP

4 (TYP)

69

Outlet | Outlet | Lateral | Lateral

Size

10 in

S 79°49'31" W

MATCH

52

48

44 当 当 S

40 **ഗ**

36 🕏

28 J

24

20

7+20

7+60

00

0

8+00

68

Stormwater Inlet Table

Elev

4 | 10+13.99 (16.00' RT) | CB | 36.75 | 32.19 | 10 in | 1.00% | 19 ft

36.76

CB

Elev

32.13

268 LF 12" CPP(ST) @ S=0.0022

232 LF 8" PVC(S) @ S=0.0045

8+00

Location

10+13.99 (16.00' LT)

+0.50%

!____

(LOCAL ACCESS PER COW STD DTL T-27)

3 (TYP)

72

70

73

Slope | Length

FG @ C/L

EG @ C/L

8+40

8" PVC C900(W)

TOP 38.32

8+80

8" IE 31.03 N (E)

8" IE 30.93 OUT (NW)

SASSE LOOP

9+20

9+24.64 (6.45' RT) SAN MH 9

1.00%

36

- CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION.
- CURB RETURN DATA (#) AND ADA RAMP GRADING -SEE SHT 08
- CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES.
- ROTATE MANHOLE CONES AWAY FROM CURB.
- 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.

STREET & SITE KEY NOTES:

- (1) LOCAL ACCESS (PER COW STD DTL T-27 SEE SHT 24)
- 2 SIDEWALK (PER COW STD DTL T-07 SEE SHT 23)
- (3) TYPE A1 CURB & GUTTER (PER COW STD DTL T-01-01A SEE SHT 23)
- (4) 9+42.72 (27.40' LT) CENTER OF DRIVEWAY (PER COW STD DTL T-03 SEE SHT 23)
- (5) CENTERLINE CURVE DATA Δ = 100°57'43", R = 35.00', L = 61.67', T = 42.43'
- 1 9+44.55 (23.38' LT) STM MH 2 (PER COW STD DTL D-10 SEE SHT 26)
- 2 10+13.99 (3.00' LT) STM MH 5 (PER COW STD DTL D-10 SEE SHT 26)
- 10+13.99 (16.00' LT) STM CB 9 (PER COW STD DTL D-02 SEE SHT 26)
- 10+13.99 (16.00' RT) STM CB 10 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)

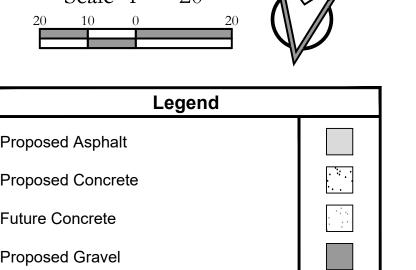
- 1 9+24.64 (6.45' RT) SAN MH 9 (PER COW STD DTL S-07 SEE SHT 29)
- 2 9+66.93 (7.32' RT) SAN MH 8 (PER COW STD DTL S-07 SEE SHT 29)
- 4" PVC(S) STANDARD SERVICE LATERAL W/ MIN 2% SLOPE (PER COW STD DTL S-04 - SEE SHT 29)

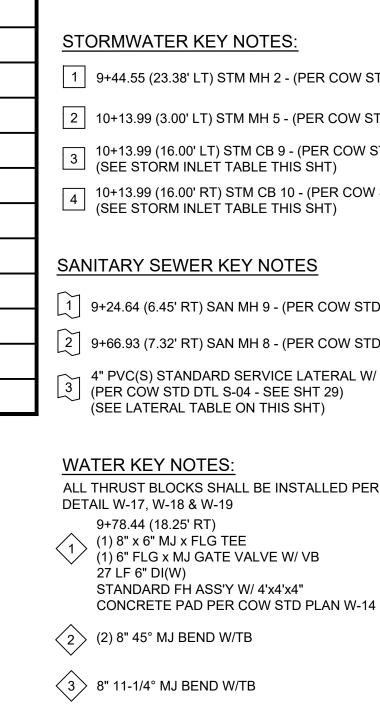
ALL THRUST BLOCKS SHALL BE INSTALLED PER COW

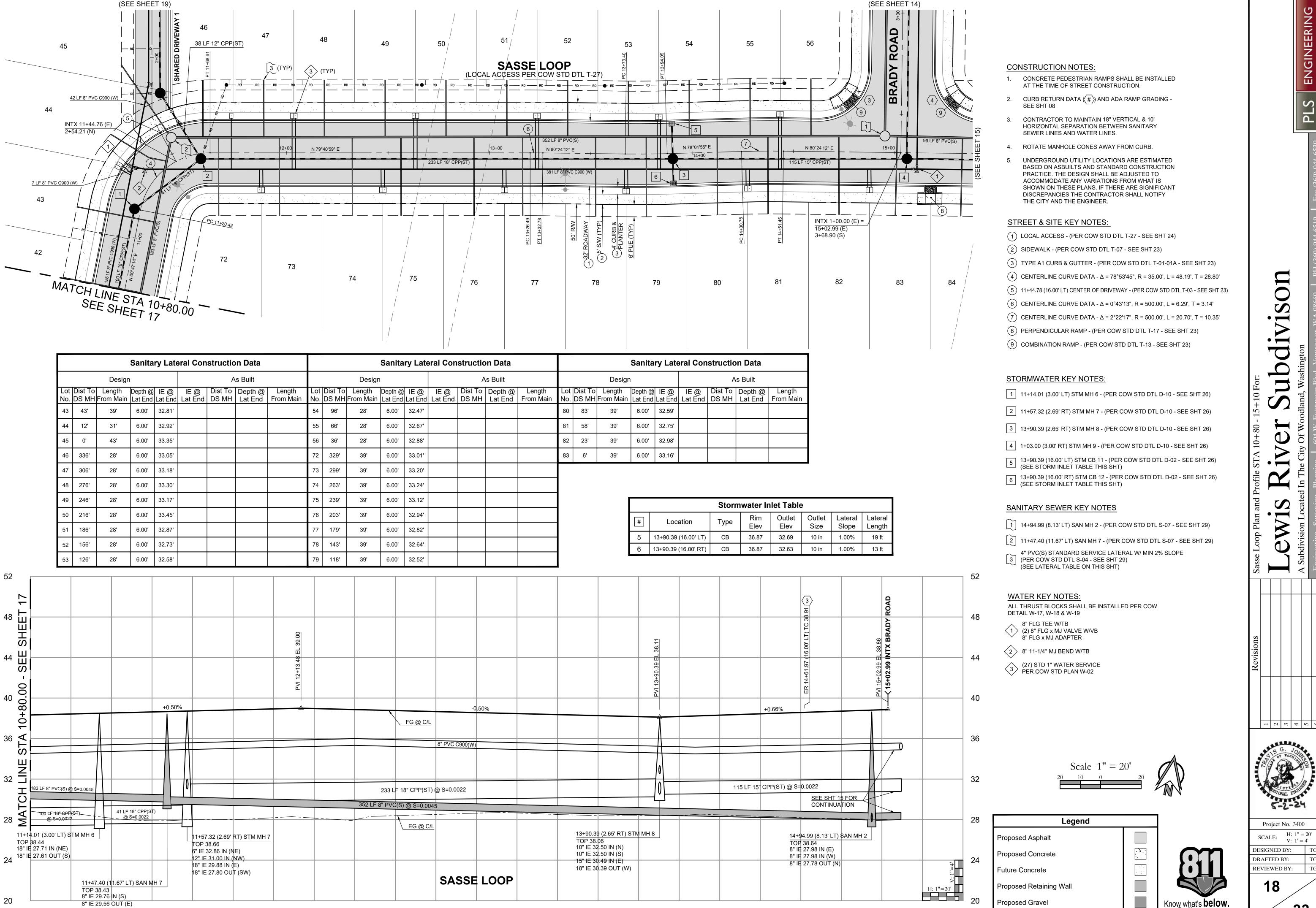
9+78.44 (18.25' RT) (1) 6" FLG x MJ GATE VALVE W/ VB 27 LF 6" DI(W) STANDARD FH ASS'Y W/ 4'x4'x4"

(21) STD 1" WATER SERVICE PER COW STD PLAN W-02

| V | |
|-------------------|----------------|
| Legend | |
| Proposed Asphalt | |
| Proposed Concrete | · |
| Future Concrete | : ::. : ::: |
| Proposed Gravel | |







10+80

11+20

12+00

11+60

12+80

12+40

13+20

13+60

14+00

14+40

14+80

15+20

15+40



Call before you dig.

Project No. 3400

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

DESIGNED BY: TO DRAFTED BY: TO REVIEWED BY: TO

Call before you dig.

CONSTRUCTION NOTES:

38

SHARED DRIVEWAY 4

34

INTX 3+08.14 (N)

ASSE OCAL ACC

9+41.78 (E)

Location

1+90.12 (10.00' LT)

2 (TYP)

Stormwater Inlet Table

Elev

38.36

СВ

Elev

28.27

(SEE SHEET 17)

Outlet | Outlet | Lateral | Lateral

Size

10 in

Slope Length

- 1. CONCRETE PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE TIME OF STREET CONSTRUCTION.
- 2. CURB RETURN DATA (#) AND ADA RAMP GRADING SEE SHT 08
- 3. CONTRACTOR TO MAINTAIN 18" VERTICAL & 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES.
- 4. ROTATE MANHOLE CONES AWAY FROM CURB.
- 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.

STREET & SITE KEY NOTES:

- 1) TYPICAL SHARED DRIVEWAY 1 (SEE SHT 21)
- (2) TYPICAL SHARED DRIVEWAY 4 (SEE SHT 21)
- 3 SIDEWALK (PER COW STD DTL T-07 SEE SHT 23)
- (4) ROLLED CURB & GUTTER (PER COW STD DTL T-01 SEE SHT 23)
- 5) 6' x 8' OUTFALL (SEE SHT 21)
- 6 DRIVEWAY WITH DETACHED SIDEWALK (PER COW STD DTL T-03 SEE SHT 23)

STORMWATER KEY NOTES:

- 1 1+34.72 (3.53' LT) STM MH 14 (PER COW STD DTL D-10 SEE SHT 26)
- 2 2+17.44 (4.08' LT) STM MH 13 (PER COW STD DTL D-10 SEE SHT 26)
- 3 2+58.95 (11.34' LT) STM MH 7 (PER COW STD DTL D-10 SEE SHT 26)
- 1+90.12 (10.00' LT) STM CB 8 (PER COW STD DTL D-02 SEE SHT 26) (SEE STORM INLET TABLE THIS SHT)
- 5 1+93.64 (4.86' RT) STM VAULT (SEE CONTECH DTL 21)
- 6 2+84.94 (4.61' LT) STM MH 2 (PER COW STD DTL D-10 SEE SHT 26)

SANITARY SEWER KEY NOTES

- 11+47.40 (11.67' LT) SAN MH 7 SEE SHT 29)
- 4" PVC(S) STANDARD SERVICE LATERAL W/ MIN 2% SLOPE (PER COW STD DTL S-04 SEE SHT 29) (SEE LATERAL TABLE ON THIS SHT)

WATER KEY NOTES:

ALL THRUST BLOCKS SHALL BE INSTALLED PER COW DETAIL W-17, W-18 & W-19

- 8" FLG TEE W/TB
 (2) 8" FLG x MJ VALVE W/VB
 8" FLG x MJ ADAPTER
 8" 11-1/4° MJ BEND W/TB
- (4) STD 1" WATER SERVICE PER COW STD PLAN W-02
- (2) 8" 11-1/4° MJ BEND W/TB
- 8" FLG TEE W/TB
 (2) 8" FLG x MJ VALVE W/VB
 8" FLG x MJ ADAPTER

Scale 1'' = 20'

Legend

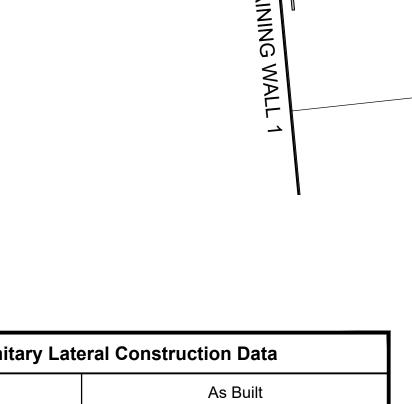
Proposed Asphalt

Proposed Concrete

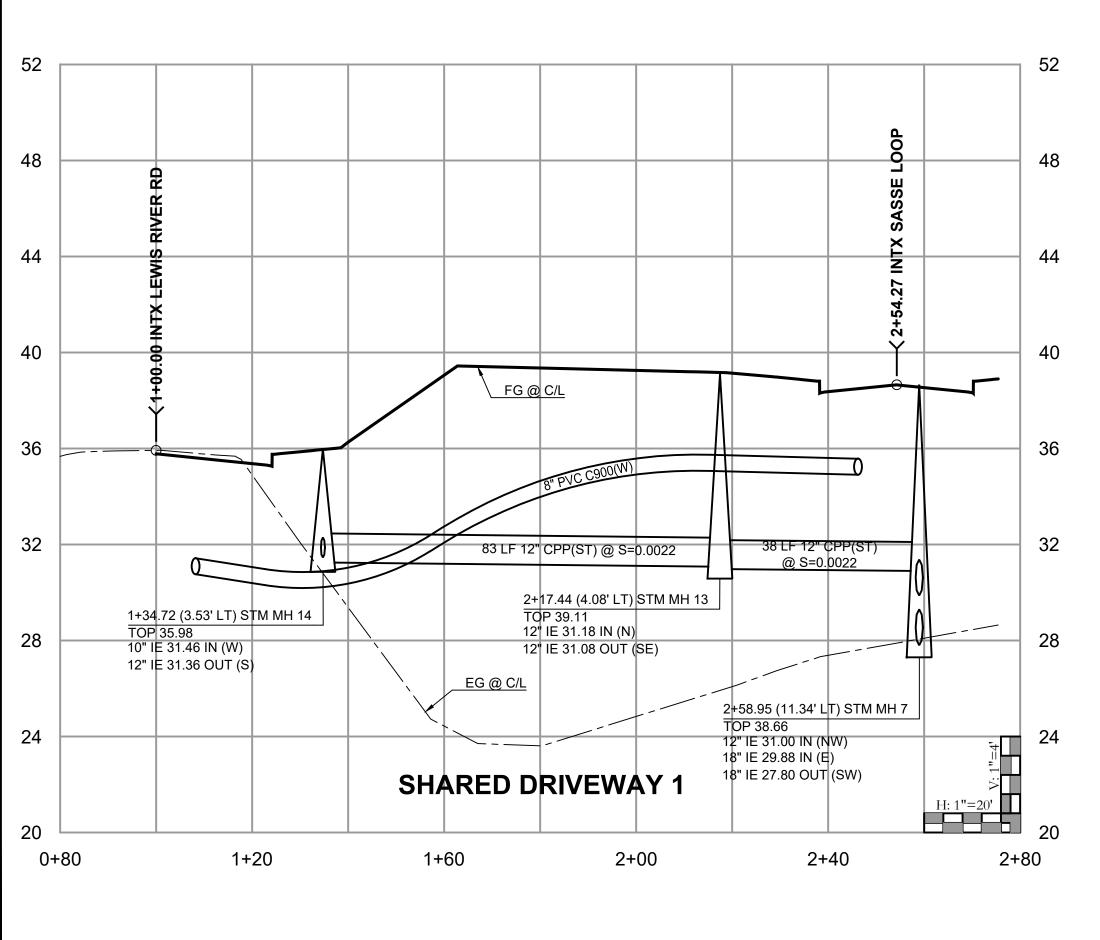
Proposed Retaining Wall

Future Concrete

Proposed Gravel



| | Sanitary Lateral Construction Data | | | | | | | | | | | | |
|----|--|--------|-------|--------|-----------------|------------------|--------------------|---------------------|--|--|--|--|--|
| | | Design | | | | As Built | | | | | | | |
| | ot Dist To Length Depth @ o. DS MH From Main Lat End L | | | | IE @ Lat End | Dist To DS MH | Depth @ Lat End | Length From Main | | | | | |
| 36 | 28' | 139' | 6.00' | 32.78' | | | | | | | | | |
| 37 | 26' | 103' | 6.00' | 32.94' | | | | | | | | | |
| 38 | 24' | 73' | 6.00' | 33.19' | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |



(SEE SHEET 18)

INTX 2+54.21 (S) |

42 LF 8" PVC

44

11+44.76 (E)

SHARED DRIVEWAY 1

83 LF 12" CPP(ST)

S 10°19'01" E

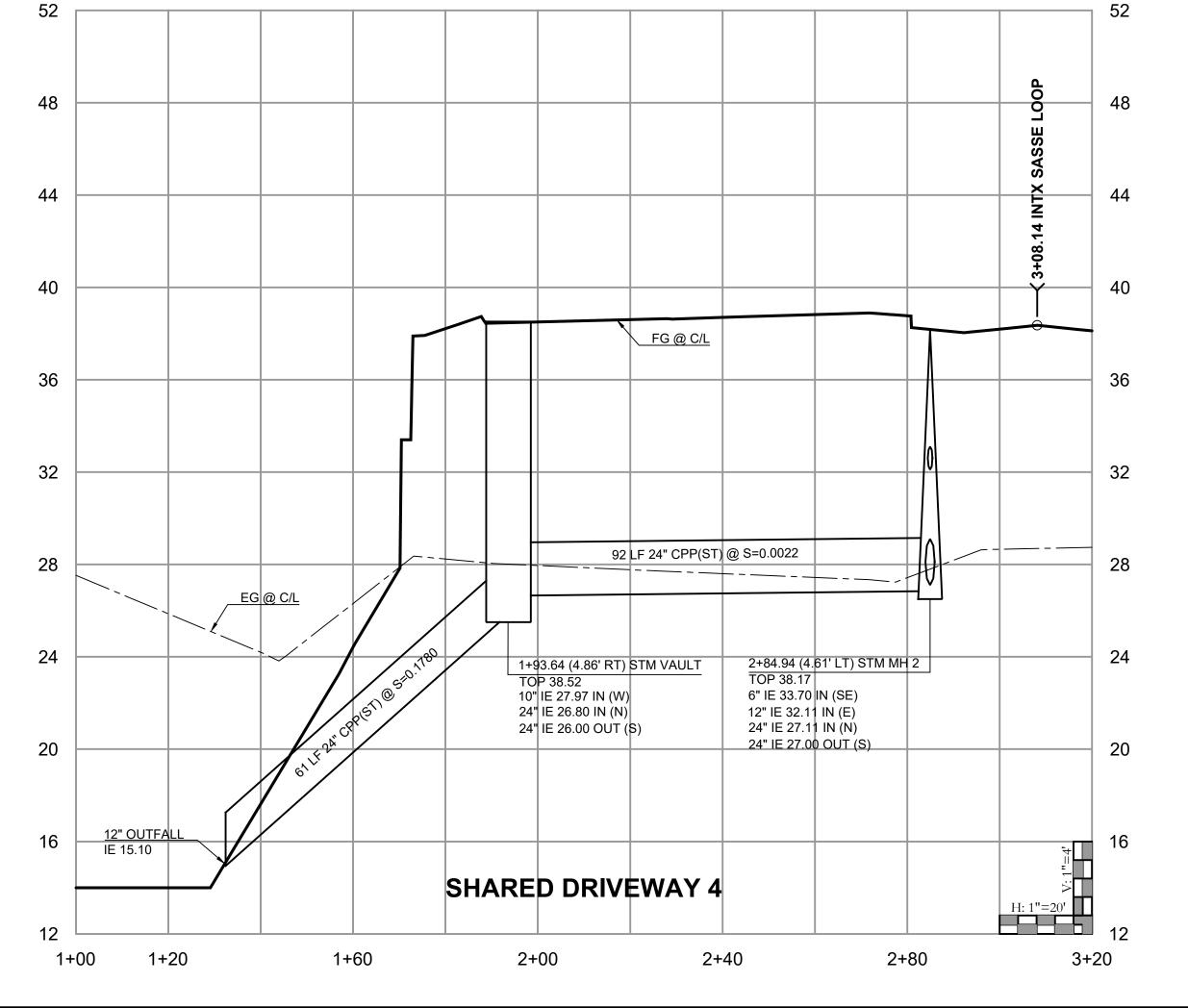
INSTALL (3) REMOVABLE BOLLARDS

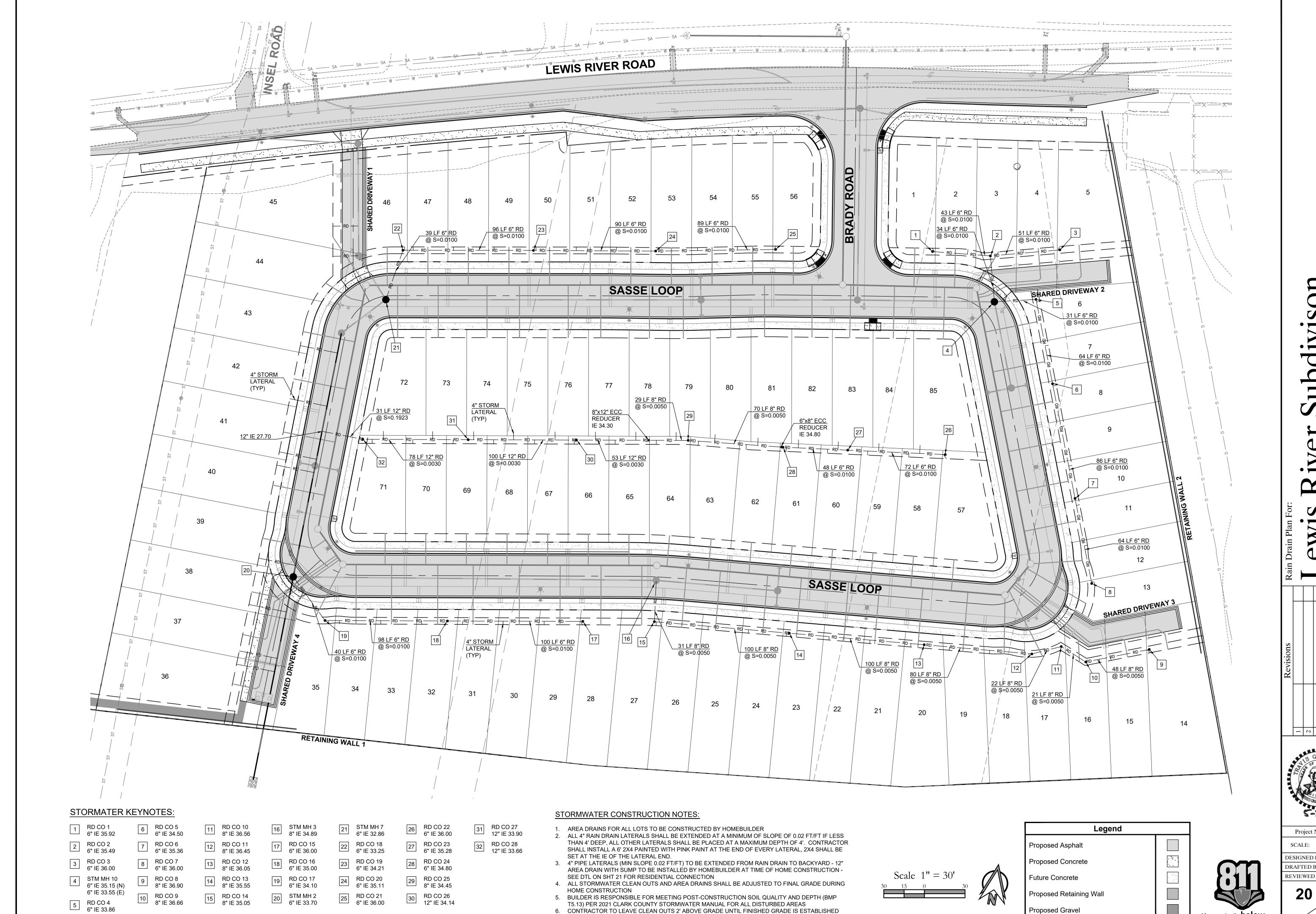
3.5' OC SPACING (SEE DTL ON SHT 21)

CENTER MIDDLE BOLLARD

ON SHARED DRIVEWAY

38 LF 12" CPP(ST)



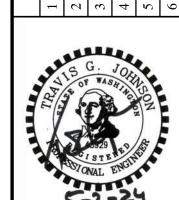


Project No. 3400 SCALE: H: 1'' = 40'V: N/ADESIGNED BY: DRAFTED BY: REVIEWED BY:

Know what's **below. Call** before you dig.



•



Project No. 3400 SCALE: H: N/A V: N/A DESIGNED BY: DRAFTED BY:

REVIEWED BY:

[1.36] | 1.67* [1.13]* | 1 [0.68] | 2 [1.36] | 1.67* [1.13]* | 1 [0.68] CARTRIDGE FLOW RATE (gpm [L/s]) 22.5 [1.42] 18.79 [1.19] 11.25 [0.71] 15 [0.95] 12.53 [0.79] 7.5 [0.47] 10 [0.63] 8.35 [0.53] 5 [0.32] * 1.67 gpm/sf [1.13 L/s/m²] SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY SITE SPECIFIC DATA REQUIREMENTS WATER QUALITY FLOW RATE (cfs [L/s]) PEAK FLOW RATE (cfs [L/s]) RETURN PERIOD OF PEAK FLOW (yrs) FRAME AND GRATE CARTRIDGE SIZE (27, 18, LOW DROP (LD) (NOT TO SCALE) MEDIA TYPE (PERLITE, ZPG, PSORB) NUMBER OF CARTRIDGES REQUIRED

STORMFILTER DESIGN NOTES STORMFILTER TREATMENT CAPACITY VARIES BY CARTRIDGE COUNT AND LOCALLY APPROVED SURFACE AREA SPECIFIC FLOW RATE. PEAK

A 6' x 12' [1829 x 3588] PEAK DIVERSION STYLE STORMFILTER IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (14) AND IS AVAILABLE IN A LEFT INLET (AS SHOWN) OR A RIGHT INLET CONFIGURATION

FRAME AND COVER

NLET BAY RIM ELEVATION

(NOT TO SCALE)

CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD

CARTRIDGE SIZE (in. [mm])

HEIGHT OF WEIR (W) (ft. [mm])

RECOMMENDED HYDRAULIC DROP (H) (ft. [mm])

CARTRIDGE

- FILTRATION BAY

ALL PARTS AND INTERNAL ASSEMBLY PROVIDED BY CONTECH UNLESS NOTED OTHERWIS

PERFORMANCE SPECIFICATION
FILTER CARTRIDGES SHALL BE MEDIA-FILLED. PASSIVE. SIPHON ACTUATED. RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH FILLER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUALED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH
SHALL BE 2" (178), FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 ECONDS. SPECIFIC FLOW RATE SHALL BE 2 GPM/SF [13.64 Lis/m²]

(MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUMETRIC FLOW RATE SHALL BE 6 GPM/CF [13.39 L/s/m³] OF MEDIA (MAXIMUM).

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. ALTERNATE DIMENSIONS ARE IN MILLIMETERS [mm] UNLESS NOTED OTHERWISE. 4. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com

5. STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS

DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.

6. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 10' [3048] AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL SECTIONS AND ASSEMBLE STRUCTURE.

CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF. CONTRACTOR TO REMOVE THE TRANSFER OPENING COVER WHEN THE SYSTEM IS BROUGHT ONLINE.

CNTECH www.ContechES.com 25 Centre Pointe Dr., Suite 400, West Chester, OH 450

1. DIG FOOTING HOLE AND SET POST FOOTING SLEEVE PLUMB AND SQUARE IN CONCRETE

4. SET THE BOLLARD AND REMOVABLE BOLLARD INSERT INTO THE POST FOOTING SLEEVE.

METAL BOLLARD (REMOVABLE)

SEE FOOTING SLEEVE AND LOCK

HASP AT FINISHED

-EXPANSION JOINT 105-02

REMOVABLE BOLLARD

- 4" MIN. DEPTH CRUSHED SURFACING TOP COURSE

-CAST-IN-PLACE CONCRETE FOOTING

-POST W/ DOME TOP

INSTALLATION SEQUENCE

VARIES -

POST FOOTING SLEEVE -

18" SQUARE

MAXIMUM DRY DENSITY

-COMPACT SUBGRADE AND CRUSHED

SURFACING TOP COURSE TO 95%

2. INSERT REMOVABLE BOLLARD INSERT INTO BOLLARD.

3. TIGHTEN HEX SOCKET SET SCREWS.

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

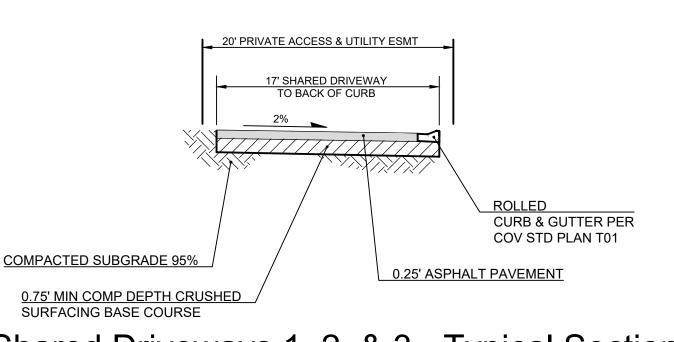
— (3) HEX SOCKET SET SCREW

- BOLLARD

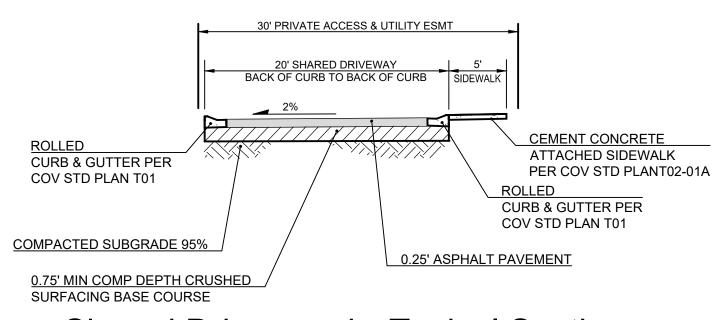
- REMOVABLE

- Post Footing Sleeve

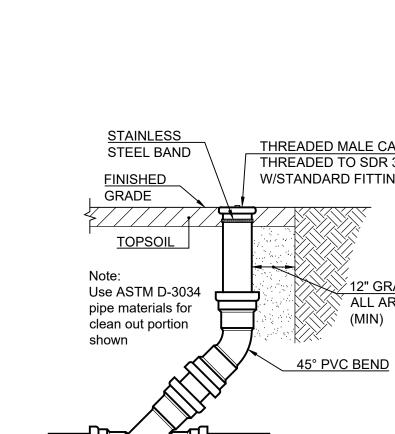
BOLLARD



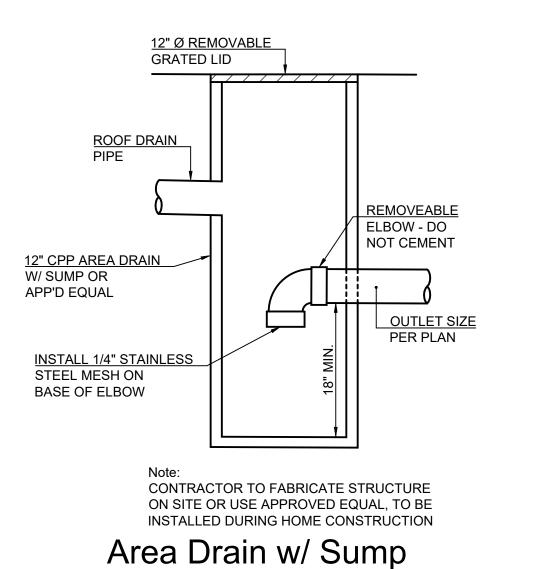
Shared Driveways 1, 2, & 3 - Typical Section



Shared Driveway 4 - Typical Section







WYE W/PLUG OR 45° BEND AT END OF LINE LOCATION Clean Out In Hard Surface Detail

CAST IRON VALVE

FOR ALL DRIVEABLE

BOX AND COVER

MATCH FG

Use ASTM D-3034

pipe materials for

clean out portion

OUTLET BAY

INLET PIPE -

OUTLET

PLAN

STORMFILTER

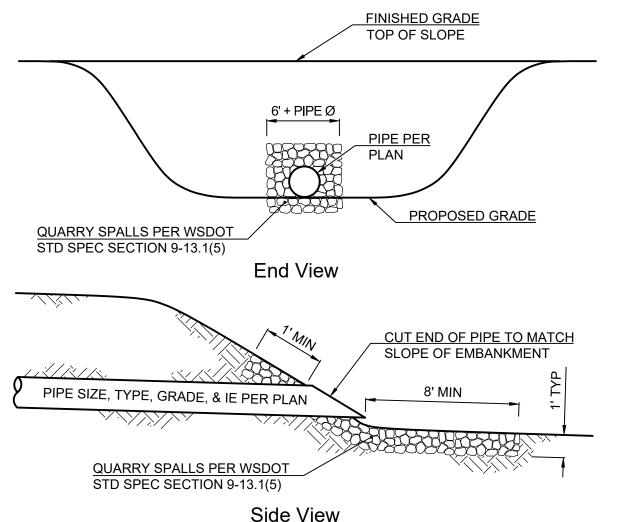
ELEVATION

StormFilter®

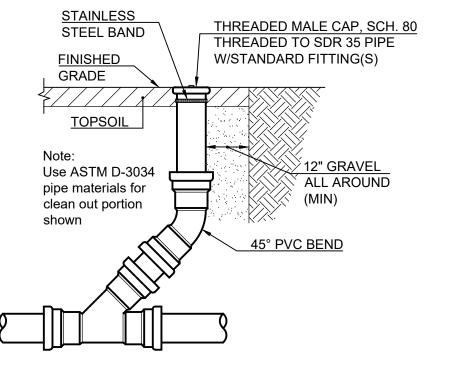
WATERTIGHT PLUG

ALL AROUND

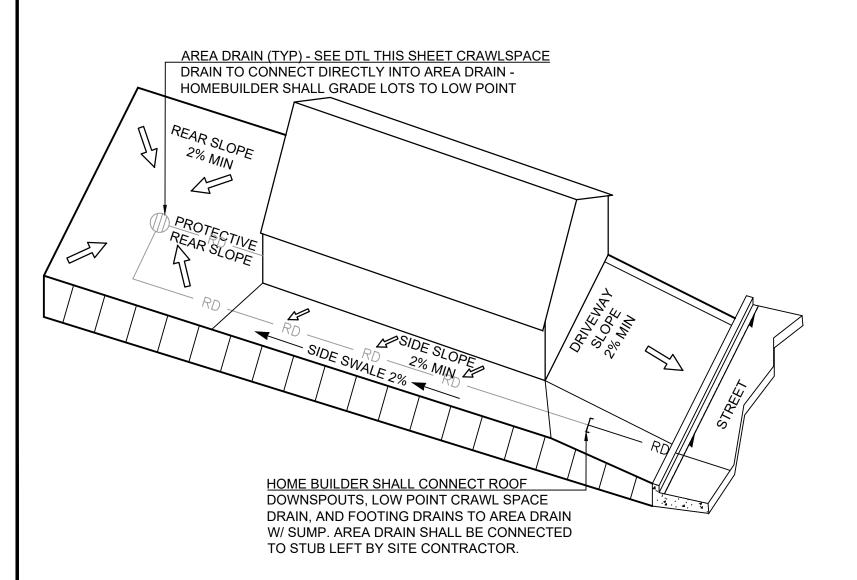
TO SDR 35 PIPE



Typical Riprap Pad Detail



(STORMWATER)



Typical Lot Grading Schematic - Front Connection

(Lots 35-48)

AREA DRAIN (TYP) - SEE DTL THIS SHEET CRAWLSPACE DRAIN TO CONNECT DIRECTLY INTO AREA DRAIN -HOMEBUILDER SHALL GRADE LOTS TO LOW POINT

Typical Lot Grading Schematic - Rear Connection

(Lots 1-10)

AREA DRAIN (TYP) - SEE DTL THIS SHEET CRAWLSPACE

HOME BUILDER SHALL CONNECT ROOF

TO STUB LEFT BY SITE CONTRACTOR.

DOWNSPOUTS, LOW POINT CRAWL SPACE

DRAIN, AND FOOTING DRAINS TO AREA DRAIN

W/ SUMP. AREA DRAIN SHALL BE CONNECTED

Typical Lot Grading Schematic - Front Connection

(Lots 11-34, 49-60)

DRAIN TO CONNECT DIRECTLY INTO AREA DRAIN -

HOMEBUILDER SHALL GRADE LOTS TO LOW POINT

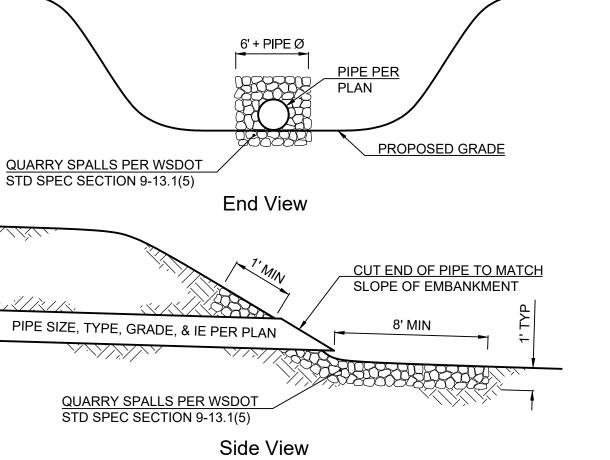
HOME BUILDER SHALL CONNECT ROOF

TO STUB LEFT BY SITE CONTRACTOR.

DOWNSPOUTS, LOW POINT CRAWL SPACE

DRAIN, AND FOOTING DRAINS TO AREA DRAIN

W/ SUMP. AREA DRAIN SHALL BE CONNECTED



Removable Bollard Detail

| Project No. 3400 | |
|-------------------------|----|
| SCALE: H: N/A V: N/A | |
| DESIGNED BY: | TC |
| DRAFTED BY: | TC |
| | |

REVIEWED BY:

GENERAL EROSION PREVENTION & SEDIMENT CONTROL NOTES

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAND DISTURBING ACTIVITY CAUSED BY CLEARING OR GRADING. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY EROSION CONTROL SPECIALIST PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR SHALL CALL FOR AN ON-SITE INSPECTION WHEN EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND PRIOR TO COMMENCEMENT OF WORK.

THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE SITED, DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS IN THE CITY OF WOODLAND'S LATEST STANDARD DETAILS AND THE WASHINGTON STATE DEPARTMENT OF ECOLOGY STORMWATER MANUAL FOR WESTERN WASHINGTON, WHERE THE CITY OF WOODLAND GENERAL REQUIREMENTS SHALL TAKE PRECEDENCE. 3. THE DEVELOPER IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES DURING AND AFTER INSTALLATION OF ALL UTILITY WORK ASSOCIATED WITH UTILITY TRENCHES.

4. PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAINAGE INLETS SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREAS PER THE STANDARD DETAILS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREAS. CLEAN THE FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.

5. THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS.

6. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION. 7. TEMPORARY SEEDING AND MULCHING OF FILL SLOPES AND DIVERSION DIKES SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADING.

8. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs), DURING THE PERIOD FROM OCTOBER 1 TO APRIL 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1 TO SEPTEMBER 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN EXPOSED FOR MOR

9. MATERIAL STOCKPILES ARE TO BE PROTECTED BY THE FOLLOWING MEANS: TEMPORARY: COVER PILES WITH TARPS OR PLASTIC SHEETING WEIGHTED WITH CONCRETE BLOCKS, LUMBER OR TIRES. PERMANENT: COVER PILES WITH TARPS OR PLASTIC, OR RESEED. PERIMETER AREAS AROUND PILES ARE TO BE SURROUNDED WITH EROSION CONTROL FILTER FABRIC FENCES UNTIL SOIL SURFACE IS STABILIZED WITH RESEEDING.

10. THE CONTRACTOR SHALL MAINTAIN ON SITE A WRITTEN DAILY LOG OF EROSION CONTROL BMP MAINTENANCE.

11. IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMP6, CITATIONS AND/OR A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF WOODLAND. IF THE BMP6 APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, OR PUBLIC RIGHT—OF—WAY, THEN THE PUBLIC WORKS DIRECTOR SHALL REQUIRE ADDITIONAL BMP6. PROTECTION OF ADJACENT PROPERTIES, ROADS AND STREETS

12. PROVIDE A 12-INCH DEEP PAD OF CRUSHED ROCK FOR A DISTANCE OF 100 FEET INTO THE SITE FOR ALL ACCESS POINTS UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS. WIDTH OF THE PAD SHALL BE A MINIMUM OF 20 FEET. ALL TRUCKS LEAVING THE SITE SHALL EGRESS ACROSS THE PAD. ACCUMULATED SOIL SHALL BE PERIODICALLY REMOVED, OR ADDITIONAL ROCK SHALL BE PLACED UPON THE PAD SURFACE. ROCK SHALL BE CLEAN 4 INCH TO 8 INCH QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

13. PAVEMENT SWEEPING AND SHOVELING IS REQUIRED. WASHING THE PAVEMENT INTO THE STORM SYSTEM IS NOT PERMITTED.

14. AT SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL, PAD LENGTH MAY BE REDUCED TO 50 FEET. SINGLE FAMILY LOT ENTRANCES MAY HAVE THE PAD LENGTH REDUCED TO 20 FEET. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS WITH THE SAME OWNER DURING CONSTRUCTION, ONE LOT ENTRANCE MAY BE USED FOR THE ADJACENT LOTS.

15. INSTALL SEDIMENT FENCE IN ACCORDANCE WITH THIS DETAIL SHEET PRIOR TO BUILDING CONSTRUCTION AND/OR EXCAVATION TO PREVENT SILT INTRUSION UPON ADJACENT LOTS. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE LOTS HAVE THE SAME OWNER DURING CONSTRUCTION, THE SILT FENCE ALONG THE COMMON LOT LINE MAY BE ELIMINATED.

16. CONSTRUCTION ROADS AND PARKING AREAS SHALL BE STABILIZED WHEREVER THEY ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR THE USE OF CONSTRUCTION TRAFFIC. MAINTENANCE OF SEDIMENT CONTROL BMPB

17. MAINTAIN AND REMOVE ALL SEDIMENT CONTROLS AS SPECIFIED IN THE STANDARD DETAILS. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, UTILITY TRENCHES AND STORM PIPES PRIOR TO ACCEPTANCE BY THE CITY.

18. SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AND AFTER ANY STORM EVENT PRODUCING RUNOFF. THE INSPECTION FREQUENCY FOR STABILIZED, HAGTIVE SITES SHALL BE ONCE EVERY TWO WEEKS OR MORE FREQUENTLY AS DETERMINED BY THE LOCAL PERMITTING AUTHORITY BASED ON THE LEVEL OF SOIL STABILITY AND POTENTIAL FOR ADVERSE ENVIRONMENTAL IMPACTS.

19. ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMP8 ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.

20. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST A. MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.

B. SPRINKLE THE SITE WITH WATER UNTIL THE SURFACE IS WET.
C. SPRAY EXPOSED SOIL AREAS WITH A DUST PALLIATIVE. NOTE: USE OF PETROLEUM PRODUCTS OR POTENTIALLY HAZARDOUS MATERIALS ARE PROHIBITED

21. EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADE OR GIVEN A PERMANENT COVER TREATMENT WITHIN 30 DAYS OF THE EXPOSURE SHALL HAVE SEED MIX AND MULCH PLACED TO STABILIZE THE SOIL AND REDUCE EROSION SEDIMENTATION. SEEDED AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STAND OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT EROSION WILL BE RESEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED.

22. APPLY AN APPROVED TEMPORARY SEEDING MIXTURE TO THE PREPARED SEED BED AT A RATE OF 120 LBS/ACRE. NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.

| | EROSION PRE | VENTION | AND | SEDIME | NT CONT | ROL | |
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BIO-FILTER BAGS OR STRAW WATTLES MAY -AND WITH PHASING OF DEVELOPMENT CATCH BASIN AREA DRAIN OVERLAP

NOTES:

1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPE.

PLAN VIEW

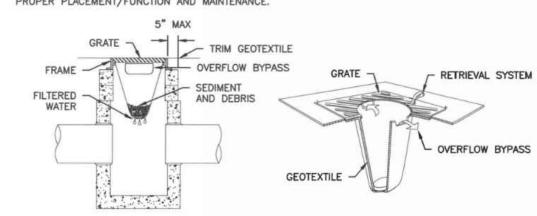
BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1" x 2" WOODEN STAKES OR APPROVED EQUAL PER BAG.

3. STRAW WATTLES MUST BE STABILIZED BY ATTACHING WIRE CLIPS TO THE CATCH BASIN PER MANUFACTURER SPECIFICATIONS.

DITCH INLET

ISOMETRIC VIEW

4. INLET PROTECTION MUST BE REGULARLY INSPECTED BY THE EROSION CONTROL INDIVIDUAL TO INSURE PROPER PLACEMENT/FUNCTION AND MAINTENANCE.



1. SIZE THE BELOW GRATE INLET DEVICE (BGID) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.

2. THE REMOVAL SYSTEM MUST ALLOW REMOVAL OF THE BGID WITHOUT SPILLING THE COLLECTED MATERIAL.

3. THE BGID SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).

CROSS SECTION

4. THE CONTRACTOR SHALL INSPECT THE BAG AFTER EACH STORM EVENT AND AT REGULAR INTERVALS.

5. THE FILTER BAG SHALL BE CLEANED OR REPLACED WHEN THE BAG BECOMES HALF FULL.

| | INLET | PROTE | CTION | (1 OF | 2) | | |
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3. ANY SEDIMENT CARRIED FROM THE SITE ONTO THE STREET SHALL BE CLEANED UP IMMEDIATELY. IF EQUIPMENT TRAVELS EXTENSIVELY ON UNSTABILIZED ROADS ON THE SITE, A TIRE AND VEHICLE UNDERCARRIAGE WASH NEAR THE ENTRANCE WILL BE NEEDED. PERFORM WASHING ON CRUSHED ROCK. WASH WATER WILL REQUIRE TREATMENT IN A SEDIMENT POND OR

EXISTING ROAD

INSTALL DRIVEWAY 4

4"-B" QUARRY SPALLS -

BECOMES CLOGGED WITH SEDIMENTS.

GEOTEXTILE -

12" MIN THICKNESS -

1. IF THE ENTRANCE SITS ON A SLOPE, PLACE A FILTER FABRIC FENCE DOWN GRADIENT.

2. TOP DRESS THE PAD WITH CLEAN 3" MINUS ROCK WHEN THE CONSTRUCTION ENTRANCE

CULVERT IF THERE IS A

ROADSIDE DITCH PRESENT

DRIVEWAYS SHALL BE PAVED TO THE EDGE OF R-O-W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO

AVOID DAMAGING THE ROADWAY

IT IS RECOMMENDED

PROVIDE FULL WIDTH OF

INGRESS/EGRESS AREA

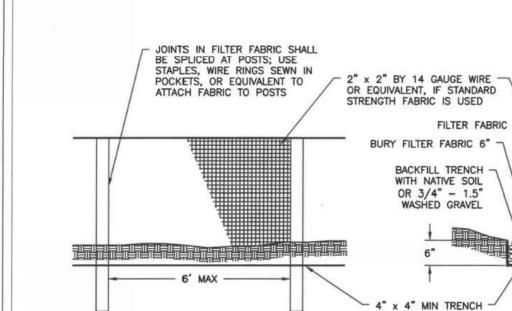
THAT THE ENTRANCE

BE CROWNED SO THAT RUNOFF DRAINS OFF

2' MIN

3' MAX

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FRONT VIEW

1. FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE. 2. POST SPACING MAY BE INCREASED TO 8' IF WIRE BACKING IS USED.

MAINTENANCE STANDARDS:

SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

2" X 2" WOOD POSTS, -STEEL FENCE, POSTS, REBAR, OR EQUIVALENT

SIDE VIEW

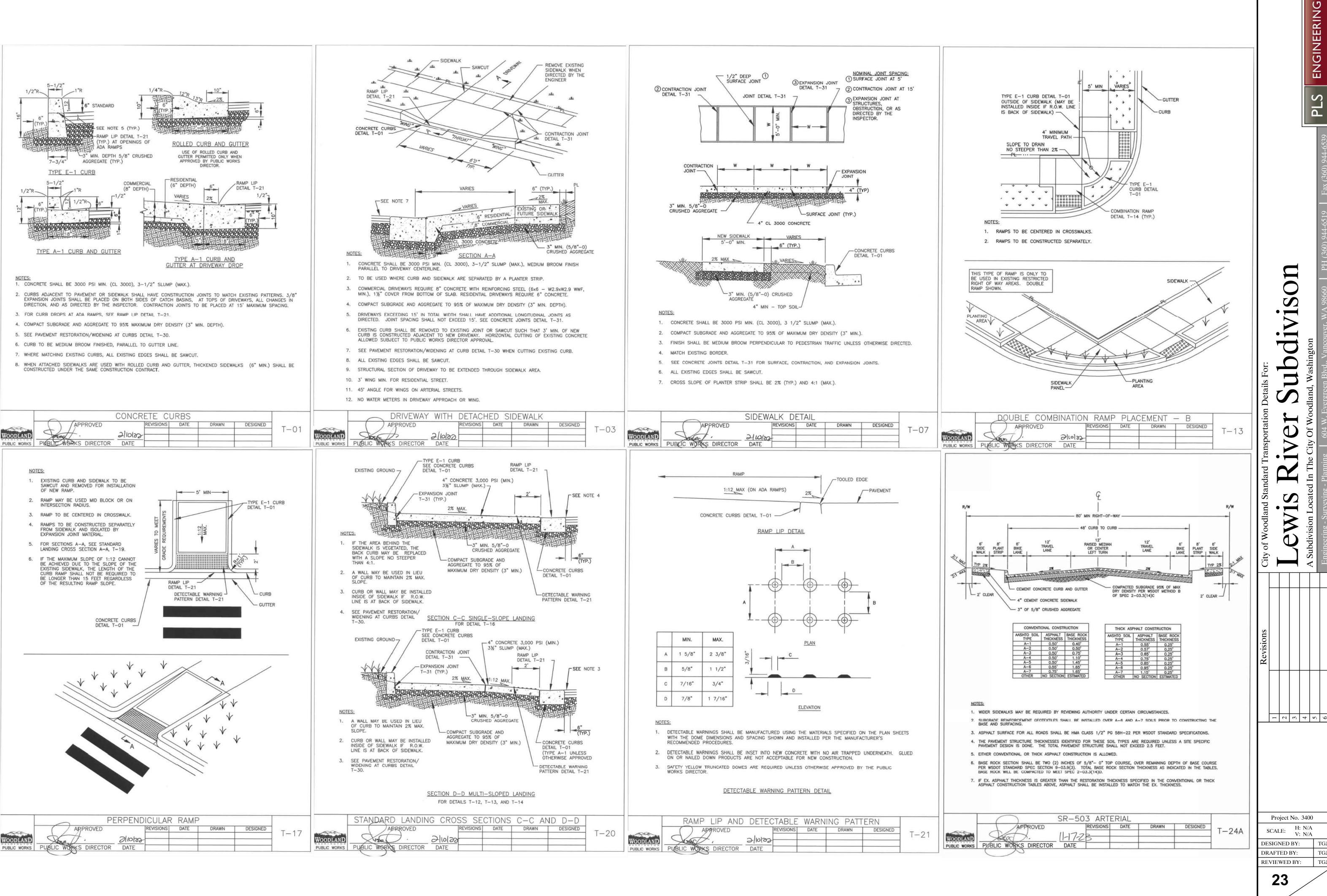
IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT POND.

3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.

SEDIMENT DEPOSITS SHALL EITHER BE REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE—THIRD THE HEIGHT OF THE SILT FENCE, OR A SECOND SILT FENCE SHALL BE INSTALLED.

IF THE FILTER FABRIC (GEOTEXTILE) HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

| | | SIL | FENC! | Ε | | | |
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Project No. 3400 SCALE: V: N/A DESIGNED BY:

CONSTRUCTION SPECIFICATIONS THE FOLLOWING ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AS ADOPTED BY THE CONCRETE STREET LIGHT FOUNDATION
ALL CONCRETE FOUNDATIONS SHALL BE THE SIZE AND CONFIGURATION SHOWN ON THE PLANS, EXCEPT WHERE, IN

PLACING THE CONCRETE, THE CONTRACTOR SHALL BLOCK OUT AROUND ANY OTHER UNDERGROUND UTILITIES THAT LIE IN THE EXCAVATED BASE SO THAT THE CONCRETE WILL NOT ADHERE TO THE UTILITY LINE. CONCRETE BASE SHALL BE CLASS 4000 AND BE TROWELED, BRUSHED, EDGED, AND FINISHED IN A WORKMANLIKE MANNER. CONCRETE SHALL BE PROMPTLY CLEANED FROM ANCHOR BOLTS AND CONDUITS AFTER PLACEMENT. ANCHOR BOLTS FOR ALL POLES SHALL BE ARRANGED SO THAT THE POLE'S BRACKET ARM IS PERPENDICULAR TO THE CENTERLINE OF THE ADJACENT ROADWAY RIGHT-OF-WAY. STREET LIGHTS MAY BE INSTALLED AFTER A COMPRESSIVE STRENGTH OF 2,400 PSI HAS ALL POLES SHALL BE INSTALLED ON LEVELING NUTS SECURED TO THE ANCHOR BOLTS AND WITH LOCKING NUTS ON THE TOP OF THE BASE FLANGE. THE SIDE OF THE POLE SHAFT OPPOSITE THE LOAD SHALL BE PLUMBED BY ADJUSTING THE LEVELING NUTS OR AS OTHERWISE DIRECTED BY THE ENGINEER. THE SPACE BETWEEN THE CONCRETE

THE JUDGMENT OF THE ENGINEER, UNSTABLE SOIL CONDITIONS REQUIRE ENLARGEMENT OF THE FOUNDATION. BEFORE

BASE AND THE BOTTOM OF THE POLE FLANGE SHALL BE FILLED WITH DRY PACK MORTAR TO COMPLETELY FILL THE SPACE UNDER THE FLANGE AND AROUND THE CONDUITS AND BE NEATLY TROWELED TO THE CONTOUR OF THE POLE FLANGE. A PLASTIC DRAIN HOSE (1/2 " DIAMETER) SHALL BE INSERTED THROUGH THE MORTAR TO PROVIDE DRAINAGE FROM THE INTERIOR OF THE POLE BASE AND TRIMMED FLUSH WITH THE INTERIOR AND EXTERIOR SURFACE OF THE MORTAR. DRY PACK MORTAR SHALL CONSIST OF A 1:3 MIXTURE OF CEMENT AND FINE SAND WITH JUST ENOUGH WATER SO THAT THE MIXTURE WILL STICK TOGETHER ON BEING MOLDED INTO A BALL BY HAND AND WILL NOT EXUDE FREE MOISTURE WHEN SO PRESSED.

ALL CONDUIT SHALL BE SCHEDULE 40 PVC, MINIMUM ONE INCH DIAMETER EXCEPT UNDER DRIVEWAYS, AND STREET CROSSINGS. THESE EXCEPTIONS SHALL BE RIGID STEEL CONDUIT AND SHALL BE A MINIMUM OF TWO INCHES IN DIAMETER. ALL ELBOWS SHALL BE RIGID STEEL.

RIGID CONDUIT TO BE PROVIDED AS SPECIFIED ON THE PLANS SHALL BE OF HOT DIPPED GALVANIZED STEEL METALLIC CONDUIT CONFORMING TO THE REQUIREMENT OF THE NATIONAL ELECTRICAL CODE. ALL UNDERGROUND CONDUIT SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE. IN PAVED DRIVEWAY OR ROADWAY AREAS, ELECTRICAL CONDUIT SHOULD BE INSTALLED BY PUSHING OR BORING METHODS.

ALL POLES, METAL CONDUITS AND CABINETS IN THE SAME AREA COVERED BY THE SAME POWER SERVICE SHALL BE MADE MECHANICALLY AND ELECTRICALLY SECURE FOR A CONTINUOUS GROUNDING SYSTEM IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. BONDING JUMPERS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH WSDOT STANDARD PLAN J-9A TO ALL #8 BARE METAL CONDUITS IN THE JUNCTION BOX. GROUNDING OF CONDUIT AND GROUND WIRE AT THE SERVICE POINT TO THE PUD SERVICE GROUND ON THE PUD POWER POLE SHALL BE ACCOMPLISHED AS REQUIRED UNDER THE NATIONAL ELECTRICAL CODE.

CATALOG CUTS
PRIOR TO THE BEGINNING OF CONSTRUCTION, CATALOG CUTS OF THE FOLLOWING ITEMS SHALL BE SUBMITTED AND APPROVED BY THE PUBLIC WORKS DIRECTOR. 1. STREET LIGHT STANDARDS 2. LUMINARIES 3. JUNCTION BOXES 4. WYE AND IN-LINE CONNECTORS 5. SERVICE CABINET 6. IN-LINE FUSE HOLDERS 7. CONDUIT 8. WIRE.

CRITICAL INSPECTION POINTS
THE ILLUMINATION SYSTEM WILL BE INSPECTED BY THE PUBLIC WORKS DEPARTMENT. THE TELEPHONE NUMBER IS:

THE FOLLOWING ARE THE CRITICAL INSPECTION POINTS. NO WORK SHALL BE DONE UNTIL INSPECTION IS COMPLETED. WIRING 1. CHECK OF CONDUIT DEPTH. NO TRENCHING SHALL BE FILLED WITHOUT THE DEPTH OF CONDUIT VERIFIED. 2. SERVICE. THE SERVICE SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR. 3. WIRING. THE WIRING, SPLICES, GROUNDING, AND FUSING SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR.

POLES 1. POLE LOCATIONS. THE POLE LOCATIONS SHALL BE APPROVED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO EXCAVATION OF THE POLE BASES. 2. POLE BASES. THE POLE BASES SHALL BE INSPECTED AND APPROVED PRIOR TO THE POURING OF THE CONCRETE.

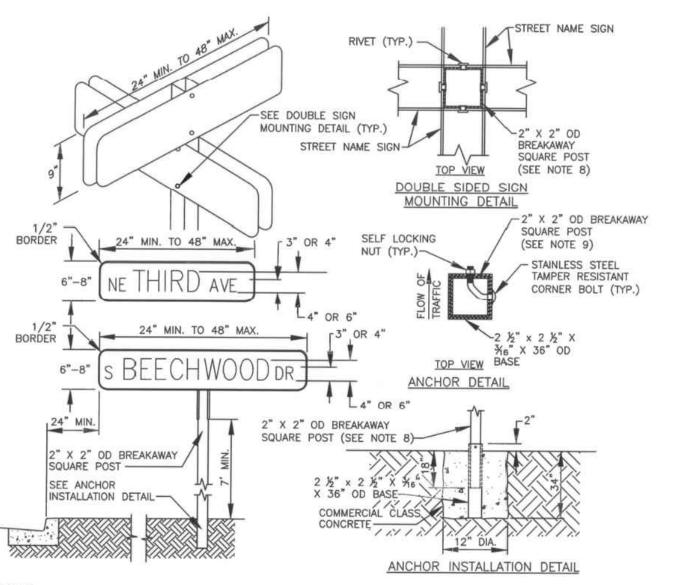
STREET LIGHTING - CONSTRUCTION NOTES

2/10/20

PUBLIC WORKS DIRECTOR DATE

THE SHIP STATES

REVISIONS DATE



- 1. FOR STREETS 25-MPH AND UNDER, 4" UPPERCASE LETTERS FOR STREET NAME AND 3" UPPER CASE LETTERS FOR SUPPLEMENTARY LETTERING.
- 2. FOR SPEEDS OVER 25-MPH, 6" UPPERCASE LETTERS FOR STREET NAME AND 4" UPPER CASE LETTERS FOR SUPPLEMENTARY LETTERING.
- SIGN FACE SHALL BE FABRICATED FROM CUBED CORNERED LENS (VIP, TYPE A DIAMOND GRADE) REFLECTIVE MATERIAL. FACE LEGEND AND BORDER SHALL BE WHITE ON A GREEN BACKGROUND PRIVATE ROAD SIGNS SHALL BE WHITE ON A BROWN BACKGROUND. BORDER SHALL BE 1/2" IN WIDTH.
- ALL SIGN MATERIALS AND ATTACHMENT HARDWARE SHALL CONFORM TO MUTCO AND WSDOT STANDARD SPECIFICATIONS.
- 5. WHEN SIGN REQUIRES TWO MESSAGE LINES, USE 2 SIGN BOARDS WITH AN ARROW ADDED TO THE BOARD (LEFT ARROW LEFT OF THE DIRECTION AND RIGHT ARROW ON THE RIGHT).

GROUND MOUNTED STREET NAME SIGN

2/10/20

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DATE

DESIGNED

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PUBLIC WORKS

6. ENGINEER SHALL APPROVE FACE COPY PRIOR TO FABRICATION.

APPROVED

7. BREAKAWAY SIGN POSTS ARE TO BE "QUICK-PUNCH" WITH KNOCK OUTS IN PLACE.

| RIVET (TYP.) |
|--|
| RIVET (TYP.) |
| 220 |
| SEE DOUBLE SIGN |
| MOUNTING DETAIL (TYP.) STREET NAME SIGN A 2" X 2" OD BREAKAWAY |
| SQUARE POST (SEE NOTE 8) |
| DOUBLE SIDED SIGN |
| MOUNTING DETAIL (-2" X 2" OD BREAKAW. |
| BORDER 24" MIN. TO 48" MAX. 3" OR 4" SELF LOCKING (SEE NOTE 9) |
| NUT (TYP.) STAINLESS STEEL |
| 6"-8" NE THIRD AVE TAMPER RESISTANT CORNER BOLT (TYP.) |
| NE THRO AVE |
| 1/2" 24" MIN. TO 48" MAX. |
| %6" X 36" OD |
| 6"-8" S BEECHWOOD DR IOP VIEW BASE ANCHOR DETAIL |
| ↑ L4" OR 6" |
| 2" X 2" OD BREAKAWAY SQUARE POST (SEE NOTE 8) |
| 2" X 2" OD BREAKAWAY Z |
| SEE ANCHOR 2 ½" × 2 ½" × 76" |
| INSTALLATION DETAIL X 36" OD BASE COMMERCIAL CLASS |
| CONCRETE |
| |
| ANCHOR INSTALLATION DETAIL |

10. 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

GENERAL NOTES:

R/W

3.5' CLEAR -

11. 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.

1. 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

. TRENCH BACKFILL AND RESURFACING SHALL BE AS SHOWN IN THE STANDARD DETAILS, UNLESS MODIFIED BY THE

3. 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

4. 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 INCLEMENT 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

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 REQIRED

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.

6. ANY PATCH OR OVERLAY ON ARTERIAL STREETS OR AREAS ZONED COMMERCIAL SHALL BE PERMANENT AND

7. 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.

8. CONTROL DENSITY 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 WARRANTY 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 WARRANTY

THEIR WORK FOR THE LIFE OF THE RESTORATION. THE OWNER SHALL REPAIR ANY OF THE FOLLOWING DEFICIENCIES

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

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

RAVELING: RAVELING IS DEFINED AS SURFACE DETERIORATION THAT OCCURS WHEN AGGREGATE PARTICLES ARE DISLODGED 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 PLANED

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.

STATE DEPARTMENT OR TRANSPORTATION (WSDOT) AND SHALL COMPLY WITH THE CURRENT EDITION.

SHOW THE INSPECTOR AND THE CITY THAT THE RESTORATION MEETS THIS SPECIFICATION.

LIMITS OF TRENCH RESTORATION SHALL BE IDENTIFIED PRIOR TO TRENCH BACKFILL.

PATCHING AND WILL BE DETERMINED BY THE DIRECTOR.

INSTALLED NEXT TO A CLEAN, NEAT SAWCUT LINE.

COMPLETED AS SOON AS POSSIBLE.

SPECIFICATIONS.

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

| | STANDARD | TRENCH | H REST | ORATIO | N NOTES | S | |
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DESIGN SPECIFICATIONS

PUBLIC WORKS | PUBLIC WORKS DIRECTOR

PARKING LANE

1. STREET LIGHT LOCATIONS ARE TO BE PLACED ON THE PROPERTY LINE WHENEVER POSSIBLE, LIGHTING FACILITIES SHALL BE LOCATED WITHIN PUBLIC RIGHT-OF-WAY OR AN EASEMENT DEDICATED TO THE CITY OF

- 50' MIN RIGHT-OF-WAY -

COMPACTED SUBGRADE 95% OF MAX DRY DENSITY PER WSDOT METHOD B

THICK ASPHALT CONSTRUCTION

THICKNESS THICKNESS

OF SPEC 2-03.3(14)C

25

- CEMENT CONCRETE CURB AND GUTTER

CONVENTIONAL CONSTRUCTION

SHTO SOIL ASPHALT BASE ROCK THICKNESS THICKNESS

1. WIDER SIDEWALKS MAY BE REQUIRED BY REVIEWING AUTHORITY UNDER CERTAIN CIRCUMSTANCES.

2. SUBGRADE REINFORCEMENT GEOTEXTILES SHALL BE INSTALLED OVER A-6 AND A-7 SOILS PRIOR TO CONSTRUCTING THE

3. ASPHALT SURFACE FOR ALL ROADS SHALL BE HMA CLASS 1/2" PG 58H-22 PER WSDOT STANDARD SPECIFICATIONS.

THE PAVEMENT STRUCTURE THICKNESSES IDENTIFIED FOR THESE SOIL TYPES ARE REQUIRED UNLESS A SITE SPECIFIC PAVEMENT DESIGN IS DONE. THE TOTAL PAVEMENT STRUCTURE SHALL NOT EXCEED 2.5 FEET.

6. BASE ROCK SECTION SHALL BE TWO (2) INCHES OF 5/8"- 0" TOP COURSE, OVER REMAINING DEPTH OF BASE COURSE PER WSDOT STANDARD SPEC SECTION 9-03.9(3). TOTAL BASE ROCK SECTION THICKNESS AS INDICATED IN THE TABLES.

IF EX. ASPHALT THICKNESS IS GREATER THAN THE RESTORATION THICKNESS SPECIFIED IN THE CONVENTIONAL OR THICK ASPHALT CONSTRUCTION TABLES ABOVE, ASPHALT SHALL BE INSTALLED TO MATCH THE EX. THICKNESS.

LOCAL ACCESS

REVISIONS

4" CEMENT CONCRETE SIDEWALK

3" OF 5/8" CRUSHED AGGREGATE

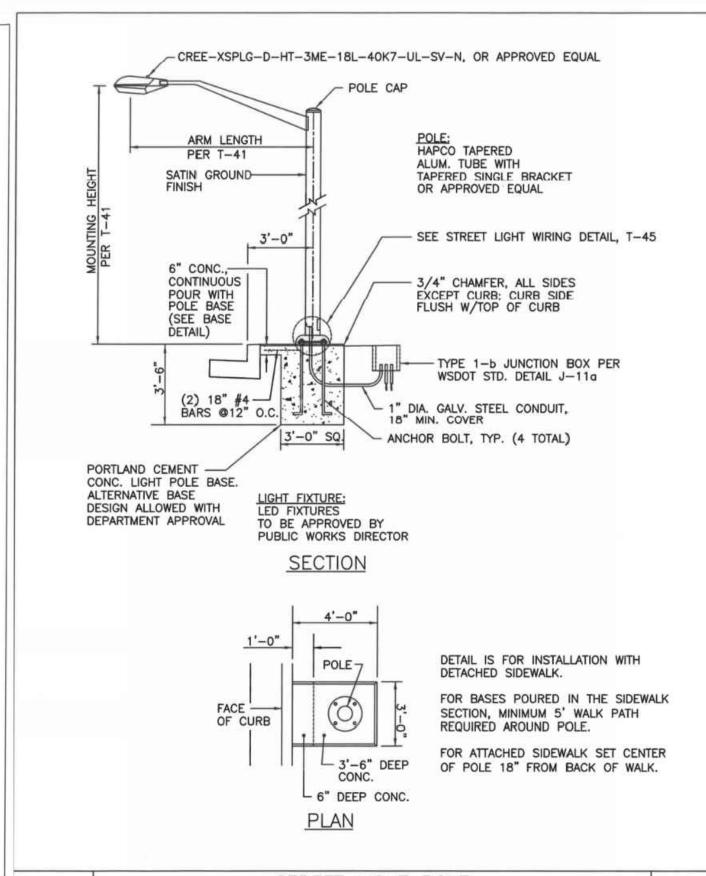
5. EITHER CONVENTIONAL OR THICK ASPHALT CONSTRUCTION IS ALLOWED.

BASE ROCK WILL BE COMPACTED TO MEET SPEC 2-03.3(14)D.

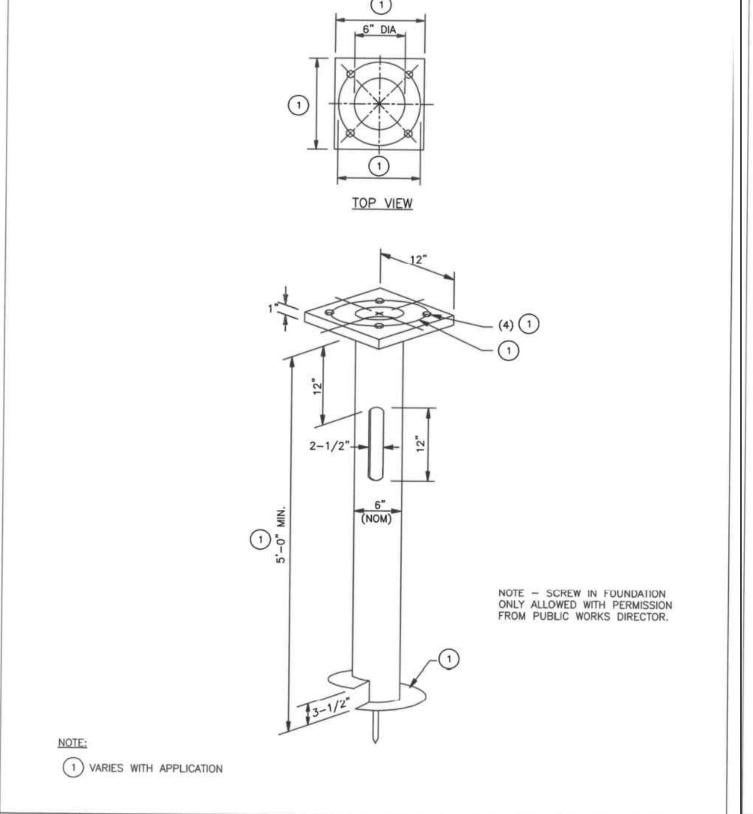
2. THE FOLLOWING TABLE SHALL BE FOLLOWED FOR STREET LIGHT DESIGN:

| | AY AND AREA FICATION | AVERAGE LUMEN | NEMA LABEL LED WATTAGE | ARM LENGTH | MOUNTING HEIGHT |
|-----------|-------------------------|------------------|---------------------------|---------------|--------------------|
| ARTERIAL | COMMERCIAL | 16,800 | 185 W | 8' | 35' |
| | INTERMEDIATE | 16,800 | 185 W | 8' | 35' |
| | RESIDENTIAL | 16,800 | 185 W | 8' | 35' |
| COLLECTOR | COMMERCIAL | 13,000 | 135 W | 6' | 30' |
| | INTERMEDIATE | 13,000 | 135 W | 6' | 30' |
| | RESIDENTIAL | 13,000 | 135 W | 6' | 30' |
| LOCAL | COMMERCIAL | 6,200 | 50 W | 6' | 25' |
| | INTERMEDIATE | 6,200 | 50 W | 6' | 25' |
| | RESIDENTIAL | 6,200 | 50 W | 6' | 25' |

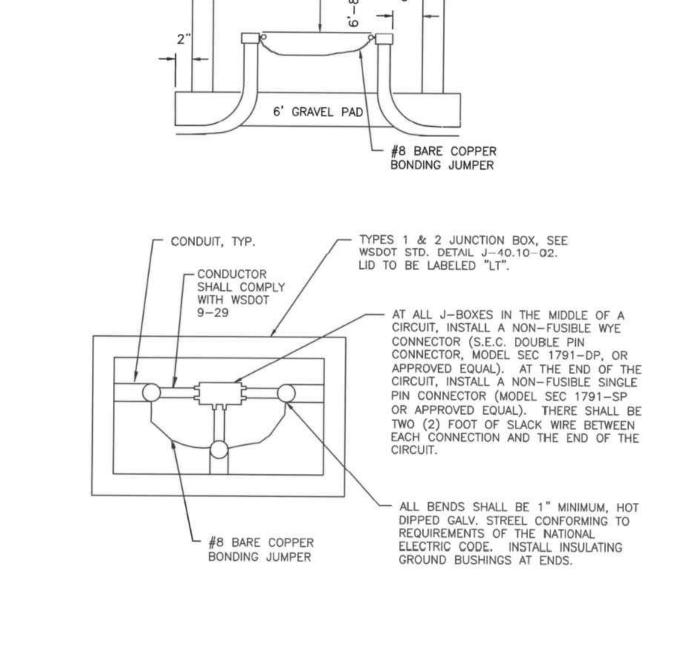
- 3. THE PUBLIC WORKS DEPARTMENT SHALL ADJUST, ADD, OR REMOVE STREET LIGHTS WHERE NECESSARY. THE CONTRACTOR MAY SUBMIT STAMPED CALCULATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WASHINGTON IF THE CONTRACTOR DOES NOT AGREE WITH THE MODIFIED POLE LOCATIONS.
- 4. WHERE THE AVERAGE RESIDENTIAL DENSITY IS IN EXCESS OF 12 UNITS PER ACRE USE INTERMEDIATE
- 5. TYPICAL MOUNTING DIMENSIONS UNLESS OTHERWISE REQUIRED BY THE PUBLIC WORKS DEPARTMENT AS
- 6. KELVIN DEGREES IS TO BE 4,000 K. IN SOLELY RESIDENTIAL NEIGHBORHOODS, THE KELVIN MAY BE 4,000 K OR 3,000 K. THE COLOR TEMPERATURE OF LESS THAN 4,000 K IS NOT ALLOWED IN ANY MIXED USE, COMMERCIAL, OR INDUSTRIAL USE.



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| PUBLIC WORKS | PUBLIC WORKS DIRECTOR | DATE | | | | | |



| | SEREW-IN FOUN | DATION FOR | STRE | ET LIGHT | TING | |
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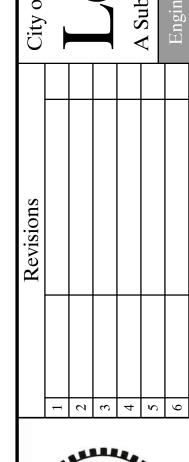
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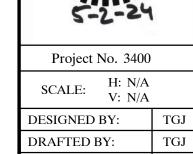


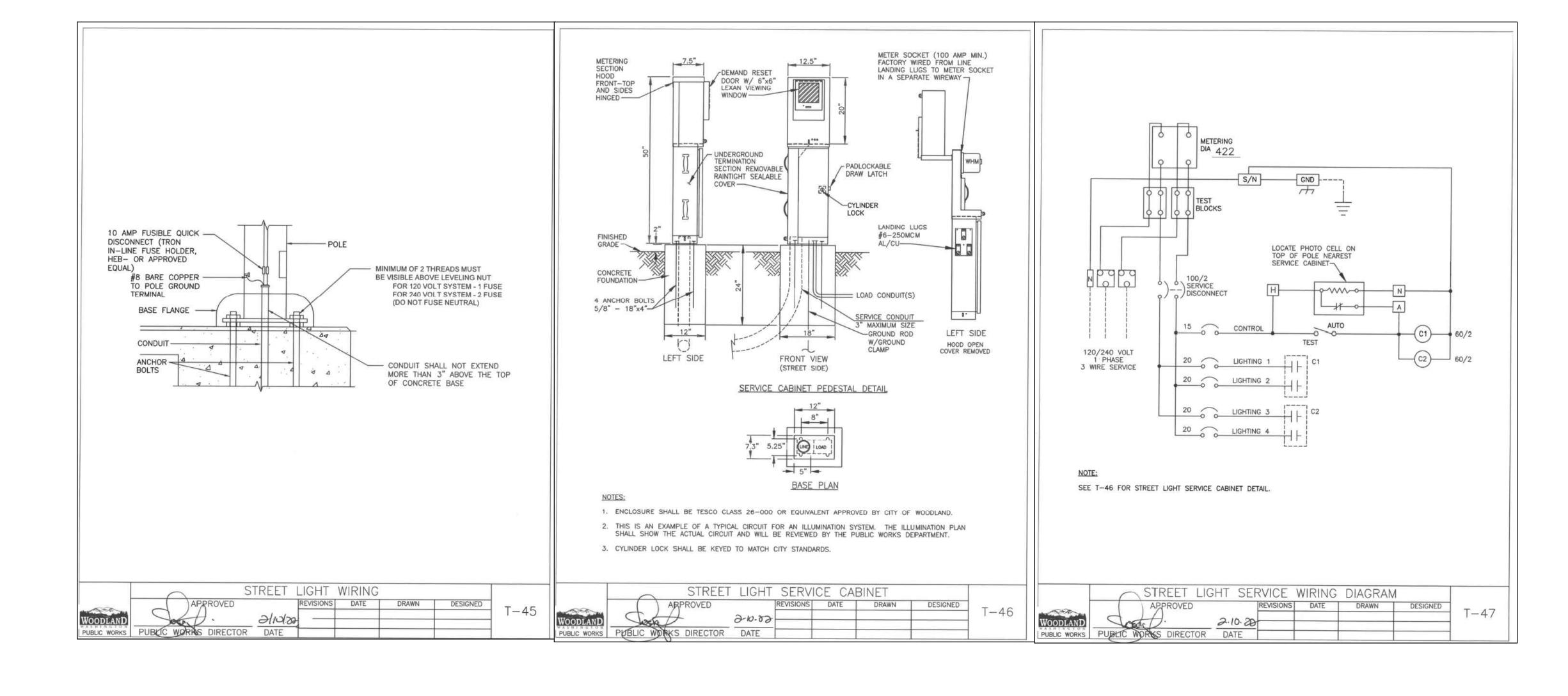


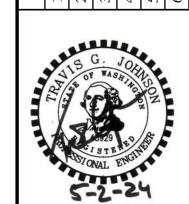
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Project No. 3400 SCALE: V: N/A DESIGNED BY: DRAFTED BY:

GENERAL NOTES FOR STORM SEWERS

- 1. 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, THE PUBLIC WORKS ENGINEERING STANDARDS, 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".
- 2. 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.
- 3. THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MAY CONTACT THE UTILITY NOTIFICATION CENTER BY DIALING 811 IN LIEU OF CONTACTING INDIVIDUAL UTILITIES.
- 4. 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
- 5. 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.
- 6. 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.
- 7. THE DEVELOPER OR 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.
- 8. 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 SEEDED WITH AN APPROVED SEED MIX, PER THE WESTERN WASHINGTON MANUAL. TURF IS ALLOWED FOR VEGETATED FILTERS PROVIDED THE TURF AREA IS OVERSEEDED WITH THE EQUIVALENT GRASS SEED MIX.
- 10. ALL CATCH BASINS SHALL BE STENCILED: "PROTECT STREAMS" OR "PROTECT GROUNDWATER."
- 11. 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 SHOWN ON APPROVED CIVIL ENGINEERING PLANS.
- 12. THE CONTRACTOR WILL PROVIDE A TELEVISION REPORT, TAPE, AND TABULAR AS-BUILT OF ALL PUBLIC STORM 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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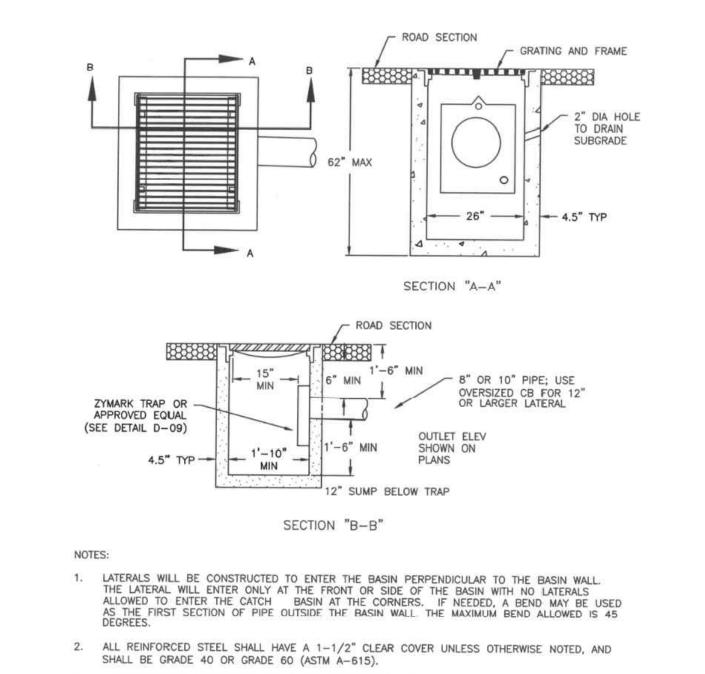
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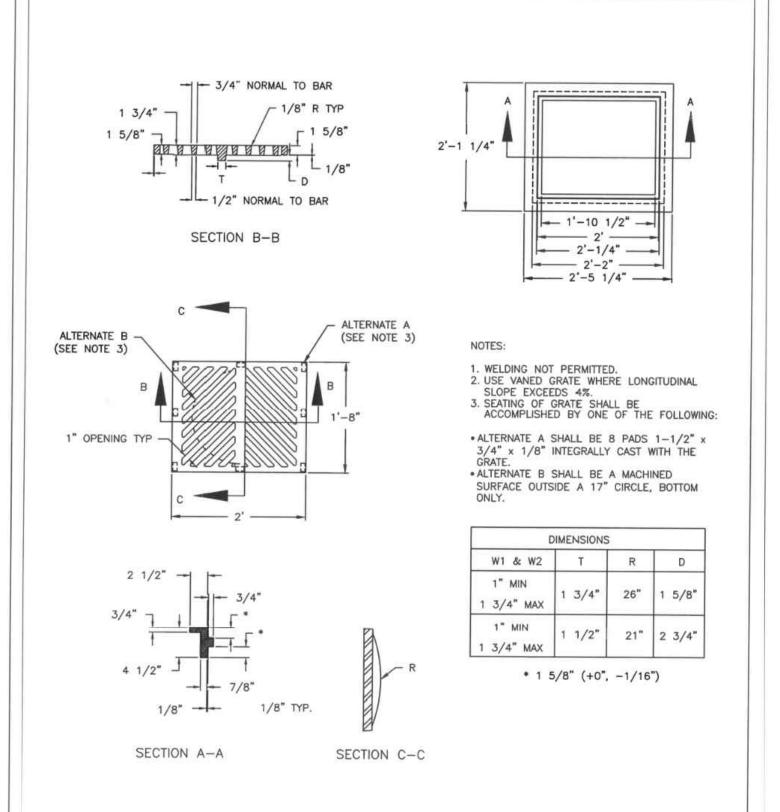
3. ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND

STANDARD CATCH BASIN

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- 4. THE METAL FRAME AND GRATE SHALL BE SET TO A SLOPE TO CONFORM TO THE PARTICULAR
- DRAINAGE AREA (SEE DETAIL D-08).
- 5. ALL PRECAST OR CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.



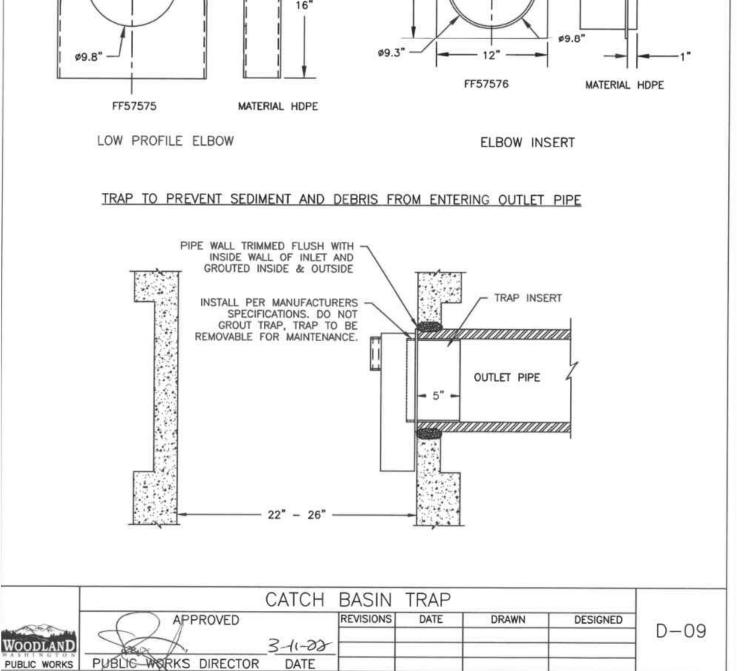
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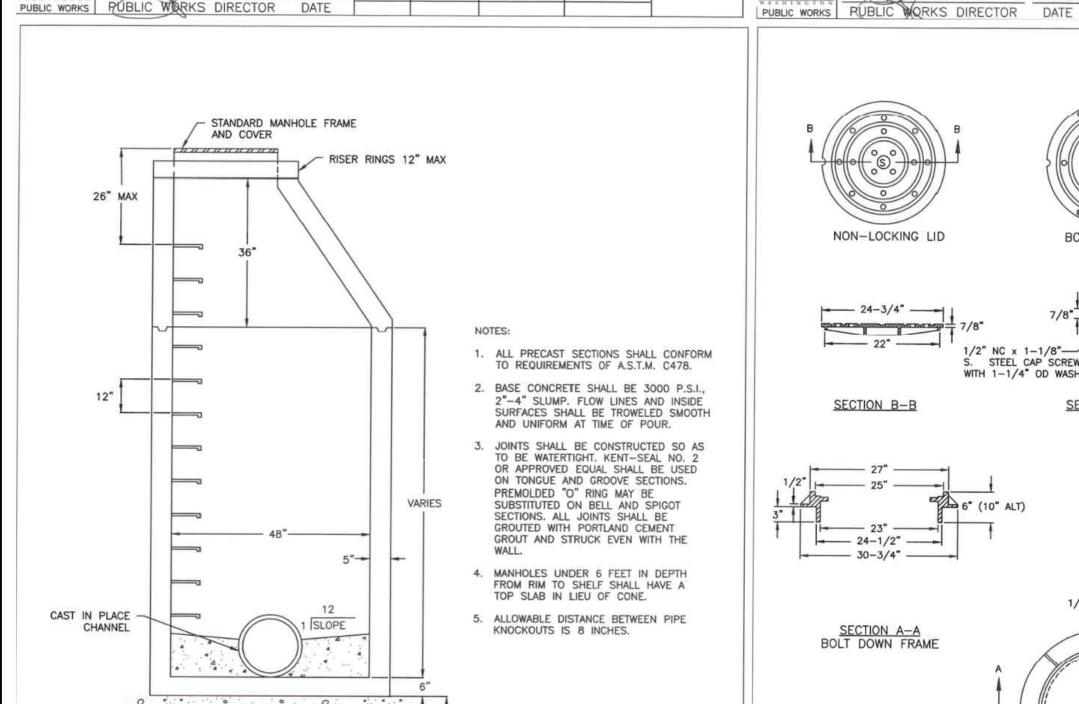
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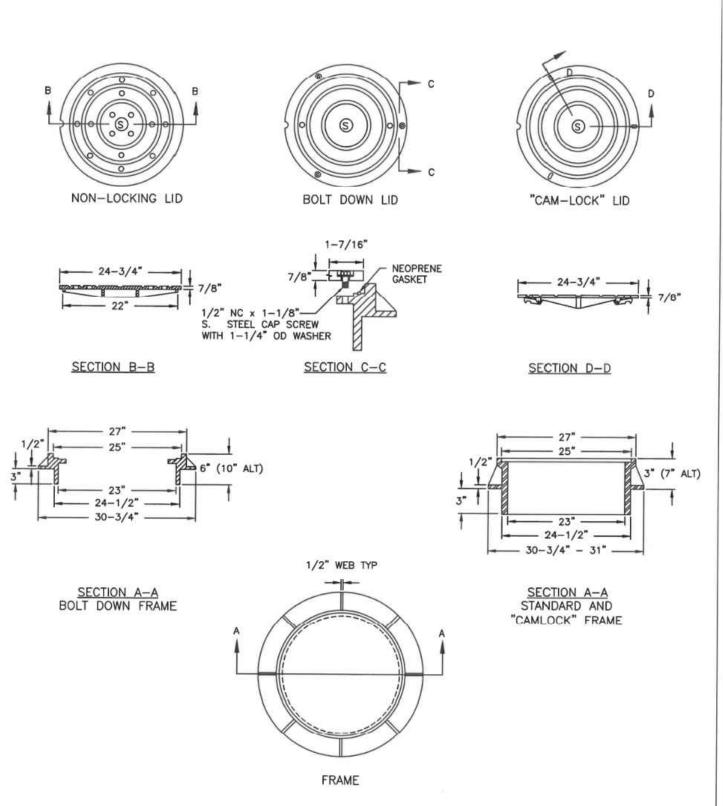


DRILL 3/4" VENT HOLE AT TOP OF TRAP



| | |) | MA | ANHOLE | | | | |
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STANDARD MANHOLE FOR 24-INCH OR SMALLER PIPE OR 30-INCH DUCTILE IRON PIPE



MANHOLE COVER AND FRAME

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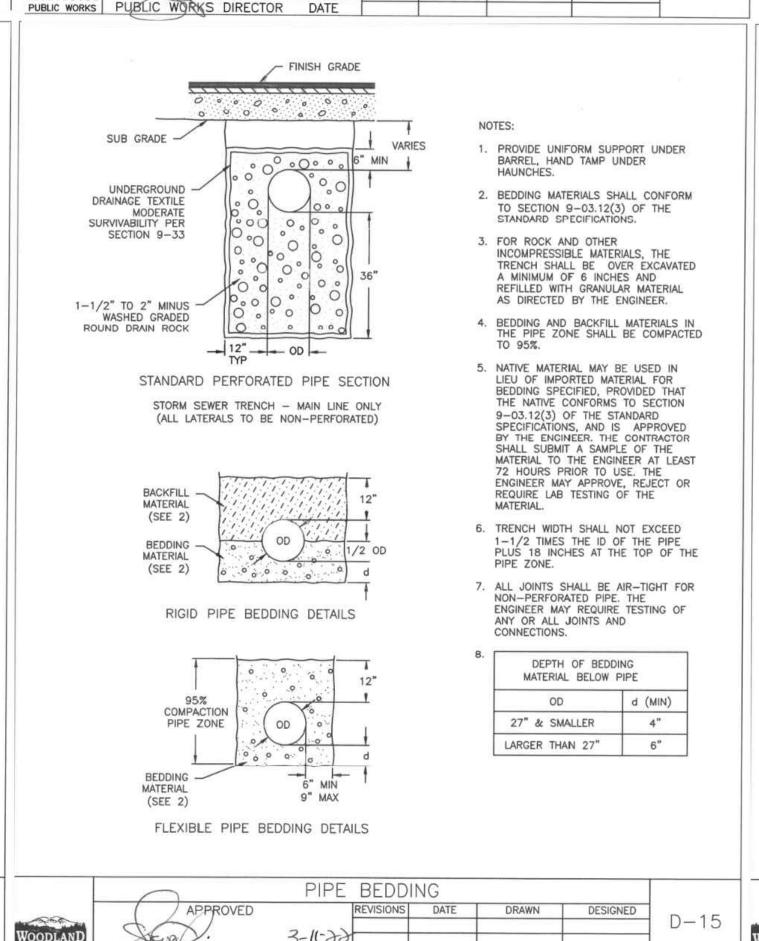
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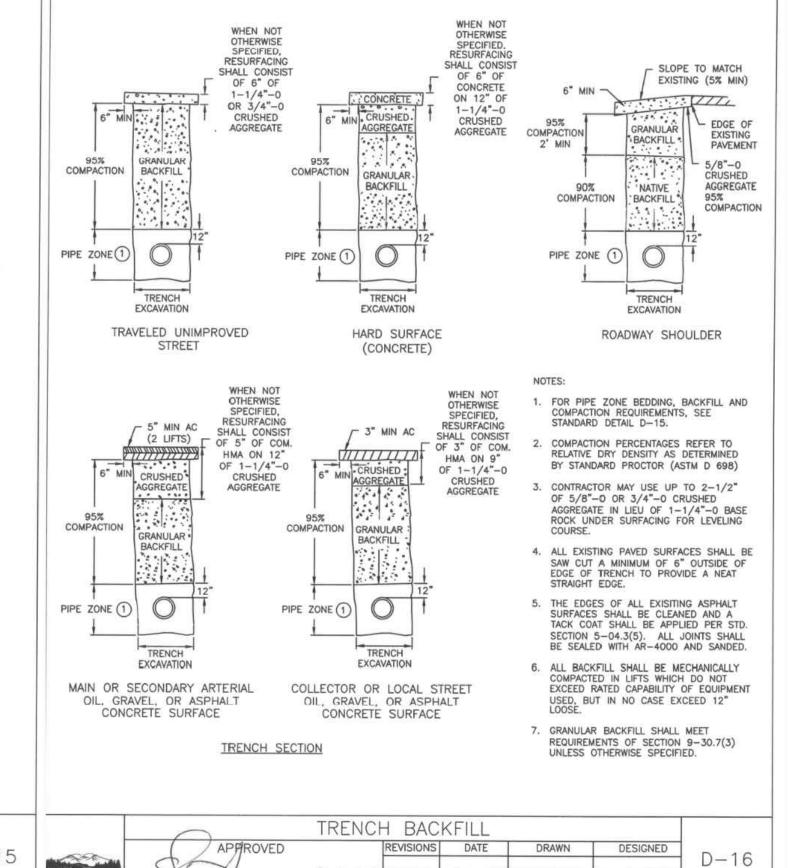
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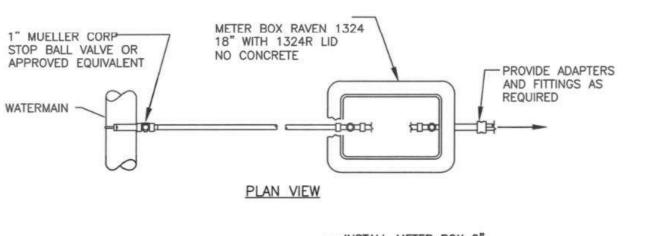


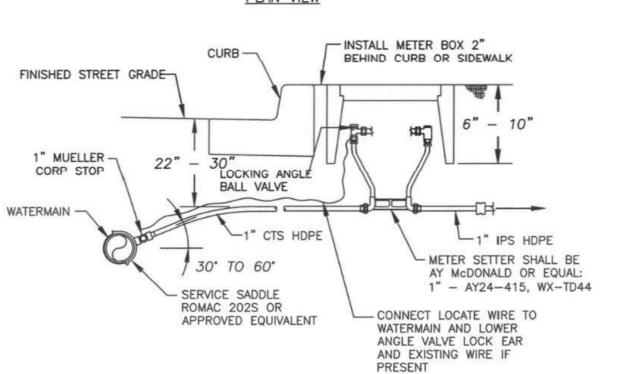
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GENERAL NOTES FOR WATER MAIN INSTALLATION

- 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 WATERMAINS. 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 ENGINEERING 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, MINIMUM DR18 OR DUCTILE IRON PRESSURE CLASS 52 OR AS NOTED ON DRAWING. ALL MATERIAL IN CONTACT WITH DRINKING WATER MUST CONFORM TO ANSI/NSF STANDARD 61 AND BE
- 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 WATERMAINS, FIRE HYDRANTS, BLOW OFF ASSEMBLIES, VACUUM BREAKERS, AND WATER SERVICES MUST HAVE LOCATE WIRE INSTALLED.
- 11. ALL MECHANICAL JOINT FITTINGS AND FITTINGS SHALL BE RESTRAINED USING MJ FOLLOWER GLANDS, MEGALUG, OR EQUAL.
- 12. PIPE SHALL BE INSTALLED IN CONFORMANCE WITH DETAIL W-13.
- 13. RESTORATION SHALL CONFORM WITH STANDARD DETAIL T-33.
- 14. THE MIN. DIAMETER FOR WATER MAIN INSTALLATION IS 8-INCHES. ASBESTOS CONCRETE (AC) AND/OR ANY WATER MAIN, REGARDLESS OF MATERIAL TYPE, 6-INCHES AND SMALLER MUST BE REPLACED.

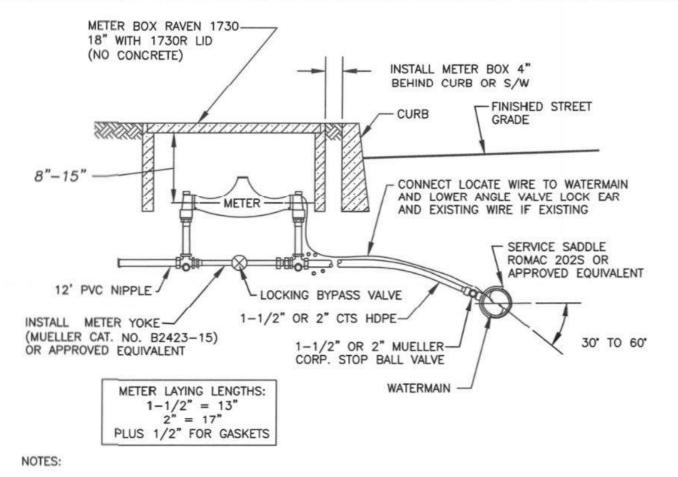




1. SERVICE LINES ON NEW WATERMAINS SHALL BE PRESSURE TESTED UP TO THE LOCKING ANGLE BALL VALVE AS PART OF THE WATERMAIN TESTING.

SECTION VIEW

- 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.



- 1. ALL DOMESTIC AND IRRIGATION METERS SHALL BE SUPPLIED, OWNED, AND INSTALLED BY THE CITY
- 2. PRIOR TO CITY INSTALLATION OF METERS, ALL SERVICE APPLICATIONS MUST BE COMPLETED AND APPROVED, SERVICE FEES PAID IN FULL AND AS-BUILTS SUBMITTED AND APPROVED.
- 3. CONTRACTOR SHALL CONTACT THE CITY OF WOODLAND PUBLIC WORKS OFFICE (360) 225-7999 48-HOURS PRIOR TO INSTALLING ANY WATER SERVICE CONNECTIONS.
- 4. METERS WILL NOT BE SET BY THE CITY PRIOR TO DISINFECTION OF THE MAIN AND SERVICE, AND
- PRIOR TO A SUCCESSFUL BACTERIOLOGICAL TEST.
- 5. SERVICE LINES ON NEW WATERMAINS SHALL BE PRESSURE TESTED UP TO THE LOCKING ANGLE BALL VALVE AS PART OF THE WATERMAIN TESTING.
- 6. DURING THE PRESSURE TEST, THE MAIN SHALL BE OPEN FOR INSPECTION OF ALL CORPORATION
- 7. USE 1-7/8" BIT FOR ALL 2" SADDLE TAPS AND 1-3/8" BIT FOR 1-1/2" SADDLE TAPS.
- 8. METER BOXES ARE NOT ALLOWED IN HARD SURFACED AREAS WITHOUT PRIOR WRITTEN APPROVAL. METER BOXES IN HARD SURFACE AREAS SHALL BE SLIGHTLY HIGHER (1/8" MAX) THAN SURROUNDING GRADE AND BOTH THE BOX AND LID MUST BE TRAFFIC RATED.

3 PORT FH WITH STORZ

1/4" PLASTIC

6" DUCTILE IRON

1/2 YD COARSE GRAVEL PIPE FROM MAIN FLG X MJ

1. IN GENERAL, FIRE HYDRANT LOCATIONS SHALL BE AS SHOWN ON THE PLANS AND SHALL CONFORM TO THIS DETAIL. FIRE HYDRANTS SHALL NOT BE SET UNTIL LOCATION AND DEPTH ARE APPROVED BY THE CITY OF

4. HYDRANT TO BE 5-1/4" COMMERCIAL W/ (2) 2-1/2" NST, (1) 4-1/2" NST THREADED PORT(S) WITH (1)

7. FIRE HYDRANTS SHALL BE FACTORY PAINTED OR QUALITY FIELD PAINTED WITH RODDA SILICONE ALKYD

8. HYDRANT STANDARD BURY IS 4' UNLESS OTHERWISE NOTED ON THE PLANS. OR WHEN BREAKAWAY JOINT IS

9. ALL JOINTS SHALL BE RESTRAINED UTILIZING MECHANICAL RESTRAIN SYSTEMS. CONCRETE THRUST BLOCKS

CONNECTION M.J.

OR DRAIN/TRACK ROCK TO HYDRANT

2. FIRE HYDRANT INSTALLATION SHALL BE APPROVED BY THE CITY OF WOODLAND PUBLIC WORKS

5" TWO LUG QUARTER TURN STORZ OR APPROVED EQUAL PUMPER PORT CONNECTION.

5. THE FIRE HYDRANT SHALL BE INSTALLED SO THAT IT IS PLUMB IN ALL DIRECTIONS.

6. FOUR (4) GUARD POSTS TO BE INSTALLED IN UNPROTECTED AREAS (4' RADIUS).

ENAMEL HEAVY DUTY GLOSS SAFETY YELLOW 7-32616-1 TO NEW CONDITION.

WITH FELT COVER

COATED AIRCRAFT

ADAPTOR ON STEAMER PORT, PORT TO FACE STREET

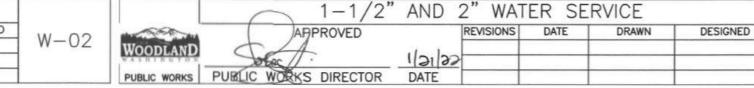
SEE STANDARD VALVE BOX (W-06)

FLG X MJ TEE

CONNECT LOCATE WIRE TO THE TOP OF THE VALVE

9. 1 1/2" METER CAN BE INSTALLED IN A 2" SETTING WITH ADAPTORS.

| | GENERAL NO | TES FOR WAT | ER MA | IN INSTA | LL | | | 3/4" | AND 1 | " WATE | R SER | VICE | | | |
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36" MIN CLEAR 24" MIN-30" MAX FIRE HYDRANT , CURB OR SIDEWALK

4'X4'X4" CONCRETE PAD

DRAINAGE

12" x 12" x 8"---

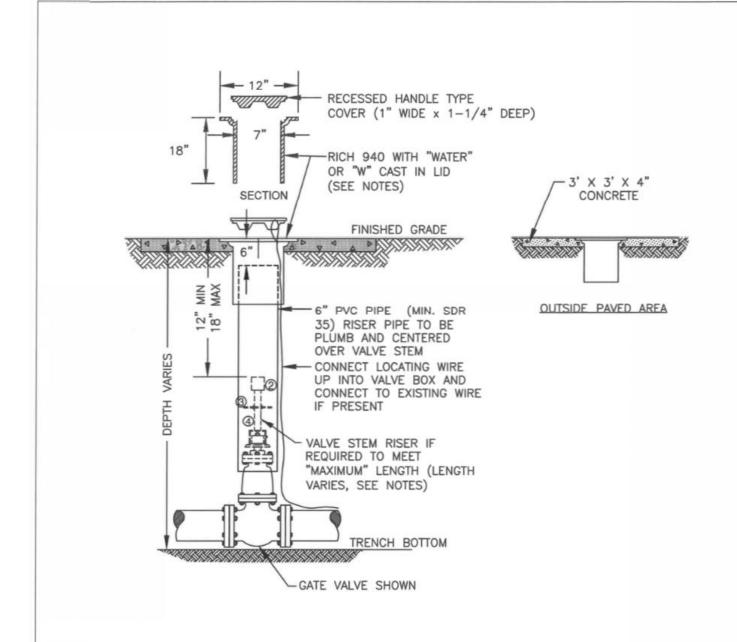
DEPARTMENT PRIOR TO BACKFILLING.

INSTALLED 7" ABOVE FINISHED GRADE.

SHALL NOT BE ALLOWED. STORZ ADAPTORS ARE REQUIRED.

3. HYDRANT TO BE WATEROUS WB67 CLASS 250.

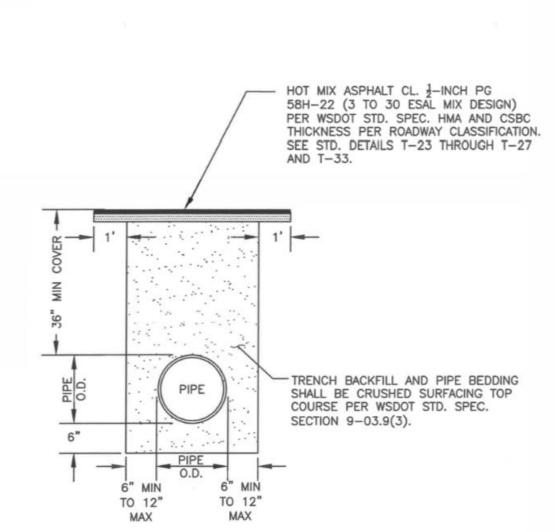
PIER BLOCK



NOTES:

- 1. VALVE STEM EXTENSION TO INCLUDE THE FOLLOWING WELDS TO BE 1/4" FILLET WELD ALL AROUND.
- 2. VALVE OPERATING NUT OR 1-7/8" X 1-7/8" X 2" HIGH GRADE STEEL.
- 3/16" THICK X 5-1/5" DIA STEEL GUIDE PLATE SHAFT.
- 4. 2" X 2" X 3/16" SQUARE STRUCTURAL STEEL TUBING TO FIT OPERATING NUT.
- 5. FOR NEW VALVES IN EXISTING STREET, RESTORE PAVEMENT PER CITY OF WOODLAND STANDARDS.

| STANDARD | VALVE BOX | AND | COVER | | | | WATER PIP | E TRENC | H BED | DING | & BACH | (FILL |
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- 1. PIPE BEDDING AND TRENCH BACKFILL SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM. D1557, IN 6-INCH MAXIMUM LIFTS.
- CURRENT WSDOT STD. SPECIFICATIONS, AS AMENDED BY CITY STANDARDS.
- 3. SEE CITY STD. DETAIL T-33 FOR STD. TRENCH RESTORATION.

| | | | FIRE | HYDRA | NT | | | |
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2. MATERIALS, WORKMANSHIP, AND INSTALLATION SHALL BE PER THE MOST

W - 14

WYE

HORIZONTAL BEND

VERTICAL BEND

CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH. ASPHALT IMPREGNATED FELT BARRIER

SHALL BE PLACED BETWEEN ALL THRUST BLOCKS AND PIPE AND/OR

ANCHOR REBAR SHALL BE 5/8"

CONCRETE DEAD-MAN THRUST

MINIMUM DIAMETER.

ALL STANDARD BLOCKING AND THRUST CRITERIA. SEE STANDARD FOR THRUST LOADS (W-19).

THRUST BLOCKING DRAWN DESIGNED REVISIONS DATE PUBLIC WORKS PUBLIC WORKS DIRECTOR DATE

TOP VIEW

SIDE VIEW GATE VALVE

CROSS WITH PLUG | CROSS WITH PLUG

TOP VIEW

NINK TURK

SIDE VIEW

TEE WITH PLUG

TO TO TO THE PORT OF THE PARTY OF THE PARTY

PLUG OR CAP

TOP VIEW

Vicinia (

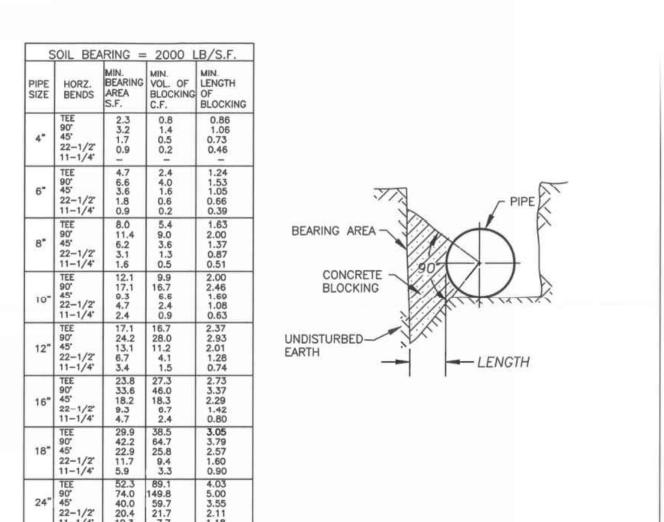
SIDE VIEW

TOP VIEW

LOCKING RETAINER GLAND . SIDE 5.

ALTERNATIVE STRADDLE BLOCKER

DEAD-MAN THRUST BLOCKING



- 1. ALL BLOCKING SHALL BE POURED AGAINST FIRM UNDISTURBED SOIL.
- 2. ALL CONCRETE BLOCKING SHALL BE POURED IN PLACE WITHOUT DIRECT CONTACT TO PIPE, FITTINGS OR FLANGES. 15 LB. ASPHALT- IMPREGNATED FELT, OR EQUIVALENT AS APPROVED BY THE INSPECTOR, SHALL BE PLACED BETWEEN THE CONCRETE AND PIPE, FITTINGS OR FLANGES.
- 3. LAYOUT TO BE APPROVED BY THE INSPECTOR PRIOR TO AND AFTER CONCRETE POUR.
- 4. CONCRETE FOR ALL BLOCKING SHALL HAVE A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 2,300 P.S.I.
- 5. THIS CHART IS NOT APPLICABLE TO VERTICAL BENDS. LOCATION SPECIFIC DESIGN IS REQUIRED FOR SUCH INSTALLATIONS.
- 6. WHERE THE TRENCH SOIL HAS A BEARING PRESSURE LESS THAN 2000 POUNDS PER SQUARE FOOT, LOCATION SPECIFIC DESIGN IS REQUIRED.

| | STA | NDARD | THRUST | r BLO | CK | | |
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THRUST LOADS

THRUST AT FITTINGS IN POUNDS AT 200 POUNDS PER SQUARE INCH OF WATER PRESSURE

| PIPE DIAMETER | 90" BEND | 45" BEND | 22-1/2* BEND | 11-1/4" BEND | DEAD END OR TEE |
|------------------|----------|----------|--------------|--------------|--------------------|
| 4" | 3,600 | 2,000 | 1,000 | 500 | 2,600 |
| 6" | 8,000 | 4,400 | 2,300 | 1,200 | 5,700 |
| 8" | 14,300 | 7,700 | 4,000 | 2,000 | 10,100 |
| 10" | 22,300 | 12,100 | 6,200 | 3,100 | 15,800 |
| 12" | 32,000 | 17,400 | 8,900 | 4,500 | 22,700 |
| 14" | 43,600 | 23,600 | 12,100 | 6,100 | 30,800 |
| 16" | 57,000 | 30,800 | 15,700 | 7,900 | 40,300 |

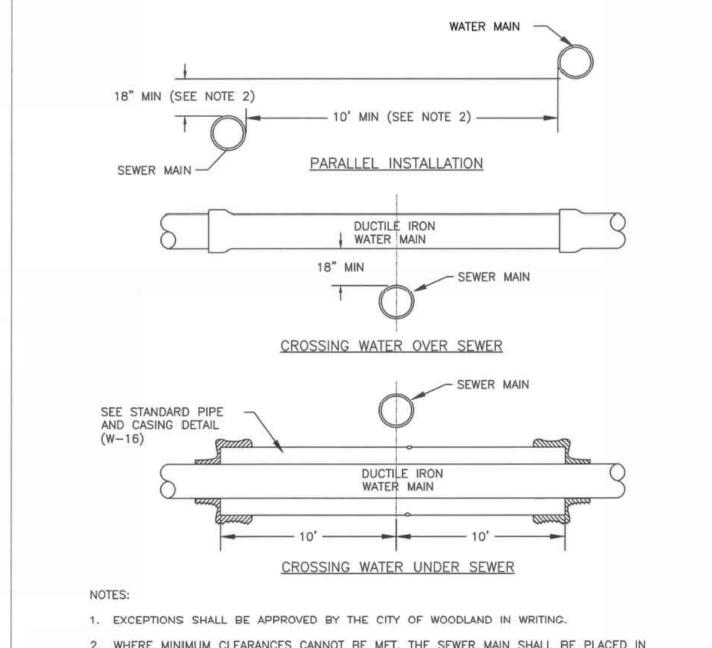
- 1. BLOCKING SHALL BE COMMERCIAL CONCRETE POURED IN PLACE AGAINST UNDISTURBED EARTH. FITTING SHALL BE ISOLATED FROM CONCRETE THRUST BLOCK WITH ASPHALT IMPREGNATED FELT OR SIMILAR MATERIAL.
- 2. TO DETERMINE THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET (S.F.): EXAMPLE: 12" - 90' BEND IN SAND AND GRAVEL 32,000 LBS 3000 LB/S.F. =
- 3. AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZE, PRESSURES AND SOIL
- 4. BLOCKING SHALL BE ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATING PRESSURE UNDER ALL CONDITIONS OF

SAFE SOIL BEARING LOADS

FOR HORIZONTAL THRUSTS WHEN THE DEPTH OF COVER OVER THE PIPE EXCEEDS 2 FEET

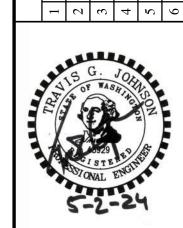
| ROSIS WHEN THE DEPTH OF COVER OF | VER THE PIPE E |
|----------------------------------|---------------------------|
| SOIL | POUNDS PER SQUARE FOOT |
| UCK, PEAT | 0 |
| OFT CLAY | 1,000 |
| AND | 2,000 |
| AND & GRAVEL | 3,000 |
| AND & GRAVEL CEMENTED WITH CLAY | 4,000 |
| ARD SHALE | 10,000 |
| | |

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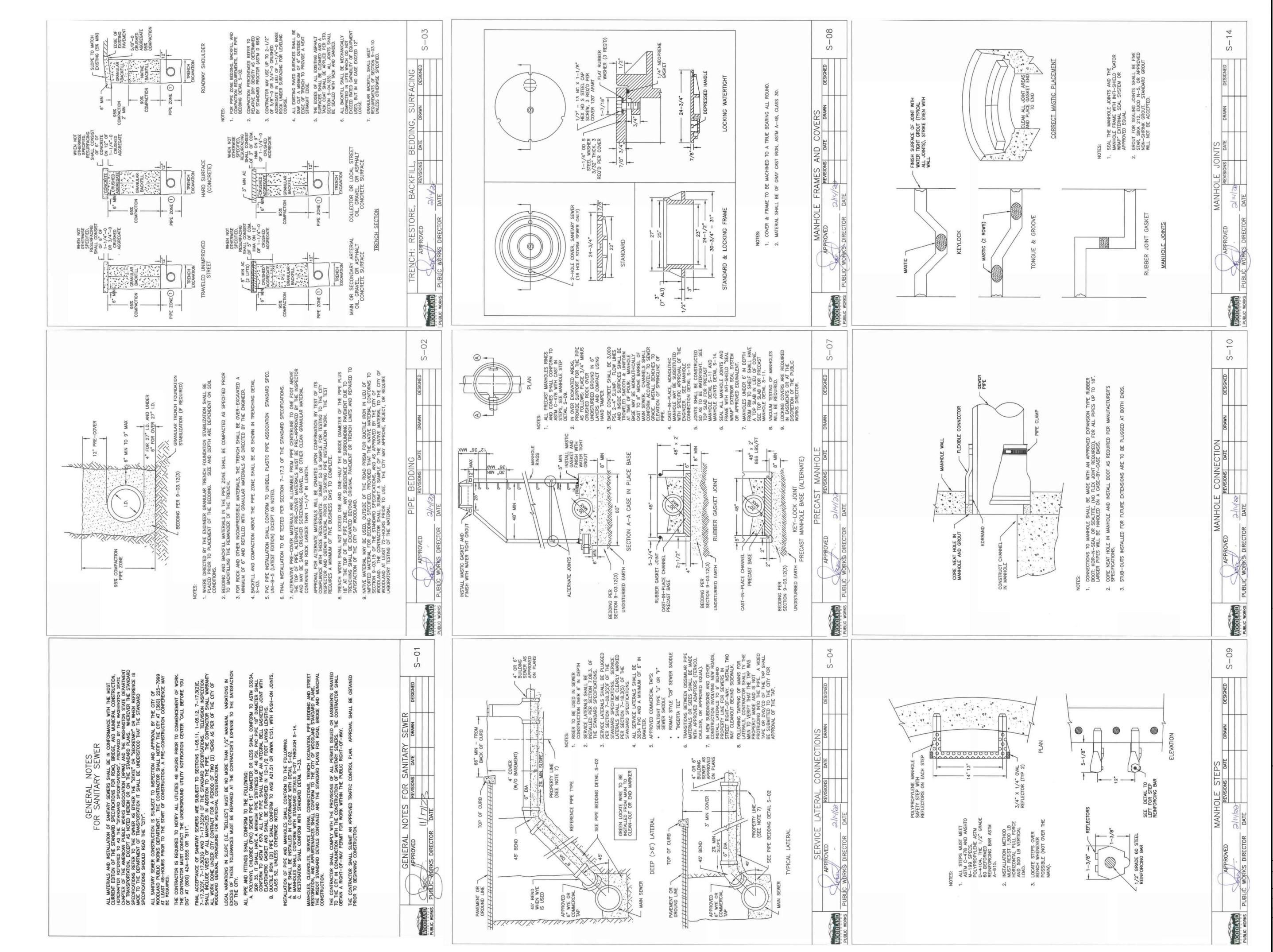


- 2. WHERE MINIMUM CLEARANCES CANNOT BE MET, THE SEWER MAIN SHALL BE PLACED IN SEPARATE TRENCHES AND CONSTRUCTED OF MATERIALS EQUIVALENT TO THE CITY OF WOODLAND WATER MAIN STANDARDS, INCLUDING PRESSURE TESTING. ADEQUATE RESTRAINT SHALL BE PROVIDED TO ALLOW TESTING TO OCCUR.
- 3. ALL SEWER CROSSINGS OVER OR UNDER WATER MAINS SHALL MAXIMIZE THE JOINT SEPARATION BY USING THE LONGEST STANDARD LENGTH PIPE AVAILABLE FROM THE MANUFACTURER FOR BOTH THE WATER AND SEWER MAINS, BOTH PIPES SHALL BE CENTERED AT THE POINT OF CROSSING.
- 4. ALL SEWER CROSSING OVER WATER MAINS SHALL BE CONSTRUCTED OF MATERIALS EQUIVALANT TO THE CITY OF WOODLAND WATER MAIN STANDARDS, INCLUDING PRESSURE

| | | |) WATER | AND | SEWER | SPAC | IIVG | | |
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| REVIEWED BY: | TGJ |

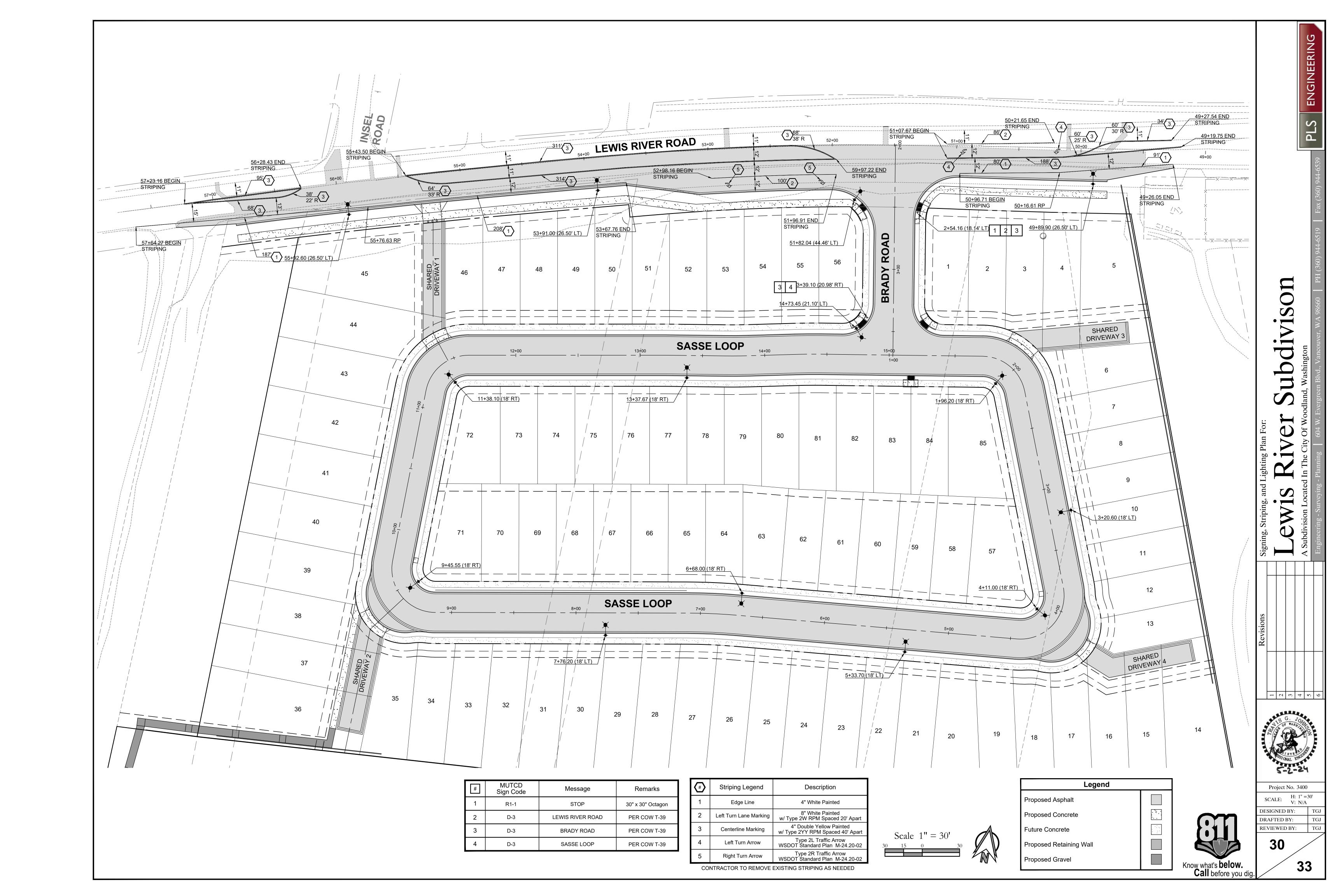


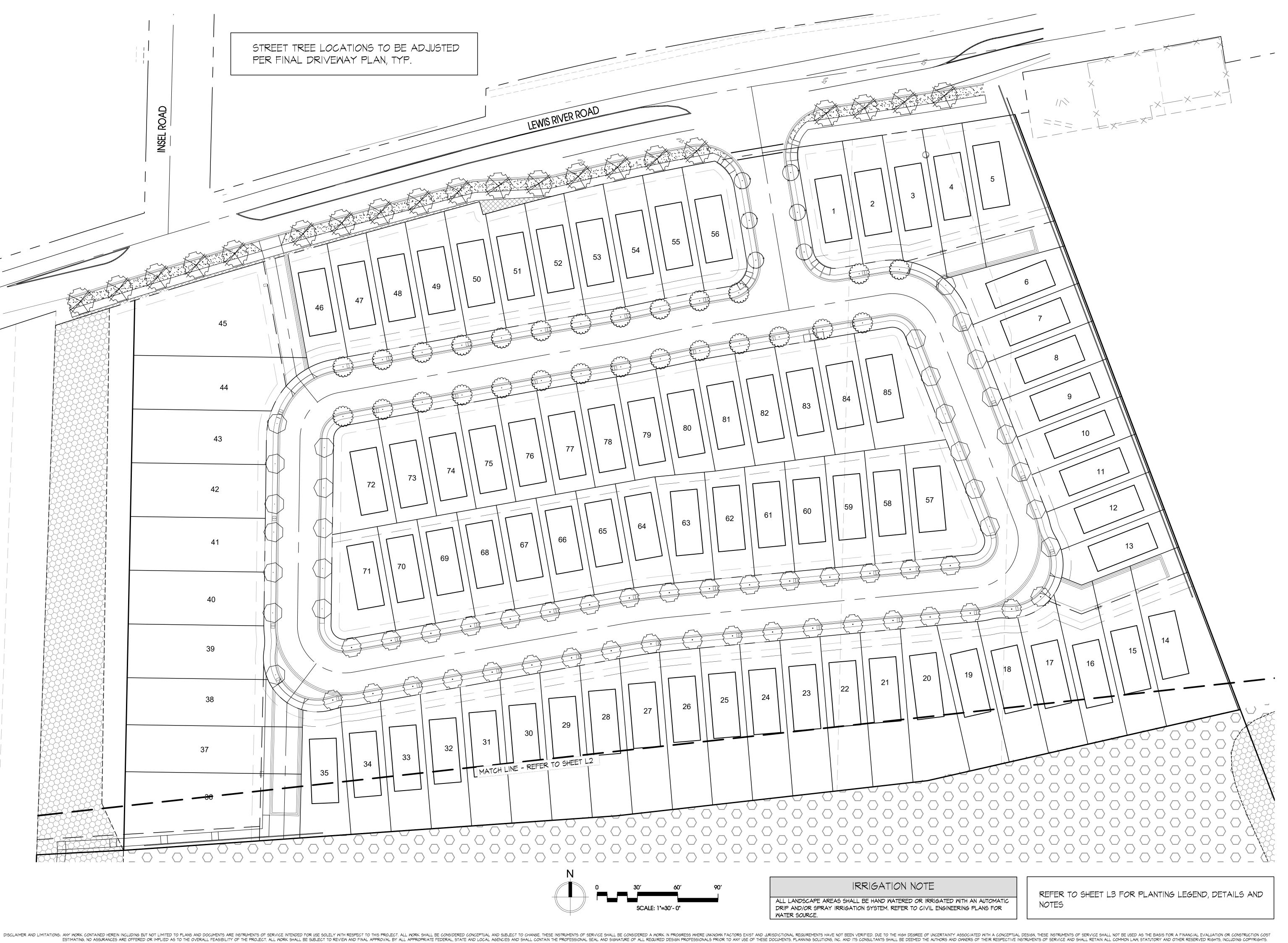
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Planning Solutions, Inc

Creating Solution to Complex Issue.

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VANCOUVER, WA 9866 www.planningsolutionsinc.co

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ISSUED FOR: PLR

PRELIMINARY LANDSCAPE PLAN



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SHEET NAME: PRELIMINARY LANDSCAPE

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A B & B Tree Planting Detail

Not To Scale

B & B Shrub Planting Detail

PREVAILING WIND PENETRATE ROOT BALL. NON ABRASIVE SECURE TREE TREE TIES AT TWO LOCATIONS, TIE W GALY. (FOUR TOTAL), TYP. FENCE STAPLE PROVIDE 5"-6" OF SLACK IN TIES TO ALLOW TREE FOR TREE MOVEMENT. POLE ROOT BALL, REMOVE OR CUT BACK BURLAP AND TWINE FROM ROOT BALL. SET CROWN 2" PLAN VIEW ABOVE FINISHED GRADE, PROVIDE POSITIVE DRAINAGE AWAY FROM ROOT BALL. WATER RETENTION BERM FIRST YEAR (EXCEPT IN TURF AREAS). REMOVE IN OCTOBER. MULCH, REFER TO NOTES THIS SHEET PLANTING PIT TO BE TWICE THE DIAMETER OF ROOT BALL. FOR BACKFILL MIX, REFER TO NOTES THIS SHEET FERTILIZER, REFER TO NOTES THIS SHEET UNDISTURBED NATIVE SOIL UNDER ROOT BALL. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOT BALL. REFER TO NOTES THIS SHEET AND PLAN SHEETS

- (2) 2"X2" TREE STAKES (SET PLUMB). DO NOT

WATER RETENTION BERM, REMOVE IN OCTOBER ROOT BALL, REMOVE OR CUT BACK BURLAP AND TWINE FROM ROOT BALL. SET CROWN OF ROOT BALL I" ABOVE FINISH GRADE. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOT BALL. FERTILIZER TABLETS, REFER TO NOTES. PLANTING PIT TO BE A MINIMUM TWICE THE DIAMETER OF ROOT BALL. FOR BACKFILL MIX, REFER TO NOTES. UNDISTURBED NATIVE SOIL UNDER ROOT BALL. PROVIDE POSITIVE DRAINAGE AWAY FROM

ROOT BALL.

SECTION / PLAN VIEW

B & B Tree Planting Detail: Evergreen under 8' Height
Not To Scale SECTION / PLAN VIEW

FOR MORE INFORMATION

ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING AS SPECIFIED IN PLANTING LEGEND.

> GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY HARD SURFACE, UNLESS OTHERWISE SPECIFIED.

Ground Cover Planting Detail

PLAN VIEW

PLANTING NOTES

- BEGINNING WORK. PROPERTY LINES AND SURVEY INFORMATION PROVIDED BY PLS ENGINEERING. IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL
- 3. 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
- 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'.
- 10. 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. 12. THE CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR 2 YEARS AFTER
- COMPLETION OF PLANTING. DISEASED, 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.

- ALL BOUNDARIES, EASEMENTS, UTILITIES AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH OWNER PRIOR TO 16. 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.
 - 17. FINISH GRADE SHALL BE SET TO ALLOW POSITIVE DRAINAGE 18. ROTOTILL 2" OF COMPOST INTO ALL PLANTED AREAS.
 - 19. INCORPORATE PEAT INTO THE ROOT ZONE OF RHODODENDRONS, AZALEAS AND OTHER ACID LOVING PLANTS. 20. INCORPORATE 10-20-20 FERTILIZER INTO THE ROOT ZONE OF ALL NEW PLANTINGS.
 - 21. RONSTAR, OR APPROVED EQUAL, PREEMERGENT HERBICIDE TO BE APPLIED TO ALL PLANTED AREAS PER MANUFACTURERS INSTRUCTIONS.
 - 22. EXISTING VEGETATION TO BE SPRAYED WITH ROUNDUP, OR APPROVED EQUAL, PER MANUFACTURERS 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. 23. CROWN LAWN AREAS AND GRADE TO PROVIDE POSITIVE DRAINAGE. 24. ROLL LAWN AREA TO INSURE PROPER COMPACTION TO MINIMIZE SETTLING.
- CONTRACTOR'S WORK, AT NO ADDITIONAL COST TO THE OWNER. CONTACT ALL UTILITY PROVIDERS SERVING THE 25. 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. 26. SEED LAWN AREAS WITH GRASS SEED MANUFACTURER'S RECOMMENDATIONS. COVER SEED WITH FINE MULCH
 - APPLIED WITH ROLLER OR HYDROSEED. 27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.
 - 28. PLANT MATERIAL SHALL BE PLANTED W/ ROOT CROWN I" ABOVE FINISHED GRADE TO ALLOW POSITIVE DRAINAGE AWAY FROM CROWN.
 - 29. STAKE ALL TREES OVER 6 FT. IN HEIGHT PER DETAILS ON THIS SHEET. 30. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
 - 31. ALL PLANTING SHALL BE HAND WATERED OR IRRIGATED BY AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM 32. ALL PLANT MATERIALS FURNISHED ARE TO BE HEALTHY, UNIFORMLY BRANCHED AND WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS.
 - 33. 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, WEED, 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. 34. FIELD CONFIRM ALL SITE CONDITIONS, AREAS AND SIZES PRIOR TO BIDDING & CONSTRUCTION. DO NOT SCALE FROM PLANS.

| PLANT LEGEND | | | | | | | | | |
|-------------------------|---|-----------------|----------|--|--|--|--|--|--|
| SYMBOL | BOTANICAL / COMMON NAME | SIZE | QUANTITY | | | | | | |
| TREES | | | | | | | | | |
| $\langle \cdot \rangle$ | ACER GRANDIDENTATUM 'SCHMIDT' ROCKY MOUNTAIN GLOW MAPLE | 2" cal. MIN. | 35 | | | | | | |
| | ACER TRUN. X PLAT. 'WARRENRED' PACIFIC SUNSET MAPLE | 2" cal. MIN. | 20 | | | | | | |
| \odot | MAGNOLIA GRAND. 'LITTLE GEM' LITTLE GEM MAGNOLIA | 2" cal. MIN. | 6 | | | | | | |
| · | PARROTIA PERSICA 'VANESSA' VANESSA PERSIAN PARROTIA | 2" cal. MIN. | 26 | | | | | | |
| £ | ZELKOVA SERRATA 'CITY SPRITE' CITY SPRITE ZELKOVA | 2" cal. MIN. | 27 | | | | | | |
| GROUNDCOVE | R S | | | | | | | | |
| CURB PLANTERS | ARCTOSTAPHYLOS UVA URSI 'MASS.' MASSACHUSETTS KINIICKINNICK | 4" | 30" O.C. | | | | | | |
| | TURF, PER OWNER | | | | | | | | |
| | LANDSCAPE PER OWNER | | | | | | | | |
| | FORESTED/SCRUB SHRUB RESTORATION RESTORATION PLAN PREPARED BY AS | | | | | | | | |
| | SCRUB-SHRUB RESTORATION - REFER PREPARED BY ASH ECO SOLUTIONS, LI | TO RESTOR | | | | | | | |



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|" = 30'-0" ISSUED FOR: PLR **REVISIONS:**

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