

Drawings For:

# City of Redmond

## Tosh Creek Restoration

### 156th Ave Flow Splitter



HDR Project No.  
261243

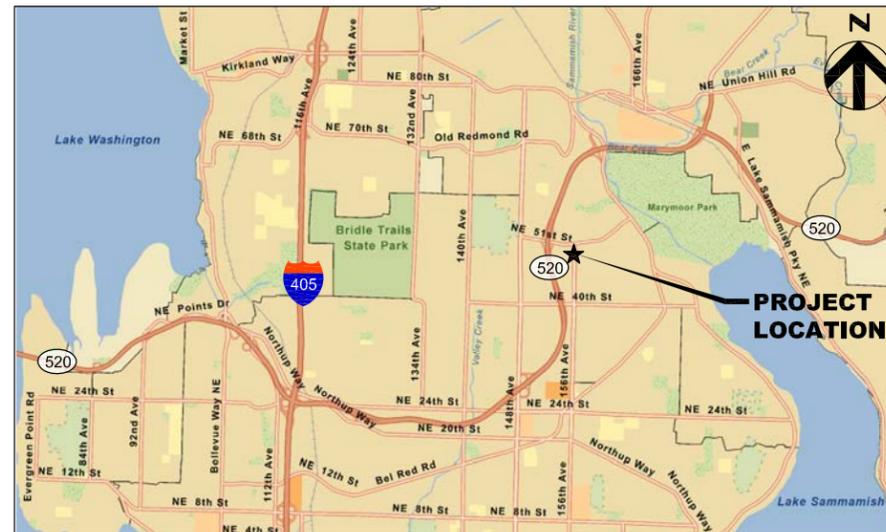
City Project No.  
20021319.04.03.02

February 2016

#### INDEX OF DRAWINGS

1	G-00	COVER SHEET
2	G-01	ABBREVIATIONS, SYMBOLS, AND NOTES
3	G-02	EXISTING CONDITIONS
* 4	G-03	TESC
5	C-01	FLOW SPLITTER PLAN AND SECTION
* 6	C-02	FLOW SPLITTER DETAILS 1
* 7	C-03	FLOW SPLITTER DETAILS 2

\* INDICATES A DRAWING THAT IS NOT PART OF THIS SUBMITTAL



VICINITY MAP  
SCALE: NO SCALE



WASHINGTON STATE  
SCALE: NO SCALE



LOCATION MAP  
SCALE: NO SCALE

30% DESIGN  
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ISSUE	DATE	DESCRIPTION

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PROJECT NUMBER:	261243



City of Redmond  
TOSH CREEK RESTORATION  
156th Ave FLOW SPLITTER



COVER SHEET

FILENAME | G-00.dwg  
SCALE | AS SHOWN

SHEET: 1 Of 7  
**G-00**

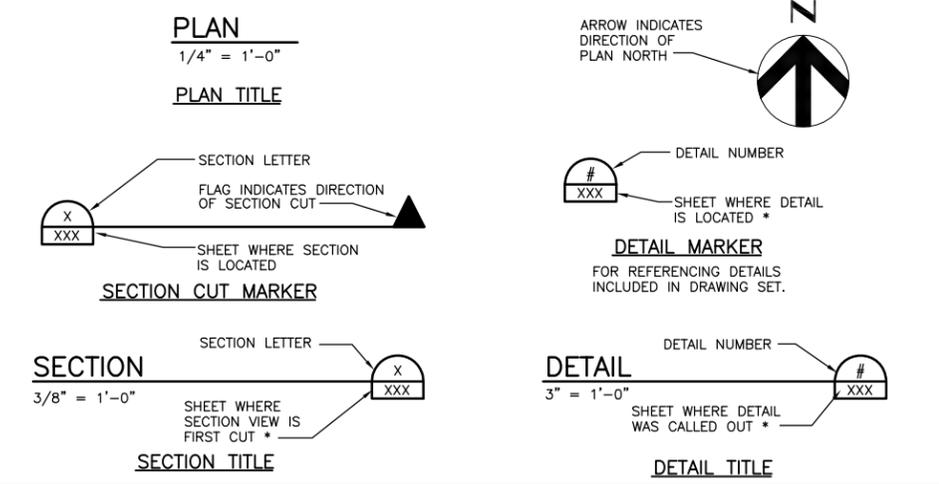
**ABBREVIATIONS**

AB, A.B.	ANCHOR BOLT	ID	INSIDE DIAMETER
APRX	APPROXIMATE	IE	INVERT ELEVATION
APVD	APPROVED	INV	INVERT
ARCH	ARCHITECTURAL	MAX	MAXIMUM
ASSY	ASSEMBLY	MH	MANHOLE
		MIN	MINIMUM
BLDG	BUILDING	N	NEUTRAL
BOP	BOTTOM OF PIPE	NA	NOT APPLICABLE
		NEG	NEGATIVE
CB	CB	NTS	NOT TO SCALE
CIP	CAST-IN-PLACE	OD	OUTSIDE DIAMETER
CJ	CONSTRUCTION JOINT	OH	OVERHEAD
CL	CENTERLINE		
CMP	CORRUGATED METAL PIPE	PI	POINT OF INTERSECTION
COM	COMMON	PT	POINT OF TANGENCY
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CONST	CONSTRUCTION		
CPP	CORRUGATED PLASTIC PIPE		
		RCPT	RECEPTACLE
DI	DUCTILE IRON	REINF	REINFORCING
DIA	DIAMETER	RGS	RIGID GALVANIZED STEEL
		RR	RAILROAD
EA	EACH	ROW	RIGHT OF WAY
EDB	ELECTRICAL DUCT BANK		
EHH	ELECTRICAL HANDHOLE	SD	STORM DRAIN
EJ	EXPANSION JOINT	SDMH	STORM DRAIN MANHOLE
EL OR ELEV	ELEVATION	SF	SQUARE FOOT, SILT FENCE
EMH	ELECTRICAL MANHOLE	SL	SLOPE
EOP	EDGE OF PAVEMENT	SPEC	SPECIFICATION
ES	EACH SIDE, EMERGENCY SHOWER	SY	SQUARE YARD
EW	EACH WAY		
EWEF	EACH WAY, EACH FACE	TBD	TO BE DETERMINED
EWTB	EACH WAY, TOP AND BOTTOM	T&B	TOP AND BOTTOM
EXST	EXISTING		
FIN	FINISHED	TOC	TOP OF CURB, TOP OF CONCRETE
FRP	FIBER REINFORCED PLASTIC	TOS	TOP OF SLAB, TOP OF STEEL,
		UTIL	UTILITY
GND	GROUND	V	VOLT
GR	GRADE		
HORIZ	HORIZONTAL		
HZ	HERTZ, CYCLES PER SECOND		

**SURVEY LEGEND**

	SD	STORM DRAIN LINE		STORM CATCH BASIN, TYPE 2
	UGE	UNDERGROUND POWER LINE		SANITARY SEWER MANHOLE
	SS	SANITARY SEWER LINE		
	W	WATER LINE		

**GENERAL SYMBOLOGY**



- LEGEND NOTES:**
- ABBREVIATIONS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS.
  - LISTING OF ABBREVIATIONS DOES NOT IMPLY THAT ALL ABBREVIATIONS ARE USED IN THE CONTRACT DRAWINGS.
  - THIS IS A STANDARD SHEET SHOWING COMMON SYMBOLOGY. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT.
  - SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.

**SHEET NOTES**

**GENERAL NOTES:**

- ALL WORK AND MATERIALS PER CITY OF REDMOND 2015 STANDARD DETAILS AND SPECIFICATIONS AND WSDOT 2014 SPECIFICATIONS.
- ANY CHANGES TO THIS DESIGN SHALL BE APPROVED IN WRITING BY THE CITY OF REDMOND PRIOR INSTALLATION.
- PER 1-08.0(1), A PRECONSTRUCTION CONFERENCE WILL BE HELD BETWEEN THE CONTRACTOR, THE ENGINEER, AND OWNER. NO WORK SHALL COMMENCE PRIOR TO THE PRECONSTRUCTION CONFERENCE.
- THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. AMONG OTHERS, THESE UTILITIES INCLUDE: TELEPHONE, COMMUNICATIONS, AND POWER; PIPELINES, SEWER, GAS, STORM, AND WATER LINES; HIGHWAY LIGHTING AND SIGNING SYSTEMS, AND INTELLIGENT TRANSPORTATION SYSTEMS (ITS). THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES THAT MAY AFFECT OR ALTER THE IMPLEMENTATION OF THIS PROJECT BY POTHOLES, VISUAL INSPECTION, COORDINATION WITH EXISTING UTILITY COMPANIES, OR OTHER MEANS AS APPROPRIATE. THE CONTRACTOR SHALL CALL ONE CALL (811) AND ARRANGE FOR FIELD LOCATION OF THE EXISTING FACILITIES PRIOR TO CONSTRUCTION. RESPONSIBILITY FOR UNDERGROUND FACILITIES OR UTILITIES IS GOVERNED BY THE PROVISIONS OF CHAPTER 19.122 REVISED CODE OF WASHINGTON.
- NOT ALL MONUMENTS ARE SHOWN. CONTRACTOR RESPONSIBLE FOR PROTECTION OF ALL MONUMENTS. SURVEY MONUMENTS, PROPERTY CORNERS AND RIGHT-OF-WAY MARKERS MAY BE REQUIRED TO BE REMOVED OR DISTURBED BY CONSTRUCTION. THE CONTRACTOR SHALL UTILIZE THE SERVICES OF A LICENSED PROFESSIONAL SURVEYOR TO LOCATE AND REFERENCE SUCH MARKERS PRIOR TO DISTURBANCE. THE SAME SHALL BE USED TO RESTORE ALL MARKERS.
- THE CONTRACTOR SHALL PROVIDE FLAGGERS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL CONSTRUCTION SIGNS, WARNING SIGNS, DETOUR SIGNS, AND OTHER TRAFFIC CONTROL DEVICES. NO WORK SHALL BE DONE ON OR ADJACENT TO ANY TRAVELED WAY UNTIL ALL NECESSARY SIGNS AND TRAFFIC CONTROL DEVICES ARE IN PLACE.

**CLEARING, GRADING AND TEMPORARY EROSION CONTROL PLANS:**

- ALL WORK AND MATERIALS TO BE PER CITY OF REDMOND STANDARDS.
- KEEP OFF-SITE STREETS CLEAN AT ALL TIMES. FLUSHING STREETS SHALL NOT BE ALLOWED. ALL STREETS SHOULD BE SWEEPED.
- ADDITIONAL EROSION/SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY CITY INSPECTOR.
- WHEN WORK IS STOPPED/COMPLETED IN AN AREA, THE CITY INSPECTOR MAY REQUIRE POST-CONSTRUCTION EROSION CONTROL INCLUDING SEEDING OR OTHER MEASURES.
- LOCATIONS SHOWN OF EXISTING UTILITIES ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE CORRECT LOCATIONS TO AVOID DAMAGE OR DISTURBANCE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION.
- ALL GROUND COVER IS TO REMAIN UNDISTURBED OUTSIDE OF CLEARING AREAS.
- THE TEMPORARY EROSION/SEDIMENT CONTROLS SHALL BE INSTALLED, INSPECTED, AND OPERATING BEFORE ANY GRADING OR EXTENSIVE LAND CLEARING. THESE CONTROLS MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING ARE COMPLETE.
- TIE IMPERVIOUS SURFACES (ROOF, STREETS, DRIVEWAYS, ETC.) TO COMPLETED DRAINAGE SYSTEM AS SOON AS POSSIBLE.
- A PRE-CONSTRUCTION MEETING WITH THE CONSTRUCTION DIVISION AND ALL PERMITS MUST BE COMPLETED BEFORE START OF CONSTRUCTION.
- CLEARING LIMITS SHALL BE LOCATED BY A LICENSED CIVIL ENGINEER OR LAND SURVEYOR.
- APPROVAL OF THIS TEMPORARY EROSION/SEDIMENTATION CONTROL (TESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN.
- THIS APPROVAL FOR TESC IS VALID FOR CONSTRUCTION BETWEEN MAY 1 AND SEPTEMBER 30. THIS APPROVAL FOR TESC IS NOT VALID FOR THE RAINY SEASON (OCTOBER 1 THROUGH APRIL 30).
- REMOVE ALL TESC MEASURES ONCE ALL WORK IS COMPLETED AND SITE IS PERMANENTLY STABILIZED.

**UTILITY NOTES:**

- CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING AROUND EXISTING UTILITIES. CONTRACTOR SHALL NOT DAMAGE, REPAIR, ALTER, DISMANTLE, OR OPERATE ANY UTILITY LINES, TEST STATIONS OR VALVES.

**DRAINAGE NOTES:**

- DUCTILE IRON PIPE SHALL BE PER ANSI A21.51 CLASS 52 WITH PUSH-ON JOINTS. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE PER ANSI A21.10 OR ANSI A21.53 WITH PUSH -ON JOINTS.
- BEDDING SHALL BE CLASS B FOR ALL PIPE EXCEPT DUCTILE IRON PIPE, WHICH SHALL BE CLASS D.
- WHERE A NEW PIPE CLEARS AN EXISTING OR NEW UTILITY BY 6" OR LESS, AN ETHAFOAM PAD SHALL BE PLACED AS A CUSHION BETWEEN EACH UTILITY, PER CITY OF REDMOND STD. SPECIFICATION 7-04.3(2).
- SERVICE DRAINS AND SIDE SEWERS SHALL BE CONNECTED/RECONNECTED AS APPROVED BY THE ENGINEER.
- TEES ON NEW PIPE SHALL BE PREFABRICATED.
- ALL WORK AND MATERIALS TO BE PER CITY OF REDMOND STANDARDS.
- MARK ALL STORM DRAIN INLETS WITH "DUMP NO WASTE" AND "DRAIN TO STREAM" PER CITY OF REDMOND STANDARD DETAIL 622, OR CITY SUPPLIED MARKERS AS DIRECTED BY ENGINEER.
- PRIOR TO FINAL INSPECTION, CLEAN, AND FLUSH STORM DRAINS PIPES AND STRUCTURES TO REMOVE SEDIMENT, TRASH DEBRIS, AND RUBBLE. DO NOT DISCHARGE WASH WATER TO ANY STORM DRAIN SYSTEM OR TO SURFACE WATERS.

**SURVEY NOTES:**

- HORIZONTAL DATUM: WASHINGTON STATE PLANE COORDINATES SYSTEM, NORTH ZONE, NAD 83 ('91 ADJ.) PRIMARY CONTROL WAS ESTABLISHED BY GPS OBSERVATIONS IN FEBRUARY 2014, CONSTRAINING TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) CORN STATIONS S5HO, PFLD, SAMMI AND L5IG. GROUND DISTANCES WERE ESTABLISHED USING A COMBINED SCALE FACTOR OF 0.99995600.  
BASIS OF BEARINGS: N00°56'46"E ALONG THE CENTERLINE OF 171st AVENUE NE, BETWEEN MONUMENTS FOUND IN PLACE AT THE INTERSECTIONS OF 171st AVENUE NE AND NE 92nd STREET AND 171st AVENUE NE AND NE 95th STREET.
- VERTICAL DATUM: NAVD 1988

**BENCH MARKS:**

- WSDOT MONUMENT ID 1796  
FOUND WSDOT BRASS DISC IN NORTHERLY SIDEWALK OF THE 51TH ST. OVERPASS  
N: 241495.472  
E: 1318821.883  
EL: 349.209'
- THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY OF OBSERVABLE FEATURES AND SUPPLEMENTED WITH PAINT MARKS BY A PROFESSIONAL LOCATE COMPANY AND INFORMATION FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED, BUT ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
  - FIELD WORK FOR THIS SURVEY WAS PERFORMED IN OCTOBER AND NOVEMBER, 2015. MONUMENTS SHOWN AS FOUND WERE VISITED AT THAT TIME.

**30% DESIGN  
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PROJECT MANAGER:	B. PETERSON
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CAD:	J. CARPENTER
PROJECT NUMBER:	261243



ISSUE	DATE	DESCRIPTION



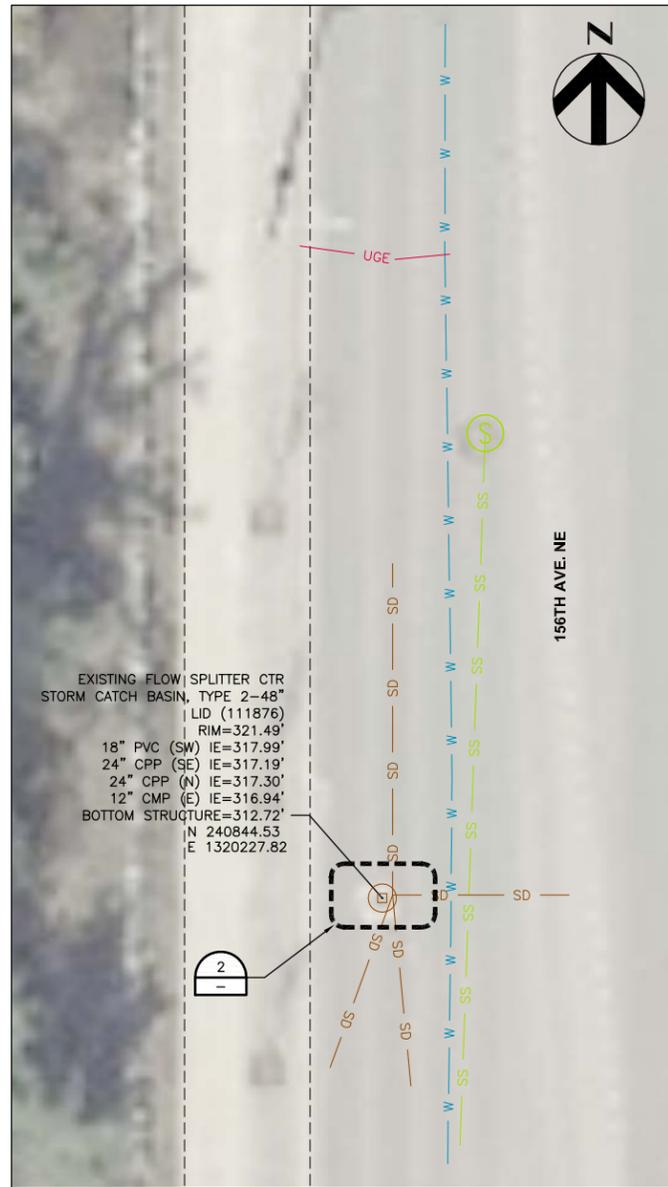
**City of Redmond**  
**TOSH CREEK RESTORATION**  
**156th Ave FLOW SPLITTER**



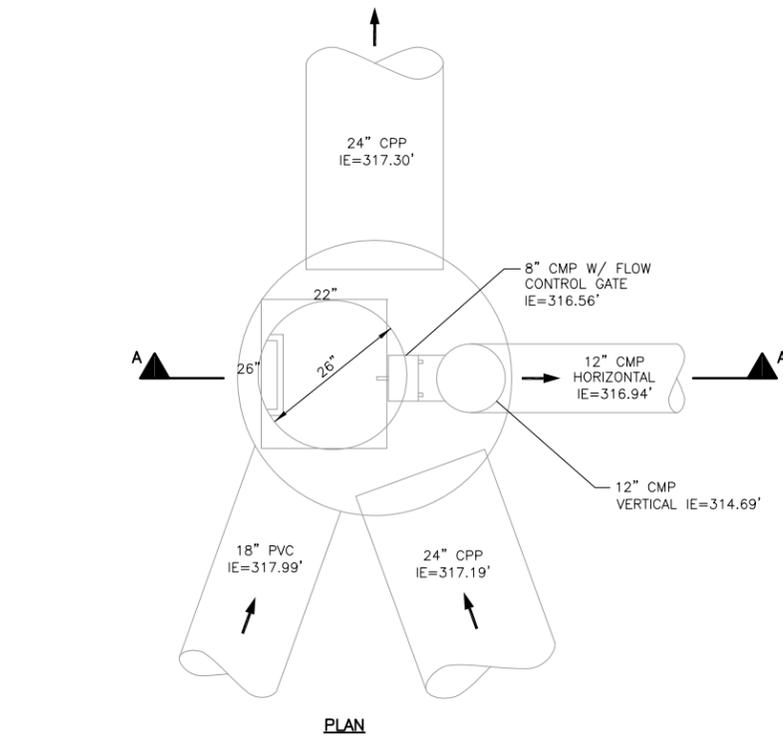
**ABBREVIATIONS, SYMBOLS, AND NOTES**

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SCALE	AS SHOWN

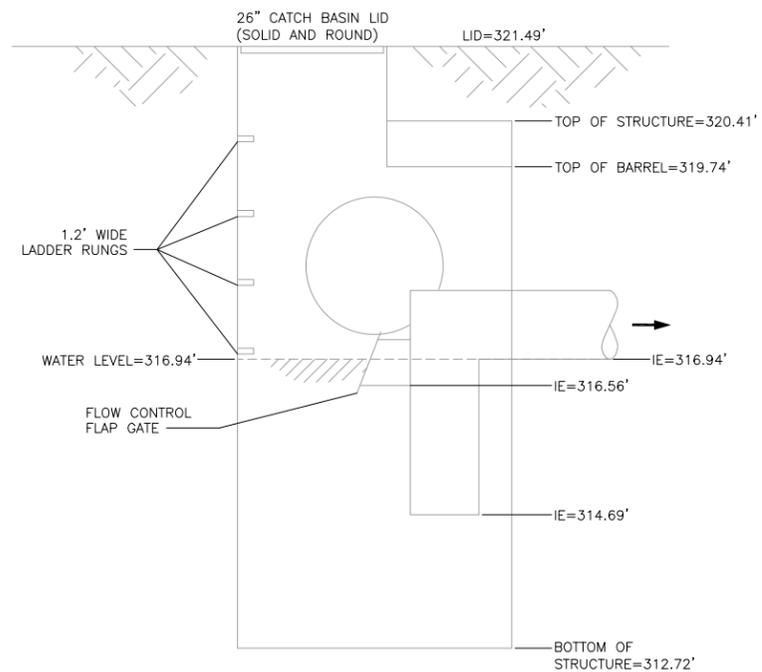
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**SITE PLAN**  
SCALE: 1" = 10'



**PLAN**

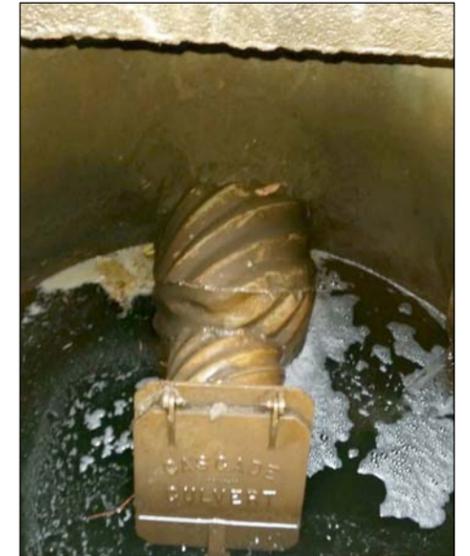


**SECTION A-A**

**EXISTING MANHOLE DETAIL**  
SCALE: 3/4" = 1'-0"



**PHOTO - 8" CMP WITH FLOW CONTROL FLAP GATE**  
SCALE: NONE



**PHOTO - 8" CMP WITH FLOW CONTROL FLAP GATE**  
SCALE: NONE



**PHOTO - 24" OUTLET (CPP)**  
SCALE: NONE



**PHOTO - 24" INLET (CPP)**  
SCALE: NONE



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ISSUE	DATE	DESCRIPTION

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<b>PROJECT NUMBER:</b>	261243



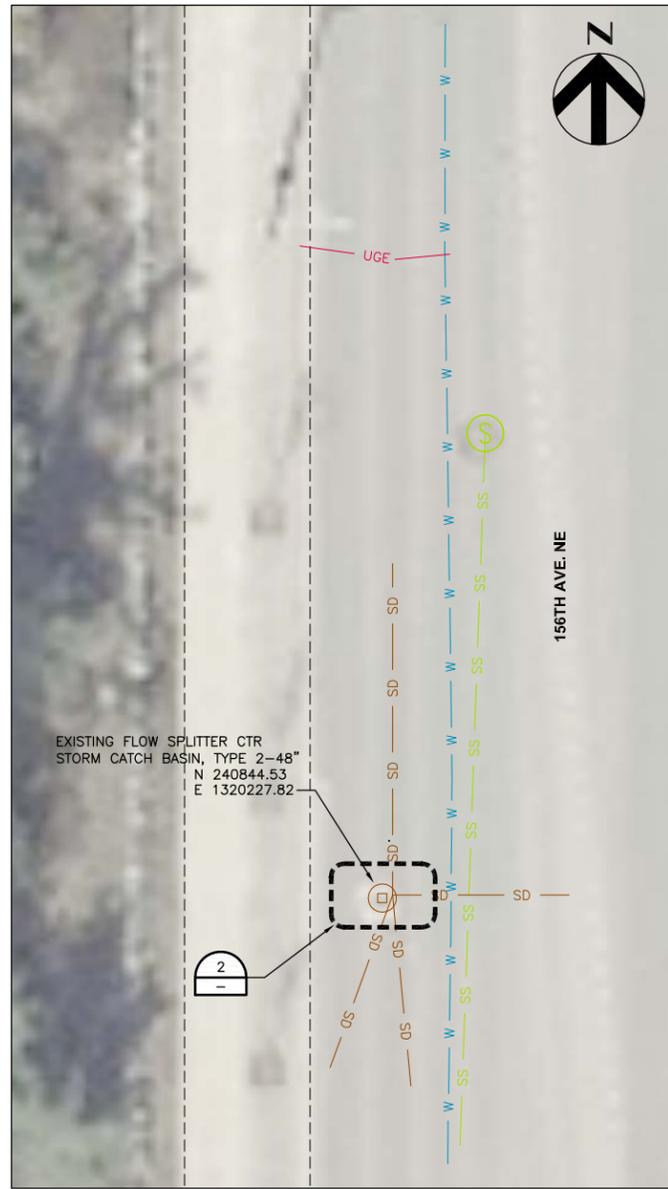
**City of Redmond**  
**TOSH CREEK RESTORATION**  
**156th Ave FLOW SPLITTER**

**EXISTING CONDITIONS**

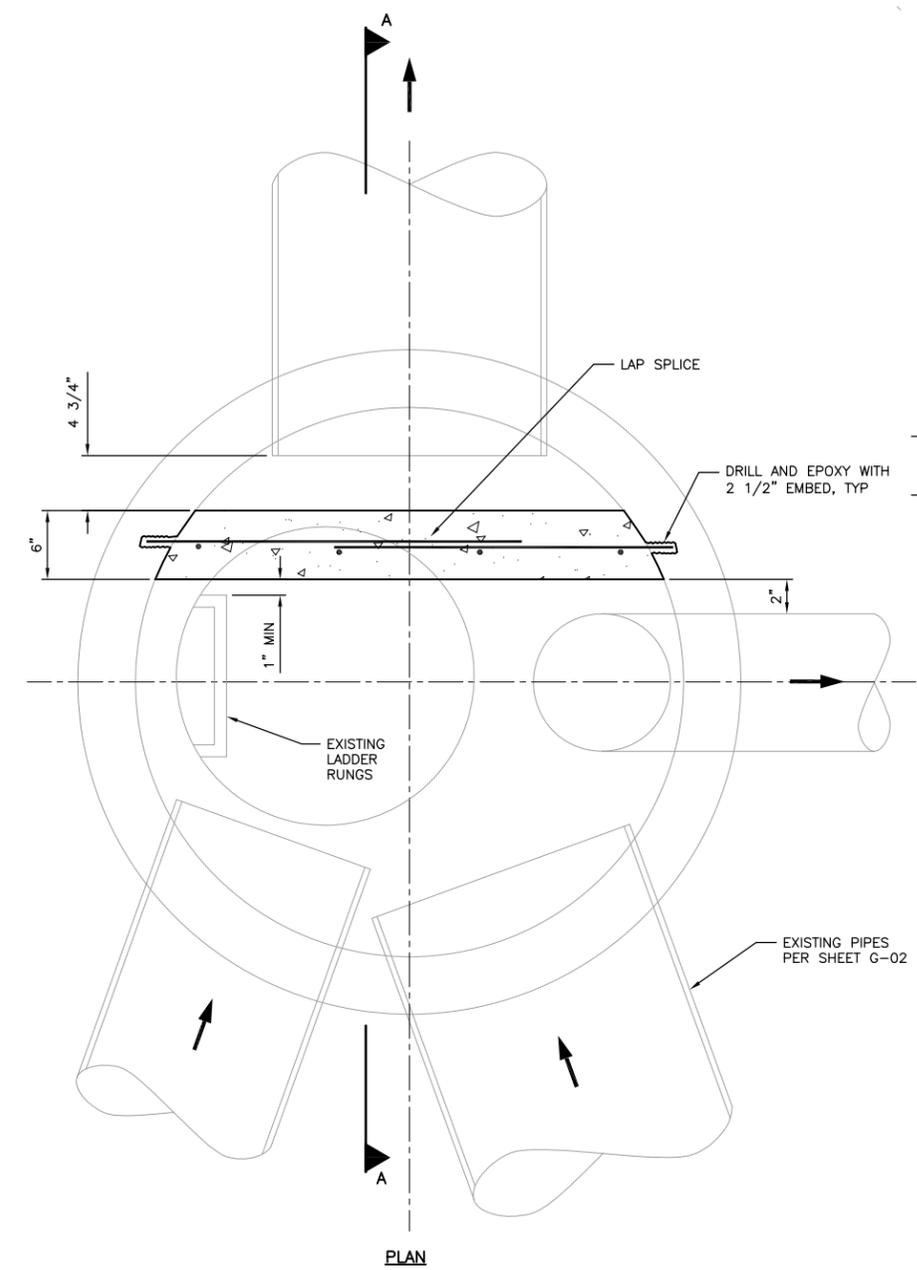


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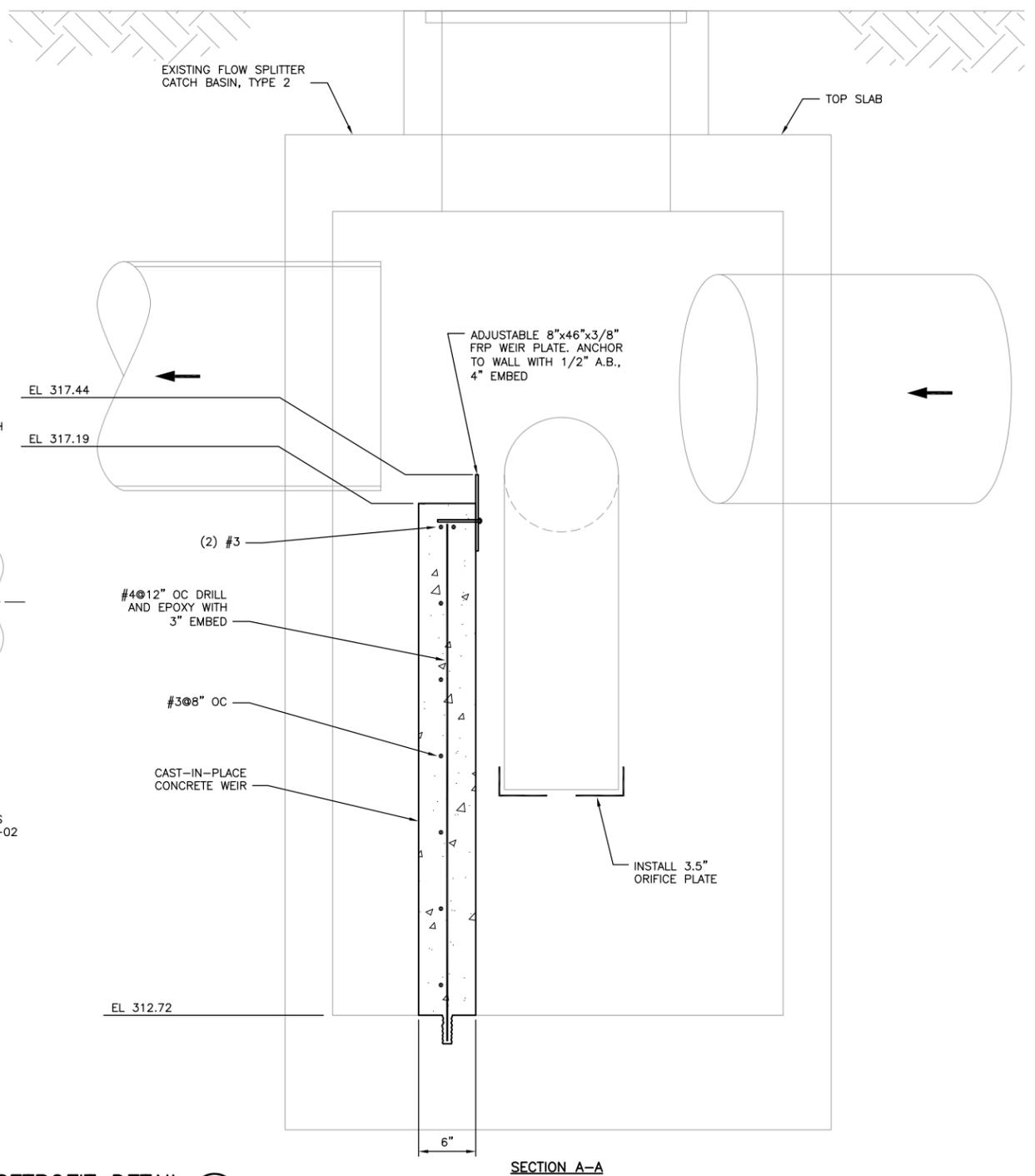
SHEET: 3 of 7  
**G-02**



**SITE PLAN**  
SCALE: 1"=10'



**FLOW SPLITTER RETROFIT DETAIL**  
SCALE: 1 1/2"=1'-0"



**SECTION A-A**

- NOTES:**
1. ALL WORK SHALL BE PERFORMED IN A MANNER TO PROTECT AND MAINTAIN THE EXISTING ROAD.
  2. ACCESS SHALL BE THROUGH THE 26" LID. REMOVAL OF THE CATCH BASIN TOP SLAB IS NOT ALLOWED AS THIS WOULD IMPACT THE EXISTING ROADWAY (SEE NOTE 1).

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ISSUE	DATE	DESCRIPTION

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PROJECT NUMBER:	261243



**City of Redmond**  
**TOSH CREEK RESTORATION**  
**156th Ave FLOW SPLITTER**



**FLOW SPLITTER  
PLAN AND SECTION**

FILENAME: C-01.dwg  
SCALE: AS SHOWN

SHEET: 5 of 7  
**C-01**