PROJECT INFORMATION:

1. PROJECT ADDRESS: 17937 CEDAR GROVE ROAD SE
   MAPLE VALLEY, WA 98038
2. EXISTING INFORMATION SHOWN ON THIS PLAN IS BASED ON THE KING COUNTY DEPARTMENT OF PUBLIC WORKS SOLID WASTE DIVISION CEDAR HILLS REGIONAL LANDFILL LEACHATE PIPE SYSTEM PLAN DRAWING NO C-6, DATED 9-20-06 AND AVAILABLE GIS INFORMATION.

GENERAL NOTES:

1. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF ALL UNDERGROUND UTILITIES AND FOR NOTIFYING THE ENGINEER IF ADDITIONAL UTILITIES OR CONFLICTS ARE DISCOVERED.
2. ALL CONSTRUCTION WASTE MATERIAL TO BE HAULED AWAY FROM SITE AND DEPOSITED AT APPROVED DISPOSAL LOCATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, TEMPORARY FENCING, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF THE CONTRACTOR'S WORK.
4. CARE SHALL BE TAKEN WHEN WORKING NEAR EXISTING UTILITIES.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND IMPLEMENT ADEQUATE EROSION CONTROL FACILITIES IN ACCORDANCE WITH LOCAL REGULATIONS.
6. PROJECT SHALL CONFORM TO 2021 WASHINGTON DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS UNLESS NOTED OTHERWISE.
7. EXISTING LEACHATE PIPELINE BEDDING IS PEA GRAVEL. CONTRACTOR SHALL MINIMIZE DISTURBANCE OF PEA GRAVEL BEDDING OF EXISTING UPSTREAM OR DOWNSTREAM PROPOSED LEACHATE PIPELINE. CONTRACTOR SHALL INJECT CONTROLLED DENSITY FILL IN ANY AREAS THAT MAY HAVE BEEN COMPROMISED TO FILL VOIDS THAT MAY HAVE FORMED BELOW THE EXISTING LEACHATE PIPELINE.
8. THE PROJECT AREA IS KNOWN TO HAVE A HIGH GROUNDWATER TABLE AS GROUNDWATER WAS PREVIOUSLY ENCOUNTERED DURING PIPELINE REPAIRS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING A DEWATERING SYSTEM TO PREVENT SOFTENING AND DISTURBANCE OF SUBGRADE TO ALLOW PIPE, BEDDING, AND BACKFILL MATERIAL TO BE PLACED IN DRY AND TO MAINTAIN A STABLE TRENCH WALL OR SIDE SLOPE. CONTRACTOR TO KEEP DEWATERING SYSTEM IN OPERATION UNTIL DEAD LOAD OF PIPE, STRUCTURE, AND BACKFILL EXCEEDS POSSIBLE BUOYANT UPLIFT FORCE ON PIPE OR STRUCTURE. CONTRACTOR TO DISPOSE OF GROUNDWATER. CONTRACTOR SHALL SUBMIT A TYPE 2 WORKING DRAWING CONSISTING OF A DEWATERING PLAN PER WSDOT STANDARD SPECIFICATION SECTION 6-20.3(2)D DEWATERING SYSTEM.
9. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATION WITH KING COUNTY TO TEMPORARILY SHUTOFF THE LEACHATE PIPELINE DURING PIPELINE REPAIRS. THE MAXIMUM DURATION OF SHUTOFF TIME IS 5 DAYS.

CONSTRUCTION REQUIREMENTS:

1. FLAG CLEARING LIMITS.
2. INSTALL CATCH BASIN PROTECTION ON ANY AND ALL CATCH BASINS THAT MAY BE IMPACTED BY THE PROPOSED CONSTRUCTION OPERATIONS.
3. INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH KING COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
4. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
5. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN 48 HOURS OR PRIOR TO FORECASTED RAIN.
6. UPON COMPLETION OF THE PROJECT ALL DISTURBED AREAS MUST BE STABILIZED AND BMPS REMOVED IF APPROPRIATE.

VICINITY MAP
1"=100'

0' 50' 100'
SCALE: 1" = 100'

DRAWING INDEX

LEGEND

- 235.00 — EXISTING GRADE MAJOR CONTOUR
- 233.00 — EXISTING GRADE MINOR CONTOUR
- B — 150' AQUATIC AREA BUFFER
- SB — 200' SHORELINE JURISDICTION BUFFER
- OHW — EXISTING WATER BODY ORDINARY HIGH WATER MARK
- EDGE OF EXISTING PAVEMENT
- EXISTING FOGLINE
- SS — EXISTING LEACHATE PIPELINE
- EDGE OF PROPOSED PAVEMENT
- PROPOSED FOGLINE
- SS — PROPOSED LEACHATE PIPELINE
- UTILITY VAULT FOOTING
- UTILITY VAULT WALLS (BELOW GRADE)
- PROPOSED UTILITY VAULT DOUBLE-LEAF ACCESS HATCH
- UTILITY VAULT ACCESS FRAME AND GRATE
- CLEANOUT
- PLUG VALVE
- FLEXIBLE ROMAC COUPLING
- FULL DEPTH ASPHALT CONCRETE PAVEMENT REMOVAL/HMA REPLACEMENT
- 2" PLANING BITUMINOUS PAVEMENT
- CLEARING AND GRUBBING

ABBREVIATIONS

DI	DUCTILE IRON
DIA	DIAMETER
FL	FLANGE
PE	PLAIN END
STD	STANDARD
SST	STAINLESS STEEL
MIN	MINIMUM

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HDR

KARSTIN RYAN JACOBSON — STATE OF WASHINGTON — 54082 — REGISTERED PROFESSIONAL ENGINEER

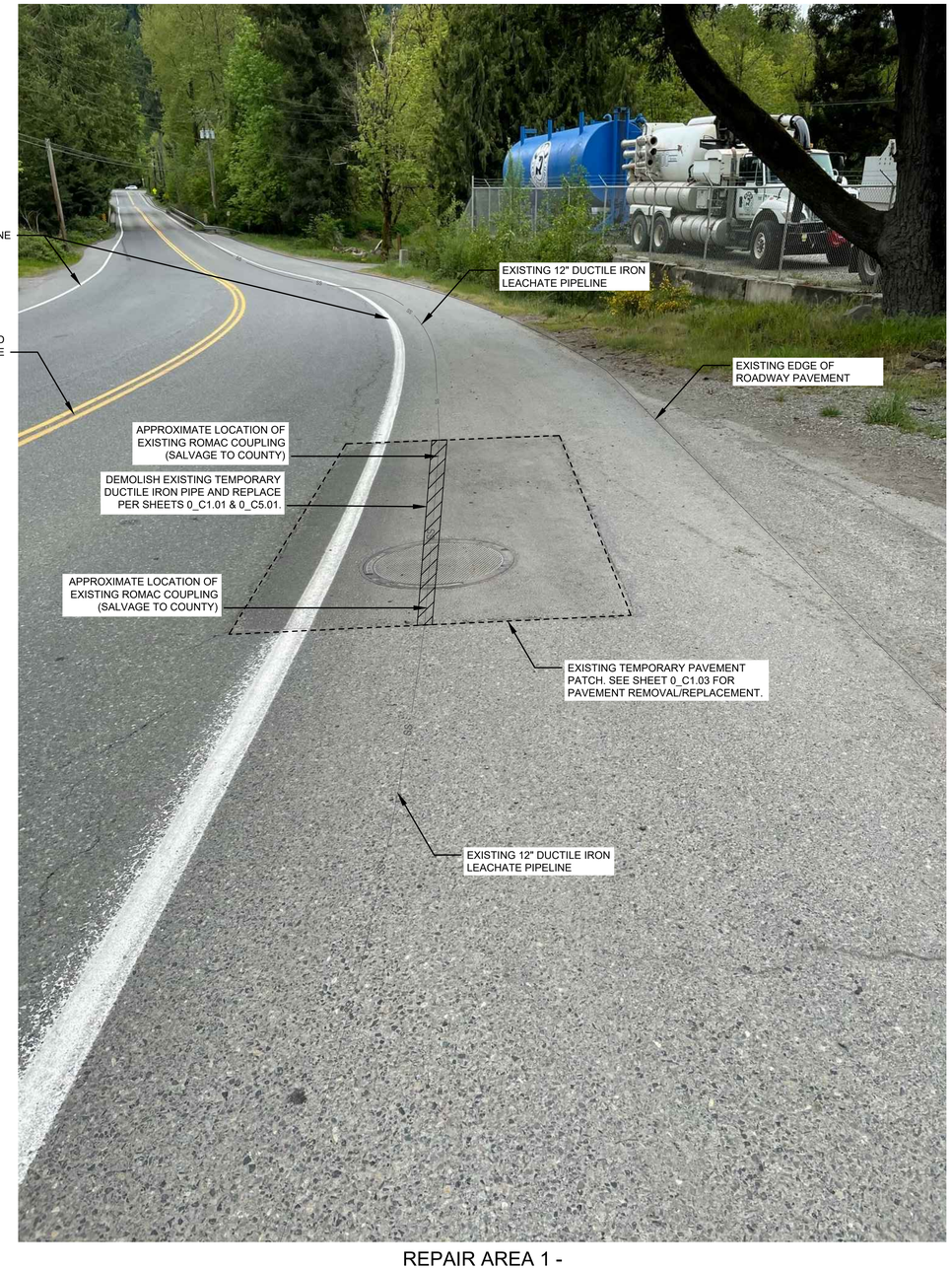
JUSTIN D. KEYES — STATE OF WASHINGTON — 48184 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED:	APPROVED:
DRAWN:	SCALE: 1"=100'
CHECKED BY	PROJECT NO: -
CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

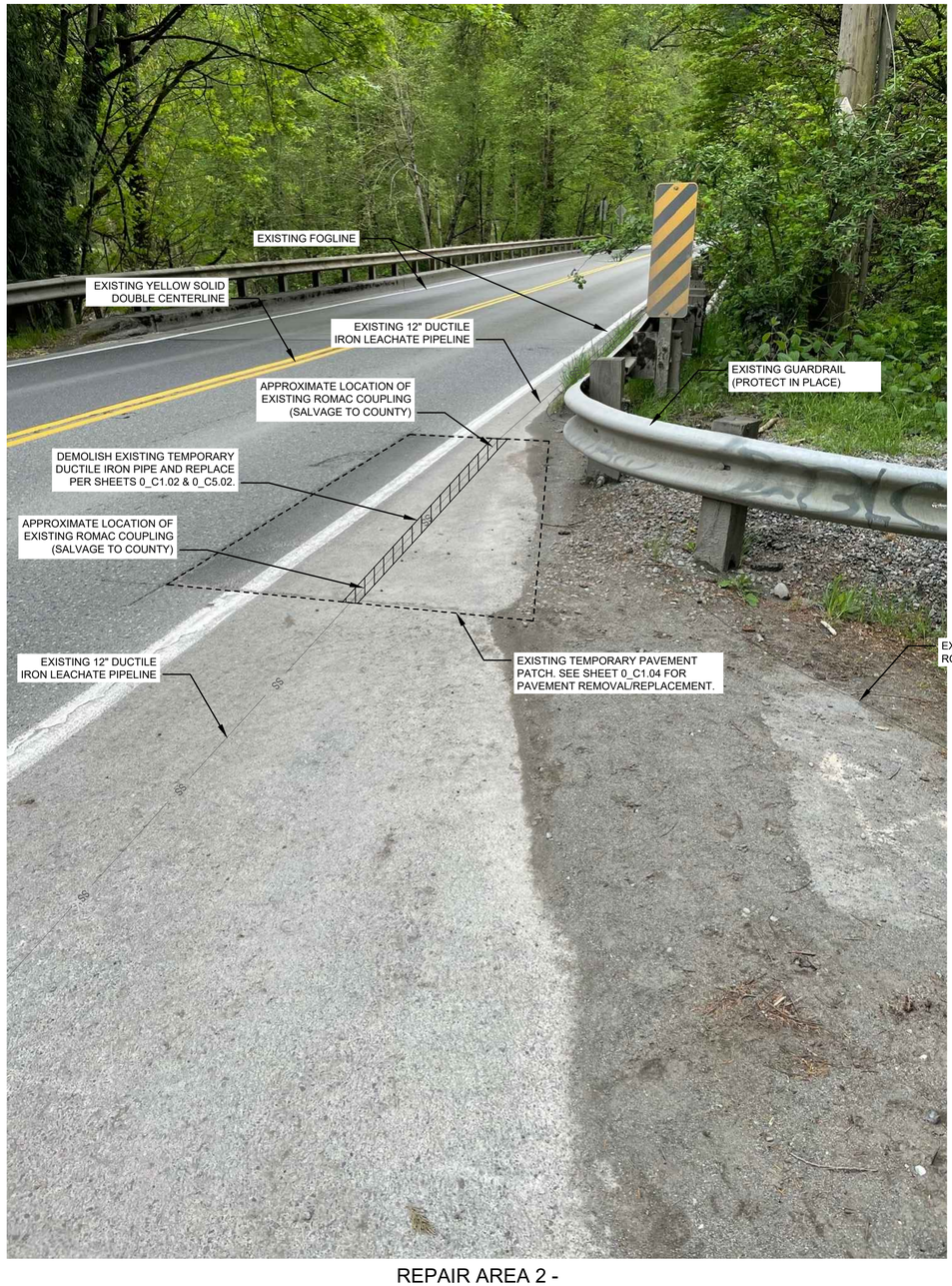
DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
COVER SHEET
& SHEET INDEX

DATE:
DRAWING NO: 0_G0.00
SHEET NO: 1 OF 10



REPAIR AREA 1 -
FACING SOUTHWEST

FIGURE 1
SCALE: NTS



REPAIR AREA 2 -
FACING SOUTHWEST

FIGURE 2
SCALE: NTS

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STATE OF WASHINGTON
54082
REGISTERED
PROFESSIONAL ENGINEER

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CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
SITE EXISTING CONDITIONS & PIPING REMOVAL FIGURES

DATE:
DRAWING NO: 0_C0.00
SHEET NO: OF 2 OF 10

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0' 10' 20'

SCALE: 1" = 20'

LEGEND

- EXISTING GRADE MAJOR CONTOUR (235.00)
- EXISTING GRADE MINOR CONTOUR (233.00)
- 150' AQUATIC AREA BUFFER LINE
- EDGE OF EXISTING PAVEMENT
- EXISTING FOGLINE
- EXISTING LEACHATE PIPELINE
- EDGE OF PROPOSED PAVEMENT
- PROPOSED FOGLINE
- PROPOSED LEACHATE PIPELINE
- UTILITY VAULT FOOTING
- UTILITY VAULT WALLS (BELOW GRADE)
- UTILITY VAULT DOUBLE-LEAF ACCESS HATCH
- UTILITY VAULT ACCESS FRAME AND GRATE
- PLUG VALVE
- FLEXIBLE ROMAC COUPLING
- CLEANOUT

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CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
OVERALL SITE PLAN

DATE:
DRAWING NO: 0_C1.00
SHEET NO: 3 OF 10

0' 2.5' 5'
SCALE: 1" = 5'

LEGEND

- 235.00 — EXISTING GRADE MAJOR CONTOUR
- 233.00 — EXISTING GRADE MINOR CONTOUR
- B — 150' AQUATIC AREA BUFFER LINE
- EDGE OF EXISTING PAVEMENT
- EXISTING FOGLINE
- SS — EXISTING LEACHATE PIPELINE
- EDGE OF PROPOSED PAVEMENT
- PROPOSED FOGLINE
- SS — PROPOSED LEACHATE PIPELINE
- UTILITY VAULT FOOTING
- UTILITY VAULT WALLS (BELOW GRADE)
- UTILITY VAULT DOUBLE-LEAF ACCESS HATCH
- UTILITY VAULT ACCESS FRAME AND GRATE
- FLEXIBLE ROMAC COUPLING
- CLEANOUT

KEY NOTES

1. CONTRACTOR SHALL VERIFY DEPTH, LOCATION, AND SIZE OF EXISTING 12" LEACHATE PIPELINE PRIOR TO INSTALLATION OF PRECAST VAULT AND CORING PIPE PENETRATIONS LOCATIONS IN PRECAST VAULT.
2. PROPOSED 12" LEACHATE PIPELINE. 12" DUCTILE IRON TRENCH SECTION PER 2020 WASHINGTON DEPARTMENT OF TRANSPORTATION (WSDOT) PIPE ZONE BEDDING AND BACKFILL STANDARD PLAN B-55.20.02. INSTALL PIPE WITH CONSTANT SLOPE BETWEEN EXISTING PIPE CONNECTION LOCATIONS WITH NO INTERIM HIGH POINTS ALONG THE PROPOSED PIPELINE.
3. APPROXIMATE LOCATION OF EXISTING TEMPORARY PAVEMENT REPAIR AREA. SEE FIGURE 1 ON SHEET 0_C0.00.

GENERAL NOTES

1. SEE SHEET 0_C1.03 FOR AREA 1 ROADWAY REMOVAL AND RESTORATION INFORMATION.

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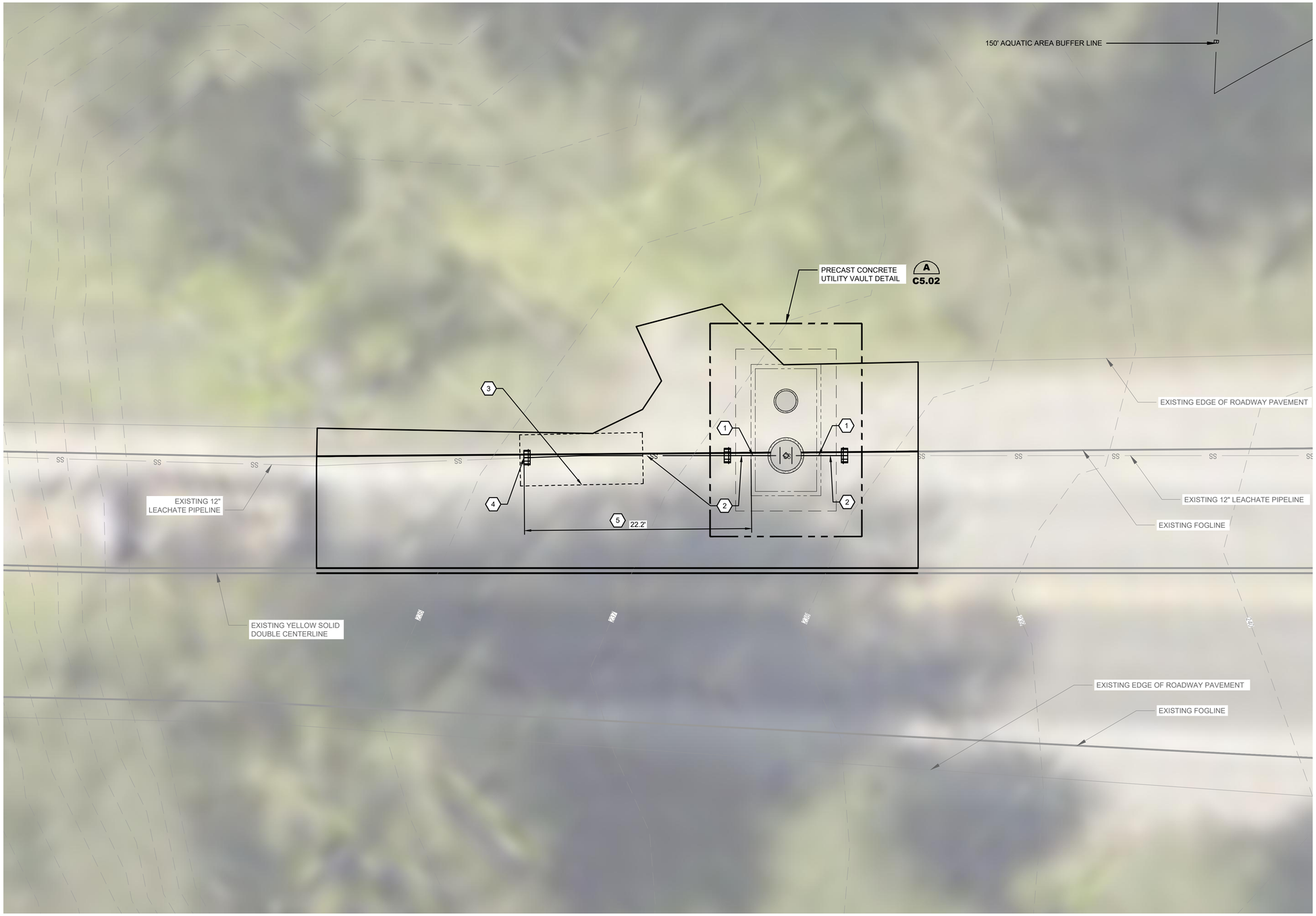
CHECKED BY -	PROJECT NO: -
CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
SITE LAYOUT & PIPING PLAN AREA 1

DATE:
DRAWING NO: 0_C1.01
SHEET NO: OF 4 OF 10



0' 2.5' 5'

SCALE: 1" = 5'

LEGEND

- 235.00 — EXISTING GRADE MAJOR CONTOUR
- 233.00 — EXISTING GRADE MINOR CONTOUR
- B — 150' AQUATIC AREA BUFFER LINE
- EDGE OF EXISTING PAVEMENT
- EXISTING FOGLINE
- SS — EXISTING LEACHATE PIPELINE
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- SS — PROPOSED LEACHATE PIPELINE
- UTILITY VAULT FOOTING
- UTILITY VAULT WALLS (BELOW GRADE)
- UTILITY VAULT ACCESS FRAME AND GRATE
- PLUG VALVE
- FLEXIBLE ROMAC COUPLING

KEY NOTES

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2. PROPOSED 12" LEACHATE PIPELINE. 12" DUCTILE IRON TRENCH SECTION PER 2020 WASHINGTON DEPARTMENT OF TRANSPORTATION (WSDOT) PIPE ZONE BEDDING AND BACKFILL STANDARD PLAN B-55.20.02. INSTALL PIPE WITH CONSTANT SLOPE BETWEEN EXISTING PIPE CONNECTION LOCATIONS WITH NO INTERIM HIGH POINTS ALONG THE PROPOSED PIPELINE.
3. APPROXIMATE LOCATION OF EXISTING TEMPORARY PAVEMENT REPAIR AREA. SEE FIGURE 2 ON SHEET 0_C0.00.
4. CONTRACTOR SHALL LOCATE THE NEAREST EXISTING 12" PIPE JOINT DOWNSTREAM OF TEMPORARY PIPE REPAIR.
5. PIPE LENGTH SHOWN AS APPROXIMATE. CONTRACTOR SHALL VERIFY PIPE LENGTH IN FIELD PER KEY NOTE 4.

GENERAL NOTES

1. SEE SHEET 0_C1.04 FOR AREA 2 ROADWAY REMOVAL AND RESTORATION INFORMATION.

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CHECKED BY	CONTRACT NO: -

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SOLID WASTE DIVISION

KING COUNTY LEACHATE PIPELINE IMPROVEMENTS

SITE LAYOUT & PIPING PLAN AREA 2

DATE:

DRAWING NO: 0_C1.02

SHEET NO: OF 5 OF 10

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0' 2.5' 5'
SCALE: 1" = 5'

LEGEND

- 2" PLANING BITUMINOUS PAVEMENT
  REMOVING ASPHALT CONCRETE PAVEMENT, FULL DEPTH
  8" HMA CL 1/2 IN. PG 58H-22 OVER 6" CSBC
- 2" PLANING BITUMINOUS PAVEMENT
  2" HMA CL 1/2 IN. PG 58H-22
- CLEARING AND GRUBBING
  2" CRUSHED SURFACING TOP COURSE

GENERAL NOTES:

1. BASE MAP COMPILED FROM PUBLICLY AVAILABLE GIS RECORDS AND AERIAL MAPS. LOCATIONS ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF EXISTING SURFACE FEATURES.
2. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF ALL UNDERGROUND UTILITIES AND FOR NOTIFYING THE ENGINEER IF ADDITIONAL UTILITIES OR CONFLICTS ARE DISCOVERED.
3. ALL CONSTRUCTION WASTE MATERIAL TO BE HAULED AWAY FROM SITE AND DEPOSITED AT APPROVED DISPOSAL LOCATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, TEMPORARY FENCING, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF THE CONTRACTORS WORK.
5. CARE SHALL BE TAKEN WHEN WORKING NEAR EXISTING STRUCTURES.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND IMPLEMENT ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OF ECOLOGY REGULATIONS AND WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARDS.
7. PROJECT SHALL CONFORM TO 2021 WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS.

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JUSTIN D KEYES
STATE OF WASHINGTON
48184
REGISTERED
PROFESSIONAL ENGINEER

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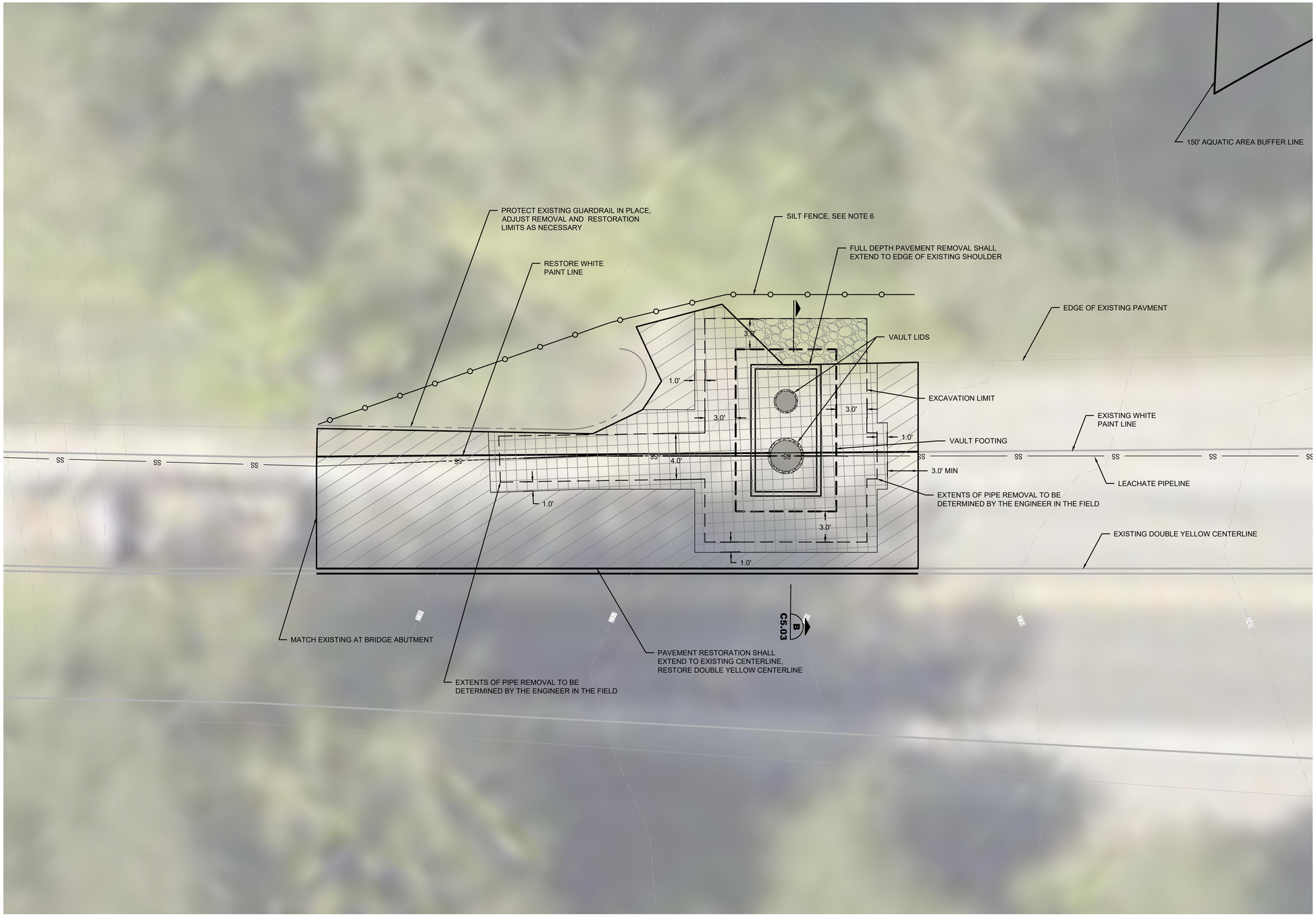
CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
ROADWAY PLAN
AREA 1

DATE:
DRAWING NO: 0_C1.03
SHEET NO: 6 OF 10



0' 2.5' 5'
SCALE: 1" = 5'

LEGEND

- 2" PLANING BITUMINOUS PAVEMENT REMOVING ASPHALT CONCRETE PAVEMENT, FULL DEPTH 8" HMA CL 1/2 IN. PG 58H-22 OVER 6" CSBC
- 2" PLANING BITUMINOUS PAVEMENT 2" HMA CL 1/2 IN. PG 58H-22
- CLEARING AND GRUBBING 2" CRUSHED SURFACING TOP COURSE

GENERAL NOTES:

1. BASE MAP COMPILED FROM PUBLICLY AVAILABLE GIS RECORDS AND AERIAL MAPS. LOCATIONS ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF EXISTING SURFACE FEATURES.
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7. PROJECT SHALL CONFORM TO 2021 WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS.

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CHECKED BY	CONTRACT NO: -

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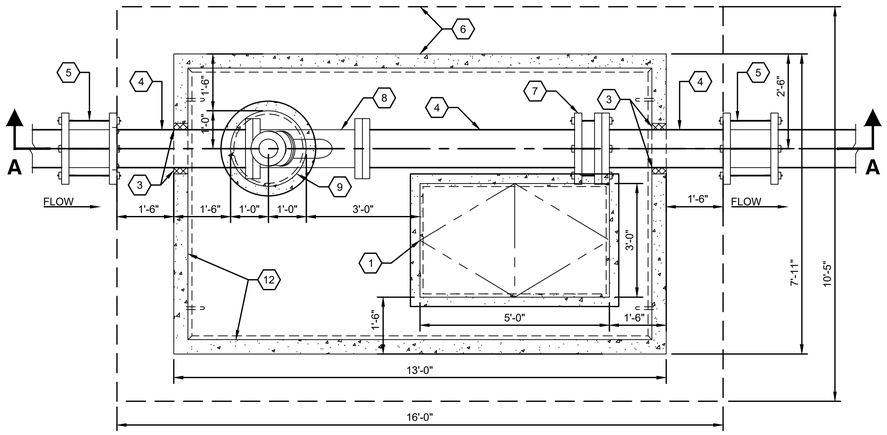
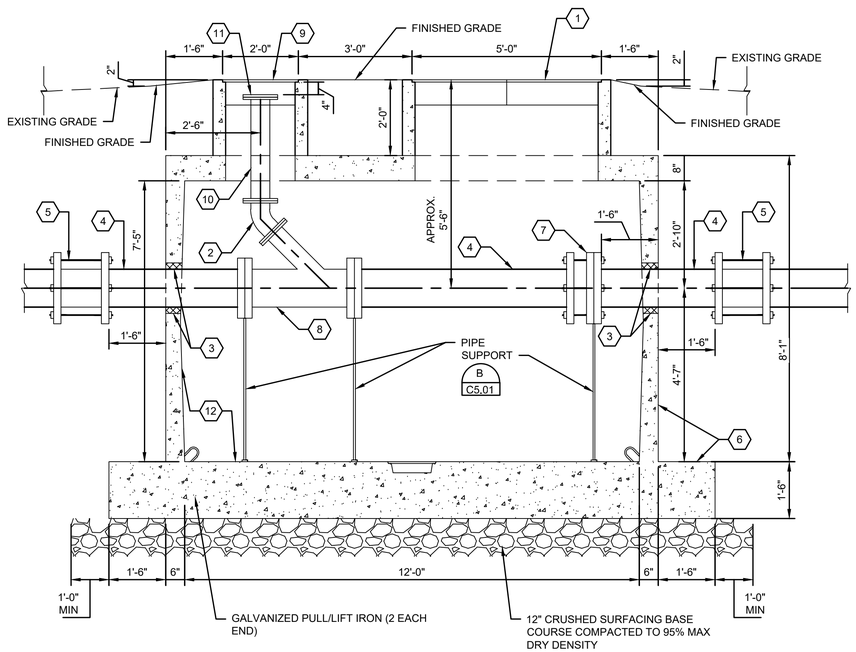
DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
ROADWAY PLAN
AREA 2

DATE:
DRAWING NO: 0_C1.04
SHEET NO: OF 7 OF 10



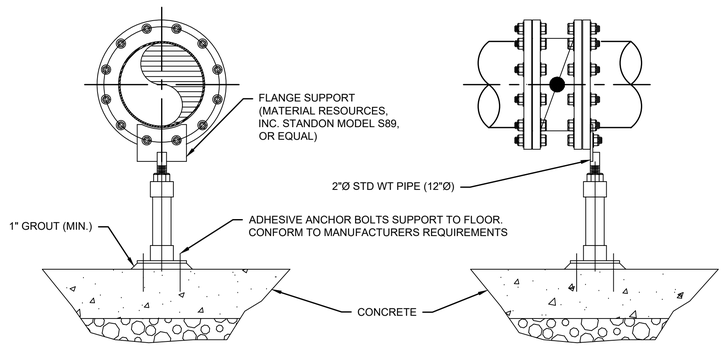
PLAN VIEW



SECTION AA

PRECAST UTILITY VAULT
AREA 1

DETAIL **A**
SCALE: 1/2"=1'-0" **C5.01**



NOTE:
1. WELD TO RESIST UPLIFT PER MANUFACTURES RECOMMENDATIONS.

PIPE SUPPORT

DETAIL **B**
SCALE: NTS **C5.01**

CONSTRUCTION NOTES

1. ALL PENETRATIONS SHALL BE CORE DRILLED AND SECURED/SEALED WITH LINK SEAL AND GROUTED INSIDE AND OUT.
2. DUCTILE IRON PIPE PER WSDOT STANDARD SPECIFICATION SECTION 9-30.1(1). DUCTILE IRON PIPE SHALL BE LINED WITH 40 MIL THICK OF CERAMIC EPOXY LINING PROTECTO 401 OR APPROVED EQUAL. POLYETHYLENE ENCASEMENT SHALL BE PER ANSI/AWWA AND WSDOT STANDARD SPECIFICATION SECTION 9-30.1(2).
3. DUCTILE IRON PIPE FITTINGS PER WSDOT STANDARD SPECIFICATION SECTION 9-30.2(1). DUCTILE IRON FITTINGS SHALL BE LINED WITH 40 MIL THICK OF CERAMIC EPOXY LINING PROTECTO 401 OR APPROVED EQUAL.

KEY NOTES

1. UTIILTY VAULT HS-20 ACCESS HATCH (36" X 60") (LW PRODUCTS COMPANY TYPE HD DOUBLE-LEAF DOOR) OR APPROVED EQUAL (COUNTY PROVIDED).
2. 6" DI 45° BEND, FL (SEE NOTE 3)
3. MODULAR MECHANICAL SEAL LINK SEAL MODEL S-316 OR APPROVED EQUAL. SEAL SHALL BE SYNTHETIC RUBBER LINKS, SIZED TO FILL THE ANNULUS BETWEEN THE PIPE AND WALL OPENING AND SHALL EXPAND TO FORM A WATERTIGHT SEAL.
4. 12" DI PIPE, FL X PE (SEE NOTE 2)
5. 12" RESTRAINED MECHANICAL COUPLING ROMAC ALPHA RESTRAINT COUPLING OR APPROVED EQUAL.
6. UTILITY VAULT W/ 1'-6" EXTENDED BASE (OLDCASTLE 712-LA) OR EQUAL (COUNTY PROVIDED).
7. 12" DI FLEXIBLE COUPLING ADAPTER. ROMAC INDUSTRIES, INC., STYLE FCA501 OR APPROVED EQUAL
8. 12" X 12" X 6" DI REDUCING WYE, FL (SEE NOTE 3)
9. 24" DIA CAST IRON ACCESS FRAME AND GRATE (COUNTY PROVIDED)
10. 6" DI PIPE. FL X PE (SEE NOTE 2)
11. 6" DI BLIND FLANGE. INSTALL 4" BELOW THE BOTTOM OF 24" DIA CAST IRON ACCESS GRATE.
12. PRECAST VAULT INTERIOR EPOXY COATING RAVEN LINING SYSTEMS RAVEN 405 OR APPROVED EQUAL. COATING SHALL BE APPLIED AND TESTED BY A CERTIFIED APPLICATOR OF THE PROTECTIVE COATING MANUFACTURER AND ACCORDING TO MANUFACTURER SPECIFICATIONS. APPLICATOR SHALL INSPECT ALL SURFACES SPECIFIED TO RECEIVE PROTECTIVE COATING PRIOR TO SURFACE PREPARATION. ALL CONTAMINANTS INCLUDING OILS, GREASE, UNSOUND OR INCOMPATIBLE EXISTING COATINGS, WAXES, FORM RELEASE, CURING COMPOUNDS, EFFLORESCENCE, SEALERS, SALTS, OR OTHER CONTAMINANTS SHALL BE REMOVED. SPRAY APPLICATION EQUIPMENT APPROVED BY THE COATING MANUFACTURER SHALL BE USED. THE SPRAYED ON MATERIAL SHALL BE APPLIED TO COMPLETELY AND UNIFORMLY COVER THE CONCRETE SURFACES, BOTTOM, WALLS, AND UNDERSIDE OF LID. FINISHED SURFACE SHALL BE SMOOTH. THE COATING SHALL BE APPLIED TO 100 MILS PER COAT TO PREVENT SAGGING. TESTING AND INSPECTION SHALL BE CONDUCTED BY THE CONTRACTOR'S COATING INSPECTOR. DURING APPLICATION A WET FILM THICKNESS GAGE PER ASTM D4414 MAY BE USED TO ENSURE A MONOLITHIC COATING AND UNIFORM THICKNESS DURING APPLICATION. AFTER THE PROTECTIVE COATING HAS SET HARD TO THE TOUCH, IT SHALL BE INSPECTED WITH HIGH-VOLTAGE HOLIDAY DETECTION EQUIPMENT. THE VOLTAGE APPLIED SHALL BE ADJUSTED AS NECESSARY TO DETER THE INDUCED HOLIDAY (REFER TO NACE RPO188-99). ALL DETECTED HOLIDAYS SHALL BE MARKED AND REPAIRED BY ABRADING THE COATING SURFACE WITH GRIT DISK PAPER OR OTHER HAND TOOLING METHOD. AFTER ABRADING AND CLEANING, ADDITIONAL PROTECTIVE MATERIAL CAN BE HAND APPLIED TO THE REPAIR AREA. A VISUAL INSPECTION SHALL BE MADE USING THE LATEST NASSCO STANDARD INSPECTION FROM. ANY DEFICIENCIES IN THE FINISHED COATING SHALL BE MARKED AND REPAIRED ACCORDING TO THE PROCEDURES SET FORTH HEREIN BY APPLICATOR.

No.	REVISION	BY	APP'D	DATE

HDR

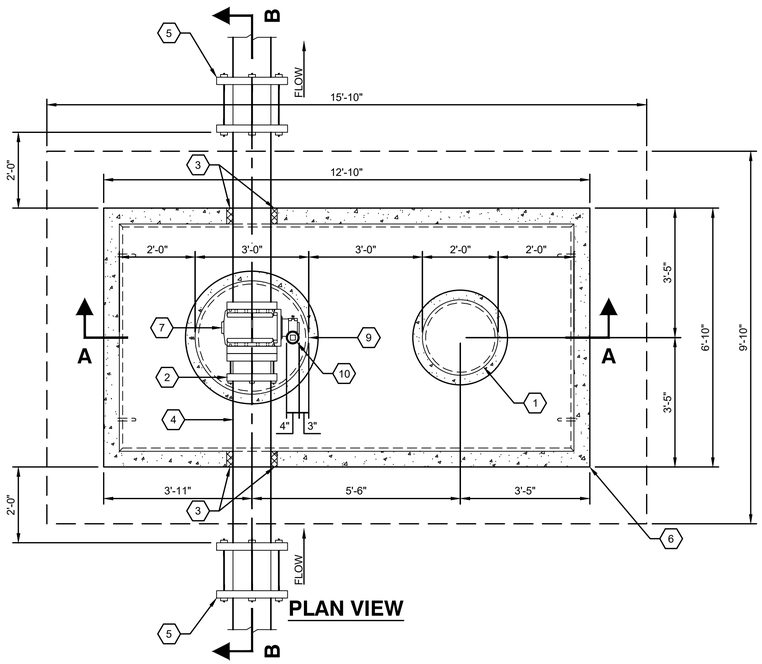
KARSTEN RYAN JACOBSON — STATE OF WASHINGTON — 54082 — REGISTERED PROFESSIONAL ENGINEER

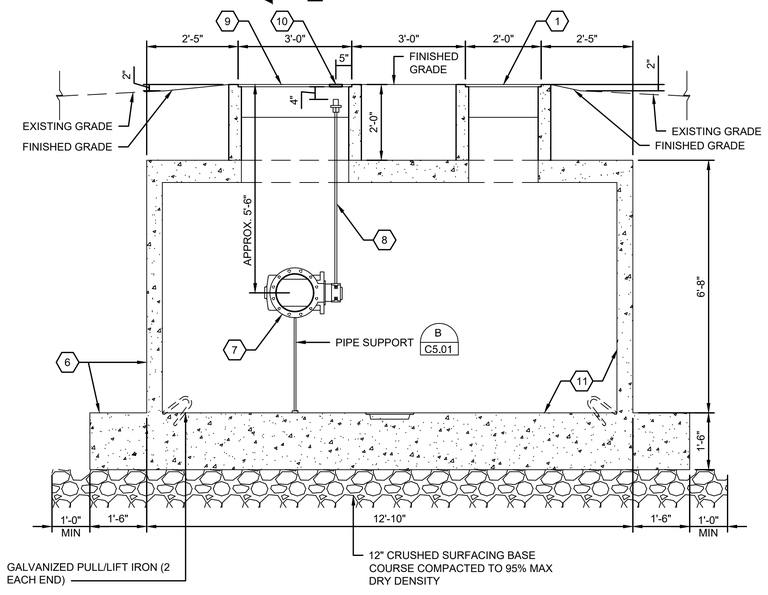
DESIGNED: -	APPROVED:
DRAWN: -	SCALE: AS NOTED
CHECKED BY -	PROJECT NO: -
CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

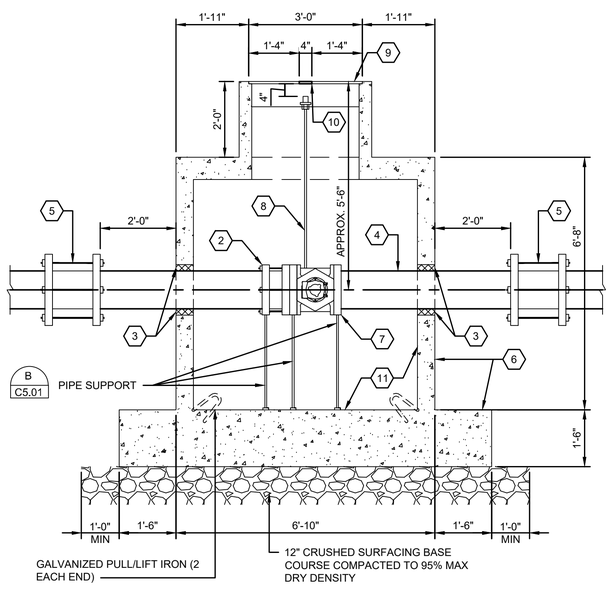
DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
PRECAST UTILITY VAULT DETAILS - AREA 1

DATE:
DRAWING NO: 0_C5.01
SHEET NO: OF 8 OF 10





SECTION AA



SECTION BB

CONSTRUCTION NOTES

1. ALL PENETRATIONS SHALL BE CORE DRILLED AND SECURED/SEALED WITH LINK SEAL AND GROUTED INSIDE AND OUT.
2. DUCTILE IRON PIPE PER WSDOT STANDARD SPECIFICATION SECTION 9-30.1(1). DUCTILE IRON PIPE SHALL BE LINED WITH 40 MIL THICK OF CERAMIC EPOXY LINING PROTECTO 401 OR APPROVED EQUAL. POLYETHYLENE ENCASEMENT SHALL BE PER ANSI/AWWA AND WSDOT STANDARD SPECIFICATION SECTION 9-30.1(2).
3. DUCTILE IRON PIPE FITTINGS PER WSDOT STANDARD SPECIFICATION SECTION 9-30.2(1). DUCTILE IRON FITTINGS SHALL BE LINED WITH 40 MIL THICK OF CERAMIC EPOXY LINING PROTECTO 401 OR APPROVED EQUAL.

KEY NOTES

1. 24" DIA CAST IRON ACCESS FRAME AND GRATE. (COUNTY PROVIDED)
2. 12" DI FLEXIBLE COUPLING ADAPTER. ROMAC INDUSTRIES, INC., STYLE FCA501 OR APPROVED EQUAL
3. MODULAR MECHANICAL SEAL LINK SEAL MODEL S-316 OR APPROVED EQUAL. SEAL SHALL BE SYNTHETIC RUBBER LINKS, SIZED TO FILL THE ANNULUS BETWEEN THE PIPE AND WALL OPENING AND SHALL EXPAND TO FORM A WATERTIGHT SEAL.
4. 12" DI PIPE, FL X PE (SEE NOTE 2)
5. 12" RESTRAINED MECHANICAL COUPLING ROMAC ALPHA RESTRAINT COUPLING OR APPROVED EQUAL.
6. UTILITY VAULT WITH 1'-6" EXTENDED BASE (OLDCASTLE 612-2-LA) OR EQUAL (COUNTY PROVIDED)
7. 12" DEZURIK ECCENTRIC PLUG VALVE WITH 2" SQUARE NUT OPERATOR (COUNTY PROVIDED)
8. 2" DEZURIK SQUARE NUT OPERATOR EXTENSION (COUNTY PROVIDED)
9. 36" DIA CAST IRON ACCESS FRAME AND GRATE (COUNTY PROVIDED)
10. 4" DIA CAST IRON ACCESS FRAME AND GRATE CENTERED OVER 2" SQUARE NUT OPERATOR (COUNTY PROVIDED)
11. PRECAST VAULT INTERIOR EPOXY COATING RAVEN LINING SYSTEMS RAVEN 405 OR APPROVED EQUAL. COATING SHALL BE APPLIED AND TESTED BY A CERTIFIED APPLICATOR OF THE PROTECTIVE COATING MANUFACTURER AND ACCORDING TO MANUFACTURER SPECIFICATIONS. APPLICATOR SHALL INSPECT ALL SURFACES SPECIFIED TO RECEIVE PROTECTIVE COATING PRIOR TO SURFACE PREPARATION. ALL CONTAMINANTS INCLUDING OILS, GREASE, UNSOUND OR INCOMPATIBLE EXISTING COATINGS, WAXES, FORM RELEASE, CURING COMPOUNDS, EFFLORESCENCE, SEALERS, SALTS, OR OTHER CONTAMINANTS SHALL BE REMOVED. SPRAY APPLICATION EQUIPMENT APPROVED BY THE COATING MANUFACTURER SHALL BE USED. THE SPRAYED ON MATERIAL SHALL BE APPLIED TO COMPLETELY AND UNIFORMLY COVER THE CONCRETE SURFACES, BOTTOM, WALLS, AND UNDERSIDE OF LID. FINISHED SURFACE SHALL BE SMOOTH. THE COATING SHALL BE APPLIED TO 100 MILS PER COAT TO PREVENT SAGGING. TESTING AND INSPECTION SHALL BE CONDUCTED BY THE CONTRACTOR'S COATING INSPECTOR. DURING APPLICATION A WET FILM THICKNESS GAGE PER ASTM D4414 MAY BE USED TO ENSURE A MONOLITHIC COATING AND UNIFORM THICKNESS DURING APPLICATION. AFTER THE PROTECTIVE COATING HAS SET HARD TO THE TOUCH, IT SHALL BE INSPECTED WITH HIGH-VOLTAGE HOLIDAY DETECTION EQUIPMENT. THE VOLTAGE APPLIED SHALL BE ADJUSTED AS NECESSARY TO DETER THE INDUCED HOLIDAY (REFER TO NACE RPO188-99). ALL DETECTED HOLIDAYS SHALL BE MARKED AND REPAIRED BY ABRADING THE COATING SURFACE WITH GRIT DISK PAPER OR OTHER HAND TOOLING METHOD. AFTER ABRADING AND CLEANING, ADDITIONAL PROTECTIVE MATERIAL CAN BE HAND APPLIED TO THE REPAIR AREA. A VISUAL INSPECTION SHALL BE MADE USING THE LATEST NASSCO STANDARD INSPECTION FROM. ANY DEFICIENCIES IN THE FINISHED COATING SHALL BE MARKED AND REPAIRED ACCORDING TO THE PROCEDURES SET FORTH HEREIN BY APPLICATOR.

PRECAST UTILITY VAULT
AREA 2

DETAIL A C5.02
SCALE: 1/2"=1'-0"

No.	REVISION	BY	APP'D	DATE

HDR

KARSTIN RYAN JACOBSON — STATE OF WASHINGTON — 54082 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED: -	APPROVED:
DRAWN: -	SCALE: AS NOTED
CHECKED BY -	PROJECT NO: -
CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

DEPARTMENT OF NATURAL RESOURCES & PARKS
SOLID WASTE DIVISION
KING COUNTY LEACHATE PIPELINE IMPROVEMENTS
PRECAST UTILITY VAULT DETAILS - AREA 2

DATE:
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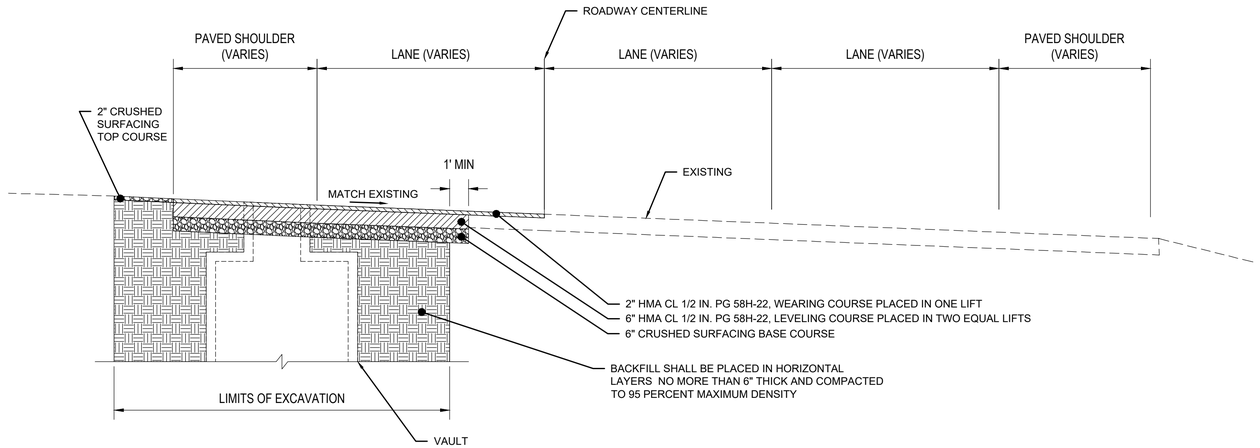
SHEET NO: OF 9 OF 10



AREA 1

TYPICAL SECTION **A**

SCALE: NTS **C1.03**

AREA 2

TYPICAL SECTION **B**

SCALE: NTS **C1.04**

CONSTRUCTION NOTES

1. PAVEMENT CONSTRUCTION SHALL BE PERFORMED PER 2021 WSDOT STANDARD SPECIFICATIONS.

No.	REVISION	BY	APP'D	DATE

HDR

JUSTIN D KEYES — STATE OF WASHINGTON — 45184 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED: -	APPROVED:
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CHECKED BY -	PROJECT NO: -
CHECKED BY	CONTRACT NO: -

SOLID WASTE DIVISION

DEPARTMENT OF NATURAL RESOURCES & PARKS

SOLID WASTE DIVISION

KING COUNTY LEACHATE PIPELINE IMPROVEMENTS

ROADWAY TYPICAL SECTIONS

DATE:

DRAWING NO: 0_C5.03

SHEET NO: OF 10 OF 10