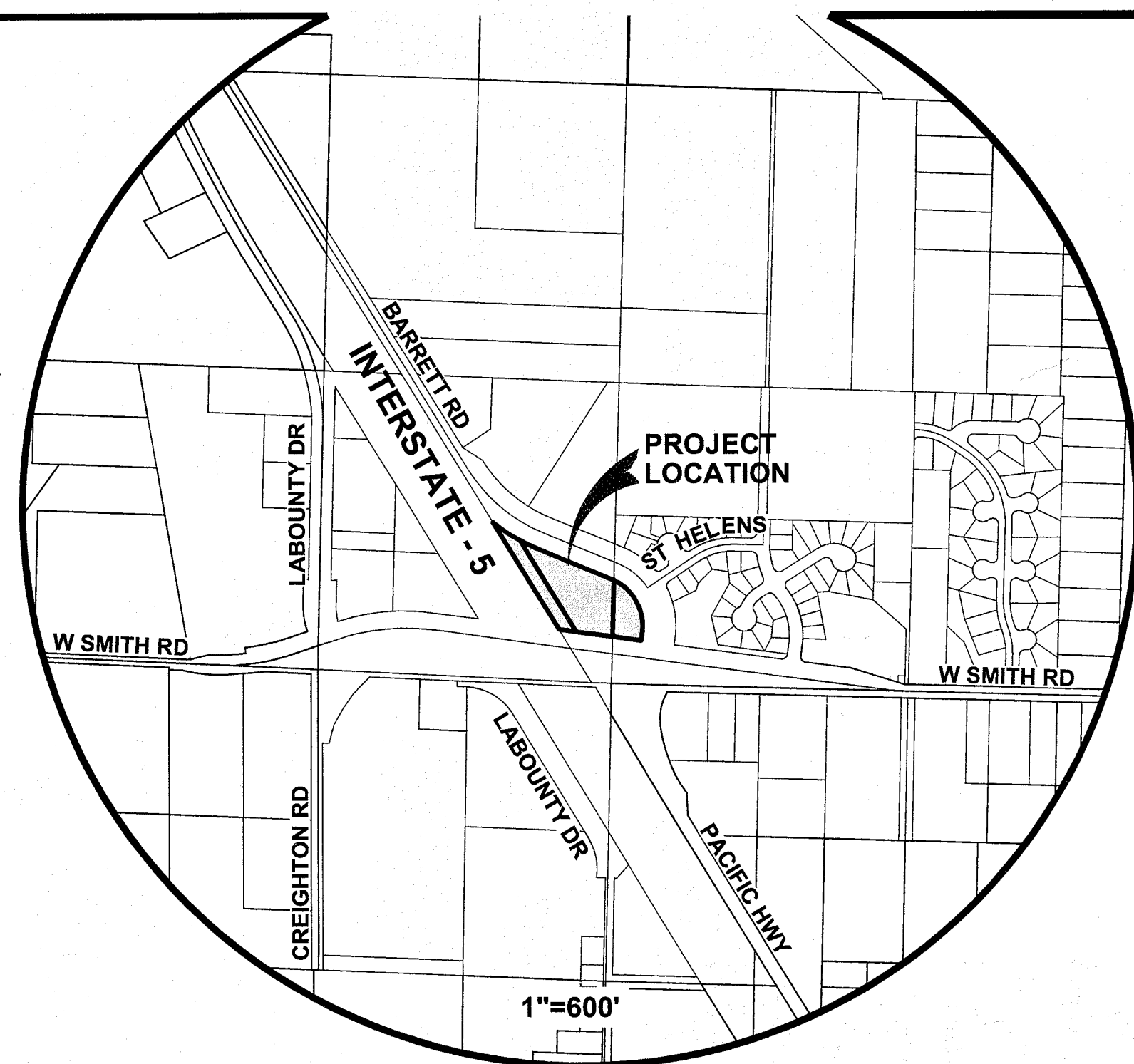


A PORTION OF THE SE 1/4 & SW 1/4 OF SECTION 28
TOWNSHIP 39 N., RANGE 2 E. OF THE W.M.
CITY OF FERNDAL, WHATCOM COUNTY, WASHINGTON

BARRETT ROAD BUSINESS PARK RECORD DRAWINGS -PHASE I & II



SHEET INDEX

1. COVER SHEET
2. CITY OF FERNDAL GENERAL NOTES
3. EXISTING CONDITIONS PLAN
4. TEMPORARY EROSION CONTROL PLAN, NOTES & DETAILS
5. COMPOSITE UTILITY PLAN
6. STORMWATER: OVERALL SITE PLAN
7. ROAD & STORMWATER: ON-SITE PLAN & PROFILES 1 & 2
8. ROAD & STORMWATER: ON-SITE PLAN & PROFILES 3 & 4
9. ROAD & STORMWATER: BARRETT RD PLAN & PROFILE
- 9A. ROAD & STORMWATER: BARRETT RD PLAN & PROFILE
10. STORMWATER POND: PLAN & DETAILS
11. GRADING PLAN & CURB RETURNS
12. CROSS SECTIONS - BARRETT: STA 2+00 TO 9+50
13. STORMWATER AND ROAD TYPICAL DETAILS
14. STORMWATER AND ROAD TYPICAL DETAILS
15. WATER AND SEWER PLAN
16. WATER AND SEWER TYPICAL DETAILS

ABBREVIATIONS

BMP	= BEST MANAGEMENT PRACTICE	PVC	= POLYVINYL CHLORIDE PIPE
BNDRY	= BOUNDARY	PSE	= PUEGET SOUND ENERGY
CL	= CENTERLINE	PWR	= POWER
CONC	= CONCRETE	N	= NOTHING
CPDP	= CORRUGATED POLY-ETHYLENE DRAIN PIPE	R	= RADIUS
CSCT	= CRUSHED SURFACING TOP COURSE	RET	= RETAINING WALL
CSBC	= CRUSHED SURFACING BASE COURSE	ROW	= RIGHT OF WAY
CTRL	= CONTROL	RT	= RIGHT
DI	= DUCTILE IRON	RY	= ROOF AND YARD
DOE	= DEPARTMENT OF ECOLOGY	S	= SLOPE
DTL	= DETAIL	SD	= STORM DRAIN
E	= EASTING	SDCB	= STORM DRAIN CATCH BASIN
EG	= EXISTING GROUND	SQ. IN.	= SQUARE INCHES
ELEV/EL	= ELEVATION	SS	= SANITARY SEWER
EOP	= EDGE OF PAVEMENT	SSCO	= SANITARY SEWER CLEAN OUT
EXIST/EX	= EXISTING	SF	= SQUARE FEET
FF	= FINISH FLOOR	SSMH	= SANITARY SEWER MANHOLE
FG	= FINISH GROUND	STA	= STATION
FL	= FLOW LINE	STRC	= STRUCTURE
FND	= FOUND	SWALK	= SIDEWALK
G.V.	= GATE VALVE	SWMF	= STORM WATER MANAGEMENT FILTER
HYD	= FIRE HYDRANT	SWMM	= STORM WATER MANAGEMENT MANUAL
J	= JUNCTION	SWPPP	= STORMWATER POLLUTION PREVENTION PLAN
JBOX	= JUNCTION BOX	TEL	= TELEPHONE
lbs.	= POUNDS	TEMP	= TEMPORARY
LF	= LINEAR FEET	TESC	= TEMPORARY EROSION AND SEDIMENT CONTROL
LT	= LEFT	TW	= TYPICAL
O.D.	= OUTSIDE DIAMETER	WA	= WATER
O/S	= OFFSET	WM	= WATER MAIN
PERF	= PERFORATED PIPE	X-ING	= CROSSING
PERM	= PERMANENT	Ø	= DIAMETER
PRP	= PROPOSED		

PROJECT CONTACTS

OWNER/APPLICANT
SYB HOLDING CO INC
PO BOX 189
FERNDAL, WA 98248
CONTACT: SAM BOULOS
(XXX) XXX-XXXX

PARCEL A
PARCEL NO. 390228266032

PARCEL B
PARCEL NO. 390228246038
5335 BARRETT RD

OWNER:
SYB HOLDING CO INC

ENGINEER
LDES, INC.
5160 INDUSTRIAL PL #108
FERNDAL, WA 98248
CONTACT: KYLE HAGGITH, PLS.
(360) 383-0620

PARCEL C
PARCEL NO. T8D

OWNER:
BMB-ASB LLC

SURVEYOR
LDES, INC.
5160 INDUSTRIAL PL #108
FERNDAL, WA 98248
CONTACT: KYLE HAGGITH, PLS.
(360) 383-0620

BURIED UTILITIES NOTE:

ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS ONLY AND THERE IS NO GUARANTEE THAT ALL UTILITIES ON THIS SITE ARE SHOWN. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT THE WASHINGTON STATE UTILITY LOCATED CENTER AT LEAST 48 HOURS BEFORE CONSTRUCTION.

LEGAL DESCRIPTIONS

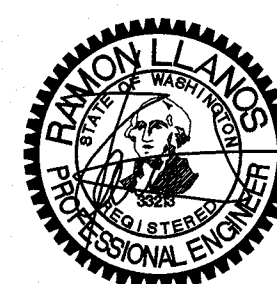
PARCEL A:
THAT PORTION OF THE WEST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 39 NORTH, RANGE 2 EAST OF W.M., LYING SOUTH AND WEST OF PACIFIC HIGHWAY AND NORTH OF SMITH ROAD, EXCEPT RIGHT OF WAY FOR PACIFIC HIGHWAY LYING ALONG THE NORTHEASTERLY LINE THEREOF AND ALSO EXCEPT THAT RIGHT OF WAY FOR SMITH ROAD ALONG THE SOUTHERLY LINE THEREOF, SITUATE IN WHATCOM COUNTY, WASHINGTON.

PARCEL B:
ALL THAT PORTION OF THE EAST THREE QUARTERS OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 39 NORTH, RANGE 2 EAST OF W.M., LYING NORTHEASTERLY OF PRIMARY STATE HIGHWAY NO. 5 AND LYING NORTHERLY OF SMITH ROAD INTERCHANGE AND SOUTHERLY OF COUNTY ACCESS ROAD AND RIGHT OF WAY; EXCEPT ANY PORTION THEREOF LYING WITHIN THE S40 ROADS, SITUATE IN WHATCOM COUNTY, WASHINGTON.

PARCEL C:
THAT PORTION OF SR 5, FORMERLY KNOWN AS STATE ROAD NO. 1 AND PRIMARY STATE HIGHWAY NO. 1, IN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 39 NORTH, RANGE 2 EAST OF W.M., WHATCOM COUNTY, WASHINGTON, DESCRIBED IN DEED DATED OCTOBER 9, 1922, RECORDED NOVEMBER 14, 1922, IN VOLUME 168 OF DEEDS, PAGE 239, UNDER AUDITOR'S FILE NO. 257038, RECORDS OF WHATCOM COUNTY, WASHINGTON, SITUATE IN WHATCOM COUNTY, WASHINGTON.

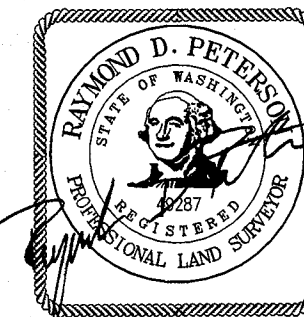
SURVEYOR'S NOTES

- 1) DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION.
- 2) EQUIPMENT USED: LEICA TORAL203+; 00'03" ± 2 PPM, ± 2 MM.
- 3) MONUMENTS SET OR FOUND ON OR ABOUT MAY AND JUNE 2015.
- 4) HORIZONTAL DATUM: NAD 83/91
BASIS OF BEARINGS: FERN-12 (N=673760.11, E=1222546.51)
AND FERN-13 (N=673448.20, E=1226649.22) PER CITY OF FERNDAL
SURVEY MONUMENT NETWORK, DATED JUNE 2001.
- 5) VERTICAL DATUM: NAVD 28, FERN-12.
- 6) PURPOSE OF SURVEY: DELINEATE PARCEL AND PREPARE RECORD OF SURVEY.
- 7) IN ACCORDANCE WITH THE REVISED CODE OF WASHINGTON: 58.09 AND WASHINGTON AUTHORITY CODE CHAPTER 332-130, THIS RECORD OF SURVEY DEPICTS OCCUPATIONAL INDICATORS, SUCH AS FENCES. THESE INDICATORS REPRESENT A POTENTIAL FOR CLAIMS OF UNWRITTEN TITLE. THIS SURVEY DOES NOT RESOLVE ANY OF THE LEGAL OWNERSHIP ISSUES THAT MAY ARISE FROM THESE UNWRITTEN TITLE CLAIMS.
- 8) THIS SURVEY WAS PERFORMED WITH THE BENEFIT OF A CURRENT ALTA COMMITMENT, ORDER NO. W-122950, DATED AUGUST 28, 2014, SUPPLEMENTAL ORDER NO. 145815, DATED JANUARY 31, 2018, SUPPLIED BY WHATCOM LAND TITLE COMPANY, INC.
- 9) REFERENCES USED ARE RECORD OF SURVEYS, RECORDED UNDER AUDITOR'S FILE NUMBER 213002085 AND 920929162, PLAT OF SHIELDS ESTATES, RECORDED UNDER AUDITOR'S FILE NUMBER 1971200927, RECORDS OF WHATCOM COUNTY, WASHINGTON AND STATE OF BELLINGHAM, SHEET 6 OF 14, DATED MARCH 4, 1925 AND RIGHT OF WAY PLANS, SR 5, MP 256.53 TO MP 262.4, BELLINGHAM TO SMITH ROAD VICINITY, DATED MAY 14, 1970, RECORDS OF WASHINGTON DEPARTMENT OF TRANSPORTATION.
- 10) REFERENCES USED ARE RECORD OF SURVEYS, RECORDED UNDER AUDITOR'S FILE NUMBER 213002085 AND 920929162, PLAT OF SHIELDS ESTATES, RECORDED UNDER AUDITOR'S FILE NUMBER 1971200927, RECORDS OF WHATCOM COUNTY, WASHINGTON AND STATE OF BELLINGHAM, SHEET 6 OF 14, DATED MARCH 4, 1925, HOLDING THE CALL 52.1' FROM THE SOUTH QUARTER CORNER OF SECTION 28 AS SHOWN THEREON AND MONUMENT 7" AS SHOWN HEREON. ALSO USED THE STATIONING THEREON OF 100+24.1 OF SAID POINT TO RESOLVE THE RIGHT OF WAY ANGLE POINT.
- 11) THE RIGHT OF WAY OF SMITH ROAD WAS CALCULATED FROM WASHINGTON STATE HIGHWAY COMMISSION, DEPARTMENT OF HIGHWAYS PLANS, SR 5, BELLINGHAM TO SMITH ROAD MONITY, MP 256.53 TO MP 262.4, SHEET 14 OF 17, DATED MAY 14, 1970, HOLDING FOUND MONUMENT "A" AND "B" AND THE RECORD ANGLE OF 90°00'00" TO THE LEFT AS SHOWN ON SAID PLANS.
- 12) BARRETT ROAD RIGHT OF WAY WAS RESOLVED HOLDING FOUND CENTERLINE MONUMENTS OF TANGENTS FITTING RECORD RADII TO THEM.



ENGINEER'S CERTIFICATION
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRETT ROAD BUSINESS PARK HAVE BEEN INSPECTED BY ME AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDAL DEVELOPMENT STANDARDS, THE CITY OF FERNDAL MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

01/27/23
RAMON LLANOS, P.E.



SURVEYOR'S CERTIFICATION
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 01/27/23

RAYMOND D. PETERSON, P.L.S.

EXISTING LEGEND:

●	= FOUND IRON PIPE IN CASE MON	---	= EXISTING PROPERTY LINE
○	= FND REBAR W/YELLOW PLASTIC CAP MARKED "LS 18927"	---	= EXISTING PARCEL LINE
■	= FND CONC. MONUMENT W/NAIL	---	= EXISTING SURVEY CENTERLING
●	= FND BRASS CAP SURFACE MON	---	= EXISTING CENTERLINE PAINT
○	= FND REBAR W/YELLOW PLASTIC CAP MARKED "LS 21423"	---	= EXISTING FOG LINE
●	= FND REBAR W/YELLOW PLASTIC CAP MARKED "LS 9361"	---	= EXISTING STORMWATER PIPE
■	= PROJECT BENCH MARK	---	= EXISTING STORMWATER PIPE, 8"
■	= EXISTING STORMDRAIN CATCH BASIN	---	= EXISTING STORMWATER PIPE, 12"
○	= EXISTING SANITARY SEWER MANHOLE	---	= EXISTING CULVERT
■	= EXIST SANITARY SEWER CLEANOUT	---	= EXISTING WATERLINE (LOCATION PER COF ASBUILTS-NOT SURVEYED)
■	= EXISTING WATER METER	---	= EXISTING WATER SERVICE
○	= EXISTING HYDRANT	---	= EXISTING SEWER MAIN
■	= EXISTING POWER POLE	---	= EXISTING 6" SEWER SERVICE (LOCATION PER COF ASBUILTS-NOT SURVEYED)
■	= EXISTING POWER BOX	---	= EXIST UNDERGROUND POWER (PAINT MARK)
■	= EXISTING J-BOX	---	= EXISTING UNDERGROUND PHONE
■	= EXISTING TELEPHONE BOOTH	---	= EXISTING TOP OF BANK
■	= EXISTING TELEPHONE MANHOLE	---	= EXISTING BOTTOM OF BANK
■	= EXISTING SIGN	---	= EXIST CONTOUR (INDEX)
○	= EXIST LIGHT POLE	---	= EXIST CONTOUR (NORMAL)
		---	= EXISTING DITCH LINE
		---	= EXISTING GUARDRAIL
		---	= EXISTING FENCE
		---	= EXISTING CURB
		---	= EXISTING ASPHALT
		---	= EXISTING CONCRETE
		---	= EXISTING GRAVEL

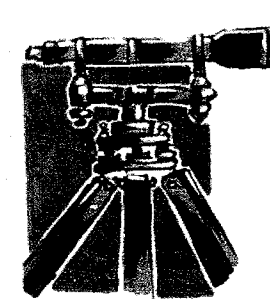
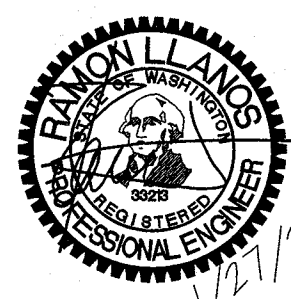
PROPOSED LEGEND:

■	= PROPOSED STORMDRAIN CATCHBASIN - TYPE 1	---	= PROPOSED STORMWATER PIPE, 8"
■	= PROPOSED STORMDRAIN CATCHBASIN - TYPE 2	---	= PROPOSED STORMWATER PIPE, 12"
■	= PROPOSED STORM DRAIN SERVICE	---	= PROPOSED CULVERT
■	= PROPOSED STORM DRAIN CLEANOUT	---	= PROPOSED DITCH
■	= PROPOSED SEWER MANHOLE	---	= PROPOSED SEWER LINE, 6"
■	= PROPOSED SANITARY SEWER CLEANOUT	---	= PROPOSED WATER LINE, 8"
■	= PROPOSED SANITARY SEWER SERVICE	---	= PROPOSED WATER LINE, 6"
■	= PROPOSED WATER METER	---	= PROPOSED WATER LINE, 4"
■	= PROPOSED FIRE HYDRANT	---	= PROPOSED OUT LINE
■	= PROPOSED POST INDICATOR VALVE (PIV)	---	= PROPOSED FILL LINE
■	= PROPOSED FIRE DEPARTMENT CONNECTION (FDC)	---	= PROPOSED TOP OF BANK
■	= PROPOSED VALVE	---	= PROPOSED BOTTOM OF BANK
■	= PROPOSED BLOW-OFF	---	= PROPOSED PERFORATED PIPE
■	= PROPOSED REDUCER	---	= PROPOSED ROOF & YARD DRAIN
■	= PROPOSED ADAPTER (FLX/MJ)	---	= PROPOSED UNDERGROUND POWER
■	= PROPOSED CAP	---	= PROPOSED CONTOUR (INDEX)
■	= PROPOSED TEE	---	= PROPOSED CONTOUR (NORMAL)
■	= PROPOSED 45° BEND	---	= PROPOSED RETAINING WALL
■	= PROPOSED 22.5° BEND	---	= PROPOSED ASPHALT
■	= THRUST BLOCK	---	= PROPOSED CONCRETE
■	= PROPOSED LANDSCAPE BUSH & TREE	---	= PROPOSED LANDSCAPING
■		---	= PROPOSED STRIPING
■		---	= PROPOSED LIGHTING ATTACHED TO BUILDING
■		---	= PROPOSED STREET LIGHT
■		---	= PROPOSED POWER STRUCTURE



CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"

NO.	REVISION	BY	DATE
1	AS-BUILTS	RL	07/14/21



LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDAL, WA 98248
PHONE 360-383-0620
FAX 360-383-0639

JOB NO.:	1455
DWG. NAME:	CDT-NEW-sewer - AB-phase 1-2.dwg
DESIGNED BY:	RL
DRAWN BY:	SR
CHECKED BY:	RL

SAM BOULOS
PO BOX 189
FERNDAL, WA

APPROVED

01/27/2023
BY: *[Signature]*
PUBLIC WORKS DEPARTMENT

COVER SHEET

BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDAL, WA
A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, W.M.

SHEET

1

OF

16

RECORD DRAWINGS

GENERAL REQUIREMENTS:

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE "STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION" (WSDOT SPECS.), THE CITY OF FERNDALE DEVELOPMENT STANDARDS (COFDS) AND THE 2005 VERSION OF THE DEPARTMENT OF ECOLOGY STORM WATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (DOE MANUAL). IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
 - PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS. THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
 - CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 a.m. TO 8 p.m., MONDAY THROUGH SATURDAY. THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER AT LEAST 72 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES. THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING IN CONFORMANCE WITH THE EROSION & SEDIMENTATION CONTROL PLAN AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL BE ON-SITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
 - SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.
 - THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDALE AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
 - THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT AND THE PROJECT ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING.
 - ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK IDENTIFIED ON THE PLANS, BOTH PUBLIC AND PRIVATE. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS FOLLOWS:
 - PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
 - CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.
 - PLACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS OF WAY OR IN WATERLINE EASEMENT TO BE DEDICATED TO THE CITY OF FERNDALE.
 - PLACING OR BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE, OR OTHER PUBLICLY SHARED FACILITIES.
 - GRADING OF PUBLIC OR PRIVATE ROADWAY AT:
 - COMPLETION OF EXCAVATION TO SUBGRADE.
 - COMPLETION OF BALLAST COURSE PLACEMENT.
 - COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
 - POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC ROADWAY.
 - ASPHALT PAVING IN PROGRESS IN PUBLIC ROADWAY.
 - OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
 - END OF MAINTENANCE PERIOD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, 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 WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO PERFORMING THE WORK. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23- TRAFFIC CONTROL, SHALL APPLY.
- THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.
- AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDALE UPON COMPLETION OF CONSTRUCTION AND PROVIDED IN CITY OF FERNDALE DATUM - VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.
- POT HOLE PUBLIC UTILITIES IS REQUIRED PRIOR TO CONSTRUCTION TO INSURE CITY UTILITY REQUIREMENTS CAN BE MET. AS-BUILT INFORMATION ON THE CITY'S DATA BASE IS NOT ALWAYS ACCURATE. THE CITY WILL NOT BE HELD RESPONSIBLE FOR CONTRACTOR NEGLIGENCE IN THIS REGARD THAT MAY RESULT IN HIGHER CONSTRUCTION COSTS OR LIMITED OPTION FOR MODIFICATION.

UNDERGROUND UTILITIES CONSTRUCTION:

- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS, WATER SERVICE TAPS, BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE). VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL THE PROJECT ENGINEER AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY.
- THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
 - NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
 - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPWILL SIDE OF DITCHES.
 - TRENCH DRAINAGE DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS.
 - WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
- UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.
- ALL UTILITY TRENCHES IN THE RIGHT OF WAY SHALL BE BACKFILLED WITH BANK RUN GRAVEL CAPPED WITH 5/8-INCH MINUS WELL GRADED CRUSHED ROCK.
- TESTING OF NEW WATER LINES, STORM SEWER SYSTEMS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.
- ALL UTILITY TRENCHES SHALL BE BACKFILLED AND COMPACTED TO 95% DENSITY IN LIFTS NOT TO EXCEED 24 INCHES WITH A "HOE PACK, OR 8 INCHES WITH HAND-OPERATED COMPACTION".
- OPEN CUTTING OF EXISTING ROADWAYS IS ONLY ALLOWED AS APPROVED AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE FERNDALE STANDARD TRENCH DETAIL(S). ALL UTILITY TRENCHES UNDERNEATH AN EXISTING ROADWAY SHALL BE BACKFILLED WITH 150 PSI CONTROLLED DENSITY FILL.
- NO PART OF THE DRAINAGE SYSTEM MAY BE COVERED, CONCEALED, OR PUT INTO USE UNTIL IT HAS BEEN INSPECTED, TESTED, AND ACCEPTED BY THE CITY INSPECTOR.
- A MINIMUM OF 5-FOOT SEPARATION IS REQUIRED BETWEEN THE MET UTILITIES (WATER, SEWER, STORM) SHOWN ON THE PLANS AND THE DRY UTILITIES (GAS, POWER, CABLE AND POWER) THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.

EARTHWORK:

- THE CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING UN-COMPACTED OR POORLY COMPACTED FILL SOILS WITHIN THE ROAD PRISM AT THE DIRECTION OF THE ENGINEER.
- THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER.
- UNSTABLE MATERIAL FOUND AND NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL.
- THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.

BASE COURSES AND SURFACING:

- GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET WSDOT STANDARD SPECIFICATIONS.
- BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
- THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/8 INCH OF FINISHED GRADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CRUSHED SURFACING TOP COURSE THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER.

STORM DRAINAGE:

- THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENTS:

CATCH BASINS TYPE 1, 1L OR 2	WSDOT STD. DETAILS B-520, B-540 OR B-1020
"RESIDENTIAL SERVICE LINE"	COFSD ST-7 (CITY OF FERNDALE STD DETAIL)
CATCH BASINS	COFSD ST-16 (CITY OF FERNDALE STD DETAIL)
- STORM SEWER PIPE HAVING DIAMETERS GREATER THAN 8" SHALL BE CORRUGATED POLYETHYLENE PIPE (CPEP); ALL OTHER STORM SEWER PIPE SHALL BE PVC.
- ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREET, DUMP NO POLLUTANTS".
- CONTROL DENSITY FILL SHALL BE USED IN AREAS WHERE LESS THAN 18" OF COVER IS MAINTAINED OVER THE PROPOSED STORM PIPES (PIPE IS IN ROAD BASE SECTION), AS SHOWN IN THE PLANS. DUCTILE IRON PIPE MAY BE USED FOR STORM PIPES WITH LESS THAN 24" OF COVER IF APPROVED BY THE CITY.
- COVER OVER PIPES SHALL BE MAINTAINED DURING CONSTRUCTION. DEPTH OF COVER REQUIRED SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS AND WILL VARY WITH THE VEHICLE LOADS TRAVELING OVER THE PIPE. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR DAMAGE TO PIPE DURING CONSTRUCTION ACTIVITIES.
- AT THE END OF ALL SITE CONSTRUCTION, THE CONTRACTOR SHALL CLEAN ALL DEBRIS FROM CATCH BASINS AND STORMWATER CONVEYANCES. DEBRIS SHALL NOT BE ALLOWED TO ENTER STREAMS OR OFF-SITE STORMWATER SYSTEMS.
- POSTIVE LOT GRADNS PER STANDARD DETAIL ST-16.

WATER:

- THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS:

PIPE BEDDING	COFSD W-11
TRENCH BACKFILL	COFSD W-11
FIRE HYDRANT ASSEMBLY	COFSD W-1
THRUST BLOCKING	COFSD W-2, W-3 & W-4
WATER SERVICE	COFSD W-5
- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE MOST RECENT VERSION OF WSDOT STANDARD SPECIFICATIONS.
- ALL WATER MAIN PIPE SHALL BE DUCTILE IRON, MINIMUM THICKNESS CLASS 50, PER ANWW STANDARDS H3-71 AND C151-71, WITH CEMENT LINING PER ANWW STANDARD C104-71.
- MATERIAL FOR FITTINGS SUCH AS CROSSES, TEES, BENDS, REDUCERS AND SLEEVES SHALL BE DUCTILE IRON. JOINTS SHALL BE M.J., FLANGED OR PUSH-ON JOINTS AND SHALL CONFORM TO ANWW SPECIFICATIONS C-110-71 AND C-104-71.
- CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDALE STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY THE PROJECT ENGINEER. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-09.3(21) OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION. NO PRE-CAST BLOCKS ARE ALLOWED.
- CONNECTIONS TO EXISTING WATER MAINS - THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE.
- ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3(23) AND SECTION 7-09.3(24) OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION - CURRENT EDITION. HYDROSTATIC TEST PRESSURE FOR WATER MAIN ACCEPTANCE SHALL BE 250 PSI AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE CITY OF FERNDALE LABORATORY SHALL CONDUCT ALL DISINFECTION TESTS AND BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED ON TWO CONSECUTIVE TESTS, CONDUCTED 24 HOURS APART.
- BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF OPTIMUM DENSITY.
- ALL PIPES SHALL HAVE A MINIMUM COVER OF 36".
- ALL VALVES SHALL BE EITHER GATE OR BUTTERFLY TYPE VALVES AND SHALL BE INSTALLED WITH SLIP TYPE CAST IRON VALVE BOXES. GATE VALVES SHALL BE USED FOR LINES 2 INCHES THROUGH 10 INCHES IN DIAMETER. SHORT-BODY VALVES SUITABLE FOR A NON-SHOOT, SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIE SEATED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO ANWW C509 AND SUITABLE FOR SERVICE WITH THE TYPE CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS.
- WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE COFDS W-5.
- FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFDS- SD W-1 (WSDOT B-19) AND THE FOLLOWING STANDARDS:
 - FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY VALVED 2-1/2" PORTS AND ONE 5-1/4" MIN. VALVE OPENING. 1-1/2" TEST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL BE EITHER IOWA OR M.H. 9297 HYDRANTS.
 - FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BUSH FLANGE OF THE HYDRANT MUST BE SET A MAXIMUM 2" ABOVE GRADE LEVEL OF THE REQUIRED ACCESS.
 - IF THE PUBLIC WORKS DIRECTOR DETERMINES THAT FIRE HYDRANTS ARE VULNERABLE TO VEHICULAR DAMAGE, APPROPRIATE CRASH POSTS SHALL BE PROVIDED. NO OBSTRUCTIONS SHALL EXIST WITHIN A 3-FOOT WORKING AREA OF EACH REQUIRED ACCESS. CRASH POSTS SHALL BE 4" CEMENT-FILLED PIPE A MIN. OF 3' IN HEIGHT WITH A MIN. OF 2" PIPE BELOW GRADE. HYDRANT SHUTOFF VALVES SHALL BE LOCATED BETWEEN 5' AND 10' FROM THE HYDRANT.
 - UNDERGROUND SUPPLIES TO FIRE HYDRANTS MUST BE PROTECTED. A FLOW TEST WILL BE REQUIRED WHEN INSTALLATION IS COMPLETE.
- FIRE HYDRANTS MUST BE MAINTAINED IN WORKABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED OR REPLACED WHEN DEFECTIVE. HYDRANTS SHALL BE KEPT OPEN AND BE AVAILABLE FOR USE AT ALL TIMES COMMENCES ABOVE GRADE LEVEL.

ROAD:

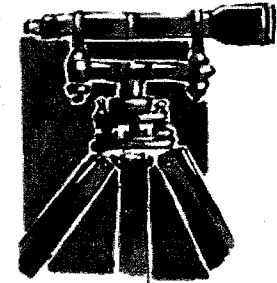
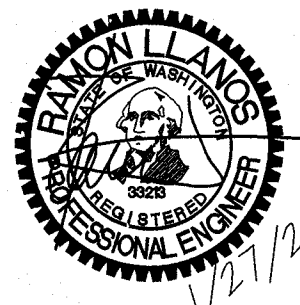
- THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF THE STANDARD STREET SECTION:

TYPICAL STREET SECTION	PER THESE PLANS
POC CURB AND GUTTER	COFSD R-9
POC SIDEWALKS	COFSD R-12 (SEE CONSTRUCTION DOCUMENTS TYPICAL SECTION)
POC CURB RAMPS	WSDOT STD. DETAIL F-40.
- ROADWAY EXCAVATION WITHIN THE ROADWAY PRISM SHALL BE CUT TO A UNIFORM GRADE. THE COMPLETED SUBGRADE SURFACE SHALL NOT VARY MORE THAN 0.10-FOOT FROM THE LOWER EDGE OF A 15-FOOT STRAIGHTEDGE PLACED ON THE SUBGRADE PARALLEL TO THE CENTERLINE UNLESS APPROVED BY THE ENGINEER.
- THE OWNER SHALL PROVIDE TO THE ENGINEER A REPORT FROM A QUALIFIED GEOTECHNICAL FIRM CERTIFYING THE COMPACTION OF THE GRAVEL BASE UNDER ALL PAVING AREAS.
- ASPHALT CONCRETE PAVEMENT SHALL BE CLASS "B" MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 5-04, EXCEPT AS MODIFIED HEREIN. CONNECTION TO EXISTING PAVEMENT SHALL BE TO A STRAIGHT NEATLY-TRIMMED LINE.
- CRUSHED ROCK SURFACING FOR PAVEMENT SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 9-03.9(3); BALLAST PER SECTION 9-03.9(1).
- CEMENT CONCRETE SHALL BE CLASS 3000 (WITH AIR ENTRAINMENT) IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 6-02.3(2B).
- CEMENT CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH CITY STANDARD DRAWING NO. R-12.
- CEMENT CONCRETE DRIVEWAYS SHALL BE 6 INCHES THICK AND CONSTRUCTED WHERE SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH THE CITY STANDARDS, DRAWING NO. R-15. A 2- INCH LATER OF 3/4 INCH DRAIN ROCK SHALL BE USED FOR DRIVEWAY BEDDING.
- CEMENT CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER, IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS, SECTION 8-04 AND CITY OF FERNDALE STANDARDS, DRAWING R-8 AND R-9. HANDICAPPED SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS F-40. WHERE NEW CEMENT CONCRETE CURB AND GUTTER IS CONNECT TO EXISTING CURB AND GUTTER, ASSURE THAT NO ABRUPT OFFSETS IN LINE OR GRADE SHALL BE CONSTRUCTED WHICH WILL BE UNLIGNHTLY OF THE FLOW IN THE GUTTER LINE.
- PAVEMENT:
 - SOIL PERMANENT HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
 - A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.
 - ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING PAVEMENT, WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING. THE APPLICANT SHALL PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. CONTRACTOR SHALL SLOD PLANE PER DIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROTAC PAVING FABRIC, OR EQUIVALENT, OVER JOINT BETWEEN PAVING LIFTS.
- THRU-CURB BASINS AND THRU-CURB INLETS CONFORMING TO THE WSDOT STANDARD SPECIFICATIONS, SECTION 7-05 SHALL BE CONSTRUCTED AT THE LOW POINT OF THE CURB FLOW LINES AND TO THE LOCATIONS, DIMENSIONS, AND DETAILS AS SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER AND CITY STANDARDS, DRAWING NO. R-8.
- TRENCH EXCAVATIONS, BEDDING AND PIPE FOR STORMWATER PIPE LAYING SHALL BE IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATIONS, SECTION 7-08.
- STORM SEWER PIPE CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 7-04. MATERIAL SHALL BE MANOR SURE-LOK F417 PIPE OR CITY APPROVED EQUAL. LOTS' STORM DRAIN SERVICE LINE SHALL BE 6" PVC PER WSDOT STANDARD SPECIFICATION, SECTION 9-05.1(5).
- PERFORATED UNDERDRAIN PIPE SHALL MEET THE WSDOT STANDARD SPECIFICATION 7-01.3(2).

SANITARY SEWER SYSTEMS:

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF FERNDALE STANDARD SPECIFICATIONS AND DETAILS, A.P.W.A. STANDARD SPECIFICATIONS, AND WSDOT STANDARD SPECIFICATIONS, MOST RECENT EDITIONS. SANITARY SEWER SYSTEM INSTALLATION, BOTH PUBLIC AND PRIVATE, IS SUBJECT TO CITY REVIEW AND APPROVAL.
- ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDALE. 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SEWER SYSTEM AND ALL CONNECTIONS TO EXISTING MAINS SHALL BE PERFORMED IN THE PRESENCE AND UNDER THE SUPERVISION OF A CITY OF FERNDALE REPRESENTATIVE.
- SANITARY SEWER MAINS SHALL BE A MINIMUM 8 INCH DIAMETER PVC PIPE (SDR-35) CONFORMING TO THE PROVISIONS OF ASTM D 3034 AND INSTALLED TO CITY SPECIFICATIONS.
- SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER COFSD SS-1. ALL TRENCHES SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL WITHIN CITY RIGHT OF WAY AND TRAVELED WAYS OUTSIDE OF RIGHT OF WAY (ACCESS EASEMENTS) AND SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. USE OF SUITABLE NATIVE BACKFILL OUTSIDE OF TRAVELED WAY SHALL BE SUBJECT TO APPROVAL BY THE CITY.
- ALL MANHOLES SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS AND SHALL BE PRE-CHANNELED. MANHOLE CONES ARE TO BE OFFSET SUCH THAT LADDER RUNGS ARE PARALLEL TO THE FLOW.
- ALL SIDE SEWERS SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE SEWERS SHALL HAVE A MINIMUM DIAMETER OF 4".
- CONTRACTOR SHALL EXTEND SEWER STUBS 5 FT BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND RIGHT-OF-WAY LINE.
- EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

AS-BUILTS	RL	07/14/21
NO.	REVISION	BY DATE



LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDALE, WA 98248
PHONE 360-383-0620
FAX 360-383-0639

JOB NO.:	1455
DWG. NAME:	SD-1-NEW-sewer - AB-phase 1-2.dwg
DESIGNED BY:	RL
DRAWN BY:	SR
CHECKED BY:	RL

SAM BOULOS
PO BOX 189
FERNDALE WA

APPROVED

FEB 12 2023
By: *[Signature]*
City of Ferndale
Public Works Department

CITY OF FERNDALE GENERAL NOTES
TESC NOTES & DETAILS

BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDALE, WA
A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, WM.

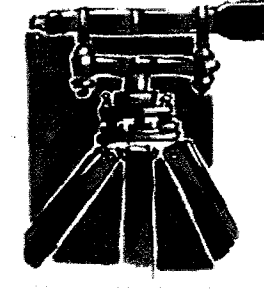
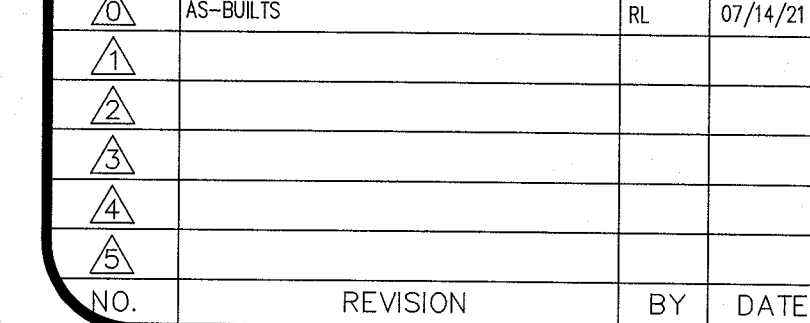
SHEET

2

OF

16

RECORD DRAWINGS



JOB NO.:	1455
DWG. NAME:	1455-BASE.dwg
DESIGNED BY:	RL
DRAWN BY:	EH
CHECKED BY:	RL

APPROVED

FEB 02 2023
BY *[Signature]* FOR *Kevin*
CITY OF BERNDAL
PUBLIC WORKS DEPARTMENT *run*

BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDALE, WA
PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, W.M.

SHEET

E

16

CITY OF FERNDAL TESC NOTES:

1. STABILIZATION & SEDIMENT TRAPPING. ALL EXPOSED SOILS SHALL BE STABILIZED BY SUITABLE APPLICATION OF BMP'S. FROM OCTOBER 1 TO APRIL 30, NO SOILS SHALL REMAIN UNEXPOSED FOR MORE THAN 2 DAYS. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN 7 DAYS. PRIOR TO LEAVING THE SITE, STORMWATER RUNOFF SHALL PASS THROUGH A SEDIMENT POND, TRAP OR OTHER APPROPRIATE BMP.
2. DELICATE CLEARING & EASEMENT LIMITS. IN THE FIELD, STAKE AND FLAG CLEARING LIMITS AND/OR ANY EASEMENTS, SETBACKS, SENSITIVE CRITICAL AREAS AND OTHER BUFFERS, TREES AND DRAINAGE COURSES.
3. PROTECTION OF ADJACENT PROPERTIES. PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, TIMING & STABILIZATION OF SEDIMENT TRAPPING MEASURES. SEDIMENT PONDS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS, AND OTHER BMP'S INTENDED TO TRAP SEDIMENT ON-SITE SHALL BE CONSTRUCTED AS A FIRST STEP IN GRADING. THESE BMP'S SHALL BE FUNCTIONAL BEFORE LAND DISTURBING ACTIVITIES TAKE PLACE. EARTH STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS SHALL BE SEEDED AND MULCHED ACCORDING TO THE TIMING INDICATED IN NO. 1 ABOVE.
4. OUT & FILL SLOPES. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. IN ADDITION, SLOPES SHALL BE STABILIZED IN ACCORDANCE WITH NO. 1 ABOVE.
5. CONTROLLING OFF-SITE EROSION. PROPERTIES AND WATERWAYS DOWNSTREAM FROM THE DEVELOPMENT SITES SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.
6. STABILIZATION OF TEMPORARY CONVEYANCE CHANNELS & OUTLETS. ALL TEMPORARY ON-SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED VELOCITY OF FLOW FROM A 2-YEAR, 24-HOUR FREQUENCY STORM FOR THE DEVELOPED CONDITION. STABILIZATION ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAMBANKS, SLOPES AND DOWNSTREAM REACHES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.
7. STORM DRAIN INLET PROTECTION. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT STORMWATER RUNOFF SHALL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
8. UNDERGROUND UTILITY CONSTRUCTION. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA: WHERE FEASIBLE, NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME; WHEN INCONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES; AND TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND.
9. CONSTRUCTION ACCESS ROUTES. WHEREVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS MUST BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
10. REMOVAL OF TEMPORARY BMP'S. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
11. DEWATERING CONSTRUCTION SITES. DEWATERING DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND.
12. CONTROL OF POLLUTANTS OTHER THAN SEDIMENT ON CONSTRUCTION SITES. ALL POLLUTANTS OTHER THAN SEDIMENT THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.
13. MAINTENANCE. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
14. FINANCIAL LIABILITY. PERFORMANCE BONDING, OR OTHER APPROPRIATE FINANCIAL INSTRUMENTS, SHALL BE REQUIRED FOR ALL PROJECTS TO ENSURE COMPLIANCE WITH THE APPROVED TESC PLAN.

TESC LEGEND:

- IP ○ = INLET PROTECTION
PROTECT NEW STRUCTURES
AS THEY ARE INSTALLED
- = SEDIMENT FENCE
(DETAIL 1, THIS SHEET)
- x = HIGH VISIBILITY CONSTRUCTION FENCE
- = CONSTRUCTION ENTRANCE
(DETAIL 2, THIS SHEET)

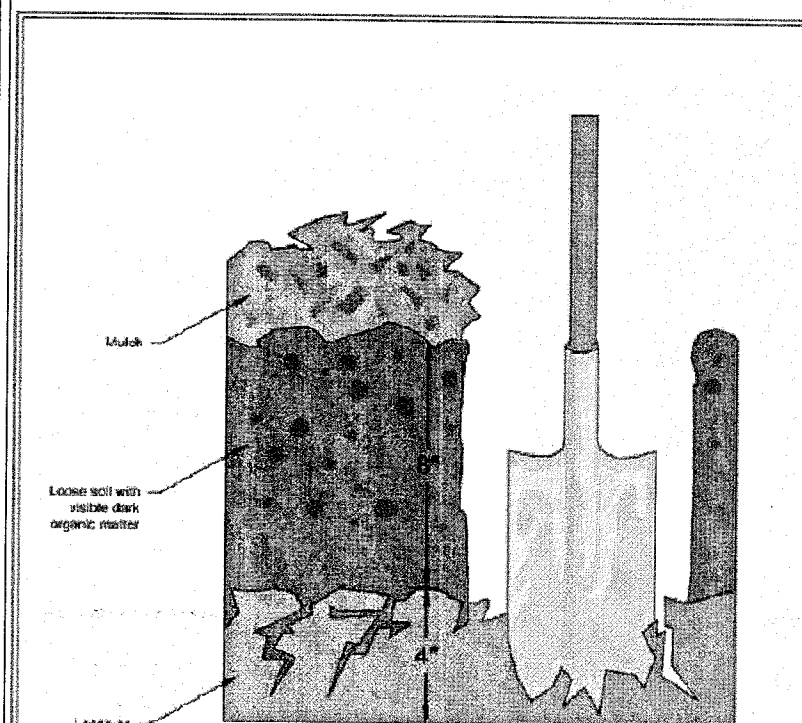
PROPOSED LEGEND:

- = PROPOSED STORMDRAIN CATCHBASIN - TYPE 1
- = PROPOSED STORMDRAIN CATCHBASIN - TYPE 2
- = PROPOSED STORM DRAIN SERVICE
- = PROPOSED STORM DRAIN CLEANOUT
- D8---D8--- = PROPOSED STORMWATER PIPE, 8"φ
- D12---D12--- = PROPOSED STORMWATER PIPE, 12"φ
- D---D--- = PROPOSED CULVERT
- W4---W4--- = PROPOSED WATER LINE, 4"φ
- OUT---OUT--- = PROPOSED CUT LINE
- FILL---FILL--- = PROPOSED FILL LINE
- B---B--- = PROPOSED TOP OF BANK
- B---B--- = PROPOSED BOTTOM OF BANK
- = PROPOSED ASPHALT
- = PROPOSED CONCRETE
- = PROPOSED LANDSCAPING

CONSTRUCTION SEQUENCE:

1. HOLD THE PRECONSTRUCTION MEETING.
2. FLAG CLEARING LIMITS.
3. POST A SIGN WITH THE NAME AND PHONE NUMBER OF THE CESC.
4. INSTALL/PLACE STORM DRAIN INLET PROTECTION INSERTS IN EXISTING CATCH BASINS.
5. CLEAR AREA FOR CONSTRUCTION ENTRANCE AND STABILIZE CONSTRUCTION TRAFFIC AREA(S) AS NEEDED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
6. INSTALL PERIMETER PROTECTION (SILT FENCE).
7. CLEAR AND GRUB REMAINDER OF SITE FOR CONSTRUCTION (CONSTRUCT SURFACE WATER BMP'S SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT).
8. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH DOE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
9. SCRAPE/DOZE TOP 6 INCHES OF SOIL COLUMN AND FORM STOCK PILE OF ORGANIC AND A HORIZONTAL COVER FOR REUSE IN PERIMETER LANDSCAPE AREAS. PROVIDE PLANT COVER OVER SOIL STOCK PILE IMMEDIATELY.
10. EXCAVATE AND CONSTRUCT PROPOSED STORMWATER POND, INCLUDING CONTROL STRUCTURE, PIPING, STORM STRUCTURES (EXCLUDING FILTER) AND DISPERSION TRENCH OUTLET. USE AS TEMPORARY SEDIMENT TRAP/POND DURING CONSTRUCTION, AND MAINTAIN PER WSDOE REQUIREMENTS.
11. CONSTRUCT BUILDING 3 FOUNDATION.
12. CONSTRUCT BUILDING 2 FOUNDATION.
13. CONSTRUCT BUILDING 1 FOUNDATION.
14. GRADE REMAINDER OF SITE TO SUBGRADE ELEVATION AND TRENCH/EXCAVATE FOR UTILITIES, AND REMAINING STORMWATER PIPE & FACILITIES.
15. INSTALL WATER PIPE, SANITARY SEWER PIPE AND STORMWATER PIPE, & STORMWATER STRUCTURES.
16. INSTALL ROCK PORTION OF PAVEMENT SECTION AND CURBS.
17. GRADE OFF-SITE AREAS (R.O.W.) TO SUBGRADE ELEVATION AND INSTALL STORM DRAIN PIPES, PAVEMENT SECTION, CURBS, AND FILL FOR R.O.W. IMPROVEMENTS.
18. INSTALL FIRST ASPHALT LIFT AND COMPLETE STORMWATER TREATMENT FACILITIES (EXCEPT FILTERS) PER DETAIL(S).
19. INSTALL FINAL ASPHALT LIFT(S).
20. UPON COMPLETION OF PROJECT, SEED OR SOD AREAS DISTURBED BY CONSTRUCTION TRAFFIC THAT ARE NOT SPECIFIED AS PLANTING IN THE LANDSCAPE PLAN & REMOVE INLET PROTECTION INSERTS, SILT FENCE, AND OTHER TESC MEASURES.
21. INSTALL FILTERS ONCE SITE HAS BEEN STABILIZED AND APPROVED BY CITY.

BMP T5.13 - POST CONSTRUCTION SOIL QUALITY AND DEPTH



ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, SHALL DEMONSTRATE THE FOLLOWING:

SOIL QUALITY.
A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 AND 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. USE COMPOST AND OTHER MATERIALS THAT MEET THE COMPOST GUIDELINES.

SOIL DEPTH.
THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL, TO AVOID STRATIFIED LAYERS WHERE FEASIBLE. PLANTING BEDS SHOULD HAVE 2 INCHES OF ORGANIC MATERIAL AS WELL.

COMPOST GUIDELINES.
MUST MEET THE DEFINITION OF "COMPOSTED MATERIAL" IN WAC 173.350.100 AND COMPLIES WITH TESTING PARAMETERS AND OTHER STANDARDS IN WAC 173.350.220. MUST BE PRODUCED AT A PERMITTED COMPOSTING FACILITY. ORGANIC MATTER CONTENT SHALL BE 40% TO 65%, CARBON TO NITROGEN RATIO OF MUST BE LESS THAN 25:1. THE C:N RATIO MAY BE UP TO 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PILEST SOUND LOWLAND NATIVE SPECIES AND UP TO 40:1 FOR COARSE COMPOST TO BE USED AS A SURFACE MULCH (NOT IN A SOIL MIX).

IMPLEMENTATION OPTIONS

1) LEAVE AS MUCH NATIVE VEGETATION AND SOIL AS POSSIBLE AND PROTECT FROM COMPACTION DURING CONSTRUCTION.

2) AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT RATES OR AT A CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.

3) IN AREAS REQUIRING CLEARING AND GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA. NOT ADJECT TO PUBLIC RESOURCES AND CRITICAL AREAS. REPLACE IT PRIOR TO PLANTING AND AMEND IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS.

4) IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.

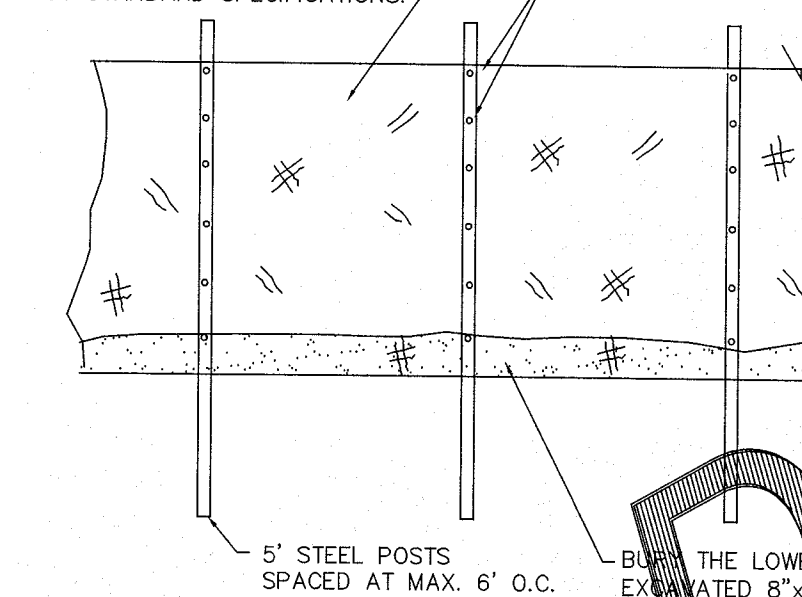
MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE.

Figure V-5.3.3

Planting Bed Cross-Section

Revised January 2016

GEOTEXTILE FABRIC MATERIAL SHALL MEET THE REQUIREMENTS OF SECTION 9-33 OF THE 2012 WSDOT STANDARD SPECIFICATIONS.



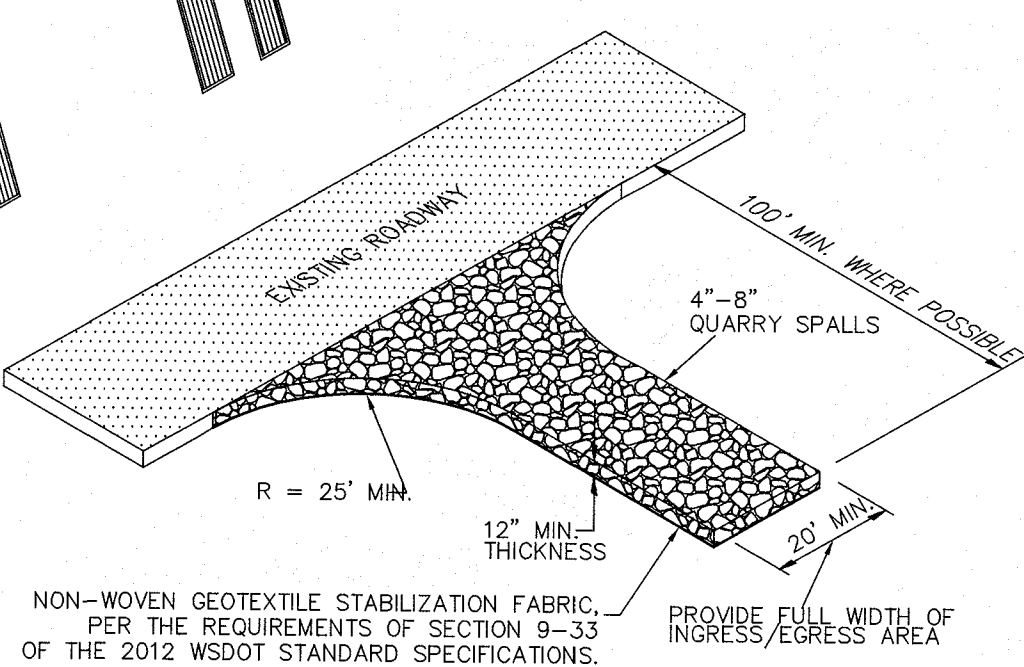
GENERAL NOTES:

1. ANY DAMAGE TO FENCING SHALL BE REPAIRED IMMEDIATELY.
2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEN THE WATER MUST BE INTERCEPTED AND CONVEYED TO A FULLY-FUNCTIONING SEDIMENT TRAP, POND, OR CONVEYANCE SYSTEM.
3. IT IS IMPORTANT TO PERIODICALLY CHECK THE UPHILL SIDE OF FENCING FOR SIGNS OF CLOGGING. IF CLOGGING OCCURS, THE FENCE WILL ACT AS A BARRIER TO FLOW AND WILL CAUSE CHANNELIZATION PARALLEL TO THE FENCE. TO REMEDY THIS, THE CONTRACTOR SHALL REPLACE THE FENCE AND/OR REMOVE THE TRAPPED SEDIMENT.
4. SILT FENCING SHALL BE CONSTRUCTED DIRECTLY AFTER CLEARING AND GRUBBING IS COMPLETE. THE FENCE SHALL ONLY BE REMOVED WHEN CONSTRUCTION OF UTILITIES DEEMS IT ABSOLUTELY NECESSARY. IMMEDIATELY AFTER UTILITIES ARE IN-PLACE, THE SILT FENCING SHALL BE RECONSTRUCTED.

1 SILT FENCE DETAIL (BASED ON FERNDAL ST-10) not to scale

EROSION AND SEDIMENT CONTROL GENERAL NOTES

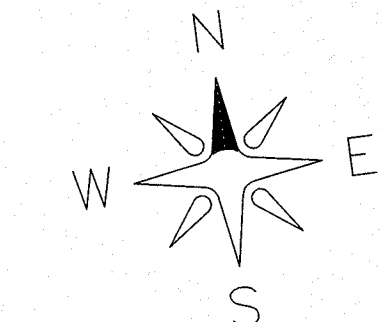
1. EROSION CONTROL METHODS AND MATERIALS SHALL MEET THE REQUIREMENTS OF SECTION 9-01 OF THE 2012 WSDOT/HPWA STANDARD SPECIFICATIONS. THE REQUIREMENTS SET FORTH IN VOLUME II OF THE "STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY, CURRENT EDITION, THE CITY OF FERNDAL DEVELOPMENT STANDARDS, THE PROJECT SWPPP AND THIS PLAN, WITH THE MOST EFFECTIVE REQUIREMENTS TAKING PRECEDENCE. THE CONTRACTOR SHALL FOLLOW RECOMMENDATIONS MADE BY SUPPLIERS AND MANUFACTURERS FOR ALL MATERIALS AND EQUIPMENT.
2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT SILT FROM ENTERING THE SITE. IF SILT LAZES OR MATERIALS ARE TRACKED FROM EXISTING THE SITE, THE CONTRACTOR SHALL STOP WORK ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WORK WITH THE PROJECT ENGINEER OR LOCAL JURISDICTION TO COORDINATE FURTHER EROSION CONTROL MEASURES NOT SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN THAT MAY BE NECESSARY TO PREVENT RUNOFF.
3. THE EXISTING AND PROPOSED STORM SYSTEMS SHALL BE MAINTAINED AND KEPT OPEN WITHOUT COMPACTION AND UNTIL ALL ON-SITE SOILS HAVE BEEN STABILIZED.
4. AT THE END OF EACH DAY OF CONSTRUCTION, THE CONTRACTOR SHALL FLUSH OUT ALL DEBRIS FROM THE STORMWATER INSTALLED ON-SITE. MATERIAL FLUSHED FROM THE SYSTEM SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED OFF-SITE.



GENERAL NOTES:

1. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO SURROUNDING FACILITIES, THEN ALTERNATIVE MEASURES TO KEEP THE FACILITIES FREE OF SEDIMENT SHALL TO USED. THIS MAY INCLUDE STREET WEAPERS OR UPSIZING THE DIMENSIONS OF THE ENTRANCE.
2. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH PAVEMENT, A SMALL SUMP OR POND SHALL BE CONSTRUCTED AND THE SEDIMENT SHALL BE CONVEYED INTO THE SUMP OR POND.

2 QUARRY SPALL CONSTRUCTION ENTRANCE DETAIL not to scale



GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

TEMPORARY EROSION CONTROL PLAN, NOTES & DETAILS

BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDAL, WA
A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, W.M.

SHEET

4

OF

16

RECORD DRAWINGS

PARCEL A
PARCEL NO. 39022826032
OWNER: SYB HOLDING CO INC

PARCEL B
PARCEL NO. 390228246038
5335 BARRETT RD
OWNER: SYB HOLDING CO INC

PARCEL C
PARCEL NO. - NONE-SURPLUS HIGHWAY ROW
OWNER: BNB-ASB LLC

PROJECT DESCRIPTION:
THREE WAREHOUSE BUILDINGS
PAVED PARKING AREA
UNDERGROUND UTILITIES
LANDSCAPING PER CIP STANDARDS
STORMWATER DETENTION FACILITY
3 DRIVEWAY ENTRANCES OFF BARRETT ROAD

ENGINEER:
LDES INC
5160 INDUSTRIAL PL #108
FERNDAL WA 98248
360-383-0620
CONTACT: RAMON LLANOS

OWNER CONTACT:
SAM BOULOS
PO BOX 189
FERNDAL WA
360-312-8080

EXISTING LEGEND:

- = FOUND IRON PIPE IN CASE MON
- = FND REBAR W/YELLOW PLASTIC CAP MARKED "LS 18927"
- = FND CONC. MONUMENT W/MAIL
- = FND BRASS CAP SURFACE MON
- = FND REBAR W/YELLOW PLASTIC CAP MARKED "LS 21423"
- = FND REBAR W/YELLOW PLASTIC CAP MARKED "LS 9361"
- = PROJECT BENCH MARK
- = EXISTING STORMDRAIN CATCH BASIN
- = EXISTING SANITARY SEWER MANHOLE
- = EXIST SANITARY SEWER CLEANOUT
- = EXISTING WATER METER
- = EXISTING HYDRANT
- = EXISTING POWER POLE
- = EXISTING POWER BOX
- = EXISTING J-BOX
- = EXISTING TELEPHONE BOOTH
- = EXISTING TELEPHONE MANHOLE
- = EXISTING SIGN
- = EXIST LIGHT POLE

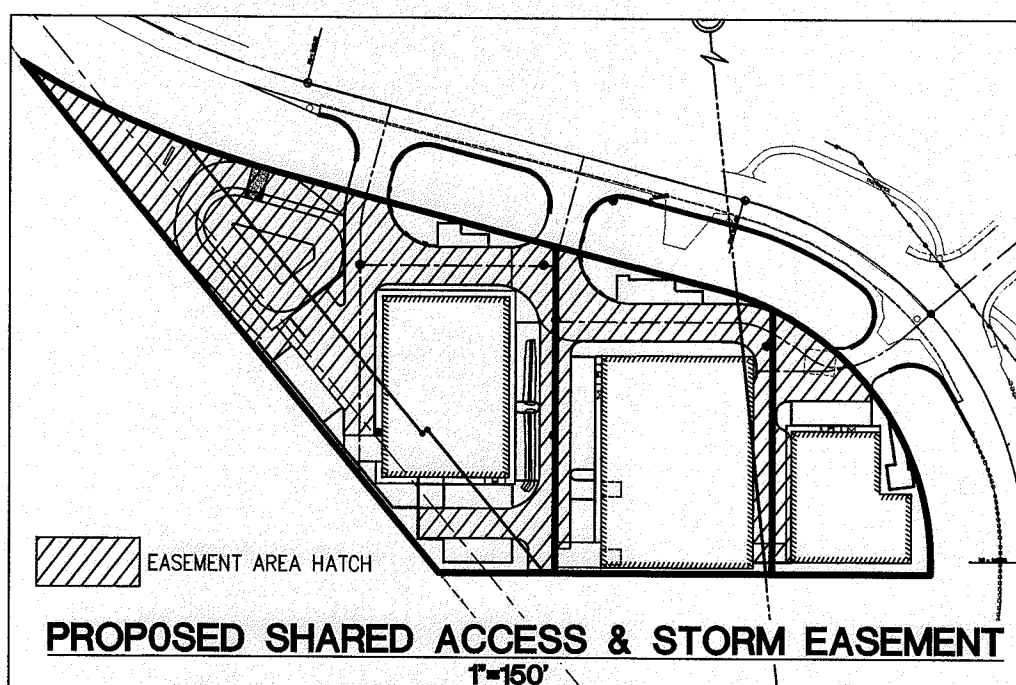
- = EXISTING PROPERTY LINE
- = EXISTING PARCEL LINE
- = EXISTING SURVEY CENTERLINE
- = EXISTING CENTERLINE PAINT
- = EXISTING FOG LINE
- = EXISTING STORMWATER PIPE
- = EXISTING STORMWATER PIPE, 8"
- = EXISTING STORMWATER PIPE, 12"
- = EXISTING CULVERT
- = EXISTING WATERLINE (LOCATION PER COF ASBUILTS—NOT SURVEYED)
- = EXISTING WATER SERVICE
- = EXISTING SEWER MAIN
- = EXISTING 6" SEWER SERVICE (LOCATION PER COF ASBUILTS—NOT SURVEYED)
- = EXIST UNDERGROUND POWER (PAINT MARK)
- = EXISTING UNDERGROUND PHONE
- = EXISTING TOP OF BANK
- = EXISTING BOTTOM OF BANK
- = EXIST CONTOUR (INDEX)
- = EXIST CONTOUR (NORMAL)
- = EXISTING DITCH LINE
- = EXISTING GUARDRAIL
- = EXISTING FENCE
- = EXISTING CURB
- = EXISTING ASPHALT
- = EXISTING CONCRETE

PROPOSED LEGEND:

- = PROPOSED STORMDRAIN CATCHBASIN - TYPE 1
- = PROPOSED STORMDRAIN CATCHBASIN - TYPE 2
- = PROPOSED STORM DRAIN SERVICE
- = PROPOSED STORM DRAIN CLEANOUT
- = PROPOSED SEWER MANHOLE
- = PROPOSED SANITARY SEWER CLEANOUT
- ▲ = PROPOSED SANITARY SEWER SERVICE
- = PROPOSED WATER METER
- = PROPOSED FIRE HYDRANT
- = PROPOSED POST INDICATOR VALVE (PIV)
- = PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
- = PROPOSED VALVE
- = PROPOSED BLOW-OFF
- = PROPOSED REDUCER
- = PROPOSED ADAPTER (FLXJM)
- = PROPOSED CAP
- = PROPOSED TEE
- = PROPOSED 45° BEND
- = PROPOSED 22.5° BEND
- = THRUST BLOCK
- = PROPOSED LANDSCAPE BUSH & TREE

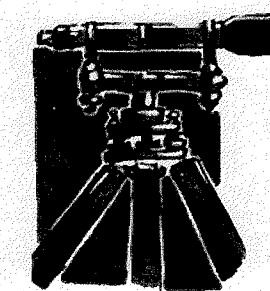
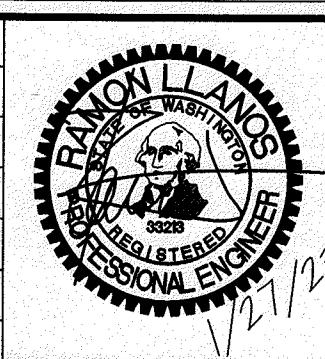
- = PROPOSED STORMWATER PIPE, 8"
- = PROPOSED STORMWATER PIPE, 12"
- = PROPOSED CULVERT
- = PROPOSED DITCH
- = PROPOSED SEWER LINE, 6"
- = PROPOSED SEWER LINE, 8"
- = PROPOSED WATER LINE, 8"
- = PROPOSED WATER LINE, 6"
- = PROPOSED WATER LINE, 4"
- = PROPOSED CUT LINE
- = PROPOSED FILL LINE
- = PROPOSED TOP OF BANK
- = PROPOSED BOTTOM OF BANK
- = PROPOSED PERFORATED PIPE
- = PROPOSED ROOF & YARD DRAIN
- = PROPOSED UNDERGROUND POWER
- = PROPOSED CONTOUR (INDEX)
- = PROPOSED CONTOUR (NORMAL)
- = PROPOSED RETAINING WALL
- = PROPOSED ASPHALT
- = PROPOSED CONCRETE
- = PROPOSED LANDSCAPING
- = PROPOSED STRIPING
- = PROPOSED LIGHTING ATTACHED TO BUILDING
- = PROPOSED STREET LIGHT
- = PROPOSED POWER STRUCTURE

CALL 2 BUSINESS DAYS BEFORE YOU DIG
UTILITIES UNDERGROUND LOCATION CENTER
1-800-424-5555



R:\Common\Land Projects\2014\455-BARRETT RD PROPERTY.dwg 1455-Civil-MSD-NEW-sewer - AB-phase 1-2.dwg PLOT DATE: 2/1/2023 4:14 PM

NO.	REVISION	BY	DATE
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LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDAL, WA 98248
PHONE 360-383-0620
FAX 360-383-0639

JOB NO.: 1455
DWG. NAME: 1455-NEW-sewer - AB-phase 1-2.dwg
DESIGNED BY: RL
DRAWN BY: RL
CHECKED BY: RL

SAM BOULOS
PO BOX 189
FERNDAL WA

APPROVED

BY: *[Signature]*
CITY OF FERNDAL
PUBLIC WORKS DEPARTMENT

COMPOSITE UTILITY PLAN

BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDAL, WA
A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, W.M.

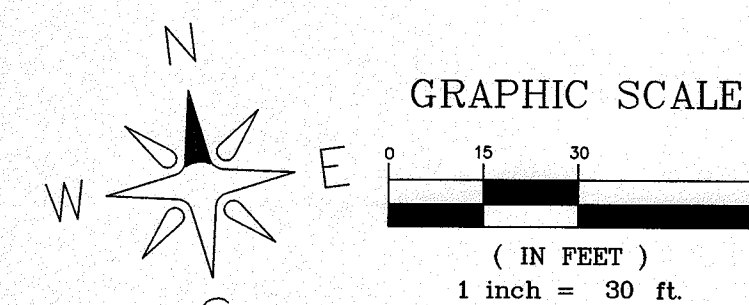
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OF

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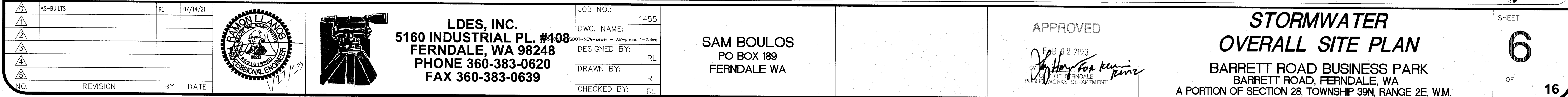
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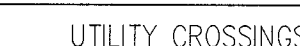
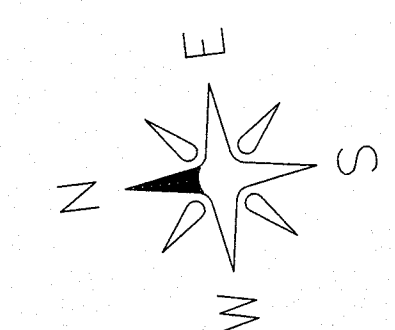


NOTES:

- IT IS THE APPLICANT'S SOLE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, AND TO OBTAIN ANY NECESSARY PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- DEVELOPER TO INSTALL STOP BAR, CITY TO INSTALL STOP SIGN WITH COST BORN BY THE DEVELOPER. THE DEVELOPER SHALL MAINTAIN STOP SIGNS & STOP BARS.
- EXTERIOR LIGHTING TO BE INSTALLED ON BUILDINGS.

28



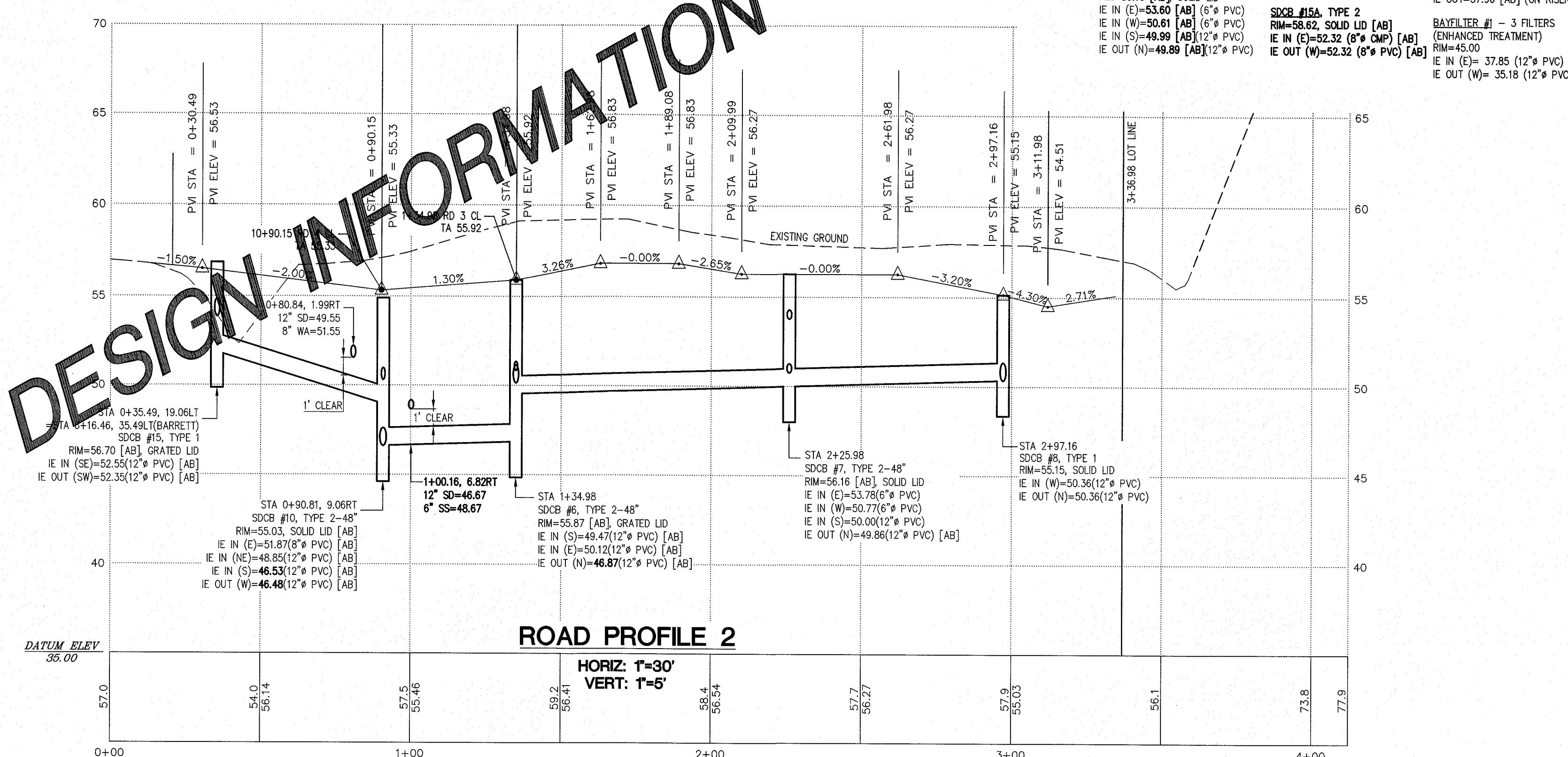
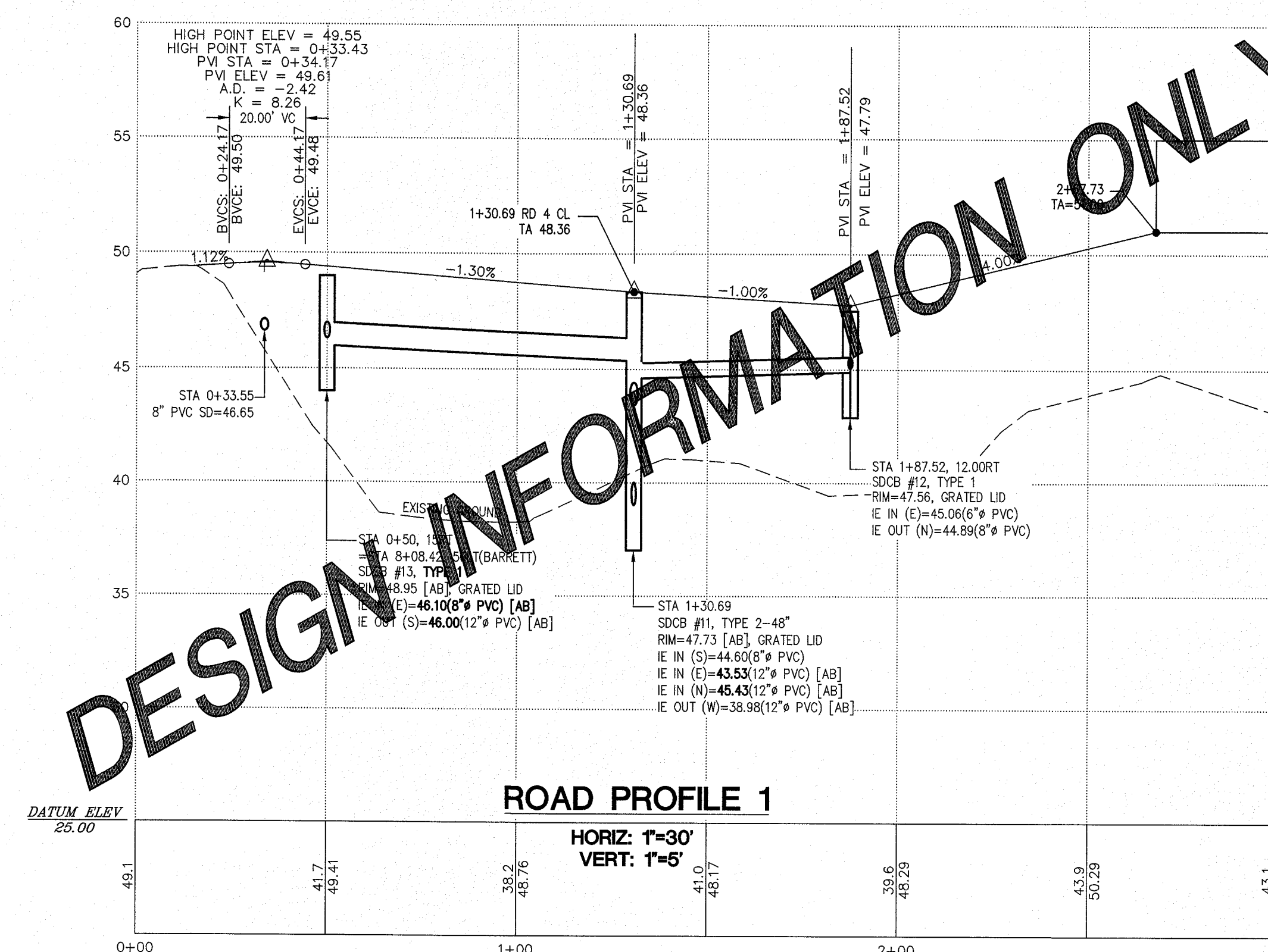
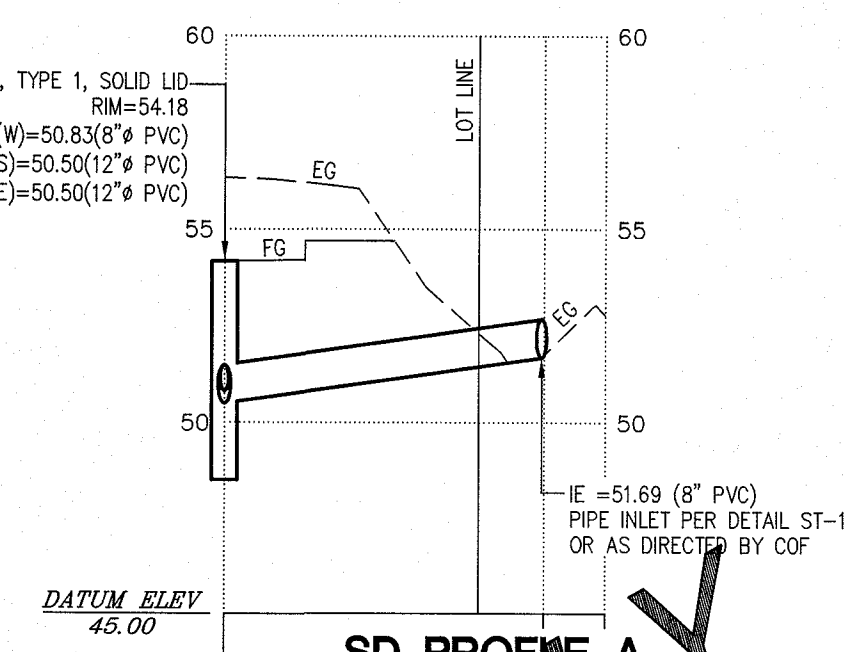


- ① 8" SD=46.49
6" SS=44.76
(1.23' CLEARANCE)
- ② REMOVED
- ③ 12" SD=44.32
6" SS=46.32
(1.00' CLEARANCE)
- ④ 12" SD=46.06
6" WA=50.20 (3'
FG=53.70
(3.14' CLEARANCE)

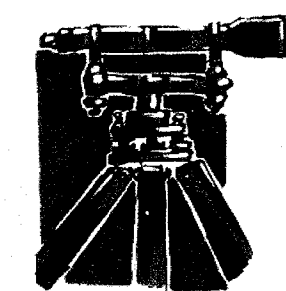
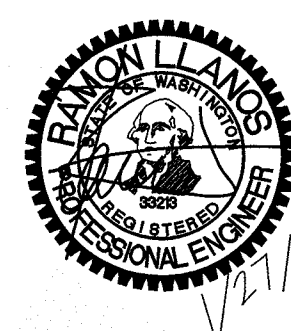
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|----|---|----|---|----|---|
| 5 | 6" SS=48.21
6" WA=50.50 (3' COVER)
FG=53.53
(1.79' CLEARANCE) | 11 | 12" SD=59.35
8" WA=51.53 (2.95' COVER)
FG=64.80
(1' CLEARANCE) | 16 | 6" SS=48.22
6" WA=44.34
FG=48.98
(1.38' CLEARANCE) |
| 12 | 12" SD=46.67
8" WA=46.67
(1' CLEARANCE) | 17 | 12" SS=49.55
8" WA=51.55
FG=55.43
(1' CLEARANCE) | 17 | 6" SS=48.07
6" WA=44.28
FG=46.69
(1.29' CLEARANCE) |
| 7 | 12" SS=51.14
6" WA=49.64
(1.0' CLEARANCE) | 19 | 10" SS IE=60.73
8" WA IE=63.93
FG=58.34
(2.4' CLEARANCE) | | |
| 12 | 12" SD=52.25
6" WA=54.29 (3' COVER)
FG=57.79
(1.04' CLEARANCE) | 19 | 10" SS IE=58.70
8" SD IE=61.54
(2' CLEARANCE) | | |
| 8 | 8" SD=46.58
6" WA=44.69
(1.39' CLEARANCE) | 19 | 12" SD=44.42
6" SS=46.51
(1.09' CLEARANCE) | | |

STORM STRUCTURES

SICR_#1#1, TYPE 1 IRM=66.21 (A#) SOUD LIU IE IN (C)=63.51(12° PWC) [AB] IE IN (S)=63.46(8° PWC) [AB] IE OUT (W)=61.36(8° PWC) [AB] SICR_#1#2, TYPE 1 IRM=65.54 (A#) GRATED LIU IE OUT (W)=64.04 (8° PWC) [AB] IE OUT (N)=63.98 (8° PWC) [AB]	SICR_#5#1, TYPE 1 IRM=55.15 (A#) SOUD LIU IE IN (W)=50.38 (A#) (12° PWC) IE OUT (W)=50.38 (A#) (12° PWC)	SICR_#4#1, INLET IRM=49.52 (A#) , THRU-CURB IE IN (S)=74.22(8° PERP PWC) [A] IE OUT (W)=47.65(8° PWC) [AB]
SICR_#6#1, TYPE 1 IRM=66.54 (A#) GRATED LIU IE OUT (W)=63.94 (8° PWC) [AB] IE OUT (N)=63.88 (8° PWC) [AB]	SICR_#5#2, TYPE 1 IRM=53.86 (A#) GRATED LIU IE OUT (C)= 50.97[AB] (8° PWC)	SICR_#5#1, TYPE 1 IRM=56.70 (A#) GRATED LIU IE OUT (S)=55.52(12° PWC) [AB] IE OUT (SW)=52.35(12° PWC) [AB]
SICR_#6#2, TYPE 1 IRM=66.53 (A#) SOUD LIU IE IN (C)=63.63(8° PWC) [AB] IE IN (S)=63.88(8° PWC) [AB] IE OUT (N)=63.63(8° PWC) [AB]	SICR_#5#3, TYPE 1 SOUD LIU IE IN (W)=50.38 (A#) (12° PWC) IE OUT (C)= 50.91 [AB] (12° PWC) IE OUT (C)= 50.46 [AB] (12° PWC)	SICR_#6#2, CONCRETE INLET IRM=64.29 (A#) , THRU-CURB IE OUT (SW)=61.59(8° PWC) [AB]
SICR_#4#1, TYPE 2-48" IRM=63.76 (A#) SOUD LIU IE IN (S)=60.80(8° PWC) [AB] IE IN (SE)=58.05(12° PWC) [AB] IE OUT (NW)=58.00(12° PWC) [AB]	SICR_#5#4, TYPE 2-48" IRM=52.50 (A#) SOUD LIU [AB] IE IN (E)=51.87(8° PWC) [AB] IE IN (NE)=48.85(12° PWC) [AB] IE IN (S)=46.53(12° PWC) [AB] IE OUT (W)=46.48(12° PWC) [AB]	SICR_#7#1, TYPE 1 IRM=64.56 (A#) SOUD LIU IE IN (NE)=61.51(8° PWC) [AB] IE OUT (NW)=61.31(12° PWC) [AB]
SICR_#5#1, TYPE 1 IRM=62.04 (A#) GRATED LIU IE IN (SE)=56.94(12° PWC) [AB] IE OUT (W)=58.48(12° PWC) [AB]	SICR_#5#1, TYPE 2-48" IRM=47.73 (A#) GRATED LIU IE IN (S)=44.60(8° PWC) IE IN (C)=43.53(12° PWC) [AB] IE IN (N)=43.53(12° PWC) [AB] IE OUT (W)=38.98(12° PWC) [AB]	SICR_#8#1, TYPE 1 IRM=70.57 (A#) GRATED LIU IE OUT (W)=67.51(12° PWC) [AB]
SICR_#5#2, TYPE 2-48" IRM=58.57 (A#) GRATED LIU IE IN (S)=49.47(12° PWC) [AB] IE IN (E)=50.12(12° PWC) [AB] IE OUT (N)=48.87(12° PWC) [AB]	SICR_#5#1, TYPE 2-48" IRM=47.75 (A#) GRATED LIU IE IN (E)=45.06(8° PWC) IE OUT (N)=44.89(8° PWC)	SICR_#8#2, TYPE 1 IRM=37.89 (A#) SOUD LIU [AB] IE IN=34.29 (12° PWC) [AB] IE OUT = 34.29 (12° PWC) [AB]
SICR_#6#4, TYPE 1 IRM=56.27 (A#) GRATED LIU IE IN (C)=53.57(8° PERP) [AB] IE OUT (W)=52.92(8° PWC) [AB]	SICR_#5#3, TYPE 1 IRM=46.85 (A#) GRATED LIU IE IN (E)=46.10(8° PWC) IE OUT (S)=46.00(12° PWC) [AB]	CONTROL_STRUCTURE_#1 TYPE 2-54" IRM=45.80 (A#) TOP OF RISER 18" RISER=44.00 IE IN=37.90 (A#) IE OUT = 37.90 (A#) (ON RISER)
SICR_#5#1, TYPE 2-48" IRM=56.16 (A#) SOUD LIU IE IN (S)=50.81 (A#) (8° PWC) IE IN (W)=50.61 (A#) (8° PWC) IE IN (S)=49.49 (A#) (12° PWC) IE OUT (N)=48.89 (A#) (12° PWC)	SICR_#5#5, TYPE 2 IRM=58.62 (A#) SOUD LIU IE IN (C)=52.32 (8° CMP) [AB] IE OUT (W)=52.32 (8° PWC) [AB]	RAVITELLER - 3 FILTERS (ENHANCED TREATMENT) IRM=45.00 IE IN (W)= 35.18 (12° PWC) IE OUT (W)= 35.18 (12° PWC)



0	AS-BUILTS	RL	07/14/21
1			
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NO.	REVISION	BY	DATE



LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDALE, WA 98248
PHONE 360-383-0620
FAX 360-383-0639

JOB NO.:	14555
DWG. NAME:	MS00T-NEW-sewer - AB-phase 1-2.dwg
DESIGNED BY:	RL
DRAWN BY:	RL
CHECKED BY:	RL

SAM BOULOS
PO BOX 189
FERNDALE WA

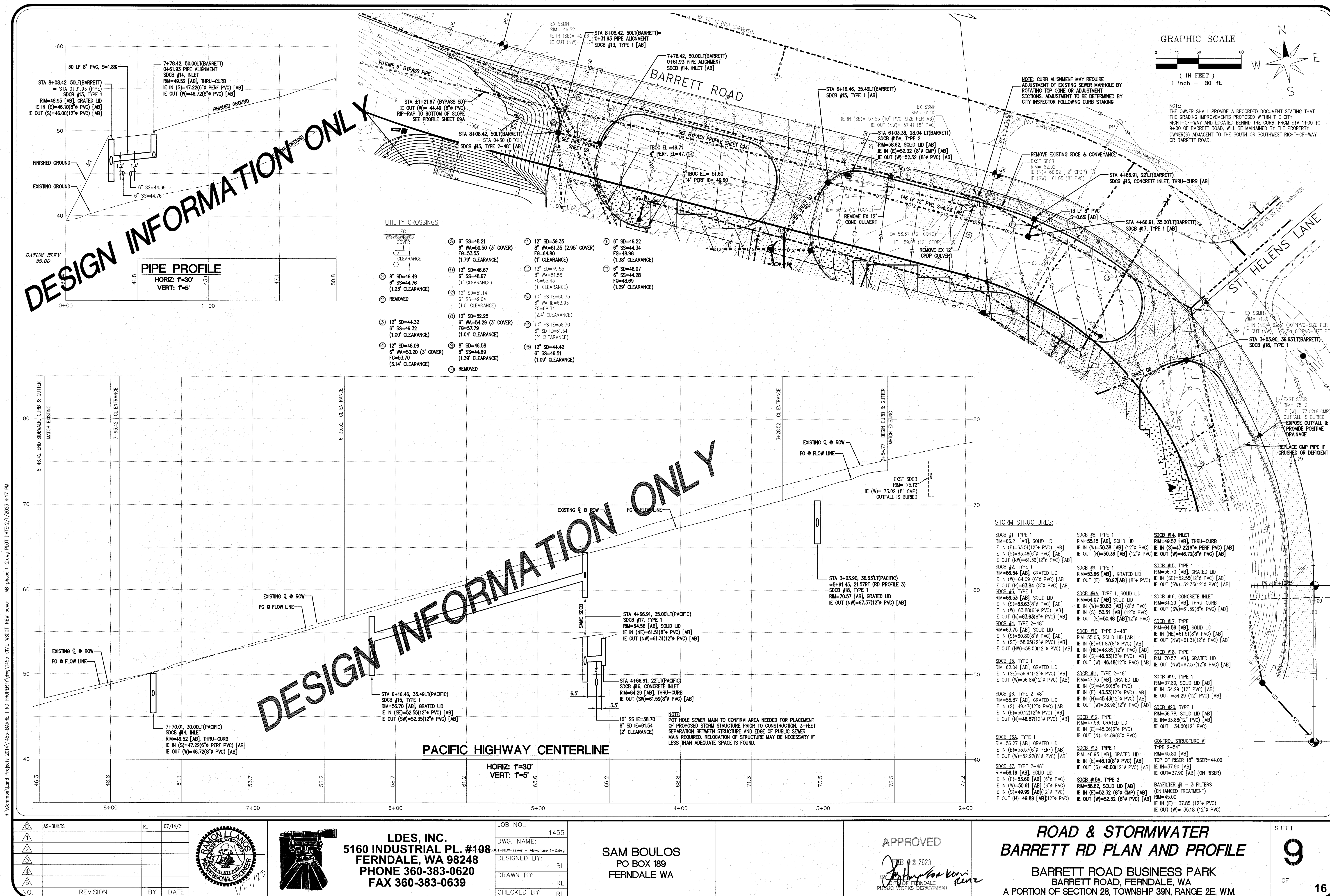
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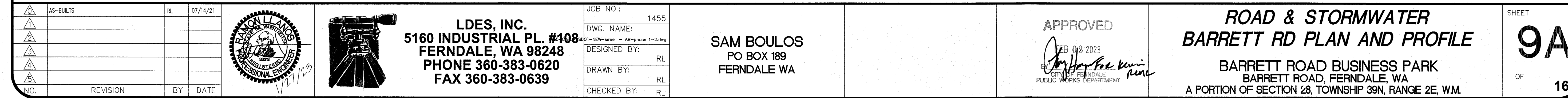
FEB 02 2023
BY Jay Harper Kevin
CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT Run

ROAD & STORMWATER
ON-SITE PLAN & PROFILES 1 & 2
BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDALE, WA
A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, W.M.

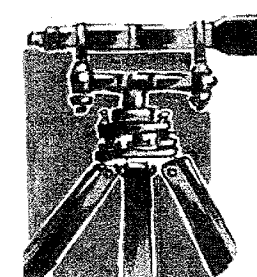
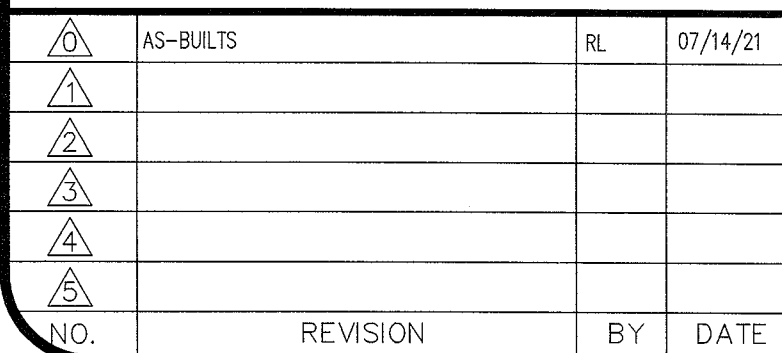
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OF

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JOB NO.:	1455
DWG. NAME:	SDOT-NEW-sewer - AB-phase 1-2.dwg
DESIGNED BY:	RL
DRAWN BY:	RL
CHECKED BY:	RL

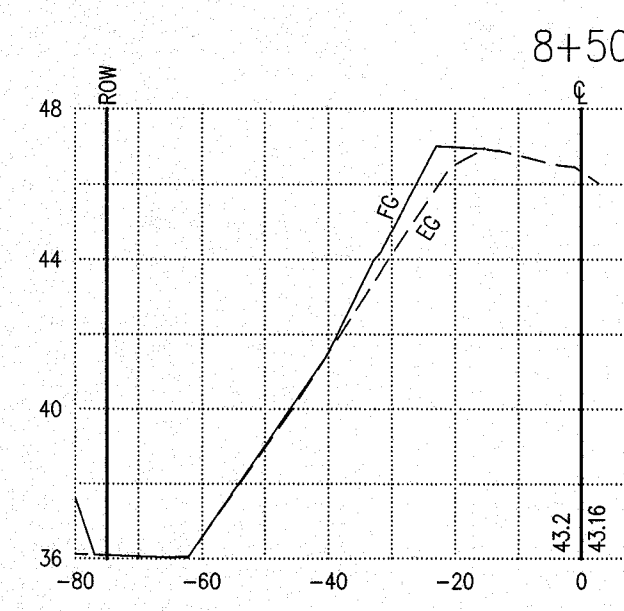
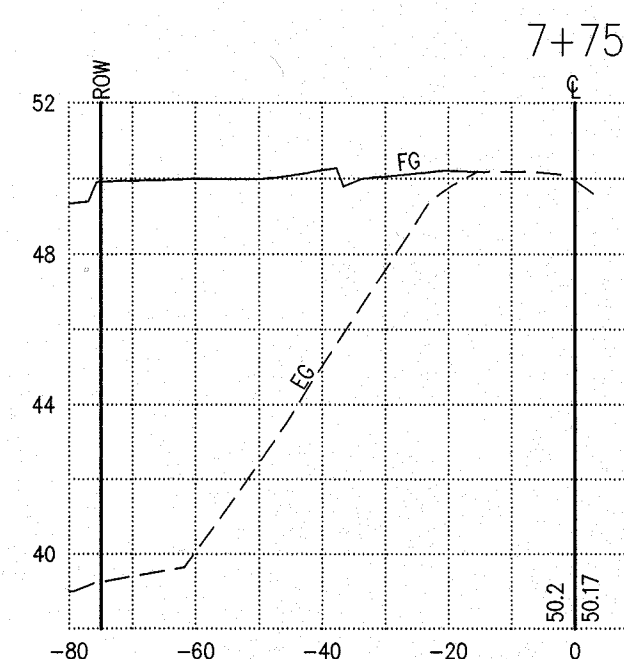
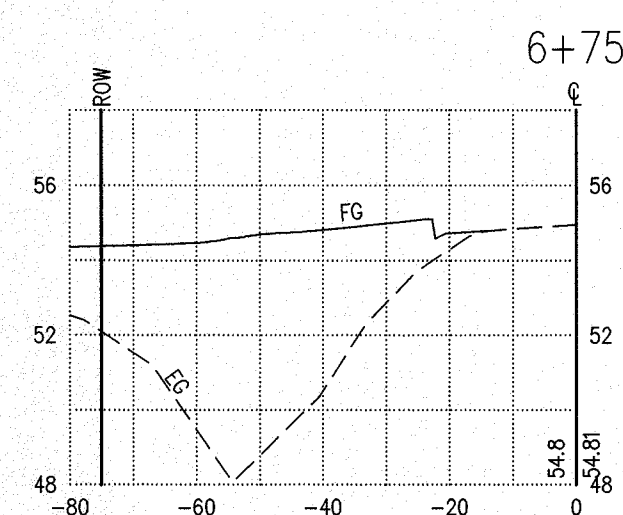
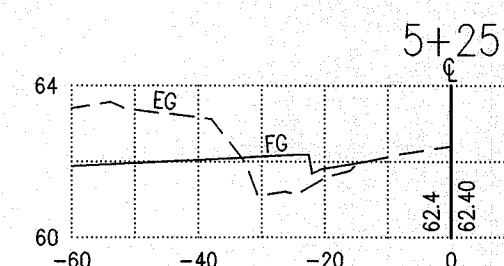
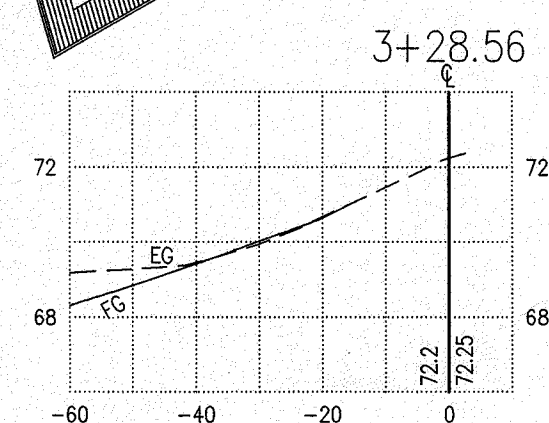
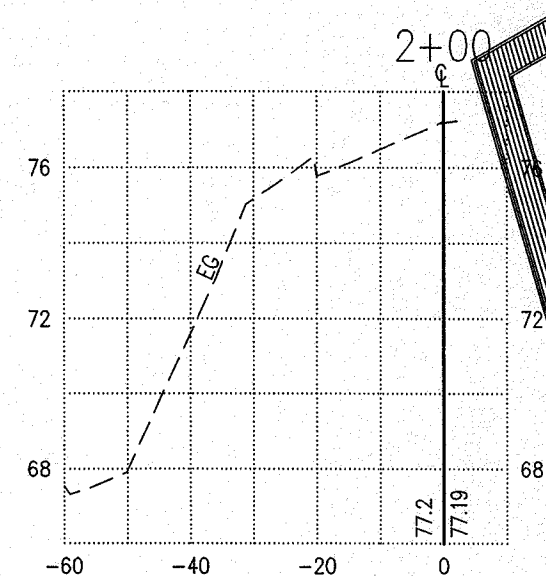
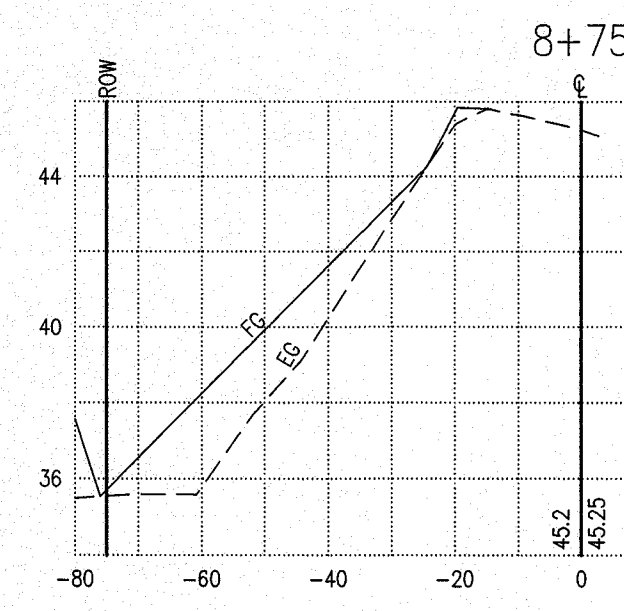
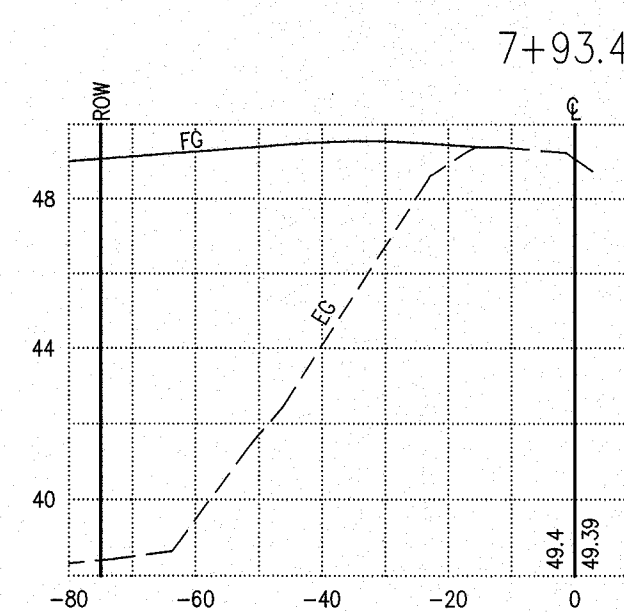
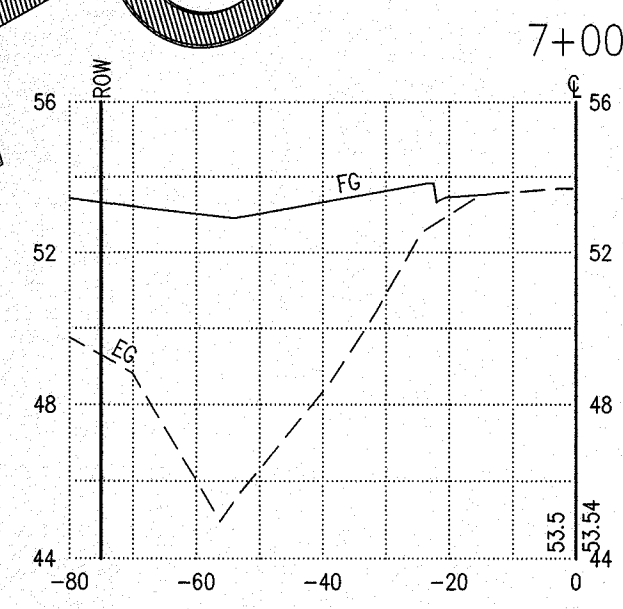
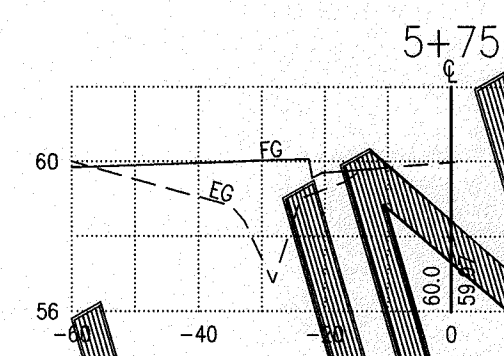
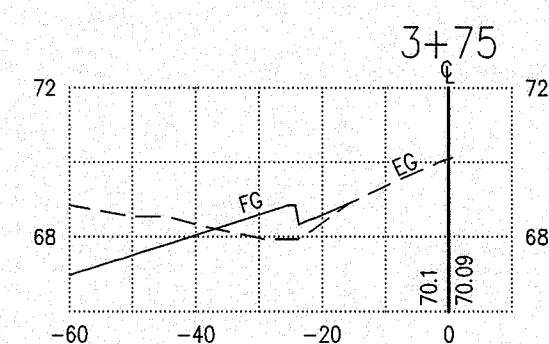
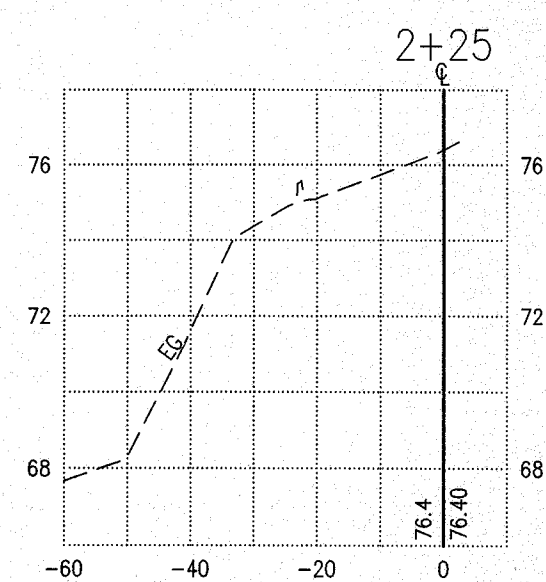
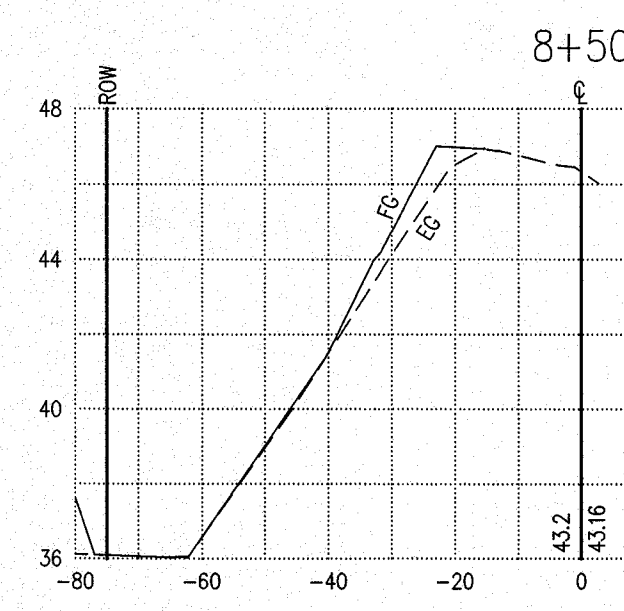
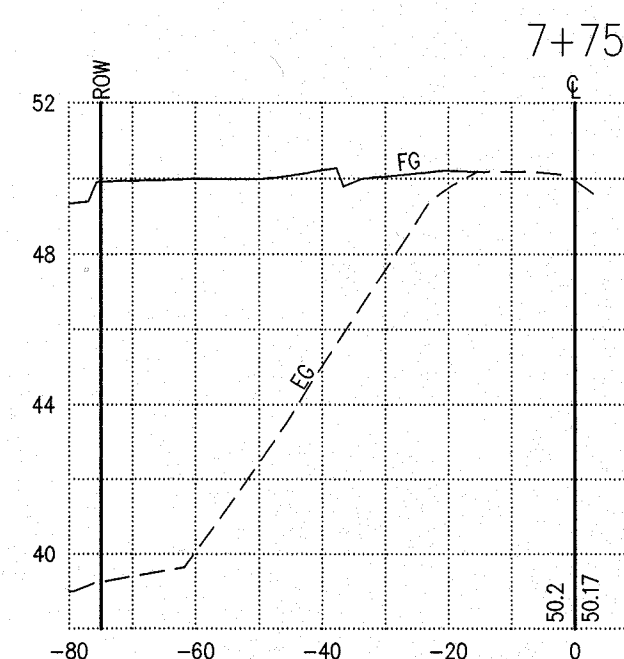
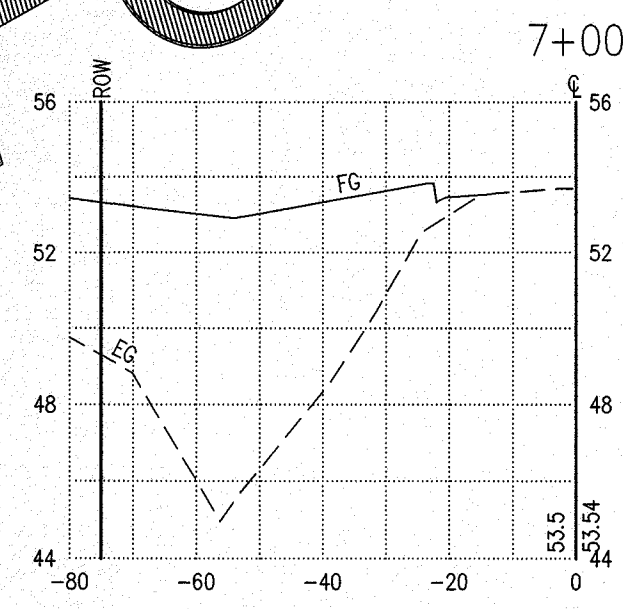
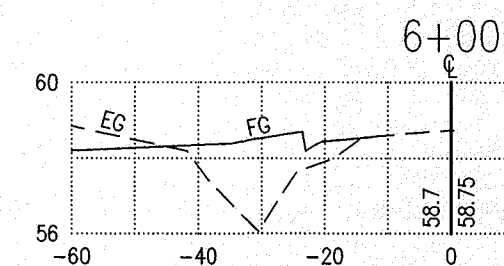
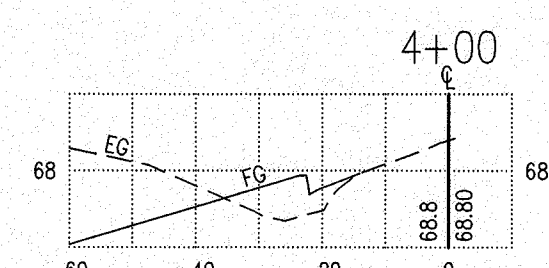
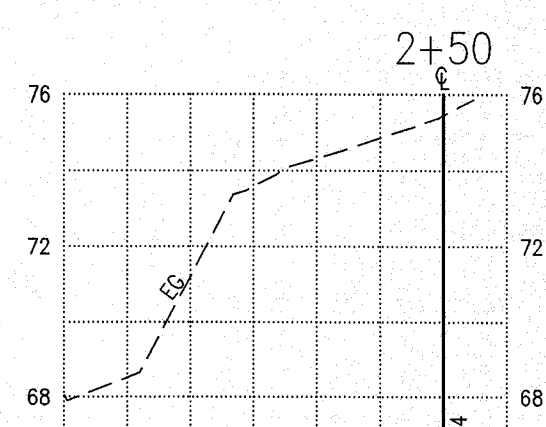
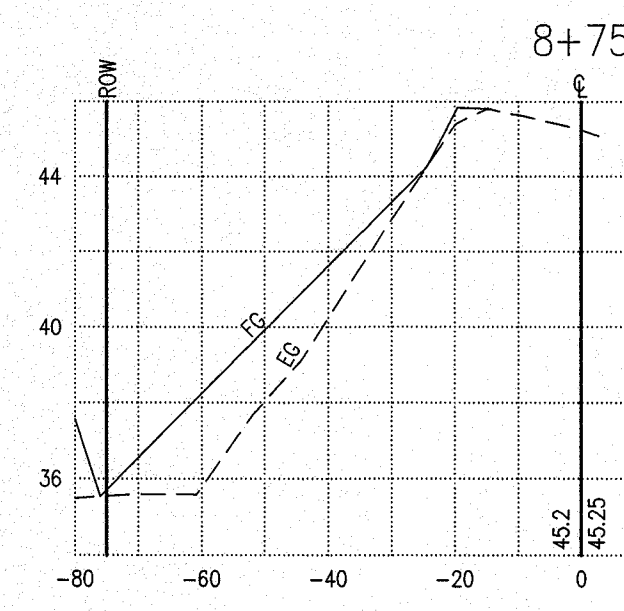
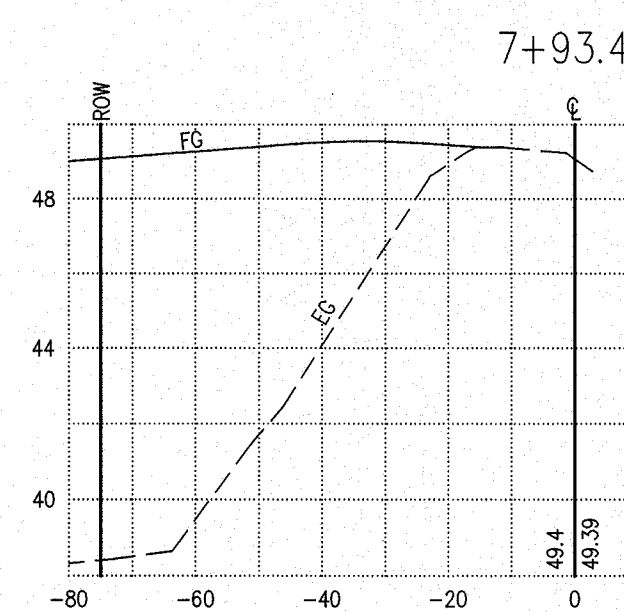
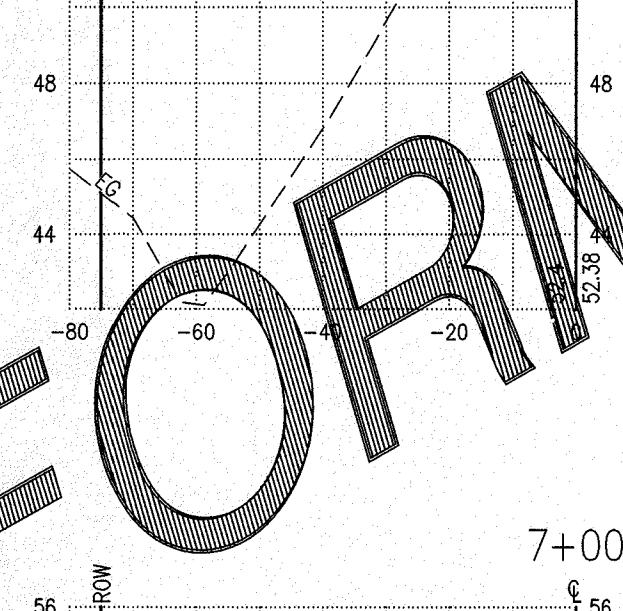
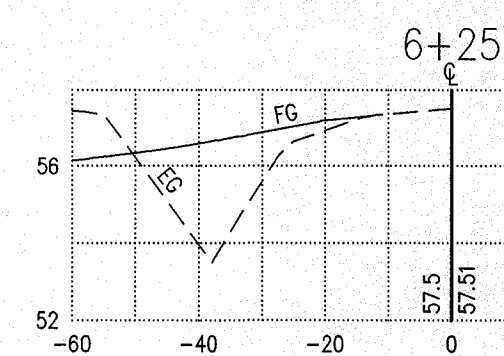
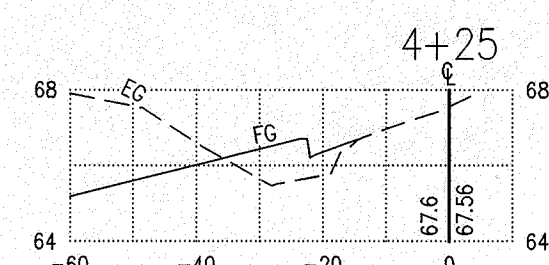
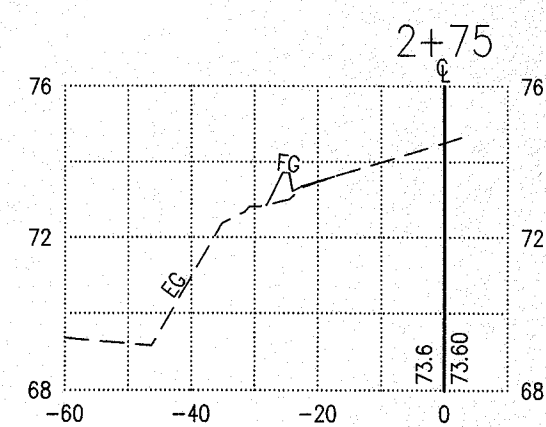
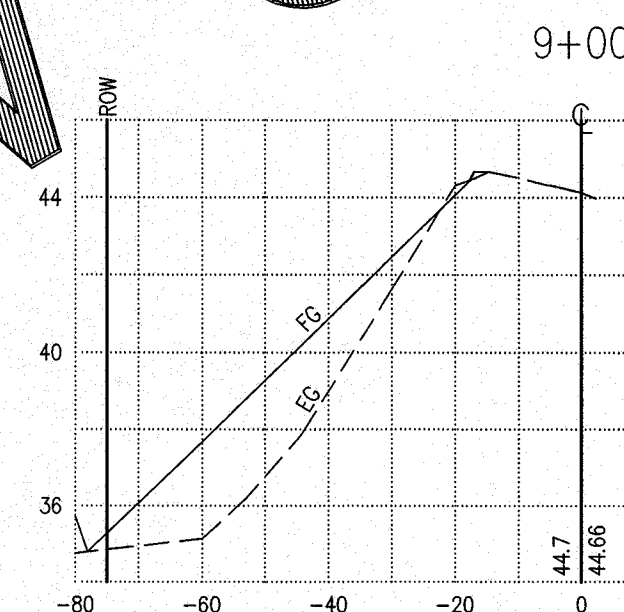
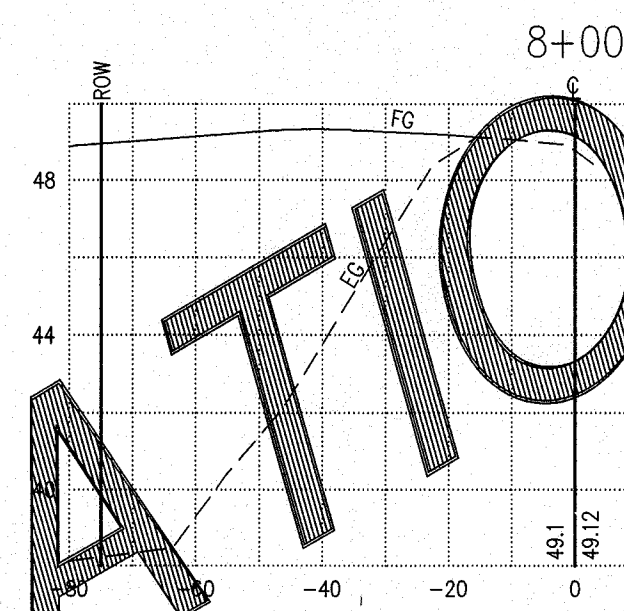
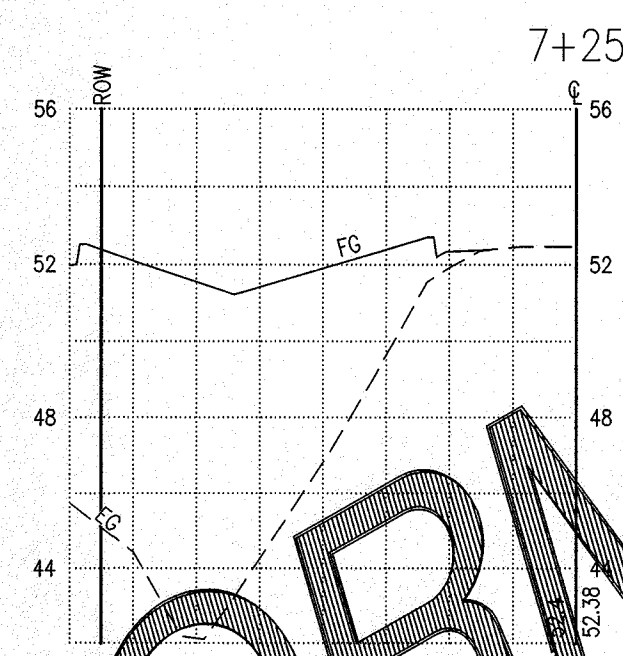
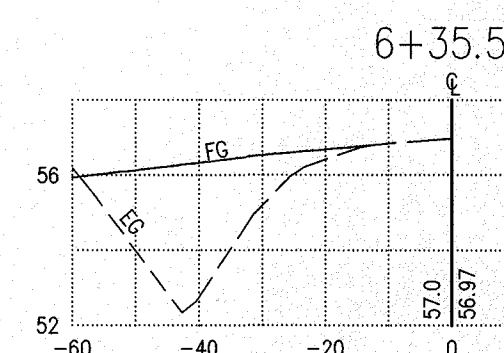
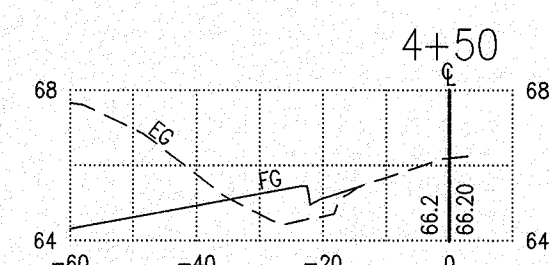
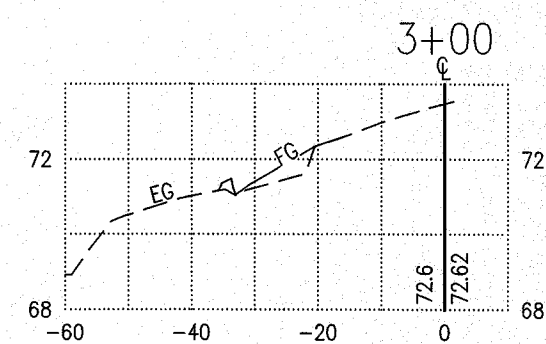
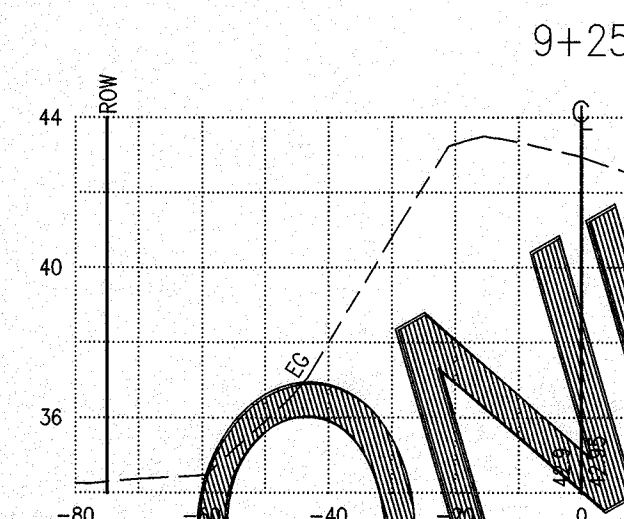
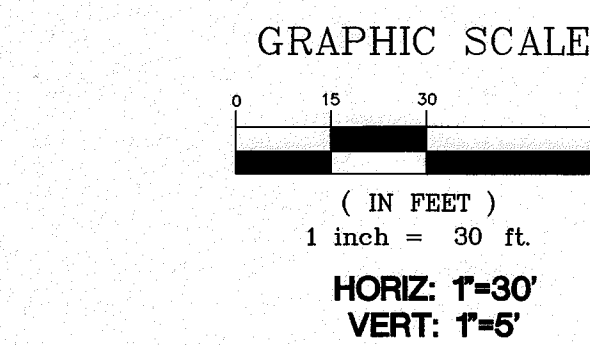
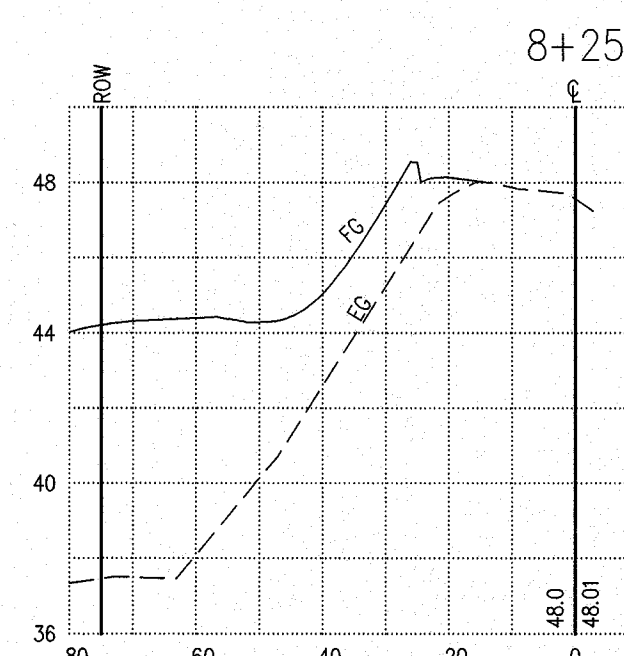
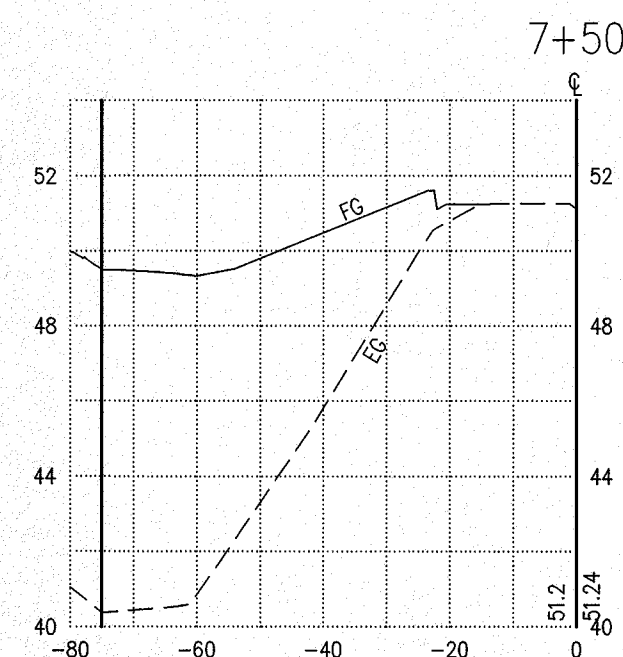
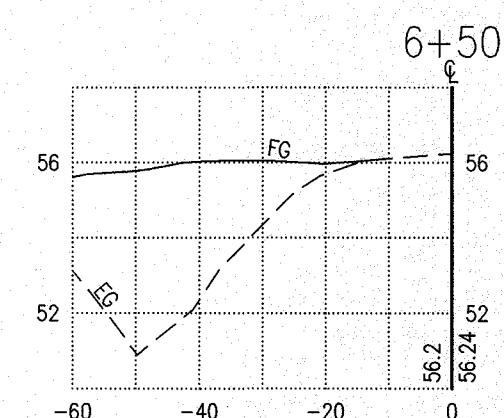
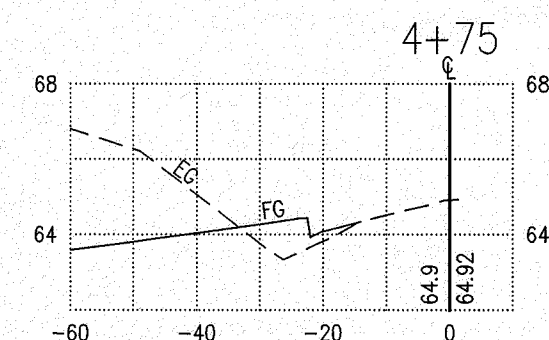
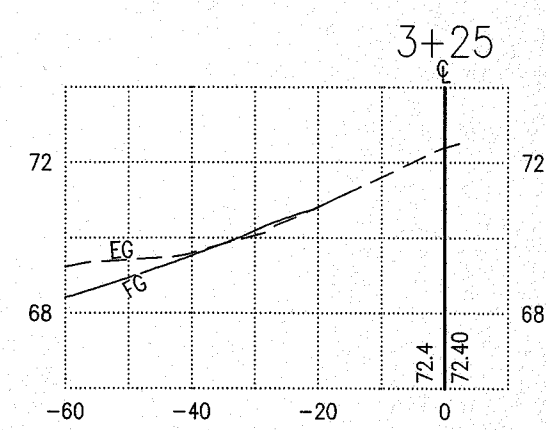
FEB 02 2023
 City of Peabody
 PUBLIC WORKS DEPARTMENT
 Kevin Pen

BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDALE, WA
PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E.

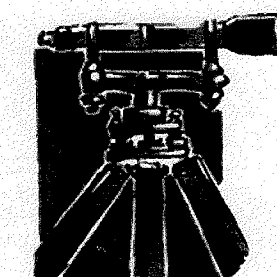
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16

R:\Common\Land Projects 2014\1455-BARRETT RD PROPERTY\DWG\1455-CNL-WSOT-NEW-sewer - AB-phase 1-2.dwg PLOT DATE: 1/27/2023 12:13 PM



NO.	REVISION	BY	DATE
1	AS-BUILTS	RL	07/14/21
2			
3			
4			
5			



LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDAL, WA 98248
PHONE 360-383-0620
FAX 360-383-0639

JOB NO.: 1455
 DWG. NAME: 1455-NEW-sewer - AB-phase 1-2.dwg
 DESIGNED BY: RL
 DRAWN BY: RL
 CHECKED BY: RL

SAM BOULOS
 PO BOX 189
 FERNDAL WA

APPROVED

FEB 02 2023
 J. H. Lee
 PUBLIC WORKS DEPARTMENT

CROSS-SECTIONS
BARRETT: STA 2+00 TO 9+50
 BARRETT ROAD BUSINESS PARK
 BARRETT ROAD, FERNDAL, WA
 A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, W.M.

SHEET
12
 OF
 16

RECORD DRAWINGS

EXTRUDED CURB AT BEAM GUARDRAIL TYPE 1

FACE OF CURB SHALL NOT EXCEED FACE OF GUARDRAIL

EXTRUDED CURB TYPE 1, 2, 3, 4, 5, OR 6 SEE NOTE 4

1" MAX

4H:1V OR FLATTER SLOPE

SEE NOTE 6

EXTRUDED CURB AT BEAM GUARDRAIL TYPE 1

ASPHALT CURB TYPE 3

10" (2.5" + 5" + 2.5")

6" (1" + 1"R + 1"R + 1"R)

1.5"R

1"R

CEMENT CONCRETE CURB TYPE 6

10" (2.5" + 5" + 2.5")

6" (1" + 1"R + 1"R)

1.5"R

1"R

#3 BAR 6" MIN.

NOTES

- EXTRUDED CURB ONLY ALLOWED AT LOCATIONS WITH GUARDRAIL.
- SPACING OF ANCHOR BARS SHALL BE 10" ON CENTER WITH A #3 BAR LOCATED 12" FROM THE END OF ANY CURB/SAWED CURB JOINT.
- THE INSTALLATION OF CURB IN AREAS WITH EXISTING GUARDRAIL MAY REQUIRE THE REMOVAL AND RESETING OF THE GUARDRAIL OR ITS COMPONENTS.
- TYPE 3 AND 6 CURBS ARE NOT USED ON ROADWAYS WITH A POSTED SPEED GREATER THAN 40 MPH AND UNDER BEAM GUARDRAIL ON ROADWAYS WITH A POSTED SPEED GREATER THAN 50 MPH. USE TYPES 1, 2, 3, OR 4 PER FRIEDT STD. PLAN F-10.42-50 FOR SPEED GREATER THAN 40 MPH.
- CONCRETE SHALL BE CEMENT CONCRETE "CLASS 3000".
- EXTEND SHOULDER PAVEMENT TO PROVIDE A BASE FOR THE EXTRUDED CURB.

AUGUST 1, 2017

APPROVED _____

Public Works Director

8/11/17 _____

Date

EXTRUDED CURB STANDARD DETAIL R-10

NOT TO SCALE

[illegible]

CATCH BASIN ALLOWANCES

CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER		PROFILE SOLID PAVC
	CONCRETE	CHSP	
48"	24"	30"	30"
54"	30"	36"	36"
60"	36"	42"	42"
72"	42"	54"	48"
84"	54"	60"	48"
96"	60"	72"	48"
120"	72"	84"	48"
144"	96"	108"	48"

CATCH BASIN DIMENSIONS

CATCH BASIN DIA.	WALL THK	BASE THK	MINIMUM DISTANCE EACH DIRECTION		BASE SEPARATE INTEGRAL BASE
			MINIMUM SIZE	MAXIMUM INKOUTS	
48"	4"	6"	36"	8"	0.15
54"	4.5"	8"	42"	8"	0.19
60"	5"	8"	48"	8"	0.25
72"	6"	8"	60"	12"	0.35
84"	8"	12"	72"	12"	0.39
96"	8"	12"	84"	12"	0.39
120"	10"	12"	96"	12"	0.5
144"	12"	12"	108"	12"	0.5

NOTES:

- No rebar are required when height is 4' or less.
- The bottom of the precast catch basin may be placed at the finished ground level.
- The rectangular frame and grate may be installed with the flange up or down. The frame may be installed with the flange up or down. The frame may be installed with the flange up or down.
- Schedule shall have a wall thickness of 1/2" minimum to 2.5" maximum. Provide a 1/2" minimum gap between the manhole wall and the outside of the catch basin after the installation.
- If the application requires the catch basin to be installed with the flange up or down, refer to Specification 4-4.2.

GENERAL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF C/C JOINTS TO THE POINTS SHOWN. JOINTS MAY BE MADE BY INSERTING MINIMUM 3/16" BITUMINOUS FILLER DUMMY JOINTS. JOINTS SHALL BE CLEANED AND EGGED.
- WEEP HOLES TO BE PLACED ON EACH SIDE OF DRIVEWAY SECTION & A MAXIMUM 60" C/C IN CUT SECTIONS WHERE SIDEWALK DRAIN NOT REQUIRED BY PUBLIC WORKS DIRECTOR.
- 3/8" EXPANSION JOINTS TO BE PLACED AT DRIVEWAY SECTIONS, CURB RETURNS, CURB RAMPS, & COOLD JOINTS OR A MAXIMUM OF 60' C/C. EXPANSION JOINTS SHALL PROTRUDE 1" BELOW THE BOTTOM OF GUTTER.
- CONCRETE SHALL BE CEMENT CONCRETE "CLASS 3000".
- FINISHED WORK SHALL NOT VARY MORE THAN 1/8" IN GRADE AND 1/4" IN ALIGNMENT WHEN CHECKED WITH A 10' STRAIGHT EDGE.
- EXPOSED SURFACES SHALL BE BRUSHED WITH A FIBER HAIR BRUSH.
- WHITE PIGMENTED OR TRANSPARENT CURING COMPOUND SHALL BE APPLIED AS OUTLINED IN THE STANDARD SPECIFICATIONS.
- OTHER REQUIREMENTS SHALL BE AS SPECIFIED IN THE STANDARD SPECIFICATIONS.

PIPE ALLOWANCES

PIPE MATERIAL	MAXIMUM DRAINAGE DRAINAGE
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CROSS- (WOOD STDS. SPEC. 8-48.20)	12"
PROF. CORR. STEEL (WOOD STDS. SPEC. 8-48.12V)	15"
PROF. CORR. STEEL (WOOD STDS. SPEC. 8-48.12V)	15"
3" CORRUGATED POLYETHYLENE STORM SEWER PIPE	15"

FRAME AND VANE GRATE

RECTANGULAR ADJUSTMENT SECTION

PRECAST BASE SECTION

ALTERNATIVE PRECAST BASE SECTION

STANDARD DETAIL R-11

NOTES:

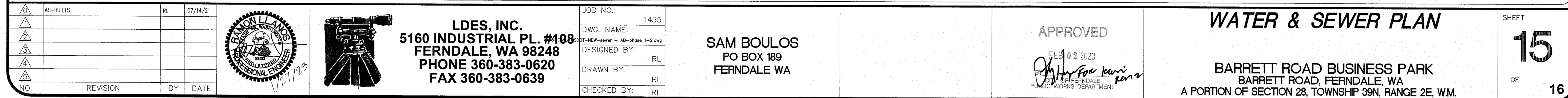
- As applicable, alternatives to the notes shown in the PRECAST BASE SECTION, shall be used. The maximum depth of the PRECAST BASE SECTION shall not exceed 12 inches. The maximum depth of the PRECAST BASE SECTION shall not exceed 12 inches. The maximum depth of the PRECAST BASE SECTION shall not exceed 12 inches.
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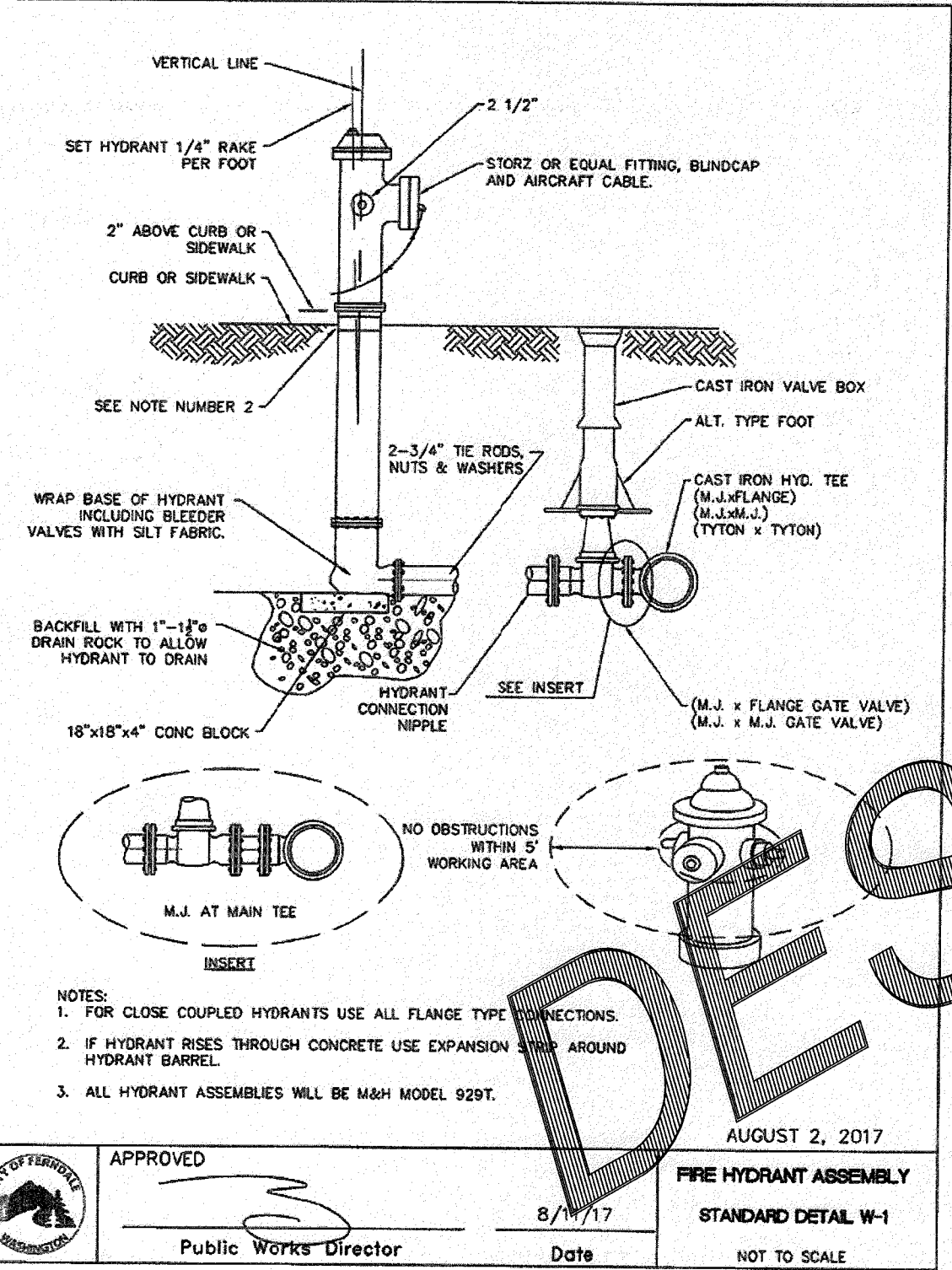
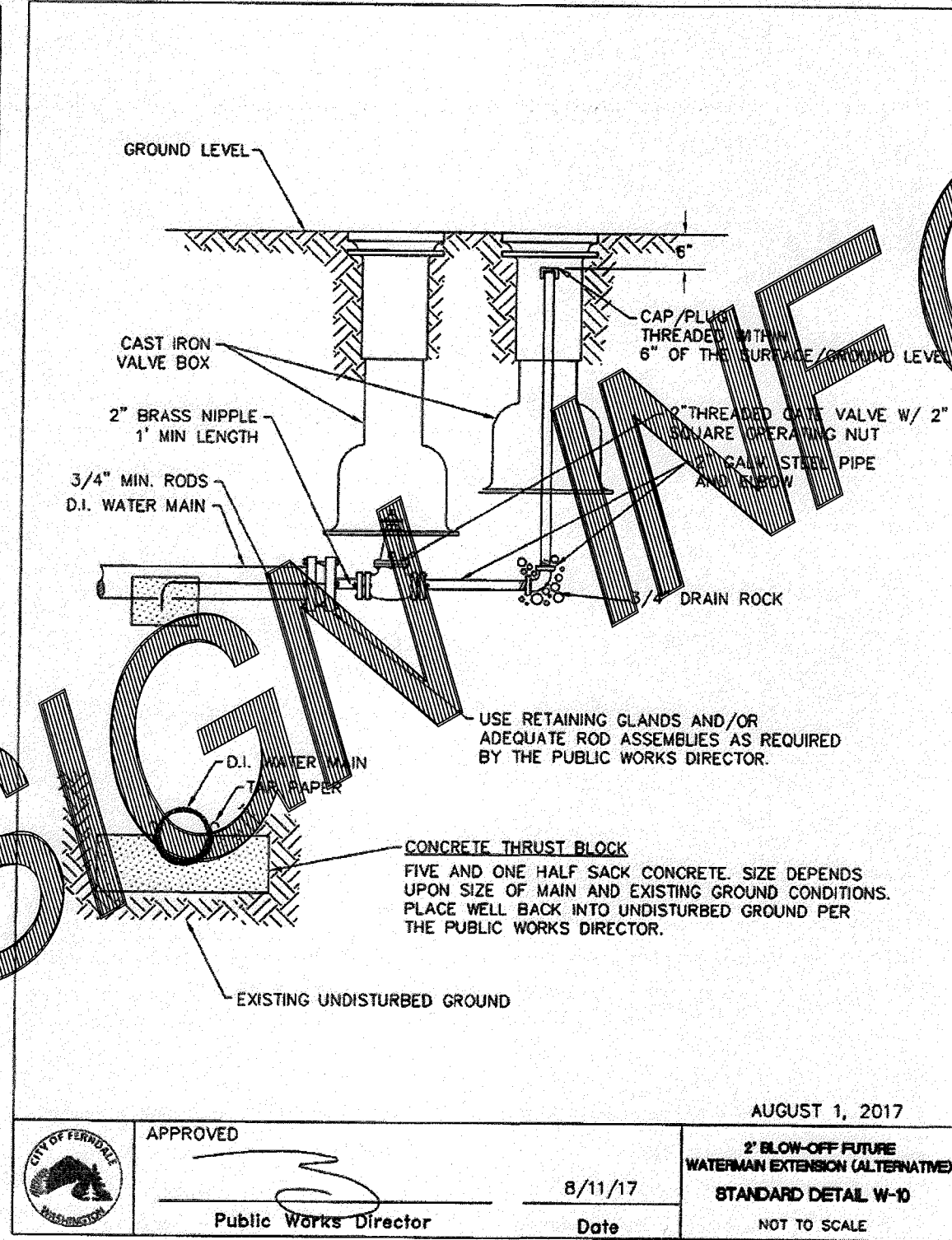
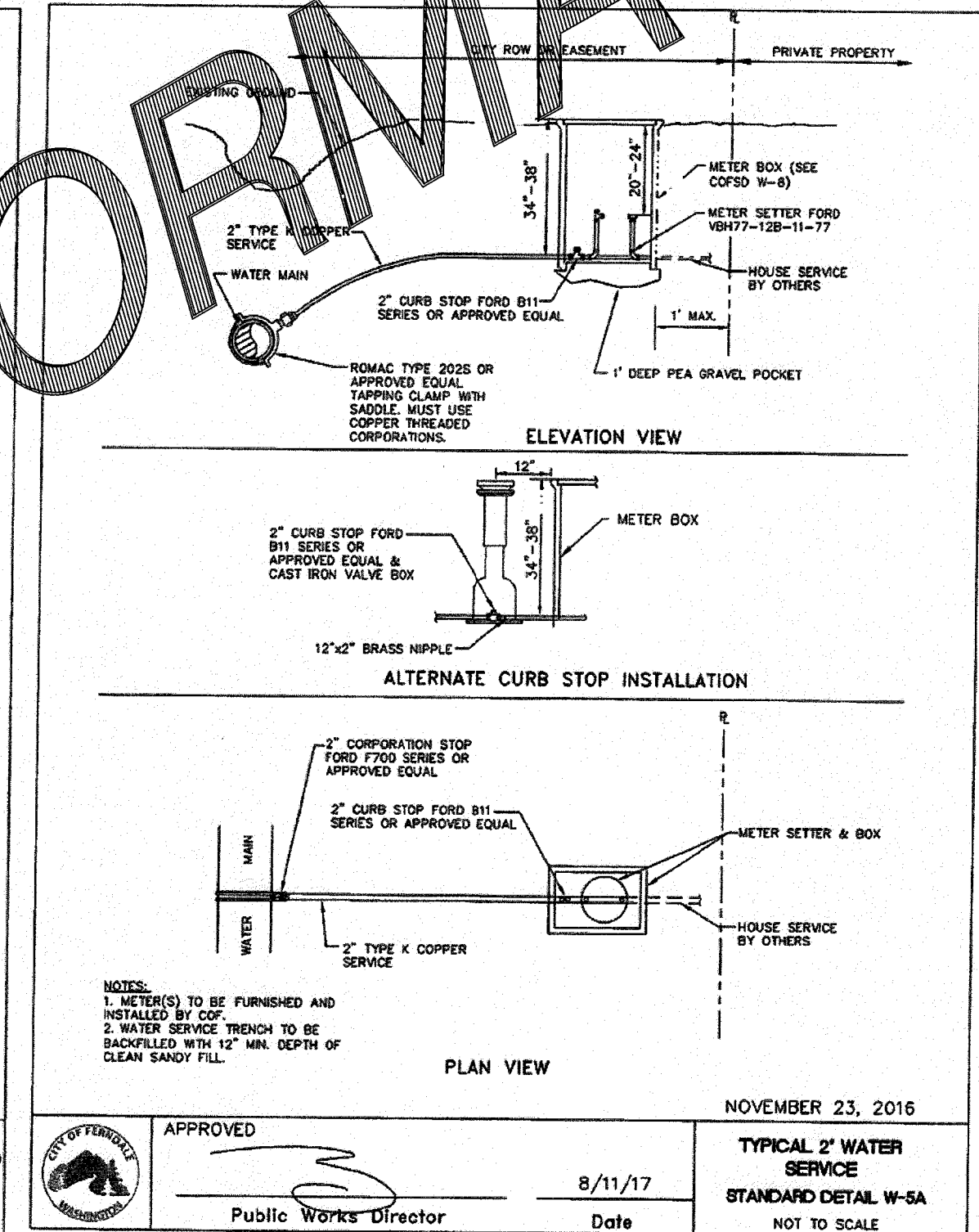
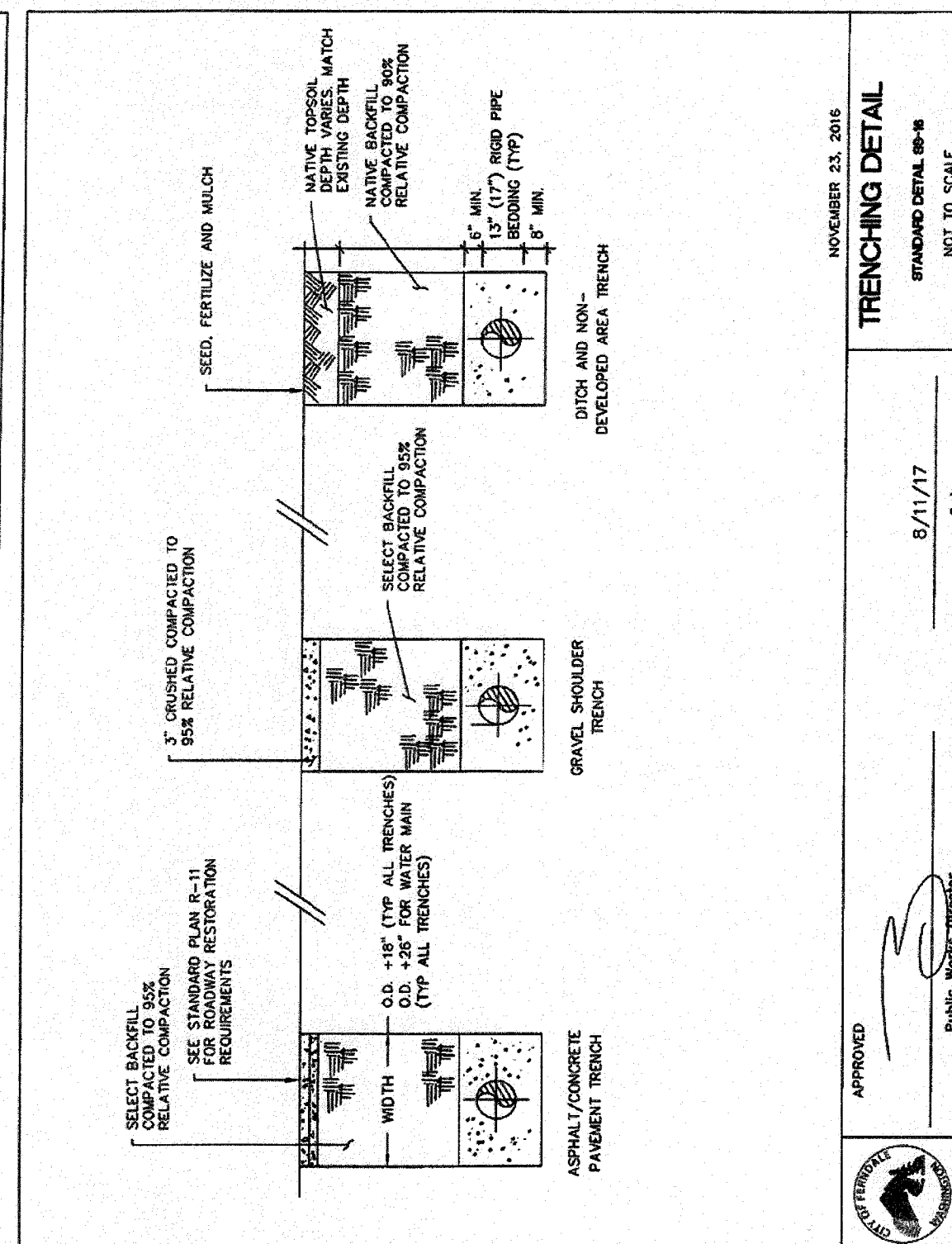
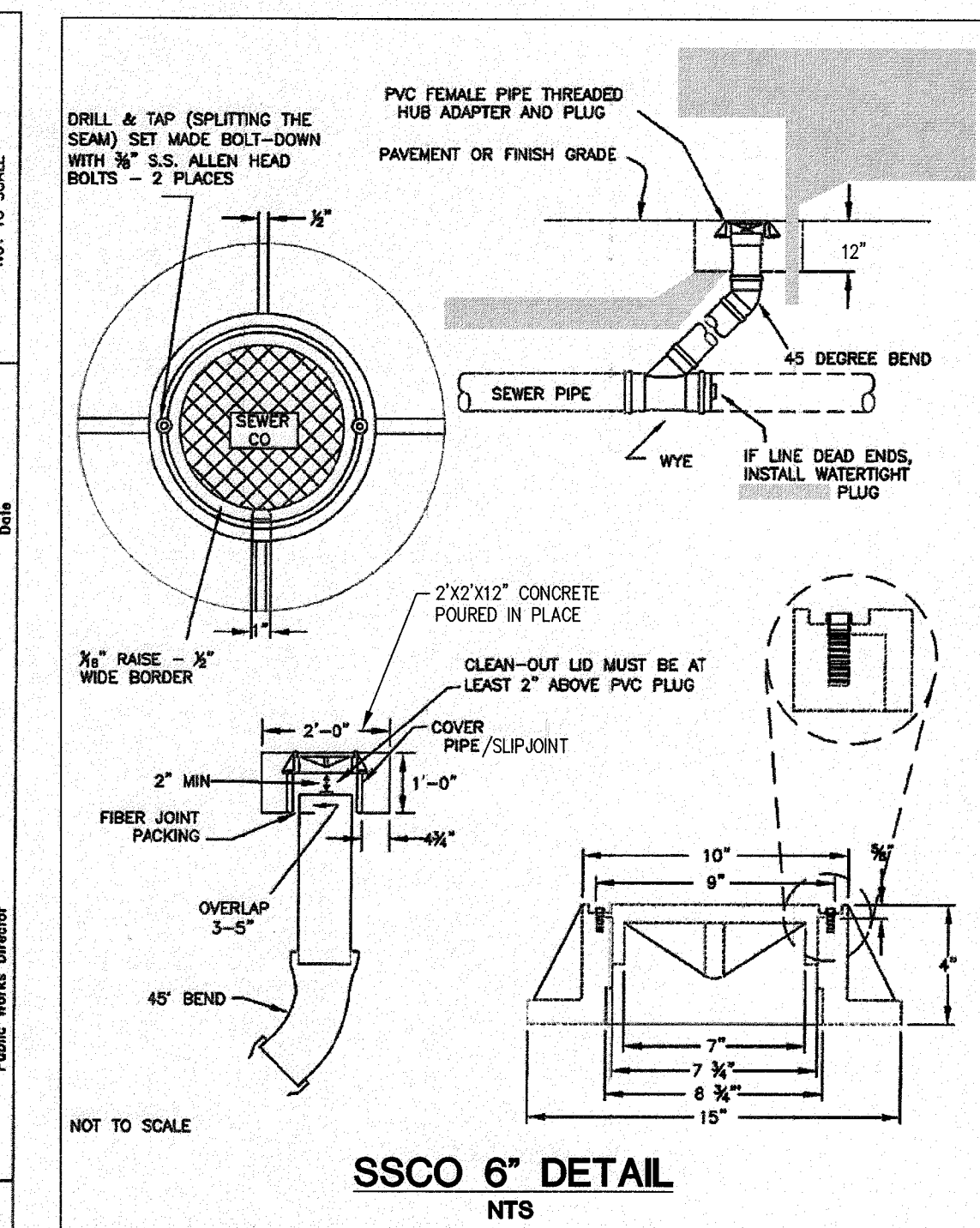
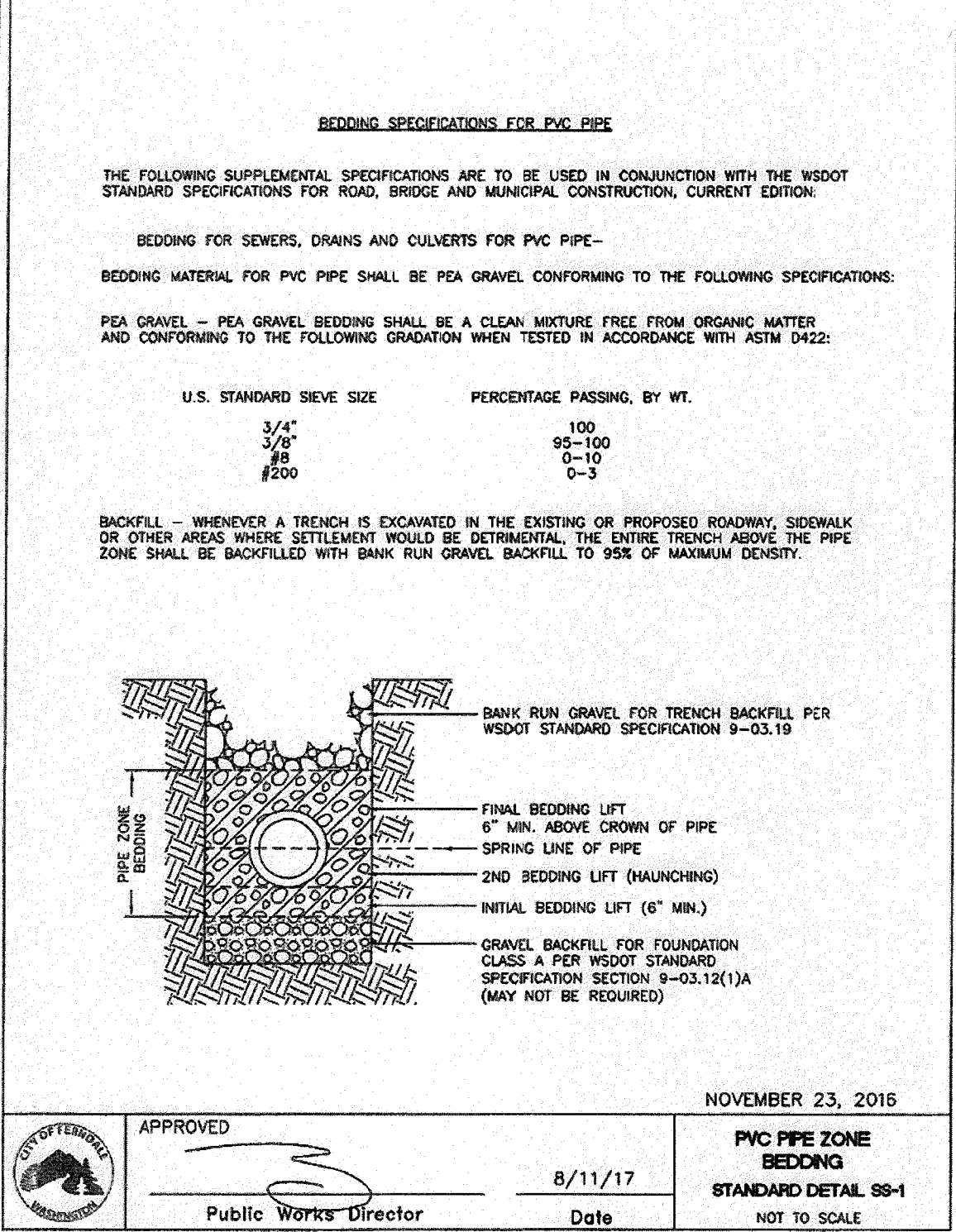
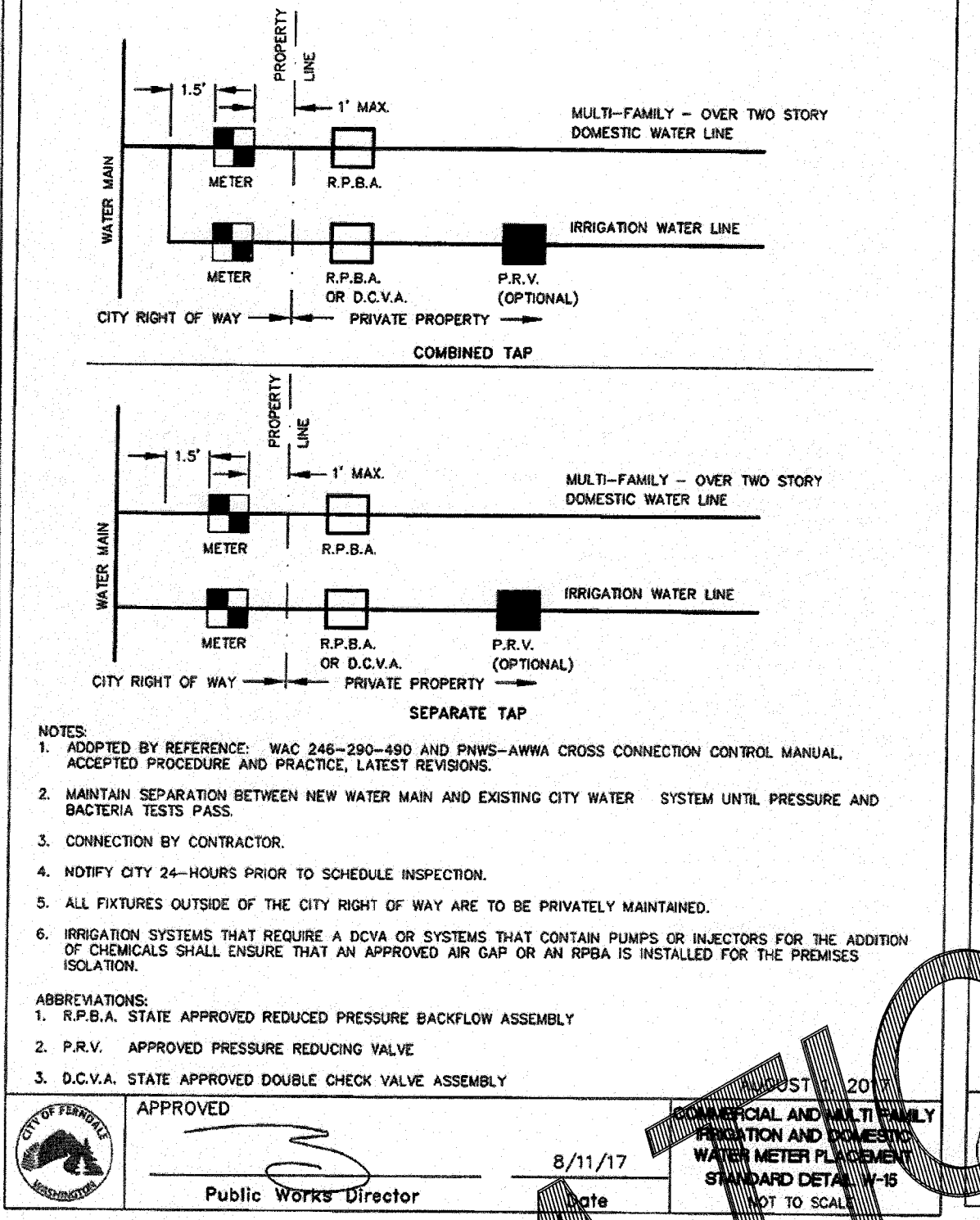
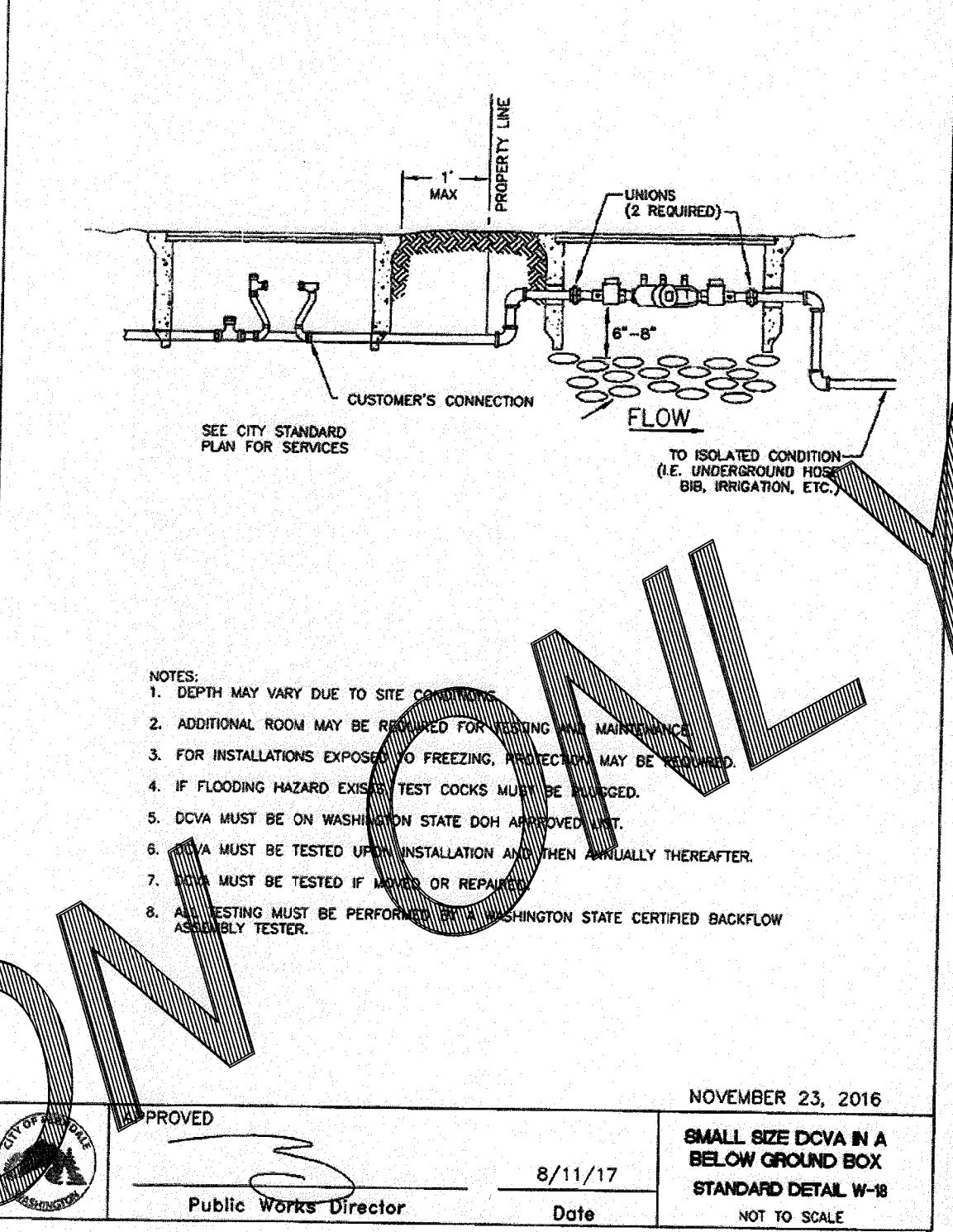
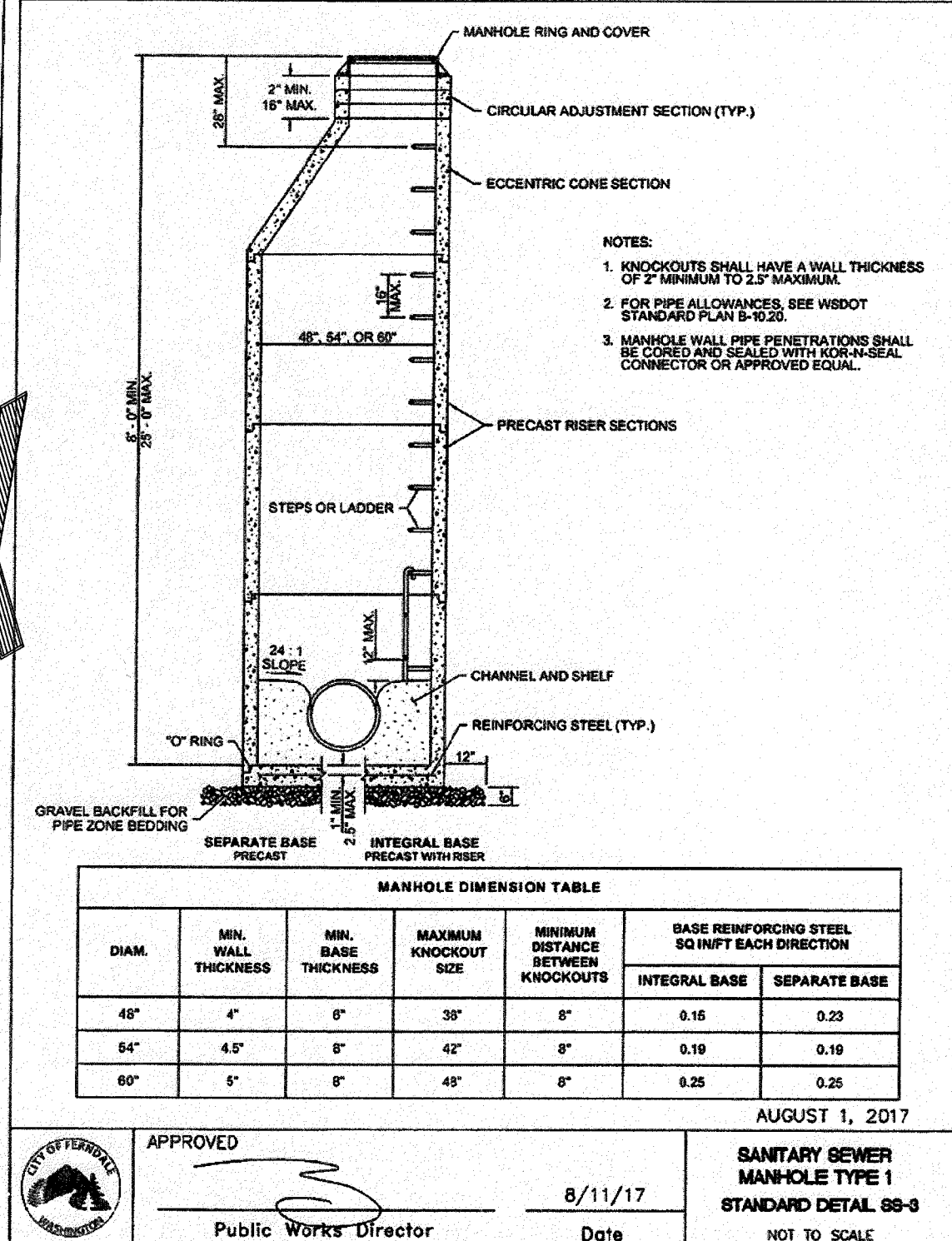
APPROVED

8/11/17

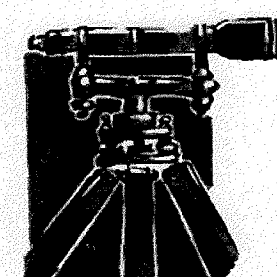
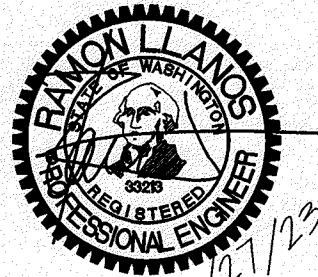
STANDARD DETAIL R-11

NOT TO SCALE





NO.	REVISION	BY	DATE
1	AS-BUILTS	RL	07/14/21



LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDAL, WA 98248
PHONE 360-383-0620
FAX 360-383-0639

JOB NO.:	1455
DWG. NAME:	DOT-NEW-sewer - AB-phase 1-2.dwg
DESIGNED BY:	RL
DRAWN BY:	RL
CHECKED BY:	RL

SAM BOULOS
PO BOX 189
FERNDAL, WA

APPROVED

FEB 02 2023
BY: [Signature]
PUBLIC WORKS DEPARTMENT

**WATER & SEWER
TYPICAL DETAILS**
BARRETT ROAD BUSINESS PARK
BARRETT ROAD, FERNDAL, WA
A PORTION OF SECTION 28, TOWNSHIP 39N, RANGE 2E, WM.

SHEET
16
OF
16