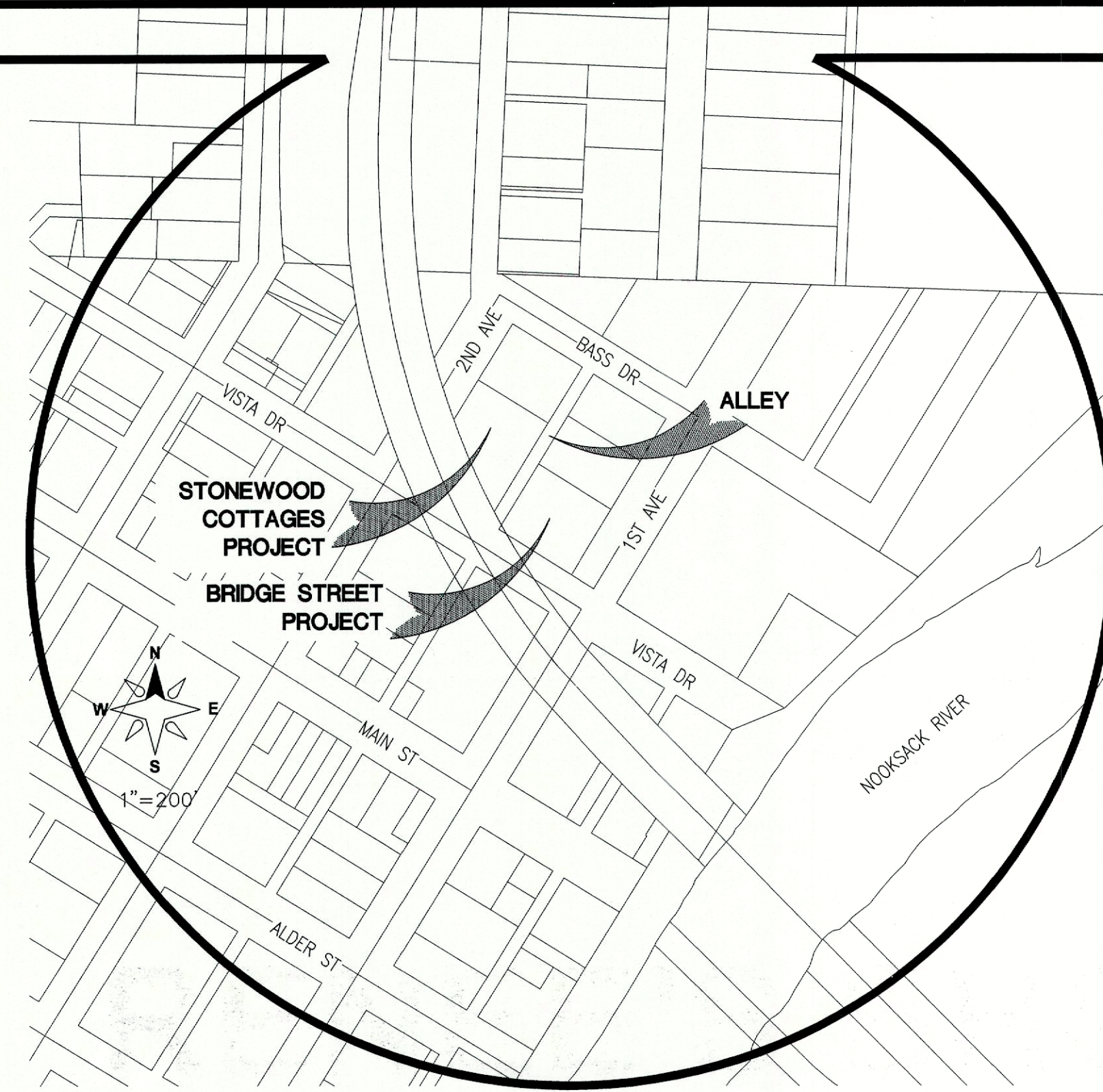


A PORTION OF THE NE 1/4 OF THE NW 1/4 OF SECTION 29, T.39N., R.2E., W.M.  
CITY OF FERNDAL, WHATCOM COUNTY, WASHINGTON

# RENEE'S SHORT PLAT / STONEWOOD COTTAGES

## RECORD DRAWINGS



ENGINEER  
LDES, INC.  
5160 INDUSTRIAL PL., SUITE 108  
FERNDAL, WA 98248  
CONTACT: RAMON LLANOS, P.E.  
PHONE: (360) 383-0620

SURVEYOR  
LDES, INC.  
5160 INDUSTRIAL PL., SUITE 108  
FERNDAL, WA 98248  
CONTACT: RAYMOND PETERSON, PLS.  
PHONE: (360) 383-0620

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

**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

BRIDGE STREET PROJECT SUMMARY	
OWNER	TERRY L & K RENEE DAWN 5340 MARKET RD BELLINGHAM, WA 98226
SITE ADDRESS	0 BRIDGE ST
ASSESSOR'S PARCEL #	390229 155529 0000
CITY ZONING	RMH-RESIDENTIAL MULTIFAMILY HIGH
PARCEL AREA	14,924 SF (0.34 ACRES)
PROJECT DESCRIPTION	-8 UNIT MULTIFAMILY (2 BUILDINGS) -PROVIDE STORM, SEWER, WATER & DRY UTILITIES -PAVED PARKING AREA
# OF PARKING	32 TOTAL STALLS (16 STALLS REQUIRED); 16 PARKING STALLS (DRIVEWAYS) 16 PARKING STALLS (GARAGES)
BUILDINGS	2 FOUR-PLEXES - 2,880 SF EACH BLDG 8 UNITS (5 UNITS MIN)
BASE FLOOD ELEVATION (BFE)	33.00 FEET

STONEWOOD COTTAGES PROJECT SUMMARY	
OWNER	JIM LUCAS STONEWOOD CONSTRUCTION, LLC PO BOX 33 FERNDAL, WA 98248
SITE ADDRESS	5698 SECOND AVE
ASSESSOR'S PARCEL #	390229 147544 0000
CITY ZONING	RMH-RESIDENTIAL MULTIFAMILY HIGH
PARCEL AREA	16,803 SF (0.386 ACRES)
PROJECT DESCRIPTION	-6 UNITS, INCL 1 EXISTING RESIDENCE AND 1 SHOP TO BE CONVERTED TO UNIT -PROVIDE STORM, SEWER, WATER & DRY UTILITIES -PAVED PARKING AREAS ON-SITE PER EACH UNIT
# OF PARKING	12 - 2 STALL PER UNIT (INCLUDING 2 - COMPACT STALLS)
BUILDINGS	UNIT 1 - 1280 SF BLDG - 2 STORIES UNIT 2 - 960 SF BLDG (EXISTING) UNIT 3 - 1280 SF BLDG - 2 STORIES UNIT 4 - 554 SF BLDG (EXISTING) UNIT 5 - 1280 SF BLDG - 2 STORIES UNIT 6 - 1280 SF BLDG - 2 STORIES
BASE FLOOD ELEVATION (BFE)	33.00 FEET

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ENGINEER'S CERTIFICATION  
I HEREBY CERTIFY THAT THE IMPROVEMENTS  
ON "RENEE'S SHORT PLAT" HAVE BEEN  
INSPECTED BY LDES 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.  
DATE: 11/23/22  
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: 11/23/22  
RAYMOND D. PETERSON, PLS.

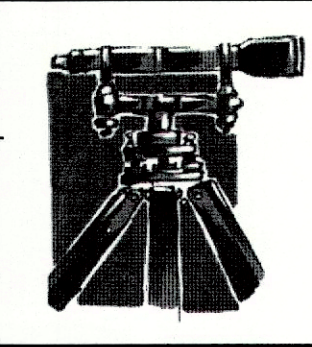
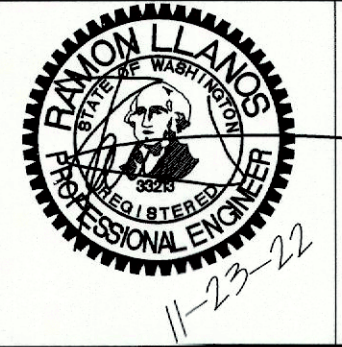
**LEGEND:**

- FOUND SURFACE MONUMENT
- FOUND IRON PIPE
- FOUND REBAR & CAP
- SET REBAR & CAP, LS "49287"
- SET WOOD LINE STAKE
- SANITARY SEWER MANHOLE
- CATCH BASIN
- WATER VALVE
- FIRE HYDRANT
- UTILITY POLE
- GUY ANCHOR
- MAIL BOX
- DECIDUOUS TREE
- CONIFER TREE
- SANITARY SEWER LINE
- STORM LINE
- STORM CULVERT
- GAS LINE
- OVERHEAD POWER LINE
- OVERHEAD TELEPHONE LINE
- OVERHEAD CABLE LINE
- DITCH LINE
- FENCE LINE

**PROPOSED LEGEND:**

- PROPOSED STORM CATCHBASIN - TYPE 1
- PROPOSED STORM DRAIN ROOF STUB
- PROPOSED STORM SERVICE
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED SANITARY SEWER CLEANOUT
- PROPOSED WATER METER
- PROPOSED FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED THRUST BLOCK
- PROPOSED SIGN
- PROPOSED MAILBOX
- PROPOSED RIP RAP
- PROPOSED LANDSCAPE BUSH & TREE
- PROPOSED STORM WATER LINE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED CONTOUR (INDEX)
- PROPOSED CONTOUR (NORMAL)
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED COMMON UTILITY TRENCH
- PROPOSED POWER
- PROPOSED POWER TRANSFORMER

NO.	REVISION	BY	DATE
1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21
3			
4			
5			



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

JOB NO.: 2109/2055  
DWG. NAME:  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

TERRY L + K  
RENEE DAWN  
5340 MARKET RD  
BELLINGHAM, WA 98226

STONEWOOD  
CONSTRUCTION LLC  
PO BOX 33  
FERNDAL, WA 98248

**APPROVED**  
DEC 05 2022  
CITY OF FERNDAL  
PUBLIC WORKS DEPARTMENT

**COVER SHEET**

BRIDGE STREET/STONEWOOD COTTAGES  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T.39 N., R. 2E., W.M.

SHEET  
**01**  
OF  
11

RECORD DRAWING



GENERAL REQUIREMENTS:

1. 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 CURRENT 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.
2. 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, THE CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.
3. 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.
4. 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.
5. 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.
6. 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.
7. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.
8. 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.
9. 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.
10. 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:
  - A. PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
  - B. CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.
  - C. 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.
  - D. 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.
  - E. GRADING OF PUBLIC OR PRIVATE ROADWAY AT:
    1. COMPLETION OF EXCAVATION TO SUBGRADE.
    2. COMPLETION OF BALUST COURSE PLACEMENT.
    3. COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
  - F. POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC ROADWAY.
  - G. ASPHALT PAVING IN PROGRESS IN PUBLIC ROADWAY.
  - H. OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
11. END OF MAINTENANCE PERIOD.
12. 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 PRIVATE & PUBLIC PROPERTY IN CONNECTION WITH THE PERFORMANCE AND WORK 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.
13. 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.
14. 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. POtholing ALL EXISTING UTILITIES IS REQUIRED PRIOR TO CONSTRUCTION TO VERIFY DESIGN FEASIBILITY. THE CITY DOES NOT GUARANTEE AS-BUILT INFORMATION IN THE CITY DATABASE IS ACCURATE AND WILL NOT BE HELD RESPONSIBLE IF FIELD MODIFICATIONS ARE REQUIRED BECAUSE POtholing WAS NOT DONE PRIOR TO DESIGN.
15. ALL STRUCTURES AND WATERMAIN CONVEYANCE WILL BE STAKED AND LOCATED BY A LICENSED LAND SURVEYOR PROVIDING OFFSET LOCATION AND ELEVATIONS PRIOR TO CONSTRUCTION AND INSPECTION. FAILURE TO DO SO WILL RESULT IN POTENTIAL RE-INSPECTION AND OR PROJECT DELAYS.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ELEMENTS:

ELEMENT 1: MARK CLEARING LIMITS

CLEARING LIMITS AREA WILL BE CLEARLY MARKED PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES, WHICH INCLUDES CLEARING AND GRADING. THESE AREAS WILL BE CLEARLY MARKED BOTH IN THE FIELD AND ON-SITE PLANS, TO PREVENT DAMAGE AND OFFSITE IMPACTS.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #1 INCLUDE:  
BMP C103: HIGH VISIBILITY PLASTIC OR METAL FENCE

ELEMENT 2: ESTABLISH CONSTRUCTION ACCESS

ONE CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED USING QUARRY SPALLS TO MINIMIZE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS. ROADS WILL BE CLEANED THROUGH THE DAY AND AT THE END OF EACH DAY. SEDIMENT TRANSPORTED TO ROADS FROM THE SITE WILL BE COLLECTED AND DISPOSED OF AT A CONTROLLED SEDIMENT DISPOSAL AREA ON SITE. IF STREET WASHING IS NEEDED, IT WILL ONLY OCCUR AFTER SEDIMENT HAS BEEN REMOVED AS DESCRIBED. THE RESULTING WASH WASTEWATER WOULD THEN BE DISPOSED OF AT AN APPROVED SITE.

ALL CONSTRUCTION ACCESS POINTS WILL BE RESTORED TO PRE-CONSTRUCTION CONDITION.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #2 INCLUDE:  
BMP C105: STABILIZED CONSTRUCTION ENTRANCE  
BMP C107: CONSTRUCTION ROAD/PARKING AREA STABILIZATION

ELEMENT 3: CONTROL FLOW RATES

STORMWATER BMP'S OUTLINED IN THE TESC PLAN AND SWPPP WILL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION AND WILL BE FUNCTIONAL PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS (E.G. INTERFEROUS SURFACES). IT IS EXPECTED THAT RAIN AND SNOWMELT WILL INFILTRATE COMPLETELY INTO THE EXISTING SOILS DURING CONSTRUCTION IF FLOW RATES NEED TO BE CONTROLLED. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO AMEND THE SWPPP AND IDENTIFY APPROPRIATE BMP'S TO CONTROL FLOW RATES.

ELEMENT 4: INSTALL SEDIMENT CONTROLS

SILT FENCING (BMP C233) SHALL BE INSTALLED ALONG THE DOWNSTREAM EDGES OF THE PROJECT AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. SEDIMENTATION SHOULD NOT BE ALLOWED TO ENTER THE CONSTRUCTION ACTIVITIES DURING CONSTRUCTION. CONSTRUCTION OF THE STORMWATER CHAMBERS SHOULD OCCUR NEAR THE END OF CONSTRUCTION WHEN THE INFILTRATION CAPACITY OF THE NATIVE SOILS, IF IT IS FOUND THAT MORE CONTROL MEASURES ARE NEEDED AND WATER NEEDS TO BE IMPOUNDED, TEMPORARY ON-SITE INTERCEPTOR DRAINAGE WALES SHALL BE CONSTRUCTED AND STABILIZED.

- OTHER SEDIMENT CONTROL MEASURES THAT MAY BE IMPLEMENTED ON SITE INCLUDE:
- CONSTRUCTION OF GRAVEL FILTER BERMS (BMP C232) TO RETAIN SEDIMENT FROM RIGHTS-OF-WAYS BY CONSTRUCTION TRAFFIC AREAS, IF APPLICABLE.
  - SILT FENCES WILL BE USED TO CONTROL TRANSPORT OF COARSE SEDIMENT FROM THE SITE. INSTALLATION OF SILT FENCES WILL BE DONE AS OUTLINED IN BMP C233 AND MAINTAINED IN CONFORMANCE WITH OTHER EROSION CONTROL METHODS IF NEEDED.
  - VEGETATED STRIPS WILL BE USED WHERE APPROPRIATE. IF STRIP TAPERS STRIPS ARE USED AS AN EROSION CONTROL MEASURE, THEY WILL BE IMPLEMENTED AS OUTLINED IN BMP C234.
  - STRAW WATTLES MAY ALSO BE CONSIDERED AS PART OF THE EROSION CONTROL MEASURES FOR THIS SITE. IF STRAW WATTLES ARE INSTALLED, THEY WILL BE DONE AS OUTLINED IN BMP C235.

A COMBINATION OF THESE BMP'S MAY NEED TO BE IN PLACE TO EFFECTIVELY MANAGE THE SITE FOR EROSION CONTROL. EVALUATION OF BMP EFFECTIVENESS AND MAINTENANCE OF THE INSTALLED BMP'S WILL MAINTAIN THROUGHOUT CONSTRUCTION. MODIFICATIONS TO THE COMBINATIONS OF BMP'S MAY OCCUR AS A RESULT OF ONSITE EVALUATION.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #4 INCLUDE:  
BMP C230: STRAW BALE BARRIER  
BMP C232: GRAVEL FILTER BERM  
BMP C233: SILT FENCE  
BMP C235: STRAW WATTLES

UNDERGROUND UTILITIES CONSTRUCTION:

- A. 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-OUT 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.
- B. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
  - i. NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
  - ii. WHEN CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.
  - iii. TRENCH DRAINAGE DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT POND.
  - iv. WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
- C. UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.
- D. ALL UTILITY TRENCHES IN THE RIGHT OF WAY SHALL BE BACKFILLED IN CONFORMANCE WITH CITY STANDARDS.
- E. TESTING OF NEW WATER LINES, STORM SEWER SYSTEMS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.
- F. 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.
- G. 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.
- H. 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.
- I. A MINIMUM OF 5-FOOT SEPARATION IS REQUIRED BETWEEN THE WET 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.

STORM DRAINAGE:

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENTS:
  - A. CATCH BASINS TYPE 1, 1L OR 2: WSDOT STD. DETAILS 8-5.20, 8-5.40 OR 8-10.20
  - B. "RESIDENTIAL SERVICE LINE": COPSF ST-7 (CITY OF FERNDALE STD DETAIL)
  - C. CATCH BASINS: COPSF ST-16 (CITY OF FERNDALE STD DETAIL)
2. STORM SEWER PIPE HAVING DIAMETERS GREATER THAN 8" SHALL BE CORRUGATED POLYETHYLENE PIPE (PEEP). ALL OTHER STORM SEWER PIPE SHALL BE PVC.
3. ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS".
4. 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 18" OF COVER IF APPROVED BY THE CITY.
5. 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.
6. AT THE END OF EACH DAY OF CONSTRUCTION, THE CONTRACTOR SHALL CLEAN ALL DEBRIS FROM CATCH BASINS AND STORMWATER CONVEYANCES. DEBRIS SHALL NOT BE ALLOWED TO ENTER STREAMS OR OFF-SITE WATERWAYS.
7. POSITIVE LOT DRAINS PER STANDARD DETAIL ST-16.

WATER:

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS:
  - A. PIPE BEDDING: COPSF W-11
  - B. TRENCH BACKFILL: COPSF W-11
  - C. FIRE HYDRANT ASSEMBLY: COPSF W-2, W-3 & W-4
  - D. WATER SERVICE: COPSF W-5
2. 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.
3. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON, MINIMUM THICKNESS CLASS 50, PER AWWA STANDARDS H3-71 AND C151-71, WITH CEMENT LINING PER AWWA STANDARD C104-71.
4. 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 AWWA SPECIFICATIONS C-110-71 AND C-104-71.
5. 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(2) OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION. NO PRE-CAST BLOCKS ARE ALLOWED.
6. 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.
7. ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3(23) AND SECTION 7-09.3(24)(F) 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 225 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.
8. BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTON SHALL BE 90% OF OPTIMUM DENSITY.
9. ALL PIPES SHALL HAVE A MINIMUM COVER OF 36".
10. ALL VALVES SHALL BE GATE 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-SHOCK SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESULY SEALED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO AWWA C508 AND SUITABLE FOR SERVICE WITH THE PIPE AND CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS.
11. WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE COFDS W-5.
12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFDS- 50 W-1 (WSDOT 8-10) AND THE FOLLOWING STANDARDS:
  - A. FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY VALVED 2-1/2" PORTS AND ONE 5-1/4" MAIN VALVE OPENING. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL BE M.H. 929T HYDRANTS.
  - B. FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BASE FLANGE OF THE HYDRANT MUST NOT VARY MORE THAN 1 FOOT IN ELEVATION FROM THE GRADE LEVEL OF THE REQUIRED ACCESS. THE LOWEST STEM SHALL BE A MINIMUM OF 14" ABOVE THE GROUND.
  - C. 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 6" DIAMETER, GALV. PIPE A MIN. OF 3" IN HEIGHT WITH A MIN. OF 2" OF PIPE BELOW GRADE. HYDRANT SHUT-OFF VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT.
  - D. UNDERGROUND SUPPLIES TO FIRE HYDRANTS MUST BE INSPECTED. SUCH INSPECTION SHALL INCLUDE VISUAL INSPECTION OF PIPING AND HYDROSTATIC PRESSURE TESTING TO A MIN. OF 225 PSI. A FLOW TEST WILL BE REQUIRED WHEN INSTALLATION IS COMPLETE.
  - E. FIRE HYDRANTS MUST BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED OR REPLACED IF INSPECTED BY HYDRANTS SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION COMMENCES ABOVE GRADE LEVEL.

SANITARY SEWER SYSTEMS:

1. 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.
2. ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDALE. YOUR NOTICE MUST BE GIVEN PRIOR TO ANY 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.
3. SANITARY SEWER MAINS SHALL HAVE A MINIMUM 8 INCH DIAMETER PVC PIPE (BMP C232-35) CONFORMING TO THE PROVISIONS OF SECTION 303.4 AND INSTALLED TO CITY SPECIFICATIONS.
4. SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER WSDOT STD. DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE SEWERS SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL WITHIN CITY RIGHT OF WAY AND TRAVELED WAYS OUTSIDE OF TRAVELED WAYS SHALL BE BACKFILLED TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. USE OF SUITABLE NATURAL BACKFILL OUTSIDE OF TRAVELED WAYS SHALL BE SUBJECT TO APPROVAL BY THE CITY.
5. ALL MANHOLES 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'.
6. LADDER RUNGERS ARE PARALLEL TO THE FLOW OF THE SEWER.
7. CONTRACTOR SHALL EXTEND SEWER STUBS TO THE CURB AND UTILITY CORNER OR 6 FEET BEYOND RIGHT-OF-WAY LINE.
8. EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATER TIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18 INCHES PAINTED AND COLORED WITH THE WORD "SEWER" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #10 STEEL WIRE.

ELEMENT 9: CONTROL POLLUTANTS

WASTE MATERIALS GENERATED ON SITE WILL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER, INCLUDING COVERING DUMPSTERS AND STOCKPILES. ROUTINE INSPECTIONS OF THE WASTE MATERIAL STORAGE AREAS WILL BE CONDUCTED TO MAKE SURE THAT LEAKS OR SPILLS DO NOT OCCUR. ANY LEAKAGE OR SPILLS WILL BE CLEANED UP IMMEDIATELY. A SPILL RESPONSE KIT THAT INCLUDES ABSORBENT MATERIAL WILL BE AVAILABLE ON SITE. USED ABSORBENT MATERIAL WILL BE DISPOSED OF PROPERLY.

MAINTENANCE OF HEAVY EQUIPMENT INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN, SOLVENT AND DE-GRASSING CLEANING AND/OR OTHER ACTIVITIES THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF WILL BE CONDUCTED WITH SPILL PREVENTION MEASURES IN PLACE, INCLUDING CONDUCTING MAINTENANCE ON A TEMPORARY PAD THAT CAN BE USED TO CAPTURE LEAK SPILLS AND THE USE OF DRIP PANS. IN THE EVENT THAT EMERGENCY REPAIRS NEED TO BE PERFORMED AND CLIMATIC CONDITIONS MAY RESULT IN A PRECIPITATION EVENT PRIOR TO THE REPAIR BEING COMPLETED, THE REPAIR AREA, WHICH INCLUDES THE VEHICLE, WILL BE COVERED WITH TAPPS OR OTHER PLASTIC SHEETING.

DISCHARGES, SPILLS, OR LEAKS WILL BE CLEANED IMMEDIATELY. THE NOTIFICATION PROCEDURE OUTLINED IN THE PERMANENT SITE SWPPP IS AS FOLLOWS:

- NOTIFY KEY PERSONNEL - DURING CONSTRUCTION, THE PROJECT ENGINEER WILL BE PROVIDING PROJECT OVERSIGHT AND WILL BE CONTACTED IN THE EVENT OF A SPILL. THE PROJECT ENGINEER WILL CONTACT THE SITE OWNER AND THE DEPARTMENT OF ECOLOGY. ANY SPILLS WITH POTENTIAL TO DISCHARGE TO STORM DRAINS, SANITARY SEWER SYSTEM, OR SURFACE WATERS WILL BE REPORTED TO CITY OF FERNDALE PUBLIC WORKS.
- ALL SPILLS WILL BE REPORTED TO THE DEPARTMENT OF ECOLOGY, SPILL RESPONSE PROGRAM (425) 649-7000.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #9 INCLUDE:

- BMP C151: CONCRETE HANDLING
- BMP C152: SAW CUTTING AND SURFACING POLLUTION PREVENTION
- BMP C153: MATERIAL STORAGE AND CONTAINMENT
- BMP C154: CONCRETE WASHOUT AREA

ELEMENT 10: CONTROL DE-WATERING

SITE DE-WATERING IS NOT ANTICIPATED FOR THIS PROJECT. IF DE-WATERING IS FOUND TO BE NEEDED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO IDENTIFY AN APPROPRIATE DE-WATERING DISCHARGE AND HAVE IT APPROVED BY CITY OF FERNDALE. IF DE-WATERING IS NEEDED, THE END OF CONSTRUCTION AND THE INFILTRATION CHAMBERS HAVE BEEN CONSTRUCTED, CLEAN SEDIMENT FREE WATER MAY BE DISCHARGED INTO A CATCH BASIN (CB) WHICH CONNECTS TO THE CHAMBERS WITH THE APPROVAL OF THE ENGINEER OF RECORD AND THE CITY. IF THE WATER IS HIGHLY TURBID OR CONTAMINATED, IT SHALL BE COLLECTED AND DISCHARGED AT AN APPROVED SITE.

OTHER DISPOSAL OPTIONS, DEPENDING ON SITE CONSTRAINTS, MAY INCLUDE:

- TRANSPORT OFF SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS
- SANITARY SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, OR
- USE OF A SEDIMENTATION BAG WITH OUTFALL TO A CATCH BASIN WHICH DISCHARGES TO ONE OF THE ON-SITE STORMWATER CHAMBERS FOR SMALL VOLUMES LOCALIZED DE-WATERING, WITH ENGINEER OF RECORD AND CITY APPROVAL.

ELEMENT 11: MAINTAIN BMPS

ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S WILL BE INSPECTED, MAINTAINED, AND REPAIRED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH THE RELEVANT BMP IDENTIFIED IN ELEMENTS #1 THROUGH #13.

TEMPORARY EROSION AND SEDIMENT CONTROLS IDENTIFIED ABOVE WILL BE INSPECTED DAILY DURING THE WET SEASON BY THE CONTRACTOR. NEEDED REPAIRS AND MAINTENANCE WILL OCCUR AS SOON AS PRACTICABLE OR, IN THE EVENT OF A FORECAST OF INCLEMENT WEATHER, REPAIRS AND MAINTENANCE WILL OCCUR PRIOR TO THE ANTICIPATED WEATHER EVENT.

TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S WILL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT WILL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL RESULTING FROM REMOVAL OF BMP'S OR VEGETATION SHALL BE PERMANENTLY STABILIZED.

ROAD:

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF THE STANDARD STREET SECTION:
  - A. TYPICAL STREET SECTION PER THESE PLANS
  - B. PCC CURB AND GUTTER COPSF R-9
  - C. PCC SIDEWALKS COPSF R-12 (SEE CONSTRUCTION DOCUMENTS TYPICAL SECTION)
  - D. PCC CURB RAMPS WSDOT STD. DETAIL F-40
2. 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.
3. 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.
4. 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.
5. 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).
6. CEMENT CONCRETE SHALL BE CLASS 3000 (WITH AIR ENTRAINMENT) IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 6-02.3(2B).
7. CEMENT CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. R-15.
8. 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.
9. CEMENT CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER, IN ACCORDANCE WITH WSDOT STANDARDS SPECIFICATIONS, SECTION 8-04 AND CITY OF FERNDALE STANDARDS, DRAWING R-8 AND R-9. HANDICAP RAMPS 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 UNSUITABLE OR IMPIDE FLOW IN THE GUTTER LINE.
10. CEMENT:
  - A. SOIL RESIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
  - B. A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.
  - C. ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. 4R-4000 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 COLD PLANE PER DIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROCRAC PAVING FABRIC, OR EQUIVALENT, OVER JOINT BETWEEN PAVING LIFTS.
11. 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.
12. TRENCH EXCAVATIONS, BEDDING AND PIPE FOR STORMWATER PIPE LAYING SHALL BE IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATIONS, SECTION 7-08.
13. STORM SEWER PIPE CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 7-04. MATERIAL SHALL BE HANCOCK SURE-LOK F477 PIPE OR CITY APPROVED EQUAL. LOTS' STORM DRAIN SERVICE LINE SHALL BE 6" PVC PER WSDOT STANDARD SPECIFICATION, SECTION 9-05.1(5).
14. PERFORATED UNDERDRAIN PIPE SHALL MEET THE WSDOT STANDARD SPECIFICATION 7-01.3(2).

EARTHWORK:

- A. 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.
- B. THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER.
- C. UNSUITABLE MATERIAL FOUND AND NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPAIRED WITH SUITABLE BACKFILL MATERIAL.
- D. THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.

BASE COURSES AND SURFACING:

- A. GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET WSDOT STANDARD SPECIFICATIONS.
- B. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
- C. THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/8 INCH OF FINISHED GRADE.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO STARTING 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.

ELEMENT 12: MANAGE THE PROJECT

NATIONAL POLLUTANT DISCHARGE ELIMINATION STATE (NPDES) THIS PROJECT WILL NOT DISTURB MORE THAN 1 ACRE OF LAND, THEREFORE, WILL NOT REQUIRE AN NPDES PERMIT.

CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL)

IT IS RECOMMENDED, ALTHOUGH NOT REQUIRED, THAT THE PROJECT OWNER OR CONTRACTOR RETAIN A CESCL TO INSPECT ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, ALL BMP'S, AND ANY STORMWATER DISCHARGE POINT (IF APPLICABLE) AT LEAST ONCE EVERY CALENDAR WEEK.

PHASING OF CONSTRUCTION

TO THE EXTENT PRACTICABLE, SITE DISTURBANCE AND CONSTRUCTION WILL BE PHASED WHERE FEASIBLE. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION WILL OCCUR AS PART OF THE CLEARING ACTIVITIES.

CLEARING AND GRADING ACTIVITIES WILL OCCUR AFTER THE APPLICABLE PERMITS HAVE BEEN OBTAINED. WHEN ESTABLISHING CLEARING AND GRADING AREAS, CONSIDERATION WILL BE GIVEN TO MINIMIZING REMOVAL OF EXISTING TREES AND MINIMIZING DISTURBANCE AND COMPACTION OF NATIVE SOILS EXCEPT AS NEEDED FOR BUILDING PURPOSES. ELEMENT #1 OUTLINES BMP'S THAT WILL EFFECTIVELY MINIMIZE REMOVAL AND DAMAGE TO NATIVE VEGETATION AND PROTECT THESE AREAS BY BEING CLEARLY DELINEATED AND MARKED.

SEASONAL WORK LIMITATIONS

FROM OCTOBER 1 THROUGH APRIL 30, SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. FROM MAY 1 THROUGH SEPTEMBER 30 SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR THAN 7 DAYS. IN ADDITION, WEATHER CONDITIONS WILL CONTINUALLY BE MONITORED INCLUDING BEFORE HOLIDAYS AND WEEKENDS FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS. BMP'S THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER CLIMATIC CONDITIONS WILL BE IMPLEMENTED THROUGHOUT THE PROJECT. INSPECTION AND EVALUATION OF THE EFFECTIVENESS OF THE BMP'S WILL OCCUR ON A DAILY BASIS BY THE CONTRACTOR. IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE SOILS WILL BE TAKEN.

COORDINATION WITH UTILITIES AND OTHER CONTRACTORS

THE STORMWATER MANAGEMENT REQUIREMENTS FOR ALL ASPECTS OF THE CONSTRUCTION PROJECT, INCLUDING UTILITIES, WERE CONSIDERED IN PREPARING THE CONSTRUCTION SWPPP. IT IS UP TO THE CONTRACTOR TO COORDINATE WITH SUB-CONTRACTORS AND OR UTILITY COMPANIES.

INSPECTION AND MONITORING

AS PREVIOUSLY MENTIONED, ALL BMP'S WILL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

IF INSPECTION AND/OR MONITORING REVEALS THAT THE BMP'S IDENTIFIED IN THIS CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO THE ACTUAL DISCHARGE OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT, THIS SWPPP SHALL BE MODIFIED, AS APPROPRIATE, IN A TIMELY MANNER, WITH NOTICE TO ENGINEER OF RECORD AND CITY OF FERNDALE.

MAINTENANCE OF THE CONSTRUCTION SWPPP

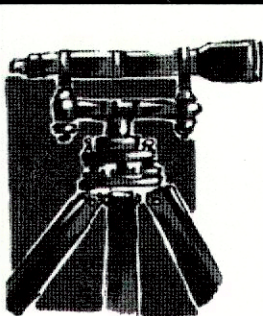
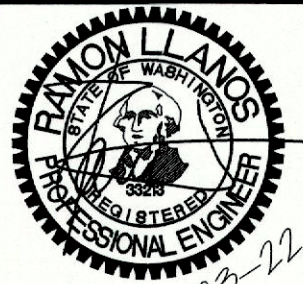
THE CONSTRUCTION SWPPP WILL BE RETAINED ON-SITE AND WILL BE UPDATED ON A REGULAR BASIS BY EITHER THE OWNER OR A DESIGNATED REPRESENTATIVE. A LOG WILL BE ATTACHED TO THE CONSTRUCTION SWPPP TO FACILITATE REGULAR UPDATES. MODIFICATIONS TO THE CONSTRUCTION SWPPP WILL BE MADE WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

ELEMENT 13: PROTECT LOW IMPACT DEVELOPMENT BMP'S

NO LID BMP'S ARE PROPOSED AT THIS SITE.

R:\Common Land Projects 2021\2109-Burg Drive- T06 Down Vang\2109-2005\_Civil-C2D16-ASBULTS.dwg PLOT DATE:11/23/2022 11:12 AM

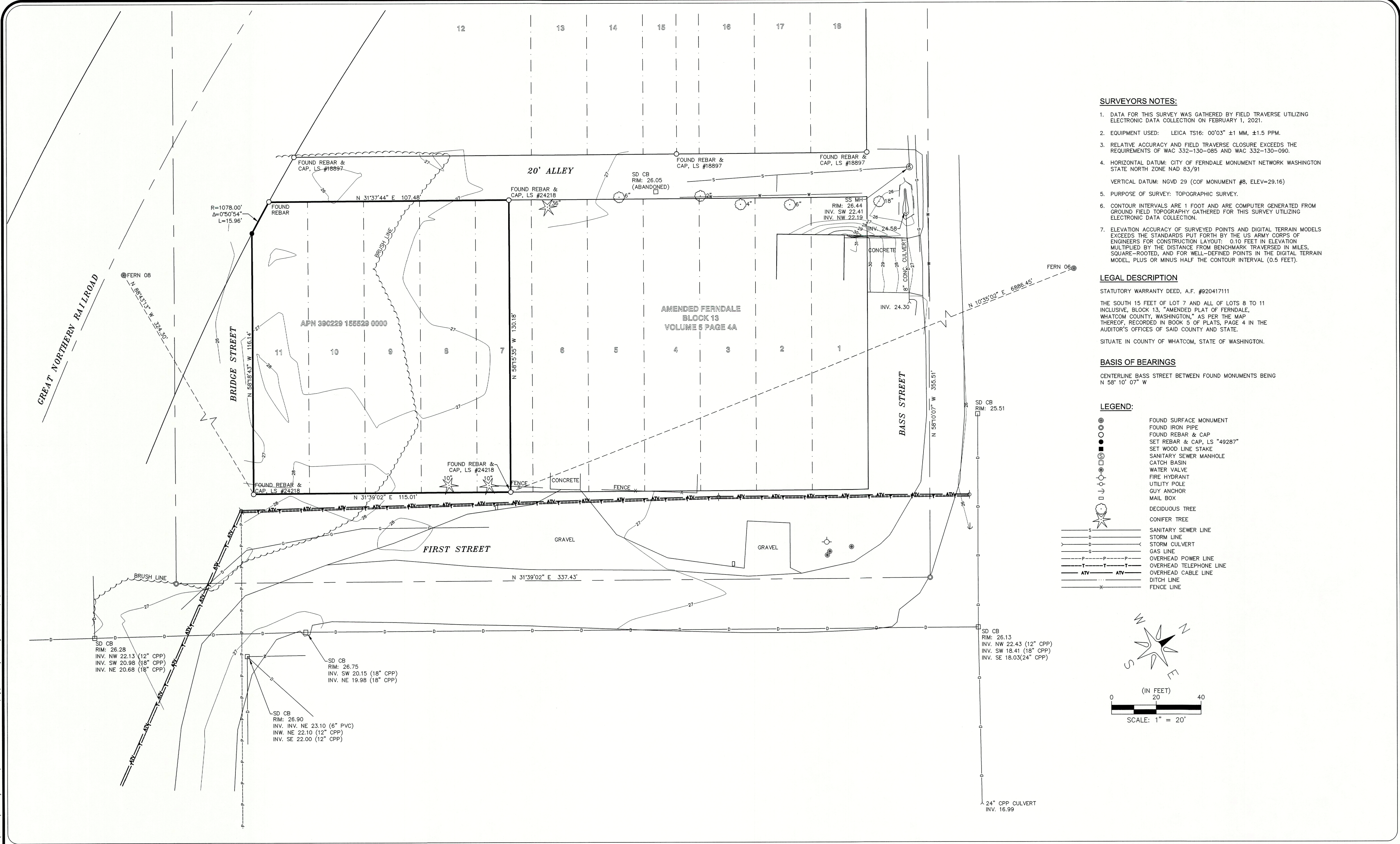
△	SUBMITTAL 1	RL	11/08/21
△	SUBMITTAL 2	RL	12/07/21
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NO.	REVISION	BY	DATE



**B. L. DES, INC.**  
**5160 INDUSTRIAL PL. #108**  
**FERNDAL, WA 98248**  
**PHONE 360-383-0620**  
**FAX 360-383-0**



R:\Common\Land Projects\2021\2109-Hoss Drive-786r Down\dwg\2109\_Survey Base.dwg PLOT DATE:11/23/2021 12:53 PM



**SURVEYORS NOTES:**

1. DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION ON FEBRUARY 1, 2021.
2. EQUIPMENT USED: LEICA TS16: 00'03" ±1 MM, ±1.5 PPM.
3. RELATIVE ACCURACY AND FIELD TRAVERSE CLOSURE EXCEEDS THE REQUIREMENTS OF WAC 332-130-085 AND WAC 332-130-090.
4. HORIZONTAL DATUM: CITY OF FERNDALE MONUMENT NETWORK WASHINGTON STATE NORTH ZONE NAD 83/91  
VERTICAL DATUM: NGVD 29 (COF MONUMENT #8, ELEV=29.16)
5. PURPOSE OF SURVEY: TOPOGRAPHIC SURVEY.
6. CONTOUR INTERVALS ARE 1 FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
7. ELEVATION ACCURACY OF SURVEYED POINTS AND DIGITAL TERRAIN MODELS EXCEEDS THE STANDARDS PUT FORTH BY THE US ARMY CORPS OF ENGINEERS FOR CONSTRUCTION LAYOUT: 0.10 FEET IN ELEVATION MULTIPLIED BY THE DISTANCE FROM BENCHMARK TRAVERSED IN MILES, SQUARE-ROOTED, AND FOR WELL-DEFINED POINTS IN THE DIGITAL TERRAIN MODEL, PLUS OR MINUS HALF THE CONTOUR INTERVAL (0.5 FEET).

**LEGAL DESCRIPTION**

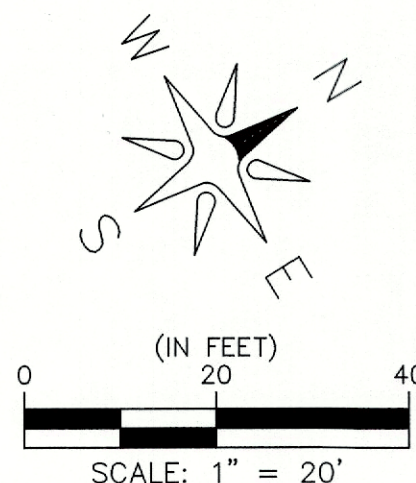
STATUTORY WARRANTY DEED, A.F. #920417111  
THE SOUTH 15 FEET OF LOT 7 AND ALL OF LOTS 8 TO 11 INCLUSIVE, BLOCK 13, "AMENDED PLAT OF FERNDALE, WHATCOM COUNTY, WASHINGTON," AS PER THE MAP THEREOF, RECORDED IN BOOK 5 OF PLATS, PAGE 4 IN THE AUDITOR'S OFFICES OF SAID COUNTY AND STATE.  
SITUATE IN COUNTY OF WHATCOM, STATE OF WASHINGTON.

**BASIS OF BEARINGS**

CENTERLINE BASS STREET BETWEEN FOUND MONUMENTS BEING  
N 58°10'07" W

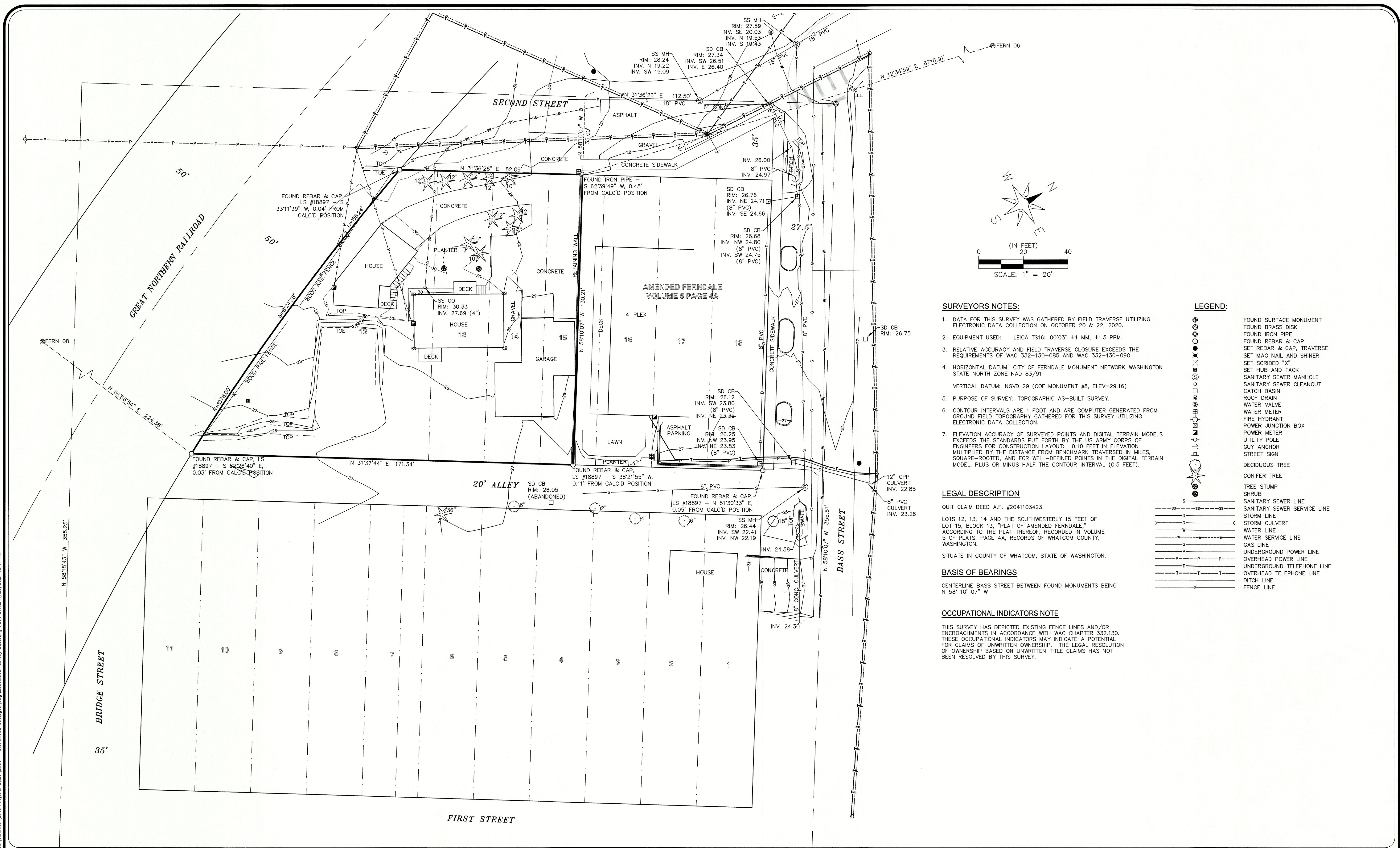
**LEGEND:**

- FOUND SURFACE MONUMENT
- FOUND IRON PIPE
- FOUND REBAR & CAP
- SET REBAR & CAP, LS "49287"
- SET WOOD LINE STAKE
- SANITARY SEWER MANHOLE
- CATCH BASIN
- WATER VALVE
- FIRE HYDRANT
- UTILITY POLE
- GUY ANCHOR
- MAIL BOX
- DECIDUOUS TREE
- CONIFER TREE
- SANITARY SEWER LINE
- STORM LINE
- STORM CULVERT
- GAS LINE
- OVERHEAD POWER LINE
- OVERHEAD TELEPHONE LINE
- OVERHEAD CABLE LINE
- DITCH LINE
- FENCE LINE



<div><div><div>⚠</div><div>⚠</div><div>⚠</div><div>⚠</div><div>⚠</div><div>⚠</div></div><div>NO.                      REVISION                      BY                      DATE</div></div>				<div><div><div>RAYMOND D. PETERSON</div><div>STATE OF WASHINGTON</div><div>49287</div><div>REGISTERED</div><div>PROFESSIONAL LAND SURVEYOR</div></div><div><div></div><div><div>LDES, INC.</div><div>5160 INDUSTRIAL PL. #108</div><div>FERNDAL, WA 98248</div><div>PHONE 360-383-0620</div><div>FAX 360-383-0639</div></div></div></div>		<div><div>JOB NO.: 2109/2055</div><div>DWG. NAME: 2109_Survey Base.dwg</div><div>DESIGNED BY: RL</div><div>DRAWN BY: RL</div><div>CHECKED BY: RL</div></div> <div><div>TERRY L + K</div><div>RENEE DAWN</div><div>5340 MARKET RD</div><div>BELLINGHAM, WA 98226</div></div>		<div><div>STONEWOOD</div><div>CONSTRUCTION LLC</div><div>PO BOX 33</div><div>FERNDAL, WA 98248</div></div>		<div><div>APPROVED</div><div>DEC 05 2022</div><div></div><div>CITY OF FERNDAL</div><div>PUBLIC WORKS DEPARTMENT</div></div>		<div><div>EXISTING CONDITIONS</div><div>BRIDGE STREET PROJECT</div><div>BRIDGE STREET/STONEWOOD COTTAGES</div><div>0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON</div><div>SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E., WM.</div></div>		<div><div>SHEET</div><div>02A</div><div>OF</div><div>11</div></div>	
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**SURVEYORS NOTES:**

1. DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION ON OCTOBER 20 & 22, 2020.
2. EQUIPMENT USED: LEICA TS16: 00'03" ±1 MM, ±1.5 PPM.
3. RELATIVE ACCURACY AND FIELD TRAVERSE CLOSURE EXCEEDS THE REQUIREMENTS OF WAC 332-130-085 AND WAC 332-130-090.
4. HORIZONTAL DATUM: CITY OF FERDALE MONUMENT NETWORK WASHINGTON STATE NORTH ZONE NAD 83/91  
VERTICAL DATUM: NGVD 29 (COF MONUMENT #8, ELEV=29.16)
5. PURPOSE OF SURVEY: TOPOGRAPHIC AS-BUILT SURVEY.
6. CONTOUR INTERVALS ARE 1 FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
7. ELEVATION ACCURACY OF SURVEYED POINTS AND DIGITAL TERRAIN MODELS EXCEEDS THE STANDARDS PUT FORTH BY THE US ARMY CORPS OF ENGINEERS FOR CONSTRUCTION LAYOUT: 0.10 FEET IN ELEVATION MULTIPLIED BY THE DISTANCE FROM BENCHMARK TRAVERSED IN MILES, SQUARE-ROOTED, AND FOR WELL-DEFINED POINTS IN THE DIGITAL TERRAIN MODEL, PLUS OR MINUS HALF THE CONTOUR INTERVAL (0.5 FEET).

**LEGAL DESCRIPTION**

QUIT CLAIM DEED A.F. #2041103423  
LOTS 12, 13, 14 AND THE SOUTHWESTERLY 15 FEET OF LOT 15, BLOCK 13, "PLAT OF AMENDED FERDALE," ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 5 OF PLATS, PAGE 4A, RECORDS OF WHATCOM COUNTY, WASHINGTON.  
SITUATE IN COUNTY OF WHATCOM, STATE OF WASHINGTON.

**BASIS OF BEARINGS**

CENTERLINE BASS STREET BETWEEN FOUND MONUMENTS BEING N 58°10'07" W

**OCCUPATIONAL INDICATORS NOTE**

THIS SURVEY HAS DEPICTED EXISTING FENCE LINES AND/OR ENCROACHMENTS IN ACCORDANCE WITH WAC CHAPTER 332.130. THESE OCCUPATIONAL INDICATORS MAY INDICATE A POTENTIAL FOR CLAIMS OF UNWRITTEN OWNERSHIP. THE LEGAL RESOLUTION OF OWNERSHIP BASED ON UNWRITTEN TITLE CLAIMS HAS NOT BEEN RESOLVED BY THIS SURVEY.

**LEGEND:**

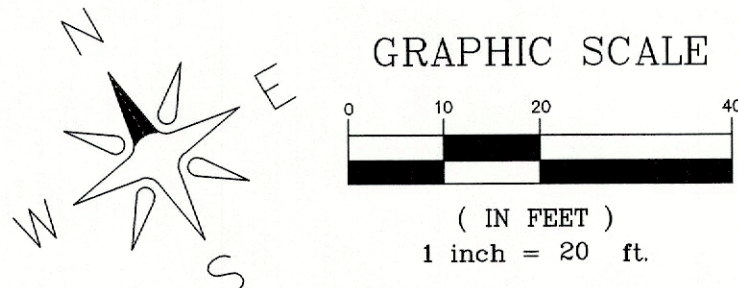
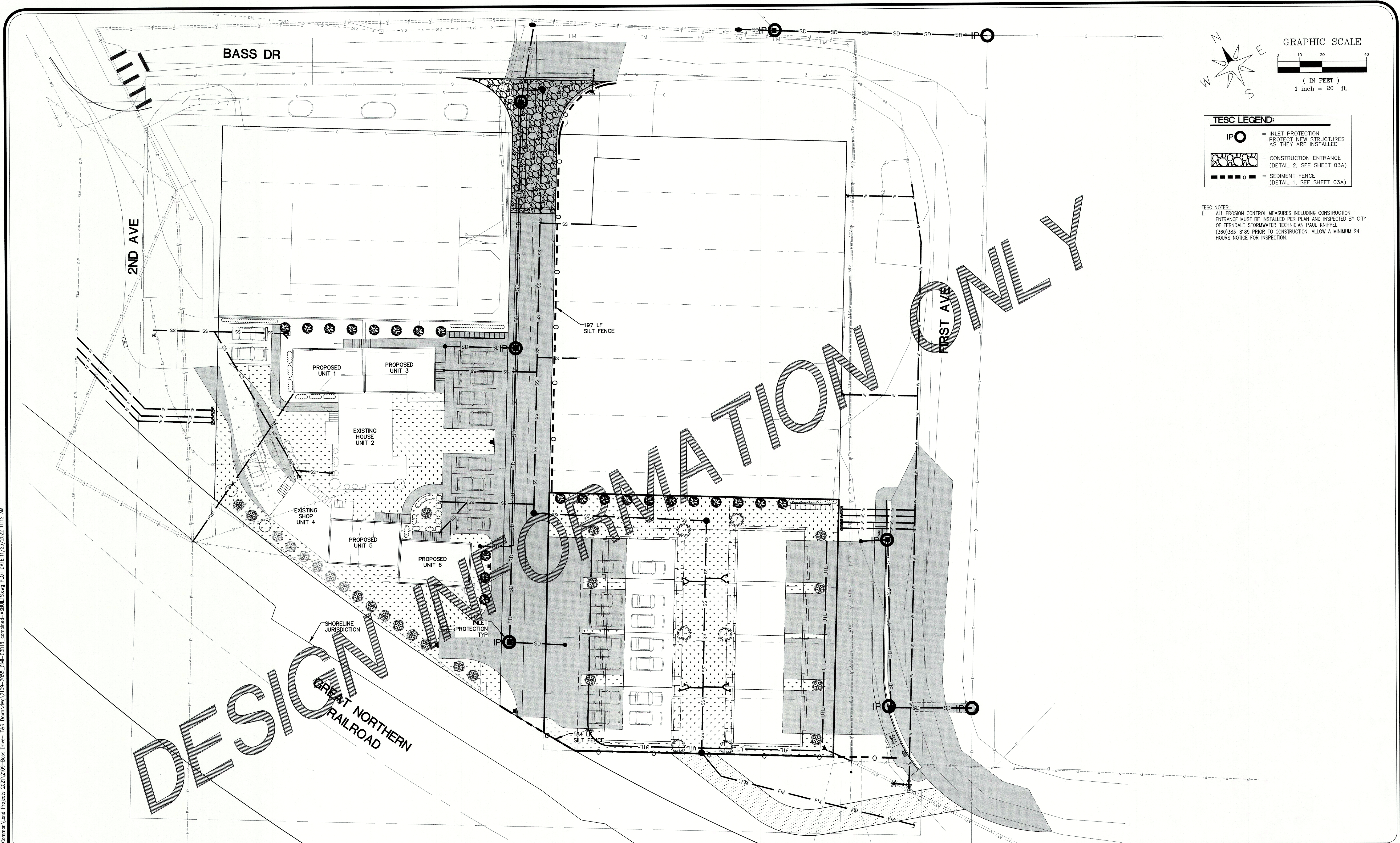
- FOUND SURFACE MONUMENT
- FOUND BRASS DISK
- FOUND IRON PIPE
- FOUND REBAR & CAP
- SET REBAR & CAP, TRAVERSE
- SET MAG NAIL AND SHINER
- SET SCRIBED "X"
- SET HUB AND TACK
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- CATCH BASIN
- ROOF DRAIN
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- POWER JUNCTION BOX
- POWER METER
- UTILITY POLE
- GUY ANCHOR
- STREET SIGN
- DECIDUOUS TREE
- CONIFER TREE
- TREE STUMP
- SHRUB
- SANITARY SEWER LINE
- SANITARY SEWER SERVICE LINE
- STORM LINE
- STORM CULVERT
- WATER LINE
- WATER SERVICE LINE
- GAS LINE
- UNDERGROUND POWER LINE
- OVERHEAD POWER LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD TELEPHONE LINE
- DITCH LINE
- FENCE LINE

SUBMITTAL 1		RL	08/19/21			<b>LDES, INC.</b> 5160 INDUSTRIAL PL. #108 FERDALE, WA 98248 PHONE 360-383-0620 FAX 360-383-0639	JOB NO.: 2109/2055 DWG. NAME: 2055_C30-Survey Base.dwg DESIGNED BY: RL DRAWN BY: RL CHECKED BY: RL	<b>TERRY L &amp; K RENEE DAWN</b> 5340 MARKET RD BELLINGHAM, WA 98226	<b>STONEWOOD CONSTRUCTION LLC</b> PO BOX 33 FERDALE, WA 98248	<b>APPROVED</b> DEC 05 2022 	<b>EXISTING CONDITIONS STONEWOOD COTTAGES</b> BRIDGE STREET/STONEWOOD COTTAGES 0 BRIDGE STREET & 5698 SECOND AVE, FERDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E., W.M.	SHEET <b>03</b> OF <b>11</b>
REVISION		BY	DATE									





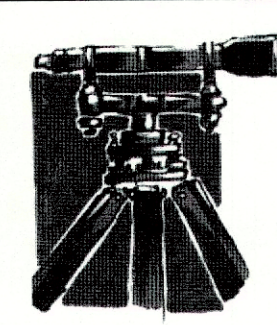
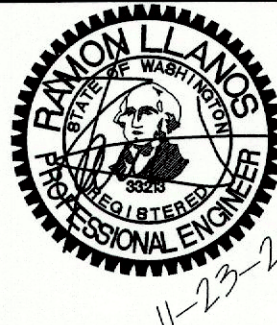




TESC LEGEND:	
IP	= INLET PROTECTION PROTECT NEW STRUCTURES AS THEY ARE INSTALLED
	= CONSTRUCTION ENTRANCE (DETAIL 2, SEE SHEET 03A)
	= SEDIMENT FENCE (DETAIL 1, SEE SHEET 03A)

TESC NOTES:  
1. ALL EROSION CONTROL MEASURES INCLUDING CONSTRUCTION  
ENTRANCE MUST BE INSTALLED PER PLAN AND INSPECTED BY CITY  
OF FERNDAL STORMWATER TECHNICIAN PAUL KNIPPEL  
(360)383-8189 PRIOR TO CONSTRUCTION. ALLOW A MINIMUM 24  
HOURS NOTICE FOR INSPECTION.

NO.	REVISION	BY	DATE
1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21



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

JOB NO.: 2109/2055  
DWG. NAME: 2109\_2055\_Civil-C3D18\_combined-ASBUILTS.dwg  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

**TERRY L + K**  
RENEE DAWN  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD**  
CONSTRUCTION LLC  
PO BOX 33  
FERNDAL, WA 98248

APPROVED

DEC 05 2022  
BY: *Raymond L. Lange*  
RAYMOND L. LANGE  
PUBLIC WORKS DEPARTMENT

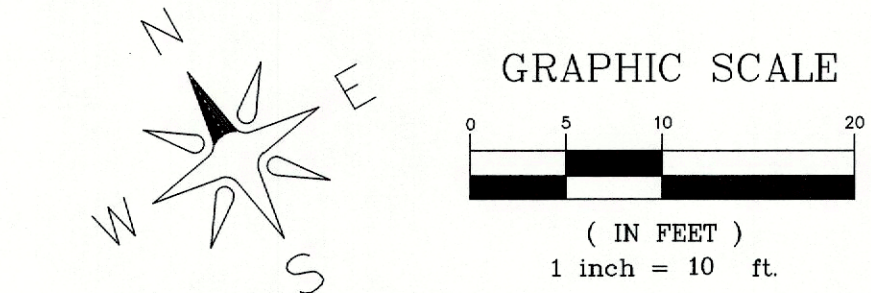
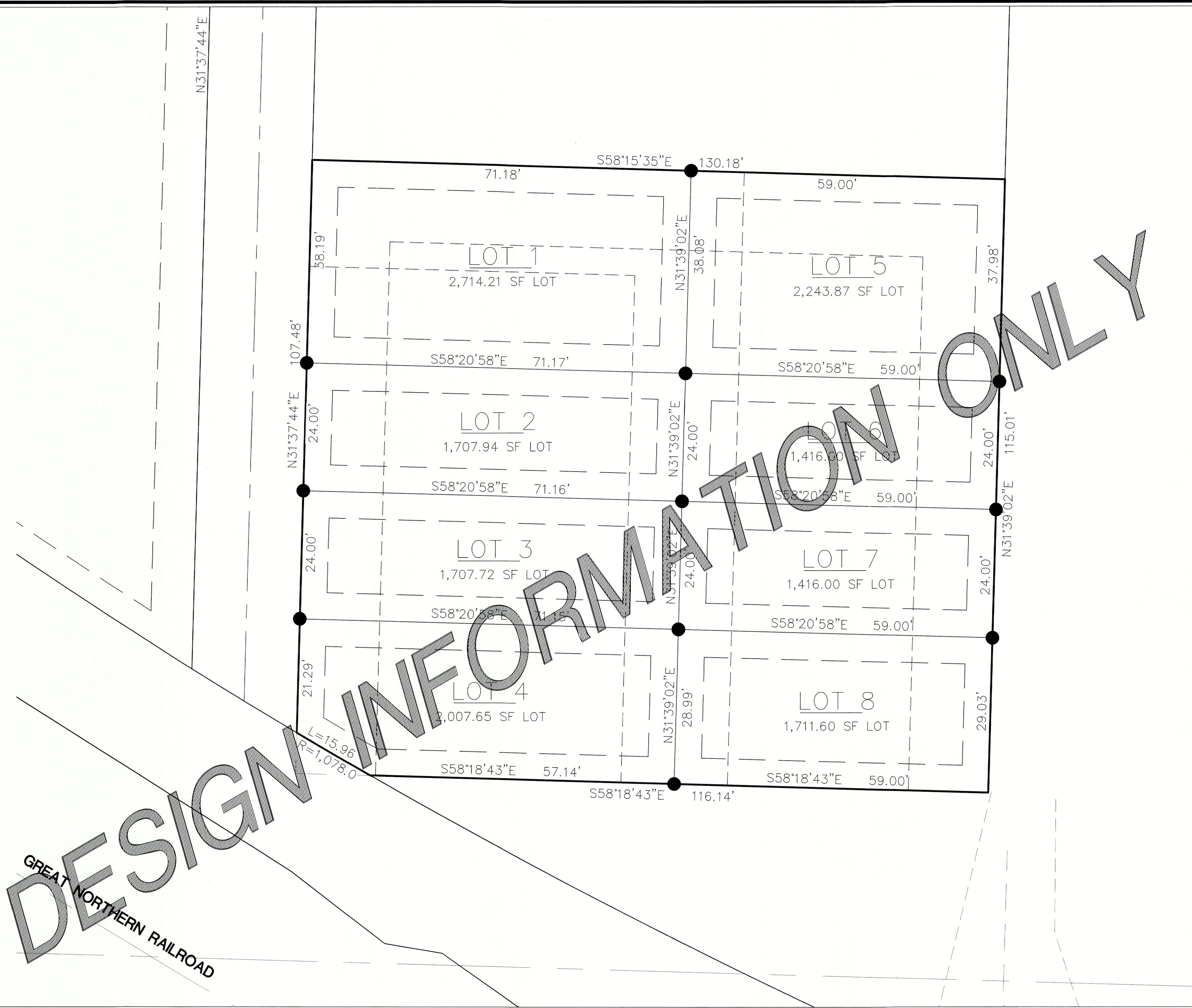
**TEMPORARY EROSION & SEDIMENTATION  
CONTROL - PLAN**

BRIDGE STREET/STONEWOOD COTTAGES  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E, W.M.

SHEET  
**04**  
OF  
11



R:\Common\Land Projects 2021\2109-Bass Drive- T&E-DWG\2109-2055.dwg - C:\3018\_combined-ASB\ULTS.dwg PLOT DATE: 11/23/2022 11:12 AM

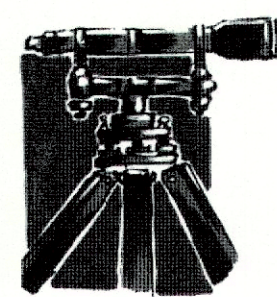
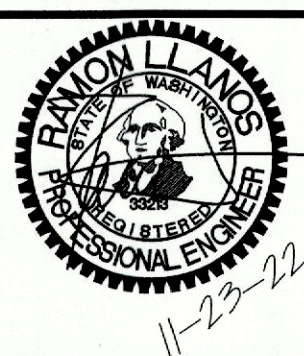


PARCEL USE SUMMARY		
	ACRES & SQUARE FOOTAGE	PERCENT
OVERALL PARCEL AREA	0.34 AC (14,924 SF)	100%
PUBLIC & PRIVATE ROADS	0	-
TOTAL LOT AREA	0.34 AC (14,924 SF)	100%
STORMWATER	0	-
OPEN SPACE	0	-
RESERVE TRACT	0	-
OTHER	0	-

BASS DRIVE

GREAT NORTHERN RAILROAD

NO.	REVISION	BY	DATE
1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21
3			
4			
5			



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

JOB NO.:	2109/2055
DWG. NAME:	2109-2055.dwg - C:\3018_combined-ASB\ULTS.dwg
DESIGNED BY:	RL
DRAWN BY:	RL
CHECKED BY:	RL

**TERRY L + K  
RENEE DAWN**  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD  
CONSTRUCTION LLC**  
PO BOX 33  
FERNDAL, WA 98248

APPROVED

DEC 05 2022  
BY: *[Signature]*  
CITY OF FERNDAL  
PUBLIC WORKS DEPARTMENT

**PRELIMINARY PLAT MAP  
BRIDGE STREET PROJECT**

**BRIDGE STREET/STONEWOOD COTTAGES**  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E, WM.

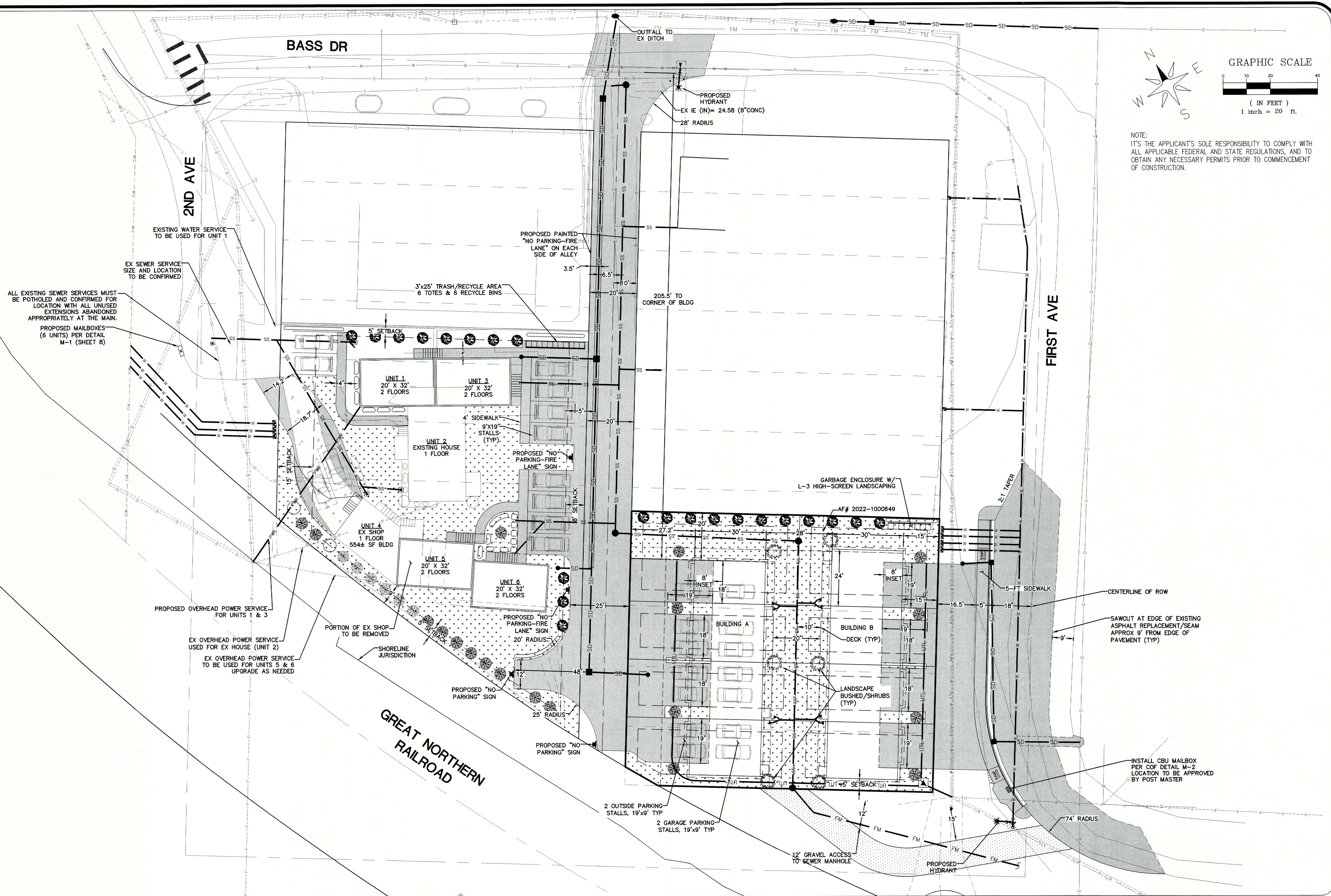
SHEET  
**04A**  
OF  
11

RECORD DRAWING

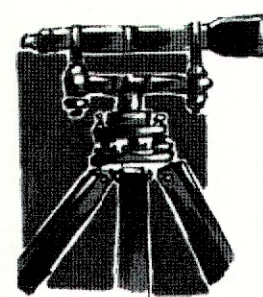
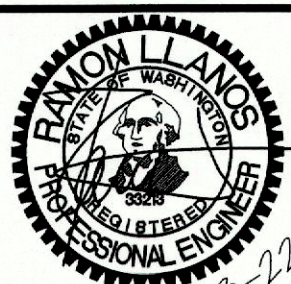
00729.007 12/05/22 RH



P:\Common\Land Projects\2021\2109-Bass Drive-148-Dwn\dwg\2109-2055-Civil-C3018-combined-ASBULTS.dwg PLOT DATE: 11/23/2022 11:12 AM



NO.	REVISION	BY	DATE
1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21
3			
4			
5			



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

JOB NO.: 2109/2005  
DWG. NAME: 2109-2055-Civil-C3018-combined-ASBULTS.dwg  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

**TERRY L + K  
RENEE DAWN**  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD  
CONSTRUCTION LLC**  
PO BOX 33  
FERNDAL, WA 98248

APPROVED

DEC 9 5 2022  
BY: [Signature]  
PUBLIC WORKS DEPARTMENT

## COMPOSITE SITE PLAN

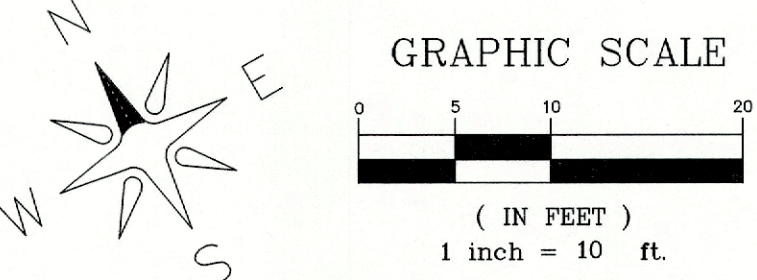
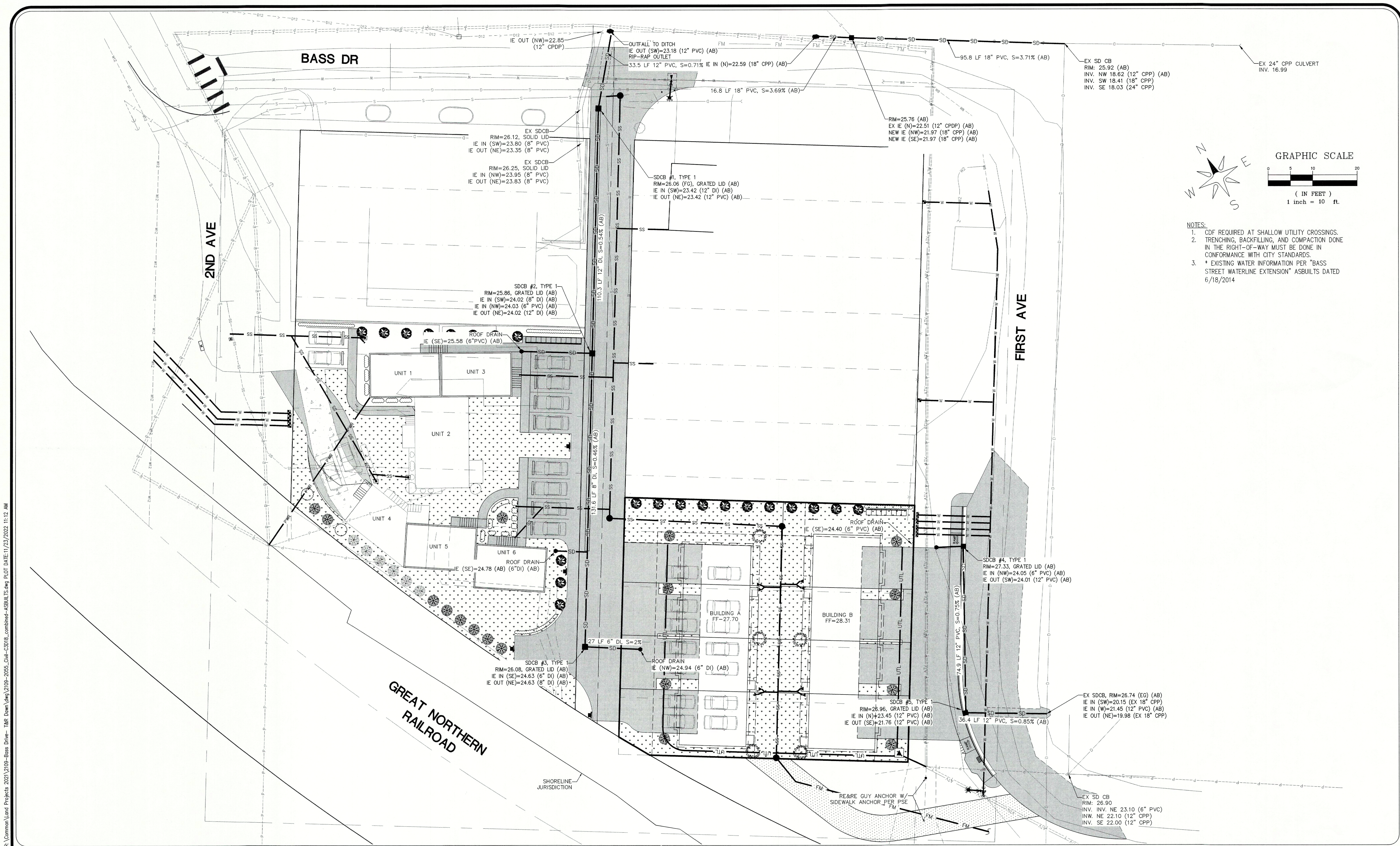
**BRIDGE STREET/STONEWOOD COTTAGES**  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E., W.M.

SHEET  
**05**  
OF  
11

RECORD DRAWING

00729.008 12/05/22 RH





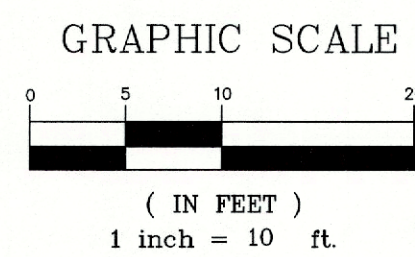
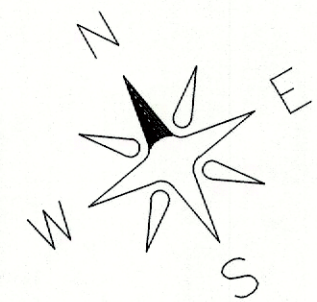
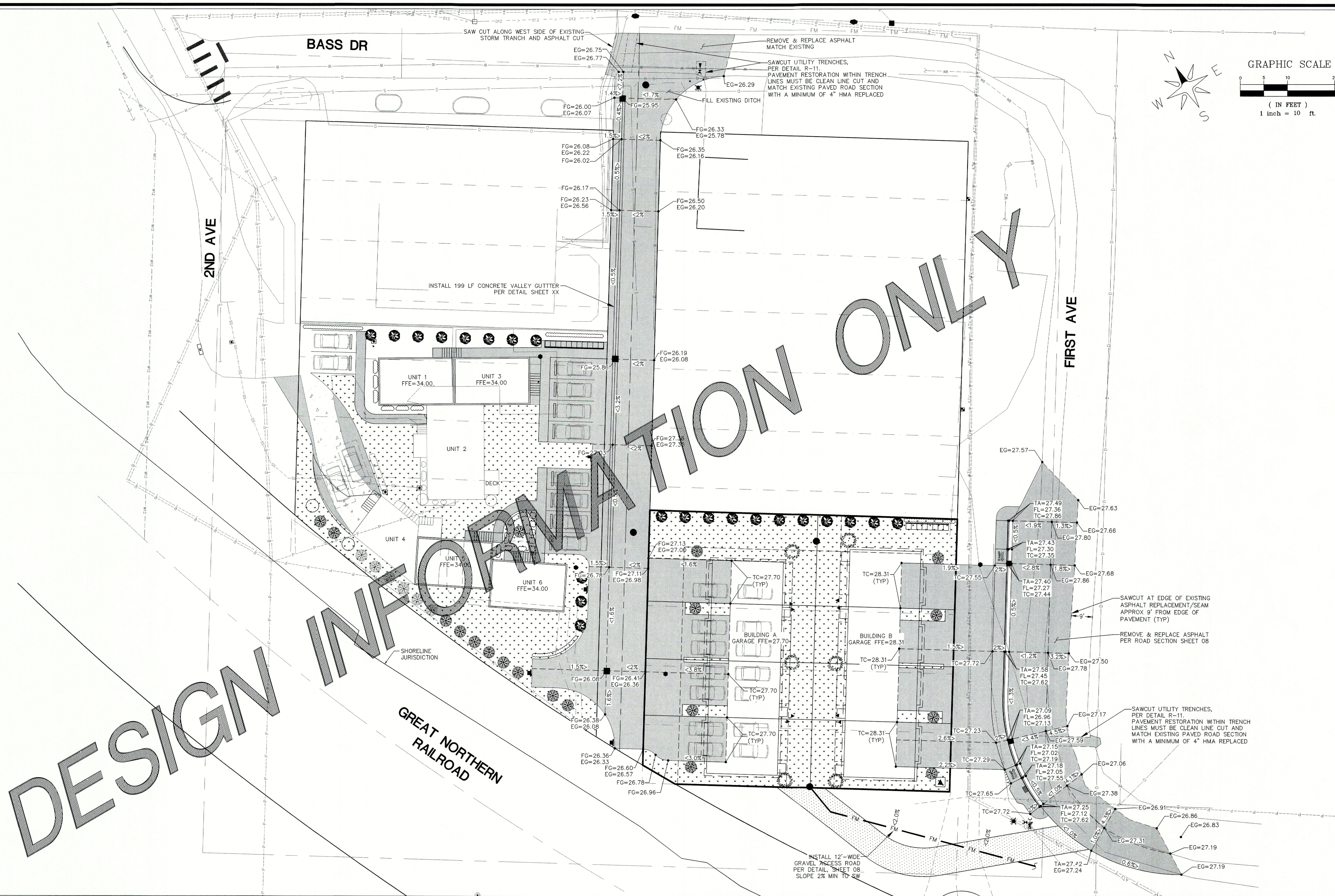
- NOTES:
1. CDF REQUIRED AT SHALLOW UTILITY CROSSINGS.
  2. TRENCHING, BACKFILLING, AND COMPACTION DONE IN THE RIGHT-OF-WAY MUST BE DONE IN CONFORMANCE WITH CITY STANDARDS.
  3. \* EXISTING WATER INFORMATION PER "BASS STREET WATERLINE EXTENSION" ASBUILTS DATED 6/18/2014

				LDES, INC. 5160 INDUSTRIAL PL. #108 FERNDAL, WA 98248 PHONE 360-383-0620 FAX 360-383-0639		JOB NO.: 2109/2055 DWG. NAME: 2109/2055.dwg DESIGNED BY: RL DRAWN BY: RL CHECKED BY: RL		TERRY L + K RENEE DAWN 5340 MARKET RD BELLINGHAM, WA 98226		STONEWOOD CONSTRUCTION LLC PO BOX 33 FERNDAL, WA 98248		APPROVED DEC 05 2022  PUBLIC WORKS DEPARTMENT		ROAD & STORMWATER PLAN & PROFILE BRIDGE STREET/STONEWOOD COTTAGES 0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E., W.M.		SHEET 06 OF 11	
SUBMITTAL 1		RL	11/08/21														
SUBMITTAL 2		RL	12/07/21														
SUBMITTAL 3		RL	4/15/22														
NO.		REVISION	BY	DATE													

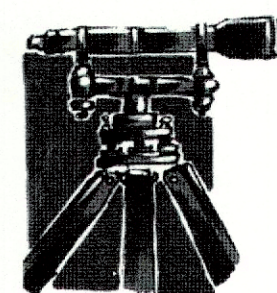
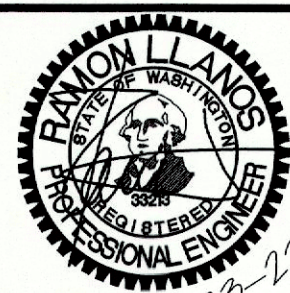
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R:\Common\Land Projects\2020\2109-Ross Drive- 1268 Down (rev) 2025-055\_Civil-C30118\_combined-ASB\LLTS.dwg PLOT DATE:11/23/2022 11:12 AM



△	SUBMITTAL 1	RL	11/08/21
△	SUBMITTAL 2	RL	12/07/21
△			
△			
△			
NO.	REVISION	BY	DATE



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

JOB NO.: 2109/2055  
DWG. NAME: 2109\_2055\_LLTS.dwg  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

**TERRY L + K**  
RENEE DAWN  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD**  
CONSTRUCTION LLC  
PO BOX 33  
FERNDAL, WA 98248

APPROVED

DEC 05 2022  
By *[Signature]*  
PUBLIC WORKS DEPARTMENT

### GRADING PLAN BRIDGE STREET & ALLEY

BRIDGE STREET/STONEWOOD COTTAGES  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N, R. 2E, W.M.

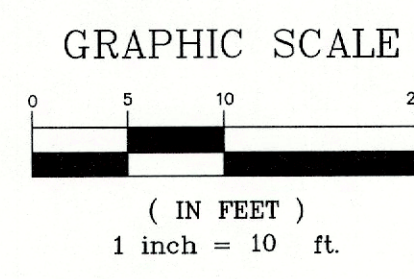
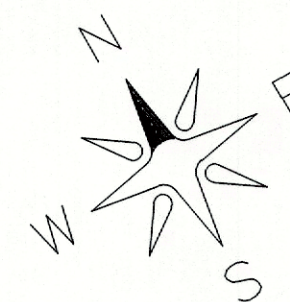
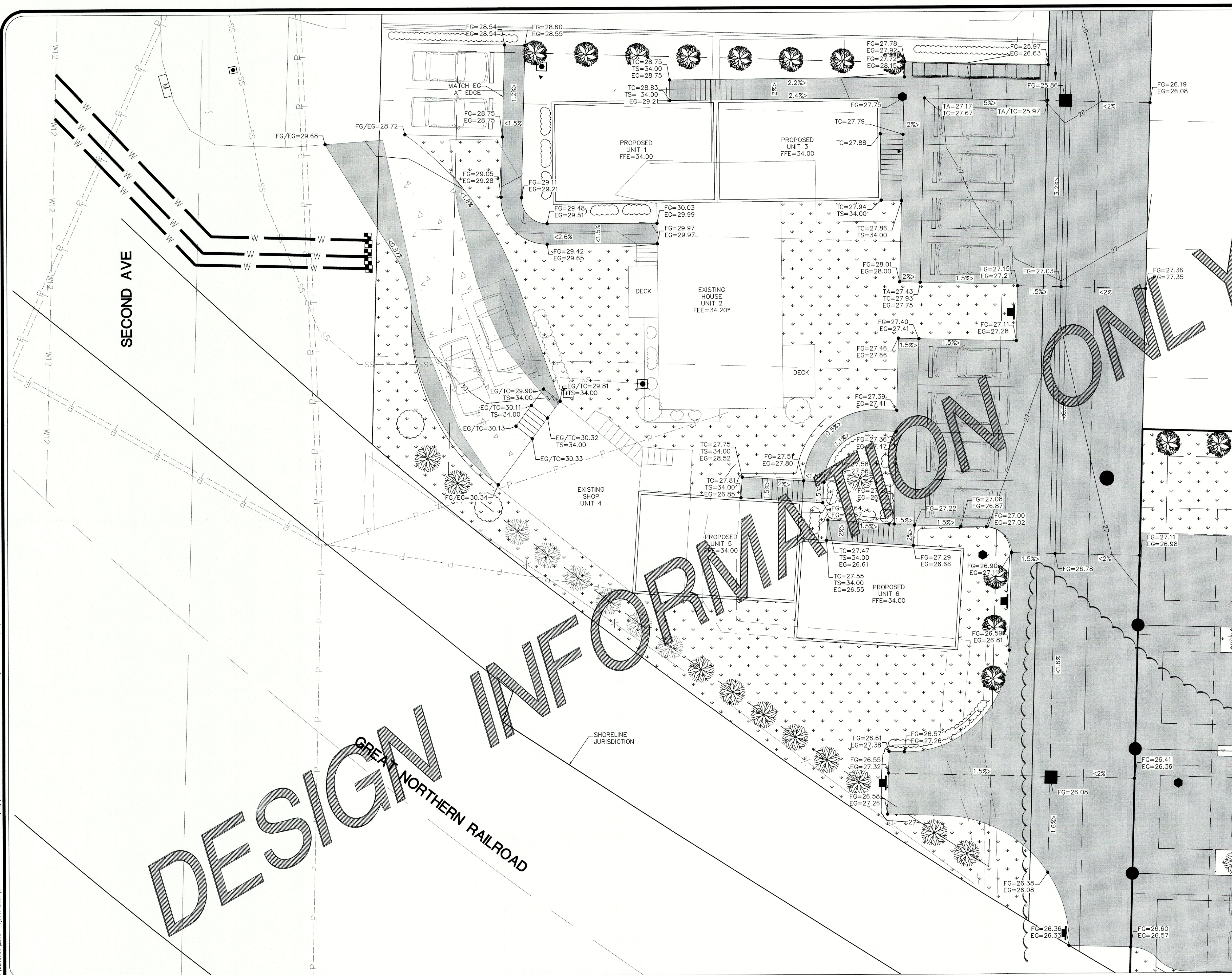
SHEET  
**07**  
OF  
**11**

RECORD DRAWING

00729.010 12/05/22 RH



R:\Common\Land Projects\2021\0108-Bess Drive-168\Draw\dwg\2109-2055-Grd-C3D18-combined-ASBULTS.dwg PLOT DATE: 11/23/2022 11:12 AM

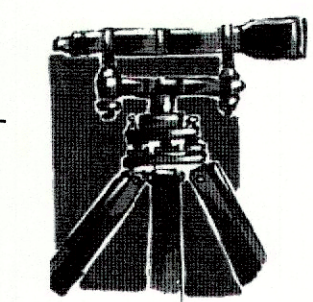
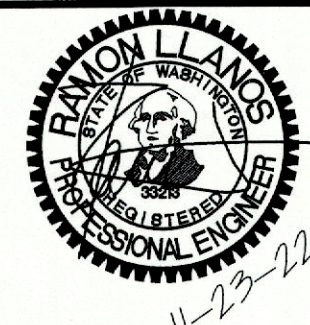


\*NOTE: FFE OF EXISTING HOUSE PER FEMA ELEVATION CERTIFICATE DATED 10/22/04 CERTIFIED BY CHRISTIE & CHRISTIE LAND SURVEYING, INC.

GRADING LEGEND:  
-EG=EXISTING GROUND  
-FG=FINISHED GROUND  
-TC=TOP OF CONCRETE  
-TS=TOP OF STEP  
-FFE=FINISHED FLOOR ELEVATION

DESIGN INFORMATION ONLY

1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21
3			
4			
5			
NO.	REVISION	BY	DATE



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

JOB NO.: 2109/2055  
DWG. NAME: 2109-2055-Grd-C3D18-combined-ASBULTS.dwg  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

**TERRY L + K  
RENEE DAWN**  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD  
CONSTRUCTION LLC**  
PO BOX 33  
FERNDAL, WA 98248

APPROVED

DEC 06 2022  
*[Signature]*  
PUBLIC WORKS DEPARTMENT

### GRADING PLAN STONEWOOD COTTAGES

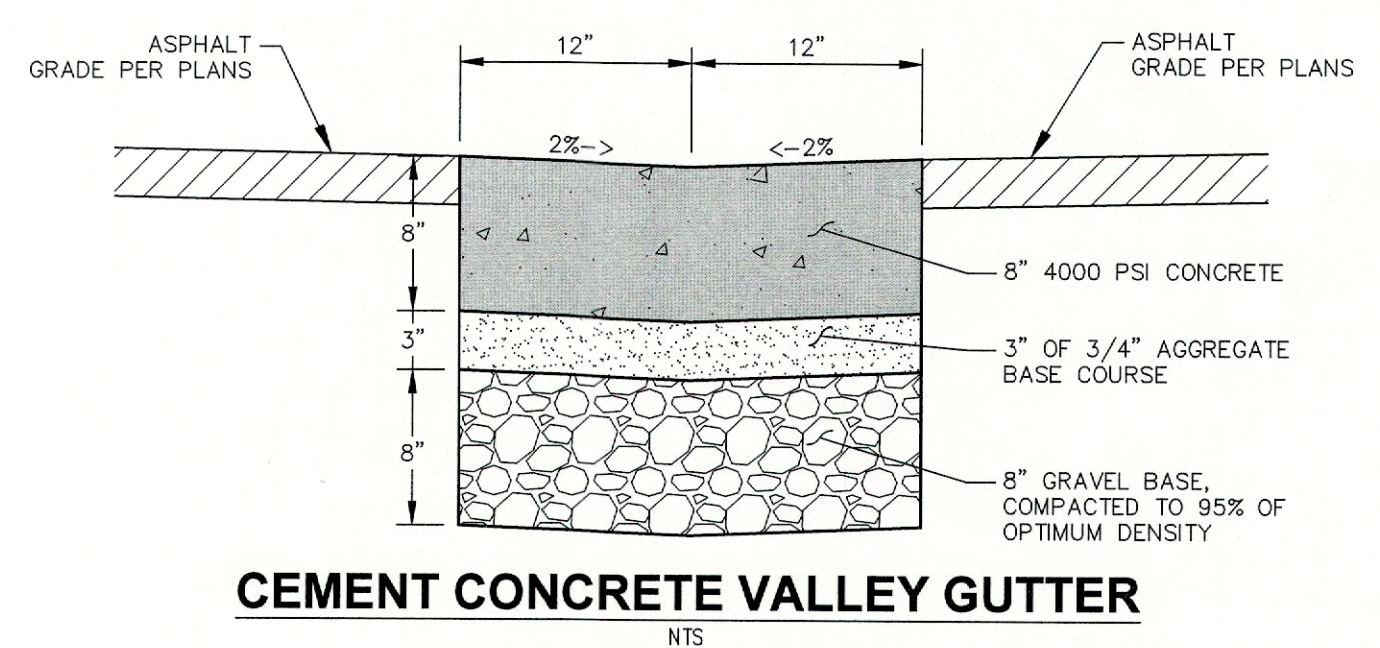
BRIDGE STREET/STONEWOOD COTTAGES  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E., W.M.

SHEET  
**07A**  
OF  
11

RECORD DRAWING

00729.011 12/05/22 RH





SAWCUT FULL DEPTH

2' FINAL LIFT HMA

2' WIDE PETRO-TAC  
CENTERED OVER  
SAWCUT SEAM

24" WIDE MIN.  
PLANE 2" DEPTH

SAWCUT FULL DEPTH

2" FIRST LIFT HMA

3" COMPACTED CRUSHED  
SURFACING TOP COURSE


12"

EXISTING TRENCH  
COMPACTED TO 95%  
MODIFIED PROCTOR

**NOTE:**  
1. TAC REQUIRED BETWEEN PAVED SURFACES, USE CSS1 EXCEPT  
WHERE PETRO-TAC IS SPECIFIED.

APRIL 21, 2017

APPROVED \_\_\_\_\_

 Public Works Director

8/11/17

Date \_\_\_\_\_

PETRO-TAC  
PLACEMENT

STANDARD DETAIL R-11A

NOT TO SCALE

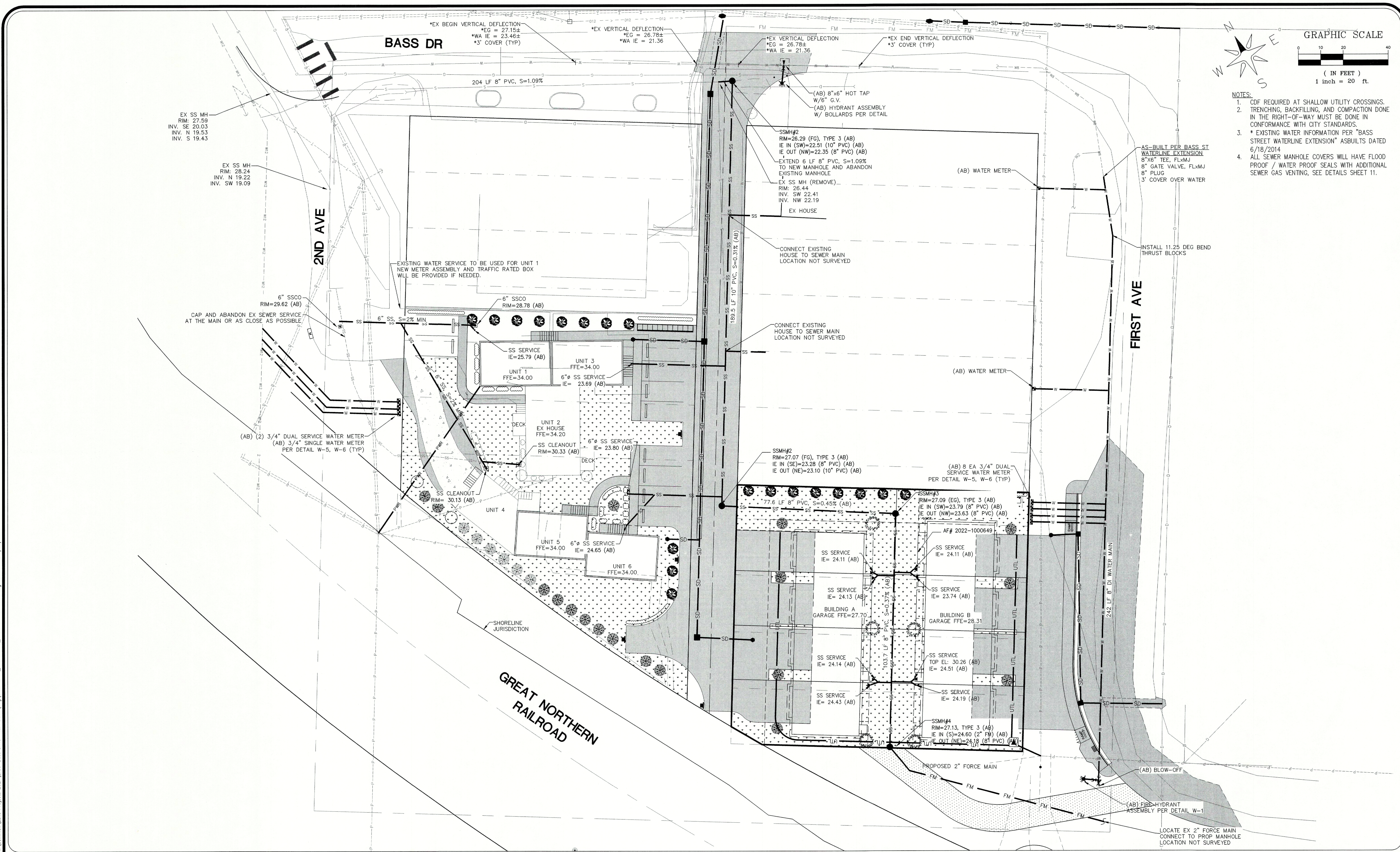
SHEET

08

OF

11





SUBMITTAL 1		RL	11/08/21
SUBMITTAL 2		RL	12/07/21
NO.		REVISION	BY DATE

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

JOB NO.: 2109/2055  
DWG. NAME: 00729.013-2018-combined-ASBUILTS.dwg  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

**TERRY L + K  
RENEE DAWN**  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD  
CONSTRUCTION LLC**  
PO BOX 33  
FERNDAL, WA 98248

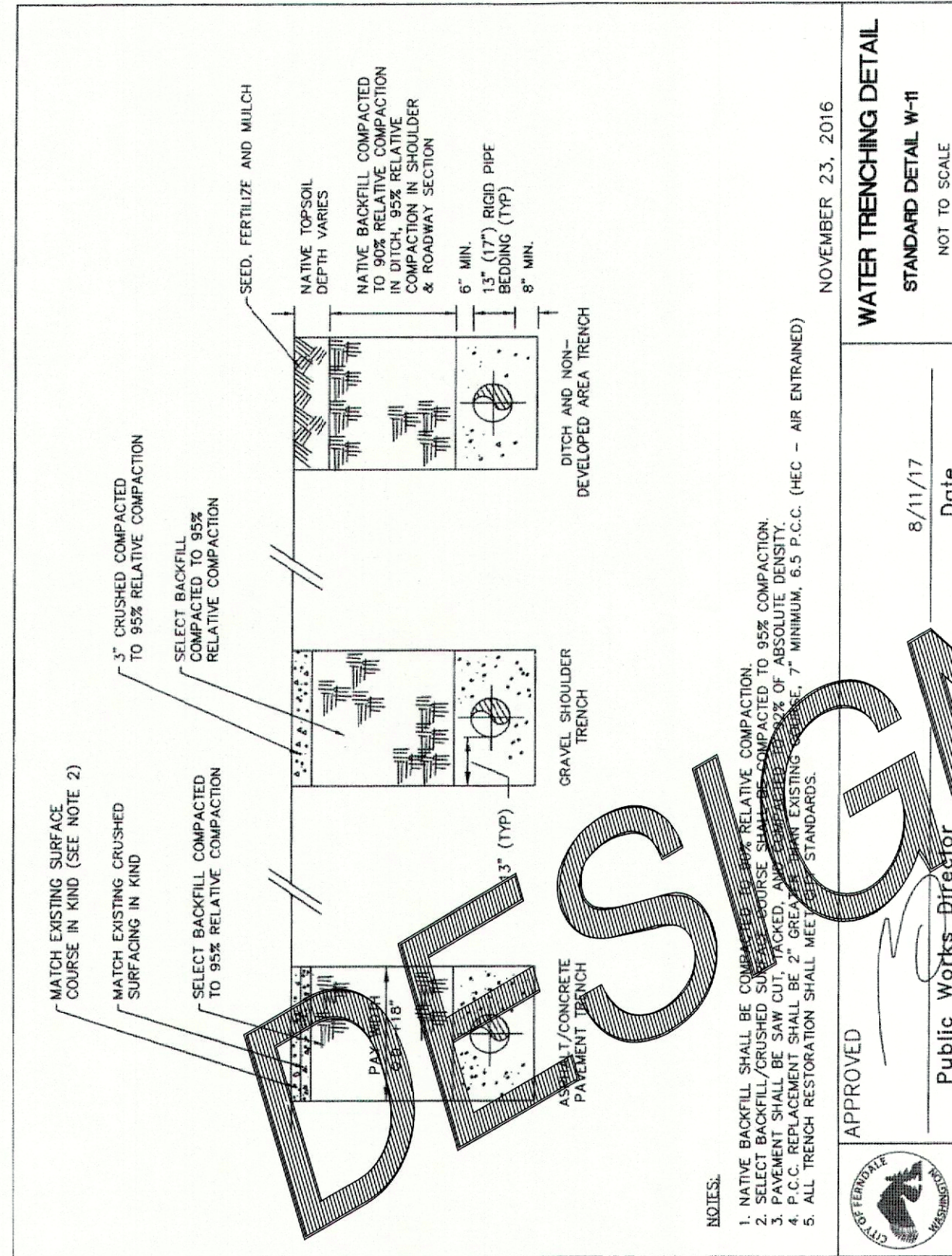
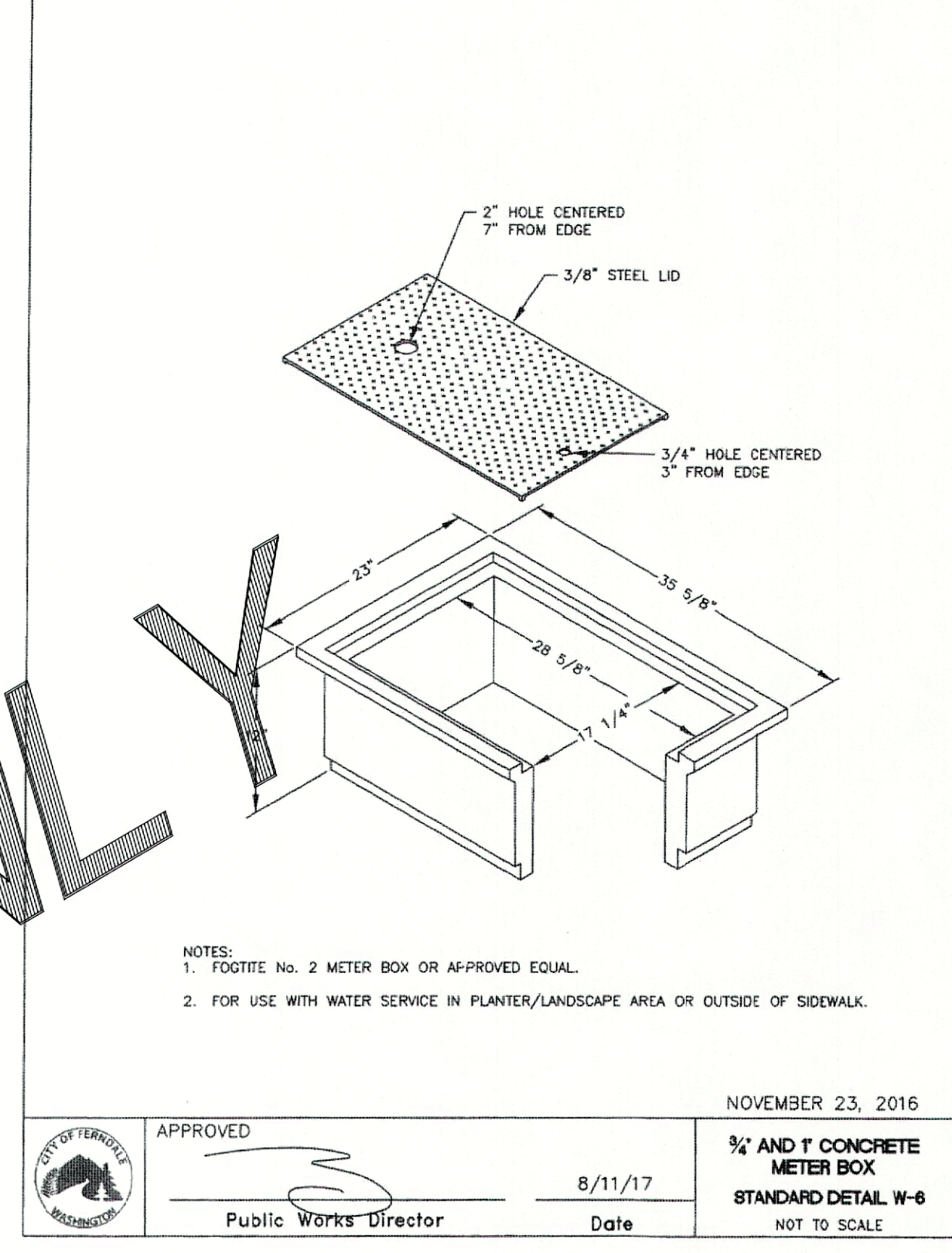
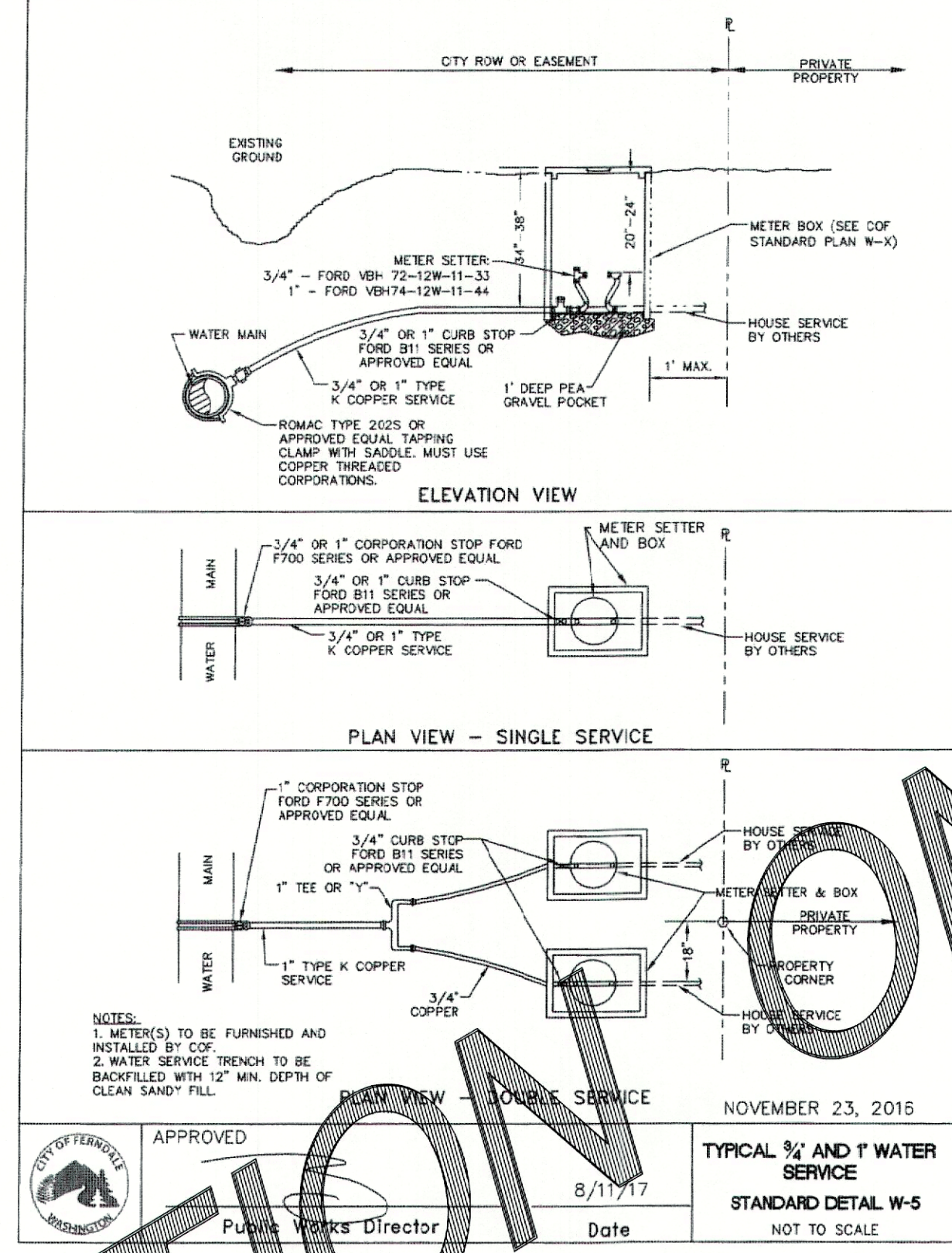
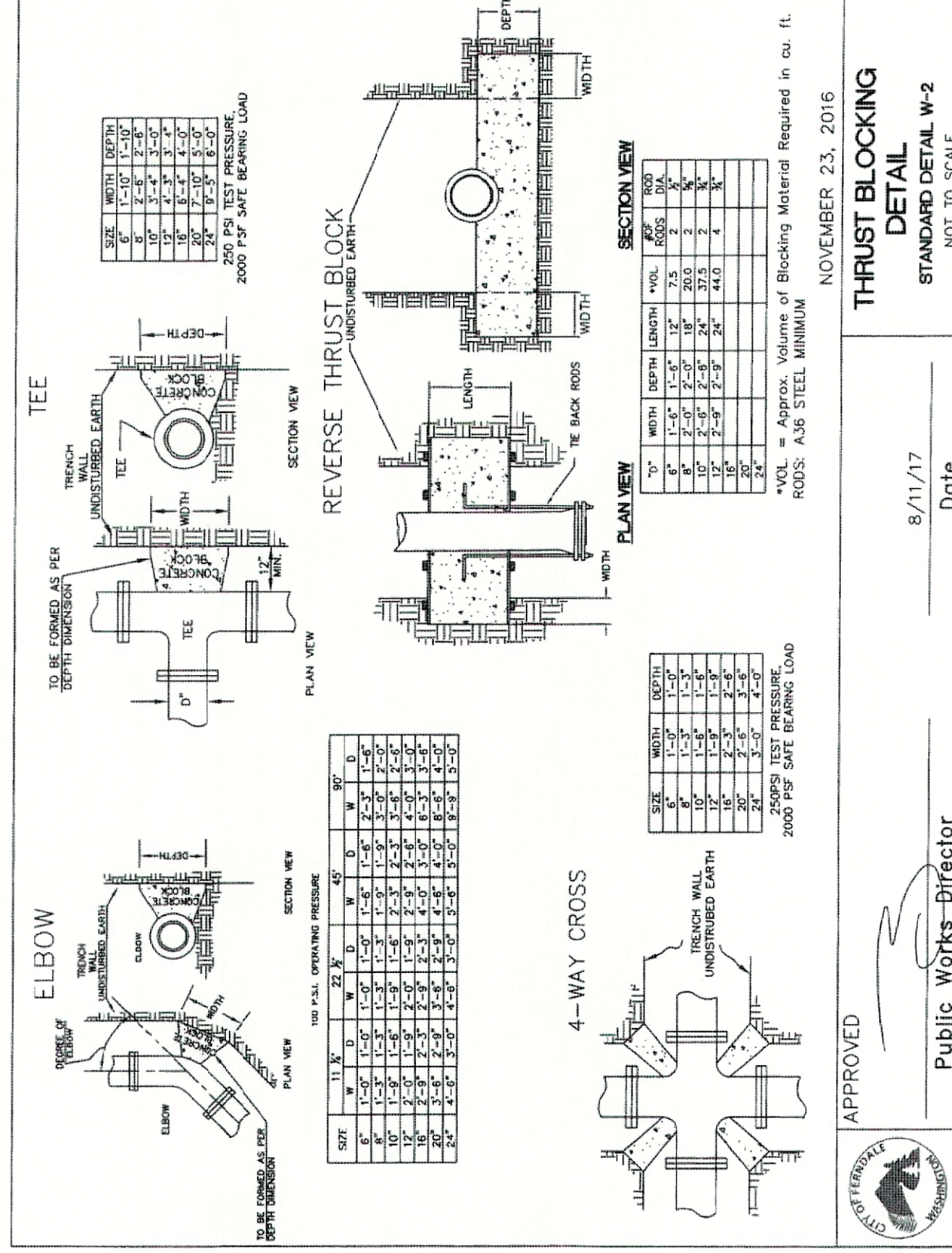
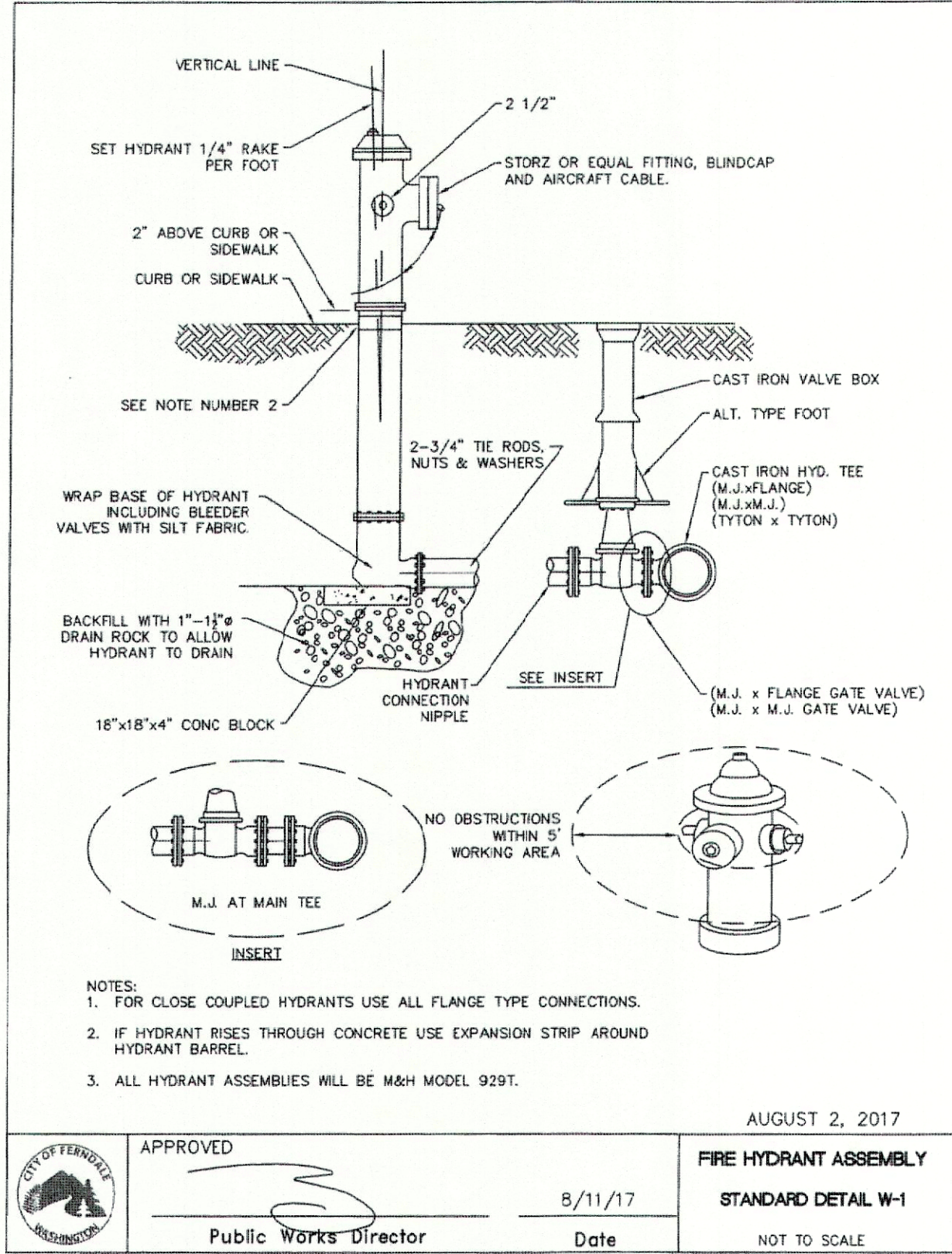
**APPROVED**  
DEC 05 2022  
*[Signature]*  
PUBLIC WORKS DEPARTMENT

**WATER & SEWER  
PLAN**

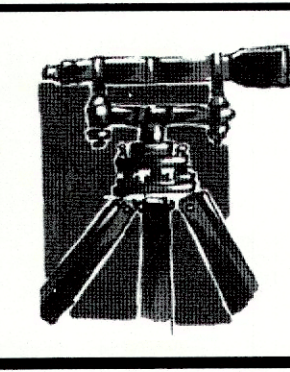
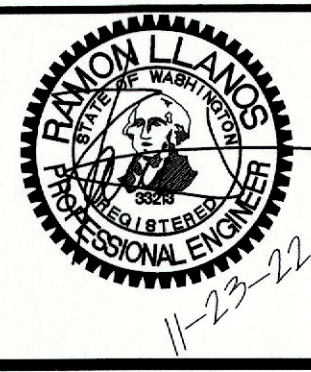
**BRIDGE STREET/STONEWOOD COTTAGES**  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N., R. 2E., W.M.

SHEET  
**09**  
OF  
**11**





NO.	REVISION	BY	DATE
1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21
3			
4			
5			



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

JOB NO.: 2109/2055  
DWG. NAME:  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

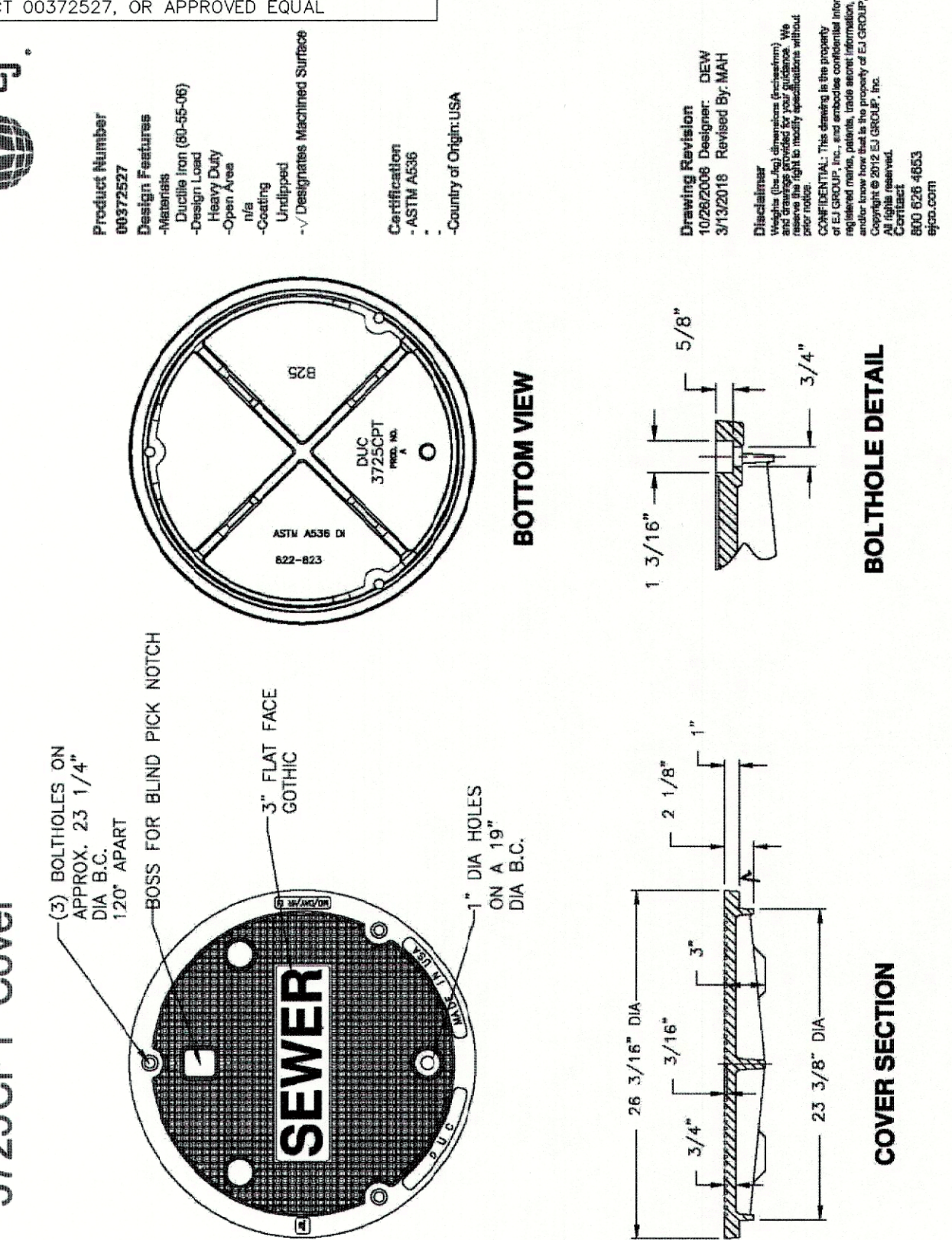
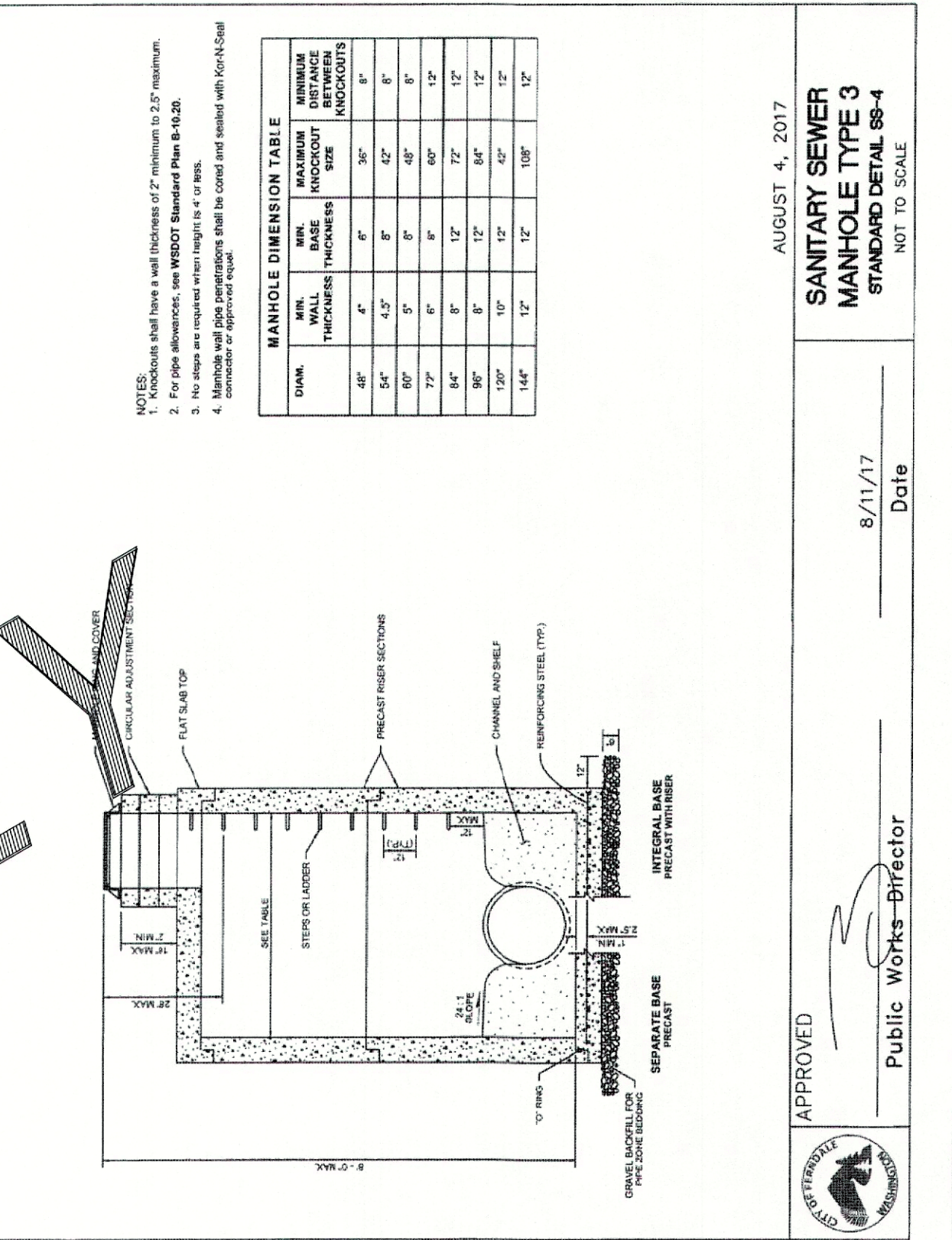
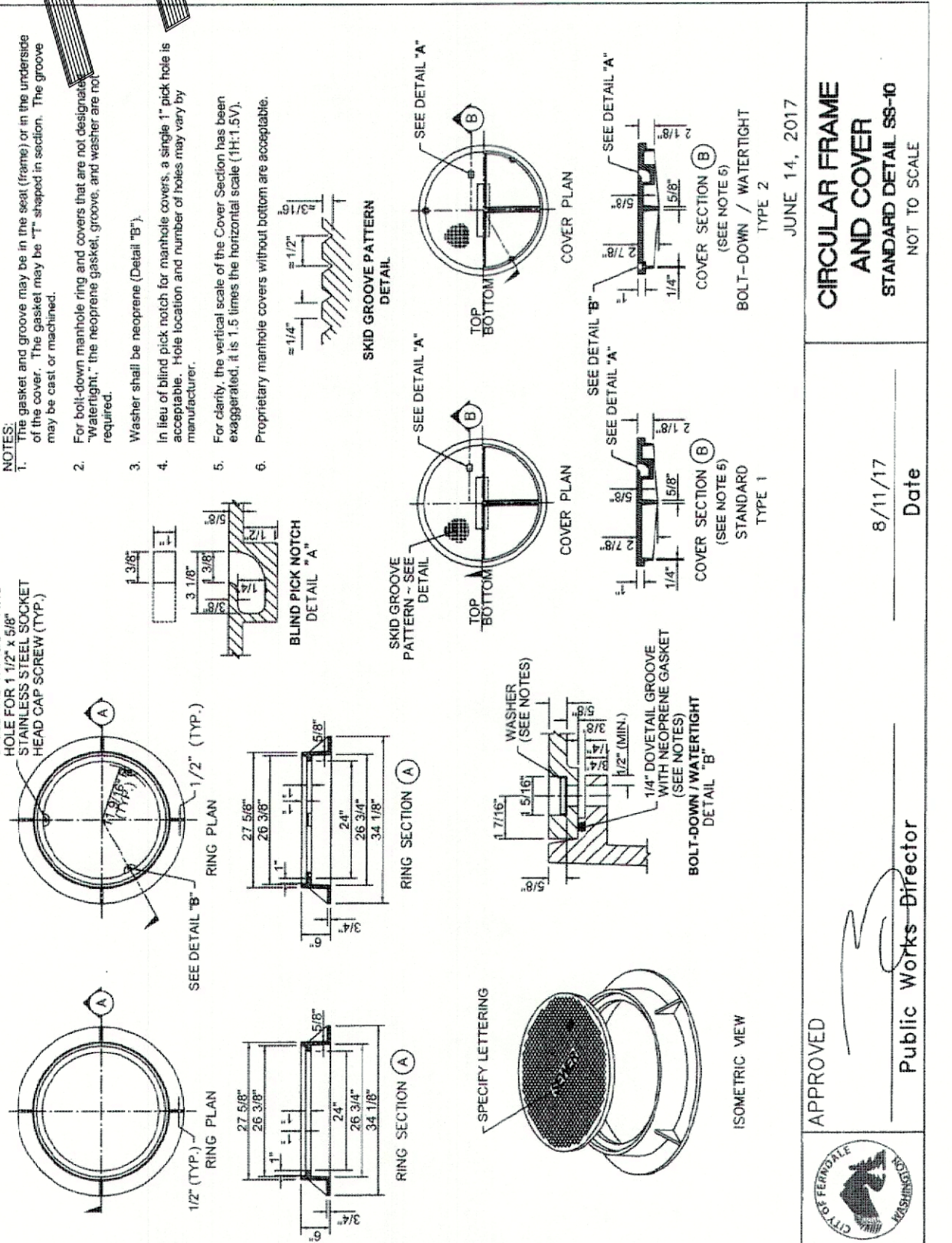
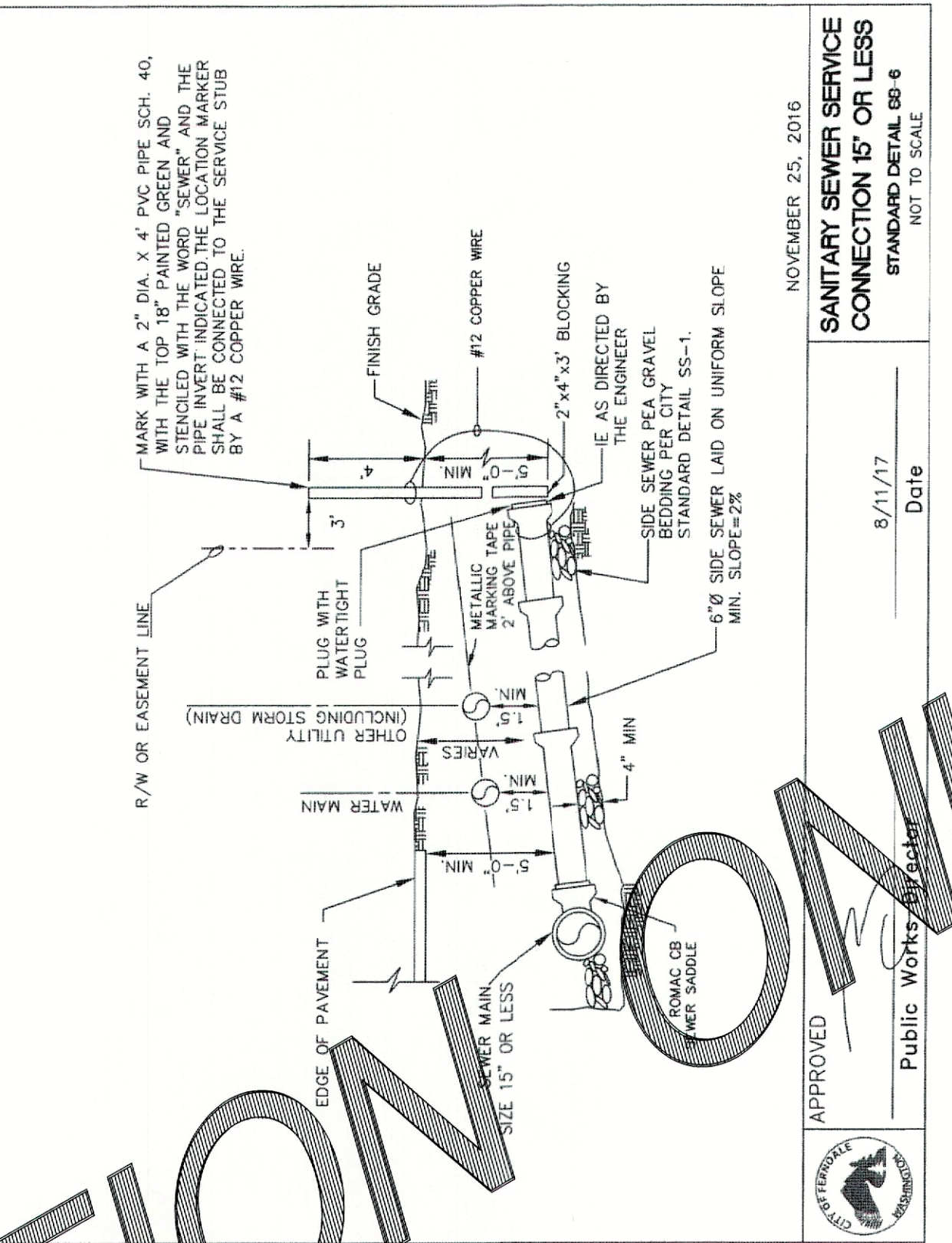
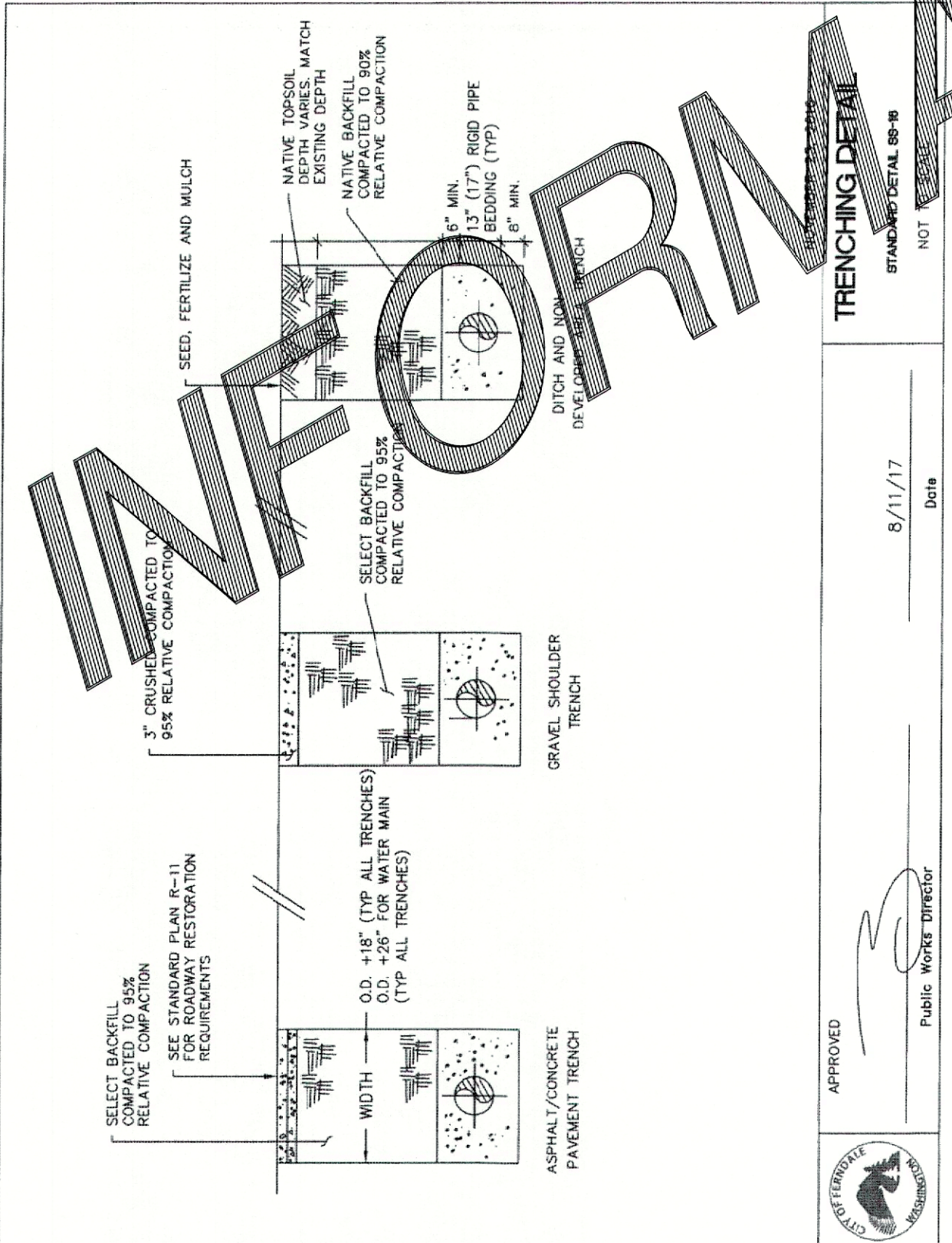
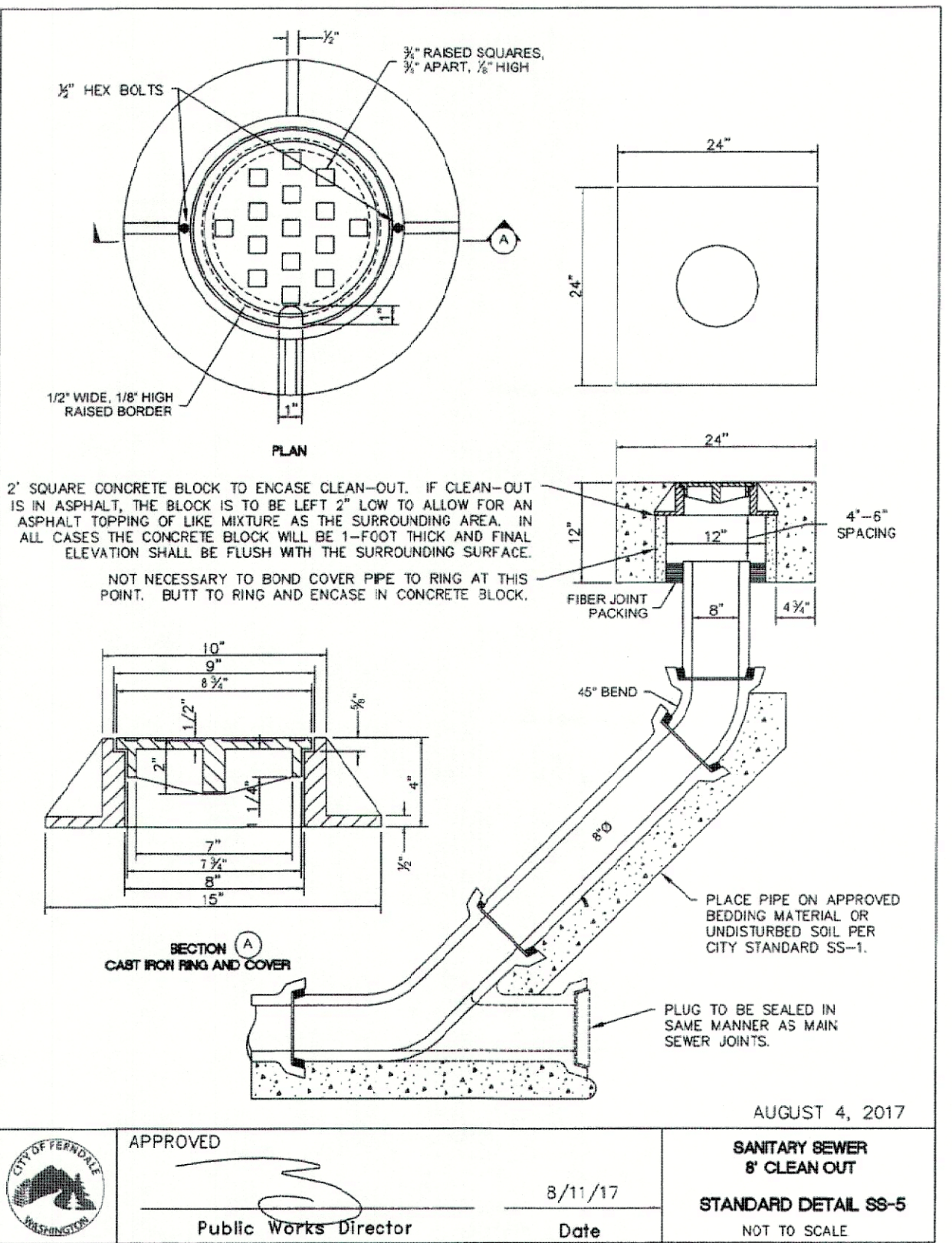
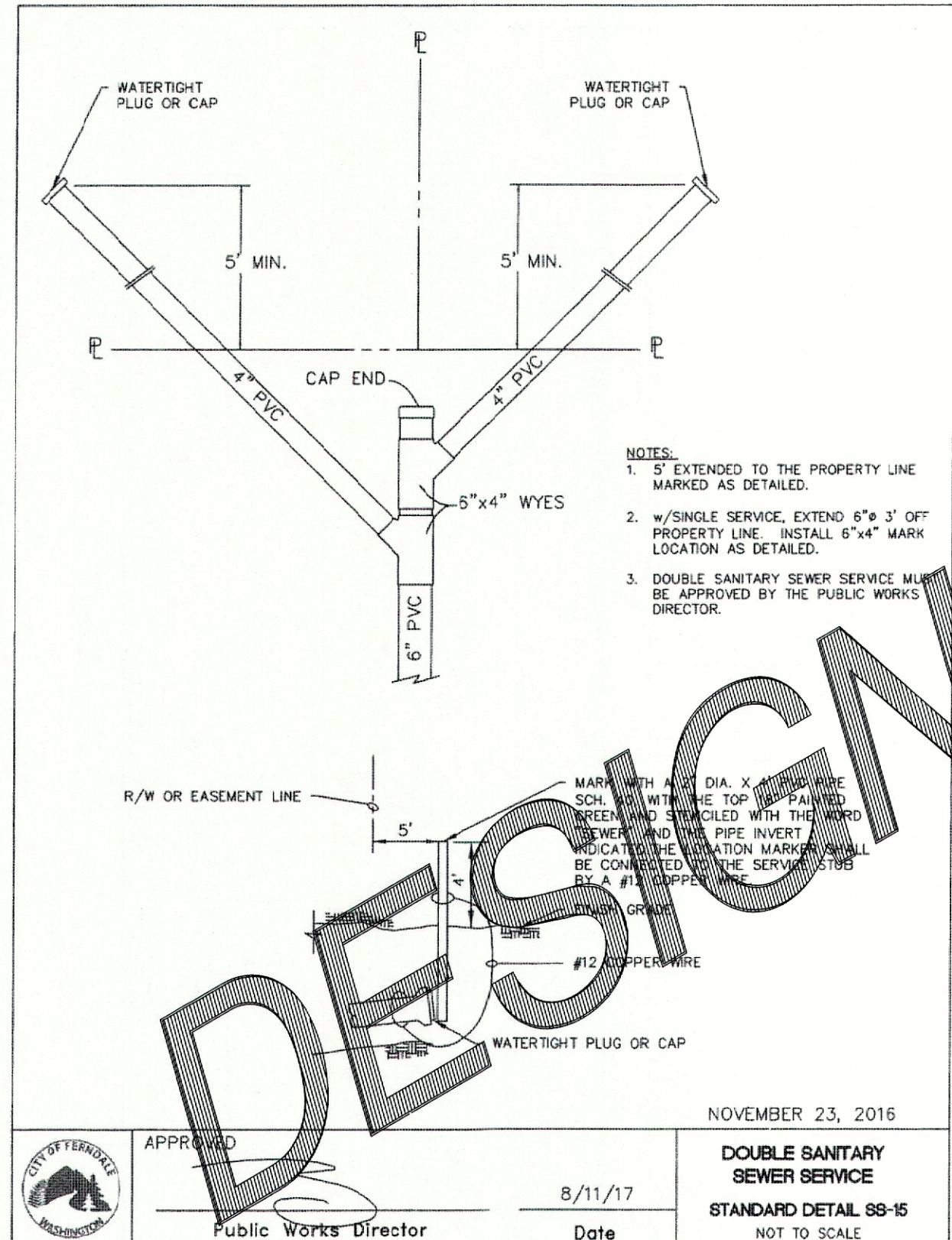
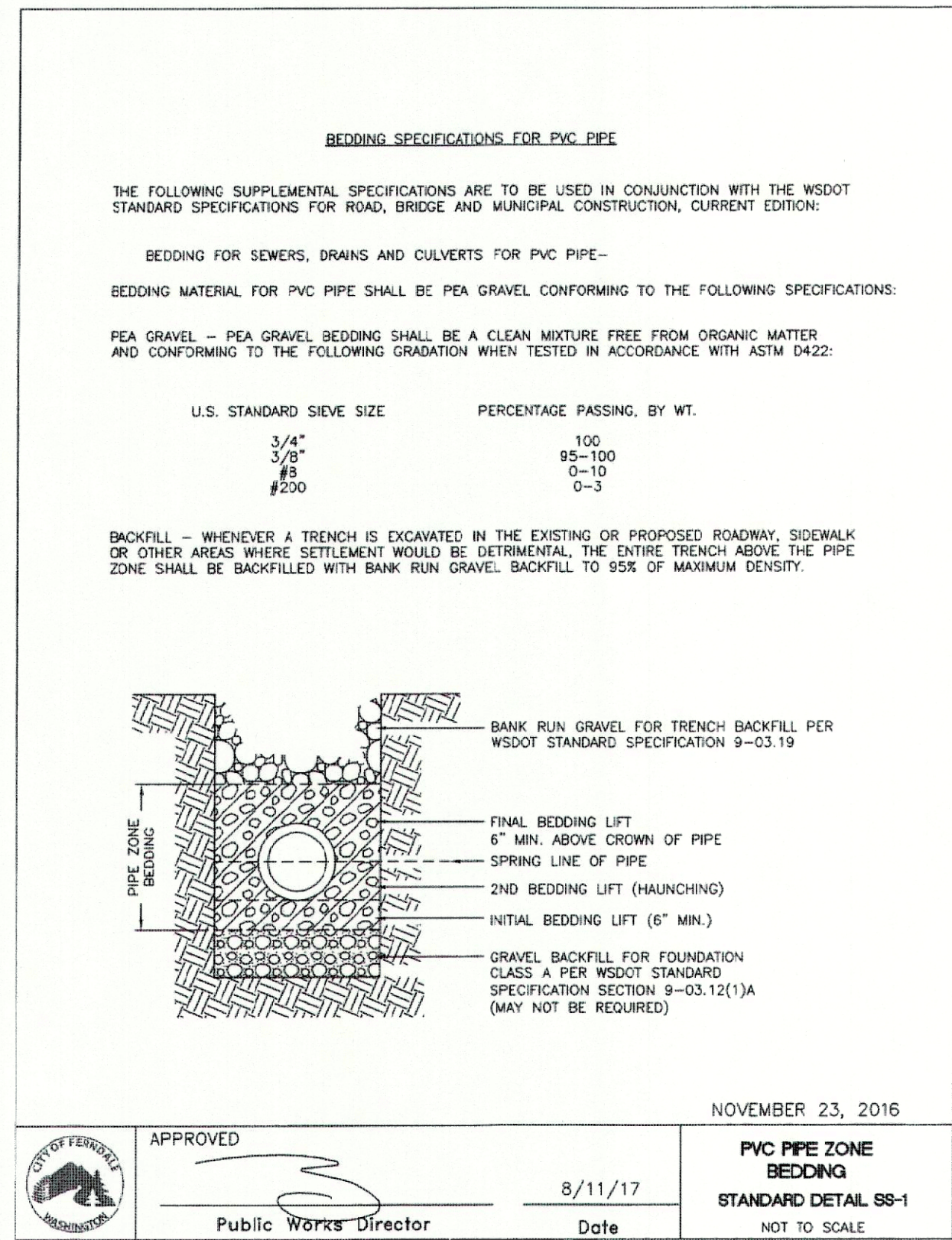
TERRY L + K  
RENEE DAWN  
5340 MARKET RD  
BELLINGHAM, WA 98226

STONWOOD  
CONSTRUCTION LLC  
PO BOX 33  
FERNDAL, WA 98248

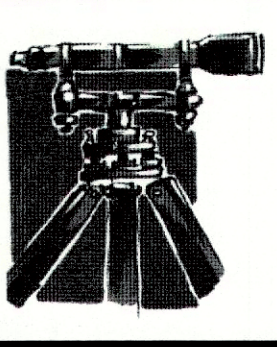
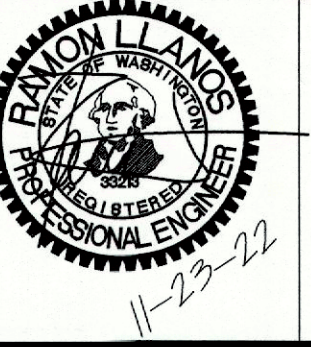
APPROVED  
DEC 06 2022  
BY: [Signature]  
CITY OF FERNDAL  
PUBLIC WORKS DEPARTMENT

WATER  
TYPICAL DETAILS  
BRIDGE STREET/STONEWOOD COTTAGES  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N, R. 2E, WM.





NO.	REVISION	BY	DATE
1	SUBMITTAL 1	RL	11/08/21
2	SUBMITTAL 2	RL	12/07/21
3			
4			
5			
6			
7			
8			
9			
10			



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

JOB NO.: 2109/2025  
DWG. NAME: 001\_Civil-C3D18-combined-ASB\UTS.dwg  
DESIGNED BY: RL  
DRAWN BY: RL  
CHECKED BY: RL

**TERRY L + K**  
RENEE DAWN  
5340 MARKET RD  
BELLINGHAM, WA 98226

**STONEWOOD**  
CONSTRUCTION LLC  
PO BOX 33  
FERNDAL, WA 98248

APPROVED

DEC 05 2022  
BY: FOR:   
PUBLIC WORKS DEPARTMENT

**SEWER**  
TYPICAL DETAILS

BRIDGE STREET/STONEWOOD COTTAGES  
0 BRIDGE STREET + 5698 SECOND AVE, FERNDAL, WHATCOM COUNTY, WASHINGTON  
SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 29, T. 39 N, R. 2E, W.M.

SHEET  
**11**  
OF  
11

RECORD DRAWING