

GENERAL NOTES

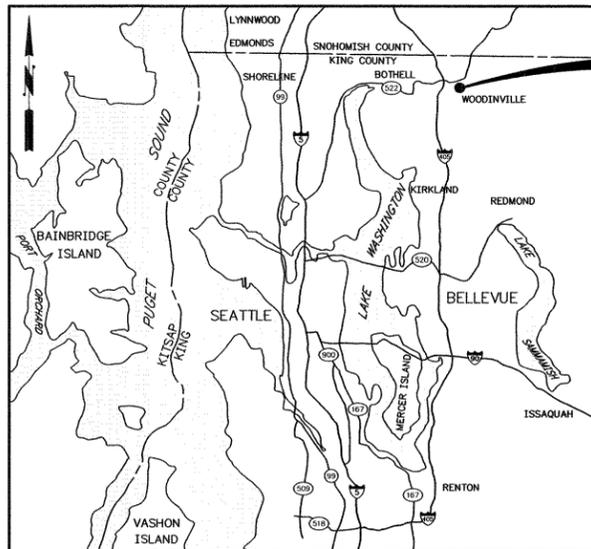
- ALL WORK SHALL CONFORM TO THE RULES AND REGULATIONS OF THE WOODINVILLE WATER DISTRICT, CITY OF WOODINVILLE, THESE DRAWINGS AND THE PROJECT MANUAL. REFERENCE TO STANDARD PLANS REFERS TO WOODINVILLE WATER DISTRICT STANDARD WATER PLANS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE PRIOR TO THE START OF CONSTRUCTION.
- WATER MAINS SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON, OR HDPE SDR 11 DIPS (160 PSI), SIZE AS NOTED ON PLANS. ALL MJ JOINTS SHALL BE RESTRAINED. PIPELINE SHALL BE RESTRAINED WITH FIELD-LOCK GASKETS AROUND FITTINGS AND VALVES AND WHERE INDICATED ON PLANS. SEE STANDARD PLAN 2.
- ALL OPERATING NUTS ON GATE VALVES ARE TO BE EXTENDED TO WITHIN 18 TO 24 INCHES OF THE FINISHED GRADE. MINIMUM COVER ON 8-INCH DIA. WATER MAIN SHALL BE 36" UNLESS OTHERWISE NOTED.
- LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE. IDENTIFICATION LOCATION MARKING AND RESPONSIBILITY FOR THE UNDERGROUND FACILITIES OR UTILITIES IS GOVERNED BY THE PROVISIONS OF CHAPTER 19.122 REVISED CODE OF WASHINGTON. CONTRACTOR SHALL COORDINATE FOR UTILITY LOCATES PRIOR TO CONSTRUCTION START AND PROVIDE FOR CURRENT LOCATES THROUGHOUT THE PERIOD OF CONSTRUCTION.
- MINIMUM SEPARATION OF POTABLE WATER MAINS AND SANITARY SEWER LINES SHALL BE TEN (10) FEET HORIZONTALLY FOR PARALLEL AND THREE (3) FEET VERTICALLY FOR PERPENDICULAR OR OBLIQUE CROSSINGS, MEASURED FROM OUTSIDE EDGE TO OUTSIDE EDGE. SITUATIONS OCCURRING WITH LESS THAN MINIMUM SEPARATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION C1-9 OF THE "CRITERIA FOR SEWAGE WORKS DESIGN" PUBLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AS REVISED AUGUST 2008.
- THE CONTRACTOR IS CAUTIONED THAT OVERHEAD ELECTRICAL SERVICE LINES ARE GENERALLY NOT SHOWN ON THESE DRAWINGS. ELECTRICAL LINES SHOWN ON THE DRAWINGS ARE LOCATED BY POINT-TO-POINT, POWER POLE-TO-POWER POLE CONNECTION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXTENT OF ANY HAZARD CREATED BY OVERHEAD ELECTRICAL POWER IN ALL AREAS AND SHALL FOLLOW PROCEDURES DURING CONSTRUCTION AS REQUIRED BY LAW AND REGULATION.
- CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND CLEARANCES PRIOR TO CONSTRUCTION. CONTRACTOR REQUIRED TO COORDINATE WITH PUGET SOUND ENERGY DURING CONSTRUCTION AROUND GAS MAINS 4" OR LARGER.
- THE CONTRACTOR SHALL KEEP EXISTING BUSINESSES IN SERVICE AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR SERVICE LINES AND MAINS IF DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT INSPECTOR AT LEAST SEVEN (7) WORKING DAYS IN ADVANCE AND MAKE THE NECESSARY ARRANGEMENTS WITH THE WATER DISTRICT INSPECTOR FOR CONNECTION TO EXISTING WATER SYSTEM. WATER SHUT OFFS REQUIRE A MINIMUM OF 72 HOURS (WORKING DAYS) PRIOR NOTIFICATION. SHUT OFFS NORMALLY ONLY ALLOWED TUESDAY THROUGH THURSDAY; 9:00 AM TO 3:00 PM. HOWEVER FOR THIS PROJECT SHUT OFFS MAY BE REQUIRED WHEN BUSINESSES ARE CLOSED.
- MINIMUM VERTICAL SEPARATION BETWEEN UTILITIES SHALL BE 12 INCHES WITH A SAND CUSHION AND HAND COMPACTION UNLESS OTHERWISE NOTED. NEW MAIN MAY NEED TO BE INSTALLED DEEPER TO GO UNDER EXISTING AND NEW UTILITIES. PROVIDE VERTICAL BENDS AND THRUST BLOCKING IN ACCORDANCE WITH THE STANDARD PLANS.
- NEW WATER MAINS ARE TO BE TESTED IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO CONNECTING TO THE EXISTING WATER SYSTEM. THE USE OF AN APPROVED BACKFLOW DEVICE IS REQUIRED TO PREVENT CROSS-CONNECTIONS DURING TESTING. SEE STD. PLAN 1.
- CONTRACTOR REQUIRED TO FOLLOW ALL CONFINED SPACE ENTRY REGULATIONS PRIOR TO ENTERING ANY CONFINED SPACE.
- CONTRACTOR REQUIRED TO PROVIDE A COMPETENT PERSON(S) TRAINED TO IDENTIFY EXISTING OR PREDICTABLE HAZARDS RELATED TO TRENCH SAFETY, SOIL CONDITIONS AND SHORING REQUIREMENTS, IN ACCORDANCE WITH WAC 296-155 PART N. REPRESENTATIVES OF THE DISTRICT SHALL NOT BE REQUIRED TO PERFORM THE ROLE OF COMPETENT PERSON FOR THIS PROJECT. NO WORKERS SHALL ENTER A TRENCH OR OTHER EXCAVATION FOUR FEET OR MORE IN DEPTH WITHOUT TRENCH SAFETY SYSTEM IN PLACE.
- SAWCUT EXISTING PAVEMENT FOR WATER LINE INSTALLATION. DISC CUTTING NOT ALLOWED. TEMPORARY TRENCH PATCH REQUIRED ON 130TH AVE NE AND NE 178TH ST. AT THE END OF EACH WORKING DAY. TEMPORARY TRENCH PATCH CAN BE COLD MIX FOR UP TO 3 DAYS. AFTER 3 DAYS, TRENCH SHALL BE PERMANENTLY PATCHED.
- NOT ALL MONUMENTS ARE SHOWN. CONTRACTOR RESPONSIBLE FOR PROTECTION OF ALL MONUMENTS. IF ANY MONUMENTS ARE TO BE REMOVED AND RESET, THE CONTRACTOR SHALL NOTIFY THE ROAD AGENCY PRIOR TO DISTURBING THE MONUMENT. MONUMENT RESTORATION SHALL MEET ALL ROADS AGENCY'S REQUIREMENTS.

SURVEYOR NOTES

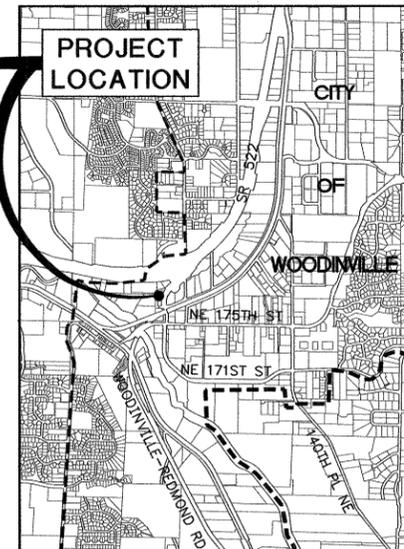


VERTICAL DATUM: NAVD88
 PER WASHDOT VERTICAL CONTROL POINT #2018
 ELEV = 98.40
HORIZONTAL DATUM: NAD83/91
 WA STATE PLANE, NORTH ZONE
SURVEY INSTRUMENTATION:

INSTRUMENTATION FOR THIS SURVEY WAS A LEICA ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS KING COUNTY AND STATE STANDARDS SET BY WAC 332-130-090.



AREA MAP
NTS

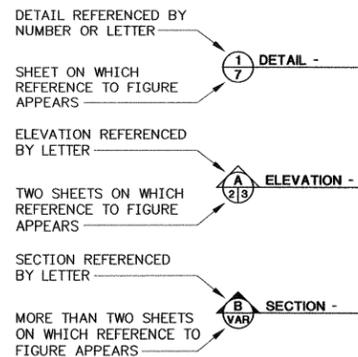


VICINITY MAP
NTS

SHEET INDEX

SHEET	DESCRIPTION
1	GENERAL NOTES, VICINITY MAP, LEGEND AND SHEET INDEX
2	TEMPORARY WATER MAIN PLAN
3	REMOVAL PLAN
4	STANDARD PLANS

REFERENCE SYMBOLS

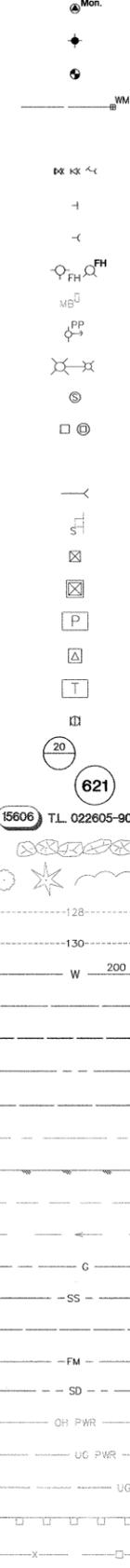


PROPOSED



LEGEND

EXISTING



DESCRIPTION

- MONUMENT IN CASE
- PK NAIL W/WASHER
- REBAR AND CAP
- WATER METER W/ SERVICE
- RELOCATED WATER METER
- WATER FITTINGS
- FLANGE FITTING
- MECHANICAL JOINT FITTING
- FIRE HYDRANT
- MAIL BOX
- POWER POLE W/ GUY
- POWER POLE W/ LUMINAIRE
- SEWER MANHOLE
- CATCH BASIN (CB)
- CB PROTECTION
- STORM DRAIN CULVERT
- SIGN
- POWER JUNCTION BOX
- POWER METER
- POWER VAULT
- POWER BOX
- TELEPHONE VAULT
- GAS VALVE
- FIRE HYDRANT NUMBER
- AS-BUILT SHEET NUMBER
- ADDRESS / TAX LOT NUMBER
- ROCKERY
- VEGETATION
- CONTOUR (MINOR)
- CONTOUR (MAJOR)
- WATER MAIN
- WATER SERVICE
- RIGHT OF WAY (R/W)
- PROPERTY LINE
- UTILITY EASEMENT
- CENTER LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- DITCH CENTERLINE
- GAS
- SANITARY SEWER
- SEWER SERVICE
- FORCE MAIN
- STORM DRAINAGE
- OVERHEAD POWER
- UNDERGROUND POWER
- TELEPHONE
- GUARD RAIL
- FENCE
- TESC/SILT FENCE
- PAVING LIMITS
- EASEMENT

22

20
621
15606 TL 022605-9028

W 200 LF± 8"DI

W 200 LF± 8"AC

WOODINVILLE WATER DISTRICT

APPROVED BY MANAGER FOR PUBLIC WATER SYSTEM ONLY

DATE



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Drawn / Date: JK / 09-14
 Designed / Date: MD / 09-14
 Checked / Date: EH / 09-14

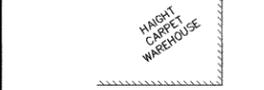
WOODINVILLE WATER DISTRICT
 SR202 - LITTLE BEAR CREEK
 TEMPORARY WATER MAIN
 GENERAL NOTES, LEGEND & SHEET INDEX

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811
 Know what's below.
 Call before you dig.

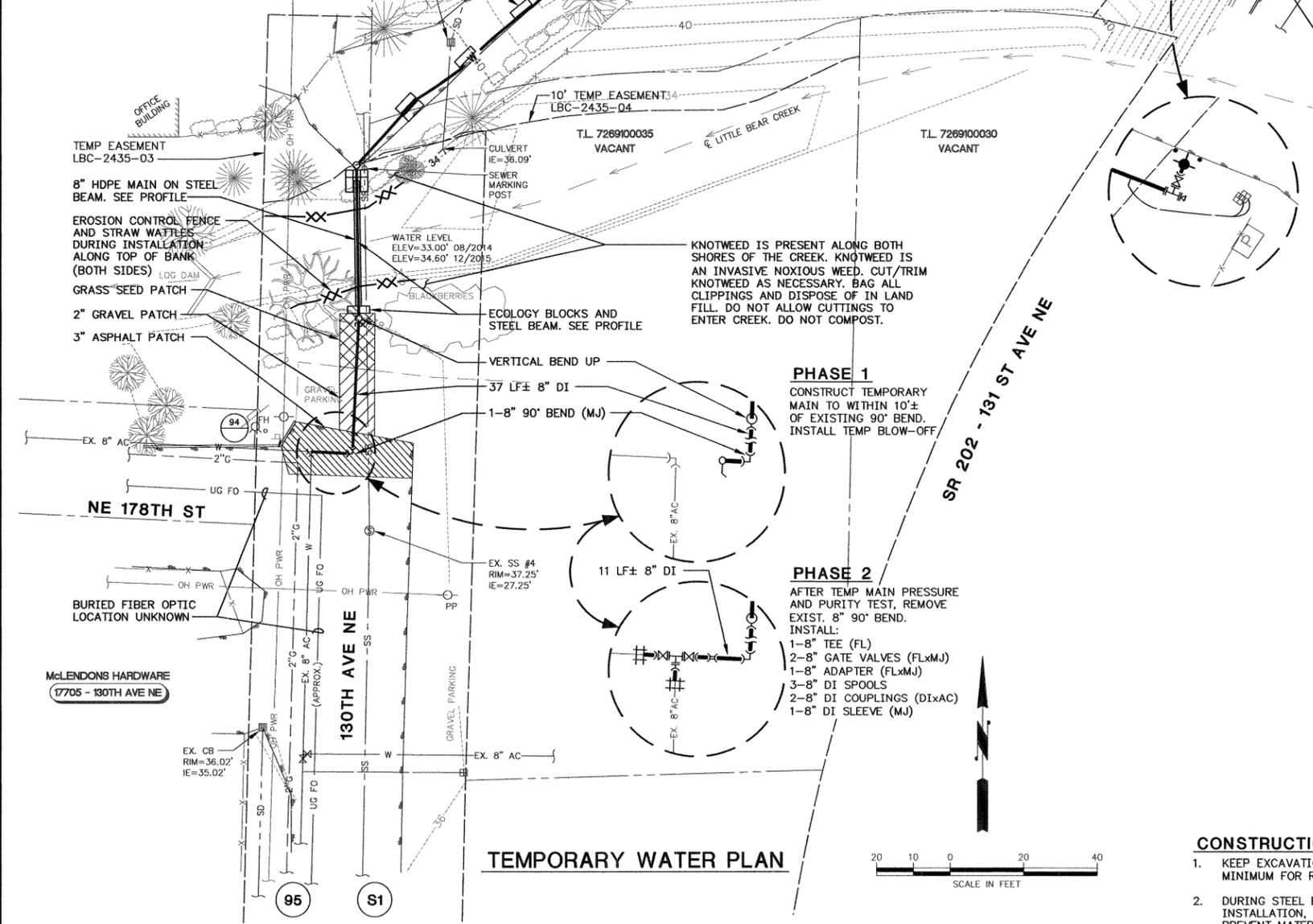
PERMIT SET
 12-23-2015

A PORTION OF THE NE 1/4 OF SECTION 9, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., KING COUNTY, WASHINGTON



BEND 8" HDPE AS NECESSARY TO DIRECT MAIN UP EXISTING RAMP. DO NOT EXCEED MANUFACTURERS RECOMMENDED RADIUS. BLOCK W/ ECOLOGY BLOCKS SPACED AS NEEDED TO HOLD BEND. CHAIN PIPE TO BLOCKS

TL 7269100046

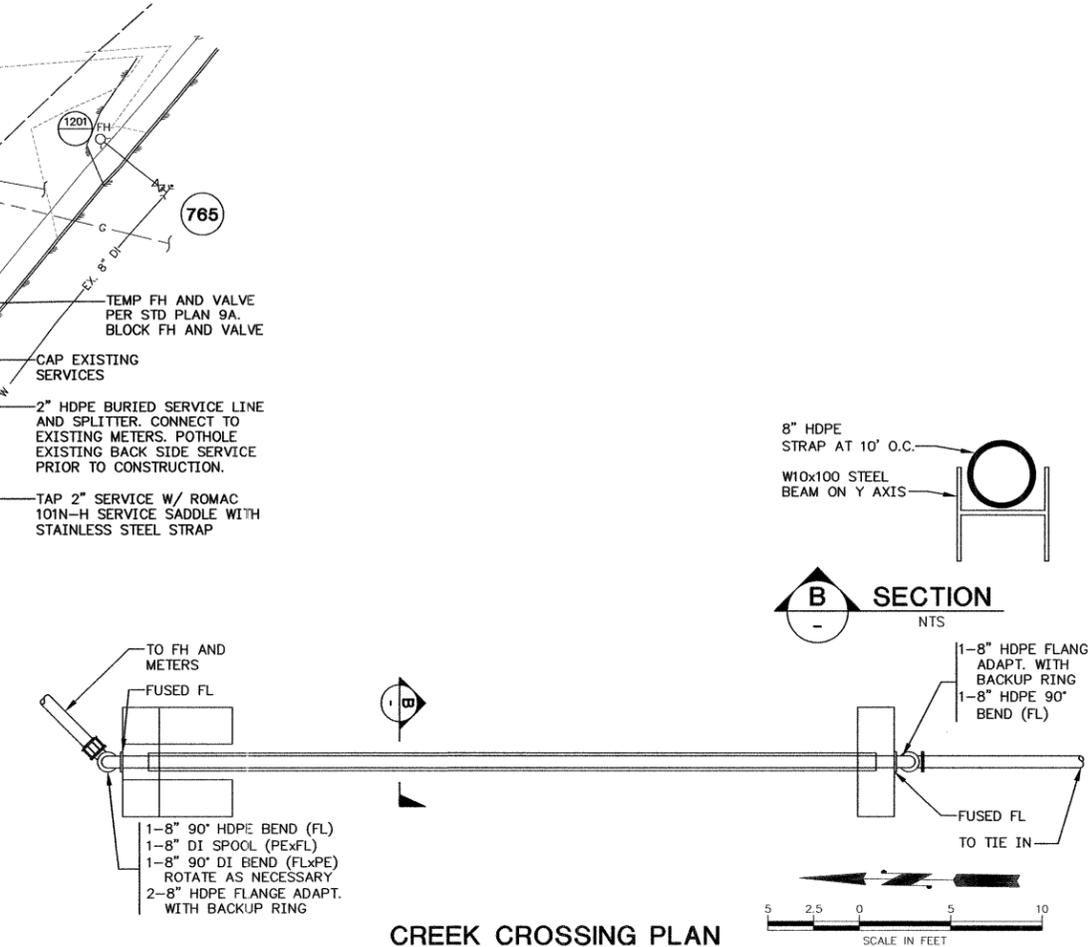


TEMPORARY WATER PLAN

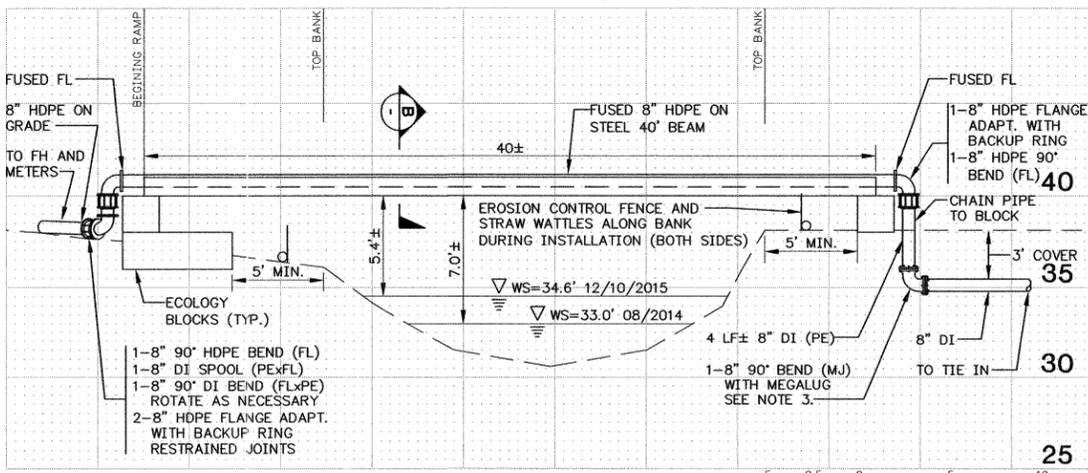


PHASE 1
CONSTRUCT TEMPORARY MAIN TO WITHIN 10'± OF EXISTING 90° BEND. INSTALL TEMP BLOW-OFF.

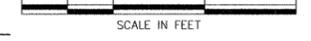
PHASE 2
AFTER TEMP MAIN PRESSURE AND PURITY TEST, REMOVE EXIST. 8" 90° BEND. INSTALL:
1-8" TEE (FL)
2-8" GATE VALVES (FLxMJ)
1-8" ADAPTER (FLxMJ)
3-8" DI SPOOLS
2-8" DI COUPLINGS (DIxAC)
1-8" DI SLEEVE (MJ)



CREEK CROSSING PLAN



CREEK CROSSING PROFILE



- CONSTRUCTION NOTES**
- KEEP EXCAVATION FOR ECOLOGY BLOCKS TO A MINIMUM FOR RELATIVELY LEVEL CREEK CROSSING.
 - DURING STEEL BEAM AND HDPE PIPE INSTALLATION, STRETCH TARP ACROSS CREEK TO PREVENT MATERIALS FROM ENTERING CREEK.

PERMIT SET
12-23-2015

WOODINVILLE WATER DISTRICT
APPROVED BY MANAGER FOR PUBLIC WATER SYSTEM ONLY
DATE

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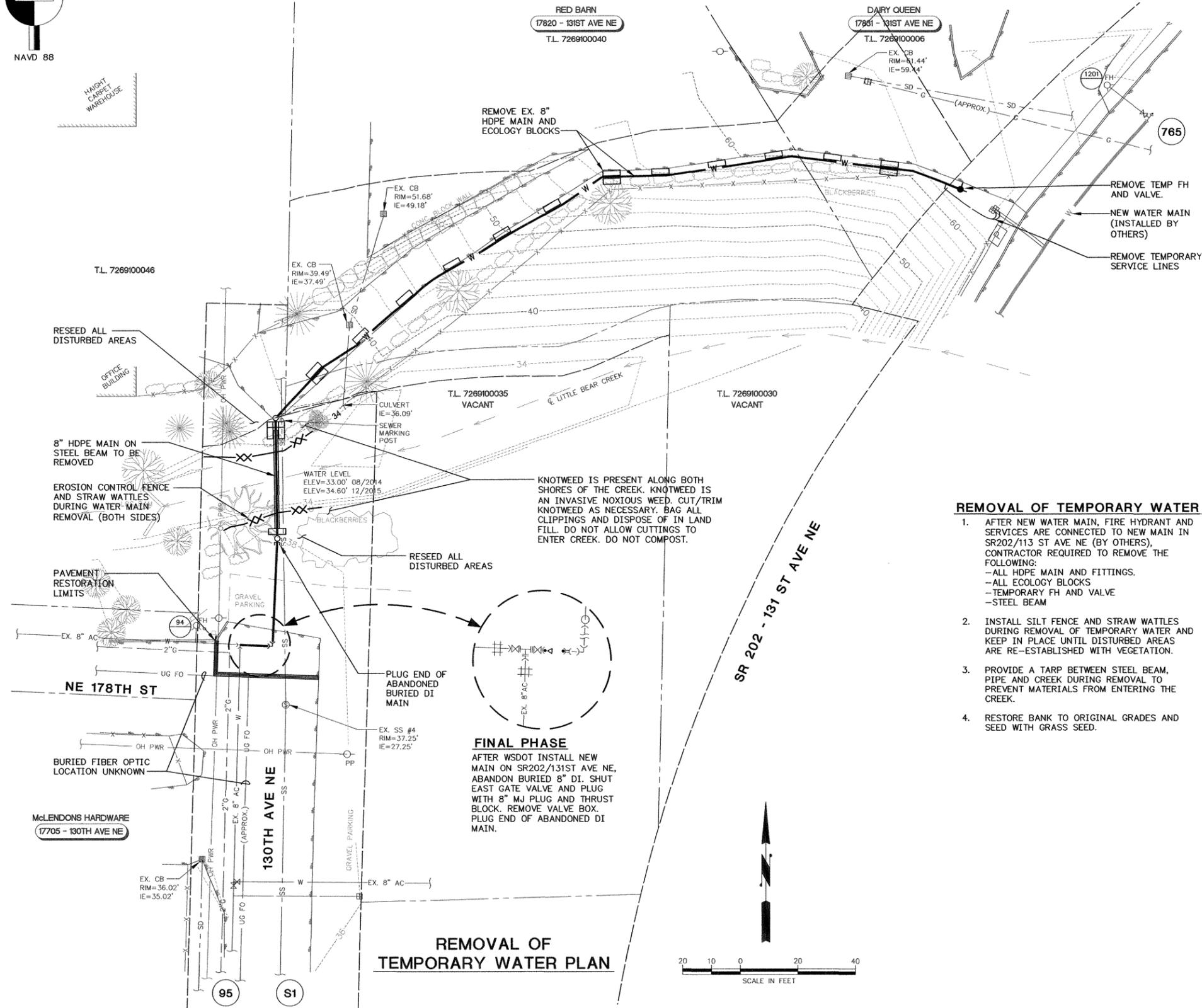
CHS ENGINEERS, LLC

Drawn / Date: JJK 09-14
Designed / Date: MD 09-14
Checked / Date: EH 09-14

WOODINVILLE WATER DISTRICT
SR202 - LITTLE BEAR CREEK
TEMPORARY WATER MAIN
PLAN AND PROFILE

Sheet 2 Of 4
Job No. 141303 2435

A PORTION OF THE NE 1/4 OF SECTION 9, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., KING COUNTY, WASHINGTON



REMOVAL OF TEMPORARY WATER

1. AFTER NEW WATER MAIN, FIRE HYDRANT AND SERVICES ARE CONNECTED TO NEW MAIN IN SR202/113 ST AVE NE (BY OTHERS), CONTRACTOR REQUIRED TO REMOVE THE FOLLOWING:
 - ALL HDPE MAIN AND FITTINGS.
 - ALL ECOLOGY BLOCKS
 - TEMPORARY FH AND VALVE
 - STEEL BEAM
2. INSTALL SILT FENCE AND STRAW WATTLES DURING REMOVAL OF TEMPORARY WATER AND KEEP IN PLACE UNTIL DISTURBED AREAS ARE RE-ESTABLISHED WITH VEGETATION.
3. PROVIDE A TARP BETWEEN STEEL BEAM, PIPE AND CREEK DURING REMOVAL TO PREVENT MATERIALS FROM ENTERING THE CREEK.
4. RESTORE BANK TO ORIGINAL GRADES AND SEED WITH GRASS SEED.

FINAL PHASE

AFTER WSDOT INSTALL NEW MAIN ON SR202/131ST AVE NE, ABANDON BURIED 8" DI. SHUT EAST GATE VALVE AND PLUG WITH 8" MJ PLUG AND THRUST BLOCK. REMOVE VALVE BOX. PLUG END OF ABANDONED DI MAIN.

REMOVAL OF TEMPORARY WATER PLAN



No.	Date	By	Cl



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J.K. / 09-14	MD / 09-14	EH / 09-14

WOODINVILLE WATER DISTRICT
SR202 - LITTLE BEAR CREEK
TEMPORARY WATER MAIN
REMOVAL PLAN

PERMIT SET
12-23-2015

WOODINVILLE WATER DISTRICT
APPROVED BY MANAGER FOR PUBLIC WATER SYSTEM ONLY
DATE _____

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INSTALL 2" DIA. TEMP BLOW OFF FOR 8" DIA. AND SMALLER AND 3" FOR LARGER THAN 8" DIA.

INSTALL FIELD LOCK GASKET IF PIPE JOINT OCCURS BEFORE TEMP BLOW OFF ASSEMBLY

2" GALV PIPING 2" GATE VALVE (IF THREADS). SUBSTITUTE 3" FOR ABOVE WHEN MAINLINE LARGER THAN 8".

BRACE 3" TO 4"

FLX MJ GATE VALVE (TYP)

RESTRAIN JOINTS 25" MAX.

MJ CAP TAP 2" FOR 8" OR SMALLER AND 3" FOR 8" AND LARGER.

TEMP BLOW-OFF

LONG PATTERN DUCTILE IRON SLEEVE (D.I. PIPE) ROMAC LONG PATTERN FLEXIBLE COUPLING (AC AND CAST IRON PIPE)

TAPPING SLEEVE (SEE NOTES 1&2)

CUT-IN CONNECTION NOT TO SCALE

CONC. THRUST BLOCKING (SEE STD. PLAN 3)

FLX MJ GATE VALVE

TAPPED CONNECTION NOT TO SCALE

4"x8"x16" CONCRETE BLOCKS SHIM W/ WEDGES TO SUPPORT PIPE.

NOTES:

- CONTRACTOR SHALL SUBMIT REQUEST FOR SHUT DOWN (TIME AND DATE - SEE NOTE 8) IN WRITING ON THE DISTRICT'S STANDARD FORM.
- TAPPED CONNECTIONS NOT ALLOWED WITHOUT SPECIFIC APPROVAL FROM THE DISTRICT.
- NO CONNECTION WILL BE ALLOWED UNTIL ALL PRESSURE TESTING COMPLETED, AND SATISFACTORY BACTERIOLOGICAL TEST RECEIVED. SEE CROSS CONNECTION CONTROL SECTION IN SPECIFICATIONS.
- TAPPING SLEEVE TO BE STAINLESS STEEL FOR AC PIPE AND EPOXY COATED STEEL FOR DUCTILE OR CAST IRON PIPE. CLOSEST EDGE OF TAPPING SLEEVE MUST BE 3" (MIN.) FROM COUPLING ON AC PIPE.
- SEE STANDARD PLANS 6 (VALVE BOX), 3 (THRUST BLOCKING) & 2 (PIPE AND FITTING RESTRAINT REQUIREMENTS).
- BACKFILL PER JURISDICTIONAL REQUIREMENTS WHEN IN ASPHALT. ALL OTHER AREAS PER THE STANDARD SPECIFICATIONS.
- TEMP BLOW OFF'S MUST BE PROTECTED FROM DAMAGE. PLACE IN TRAFFIC BOX IF REQUIRED.
- WATER OUTAGE ONLY ALLOWED TUESDAY THROUGH THURSDAY 9:00AM TO 4:00PM. (7) WORKING DAYS NOTICE REQUIRED. AFTER HOUR CONNECTION MAY BE REQUIRED IF A BUSINESS, SCHOOL, ETC. IS IMPACTED.
- ALL MJ JOINTS TO BE MEGALUG OR EQUAL.
- SIMILAR TEMP B.O. REQUIREMENTS FOR TAPPED CONNECTIONS. LOCATE BLOW OFF OUT OF ASPH. WHEN POSSIBLE.
- ALL PIPE, FITTINGS AND OTHER COMPONENTS USED IN CONNECTIONS AND THE STUB ON TO SITE SHALL BE STERILE SWABBED. CONNECTIONS SHALL BE TESTED UNDER FULL LINE PRESSURE PRIOR TO BACKFILL. THE STUB ON TO SITE SHALL BE PRESSURE TESTED (AT 200PSI) IN THE PRESENCE OF THE DISTRICT INSPECTOR.

Woodinville Water District CONNECTION REQUIREMENTS WATER STD. PLAN NO. 1 REVISION DATE 12-11

RESTRAIN PIPE JOINTS W/ FIELD LOCK GASKETS (MIN. 35") EACH SIDE OF IN-LINE VALVE

ELEVATION

INSTALL FIELD LOCK GASKET IN PIPE JOINT IF LESS THAN FULL STICK OF PIPE (18") (TYP BOTH LEGS) NOTE: NOT NECESSARY IF WATER MAIN EXTENDS OUT OF OPPOSITE SIDE OF THE TEE

PLAN

SEE TABLE BELOW FOR JOINT RESTRAINT REQUIREMENTS (BOTH LEGS)

DEGREE OF BEND	RESTRAIN PIPE JOINT IF CLOSER THAN
11 1/4" BEND	NA
22 1/2" BEND	NA
45" BEND	8"
90" BEND	18"

NOTES:

- THRUST BLOCKING REQUIRED - SEE STANDARD PLAN NO. 3.
- ADDITIONAL RESTRAINT MAY BE REQUIRED (AS DIRECTED BY THE DISTRICT) FOR POOR GROUND CONDITIONS.
- MEGALUGS (EBAA IRON OR EQUAL) SHALL BE INSTALLED ON ALL MECHANICAL JOINTS.
- SEE STANDARD PLANS NO. 4 FOR VERTICAL BEND REQUIREMENTS.

Woodinville Water District PIPE AND FITTING RESTRAINT REQUIREMENTS WATER STD. PLAN NO. 2 REVISION DATE 11-12

CROSS WITH PLUG

PLUGGED TEE

HORIZONTAL BEND

TEE

*** USE 12" OR L/2, WHICHEVER IS GREATER.**

UNDISTURBED EARTH

3000 PSI CONCRETE FORMED TO ALLOW FOR REMOVAL OF BOLTS

20 LB. BUILDING PAPER OR 4 MIL POLY (TYP)

ELEVATION

PLAN

THRUST BLOCK TABLE

PIPE SIZE	TEE OR END PLUG	90°	45°	22 1/2°	11 1/4°
4" OR 6"	3	4	2	2	2
8"	6	7	4	2	2
10" OR 12"	12	16	9	5	3
16"	21	29	16	8	4

MINIMUM BEARING AREA AGAINST UNDISTURBED EARTH (SQUARE FEET)

NOTES:

- BEARING AREA OF CONC. THRUST BLOCK BASED ON 200 PSI PRESSURE AND SOIL BEARING LOAD OF 2000 POUNDS PER SQUARE FOOT.
- AREAS MUST BE ADJUSTED FOR OTHER SIZE PIPES, PRESSURES AND SOIL CONDITIONS.
- CONCRETE BLOCKING SHALL BE CAST IN PLACE AND HAVE A MINIMUM OF 1/2 SQUARE FOOT BEARING AGAINST THE FITTING. SIDES SHALL BE FORMED WITH PLYWOOD OR EQUIVALENT.
- THRUST BLOCK SHALL BEAR AGAINST FITTING ONLY AND SHALL BE CLEAR OF JOINTS TO PERMIT DISMANTLING OF JOINTS.
- CONCRETE TO BE 3000 PSI MINIMUM. PRE-MIX CONCRETE IS PREFERRED. IF CONCRETE IS HAND MIXED THE PROPORTIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. COMPRESSIVE TESTS OF "HAND MIXED" CONCRETE MAY BE REQUIRED. PRE-INSPECTION OF BLOCKING AREA REQUIRED PRIOR TO PLACEMENT OF CONCRETE.
- CONTRACTOR SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATING PRESSURE UNDER ALL CONDITIONS OF SERVICE.
- SEE STANDARD PLAN NO. 2 FOR PIPE AND FITTING RESTRAINT REQUIREMENTS.
- INSPECTION REQUIRED PRIOR TO BACKFILL.

Woodinville Water District THRUST BLOCKING REQUIREMENTS WATER STD. PLAN NO. 3 REVISION DATE 11-12

3/4" "COR-TEN" OR #4 REBAR. BEND LAST FOOT OF EMBEDDED ENDS 90°.

WRAP BEND IN 4 MIL POLY AND SECURE W/ DUCT TAPE

UNDISTURBED GROUND

CAST-IN-PLACE GRAVITY THRUST BLOCK (1) CY MIN. SEE NOTE 5.

PIPE CLAMP (DIAM. OF PIPE). SECURE ALLTHREAD W/ (2) 3/4" HEX NUTS

3/4" "COR-TEN" ALL THREAD- LOOP THROUGH PICK STRAP OF ECO-BLOCK

FULL SIZED ECOLOGY BLOCK (3000 LB.±) PERPENDICULAR TO TRENCH & "KEYED" INTO NATIVE GROUND

ECOLOGY BLOCK OPTION

WRAP BEND IN 4 MIL POLY AND SECURE W/ DUCT TAPE

POURED IN PLACE CONC. SEE NOTE 5.

12" MIN.

24" FOR 8" 30" FOR 12"

REVERSE VERTICAL BENDS

CAST IN PLACE

RESTRAINED JOINT REQUIREMENTS

BEND SIZE	MIN. REQUIRED DISTANCE (LF) PIPE RESTRAINT EA. SIDE WITHOUT VERTICAL BLOCKING		MIN. REQUIRED DISTANCE (LF) PIPE RESTRAINT EA. SIDE WITH VERTICAL BLOCKING	
	4" TO 8"	12"	4" TO 8"	10" TO 12"
11 1/4"	30	30	0	0
22 1/2"	40	40	10	20
45"	NA	NA	20	30

NOTES:

- DRAWING SUBMITTAL REQUIRED FOR APPROVAL BY THE DISTRICT WHEN PIPE DIAMETER EXCEEDS 12" OR VERTICAL DEFLECTION MORE THAN 45 DEGREES.
- EBAA IRON MEG-A-LUGS OR EQUAL REQUIRED ON ALL MECHANICAL JOINTS.
- POOR GROUND CONDITIONS WILL REQUIRE ADDITIONAL RESTRAINT, (AS DIRECTED BY THE DISTRICT).
- ALL REVERSE VERTICAL BENDS SHALL BE BLOCKED AS SHOWN.
- CONCRETE TO BE MIN. 3000 PSI COMPRESSIVE STRENGTH.

Woodinville Water District VERTICAL BLOCKING RESTRAINT REQUIREMENTS WATER STD. PLAN NO. 4 REVISION DATE 12-11

1" SERVICE MATERIAL LIST

- SERVICE SADDLE**
ROMAC 101-S, FORD FS101 W/ LP. THREADS & STAINLESS STEEL STRAP
- BALL CORP. STOP (W/ 1" I.P. THREADS)**
AY MCDONALD 731318 W/ 74754-30 COMP. OR 3H HANDYLOK FITTING & STIFFENER
FORD FB 500 W/ C84-44-Q-NL COMP. OR C86-44-U-NL ULTRA-TITE FITTING & STIFFENER
MUELLER B-20013 H/ H-15456 INSTA-TITE
- SERVICE PIPE**
1" DRISCOPIPE ULTRA LINE 5100 HIGH DENSITY POLYETHYLENE SERVICE PIPE MEETING AWWA C901 REQUIREMENTS; PE 3408 MATERIAL, SDK7, PRESSURE CLASS 200 PSI, L.P.S. OR APPROVED EQUAL.
- BALL ANGLE METER STOP (W/ 1" I.P. THREADS & CONNECTION TO 1" POLY PIPE) FOR 1" METER**
1"x1" AY MCDONALD 746048 W/ 1" 74754 3H HANDYLOK FITTING
1"x1" FORD BA13-444W W/ C86-44-U-NL ULTRA-TITE
1"x1" MUELLER B-24265 W/ H-15426 INSTA-TITE
FOR 3/4" METER
1"x3/4" AY MCDONALD 746048 W/ 1" 74753 3H HANDYLOK
3/4"x1" FORD BA13-342W W/ C86-33-U-NL ULTRA TITE
3/4"x1" MUELLER B-24265 W/ H-15426 INSTA-TITE
OR APPROVED EQUAL
FOR 1" METER STOP (W/ 1" I.P. THREADS & CONNECTION TO 1" COPPER PIPE)
1"x1" AY MCDONALD 746048 W/ 1" 74753-22 PACK JOINT
1"x1" FORD BA13-444W W/ 1" C84-44-NL PACK JOINT
1"x1" MUELLER B-24265 W/ 1" P-15428 PACK JOINT FITTING
1"x1" MUELLER 110 COMPRESSION FITTING OR APPROVED EQUAL
FOR 3/4" METER
1"x3/4" AY MCDONALD 746048 W/ 3/4"x1" 74753-22 PACK JOINT W/ STIFFENER.
3/4"x1" FORD BA13-342W W/ 3/4"x1" C84-43-NL PACK JOINT W/ STIFFENER.
3/4"x1" MUELLER B-24265 W/ 3/4"x1" P-15428 PACK JOINT FITTING W/ STIFFENER.
3/4"x1" MUELLER 110 COMPRESSION FITTING OR APPROVED EQUAL
- METER BOX**
OLD CASTLE 13248CF-12 ENCLOSURE W/ DUCTILE IRON LID (H2O LOADING) & 1 7/8" DIAMETER AMR HOLE. NO READER FLAP
- DISTRICT WILL PROVIDE (1) METER IDLER PER TYPICAL INSTALLATION (IE. 1" OR 3/4") THE CONTRACTOR SHALL ENSURE THE METER IDLER IS PARALLEL TO THE METER BOX AND CENTERED IN BOTH DIRECTIONS.

NOTE: ALL BRASS COMPONENTS SHALL CONFORM TO THE LATEST VERSIONS OF NSF 61 AND ANSI/AWWA STANDARD C800 AND SHALL BE STAMPED/ EMOSSO TO SHOW THE PRODUCT IS MADE FROM A NO LEAD ALLOY.

Woodinville Water District 1" POLY SERVICE MATERIAL LIST WATER STD. PLAN NO. 13M REVISION DATE 11-13

12 GAUGE TRACER WIRE WRAP AROUND ENTIRE LENGTH OF PIPE W/ 2" MIN. EXTRA IN METER BOX

3" BACK OF CURB OR EDGE OF SIDEWALK

R/W OR PL. EASEMENT

6" MIN.

END OF DISTRICT RESPONSIBILITY

1" (MIN.) DIA. TYPE "K" COPPER TO RPBA OR DCVA. SEE NOTE 8. BACKFILL COPPER PIPE WITH SAND.

SEE STANDARD PLAN 13M FOR MATERIAL LIST NOTE - CIRCLED NUMBERS ABOVE REFER TO MATERIALS LISTED ON STD PLAN 13M.

NOTES:

- CONTRACTOR TO PROVIDE ALL MATERIALS. SERVICES SHALL BE TESTED WITH THE MAINLINE.
- TRACE WIRES MUST BE VISIBLE IN METER BOX.
- NO SPLICES ALLOWED IN SERVICE LINE.
- CORP STOP LOCATION SHALL BE OFFSET PRECISELY FOR GPS SURVEY.
- LOCATE METER BOX OUT OF PAVING OR SIDEWALKS. METER BOX SHALL BE PERPENDICULAR TO THE SIDEWALK OR AS DIRECTED BY THE DISTRICT.
- CONTRACTOR SHALL SCHEDULE SERVICE FLUSH WITH THE DISTRICT'S INSPECTOR.
- METER INSTALLATION BY THE DISTRICT. METER WILL NOT BE SET UNTIL PROJECT ACCEPTED.
- THE BACKSIDE OF ALL SERVICES SHALL BE PLUMBED IN TYPE "K" COPPER AND HAVE BACKFLOW PROTECTION. DOMESTIC WATER SHALL CONNECT TO A RPBA PER STD. PLAN 19. IRRIGATION AND FIRE METERS SHALL CONNECT TO A DCVA PER STD PLAN 21.
- IF FIRE OR IRRIGATION SERVICE IS REQUIRED, IT SHALL BE A SEPARATE DEDICATED SERVICE. FIRE SERVICE SHALL BE SIZED ACCORDING TO FLOW REQUIREMENTS NEEDED.

NOTE: ALL BRASS COMPONENTS SHALL CONFORM TO THE LATEST VERSIONS OF NSF 61 AND ANSI/AWWA STANDARD C800 AND SHALL BE STAMPED/ EMOSSO TO SHOW THE PRODUCT IS MADE FROM A NO LEAD ALLOY.

Woodinville Water District 1" COMMERCIAL SERVICE CONNECTION WATER STD. PLAN NO. 16 REVISION DATE 11-13

5' MIN. FROM BACK EDGE OF ROLLED CURB OR EDGE OF ROAD

4' MIN. FROM BACK EDGE OF VERTICAL CURB.

R/W LINE

60" MIN. FROM R/W

12" MIN.

60" MIN. RAD. CLEAR & LEVEL

BACK EDGE OF SIDEWALK

18" MIN. 24" MAX.

CAST IRON VALVE BOX AND LID W/ COLLAR SEE STD. PLAN 6

CULVERT AS REQUIRED BY THE DISTRICT.

INSTALL ROCKERY IF REQ'D.

3"x3"x4" CONCRETE PAD INSTALL #4 REBAR HOOP (2'SO)

DUCT TAPE FILTER FABRIC TO BARREL OF THE HYD.

WRAP DRAIN ROCK W/ FILTER FABRIC

1 CY 1 1/2" (CLEAN) WASHED DRAIN ROCK

16"x3"x4" SOLID CONC. BLOCK

6" AUXILIARY GATE VALVE

RESTRAIN PIPE FROM GATE VALVE TO FIRE HYDRANT W/ MEGALUGS AND FIELD LOK GASKETS

NOTES:

- 6" DIA. CL 52 (PER SPEC'S) TO BE USED IF PIPE RUN UNDER 50'. 8" REQUIRED IF OVER 50'. AN 8"x6" TEE AND 6" GATE VALVE SHALL BE PLACED AT THE END OF AN 8" PIPE RUN W/ 6" D.I. CL 52 TO THE FIRE HYDRANT LOCATION.
- SEE STANDARD PLANS 3, (THRUST BLOCKING), 6 (VALVE BOX), 7 & 7A (TYPICAL LONGITUDINAL & TRANSVERSE TRENCH SECTION) & 8 (TRENCH RESTORATION).
- PROVIDE LEVEL ACCESS TO FIRE HYDRANT. SEE SPECIFICATIONS.
- IN THE CITY OF WOODINVILLE AND KING COUNTY, A 4" PUMPER PORT W/ SEATTLE THREADS REQUIRED. SEE SPECIFICATIONS. STORZ ADAPTERS ARE REQUIRED IN THE CITY'S OF BOTHELL, KIRKLAND AND REDMOND (PER THEIR DETAILS). NEW WATER MAINS WILL NOT BE PLACED INTO SERVICE IF WRONG PUMPER PORTS INSTALLED.
- THE DEVELOPER SHALL PROVIDE SURVEY TO SET THE BASE ELEVATION (TOP OF CONCRETE PAD) OF THE FIRE HYDRANT. SEE THE DE SPECIFICATIONS FOR OTHER REQUIREMENTS.
- MAXIMUM BURY DEPTH ON FH IS 6'. DEEPER INSTALLATION SHALL BE INSTALLED PER STANDARD PLAN 9C.

Woodinville Water District NEW FIRE HYDRANT INSTALLATION WATER STD. PLAN NO. 9A REVISION DATE 11-13

WOODINVILLE WATER DISTRICT

APPROVED BY MANAGER FOR PUBLIC WATER SYSTEM ONLY

DATE



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TEL 425-637-3693 - FAX 425-637-3694
www.chsengineers.com

Drawn / Date / MD 09-14
Designed / Date / EH 09-14
Checked / Date / MD 09-14

WOODINVILLE WATER DISTRICT

SR202 - LITTLE BEAR CREEK STANDARD PLANS

Sheet 4 Of 4

Job No. 141303

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