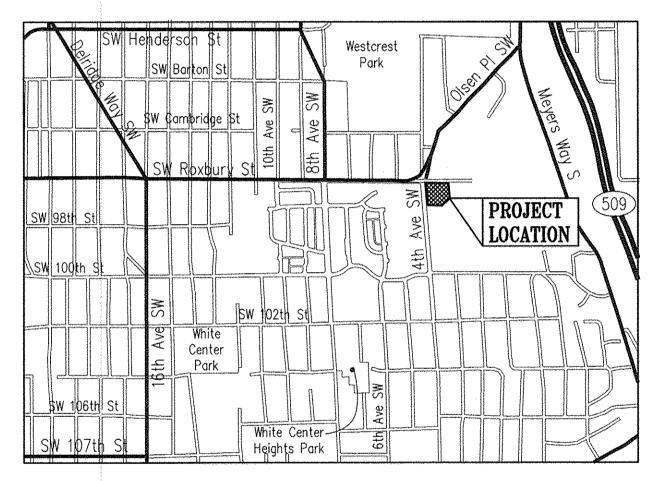
SEC. 6, T.23 N., R.4E., W.M.

King County, Washington

FEBRUARY 2017

PERMIT SUBMITTAL



VICINITY MAP
N.T.S.



Contract No.

PROJECT DEVELOPER

KING COUNTY HOUSING AUTHORITY
600 ANDOVER PARK WEST
SEATTLE, WA. 98188-3326
TELEPHONE: (206) 574-1196
CONTACT PERSON: JOHN ELIASON

PROJECT ENGINEER

KPFF CONSULTING ENGINEERS
1601 FIFTH AVENUE, SUITE 1600
SEATTLE, WASHINGTON 98101
TELEPHONE: (206) 622-5822





17. 2017 – 3:43pm BrianB

GENERAL NOTES

- A COPY OF THE APPROVED PLAN SHALL BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR WORK WITHIN THE PUBLIC RIGHT OF WAY.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF SEATTLE. THE CONTRACTOR SHALL NOTIFY THE OWNER'S PROFESSIONAL ENGINEERING CONSULTANT OF THE PRECONSTRUCTION MEETING TIME AND LOCATION.
- VERTICAL DATUM: NAVD 88

BENCHMARK "B": SOUTHERLY TOP FLANGE BOLT BETWEEN THE LETTERS "E" AND "L" IN THE WORD MULLER ON FIRE HYDRANT AT SOUTHWEST CORNER OF 8TH AVENUE SW AND SW 102ND STREET. ELEVATION = 407.61 FEET.

BENCHMARK "C": CHISELED SQUARE AT INTERSECTION OF BACK OF CONCRETE WALKS AND BACK OF CURBS AT THE NORTHEAST CORNER OF 4TH AVENUE SW AND SW 102ND STREET. ELEVATION = 423.37 FEET.

SITE BM #1: FOUND LEAD AND TACK WITH TAG AT THE SOUTHWEST FILLET OF THE INTERSECTION OF 4TH AVENUE SW AND SW ROXBURY STREET. THE BM IS 2.2 FEET SOUTHWEST OF THE TOP BACK OF CURB AND 4.0 FEET NORTHEAST OF 4 FOOT HIGH FENCE POST. ELEVATION = 400.91 FEET.

SITE BM #2: FOUND PK WITH TAG STAMPED "PACE CONTROL" AT SOUTH EDGE OF PAVEMENT OF SW ROXBURY STREET AND 31 FEET± S 22° W OF UTILITY POLE NO. 206. ELEVATION = 376.14 FEET.

SITE BM #3: FOUND REBAR AND CAP LS #6090 AT THE ANGLE POINT OF THE SOUTH PROPERTY LINE. ELEVATION = 381.19 FEET.

SITE BM #4: SET REBAR AND CAP 105.1 FEET NORTH AND 32.7 FEET EAST OF THE SOUTHWEST PROPERTY CORNER. ELEVATION = 394.83 FEET.

SITE BM #5: FOUND 1 1/2" ALUMINUM CAP AND PUNCH ON CENTERLINE OF 4TH AVENUE SW AT APPROXIMATE INTERSECTION WITH SW 97TH PLACE (VACATED ROAD TO EAST). ELEVATION = 397.71 FEET.

- THE CONTRACTOR SHALL NOTIFY THE HIGHLINE FIRE DEPARTMENT DISPATCHER (206) 243-0330. TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL WATER SERVICE INTERRUPTIONS, HYDRANT SHUTOFFS, AND STREET CLOSURES OR OTHER ACCESS BLOCKAGE. THE CONTRACTOR SHALL ALSO NOTIFY THE DISPATCHER OF ALL NEW, RELOCATED, OR ELIMINATED HYDRANTS RESULTING FROM THIS WORK.
- ALL LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE CONTRACTOR SHALL LOCATE AND PROTECT ALL CASTINGS AND UTILITIES DURING CONSTRUCTION AND SHALL CONTACT THE UNDERGROUND UTILITIES LOCATOR SERVICE (1-800-424-5555) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.
- UTILITY SERVICE CONNECTIONS ARE TO BE MAINTAINED PRIVATELY AND NOT BY THE CITY OF
- COORDINATE SIGN AND METER HEAD REMOVAL AND INSTALLATION WITH SEATTLE TRANSPORTATION DIVISION (ROBERT BURNS) AT 684-5370. SIGN POSTS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD PLAN NO'S, 620, 622, 624, & 625.
- ALL WORK PERFORMED BY SEATTLE CITY LIGHT, SPU/WATER DEPARTMENT, AND OTHER PUBLIC/PRIVATE UTILITIES TO REMOVE OR RELOCATE EXISTING UTILITIES AT THE DEVELOPER'S EXPENSE. SHALL BE COORDINATED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL POSITION OF ALL PROPOSED UTILITY POINTS OF CONNECTION, AND SHALL POTHOLE ALL CROSSINGS WITH EXISTING UTILITIES PRIOR TO THE START OF DEMOLITION AND INSTALLATION OF PROPOSED

1601 5th Avenue, Suite 1600

206.622.5822

www.kpff.com

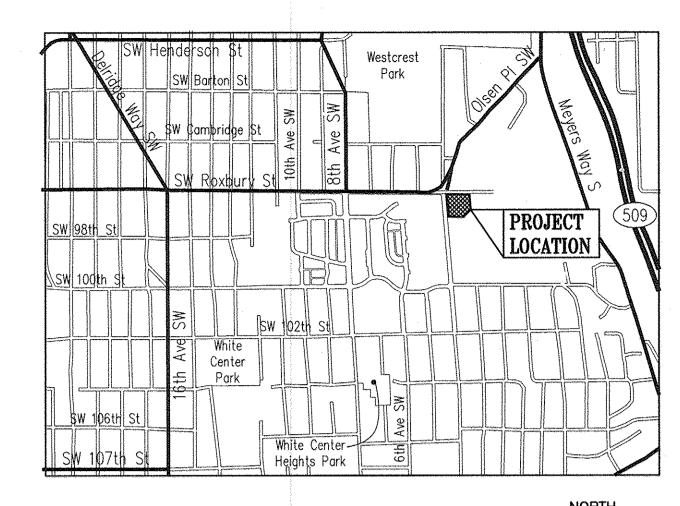
WATER SERVICE NOTES

- APPLICATION FOR A NEW METERED WATER SERVICE AND PAYMENT OF ALL FEES IS REQUIRED BEFORE SERVICE WILL BE AVAILABLE.
- APPLICANT WILL NEED A WATER AVAILABILITY CERTIFICATE (WAC) AND LEGAL DESCRIPTION OF PROPERTY WHEN SUBMITTING THE APPLICATION. TO OBTAIN A WAC, PLEASE CONTACT THE DEVELOPMENT SERVICES OFFICE AT (206) 684-3333 OR SPUWATERAVAILABILITY@SEATTLE.GOV.
- 3. ALL WATER SERVICES SHALL BE LOCATED IN THE PUBLIC RIGHT OF WAY AND WITHIN THE FRONTAGE OF THE PARCEL BEING SERVED.
- WATER SERVICES SERVING PARCELS WITHOUT FRONTAGE TO THE PUBLIC RIGHT OF WAY (SUCH AS UNIT LOT SUBDIVISIONS) OR LANDLOCKED PARCELS SHALL BE SERVED BY A PRIVATE WATER SERVICE EXTENDING FROM THE WATER METER TO THE PARCEL BEING SERVED. THE WATER SERVICE SHALL BE INSTALLED IN A DEDICATED EASEMENT. THE EASEMENT SHALL BE OBTAINED BY THE DEVELOPER, RECORDED, AND A COPY SHALL BE PROVIDED TO SEATTLE PUBLIC UTILITIES (SPU) AT THE TIME OF APPLICATION SUBMITTAL.
- 5. ALL WATER SERVICES PIPING ON PROPERTY MUST BE INSPECTED PRIOR TO BACKFILLING TRENCH. CONTACT (206) 684-5800 TO REQUEST AN INSPECTION.
- 6. CUSTOMERS ARE REQUIRED TO INSTALL AN APPROVED AIR GAP OR REDUCED-PRESSURE BACKFLOW ASSEMBLY (RPBA/RPDA) ON ALL WATER SERVICE CONNECTIONS POSING A HIGH HEALTH CROSS-CONNECTION HAZARD (PURSUANT TO WAC 246-290-490). BACKFLOW PREVENTION IS ALSO REQUIRED ON WATER SERVICE CONNECTIONS SUCH AS FIRE SERVICES, IRRIGATION SERVICES, BUILDINGS EXCEEDING THREE STORIES OR 30 FT. IN HEIGHT ABOVE THE METER (MEASURED TO THE HIGHEST WATER FIXTURE), AND MAY BE REQUIRED FOR OTHER WATER SERVICES. SPU AND KING COUNTY HEALTH DEPARTMENT (KCHD) ARE THE ADMINISTRATIVE AUTHORITIES ENGAGED IN A JOINT PROGRAM IDENTIFYING ACTUAL AND POTENTIAL CROSS-CONNECTIONS BETWEEN THE PUBLIC WATER SUPPLY AND POSSIBLE SOURCES OF CONTAMINATION. FOR ANSWERS TO SPECIFIC CROSS-CONNECTION CONTROL QUESTIONS OR TO REQUEST AN INSPECTION, PLEASE CALL (206) 684-3536.
- 7. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ALL WATER METER BOXES TO GRADE.

GENERAL NOTES ON PLANS FOR 4" THROUGH 12" WATER MAINS

UNLESS OTHERWISE NOTED

- ALL PIPE. APPURTENANCES AND WORK SHALL CONFORM TO THE CITY OF SEATTLE STANDARD PLANS AND SPECIFICATIONS, 2011 OR LATEST EDITION, UNLESS OTHERWISE NOTED ON THE APPROVED PLANS.
- ALL MATERIALS FOR WATER DISTRIBUTION SHALL BE NEW. SPU WILL PROVIDE ANY REQUIRED HYDRANTS. PROJECT OWNER SHALL PROVIDE THE CONNECTING PIPE AND FITTINGS.
- PIPE (W) 4" AND LARGER SHALL BE D. 1. P. CL. 52 CONFORMING TO AWWA C-151 WITH CEMENT MORTAR LINING CONFORMING TO AWWA C-104. JOINTS SHALL HAVE RESTRAINED JOINTS (RJ). REFER TO COS 9-30.2(6)A.
- UNLESS PROVIDED BY A PRE-APPROVED MANUFACTURER, PIPE (W) 4" AND LARGER SHALL BE SUBJECT TO SPU TASTE TESTING PROCEDURES PRIOR TO INSTALLATION.
- ALL FITTINGS SHALL BE DUCTILE IRON CONFORMING TO AWWA C-110 AND C-111, OR AWWA C-153, AND SHALL BE CEMENT MORTAR LINED CONFORMING TO AWWA C-104.
- ALL CONNECTIONS TO EXISTING WATER MAINS SHALL BE MADE IN CONFORMANCE WITH STANDARD PLAN #300.
- 7. PRIOR TO LAYING PIPE THE CONTRACTOR SHALL:
- A. IN THE PRESENCE OF THE SPU RESIDENT ENGINEER, EXPOSE THE EXISTING WATER MAIN TO DETERMINE ITS ELEVATION AND ALIGNMENT. (SPU TO OBTAIN O.D. AT THE SAME TIME)
- B. PROVIDE ALL CONTROL SURVEYS REQUIRED TO DEFINE THE ALIGNMENT AND ELEVATIONS OF THE WATER MAIN IN CONFORMANCE WITH THE APPROVED PLAN. THE SURVEYS SHALL BE PERFORMED BY A SURVEYOR LICENSED BY THE STATE OF WASHINGTON. ALL REFERENCE MARKS SHALL BE PRESERVED DURING CONSTRUCTION. A GRADE SHEET, IN ACCEPTABLE FORMAT, SHALL BE PROVIDED PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL NOTIFY OWNERS (MINIMUM 48 HOURS IN ADVANCE) OF ALL AFFECTED UNDERGROUND UTILITIES FOR FIELD LOCATING THEIR FACILITIES. THE ONE CALL NOTIFICATION NUMBER IS 1-800-424-5555.
- CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR EXISTING CHARGED WATER MAINS.
- LOCATIONS SHOWN FOR EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. UTILITIES HAVING NO RECORDED DEPTH ARE SHOWN AT THEIR STANDARD DEPTH. UTILITIES THAT APPEAR CLOSE TO THE PROPOSED WATER MAIN SHALL BE EXPOSED BY THE CONTRACTOR PRIOR TO LAYING THE WATER MAIN TO DETERMINE IF CHANGES ARE NEEDED. WATER/SEWER SEPARATION SHALL BE PER STANDARD PLAN #286. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL DUCTILE IRON PIPE IN PLACE OF ANY OTHER SANITARY SEWER PIPE MATERIAL WHERE SANITARY SEWERS ARE LOCATED ABOVE AND CLOSER THAN 10 FEET, OR CROSS OVER ANY WATER LINE. SEE SPECIAL PROVISIONS FOR MINIMUM CLEARANCES, SECTION I- I 07.17(2)B REGARDING CROSSING OF GAS
- ALL WATER MAINS SHALL BE PRESSURE TESTED (300 PSI) AND DISINFECTED IN ACCORDANCE WITH SECTION 7-11.3(12) OF THE STANDARD SPECIFICATIONS. ALL PRESSURE TESTING SHALL BE DONE IN THE PRESENCE OF THE CONSTRUCTION ENGINEER. THE CONTRACTOR IS TO PROVIDE PLUGS AND TEMPORARY BLOWOFF ASSEMBLIES FOR PRESSURE TESTING AND DISINFECTION. SEE STANDARD PLAN #300 FOR FLUSHING CONNECTION DETAILS.
- 12. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS ISSUED FOR THIS
- 13. HORIZONTAL ANGLE POINTS & VERTICAL GRADE POINTS SHALL BE CONSTRUCTED BY DEFLECTING PIPE JOINTS. UNLESS OTHERWISE SPECIFIED.
- 14. CONCRETE WATER MAIN THRUST BLOCKING FOR HORIZONTAL FITTINGS SHALL BE PER STANDARD PLAN #331.1.
- HYDRANT INSTALLATION SHALL BE PER STANDARD PLAN #311.1A
- RESTRAINT JOINT PIPE IS REQUIRED IN THOSE AREA WHERE THE TERRAIN IS GREATER THAN 15% OR THE SOIL IS SUBJECT TO LIQUEFACTION OR THE AREA IS DEFINED AS SENSITIVE OR WHERE SPACE IS CONFINED (NO ROOM FOR MECHANICAL JOINT OR CONCRETE BLOCKING) OR WHERE REQUIRED BY SPU.
- 17. HYDRANT CONNECTION SHALL BE 6" DIP CL 52 CONFORMING TO AWWA C-151 WITH CEMENT MORTAR LINING CONFORMING TO AWWA C-104.
- 18. VALVE BOX AND OPERATING NUT EXTENSIONS SHALL BE PER STANDARD PLAN # 315.1A.
- 19. PIPE SHALL BE WRAPPED WITH 8 ML POLYETHYLENE, CONFORMING TO AWWA C-105.
- WATER MAIN TRENCH SHALL BE AS SHOWN ON STANDARD PLAN 350.21.
- 21. ALL FITTINGS SHALL BE RESTRAINED PER SECTION 9-30.2(6) OF CITY OF SEATTLE 2011 STANDARD SPECIFICATIONS OR LATEST EDITION.



VICINITY MAP N.T.S.

DRAWING INDEX						
SHEET	DRAWING TITLE					
1	COVER SHEET					
2	SW 97TH PLACE WATER PLAN & PROFILE					
3	SW 97TH PLACE WATER PLAN & PROFILE					
4	WATER PLAN & PROFILE					
5	SW ROXBURY ST WATER PLAN & PROFILE					
6	WATER DETAILS					

LEGEND AND ABBREVIATIONS

4	X X-X,	DETAIL REFERENCE NUMBER SHEET	R/SECTIO	<u>N</u>	
	B/C	BACK OF CURB		STD(S)	STANDARD(S)
	B/W	BACK OF WALK		SPU	SEATTLE PUBLIC UTILITIES
	CL	CENTERLINE		TB	THRUST BLOCK
	CTR	CENTER		WL_	WATER LINE
	EL	ELEVATION		VBOX	VALVE BOX
	FL	FLANGE JOINT		W/	WITH
	G	GAS		igoplus	SURVEY MONUMENT
	GD	GREEN DRAINAGE			FIRE HYDRANT
	GV	GATE VALVE		+	HORIZONTAL BED W/ BLOCKING
	MJ	MECHANICAL JOINT		-101-	GATE VALVE
	EX, EXIST.	EXISTING		+7+	TEE W/ BLOCKING
	ΙE	INVERT ELEVATION			ADAPTER
	PL	PROPERTY LINE			WATER METER
	P.O.C.	POINT OF CONNECTION		_	
	R/W	RIGHT OF WAY			TEMPORARY CAP
	RJ	RESTRAINED JOINT		~	BLOW OFF ASSEMBLY
	RS	RESILIANT SEATED		E-+6	PROPOSED WATER SYSTEM
	SCL	SEATTLE CITY LIGHT		E1-	EXISTING WATER SYSTEM
	SD	STORM DRAINAGE			STD REDUCER
	SL	SLEEVE			PROJECT LIMITS



B R/W CO VAULT PLAN NO. 776-439

SHEET 1 OF 6







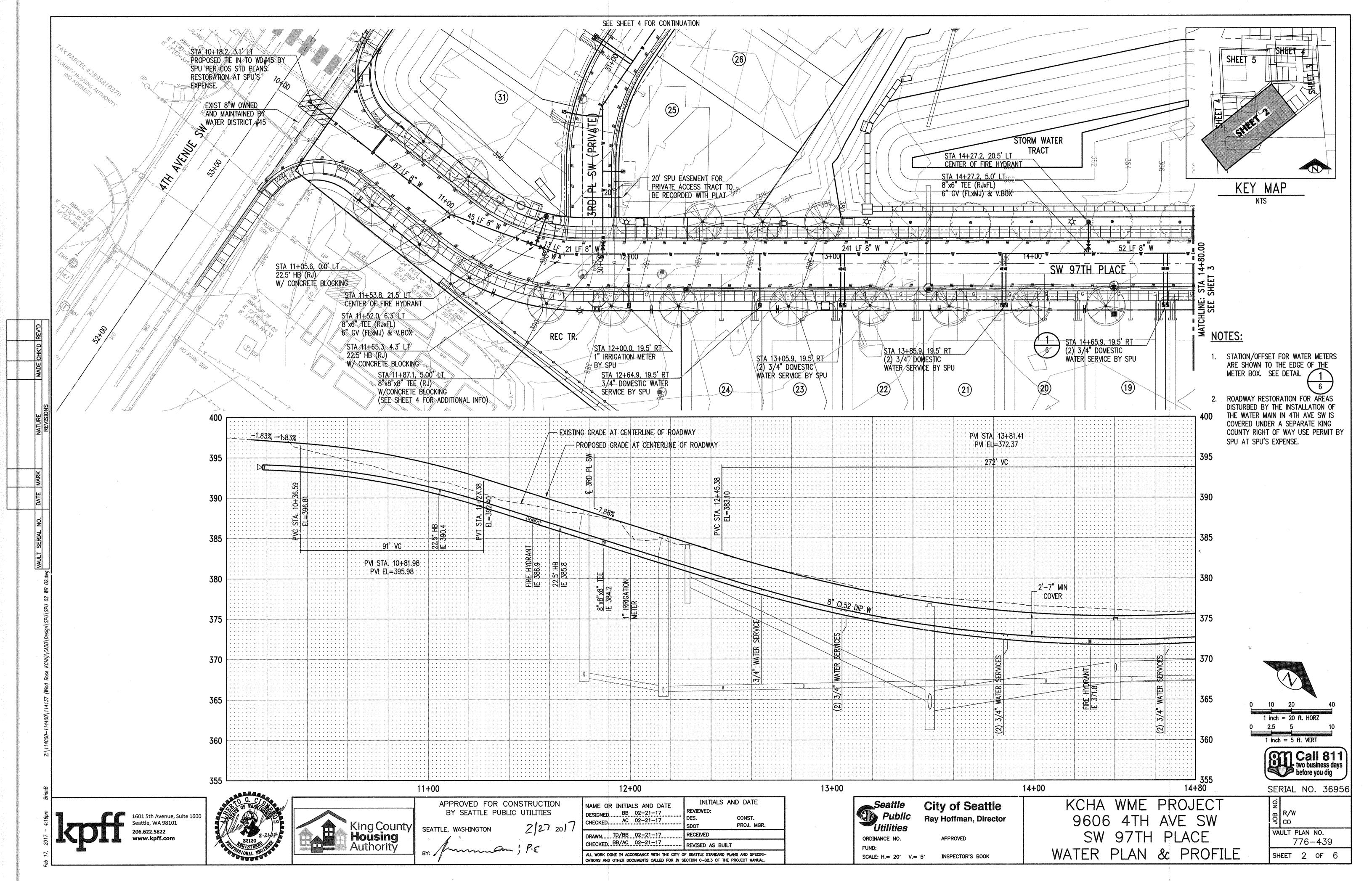
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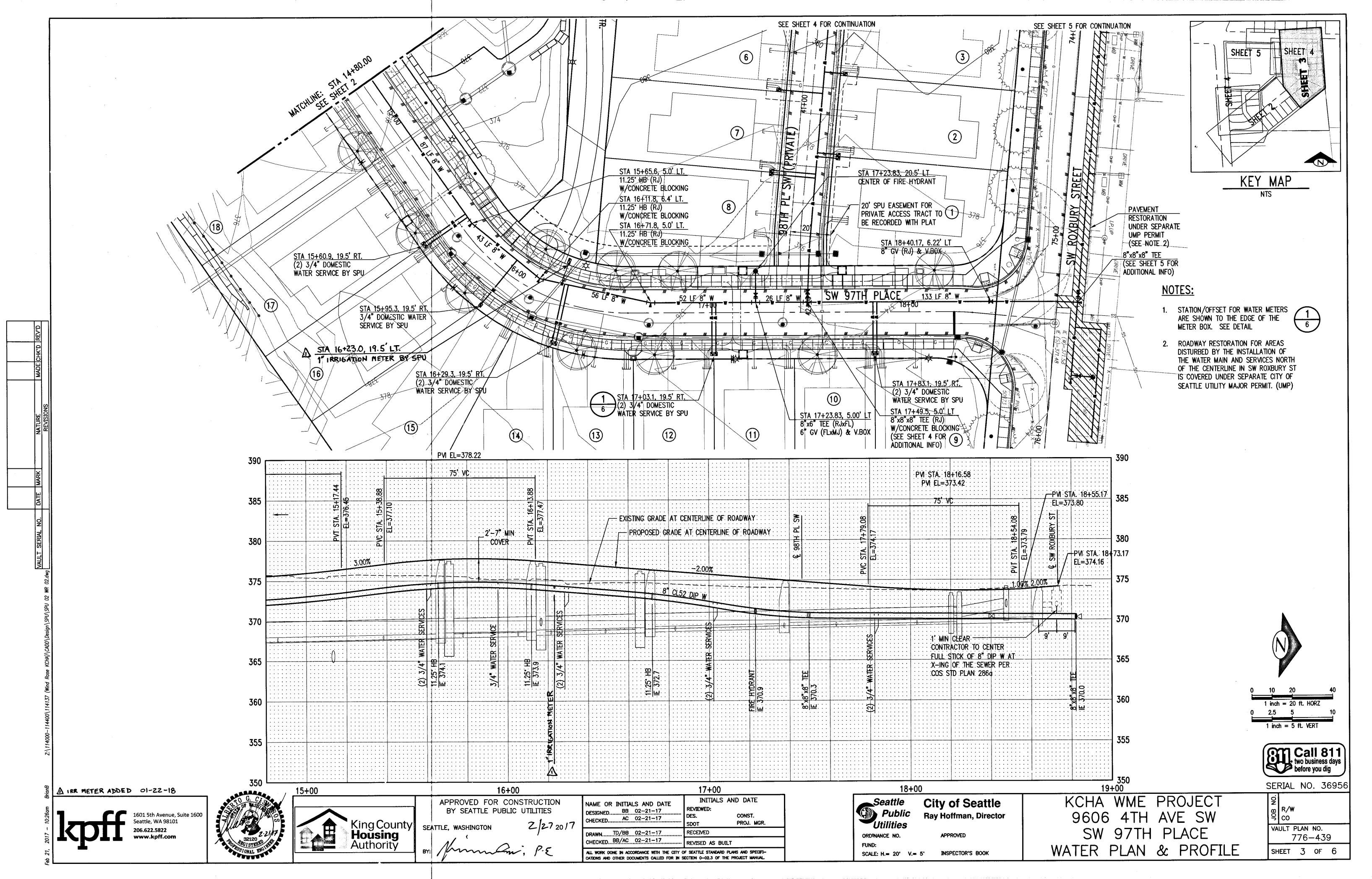
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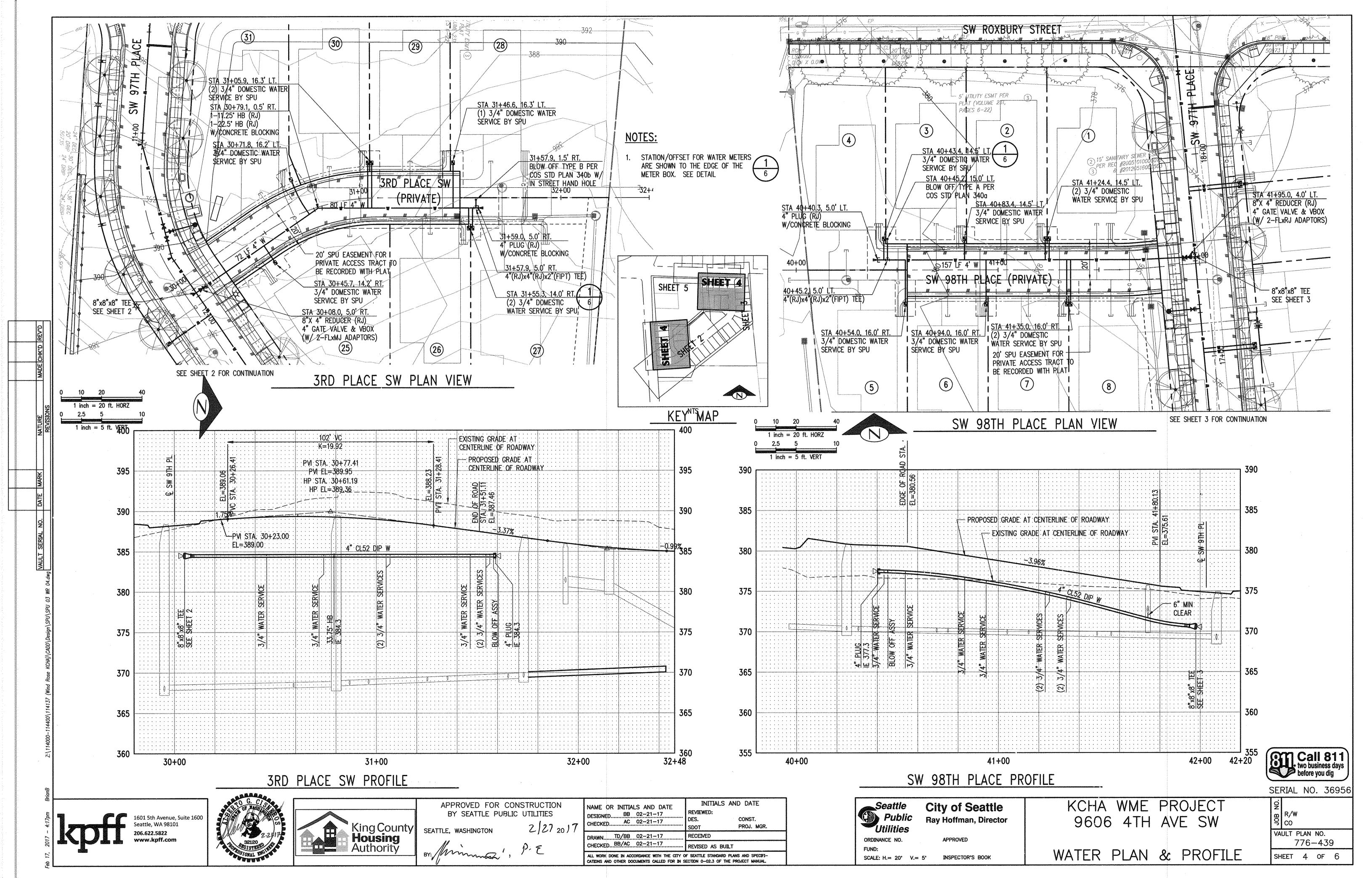
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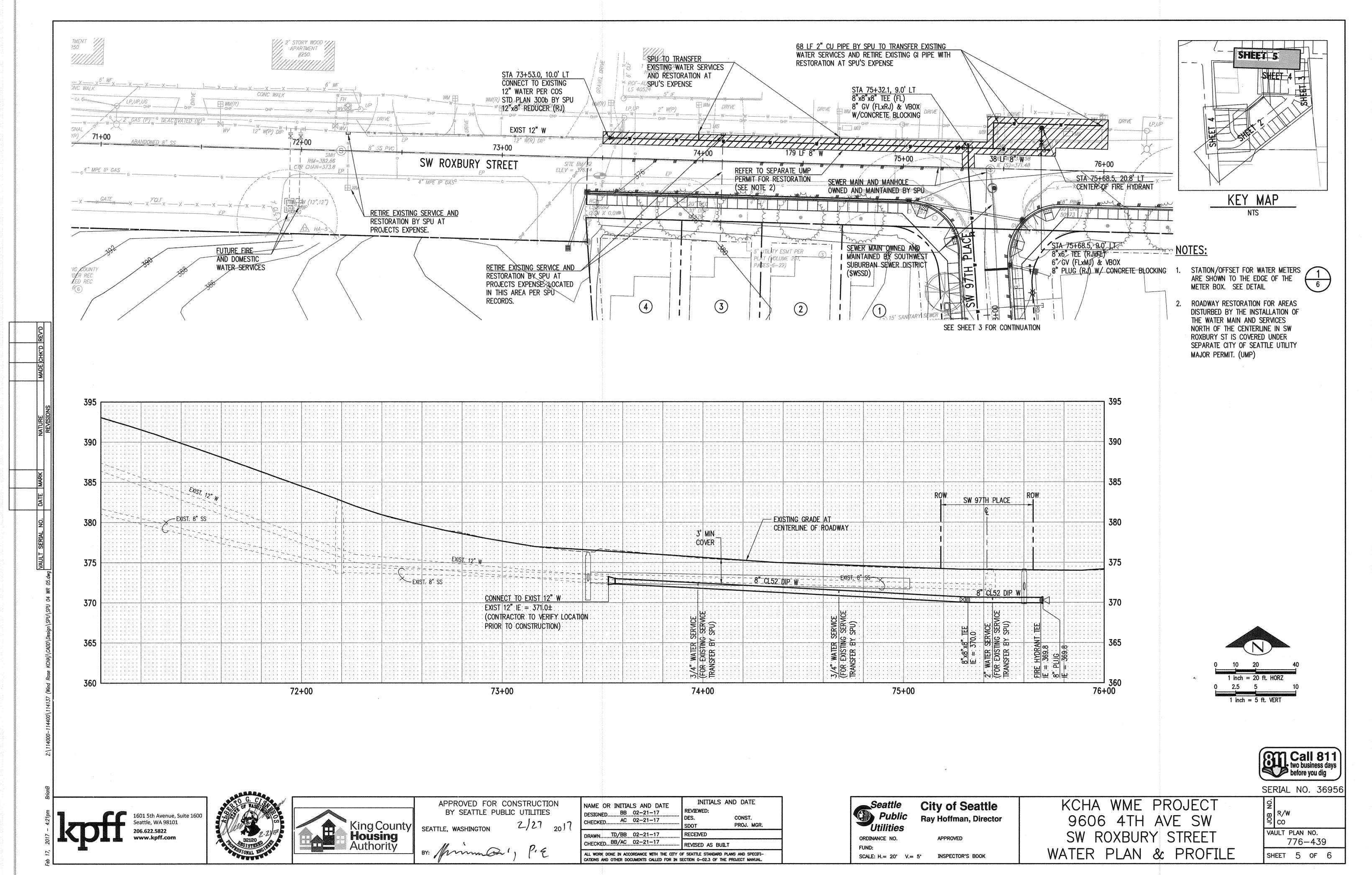
KCHA WME PROJECT

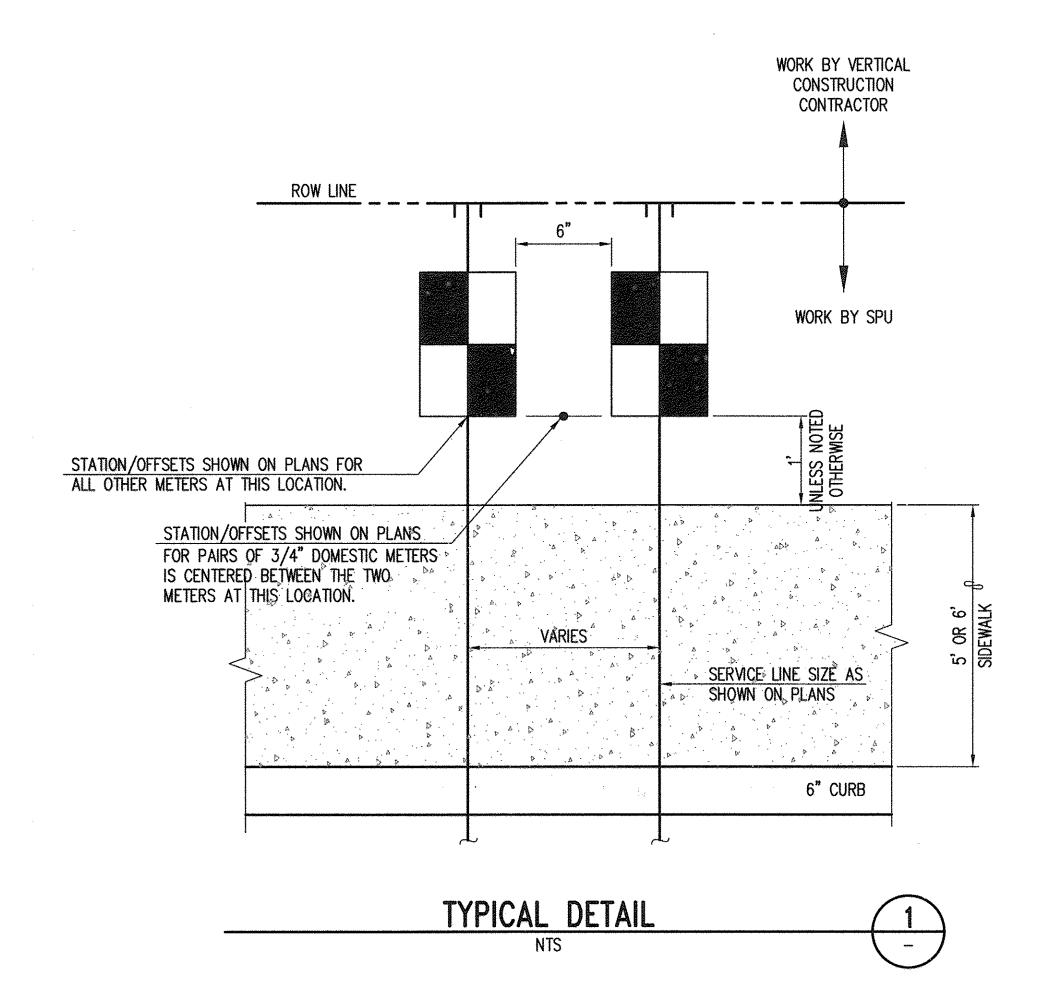
9606 4TH AVE SW



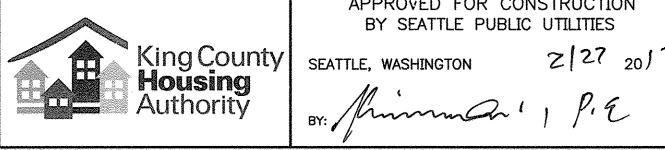












INITIALS AND DATE NAME OR INITIALS AND DATE
DESIGNED. BB 02-21-17
CHECKED. AC 02-21-17 CONST. PROJ. MGR. DRAWN TD/BB 02-21-17
CHECKED BB/AC 02-21-17 RECEIVED REVISED AS BUILT

Seattle Public Utilities ORDINANCE NO.

SCALE: AS NOTED

FUND:

City of Seattle
Ray Hoffman, Director

APPROVED INSPECTOR'S BOOK

KCHA WME PROJECT 9606 4TH AVE SW

SERIAL NO. 36956 m R/W VAULT PLAN NO. 776-439

SHEET 6 OF 6

WATER DETAILS

APPROVED FOR CONSTRUCTION BY SEATTLE PUBLIC UTILITIES