





WATER NOTES

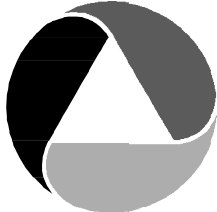
1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
2. ALL WATER MAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CURRENT AWWA, WSDOT, AND APWA STANDARD SPECIFICATIONS, AS AMENDED BY THE CITY OF KIRKLAND. ALL MATERIAL UTILIZED SHALL BE NEW, NO PARTS SHALL BE REUSED. ANY PART REMOVED FROM THE SYSTEM FOR ANY REASON MAY NOT BE REUSED AND SHALL BE REPLACED WITH A NEW PART. (E.G. A ROMAC WITH A BAD GASKET MUST BE REPLACED WITH AN ENTIRELY NEW ROMAC ASSEMBLY).
3. THE WATER MAIN SHALL BE CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51-86 OR THE MOST RECENT REVISION. THE PIPE SHALL BE 1/16" CEMENT LINED AND SEALED IN ACCORDANCE WITH ANSI/AWWA C104/A21.4-90. THE CAST IRON OR DUCTILE IRON PIPE FITTINGS SHALL BE CLASS 250 AS PER ANSI/AWWA C110/A21.10-82. PIPE BEDDING SHALL BE COMPACTED TO 95 PERCENT OF ITS MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. UNLESS IT IS NECESSARY TO CLEAR EXISTING UTILITIES, THE WATER MAIN SHOULD BE INSTALLED WITH UNDER 60" OF COVER BUT NEVER LESS THAN 36" OF COVER TO THE TOP OF THE PIPE. ANY DEVIATIONS FROM THIS SHALL BE APPROVED BY THE CITY OF KIRKLAND APPROVING AUTHORITY PRIOR TO START OF CONSTRUCTION ACTIVITIES.
4. CONCRETE BLOCKING FOR WATER MAINS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH AWWA AND CITY OF KIRKLAND SPECIFICATIONS AND SHALL BE INSTALLED AT ALL VERTICAL AND HORIZONTAL BENDS AND FITTINGS. PRIOR TO BLOCKING, THE FITTINGS SHALL BE WRAPPED WITH VISQUEEN.
5. ALL CONNECTIONS TO EXISTING MAINS AND ALL TESTING AND DISINFECTION SHALL BE PERFORMED UNDER THE SUPERVISION OF THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS INSPECTOR.
6. APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE LOCATIONS SHOWN AND FOR DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN SO AS TO AVOID DAMAGE OR DISTURBANCE. THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
7. ALL CONTRACTORS WORKING WITH AC PIPE MUST BE STATE-CERTIFIED. THE CONTRACTOR SHALL PROVIDE PROTECTIVE CLOTHING AND EQUIPMENT (COVERALLS, GLOVES, BOOTS, HEAD COVERING, GOGGLES, RESPIRATORS, ETC.) TO CREWS WORKING WITH ASBESTOS CEMENT PIPE IN ORDER TO ASSURE THE WORKER'S EXPOSURE TO ASBESTOS MATERIAL IS AT OR BELOW THE LIMITS PRESCRIBED IN WAC 296-62-07705.
8. AN APPROVED COPY OF THE WATER PLAN MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
9. A 5' MINIMUM HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER FACILITIES AND UNDERGROUND POWER AND TELEPHONE FACILITIES, UNLESS OTHERWISE APPROVED BY THE CITY OF KIRKLAND.
10. FOR WATER MAIN AND SEWER MAIN SEPARATION REQUIREMENTS, SEE ITEM VIII.C OF THE SANITARY SEWER - DESIGN CRITERIA SECTION AND DETAIL W.01.
11. PRESSURE AND PURITY TESTING SHALL BE DONE IN THE PRESENCE OF, AND UNDER THE SUPERVISION OF, A CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS INSPECTOR. THE CONTRACTOR SHALL PROVIDE ALL PLUGS AND TEMPORARY BLOWOUT ASSEMBLIES FOR PRESSURE TESTING AND DISINFECTION PRIOR TO FINAL TIE-IN. NO CONNECTION SHALL BE MADE BETWEEN THE NEW MAIN AND THE EXISTING MAINS UNTIL THE NEW PIPING HAS BEEN DISINFECTED, FLUSHED, AND PASSED BOTH PRESSURE AND PURITY TESTING. TEMPORARY PLUGS AND BLOCKING SHALL BE INSTALLED AT THE POINTS OF CONNECTION TO THE EXISTING SYSTEM FOR CONSTRUCTION OF NEW WATER MAIN, THE SERVICES, HYDRANTS ETC., WILL BE TESTED WITH THE MAIN PRESSURE TESTING WILL REQUIRE A MINIMUM OF 200 PSI FOR 15 MINUTES WITH NO PRESSURE DROP. UPON SATISFACTORY COMPLETION OF THE PRESSURE TEST, THE LINE SHALL BE DISINFECTED, FLUSHED, AND THEN A SAMPLE SHALL BE TAKEN FOR PURITY TESTING BY THE PUBLIC WORKS INSPECTOR.
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF KIRKLAND INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL WATER MAIN CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING AS-BUILT DRAWINGS OF ALL CONSTRUCTION NOT INSTALLED ACCORDING TO THE APPROVED PLANS. (THIS DOES NOT GIVE APPROVAL FOR AS-BUILT CONSTRUCTION.)
13. THE CONTRACTOR SHALL CONTACT THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS FIVE (5) DAYS PRIOR TO ANY WORK REQUIRING THE SHUTDOWN OF EXISTING WATER MAINS. THE CONTRACTOR IS REQUIRED TO GIVE TWO (2) WORKING DAYS NOTICE TO ALL CUSTOMERS AFFECTED BY A WATER MAIN SHUTDOWN (NOTICES AND MAPS FOR THE SHUTDOWN WILL BE PROVIDED BY THE WATER DIVISION). SHUTDOWNS SHALL BE SCHEDULED FOR MONDAYS, TUESDAYS, WEDNESDAYS, AND THURSDAYS BETWEEN 8:30 AM AND 2 PM. SHUTDOWNS AFFECTING INSTITUTIONS SHALL BE SCHEDULED AT NIGHT. ONLY WATER DIVISION PERSONNEL OR A DESIGNATE OF THE WATER DIVISION MANAGER MAY OPERATE VALVES, AND/OR HYDRANTS, BLOW-OFFS, ETC. FOR FILLS, SHUT DOWNS, FLUSHING, OR RECHARGING OF WATER LINES. TWO (2) WORKING DAYS NOTICE TO THE WATER DIVISION IS REQUIRED TO SCHEDULE FILLS.
14. THERE SHALL BE NO WATER MAIN CONSTRUCTION ON A SATURDAY, SUNDAY, OR HOLIDAYS OBSERVED BY THE CITY OF KIRKLAND.
15. SHOULD THE WATER MAIN WORK NECESSITATE THE CLOSING OF CERTAIN GATE VALVES WITHIN THE EXISTING SYSTEM, THE CITY OF KIRKLAND MAINTENANCE DEPARTMENT SHALL BE RESPONSIBLE FOR THE OPERATION OF SUCH VALVES.
16. THE FIRE FLOW SYSTEM SHALL BE INSTALLED, TESTED, AND APPROVED PRIOR TO ABOVE-GROUND COMBUSTIBLE CONSTRUCTION.
17. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
18. MEGA-LUGS (OR SIMILAR PRODUCT) SHALL BE REQUIRED ON ALL FITTINGS AND VALVES FOR TIE-INS, OR BUILDOUTS FOR TIE-INS PRIOR TO A FINAL CONNECTION TO THE EXISTING WATER MAIN. APPROPRIATE CONCRETE BLOCKING IS ALSO REQUIRED IN ADDITION TO MEGA-LUGS.
19. FOR THE DURATION OF ANY WATER MAIN INSTALLATION PROJECT, ALL EXISTING AND NEWLY INSTALLED VALVE CANS ARE TO REMAIN ACCESSIBLE TO WATER DIVISION PERSONNEL.
20. WHEN IT BECOMES NECESSARY TO RE-PLUMB THE CUSTOMER'S SIDE OF AN EXISTING WATER METER AS THE RESULT OF THE RELOCATION OF THE EXISTING SERVICE OR TO COMPLY WITH OTHER CITY OF KIRKLAND PUBLIC WORKS SPECIFICATIONS, THE CUSTOMER'S SIDE SHALL BE RECONNECTED WITH THE APPROPRIATE PLUMBING MATERIALS (AND RELATED FITTINGS) SUCH AS BRASS, COPPER, POLYETHYLENE WITH A 200 P.S.I. RATING, OR ALL PARTS, PIPE, AND/OR FITTINGS SHALL BE NEW FROM THE BACK SIDE OF THE METER TO THE CONNECTION POINT OF THE CUSTOMER'S SERVICE.
21. NO TIE-IN WILL BE ALLOWED INTO THE EXISTING TAILPIECE ON THE CUSTOMER'S SIDE OF THE METER. IF THE EXISTING METER DOES NOT HAVE A CHECK VALVE INSTALLED ON THE BACK SIDE OF THE METER (CUSTOMER'S SIDE), A CHECK VALVE CANNOT BE INSTALLED WHEN DOING THE TIE-IN.
22. IF A FITTING, EITHER DURING INSTALLATION OR AFTER, IS FOUND TO BE DEFECTIVE IN ANY WAY AS DETERMINED BY THE CITY, THE CONTRACTOR SHALL REPLACE THE ENTIRE FITTING AND NOT JUST THE DEFECTIVE COMPONENT.
23. BEGINNING JANUARY 1, 2014, ALL PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND PLUMBING FIXTURES USED FOR POTABLE WATER, MUST HAVE A MAXIMUM LEAD CONTENT NOT TO EXCEED 0.25% PER "LEAD FREE" STANDARDS AS DEFINED IN SECTION 9 OF NSF/ANSI STANDARD 61.

GENERAL NOTES

1. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING WITH THE CITY OF KIRKLAND TO BE ATTENDED BY ALL MAJOR CONTRACTORS AND REPRESENTATIVES OF INVOLVED UTILITIES. SEE SECTION 1-07.17 OF THE SPECIAL PROVISIONS FOR UTILITY CONTACT INFORMATION.
2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REQUEST A PUNCH LIST FROM THE CITY'S INSPECTOR PER SECTION 1-05.11 OF THE SPECIFICATIONS. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE PROJECT.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, CURRENT EDITION AT TIME OF BID, (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), PUBLISHED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, UNLESS SUPERSEDED OR AMENDED BY THE PROJECT SPECIAL PROVISIONS OR CITY OF KIRKLAND PRE-APPROVED PLANS (CURRENT EDITION) (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
4. A COPY OF THESE APPROVED PLANS, SPECIFICATIONS, AND DETAILS, AND THE WSDOT STANDARD SPECIFICATIONS SHALL BE ONSITE DURING ALL CONSTRUCTION.
5. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND BEFORE WORK COMMENCES. CALL 8-1-1 AT LEAST 2 WORKING DAYS PRIOR TO ANY CONSTRUCTION.
6. CONTRACTOR SHALL COORDINATE CONSTRUCTION W/ PUGET SOUND ENERGY (PSE) PRIOR TO EXCAVATION NEAR GAS MAINS. THE PSE REPRESENTATIVE SHALL (AT A MINIMUM) BE ONSITE FOR CONSTRUCTION AROUND 4" DIAMETER AND LARGER AND/OR HIGH PRESSURE GAS MAINS.
7. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE MUTCD AND SHALL SUBMIT TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING. NO WORK SHALL BEGIN PRIOR TO APPROVAL OF THE TRAFFIC CONTROL PLAN.

WATER - CONSTRUCTION CRITERIA

1. UNLESS OTHERWISE SPECIFIED, THE MINIMUM NEW WATER SERVICE SIZE SHALL BE 1" POLY WITH A 1" ANGLE STOP. CRIMPING WILL NOT BE ALLOWED ON ANY NEW OR EXISTING SERVICE.
2. THIS NOTE INTENTIONALLY DELETED.
3. THIS NOTE INTENTIONALLY DELETED.
4. THIS NOTE INTENTIONALLY DELETED.
5. SIZE-ON-SIZE WET TAPS ARE ALLOWED AS LONG AS THE EXISTING PIPE IS OF AN ACCEPTABLE CONDITION. IF IT IS DETERMINED BY CITY STAFF THAT THE PIPE CANNOT ACCEPT A WET TAP, THE NEW VALVE WILL NEED TO BE CUT IN.
6. NEW MAIN INSTALLATIONS: ALL NEW WATER MAINS SHALL BE LAID STARTING AT THE EXISTING MAIN. ALL VALVES SHALL BE CUT IN FIRST, (DEPENDING ON THE REQUIREMENTS FOR THE NEW INSTALLATION) ALLOWING FOR A GAP FROM THE VALVE, (NO LESS THAN 3' LONG AND NO MORE THAN 10' LONG) WITH TEMPORARY BLOCKING PER CK-W.10. TYPICALLY A THREE-WAY VALVE CLUSTER IS REQUIRED AT THE CUT-IN TEE. DO NOT USE A WET TAP VALVE WITHOUT PRIOR AUTHORIZATION BY PUBLIC WORKS (DISCUSS WITH THE DEVELOPMENT ENGINEER). THE NEW MAIN SHALL BE LAID STARTING AT THIS POINT. AFTER INSPECTION OF THE NEW MAIN AND APPURTENANCES (SERVICES, HYDRANTS, AIR/VACS AND BLOW-OFFS, ETC.), THE MAIN SHALL BE FILLED PER CK-W.10, PRESSURE TESTED, FLUSHED AND A "SATISFACTORY" PURITY SAMPLE TAKEN PRIOR TO TIE-IN. THE CONTRACTOR WILL BE REQUIRED TO RENT A 2" HYDRANT METER FROM THE CITY PER CK-W.10 FOR FILLING AND FLUSHING OF THE NEW MAIN.
7. THIS NOTE INTENTIONALLY DELETED.
8. HYDRANTS INSTALLED WITH NEW MAIN EXTENSIONS SHALL BE TESTED WITH THE FOOT VALVE OPEN AND THE MAIN VALVE (HYDRANT) CLOSED. HYDRANT WILL THEN BE INSPECTED AND OPERATED DURING FLUSH.
9. HYDRANTS INSTALLED ON EXISTING MAINS SHALL BE SWABBED WITH CHLORINE, FLUSHED AND PRESSURE TESTED WITH THE FOOT VALVE CLOSED AND THE MAIN VALVE (HYDRANT) OPEN.
10. ALL NEW BUILDINGS SHALL HAVE A WATER SERVICE THAT MEETS THE CURRENT STANDARDS. ANY EXISTING SERVICES THAT NEED TO BE ABANDONED BECAUSE OF SIZE, MATERIAL, LOCATION OR OTHER CONDITIONS, MUST BE CUT AND CAPPED AT THE MAIN PER CURRENT PUBLIC WORK'S SPECIFICATIONS. IF IT IS DETERMINED THAT THE EXISTING CORPORATION STOP IS A HAYES OR B-MACHINE, THE CORPORATION STOP SHALL BE REMOVED FROM THE MAIN AND A REPAIR BAND INSTALLED (SHALL USE ROMAC SS-1 (OR EQUAL) 12" LONG REPAIR BAND IF REQUIRED). NOTE: GALVANIZED, "BLUE-POLY", COPPER AND PVC ARE THE MOST COMMON TYPES OF EXISTING SERVICES THAT ARE FOUND IN THE CITY AND REQUIRED TO BE UPGRADED.
11. WATER SERVICES AND METERS SHALL NOT BE LOCATED IN DRIVEWAYS. IF AN EXISTING WATER METER IS LOCATED IN AN EXISTING DRIVEWAY AND THE SERVICE NEEDS TO BE UPGRADED, OR THE DRIVEWAY IS REMOVED AND REPLACED, THE EXISTING WATER SERVICE SHALL BE ABANDONED AT THE WATER MAIN AND A NEW WATER SERVICE SHALL BE INSTALLED OUTSIDE OF THE DRIVEWAY.
12. IF AN EXISTING WATER VALVE NEEDS TO BE ABANDONED, A SHUT DOWN SHALL BE SCHEDULED WITH THE WATER DEPARTMENT. THE VALVE MUST BE REMOVED AND A BLIND FLANGE INSTALLED ON THE TEE.
13. WHEN AN AC WATER MAIN IS TUNNELED UNDER TO INSTALL ANOTHER UTILITY, THE SECTION OF THE AC MAIN WITHIN THE TRENCH AND FOR 5 FEET ON EITHER SIDE OF THE TRENCH SHALL BE REPLACED WITH CLASS 52 DI PIPE. IT MAY REQUIRE ONE FULL STICK OF PIPE OR MORE TO INCLUDE REPLACING ANY EXPOSED COUPLINGS AND MILLS. ALL CONNECTIONS SHALL BE MADE WITH ROMAC COUPLINGS.
14. THE CONTRACTOR SHALL COORDINATE SHUT DOWNS, FILLS AND FLUSHES WITH THE CITY OF KIRKLAND INSPECTOR WHO WILL THEN COORDINATE DATES AND TIMES WITH THE WATER DIVISION. ALL VALVES, INCLUDING HYDRANTS, BLOW-OFFS, ETC., SHALL BE OPERATED BY CITY OF KIRKLAND WATER DEPARTMENT PERSONNEL. A MINIMUM OF TWO (2) WORKING DAYS NOTICE TO ALL AFFECTED PROPERTY OWNERS IS REQUIRED BEFORE A SHUT DOWN CAN OCCUR. A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED TO SCHEDULE FILLS. NOTE: SCHEDULING OF SHUT DOWNS WILL NOT BE ALLOWED TO OCCUR FOR DAYS IMMEDIATELY FOLLOWING HOLIDAYS OBSERVED BY THE CITY OF KIRKLAND.
15. IN GENERAL, FLUSHES ARE SCHEDULED FOR THE NEXT WORKING DAY AFTER THE NEW WATER SYSTEM IS FILLED. IT IS ASSUMED THAT THE PRESSURE TEST WILL ALSO BE PERFORMED ON THE DAY OF THE FILL. TO ADHERE TO THIS SCHEDULE, THE WATER DIVISION MUST BE NOTIFIED BY THE CITY INSPECTOR OR PROJECT MANAGER BY 1PM ON THE DAY OF THE FILL CONFIRMING THAT THE PRESSURE TEST WAS SUCCESSFUL IN ORDER TO RECEIVE THE FLUSH ON THE FOLLOWING WORKING DAY.



ATWELL

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LEGEND

EXISTING FEATURES

- ADJACENT PLAT/PARCEL LINE  
ADJACENT RIGHT-OF-WAY  
CENTERLINE  
EASEMENT  
SURFACE FEATURES  
BUILDING FOOTPRINT  
10' CONTOURS  
2' CONTOURS  
SD - STORM DRAIN PIPE  
SS - SEWER MAIN  
W - WATER MAIN  
OP - AERIAL POWER LINE  
P - BURIED POWER LINE  
G - GAS MAIN  
T - BURIED TELECOMM LINE  
FO - BURIED FIBER OPTIC CABLE  
X - WIRE FENCE  
CHANNELIZATION  
EDGE OF LANDSCAPE  
TEMPORARY CONSTRUCTION  
EASEMENT  
RETAINING WALL  
ROCKERY  
CATCH BASIN, TYPE I  
CATCH BASIN, TYPE II  
SD PIPE FLOW  
SEWER MANHOLE  
SEWER CLEANOUT  
SS PIPE FLOW  
FIRE HYDRANT  
WATER METER  
GATE VALVE  
WATER VAULT  
IRRIGATION METER  
WATER INDICATOR POST  
BASKETBALL HOOP  
BASKETBALL HOOP BASE (CONCRETE)  
IRRIGATION VALVE  
AIR-VAC  
GUY ANCHOR  
UTILITY POLE W/ LIGHT  
UP W/ TRANSFORMER  
UP W/ TRANSFORMER & UNDERGROUND CONDUIT  
TRANSFORMER  
POWER METER  
JUNCTION BOX  
GAS VALVE  
TV RISER  
TELECOMM VAULT  
TELECOMM RISER  
TELECOMM JUNCTION BOX  
MAIL BOX  
SIGN  
HEDGE  
DECIDUOUS TREE  
CONIFEROUS TREE  
TREE TO BE REMOVED  
SHRUB TO BE REMOVED  
ASPHALT  
CONCRETE  
GRAVEL

LEGEND

PROPOSED SURFACE FEATURES

- FLOW & CURB  
CENTER LINE  
SAWCUT  
RETAINING WALL  
FENCE  
CONIFEROUS TREE  
HMA PATCH  
CEMENT CONCRETE SIDEWALK  
GRAVEL  
LANDSCAPE RESTORATION

PROPOSED WATER

- WATER MAIN  
WATER METER  
FIRE HYDRANT  
AIR/VAC RELEASE VALVE  
GATE VALVE  
VERTICAL BEND  
TEE W/ CONC BLOCKING  
BEND W/ CONC BLOCKING  
REDUCER  
SLEEVE  
COUPLING  
CROSS  
ADAPTER

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL JOB # BL23-113

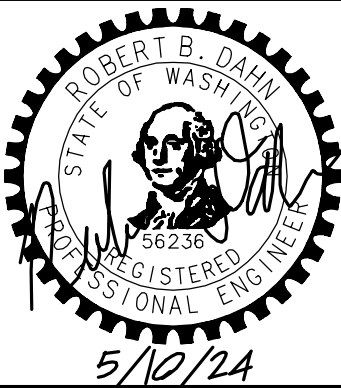


CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS

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(425) 587-3800 www.kirklandwa.gov



APPROVED BY:

DATE:

KAI POPE, EIT 4/2024  
DESIGNED BY: DATE

CAROL DOGGETT 4/2024  
DRAWN BY: DATE

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT

GENERAL NOTES & LEGEND

SHEET:

2 OF 19

SCALE:

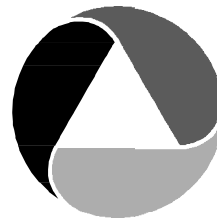
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***EROSION/SEDIMENTATION CONTROL - PLAN NOTES***



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- THE APPROVED CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS: A. CONDUCT PRE-CONSTRUCTION MEETING. B. FLAG OR FENCE CLEARING LIMITS. C. POST SIGN WITH NAME AND PHONE NUMBER OF TESC SUPERVISOR. D. INSTALL CATCH BASIN PROTECTION DOWNSTREAM AND AS DETERMINED BY THE CITY INSPECTOR. E. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S). F. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.). G. CONSTRUCT SEDIMENT PONDS AND TRAPS. H. GRADE AND STABILIZE CONSTRUCTION ROADS. I. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT. J. MAINTAIN EROSION CONTROL MEASURE IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS. K. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY TESC MINIMUM REQUIREMENTS. L. COVER ALL AREAS WITHIN THE SPECIFIED TIME FRAME WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, CRUSHED ROCK OR EQUIVALENT. M. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN 7 DAYS. N. SEED OR SOO ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS. O. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.

  - CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS CLEAN AND FREE OF CONTAMINANTS AT ALL TIMES AND FOR PREVENTING AN ILLICIT DISCHARGE (KMC 15.52) INTO THE MUNICIPAL STORM DRAIN SYSTEM. IF YOUR CONSTRUCTION PROJECT CAUSES AN ILLICIT DISCHARGE TO THE MUNICIPAL STORM DRAIN SYSTEM, THE CITY OF KIRKLAND STORM MAINTENANCE DIVISION WILL BE CALLED TO CLEAN THE PUBLIC STORM SYSTEM, AND OTHER AFFECTED PUBLIC INFRASTRUCTURE. THE CONTRACTOR(S), PROPERTY OWNER, AND ANY OTHER RESPONSIBLE PARTY MAY BE CHARGED ALL COSTS ASSOCIATED WITH THE CLEAN-UP AND MAY ALSO BE ASSESSED A FINE (KMC 1.12.200). THE MINIMUM PENALTY IS \$500. A FINE FOR REPEAT VIOLATION SHALL BE DETERMINED BY MULTIPLYING THE SURFACE WATER FINE BY THE NUMBER OF VIOLATIONS. A FINE MAY BE REDUCED OR WAIVED FOR PERSONS WHO IMMEDIATELY SELF-REPORT VIOLATION TO THE CITY AT 425-587-3900. A FINAL INSPECTION OF YOUR PROJECT WILL NOT BE GRANTED UNTIL ALL COSTS ASSOCIATED WITH THE CLEAN-UP, AND PENALTIES, ARE PAID TO THE CITY OF KIRKLAND.
  - CONSTRUCTION DEWATERING DISCHARGES SHALL ALWAYS MEET WATER QUALITY GUIDELINES LISTED IN COK POLICY E-1. SPECIFICALLY, DISCHARGES TO THE PUBLIC STORMWATER DRAINAGE SYSTEM MUST BE BELOW 5NTU, AND NOT CONSIDERED AN ILLICIT DISCHARGE (PER KMC 15.52.090). TEMPORARY DISCHARGES TO SANITARY SEWER REQUIRE PRIOR AUTHORIZATION AND PERMIT FROM KING COUNTY INDUSTRIAL WASTE PROGRAM (206-477-5300) AND NOTIFICATION TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR.
  - ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS AND SPECIFICATIONS.
  - THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE SET BY SURVEY AND CLEARLY FLAGGED IN THE FIELD BY A CLEARING CONTROL FENCE PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE OR REMOVAL OF ANY GROUND COVER BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMITEE/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
  - APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
  - THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADE OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
  - A COPY OF THE APPROVED ESC PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
  - THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
  - THE ESC FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE APPROVED PLANS. LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CITY OF KIRKLAND INSPECTOR.
  - THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY, MORE ESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.
  - THE ESC FACILITIES SHALL BE INSPECTED BY THE PERMITEE/CONTRACTOR DAILY DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT, AND AT THE END OF EVERY RAINFALL, AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, TEMPORARY SILTATION PONDS AND ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED. WRITTEN RECORDS SHALL BE KEPT DOCUMENTING THE REVIEWS OF THE ESC FACILITIES.
  - THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.
  - STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
  - ALL DENUDED SOILS MUST BE STABILIZED WITH AN APPROVED TESC METHOD (E.G. SEEDING, MULCHING, PLASTIC COVERING, CRUSHED ROCK) WITHIN THE FOLLOWING TIMELINES: •MAY 1 TO SEPTEMBER 30 -SOILS MUST BE STABILIZED WITHIN 7 DAYS OF GRADING. •OCTOBER 1 TO APRIL 30 -SOILS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. •STABILIZE SOILS AT THE END OF THE WORKDAY PRIOR TO A WEEKEND, HOLIDAY, OR PREDICTED RAIN EVENT.
  - THE LONG-TERM USE OF PLASTIC COVERING ON A SITE SHALL BE LIMITED TO ONE WET SEASON (OCTOBER 1 TO APRIL 30). AFTER THAT, THE SITE WILL BE REQUIRED TO HYDROSEED OR INSTALL OTHER TESC METHODS AS APPROVED BY THE PUBLIC WORKS DEPARTMENT.
  - WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (EXAMPLE: ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
  - WHERE STRAW MULCH IS REQUIRED FOR TEMPORARY EROSION CONTROL, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2".
  - ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) SHALL HAVE A 6' HIGH TEMPORARY CONSTRUCTION FENCE (CHAIN LINK WITH PIER BLOCKS) SEPARATING THE LOT (OR BUILDABLE PORTIONS OF THE LOT) FROM THE AREA RESTRICTED BY THE NGPE AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR CLEARING AND REMAIN IN PLACE UNTIL THE PLANNING DEPARTMENT AUTHORIZES REMOVAL.
  - CLEARING LIMITS SHALL BE DELINEATED WITH A CLEARING CONTROL FENCE. THE CLEARING CONTROL FENCE SHALL CONSIST OF A 6-FT. HIGH CHAIN LINK FENCE ADJACENT THE DRIP LINE OF TREES TO BE SAVED, WETLAND OR STREAM BUFFERS, AND SENSITIVE SLOPES. CLEARING CONTROL FENCES ALONG WETLAND OR STREAM BUFFERS OR UPSLOPE OF SENSITIVE SLOPES SHALL BE ACCOMPANIED BY AN EROSION CONTROL FENCE. IF APPROVED BY THE CITY, A FOUR-FOOT HIGH ORANGE MESH CLEARING CONTROL FENCE MAY BE USED TO DELINEATE CLEARING LIMITS IN ALL OTHER AREAS.
  - OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET SYSTEM, THE STREET SHALL BE IMMEDIATELY CLEANED WITH POWER SWEEPER OR OTHER EQUIPMENT. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION ENTRANCE AND SHALL BE CLEANED OF ALL DIRT THAT WOULD BE DEPOSITED ON THE PUBLIC STREETS.
  - ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF 1' AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; AND 1"-2" ROCK/10%-20% PASSING. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON THE SITE.
  - IF ANY PART(S) OF THE CLEARING LIMIT BOUNDARY OR TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN IS/ARE DAMAGED, IT SHALL BE REPAIRED IMMEDIATELY.
  - ALL PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND RUNOFF.
  - AT NO TIME SHALL MORE THAN 1' OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED IMMEDIATELY FOLLOWING REMOVAL OF EROSION CONTROL BMPs. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
  - ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM WHICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN.
  - ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING 6" MUST HAVE A PERIMETER FENCE WITH A MINIMUM HEIGHT OF 3'.
  - THE WASHED GRAVEL BACKFILL ADJACENT TO THE FILTER FABRIC FENCE SHALL BE REPLACED AND THE FILTER FABRIC CLEANED IF IT IS NONFUNCTIONAL BY EXCESSIVE SILT ACCUMULATION AS DETERMINED BY THE CITY OF KIRKLAND. ALSO, ALL INTERCEPTOR SWALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-QUARTER DEPTH.
  - PRIOR TO THE OCTOBER 1 OF EACH YEAR (THE BEGINNING OF THE WET SEASON), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEED IN PREPARATION FOR THE WINTER RAINS. THE IDENTIFIED DISTURBED AREA SHALL BE SEED WITHIN ONE WEEK AFTER OCTOBER 1. A SITE PLAN DEPICTING THE AREAS TO BE SEED AND THE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR. THE INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT SUBURBIES, OR DRAINAGE FACILITIES.
  - ANY AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT (INCLUDING A 5-FOOT BUFFER) MUST BE SURROUNDED BY SILT FENCE PRIOR TO CONSTRUCTION AND UNTIL FINAL STABILIZATION OF THE SITE TO PREVENT SOIL COMPACTION AND SILTATION BY CONSTRUCTION ACTIVITIES.
  - IF THE TEMPORARY CONSTRUCTION ENTRANCE OR ANY OTHER AREA WITH HEAVY VEHICLE LOADING IS LOCATED IN THE SAME AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT, 6" OF SEDIMENT BELOW THE GRAVEL SHALL BE REMOVED PRIOR TO INSTALLATION OF THE INFILTRATION FACILITY OR PERVIOUS PAVEMENT (TO REMOVE FINES ACCUMULATED DURING CONSTRUCTION).
  - ANY CATCH BASINS COLLECTING RUNOFF FROM THE SITE, WHETHER THEY ARE ON OR OFF THE SITE, SHALL HAVE ADEQUATE PROTECTION FROM SEDIMENT. CATCH BASINS DIRECTLY DOWNSTREAM OF THE CONSTRUCTION ENTRANCE OR ANY OTHER CATCH BASIN AS DETERMINED BY THE CITY INSPECTOR SHALL BE PROTECTED WITH A "STORM DRAIN PROTECTION INSERT" OR EQUIVALENT.
  - IF A SEDIMENT POND IS NOT PROPOSED, A BAKER TANK OR OTHER TEMPORARY GROUND AND/OR SURFACE WATER STORAGE TANK MAY BE REQUIRED DURING CONSTRUCTION, DEPENDING ON WEATHER CONDITIONS.
  - DO NOT FLUSH CONCRETE BY-PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT COULD MEAN RE-CLEANING THE ENTIRE DOWNSTREAM STORM SYSTEM, OR POSSIBLY RE-LAYING THE STORM LINE.
  - RECYCLED CONCRETE SHALL NOT BE STOCKPILED ON SITE, UNLESS FULLY COVERED WITH NO POTENTIAL FOR RELEASE OF RUNOFF.

## ROADWAY - PLAN NOTES

  - A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
  - ALL ROADWAY WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH THE CURRENT APWA AND CITY OF KIRKLAND STANDARDS AND SPECIFICATIONS.
  - THIS NOTE INTENTIONALLY DELETED.
  - A COPY OF THE APPROVED ROADWAY PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
  - DENSITY TEST REPORTS WILL BE REQUIRED FOR ALL PUBLIC ROADWAYS AND ALL PRIVATE ROADWAYS WITHIN PLATS. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
  - ALL COMMERCIAL AND RESIDENTIAL DRIVEWAYS MUST CONFORM TO THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS DRIVEWAY POLICY.
  - ALL CONCRETE FOR SIDEWALKS AND CURB AND GUTTER MUST BE 4,000 PSI MINIMUM. (5-3/4 SACK MIX.)
  - IN THE CASE OF NEW ROAD CONSTRUCTION OR RECONSTRUCTION REQUIRING MAILBOXES TO BE MOVED OR REARRANGED, THE DEVELOPER/CONTRACTOR SHALL COORDINATE WITH THE U.S. POSTAL SERVICE FOR THE NEW LOCATION OF THE MAILBOX STRUCTURE.
  - ANY ROADWAY SIGNAGE OR STRIPING REMOVED OR TEMPORARILY MOVED BY THE CONTRACTOR SHALL BE RESTORED SO AS TO MEET THE CURRENT CITY OF KIRKLAND STANDARDS.
  - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE



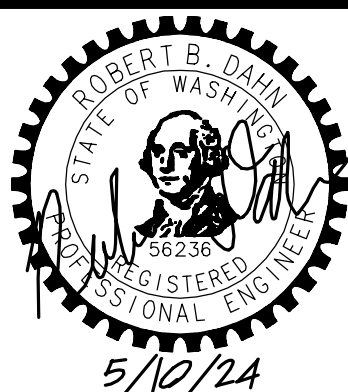
CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS

123 FIFTH AVENUE KIRKLAND, WA 98033

(425) 587-3800 [www.kirklandwa.gov](http://www.kirklandwa.gov)

NO.	DATE	BY	APPR.	REVISION



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DATE:

KAI POPE, EIT 4/2024  
DESIGNED BY: DATE

CAROL DOGETT 4/2024  
DRAWN BY: DATE

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

# NE 73RD ST WATER MAIN IMPROVEMENT PROJECT

## GENERAL NOTES

**SHEET:**

**3 OF 19**

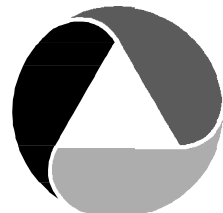
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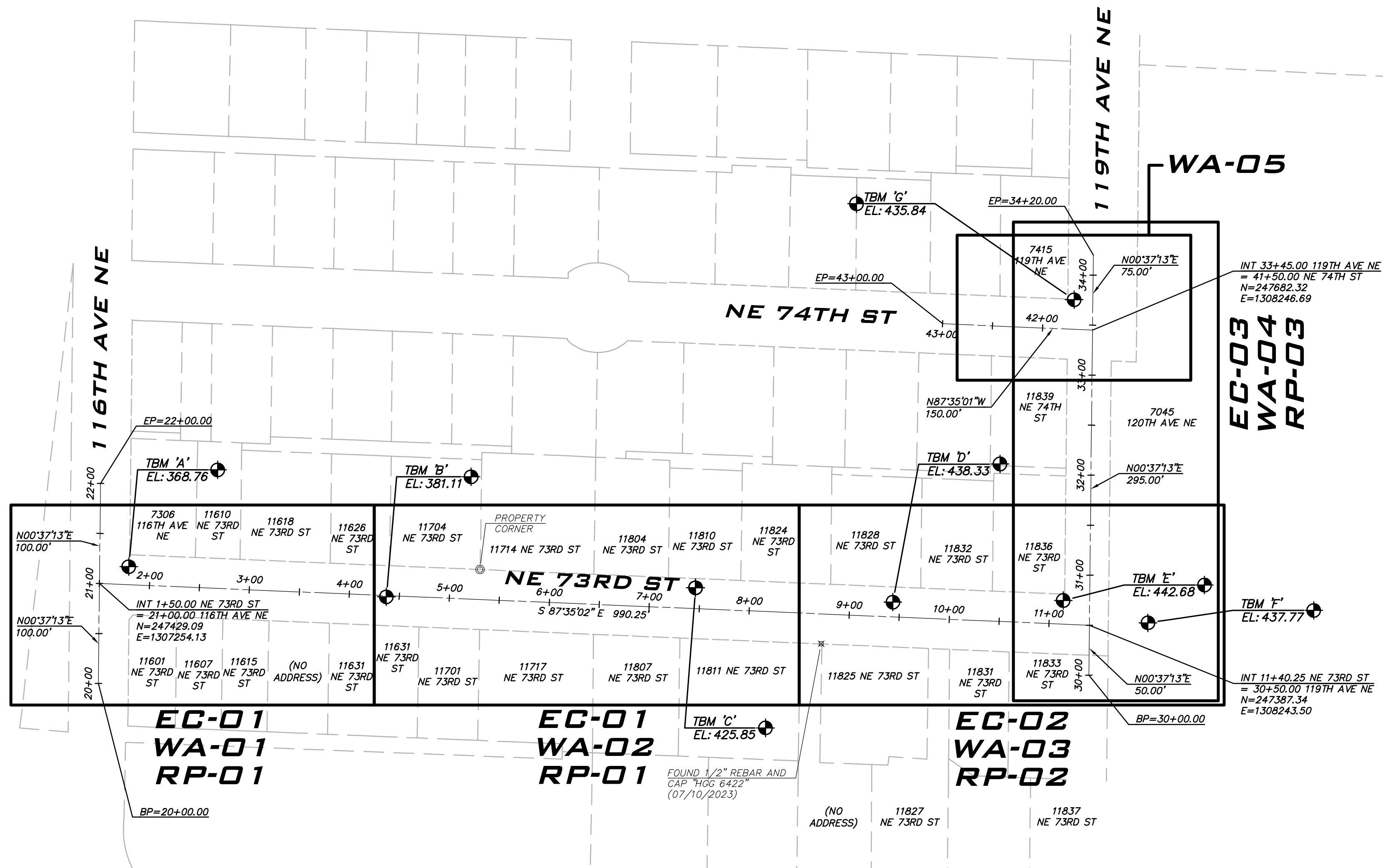
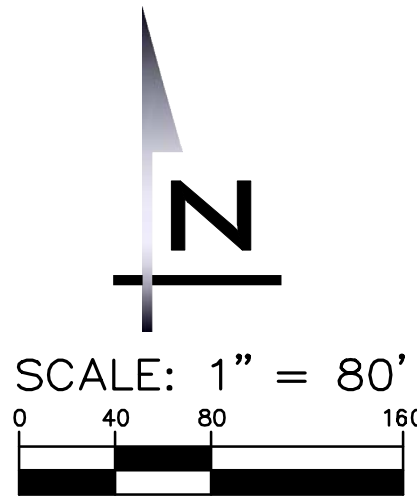
**GN-02**





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### BASIS OF BEARINGS

BASIS OF BEARING: NORTH 47°27'09" EAST BETWEEN THE FOUND CITY OF KIRKLAND MONUMENTS NO. 18 & 21 AS SHOWN IN THE CITY OF KIRKLAND DATABASE.

### HORIZONTAL DATUM

NAD '83/'91 GPS HXGN SMARTNET

### VERTICAL DATUM

NAVD '88 PER GPS HXGN SMARTNET AS VERIFIED TO CITY OF KIRKLAND CONTROL POINT 16

### ORIGINATING BENCHMARK

CITY OF KIRKLAND MONUMENT NO. 18, AS PUBLISHED IN THE WGS SURVEY DATA WAREHOUSE.

ELEVATION: 389.96'

### TEMPORARY BENCHMARKS

TBM 'A'  
SET MAG NAIL WITH AXIS CONTROL WASHER IN THE NORTHEAST QUADRANT INTERSECTION OF NE 73RD ST AND 116TH AVE NE ±6.8' SOUTHWESTERLY OF CB 5040.

ELEVATION: 368.76'

TBM 'B'  
SET MAG NAIL WITH AXIS CONTROL WASHER IN THE SOUTHERLY SIDE OF PAVING FOR NE 73RD ST. ±2.5' SOUTH OF SSMH 5091.

ELEVATION: 381.11'

TBM 'C'  
SET MAG NAIL IN THE NORTHERLY SIDE OF PAVING FOR NE 73RD ST AT DRIVEWAY FOR HOUSE NUMBER 11810.

ELEVATION: 425.85'

TBM 'D'  
SET MAG NAIL WITH AXIS CONTROL WASHER IN THE NORTHERLY SIDE OF PAVING FOR NE 73RD ST ±23.6' WESTERLY OF CB 2252.

ELEVATION: 438.33'

TBM 'E'  
SET MAG NAIL WITH AXIS CONTROL WASHER AT THE NORTHWEST QUADRANT IF INTERSECTION OF NE 73RD ST AND 119TH AVE NE NEAR THE BOTTOM OF HANDICAP RAMP.

ELEVATION: 442.68'

TBM 'F'  
SET MAG NAIL WITH AXIS CONTROL WASHER AT THE SOUTHERLY END OF NO PARKING HATCHING IN CHURCH PARKING LOT.

ELEVATION: 437.77'

TBM 'G'  
SET MAG NAIL WITH AXIS CONTROL WASHER AT THE NORTHWEST QUADRANT IF INTERSECTION OF NE 75TH ST AND 119TH AVE NE AT THE TOP BACK OF HANDICAP RAMP.

ELEVATION: 435.84'

### EQUIPMENT NOTES

PRIMARY CONTROL POINTS AND ACCESSIBLE MONUMENT POSITIONS WERE FIELD MEASURED UTILIZING GLOBAL POSITIONING SYSTEM (GPS) SURVEY TECHNIQUES USING LEICA GS14 GPS/GNSS EQUIPMENT. MONUMENT POSITIONS THAT WERE NOT DIRECTLY OBSERVED USING GPS SURVEY TECHNIQUES WERE TIED INTO THE CONTROL POINTS UTILIZING A LEICA TS16 FOR THE MEASUREMENT OF BOTH ANGLES AND DISTANCES. THIS SURVEY MEETS OR EXCEEDS THE STANDARDS SET BY WACS 332-130-080/090.

### NOTES

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONCLUDED ON JULY 11, 2022 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

THIS SURVEY DISCLOSES FACTORS OF RECORD AND ON THE GROUND AFFECTING THE SUBJECT PROPERTY BOUNDARY, BUT IT DOES NOT PURPORT TO LEGALLY RESOLVE RELATED PROPERTY LINE DISPUTES. WHERE AMBIGUITIES ARE NOTED, AXIS RECOMMENDS THAT THE OWNER CONSULT WITH LEGAL COUNSEL TO DETERMINE HOW BEST TO INTERPRET THEIR PROPERTY RIGHTS AND ADDRESS ANY POTENTIAL PROPERTY LINE DISPUTES.

UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS, ETC.). THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

2' CONTOURS INTERVAL DERIVED FROM DIRECT FIELD OBSERVATION.

THIS SURVEY MEETS UNITED STATES NATIONAL MAP ACCURACY STANDARDS FOR VERTICAL ACCURACY OF ONE HALF THE CONTOUR INTERVAL.

ANY LOT LINES SHOWN ARE PER KING COUNTY GIS DATA. NOTE THAT IT IS ONLY A SCHEMATIC REPRESENTATION FOR CONVENIENCE IN INTERPRETING THE TOPOGRAPHY. IT IS NOT A BOUNDARY SURVEY AND SHOULD NOT BE RELIED ON AS SUCH.

ATWELL JOB # BL23-113



CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS

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DESIGNED BY: DATE

CAROL DOGGETT 4/2024  
DRAWN BY: DATE

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT

KEY MAP & SURVEY CONTROL

SHEET:

4 OF 19

SCALE:

AS SHOWN

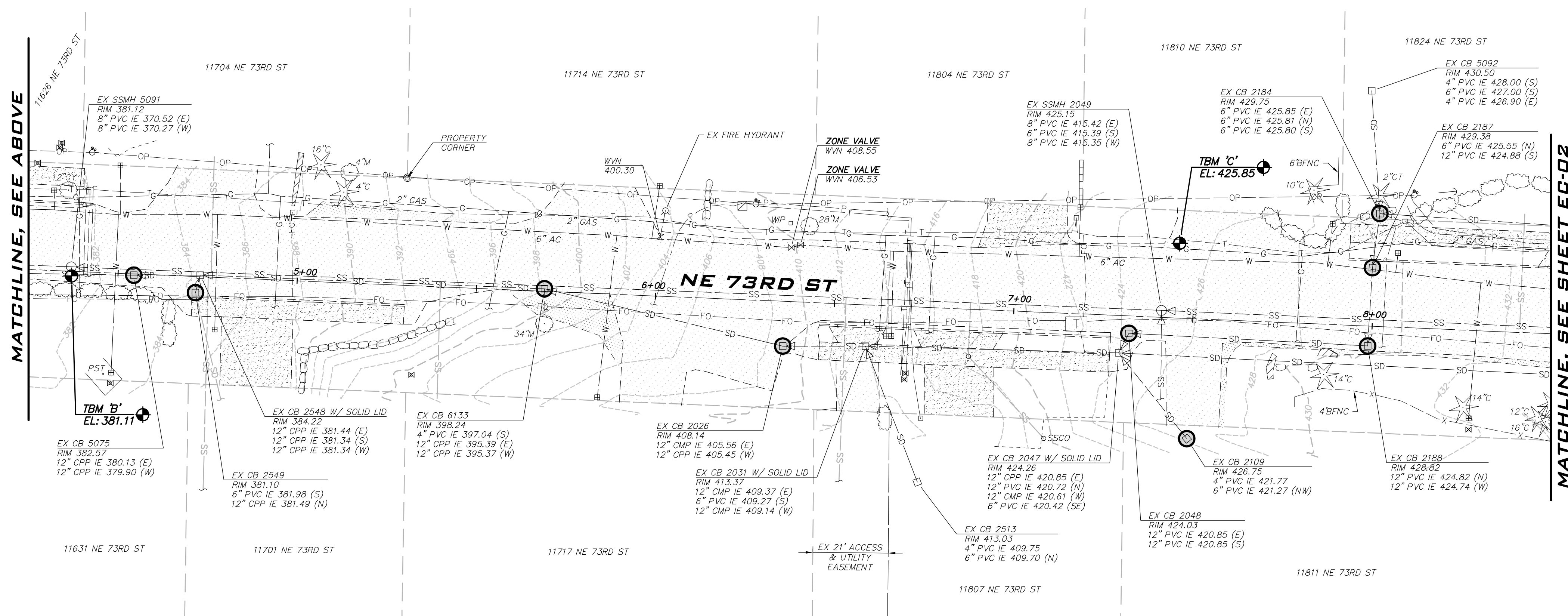
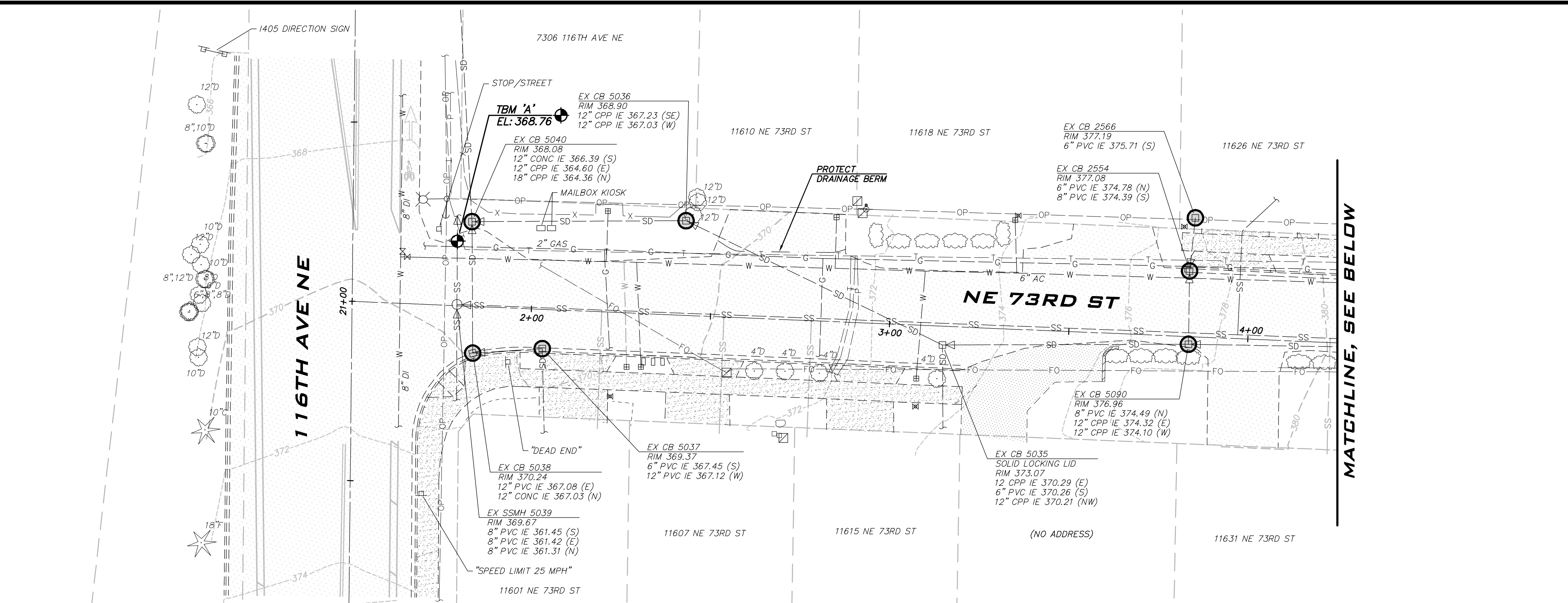
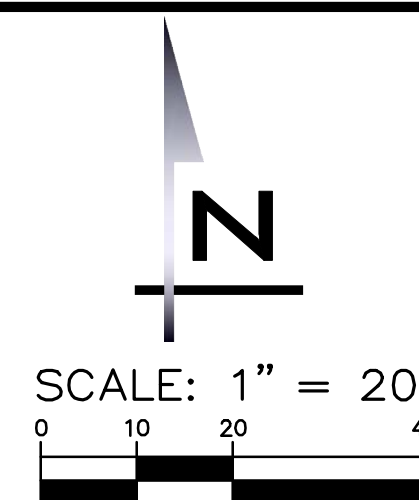
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GN-03





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## LEGEND

## TESC FEATURES

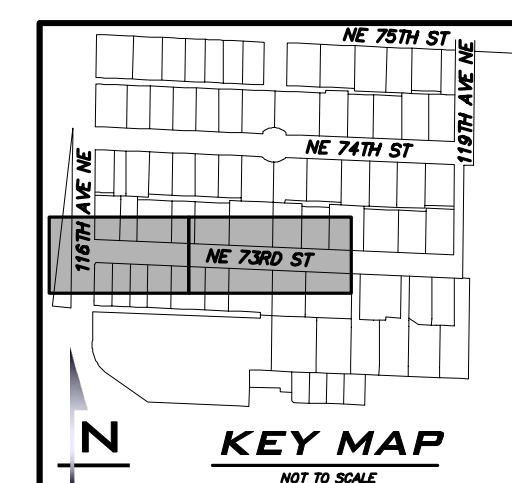
- SILT FENCE  
○ INTERIM CATCH BASIN PROTECTION (INSERT)

## NOTES

1. SEE EROSION/SEDIMENTATION CONTROL PLAN NOTES, SHEET GN-02.
2. TREES NOT MARKED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. ROOTS SHALL BE PROTECTED OR REMOVED AS DESCRIBED IN SECTIONS 2-01, 2-02, AND 8-01 OF THE SPECIFICATIONS.
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4. SEE NOTES ON WA SHEETS FOR LOCATIONS TO POTHOLE PRIOR TO INSTALLING ANY WATER MAIN.

**EXISTING UTILITY NOTE**

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ATWELL JOB # BL23-113



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CAROL DOGGETT 4/2024  
DRAWN BY: DATE:

ROB DAHN, PE 4/2024  
CHECKED BY: DATE:

# NE 73RD ST WATER MAIN IMPROVEMENT PROJECT

**EXISTING CONDITIONS -  
NE 73RD ST**

SHEET:

**5 OF 19**

SCALE:

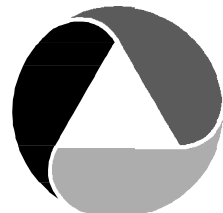
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**EC-01**

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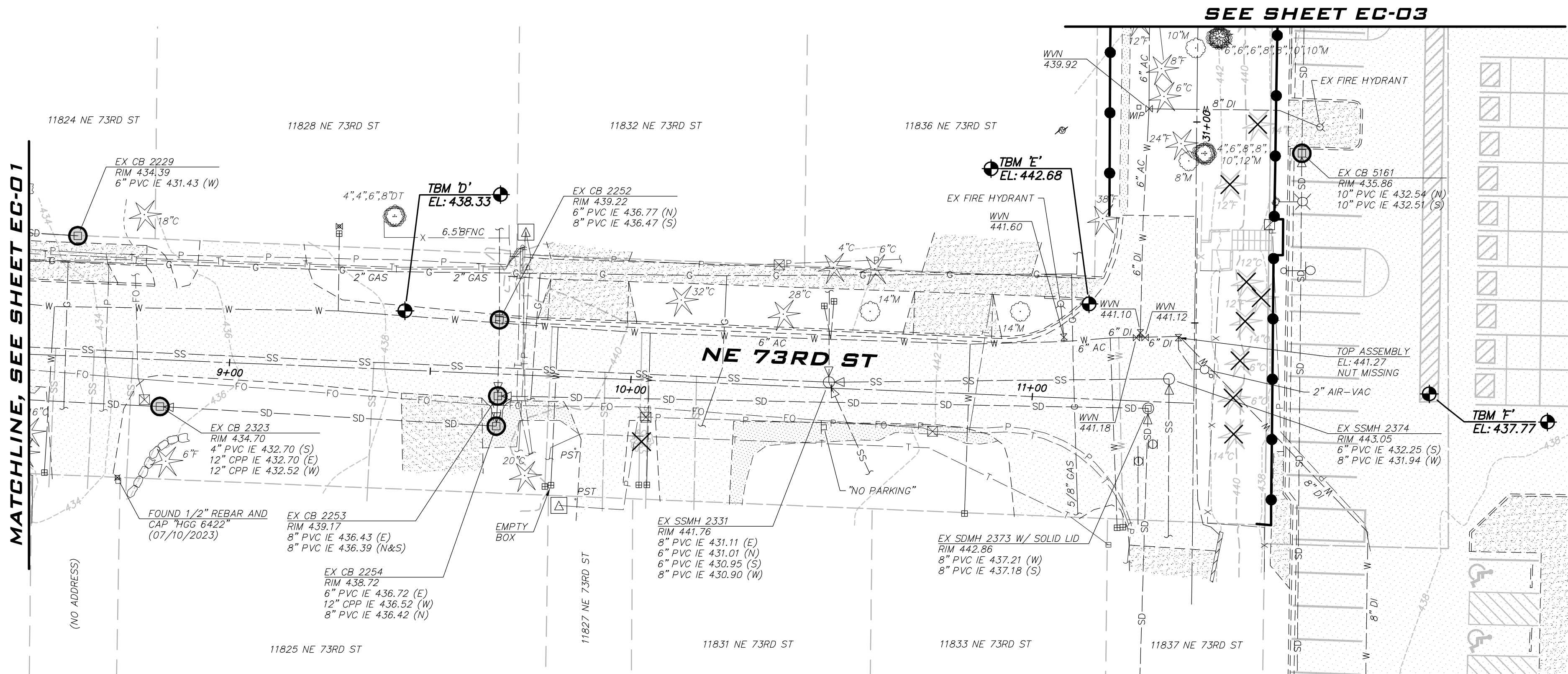


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SCALE: 1" = 20'  
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**LEGEND**

TESC FEATURES

SILT FENCE

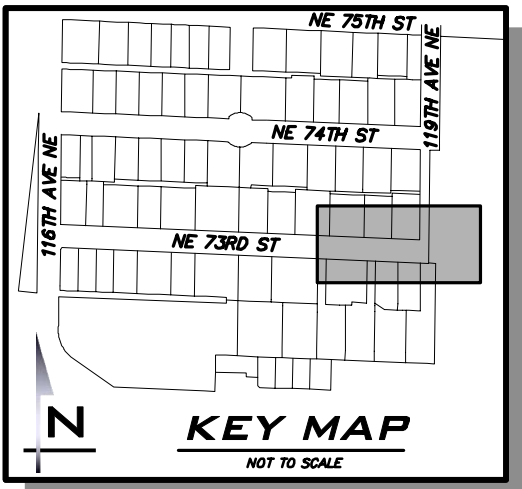
INTERIM CATCH BASIN PROTECTION (INSERT)

NOTES

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ATWELL JOB # BL23-113



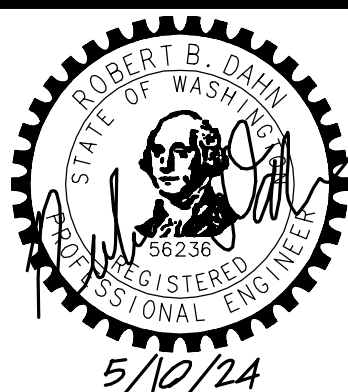
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NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT

EXISTING CONDITIONS -  
NE 73RD ST

SHEET:

6 OF 19

SCALE:

AS SHOWN

FILENAME:

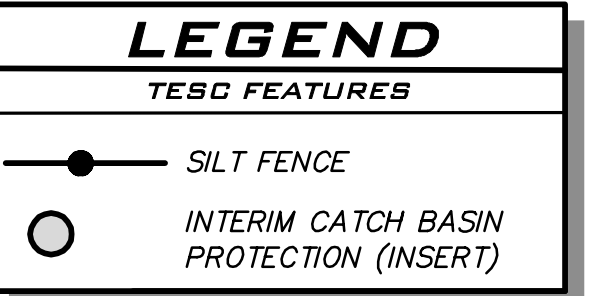
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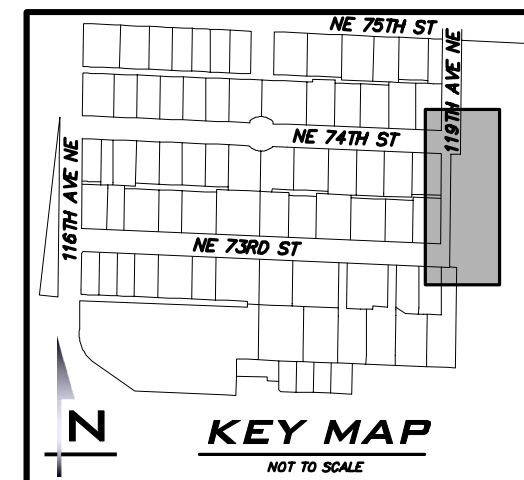
SCALE: 1" = 20'

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SHEET: \_\_\_\_\_

SCALE:  
*AS SHOWN*

The logo of the City of Kirkland, Washington, is a circular seal. It features a stylized sailboat on the water in the foreground, with a bridge and evergreen trees in the background. The words "CITY OF KIRKLAND" are written along the top arc and "WASHINGTON" along the bottom arc.

DEPARTMENT OF PUBLIC WORKS  
123 FIFTH AVENUE KIRKLAND, WA 98033  
(425) 587-3800 [www.kirklandwa.gov](http://www.kirklandwa.gov)

NO.	DATE	BY	APPR.	REVISION



DATE:

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

**EXISTING CONDITIONS -  
119TH AVE NE**

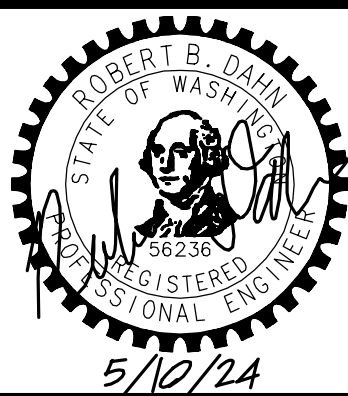


May 08, 2024 1:13:37pm - User: c:\pwworking\atwell\project\24\240123\240123.dwg



CITY OF KIRKLAND  
DEPARTMENT OF PUBLIC WORKS  
123 FIFTH AVENUE KIRKLAND, WA 98033  
(425) 587-3800 www.kirklandwa.gov

NO.	DATE	BY	APPR.	REVISION

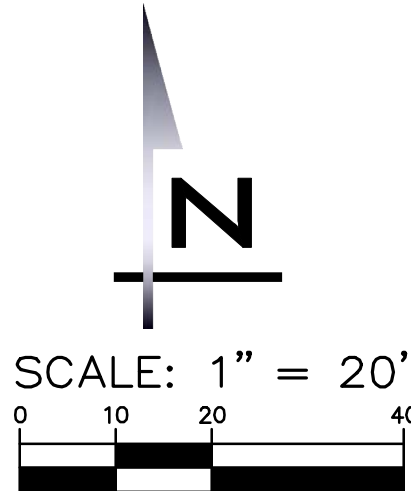
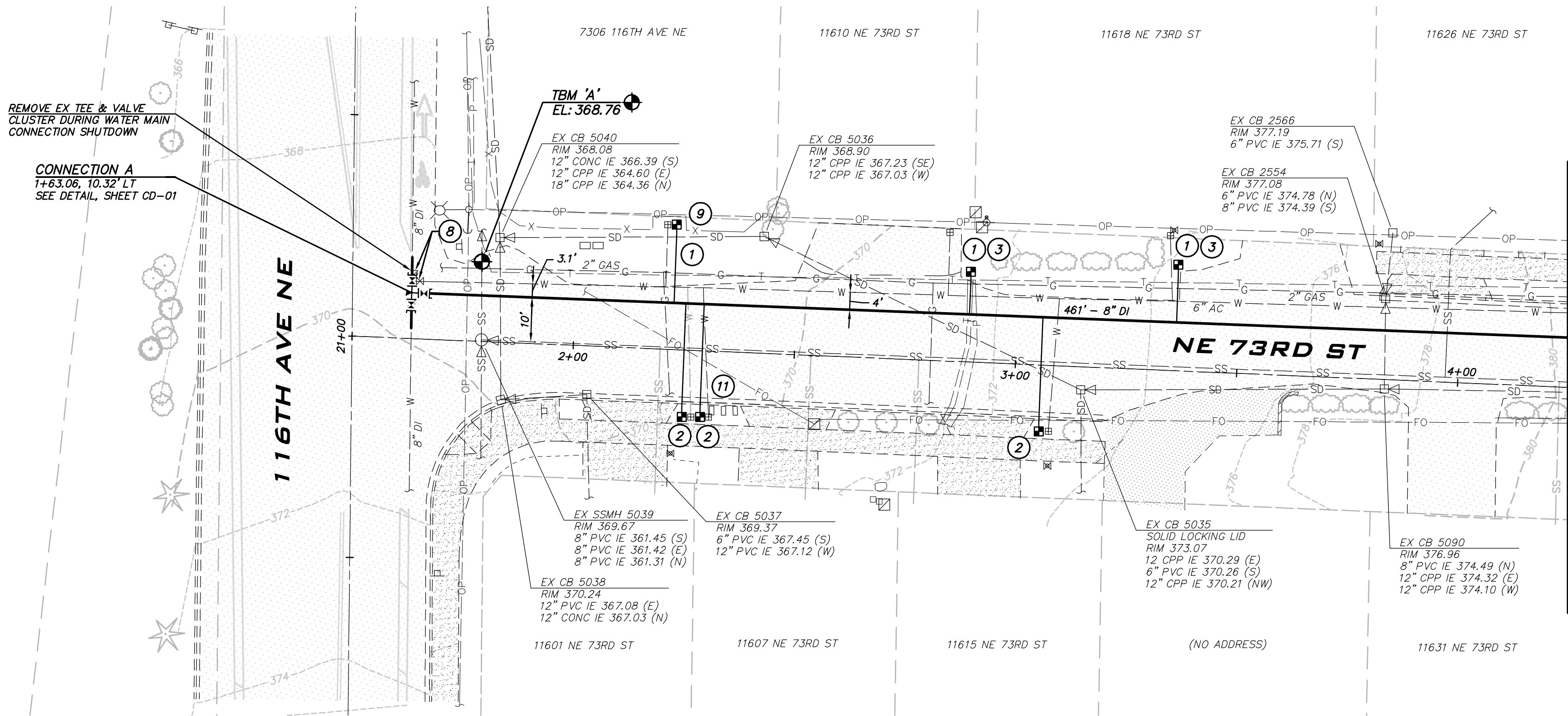


KAI POPE, EIT 4/2024  
DESIGNED BY: DATE  
CAROL DOGGETT 4/2024  
DRAWN BY: DATE  
ROB DAHN, PE 4/2024  
CHECKED BY: DATE

## NE 73RD ST WATER MAIN IMPROVEMENT PROJECT

WATER PLAN - NE 73RD ST

SHEET:  
**8 OF 19**  
SCALE:  
**AS SHOWN**  
FILENAME:  
**WA-01**



### NOTES

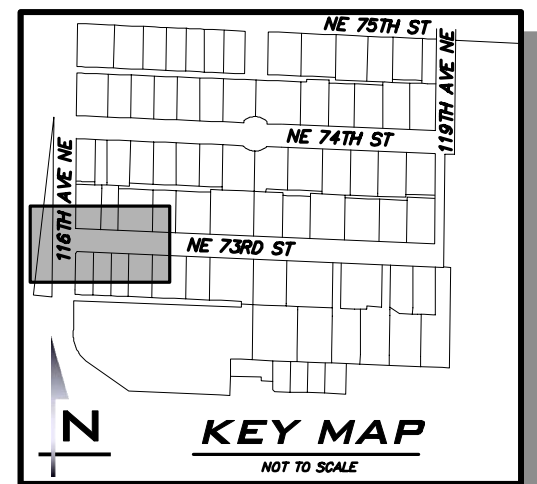
1. INSTALL 1" SHORT SIDE WATER SERVICE INCLUDING ADAPTER FOR 3/4" METER AS NECESSARY PER STD DETAIL CK-W.18.
2. INSTALL 1" LONG SIDE WATER SERVICE INCLUDING ADAPTER FOR 3/4" METER AS NECESSARY PER STD DETAIL CK-W.18.
3. INSTALL TRAFFIC BEARING WATER METER TRAVEL BOX AND LID PER COK STD PLAN NO. CK-W.23.
4. CONTRACTOR TO HAND DIG OR VACTOR EXCAVATE FOR WATER METER INSTALLATION AND BACKSIDE CONNECTION. EXERCISE CAUTION WHEN WORKING AROUND TREE ROOTS.
5. CONTRACTOR TO POTHOLE TO LOCATE BACKSIDE SERVICE LINE AND MAKE BACKSIDE CONNECTION AS SHOWN. VERIFY ALIGNMENT WITH PROJECT INSPECTOR PRIOR TO POTHOLING.
6. CONTRACTOR TO POTHOLE EXISTING UTILITIES IN ADVANCE TO SET HYDRANT WITHOUT USING VERTICAL BENDS.
7. REMOVE EXISTING FIRE HYDRANT, VALVE CAN, AND CONCRETE PAD IF PRESENT. CAP OR PLUG THE VALVE AT THE MAIN AS DIRECTED BY THE CITY.
8. ABANDON EXISTING GATE VALVE AND REMOVE EXISTING VALVE CAN. CONTRACTOR TO REMOVE VALVE OR CLOSE AND INSTALL BLIND FLANGE OR PLUG ON EXISTING VALVE AS DIRECTED BY THE CITY.
9. PROTECT EXISTING FENCE. REMOVE AND REPLACE FENCE IN KIND AS NECESSARY. NOTIFY PROPERTY OWNER PRIOR TO REMOVAL.
10. PROTECT ROCK LANDSCAPING. TEMPORARILY REMOVE AND REINSTALL LANDSCAPING AS NEEDED.
11. PROTECT EXISTING MAILBOX.
12. PROTECT EXISTING TREES, BUSHES AND/OR LANDSCAPING.
13. CONTRACTOR TO POTHOLE PRIOR TO INSTALLING ANY WATER MAIN. IMMEDIATELY ALERT THE CITY TO POTHOLING RESULTS. REFER TO SP 7-09.3(6)A FOR ADDITIONAL INFORMATION.

### CONSTRUCTION NOTES

1. ALL MECHANICAL JOINT FITTINGS SHALL BE RESTRAINED WITH MEGALUGS.
2. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES A MINIMUM OF 200 FEET AHEAD OF WATER MAIN CONSTRUCTION TO VERIFY DEPTHS AT CROSSINGS AND CONNECTIONS.
3. COORDINATE WITH CITY TO ACCOMPLISH WATER MAIN CONNECTIONS TO EXISTING SYSTEM. CITY STAFF SHALL OPERATE ALL WATER SYSTEM VALVES. CONTRACTOR NOT ALLOWED TO OPERATE VALVES.
4. EXACT LOCATION OF WATER METER BOXES SHALL BE FIELD VERIFIED BY THE INSPECTOR PRIOR TO TAPPING THE WATER MAIN. WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE MAIN.
5. MAINTAIN 1 FOOT VERTICAL SEPARATION BETWEEN WATER MAIN AND OTHER UTILITIES UNLESS OTHERWISE SHOWN. INSTALL ETHAFOAM 220 PAD TO PREVENT UTILITIES FROM BEARING ON WATER MAIN WHERE SEPARATION IS LESS THAN 1 FOOT.
6. WHERE WATER MAIN PASSES UNDER EXISTING STORM OR SEWER, INSTALL WATER MAIN SO THAT THE PIPE ABOVE IS CENTERED BETWEEN WATER MAIN PIPE JOINTS.
7. LOCATION OF EXISTING WATER MAINS AND OTHER UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL PROVIDE THEIR OWN POTHOLING WORK AS NECESSARY TO VERIFY ACTUAL LOCATIONS OF EXISTING WATER MAINS AND OTHER UTILITIES. CONTRACTOR SHALL MAKE ADJUSTMENTS TO DEPTH AND ALIGNMENT OF PROPOSED MAINS AS NECESSARY TO COMPLETE INSTALLATION. PAYMENT FOR CROSSING ANY EXISTING UTILITIES, INCLUDING ADJUSTMENTS TO DEPTH AND ALIGNMENT, SHALL BE INCIDENTAL TO THE WATER MAIN BID ITEMS.
8. ALL POTHOLING WORK SHALL BE COMPLETED PRIOR TO ANY TRENCHING AND PIPE LAYING. CONTRACTOR SHALL POTHOLE THE EXISTING MAIN TO VERIFY THE SIZE, MATERIAL, DEPTH AND LOCATION OF THE EXISTING MAIN. FOR CONNECTIONS TO EXISTING AC WATER MAINS, CONTRACTOR IS TO POTHOLE UNTIL ROUGH BARREL AC IS EXPOSED FOR CONNECTION AND PROVIDE A MEASUREMENT OF THE OUTSIDE DIAMETER OF THE EXISTING AC PIPE TO THE PROJECT INSPECTOR. POTHOLING FOR CONNECTIONS IS PAID UNDER THE "POTHOLING OF CONNECTIONS AND UTILITY CROSSINGS" LINE ITEM IN THE CONTRACTOR'S BID.
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### EXISTING UTILITY NOTE

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ATWELL JOB # BL23-113



May 08, 2024 11:32am - User: c:\pwworking\atwell\projects\24\NE 73RD ST WATER MAIN IMPROVEMENT\DWG\NE 73RD ST WATER MAIN IMPROVEMENT - 02.dwg



CITY OF KIRKLAND  
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(425) 587-3800 www.kirklandwa.gov

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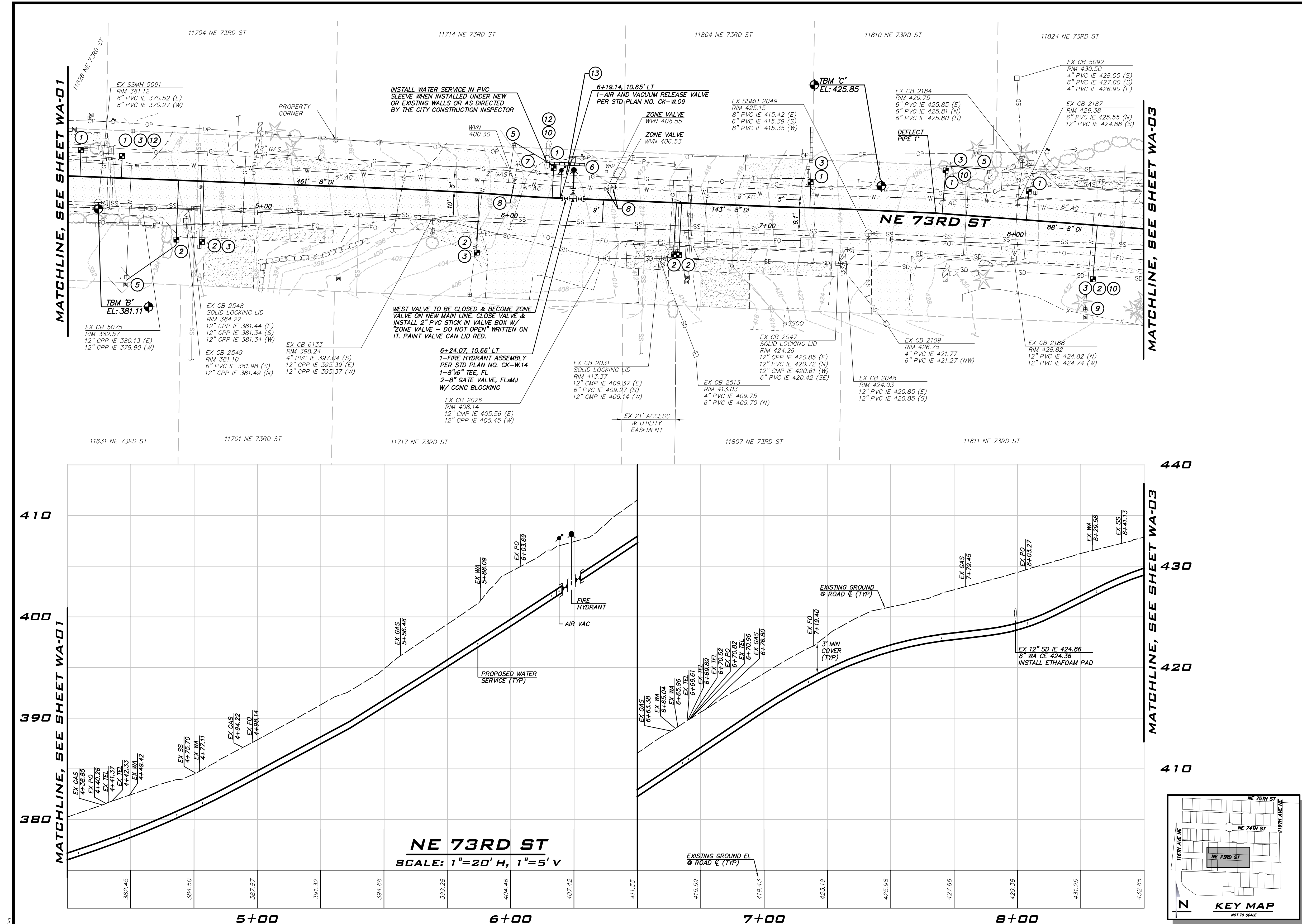


KAI POPE, EIT 4/2024  
DESIGNED BY: DATE  
CAROL DOGGETT 4/2024  
DRAWN BY: DATE  
ROB DAHN, PE 4/2024  
CHECKED BY: DATE

## NE 73RD ST WATER MAIN IMPROVEMENT PROJECT

### WATER PLAN - NE 73RD ST

SHEET:  
**9 OF 19**  
SCALE:  
**AS SHOWN**  
FILENAME:  
**WA-02**



SCALE: 1" = 20'

25 CENTRAL WAY, SUITE 400  
KIRKLAND, WA 98033  
P: 425.216.4061  
WWW.ATWELL-GROUP.COM

### NOTES

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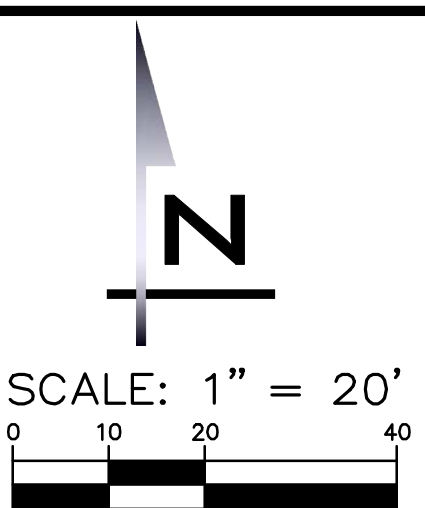
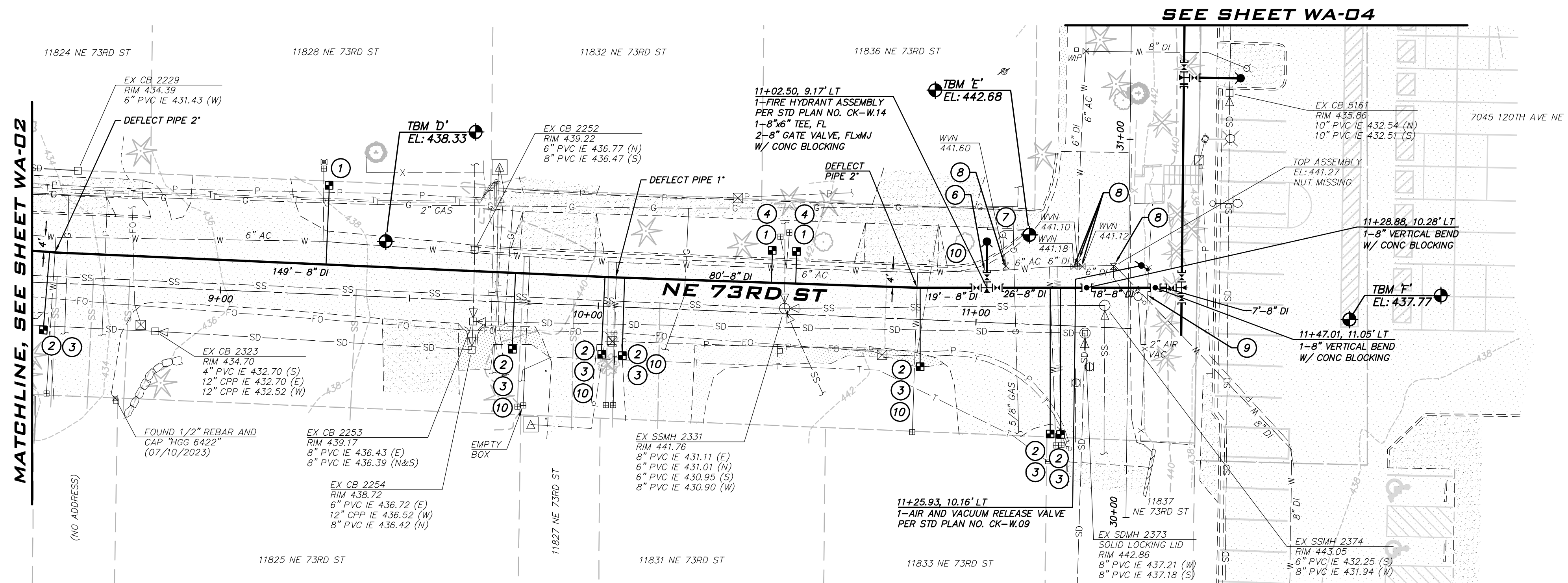
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ATWELL JOB # BL23-113



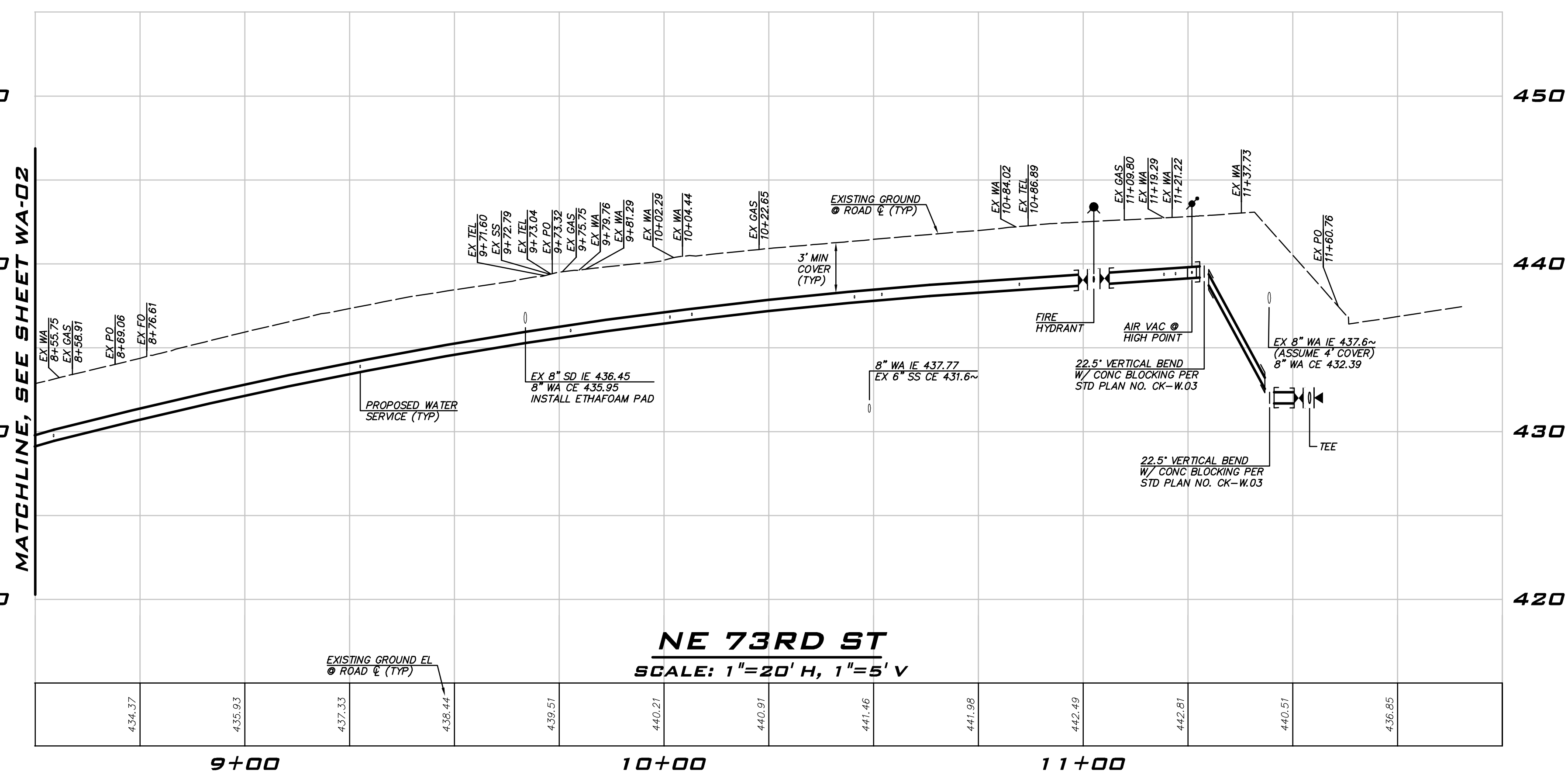
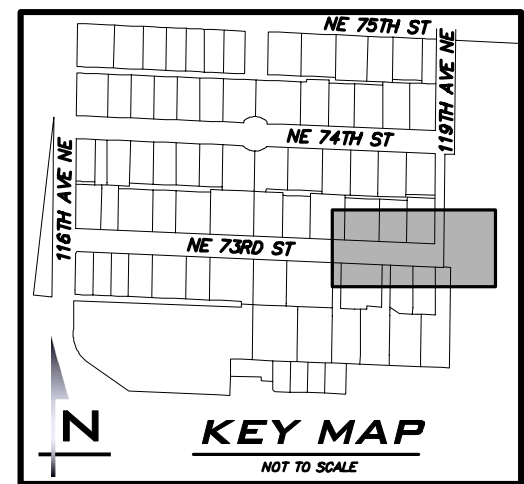


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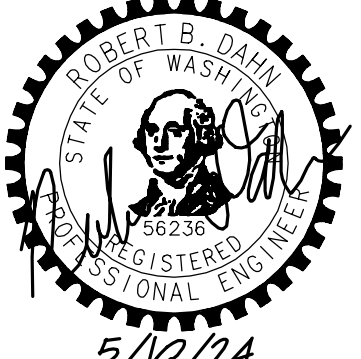
CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS

123 FIFTH AVENUE KIRKLAND, WA 98033

(425) 587-3800 www.kirklandwa.gov

NO.	DATE	BY	APPR.	REVISION



5/10/24

KAI POPE, EIT 4/2024  
DESIGNED BY: DATE

CAROL DOGGETT 4/2024  
DRAWN BY: DATE

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

## NE 73RD ST WATER MAIN IMPROVEMENT PROJECT

### WATER PLAN - NE 73RD ST

SHEET: 10 OF 19

SCALE: AS SHOWN

FILENAME: WA-03

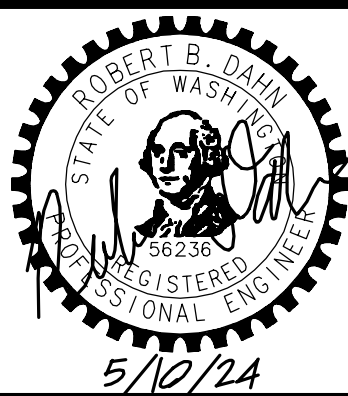


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CITY OF KIRKLAND  
DEPARTMENT OF PUBLIC WORKS  
123 FIFTH AVENUE KIRKLAND, WA 98033  
(425) 587-3800 www.kirklandwa.gov

NO.	DATE	BY	APPR.	REVISION

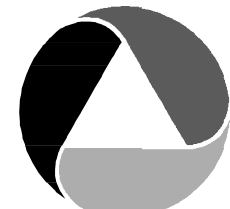


KAI POPE, EIT 4/2024  
DESIGNED BY: DATE  
CAROL DOGGETT 4/2024  
DRAWN BY: DATE  
ROB DAHN, PE 4/2024  
CHECKED BY: DATE

## NE 73RD ST WATER MAIN IMPROVEMENT PROJECT

WATER PLAN - 119TH AVE NE

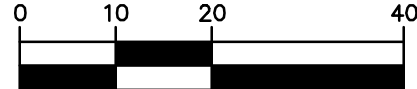
SHEET:  
**11 OF 19**  
SCALE:  
**AS SHOWN**  
FILENAME:  
**WA-04**



25 CENTRAL WAY, SUITE 400  
KIRKLAND, WA 98033  
P: 425.216.4051  
WWW.ATWELL-GROUP.COM



SCALE: 1" = 20'



### NOTES

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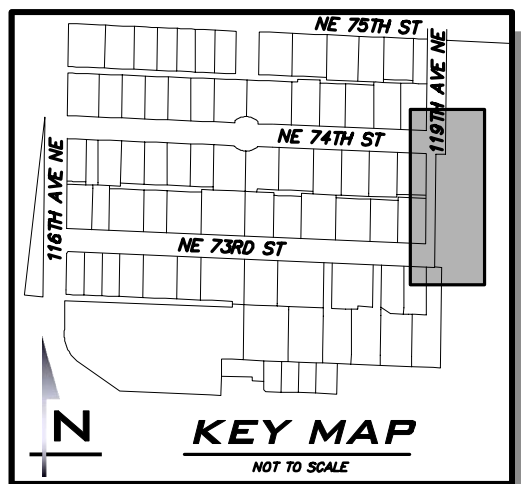
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4. EXACT LOCATION OF WATER METER BOXES SHALL BE FIELD VERIFIED BY THE INSPECTOR PRIOR TO TAPPING THE WATER MAIN. WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE MAIN.
5. MAINTAIN 1 FOOT VERTICAL SEPARATION BETWEEN WATER MAIN AND OTHER UTILITIES UNLESS OTHERWISE SHOWN. INSTALL ETHAFOAM 220 PAD TO PREVENT UTILITIES FROM BEARING ON WATER MAIN WHERE SEPARATION IS LESS THAN 1 FOOT.
6. WHERE WATER MAIN PASSES UNDER EXISTING STORM OR SEWER, INSTALL WATER MAIN SO THAT THE PIPE ABOVE IS CENTERED BETWEEN WATER MAIN PIPE JOINTS.
7. LOCATION OF EXISTING WATER MAINS AND OTHER UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL PROVIDE THEIR OWN POTHOLING WORK AS NECESSARY TO VERIFY ACTUAL LOCATIONS OF EXISTING WATER MAINS AND OTHER UTILITIES. CONTRACTOR SHALL MAKE ADJUSTMENTS TO DEPTH AND ALIGNMENT OF PROPOSED MAINS AS NECESSARY TO COMPLETE INSTALLATION. PAYMENT FOR CROSSING ANY EXISTING UTILITIES, INCLUDING ADJUSTMENTS TO DEPTH AND ALIGNMENT, SHALL BE INCIDENTAL TO THE WATER MAIN BID ITEMS.
8. ALL POTHOLING WORK SHALL BE COMPLETED PRIOR TO ANY TRENCHING AND PIPE LAYING. CONTRACTOR SHALL POTHOLE THE EXISTING MAIN TO VERIFY THE SIZE, MATERIAL, DEPTH AND LOCATION OF THE EXISTING MAIN. FOR CONNECTIONS TO EXISTING AC WATER MAINS, CONTRACTOR IS TO POTHOLE UNTIL ROUGH BARREL AC IS EXPOSED FOR CONNECTION AND PROVIDE A MEASUREMENT OF THE OUTSIDE DIAMETER OF THE EXISTING AC PIPE TO THE PROJECT INSPECTOR. POTHOLING FOR CONNECTIONS IS PAID UNDER THE "POTHOLING OF CONNECTIONS AND UTILITY CROSSINGS" LINE ITEM IN THE CONTRACTOR'S BID.
9. CONTRACTOR SHALL COORDINATE CONSTRUCTION W/ PUGET SOUND ENERGY (PSE) PRIOR TO EXCAVATION NEAR GAS MAINS. THE PSE REPRESENTATIVE SHALL (AT A MINIMUM) BE ONSITE FOR CONSTRUCTION AROUND 4" DIA. AND LARGER AND/OR HIGH PRESSURE GAS MAINS. PROVIDE SAND BEDDING PER PSE REQUIREMENTS.
10. PRIOR TO ANY TRENCHING OR DISTURBANCE OF ANY IRRIGATION SYSTEM THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE PROPERTY OWNER TO HAVE THE EXISTING SYSTEM TURNED ON, TESTED, AND DOCUMENTED. DEFICIENCIES FOUND SHALL BE REPORTED TO THE ENGINEER PRIOR TO DISTURBANCE OF THE EXISTING SYSTEM.
11. CONTRACTOR SHALL CONNECT ALL WATER SERVICES TO THE NEW MAIN FROM CONNECTION A TO STA 6+50 ON THE SAME DAY CONNECTION A IS INSTALLED.

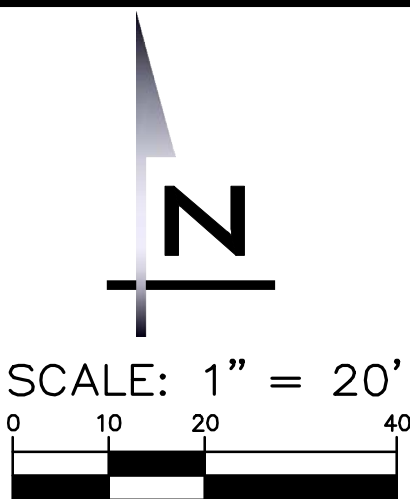
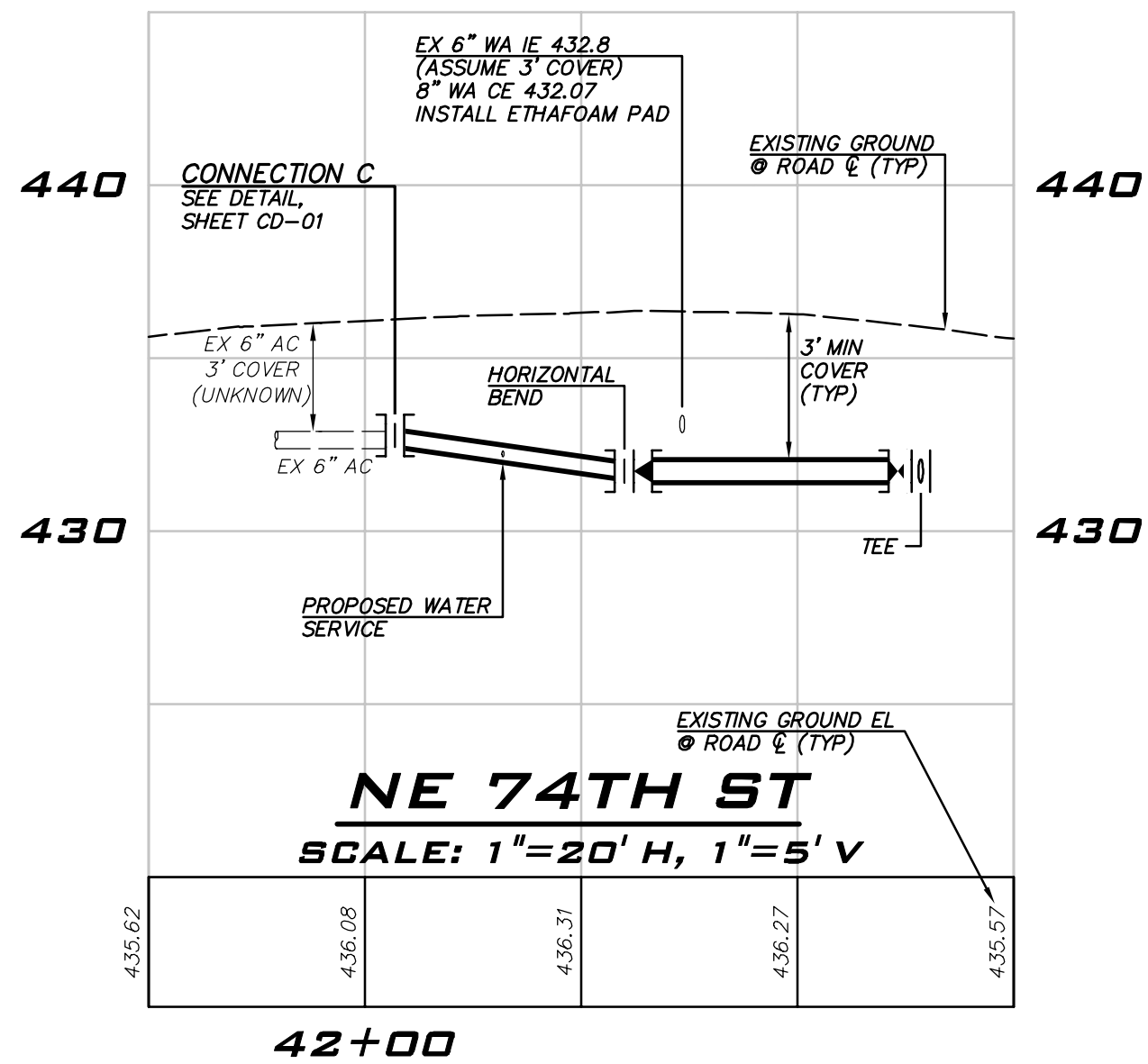
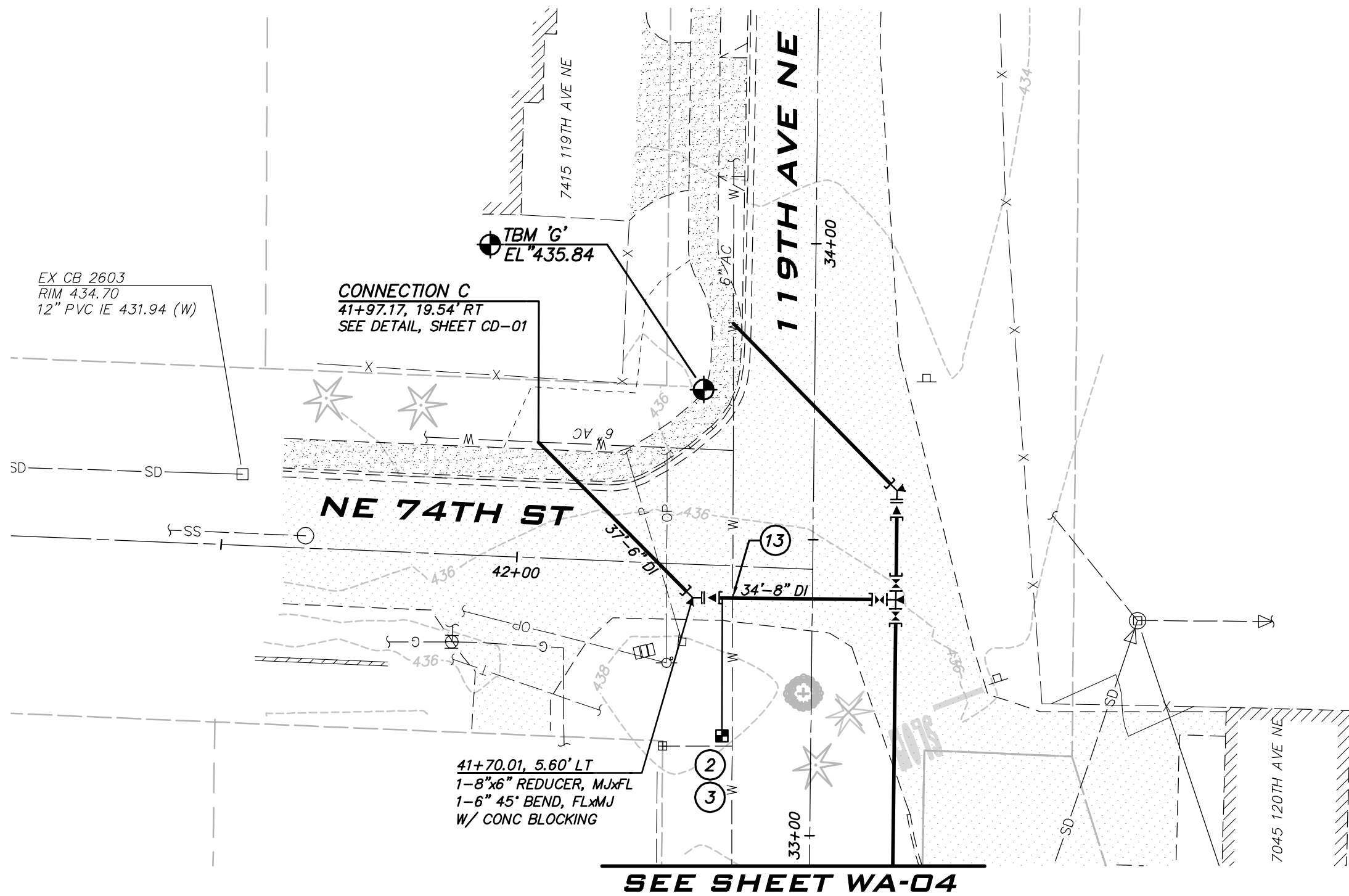
### EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL JOB # BL23-113







### NOTES

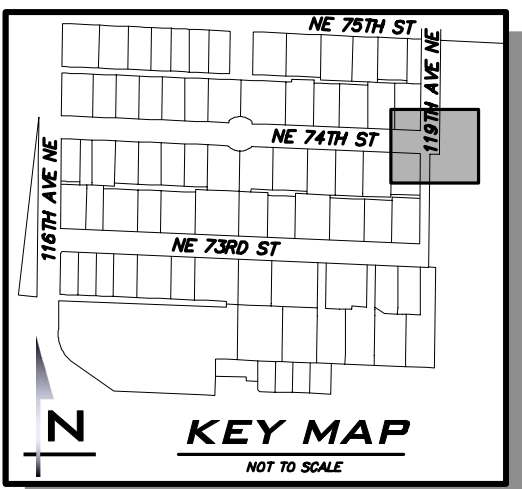
1. INSTALL 1" SHORT SIDE WATER SERVICE INCLUDING ADAPTER FOR 3/4" METER AS NECESSARY PER STD DETAIL CK-W.18.
2. INSTALL 1" LONG SIDE WATER SERVICE INCLUDING ADAPTER FOR 3/4" METER AS NECESSARY PER STD DETAIL CK-W.18.
3. INSTALL TRAFFIC BEARING WATER METER TRAVEL BOX AND LID PER COK STD PLAN NO. CK-W.23.
4. CONTRACTOR TO HAND DIG OR VACTOR EXCAVATE FOR WATER METER INSTALLATION AND BACKSIDE CONNECTION. EXERCISE CAUTION WHEN WORKING AROUND TREE ROOTS.
5. CONTRACTOR TO POTHOLE TO LOCATE BACKSIDE SERVICE LINE AND MAKE BACKSIDE CONNECTION AS SHOWN. VERIFY ALIGNMENT WITH PROJECT INSPECTOR PRIOR TO POTHOLING.
6. CONTRACTOR TO POTHOLE EXISTING UTILITIES IN ADVANCE TO SET HYDRANT WITHOUT USING VERTICAL BENDS.
7. REMOVE EXISTING FIRE HYDRANT, VALVE CAN, AND CONCRETE PAD IF PRESENT. CAP OR PLUG THE VALVE AT THE MAIN AS DIRECTED BY THE CITY.
8. ABANDON EXISTING GATE VALVE AND REMOVE EXISTING VALVE CAN. CONTRACTOR TO REMOVE VALVE OR CLOSE AND INSTALL BLIND FLANGE OR PLUG ON EXISTING VALVE AS DIRECTED BY THE CITY.
9. PROTECT EXISTING FENCE. REMOVE AND REPLACE FENCE IN KIND AS NECESSARY. NOTIFY PROPERTY OWNER PRIOR TO REMOVAL.
10. PROTECT ROCK LANDSCAPING. TEMPORARILY REMOVE AND REINSTALL LANDSCAPING AS NEEDED.
11. PROTECT EXISTING MAILBOX.
12. PROTECT EXISTING TREES, BUSHES AND/OR LANDSCAPING.
13. CONTRACTOR TO POTHOLE PRIOR TO INSTALLING ANY WATER MAIN. IMMEDIATELY ALERT THE CITY TO POTHOLING RESULTS. REFER TO SP 7-09.3(6)A FOR ADDITIONAL INFORMATION.

### CONSTRUCTION NOTES

1. ALL MECHANICAL JOINT FITTINGS SHALL BE RESTRAINED WITH MEGALUGS.
2. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES A MINIMUM OF 200 FEET AHEAD OF WATER MAIN CONSTRUCTION TO VERIFY DEPTHS AT CROSSINGS AND CONNECTIONS.
3. COORDINATE WITH CITY TO ACCOMPLISH WATER MAIN CONNECTIONS TO EXISTING SYSTEM. CITY STAFF SHALL OPERATE ALL WATER SYSTEM VALVES. CONTRACTOR NOT ALLOWED TO OPERATE VALVES.
4. EXACT LOCATION OF WATER METER BOXES SHALL BE FIELD VERIFIED BY THE INSPECTOR PRIOR TO TAPPING THE WATER MAIN. WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE MAIN.
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ATWELL JOB # BL23-113



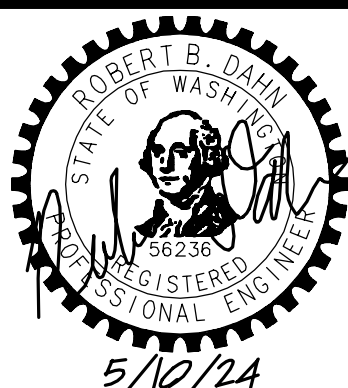
CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS

123 FIFTH AVENUE KIRKLAND, WA 98033

(425) 587-3800 www.kirklandwa.gov

NO.	DATE	BY	APPR.	REVISION



KAI POPE, EIT 4/2024  
DESIGNED BY: DATE

CAROL DOGGETT 4/2024  
DRAWN BY: DATE

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT

WATER PLAN - NE 74TH ST

SHEET:

12 OF 19

SCALE:

AS SHOWN

FILENAME:

WA-05





The diagram illustrates a 6-inch water main replacement project. It shows the layout of the old line (dashed line) and the new line (solid line). The new line is installed parallel to the old line, with a 6-inch AC (As-Cast) section. The old line is to be removed after the new line is installed. Key features include:

- 2" TEMPORARY BLOW-OFF:** Located at the start of the new line.
- TEMPORARY 8" CAP W/ CONC BLOCKING:** Located at the end of the new line.
- CUT, CAP & ABANDON OR RECHARGE AS NECESSARY EX 6" AC:** Located at the end of the old line.
- REMOVE TEMPORARY CAP & BLOW-OFF, & EX TEE & VALVES, & CONNECT TO EX 8" DI W/ 3-8" GATE VALVE, FLX MJ 1-8" TEE, FL 3-8" DI SPOOL, LENGTH TO FIT 3-9" SLEEVE, M/ W/ CONC BLOCKING:** Located at the end of the old line.

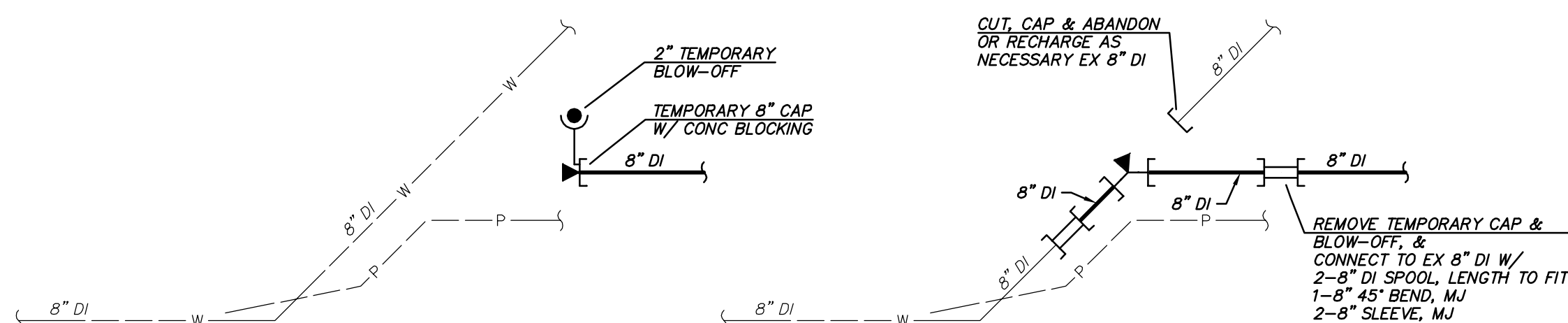
The diagram also shows the locations of the old and new lines, the 6-inch AC section, and the 8-inch DI (Ductile Iron) section. The old line is shown with a 6-inch AC section and an 8-inch DI section. The new line is shown with a 6-inch AC section and an 8-inch DI section. The 6-inch AC section is shown with a 6-inch AC section and an 8-inch DI section. The 8-inch DI section is shown with an 8-inch DI section and a 6-inch AC section.

## TESTING CONNECTION

## FINAL CONNECTION

## CONNECTION A

NOT TO SCALE  
(SEE SHEET WA-01)

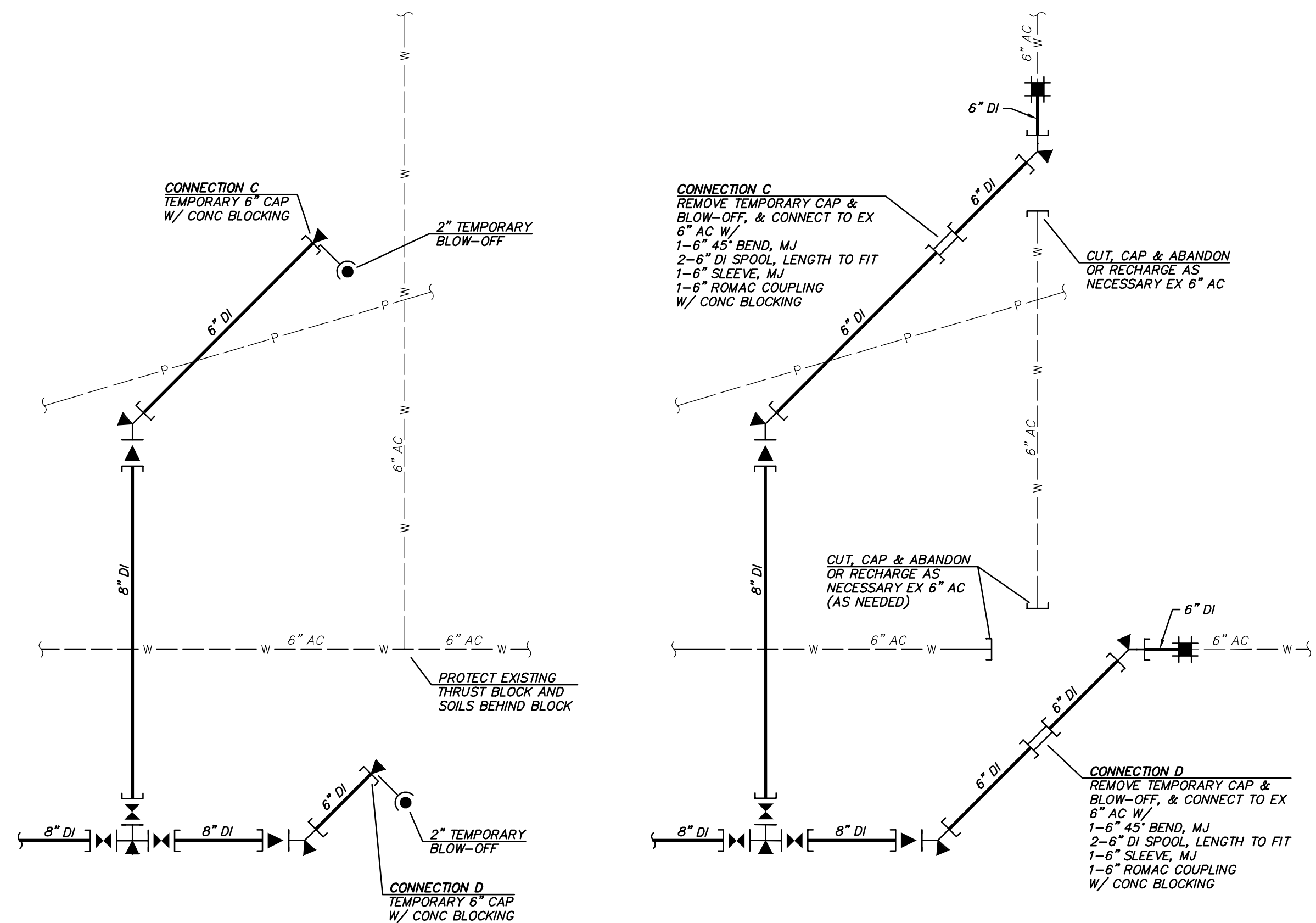


## TESTING CONNECTION

## FINAL CONNECTION

## CONNECTION B

NOT TO SCALE  
(SEE SHEET WA-04)



### TESTING CONNECTION

## FINAL CONNECTION

## CONNECTIONS C & D

NOT TO SCALE  
(SEE SHEETS WA-04 & WA-05)



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NO.	DATE	BY	APPR.	REVISION



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ROB DAHN, PE 4/2024  
CHECKED BY: DATE

**NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT**

## CONNECTION DETAILS

HEET:

13 OF 19

SCALE:  
*AS SHOWN*

FILENAME:  
***CD-01***

**ATWELL JOB # BL23-113**

May 09, 2024 - 3:33pm - User cdoggott  
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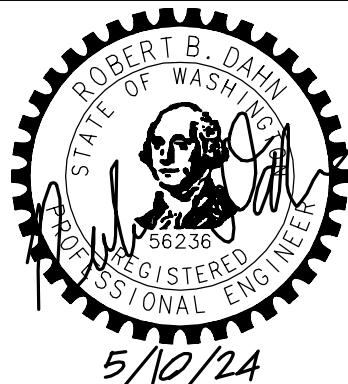


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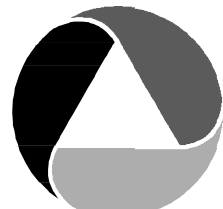
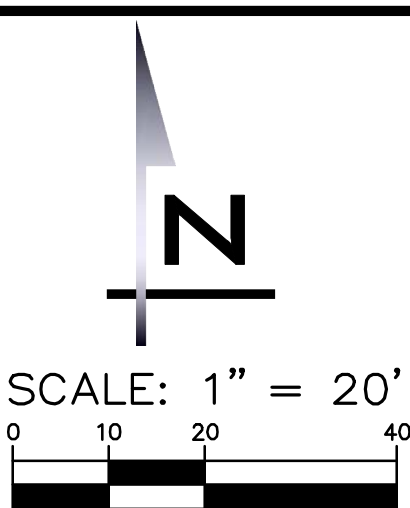
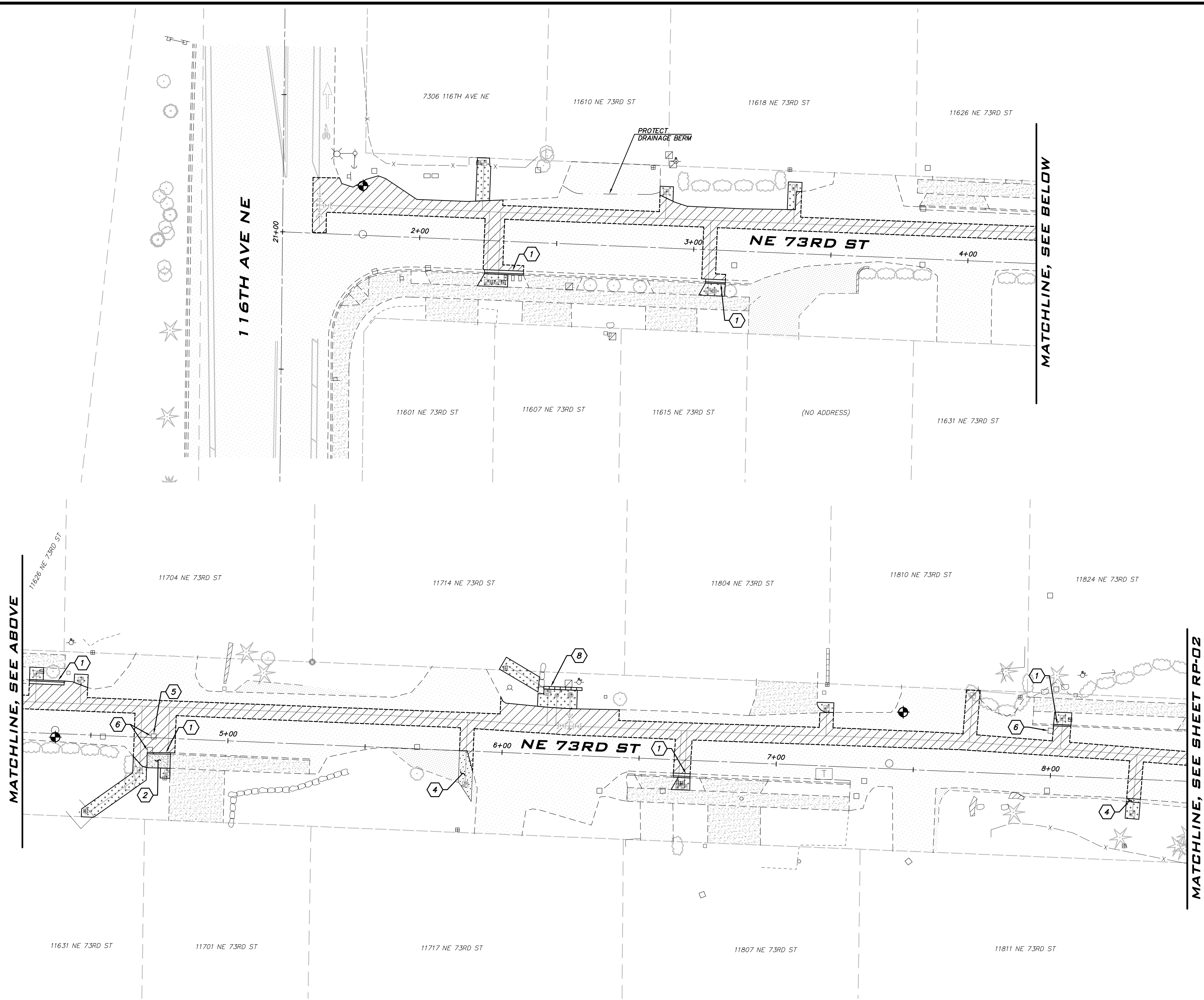


APPROVED BY:  
  
DATE: \_\_\_\_\_

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NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT  
  
RESTORATION PLAN -  
NE 73RD ST

SHEET:  
**14 OF 19**  
SCALE:  
AS SHOWN  
FILENAME:  
RP-01



25 CENTRAL WAY, SUITE 400  
KIRKLAND, WA 98033  
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WWW.ATWELL-GROUP.COM

NOTES

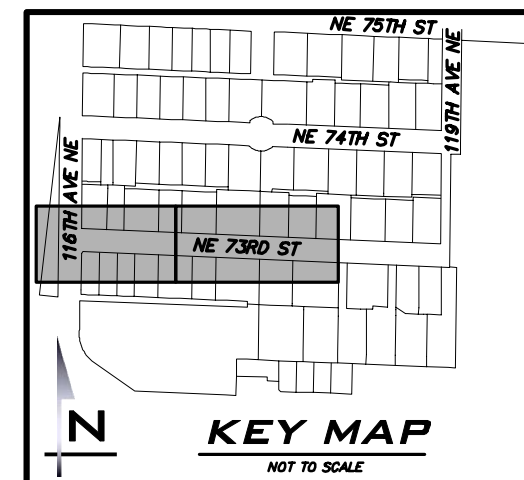
- CEMENT CONCRETE CURB & GUTTER TYPE A PER COK STD PLAN CK-R.17. REPLACE TO THE NEAREST JOINT. MINIMUM 2' WIDE HMA PATCH.
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- CEMENT CONCRETE CURB TYPE E-2 PER COK STD PLAN CK-R.18. REPLACE TO THE NEAREST JOINT. CURB TO BE PAINTED TO MATCH ORIGINAL CONDITIONS. CONTRACTOR TO VERIFY & RECORD EXISTING PAINT MARKINGS PRIOR TO REMOVAL.
- REPLACE EXISTING GRAVEL TO ORIGINAL CONDITION.
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- ADJUST EXISTING CATCH BASIN OR MANHOLE TO GRADE PER COK STD PLAN CK-D.11.
- RESTORE PAVEMENT MARKINGS IN ORIGINAL LOCATION. CONTRACTOR TO FIELD VERIFY & RECORD ORIGINAL TYPE AND LOCATION OF MARKINGS PRIOR TO REMOVAL.
- INSTALL GRAVITY BLOCK WALL PER DETAIL SHOWN ON SHEET DT-03. INSTALL UNDERDRAIN DAYLIGHT AT END OF WALL IF DIRECTED BY CITY INSPECTOR. CITY INSPECTOR TO DETERMINE HEIGHT OF WALL REQUIRED IN THE FIELD.
- PROTECT EXISTING FENCE. REMOVE AND REPLACE FENCE PER COK STD PLAN CK-R.51A ONLY AS NECESSARY TO INSTALL IMPROVEMENTS. IF APPLICABLE, NOTIFY PROPERTY OWNER PRIOR TO REMOVAL.
- INSTALL 5' TALL BLACK CHAIN LINK FENCE PER COK STD PLAN CK-5.51A. FENCE SHALL HAVE BLACK SLATS INSTALLED. ALIGN EASTERN POSTS FOR FUTURE FENCE INSTALLATION.
- TREE TO BE REPLACED IN KIND. CITY FIELD INSPECTOR TO DETERMINE FINAL LOCATION.

RESTORATION NOTES

- THE LOCATION OF THE PAVEMENT RESTORATION SHOWN IS APPROXIMATE ONLY AND THE EXACT LOCATION SHALL BE AS DIRECTED BY THE CITY CONSTRUCTION INSPECTOR DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR BARRICADES AND SIGNS OR OTHER NOTIFICATIONS AS APPROPRIATE IN ORDER TO ENSURE THAT RESIDENTS REMOVE VEHICLES OR OTHER OBSTRUCTIONS FROM THE ROAD PRIOR TO PAVEMENT RESTORATION.
- ADJUST ALL NEW AND EXISTING CASTINGS WITHIN ASPHALT PATCHES TO GRADE PER CITY STANDARD DETAILS.
- CONTRACTOR TO SAWCUT TRENCHES PRIOR TO EXCAVATION. MAKE SEPARATE SAWCUT MIN. 1' WIDTH PATCHING ALONG TRENCH PER COK STD PLAN CK-R.12.
- LIMIT IMPACTS TO LANDSCAPING. RESTORATION LIMITS SHOWN ARE APPROXIMATE AND WILL BE INCREASED TO CAPTURE ALL LOCATIONS IMPACTED BY CONTRACTOR ACTIVITY. RESTORE DISTURBED VEGETATIVE AREAS AND GRADE SLOPE TO MATCH ADJACENT SLOPE. PLACE MINIMUM 2" TOPSOIL AND SEED.

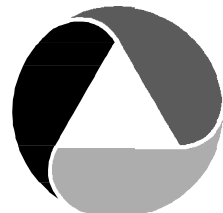
LEGEND

- HMA PATCH PLACED IN MAX 3" LIFTS OVER 4" CSTC COMPACTED TO 95%. HMA THICKNESS PER COK STD PLAN CK-R.12.
- CEMENT CONCRETE SIDEWALK OVER 4" CSTC
- GRAVEL
- LANDSCAPE RESTORATION

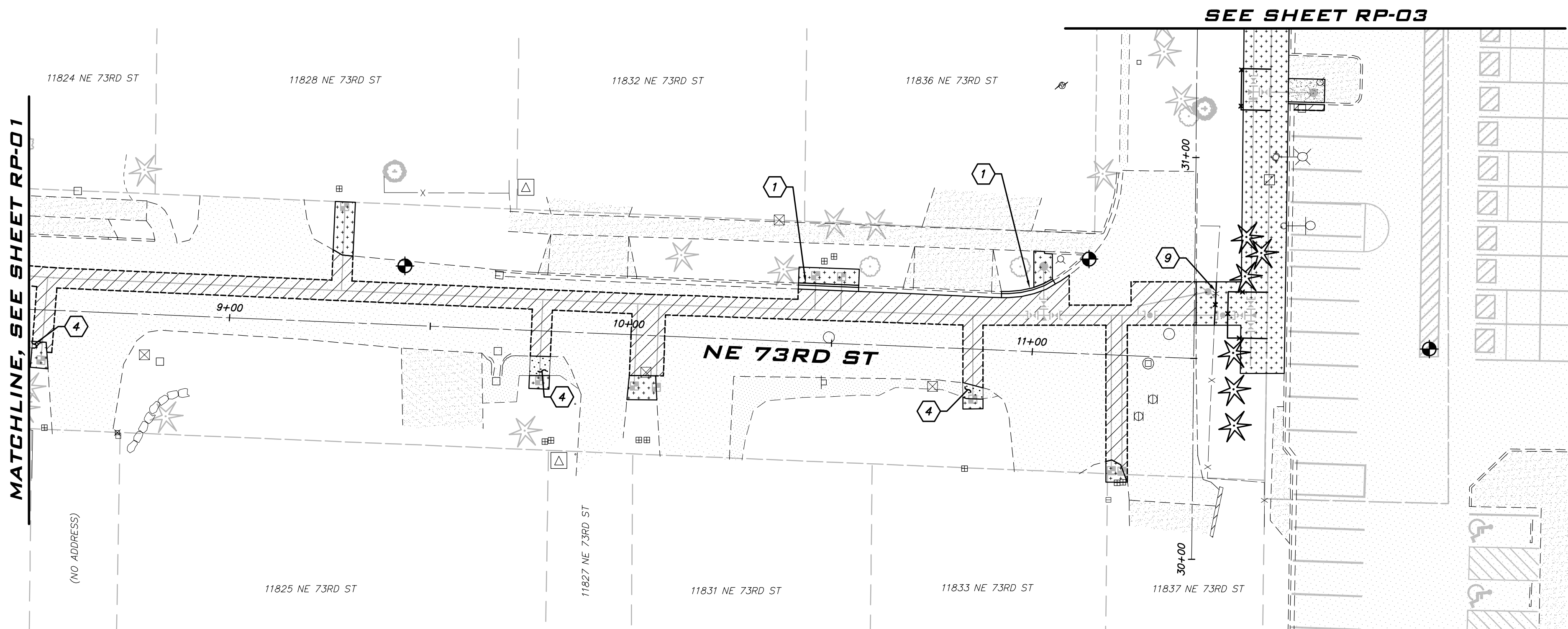
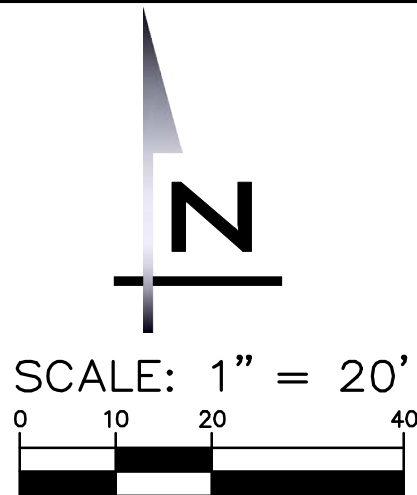


ATWELL JOB # BL23-113





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### NOTES

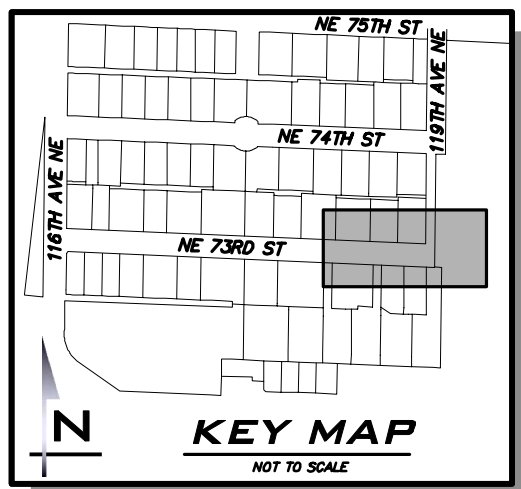
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ATWELL JOB # BL23-113



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NO.	DATE	BY	APPR.	REVISION



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**NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT**

**RESTORATION PLAN -  
NE 73RD ST**

SHEET:

**15 OF 19**

SCALE:

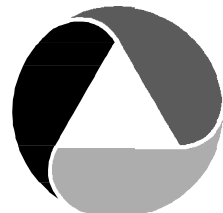
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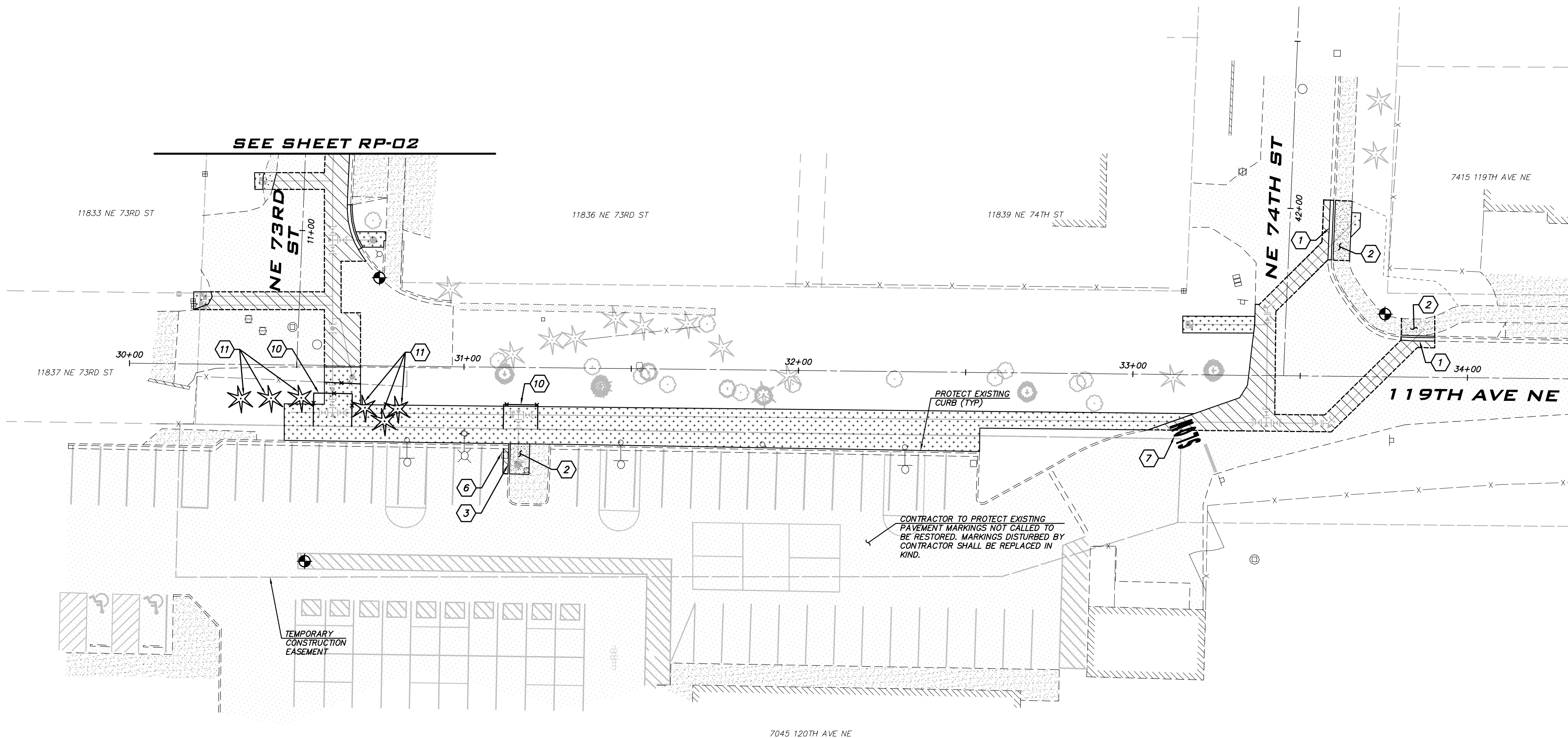
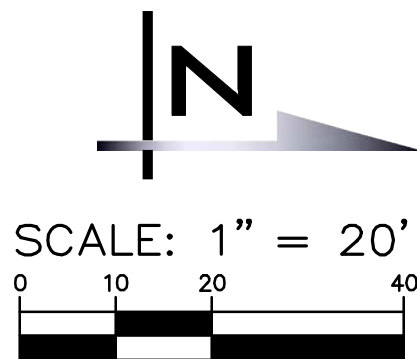
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### NOTES

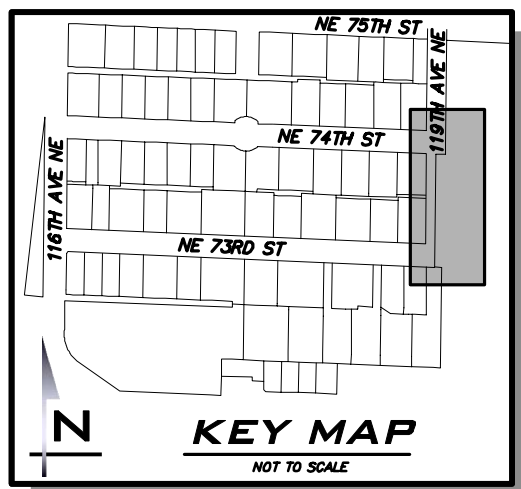
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- RESTORE PAVEMENT MARKINGS IN ORIGINAL LOCATION. CONTRACTOR TO FIELD VERIFY & RECORD ORIGINAL TYPE AND LOCATION OF MARKINGS PRIOR TO REMOVAL.
- INSTALL GRAVITY BLOCK WALL PER DETAIL SHOWN ON SHEET DT-03. INSTALL UNDERDRAIN DAYLIGHT AT END OF WALL IF DIRECTED BY CITY INSPECTOR. CITY INSPECTOR TO DETERMINE HEIGHT OF WALL REQUIRED IN THE FIELD.
- PROTECT EXISTING FENCE. REMOVE AND REPLACE FENCE PER COK STD PLAN CK-R.51A ONLY AS NECESSARY TO INSTALL IMPROVEMENTS. IF APPLICABLE, NOTIFY PROPERTY OWNER PRIOR TO REMOVAL.
- INSTALL 5' TALL BLACK CHAIN LINK FENCE PER COK STD PLAN CK-5.51A. FENCE SHALL HAVE BLACK SLATS INSTALLED. ALIGN EASTERN POSTS FOR FUTURE FENCE INSTALLATION.
- TREE TO BE REPLACED IN KIND. CITY FIELD INSPECTOR TO DETERMINE FINAL LOCATION.

### RESTORATION NOTES

- THE LOCATION OF THE PAVEMENT RESTORATION SHOWN IS APPROXIMATE ONLY AND THE EXACT LOCATION SHALL BE AS DIRECTED BY THE CITY CONSTRUCTION INSPECTOR DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR BARRICADES AND SIGNS OR OTHER NOTIFICATIONS AS APPROPRIATE IN ORDER TO ENSURE THAT RESIDENTS REMOVE VEHICLES OR OTHER OBSTRUCTIONS FROM THE ROAD PRIOR TO PAVEMENT RESTORATION.
- ADJUST ALL NEW AND EXISTING CASTINGS WITHIN ASPHALT PATCHES TO GRADE PER CITY STANDARD DETAILS.
- CONTRACTOR TO SAWCUT TRENCHES PRIOR TO EXCAVATION. MAKE SEPARATE SAWCUT MIN. 1' WIDTH PATCHING ALONG TRENCH PER COK STD PLAN CK-R.12.
- LIMIT IMPACTS TO LANDSCAPING. RESTORATION LIMITS SHOWN ARE APPROXIMATE AND WILL BE INCREASED TO CAPTURE ALL LOCATIONS IMPACTED BY CONTRACTOR ACTIVITY. RESTORE DISTURBED VEGETATIVE AREAS AND GRADE SLOPE TO MATCH ADJACENT SLOPE. PLACE MINIMUM 2" TOPSOIL AND SEED.

### LEGEND

- HMA PATCH PLACED IN MAX 3" LIFTS OVER 4" CSTC COMPACTED TO 95%. HMA THICKNESS PER COK STD PLAN CK-R.12.
- CEMENT CONCRETE SIDEWALK OVER 4" CSTC
- GRAVEL
- LANDSCAPE RESTORATION



ATWELL JOB # BL23-113



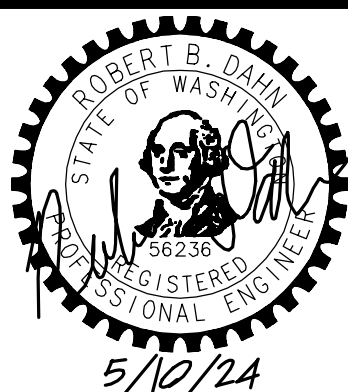
CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS

123 FIFTH AVENUE KIRKLAND, WA 98033

(425) 587-3800 www.kirklandwa.gov

NO.	DATE	BY	APPR.	REVISION



APPROVED BY:

DATE:

KAI POPE, EIT 4/2024  
DESIGNED BY: DATE

CAROL DOGGETT 4/2024  
DRAWN BY: DATE

ROB DAHN, PE 4/2024  
CHECKED BY: DATE

NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT

RESTORATION PLAN -  
119TH AVE NE

SHEET:

16 OF 19

SCALE:

AS SHOWN

FILENAME:

RP-03







LAST REVISED: 11/30/99

NO SEWER ALLOWED IN THIS AREA

WATER MAIN STANDARD PIPE MATERIAL FOR SEWER LINES

STANDARD SEWER PIPE MATERIAL

PARALLEL CONSTRUCTION

TABLE 1  
WATER MAIN STANDARD PIPE MATERIAL

AWWA STANDARD			
TYPE OF PIPE	PIPE	JOINT	FITTINGS
DUCTILE IRON	C 152	C 111	C 110
CONCRETE CYLINDER	C 303		

NOTES

- TO BE USED WHEN 10" MINIMUM SEPARATION CANNOT BE OBTAINED.

CITY OF KIRKLAND

PLAN NO. CK-W.01

WATER AND SEWER SPACING AND CLEARANCE

LAST REVISED: 1/1/18

THRUST BLOCK TABLE

Minimum Bearing Area Against Undisturbed Soil (F<sub>2</sub>)  
(block sizes based on 200 psi test pressure)

PIPE SIZE	A	B	C	D	E	x (in)	d (ft)
4"	3	2	2	1	1	None	1
6"	5	4	4	2	2	None	1.25
8"	9	6	5	3	2	4	1.5
10"	13	10	7	4	3	5	2
12"	19	13	11	6	4	6	2.25
14"	26	19	14	7	4	9	2.75
16"	27	25	19	10	6	12	2.75
18"	42	30	23	12	6	15	3.25
20"	52	37	28	15	9	19	3.75
24"	74	53	41	21	11	27	4.25

NOTES

For different test pressure multiply bearing area by (actual test pressure ÷ 200)

2 - 3/4" DIA. RODS FOR 10" SIZE & SMALLER  
2 - 1" DIA. RODS LARGER THAN 10" SIZE

NOTE: ADDITIONAL BLOCKING MUST BE PROVIDED IF GATE VALVE IS AT END OF LINE DURING TESTING.

9" MIN.

GATE VALVE

4. BLOCK SHALL BEAR AGAINST FITTINGS ONLY & SHALL BE CLEAR OF JOINTS TO PERMIT TAKING UP OR DISMANTLING JOINT.

5. CONTRACTOR SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATING PRESSURE UNDER ALL CONDITIONS OF SERVICE.

6. IN CLAY OR FINE SILT, MULTIPLY BLOCK BEARING AREA BY 2.

7. IN MUCK OR PEAT, ALL THRUSTS SHALL BE RESTRAINED BY PILES OR THE RODS TO SOLID FOUNDATIONS OR BY REMOVAL OF MUCK OR PEAT AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THRUST.

NOTES

- SQUARE FEET OF CONCRETE THRUSTS - BLOCK AREA BASED ON SAFE BEARING LOAD OF 2000 POUNDS PER SQUARE FOOT.
- AREAS MUST BE ADJUSTED FOR OTHER SIZE PIPE, PRESSURES & SOIL CONDITIONS.
- CONCRETE BLOCKING SHALL BE CAST IN PLACE & HAVE MINIMUM OF 1/4 SQUARE FOOT BEARING AGAINST THE FITTING.

CITY OF KIRKLAND

PLAN NO. CK-W.02

CONCRETE THRUST BLOCKING

LAST REVISED: 02/04/10

VERTICAL BLOCKING

FOR 11 1/4"-22 1/2"-30" BENDS

PIPE SIZE	V	B	CU FT	A	D	L
4"	11 1/4"	8	2.0	5/8"	1.5"	2.0
6"	11 1/4"	11	2.2	5/8"	2.0"	2.0
8"	11 1/4"	16	2.5	5/8"	2.0"	2.0
12"	11 1/4"	32	3.2	3/4"	2.0"	2.0
16"	11 1/4"	70	4.1	7/8"	3.0"	3.0
20"	11 1/4"	128	5.0	1"	3.5"	3.5"
24"	11 1/4"	224	8.8	1 1/4"	4.0"	4.0"

VERTICAL BLOCKING FOR 45° BENDS

PIPE SIZE	V	B	CU FT	A	D	L
4"	11 1/4"	8	2.0	5/8"	1.5"	2.0
6"	11 1/4"	11	2.2	5/8"	2.0"	2.0
8"	11 1/4"	16	2.5	5/8"	2.0"	2.0
12"	11 1/4"	32	3.2	3/4"	2.0"	2.0
16"	11 1/4"	70	4.1	7/8"	3.0"	3.0
20"	11 1/4"	128	5.0	1"	3.5"	3.5"
24"	11 1/4"	224	8.8	1 1/4"	4.0"	4.0"

NOTES

- CONCRETE BLOCKING BASED ON 200 PSI PRESSURE AND 3000 PSI CONCRETE.

CITY OF KIRKLAND

PLAN NO. CK-W.03

VERTICAL THRUST BLOCKING

LAST REVISED: 1/10/2011

FINISHED GRADE

STD CAST IRON VALVE BOX (RICH OR EQUAL #940)

2" SQUARE OPERATING NUT W/ 1/4" THICK ROUND PLATE WELDED TO NUT AND EXTENSION STEM

1" DIA MILD STEEL OR DOUBLE EXTRA STRONG PIPE EXTENSION STEM

2" SQUARE NUT SOCKET MADE FROM 1/4" STEEL PLATE

VALVE ASSEMBLY

5" MAX (SEE NOTE 1)

VARIES

SEE NOTE 2

1/4" STEEL PLATE

2" DIA MILD STEEL OR DOUBLE EXTRA STRONG PIPE EXTENSION STEM

2" SQUARE NUT SOCKET MADE FROM 1/4" STEEL PLATE

VALVE ASSEMBLY

NOTE:

- VALVE EXTENSIONS ARE ONLY REQUIRED IF DEPTH FROM FINISHED GRADE TO TOP OF OPERATING NUT IS GREATER THAN 5 FEET.
- WHEN AN EXTENSION IS USED, THE DEPTH FROM EXTENSION OPERATING NUT TO FINISHED GRADE SHALL NOT BE LESS THAN 3 FEET.

CITY OF KIRKLAND

PLAN NO. CK-W.05

WATER VALVE EXTENSION

LAST REVISED: 1/23/17

2" CON. AIR/SEW. RETURN BEND

2" BELL MOORE 260-16-1258 CLASS FRAMES SAFETY TUBE

2" GALV. IRON PIPE FIELD LOCATED NEXT TO EXISTING

2" X 2" X 96" EL (GALV)

2" DIA. MILD STEEL OR DOUBLE EXTRA STRONG PIPE EXTENSION STEM

2" SQUARE NUT SOCKET MADE FROM 1/4" STEEL PLATE

2" DIA MILD STEEL OR DOUBLE EXTRA STRONG PIPE EXTENSION STEM

2" SQUARE NUT SOCKET MADE FROM 1/4" STEEL PLATE

VALVE ASSEMBLY

5" MAX (SEE NOTE 1)

VARIES

SEE NOTE 2

1/4" STEEL PLATE

2" DIA MILD STEEL OR DOUBLE EXTRA STRONG PIPE EXTENSION STEM

2" SQUARE NUT SOCKET MADE FROM 1/4" STEEL PLATE

VALVE ASSEMBLY

NOTE:

- VALVE EXTENSIONS ARE ONLY REQUIRED IF DEPTH FROM FINISHED GRADE TO TOP OF OPERATING NUT IS GREATER THAN 5 FEET.
- WHEN AN EXTENSION IS USED, THE DEPTH FROM EXTENSION OPERATING NUT TO FINISHED GRADE SHALL NOT BE LESS THAN 3 FEET.

CITY OF KIRKLAND

PLAN NO. CK-W.09

2" AIR AND VACUUM RELEASE VALVE ASSEMBLY

LAST REVISED: 02/01/10

2-1/2" CONTROL VALVE

5" HYDRANT METER RENTED FROM CITY

1" DOUBLE CHECK VALVE ASSEMBLY

2" SUPPLY HOSE

NEW HYDRANT, BLOW-OFF ASSEMBLY, OR TEMPORARY FLUSHING CONNECTION

HOSE BIBB SAMPLE

TEMPORARY TEST BLOCKING

3" MIN - 10" MAX

EXISTING WATER MAIN WITH NEW VALVE(S) CUT IN OR WET TAPPED

NOTES

- AN APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED BETWEEN THE EXISTING AND NEW WATER LINES DURING DISINFECTION AND FLUSHING OF NEW WATERMAIN.
- THE BACKFLOW PREVENTION ASSEMBLY AND SUPPLY HOSE MUST BE DISCONNECTED DURING HYDROSTATIC PRESSURE TESTING OF THE NEW MAIN.
- THE NEW WATERMAIN SHALL BE CONNECTED TO THE EXISTING SYSTEM ONLY AFTER NEW MAIN IS FLUSHED, DISINFECTED AND SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED.
- THE INTERIORS OF ALL PIPES AND FITTINGS TO BE USED IN FINAL CONNECTION MUST BE SWABBED OR SPRAYED WITH A 1% AVAILABLE CHLORINE SOLUTION.
- 2" HYDRANT METER SHALL BE OBTAINED FROM THE CITY OF KIRKLAND PUBLIC WORKS DEPARTMENT.
- DISCHARGE FLUSHING TO SEWER ONLY. PROVIDE AIR GAP AT DISCHARGE.

CITY OF KIRKLAND

PLAN NO. CK-W.10

FILLING NEW WATER MAINS

LAST REVISED: 01/1/18

PUMPER PORT TO BACK OF SIDEWALK SHALL BE MINIMUM OF 1" OR AS DIRECTED BY FIRE DEPARTMENT

CONCRETE PAD 2" DIA. x 4" THICK (ONLY IN NON-PAVED AREAS)

DO NOT BLOCK DRAIN HOLES

HYDRANT

6" D.I. TEE MI X MI X FL

MAIN

1/2 YARD WASHED DRAIN ROCK (3" TO 3/8") MIN. 1" ABOVE BOOT FLANGE. PLACE 1 MIL POLYETHYLENE FILM AROUND TOP AND SIDES OF GRAVEL.

4"x6"x16" MIN. SIZE CONC. BLOCK UNDER HYDRANT AND VALVE.

A. 1-5 1/4" M.V.O. HYDRANT WITH 2-2 1/2" N.S.T. AND 1-4" PUMPER, SEATTLE STANDARD. THREAD-M.I. INLET, WITH LUGS, BRASS TO BRASS SUB-SEAT.

B. 1-AUXILIARY GATE VALVE: 6" AWWA C509 OR C515, RESILIENT SEAT, "O" RING STEM SEAL, M.I. JFL, WITH LUGS.

C. 1-TWO-PIECE CAST IRON VALVE BOX WITH LOCKING BOLTS EQUAL TO RICH SEATTLE TYPE # 940.

D. 1-6" DUCTILE IRON CLASS 52 CEMENT-LINED PIPE, LENGTH TO FIT.

E. 2 - 3/4" GALVANIZED STEEL SHACKLE RODS, TAR SEALED AFTER ASSEMBLY.

F. 1/4 CY - 1-3/8: CONCRETE MIX, POUR IN PLACE TO BLOCK. MAINTAIN CLEARANCE FOR BOLTS.

G. 5" X 4" FEMALE SEATTLE STANDARD THREAD RIGID 5" STORZ ADAPTOR WITH ALL CAPS AND CHAINS OR CABLES. ADAPTOR MATERIAL TO BE ANODIZED ALUMINUM.

NOTES

- FIRE HYDRANT EXTENSION, IF REQUIRED.
- FIRE HYDRANT TO BE PAINTED WITH TWO COATS OF HIGH GLOSS ORSA SAFETY YELLOW ENAMEL PAINT.
- INSTALL BLUE - TYPE 2 RFLM ON STREET SURFACE ADJACENT TO MAIN PORT.

CITY OF KIRKLAND

PLAN NO. CK-W.14

FIRE HYDRANT ASSEMBLY

LAST REVISED: 1/2023

WITH OR WITHOUT SIDEWALK

PLANTER STRIP

CURB & GUTTER

APPROVED METER BOX ASSEMBLY (PER PLAN NO. CK-W.21 OR W.22)

INSTALLATION IN PLANTER STRIP 3' OR WIDER

PLANTER STRIP

SIDEWALK

CURB & GUTTER

APPROVED METER BOX ASSEMBLY (PER PLAN NO. CK-W.21 OR W.22)

INSTALLATION BEHIND SIDEWALK

EXPANSION JOINT MATERIAL

APPROVED METER BOX (PER PLAN NO. CK-W.23 OR W.25 AS APPLICABLE TO SERVICE SIZE) WITH SOLID METAL TRAFFIC LID SET FLUSH WITH SIDEWALK SURFACE.

METER BOX TO BE INSTALLED IN SIDEWALK COMPLETELY 6" FROM EDGE

INSTALLATION IN SIDEWALK

NOTES

WATER METERS MUST BE LOCATED ALONG THE FRONTAGE THAT THE PROPERTY IS ADDRESSED FROM UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DEPARTMENT.

CITY OF KIRKLAND

PLAN NO. CK-W.17

WATER METER PLACEMENT DETAILS

LAST REVISED: 10/15/19

6"-10"

36" MIN

7-1/2" 10-3/4"

NOT TO BE INSTALLED WHEN REPLACING AN EXISTING SERVICE TO A BUILDING THAT DID NOT HAVE ONE INSTALLED PREVIOUSLY (SEE STANDARD 11)

NOT TO SCALE

WATER SERVICE STANDARDS

DESCRIPTION	MAKER OR TYPE	1"
1. SINGLE STRAP SADDLE	STAINLESS ROMAC OR EQUAL	101 LPT
2. CORP STOP	FORD OR EQUAL	BA63-44W-G-HL
3. ANGLE STOP	FORD OR EQUAL	#72 STAINLESS STEEL
4. INSERTS	FORD OR EQUAL	IP5-SOR-7(PES48)
5. POLY PIPE	POLYETHYLENE ASTM D2239	CK-W.21 (OR W.23 W/APPROVAL)
6. METER BOX	CHISON OR EQUAL	14 GAUGE
7. TRACER WIRE	CULI SOLID WIRE	CITY TO INSTALL*
8. CHECK VALVE	---	CITY TO INSTALL*
9. METER	FORD OR EQUAL #424	CITY TO INSTALL UNLESS A CIP PROJECT
10. 1" x 3/4" METER ADAPTOR (FOR 5/8 x 3/4" MTR)	FORD OR EQUAL L31-44	---
11. 1" METER	FORD OR EQUAL L31-24	---

NOTES

- ALL FITTINGS MUST BE FORD OR EQUAL.
- TRACER WIRE FROM MAIN TO SERVICE METER MUST BE INSTALLED IN ALL INSTALLATIONS. WIRE MUST BE WRAPPED AROUND ANGLE STOP AND THE CORPORATION STOP, WITH LAST 8" STRIPPED.
- POLY SERVICE LINE IS TO BE CONTINUOUS FROM MAIN TO METER AND BRIDGES OF ANY KIND.
- POLY PIPE TO BE 1" FROM MAIN TO METER.
- METERS SHALL NOT BE LOCATED IN CONCRETE OR ASPHALT PAVING UNLESS UNAVOIDABLE.
- THE ANGLE STOP SHALL BE IN A POSITION THAT RESULTS IN THE METER BEING CENTERED DIRECTLY BENEATH THE METER READING LID.

CITY OF KIRKLAND

PLAN NO. CK-W.18

5/8"x3/4" & 1" WATER METER SERVICE INSTALLATION

LAST REVISED: 02/01/10

19-3/4"

13-1/2"

1-3/4"

BOLT DOWN

21-1/2"

15"

12"

18-3/4"

25-3/4"

3"x 4" KNOCK OUTS (OPPOSITE SIDES)

ANCHOR TABS (4 PLACES)

NOTES

- USE - CARSON MODEL 1220-12 WITH METER READING COVER OR EQUAL.
- COVER MUST DISPLAY "WM." OR EQUAL.
- METER READING FLIP-UP LID SHALL BE PLASTIC.

CITY OF KIRKLAND

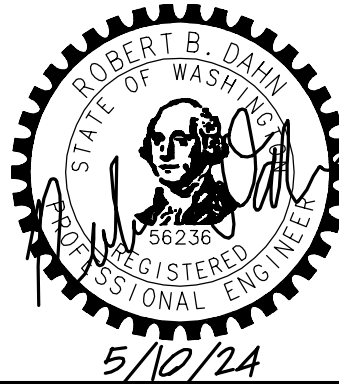
PLAN NO. CK-W.21

3/4" & 1" WATER METER BOX PLACED IN PLANTER

ATWELL JOB # BL23-113



DEPARTMENT OF PUBLIC WORKS  
123 FIFTH AVENUE KIRKLAND, WA 98033



APPROVED BY:

DATE:

KAI POPE, EIT  
DESIGNED BY:

4/2024  
DATE

CAROL DOGGETT  
DRAWN BY:

4/2024  
DATE

ROB DAHN, PE  
CHECKED BY:

4/2024  
DATE

NE 73RD ST WATER MAIN  
IMPROVEMENT PROJECT

STANDARD DETAILS

SHEET:

18 OF 19

SCALE:

AS SHOWN

FILENAME:

DT-02



