

CITY OF PORTLAND PUBLIC WORKS DEPARTMENT

CONTRACT DRAWINGS



MADISON, WALNUT, WASHINGTON SEWER SEPARATION

BID NUMBER: 18009

100% PLANS
AUGUST 2017

DESIGNED BY:



Relationships. Responsiveness. Results.
www.gorrillpalmer.com
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WILLIAM C. HASKELL, P.E.
PRINCIPAL

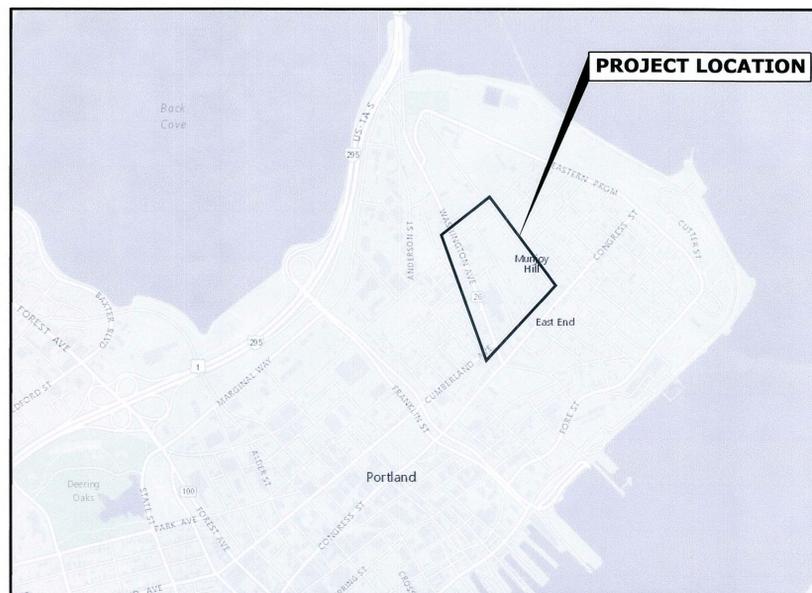


DATE

YEAR APPROVED
2017

Katherine A. Earley 8/10/2017
KATHERINE A. EARLEY, P.E. DATE
ENGINEERING MANAGER/CITY ENGINEER

Nathaniel H. Smith 8/10/2017
NATHANIEL H. SMITH DATE
PROJECT ENGINEER



INDEX OF PLANS	
1	COVER SHEET
2	GENERAL NOTES AND LEGEND
3	OVERALL PLAN
CIVIL PLANS & PROFILES	
4-5	WASHINGTON AVENUE EXISTING CONDITIONS
6	WALNUT STREET EXISTING CONDITIONS
7	NORTH STREET EXISTING CONDITIONS
8-11	WASHINGTON AVENUE PLAN AND PROFILE
12-13	WALNUT STREET PLAN AND PROFILE
14	NORTH STREET PLAN AND PROFILE
15	WALNUT ST/NORTH ST CROSSWALK DETAIL
16-17	WALNUT ST/WASHINGTON AVE/FOX ST CROSSWALK DETAIL
18	WASHINGTON AVE/MONROE ST CROSSWALK DETAIL
19-22	WALNUT STREET CROSS SECTIONS
23-24	NORTH STREET CROSS SECTIONS
25-30	WASHINGTON CROSS SECTIONS
31-32	WASHINGTON AVENUE STRIPING PLAN
CIVIL DETAILS	
33-34	DRAINAGE DETAILS
35	UTILITY DETAILS
36	ROADWAY DETAILS
37-38	EROSION CONTROL NOTES AND DETAILS
PORTLAND WATER DISTRICT PLANS	
W1-W13	PORTLAND WATER DISTRICT PLANS
W14-W15	PORTLAND WATER DISTRICT DETAILS

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	RIGHT OF WAY	
	PROPERTY LINE	
	SEWER EASEMENT	
	PARKING SETBACK	
	BUILDING SETBACK	
	WETLAND BOUNDARY	
	TOP OF STREAM BANK	
	EDGE OF PAVEMENT	
	GRADING CONTOUR LINE	
	SPOT ELEVATION	
	TREELINE	
	TREES & HEDGES	
	POLE WITH LIGHT FIXTURE(S)	
	UTILITY POLE	
	FREESTANDING SIGN	
	PAINTED DIRECTIONAL TRAFFIC ARROW	
	OVERHEAD ELECTRIC/TELEPHONE/CABLE	
	UNDERGROUND ELECTRIC/TELEPHONE/CABLE	
	WATER LINE	
	STORM DRAIN LINE	
	CULVERT	
	HYDRANT	
	WATER GATE VALVE	
	WATER SHUT OFF VALVE	
	MANHOLE	
	CATCH BASIN	
	TEST PIT	
	IRON ROD (SET)	
	IRON ROD (FOUND)	
	MONUMENT	
	RIPRAP	
	SILT FENCE - SINGLE ROW	
	SILT FENCE - DOUBLE ROW	
	STONE SEDIMENT BARRIER	
	CENTER LINE	
	FENCE	
	3 FOOT PROPERTY LINE OFFSET	
	VERTICAL GRANITE CURB	
	SLOPED CURB	
	PAVEMENT RESTORATION	
	FULL DEPTH RECONSTRUCTION	
	RECONSTRUCTED CONCRETE DRIVE	
	RECONSTRUCTED BRICK DRIVE	

TEMPORARY EROSION CONTROL MEASURES

- MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE CITY OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE CITY.
- LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL EROSION CONTROL BMPs AS SHOWN OR NOTED ON THE PLANS.
- SILTATION FENCE SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF-BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. THE SILT FENCE SHALL BE INSTALLED PER THE DETAILS PROVIDED ON THIS PLAN AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.
- FOR WORK WHICH IS CONDUCTED BETWEEN SEPTEMBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DISTURBED AREAS SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 7 DAYS FOR ALL AREAS.
- PUBLIC WAYS SHALL BE SWEEPED, AS NECESSARY, TO CONTROL MUD AND DUST.
- SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHOULD BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE EMBEDDED IN A SOIL TRENCH.
- WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MAINE DOT SPECIFICATIONS - SECTION 637 - DUST CONTROL.
- LOAM AND SEED IS INTENDED TO SERVE AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DISTURBED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP.

GENERAL NOTES:

- EXISTING CONDITIONS BASED ON SURVEY COMPLETED BY TITCOMB ASSOCIATES OF FALMOUTH, MAINE IN 2016.
- VERTICAL DATUM IS REFERENCED TO CITY DATUM WITH ONE-FOOT CONTOUR INTERVALS. CITY DATUM IS +0.02 FEET OF NGVD 1929. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
- EXISTING PROFILE GRADE IS CENTERED ON EXISTING ROADWAY OR RIGHT-OF-WAY CENTERLINE.
- PROTECT EXISTING FEATURES/STRUCTURES NOT CALLED OUT FOR REPLACEMENT/ALTERATION.
- THE CITY OF PORTLAND SHALL HAVE THE RIGHT AND AUTHORITY TO DETERMINE THE ACCEPTABILITY OF WORK AND MATERIALS IN PROGRESS OR COMPLETED. THE CITY OF PORTLAND SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIALS WHICH DO NOT CONFORM, IN ITS SOLE OPINION, TO THE PLANS OR SPECIFICATIONS.
- PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE A STREET OPENING PERMIT FROM THE PORTLAND DEPARTMENT OF PUBLIC WORKS. NO FEE WILL BE CHARGED FOR THIS PERMIT.
- ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
- ELECTRICAL AND TELECOMMUNICATIONS SERVICE PROVIDED VIA OVERHEAD LINES, UNLESS OTHERWISE SHOWN. CONTRACTOR SHALL USE CAUTION WHEN WORKING NEAR EXISTING OVERHEAD LINES.
- TEST PITS SHALL BE COMPLETED AT LEAST TWO WEEKS PRIOR TO THE START OF CONSTRUCTION OR ORDERING OF MATERIALS AT THE TEST PIT LOCATION. THE CONTRACTOR SHALL PROMPTLY PROVIDE TEST PIT INFORMATION TO THE ENGINEER FOR REVIEW, AND SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL UTILITY CROSSING CONFLICTS.
- RESIDENTIAL SANITARY SEWER SERVICE INFORMATION (LOCATION, SIZE, PIPE MATERIALS, ETC.) OBTAINED FROM HISTORIC SEWER CARDS AND SEWER VIDEOS TAKEN IN MAY 2015. GORRILL-PALMER CONSULTING ENGINEERS, INC. MAKES NO GUARANTEES TO THE ACCURACY OF THIS INFORMATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING THE EXISTING SEWER LATERAL AND REPLACING THE LATERAL FROM THE NEW SEWER MAIN TO THE RIGHT OF WAY. THIS INCLUDES LOCATING SERVICE LATERALS THAT ARE CONNECTED TO EXISTING SEWER MAINS THAT ARE TO BE ABANDONED.
- ALL DRIVEWAYS SHOWN TO BE REPLACED SHALL HAVE PAVEMENT AND GRAVELS REMOVED AND BOX CUT AND REPLACED PER THE DRIVEWAY DETAIL.
- DISPOSITION OF SURPLUS MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SURPLUS MATERIAL SHALL NOT BE DISPOSED OF ON THE PROJECT SITE. DISPOSITION SHALL BE MADE ONLY AT WASTE AREAS WHICH ARE LICENSED TO ACCEPT SUCH MATERIALS, UNLESS THE MATERIALS CAN BE INCORPORATED IN FILLS IN OTHER PROJECTS OF THE CONTRACTOR.
- IF CONTRACTOR PROPOSES TO TEMPORARILY STOCKPILE ANY SURPLUS SOIL AND ROCK IN THE CITY OF PORTLAND, THE CONTRACTOR SHALL OBTAIN APPROVAL FOR EACH STOCKPILE LOCATION FROM THE CITY. IF CONTRACTOR PROPOSES TO PERMANENTLY STOCKPILE ANY SURPLUS SOIL AND ROCK ON PROPERTY IN THE CITY OF PORTLAND, THE CONTRACTOR MUST OBTAIN ANY SITE PLAN AND FILL PERMITS REQUIRED FROM CITY PLANNING AUTHORITY OR ANY FILL PERMITS REQUIRED FROM MAINE DEP OR US ARMY CORP OF ENGINEERS. BOTH TEMPORARY AND PERMANENT STOCKPILE LOCATIONS SHALL MEET THE APPLICABLE SETBACK REQUIREMENTS IN THE CITY LAND USE CODE.
- MAINTENANCE OF TRAFFIC SHALL BE PER THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE MAINE DOT SPECIFICATIONS AND STANDARD PLANS.
- PROPERTY LINE AND R.O.W. MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE, BY A MAINE LICENSED LAND SURVEYOR.
- THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. UNDERGROUND FACILITIES INDICATED ON THE CROSS SECTIONS HAVE BEEN CARRIED OVER FROM THE PLAN VIEW DATA AND MAY ALSO INCLUDE FURTHER APPROXIMATIONS OF THE ELEVATIONS (DEPTHS) BASED UPON STRAIGHT LINE INTERPOLATION FROM THE NEAREST MANHOLES, GATE VALVES, OR TEST PITS. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE ENGINEER HAS COORDINATED THE PROPOSED WORK WITH THE AFFECTED UTILITY COMPANIES TO ARRANGE FOR REQUIRED RELOCATION OF THEIR KNOWN FACILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK AND SCHEDULE WITH THE UTILITY RELOCATION WORK AND THE PROPER UTILITY COMPANY. THE FOLLOWING UTILITIES HAVE FACILITIES WITHIN THE PROJECT LIMITS:
 - CENTRAL MAINE POWER COMPANY
 - UNILIT
 - PORTLAND FIRE DEPARTMENT
 - PORTLAND WATER DISTRICT
 - CITY OF PORTLAND
 - TIME WARNER CABLE
 - FAIRPOINT
 - AT&T
- ANY ADDITIONAL UTILITY WORK NOT SPECIFIED ON THE PLANS SHALL BE COMPLETED BY THE RESPECTIVE UTILITY COMPANY.
- CONTRACTOR SHALL COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LAND OWNER AT LEAST 2 DAYS (48 HOURS) PRIOR TO SCHEDULED DISRUPTION.
- EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA REGULATIONS SUBPART P OF 29 CFR PART 1926.650-652 (CONSTRUCTION STANDARD FOR EXCAVATIONS).
- LOCATIONS OF RIGHT-OF-WAY SHOWN ON PLANS ARE APPROXIMATE ONLY.
- THE CONTRACTOR SHALL COMPLETE THE WORK WITHIN THE RIGHT-OF-WAY, AND SHALL BE RESPONSIBLE IF TRESPASSING ON PRIVATE PROPERTY OCCURS.
- CONTRACTOR SHALL NOT PARK, IMPEDE ACCESS OR STORE EQUIPMENT/MATERIAL ON ADJACENT CITY OR PRIVATELY OWNED LAND WITHOUT WRITTEN CONSENT FROM THE CITY OR LAND OWNER.
- THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES, TO ORIGINAL FINISH SURFACE (LAWN, PAVEMENT, GRAVEL, ETC.) UNLESS NOTED OTHERWISE ON PLANS. RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, WALKWAYS, LAWNS AND OTHER AREAS SHALL BE AT THE CONTRACTOR'S EXPENSE. ALL CURB DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND, AT THE CONTRACTOR'S EXPENSE, AND SHALL CONFORM TO CITY OF PORTLAND STANDARDS.

- ALL SIGNING, SIGNAL AND STRIPING MATERIALS AND PLACEMENT SHALL CONFORM TO THE MAINE DOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH THE FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- BUTT JOINTS SHALL BE USED AT ALL LOCATIONS WHERE THE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED. COST OF BUTT JOINTS SHALL BE INCIDENTAL TO PAY ITEMS IN SECTION 403 - HOT BITUMINOUS PAVEMENT AND SECTION 608 - SIDEWALKS AND DRIVEWAYS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY, REMOVAL OF UNACCEPTABLE MATERIALS, COMPLETE REPLACEMENT, JOINT SEALING, OR RECONSTRUCTING PAVEMENT JOINTS AS REQUIRED. THIS WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE ONE YEAR GUARANTEE. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- ALL WORK COMPLETED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND SHALL CONFORM WITH CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.
- EXISTING FACILITIES/STRUCTURES (I.E. TREES, POLES, LIGHT POLES) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION. CITY RETAINS THE RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES/STRUCTURES. CONTRACTOR SHALL DISPOSE OF UNWANTED/UNUSED FACILITIES/STRUCTURES OFF SITE IN CONFORMANCE WITH APPLICABLE FEDERAL, STATE, AND LOCATION REGULATIONS.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND CITY OF PORTLAND CODES AND SPECIFICATIONS.
- COMPACTION REQUIREMENTS:

LOCATION	MINIMUM COMPACTION*
BELOW PAVED AREAS	95%
BELOW SEEDED AREAS	90%

*ALL PERCENTAGES OF COMPACTION SHALL BE OF MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557.
- CLEAN AND/OR FLUSH SEDIMENT AND DEBRIS FROM ALL MANHOLES, CATCH BASINS AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED. ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- STATIONING, PIPE LENGTHS, PIPE SLOPES AND PIPE INVERT CALCULATIONS ARE MEASURED ALONG THE PIPE CENTERLINE TO THE INSIDE WALL OF MANHOLE AND CATCH BASIN STRUCTURES.
- PROPOSED CATCH BASIN, SEWER MANHOLE (SMH), AND DRAIN MANHOLE (DMH) SYMBOLS REPRESENT LOCATION OF NEW STRUCTURES. REFER TO DETAILS AND SPECIFICATIONS FOR INFORMATION ON FRAMES AND GRATES, COVERS, SHAPE, STYLE AND DIMENSIONS.
- ALL WORK WITHIN CITY STREET RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL SUBMIT A PROPOSED TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEER AT LEAST 7 DAYS BEFORE STARTING CONSTRUCTION IN ANY STREET. THE TRAFFIC CONTROL PLAN SHALL BE SUBJECT TO APPROVAL BY THE TRAFFIC ENGINEER, WHO MAY ATTACH SPECIAL CONDITIONS TO, OR REQUIRE MODIFICATIONS OF, THE TRAFFIC CONTROL PLAN. CONSTRUCTION SHALL NOT BEGIN UNTIL THE PLAN IS APPROVED BY THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRIERS, FENCES, LIGHTS, WARNING SIGNS AND OTHER DEVICES NECESSARY TO SAFEGUARD TRAFFIC AND THE PUBLIC DURING WORKING AND NON-WORKING HOURS FOR THE DURATION OF THE PROJECT. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO BIDDING.
- ON ALL "ALTER", "MODIFY" AND "REMOVE" STRUCTURES, THE CONTRACTOR SHALL REMOVE ABANDONED PIPES OR PLUG AND FILL WITH FLOWABLE FILL.
- THE COST OF REMOVING EXISTING STRUCTURES AND/OR PIPES SHALL BE INCIDENTAL TO THE COST OF THE REPLACEMENT STRUCTURE AND/OR PIPE WHEN REPLACED IN THE SAME VICINITY, REFER TO SPECIFICATION SECTION 202.08.
- SOIL BORING INFORMATION PROVIDED BY NORTHERN TEST BORING, INC. AS A RESULT OF FIELD EXPLORATIONS CONDUCTED IN AUGUST 2016; REFER TO PROJECT SPECIFICATIONS FOR BORING LOGS.
- RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
- CAPPED PIPE STUB LOCATIONS SHALL BE MARKED WITH EMBEDDED STAKE AND A MINIMUM OF THREE TIES SHOULD BE RECORDED. EMBEDDED STAKE SHALL BE 2X4 WITH PK NAIL DRIVEN IN TOP, LENGTH AS REQUIRED TO SPAN FROM TOP OF PIPE TO 6" BELOW GRADE. LOCATION AND ELEVATION OF PIPE STUB SHALL BE PROVIDED TO THE CITY OF PORTLAND ENGINEERING OFFICE. WARNING TAPE AND WIRE SHALL BE INSTALLED OVER PIPE STUBS IN ACCORDANCE WITH SPECIFICATIONS.
- THE FOLLOWING SHALL BE INCIDENTAL TO THE 603 & 604 PAY ITEMS:
 - CUTTING OF PIPE AND/OR CONNECTIONS NECESSARY TO CONSTRUCT NEW STORM DRAIN & SEWER PIPE AND APPURTENANCES
 - WORK & MATERIALS NECESSARY TO CONNECT NEW OR EXISTING PIPES TO CATCH BASINS OR MANHOLES
 - CHANGES TO FLOW LINES/PROFILE GRADES/PIPE INVERTS OF ONE(1) FOOT OR LESS.
- INCLUDE LOAM, SEED AND MULCH (IN PAY ITEM 615.071) FOR ONE (1) FOOT MINIMUM WIDE STRIP ON BOTH SIDES OF ROADS AND ACCESS DRIVES WHERE PAVEMENT IS BEING REMOVED AND REPLACED WITHIN THE PROJECT LIMITS. THIS IS IN ADDITION TO OTHER AREAS THAT HAVE BEEN DISTURBED BY CONSTRUCTION ACTIVITIES THAT MAY REQUIRE LOAM, SEED AND MULCH.

- AT LOCATIONS WHERE EXISTING CATCH BASINS ARE BEING REMOVED AND NEW CATCH BASINS ADDED IN A DIFFERENT LOCATION, CONTRACTOR SHALL REGRADE THE AREA WHERE THE OLD BASIN IS BEING REMOVED TO BLEND IN SMOOTHLY WITH ADJACENT STREET GRADES. AT THE LOCATION OF THE NEW CATCH BASIN, CONTRACTOR SHALL CONSTRUCT APPROPRIATE DEPRESSION PER THE CITY OF PORTLAND DETAILS AND STANDARDS.
- CATCH BASIN OFFSETS AND RIM ELEVATIONS ARE MEASURED TO THE CENTER OF THE GRATE.
- RECONSTRUCT DRIVE AS NECESSARY TO MATCH FINISHED ROAD GRADE.
- ALL CATCH BASINS LOCATED ON WALNUT STREET REQUIRE CASCADE FRAMES AND GRATES.
- REMOVE ALL ABANDONED STORM DRAIN PIPES TO TEE/WYE CONNECTION WITH SEWER MAIN UNLESS OTHERWISE NOTED ON THE PLANS.
- RECONSTRUCT ALL SEWER LATERALS TO THE RIGHT-OF-WAY LINE. ALL BRICK/CONCRETE/ASPHALT DRIVEWAYS AND SIDEWALKS AND ASSOCIATED CURB SHALL BE RECONSTRUCTED TO MATCH EXISTING WHEN REQUIRED BY SEWER LATERAL RECONSTRUCTION.
- SEPARATE PAYMENT FOR PIPE REMOVAL SHALL BE MADE WHENEVER A PIPE CALLED OUT FOR DEMOLITION IS OUTSIDE THE HORIZONTAL LIMITS OF EXCAVATION FOR A PROPOSED PIPE OR STRUCTURE BY FOUR OR MORE FEET.
- ALL LOCATIONS WHERE A SEPARATE PAYMENT FOR CATCH BASIN OR MANHOLE REMOVAL IS REQUIRED IS INDICATED ON THE PLANS.

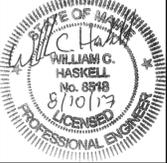
ABBREVIATIONS:

& AND	RCP REINFORCED CONCRETE PIPE
ADA AMERICANS WITH DISABILITIES ACT	REINF REINFORCED
AG ABOVE GROUND	REQREQUIRED
ALT ALTERNATE	ROW RIGHT-OF-WAY
AVE AVENUE	RT RIGHT
BIT BITUMINOUS	S SLOPE/SOUTH
B/W BETWEEN	SF SILT FENCE
CB CATCH BASIN	SS SANITARY SEWER
CMP CENTRAL MAINE POWER	SD STORM DRAIN
CONC CONCRETE	SMH SEWER MANHOLE
DI DUCTILE IRON	SCH SCHEDULE
DIA DIAMETER	SL STOP LINE
DMH DRAIN MANHOLE	ST STREET
DTL DETAIL	STA STATION
DYDOUBLE YELLOW CENTERLINE	SWLLSOLID WHITE LANE LINE
DWLDASHED WHITE LANE LINE	TBM TEMPORARY BENCHMARK
E EAST	TP TEST PIT
EG EXISTING GRADE	TRM TURF REINFORCING MAT
EL/ELEV ELEVATION	TWC TIME WARNER CABLE
EOP EDGE OF PAVEMENT	TYP TYPICAL
EXIST EXISTING	UD UNDERDRAIN
FF FINISH FLOOR	UG UNDERGROUND
FT FOOT/FEET	UGC UNDERGROUND CABLE
GS GAS SERVICE	UGE UNDERGROUND ELECTRIC
GALV GALVANIZED	UGT UNDERGROUND TELEPHONE
GRAN GRANITE	VER VERTIC
GV GATE VALVE	VERT VERTICAL
HDPEHIGH DENSITY POLYETHYLENE	VT VITRIFIED CLAY
HORIZ HORIZONTAL	W WEST
HYD HYDRANT	W/ WITH
INV INVERT	WS WATER SERVICE
IP IRON PIPE	
LF LINEAR FEET	
LT LEFT	
MAX MAXIMUM	
MIN MINIMUM	
MON MONUMENT	
N NORTH	
NO NUMBER	
NR NO REFUSAL	
NSBB NUTRIENT SEPARATING BAFFLE BOX	
NTS NOT TO SCALE	
OB ORANGEBOG	
OFF OFFSET	
OHE OVERHEAD ELECTRIC	
OH OVERHEAD	
± PLUS OR MINUS	
PLS PROFESSIONAL LAND SURVEYOR	
PT POINT	
PVC POLYVINYL CHLORIDE	
RD ROAD	

LDD PROJECT NAME: N/A
 DRAWING NAME: 2835.13-GENERAL
 FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: OCC	DRAWN BY: LAN	CHECKED BY: WCH	SCALE: AS NOTED	DATE: AUGUST 2017
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MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 GENERAL NOTES
 AND LEGEND

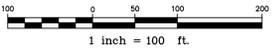
CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



SHEET # 2 OF 38
 VAULT PLAN NUMBER



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LDD PROJECT NAME:
N/A
 DRAWING NAME:
2835.13-OVERALL
 FIELD BOOK USED:
N/A

REFERENCES:

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DRAWN BY:	LAN
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SCALE:	AS NOTED
DATE:	AUGUST 2017

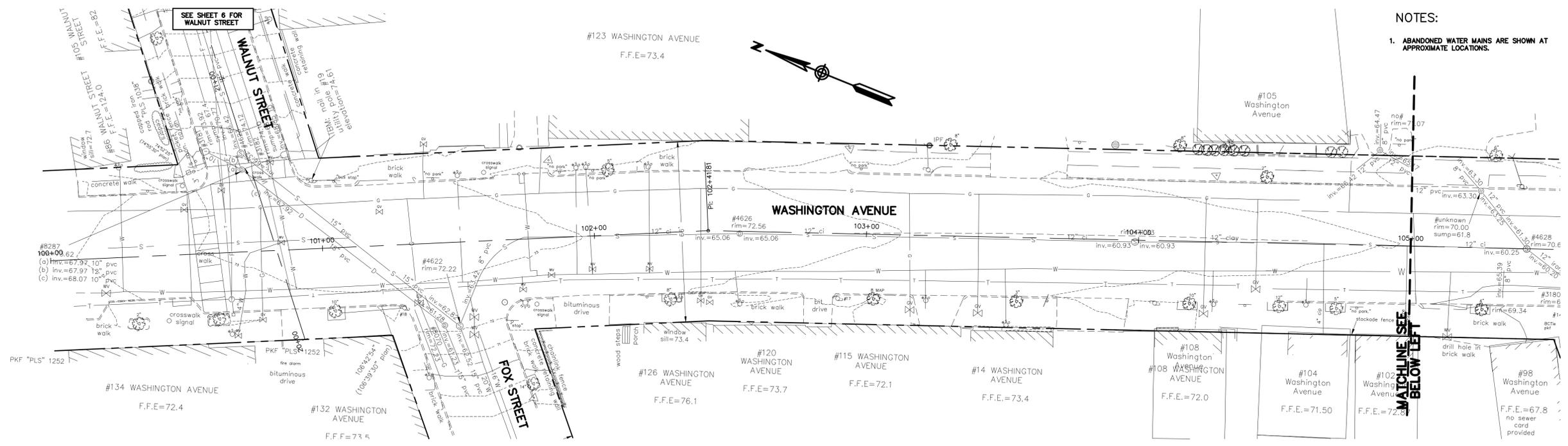


MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 OVERALL PLAN

CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



SHEET #
3 OF 38
 VAULT PLAN NUMBER



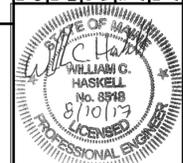
WASHINGTON AVENUE EXISTING CONDITIONS PLAN
1"=20'

NOTES:
1. ABANDONED WATER MAINS ARE SHOWN AT APPROXIMATE LOCATIONS.

LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PBASE
FIELD BOOK USED:
N/A

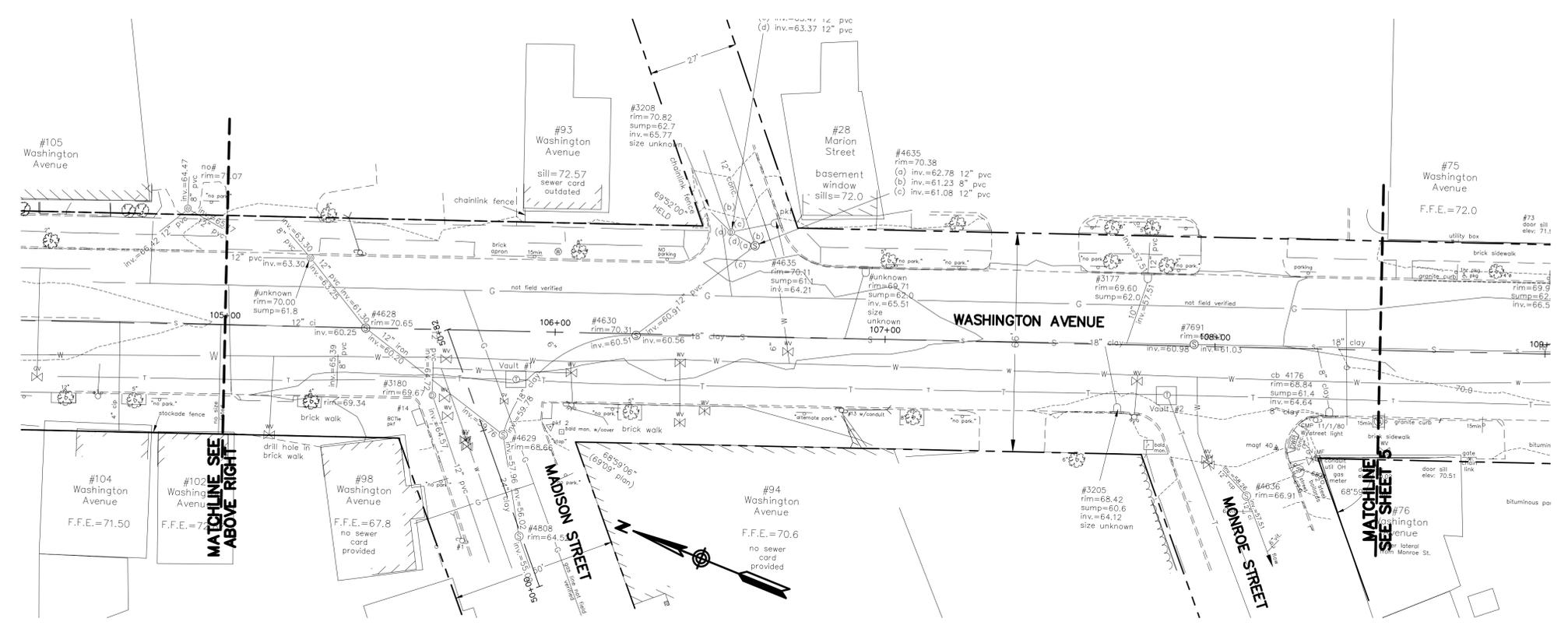
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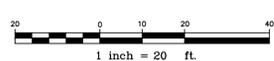


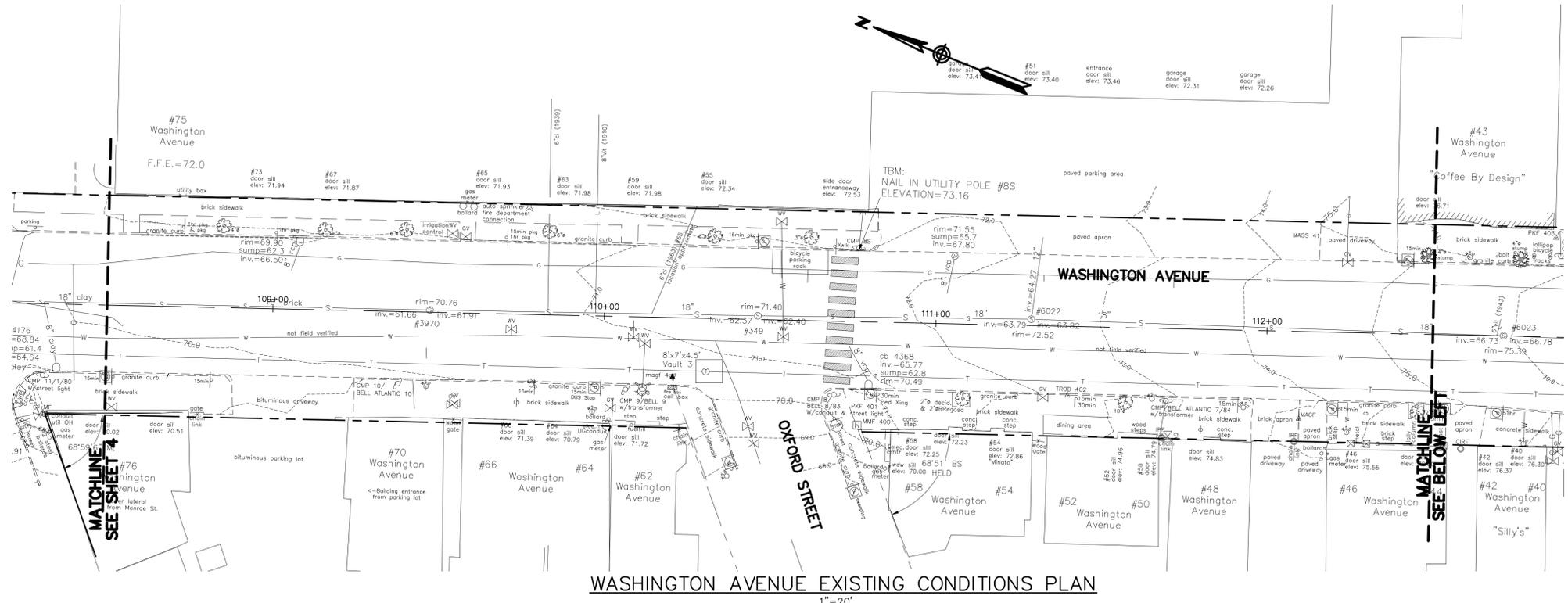
MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
EXISTING CONDITIONS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION

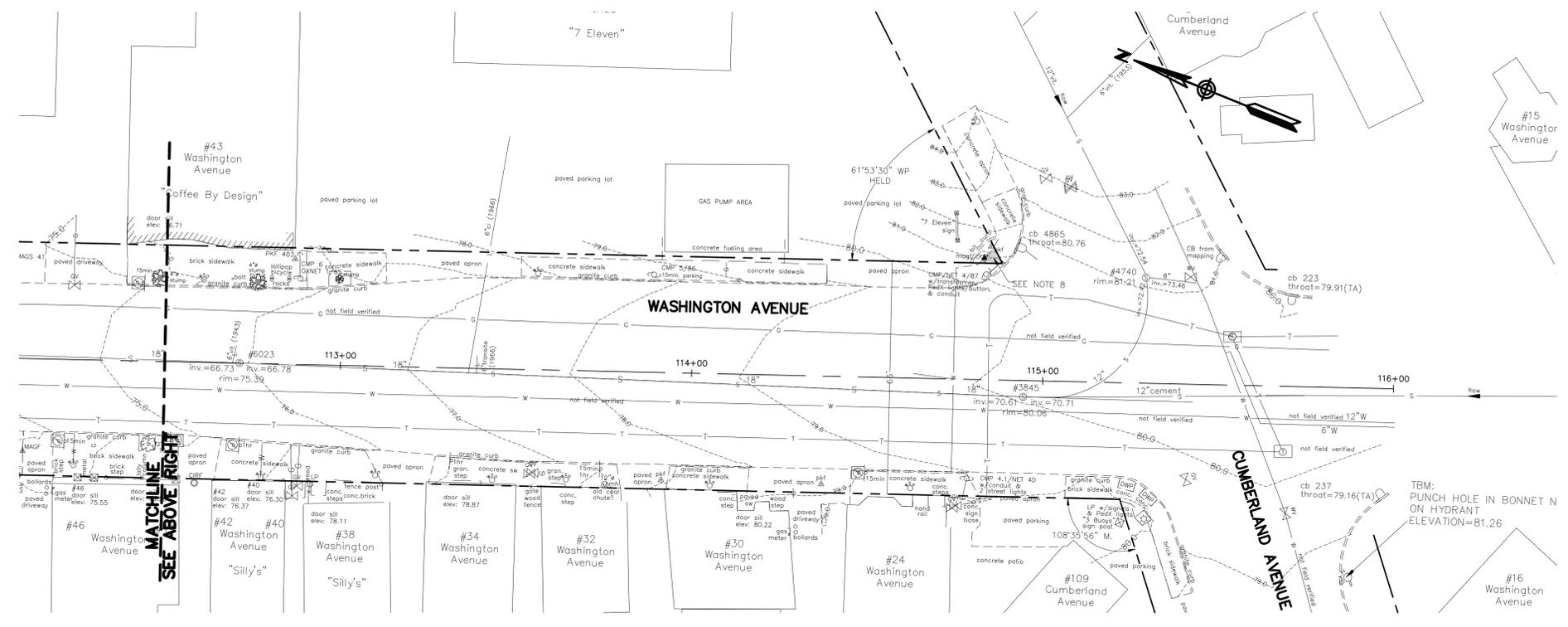


WASHINGTON AVENUE EXISTING CONDITIONS PLAN
1"=20'





WASHINGTON AVENUE EXISTING CONDITIONS PLAN
1"=20'



WASHINGTON AVENUE EXISTING CONDITIONS PLAN
1"=20'

NOTES:
1. ABANDONED WATER MAINS ARE SHOWN AT APPROXIMATE LOCATIONS.

LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PBASE
FIELD BOOK USED:
N/A

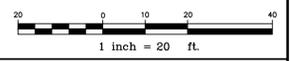
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DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



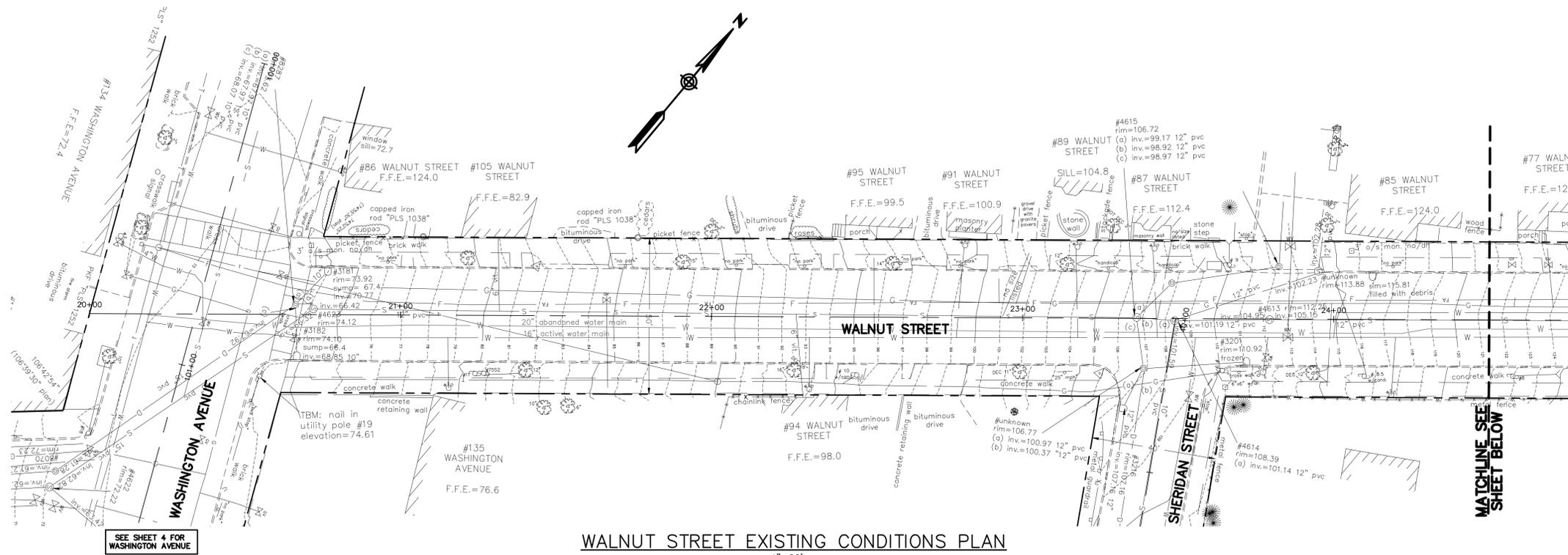
MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
EXISTING CONDITIONS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



Relationships. Responsiveness. Results.
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SHEET #
5 OF 38
VAULT PLAN NUMBER



WALNUT STREET EXISTING CONDITIONS PLAN

1"=20'

NOTES:

1. ABANDONED WATER MAINS ARE SHOWN AT APPROXIMATE LOCATIONS.

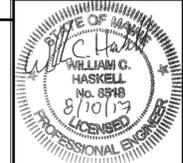
LDD PROJECT NAME:
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DRAWING NAME:
2835.13-PHASE

FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	CC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017

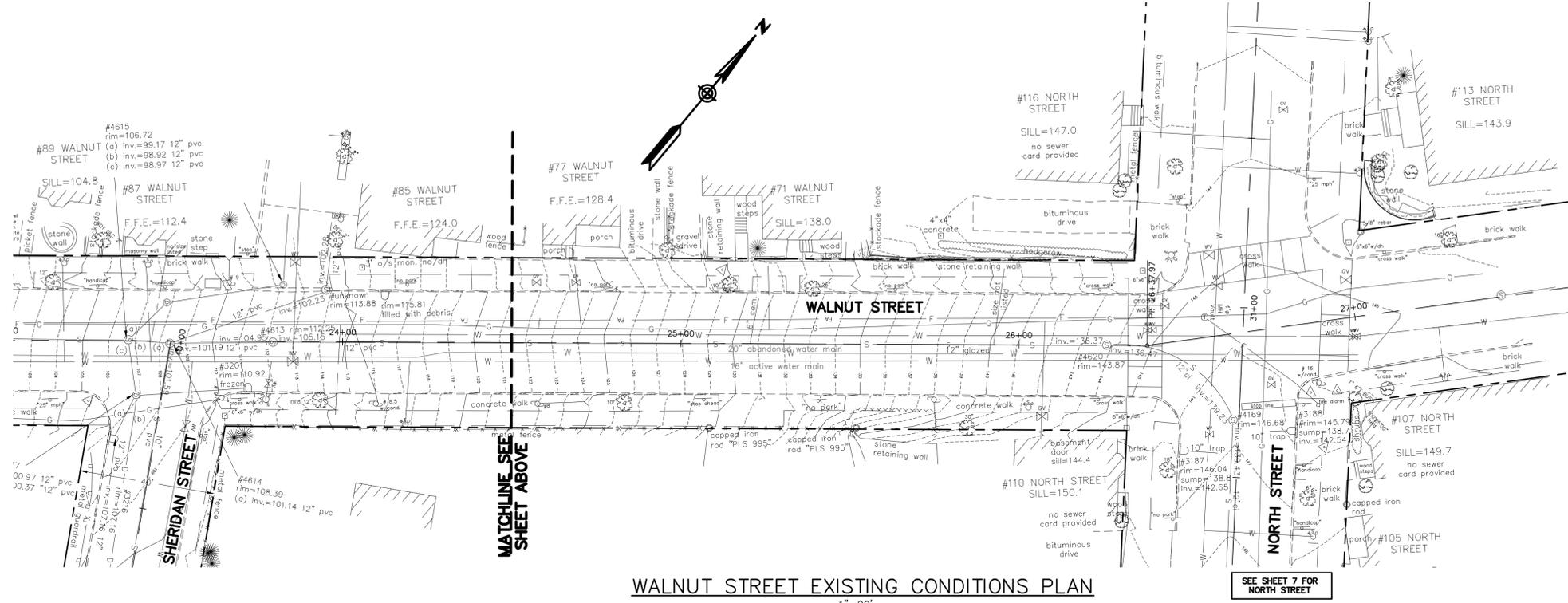


MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT STREET
EXISTING CONDITIONS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



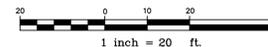
SHEET #
6 OF 38
VAULT PLAN NUMBER



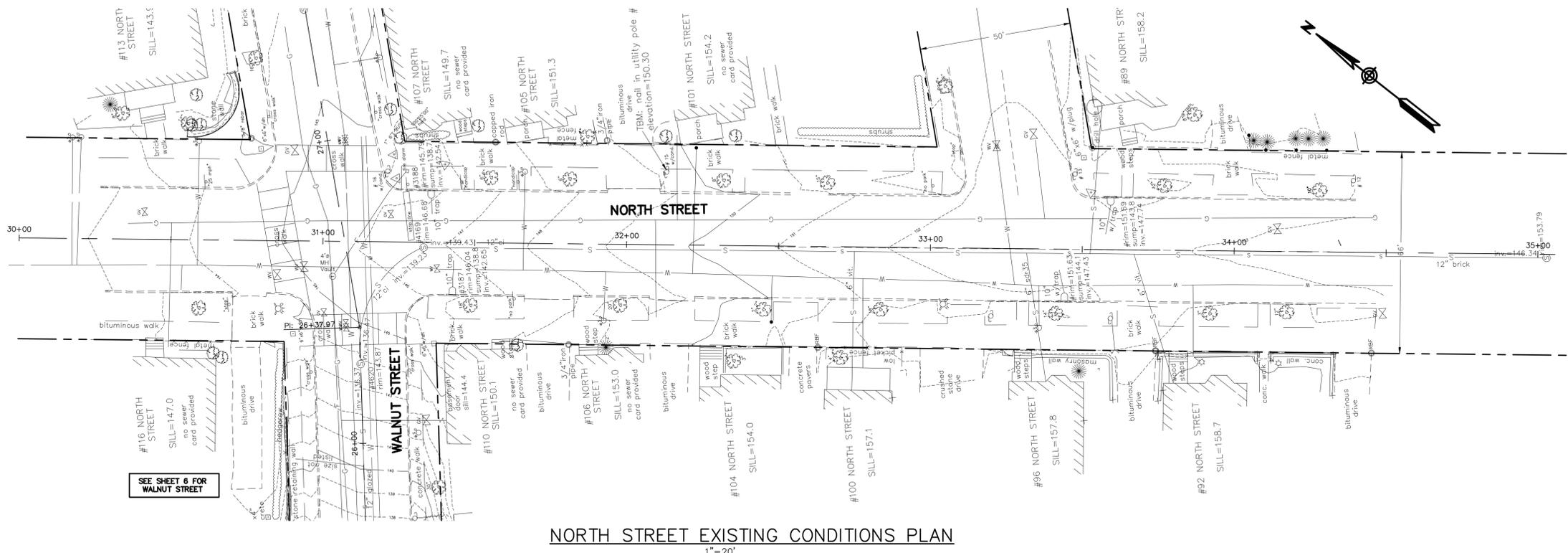
WALNUT STREET EXISTING CONDITIONS PLAN

1"=20'

SEE SHEET 7 FOR
NORTH STREET



Relationships. Responsiveness. Results.
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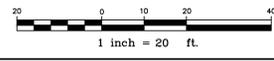


NOTES:
 1. ABANDONED WATER MAINS ARE SHOWN AT APPROXIMATE LOCATIONS.

NORTH STREET EXISTING CONDITIONS PLAN

1" = 20'

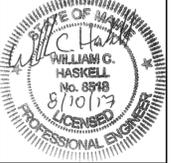
SEE SHEET 6 FOR WALNUT STREET



LDD PROJECT NAME:
N/A
 DRAWING NAME:
2835.13-PBASE
 FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 NORTH STREET
 EXISTING CONDITIONS

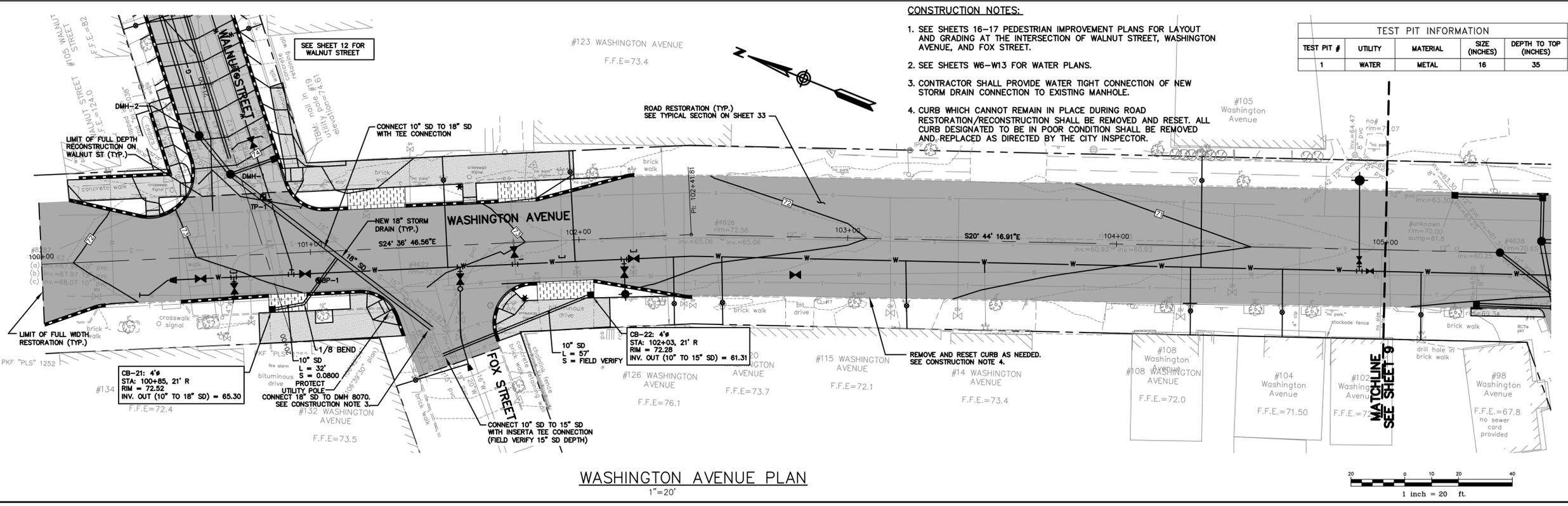
CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



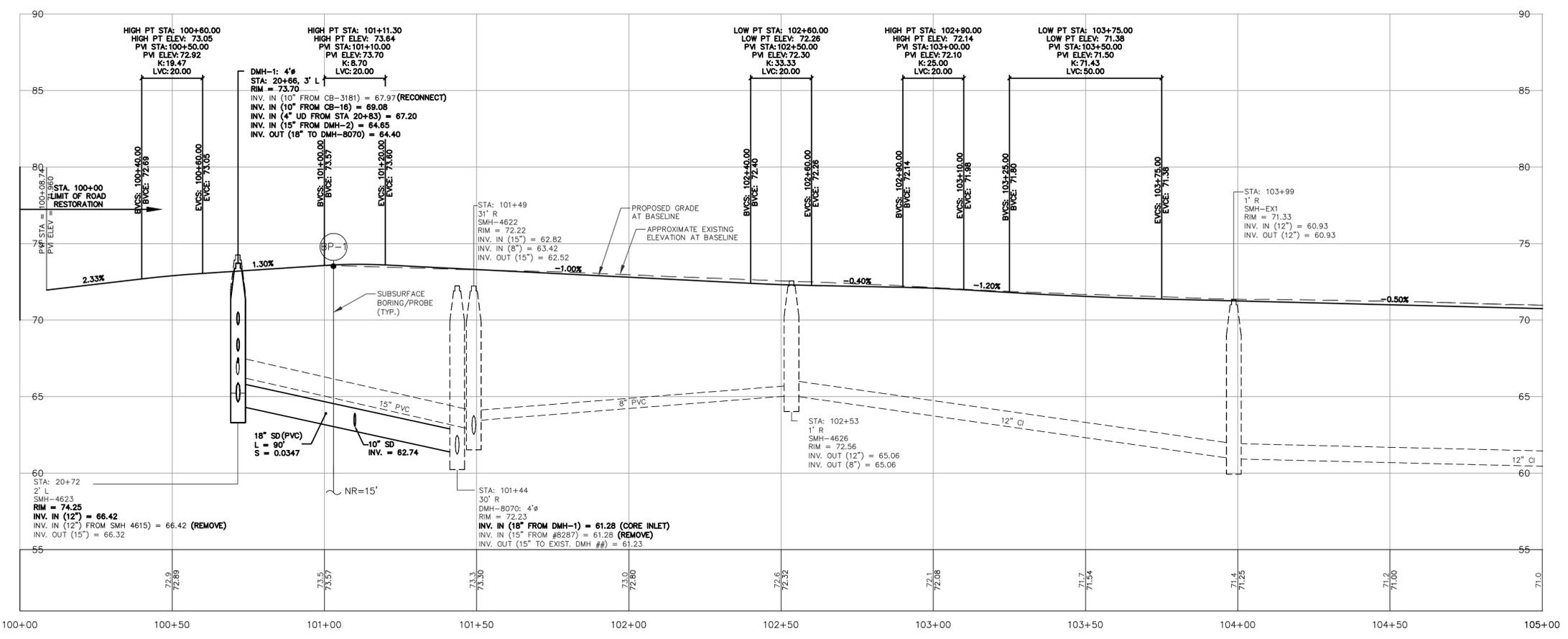
SHEET #
7 OF 38
 VAULT PLAN NUMBER



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WASHINGTON AVENUE PLAN
1"=20'



WASHINGTON AVENUE PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

- CONSTRUCTION NOTES:**
- SEE SHEETS 16-17 PEDESTRIAN IMPROVEMENT PLANS FOR LAYOUT AND GRADING AT THE INTERSECTION OF WALNUT STREET, WASHINGTON AVENUE, AND FOX STREET.
 - SEE SHEETS W6-W13 FOR WATER PLANS.
 - CONTRACTOR SHALL PROVIDE WATER TIGHT CONNECTION OF NEW STORM DRAIN CONNECTION TO EXISTING MANHOLE.
 - CURB WHICH CANNOT REMAIN IN PLACE DURING ROAD RESTORATION/RECONSTRUCTION SHALL BE REMOVED AND RESET. ALL CURB DESIGNATED TO BE IN POOR CONDITION SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE CITY INSPECTOR.

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-PBASE
FIELD BOOK USED: N/A

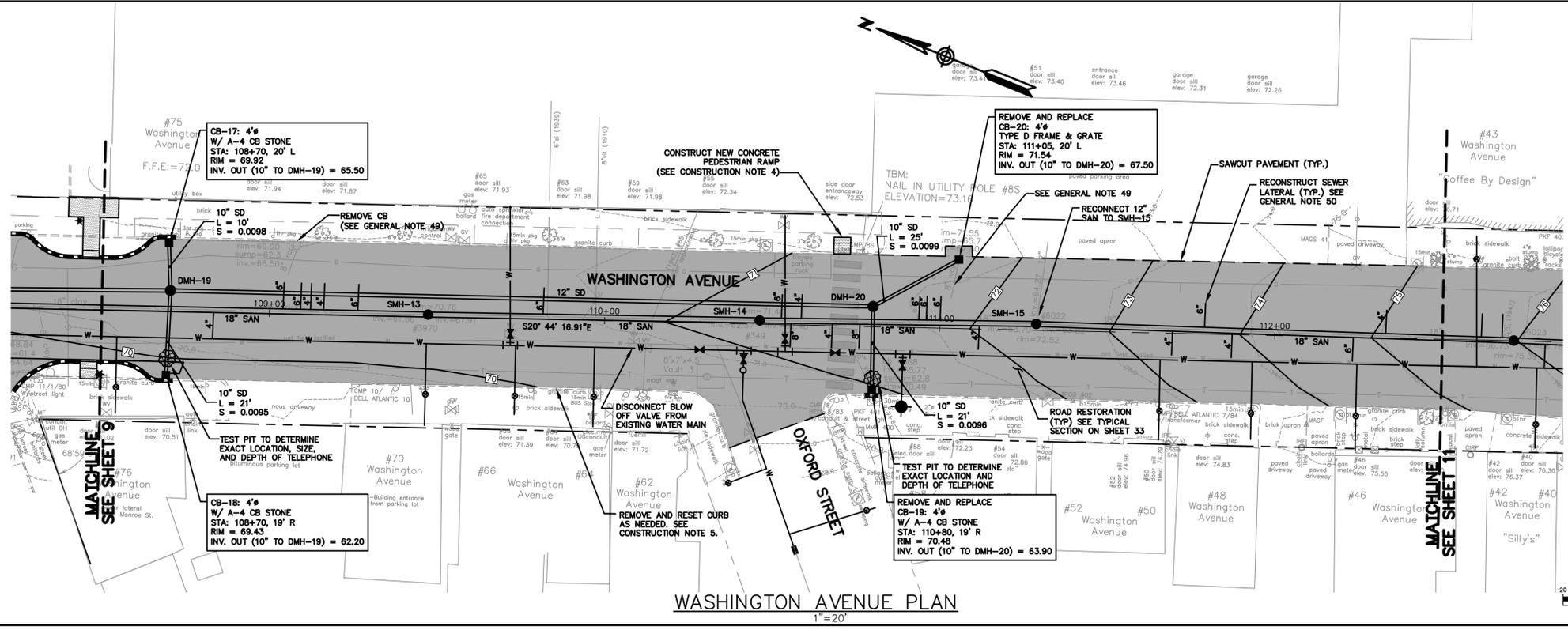
DESIGNED BY: OCC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
PLAN AND PROFILE

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



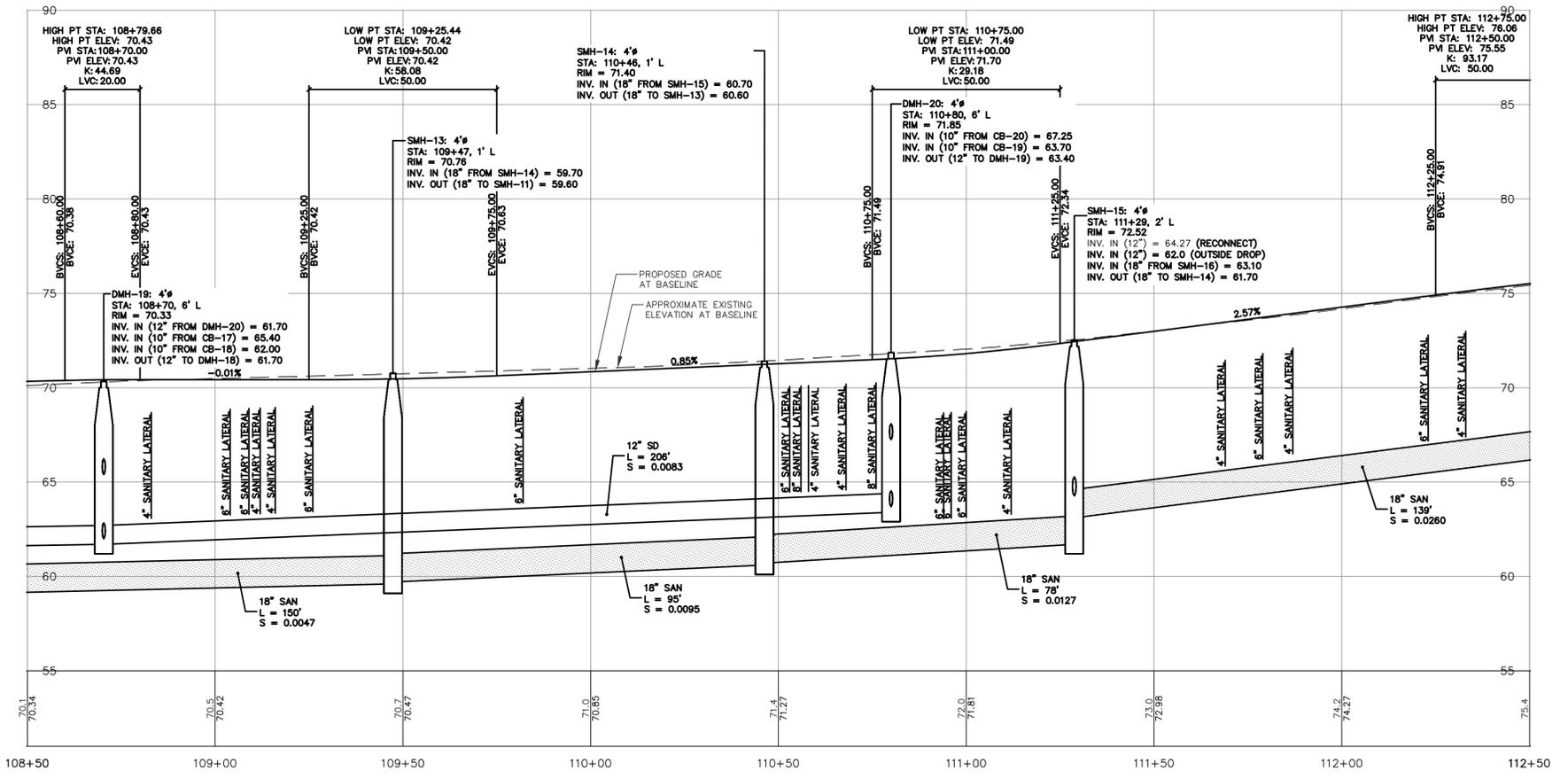


TELEPHONE VAULT KEY	
VAULT #	INSIDE DIMENSION (LxWxH)
3	8'x7'x4.5'

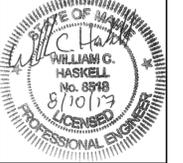
- CONSTRUCTION NOTES:**
- SEE SHEET 18, FOR PEDESTRIAN IMPROVEMENT PLANS, FOR LAYOUT AND GRADING AT THE INTERSECTION OF WASHINGTON AVENUE AND MONROE STREET.
 - SEE SHEETS W6-W13 FOR WATER PLANS.
 - EXISTING CONDITIONS OUTSIDE OF THE ROADWAY FROM STA. 108+50 TO STA. 116+00 WERE NOT OBTAINED IN SURVEY COMPLETED BY TITCOMB ASSOCIATES. UTILITY POLES, SIDEWALK, DRIVEWAYS, AND OTHER EXISTING CONDITIONS WERE SURVEYED BY THE CITY.
 - EXACT LOCATION OF PEDESTRIAN RAMP SHALL BE FIELD VERIFIED WITH CITY INSPECTOR.
 - CURB WHICH CANNOT REMAIN IN PLACE DURING ROAD RESTORATION/RECONSTRUCTION SHALL BE REMOVED AND RESET. ALL CURB DESIGNATED TO BE IN POOR CONDITION SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE CITY INSPECTOR.

LDD PROJECT NAME: N/A
 DRAWING NAME: 2835.13-PBASE
 FIELD BOOK USED: N/A

DESIGNED BY: OCC
 DRAWN BY: LAN
 CHECKED BY: WCH
 SCALE: AS NOTED
 DATE: AUGUST 2017



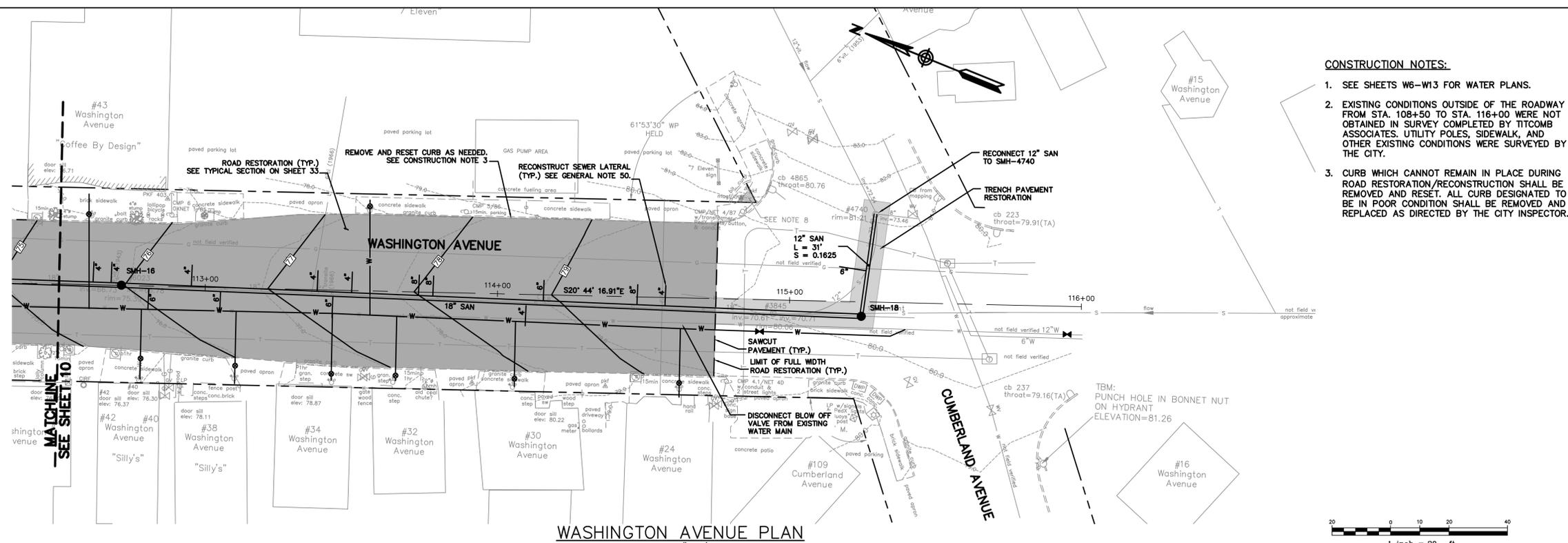
WASHINGTON AVENUE PROFILE
 1"=20' HORIZONTAL
 1"=4' VERTICAL



MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 WASHINGTON AVENUE
 PLAN AND PROFILE

CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION

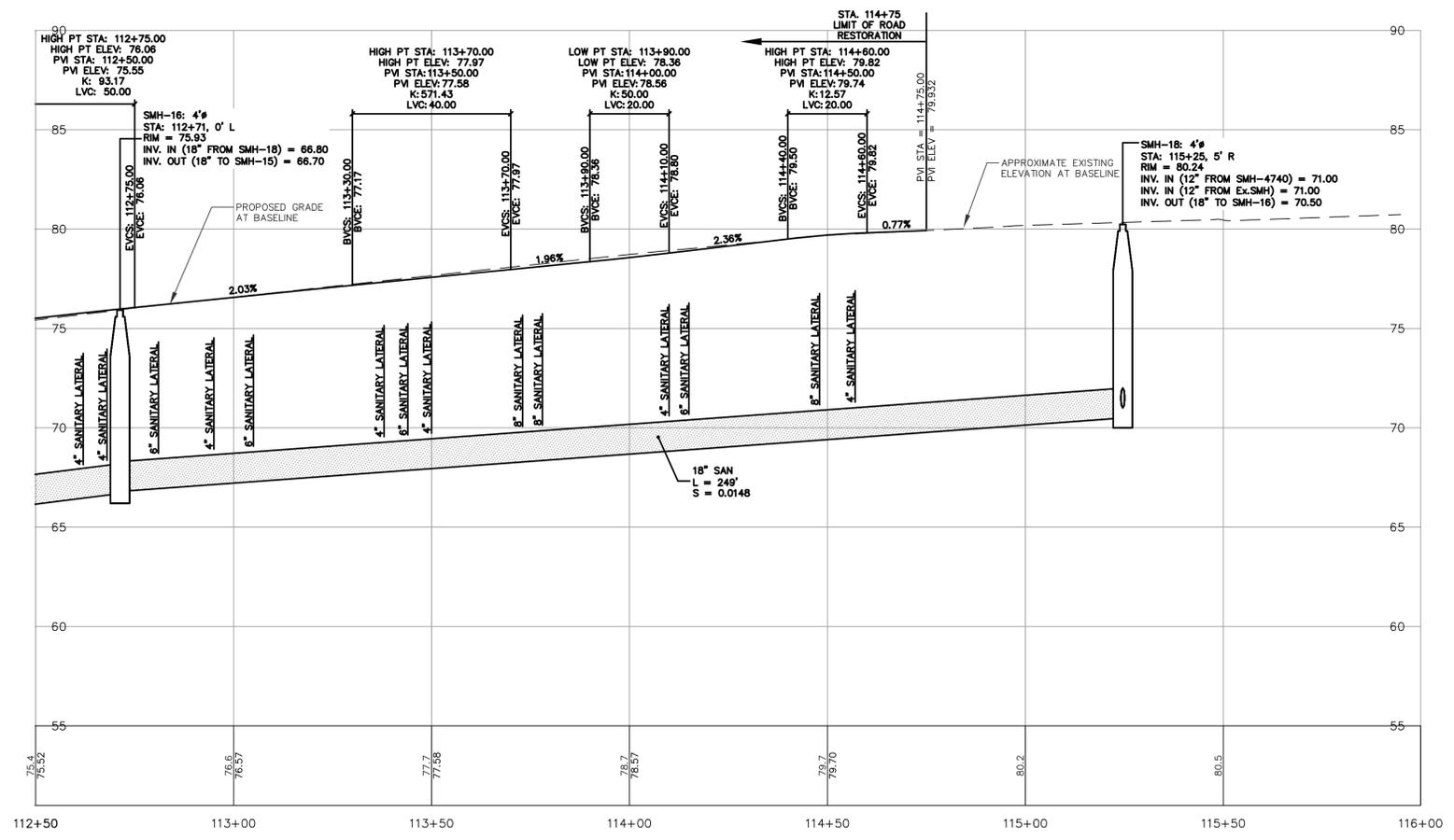




- CONSTRUCTION NOTES:**
1. SEE SHEETS W6-W13 FOR WATER PLANS.
 2. EXISTING CONDITIONS OUTSIDE OF THE ROADWAY FROM STA. 108+50 TO STA. 116+00 WERE NOT OBTAINED IN SURVEY COMPLETED BY TITCOMB ASSOCIATES. UTILITY POLES, SIDEWALK, AND OTHER EXISTING CONDITIONS WERE SURVEYED BY THE CITY.
 3. CURB WHICH CANNOT REMAIN IN PLACE DURING ROAD RESTORATION/RECONSTRUCTION SHALL BE REMOVED AND RESET. ALL CURB DESIGNATED TO BE IN POOR CONDITION SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE CITY INSPECTOR.



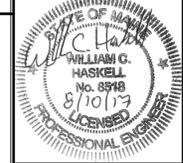
WASHINGTON AVENUE PLAN
1"=20'



WASHINGTON AVENUE PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

DESIGNED BY: **CC**
 DRAWN BY: **LAN**
 CHECKED BY: **WCH**
 SCALE: **AS NOTED**
 DATE: **AUGUST 2017**

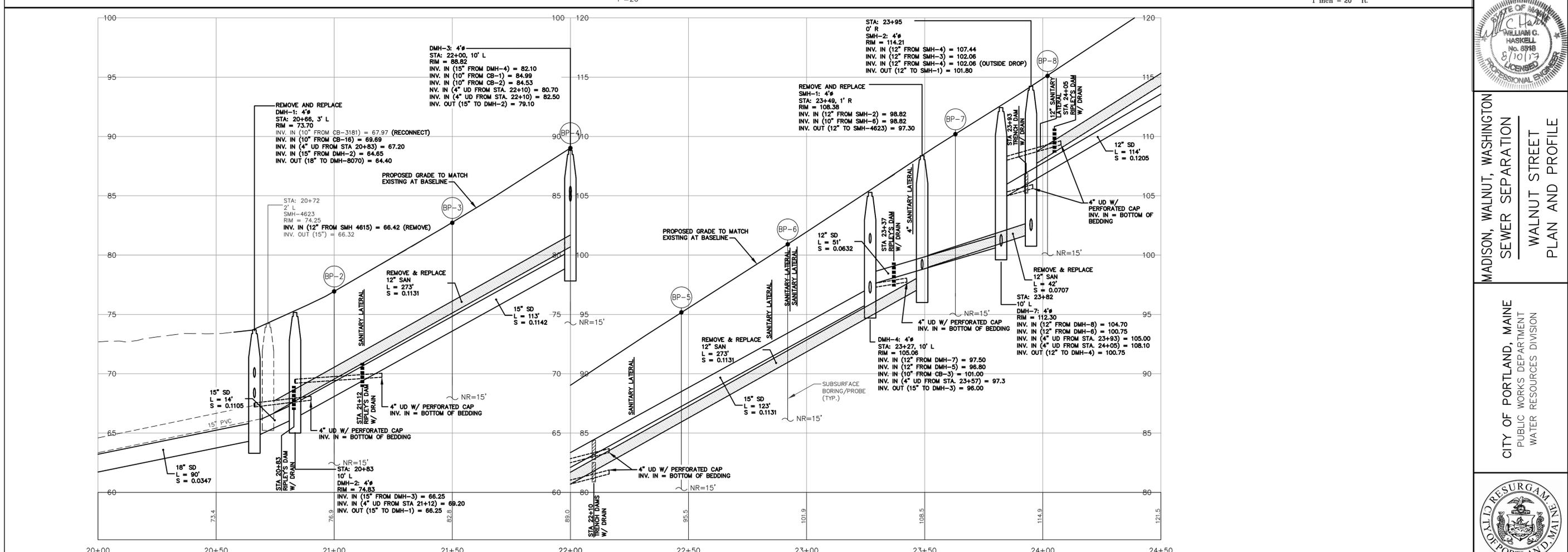
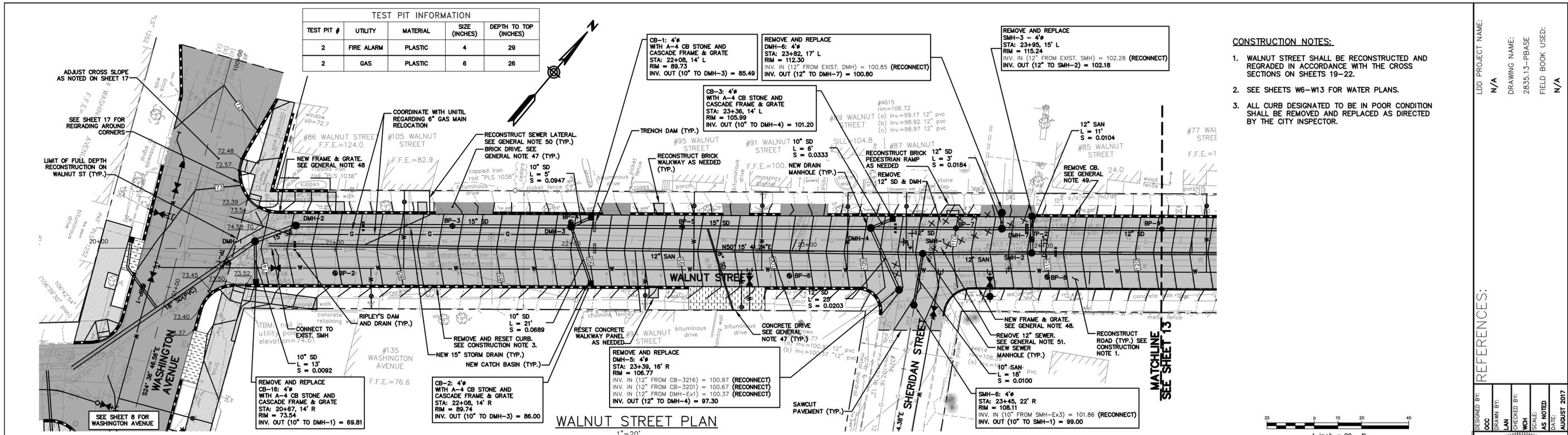
DESIGNED BY: **CC**
 DRAWN BY: **LAN**
 CHECKED BY: **WCH**
 SCALE: **AS NOTED**
 DATE: **AUGUST 2017**



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
PLAN AND PROFILE

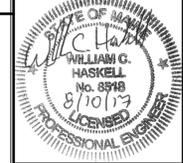
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION





DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 AS NOTED DATE: AUGUST 2017

DD PROJECT NAME: N/A
 DRAWING NAME: 2835.13-PBASE
 FIELD BOOK USED: N/A



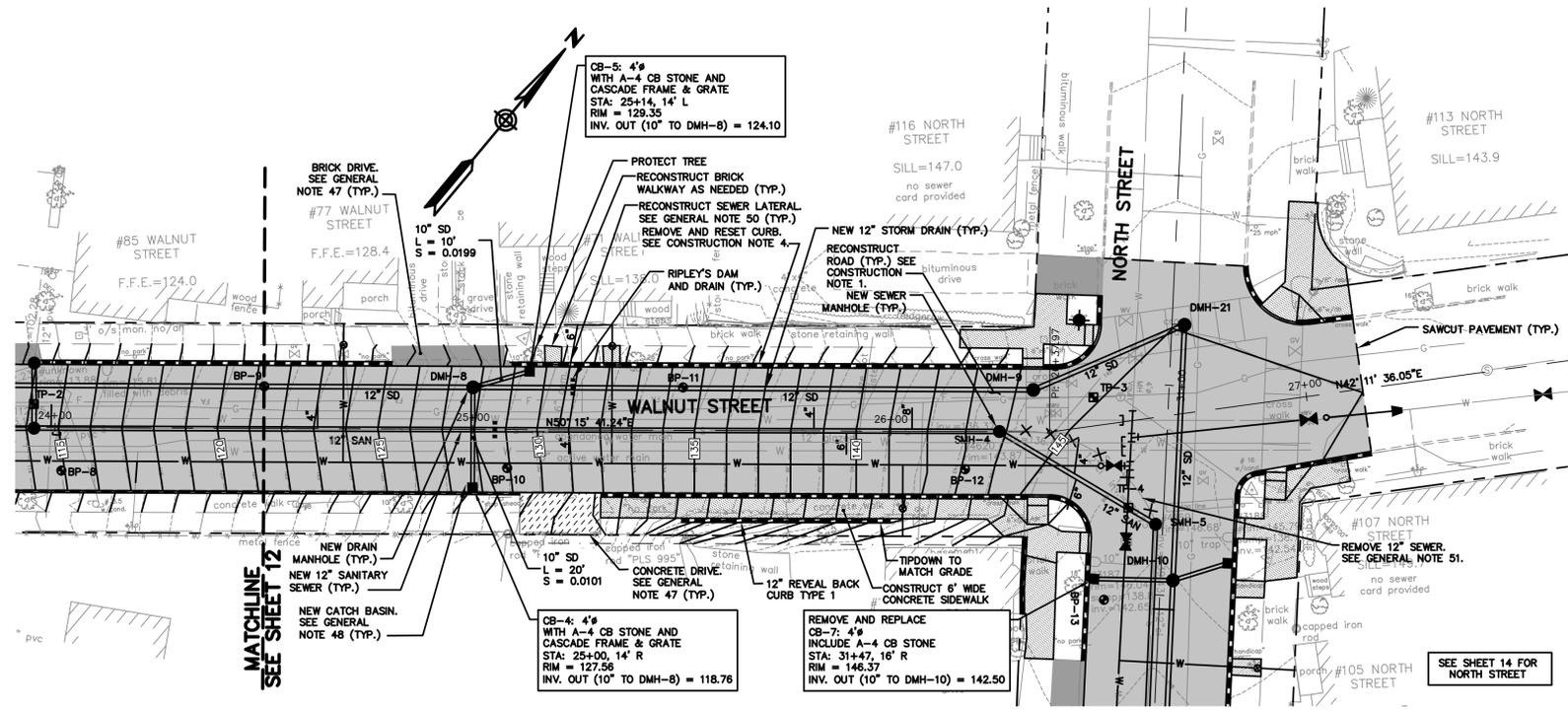
MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 WALNUT STREET
 PLAN AND PROFILE

CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



SHEET # 12 OF 38
 VAULT PLAN NUMBER

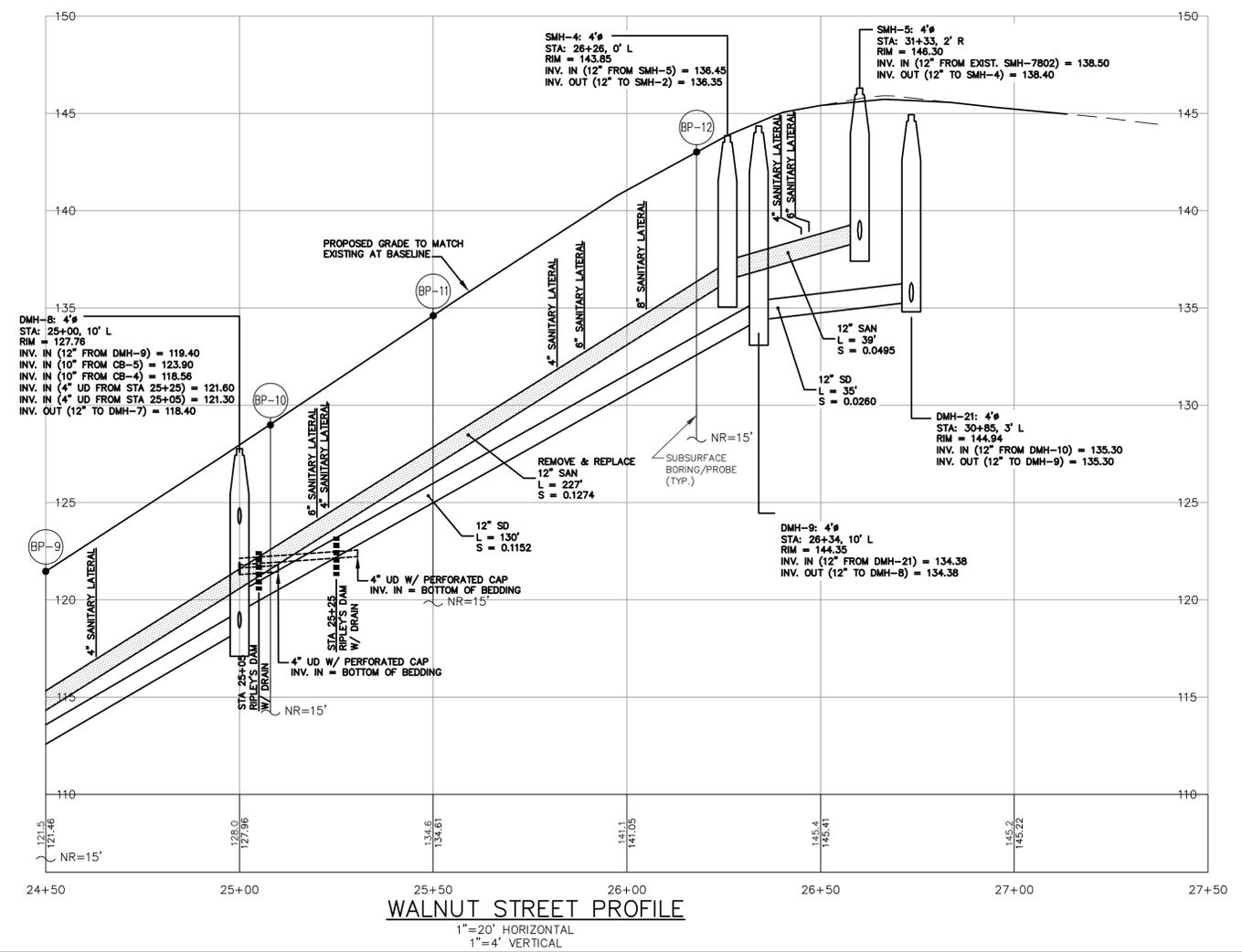
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WALNUT STREET PLAN
1"=20'

TEST PIT INFORMATION					
TEST PIT #	UTILITY	MATERIAL	SIZE (INCHES)	DEPTH TO TOP (INCHES)	NOTES
3	FIRE ALARM	PLASTIC	4	38	
3	GAS	PLASTIC	6	29	
4	WATER	METAL	12	53	
4	ABAND. GAS	METAL	4	25	LOCATED 18" RIGHT FROM EXISTING WATER

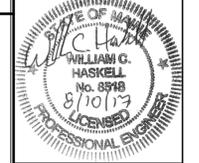
- CONSTRUCTION NOTES:**
1. WALNUT STREET SHALL BE RECONSTRUCTED AND REGRADED IN ACCORDANCE WITH THE CROSS SECTIONS ON SHEETS 19-22.
 2. SEE SHEETS W6-W13 FOR WATER PLANS.
 3. SEE SHEET 15 PEDESTRIAN IMPROVEMENTS PLAN FOR LAYOUT AND GRADING AT THE INTERSECTION OF WALNUT STREET AND NORTH STREET.
 4. ALL CURB DESIGNATED TO BE IN POOR CONDITION SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE CITY INSPECTOR.



WALNUT STREET PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-PHASE
FIELD BOOK USED: N/A

DESIGNED BY: JCC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT STREET
PLAN AND PROFILE

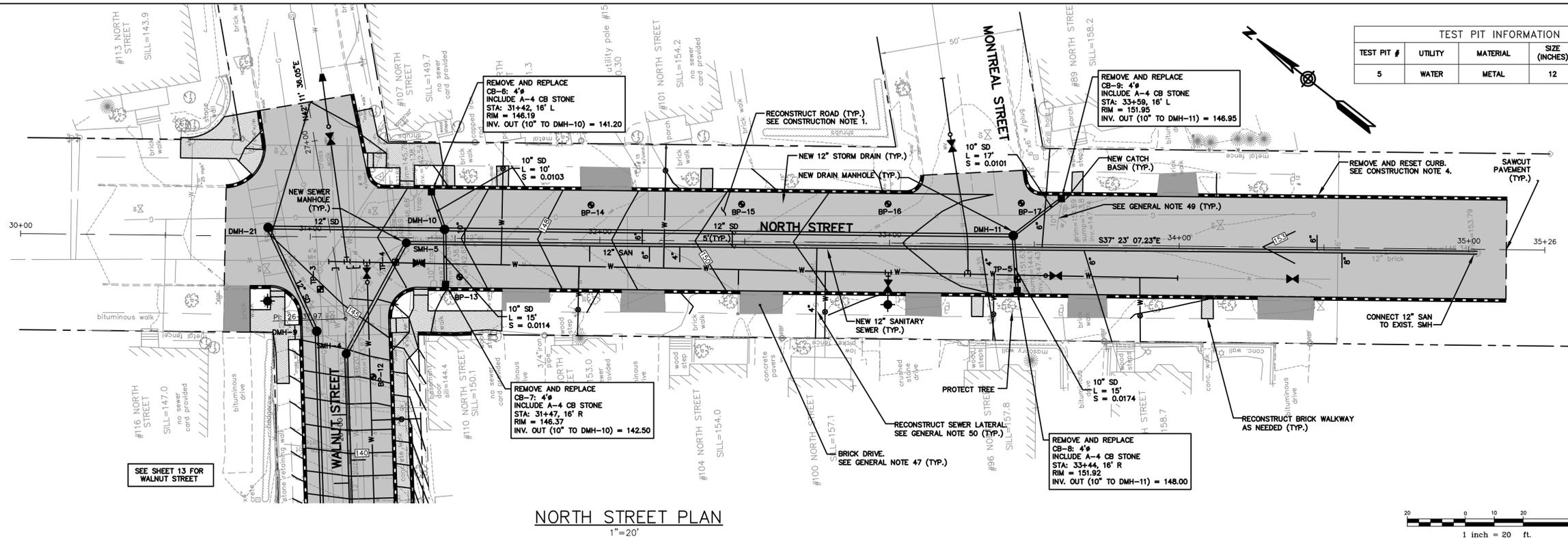
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



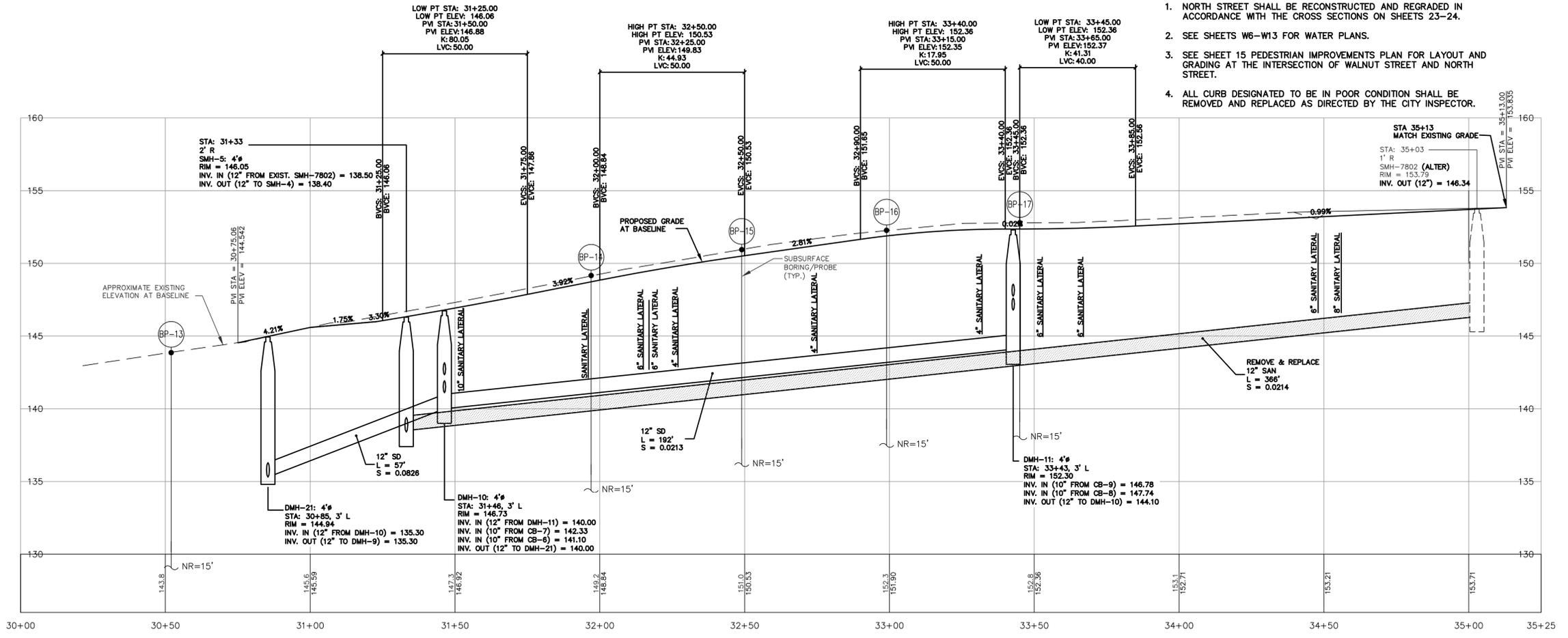
SHEET # 13 OF 38
VAULT PLAN NUMBER



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NORTH STREET PLAN
1"=20'



NORTH STREET PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

LDD PROJECT NAME: N/A
DRAWING NAME: 2635.13-PHASE
FIELD BOOK USED: N/A

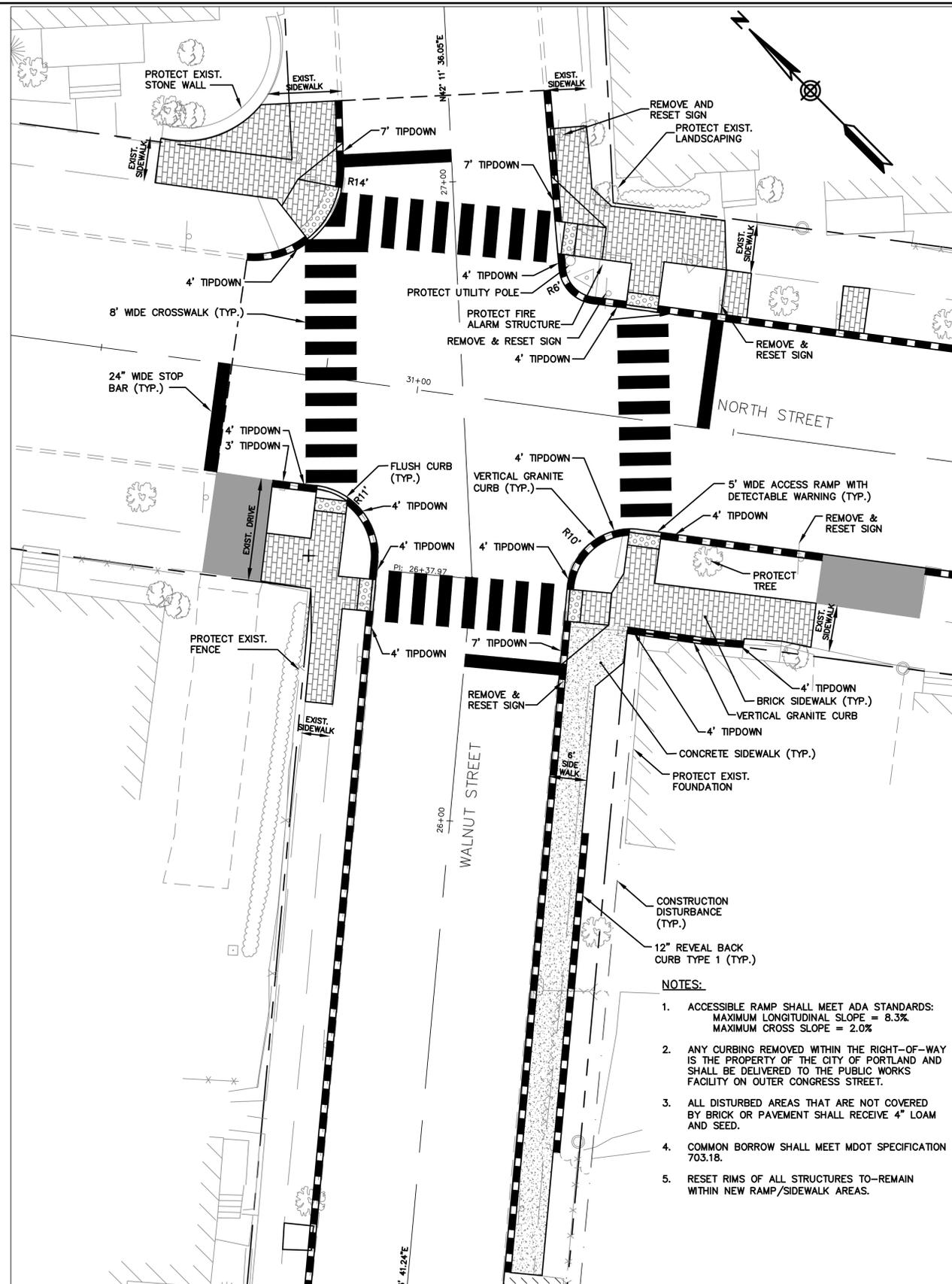
DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
SCALE: AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
NORTH STREET
PLAN AND PROFILE

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



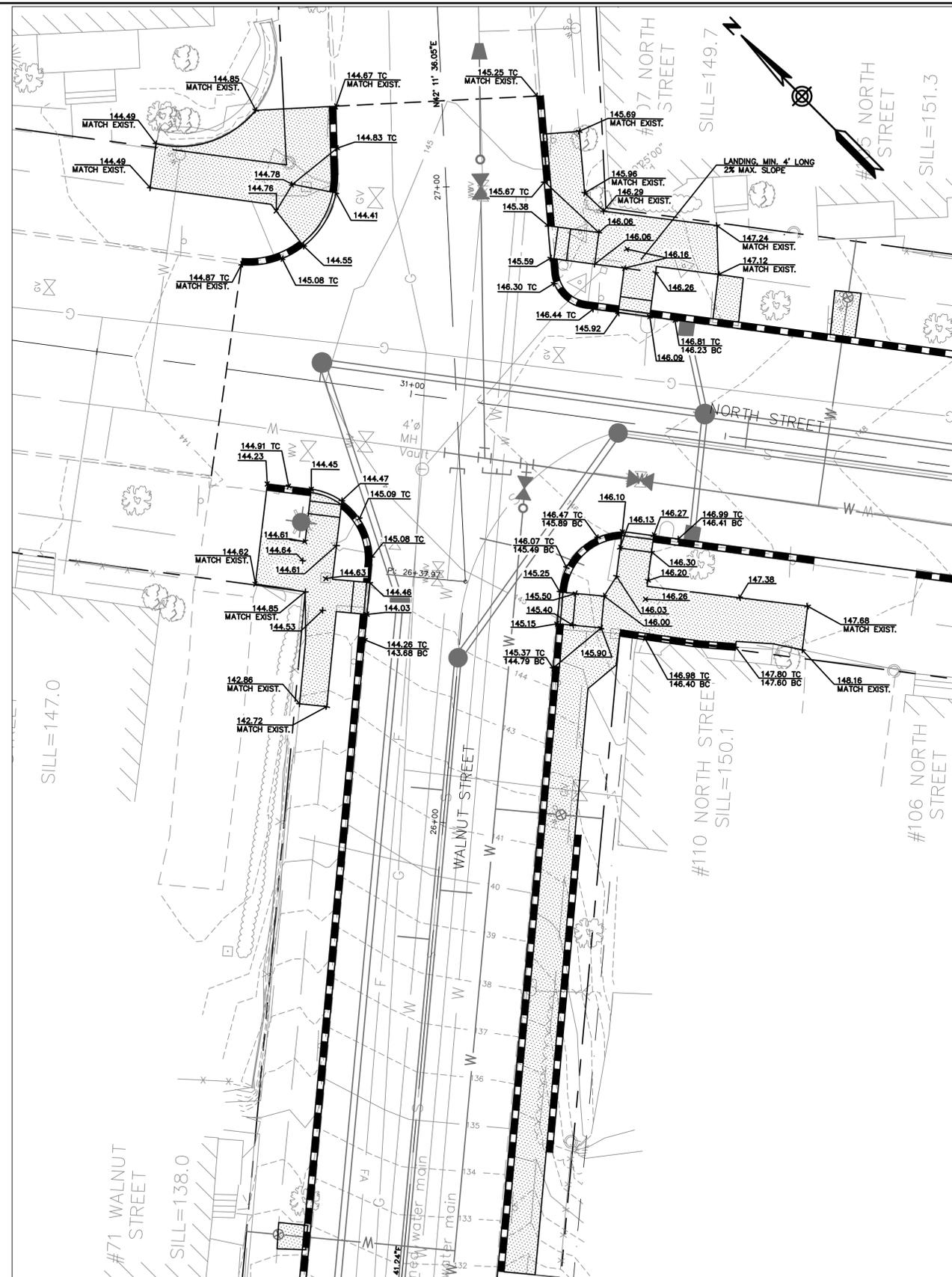


WALNUT STREET/NORTH STREET CROSSWALK LAYOUT PLAN

1"=10'

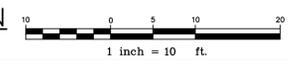
NOTES:

1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 8.3%
MAXIMUM CROSS SLOPE = 2.0%
2. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
3. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
4. COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
5. RESET RIMS OF ALL STRUCTURES TO REMAIN WITHIN NEW RAMP/SIDEWALK AREAS.



WALNUT STREET/NORTH STREET CROSSWALK GRADING PLAN

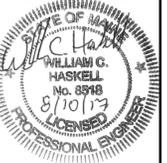
1"=10'



LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.22-INT-DET
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY: [blank]
DRAWN BY: [blank]
CHECKED BY: [blank]
SCALE: [blank]
AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT/WASHINGTON
CROSSWALK DETAIL

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



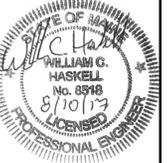
SHEET #
15 OF 38
VAULT PLAN NUMBER



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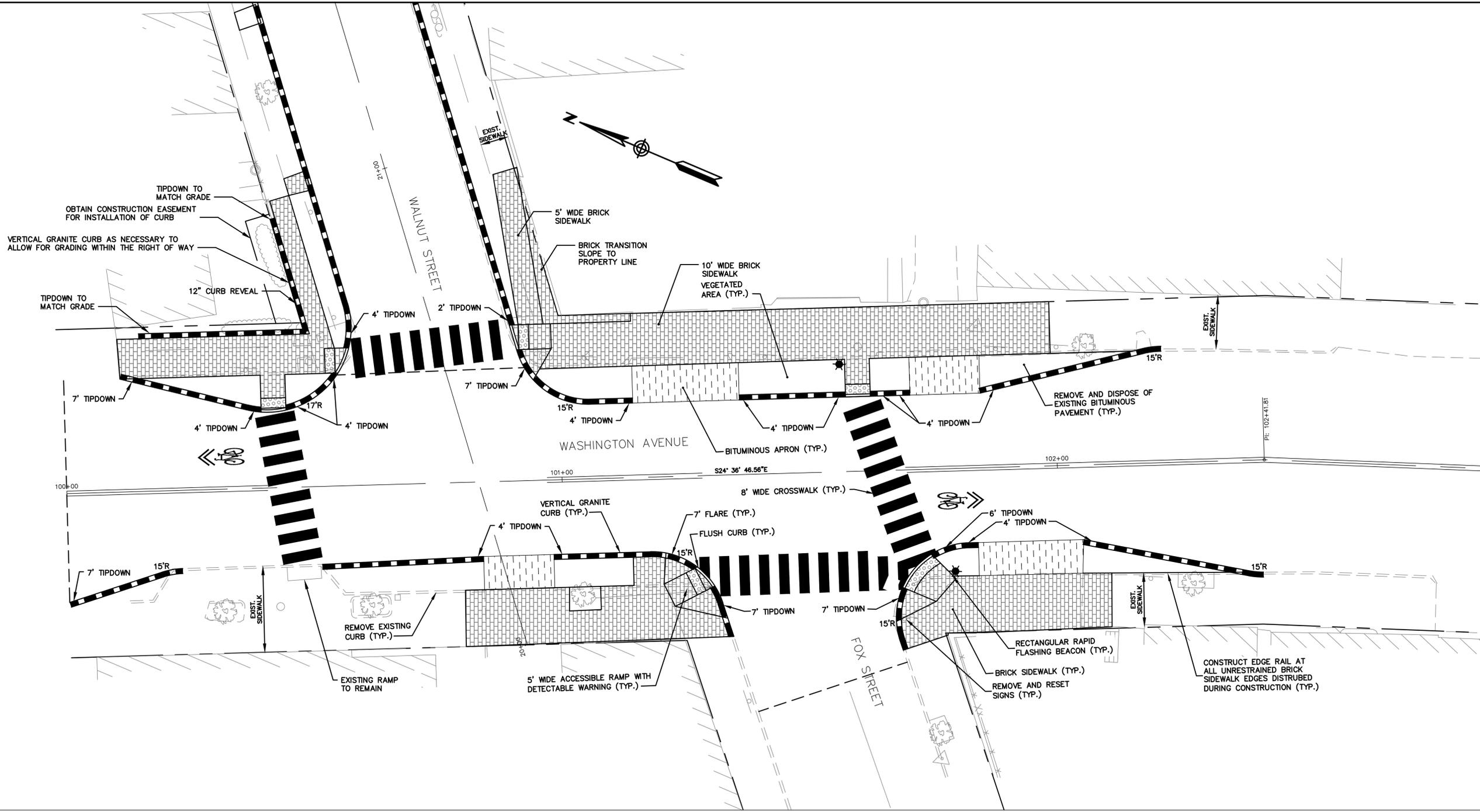
REFERENCES:

DESIGNED BY:	OCC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 WALNUT/WASHINGTON/FOX
 CROSSWALK DETAIL

CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



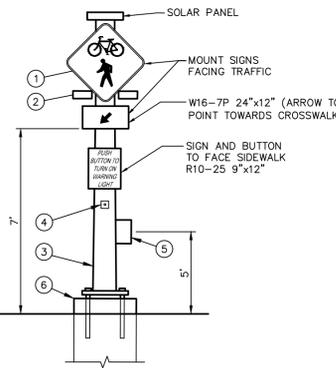
WASHINGTON AVENUE/WALNUT STREET/FOX STREET CROSSWALK LAYOUT PLAN
 1"=10'

CONSTRUCTION NOTES:

- 30"x30" SIGN W11-15
- 12" YELLOW RECTANGULAR RAPID FLASHING BEACONS (BLACK HOUSING) SET TO HIGH VISIBILITY STROBE PATTERN - MOUNTED FACING TRAFFIC
- MAINEDOT PEDESTAL POLE
- PEDESTRIAN PUSH BUTTON
- POLE MOUNTED NETWORK CONTROLLER
- 18" CONCRETE FOUNDATION PER MAINEDOT STANDARDS

GENERAL NOTES:

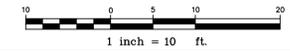
- ALL LIGHTS AND PEDESTRIAN PUSH BUTTONS SHALL BE JSP TECHNOLOGIES OR EQUAL
- POLE SHALL BE PAINTED MATTE BLACK
- LIGHTS SHALL FLASH FOR 30 SECONDS (AS NOTED)
- SIGNS W11-15 AND W16-7P SHALL BE FLUORESCENT YELLOW-GREEN BACKGROUND COLOR. SEE SUPPLEMENTAL SPECIFICATION 643 (RECTANGULAR RAPID FLASHING BEACON).
- UPON ACTIVATION FROM EITHER SIDE, THE RRFB ON EACH SIDE OF THE CROSSWALK SHALL FLASH SIMULTANEOUSLY.



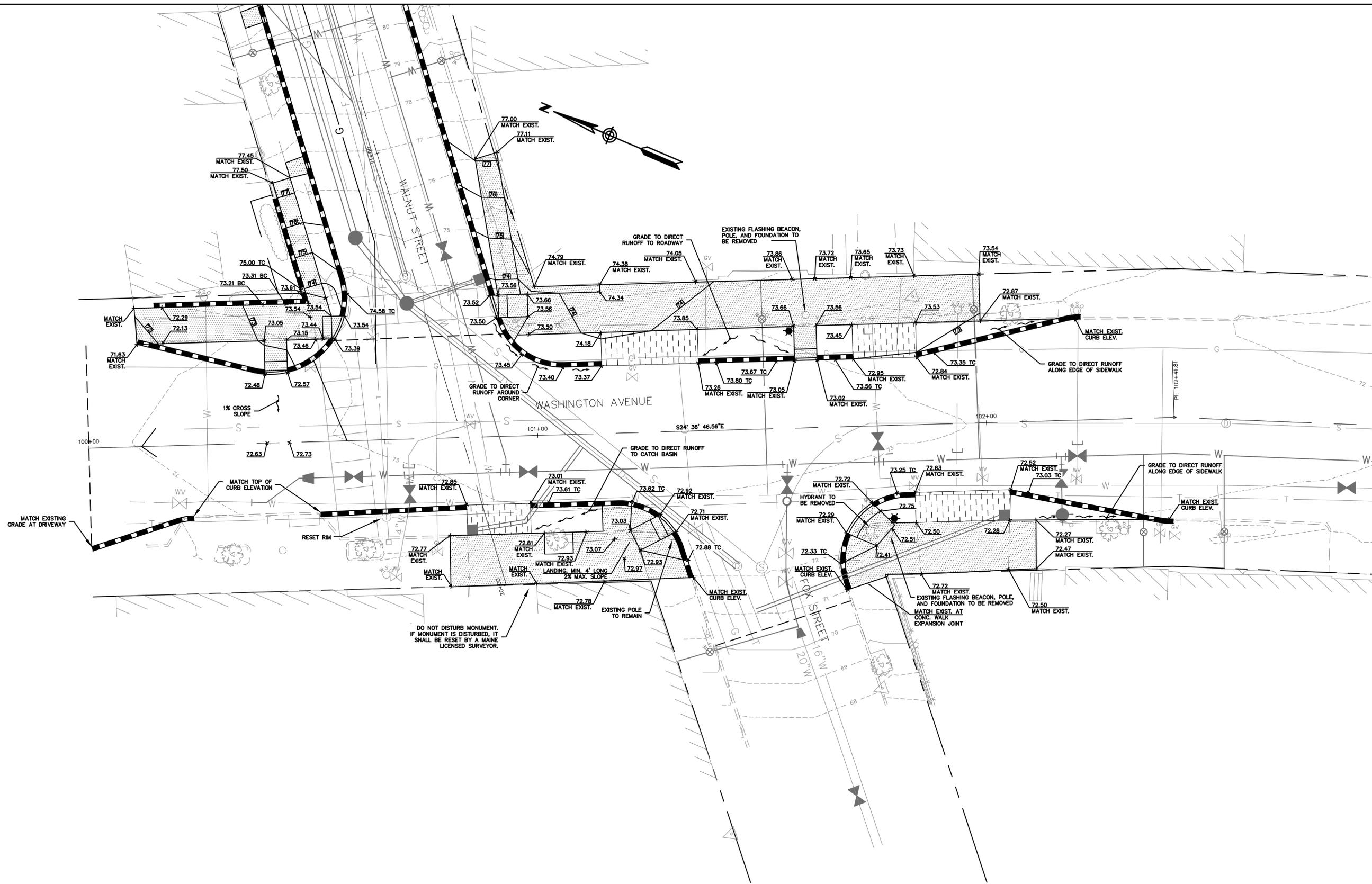
NOTES:

- ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
 MAXIMUM LONGITUDINAL SLOPE = 8.3%
 MAXIMUM CROSS SLOPE = 2.0%
- ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
- ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
- COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
- RESET RIMS OF ALL STRUCTURES TO-REMAIN WITHIN NEW RAMP/SIDEWALK AREAS.
- ALL WORK TO CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES AND STANDARD DETAILS.
- ALL PROPOSED WORK SHALL BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", "STANDARD HIGHWAY SIGNS", U.S.D.O.T., F.H.W.A., LATEST EDITION.

RECTANGULAR RAPID FLASHING BEACON ASSEMBLY DETAIL
 (SOLAR POWERED, RADIO ACTIVATED)
 NOT TO SCALE



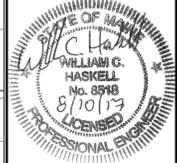
Relationships. Responsiveness. Results.
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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.22-INT-DET
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY: OOC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT/WASHINGTON/FOX
CROSSWALK DETAIL

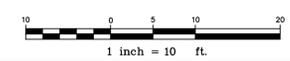
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



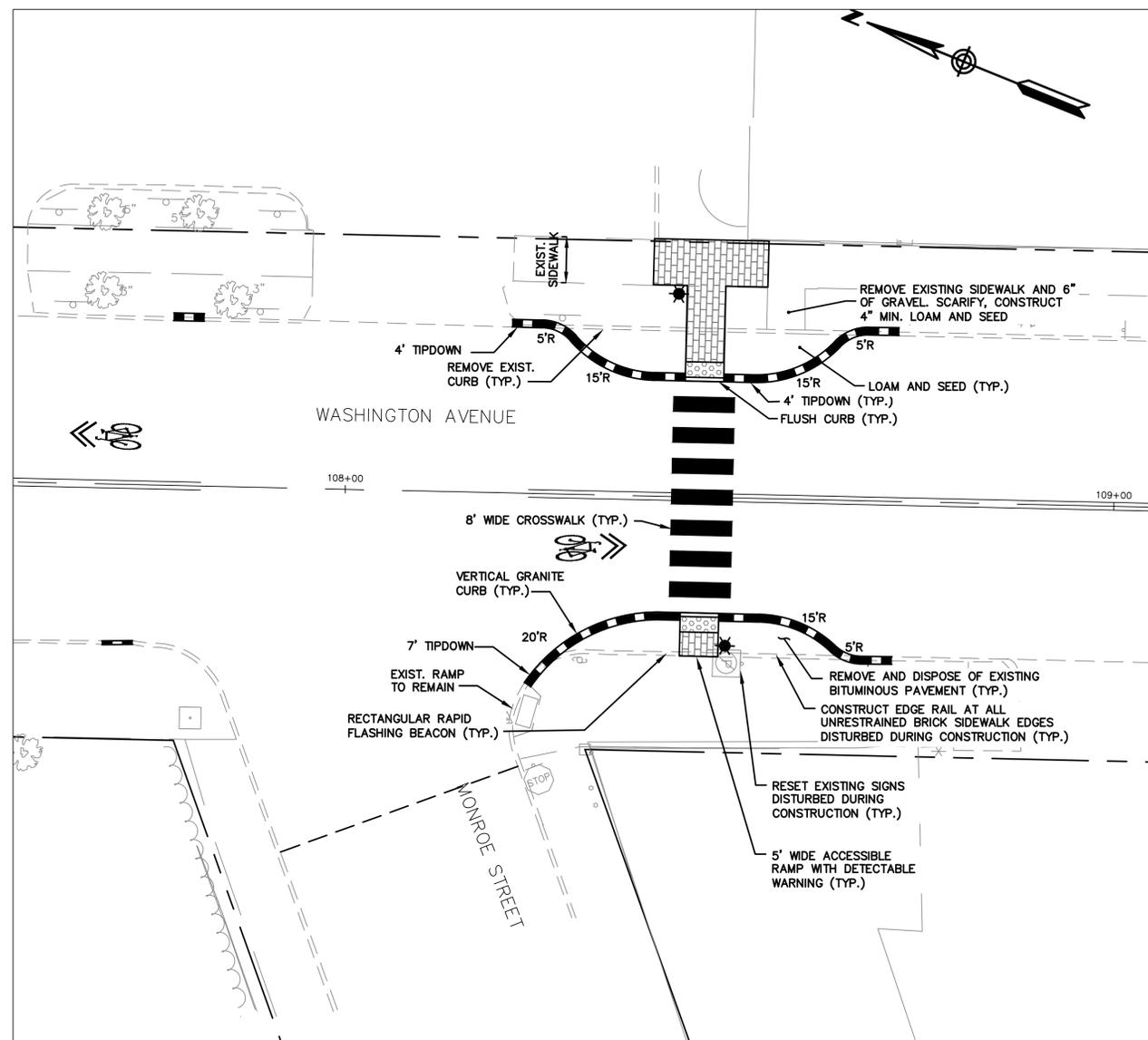
SHEET #
17 OF 38
VAULT PLAN NUMBER

WASHINGTON AVENUE/WALNUT STREET/FOX STREET CROSSWALK GRADING PLAN

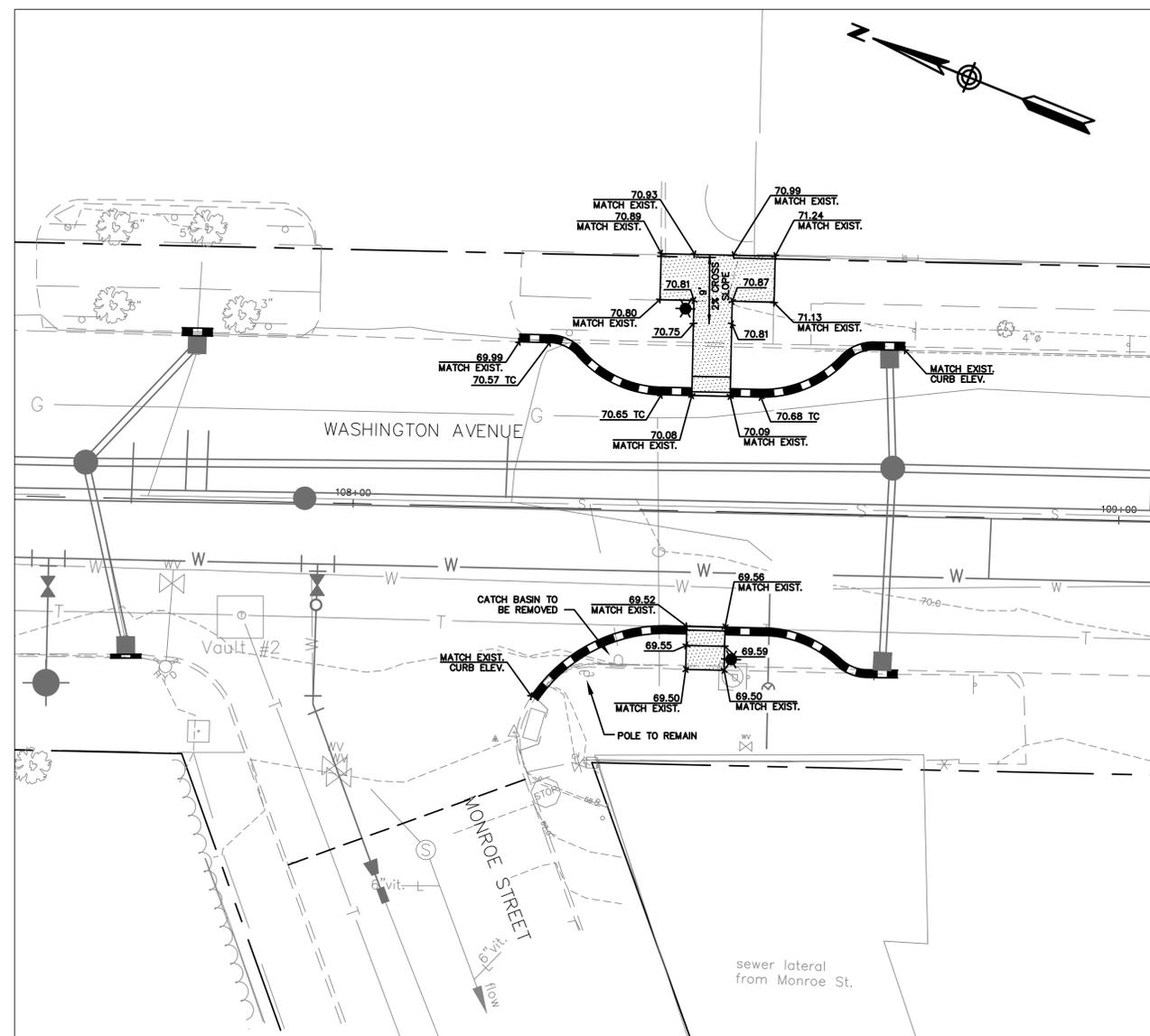
1"=10'



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WASHINGTON AVE/MONROE STREET CROSSWALK LAYOUT PLAN
1"=10'



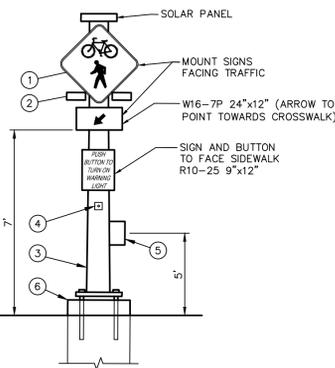
WASHINGTON AVE/MONROE STREET CROSSWALK GRADING PLAN
1"=10'

CONSTRUCTION NOTES:

1. 30"x30" SIGN W11-15
2. 12" YELLOW RECTANGULAR RAPID FLASHING BEACONS (BLACK HOUSING) SET TO HIGH VISIBILITY STROBE PATTERN - MOUNTED FACING TRAFFIC
3. MAINE DOT PEDESTAL POLE
4. PEDESTRIAN PUSH BUTTON
5. POLE MOUNTED NETWORK CONTROLLER
6. 18" CONCRETE FOUNDATION PER MAINE DOT STANDARDS

GENERAL NOTES:

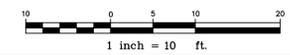
7. ALL LIGHTS AND PEDESTRIAN PUSH BUTTONS SHALL BE JSF TECHNOLOGIES OR EQUAL.
8. POLE SHALL BE PAINTED MATTE BLACK
9. LIGHTS SHALL FLASH FOR 30 SECONDS (AS NOTED)
10. SIGNS W11-15 AND W16-7P SHALL BE FLUORESCENT YELLOW-GREEN BACKGROUND COLOR
11. SEE SUPPLEMENTAL SPECIFICATION 643 (RECTANGULAR RAPID FLASHING BEACON).
12. UPON ACTIVATION FROM EITHER SIDE, THE RRFB ON EACH SIDE OF THE CROSSWALK SHALL FLASH SIMULTANEOUSLY.



RECTANGULAR RAPID FLASHING BEACON ASSEMBLY DETAIL
(SOLAR POWERED, RADIO ACTIVATED)
NOT TO SCALE

NOTES:

1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS: MAXIMUM LONGITUDINAL SLOPE = 8.3% MAXIMUM CROSS SLOPE = 2.0%
2. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
3. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
4. COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
5. RESET RIMS OF ALL STRUCTURES TO-REMAIN WITHIN NEW RAMP/SIDEWALK AREAS.
6. ALL WORK TO CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES AND STANDARD DETAILS.
7. ALL PROPOSED WORK SHALL BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", "STANDARD HIGHWAY SIGNS", U.S.D.O.T., F.H.W.A., LATEST EDITION.



LDD PROJECT NAME: N/A
DRAWING NAME: 2835.22-INT-DET
FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: OOC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON/MONROE
CROSSWALK DETAIL

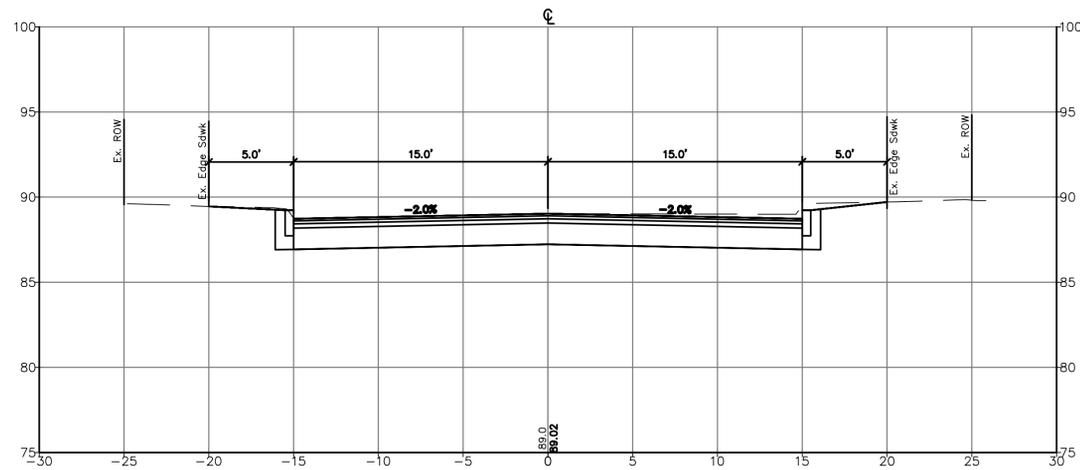
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



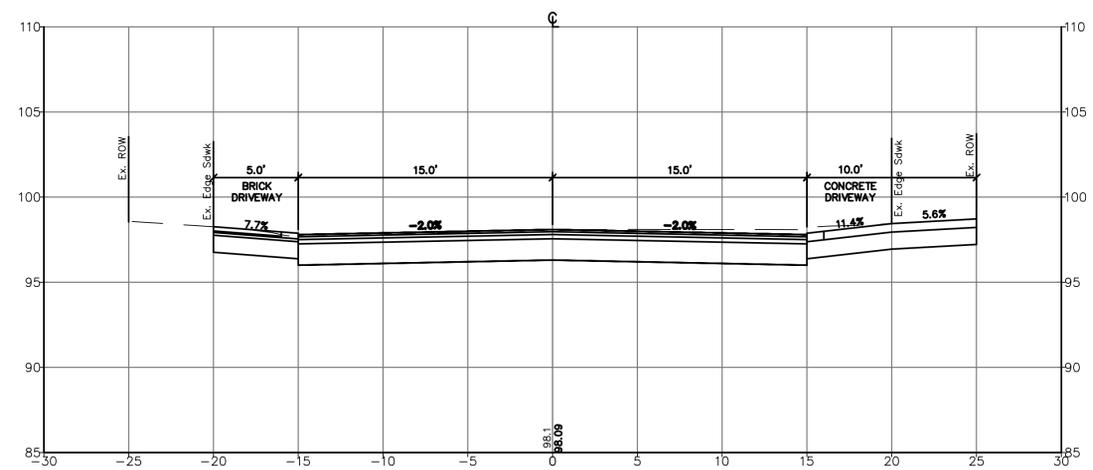
SHEET #
18 OF 38
VAULT PLAN NUMBER



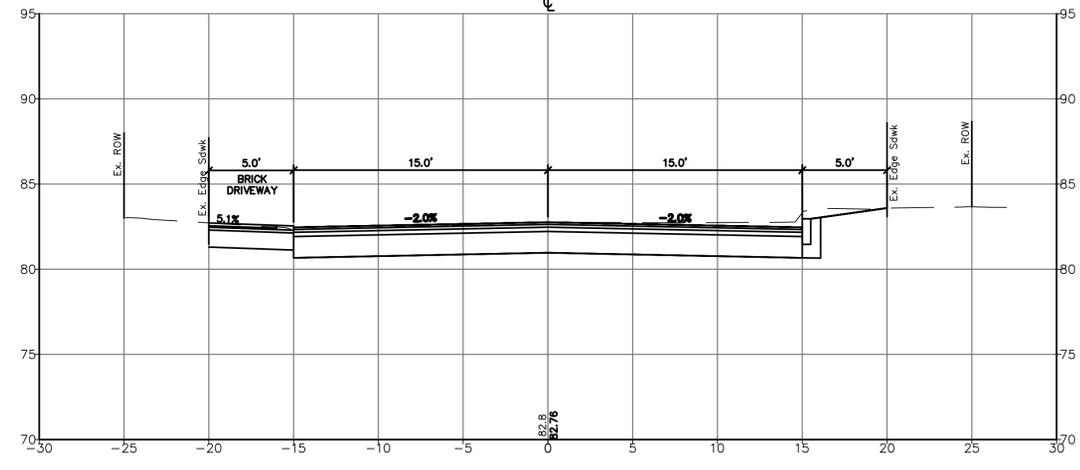
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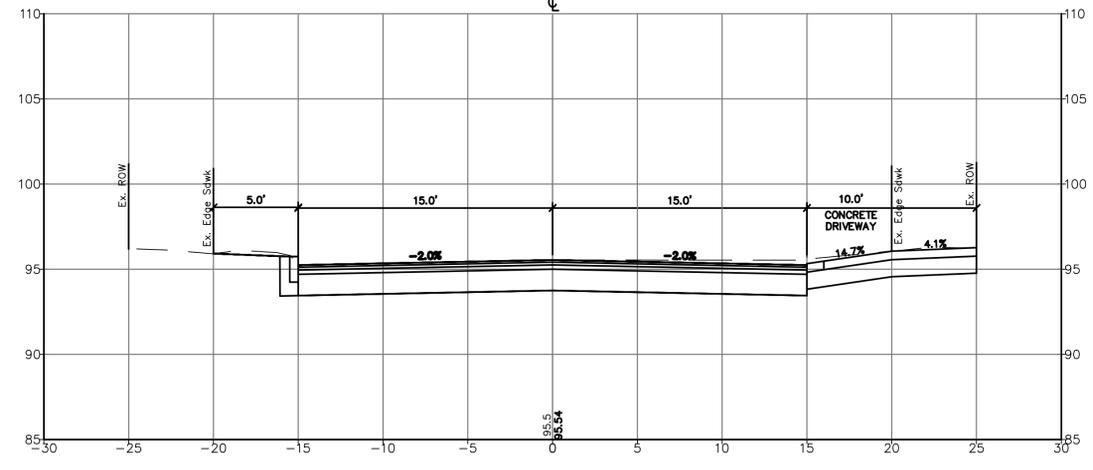
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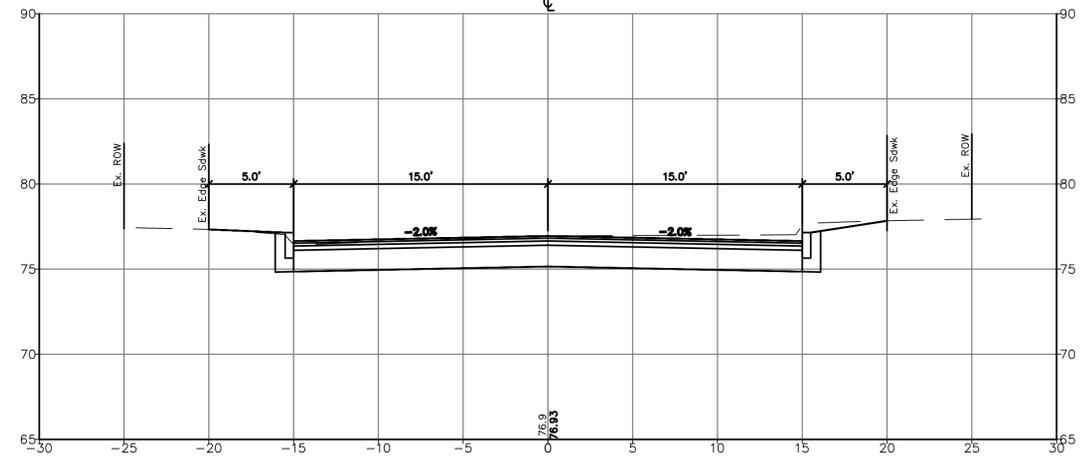
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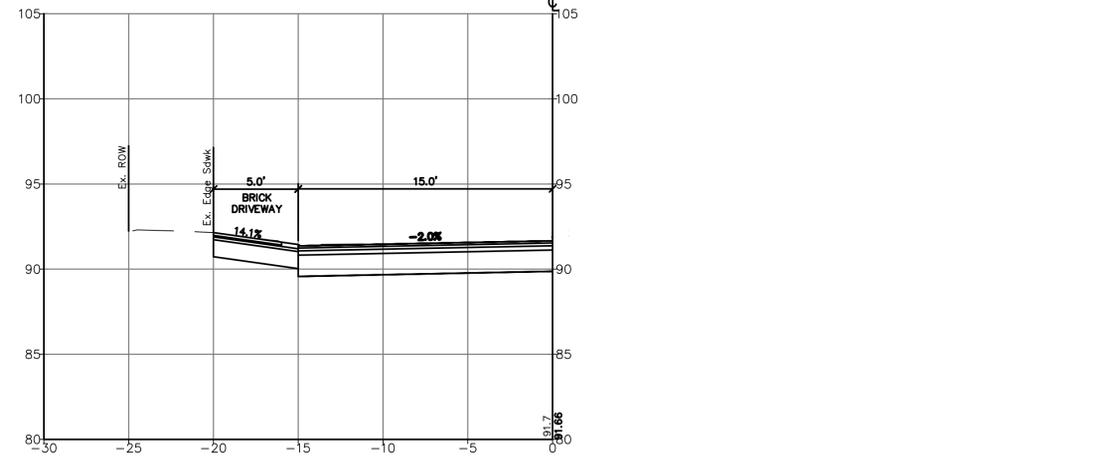
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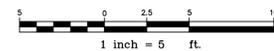
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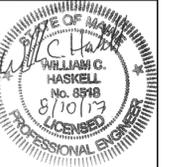
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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PBASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT STREET
CROSS SECTIONS

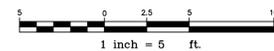
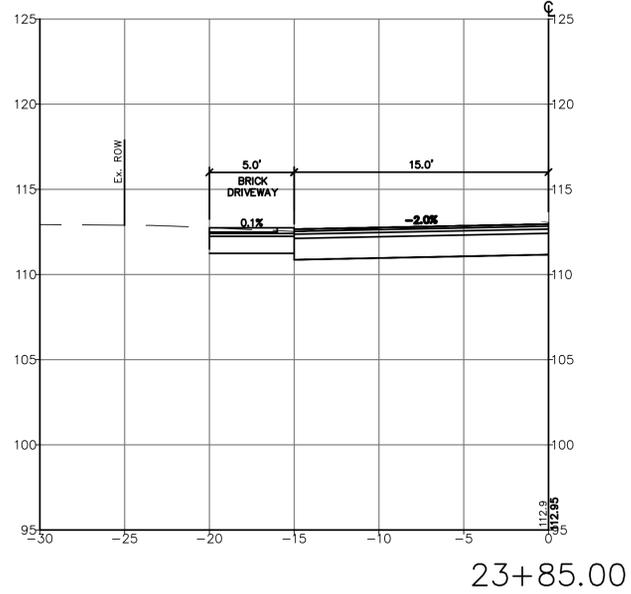
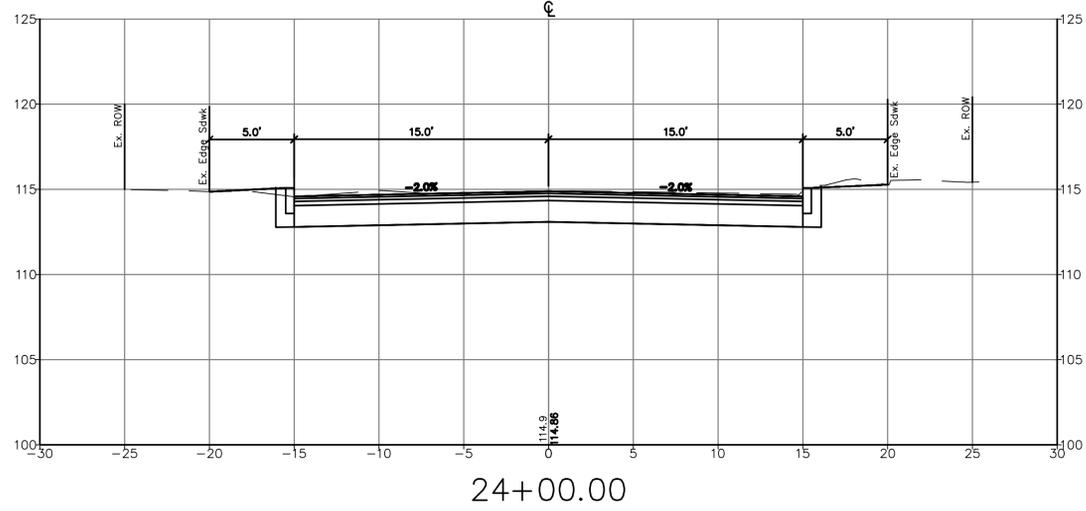
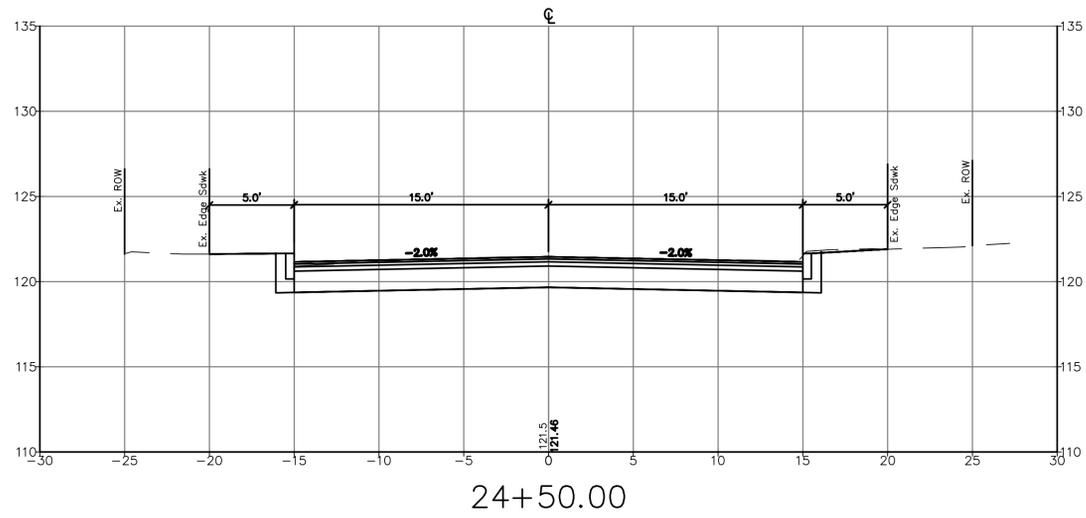
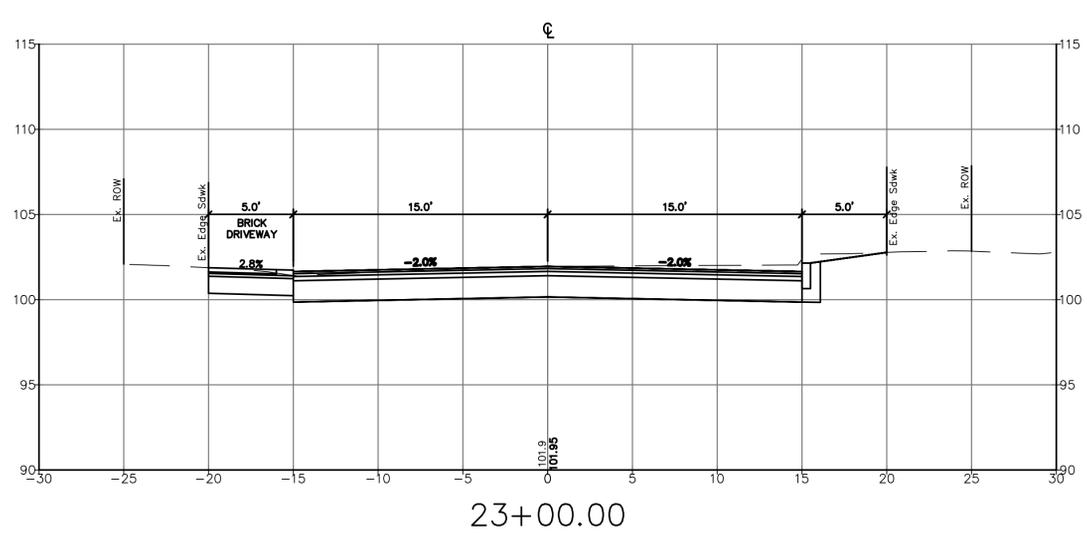
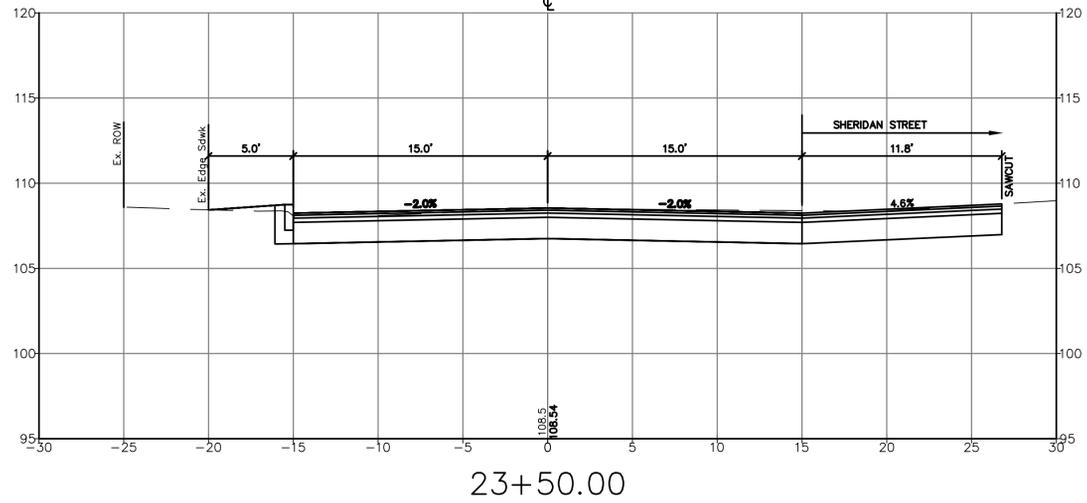
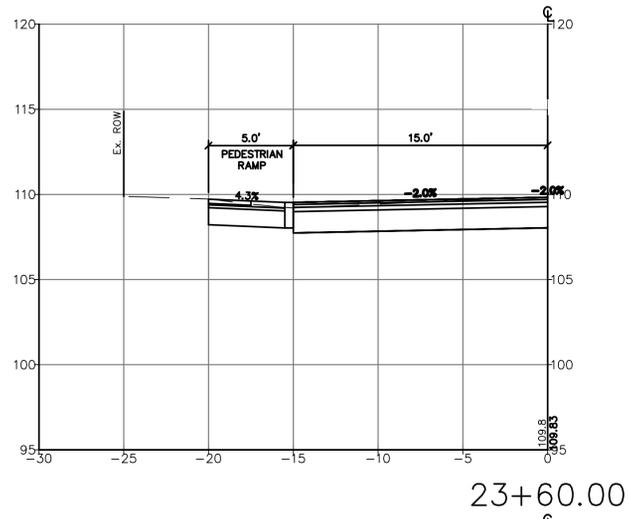
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



SHEET #
19 OF 38
VAULT PLAN NUMBER



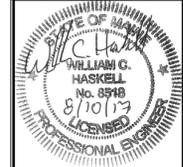
Relationships. Responsiveness. Results.
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207.772.2515



LDD PROJECT NAME: N/A
 DRAWING NAME: 2835.13-PBASE
 FIELD BOOK USED: N/A

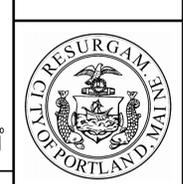
REFERENCES:

DESIGNED BY: JCC	DRAWN BY: LAN	CHECKED BY: WCH	AS NOTED	DATE: AUGUST 2017
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MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 WALNUT STREET
 CROSS SECTIONS

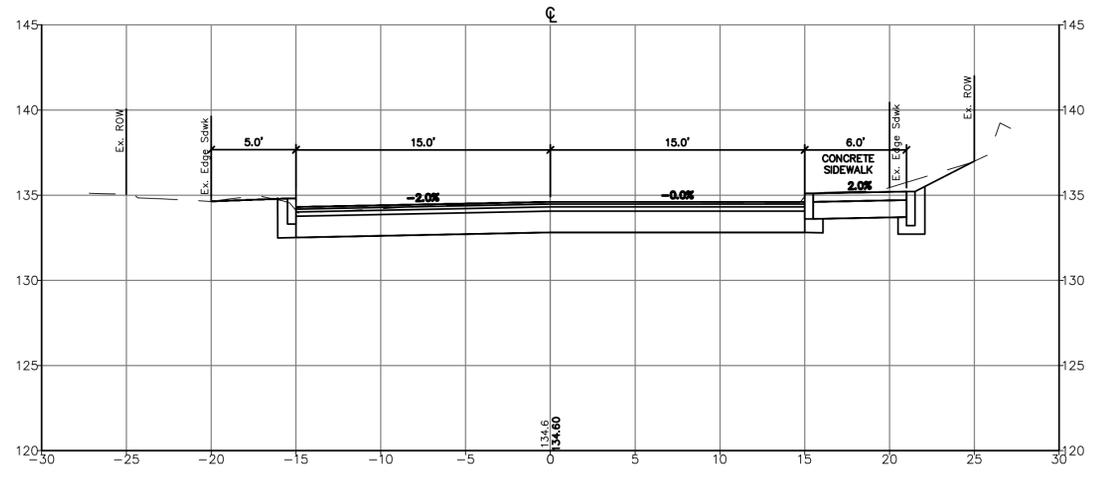
CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



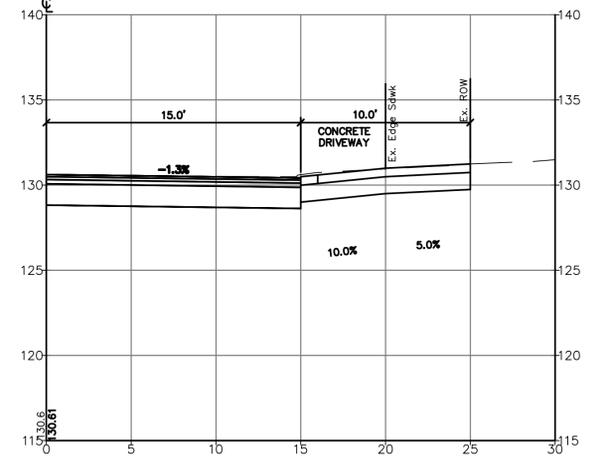
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 VAULT PLAN NUMBER



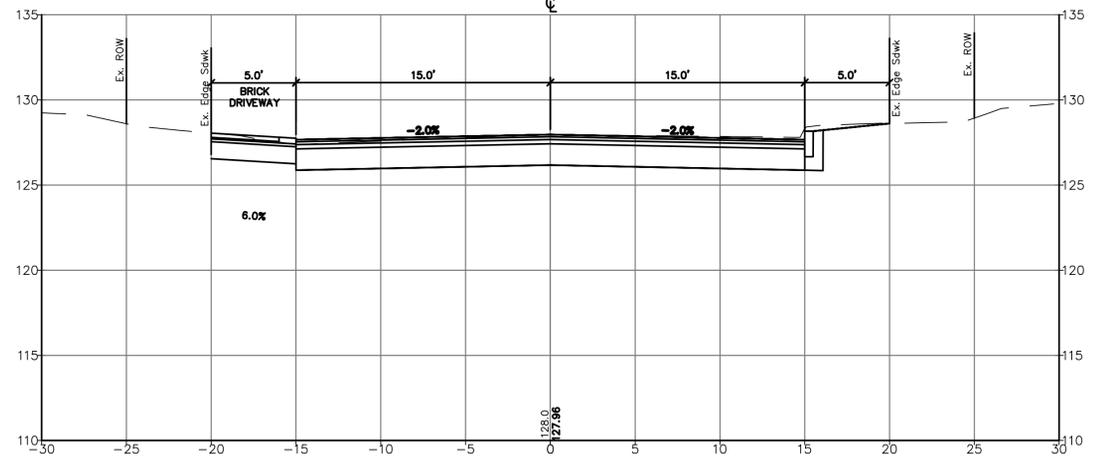
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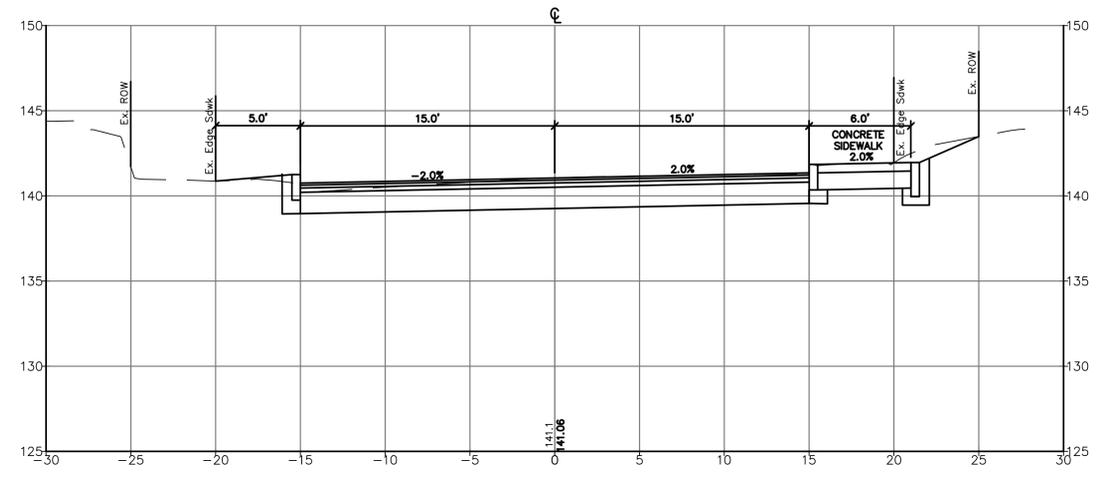
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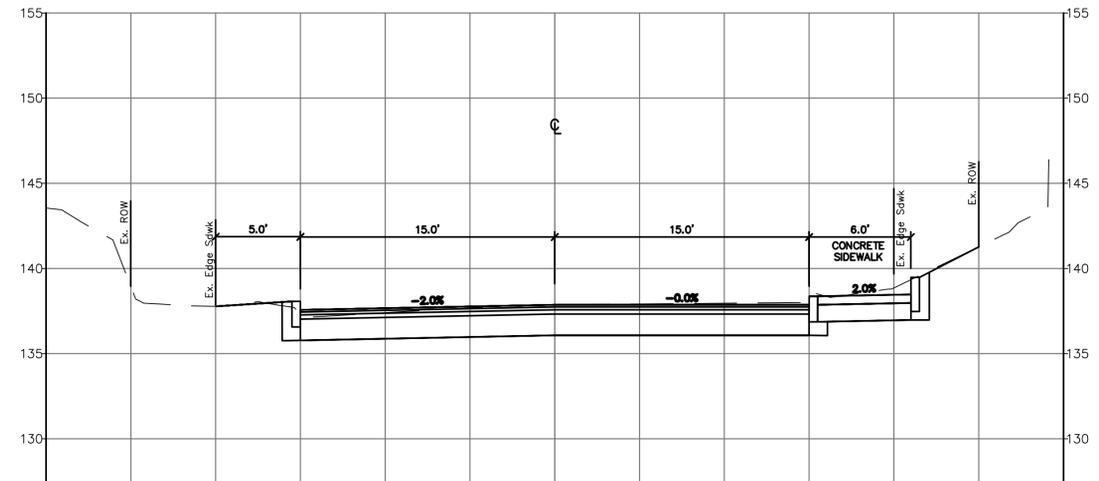
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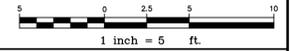
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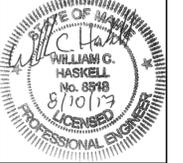
25+75.00



LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PBASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT STREET
CROSS SECTIONS

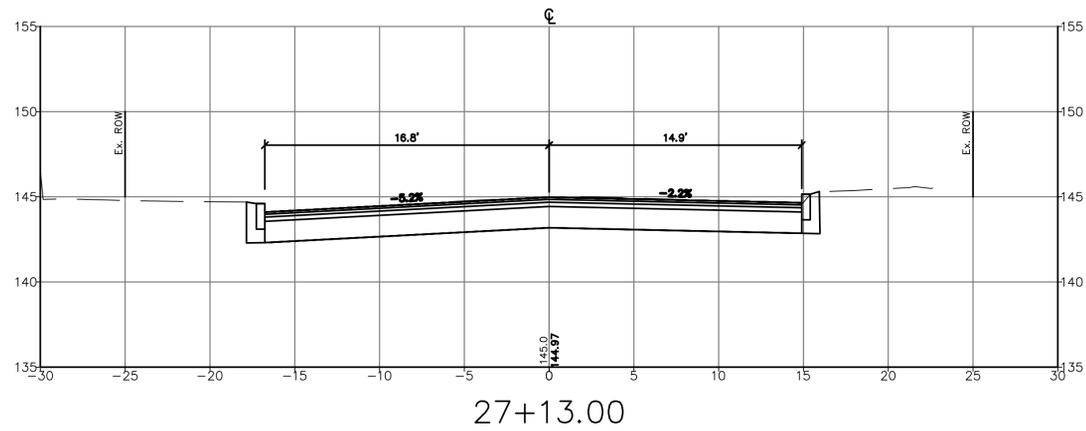
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



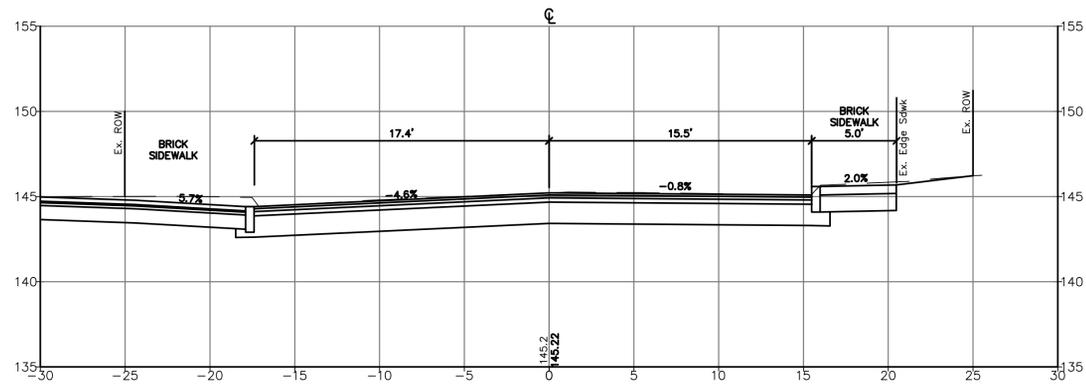
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21 OF 38
VAULT PLAN NUMBER



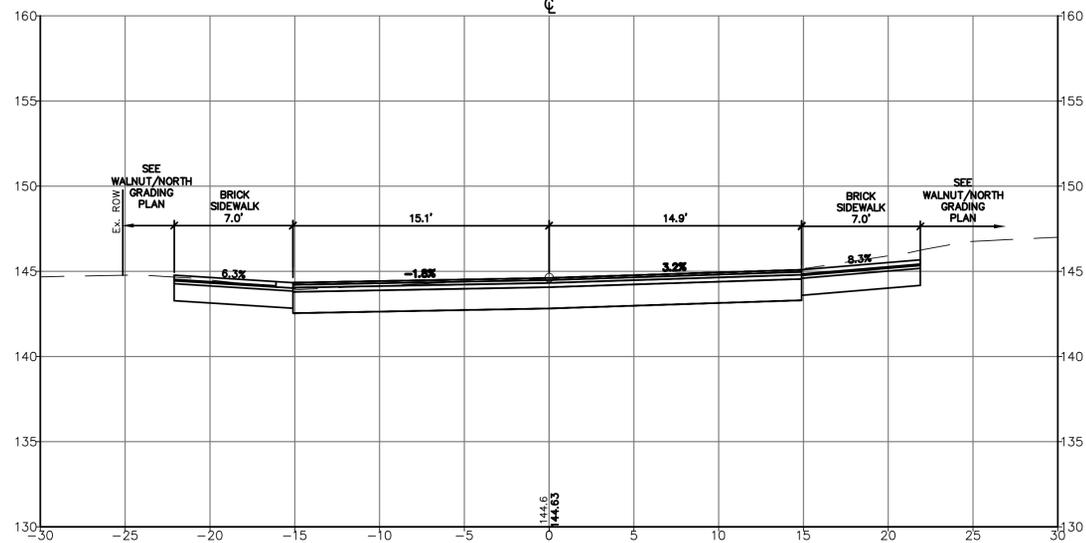
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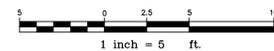
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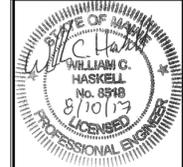
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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PHASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WALNUT STREET
CROSS SECTIONS

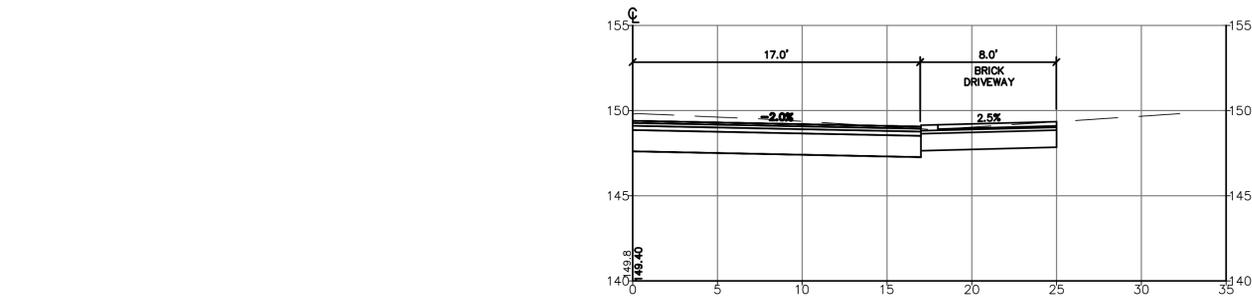
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



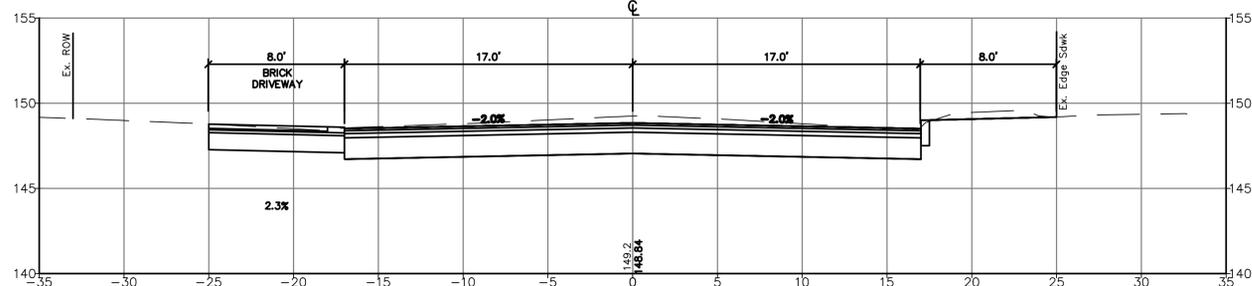
SHEET #
22 OF 38
VAULT PLAN NUMBER



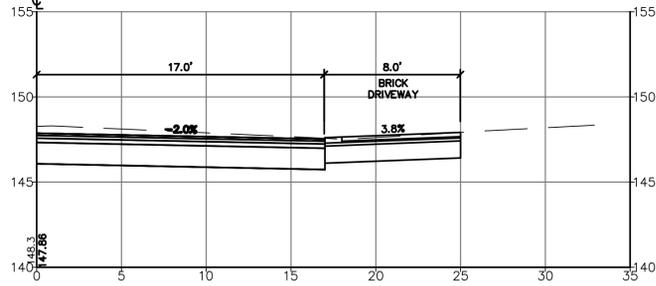
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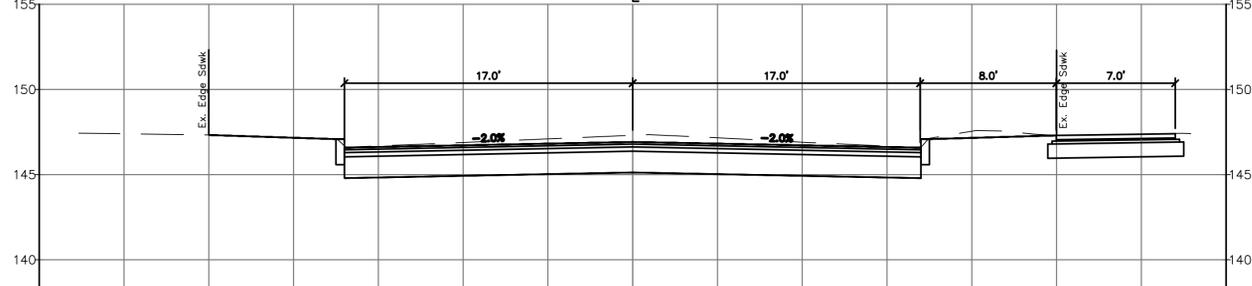
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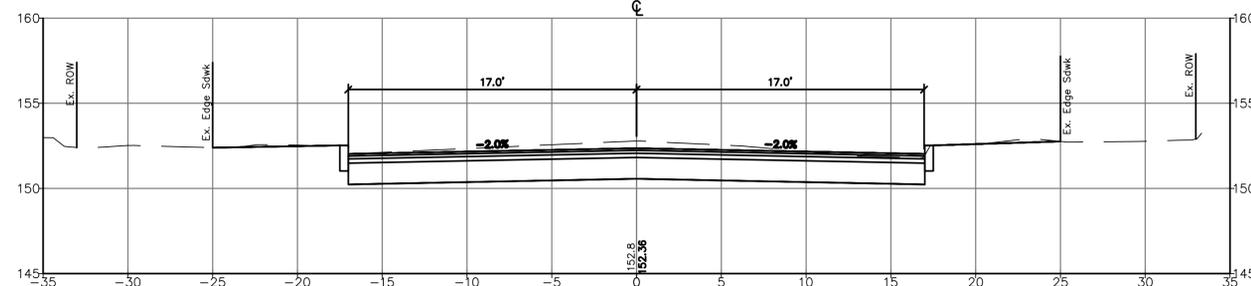
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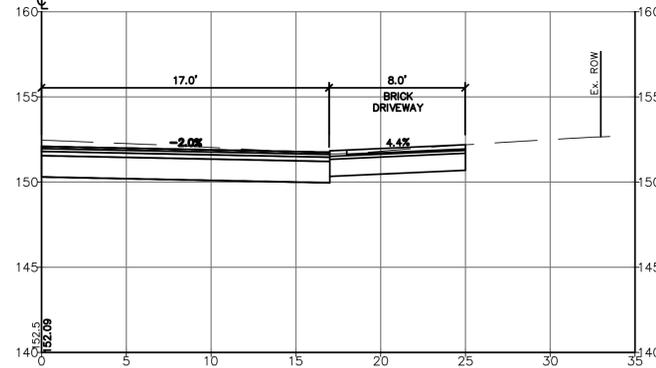
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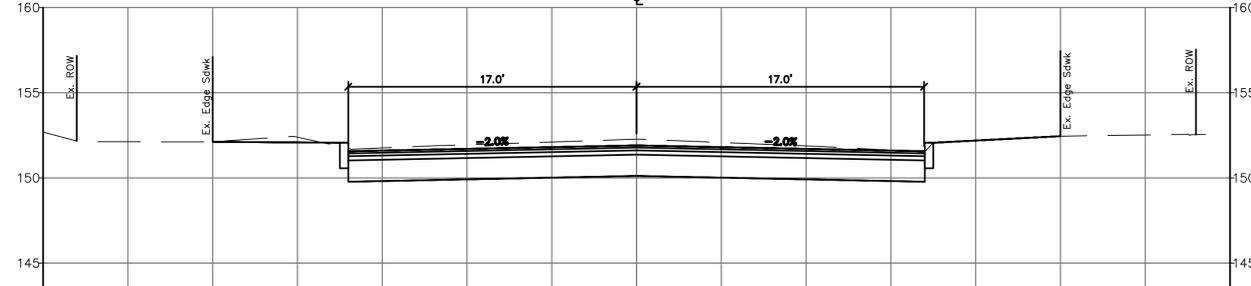
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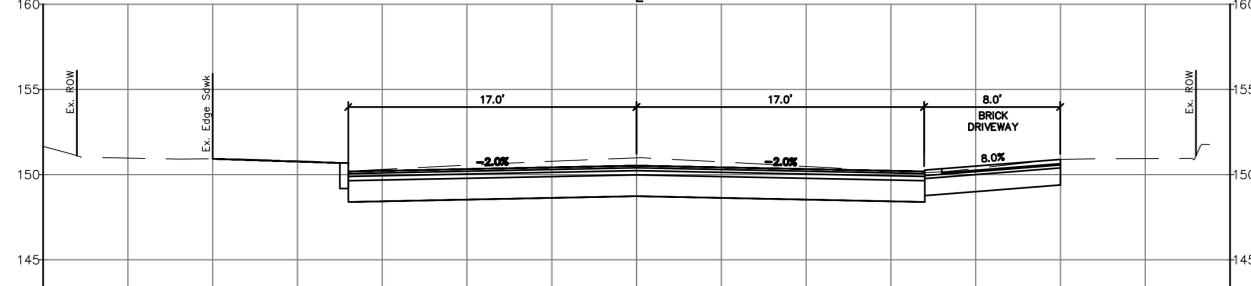
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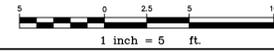
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33+00.00



32+50.00



LDD PROJECT NAME: N/A
 DRAWING NAME: 2835.13-PHASE
 FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: CC	DRAWN BY: LAN	CHECKED BY: WCH	SCALE: AS NOTED	DATE: AUGUST 2017
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MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 NORTH STREET
 CROSS SECTIONS

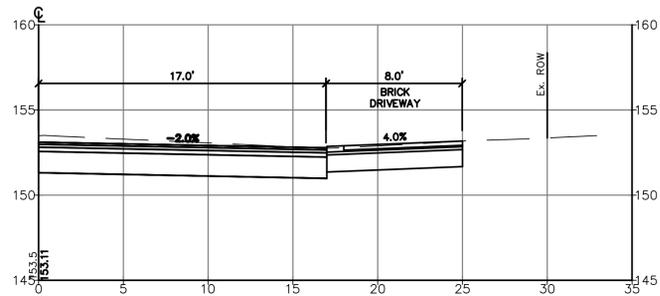
CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



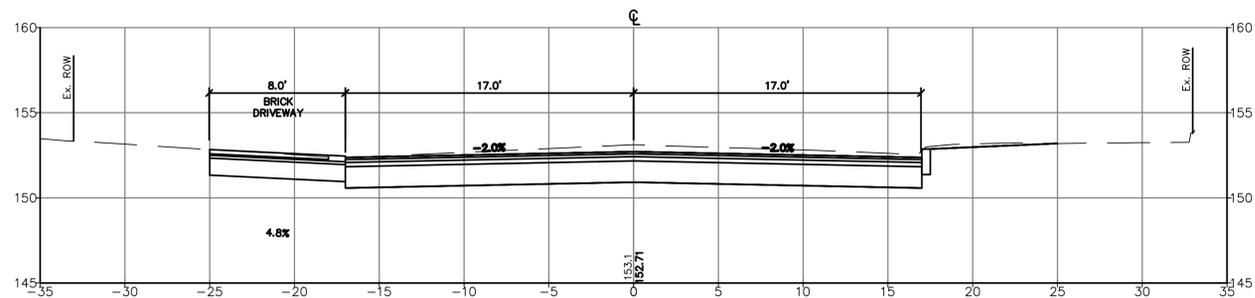
SHEET # **23 OF 38**
 VAULT PLAN NUMBER



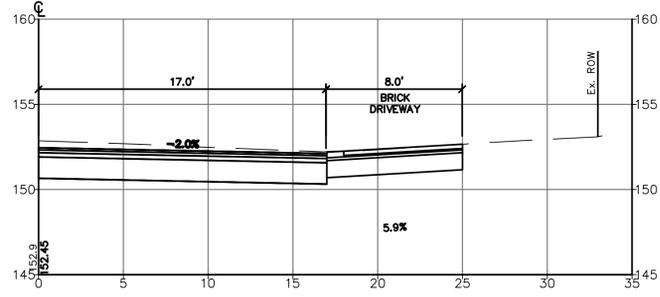
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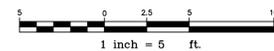
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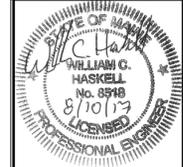


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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13--PBASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017

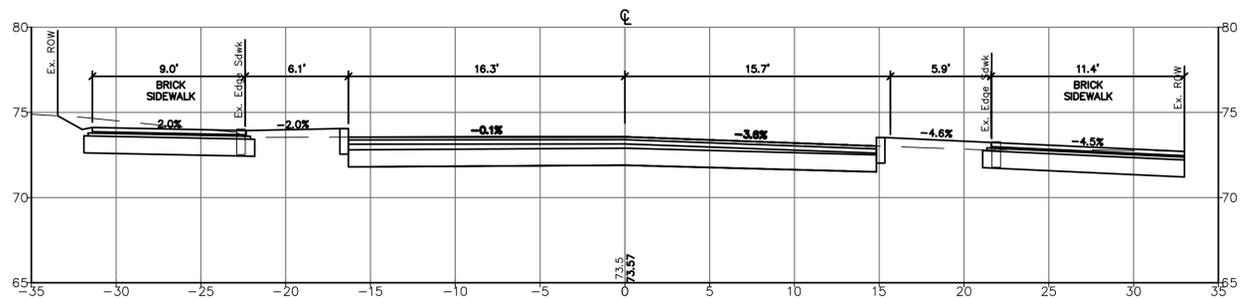


MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
NORTH STREET
CROSS SECTIONS

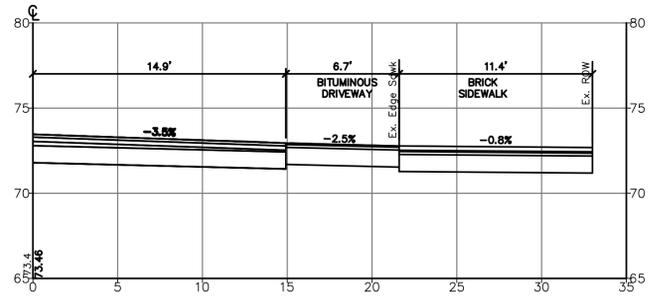
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



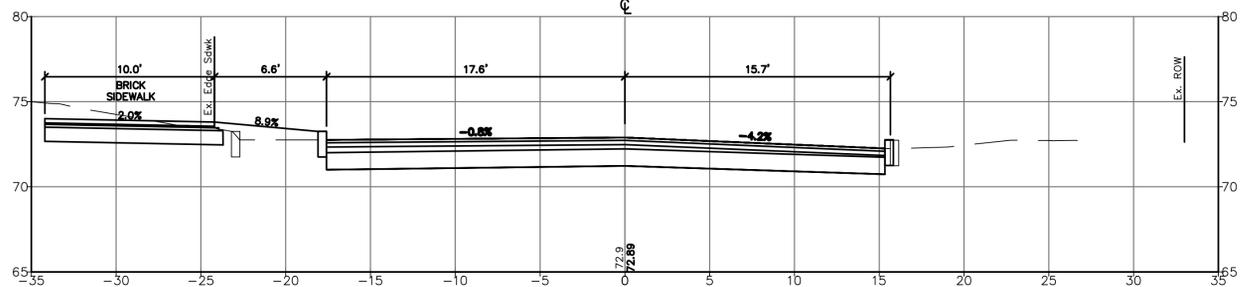
SHEET #
24 OF 38
VAULT PLAN NUMBER



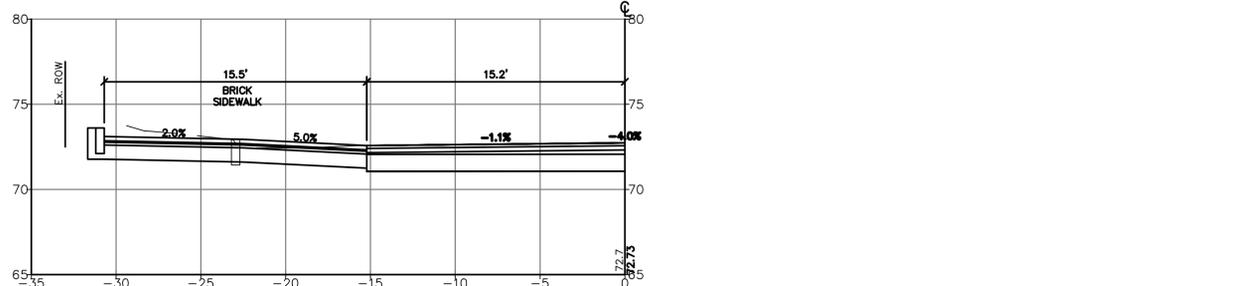
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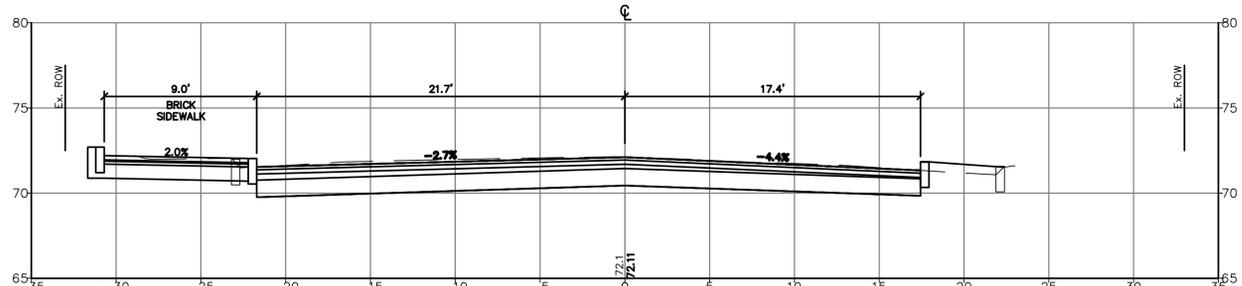
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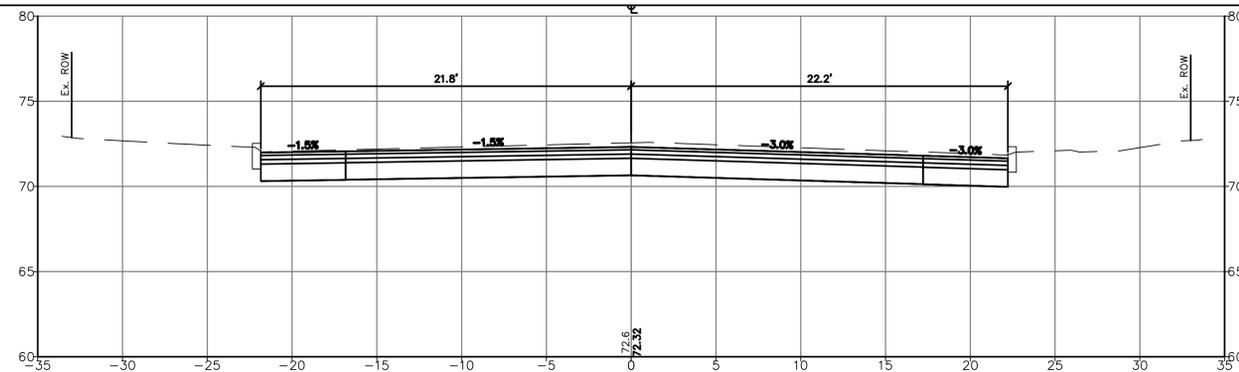
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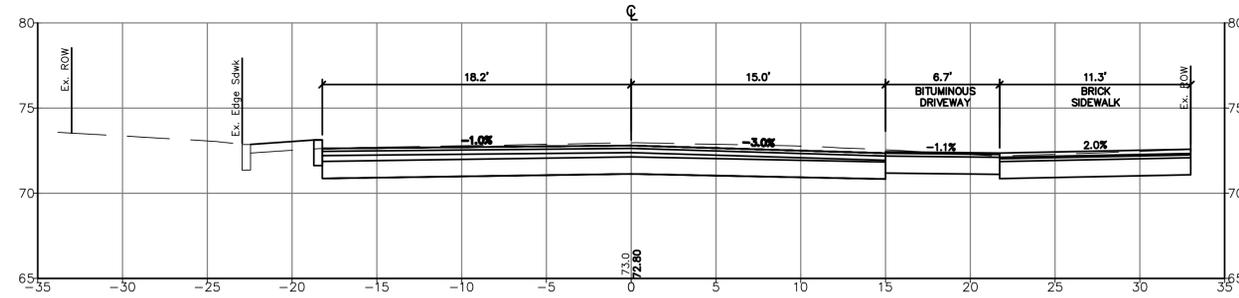
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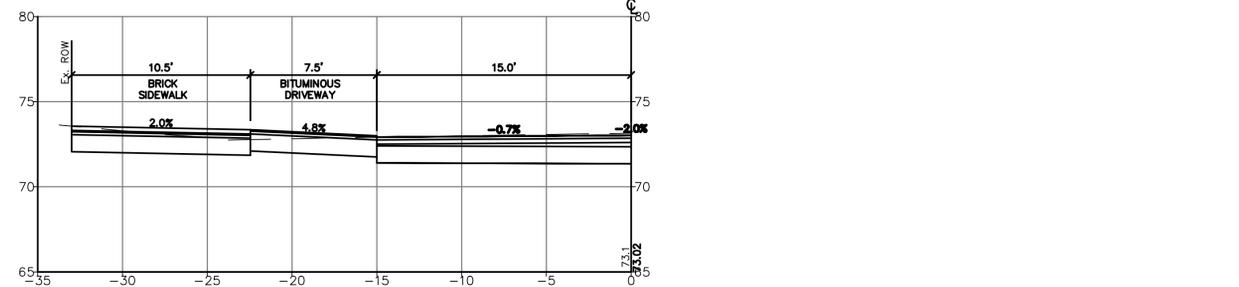
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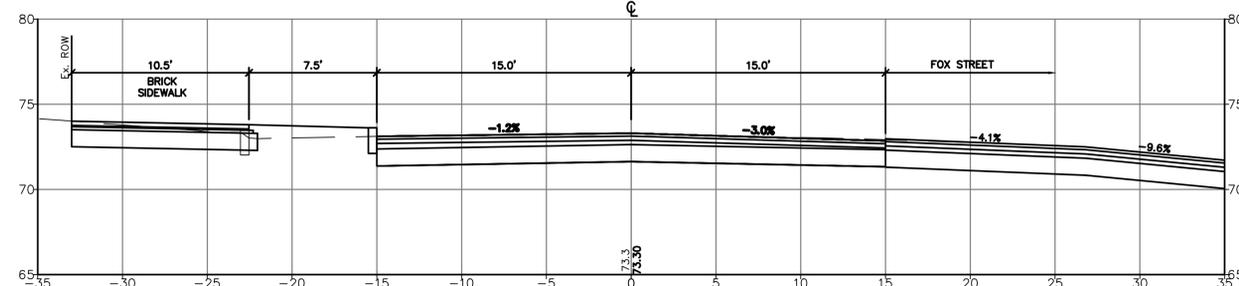
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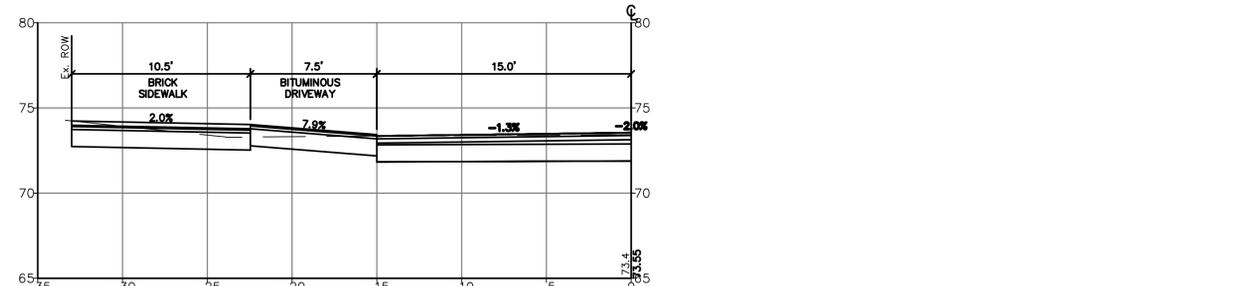
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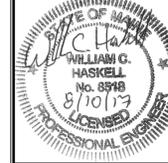
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LDD PROJECT NAME: N/A
 DRAWING NAME: 2835.13-PBASE
 FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: JCC	DRAWN BY: LAN	CHECKED BY: WCH	AS NOTED	DATE: AUGUST 2017
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MADISON, WALNUT, WASHINGTON
 SEWER SEPARATION
 WASHINGTON AVENUE
 CROSS SECTIONS

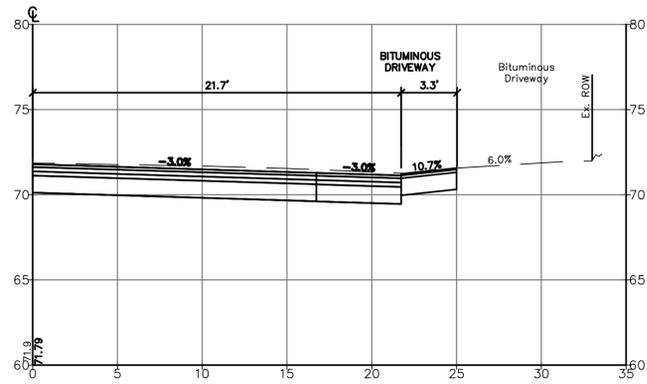
CITY OF PORTLAND, MAINE
 PUBLIC WORKS DEPARTMENT
 WATER RESOURCES DIVISION



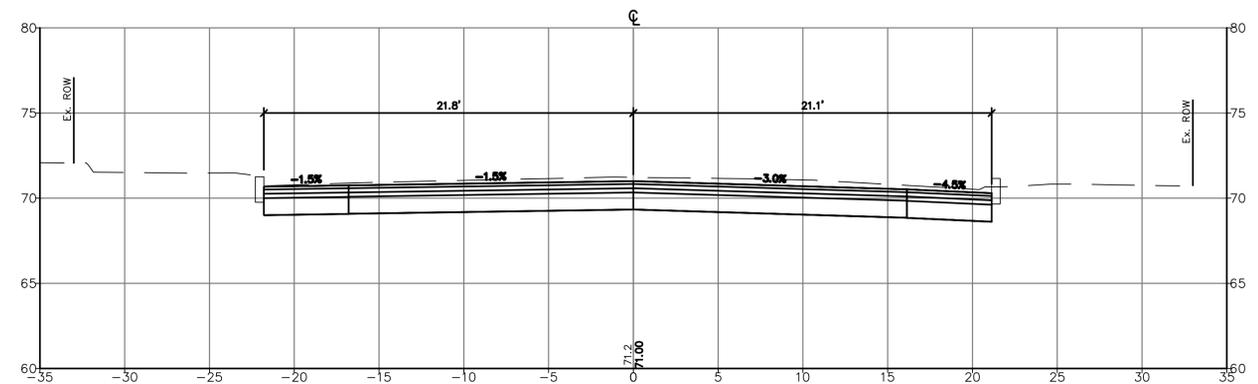
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 VAULT PLAN NUMBER



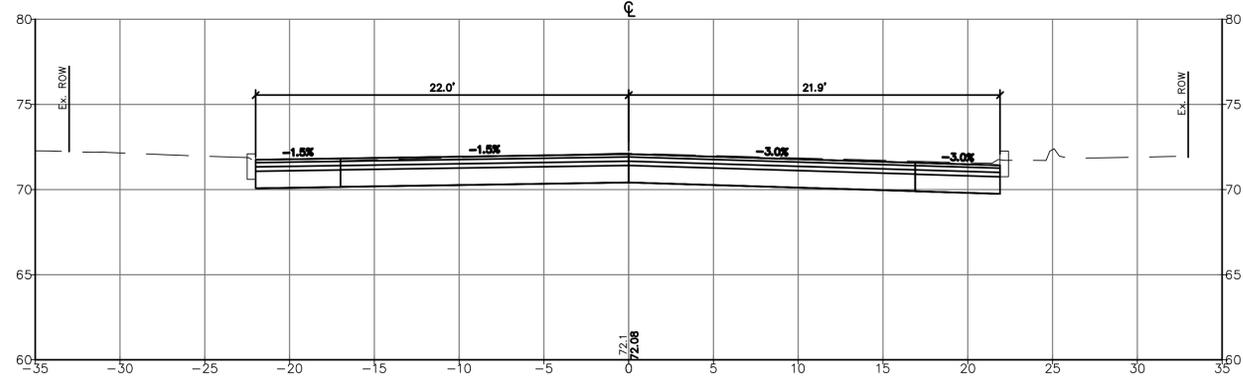
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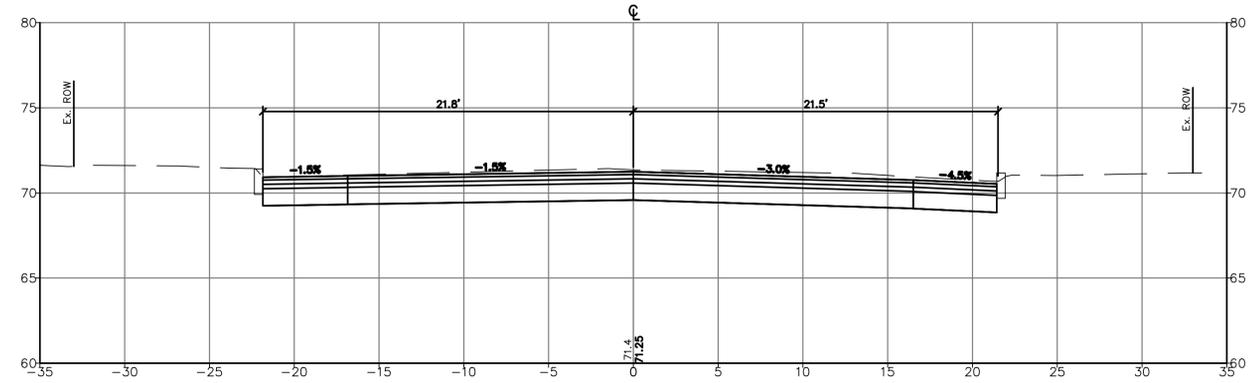
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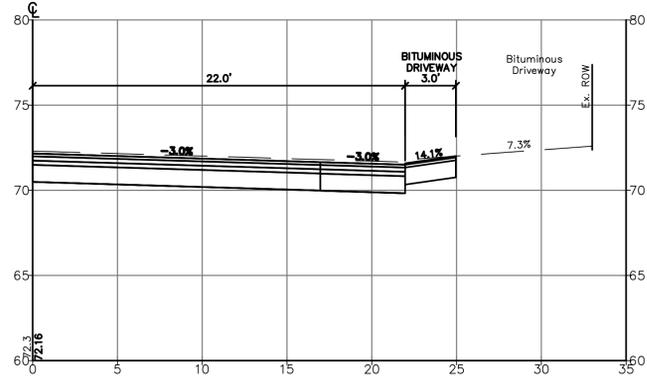
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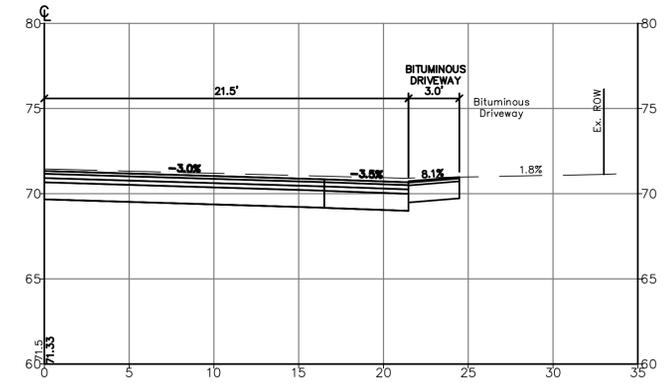
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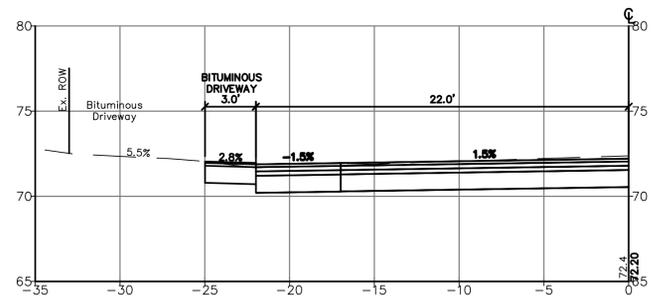
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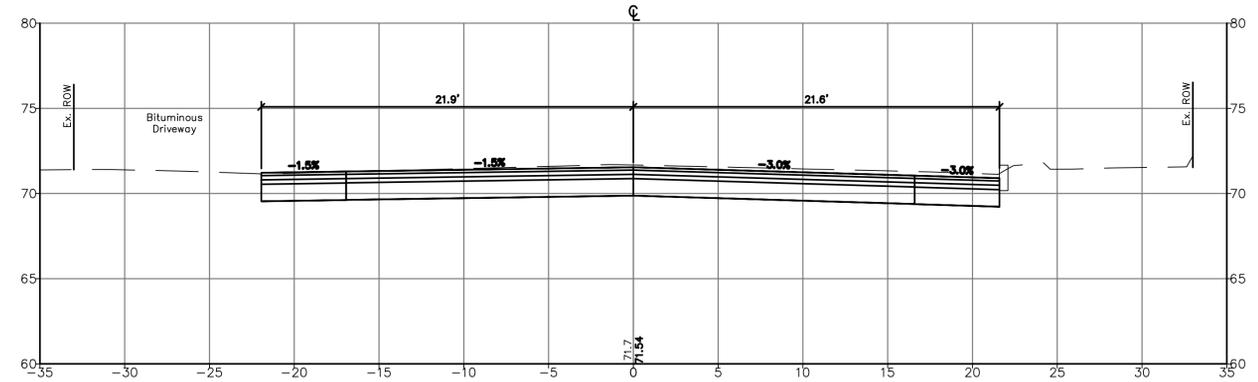
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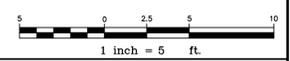
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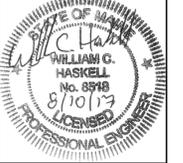
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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PBASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
CROSS SECTIONS

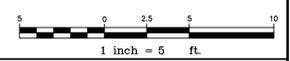
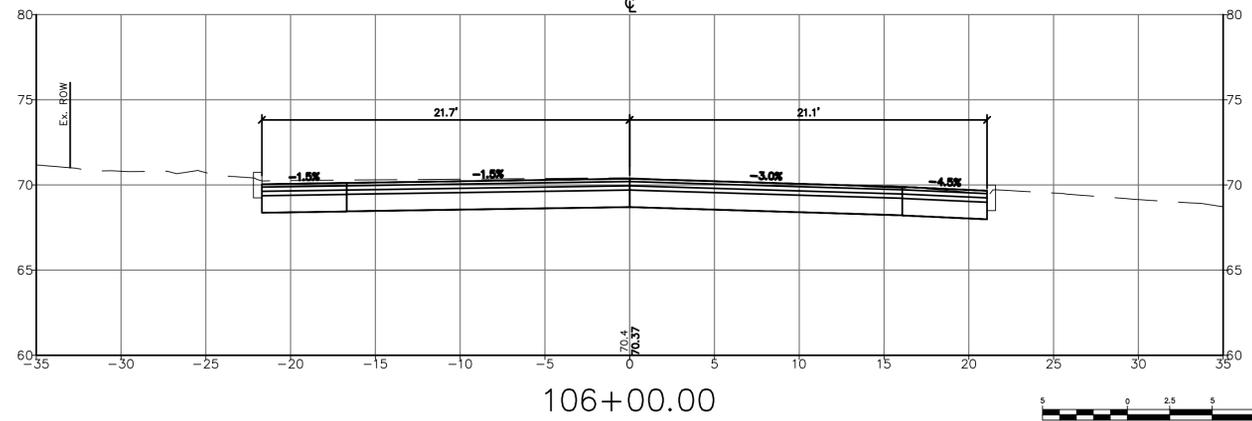
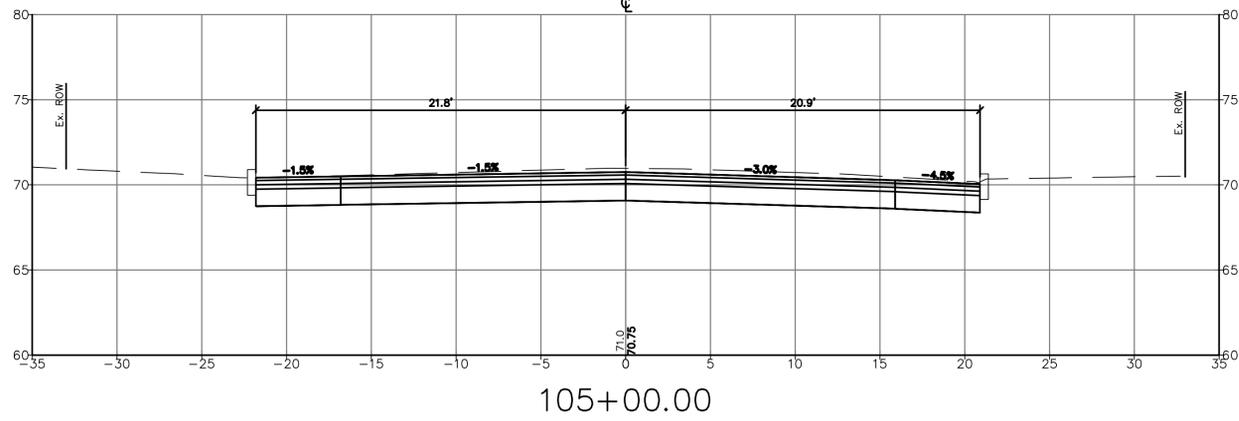
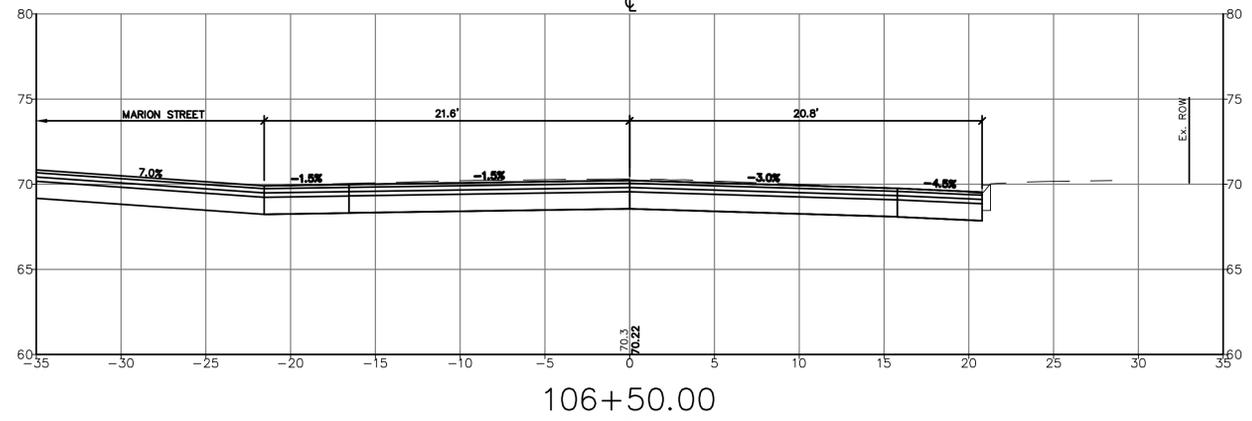
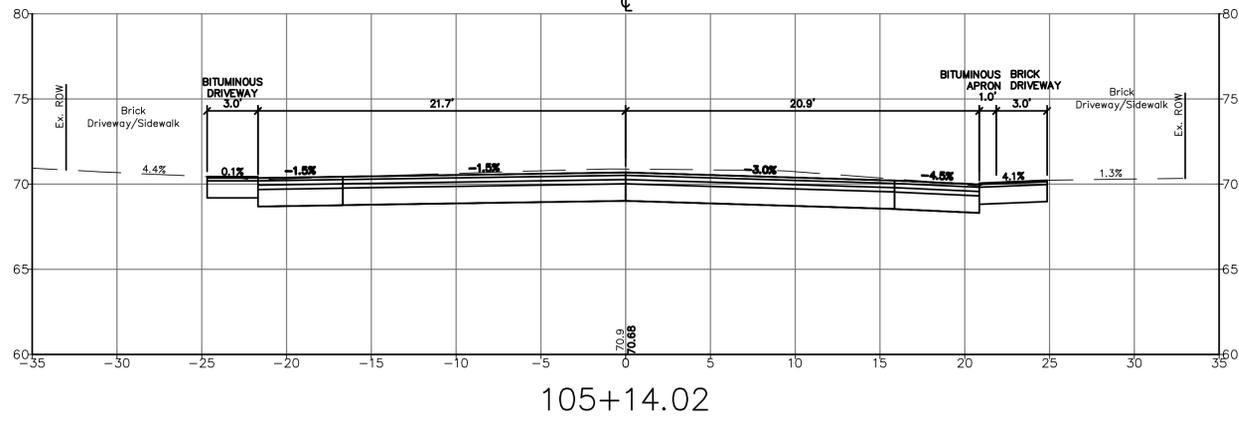
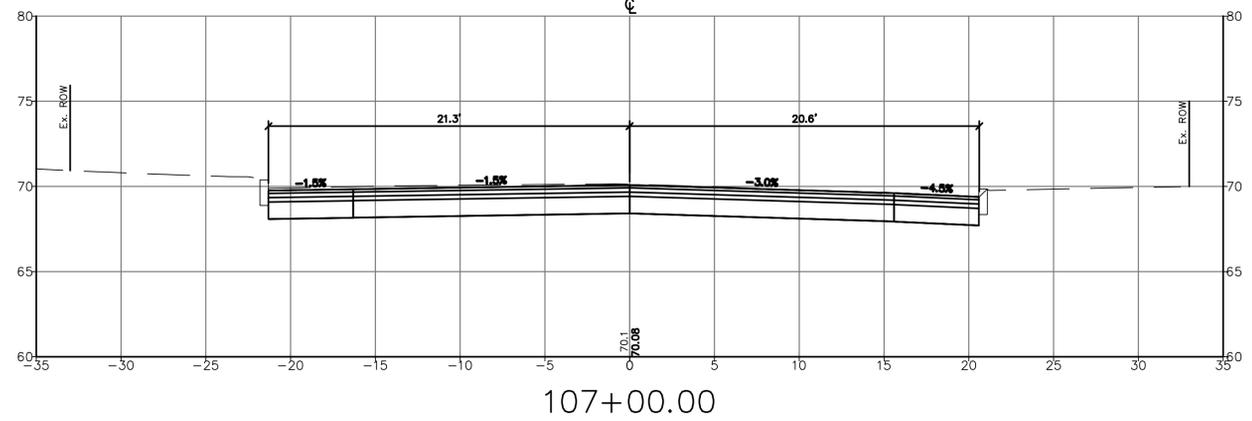
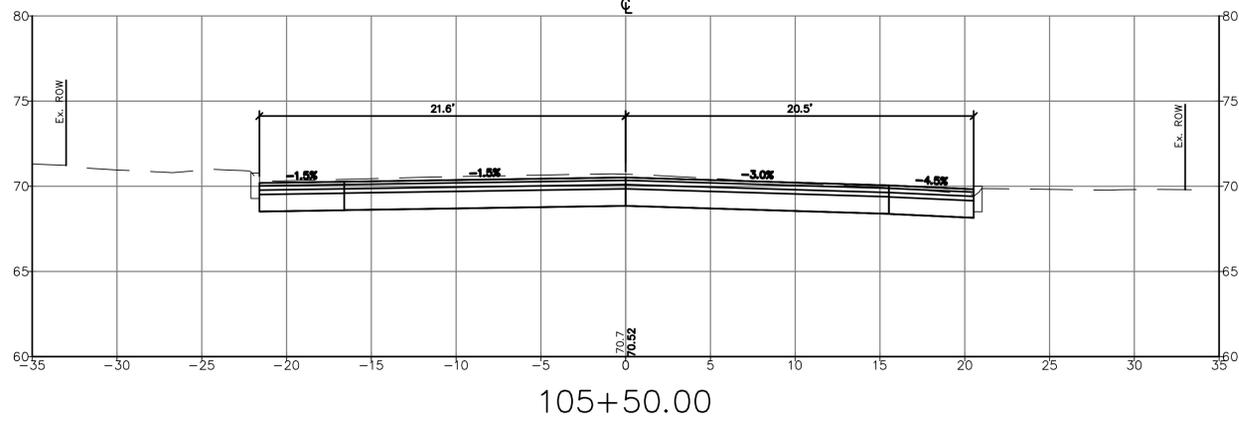
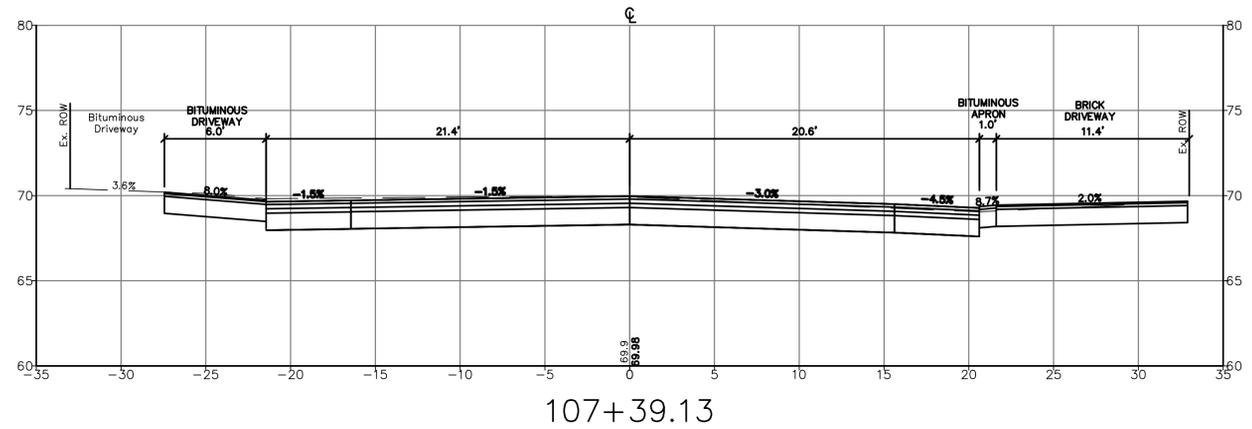
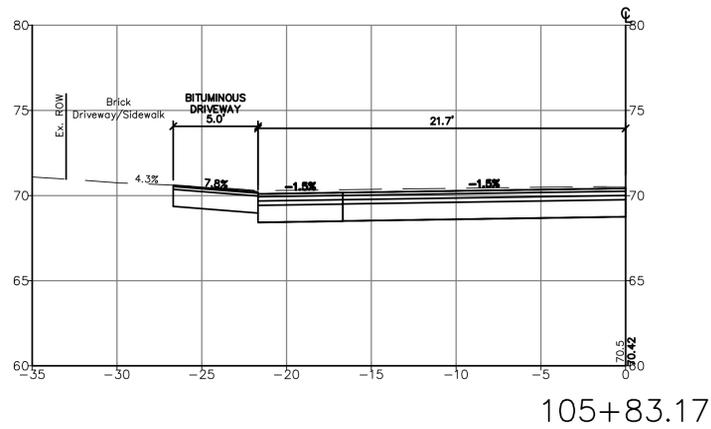
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



SHEET #
26 OF 38
VAULT PLAN NUMBER



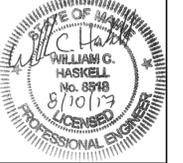
Relationships. Responsiveness. Results.
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207.772.2515



LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PHASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
CROSS SECTIONS

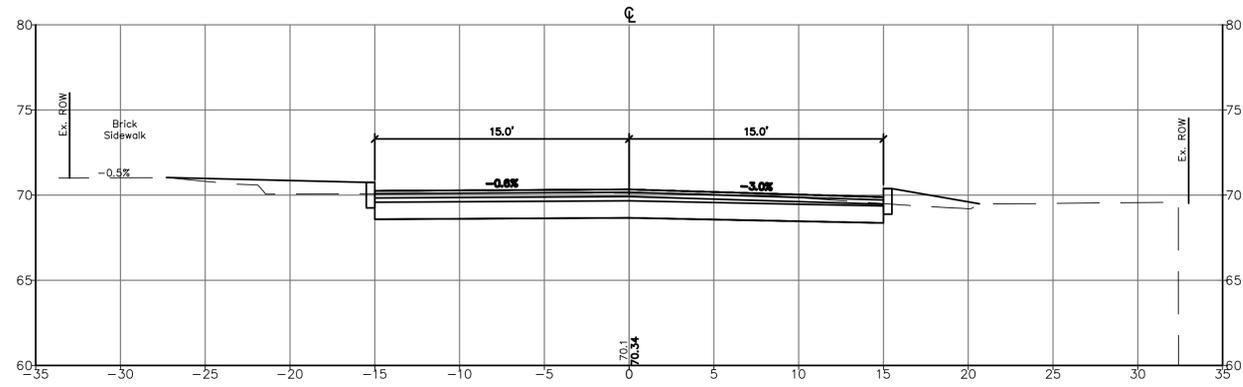
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



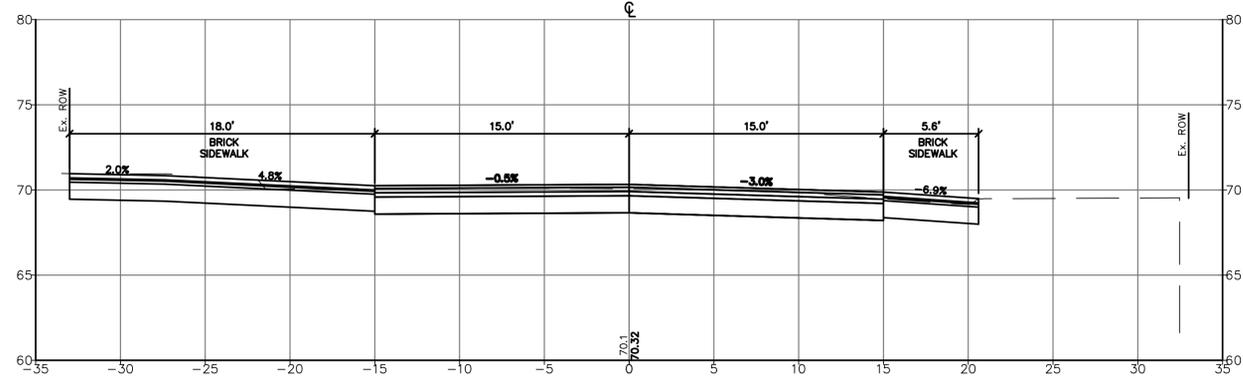
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27 OF 38
VAULT PLAN NUMBER



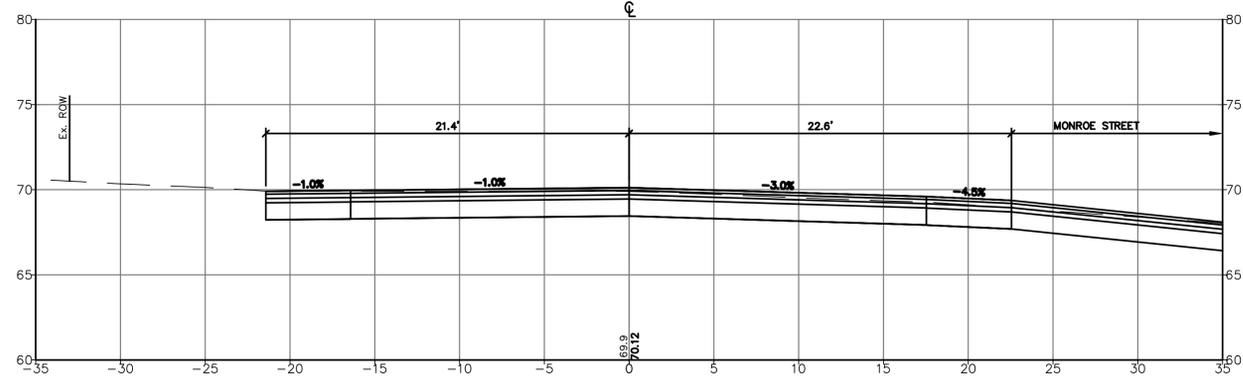
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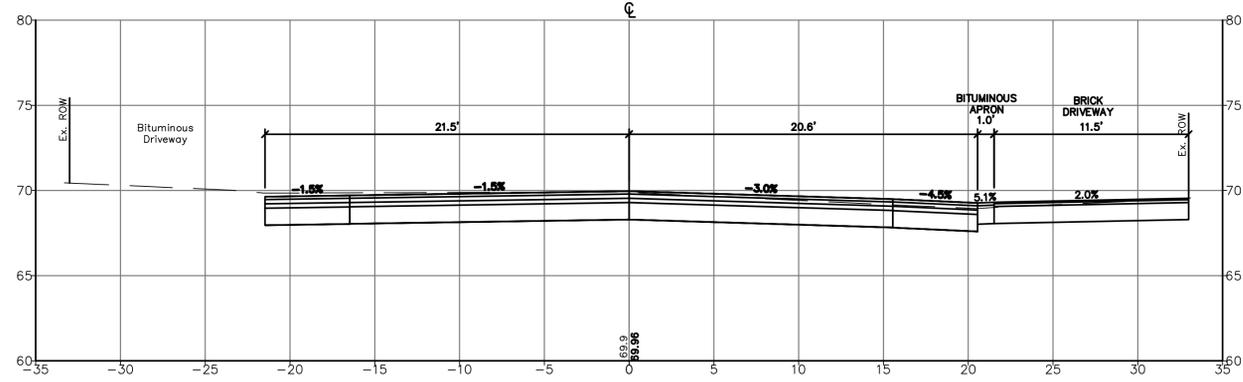
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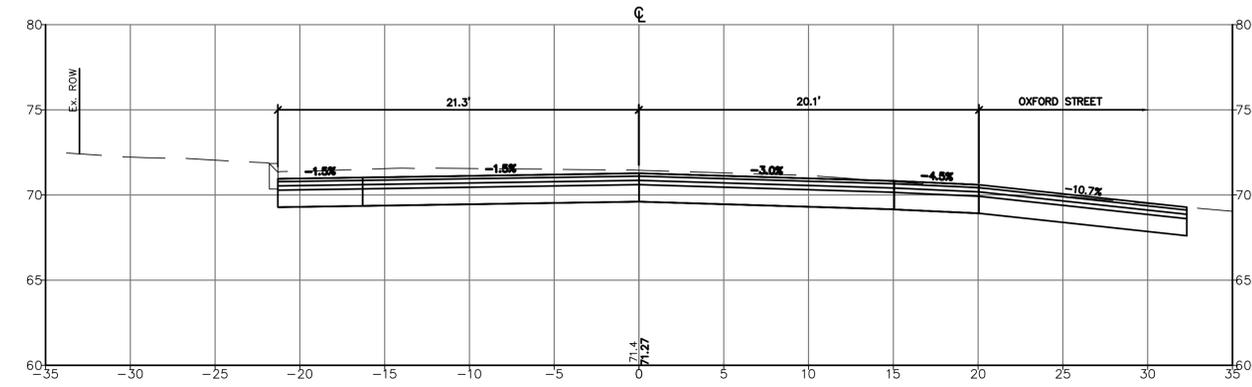
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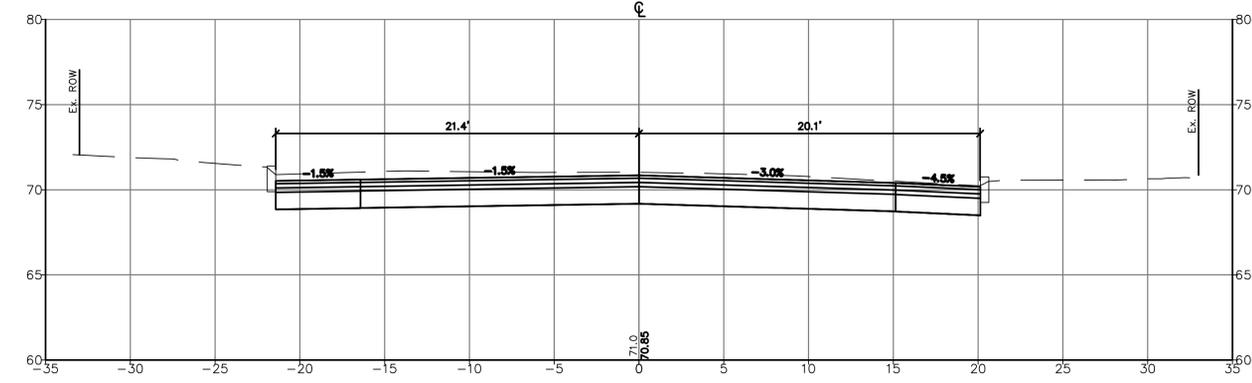
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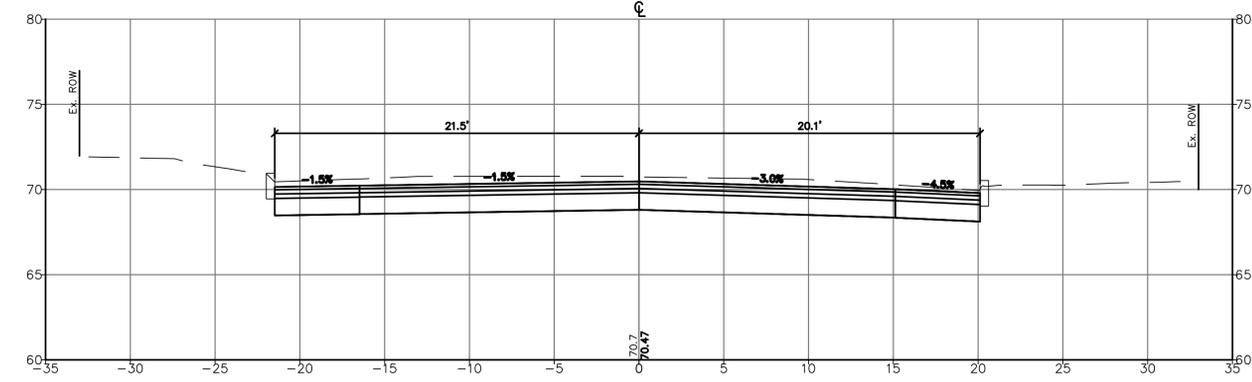
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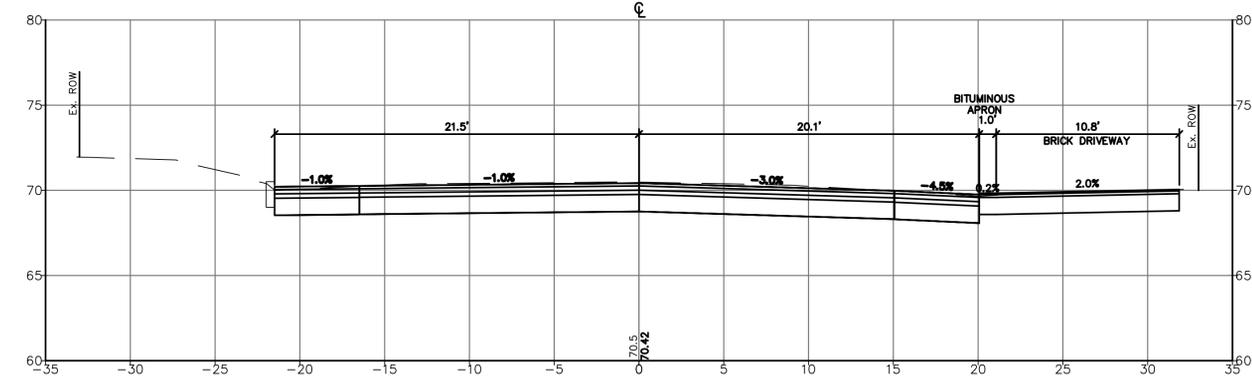
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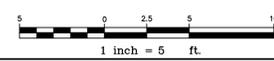
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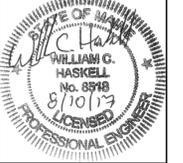
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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PHASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	LAN
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
CROSS SECTIONS

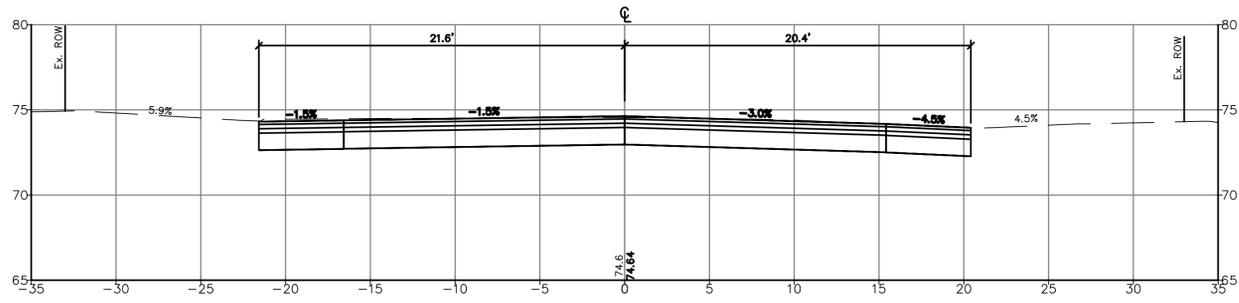
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



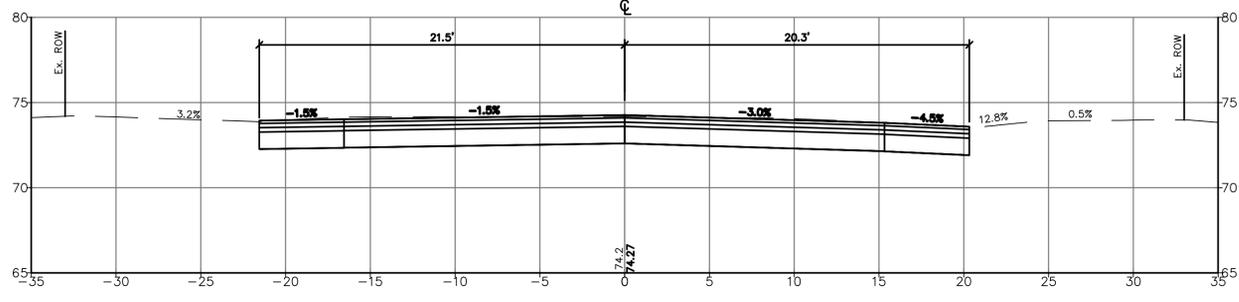
SHEET #
28 OF 38
VAULT PLAN NUMBER



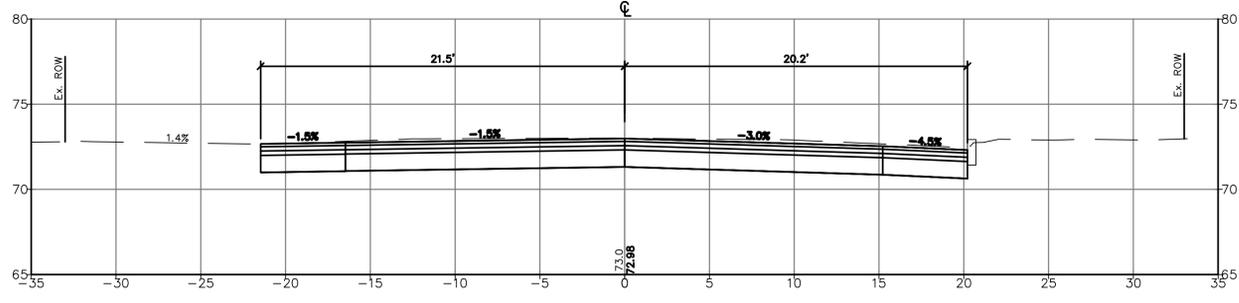
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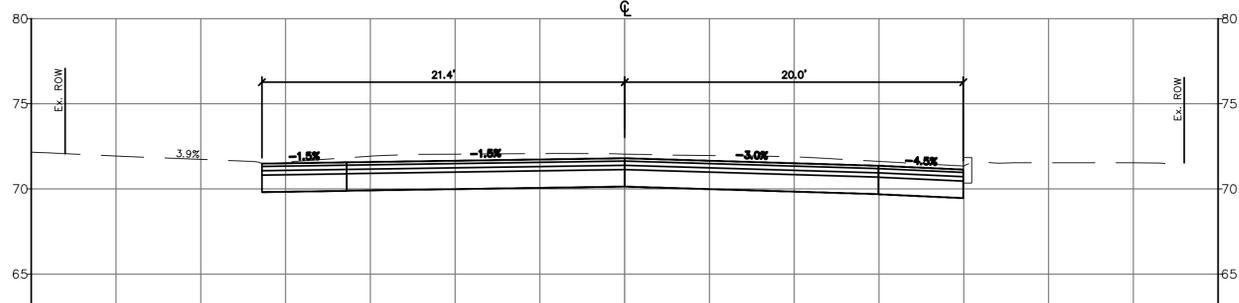
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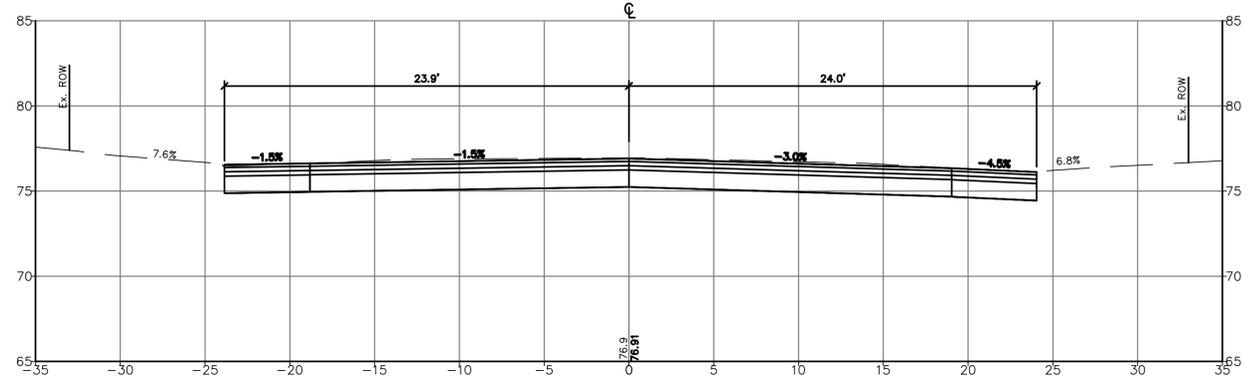
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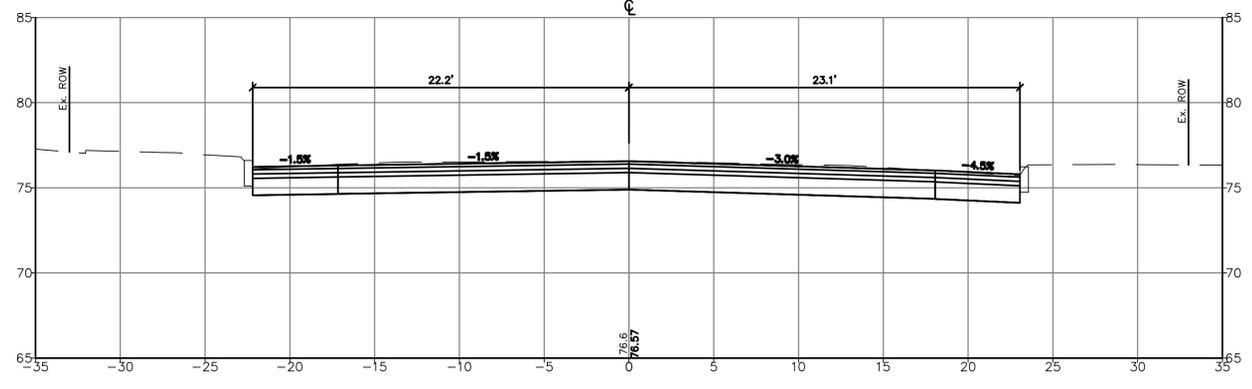
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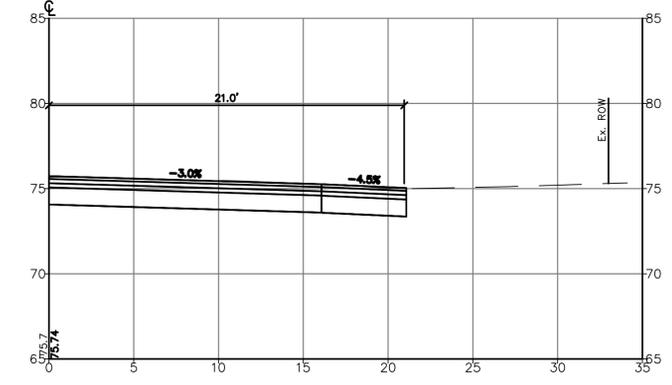
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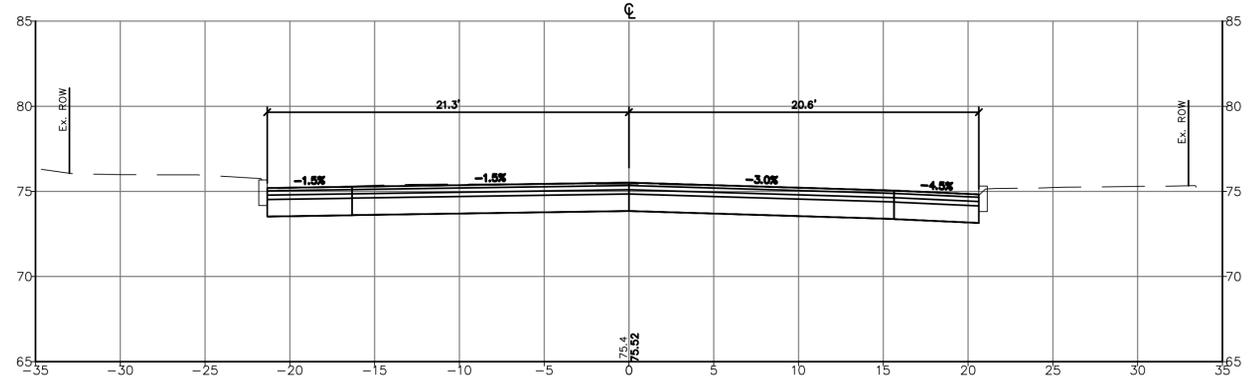
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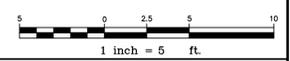
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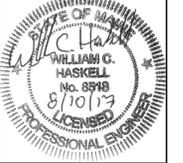
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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.13-PBASE
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
CROSS SECTIONS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



SHEET #
29 OF 38
VAULT PLAN NUMBER

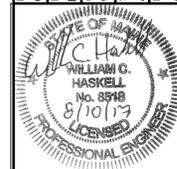


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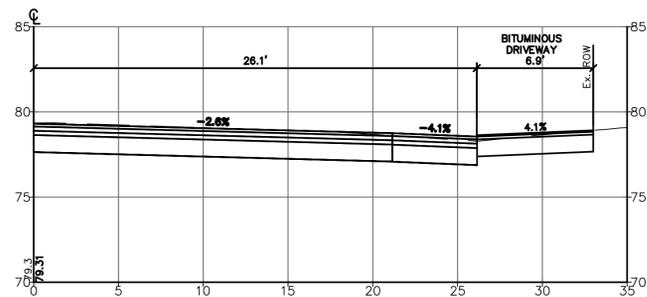


MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
CROSS SECTIONS

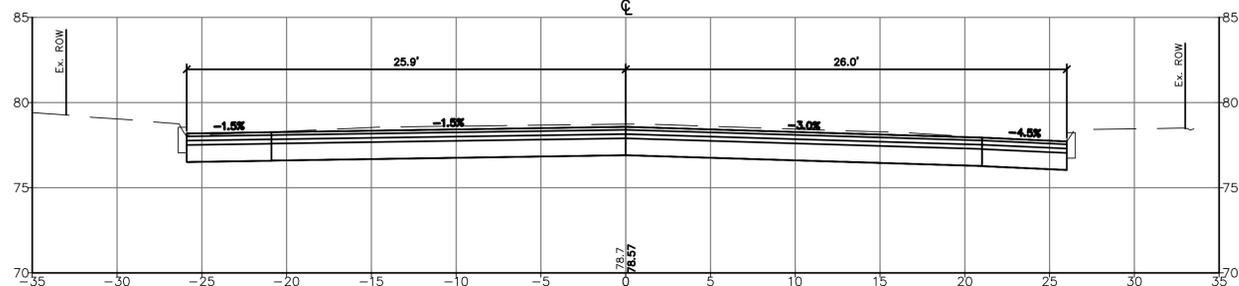
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



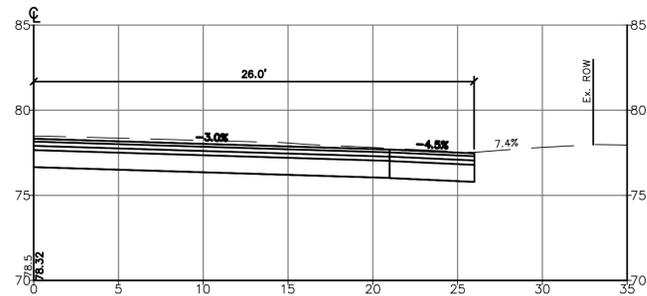
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30 OF 38
VAULT PLAN NUMBER



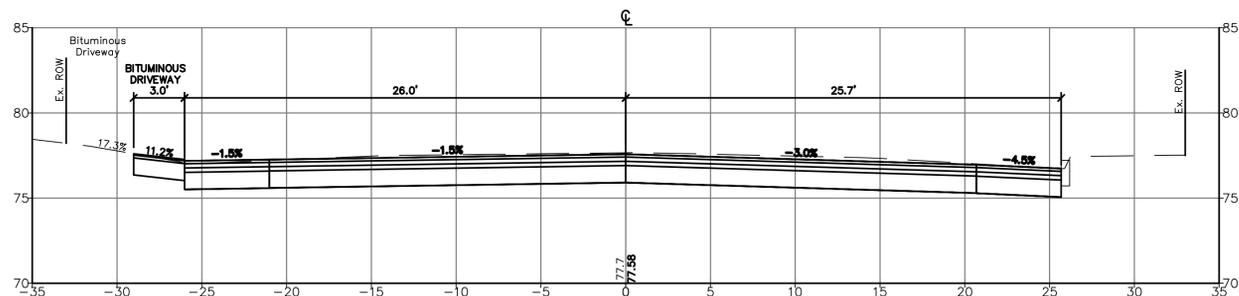
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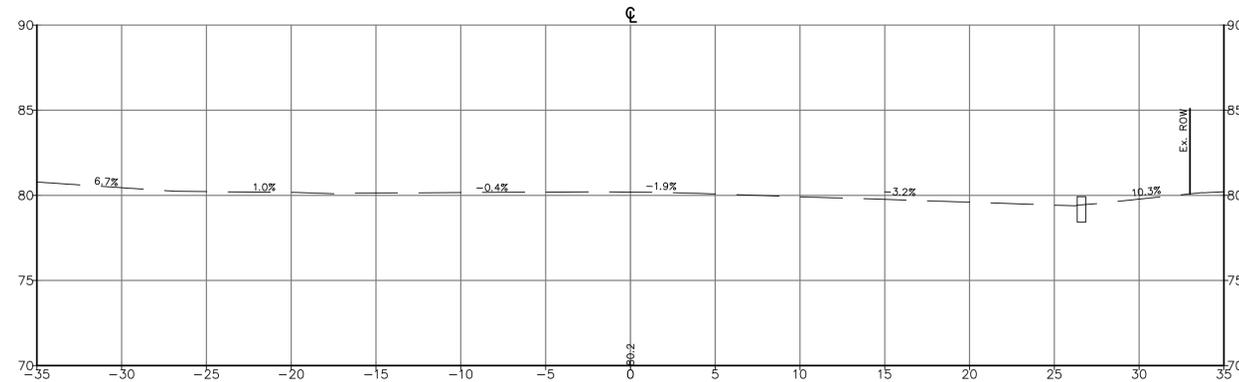
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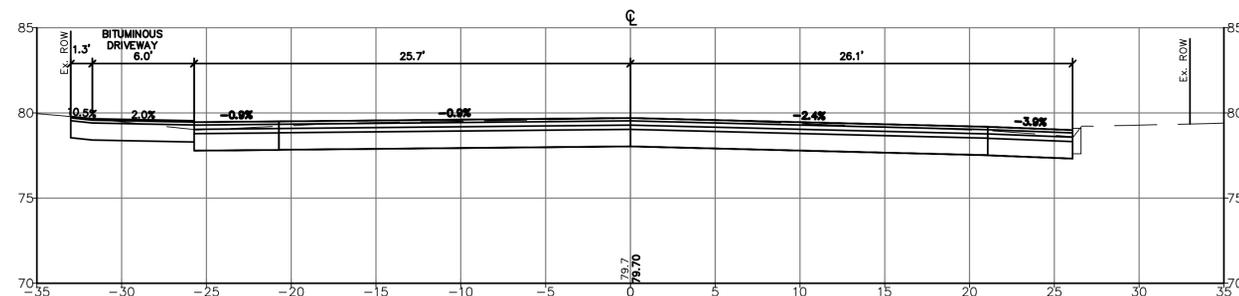
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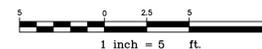
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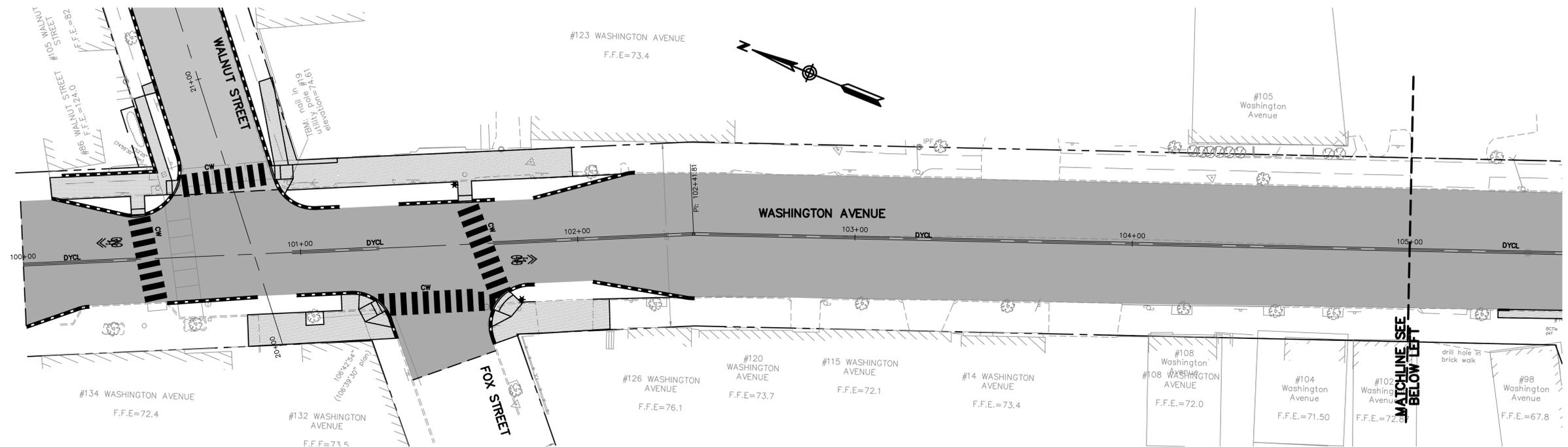
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114+50.00



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WASHINGTON AVENUE STRIPING PLAN
1"=20'

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-PBASE
FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	AUGUST 2017

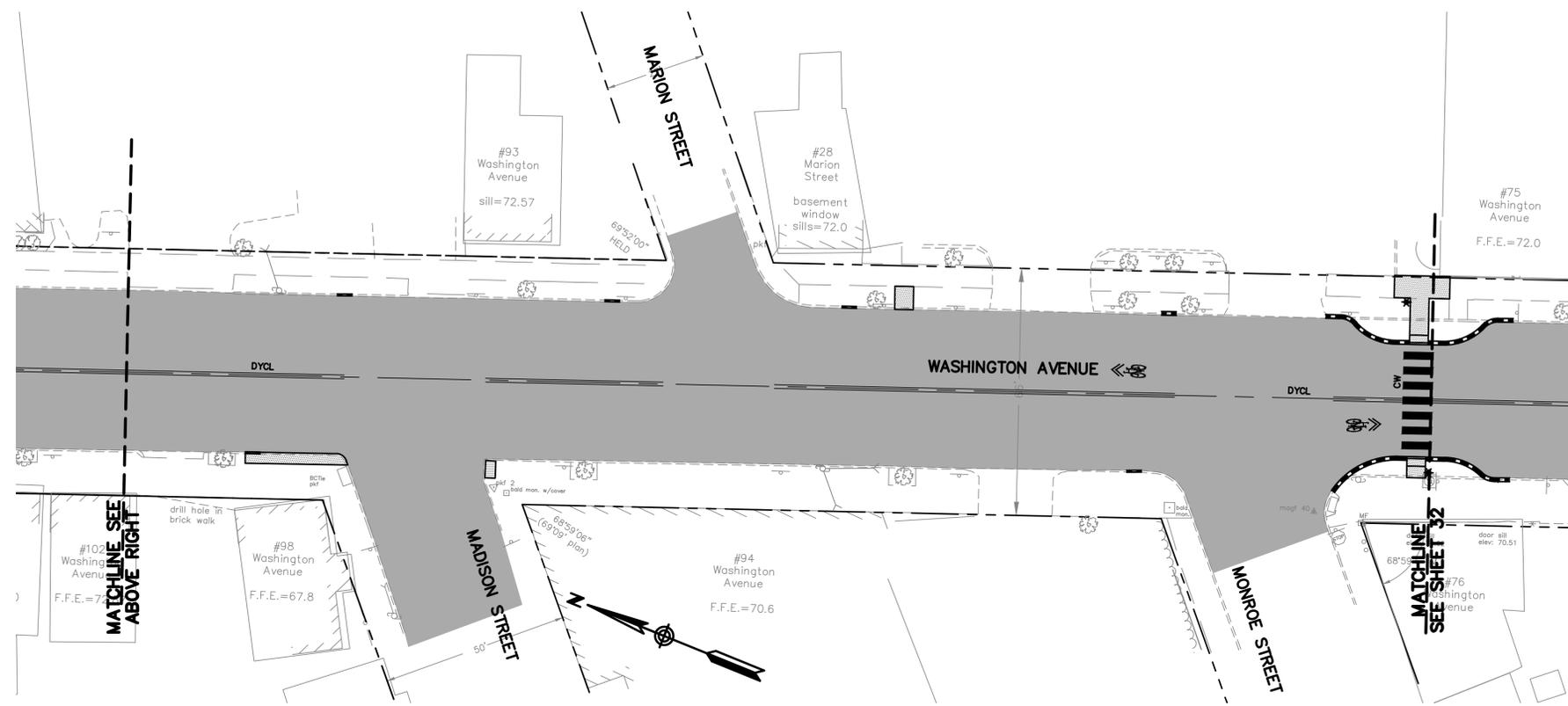


MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
STRIPING PLAN

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



SHEET #
31 OF 38
VAULT PLAN NUMBER

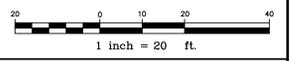


WASHINGTON AVENUE STRIPING PLAN
1"=20'

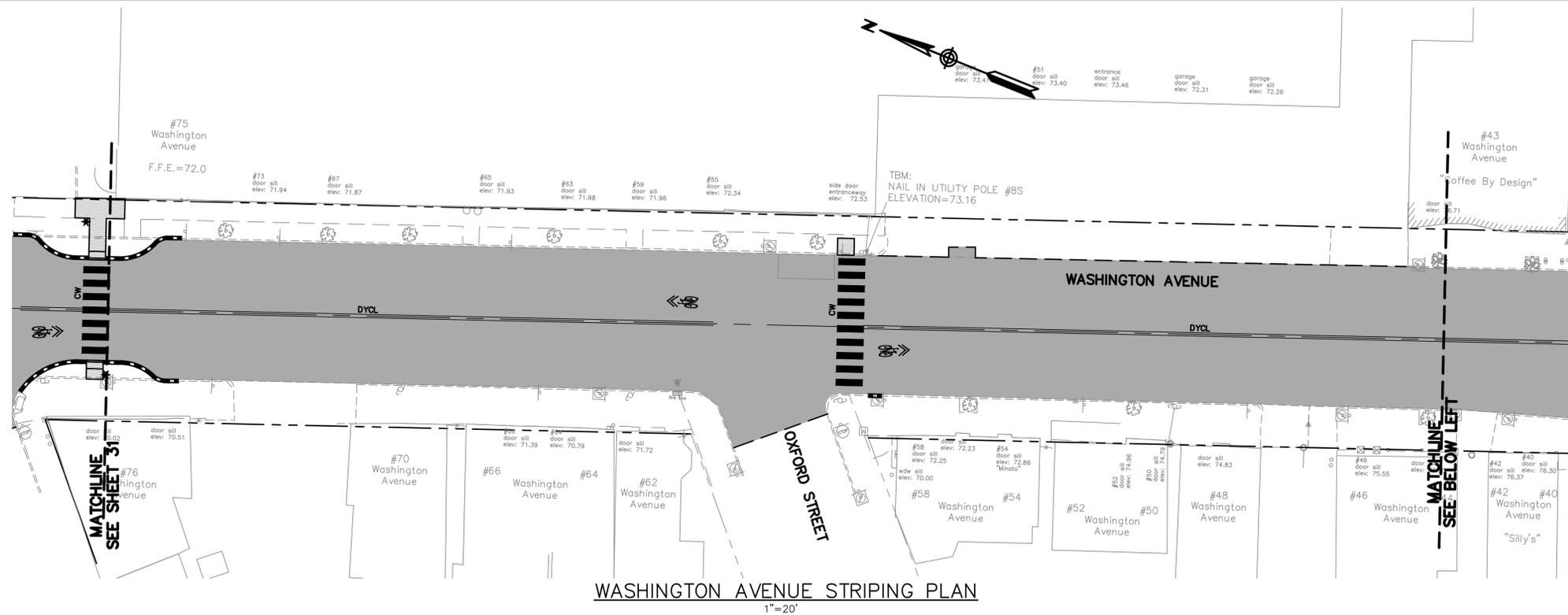
LEGEND			
SMLL	SOLID WHITE LANE LINE	→	STRAIGHT ARROW PAVEMENT MARKING
SYLL	SOLID YELLOW LANE LINE	←	LEFT ARROW PAVEMENT MARKING
BWLL	BROKEN WHITE LANE LINE (10' LINE & 30' GAP)	→	RIGHT ARROW PAVEMENT MARKING
BYLL	BROKEN YELLOW LANE LINE (10' LINE & 30' GAP)	↔	SHARED STRAIGHT & RIGHT/LEFT ARROW PAVEMENT MARKING
DWLL	DOTTED WHITE LANE LINE (2' LINE AND 4' GAP)	↔	'ONLY' PAVEMENT MARKING (10' LONG FOR VEHICLES, 6' LONG FOR BIKES)
DYCL	DOUBLE YELLOW CENTER LINE	↔	BIKE PAVEMENT MARKING
SL	STOP LINE (24")	↔	SHARED BIKE PAVEMENT MARKING
CW	CROSS WALK - 2'x 8' WHITE BARS, 4' O.C.		
SWCH	SOLID WHITE CHANNELIZATION LINE		
	PAVEMENT RESTORATION		
	FULL DEPTH RECONSTRUCTION		

STRIPING NOTES:

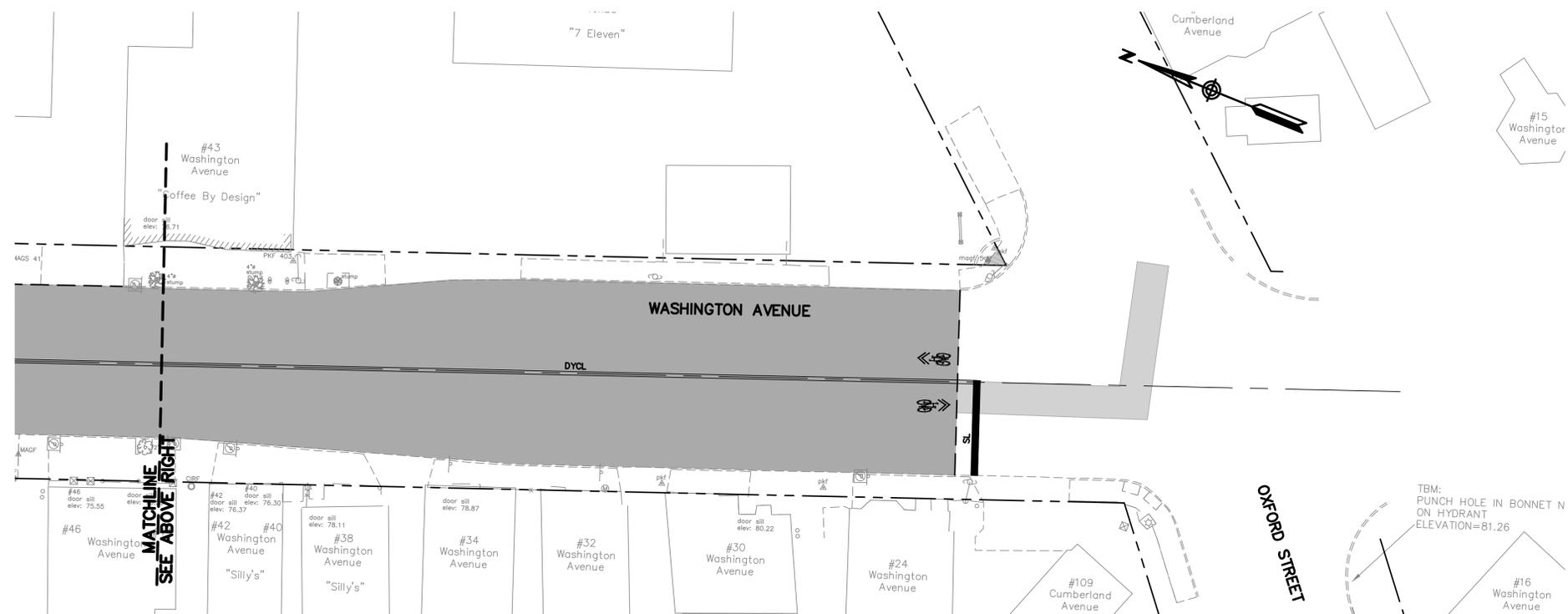
1. THE INTENT OF THE STRIPING PLANS IS TO APPROXIMATELY SHOW THE EXTENTS OF THE EXISTING STRIPING WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL CONFIRM AND NOTE ACTUAL FIELD CONDITIONS PRIOR TO DISTURBING ANY EXISTING STRIPING.
2. THE CONTRACTOR SHALL REPLACE THE EXISTING STRIPING THAT IS DISTURBED BY THE STORM DRAIN AND SEWER CONSTRUCTION. THE ACTUAL LAYOUT CONTROL FOR THE STRIPING AND LOCATION OF THE STRIPING, ARROWS, STOP BARS, AND CROSSWALKS SHALL BE BASED ON MATCHING EXISTING FIELD CONDITIONS UNLESS OTHERWISE NOTED. THE STRIPING LEGEND STRIPE WIDTHS, AND DIMENSIONS SHOWN ON THE PLANS AND DETAILS MEET CITY STANDARDS. ACTUAL STRIPING MAY BE DIFFERENT.
3. COORDINATE LAYOUT OF CROSSWALKS WITH CITY PRIOR TO STRIPING.
4. STOP BARS SHALL BE A MINIMUM OF 4' PRIOR TO CROSSWALK LOCATIONS.
5. ANY DISTURBED AREAS NOT INCLUDED IN THE STRIPING PLANS SHALL BE RESTRIPEDED BASED ON EXISTING FIELD CONDITIONS.



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WASHINGTON AVENUE STRIPING PLAN
1"=20'

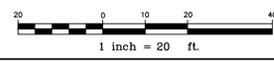


WASHINGTON AVENUE STRIPING PLAN
1"=20'

LEGEND			
SWLL	SOLID WHITE LANE LINE	↑	STRAIGHT ARROW PAVEMENT MARKING
SYLL	SOLID YELLOW LANE LINE	↶	LEFT ARROW PAVEMENT MARKING
BWLL	BROKEN WHITE LANE LINE (10' LINE & 30' GAP)	↷	RIGHT ARROW PAVEMENT MARKING
BYLL	BROKEN YELLOW LANE LINE (10' LINE & 30' GAP)	↶↷	SHARED STRAIGHT & RIGHT/LEFT ARROW PAVEMENT MARKING
DWLL	DOTTED WHITE LANE LINE (2' LINE AND 4' GAP)	↑	ONLY 'ONLY' PAVEMENT MARKING (10' LONG FOR VEHICLES, 6' LONG FOR BIKES)
DYCL	DOUBLE YELLOW CENTER LINE	⊞	BIKE PAVEMENT MARKING
SL	STOP LINE (24")	⊞	SHARED BIKE PAVEMENT MARKING
CW	CROSS WALK - 2' x 8' WHITE BARS, 4' O.C.		
SWCH	SOLID WHITE CHANNELIZATION LINE		
	PAVEMENT RESTORATION		
	FULL DEPTH RECONSTRUCTION		

STRIPING NOTES:

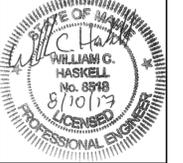
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LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-PBASE
FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: OGC	DRAWN BY: LAN	CHECKED BY: WCH	SCALE: AS NOTED	DATE: AUGUST 2017
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MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
WASHINGTON AVENUE
STRIPING PLAN

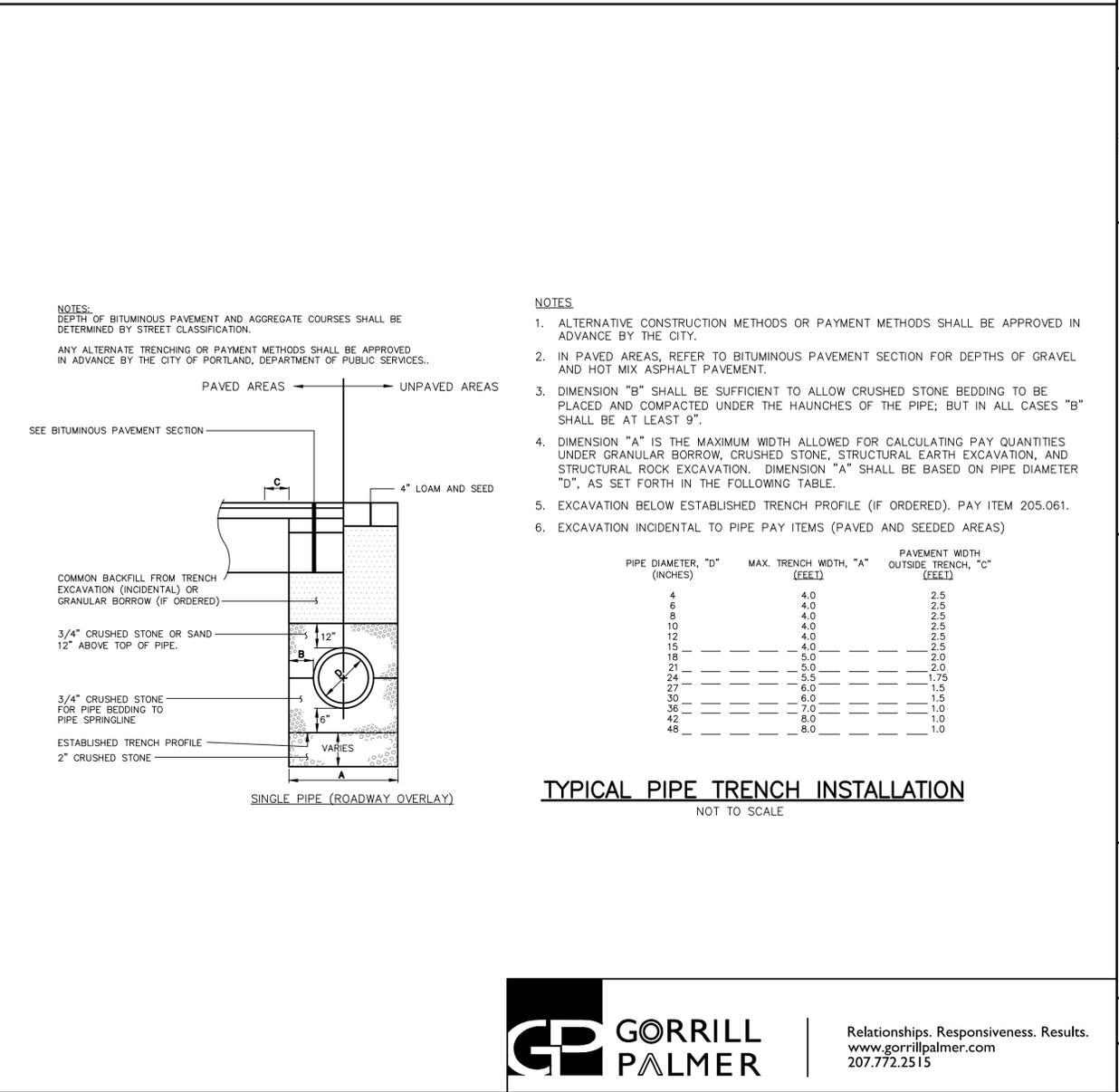
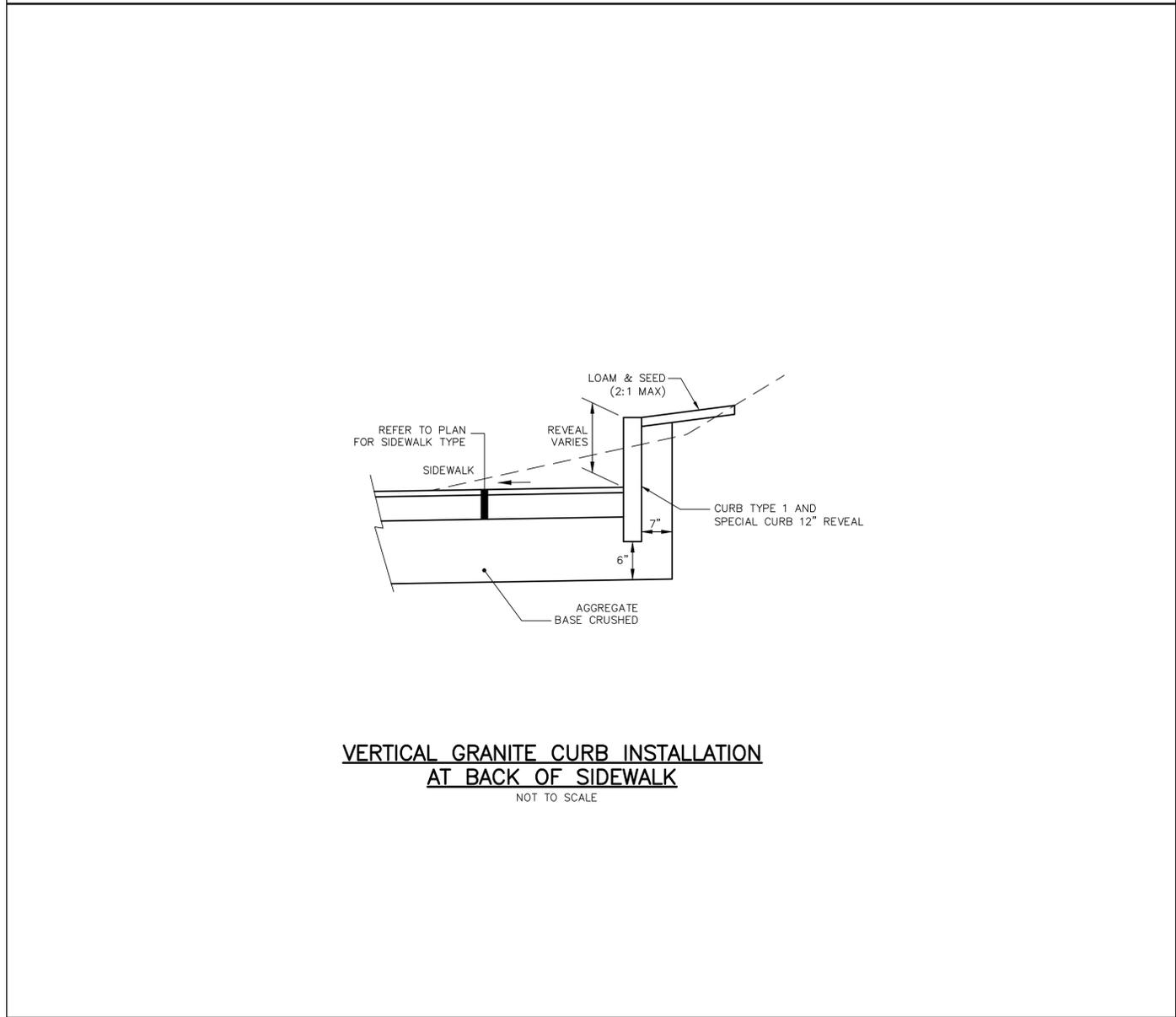
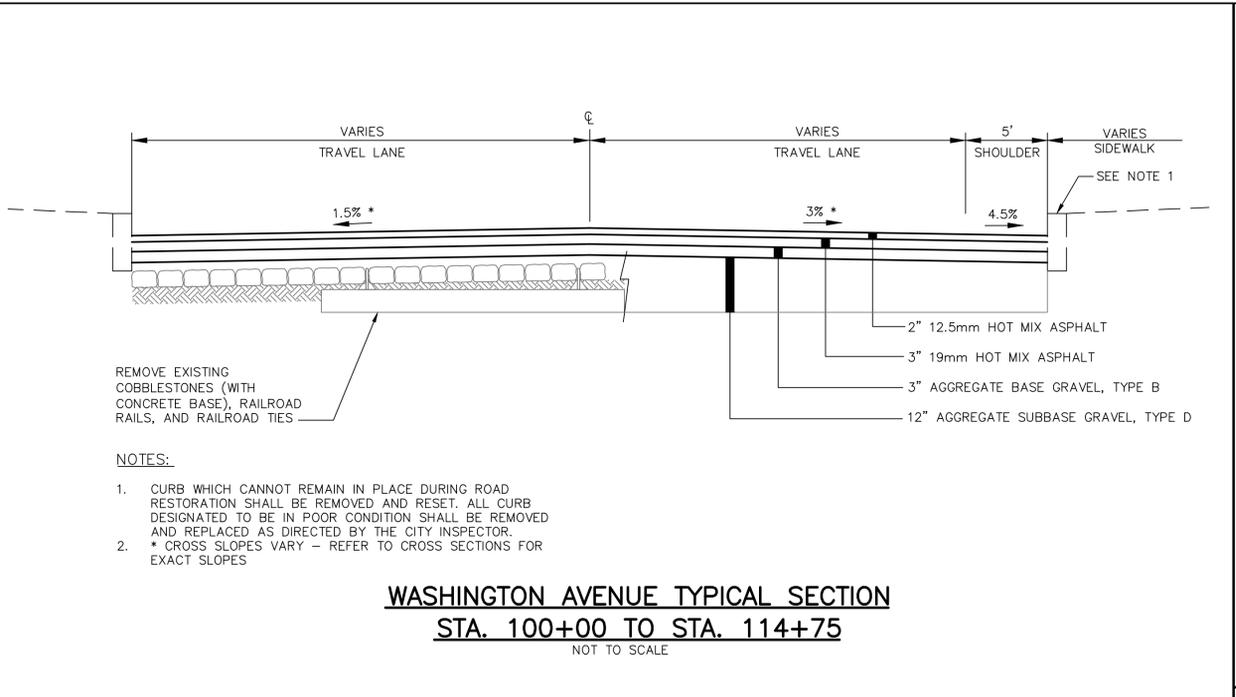
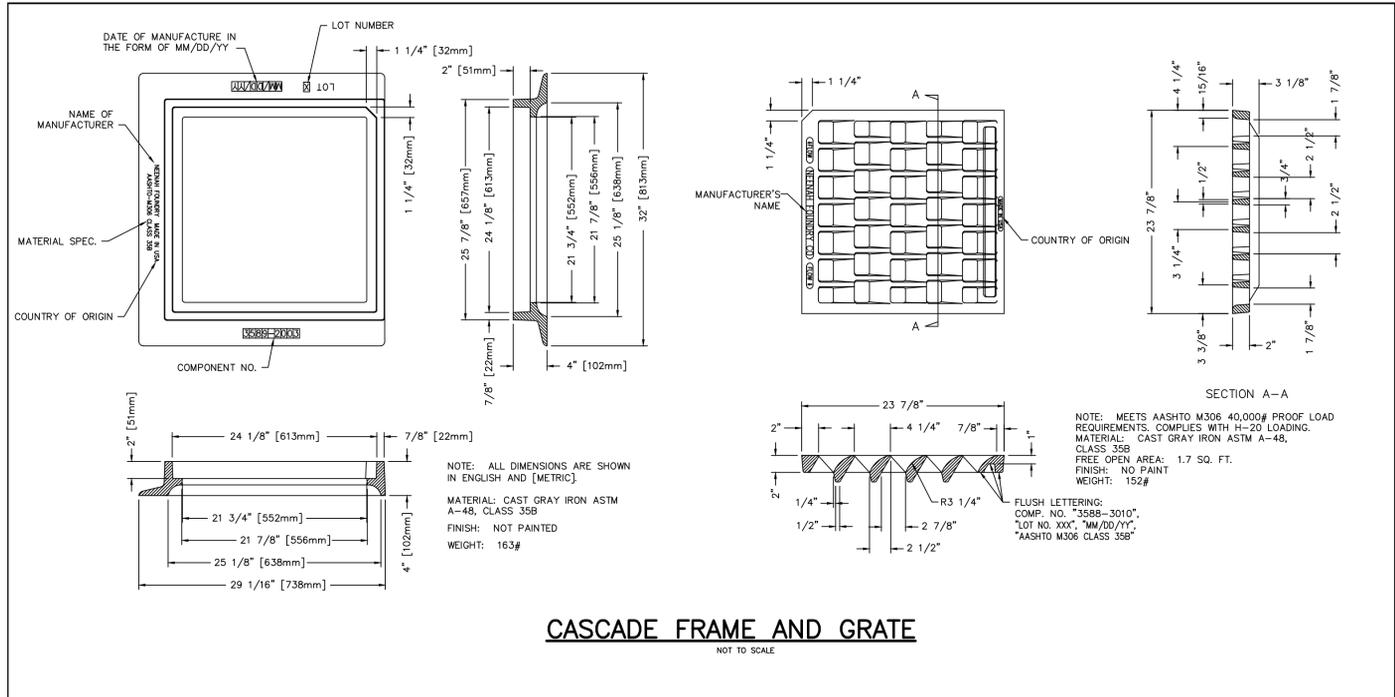
CITY OF PORTLAND, MAINE
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WATER RESOURCES DIVISION



SHEET # 32 OF 38
VAULT PLAN NUMBER



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LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-DET
FIELD BOOK USED: N/A

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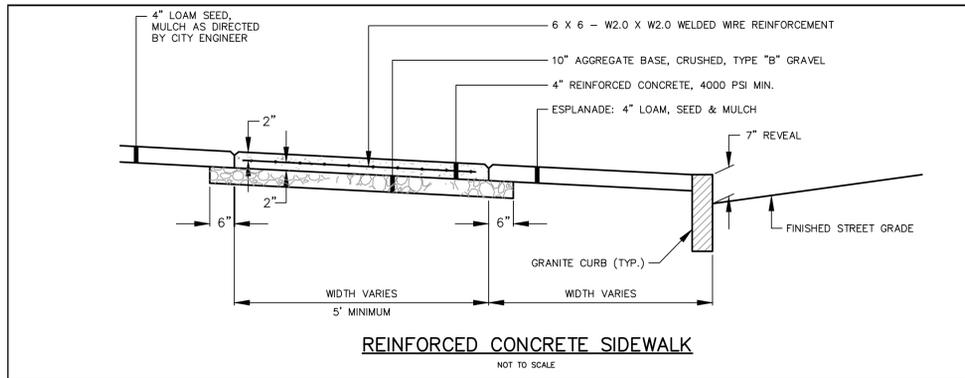
DESIGNED BY: OCC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017

MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
DRAINAGE AND ROADWAY DETAILS

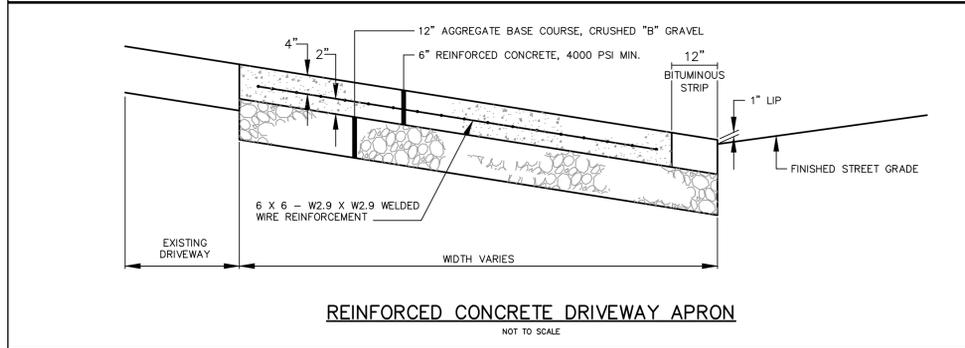
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PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION

SHEET # 35 OF 38
VAULT PLAN NUMBER

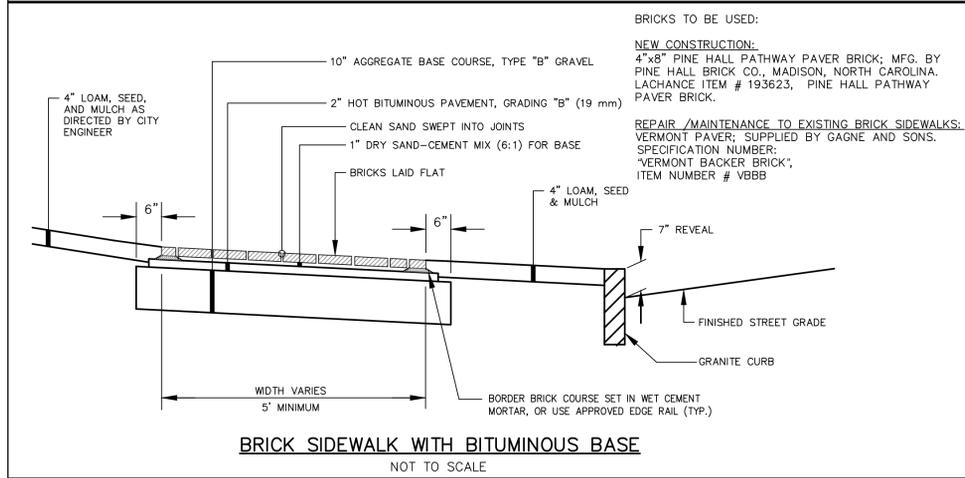
GP GORRILL PALMER
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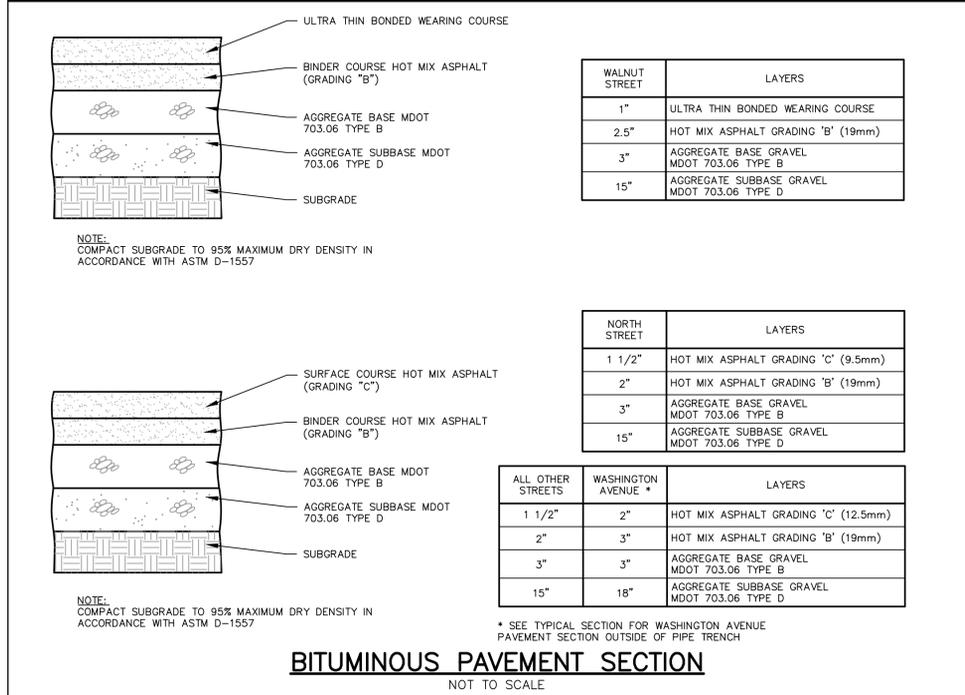
REINFORCED CONCRETE SIDEWALK
NOT TO SCALE



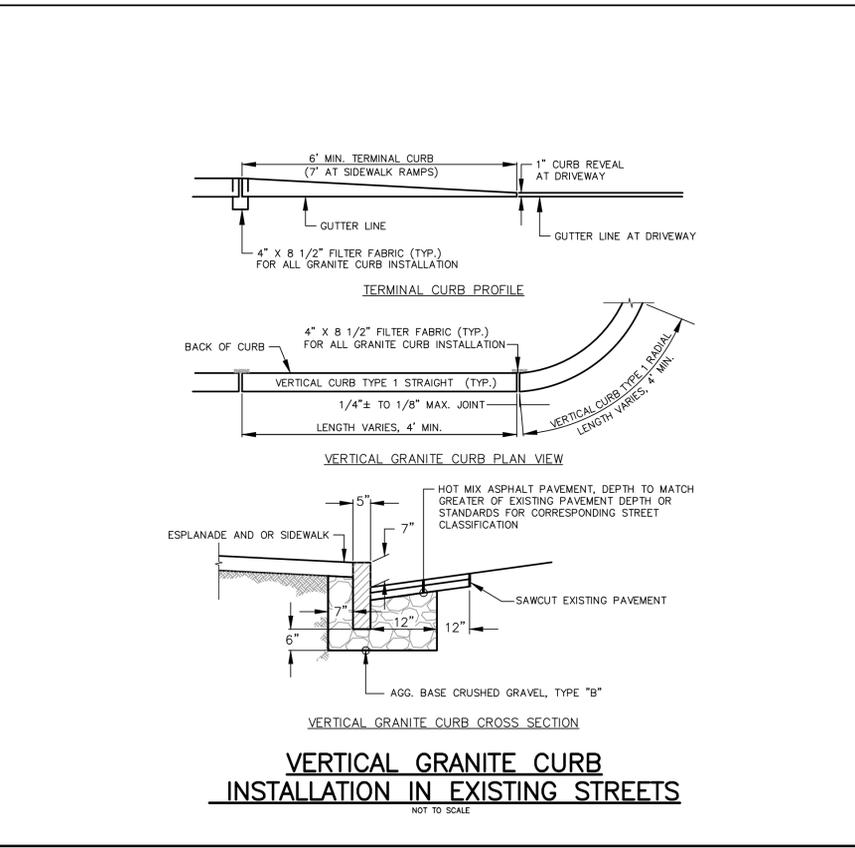
REINFORCED CONCRETE DRIVEWAY APRON
NOT TO SCALE



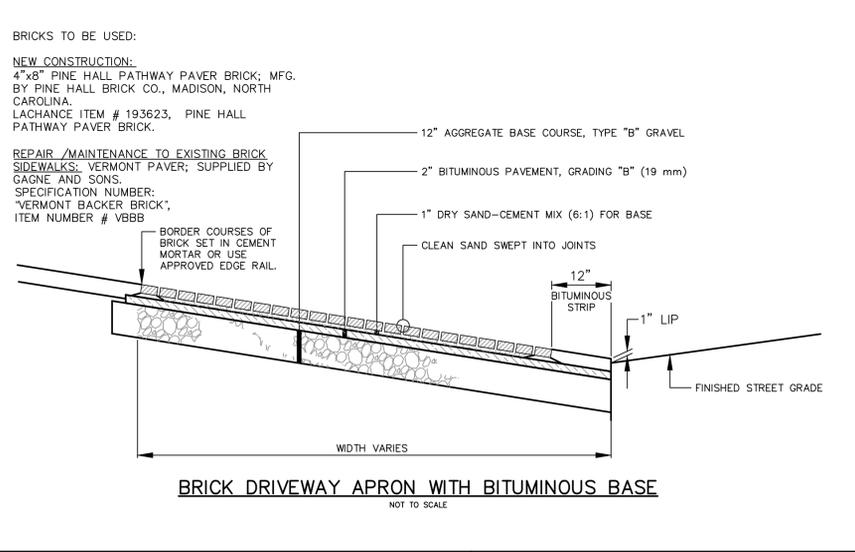
BRICK SIDEWALK WITH BITUMINOUS BASE
NOT TO SCALE



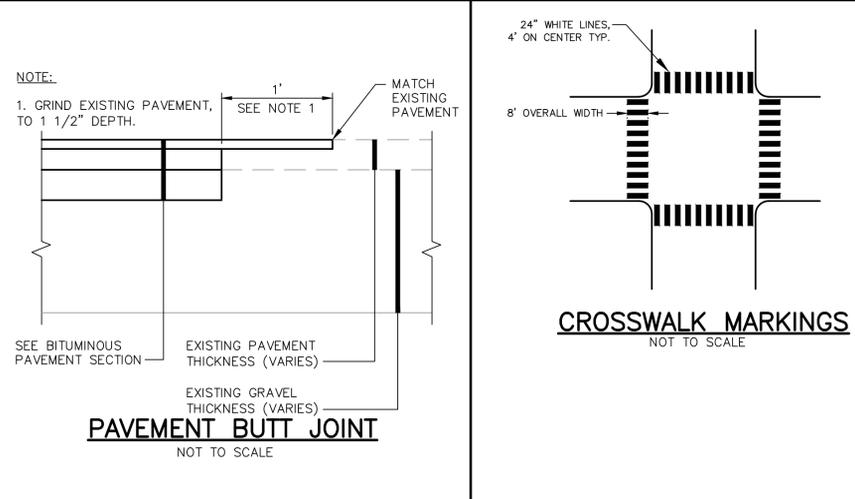
BITUMINOUS PAVEMENT SECTION
NOT TO SCALE



VERTICAL GRANITE CURB INSTALLATION IN EXISTING STREETS
NOT TO SCALE

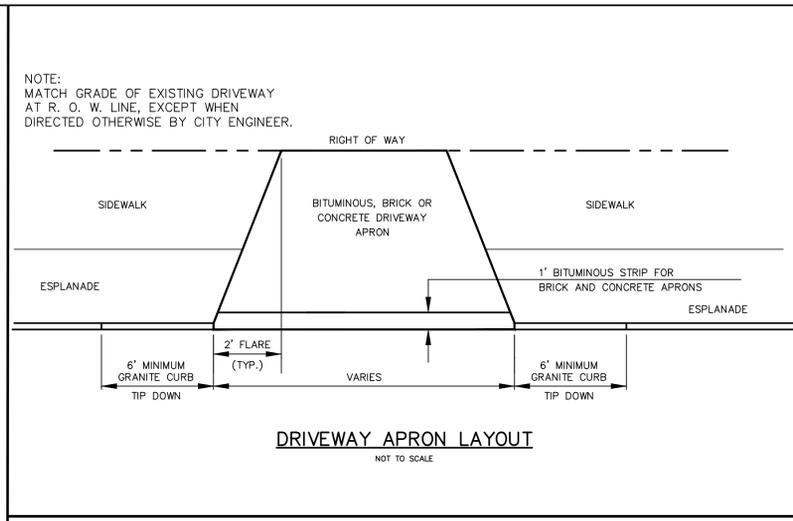


BRICK DRIVEWAY APRON WITH BITUMINOUS BASE
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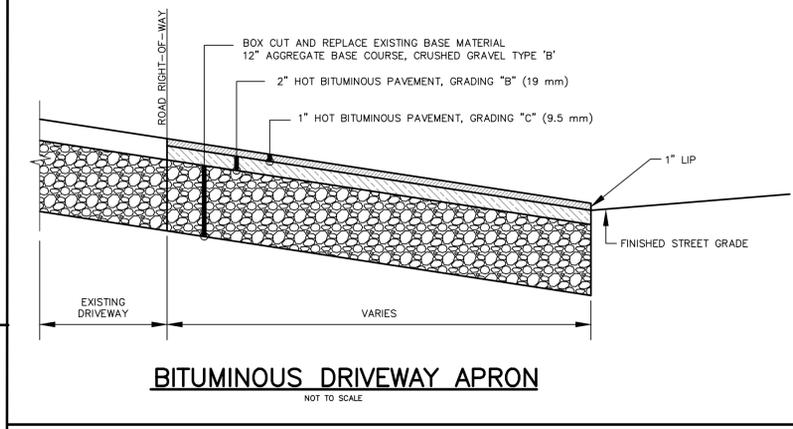


PAVEMENT BUTT JOINT
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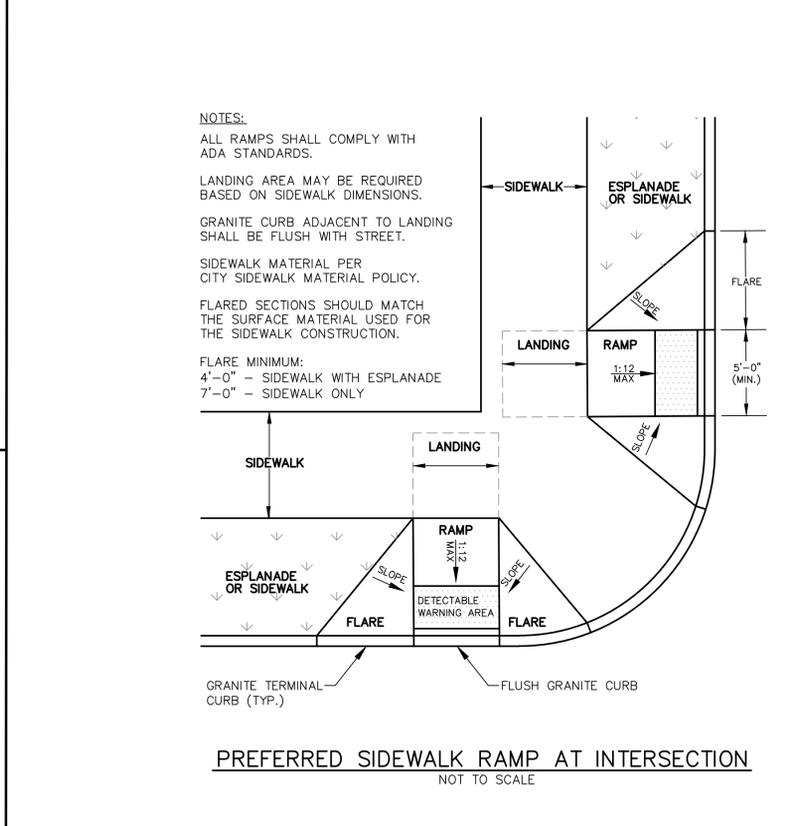
CROSSWALK MARKINGS
NOT TO SCALE



DRIVEWAY APRON LAYOUT
NOT TO SCALE



BITUMINOUS DRIVEWAY APRON
NOT TO SCALE



PREFERRED SIDEWALK RAMP AT INTERSECTION
NOT TO SCALE

NOTES:
ALL RAMP SHALL COMPLY WITH ADA STANDARDS.
LANDING AREA MAY BE REQUIRED BASED ON SIDEWALK DIMENSIONS.
GRANITE CURB ADJACENT TO LANDING SHALL BE FLUSH WITH STREET.
SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.
FLARED SECTIONS SHOULD MATCH THE SURFACE MATERIAL USED FOR THE SIDEWALK CONSTRUCTION.
FLARE MINIMUM:
4'-0" - SIDEWALK WITH ESPLANADE
7'-0" - SIDEWALK ONLY

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-DET
FIELD BOOK USED: N/A

DESIGNED BY: JCC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017

REFERENCES:

STATE OF MAINE
WILLIAM G. HASKELL
No. 8518
8/10/13
LICENSED PROFESSIONAL ENGINEER

MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
UTILITY AND ROADWAY DETAILS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION

STATE OF MAINE
WILLIAM G. HASKELL
No. 8518
8/10/13
LICENSED PROFESSIONAL ENGINEER

SHEET # 36 OF 38
VAULT PLAN NUMBER

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EROSION AND SEDIMENTATION CONTROL PLAN

THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES WILL BE IMPLEMENTED AS PART OF THE SITE DEVELOPMENT. THESE DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS OR AS DESCRIBED WITHIN THIS REPORT. WINTER CONSTRUCTION IS NOT ANTICIPATED, BUT IF CONSTRUCTION IS NECESSARY IN THE WETLAND IMPACT AREA BETWEEN SEPTEMBER 15 AND APRIL 15 THE CONTRACTOR IS REFERRED TO SECTION 8.4 -WINTER STABILIZATION PLAN AND 8.5 - STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITE DURING WINTER. FOR FURTHER REFERENCE, SEE THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES.

A. TEMPORARY EROSION CONTROL MEASURES

- 1. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE CITY OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE CITY.
2. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
3. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL EROSION CONTROL BMPs AS SHOWN OR NOTED ON THE PLANS.
4. SILTATION FENCE SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF-BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. THE SILT FENCE SHALL BE INSTALLED PER THE DETAILS PROVIDED ON THIS PLAN AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.
5. FOR WORK WHICH IS CONDUCTED BETWEEN SEPTEMBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DISTURBED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 7 DAYS FOR ALL AREAS.
6. PUBLIC WAYS SHALL BE SWEEPED, AS NECESSARY, TO CONTROL MUD AND DUST.
7. SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHOULD BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE EMBEDDED IN A SOIL TRENCH.
8. WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MAINE DOT SPECIFICATIONS - SECTION 637 - DUST CONTROL.
9. LOAM AND SEED IS INTENDED TO SERVE AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DISTURBED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP.
10. ALL CATCH BASINS WITH DISTURBED TEMPORARY AREA SHALL HAVE CATCH BASIN INLET FILTERS INSTALLED. CATCH BASIN INLET FILTERS SHALL BE MAINTAINED PRIOR TO AND AFTER ALL RAINFALL EVENTS.

B. PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE IMPLEMENTED AS PART OF THE EROSION AND SEDIMENTATION CONTROL PLAN:

- 1. ALL AREAS DISTURBED DURING CONSTRUCTION NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.) SHALL BE LOAMED, LIMED, FERTILIZED, MULCHED, AND SEEDED. FABRIC NETTING ANCHORED WITH STAPLES SHALL BE PLACED OVER THE MULCH IN AREAS AS NOTED IN PARAGRAPH 8.3.5.A.3. ALL AREAS WITHIN 100 FEET OF UNDISTURBED WETLANDS SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 7-DAY WINDOW. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION IF DEEMED TO BE OF SUFFICIENT QUALITY.
2. CATCH BASINS SHALL BE PROVIDED WITH SEDIMENT (SEE DETAILS) AND SEDIMENT HOODS IF CALLED FOR ON THE PLANS.

8.4 WINTER STABILIZATION PLAN

THE WINTER CONSTRUCTION PERIOD BEGINS SEPTEMBER 15 AND ENDS APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, ROAD GRAVEL BASE, 75 PERCENT MATURE VEGETATION COVER, OR RIPRAP BY NOVEMBER 15, ALL EXPOSED AREAS SHALL BE PROTECTED WITH OVER-WINTER STABILIZATION. AN EXPOSED AREA IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MAT, RIPRAP, OR GRAVEL BASE (ROAD ONLY).

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR TO THE SATISFACTION OF THE THIRD PARTY EROSION CONTROL INSPECTOR. EXPOSED AREAS SHALL BE LIMITED TO THOSE AREAS IN WHICH WORK IS EXPECTED TO COMMENCE AND COMPLETE IN THE NEXT FIFTEEN (15) DAYS AND THAT CAN BE MULCHED WITHIN ONE DAY PRIOR TO ANY SNOW EVENT.

ALL FUTURE ROADWAY AREAS SHALL BE CLASSIFIED EXPOSED UNTIL SUBBASE GRAVEL HAS BEEN INSTALLED; ALL FUTURE LOAM AND SEED AREAS SHALL BE CLASSIFIED EXPOSED UNTIL THEY HAVE BEEN LOAMED, SEEDED, AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT TWICE THE NORMAL RATE, OR 150 LBS./1,000 S.F. (3 TONS/ACRE) MINIMUM, AND SHALL BE PROPERLY ANCHORED.

THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL MEASURES AS NECESSARY TO CONTROL EROSION AND SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. EARTHWORK OPERATIONS ON OTHER AREAS SHALL NOT COMMENCE UNTIL THE EXPOSED SOIL SURFACE ON PREVIOUS AREAS BEING WORKED ON HAS BEEN STABILIZED IN ORDER TO MINIMIZE THE QUANTITY OF EXPOSED AREA AT ANY GIVEN TIME.

8.4.1 SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE -150 LBS/1,000 S.F. (3 TONS/ACRE) -OR WITH A 4-INCH LAYER OF WOODWASTE EROSION CONTROL MIX. THIS MULCHING SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND SHALL BE RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL EVENT. NO SOIL STOCKPILE, MULCHED OR OTHERWISE, SHALL BE PLACED WITHIN 100 FEET OF ANY NATURAL RESOURCE.

8.4.2 NATURAL RESOURCE PROTECTION

ANY AREA WITHIN 100 FEET OF A NATURAL RESOURCE THAT IS NOT STABILIZED WITH A MINIMUM 75 PERCENT MATURE VEGETATION CATCH SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. A DOUBLE-LINE SEDIMENT BARRIER -SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX -SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. ANY NATURAL RESOURCE CROSSINGS SHALL BE PROTECTED TO MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESOURCE.

8.4.3 GENERAL MULCHING

ALL FUTURE LOAM AND SEED AREAS SHALL BE CONSIDERED DENUDED UNTIL THEY HAVE BEEN LOAMED, SEEDED, AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT TWICE THE NORMAL RATE, OR 150 LBS/1,000 S.F. (3 TONS/ACRE), AND SHALL BE PROPERLY ANCHORED. IN NO INSTANCE SHALL MULCH BE SPREAD ON TOP OF SNOW; SNOW SHALL BE REMOVED DOWN TO A MAXIMUM DEPTH OF ONE (1) INCH PRIOR TO MULCH APPLICATION.

AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY, STRAW, OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED STABILIZED WHEN EXPOSED SURFACES HAVE BEEN MULCHED WITH STRAW OR HAY AT A RATE OF 150 LBS/1,000 S.F. (3TONS/ACRE) AND ADEQUATELY ANCHORED TO THE EXTENT THAT THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. ALL MULCH SHALL BE ANCHORED BY PEG LINE, MULCH NETTING, TRACKING, OR WOOD CELLULOSE FIBER. MULCH SHALL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NO LONGER VISIBLE.

8.4.4 SLOPE AND DITCH MULCHING

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED PERIOD OF TIME UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR EROSION CONTROL BLANKET. MULCH SHALL BE APPLIED TO ALL SLOPES GREATER THAN 8 PERCENT AT A RATE OF 230 LBS/1,000 S.F. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAT 3 PERCENT, FOR ALL SLOPES EXPOSED TO DIRECT WINDS, AND FOR ALL OTHER SLOPES GREATER THAN 8 PERCENT. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN OR EQUAL TO 8 PERCENT. EROSION CONTROL MIX MAY BE SUBSTITUTED FOR EROSION CONTROL BLANKETS ON ALL SLOPES NOT ASSOCIATED WITH DITCHES.

8.4.5 SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM AND SEED SHALL NOT BE REQUIRED. DURING PERIODS OF ABOVE-FREEZING TEMPERATURES, FINISHED AREAS SHALL BE FINE GRADED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL FINAL TREATMENT CAN BE APPLIED. IF AFTER NOVEMBER 1 THE EXPOSED AREA HAS BEEN LOAMED AND FINAL GRADED WITH A UNIFORM SURFACE, THE AREA MAY BE DORMANT-SEEDED AT A RATE THREE TIMES THAT SPECIFIED FOR PERMANENT SEEDING AND MULCHED. DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND STAPLE-ANCHORED FABRIC NETTING. ALL DISTURBED AREAS RECEIVING DORMANT SEEDING SHALL RECEIVE FOUR (4) INCHES OF LOAM AND SHALL BE SEEDED AT A RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED AT THIS TIME (LESS THAN 75 PERCENT CATCH) SHALL BE RE-VEGETATED WITH LOAM, SEED, AND MULCH. IF DORMANT SEEDING IS NOT USED, ALL DISTURBED AREAS SHALL BE RE-VEGETATED IN THE SPRING.

8.4.6 DEWATERING AND TEMPORARY STREAM DIVERSION

WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION SHALL PASS THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. A DISCHARGE LOCATION SHALL BE SELECTED THAT AVOIDS FLOODING, ICING, AND SEDIMENT DISCHARGE TO ANY PROTECTED RESOURCE. IN NO INSTANCE SHALL FILTER BAGS OR CONTAINMENT STRUCTURES BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

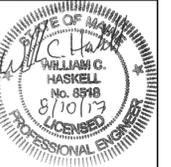
8.4.7 INSPECTION AND MONITORING

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED THROUGHOUT THE ENTIRE CONSTRUCTION PHASE. AFTER EACH RAINFALL EVENT, SNOWFALL EVENT, OR PERIOD OF THAWING AND RUNOFF, CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO ENSURE THEIR PROPER CONTINUOUS FUNCTION. IN THE SPRING FOLLOWING TEMPORARY AND/OR FINAL SEEDING AND MULCHING, CONTRACTOR SHALL INSPECT AND REPAIR ANY DAMAGED AND/OR UNESTABLISHED AREAS. VEGETATIVE COVER IS CONSIDERED ESTABLISHED WHEN A MINIMUM 85 TO 90 PERCENT OF VEGETATED AREAS EXHIBIT VIGOROUS GROWTH.

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-DET
FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: OCC
DRAWN BY: LAN
CHECKED BY: WCH
SCALE: AS NOTED
DATE: AUGUST 2017



MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
EROSION CONTROL NOTES

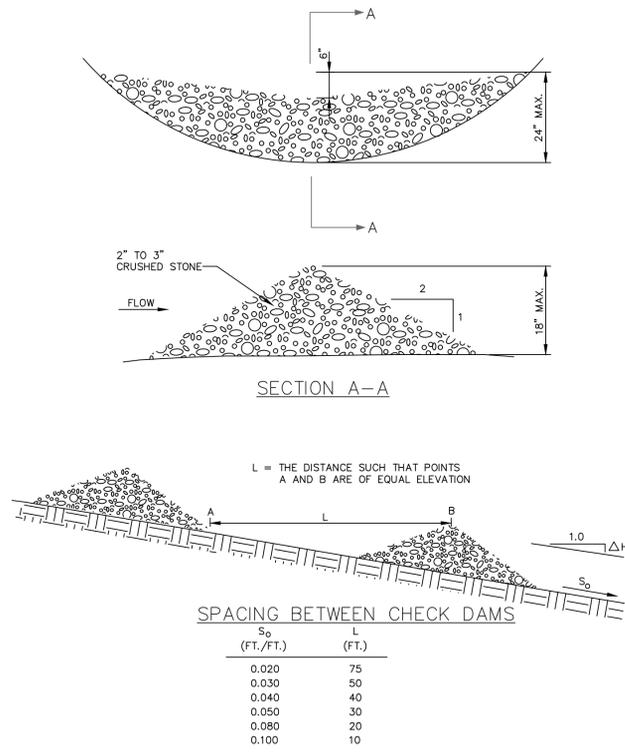
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



SHEET # 37 OF 38
VAULT PLAN NUMBER

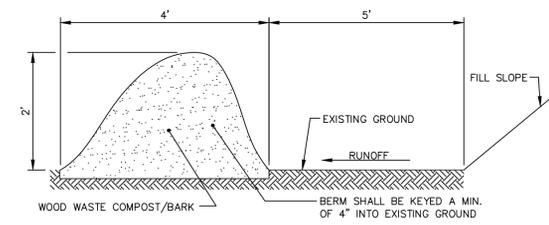


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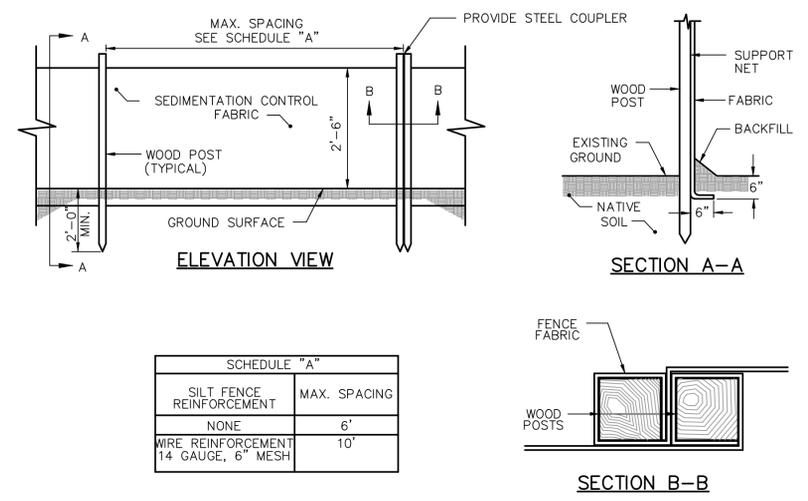


STONE CHECK DAM
NOT TO SCALE

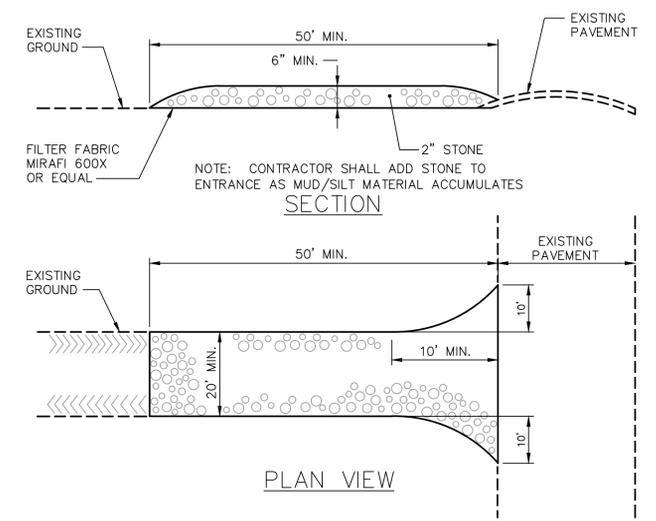
- NOTES:**
- THE WOOD WASTE COMPOST/BARK MIX SHALL CONFORM TO THE FOLLOWING STANDARDS:
 - MOISTURE CONTENT - 30-60%
 - pH - 5.0 - 8.0
 - SCREEN SIZE - 100% LESS THAN 3", MAX. 70% LESS THAN 1"
 - NO LESS THAN 40% ORGANIC MATERIAL (DRY WEIGHT) BY LOSS OF IGNITION.
 - NO STONES LARGER THAN 2" IN DIAMETER.
 - SILTS, CLAYS OR SUGAR SANDS ARE NOT ACCEPTABLE IN THE MIX.
 - THE COMPOST BERM SHALL BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR.
 - THE WOOD WASTE COMPOST/BARK FILTER BERM MAY BE USED IN LIEU OF SILTATION FENCE, AT THE TOE OF SHALLOW SLOPES, ON FROZEN GROUND, LEDGE OUT CROPS, VERY ROOTED FORESTED AREA OR AT THE EDGE OF GRAVEL PARKING AREAS.
 - BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS COMPLETED OR 70% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.
 - WOODWASTE COMPOST BARK FILTER SHALL NOT BE USED IN WETLAND AREAS.



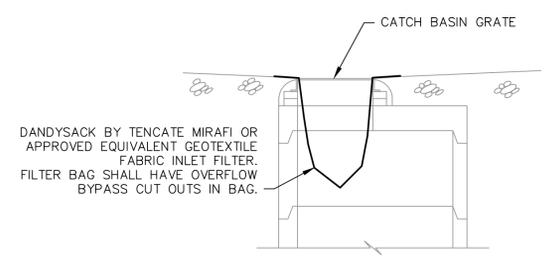
WOOD WASTE COMPOST/BARK
FILTER BERM DETAIL
NOT TO SCALE



SILTATION FENCE
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

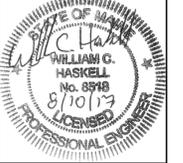


CATCH BASIN INLET FILTER
NOT TO SCALE

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.13-DET
FIELD BOOK USED: N/A

REFERENCES:

DESIGNED BY: JCC	DRAWN BY: LAN	CHECKED BY: WCH	SCALE: AS NOTED	DATE: AUGUST 2017
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MADISON, WALNUT, WASHINGTON
SEWER SEPARATION
EROSION CONTROL
DETAILS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION



SHEET # 38 OF 38
VAULT PLAN NUMBER



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NOTES:

- CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED PIPING AND APPURTENANCES. SALVAGE ALL REMOVED HYDRANTS AND DELIVER TO PWD YARD AT 225 DOUGLASS ST – PORTLAND.
- ALL MAINS AND SERVICES SHALL BE INSTALLED WITH 5.5' OF COVER MEASURED FROM PROPOSED ROAD GRADE UNLESS INDICATED OTHERWISE ON THE DRAWINGS OR APPROVED BY A PWD REPRESENTATIVE.
- THE PORTLAND WATER DISTRICT WILL NOTIFY CUSTOMERS FOR ALL WORK INVOLVING TEMPORARY SHUTDOWN OF SERVICE. CUSTOMERS MUST RECEIVE AT LEAST 48 HOURS NOTIFICATION PRIOR TO ANY SHUTDOWN. THE DISTRICT MUST RECEIVE NOTICE FROM THE CONTRACTOR OF THE SHUTDOWN AT LEAST 48 HOURS PRIOR TO CUSTOMER NOTIFICATION.
- ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY-WRAPPED PER SPECIFICATIONS.
- THE COST OF PROVIDING TEMPORARY WATER SERVICE TO THE BUILDINGS INDICATED ON THE DRAWINGS PLAN SHALL BE AN INCIDENTAL COST FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE. IF PROPERTIES REQUIRING A TEMPORARY WATER CONNECTION HAVE MALFUNCTIONING SILLCOCKS OR NO EXTERIOR PLUMBING, IT MAY BE NECESSARY TO EXCAVATE AND CONNECT INTO THE EXISTING SERVICE LINE BEHIND THE EXISTING SHUT-OFF VALVE TO PROVIDE TEMPORARY SERVICE.
- PROVIDE TEMPORARY MAIN CONNECTION TO HYDRANT USING ALL BRASS OR 304 SS ADAPTER, 304 SS NPT TO HDPE TRANSITION, AND FLANGED HDPE PIPING TO BRING PIPING ELEVATION FROM HYDRANT PORT TO GRADE. PROVIDE PIPING SUPPORTS/BLOCKING AT FITTINGS. HDPE SHALL BE AWWA C906, SDR 11 WITH IPS FLANGE ADAPTERS AND DI BACKUP RINGS, DIMENSIONS PER AWWA C207. ALL PIPING AND FITTINGS SHALL BE NSF 61.
- PROVIDE FLANGED LL DOUBLE CHECK VALVE BACKFLOW DEVICE, SAME NOMINAL SIZE AS TEMP MAIN, AT EACH HYDRANT CONNECTED TO A TEMPORARY MAIN. PROVIDE FLANGED RESILIENT SEATED GATE VALVES FOR ISOLATION, AND PROVIDE UPSTREAM AND DOWNSTREAM TAPS. REMOVE BACKFLOW ONLY UPON OWNER'S REQUEST AND PROVIDE FLANGED HDPE REPLACEMENT SPOOL PIECE. HDPE SHALL BE AWWA C906, SDR 11 WITH IPS FLANGE ADAPTERS AND DI BACKUP RINGS. FLANGE DIMENSIONS PER AWWA C207. ALL PIPING AND FITTINGS SHALL BE NSF 61. PROVIDE DOCUMENTATION OF ANNUAL INSPECTION BY A PERSON CERTIFIED BY THE NEW ENGLAND WATER WORKS ASSOCIATION OR AMERICAN BACKFLOW PREVENTION ASSOCIATION.
- INSTALL 4" TEMPORARY FIRE DEPARTMENT CONNECTION (TYP.). 4" GATE VALVE, 90° ELBOW, AND 4-1/2" NPT STEAMER PORT CONNECTION WITH CAP AT LOCATIONS SHOWN ON THE DRAWINGS. ALL JOINTS TO BE RESTRAINED. STEAMER PORT AND RISER TO BE ANCHORED TO THE GROUND. OUTLET TO BE BETWEEN 1' AND 2' OFF THE GROUND. OUTLET AND TEE TO BE BRACED.
- REMOVE ALL OLD PIPING NOT EXPLICITLY CALLED OUT FOR ABANDONMENT.
- TEMPORARY WATER SYSTEM SHALL ONLY BE ACTIVE BETWEEN APRIL 15TH AND OCTOBER 15TH. ALL WATER MAIN, EITHER EXISTING OR NEWLY INSTALLED, MUST BE ACTIVE BETWEEN OCTOBER 16TH AND APRIL 14TH.
- CONTRACTOR MUST ALLOW OWNER SUFFICIENT TIME TO TRANSFER WATER SERVICES FROM EXISTING WATER MAIN TO TEMPORARY WATER MAIN/SERVICES INSTALLED BY CONTRACTOR AND TO TRANSFER SERVICE TO NEW WATER MAIN/SERVICE LINE UPON SUCCESSFUL TESTING OF SAMPLE FOR ABSENCE OF BACTERIA. THE CONTRACTOR SHALL NOT CLAIM ANY DELAY-RELATED COST OR TIME RELATED TO THIS WORK.
- REPLACE ALL SERVICES TO BE RENEWED FROM MAIN TO STREET LINE WITH 1" COPPER PIPING, UNLESS OTHERWISE NOTED.
- LOCATIONS OF UTILITIES OTHER THAN WATER ARE APPROXIMATE, AND NOT ALL UTILITIES ARE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, SUPPORTING AND PROTECTING ALL UTILITIES DURING INSTALLATION OF THE WATER MAIN.
- INSTALL SWIVEL TYPE TEES FOR ALL HYDRANT CONNECTIONS.
- A SHUTDOWN IS REQUIRED FOR INSTALLATION OF ALL CUT-IN VALVES AND FITTINGS ON EXISTING WATER MAINS.
- ALL FITTINGS SHALL BE MECHANICAL JOINT (RESTRAINED).
- REMOVE THE TOP SECTION OF ALL ABANDONED VALVE BOXES AND FILL WITH SAND.
- INSTALL A MECHANICAL JOINT CAP ON ENDS OF ALL ABANDONED MAINS.
- ALL TEMPORARY WATER TO BE BURIED BELOW GRADE AT DRIVEWAYS AND ROADWAYS.
- LOCATION OF THE TEMPORARY WATER MAIN TO SERVE MUNJOY HEIGHTS SHALL BE COORDINATED WITH THE PORTLAND WATER DISTRICT, CITY OF PORTLAND AND PORTLAND TRAILS. TREE CLEARING SHALL BE MINIMIZED AND APPROVED BY THE ABOVE PARTIES PRIOR TO CONSTRUCTION.

PHASING NOTES:

- INSTALLATION SHALL BE CONDUCTED IN TWO PHASES. PHASE 1 SHALL BE INSTALLED, FLUSHED, PRESSURE TESTED, DISINFECTED AND TEST NEGATIVE FOR BACTERIA BEFORE PHASE 2 IS TAKEN OUT OF SERVICE
- PHASE 1: NORTH AND EAST OF FOX STREET, INCLUDING WASHINGTON AVENUE (NORTHWEST OF FOX STREET), WALNUT STREET, SHERIDAN STREET AND NORTH STREET (TO BE COMPLETED PRIOR TO CONSTRUCTING PHASE 2)
- PHASE 2: WASHINGTON AVENUE SOUTHEAST OF FOX STREET.

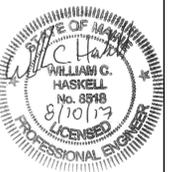
STREET OPENING & PAVEMENT RESTORATION REQUIREMENTS & FEES

- CONTRACTOR IS REQUIRED TO HAVE A VALID EXCAVATOR'S LICENSE IN THE CITY OF PORTLAND.
- THE CONTRACTOR IS REQUIRED TO SUBMIT A COMPLETE TRAFFIC CONTROL PLAN TO THE CITY OF PORTLAND (ATTN: STREET OPENINGS). APPROVAL OF THE PLAN BY THE CITY IS REQUIRED BEFORE A STREET OPENING PERMIT WILL BE ISSUED.
- IF EXCAVATION (OR PAVEMENT DAMAGE) OCCURS AT OR WITHIN 24 INCHES OF THE EDGE OF PAVEMENT, FULL DEPTH PAVEMENT TO THE EDGE OF THE PAVEMENT IS REQUIRED.
- BACKFILLED TRENCHES ARE TO BE PAVED NO LATER THAN SEVEN DAYS FOLLOWING INSTALLATION OF THE WATER MAIN. (PAVING IS REQUIRED ON A WEEKLY BASIS THROUGHOUT THE PROJECT.) THE CONTRACTOR MUST NOTIFY THE CITY OF PORTLAND NO LATER THAN 9:00 AM ON DAYS THAT IT PLANS TO PAVE.

VEHICLE, BICYCLE & PEDESTRIAN TRAFFIC CONTROL & WORKING HOURS

- NORMAL WORKING HOURS ARE LIMITED TO 7:00 AM TO 7:00 PM MONDAY THRU FRIDAY. DUE TO THE DENSELY POPULATED RESIDENTAL NEIGHBORHOOD, NO WORK, INCLUDING THE RUNNING OF CONSTRUCTION EQUIPMENT, IS TO BE PERFORMED OUTSIDE OF THESE HOURS WITHOUT APPROVAL OF THE PORTLAND WATER DISTRICT. IN ADDITION, NO WORK WILL BE PERMITTED ON PATRIOT'S DAY (APRIL 17), MEMORIAL DAY (MAY 29), JULY 3, INDEPENDENCE DAY (JULY 4), LABOR DAY (SEPTEMBER 4), COLUMBUS DAY (OCTOBER 9), OR NOVEMBER 10.
- ALTERNATING ONE-WAY TRAFFIC IS PERMISSIBLE DURING DAYTIME WORKING HOURS – 7:00 AM to 7:00 PM.
- FULL ACCESS TO ALL SIDE STREETS AND INTERSECTIONS IS REQUIRED UNLESS A DETOUR PLAN HAS BEEN SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE CITY.
- SIDEWALKS MUST REMAIN UNOBSTRUCTED AT ALL TIMES OR REASONABLE DETOURS PROVIDED.
- CROSSWALKS SHALL BE MAINTAINED AND ACCESSIBLE AT ALL TIMES.
- PROVISIONS FOR BICYCLES MUST BE MAINTAINED. IN AREAS WHERE SPACE IS NOT PROVIDED, APPROPRIATE WARNING SIGNS MUST BE PROVIDED.
- ALL TRAVEL LANES SHALL BE AT LEAST 11 FEET WIDE.
- METRO BUS STOP LOCATIONS MUST BE MAINTAINED. COORDINATE WORK WITH METRO WHEN ADJUSTMENTS TO NORMAL BUS STOPS AND/OR ROUTES ARE NECESSARY.
- DAMAGED TRAFFIC LOOPS OR SIGNAL EQUIPMENT MUST BE REPAIRED IMMEDIATELY AFTER COMPLETION OF THE IMPACTED AREA. TRAFFIC AND STREET SIGNS MUST BE MAINTAINED AT ALL TIMES.
- IF WORK DISTURBS CENTERLINES OR LANE MARKINGS, TEMPORARY REFLECTIVE MARKERS ARE TO BE PLACED IMMEDIATELY AFTER THE PAVEMENT IS PLACED. ANY DISTURBED STREET MARKINGS MUST BE PERMANENTLY REPLACED NO LATER THAN THIRTY DAYS AFTER PAVEMENT RESTORATION.

NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

BIDDING	8/10/17	WCH
Issued For	Date	By

Design: JWA	Draft: LAN	Date: APRIL 2017
Checked: WCH	Scale: AS SHOWN	Job No.: 3218
File Name: 3218-PBASE.dwg		
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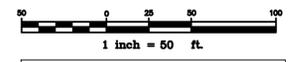


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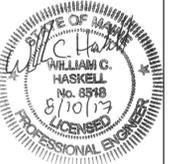
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Drawing Name:	GENERAL NOTES
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.	W1
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Rev.	Date	Revision

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		8/10/17	WCH

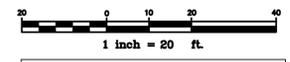
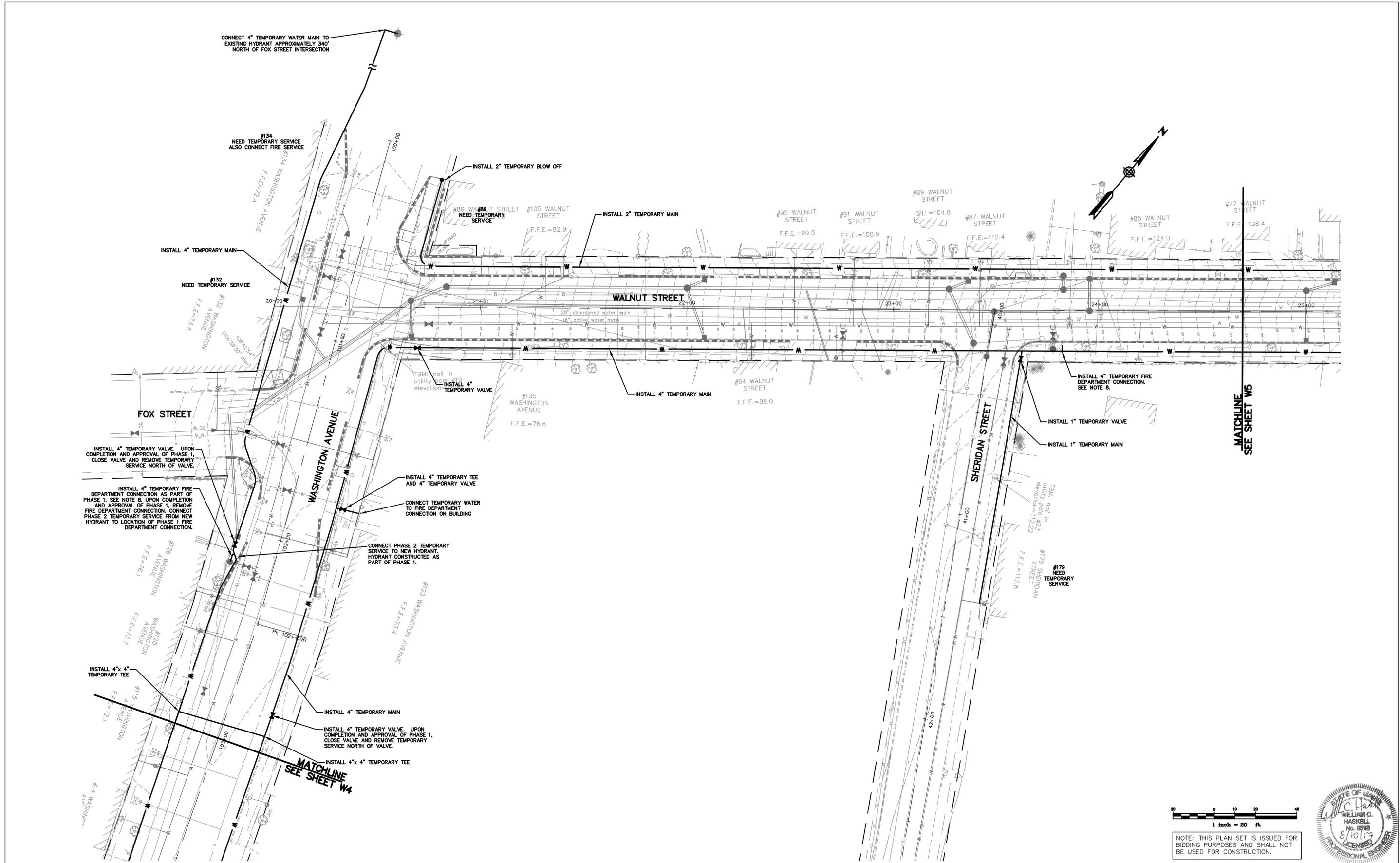
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 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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Drawing Name:	TEMPORARY WATER SERVICE PLAN
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
 W2



NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

BIDDING	8/10/17	WCH
Issued For	Date	By

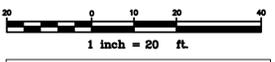
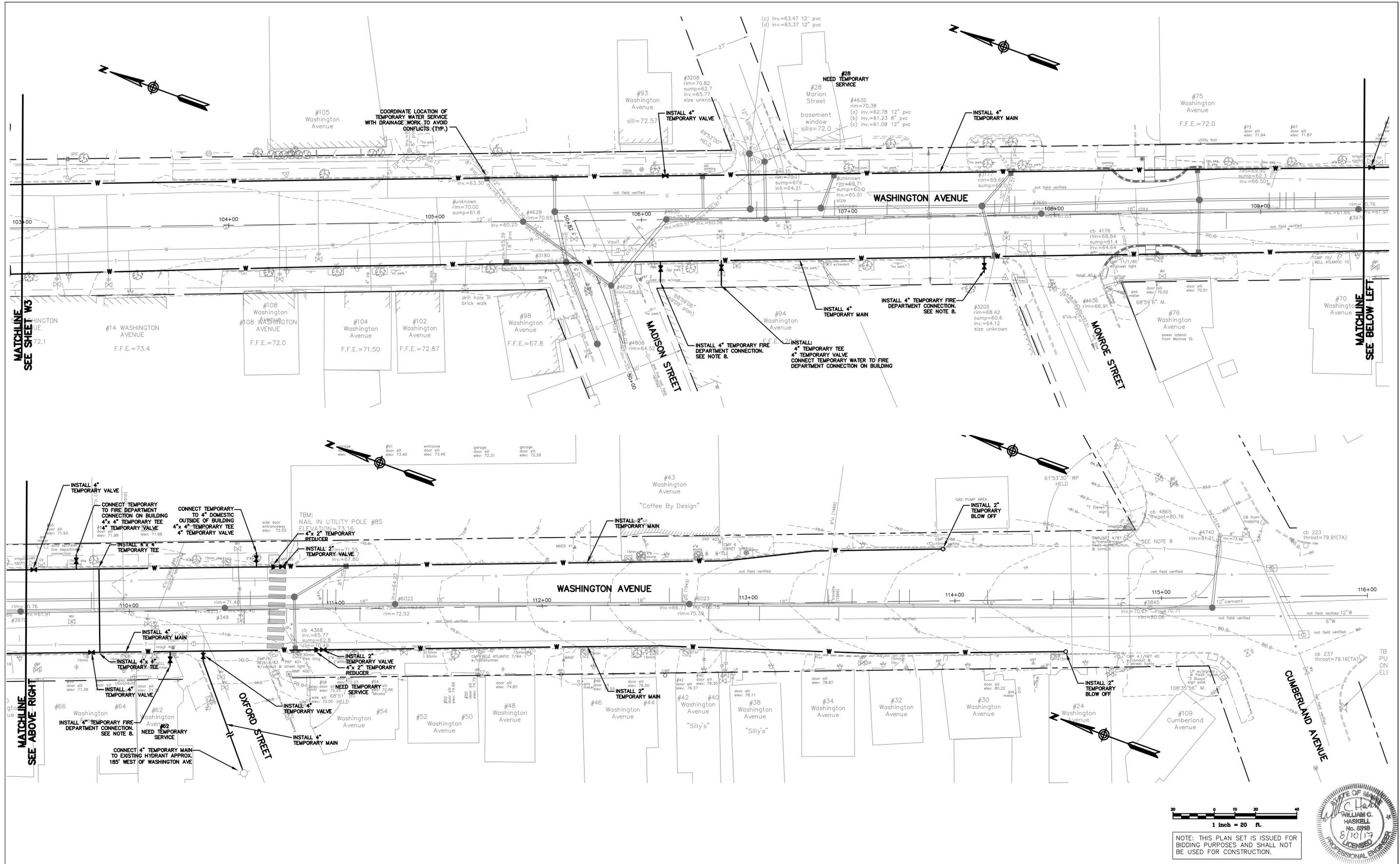
Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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Drawing Name:	TEMPORARY WATER SERVICE PLAN
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
 W3



NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

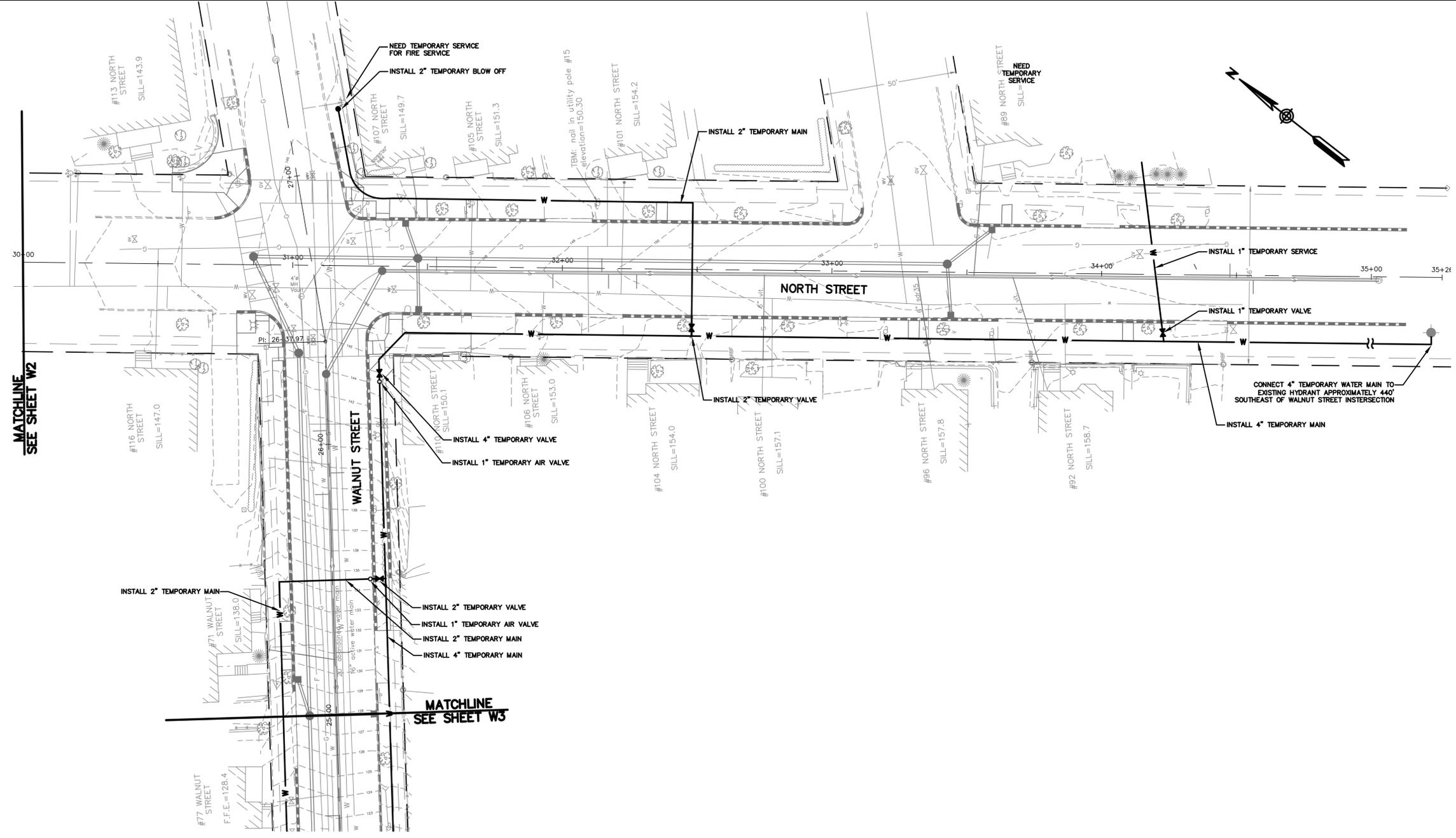
BIDDING	Issued For	Date	By
		8/10/17	WCH

Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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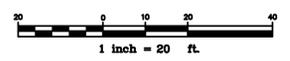
Drawing Name:	TEMPORARY WATER SERVICE PLAN
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
W4

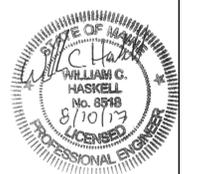


MATCHLINE
SEE SHEET W2

MATCHLINE
SEE SHEET W3



NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

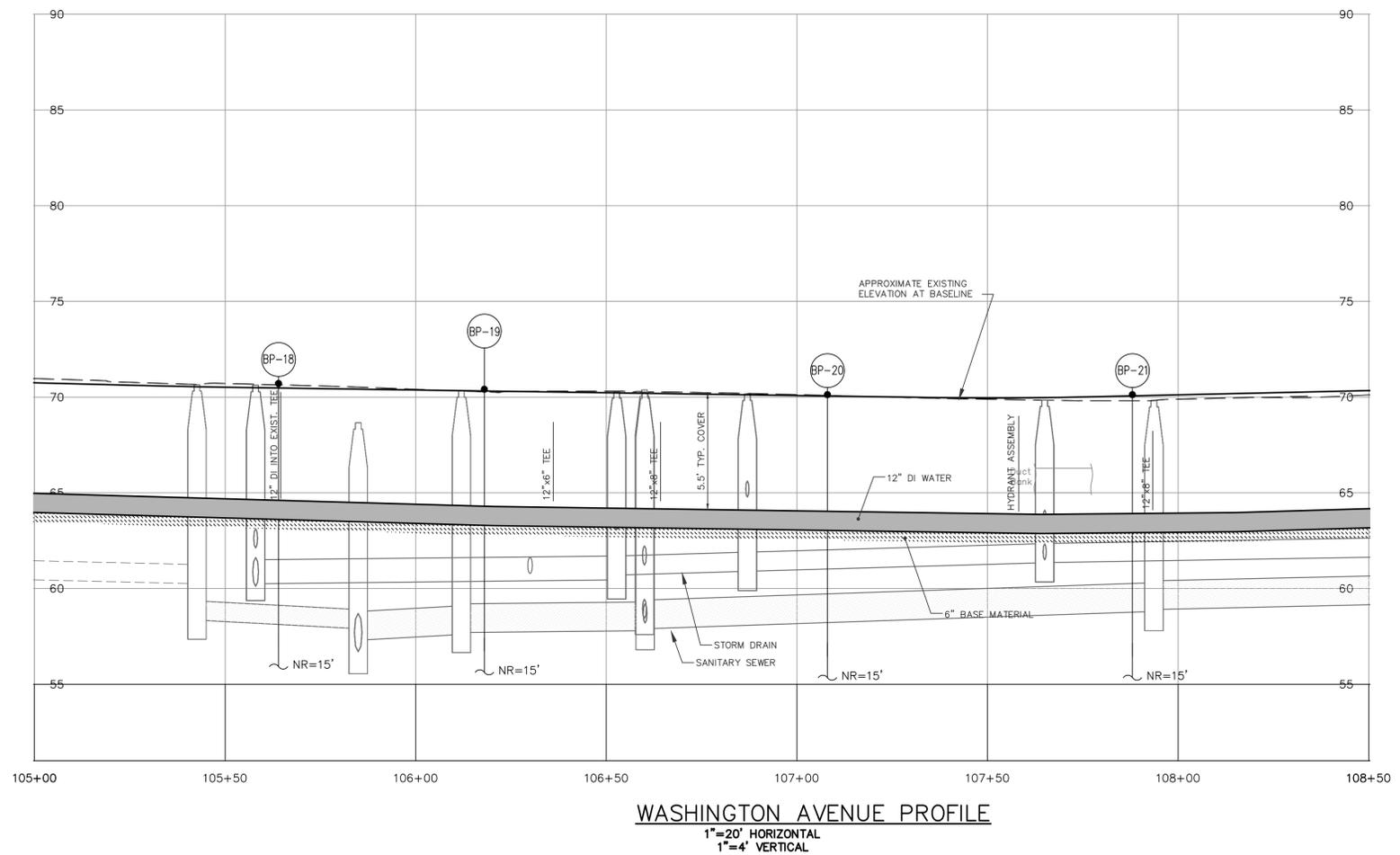
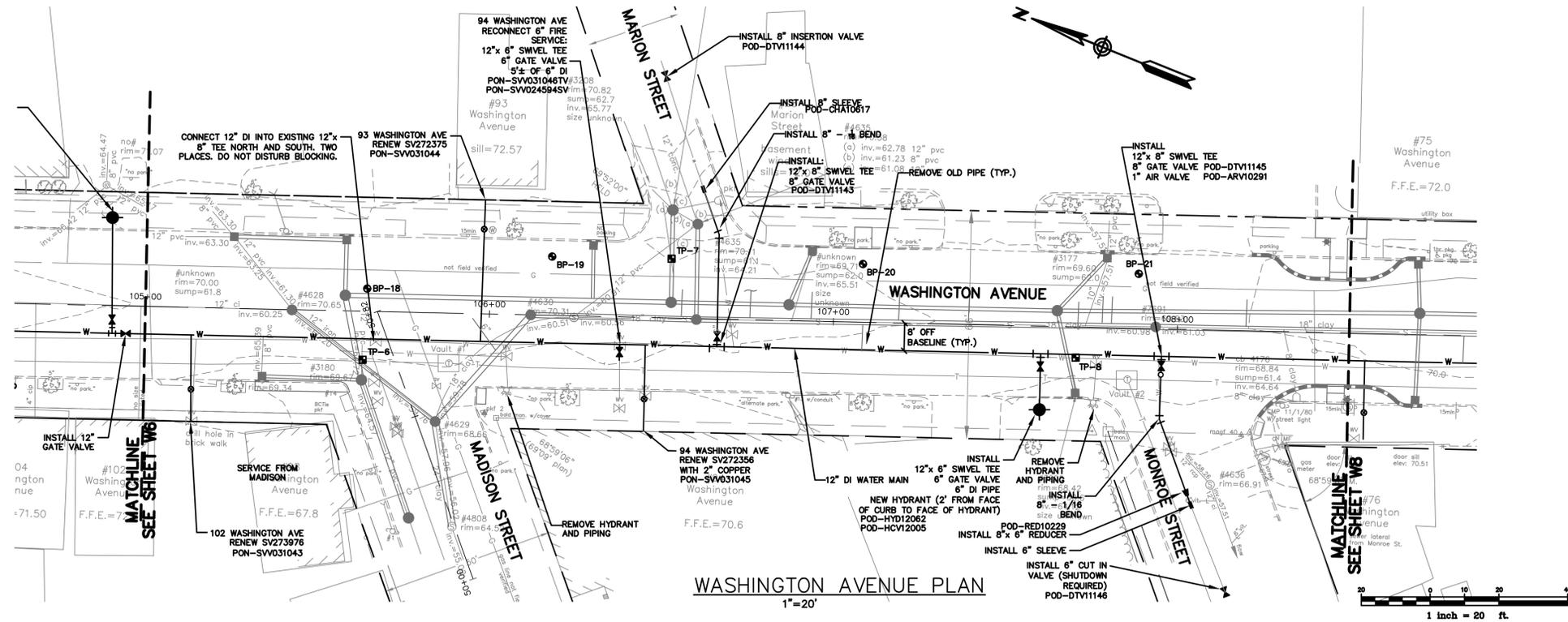
BIDDING	8/10/17	WCH
Issued For	Date	By

Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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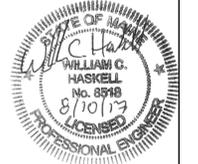
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Drawing Name:	TEMPORARY WATER SERVICE PLAN
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
W5



NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

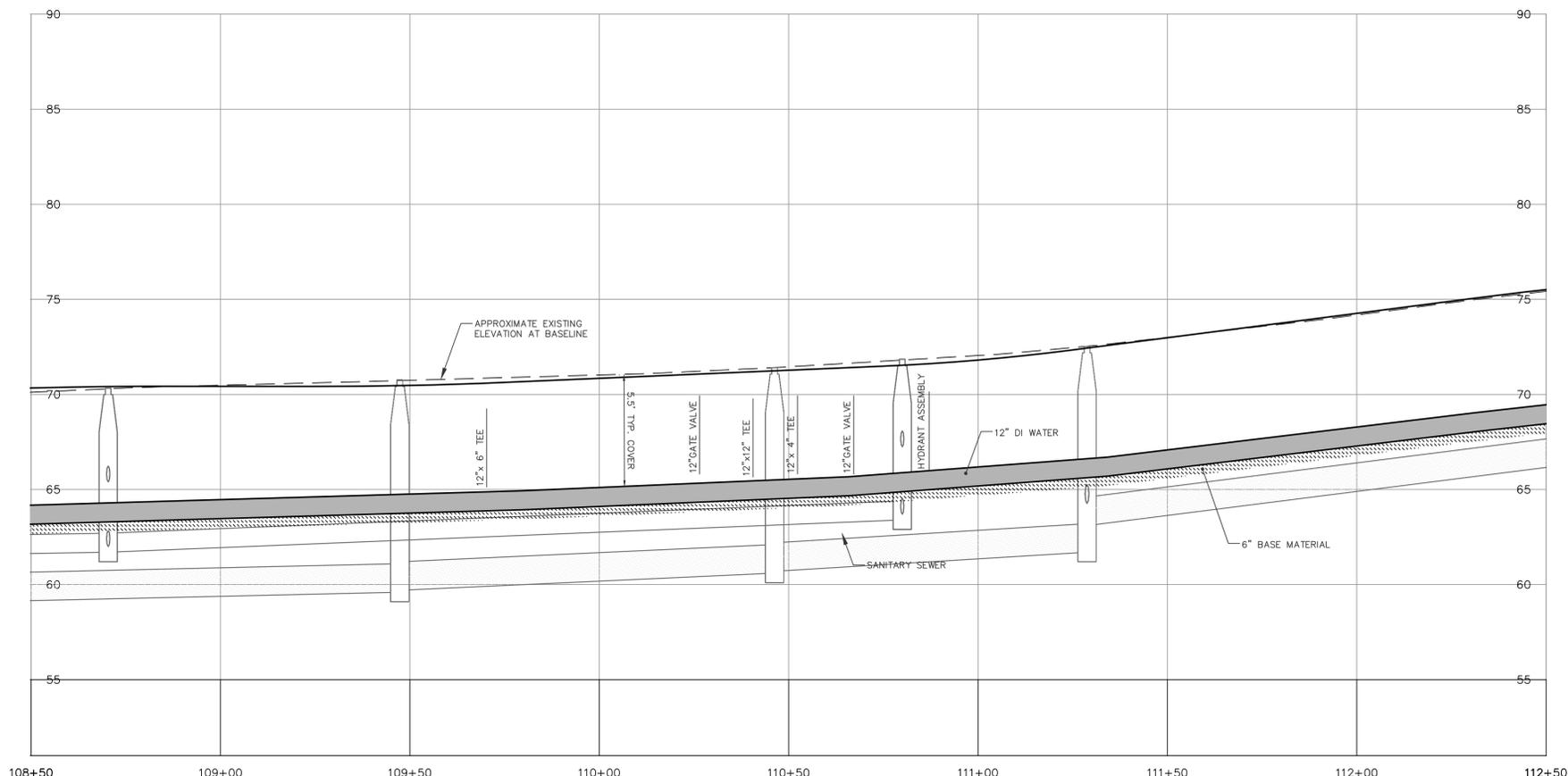
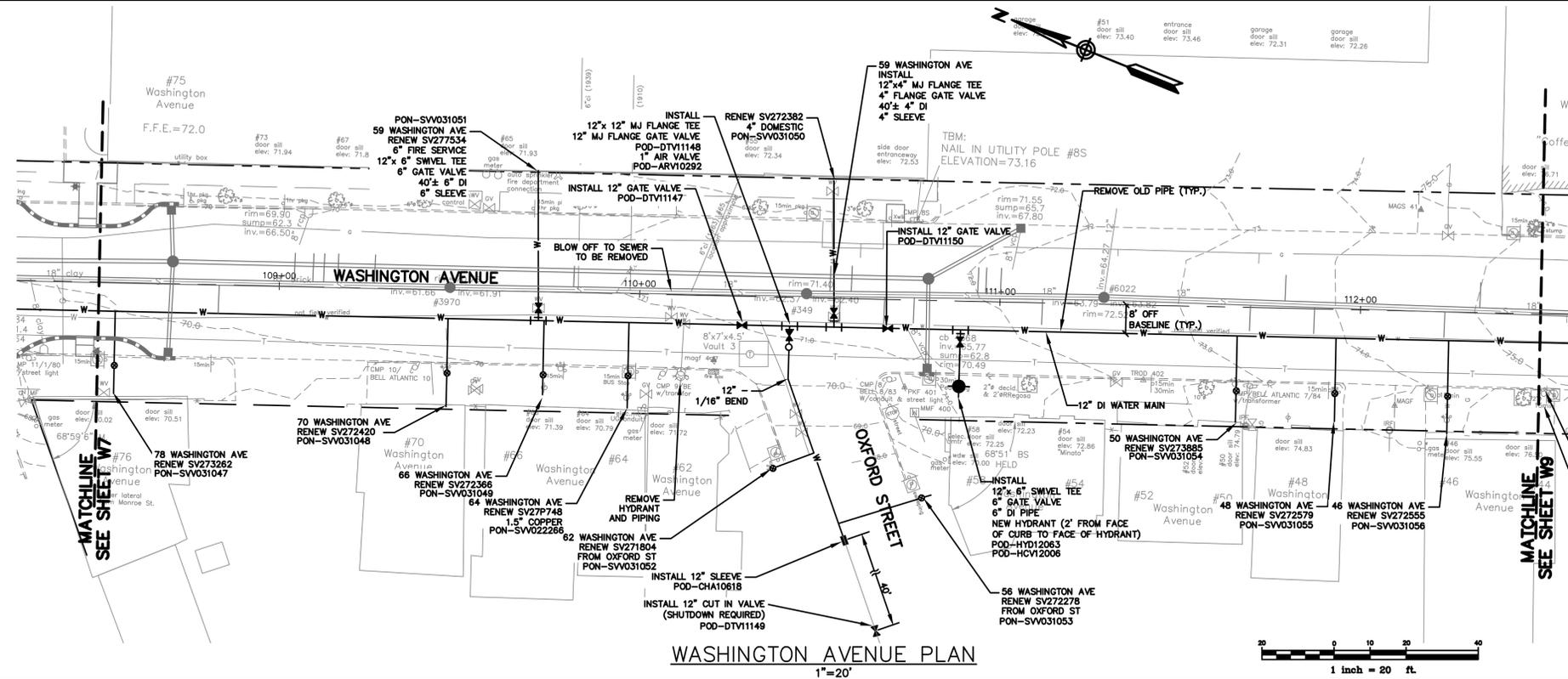
BIDDING	Issued For	Date	By
		8/10/17	WCH

Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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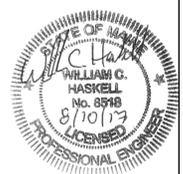
Drawing Name:	WASHINGTON AVENUE WATER MAIN PLAN AND PROFILE
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
W7



WASHINGTON AVENUE PROFILE
 1"=20' HORIZONTAL
 1"=4' VERTICAL

NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

BIDDING	Issued For	Date	By
		8/10/17	WCH

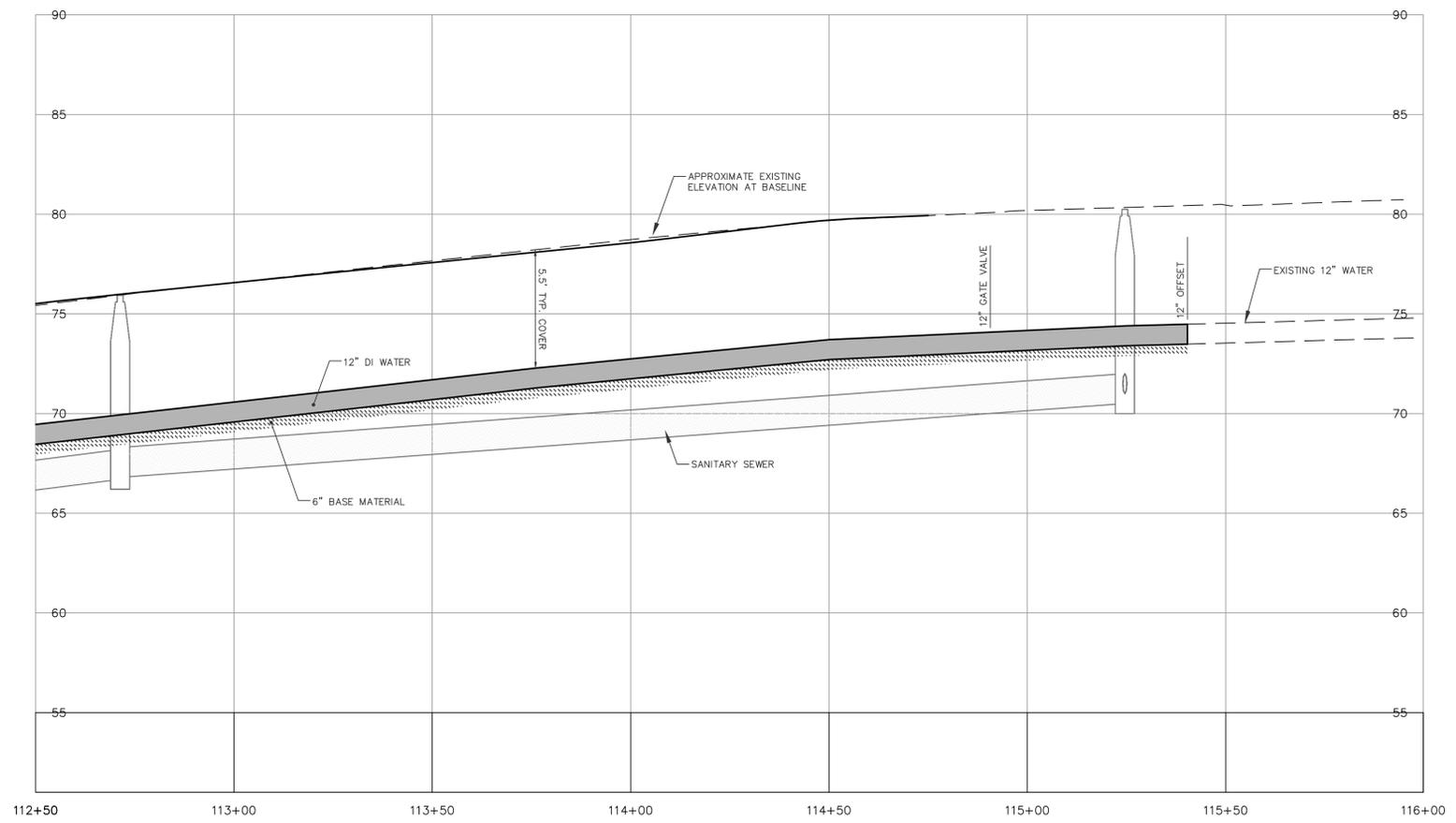
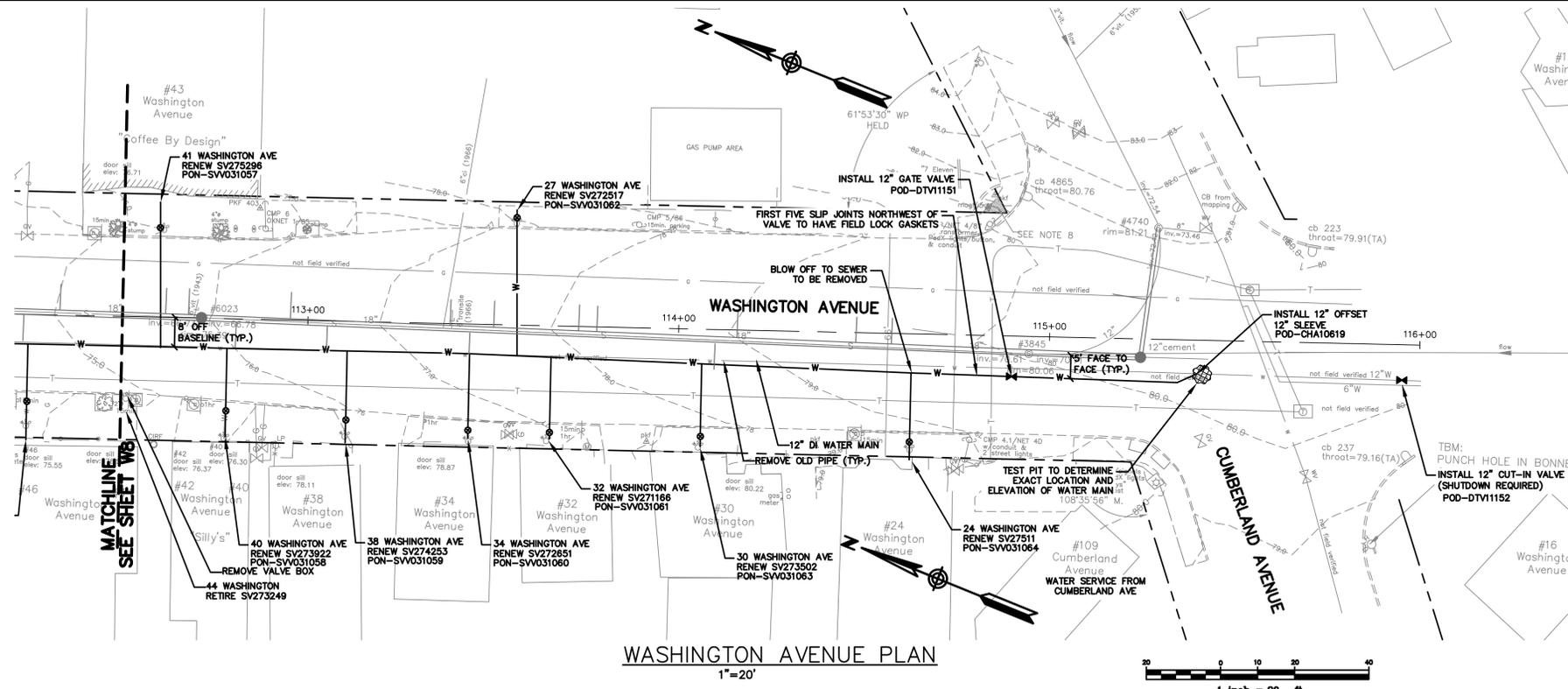
Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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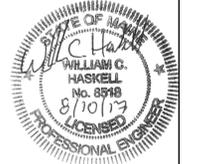
Drawing Name:	WASHINGTON AVENUE WATER MAIN PLAN AND PROFILE
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
 W8



WASHINGTON AVENUE PROFILE
 1"=20' HORIZONTAL
 1"=4' VERTICAL

NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

BIDDING	Issued For	Date	By
		8/10/17	WCH

Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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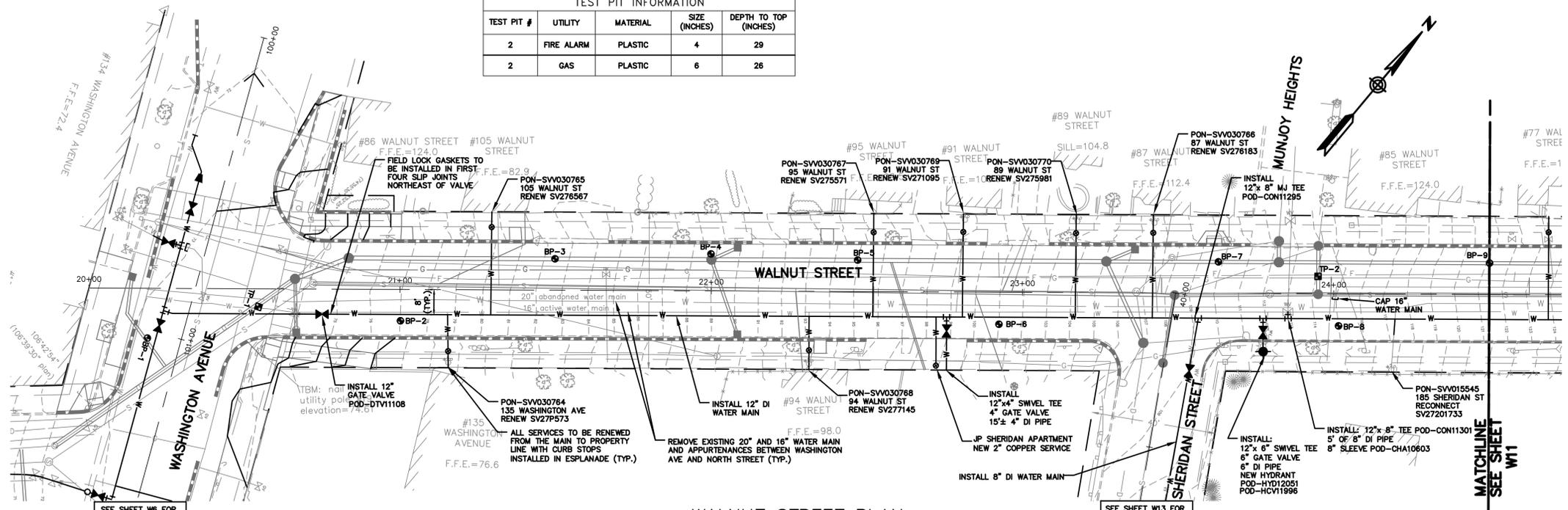


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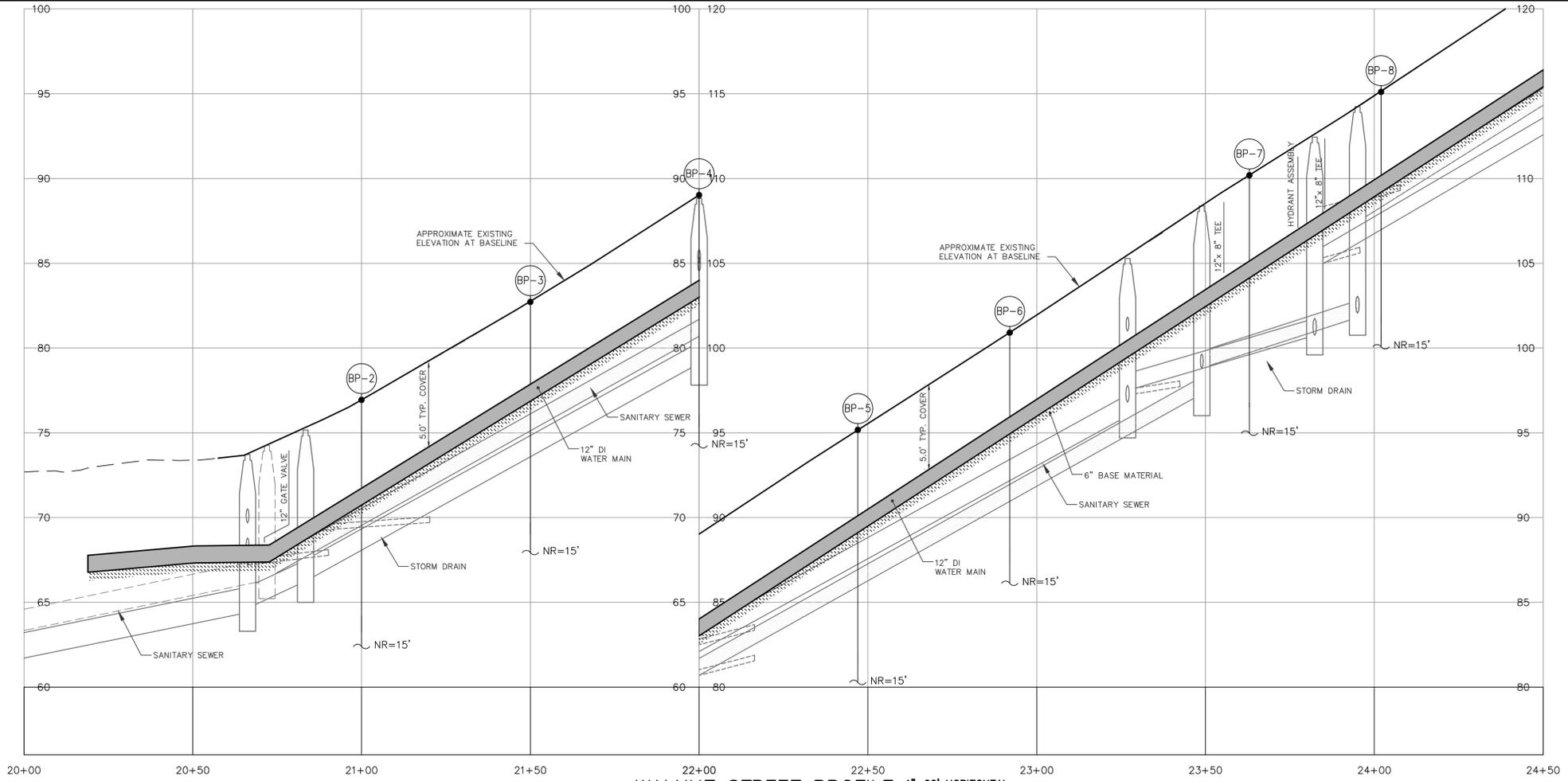
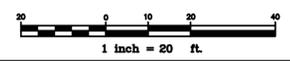
Drawing Name:	WASHINGTON AVENUE WATER MAIN PLAN AND PROFILE
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
 W9

TEST PIT INFORMATION				
TEST PIT #	UTILITY	MATERIAL	SIZE (INCHES)	DEPTH TO TOP (INCHES)
2	FIRE ALARM	PLASTIC	4	29
2	GAS	PLASTIC	6	26

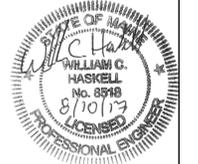


WALNUT STREET PLAN
1"=20'



WALNUT STREET PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

BIDDING	8/10/17	WCH
Issued For	Date	By

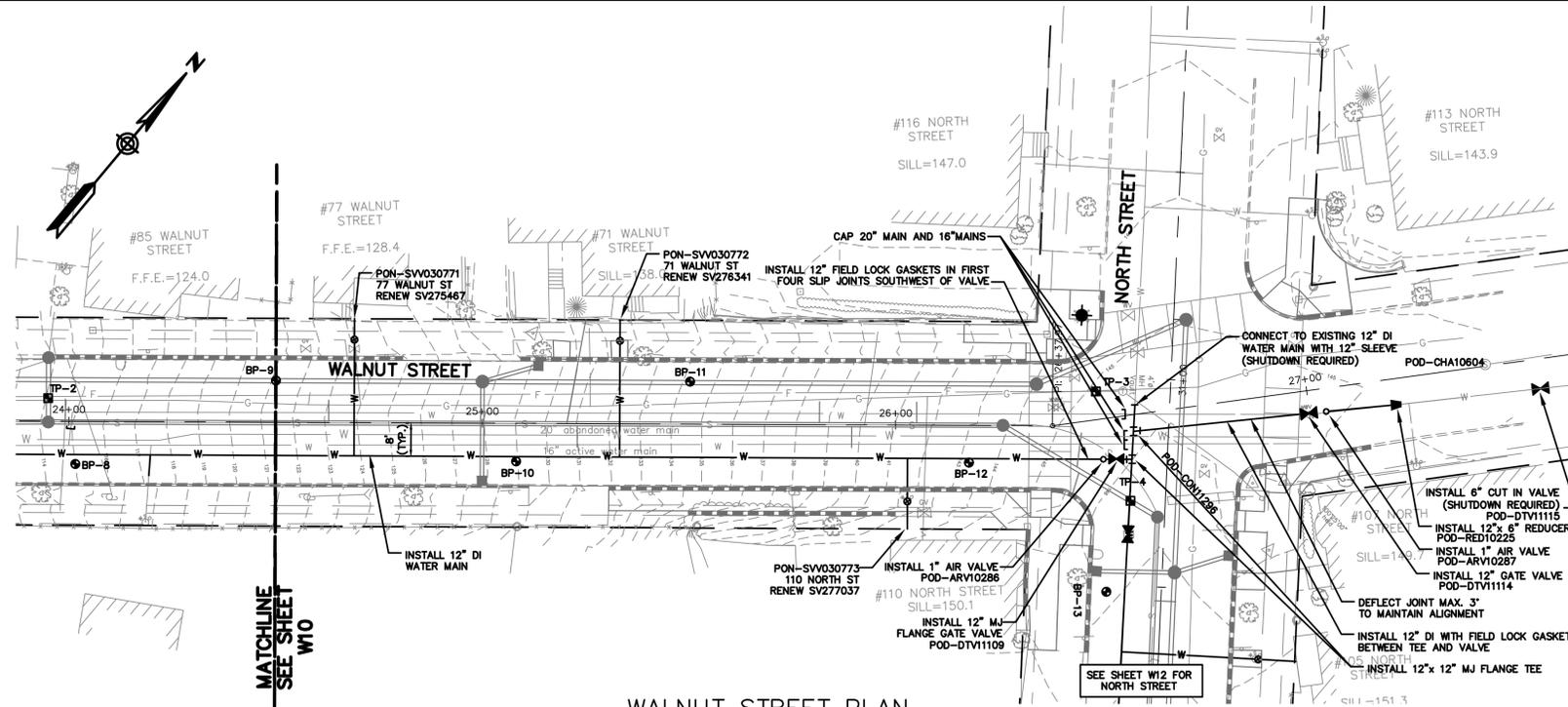
Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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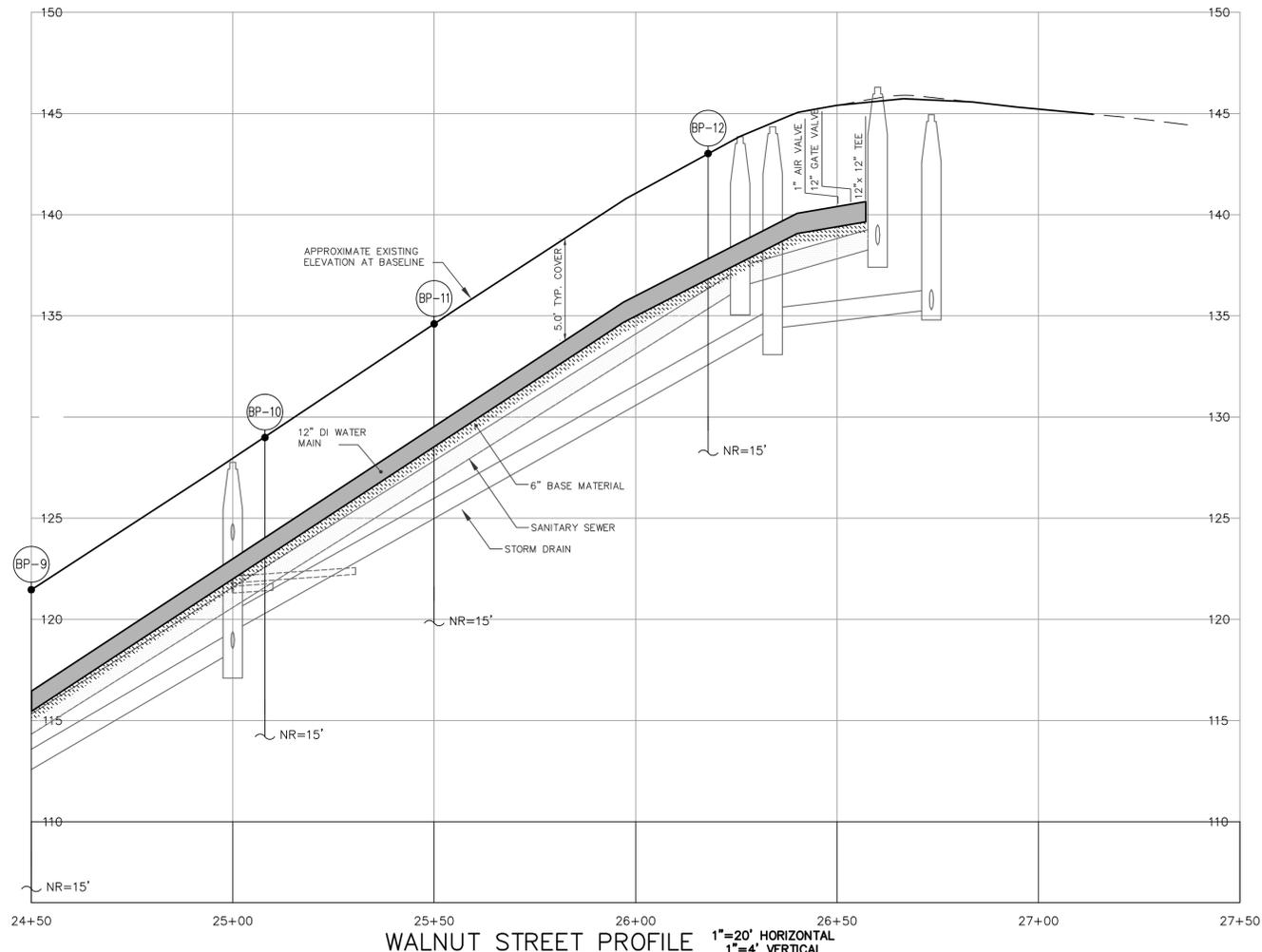
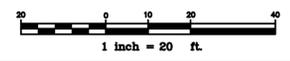
Drawing Name:	WALNUT STREET WATER MAIN PLAN AND PROFILE
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
W10



TEST PIT INFORMATION					
TEST PIT #	UTILITY	MATERIAL	SIZE (INCHES)	DEPTH TO TOP (INCHES)	NOTES
3	FIRE ALARM	PLASTIC	4	38	
3	GAS	PLASTIC	6	29	
4	WATER	METAL	12	53	
4	ABAND. GAS	METAL	4	25	LOCATED 18\"/>

WALNUT STREET PLAN
1"=20'



WALNUT STREET PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



Rev.	Date	Revision

BIDDING	Issued For	Date	By
		8/10/17	WCH

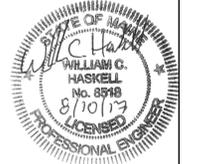
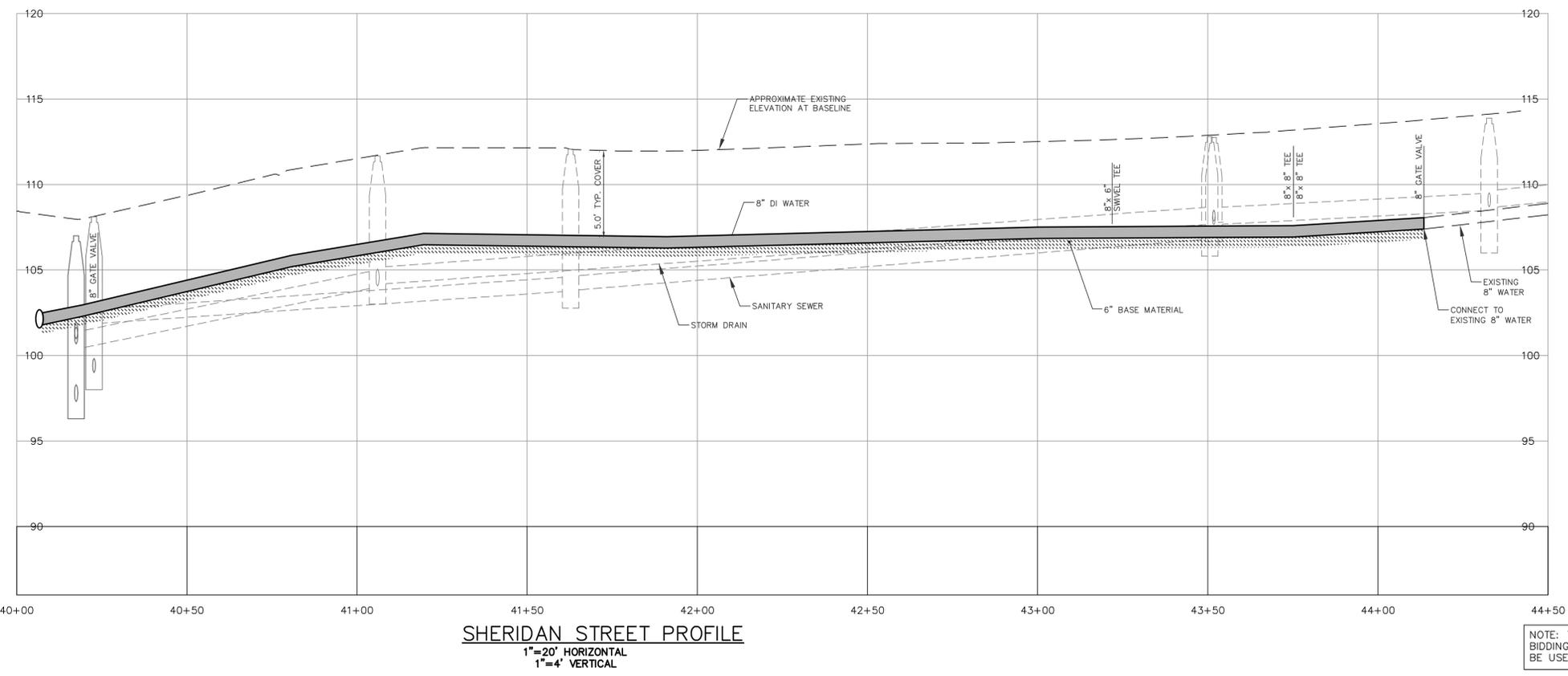
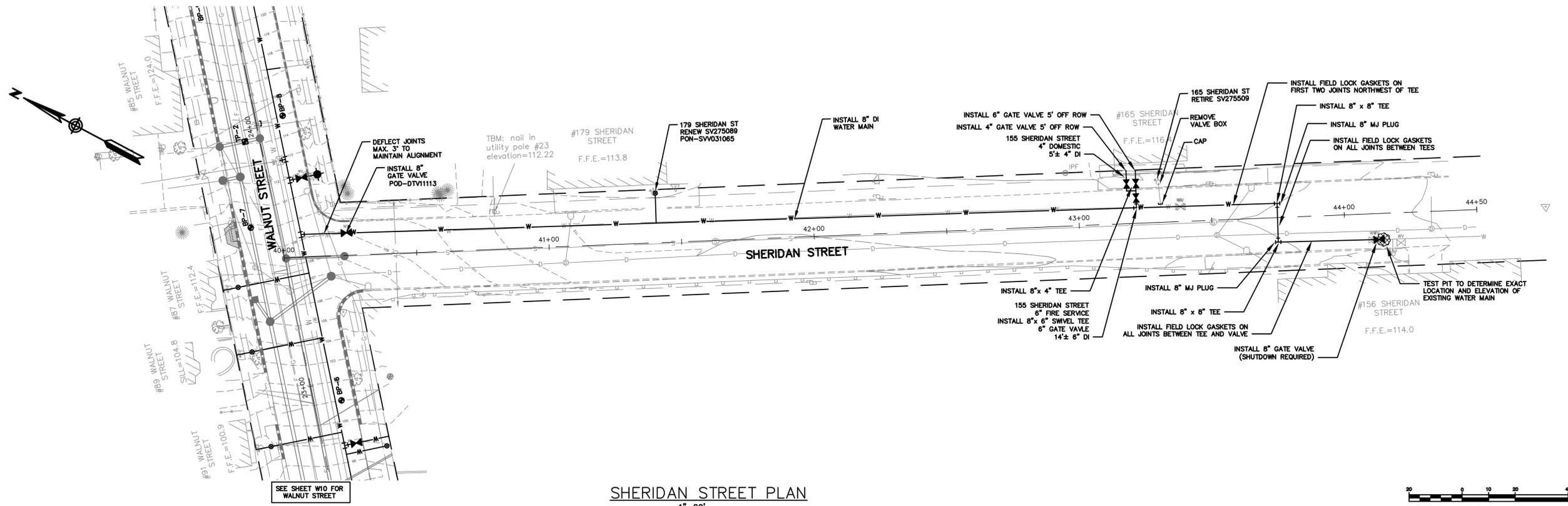
Design: JWA Draft: LAN Date: APRIL 2017
 Checked: WCH Scale: AS SHOWN Job No.: 3218
 File Name: 3218-PBASE.dwg
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Drawing Name:	WALNUT STREET WATER MAIN PLAN AND PROFILE
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
W11



Rev.	Date	Revision

BIDDING	Issued For	Date	By
		8/10/17	WCH

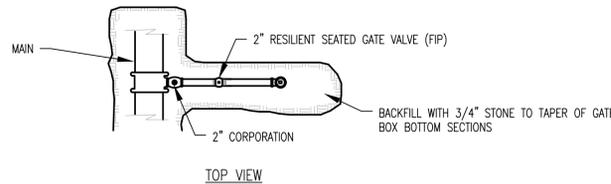
Design: JWA	Draft: LAN	Date: APRIL 2017
Checked: WCH	Scale: AS SHOWN	Job No.: 3218
File Name: 3218-PBASE.dwg		
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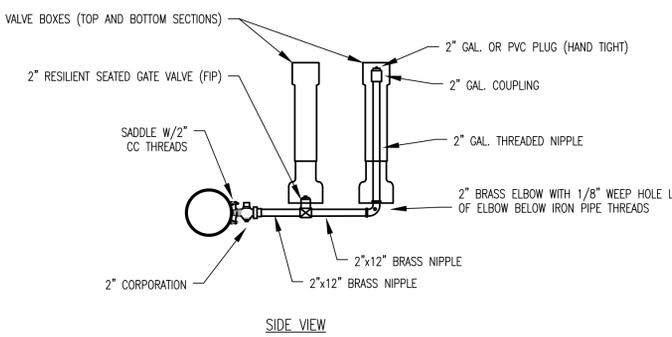
Relationships. Responsiveness. Results.
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Drawing Name:	SHERIDAN STREET WATER MAIN PLAN AND PROFILE
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.
W13

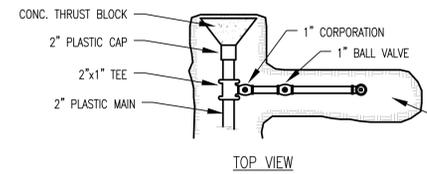


TOP VIEW

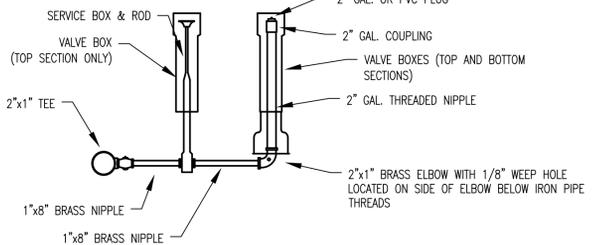


SIDE VIEW

SIDE-ARM BLOW-OFF (4" & LARGER MAINS)



TOP VIEW

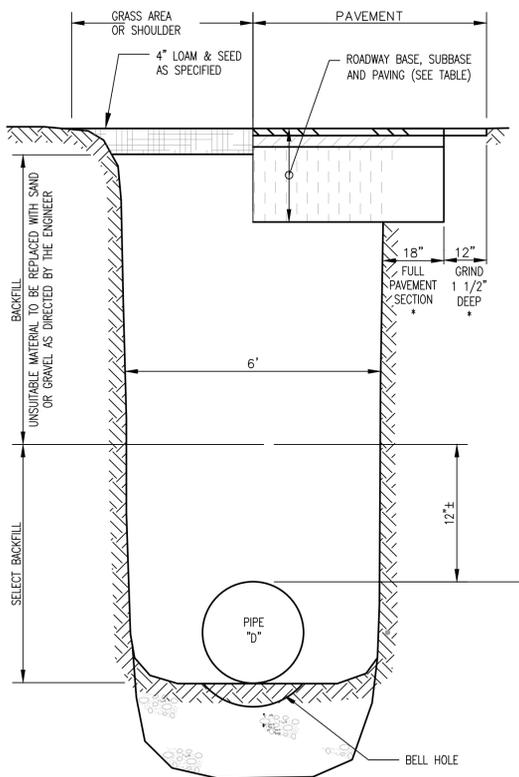


SIDE VIEW

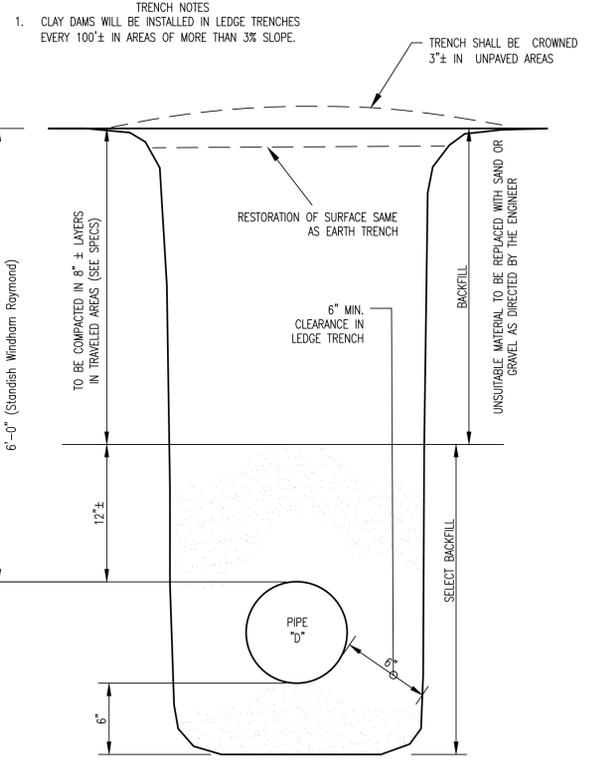
SIDE-ARM BLOW-OFF (2" MAIN)

PAVEMENT SCHEDULE		
WASHINGTON AVE CLUMBERLAND AVE	ALL OTHER STREETS	
2"	1 1/2"	HOT MIX ASPHALT GRADING C (12.5mm)
3"	2"	HOT MIX ASPHALT GRADING B (19.0mm)
3"	3"	AGGREGATE BASE GRAVEL MDOT 703.06 TYPE B
18"	15"	AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D

* ADDITIONAL RESTORATION REQUIRED FOR PAVED AREAS NOT PROPOSED FOR FULL RECONSTRUCTION



SECTION THRU EARTH TRENCH



SECTION THRU LEDGE TRENCH

TRENCH NOTES
1. CLAY DAMS WILL BE INSTALLED IN LEDGE TRENCHES EVERY 100'± IN AREAS OF MORE THAN 3% SLOPE.
TRENCH SHALL BE CROWNED 3'± IN UNPAVED AREAS

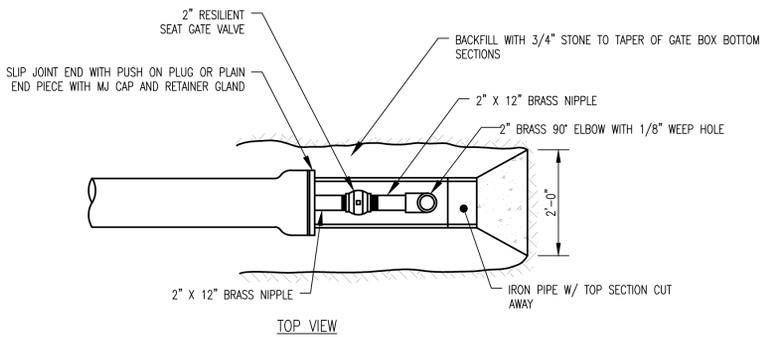
RESTORATION OF SURFACE SAME AS EARTH TRENCH

UNSATURABLE MATERIAL TO BE REPLACED WITH SAND OR GRAVEL AS DIRECTED BY THE ENGINEER

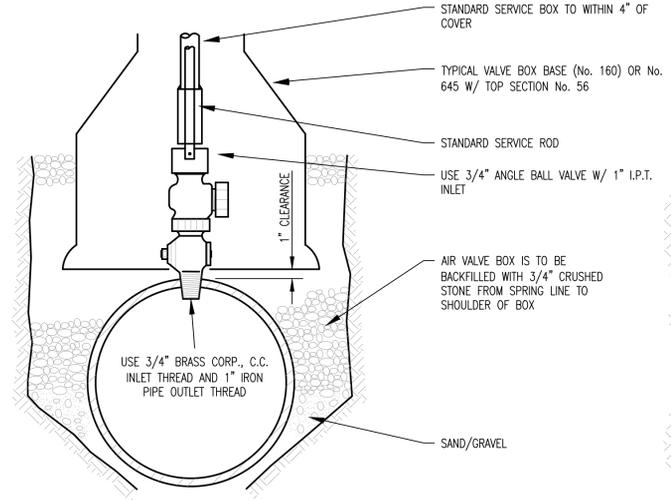
TO BE COMPACTED IN 8" ± LAYERS IN TRAVELED AREAS (SEE SPECS)

6" MIN. CLEARANCE IN LEDGE TRENCH

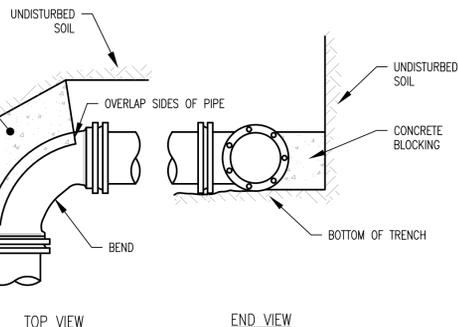
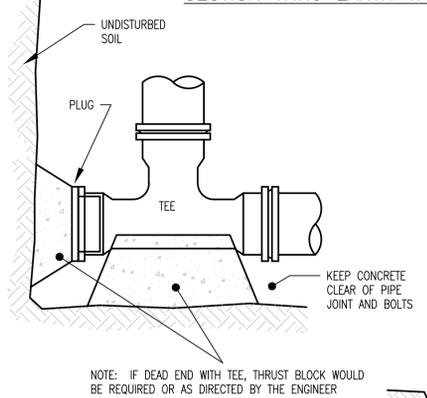
FOR STATE ROADS
SETBACK SHALL CONFORM TO M.D.O.T. POLICY FOR ABOVE GROUND UTILITY LOCATIONS. FOR SPEED LIMITS >35MPH 6.5' FROM EDGE OF SHOULDER OR FACE OF CURB. FOR SPEED LIMITS <35MPH 3' FROM EDGE OF SHOULDER OR 1' FROM FACE OF CURB.
FOR CITY OR TOWN ROADS CHECK WITH MUNICIPALITY FOR REQUIREMENTS



TOP VIEW



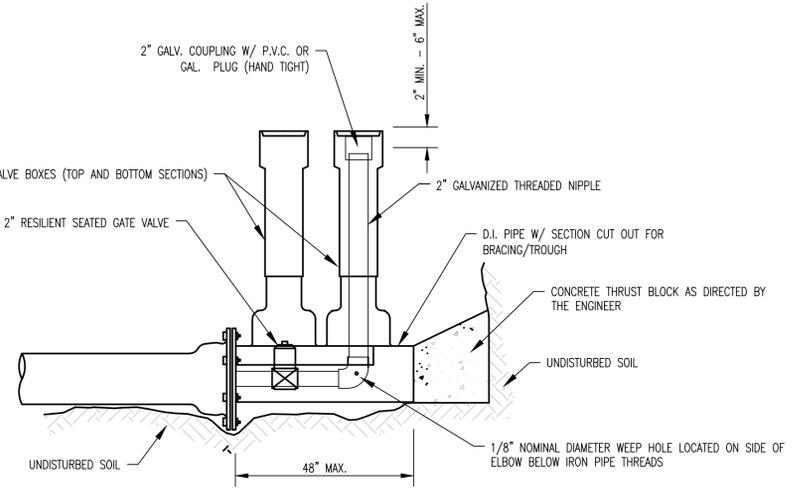
TYPICAL AIR VALVE (1")



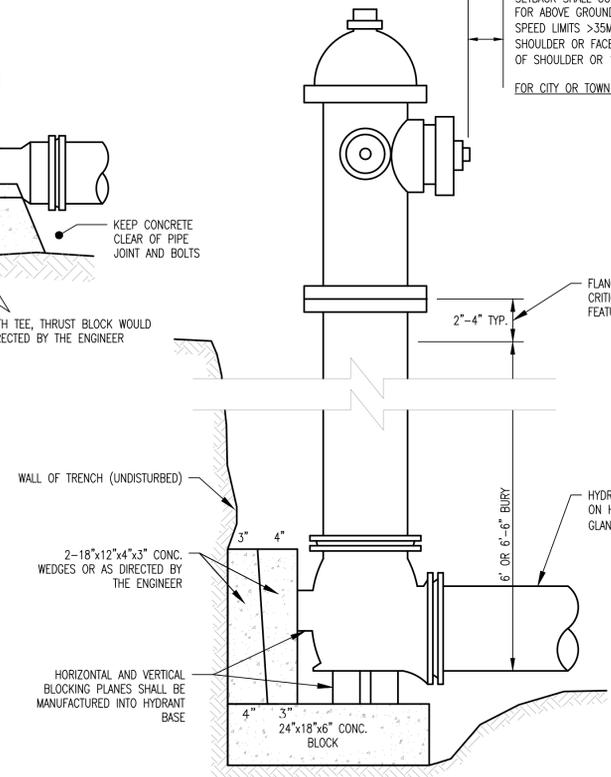
TOP VIEW

END VIEW

STANDARD BEND BLOCKING

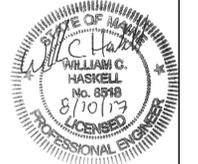


STANDARD 2" BLOW OFF



TYPICAL HYDRANT INSTALLATION DETAIL

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BIDDING	Issued For	Date	By
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Design:	Draft:	Date:
JWA	LAN	APRIL 2017
Checked:	Scale:	Job No.:
WCH	AS SHOWN	3218
File Name: 3218-PBASE.dwg		

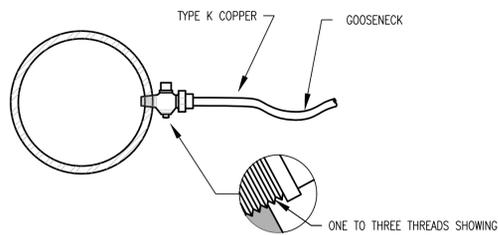
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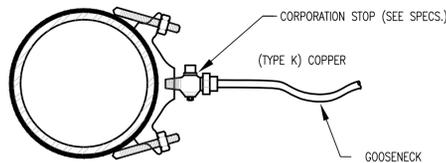
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Drawing Name:	PORTLAND WATER DISTRICT DETAILS
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

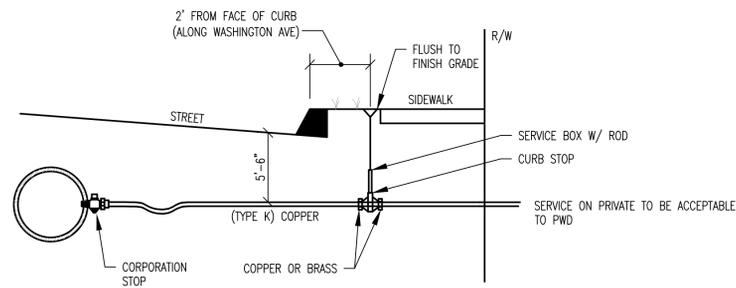
Drawing No.
W14



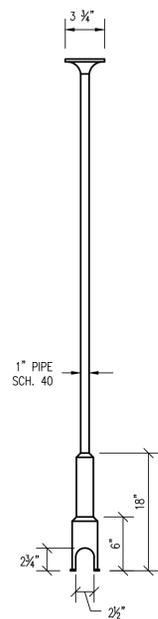
SERVICE TAP
(3/4" AND 1" C.C. THREAD)



SERVICE SADDLE
(1-1/2" AND 2" C.C. THREAD)

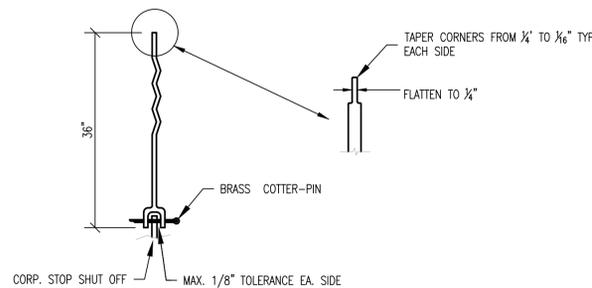


TYPICAL SERVICE CONNECTION



SERVICE BOX

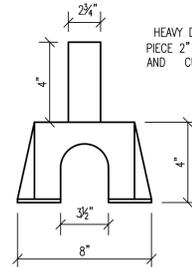
- NOTE: ANY EXTENSION OF SERVICE BOX REQUIRES:
- 1" FEMALE IRON PIPE COUPLING
 - 1" THREADED PIPE (THIS IS TO BE A NON-WELDED, TWO PIECE ARRANGEMENT. SLIP ON ADAPTERS ARE NOT PERMISSIBLE.)



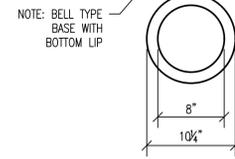
SERVICE ROD



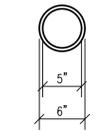
COVER



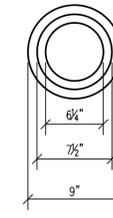
FOOT PIECE



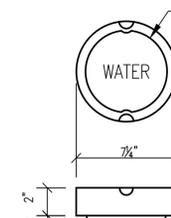
BASE SECTION NO. 645



INTERMEDIATE SECTION NO.58



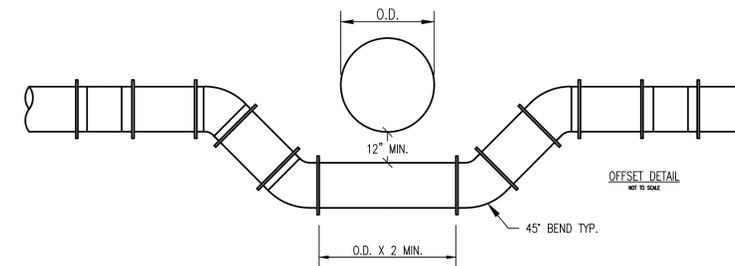
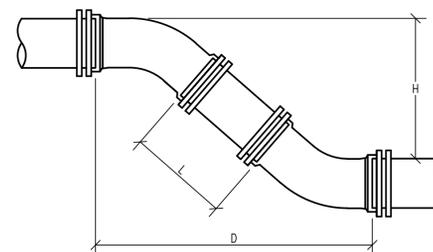
TOP SECTION NO.56



DROP STYLE COVER

(NUMBERS ARE FOR 5 1/2" BUFFALO VALVE BOXES)
(BASE SECTION MAY BE USED AS INTERMEDIATE SECTION)

VALVE BOX & COVER

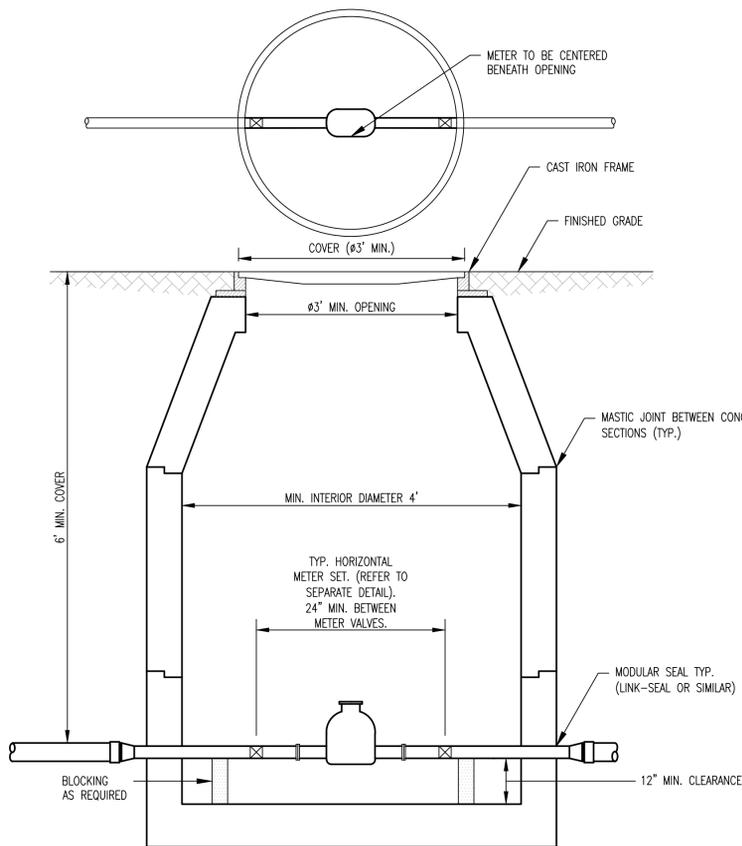


NOTE: DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS. FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION AND SUBTRACT 1/2" FROM "L" DIMENSION. FOR OTHER FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.

H	6" PIPE		8" PIPE		12" PIPE	
	D	L	D	L	D	L
12"	1' 6-1/2"	0' 10-1/2"	1' 7-1/2"	0' 9-1/2"	1' 11-1/2"	0' 5-1/2"
13"	1' 7-1/2"	0' 11-7/8"	1' 8-1/2"	0' 10-7/8"	2' 0-1/2"	0' 6-7/8"
14"	1' 8-1/2"	1' 1-3/16"	1' 9-1/2"	1' 0-5/16"	2' 1-1/2"	0' 8-3/16"
15"	1' 9-1/2"	1' 2-11/16"	1' 10-1/2"	1' 1-11/16"	2' 2-1/2"	0' 9-11/16"
16"	1' 10-1/2"	1' 4-1/8"	1' 11-1/2"	1' 3-1/8"	2' 3-1/2"	0' 11-1/8"
17"	1' 11-1/2"	1' 5-9/16"	2' 0-1/2"	1' 4-9/16"	2' 4-1/2"	1' 0-9/16"
18"	2' 0-1/2"	1' 6-13/16"	2' 1-1/2"	1' 5-13/16"	2' 5-1/2"	1' 1-13/16"
19"	2' 1-1/2"	1' 8-3/8"	2' 2-1/2"	1' 7-3/8"	2' 6-1/2"	1' 3-3/8"
20"	2' 2-1/2"	1' 9-13/16"	2' 3-1/2"	1' 8-13/16"	2' 7-1/2"	1' 4-13/16"
21"	2' 3-1/2"	1' 11-3/16"	2' 4-1/2"	1' 10-3/16"	2' 8-1/2"	1' 6-3/16"
22"	2' 4-1/2"	2' 0-5/8"	2' 5-1/2"	1' 11-5/8"	2' 9-1/2"	1' 7-5/8"
23"	2' 5-1/2"	2' 2"	2' 6-1/2"	2' 1"	2' 10-1/2"	1' 9"
24"	2' 6-1/2"	2' 3-7/16"	2' 7-1/2"	2' 2-7/16"	2' 11-1/2"	1' 10-7/16"
25"	2' 7-1/2"	2' 4-7/8"	2' 8-1/2"	2' 3-7/8"	3' 0-1/2"	1' 11-7/8"
26"	2' 8-1/2"	2' 6-1/4"	2' 9-1/2"	2' 5-1/4"	3' 1-1/2"	2' 1-1/4"
27"	2' 9-1/2"	2' 7-11/16"	2' 10-1/2"	2' 6-11/16"	3' 2-1/2"	2' 2-11/16"
28"	2' 10-1/2"	2' 9-1/8"	2' 11-1/2"	2' 8-1/8"	3' 3-1/2"	2' 4-1/8"
29"	2' 11-1/2"	2' 10-1/2"	3' 0-1/2"	2' 9-1/2"	3' 4-1/2"	2' 5-1/2"
30"	3' 0-1/2"	2' 11-15/16"	3' 1-1/2"	2' 10-15/16"	3' 5-1/2"	2' 6-15/16"
31"	3' 1-1/2"	3' 1-5/16"	3' 2-1/2"	3' 0-5/16"	3' 6-1/2"	2' 8-5/16"
32"	3' 2-1/2"	3' 2-3/4"	3' 3-1/2"	3' 1-3/4"	3' 7-1/2"	2' 9-3/4"
33"	3' 3-1/2"	3' 4-3/16"	3' 4-1/2"	3' 3-3/16"	3' 8-1/2"	2' 11-3/16"
34"	3' 4-1/2"	3' 5-9/16"	3' 5-1/2"	3' 4-9/16"	3' 9-1/2"	3' 1-9/16"
35"	3' 5-1/2"	3' 7"	3' 6-1/2"	3' 6"	3' 10-1/2"	3' 2"
36"	3' 6-1/2"	3' 8-7/16"	3' 7-1/2"	3' 7-7/16"	3' 11-1/2"	3' 3-7/16"
37"	3' 7-1/2"	3' 9-13/16"	3' 8-1/2"	3' 8-13/16"	4' 0-1/2"	3' 4-13/16"
38"	3' 8-1/2"	3' 11-1/4"	3' 9-1/2"	3' 10-1/4"	4' 1-1/2"	3' 6-1/4"
39"	3' 9-1/2"	4' 0-11/16"	3' 10-1/2"	3' 11-11/16"	4' 2-1/2"	3' 7-11/16"
40"	3' 10-1/2"	4' 2-1/16"	3' 11-1/2"	4' 1-1/16"	4' 3-1/2"	3' 9-1/16"
41"	3' 11-1/2"	4' 3-1/2"	4' 0-1/2"	4' 2-1/2"	4' 4-1/2"	3' 10-1/2"
42"	4' 0-1/2"	4' 4-7/8"	4' 1-1/2"	4' 3-7/8"	4' 5-1/2"	3' 11-7/8"
43"	4' 1-1/2"	4' 6-5/16"	4' 2-1/2"	4' 5-5/16"	4' 6-1/2"	4' 1-5/16"
44"	4' 2-1/2"	4' 7-3/4"	4' 3-1/2"	4' 6-3/4"	4' 7-1/2"	4' 2-3/4"
45"	4' 3-1/2"	4' 9-1/8"	4' 4-1/2"	4' 8-1/8"	4' 8-1/2"	4' 4-1/8"
46"	4' 4-1/2"	4' 10-9/16"	4' 5-1/2"	4' 9-9/16"	4' 9-1/2"	4' 5-9/16"
47"	4' 5-1/2"	4' 11-15/16"	4' 6-1/2"	4' 10-15/16"	4' 10-1/2"	4' 6-15/16"
48"	4' 6-1/2"	5' 1-3/8"	4' 7-1/2"	5' 0-3/8"	4' 11-1/2"	4' 8-3/8"
49"	4' 7-1/2"	5' 2-13/16"	4' 8-1/2"	5' 1-13/16"	5' 0-1/2"	4' 9-13/16"
50"	4' 8-1/2"	5' 4-3/16"	4' 9-1/2"	5' 3-3/16"	5' 1-1/2"	4' 11-3/16"
51"	4' 9-1/2"	5' 5-5/8"	4' 10-1/2"	5' 4-5/8"	5' 2-1/2"	5' 0-5/8"
52"	4' 10-1/2"	5' 7-1/16"	4' 11-1/2"	5' 6-1/16"	5' 3-1/2"	5' 2-1/16"
53"	4' 11-1/2"	5' 8-7/16"	5' 0-1/2"	5' 7-7/16"	5' 4-1/2"	5' 3-7/16"
54"	5' 0-1/2"	5' 9-7/8"	5' 1-1/2"	5' 8-7/8"	5' 5-1/2"	5' 4-7/8"
55"	5' 1-1/2"	5' 11-5/16"	5' 2-1/2"	5' 10-5/16"	5' 6-1/2"	5' 6-5/16"

TYPICAL MAIN OFFSET

NOTE: THIS PLAN SET IS ISSUED FOR BIDDING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



TYPICAL SMALL METER PIT
(5/8" TO 2" METER)

Design: JWA	Draft: LAN	Date: APRIL 2017
Checked: WCH	Scale: AS SHOWN	Job No.: 3218
File Name: 3218-PBASE.dwg		
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Drawing Name:	PORTLAND WATER DISTRICT DETAILS
Project:	Madison, Walnut, Washington Water Main Reconstruction Portland, Maine
Client:	Portland Water District 225 Douglass Street, Portland, Maine 04104

Drawing No.	W15
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Rev.	Date	Revision

BIDDING	8/10/17	WCH
Issued For	Date	By