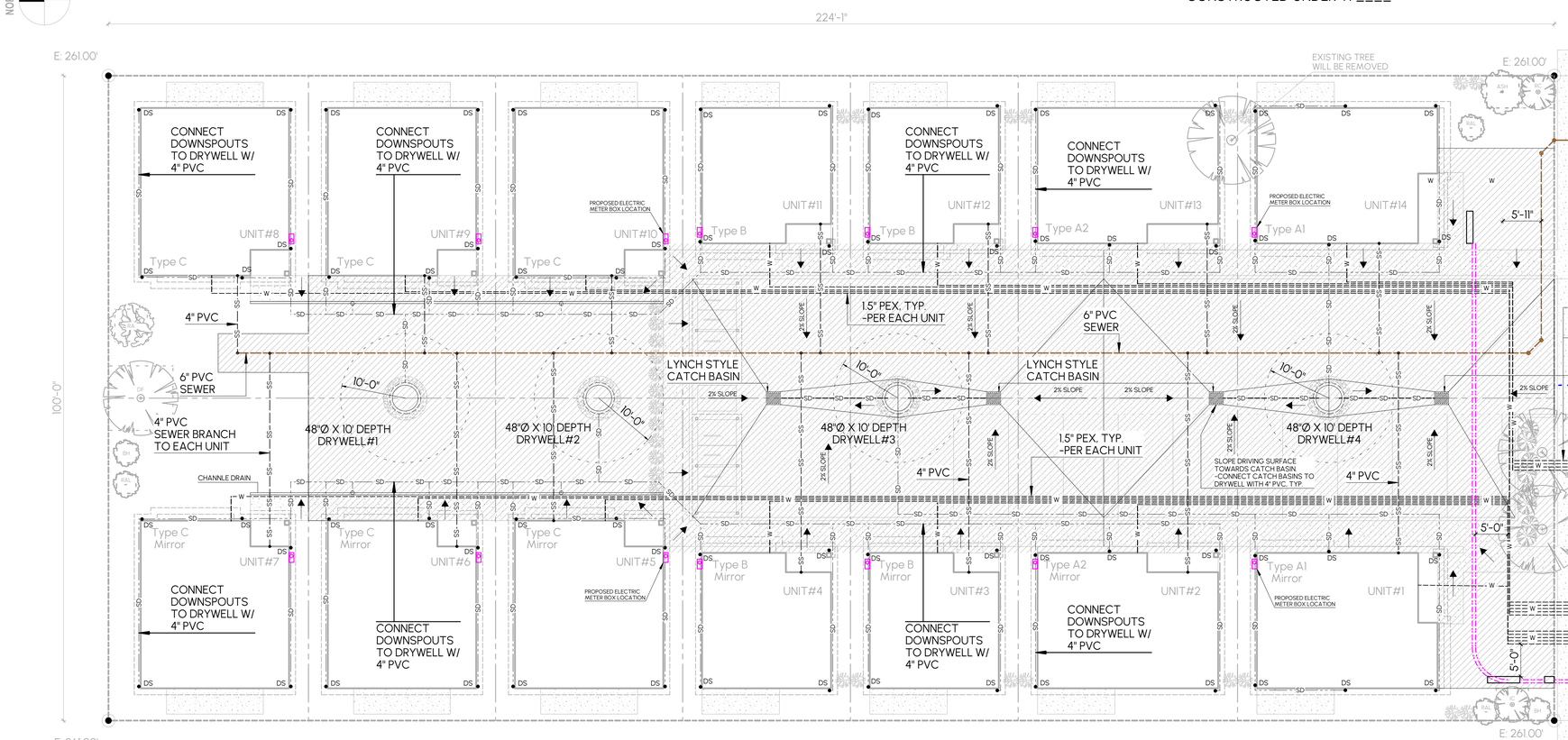
UTILITY & EASEMENT PLAN

Scale 1" = 10'-0"

NOTE: ALL PUBLIC IMPROVEMENTS WILLL BE CONSTRUCTED UNDER TF____



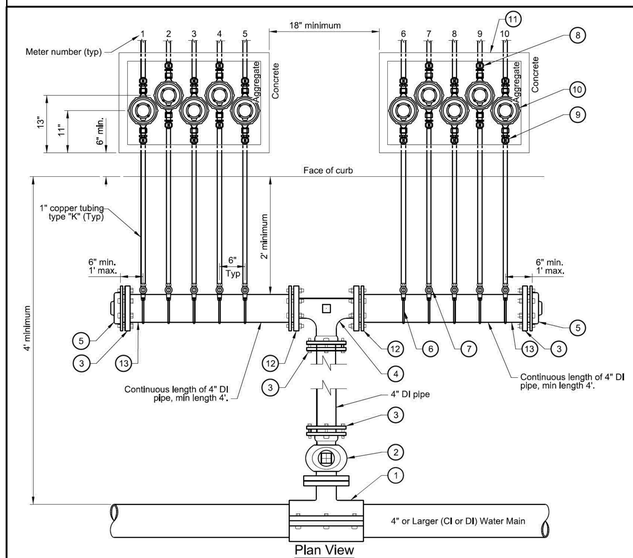
HATCHED AREAS INDICATE EASEMENTS FOR UTILITIES

UTILITY NOTES

- SEPARATION BETWEEN SANITARY SEWER AND WATER SERVICES AND VAULTS SHOULD BE 5FT MINIMUM SKIN TO SKIN.
- ALL ABOVE & UNDERGROUND UTILITIES, SUCH AS GAS AND ELECTRICAL, NEED TO HAVE 3FT MINIMUM SEPARATION FROM WATER SERVICES AND METERS 2-INCH OR LESS
- ALL ABOVE & UNDERGROUND UTILITIES, SUCH AS GAS AND ELECTRICAL, NEED TO HAVE 5FT MINIMUM SEPARATION FROM WATER SERVICES LARGER THAN 2-INCH, WATER MAINS AND VAULTS.
- SEPARATION BETWEEN MULTIPLE WATER SERVICES SHOULD BE 1.5FT MINIMUM.
- A NEW WATER SERVICE CANNOT BE INSTALLED IN THE SAME LOCATION AS AN EXISTING SERVICE
- SEPARATION BETWEEN WATER METERS AND PROPERTY LINES SHOULD BE 3FT MINIMUM.
- SEPARATION FROM GUY WIRES AND ANCHORS SHOULD BE 5FT MINIMUM
- NEW WATER METERS SHOULD NOT BE PLACED IN DRIVEWAY WINGS
- WATER SERVICES MUST BE PERPENDICULAR TO THE WATER MAIN FOR THE ENTIRE PORTION IN THE PUBLIC RIGHT-OF-WAY AND ADJACENT TO THE CURB.
- STREET TREES MUST BE A MINIMUM OF 5' FROM THE NEAREST EDGE OF WATER PIPE, VALVE OR METER BOX AND A MINIMUM OF 10' FROM A FIRE HYDRANT. REFERENCE STANDARD DRAWING P-845 FOR MORE INFORMATION

NOTE TO CONTRACTOR, PRIOR TO START OF CONSTRUCTION ACTIVITIES

- ALL UTILITIES IN THE RIGHT-OF-WAY WITHIN THE DEVELOPMENT PROPERTY'S FRONTAGE MUST BE LOCATED THOUGH 811, ONE CALL PRIOR TO START OF CONSTRUCTION. CONTRACTOR WILL NEED TO BE ABLE TO PROVIDE THE LOCATE TICKET NUMBER IF REQUESTED FOR VERIFICATION.
- CONTRACTOR IS RESPONSIBLE FOR FINAL UTILITY INSTALLATION AND DESIGN
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ABOVE GROUND UTILITIES (ELECTRIC, COMMUNICATION ETC.) WIRES, PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ON-SITE SAFETY OF WORKERS AND CONFIRMING WITH COMPANIES RESPONSIBLE OF THE LINES THAT THE REQUIRED SAFETY MINIMUMS ARE MET. BUILDER'S DESIGN TAKES NO RESPONSIBILITY FOR LOCATING THESE ITEMS. BUILDER'S DESIGN TAKES NO RESPONSIBILITY FOR ON-SITE WORKER'S SAFETY. BUILDER'S DESIGN HAS NO CONTROL OVER JOB-SITE SAFETY AND WILL NOT BE HELD LIABLE FOR ANY ISSUES RELATING TO ON-SITE SAFETY.



Plan View

NTS

Preferred Meter Locations

Total Number of Meters	Meter Location Number										
	1	2	3	4	5	Tee	6	7	8	9	10
3	X		X		X			Don't Install Second Service Box			
4	X	X	X		X			Don't Install Second Service Box			
5	X	X	X	X	X			Don't Install Second Service Box			
6	X	X	X	X	X		X				
7	X	X	X	X	X		X		X		
8	X	X	X	X	X		X		X		X
9	X	X	X	X	X		X	X	X		X
10	X	X	X	X	X		X	X	X	X	X

Materials List

Item No	Size	Qty	Description
1	varies x4"	1	Tapping sleeve (flange outlet)
2	4"	1	Tapping gate valve (FL x MJ)
3	4"	6	Gland, wedge action retainer (Megalug)
4	4"x4"x4"	1	Tee, DI MJ x MJ
5	4"	2	Tapped cap (MJ) with 2" brass plug.
6	4"x1"	10	service saddle
7	1"	10	1" Corporation Stop
8	1"	10	Insulated (dielectric isolation) Angle Meter Stop
9	1"	10	Angle Meter Stop
10	1"	10	Meter - see standard drawing P-780
11	24"x36"	2	H-20 Rated Lid on #9 wood form, see Std Drawing P-980
12	4"	2	Dielectric isolation joint, see Std. Drawing P-760
13	-	4	32 lb. bare metal weight magnesium anode bonded to 4" DI pipe

Notes:

1. Install 24" x 36" frame and cover and # 9 wood form with non-skid surface in furnishing zone. Install 24" x 36" H-20 traffic rated frame and cover and # 9 wood form with non-skid surface together in driveways. Pour concrete around wood form to fill to surrounding backfill.
2. A 3/4" or 5/8" meter may be substituted for any of the 1" meters. If all meters in the box are 3/4" or 5/8", or a combination thereof; then 6 meters can be placed in each service box.
3. Service lines and 4" DI pipe shall maintain 1.5' vertical separation when crossing other utilities. Vertical separation may be reduced to 6" with mitigation approved by PWB. Provide a sleeve when the 4" DI crosses potential stray current sources, See Standard Drawing P-770.
4. If less than five meters are installed in a box, note position of meters to be installed, and position of meter locations not used.
5. Install meters at a depth of 12".

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.

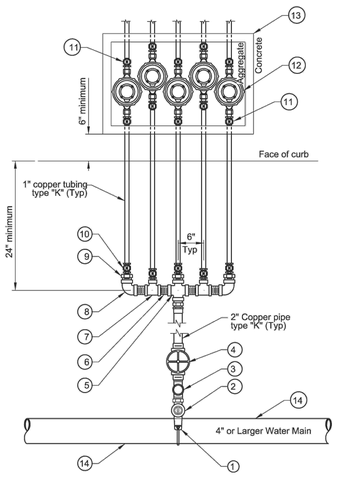
PORTLAND WATER BUREAU
CITY OF PORTLAND, OREGON
Chief Engineer

Standard Drawing Title
1" Header Service Assembly - Option A Ten 1" Meters

Note: All material and workmanship shall be in accordance with City of Portland Standard Construction Specifications.

Effective Date
Calc. Book No.
Baseline Report Date

Standard Drawing No.
P-785



Plan View

Scale: ¾"=1'-0"

Materials List

Item No	Size	Qty	Description
1	varies	1	Service saddle
2	2"	1	2" Corporation stop
3	2"	2	Swinging Joint
4	2"	1	Iron Body Gate Valve
5	2"x2"x2"	1	Brass cross
6	2"	4	Brass Nipple - 3" length (threaded)
7	2"x1"	2	Brass Tee
8	2"	2	90° Brass Elbow
9	2"x1"	2	Brass bushing
10	1"	5	Straight Corporation Stop
11	1"	10	Angle Meter Stop
12	varies	5	Meter - see standard drawing P-780
13	24"x36"	1	H-20 Rated Lid on #9 wood form, see Std Drawing P-980
14	-	2	32 lb. bare metal weight magnesium anode bonded to water main, see Detail P-750

Notes:

1. Install 24" x 36" frame and cover and # 9 wood form with non-skid surface in furnishing zone. Install 24" x 36" H-20 traffic rated frame and cover and # 9 wood form with non-skid surface together in driveways. Pour concrete around wood form to fill to surrounding backfill.
2. A maximum of six ¾" meters may be installed on one 2" header. A maximum of four ¾" meters may be installed. See table on this sheet for other sizes and combinations.

Meter Size and Max Number of Meters

Meter Size	5/8"	3/4"	1"
Combinations of meter sizes		2	1
	3		1
	6		
		4	
	1		2

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.

PORTLAND WATER BUREAU
CITY OF PORTLAND, OREGON
Chief Engineer

Standard Drawing Title
2" Header Service Assembly

Note: All material and workmanship shall be in accordance with City of Portland Standard Construction Specifications.

Effective Date
Calc. Book No.
Baseline Report Date

Standard Drawing No.
P-783

1. WATER BUREAU TO PERFORM ALL WATER WORK IN THE PUBLIC RIGHT-OF-WAY UP TO THE POINT OF CONNECTION. SERVICES ARE INSTALLED AT A DEPTH OF 3' - 4' WITH A SHORT STUB FOR PRIVATE CONNECTION. CONTRACTOR IS RESPONSIBLE TO MAKE PRIVATE CONNECTION AND BACKFILL TO PROPERTY. WATER BUREAU WILL BACKFILL RIGHT-OF-WAY EXCAVATION.

2. PERMITTEE /CONTRACTOR IS RESPONSIBLE FOR MARKING LOCATION, FINISHED GRADE AND CURB ALIGNMENT. MARKED LOCATIONS MUST MATCH THE ISSUED BUILDING PERMIT AND APPROVED PUBLIC WORKS PLANS PRIOR TO INSTALLATION. CHANGES OR MODIFICATIONS REQUIRE A REVISION TO THE PERMIT. THE APPLICANT IS RESPONSIBLE FOR THE ENTIRE COST OF RELOCATING ANY INSTALLATION MARKED IN ERROR. IF SITE CONDITIONS ARE SIGNIFICANTLY DIFFERENT FROM THOSE SHOWN ON APPROVED PLANS, APPLICANT MAY BE RESPONSIBLE FOR ADDITIONAL FEES.

- TO SCHEDULE INSTALLATION:
*NOTE THAT BUILDING PERMIT MUST BE ISSUED AND ANY RELATED 90% PUBLIC WORKS PLANS APPROVED BEFORE SCHEDULING SERVICE INSTALLATION.

FOR 2" AND SMALLER SERVICES PLEASE WAIT 2 BUSINESS DAYS AFTER PAYMENT BEFORE CONTACTING WBISTATESHED@PORTLANDOREGON.GOV OR 503-823-1526.
NORMAL INSTALLATION TIME IS 3 WEEKS.

FOR 3" AND LARGER SERVICES AND HYDRANTS CONTACT WATERSERVICE@PORTLANDOREGON.GOV OR 503-823-7368 AT LEAST 4-7 WEEKS IN ADVANCE OF DESIRED INSTALLATION DATE TO ALLOW TIME FOR SECURING A PBOT STREET OPENING PERMIT (SOP) AND SCHEDULING INSTALLATION.

For: EZEKIEL SERVICES LLC
Project address:
6035 SE Tenino St Portland, OR

EZEKIEL SERVICES LLC

6035 SE Tenino Street

Utility & Easement Plan

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A2.2

24"x36" paper size