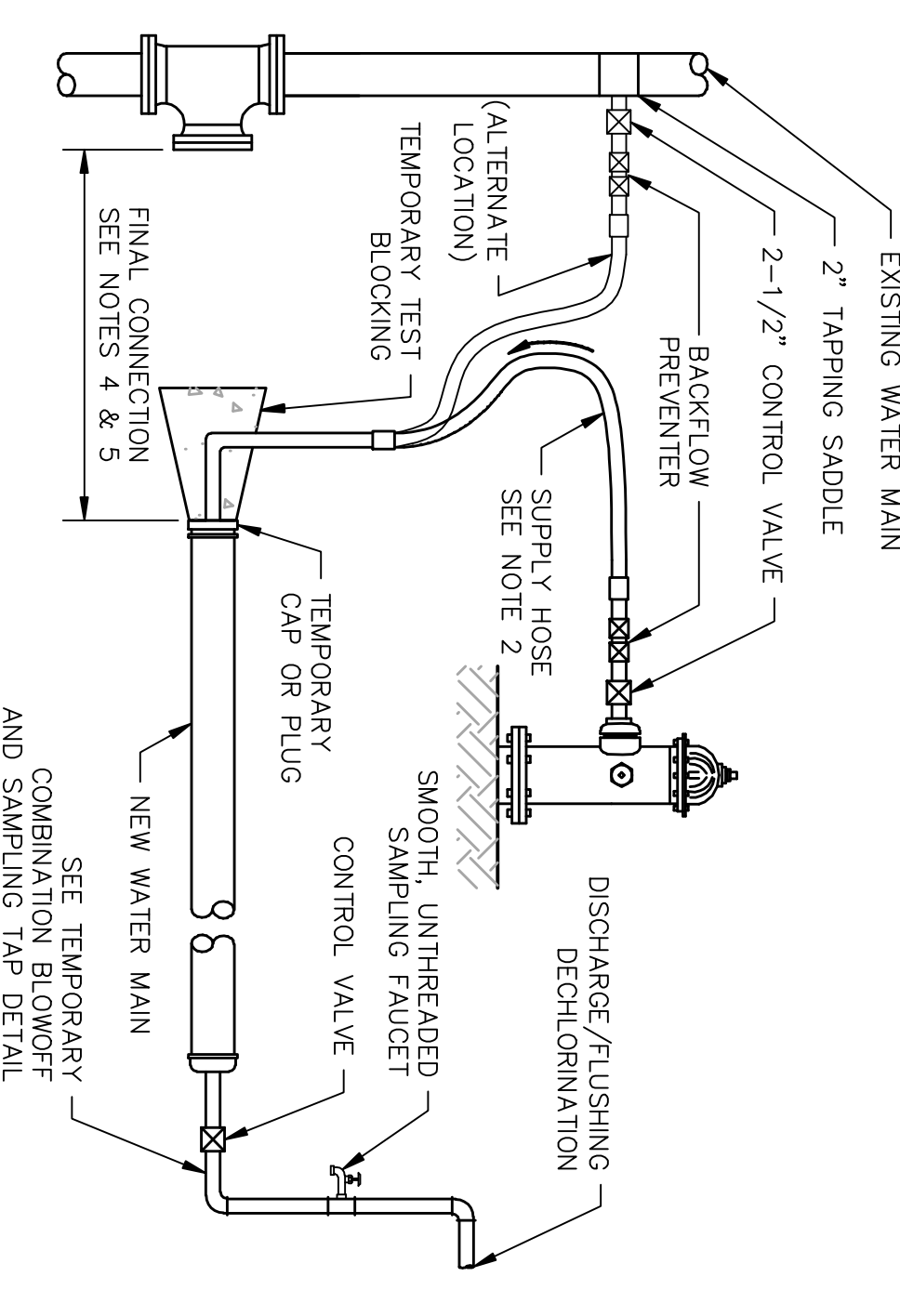


FOR EITHER PAVED OR NON-PAVED AREAS

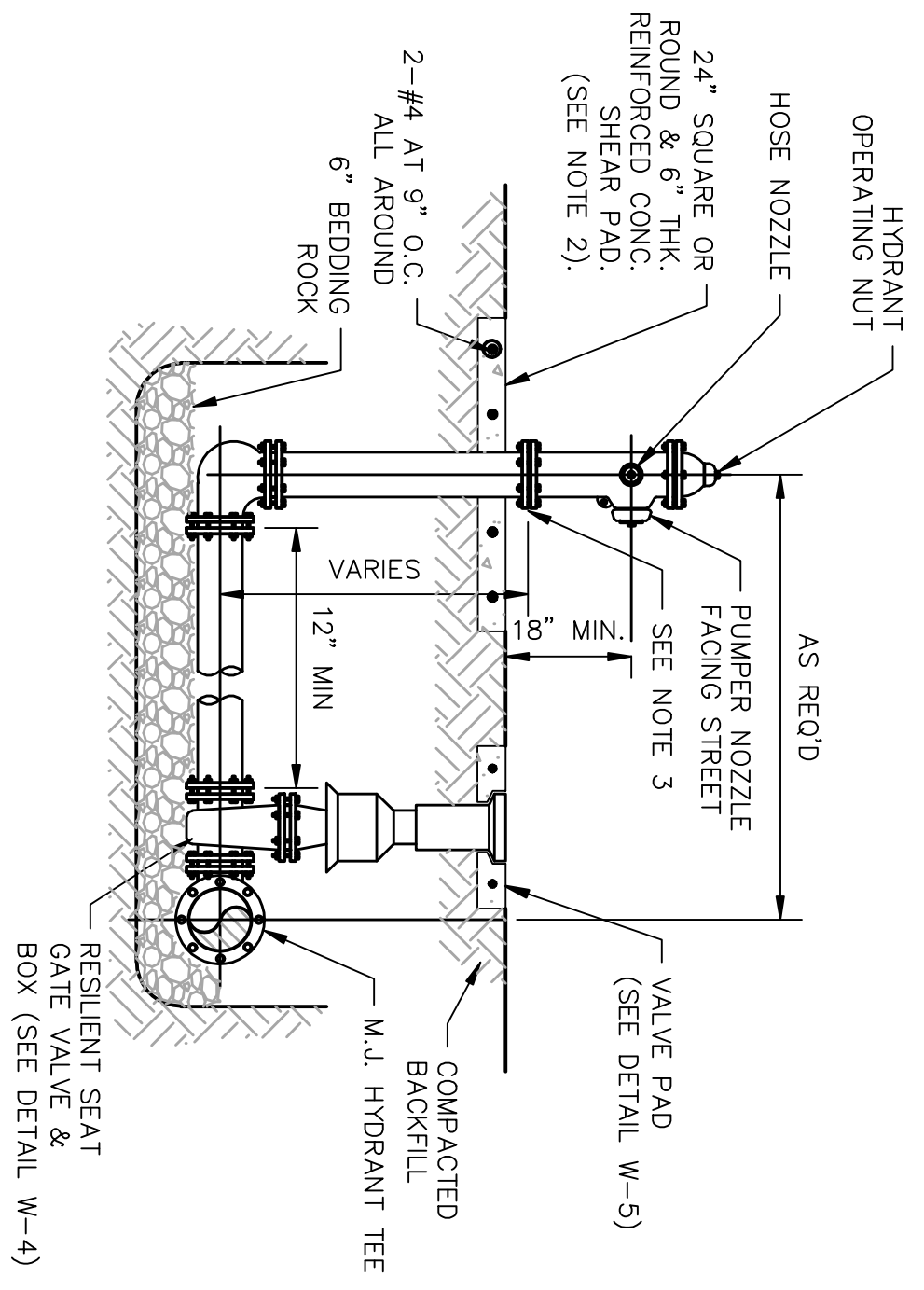
NOTES:

- MECHANICAL JOINTS/UNDERGROUND PIPING SHALL BE RESTRAINED AS SPECIFIED IN JOINT RESTRAINT TABLE.
- OPERATING NUT SHALL BE WITHIN 12" OF GRADE. EXTENSION TO BE PROVIDED AS REQUIRED.
- VALVE EXTENSION SHALL BE MECHANICALLY ATTACHED AND SHALL HAVE A STAINLESS STEEL PIN AT THE VALVE AND SHEAR PIN ONLY AT THE OPERATING NUT.



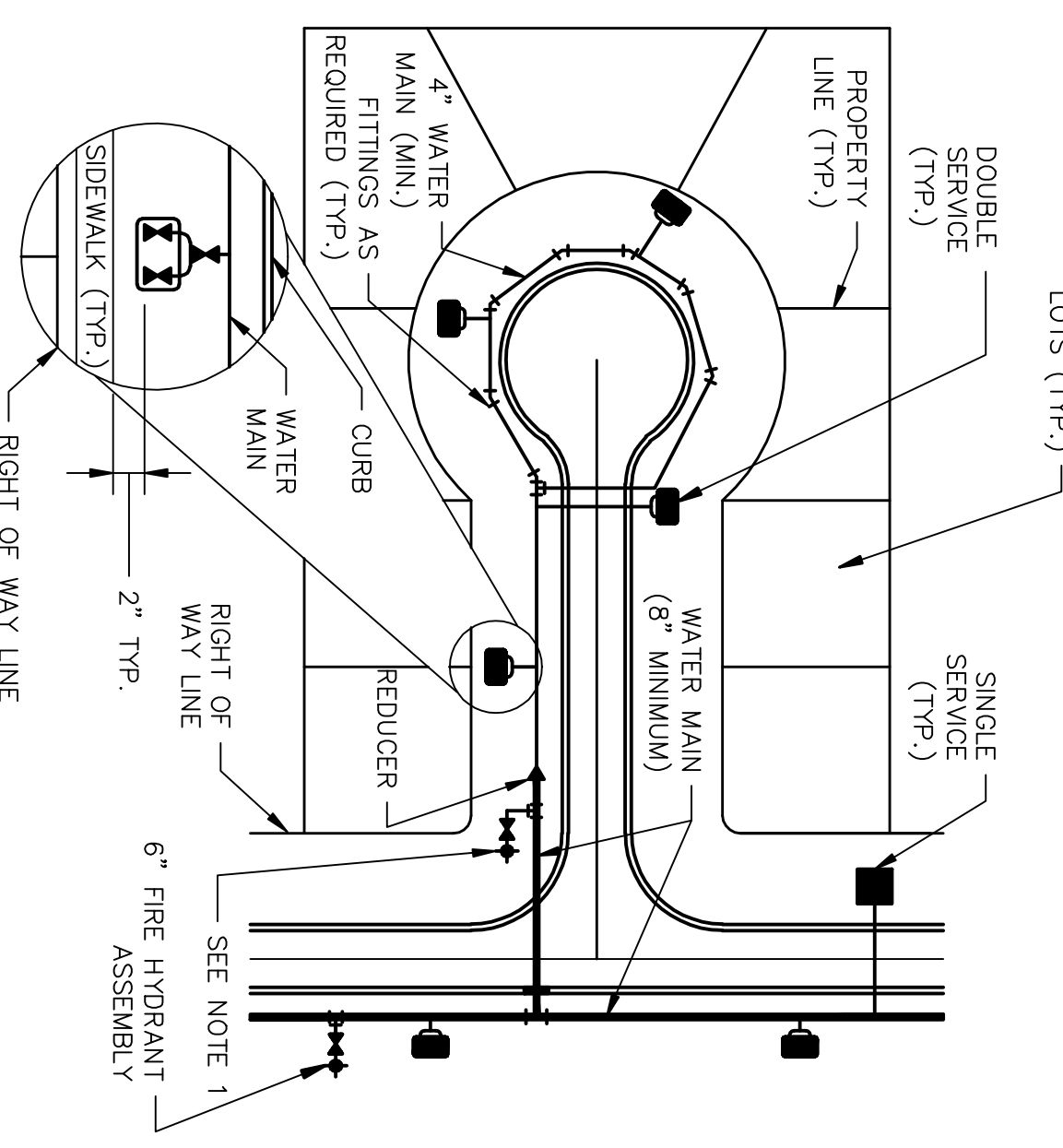
NOTES:

- REFERENCE: AWWA C651, FIG.1
- CLEAN POTABLE WATER HOSE ONLY. SIZE AND NUMBER OF TAPS AND DRINKANT OUTLETS PER TABLE 3 OF AWWA C651. SUPPLY HOSE MUST BE REMOVED DURING THE HYDROSTATIC PRESSURE TEST.
- THIS DETAIL APPLIES TO PIPES WITH DIAMETERS 4" THROUGH 12". ALL LARGER SIZES MUST BE HANDLED ON A CASE BY CASE BASIS.
- PIPE FOR FINAL CONNECTION SHALL BE THOROUGHLY CLEANED WITH CHLORINE SOLUTION BY SWABING PRIOR TO CONNECTION.
- LENGTH OF FINAL CONNECTION SHALL BE MINIMIZED. CONNECTION SHALL BE VISUALLY INSPECTED UNDER LINE PRESSURE PRIOR TO BACKFILLING.



NOTES:

- FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE. OR THE DEVELOPER SHALL PROVIDE THE WEEP HOLE.
- THE DEVELOPER MAY INSTALL THE SHEAR PAD RECESSED UP TO 4 INCHES BELOW FINISHED GRADE AND SOO. THE RECESSED SECTION SHALL BE 6" MINIMUM.
- A BLUE REFLECTOR SHALL BE PLACED IN THE CENTER OF THE DRIVING LANE ADJACENT TO THE HYDRANT FOR LOCATION PURPOSES.



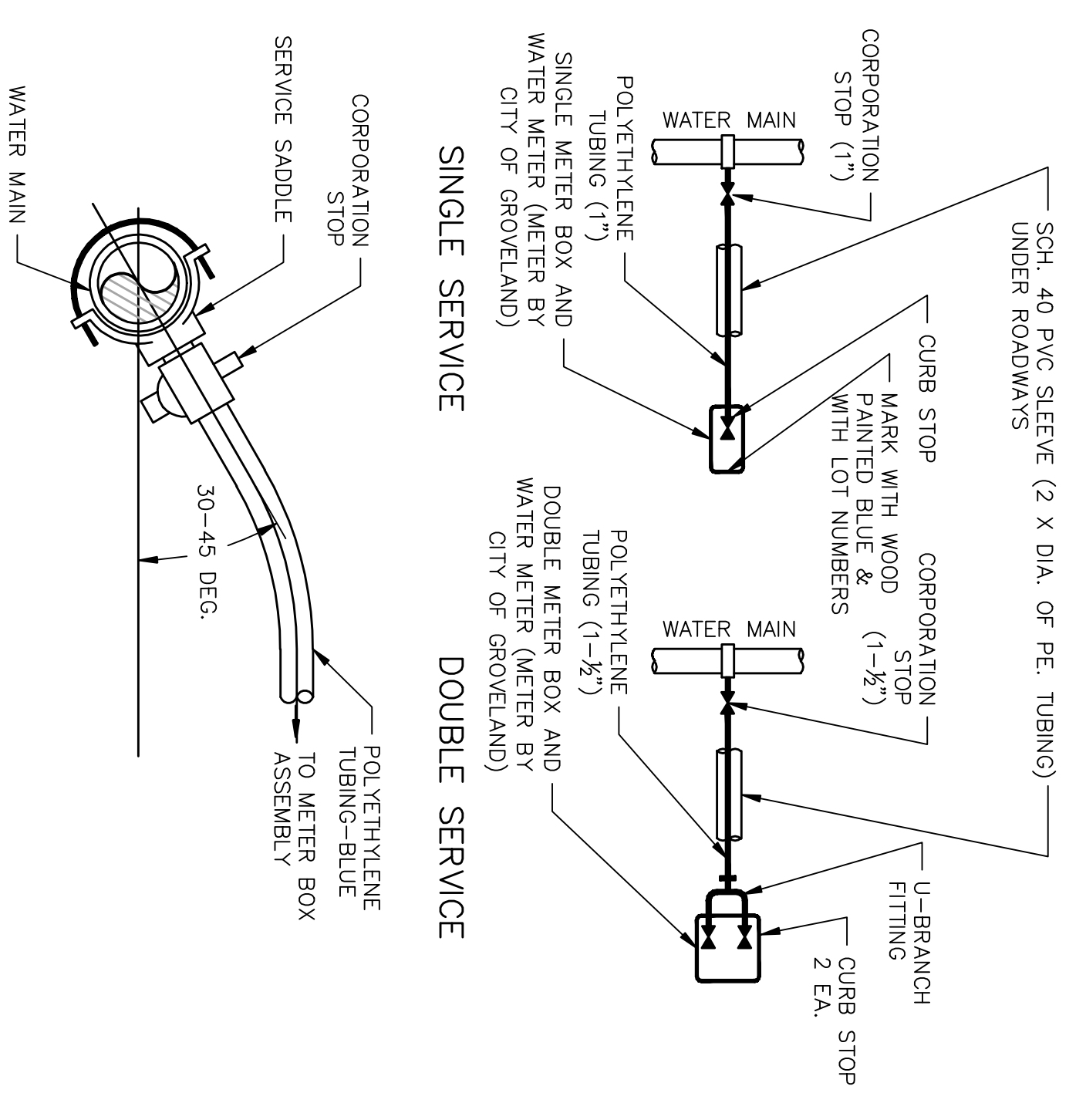
NOTES:

- THIS ARRANGEMENT SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
- METER BOX TO BE PROVIDED BY CONTRACTOR.
- SERVICES BE LOCATED ON LOT LINES.

CITY OF GROVELAND STANDARD DETAILS: WATER

PERMANENT BLOW-OFF DETAIL

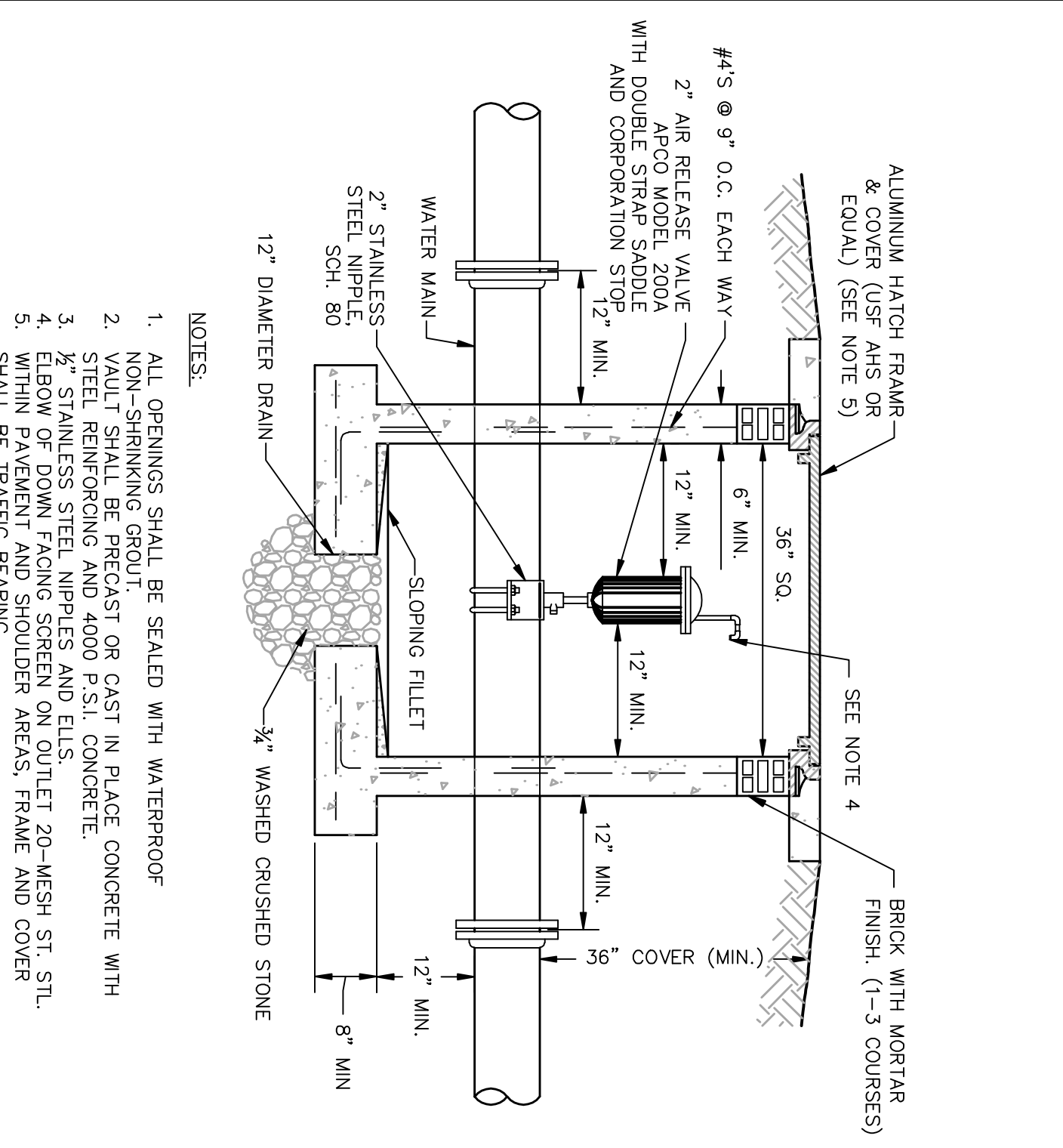
DATE: JULY 7, 2008
SCALE: N.T.S.
W-6



CITY OF GROVELAND STANDARD DETAILS: WATER

TEMPORARY FLUSHING/TESTING DETAIL

DATE: JULY 7, 2008
SCALE: N.T.S.
W-7



CITY OF GROVELAND STANDARD DETAILS: WATER

FIRE HYDRANT ASSEMBLY DETAIL

DATE: JULY 7, 2008
SCALE: N.T.S.
W-9A

MINIMUM LENGTH OF PIPE (IN FEET) REQUIRED TO BE RESTRAINED ON EACH SIDE OF A VALVE OR FITTING FOR SANDY SOILS (SW, SP, SM, SC)

PIPE TYPE	PIPE SIZE	90° BEND		45° BEND		TEE OR CROSS		VERTICAL OFFSET		REDUCER ^B	VALVE	DEAD END
		LOW	HIGH	LOW	HIGH	LOW	HIGH					
P	4	18	18	18	18	18	18	18	18	36	18	52
V	6	24	18	18	18	18	18	18	18	30	38	36
C	8	31	18	18	18	18	18	18	18	40	69	36
P	10	37	18	18	18	18	18	18	18	48	93	36
I	12	43	18	18	18	18	18	18	18	56	99	54
F	14	49	20	18	18	18	18	18	18	64	101	72
E	16	55	23	18	18	18	18	18	18	72	103	174
	18	60	25	18	18	18	18	18	18	80	104	192
	20	65	27	18	18	18	18	18	18	87	105	211
	24	75	31	18	18	18	18	18	18	102	134	246
	30	88	37	18	18	18	18	18	18	122	185	295

CITY OF GROVELAND STANDARD DETAILS: WATER

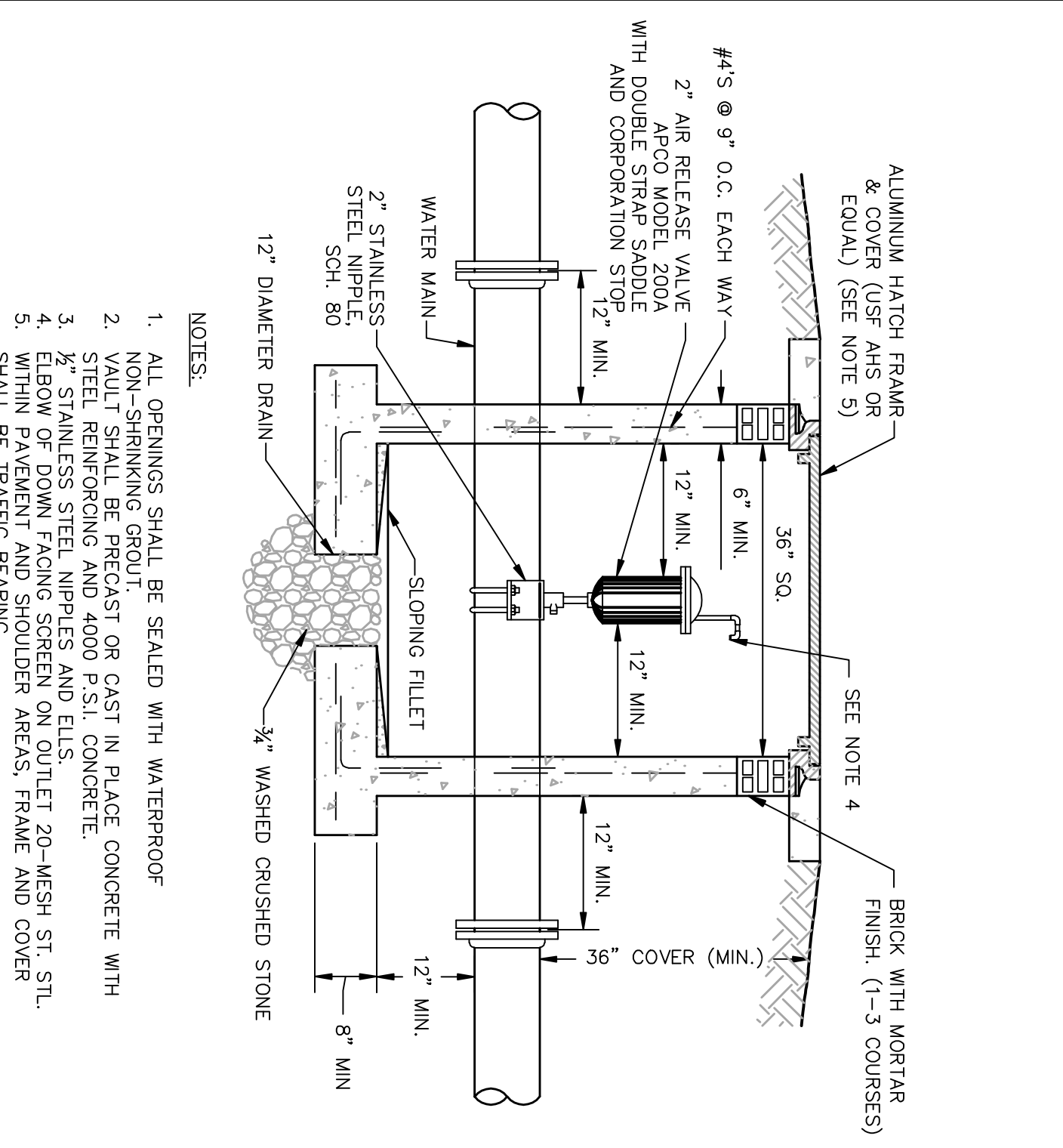
TYPICAL RESIDENTIAL DISTRIBUTION SYSTEM AND SERVICE LAYOUT

DATE: JULY 7, 2008
SCALE: N.T.S.
W-10

CITY OF GROVELAND STANDARD DETAILS: WATER

WATER SERVICE CONNECTION DETAIL

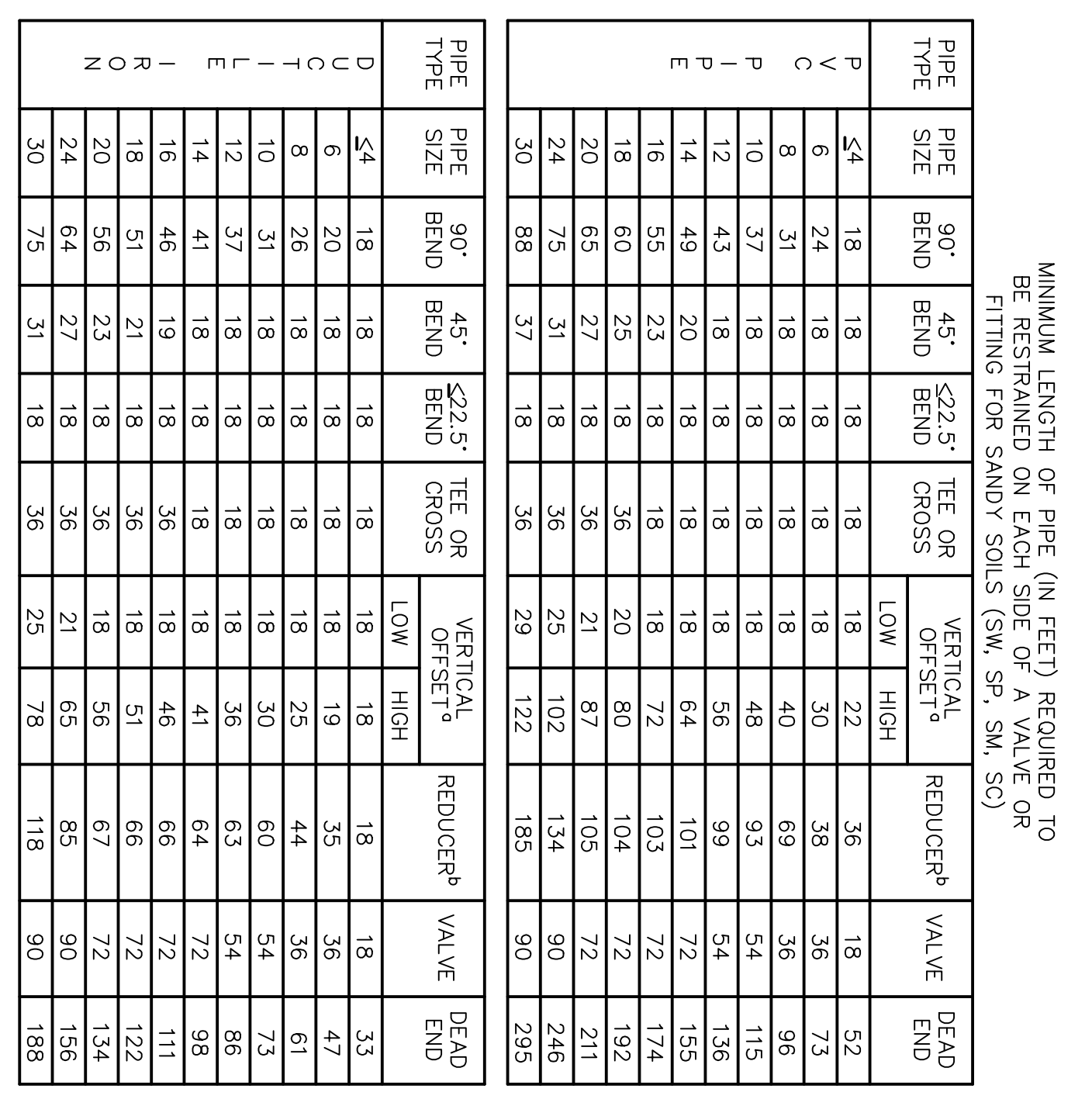
DATE: JULY 7, 2008
SCALE: N.T.S.
W-11



CITY OF GROVELAND STANDARD DETAILS: WATER

AIR RELEASE VALVE

DATE: JULY 7, 2008
SCALE: N.T.S.
W-13A



CITY OF GROVELAND STANDARD DETAILS: WATER

PIPE RESTRAINT SCHEDULE

DATE: JULY 7, 2008
SCALE: N.T.S.
W-14A

MINIMUM LENGTH OF PIPE (IN FEET) REQUIRED TO BE RESTRAINED ON EACH SIDE OF A VALVE OR FITTING FOR SANDY SOILS (SW, SP, SM, SC)

PIPE TYPE	PIPE SIZE	90° BEND		45° BEND		TEE OR CROSS		VERTICAL OFFSET		REDUCER ^B	VALVE	DEAD END
		LOW	HIGH	LOW	HIGH							
D	4	18	18	18	18	18	18	18	18	18	18	33
O	6	20	18	18	18	18	18	18	18	19	35	47
T	8	26	18	18	18	18	18	18	18	25	44	36
I	10	31	18	18	18	18	18	18	18	30	60	54
L	12	37	18	18	18	18	18	18	18	36	63	86
E	14	41	18	18	18	18	18	18	18	41	64	98
I	16	46	19	18	18	18	18	18	18	46	66	111
R	18	51	21	18	18	18	18	18	18	51	68	122
O	20	56	23	18	18	18	18	18	18	56	67	134
N	24	64	27	18	18	18	18	18	18	64	72	156
	30	75	31	18	18	18	18	18	18	78	85	188

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218 N. Florida Street, Suite 3
Bushnell, Florida 33513
Phone : (352) 793-2113

Lake Minneola Landings
C.R. 5614
Groveland, FL 34711

Site Plan
Lake County Water
Detail Sheet