

RECORD SURVEY

MSB
SURVEYING, INC.
GEOMATICS

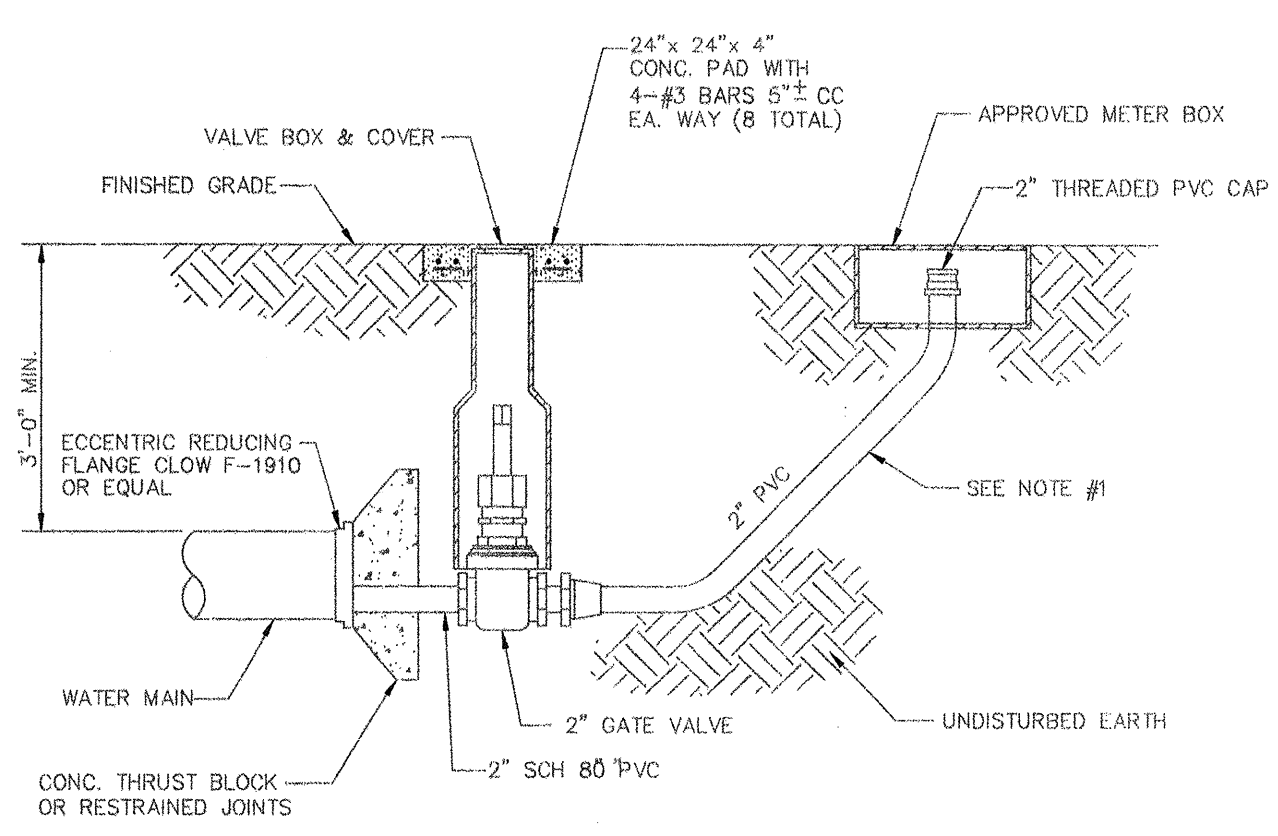
40 SARASOTA CENTER BOULEVARD, UNIT H
SARASOTA, FLORIDA 34240
PHONE NO.: (941) 341-9955
CERTIFICATE OF AUTHORIZATION NO. LB. 7044

REPORT OF SURVEY

ACCURACY:
VERTICAL: FIELD-MEASURED CONTROL FOR VERTICAL DATA SHOWN HEREON ARE BASED ON A LEVEL LOOP CLOSURE IN FEET EXCEEDS A STANDARD OF PLUS OR MINUS 0.05 TIMES THE SQUARE ROOT OF THE DISTANCE IN MILES.

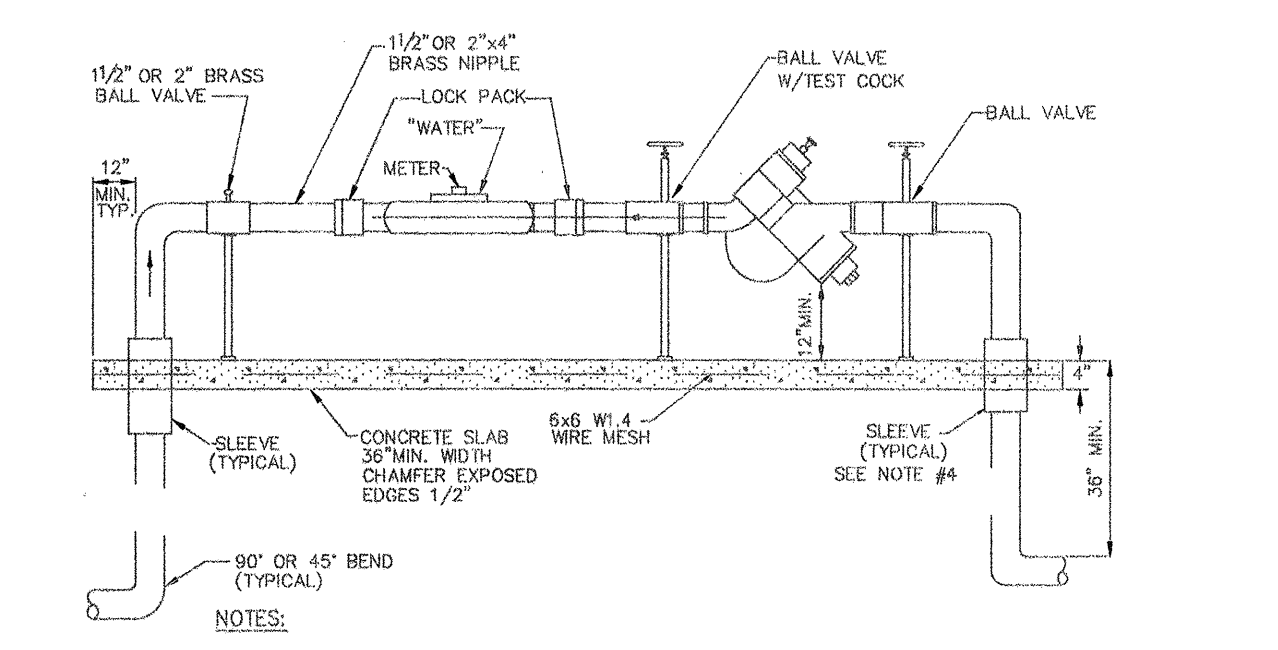
DATA SOURCE:
1. CONSTRUCTION PLANS IN AUTOCAD FORMAT FURNISHED BY CONSUL-TECH DEVELOPMENT SERVICES INC.
2. BOUNDARY SURVEY BY MSB SURVEYING INC.
3. NO OTHER INFORMATION WAS RESEARCHED OR FURNISHED.

NOTES:
1. THIS MAP REPRESENTS A UTILITY RECORD SURVEY RELATIVE TO THE CONSTRUCTION PLAN FOR POSTIANO, BY CONSUL-TECH DEVELOPMENT SERVICES, INC. RECORD DATA IS OVERLAID ONTO CONSTRUCTION PLANS IN AUTOCAD FORMAT. ALL GRAY SCALE DATA IS FOR REFERENCE ONLY & IS NOT A PART OF THIS SURVEY.
2. ELEVATIONS SHOWN HEREON ARE IN FEET AND DECIMALS REFERENCED TO NGVD 1929 AND ARE BASED ON DNR (SURVEY MARK) MONUMENT R-624 (RESET 1985) PUBLISHED ELEVATION=8.82 N.G.V.D. 1929.
3. UTILITY RECORD SURVEY IS NOT VALID UNLESS ALL SHEETS AS DICTATED BY THE COVER SHEET ARE PRESENT.



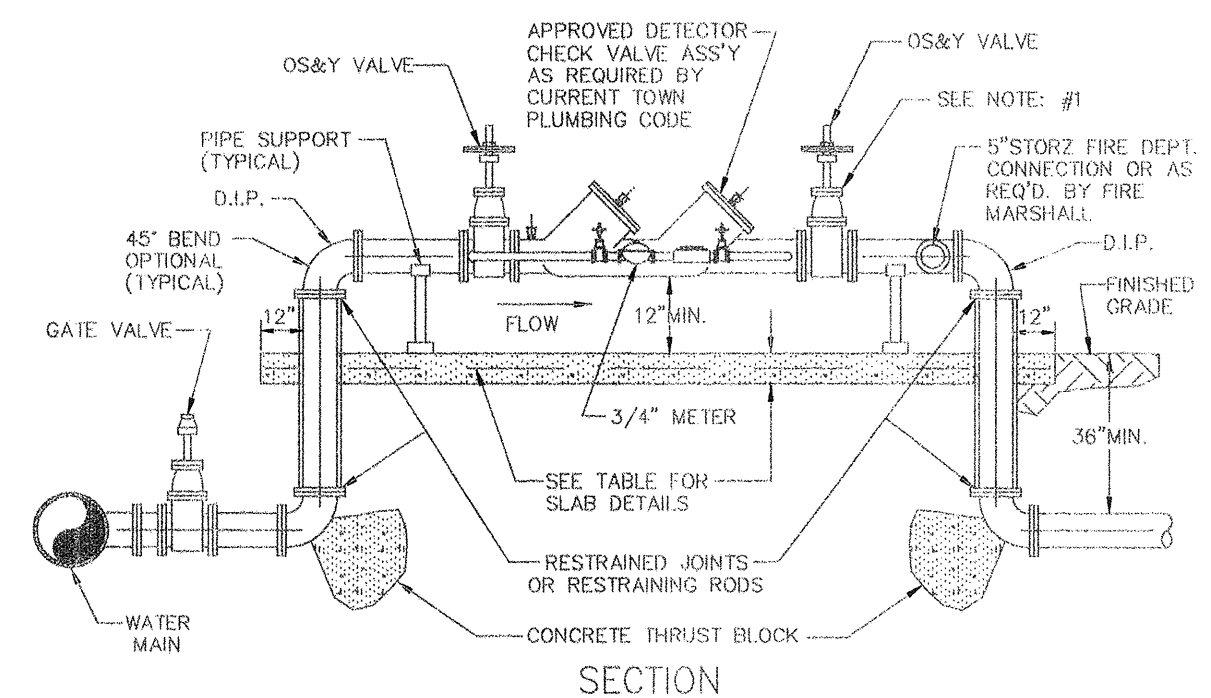
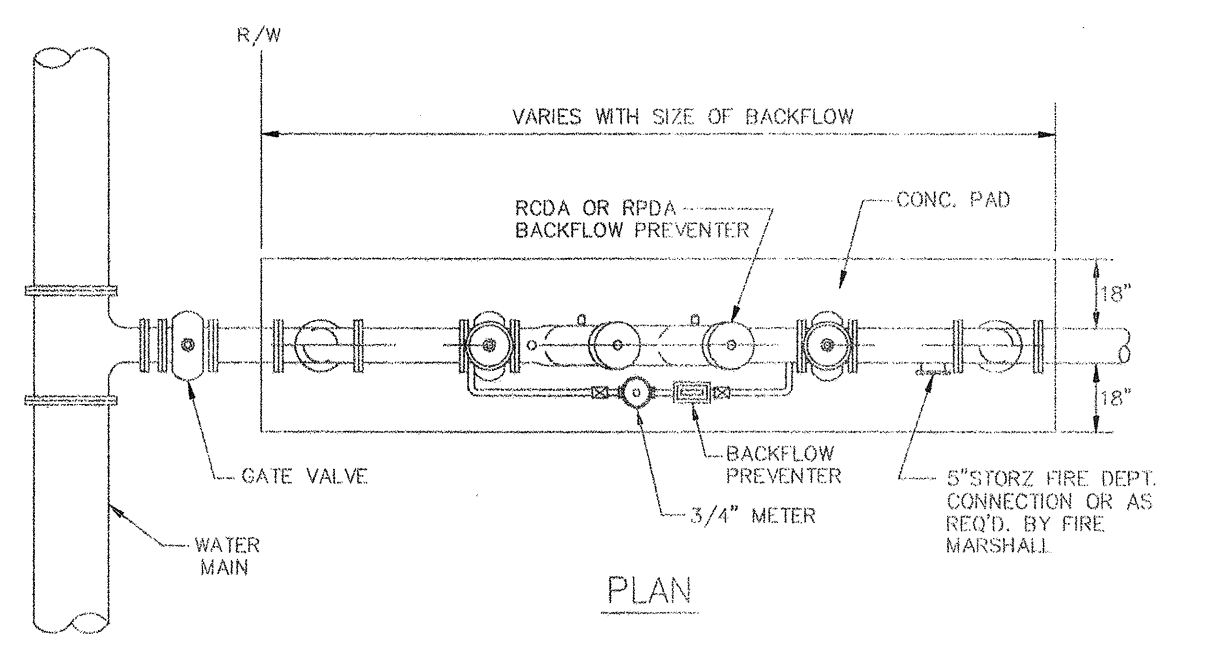
- NOTES:
1. THIS DETAIL TO BE USED FOR ALL WATER MAINS 10\"/>

END OF LINE 2" BLOW-OFF ASSEMBLY



- NOTES:
1. BOTTOM OF BACKFLOW DEVICE MUST BE 18\"/>

1-1/2" & 2" METER & BACKFLOW PREVENTOR DETAIL

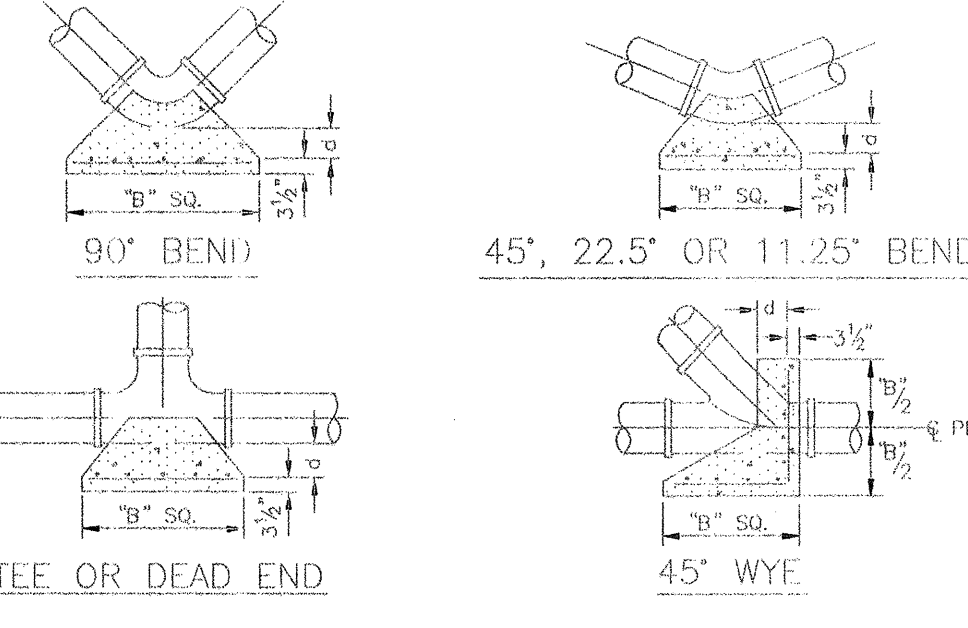


- NOTES:
1. WHEN PRESSURE TESTING FIRE LINE, TEST AGAINST DOWNSTREAM GATE VALVE.
2. THE SYSTEM MUST MEET ALL REQUIREMENTS OF THE TOWN OF LONGBOAT KEY PLUMBING CODE AND THE TOWN OF LONGBOAT KEY COUNTY FIRE MARSHALL REQUIREMENTS.
3. PAINT BACKFLOW ASSEMBLY RED.
4. ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2\"/>

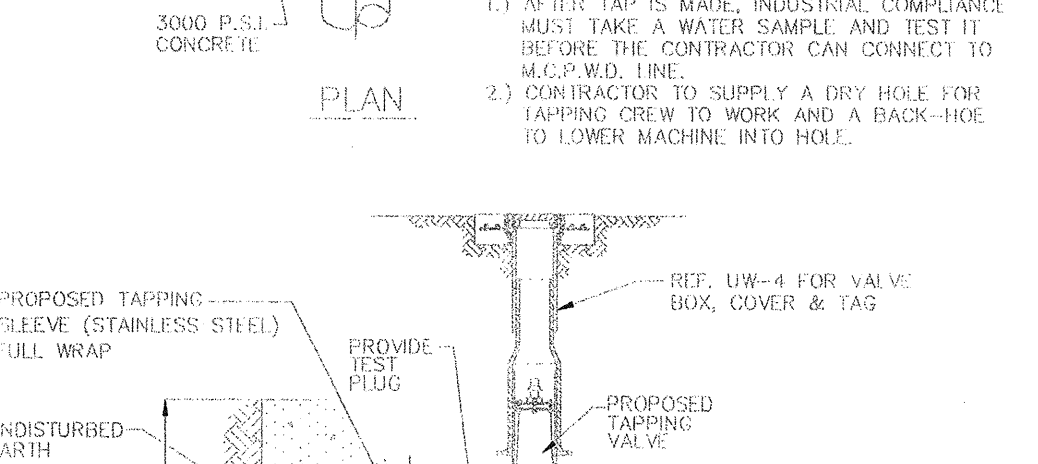
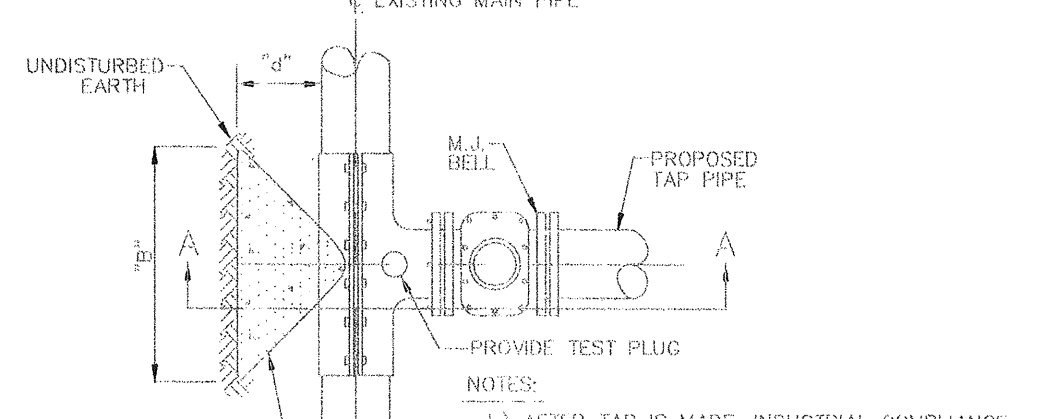
3" AND ABOVE FIRE LINES BACKFLOW PREVENTER

PIPE SIZE (IN.)	THRUST BLOCK DIMENSIONS B ft. x d inches					
	90° BEND	45° BEND	22.5° BEND	11.25° BEND	DEAD END & TEE	45° WYE
4	1.3 3/2	1.0 3/2	0.7 3/2	0.6 3/2	1.1 3/2	1.0 3/2
6	1.9 4/2	1.5 3/4	1.1 3/2	0.8 3/2	1.6 4	1.5 3/4
8	2.6 6/4	1.9 4/4	1.4 3/4	1.0 3/2	2.2 5/2	1.8 4/2
10	3.2 7/4	2.4 6	1.7 4/4	1.2 3/2	2.7 6/2	2.3 5/2
12	3.8 8/4	2.8 6/4	2.0 5	1.5 3/4	3.2 7/4	2.7 6/2
14	4.5 11	3.3 8	2.4 6	1.7 4/4	3.8 9/4	3.2 7/4
16	5.1 12 1/4	3.8 9 1/4	2.7 6 1/2	1.9 4/4	4.3 10 1/2	3.6 8 1/4
18	5.7 13 1/4	4.2 10 1/4	3.0 7 1/2	2.2 5/2	4.8 11 3/4	4.1 10
20	6.4 15 1/2	4.7 11 1/2	3.4 8 1/4	2.4 6	5.4 13	4.5 11
24	7.6 18 1/4	5.6 13 1/2	4.0 9 3/4	2.9 7	6.4 15 1/2	5.4 13
30	9.5 23	7.0 17	5.0 12	3.6 8 3/4	8.0 19 1/4	6.7 16
36	11.4 27 1/2	8.4 20 1/4	6.0 14 1/2	4.3 10 1/2	9.6 23	8.1 19 1/2

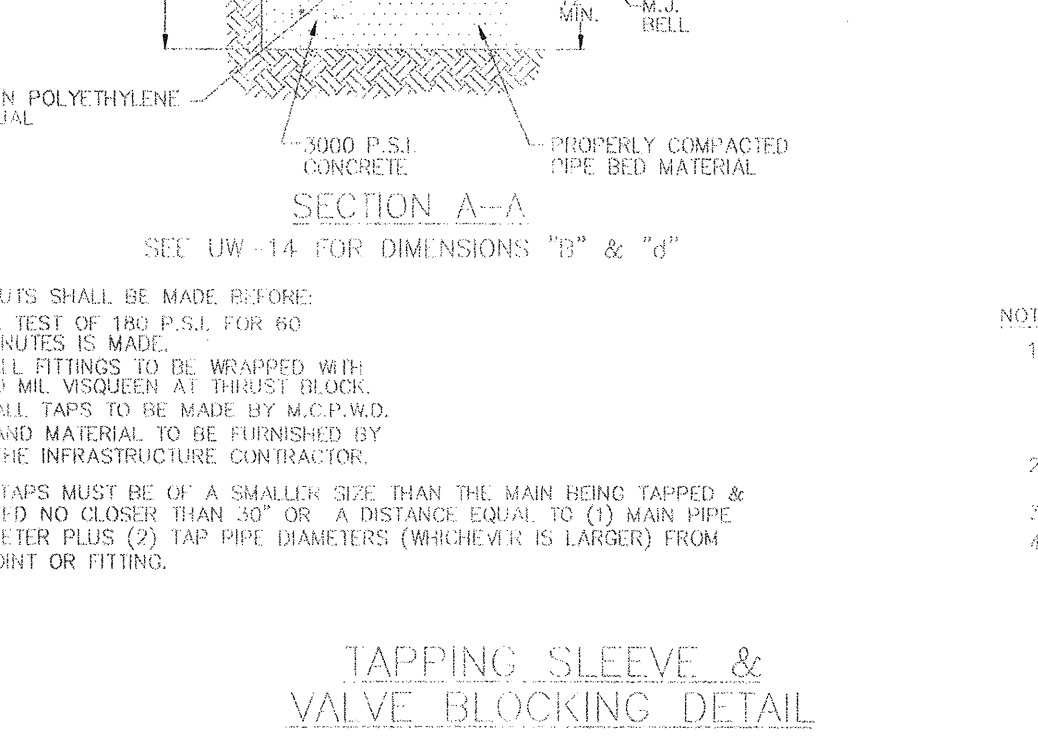
REINFORCEMENT MAT SCHEDULE
FOR DIM. 'B' BETWEEN 5.75' & 11.5' USE #4 @ 8" EACH WAY
FOR DIM. 'B' LESS THAN 5.75' USE #3 @ 8" EACH WAY



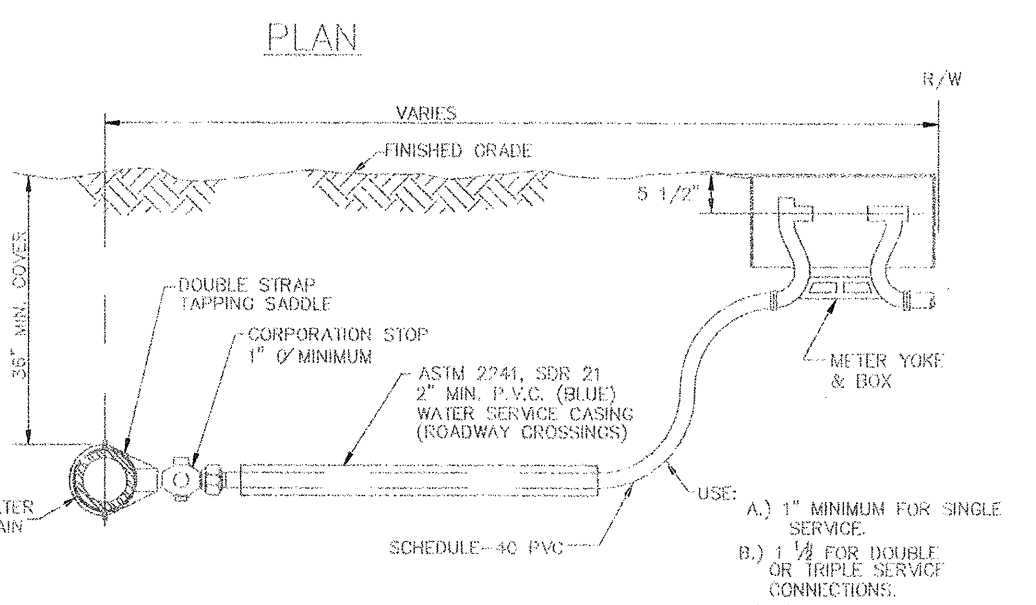
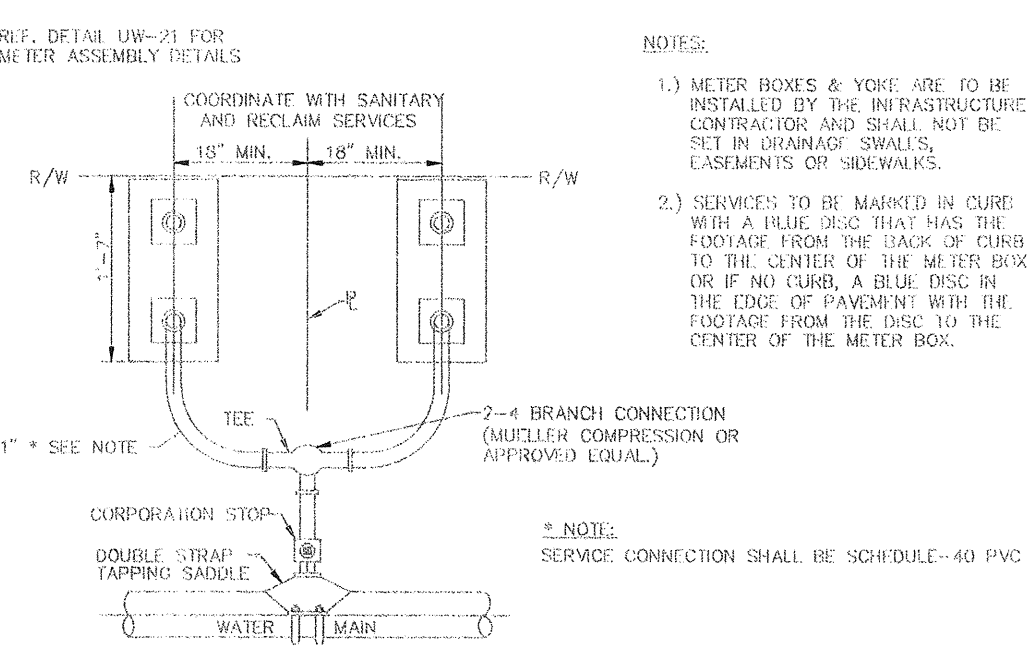
THRUST BLOCK DETAILS



NOTES:
1. NO CUTS SHALL BE MADE BEFORE:
(A) A TEST OF 180 P.S.I. FOR 90 MINUTES IS MADE.
(B) ALL FITTINGS TO BE WRAPPED WITH 2" MIN. VISCOUS AT THRUST BLOCK.
(C) ALL TAPS TO BE MADE BY M.C.P.W.D. AND MATERIAL TO BE FURNISHED BY THE INFRASTRUCTURE CONTRACTOR.
2. ALL TAPS MUST BE OF A SMALLER SIZE THAN THE MAIN HOLE TAPPED & PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) TAP PIPE DIAMETERS (WHICHEVER IS LARGER) FROM A JOINT OR FITTING.



GATE VALVE, BOX, COVER AND TAG

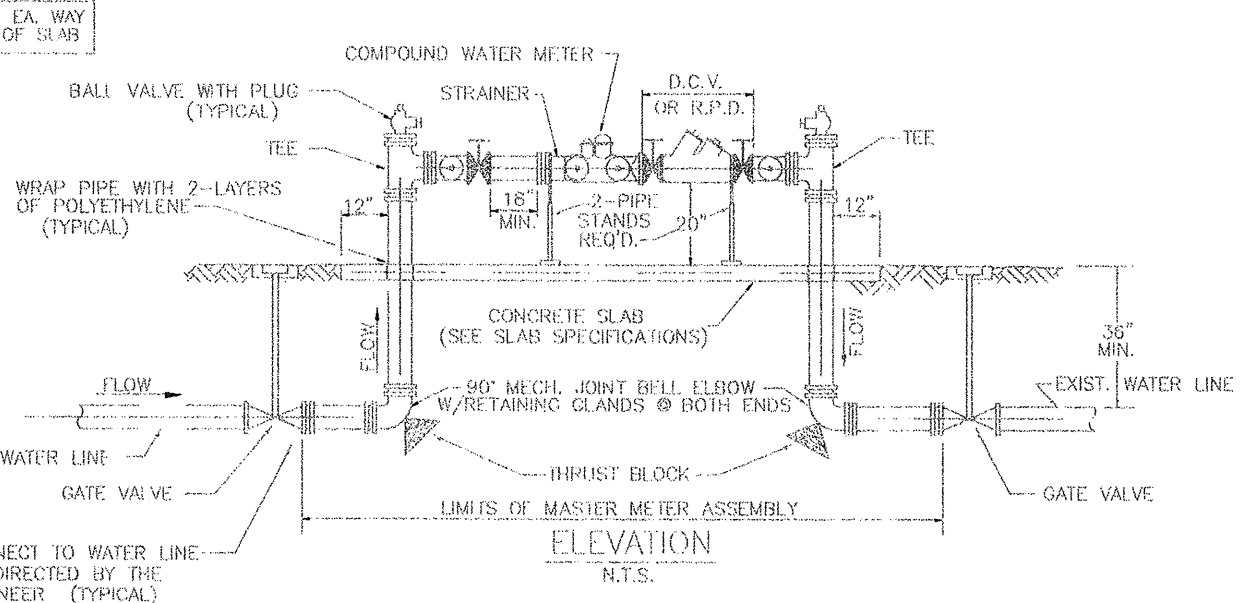
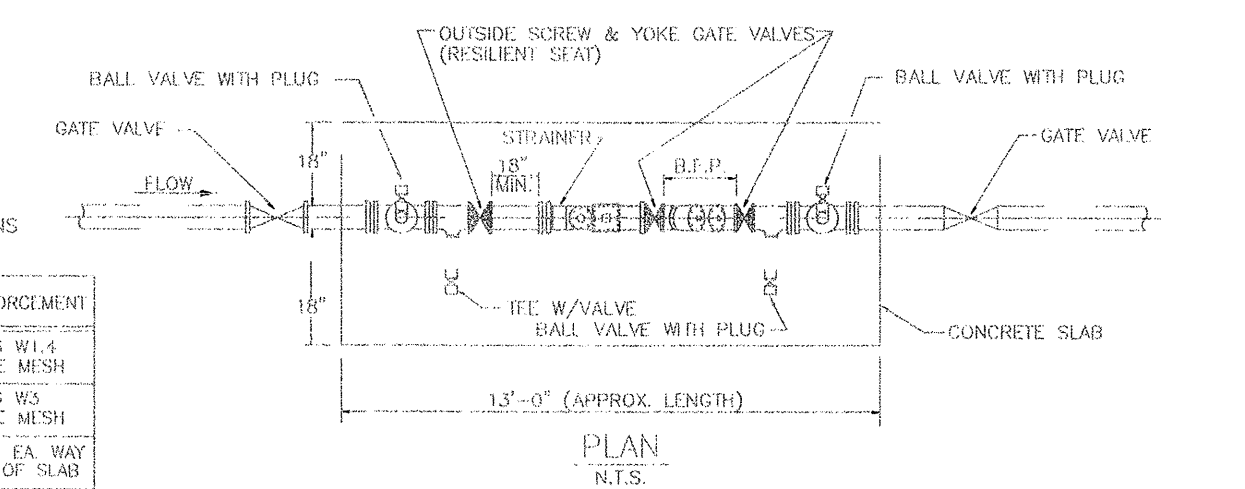


- NOTES:
1. ALL SERVICE TAPS TO BE LOCATED IN FIELD.
2. TAPS SHALL BE NO CLOSER THAN 2'-0" STAGGERED INTERVALS OR WITHIN 2'-0" FROM BELL OR SPOUT ENDS.
3. METER YOKES AND BOX TO BE FURNISHED AND INSTALLED BY THE INFRASTRUCTURE CONTRACTOR.

TYPICAL WATER SERVICE CONNECTION

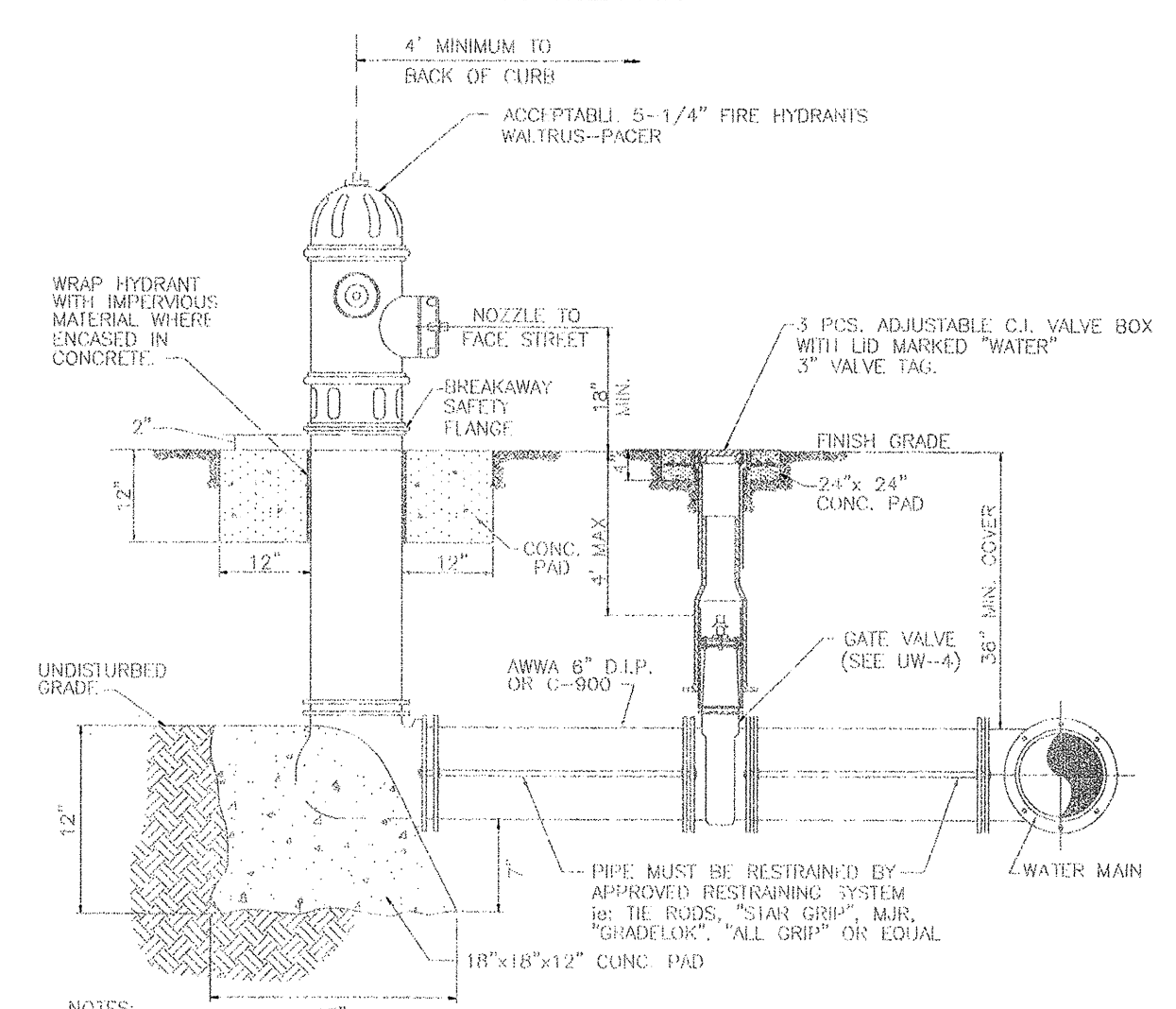
SLAB SPECIFICATIONS

PIPE DIAMETER	SLAB THICKNESS	REINFORCEMENT
3" TO 10"	4"	6#6 W/4 WIRE MESH
12" TO 18"	4"	6#6 W/3 WIRE MESH
20" TO 24"	3 1/2"	6#6@5" EA. WAY @ 6" OF SLAB
42" TO 48"	2 1/2"	6#6@5" EA. WAY @ 6" OF SLAB



- NOTES:
1. ABOVE GROUND PIPING TO BE PAINTED BLUE.
2. DEVICES MUST BE INSTALLED LEVEL.
3. ALL JOINTS SHALL BE FLANGED UNLESS OTHERWISE NOTED.
4. DENOTES OUTSIDE SCREW & YOKE GATE VALVE.
5. ALL BELOW GROUND D.I. PIPE AND FITTINGS SHALL BE POLYETHYLENE WRAPPED.
6. ICE BETWEEN METER AND BACKFLOW IS REQUIRED ON TURBINE METERS. ICE IS NOT REQUIRED ON COMPOUND METERS.
7. ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2" CHAMFER.

3" AND ABOVE MASTER METER DETAIL



- NOTES:
1. WEEDPICES TO BE PLUGGED WITH BRASS PLUGS.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF 6'-0" OFF EDGE OF PAVEMENT AND 10'-0" MAX. FROM FACE OF CURB WHERE POSSIBLE AND WHERE SIDEWALK IS TO BE INSTALLED, SHALL BE LOCATED BETWEEN THE SIDEWALK AND EDGE OF ROAD.
3. HYDRANTS SHALL BE PAINTED SAFETY YELLOW. HYDRANT SHALL BE ALL CAST IRON CONSTRUCTION.
4. PAY ITEMS FOR FIRE HYDRANT ASSEMBLIES SHALL INCLUDE HYDRANT, VALVE, PIPING, MAINLINE, TEE & HARNESING, VALVE BOX & CONCRETE ENCLOSUREMENTS.
5. FIRE HYDRANTS SHALL BE PREFERABLY PLACED SO THAT STORM WATER FLOWS AWAY FROM & NOT TOWARDS THE HYDRANT.
6. FIRE HYDRANTS SHALL BE CONSTRUCTED SET TO FINISHED GRADES AS ESTABLISHED. NORMAL BURY IS 3' BENEATH FINISHED GRADE. IF EXTENSIONS ARE REQUIRED, THE COST SHALL BE INCLUDED IN THE PRICE BID.
7. FIRE HYDRANTS MAY BE CONSTRUCTED WITH OFFSET FITTING.
8. RAISED REFLECTIVE PAVEMENT MARKER (R.F.P.M.) AT CENTERLINE OF PAVEMENT ADJACENT TO HYDRANT.
9. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".

TYPICAL FIRE HYDRANT ASSEMBLY

I, the undersigned Professional Engineer, hereby certify that the best of my knowledge and belief, and based on the certification provided by the surveyor of record, the improvements depicted hereon have been constructed in substantial compliance with the approved plans. The undersigned engineer is not certifying the accuracy of the drawing prepared by the surveyor.

Engineer's Signature
Date: 2/2/12

DATE: 2/2/12
REVISIONS:
1. 2/2/12
2. 2/2/12
3. 2/2/12

PROJECT No. 03200440
LONGBOAT KEY, FLORIDA
SECTION 36, TOWNSHIP 35 S., RANGE 16 E.

SCALE: AS SHOWN
DATE: 2/2/12

CONSUL-TECH DEVELOPMENT SERVICES, INC.
515 Town Center Parkway, Suite 12, Sarasota, Florida 34232 Phone: 941-341-9955 Fax: 941-341-9951

DATE: 2/2/12
DESIGNED BY: R.P.F.
CHECKED BY: R.P.F.
DATE: 2/2/12

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