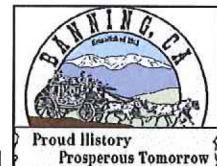


CITY OF BANNING NON-POTABLE WATER FACILITY STANDARDS  
DRAWING INDEX (NUMERICAL)

N-1	NON-POTABLE WATER IRRIGATION LEGEND
N-2	NON-POTABLE WATER LINE LOCATION
N-3	NON-POTABLE WATER NOTES FOR NON-RESIDENTIAL SITES
N-4	NON-POTABLE WATER NOTES – FOR ON-SITE RESIDENTIAL USE
N-5	NON-POTABLE 3/4" DUAL METER ASSEMBLY
N-7	NON-POTABLE 1 1/2" THRU 2" SERVICE INSTALLATION
N-15	NON-POTABLE 1" AND 2" AIR AND VACUUM VALVE ASSEMBLY
N-19	NON-POTABLE 4" BLOW-OFF ASSEMBLY
N-23	NON-RESIDENTIAL NON-POTABLE WATER CROSS-CONNECTION CONTROL TEST STATION DETAIL

NOTE: W- DWGS LISTED BELOW ARE CITY OF BANNING WATER STANDARD DRAWINGS APPLICABLE  
TO NON-POTABLE FACILITIES.

W-1	STANDARD LEGEND
W-3	UTILITY LOCATIONS – SECTIONS
W-8	3" AND 4" METER INSTALLATION
W-9	6" AND 8" METER INSTALLATION
W-10	DOUBLE CHECK BACKFLOW ASSEMBLY
W-11	REDUCED PRESSURE BACKFLOW ASSEMBLY
W-18	RESIDENTIAL FIRE HYDRANT INSTALLATION
W-20	VALVE AND VALVE BOX INSTALLATION
W-21	VALVE STEM EXTENSION
W-24	PREFABRICATED VAULT/LID/VENT ASSEMBLY
W-26	STEEL CASING PIPE
W-30	TRENCH REPAIR DETAIL
W-31	PIPE BEDDING DETAILS

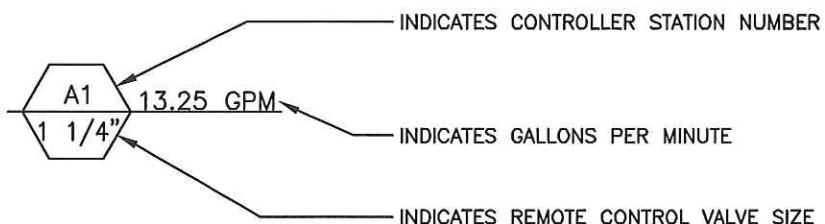


2012 EDITION

 REGISTERED PROFESSIONAL KAHONO OEI ENGINEER No. 52652 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	RECOMMENDED BY:  ARTURO VELA, P.E., SR. ENGINEER	DATE 12-12-12	<b>CITY OF BANNING</b>	STANDARD NO.
	APPROVED BY:  KAHONO OEI, P.E., CITY ENGINEER	DATE 12-12-12	<b>NON-POTABLE WATER STANDARD INDEX</b>	NPSI 1 OF 1

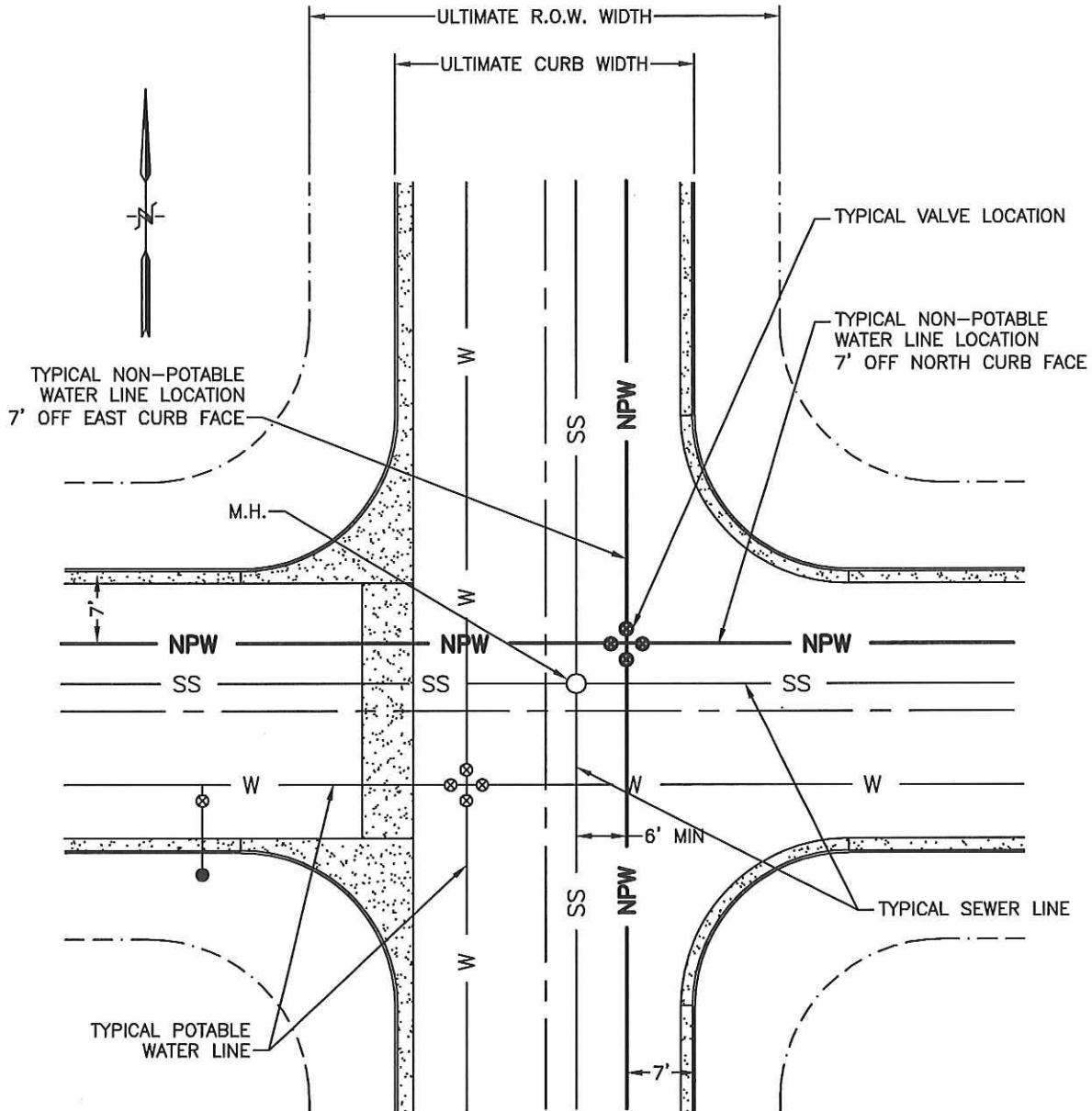
## IRRIGATION LEGEND

	REMOTE CONTROL VALVE	ELECTRIC CONTROL VALVE WITH RECYCLED ID TAGS
	PRESSURE REGULATING VALVE	WILKINS 70 SERIES, 3/4" SIZE
	ISOLATION VALVE	WITH RECYCLED ID TAGS
	IRRIGATION CONTROLLER	EXTERIOR MOUNT WITH RECYCLED WATER LABEL
	POTABLE WATER HOSE BIB	
	VALVE	
	BACKFLOW PREVENTER	
—NPW—	NON-POTABLE WATER MAINLINE	SCH. 40 PURPLE PVC PIPE, SIZE PER PLAN
—W—	POTABLE WATER MAINLINE	SCH 40 WHITE PVC WITH 3" WARNING TAPE
—————	NON-POTABLE WATER LATERAL	CLASS 200 PURPLE PVC PIPE, SIZE PER PLAN FOR NON-CONSTANT PRESSURE PIPE.
=====	NON-POTABLE WATER SLEEVING	2" MIN. SCHEDULE 40 PURPLE PVC PIPE
—————	POTABLE WATER FEATURE FILL LINE	COPPER TUBING, TYPE K
	POINT OF CONNECTION (P.O.C.)	LOCKED VALVE TO BACK YARD

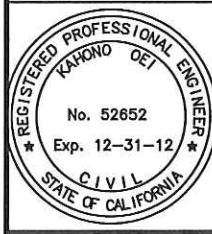


2012 EDITION

 <b>REGISTERED PROFESSIONAL ENGINEER</b> <b>KAHONO OEI</b>  No. 52652 Exp. 12-31-12	 RECOMMENDED BY: <b>ARTURO VELA, P.E., SR. ENGINEER</b> DATE <b>12-12-12</b>	<b>CITY OF BANNING</b>	STANDARD NO.
		<b>STANDARD LEGEND</b>	<b>N-1</b> 1 OF 1



2012 EDITION



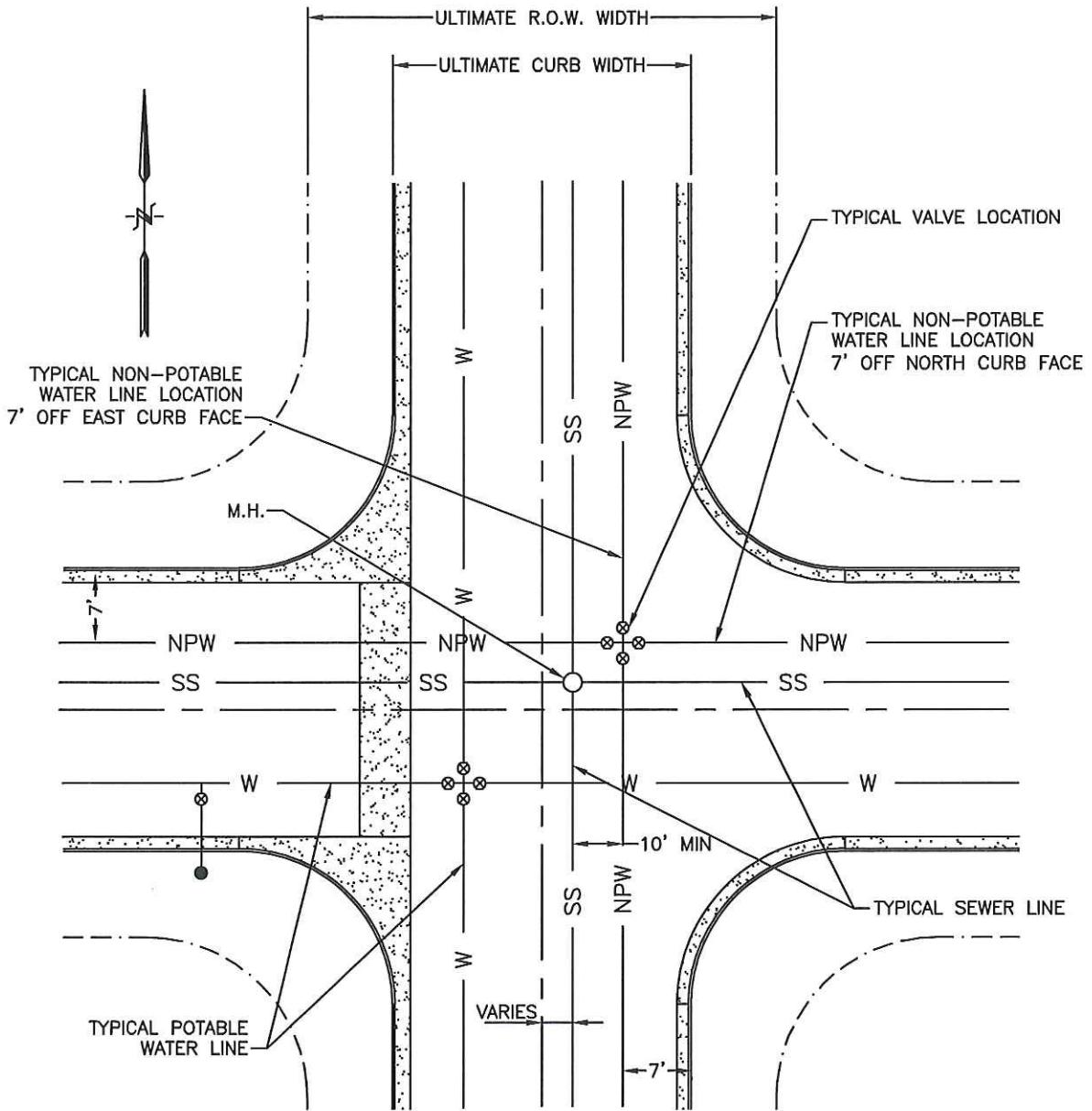
RECOMMENDED BY: *A.H. Vela* 12-12-12  
ARTURO VELA, P.E., SR. ENGINEER DATE  
APPROVED BY: *Chu* 12-12-12  
KAHONO OEI, P.E., CITY ENGINEER DATE

**CITY OF BANNING**

STANDARD  
NO.

**NON-POTABLE WATER  
LINE LOCATION**

**N-2**  
1 OF 1



2012 EDITION



**RECOMMENDED BY:**

ARTURO VELA, P.E., SR. ENGINEER

12-12-12

ARTURO VELA, P.E., SR. ENGINEER DATE

APPROVED BY:

PROVED BY:   
KAHONO DEL. B. F. CITY ENGINEER

12-12-12

## **CITY OF BANNING**

**STANDARD  
NO.**

## NON-POTABLE WATER LINE LOCATION

N-2  
1 OF 1

1. THE INSTALLATION OF THE NON-POTABLE WATER SYSTEM SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE CITY OF BANNING (C.O.B.).
2. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH C.O.B. AT (951) 922-3130 TWO (2) WORKING DAYS IN ADVANCE OF STARTING WORK. CONSTRUCTION SHALL BEGIN NO LATER THAN FIVE (5) DAYS AFTER THE PRE-CONSTRUCTION MEETING. C.O.B. SHALL BE NOTIFIED OF EACH WORKDAY THEREAFTER UNTIL COMPLETION OF THE PROJECT.
3. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR PROVIDING ACCESS TO AND COOPERATION WITH THE CITY INSPECTOR TO PERFORM ALL INSPECTIONS AND TESTING.
4. CONNECTIONS TO THE EXISTING NON-POTABLE WATER FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR PER THE C.O.B. NON-POTABLE WATER ON-SITE DESIGN AND CONSTRUCTION STANDARDS.
5. THERE SHALL NEVER BE DIRECT CONNECTIONS BETWEEN THE POTABLE AND NON-POTABLE WATER SYSTEMS.
6. NON-POTABLE WATER SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN LANDSCAPE IRRIGATION AND APPROVED USES SUCH AS INDUSTRIAL USE OR IMPOUNDMENTS.
7. HOSE BIBS ARE PROHIBITED ON NON-POTABLE WATER SYSTEMS.
8. WATER USED IN HOSE BIBS SHALL BE POTABLE WATER AND ALL HOSE BIBS SHALL BE AFFIXED TO THE BUILDING.
9. THE POTABLE WATER SYSTEM SHALL BE PROTECTED BY AN APPROVED BACKFLOW PREVENTION DEVICE. THE NON-POTABLE WATER SERVICE WILL NORMALLY NOT REQUIRE BACKFLOW PROTECTION (AT C.O.B. DISCRETION).
10. A MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE CONSTANT PRESSURE POTABLE AND NON-POTABLE WATER LINES. A MINIMUM OF ONE (1) FOOT VERTICAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE POTABLE AND NON-POTABLE WATER LINES WITH THE NON-POTABLE WATERLINE BELOW THE POTABLE.
11. ALL CROSSINGS BETWEEN POTABLE AND NON-POTABLE WATER LINES SHALL BE AS NEAR TO PERPENDICULAR AS POSSIBLE AND THE NON-POTABLE WATER LINES SHALL BE SLEEVED A MINIMUM OF FIVE (5) FEET ON BOTH SIDES OF THE POTABLE WATER LINE.
12. SERVICE LINES FOR THE ON-SITE POTABLE SYSTEM AND FILL LINES FOR WATER FEATURES CONNECTED TO THE POTABLE WATER SYSTEM SHALL BE CONSTRUCTED USING COPPER PIPE.
13. CONTINUOUS BLUE WARNING TAPE SHALL BE PLACED OVER THE PIPE IN ALL TRENCHES CARRYING POTABLE WATER. REFER TO T. CHRISTY'S OR APPROVED EQUAL.
14. CONTINUOUS PURPLE WARNING TAPE SHALL BE PLACED OVER THE PIPE IN ALL TRENCHES CARRYING NON-POTABLE WATER. REFER TO T. CHRISTY'S OR APPROVED EQUAL.
15. NON-POTABLE WATER PIPING SHALL BE PURPLE AND IDENTIFIED AS NON-POTABLE WATER BY CONTINUOUS MARKING ON BOTH SIDES. THE MARKINGS SHALL INCLUDE THE FOLLOWING: "WARNING RECYCLED WATER - DO NOT DRINK". NOMINAL PIPE SIZE, PRESSURE RATING, AND ASTM DESIGNATIONS.

(CONTINUED ON SHEET 2 OF 2)

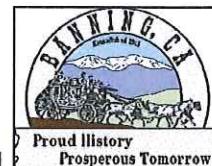


2012 EDITION

 <small>REGISTERED PROFESSIONAL KAHONO OEI ENGINEER No. 52652 * Exp. 12-31-12 *</small> <small>CIVIL STATE OF CALIFORNIA</small>	<small>RECOMMENDED BY:</small> <b>ARTURO VELA, P.E., SR. ENGINEER</b> <small>DATE</small> <small>12-12-12</small>	<b>CITY OF BANNING</b> <small>NON-POTABLE WATER NOTES (NON-RESIDENTIAL SITES)</small>	<b>STANDARD NO.</b>
			<b>N-3</b>
<small>APPROVED BY:</small> <b>KAHONO OEI, P.E., CITY ENGINEER</b> <small>DATE</small> <small>Chs 12-12-12</small>	<b>1 OF 2</b>		

(CONTINUED FROM SHEET 1 OF 2)

16. NON-POTABLE WATER ISOLATION AND CONTROL VALVE BOXES SHALL BE WEATHERPROOF PURPLE PLASTIC AND MARKED "NON-POTABLE WATER". \*NOTE-ALL CONTROL VALVES SHALL BE BURIED BELOW GRADE AUTOMATIC CONTROL VALVES OPERATED BY A PROGRAMMABLE CONTROLLER. ABOVE GROUND ANTI-SIPHON CONTROL VALVES ARE NOT ALLOWED.
17. ALL NON-POTABLE WATER IRRIGATION SYSTEM CONTROL VALVES, ISOLATION VALVES, QUICK COUPLERS, REGULATORS, AND APPURTENANCES SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES AND IMPRINTED WITH "WARNING RECYCLED WATER - DO NOT DRINK". REFER TO T. CHRISTY'S OR APPROVED EQUAL.
18. ALL AREAS WHERE NON-POTABLE WATER IS USED SHALL BE POSTED WITH APPROVED SIGNAGE. EACH SIGN SHALL STATE "NON-POTABLE WATER - DO NOT DRINK" AND DISPLAY THE INTERNATIONAL "DO NOT DRINK" SYMBOL.
19. BEFORE ACTIVATION OF THE POTABLE WATER SERVICE THE BACKFLOW DEVICE SHALL BE TESTED AND APPROVED BY A LICENSED BACKFLOW TESTER. ARRANGEMENTS WITH C.O.B. MUST BE MADE AT LEAST TWO (2) WORKING DAYS IN ADVANCE TO TURN ON THE POTABLE SERVICE TO ALLOW TESTING OF THE DEVICE. POTABLE WATER SERVICE WILL NOT BE ACTIVATED UNTIL THE BACKFLOW DEVICE PASSES INSPECTION.
20. BEFORE ACTIVATION OF THE NON-POTABLE WATER SERVICE, A CROSS CONNECTION TEST AND FINAL INSPECTION AND APPROVAL OF THE IRRIGATION SYSTEM SHALL BE PERFORMED. THE PROPERTY OWNER OR CONTRACTOR SHALL ARRANGE WITH THE CITY FOR AN IRRIGATION COVERAGE TEST AND MAKE ANY MODIFICATIONS OR ADJUSTMENTS DEEMED REQUIRED BEFORE FINAL APPROVAL.
21. ALL SPRAY HEADS SHALL BE ADJUSTED TO ELIMINATE OVERSPRAY AND RUNOFF ONTO ADJACENT HARDCAPES, DRINKING FOUNTAINS OR WATER FEATURES, AND OUTDOOR FURNITURE SUCH AS PICNIC TABLES, ETC.
22. NON-POTABLE WATER IRRIGATION SYSTEMS SHALL ONLY BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 6:00 AM.
23. FAILURE TO COMPLY WITH ANY OF THE CITY OF BANNING STANDARDS MAY RESULT IN TERMINATION OF NON-POTABLE WATER AND/OR POTABLE WATER SERVICE.

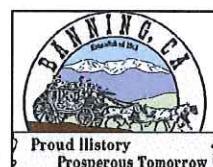


2012 EDITION

REGISTERED PROFESSIONAL ENGINEER KAHONO OEI No. 52652 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	RECOMMENDED BY: ARTURO VELA, P.E., SR. ENGINEER 12-12-12 APPROVED BY: KAHONO OEI, P.E., CITY ENGINEER 12-12-12	<b>CITY OF BANNING</b> NON-POTABLE WATER NOTES (NON-RESIDENTIAL SITES)	STANDARD NO. N-3 2 OF 2
--	---	---	----------------------------------

1. THE INSTALLATION OF THE NON-POTABLE WATER SYSTEM SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE CITY OF BANNING (C.O.B.).
2. THE HOMEOWNER OR CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH C.O.B. AT (951)922-3130 TWO (2) WORKING DAYS IN ADVANCE OF STARTING WORK. CONSTRUCTION SHALL BEGIN NO LATER THAN FIVE (5) DAYS AFTER THE PRE-CONSTRUCTION MEETING. C.O.B. SHALL BE NOTIFIED OF EACH WORKDAY THEREAFTER UNTIL COMPLETION OF THE PROJECT.
3. THE HOMEOWNER SHALL BE RESPONSIBLE FOR PROVIDING ACCESS TO AND COOPERATION WITH THE CITY INSPECTOR TO PERFORM ALL INSPECTIONS AND TESTING.
4. CONNECTIONS TO THE EXISTING NON-POTABLE WATER FACILITIES SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH THE C.O.B. NON-POTABLE ON-SITE DESIGN AND CONSTRUCTION STANDARDS.
5. THERE SHALL NEVER BE ANY DIRECT CONNECTIONS BETWEEN THE POTABLE AND NON-POTABLE WATER SYSTEMS.
6. NON-POTABLE WATER SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN LANDSCAPE IRRIGATION.
7. HOSE BIBS ARE PROHIBITED ON NON-POTABLE WATER SYSTEMS.
8. WATER USED IN HOSE BIBS SHALL BE POTABLE WATER AND ALL HOSE BIBS SHALL BE AFFIXED TO THE HOUSE.
9. THE POTABLE WATER SYSTEM SHALL BE PROTECTED BY AN APPROVED BACKFLOW PREVENTION DEVICE. THE NON-POTABLE WATER SERVICE WILL NORMALLY NOT REQUIRE BACKFLOW PROTECTION (AT C.O.B. DISCRETION).
10. A MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE CONSTANT PRESSURE POTABLE AND NON-POTABLE WATER LINES. A MINIMUM OF ONE (1) FOOT VERTICAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE POTABLE AND NON-POTABLE WATER LINES WITH THE NON-POTABLE WATER LINE BELOW THE POTABLE.
11. ALL CROSSINGS BETWEEN POTABLE AND NON-POTABLE WATER LINES SHALL BE AS NEAR TO PERPENDICULAR AS POSSIBLE AND THE NON-POTABLE WATER LINES SHALL BE SLEEVED A MINIMUM OF FIVE (5) FEET ON BOTH SIDES OF THE POTABLE WATER LINE.
12. SERVICE LINES FOR THE ON-SITE POTABLE SYSTEM AND FILL LINES FOR WATER FEATURES CONNECTED TO THE POTABLE WATER SYSTEM SHALL BE CONSTRUCTED USING COPPER PIPE.
13. CONTINUOUS BLUE WARNING TAPE SHALL BE PLACED OVER THE COPPER POTABLE WATER PIPE IN THE TRENCH OF ALL PIPES CARRYING POTABLE WATER. REFER TO T. CHRISTYS OR APPROVED EQUAL.
14. CONTINUOUS PURPLE WARNING TAPE SHALL BE PLACED OVER THE PURPLE PVC NON-POTABLE WATER PIPE IN THE TRENCH OF ALL PIPES CARRYING NON-POTABLE WATER. REFER TO T. CHRISTYS OR APPROVED EQUAL.
15. NON-POTABLE WATER PIPING SHALL BE PURPLE AND IDENTIFIED AS NON-POTABLE WATER PIPE BY CONTINUOUS MARKING ON BOTH SIDES. THE MARKINGS SHALL INCLUDE THE FOLLOWING: "WARNING RECYCLED WATER - DO NOT DRINK", NOMINAL PIPE SIZE, PRESSURE RATING, AND ASTM DESIGNATIONS.

(CONTINUED ON SHEET 2 OF 2)



2012 EDITION

 <p>REGISTERED PROFESSIONAL ENGINEER KAHONO OEI No. 52652 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA</p>	<p><i>Arturo Vela</i> RECOMMENDED BY: ARTURO VELA, P.E., SR. ENGINEER DATE <i>12-12-12</i></p> <p>APPROVED BY: KAHONO OEI, P.E., CITY ENGINEER DATE <i>Chas</i> <i>12-12-12</i></p>	<p><b>CITY OF BANNING</b></p>	STANDARD NO.
		<p><b>NON-POTABLE WATER NOTES (RESIDENTIAL SITES)</b></p>	N-4 1 OF 2

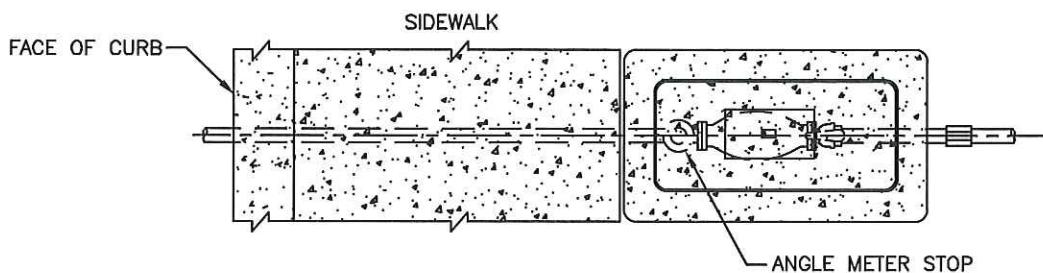
(CONTINUED FROM SHEET 1 OF 2)

16. NON-POTABLE WATER ISOLATION AND CONTROL VALVE BOXES SHALL BE WEATHERPROOF PURPLE PLASTIC AND MARKED "RECYCLED WATER". \*NOTE - ALL CONTROL VALVES SHALL BE BURIED BELOW GRADE AUTOMATIC CONTROL VALVES OPERATED BY A PROGRAMMABLE CONTROLLER. ABOVE GROUND ANIT-SIPHON CONTROL VALVES ARE NOT ALLOWED.
17. ALL NON-POTABLE WATER IRRIGATION SYSTEM CONTROL VALVES, ISOLATION VALVES, QUICK COUPLERS, REGULATORS, AND APPURTEINANCES SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES AND IMPRINTED WITH "WARNING RECYCLED WATER - DO NOT DRINK". REFER TO T. CHRISTY'S OR APPROVED EQUAL.
18. ALL AREAS WHERE RECYCLED WATER IS USED SHALL BE POSTED WITH APPROVED SIGNAGE. EACH SIGN SHALL STATE "RECYCLED WATER - DO NOT DRINK" AND DISPLAY THE INTERNATIONAL "DO NOT DRINK" SYMBOL.
19. BEFORE ACTIVATION OF THE POTABLE WATER SERVICE THE BACKFLOW DEVICE SHALL BE TESTED AND APPROVED BY A LICENSED BACKFLOW TESTER. ARRANGEMENTS WITH C.O.B. MUST BE MADE AT LEAST TWO (2) WORKING DAYS IN ADVANCE TO TURN ON THE POTABLE SERVICE TO ALLOW TESTING OF THE DEVICE. POTABLE WATER SERVICE WILL NOT BE ACTIVATED UNTIL THE BACKFLOW DEVICE PASSES INSPECTION.
20. BEFORE ACTIVATION OF THE NON-POTABLE WATER SERVICE, A CROSS CONNECTION TEST AND FINAL INSPECTION AND APPROVAL OF THE IRRIGATION SYSTEM SHALL BE PERFORMED. THE PROPERTY OWNER OR CONTRACTOR SHALL ARRANGE WITH THE DISTRICT FOR AN IRRIGATION COVERAGE TEST AND MAKE ANY MODIFICATIONS OR ADJUSTMENTS DEEMED REQUIRED BEFORE FINAL APPROVAL.
21. ALL SPRAY HEADS SHALL BE ADJUSTED TO ELIMINATE OVERSPRAY AND RUNOFF ONTO ADJACENT HARDSCAPES, DRINKING FOUNTAINS OR WATER FEATURES, AND OUTDOOR FURNITURE SUCH AS PICNIC TABLES, ETC.
22. NON-POTABLE WATER IRRIGATION SYSTEMS SHALL ONLY BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 6:00 AM.
23. FAILURE TO COMPLY WITH ANY OF THE CITY OF BANNING STANDARDS MAY RESULT IN TERMINATION OF NON-POTABLE WATER AND/OR POTABLE WATER SERVICE.



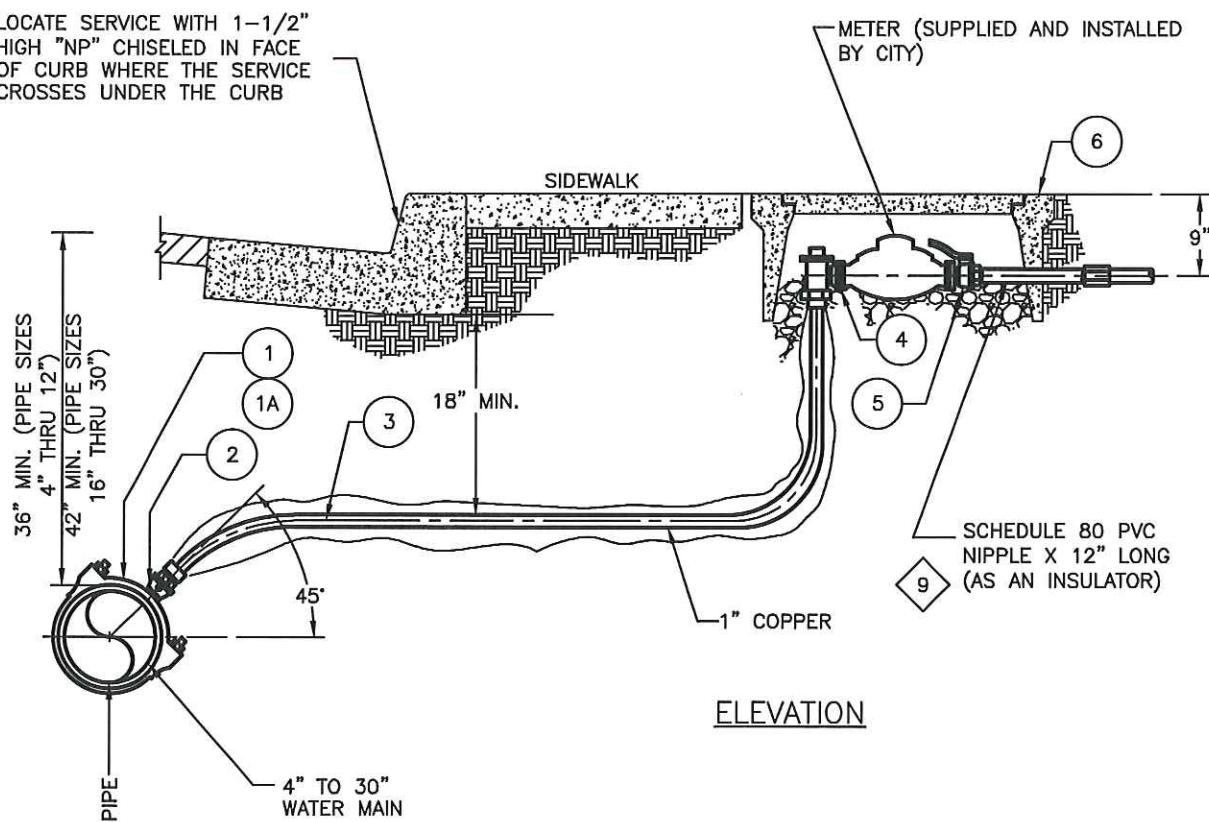
2012 EDITION

REGISTERED PROFESSIONAL ENGINEER KAHONO OEI No. 52652 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	RECOMMENDED BY: <i>Arturo Vela</i> 12-12-12 ARTURO VELA, P.E., SR. ENGINEER DATE	<b>CITY OF BANNING</b>	STANDARD NO.
	APPROVED BY: <i>Chas</i> 12-12-12 KAHONO OEI, P.E., CITY ENGINEER DATE	<b>NON-POTABLE WATER NOTES (RESIDENTIAL SITES)</b>	N-4 2 OF 2



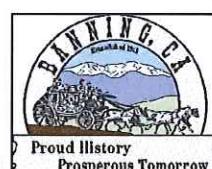
PLAN

LOCATE SERVICE WITH 1-1/2"  
HIGH "NP" CHISELED IN FACE  
OF CURB WHERE THE SERVICE  
CROSSES UNDER THE CURB



ELEVATION

\* SEE SHEET 2 OF 2 FOR NOTES AND LIST OF MATERIALS



2012 EDITION

REGISTERED PROFESSIONAL KAHONO OEI ENGINEER No. 52652 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	RECOMMENDED BY: ARTURO VELA, P.E., SR. ENGINEER APPROVED BY: KAHONO OEI, P.E., CITY ENGINEER	12-12-12 DATE 12-12-12 DATE	<b>CITY OF BANNING</b> 3/4" THRU 1" NON-POTABLE COPPER SERVICE INSTALLATION	STANDARD NO. N-5 1 OF 2
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## LIST OF MATERIALS

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	DOUBLE STRAP SERVICE SADDLE I.P. OUTLET (FOR D.I.P. MAINS) DUCTILE IRON BODY STAINLESS STEEL STRAPS	ROMAC FORD MUELLER SMITH BLAIR	202S-PIPE O.D.-1" I.P. DR2S-PIPE O.D.-1" I.P. FS202-PIPE O.D.-I.P. 100 317
2	BRONZE BALL CORPORATION STOP M.I.P.T. X COMP 110 CONNECTION	JONES MUELLER	E1943 B-20013N
3	1" CTS COPPER TUBING – PURPLE OR WITH PURPLE POLY SLEEVE	MUELLER	COPPER TYPE "K" SOFT PLUMB SHIELD
4	BRONZE ANGLE METER STOP W/LOCKWING (COMPRESSION TYPE) 1" COPPER X 3/4" OR 1" METER	JONES MUELLER	E-1975 WSG B-24258N
5	BRONZE CUSTOMER SERVICE VALVE-METER NUT X F.I.P., WITH HANDLE	JONES MUELLER	E1908 B24351 WITH HANDLE
6	METER BOX W/ PURPLE READING LID WITH "RECYCLED WATER" LOGO	J&R	4 1/2 P

NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12" OF VALVE, COUPLING, JOINT OR FITTING.
2. PURPLE PLASTIC COATED OR POLY-SLEEVE SHALL BE SECURED AT THE CORP. AND THE ANGLE VALVE WITH 10 MIL. TAPE.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK AS SHOWN.
4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF THE PIPE.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. METER BOX SHALL BE SET BEHIND SIDEWALK.
7. ALL CONNECTIONS TO COPPER TUBING SHALL BE COMPRESSION FITTINGS.
8. ALL SERVICE LATERALS WILL BE LOCATED AT PROPERTY LINES.
9. CUSTOMER SERVICE VALVE AND INSULATOR NIPPLE IS REQUIRED ON CUSTOMER SIDE OF METER. METER, CUSTOMER SERVICE VALVE, INSULATOR TO BE PROVIDED BY THE C.O.B.
10. APPROVALS TO SUBSTITUTIONS TO THE ABOVE MATERIAL LIST MUST BE ACQUIRED FROM THE CITY ENGINEER.



2012 EDITION



RECOMMENDED BY:

ARTURO VELA, P.E., SR. ENGINEER

12-12-12

**CITY OF BANNING**

STANDARD  
NO.

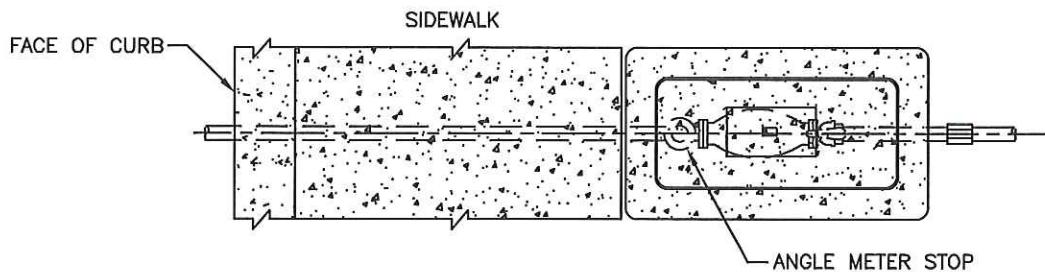
APPROVED BY:

KAHONO OEI, P.E., CITY ENGINEER

12-12-12

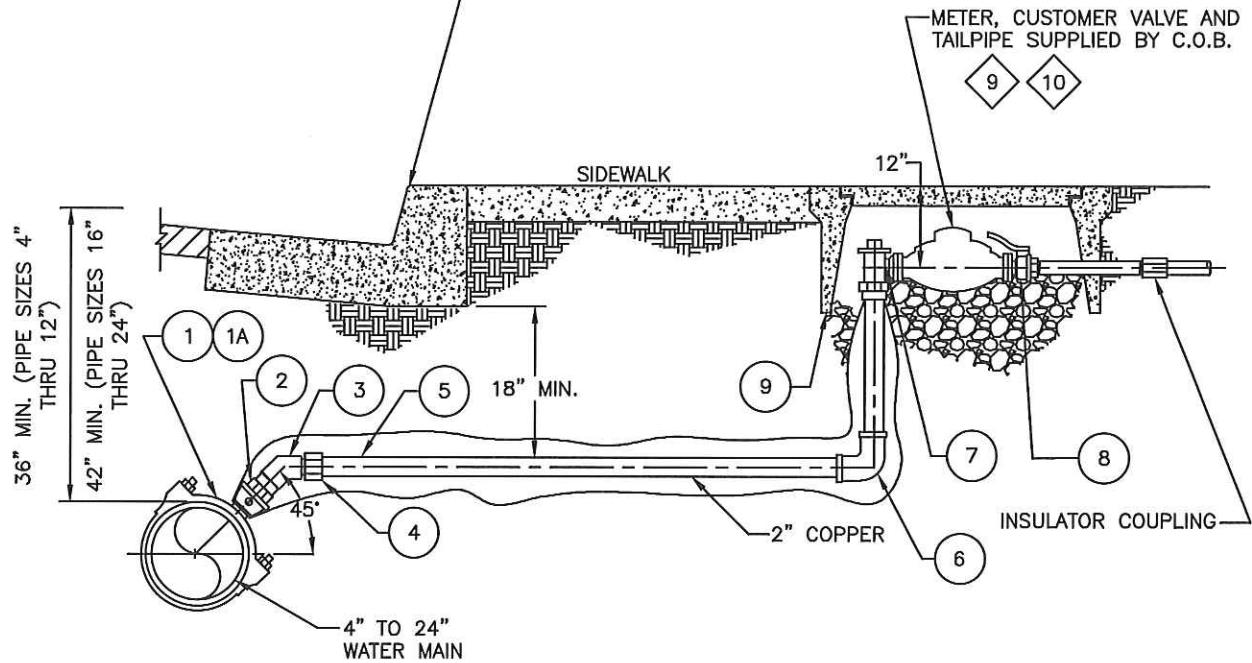
3/4" THRU 1" NON-POTABLE  
COPPER SERVICE INSTALLATION

**N-5**  
2 OF 2



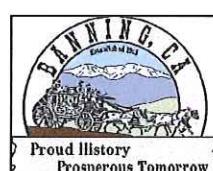
LOCATE SERVICE WITH 1-1/2" HIGH "NP"  
CHISELED IN FACE OF CURB WHERE THE  
SERVICE CROSSES UNDER THE CURB

PLAN



ELEVATION

SEE SHEET 2 OF 2 FOR NOTES AND LIST OF MATERIALS.



2012 EDITION

<p>REGISTERED PROFESSIONAL KAHONO OEI ENGINEER No. 52652 Exp. 12-31-12</p>	<p>RECOMMENDED BY: ARTURO VELA, P.E., SR. ENGINEER</p> <p>APPROVED BY: KAHONO OEI, P.E., CITY ENGINEER</p>	<p>12-12-12</p> <p>12-12-12</p>	<p><b>CITY OF BANNING</b></p> <p>NON-POTABLE 1 1/2" THRU 2" SERVICE INSTALLATION</p>	<p>STANDARD NO.</p> <p><b>N-7</b></p> <p>1 OF 2</p>

NOTES:

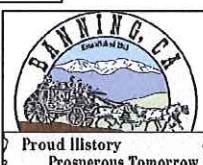
1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12" OF VALVE, COUPLING, JOINT OR FITTING.
2. IF PURPLE TUBING CAN NOT BE USED, PURPLE POLY-SLEEVE SHALL BE USED AND SECURED AT THE CORP. AND THE ANGLE VALVE WITH 10 MIL. TAPE.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN.
4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF THE PIPE.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. METER BOX SHALL BE SET BEHIND CURB WHERE SIDEWALK IS ADJACENT TO CURB, OR IN PARKWAY BETWEEN CURB AND SIDEWALK.
7. METER BOX COVER AND READING LID FOR ALL RECLAIMED WATER SERVICE SHALL BE PAINTED PURPLE AND STAMPED WITH "RECYCLED WATER" LOGO.
8. METER BOX COVER AND READING LID FOR ALL RECLAIMED WATER SERVICES SHALL BE PAINTED OR CAST/FORMED "PURPLE".

9 METERS SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES WITH THE WORDS "WARNING RECYCLED WATER - DO NOT DRINK". IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.

10 ALL ONSITE PIPING IS PURPLE SCH 40 PVC PER CITY OF BANNING NON-POTABLE DESIGN AND CONSTRUCTION STANDARDS.

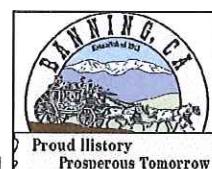
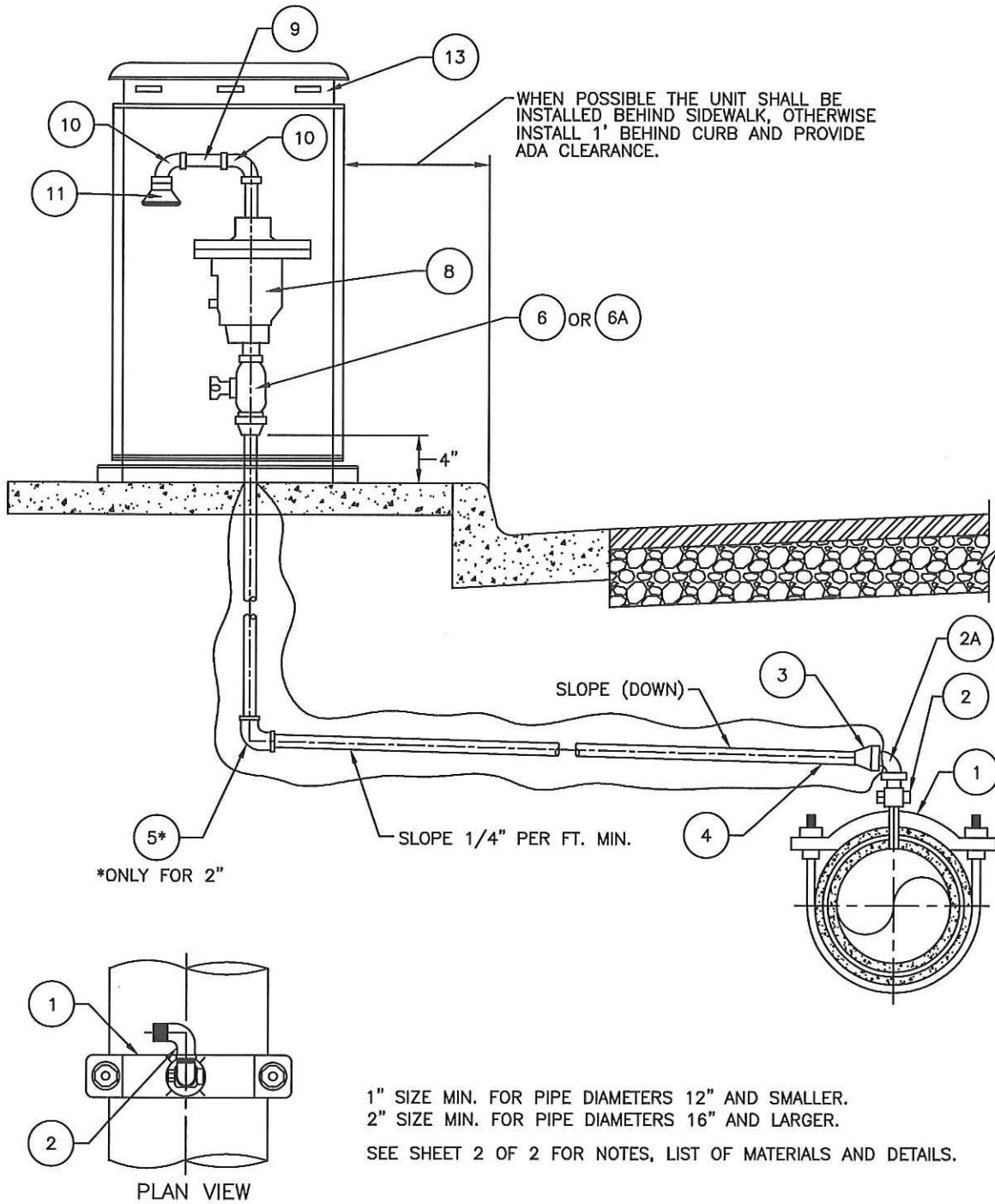
**LIST OF MATERIALS**

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	DOUBLE STRAP SERVICE SADDLE I.P. OUTLET (FOR D.I.P. MAINS)	ROMAC FORD MUELLER	202S-PIPE O.D.-2" I.P. FS202-PIPE O.D.-2" I.P. DR2S-PIPE O.D.-I.P. 200
2	BRONZE CORPORATION STOP MIPT X MIPT	JONES MUELLER	E-1935SG B-25028N
3	BRASS 45° ELBOW 2" X 2" F.I.P.T. X F.I.P.T.	—	—
4	M.I.P.T. X COMPRESSION ADAPTOR	JONES MUELLER	E-2605SG NH-15428N
5	2" TYPE "K" SOFT COPPER PIPE/POLY SLEEVED (PURPLE)	—	—
6	BRASS 90° ELBOW 2" X 2" COMPRESSION X COMPRESSION.	JONES MUELLER	E-2611SG NH-15526N
7	BRONZE ANGLE METER STOP W/LOCKWING COMP X FLANGE 1 1/2" THRU 2" COMBO ANGLE VALVE.	JONES MUELLER	E-1963WSG B-25028N
8	BRONZE CUSTOMER SERVICE VALVE-METER FLANGE X F.I.P. WITH HANDLE	JONES MUELLER	E-1913W NB24337 WITH HANDLE
9	METER BOX W/ PURPLE READING LID WITH "RECYCLED WATER" LOGO	J&R	#6 POLYMER



2012 EDITION

A circular seal for a registered professional engineer, with text including "REGISTERED PROFESSIONAL ENGINEER", "KAHONO OEI", "No. 52652", "Exp. 12-31-12", and "CIVIL STATE OF CALIFORNIA".	<i>Arturo Vela</i> RECOMMENDED BY: <i>12-12-12</i> ARTURO VELA, P.E., SR. ENGINEER DATE	<b>CITY OF BANNING</b>	STANDARD NO.
			N-7
APPROVED BY: <i>Ch</i> <i>12-12-12</i> KAHONO OEI, P.E., CITY ENGINEER DATE	NON-POTABLE 1 1/2" THRU 2" SERVICE INSTALLATION		2 OF 2



2012 EDITION



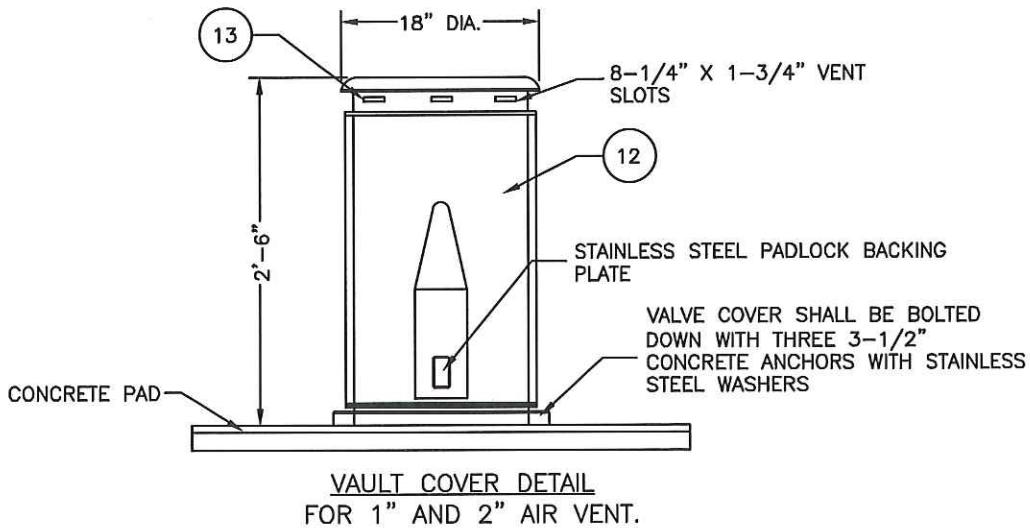
RECOMMENDED BY: *Arturo Vela* 12-12-12  
ARTURO VELA, P.E., SR. ENGINEER DATE  
APPROVED BY: *Tom* 12-12-12  
KAHONO OEI, P.E., CITY ENGINEER DATE

**CITY OF BANNING**

1" AND 2" AIR AND VACUUM  
VALVE ASSEMBLY

STANDARD  
NO.

N-15  
1 OF 2

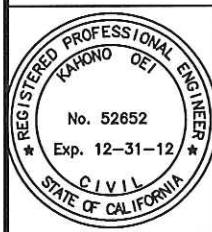


### LIST OF MATERIAL

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	CONNECTION PER C.O.B. STD. DWG. N-5 OR DWG. N-7 OFF THE TOP OF PIPE	-	-
2	CORPORATION STOP	JONES MUELLER	E1943 NB-20013N
2A	2-90° STREET ELBOW SWING JOINT (BRASS)		
3	F.I.P. X COMPRESSION ADAPTOR	JONES MUELLER	E2607SG H-15451N
4	TUBING, CTS (PURPLE POLY SLEEVE FOR 1 $\frac{1}{2}$ " AND ABOVE)	MUELLER	COPPER TYPE K SOFT PLUMB SHIELD
5	COMPRESSION X COMPRESSION 90° ELBOW (WILL ONLY BE USED ON 2")	JONES MUELLER	E-2611 H-15526N
6	1" BALL CORP STOP MIP X COMP	JONES MUELLER	E-1935SG B-25028N
6A	2" BALL COPR STOP MIP X COMP	JONES MUELLER	E-1935SG B-25028N
8	COMBINATION, AIR & VACUUM VALVE, 1" MIN. VAULT SIZE PER PLAN	ARI	D040P W/ SCREEN
9	2" STANDARD WEIGHT GALV. STEEL NIPPLE	-	-
10	90° DEGREE STREET ELL G.I.P.	-	-
11	BUG SCREEN	-	-
12	POLYETHYLENE VAULT COVER (SEE DETAIL, ABOVE).	PIPELINE PRODUCTS OR APPROVED EQUAL	VCAS-1830
13	PURPLE COLLAR STRAP (REFLECTIVE)		



2012 EDITION



RECOMMENDED BY:

ARTURO VELA, P.E., SR. ENGINEER

12-12-12

APPROVED BY:

KAHONO OEI, P.E., CITY ENGINEER

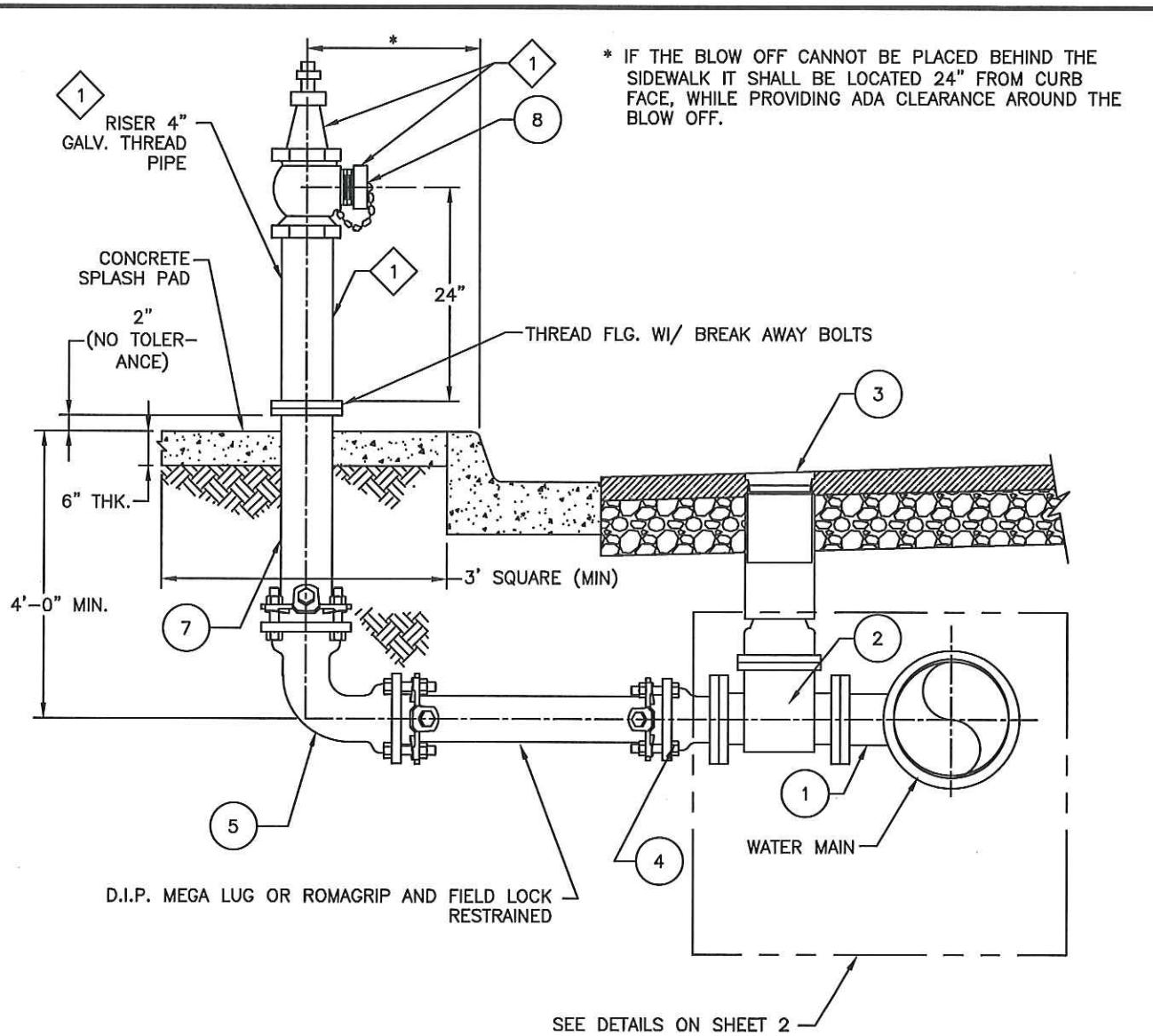
12-12-12

**CITY OF BANNING**

STANDARD NO.

1" AND 2" AIR AND VACUUM  
VALVE ASSEMBLY

N-15  
2 OF 2



NOTES:

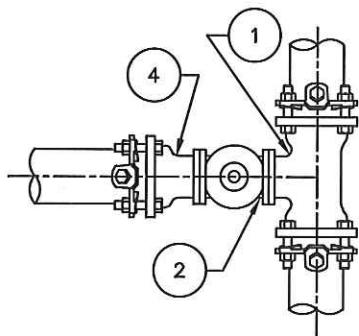
- 1. PAINT WITH 2 COATS, 3 TO 5 MILS EACH, OF TNEMIC N69 SAFETY YELLOW 025F. ENTIRE HEAD SHALL BE PAINTED PURPLE.
- 2. BLOW-OFFS LOCATED HIGHER THAN 3,500 FT ABOVE SEA LEVEL SHOULD BE A DRY BARREL FIRE HYDRANT.
- 3. BOTTOM FLUSH INSTALLATION WHERE REQUIRED BY C.O.B.
- 4. ALL NON-POTABLE WATER LINES BELOW GROUND ARE TO BE FULLY BAGGED USING PURPLE POLY SLEEVE

SEE SHEET 2 OF 2 FOR LIST OF MATERIALS

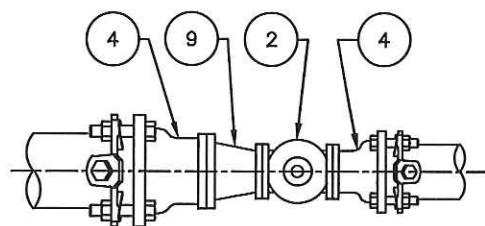


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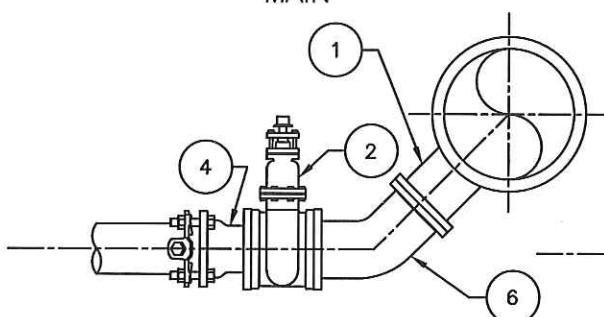
<p>REGISTERED PROFESSIONAL ENGINEER KAHONO OEI No. 52652 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA</p>	<p>RECOMMENDED BY: <i>Arturo Vela</i> 12-12-12 ARTURO VELA, P.E., SR. ENGINEER</p>	<p><b>CITY OF BANNING</b></p>	STANDARD NO.
	<p>APPROVED BY: <i>Ch</i> 12-12-12 KAHONO OEI, P.E., CITY ENGINEER</p>	<p><b>NON-POTABLE BLOW-OFF ASSEMBLY</b></p>	N-19 1 OF 2



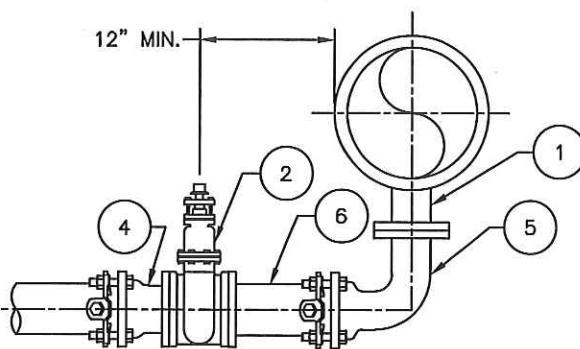
PLAN  
BLOW-OFF ASSEMBLY GATE VALVE,  
BRANCH CONNECTION FROM WATER  
MAIN



PLAN  
BLOW-OFF ASSEMBLY GATE VALVE,  
END CONNECTION FROM WATER MAIN  
(OPTIONAL)



BRANCH CONNECTION CASE A



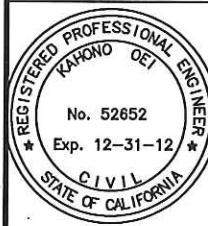
BRANCH CONNECTION CASE B

### LIST OF MATERIAL

ITEM NUMBER	DESCRIPTION
1	TEE - MJ X MJ X FLG WITH MEGALUG OR ROMAGRIp
2	GATE VALVE - FLG X FLG (MUELLER A2362 OR APPROVED EQUAL)
3	VALVE BOX PER STD. DWG. W-20
4	MJ X FLG ADAPTOR W/ MEGALUG OR ROMAGRIp
5	90° ELBOW - FLG X MJ WITH MEGA LUG OR ROMAGRIp RESTRIANTS
6	45° ELBOW - FLG X FLG
7	D.I.P. HALF SPOOL - FLG x PE
8	CAST IRON HYDRANT CAP WITH CHAIN
9	FLG X FLG REDUCER



2012 EDITION



RECOMMENDED BY:

*Arturo Vela*

12-12-12

ARTURO VELA, P.E., SR. ENGINEER

APPROVED BY:

*Chu*

12-12-12

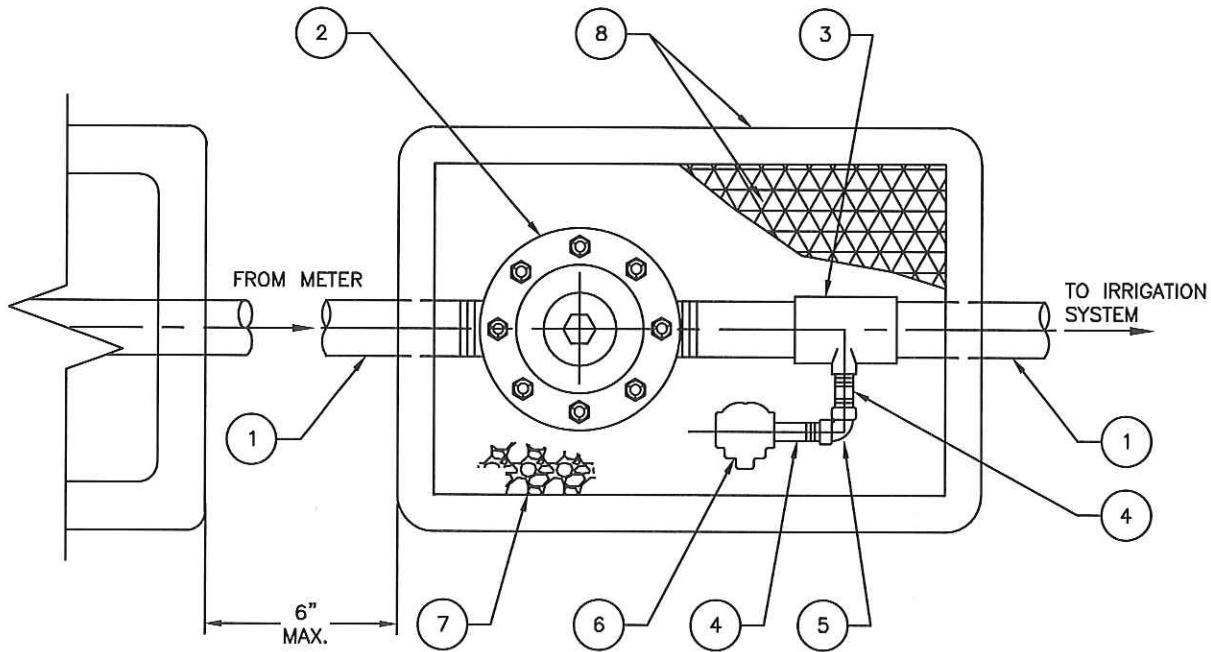
KAHONO OEI, P.E., CITY ENGINEER

**CITY OF BANNING**

STANDARD  
NO.

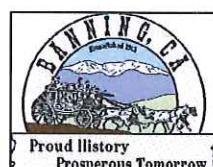
NON-POTABLE  
BLOW-OFF ASSEMBLY

**N-19**  
2 OF 2



LIST OF MATERIALS	
ITEM NO.	DESCRIPTION
1	2" SCH 80 MAINLINE
2	2" PRESSURE REDUCING REGULATOR AS REQUIRED
3	2" X 2" X 3/4" SCH 80 TEE (SOC X SOC X THD)
4	3/4" SCH 80 NIPPLE
5	3/4" SCH 80 ELBOW (THD X THD)
6	3/4" BRONZE BALL VALVE (FIP X FIP)
7	3/8" DIA. PEA GRAVEL SUMP (MIN. 1 CUBIC FT.)
8	PURPLE COLOR JUMBO VALVE BOX AND LID

NOTE: THIS DETAIL IS FOR NON-RESIDENTIAL NON-POTABLE WATER CROSS CONNECTION TEST STATIONS



2012 EDITION



RECOMMENDED BY: *Arturo Vela* 12-12-12  
 ARTURO VELA, P.E., SR. ENGINEER DATE  
 APPROVED BY: *CM* 12-12-12  
 KAHONO OEI, P.E., CITY ENGINEER DATE

**CITY OF BANNING**

**CROSS CONNECTION  
CONTROL TEST  
STATION DETAIL**

STANDARD NO.  
**N-23**  
1 OF 1