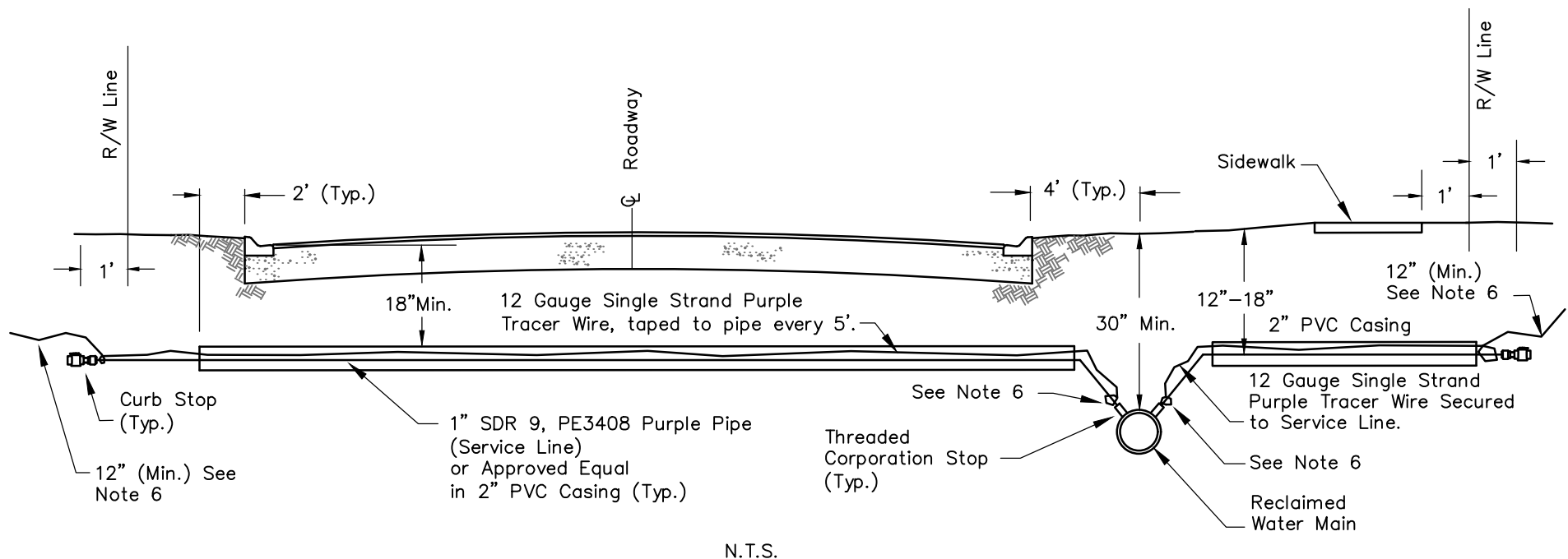


NOTES:

1. 2" PVC casing, colored Pantone 522c, shall extend to customer side of sidewalk.
2. PVC casing to be min. 18" below the surface measured from top of face of curb.
3. Reclaimed Water Mains to be min. 30" below grade and approx. 4' back of curb.
4. Curb Stop to be located approx. 1 foot back of Right-of-Way.
5. Service Line to be min. 12" and max. 18" below grade.
6. Connect 12-gauge tracer wire with tie wraps at Corporation Stop and at Curb Stop. Provide 1 foot minimum excess length of tracer wire in Meter Box.
7. 12-gauge single strand tracer wire should accompany all reclaimed Service Line installations.
8. 2" SDR 9 purple pipe or approved equal Service Line shall be in 4" casing, colored Pantone 522c.
9. See also City of Clearwater's Technical Specification Section IV.



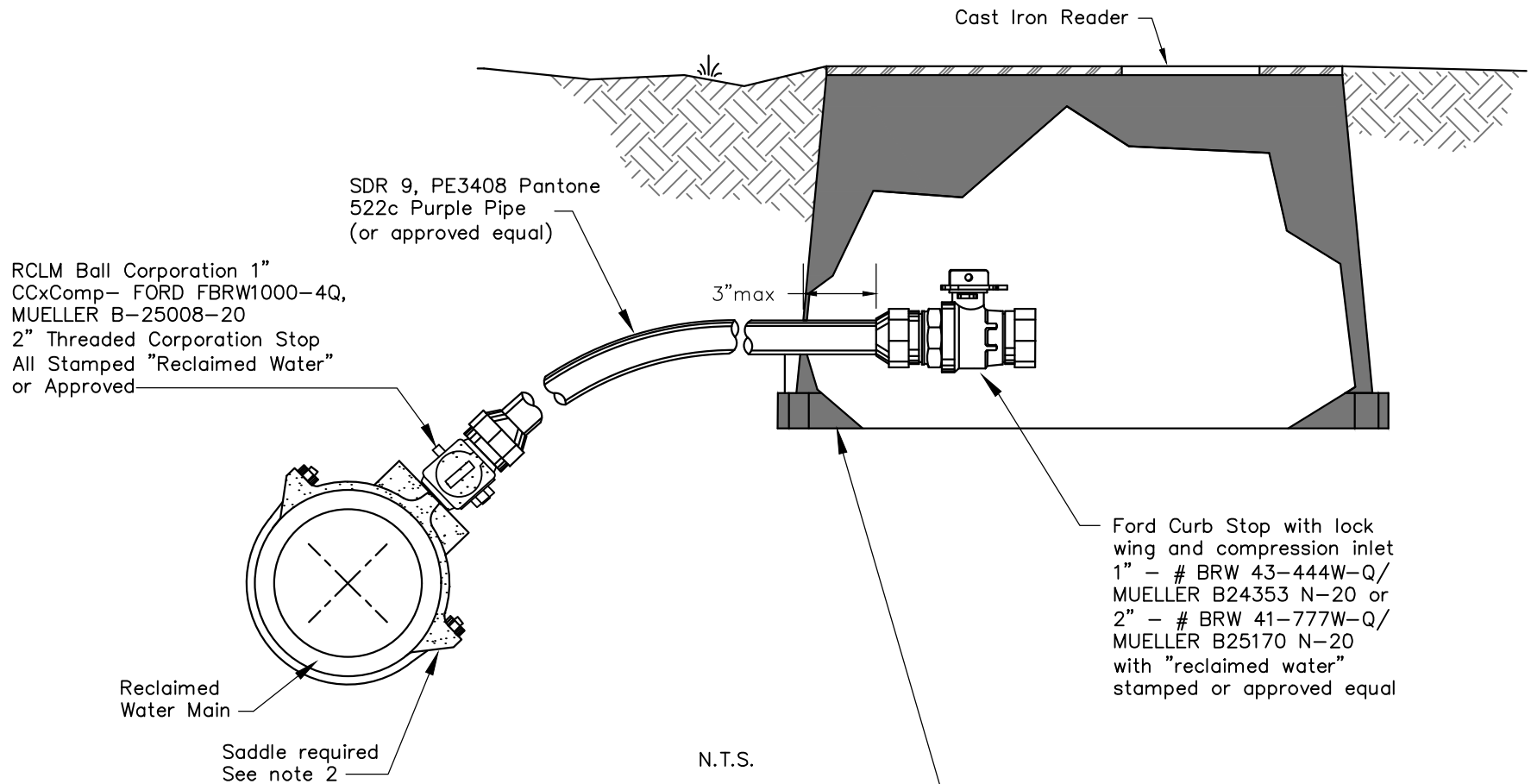
N.T.S.

DATE	REVISION DESCRIPTION	APP

**CITY OF CLEARWATER**  
ENGINEERING DEPARTMENT  
**RECLAIMED WATER**  
DETAILS

**RECLAIMED WATER MAIN SERVICE LINES**  
**TYPICAL SECTION**

INDEX NO.	PAGE NO.
501	1 OF 2
LATEST REVISION	10/21/2019



NOTES:

1. Saddles are required to all service connections to main.
2. Iron service saddle shall be Ford FC 202 series with stainless steel band and epoxy coated ductile iron body, or approved equal.
5. Taps should be made on a 45° angle from top of pipe. For cover less than 30", City of Clearwater Engineering Department approval is required.
6. For all other taps that can not be done as described above refer to Potable Water Main Service Connection Detail, (Swing Joint Installation).
7. Stiffeners shall be manufactured by Mars Company P.O. Box 830340, Ocala, FL 34483
8. See also City of Clearwater's Technical Specifications Section IV.

DATE	REVISION DESCRIPTION	APP

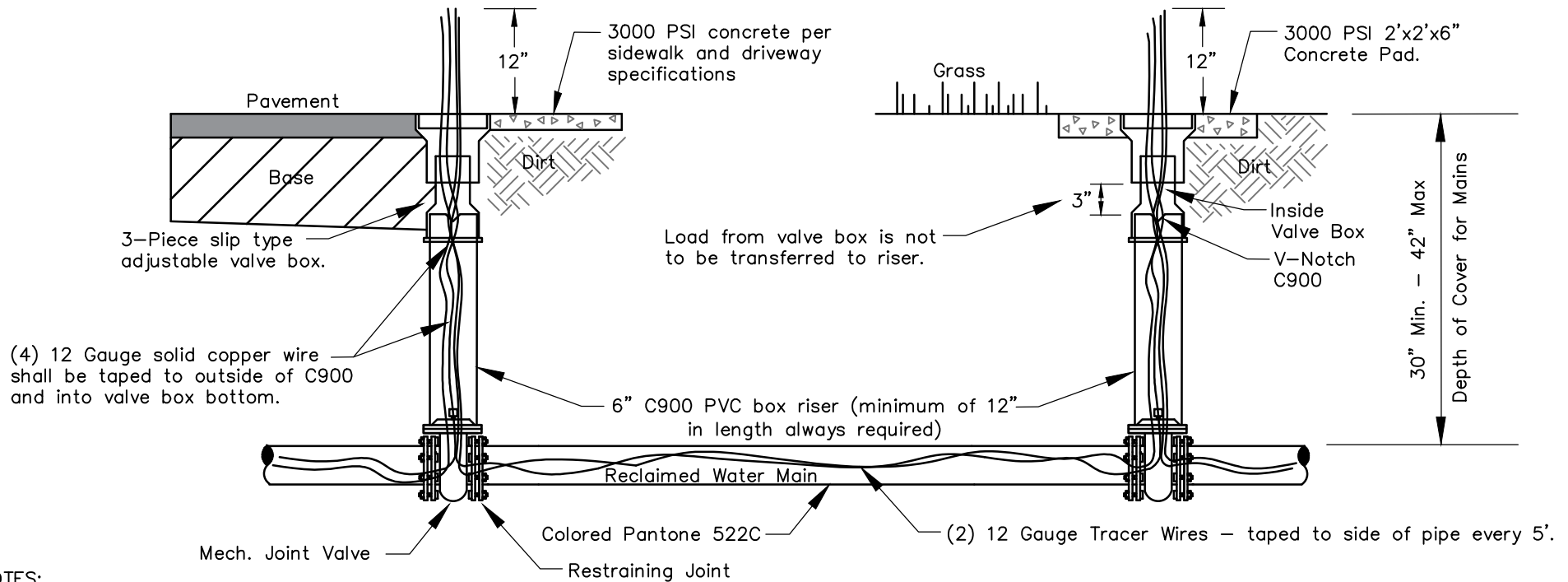
**CITY OF CLEARWATER**  
ENGINEERING DEPARTMENT  
**RECLAIMED WATER**  
DETAILS

**RESIDENTIAL RECLAIMED**  
**WATER CONNECTION**

INDEX NO.	PAGE NO.
501	2 OF 2
LATEST REVISION	10/21/2019

## Roadway/Sidewalk Installation

## Green Space Installation



### NOTES:

1. Must center operation nut in box
2. C900 Riser to be one continuous section and color coded Pantone 522c.
3. Gate Valves shall be open left only.
4. Valve key extensions required on valves with operator nut over 3' deep.
5. Tracer Wire required in all applications including on D.I.P. and colored Pantone 522c.
6. See also City of Clearwater's Technical Specification Section IV.

## SECTION VIEW

N.T.S.

DATE	REVISION DESCRIPTION	APP

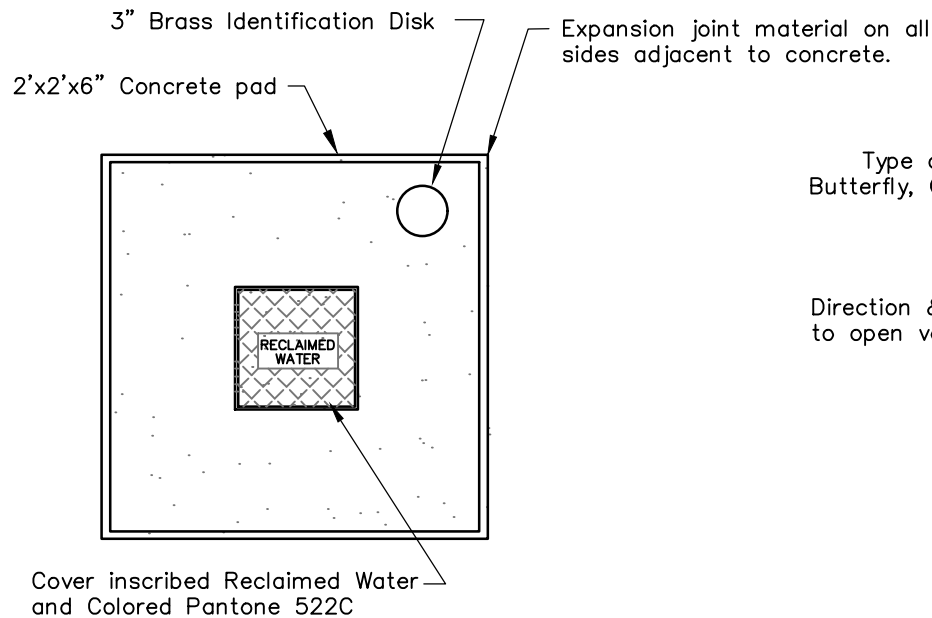
CITY OF CLEARWATER  
ENGINEERING DEPARTMENT  
RECLAIMED WATER  
DETAILS

RECLAIMED WATER  
TYPICAL VALVE & BOX SETTINGS

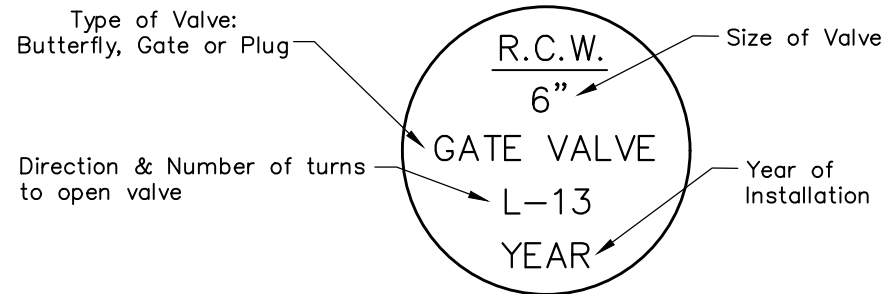
INDEX NO.	PAGE NO.
502	1 OF 3
LATEST REVISION	10/21/2019

NOTES:

1. Extension on Valve Box shall be set so as to reserve 1/2 of the adjustment length for future use.
2. Valve key extension required on valves with operator nut over 3' deep.
3. Install 3" Brass Identification Disk in concrete, per detail below.
4. Terminate insulated, solid 12 gauge copper tracer wire at top w/ a minimum 12" of extra wire.
5. Reclaimed Water Valve Box lid openings are to be 9" x 9" square.
6. Tracer Wire Station — Installed where new construction tie-in to existing pipe. Wire brought up into valve pad on top of pipe.
7. Valve Box to be centered in concrete slab in green space only.
8. See also City of Clearwater's Technical Specification Section IV.



PLAN VIEW  
N.T.S.



3" BRASS IDENTIFICATION DISK  
N.T.S.

DATE	REVISION DESCRIPTION	APP

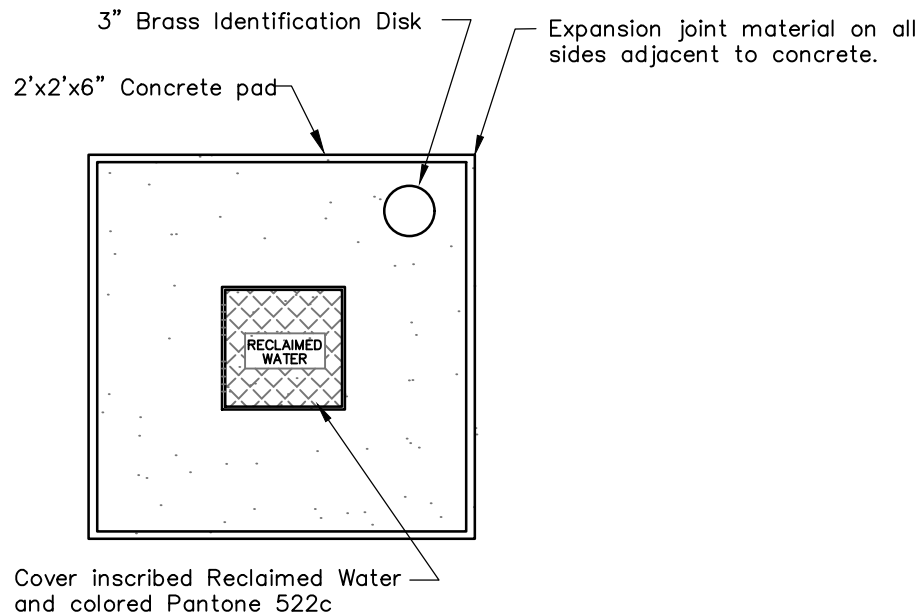
CITY OF CLEARWATER  
ENGINEERING DEPARTMENT  
RECLAIMED WATER  
DETAILS

RECLAIMED WATER VALVE BOX  
CONCRETE PAD PLAN VIEW  
GREEN SPACE ONLY

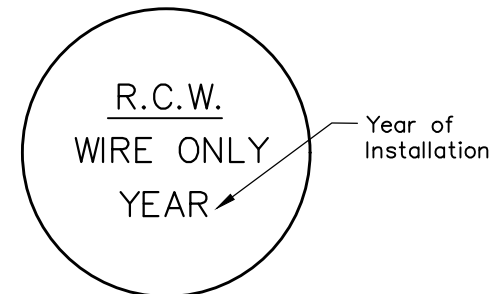
INDEX NO.	PAGE NO.
502	2 OF 3
LATEST REVISION	10/21/2019

NOTES:

1. Extension on Valve Box shall be set so as to reserve 1/2 of the adjustment length for future use.
2. Install 3" Brass Identification Disk in concrete per detail below.
3. Terminate insulated, solid 12 gauge copper tracer wire at top with 12" of extra wire.
4. Reclaimed Water Valve Box lid openings are to be 9" x 9" square.
5. Tracing wire Station – Installed where new construction tie-in to existing pipe. Wire brought up into valve pad on top of pipe.
6. Valve Box to be centered in concrete slab in green space only.
7. See also City of Clearwater's Technical Specification Section IV.



PLAN VIEW  
N.T.S.



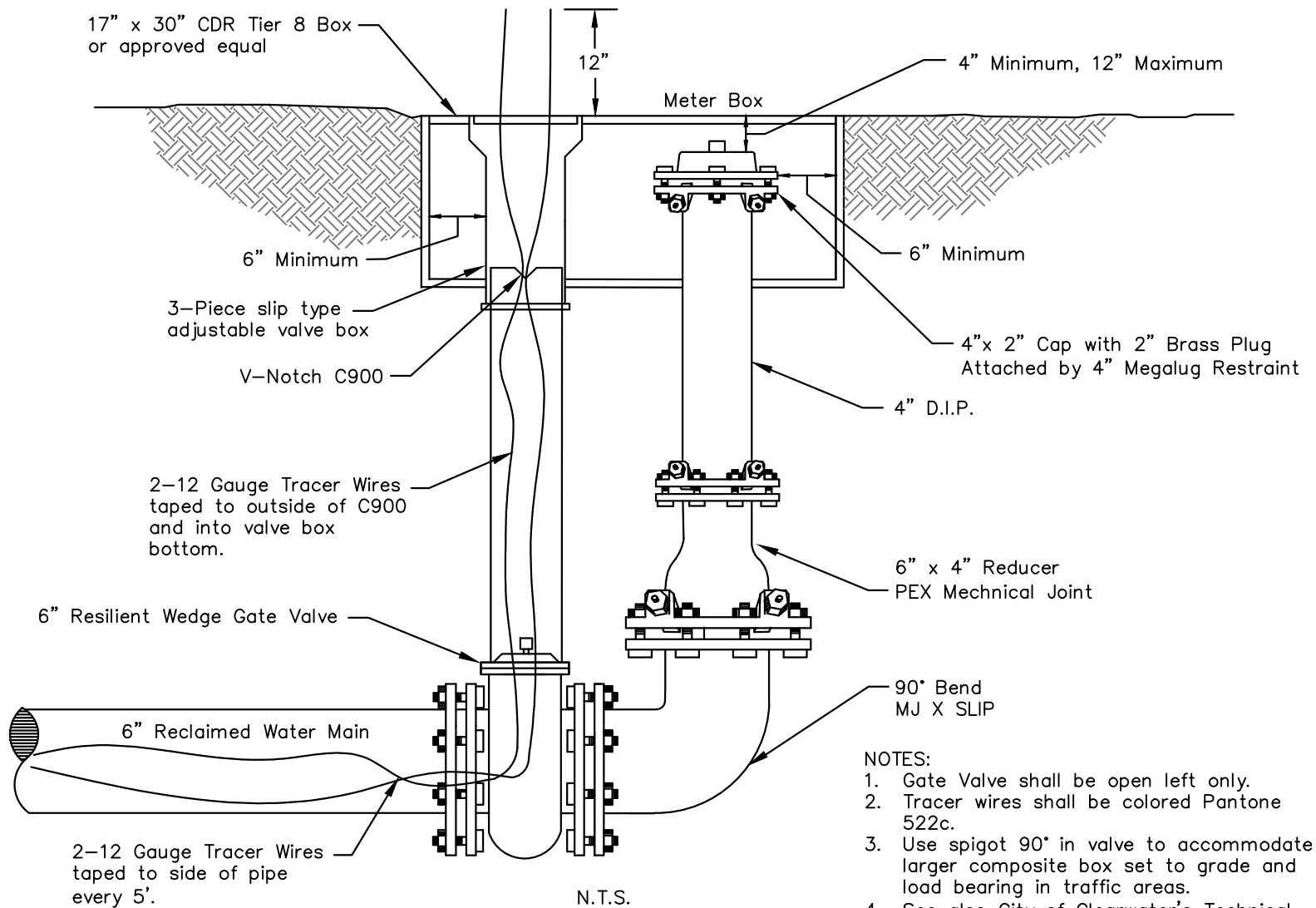
3" BRASS IDENTIFICATION DISK  
N.T.S.

DATE	REVISION DESCRIPTION	APP

CITY OF CLEARWATER  
ENGINEERING DEPARTMENT  
RECLAIMED WATER  
DETAILS

RECLAIMED WATER TRACING WIRE STATION  
CONCRETE PAD PLAN VIEW  
GREEN SPACE ONLY

INDEX NO.	PAGE NO.
502	3 OF 3
LATEST REVISION	10/21/2019

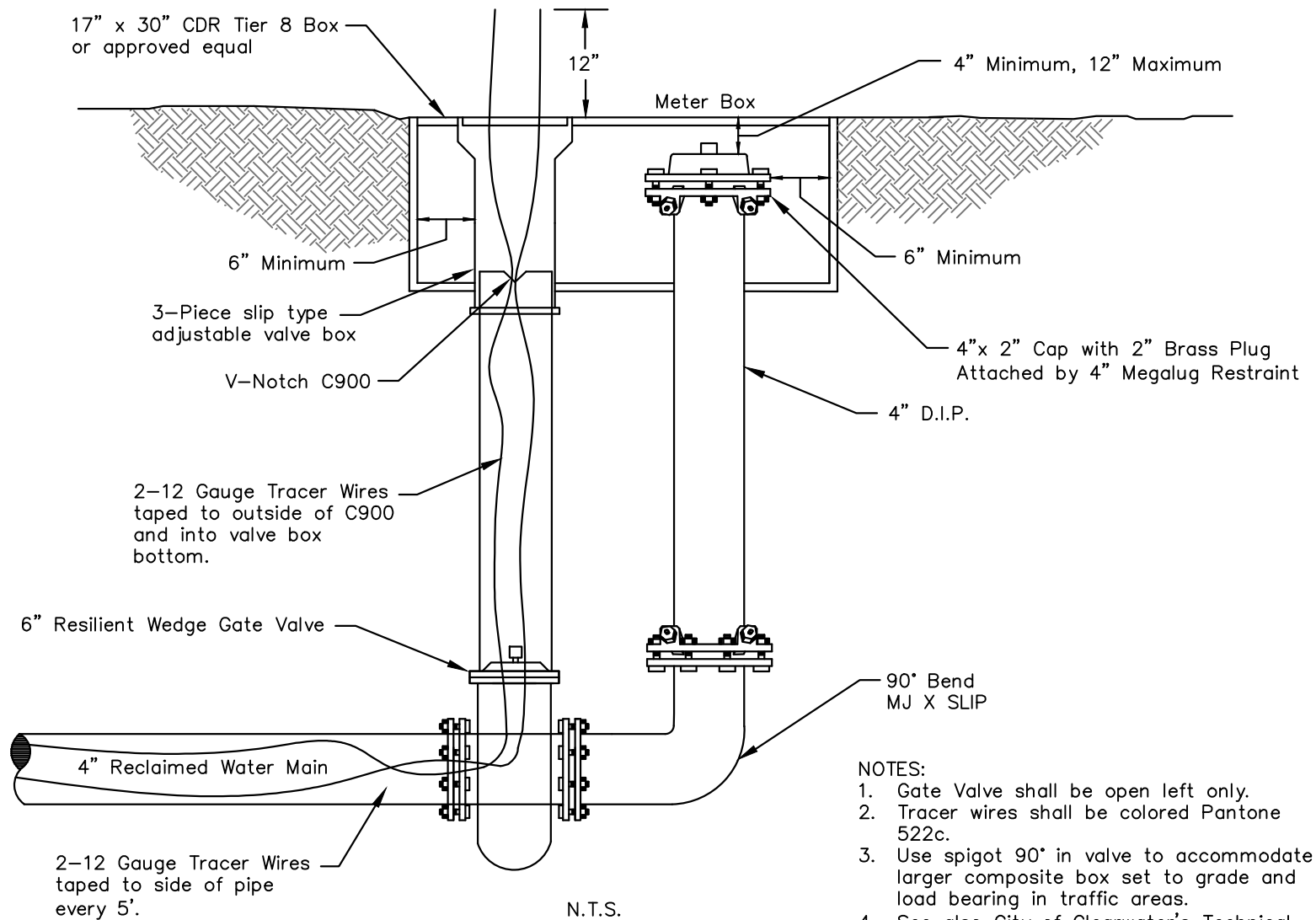


DATE	REVISION DESCRIPTION	APP

**CITY OF CLEARWATER**  
ENGINEERING DEPARTMENT  
**RECLAIMED WATER  
DETAILS**

## RECLAIMED 6" BLOWOFF DETAIL

INDEX NO.	PAGE NO.
503	1 OF 2
LATEST REVISION	11/08/2019



DATE	REVISION DESCRIPTION	APP

CITY OF CLEARWATER  
ENGINEERING DEPARTMENT  
RECLAIMED WATER  
DETAILS

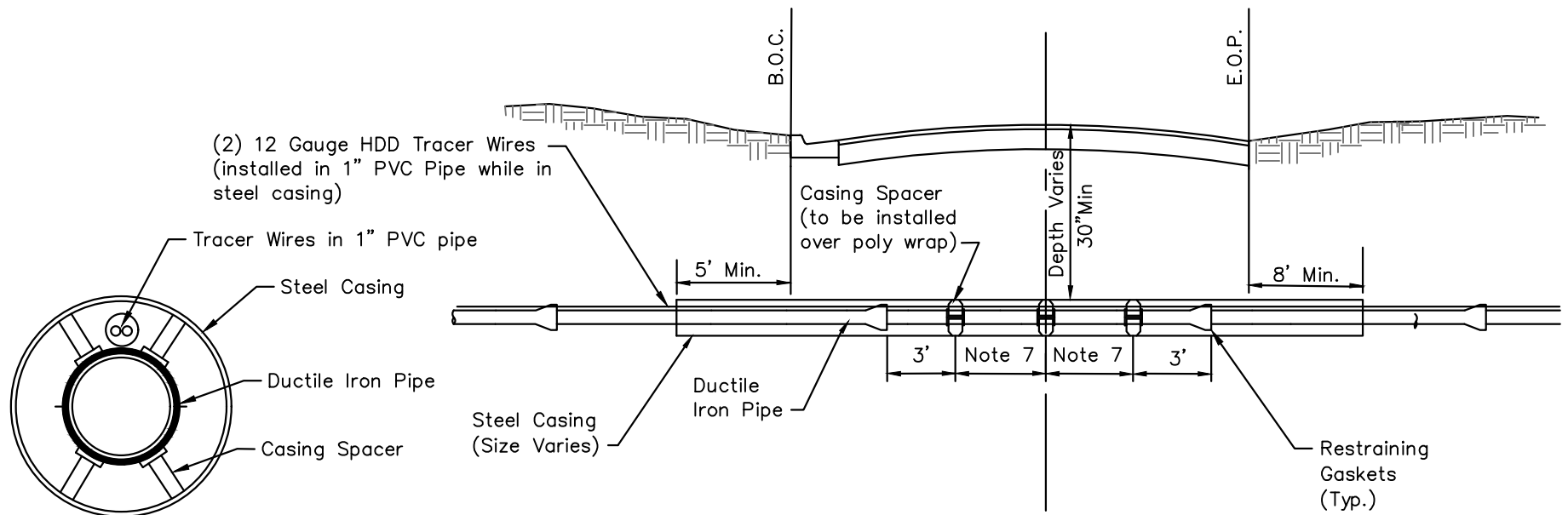
## RECLAIMED 4" BLOWOFF DETAIL

INDEX NO.	PAGE NO.
503	2 OF 2
LATEST REVISION 11/08/2019	

STREET WITH CURB

℄

STREET WITHOUT CURB



NOTES:

1. All pipe installed within the casing shall be ductile iron or approved by City Engineering Department
2. (2) 12 gauge HDD tracer wires will be used over D.I.P.
3. All pipes within casing to be restrained by restraining gaskets.
4. All materials to meet latest F.D.O.T. standards.
5. Approved casing spacers must be installed to keep pipe centered in casing.
6. Ends of casing must be sealed with bricks and cement to prevent infiltration of soil or by City of Clearwater Engineering Department's approved method.
7. Distance between Casing Spacers shall be 6' for 18' joints and 7' for 20' joints.
8. See also City of Clearwater's Technical Specification Section IV.

N.T.S.

DATE	REVISION DESCRIPTION	APP

**CITY OF CLEARWATER**  
ENGINEERING DEPARTMENT  
**RECLAIMED WATER**  
DETAILS

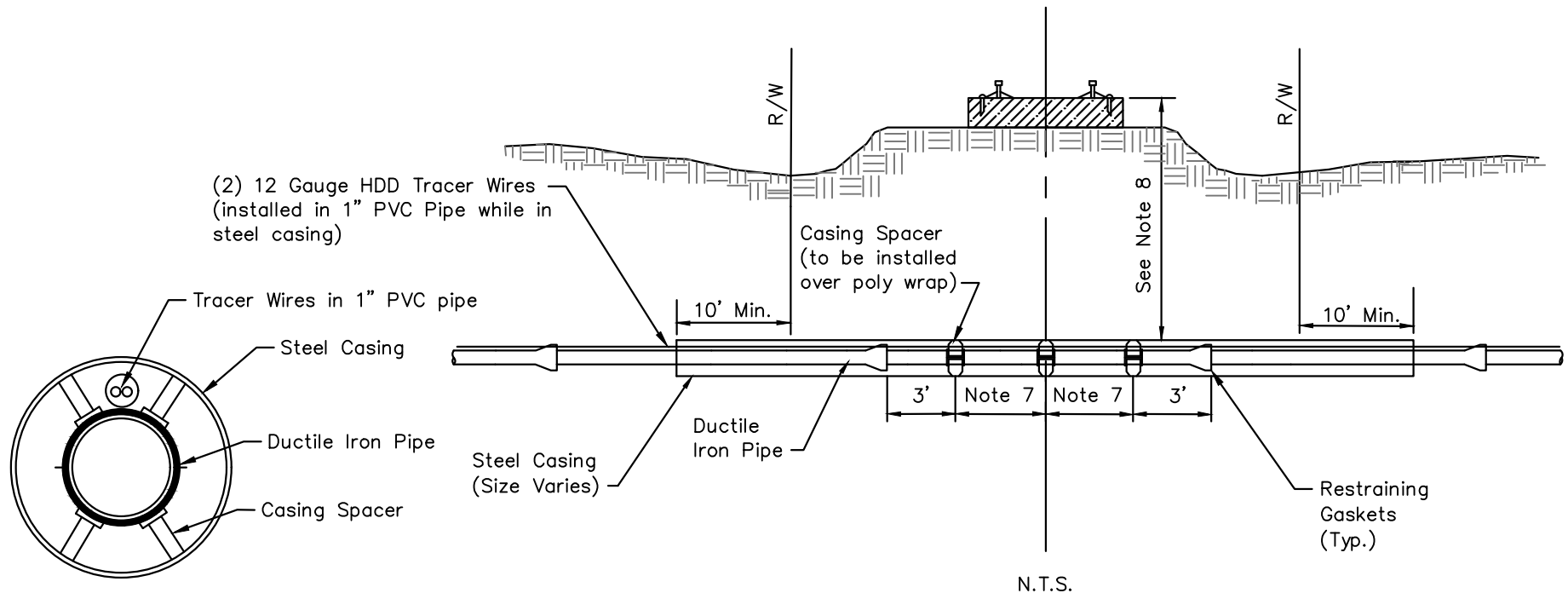
**RECLAIMED WATER – JACK AND BORE**  
**UNDER ROADWAY DETAIL**

INDEX NO.	PAGE NO.
504	1 OF 2
LATEST REVISION 11/08/2019	



# STREET WITH CURB

# STREET WITHOUT CURB



## NOTES:

1. CSX permit required for work under railway right-of-way.
2. All pipe installed within the casing shall be ductile iron or approved by City Engineering Department.
3. (2) 12 gauge HDD tracer wires will be used over D.I.P.
4. All pipes within casing to be restrained by restraining gaskets.
5. All materials to meet latest F.D.O.T. standards.
6. Approved casing spacers must be installed to keep pipe centered in casing.
7. Ends of casing must be sealed with bricks and cement to prevent infiltration of soil or by City of Clearwater Engineering Department's approved method.
8. Distance between Casing Spacers shall be 6' for 18' joints and 7' for 20' joints.
9. Distance from top of railway to top of casing shall be 5' min.
10. See also City of Clearwater's Technical Specification Section IV.

DATE	REVISION DESCRIPTION	APP

**CITY OF CLEARWATER**  
ENGINEERING DEPARTMENT  
**RECLAIMED WATER**  
DETAILS

**RECLAIMED WATER – JACK AND BORE**  
**UNDER RAILWAY DETAIL**

INDEX NO.	PAGE NO.
504	2 OF 2
LATEST REVISION	11/08/2019

