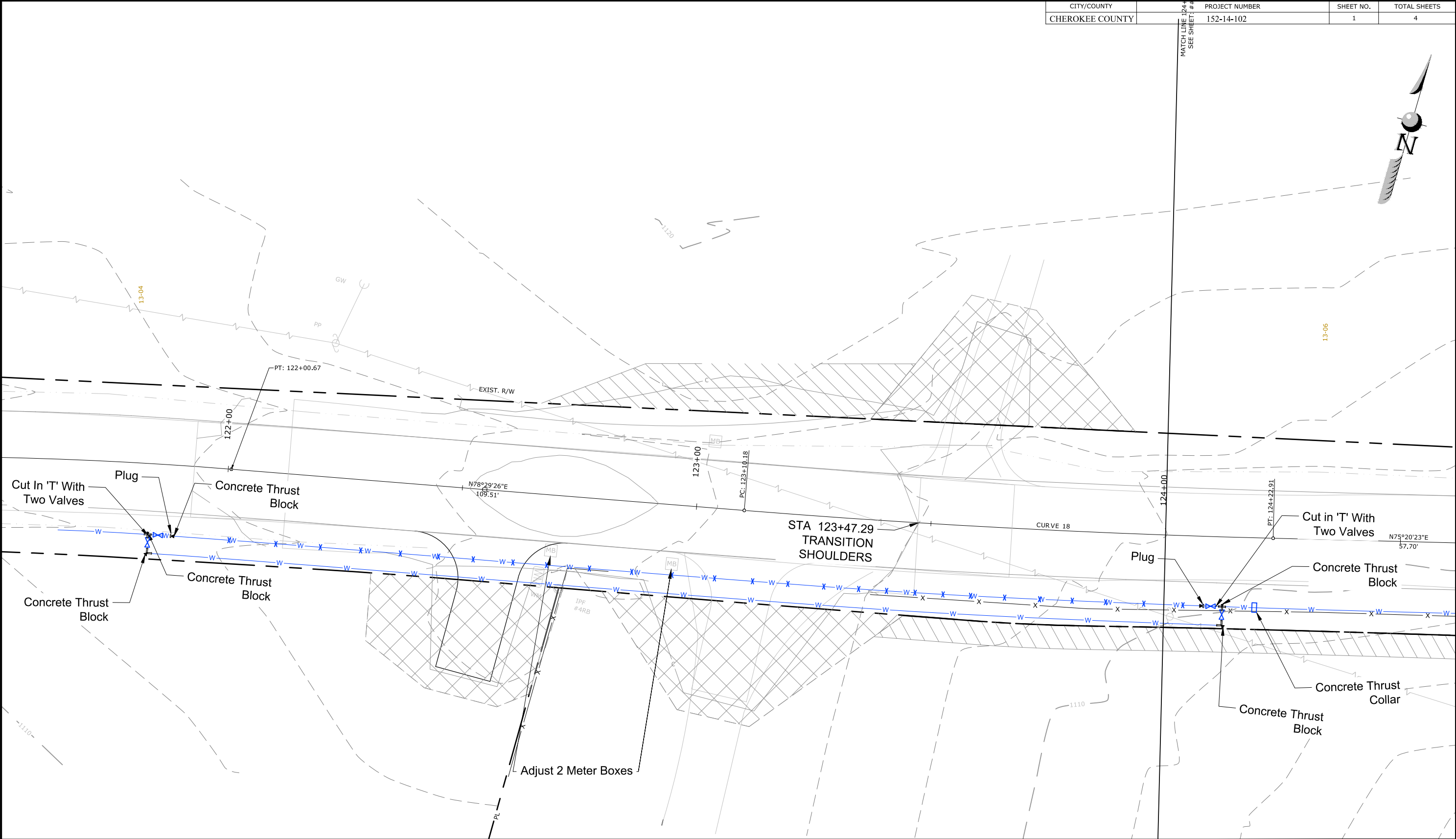


MATCH LINE 124+ SEE SHEET: #4



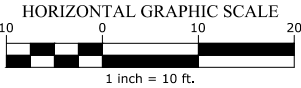
| | | | |
|--|--|----------------------|--|
| PROPERTY AND EX. R/W LINE | | STORM LINE | |
| REQUIRED R/W LINE | | TELEPHONE LINE | |
| CONSTRUCTION LIMITS | | OH POWER LINE | |
| PERMANENT EASEMENT FOR MAINTENANCE | | UG POWER LINE | |
| TEMPORARY EASEMENT FOR CONSTRUCTION | | WATER LINE | |
| EASEMENT FOR CONSTRUCTION OF DRIVEWAYS | | FIBER OPTIC LINE | |
| PERMANENT DRAINAGE EASEMENT | | GAS LINE | |
| | | SANITARY SEWER LINE | |
| | | LIGHTING CONDUIT | |
| | | RETAINING WALL | |
| | | LIMIT OF DISTURBANCE | |





SEI

SOUTHEASTERN ENGINEERING, INC.
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936 fax: 770-321-3935
www.seengineering.com



| REVISION DATES | |
|----------------|--|
| 12-18-15 | |
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| CHEROKEE COUNTY GOVERNMENT | |
|---|----------------|
| OFFICE: | DATE: 06/26/17 |
| WATERLINE RELOCATION PLAN | |
| ROADWAY IMPROVEMENTS BRICK MILL ROAD | |
| SHEET NO. 44-01 | |

DRAWING NAME: I:\CUSTOMERS\PROJECTS\152 Cherokee County\152-14-102 Brick Mill Road\Eng\Construction\Exhibits\152-14-102-C-PROJ\WaterLine07-18-17.dwg
CUTTER: TMC/JUL 13, 2017 - 11:41 AM
PRINTED BY: KEVIN CARRK

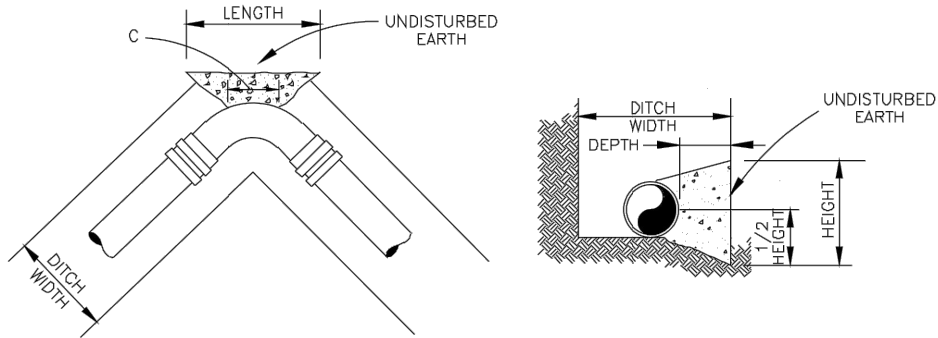


TABLE FOR CONCRETE BLOCKING
(250 PSI TEST PRESSURE)

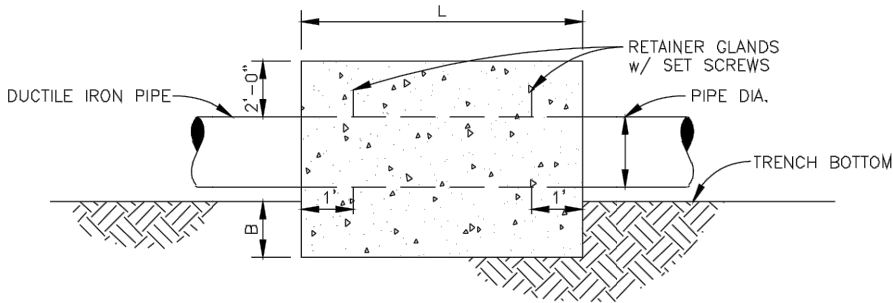
| MINIMUM DIMENSIONS OF BLOCKING | | | | | | | |
|--------------------------------|------|-------------|--------------|-----------|--------------|---------------|--------------|
| FITTING | SIZE | DEPTH (FT.) | LENGTH (FT.) | "C" (IN.) | HEIGHT (FT.) | VOLUME (C.Y.) | THRUST (LB.) |
| 11 1/4" BEND | 6" | 1.0 | 2.0 | 6 | 1.0 | 0.04 | 1,385 |
| 11 1/4" BEND | 8" | 1.0 | 2.0 | 7 | 1.0 | 0.05 | 2,465 |
| 11 1/4" BEND | 10" | 1.0 | 2.0 | 9 | 1.0 | 0.07 | 3,850 |
| 11 1/4" BEND | 12" | 1.0 | 2.5 | 11 | 1.5 | 0.12 | 5,550 |
| 11 1/4" BEND | 16" | 2.0 | 2.5 | 12 | 2.1 | 0.26 | 9,860 |
| 11 1/4" BEND | 20" | 2.0 | 3.5 | 15 | 2.5 | 0.48 | 15,406 |
| 11 1/4" BEND | 24" | 2.0 | 4.0 | 18 | 3.0 | 0.70 | 22,185 |
| 22 1/2" BEND | 6" | 1.0 | 2.0 | 6 | 1.0 | 0.04 | 2,760 |
| 22 1/2" BEND | 8" | 1.0 | 2.0 | 7 | 1.5 | 0.06 | 4,905 |
| 22 1/2" BEND | 10" | 1.0 | 2.0 | 9 | 2.0 | 0.10 | 7,665 |
| 22 1/2" BEND | 12" | 1.0 | 3.0 | 11 | 2.0 | 0.16 | 11,040 |
| 22 1/2" BEND | 16" | 2.0 | 3.5 | 12 | 3.0 | 0.45 | 19,625 |
| 22 1/2" BEND | 20" | 2.0 | 4.0 | 15 | 4.0 | 0.74 | 30,665 |
| 22 1/2" BEND | 24" | 3.0 | 5.0 | 18 | 4.5 | 1.47 | 44,160 |
| 45° BEND | 6" | 1.0 | 2.0 | 6 | 1.5 | 0.06 | 5,415 |
| 45° BEND | 8" | 1.0 | 2.5 | 7 | 2.0 | 0.10 | 9,625 |
| 45° BEND | 10" | 2.0 | 3.5 | 9 | 2.5 | 0.31 | 15,040 |
| 45° BEND | 12" | 2.0 | 3.5 | 11 | 3.0 | 0.41 | 21,655 |
| 45° BEND | 16" | 3.0 | 5.0 | 12 | 4.0 | 1.45 | 38,495 |
| 45° BEND | 20" | 4.0 | 6.0 | 15 | 5.0 | 2.05 | 60,145 |
| 45° BEND | 24" | 4.0 | 7.5 | 18 | 6.5 | 3.35 | 91,610 |
| 90° BEND | 6" | 1.0 | 2.5 | 12 | 2.0 | 0.13 | 10,005 |
| 90° BEND | 8" | 2.0 | 3.0 | 14 | 3.0 | 0.38 | 17,785 |
| 90° BEND | 10" | 2.5 | 4.5 | 18 | 3.0 | 0.74 | 27,785 |
| 90° BEND | 12" | 3.0 | 5.0 | 20 | 4.0 | 1.24 | 40,000 |
| 90° BEND | 16" | 4.0 | 6.5 | 26 | 5.5 | 2.91 | 71,125 |
| 90° BEND | 20" | 4.0 | 8.0 | 32 | 7.0 | 4.68 | 111,135 |
| 90° BEND | 24" | 5.0 | 10.0 | 40 | 8.0 | 8.50 | 160,035 |

NOTES:

1. SOIL BEARING STRENGTH OF 2000 PSI IS ASSUMED IN THE CALCULATIONS ABOVE. ENGINEER SHALL VERIFY.
2. COVER GLANDS AND BOLTS WITH POLYETHYLENE BEFORE PLACING CONCRETE.
3. ALLOW CONCRETE TO SET UP A MINIMUM OF 6 HOURS BEFORE PLACING BACKFILL.
4. CONCRETE SHALL BE 3000 PSI, CLASS A.
5. ALL IRON FITTINGS SHALL BE BLOCKED AND SUPPORTED AS SHOWN ABOVE.
6. VERTICAL BENDS WITH AN UPWARD THRUST SHALL BE RESTRAINED AS SHOWN IN STANDARD W715.
7. VERTICAL BENDS WITH A DOWNWARD THRUST SHALL BE RESTRAINED AS SHOWN IN STANDARD W716.

CONCRETE BLOCKING FOR BENDS

| | | | |
|----------------------------|-----------------------------|-----------------|-----------------------------|
| CITY OF CANTON, GEORGIA | CONCRETE BLOCKING DETAIL | DATE: SEPT. '13 | STANDARD NO. W713 |
| | | | |
| | | APPROVED: | |
| CONSTRUCTION STANDARD | | | |



PROFILE VIEW

| PIPE DIA. | L | B |
|-----------|----|----|
| 6" | 4' | 1' |
| 8" | 4' | 1' |
| 10" | 4' | 1' |
| 12" | 4' | 1' |
| 16" | 4' | 2' |

NOTE:
CONCRETE COLLAR WIDTH EQUALS THE WIDTH
OF THE TRENCH PLUS FOUR FEET (TWO FEET
ON EACH SIDE OF THE TRENCH).

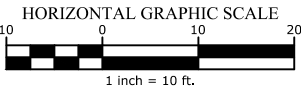
CONCRETE THRUST COLLAR

| | | | |
|----------------------------|------------------------------|-----------------|-----------------------------|
| CITY OF CANTON, GEORGIA | CONCRETE THRUST COLLAR | DATE: SEPT. '13 | STANDARD NO. W717 |
| | | | |
| | | APPROVED: | |
| CONSTRUCTION STANDARD | | | |

DRAWING NAME: I:\CUSTOMERS\PROJECTS\152-14-102 Cherokee County\152-14-102-C-PROF-WaterLine07-18-17.dwg
CUTTER: TMC/JUL 13, 2017 - 11:49 AM
PRINTED BY: KEVIN CARR

| | |
|--|--------|
| PROPERTY AND EX. R/W LINE | ==R== |
| REQUIRED R/W LINE | ==P== |
| CONSTRUCTION LIMITS | ==C== |
| PERMANENT EASEMENT FOR MAINTENANCE | ==M== |
| TEMPORARY EASEMENT FOR CONSTRUCTION | ==T== |
| EASEMENT FOR CONSTRUCTION OF DRIVEWAYS | ==D== |
| PERMANENT DRAINAGE EASEMENT | ==DE== |

| | |
|----------------------|---------|
| STORM LINE | ==S== |
| TELEPHONE LINE | ==T== |
| OH POWER LINE | ==V== |
| UG POWER LINE | ==P== |
| WATER LINE | ==W== |
| FIBER OPTIC LINE | ==FO== |
| GAS LINE | ==GAS== |
| SANITARY SEWER LINE | ==SS== |
| LIGHTING CONDUIT | ==L== |
| RETAINING WALL | ==RW== |
| LIMIT OF DISTURBANCE | ==LD== |



| REVISION DATES | | |
|----------------|--|--|
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| CHEROKEE COUNTY GOVERNMENT | |
|---|----------------|
| OFFICE: | DATE: 06/26/17 |
| WATERLINE RELOCATION PLAN | |
| ROADWAY IMPROVEMENTS BRICK MILL ROAD | |
| SHEET NO. 44-02 | |

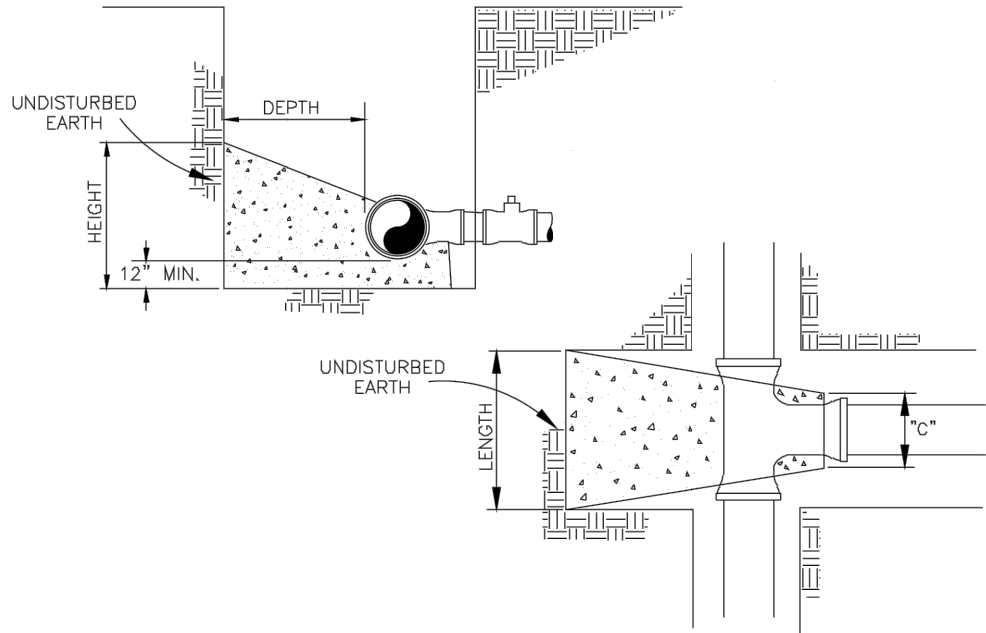


TABLE FOR CONCRETE BLOCKING
(250 PSI TEST PRESSURE)

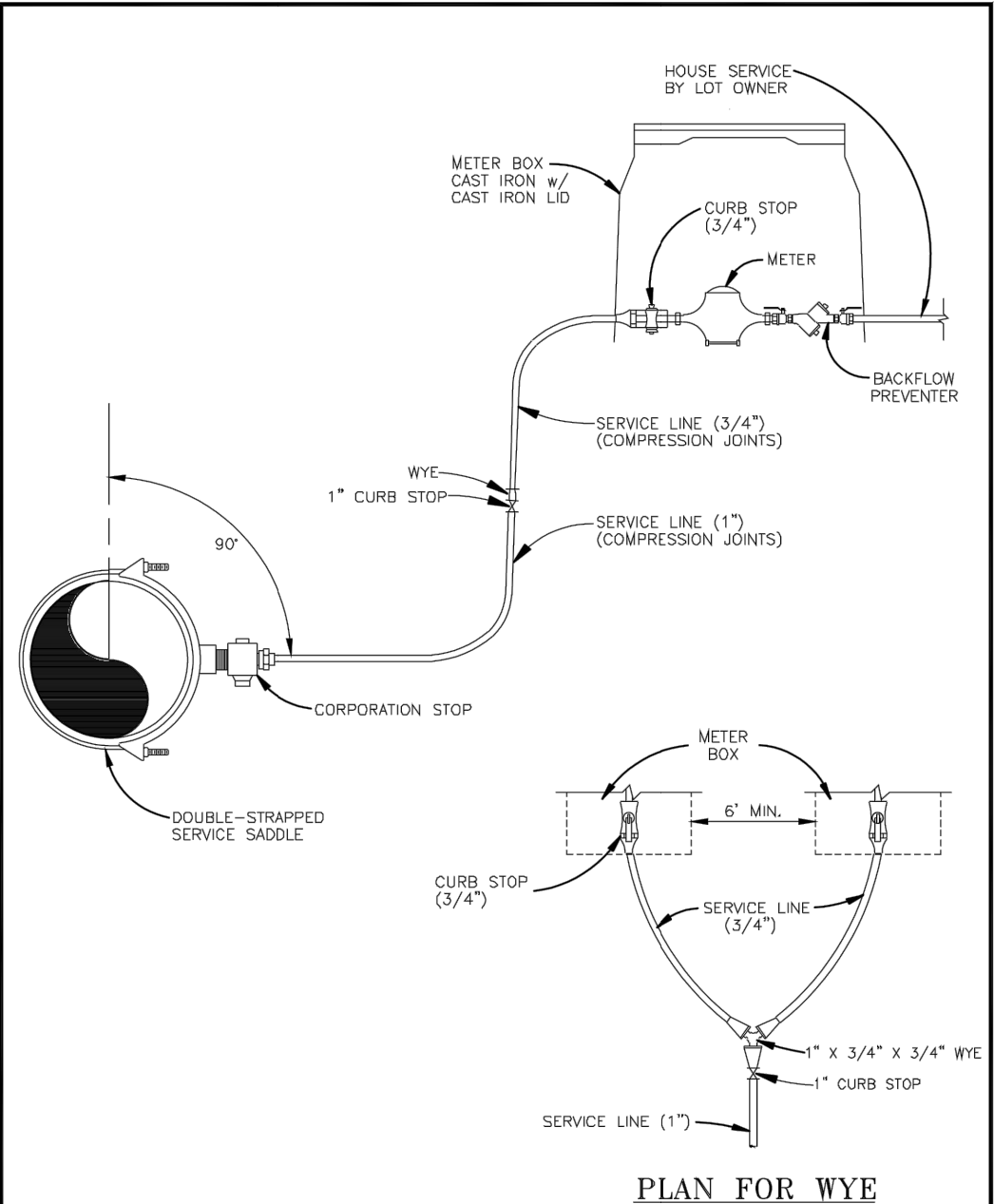
| MINIMUM DIMENSIONS OF BLOCKING | | | | | | |
|--------------------------------|-------------|--------------|-----------|--------------|---------------|--------------|
| SIZE | DEPTH (FT.) | LENGTH (FT.) | "C" (IN.) | HEIGHT (FT.) | VOLUME (C.Y.) | THRUST (LB.) |
| 6" | 1.0 | 2.5 | 12 | 1.5 | 0.10 | 7,070 |
| 8" | 1.7 | 3.25 | 14 | 2.0 | 0.27 | 12,565 |
| 10" | 2.0 | 4.0 | 18 | 2.5 | 0.50 | 19,635 |
| 12" | 2.5 | 4.5 | 20 | 3.25 | 0.91 | 28,275 |
| 16" | 3.0 | 5.0 | 26 | 5.0 | 1.77 | 50,265 |
| 20" | 4.0 | 7.0 | 32 | 5.75 | 3.69 | 78,540 |
| 24" | 6.0 | 9.0 | 40 | 6.5 | 7.94 | 113,100 |

NOTES:

1. SOIL BEARING STRENGTH OF 2000 PSI IS ASSUMED IN THE CALCULATIONS ABOVE. ENGINEER SHALL VERIFY.
2. COVER GLANDS AND BOLTS WITH POLYETHYLENE BEFORE PLACING CONCRETE.
3. ALLOW CONCRETE TO SET UP A MINIMUM OF 6 HOURS BEFORE PLACING BACKFILL.
4. CONCRETE SHALL BE 3000 PSI, CLASS A.
5. ALL IRON FITTINGS SHALL BE BLOCKED AND SUPPORTED AS SHOWN ABOVE.

CONCRETE BLOCKING-FOR TEES AND PLUGS

| | | | |
|----------------------------|-----------------------------|-----------------------|-----------------------------|
| CITY OF CANTON, GEORGIA | CONCRETE BLOCKING DETAIL | DATE: SEPT. '13 | STANDARD NO. W714 |
| | | APPROVED: | |
| | | CONSTRUCTION STANDARD | |

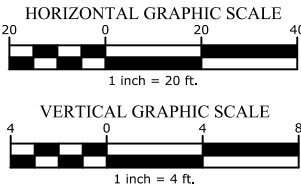


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|----------------------------|---|-----------------|-----------------------------|
| CITY OF CANTON, GEORGIA | RESIDENTIAL WATER METER INSTALLATION CONSTRUCTION STANDARD | DATE: SEPT. '13 | STANDARD NO. W704 |
| | | APPROVED: | |
| | | | |

DRAWING NAME: I:\CUSTOMERS\PROJECTS\152 Cherokee County\152-14-102 Brick Mill Road\Eng\Construction\Exhibits\152-14-102-C-PROF\WaterLine07-18-17.dwg
PLOTTER: HP DesignJet 500, 2017-11-14 AM
PRINTED BY: KEVIN CUMMINS

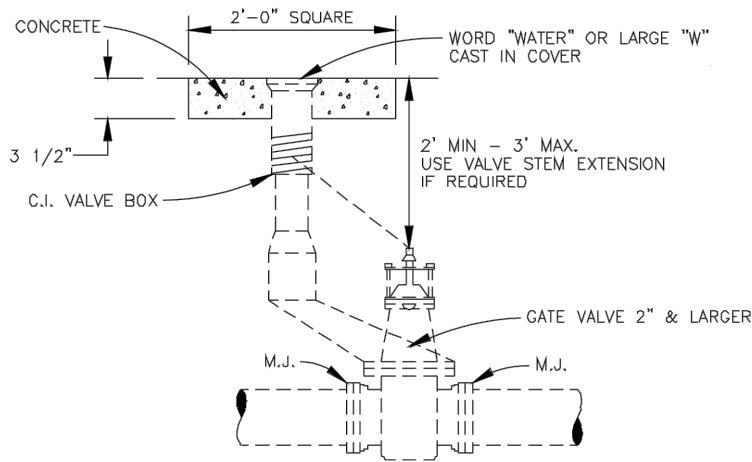
| | |
|--|-----|
| PROPERTY AND EX. R/W LINE | --- |
| REQUIRED R/W LINE | --- |
| CONSTRUCTION LIMITS | --- |
| PERMANENT EASEMENT FOR MAINTENANCE | --- |
| TEMPORARY EASEMENT FOR CONSTRUCTION | --- |
| EASEMENT FOR CONSTRUCTION OF DRIVEWAYS | --- |
| PERMANENT DRAINAGE EASEMENT | --- |

| | |
|----------------------|-----|
| STORM LINE | --- |
| TELEPHONE LINE | --- |
| OH POWER LINE | --- |
| UG POWER LINE | --- |
| WATER LINE | --- |
| FIBER OPTIC LINE | --- |
| GAS LINE | --- |
| SANITARY SEWER LINE | --- |
| LIGHTING CONDUIT | --- |
| RETAINING WALL | --- |
| LIMIT OF DISTURBANCE | --- |



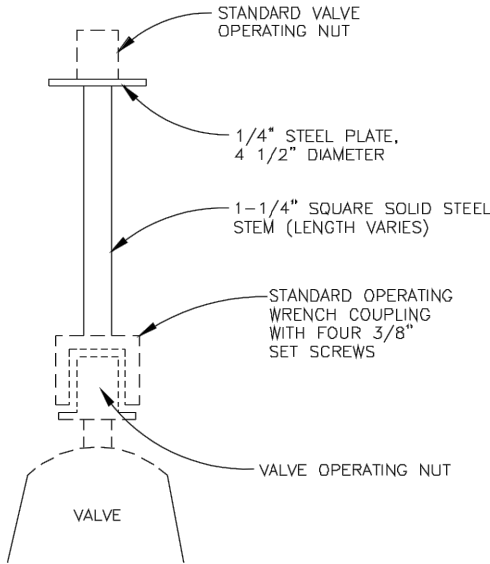
| REVISION DATES | |
|----------------|--|
| 1/12/16 | |
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|---|----------------|
| CHEROKEE COUNTY GOVERNMENT | |
| OFFICE: | DATE: 06/26/17 |
| WATERLINE RELOCATION PLAN | |
| ROADWAY IMPROVEMENTS BRICK MILL ROAD | |
| SHEET NO. 44-03 | |



TYPICAL VALVE INSTALLATION

- NOTES:
1. TOP OF EXTENSION SHALL BE NO MORE THAN THREE FEET BELOW FINAL GRADE.
 2. CONTRACTOR IS RESPONSIBLE FOR IN FIELD MEASUREMENT OF DEPTH OF PIPE COVER TO DETERMINE NEED FOR VALVE STEM EXTENSION.



VALVE STEM EXTENSION DETAIL

CITY OF
CANTON, GEORGIA

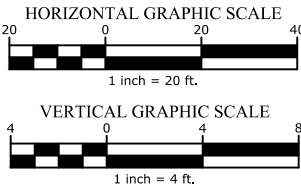
TYPICAL
VALVE
INSTALLATION
CONSTRUCTION STANDARD

DATE: SEPT. '13
APPROVED:

STANDARD
NO.
W718

| | |
|--|-----|
| PROPERTY AND EX. R/W LINE | --- |
| REQUIRED R/W LINE | --- |
| CONSTRUCTION LIMITS | --- |
| PERMANENT EASEMENT FOR MAINTENANCE | --- |
| TEMPORARY EASEMENT FOR CONSTRUCTION | --- |
| EASEMENT FOR CONSTRUCTION OF DRIVEWAYS | --- |
| PERMANENT DRAINAGE EASEMENT | --- |

| | |
|----------------------|-----|
| STORM LINE | --- |
| TELEPHONE LINE | --- |
| OH POWER LINE | --- |
| UG POWER LINE | --- |
| WATER LINE | --- |
| FIBER OPTIC LINE | --- |
| GAS LINE | --- |
| SANITARY SEWER LINE | --- |
| LIGHTING CONDUIT | --- |
| RETAINING WALL | --- |
| LIMIT OF DISTURBANCE | --- |



| REVISION DATES | | | |
|----------------|--|--|--|
| 1/12/16 | | | |
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| CHEROKEE COUNTY GOVERNMENT | |
|---|----------------|
| OFFICE: | DATE: 06/26/17 |
| WATERLINE RELOCATION PLAN | |
| ROADWAY IMPROVEMENTS BRICK MILL ROAD | |
| SHEET NO. 44-04 | |