

RECEIVED

MAY 04 2018

PUBLIC SERVICE
COMMISSION



April 4, 2018

Ms. Renee C. Smith
Filings Branch
Commonwealth of Kentucky
Public Service Commission
211 Sower Blvd.
PO Box 615
Frankfort, Kentucky 40602-0615

Re: Bronston Water Association
2017 Water System Improvements Project:
Contract 1 - Green Hill Estates & Cedar Hill Heights Water Line Replacements
Contract 2 - 500,000 Gallon Ground Water Storage Tank Replacement
RD Loan: \$1,380,000.00
RD Grant: \$ 458,000.00
Case: 2017-00138

Dear Ms. Smith:

This is to certify that the above-referenced project has been satisfactorily completed in accordance with the contract plans and specifications. Enclosed you will find an electronic copy on CD of the "Record Drawings" (As-Built) for the above-reference project.

Should you have any questions or need additional information, please advise.

Sincerely,

A handwritten signature in blue ink that reads 'Deron S. Byrne'. The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Deron S. Byrne, P.E.
Project Engineer

2017 WATER SYSTEM IMPROVEMENTS: GREEN HILL ESTATES & CEDAR HILL HEIGHTS CONTRACT 1 - WATER LINE REPLACEMENTS BRONSTON WATER ASSOCIATION PULASKI COUNTY, KENTUCKY

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BRONSTON WATER ASSOCIATION

CARTER STEWART, PRESIDENT
CHARLES CASSADA, VICE PRESIDENT
ERIC KEITH, SEC/TREASURER
CLINT KEITH LELAND KEITH

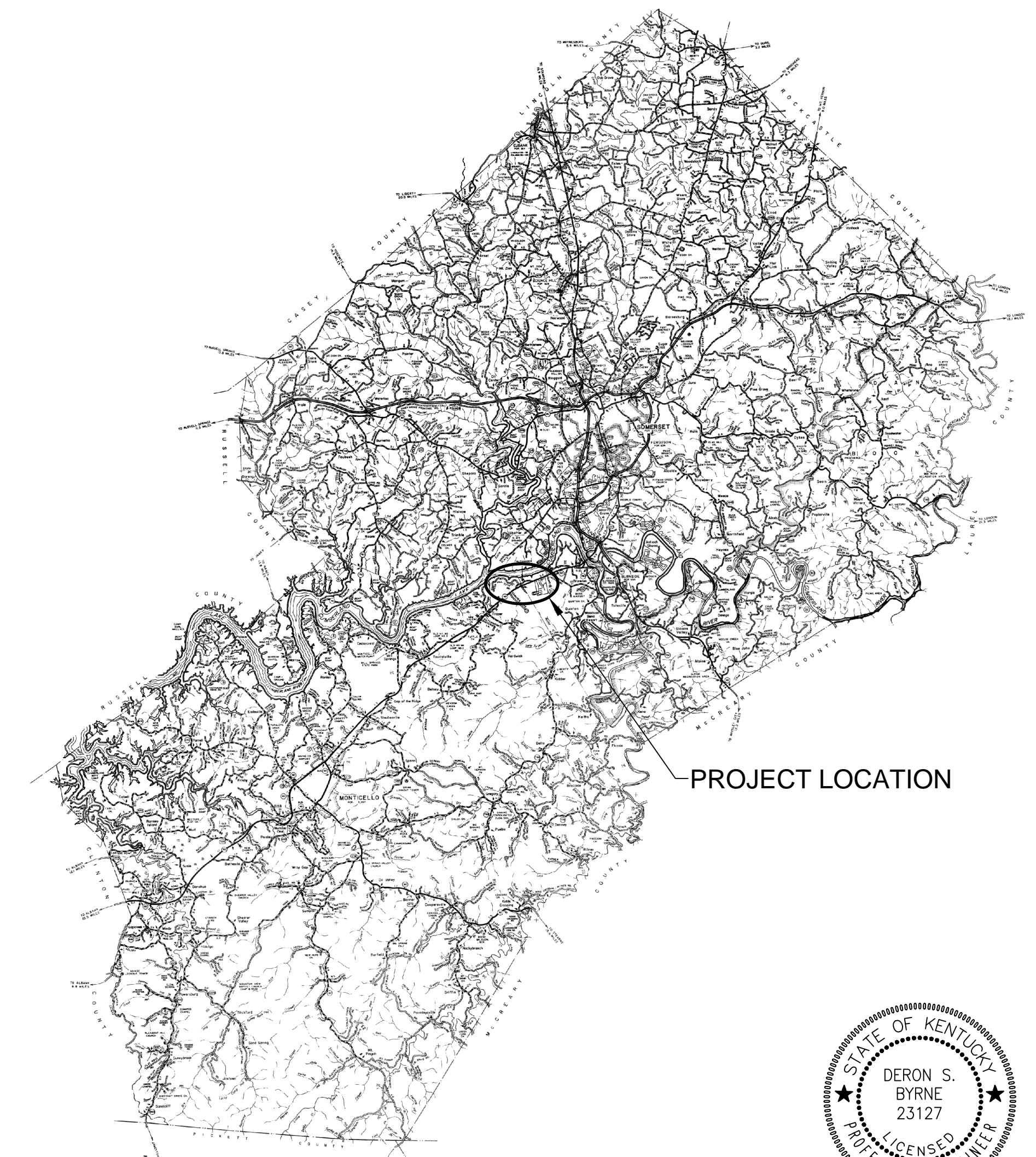
OFFICE SECRETARY - VICKIE RAMSEY
GENERAL MANAGER - DAVID SLAGLE
SUPERINTENDENT - J.C. NEW

APRIL 2016

M
Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

LOCATION MAP

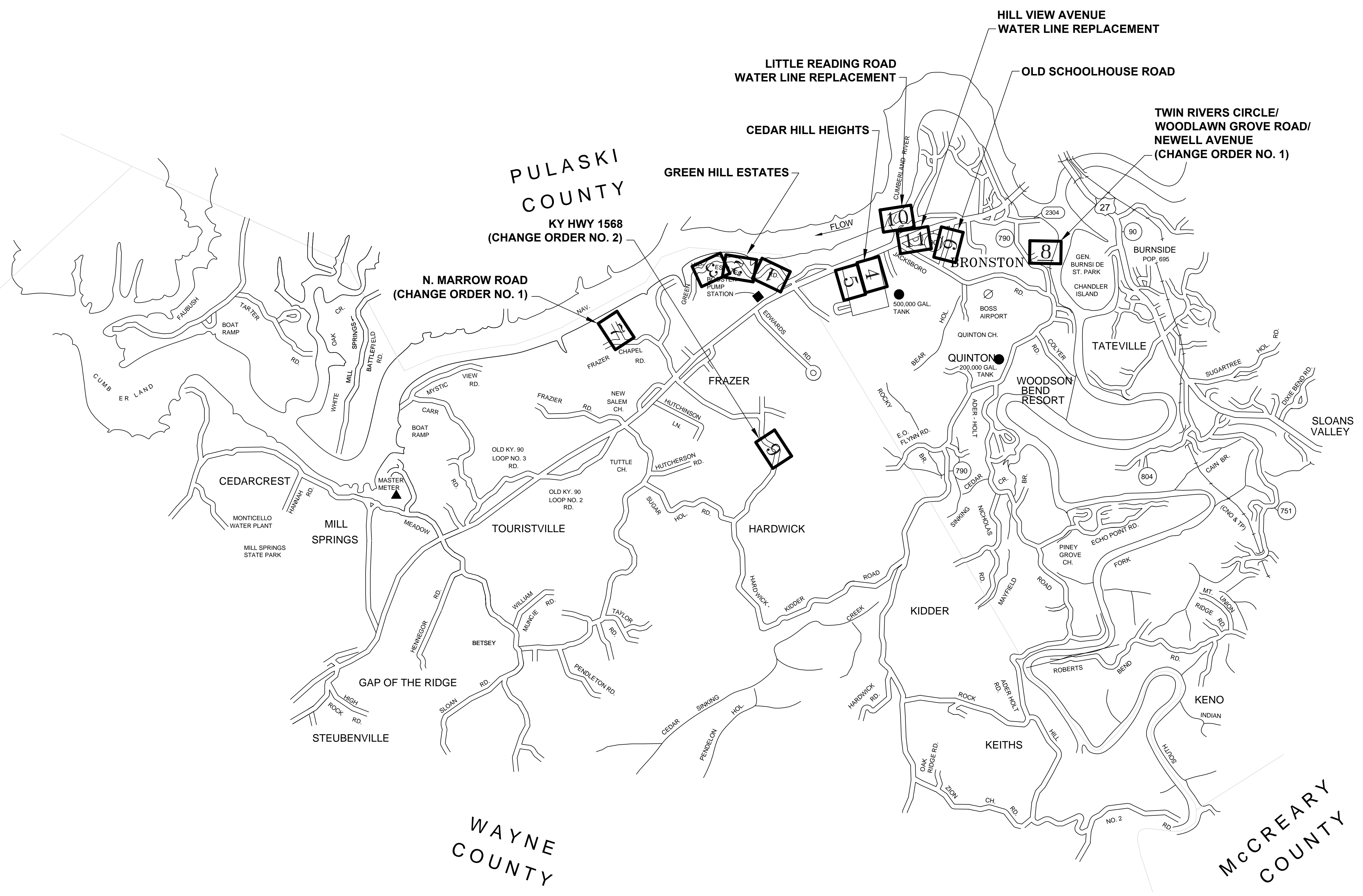


RECORD DRAWINGS



RUSSELL COUNTY

PULASKI COUNTY
KY HWY 1568
(CHANGE ORDER NO. 2)



N. MARROW ROAD
(CHANGE ORDER NO. 1)

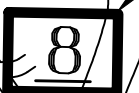
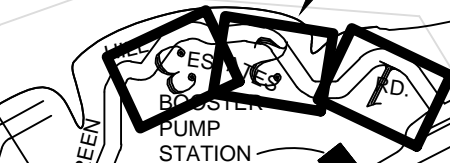
LITTLE READING ROAD
WATER LINE REPLACEMENT

HILL VIEW AVENUE
WATER LINE REPLACEMENT

OLD SCHOOLHOUSE ROAD

TWIN RIVERS CIRCLE/
WOODLAWN GROVE ROAD/
NEWELL AVENUE
(CHANGE ORDER NO. 1)

GREEN HILL ESTATES



CEDARCREST

MILL SPRINGS

TOURISTVILLE

FRAZER

HARDWICK

KIDDER

KEITHS

MCCREARY COUNTY

WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
PULASKI COUNTY, KENTUCKY

LOCATION MAP



M Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

| | | | |
|-----------------|------------------|---------|-------|
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: DSB | SCALE: N.T.S. | | LM-1 |
| CHECKED BY: DMB | PROJECT: 1615 | | |

GENERAL NOTES TO CONTRACTOR

- BEFORE CONSTRUCTION BEGINS NEAR OR THROUGH EXISTING UTILITIES (i.e. GAS CO., TELEPHONE CO., CABLE CO., ETC.) EACH UTILITY COMPANY SHALL BE NOTIFIED. A REQUEST FOR THE EXACT LOCATION OF THE UTILITY SHALL BE MADE, AND PERMISSION TO PROCEED WITH CONSTRUCTION OBTAINED.
- BEFORE CONSTRUCTION BEGINS THROUGH ANY PROPERTY, THE CONTRACTOR SHALL MAKE HIMSELF AWARE OF THE EXACT LOCATION OF CONSTRUCTION THROUGH THE PROPERTY AND THE BOUNDS OF THE PERMANENT AND TEMPORARY CONSTRUCTION EASEMENTS.
- THE CONTRACTOR SHALL HAVE ON HAND AT THE JOB SITE 22, 45, AND 90 DEGREE BENDS TO ALLOW FOR THEIR USE WHERE BRONSTON WATER ASSOCIATION REQUESTS INSTALLATION AS NECESSARY.
- PIPE JOINT DEFLECTION IS NOT TO EXCEED MANUFACTURER'S ALLOWABLE LIMITS.
- CONNECTING NEW LINES TO EXISTING LINES OR TO WORK IN THEIR CONTRACTS IS SUBSIDIARY TO THE CONTRACT. IT INCLUDES FITTINGS, SLEEVES, ETC., BUT DOES NOT INCLUDE GATE VALVES, WHICH ARE EXTRA PAY ITEM.
- THE CONTRACTOR SHALL FREE BORE ALL ASPHALT AND CONCRETE RESIDENTIAL DRIVEWAYS IN DIRT AND OPEN CUT IN ROCK AS DIRECTED BY THE BRONSTON WATER ASSOCIATION AND ENGINEER. THE CONTRACTOR SHALL EXCAVATE FROM EITHER SIDE OF ALL FENCES TO AVOID CUTTING. FENCE CUTTING AND REPAIR SHALL BE LIMITED TO UNIQUE CONDITIONS WHERE APPROVED BY BRONSTON WATER ASSOCIATION.
- ALL STREAM AND RIVER CROSSINGS GREATER THAN 15 FEET WIDE SHALL HAVE GATE VALVES INSTALLED ON EACH SIDE OF THE CROSSING. THE VALVE ON THE SOURCE SIDE SHALL HAVE A BYPASS SERVICE METER INSTALLED FOR LEAK DETECTION.
- ALL WATER LINES WITHIN 200 FEET RADIUS OF UNDERGROUND STORAGE TANKS (KRS-224.6-100), PETROLEUM STORAGE TANKS (KRS-224.60-115) AND ASSOCIATED PUMPS AND LINES SHALL BE DUCTILE IRON PIPE WITH PETROLEUM RESISTANT JOINTS AND ALL SERVICE LINE SHALL BE COPPER.
- WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS ABOVE OR BELOW THE SEWER AT CROSSINGS, ONE FULL LENGTH OF THE WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED.
- WATER MAINS INSTALLED PARALLEL TO SEWERS SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN.
- THE CONTRACTOR SHALL NOT BE ALLOWED TO MAINTAIN PERSONNEL RESIDENCY FOR ANY EMPLOYEE ON THE CONSTRUCTION SITE.
- WHEN WORKING ALONG THE COMMONWEALTH OF KENTUCKY RIGHT OF WAY, THE CONTRACTOR SHALL BE ADVISED THAT THE WATER LINES SHALL NOT BE PLACED IN FILL AREAS.
- WHEN PERFORMING WORK ALONG OR ACROSS ANY PUBLIC ROADWAY, THE CONTRACTOR SHALL POST WARNING SIGNS PAINTED ORANGE AND THEY SHALL BE FOUR (4) FEET BY FOUR (4) FEET MOUNTED ON POSTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE SIGNS SHALL BE AS FOLLOWS:
 - 1) CAUTION PIPELINE CONSTRUCTION 1500 FEET
 - 2) CAUTION PIPELINE CONSTRUCTION 1000 FEET
 - 3) CAUTION PIPELINE CONSTRUCTION 500 FEET
- THE CONTRACTOR SHALL MAINTAIN TWO (2) FLAG MEN AT ALL TIMES WHERE MACHINERY IS IN OPERATION WHEN WORKING THE FLOW OF TRAFFIC WILL BE DISTURBED. THERE IS NO EXCEPTION TO THIS REQUIREMENT. THE USE OF RADIOS WILL BE REQUIRED WHEN VISUAL CONTACT BETWEEN THE FLAG MEN DOES NOT EXIST.
- ALL SIGNS, BARRICADES, LIGHTS AND TRAFFIC CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- AT THE COMPLETION OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES AND INSTALL ALL TRAFFIC CONTROL SIGNS, BARRICADES AND LIGHTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ENTIRE ROADWAY FREE AND CLEAR AT THE END OF EACH WORKING DAY. NO EQUIPMENT SHALL BE LEFT ON OR PARKED ALONG THE ROAD RIGHT OF WAY.
- ALL NECESSARY STEPS SHALL BE TAKEN TO PREVENT EROSION OR SILTATION OF THE PUBLIC RIGHT OF WAY, ADJOINING PROPERTY AND WATER WAYS.

WATER LINE GENERAL NOTES

1. ALL WATER LINES SHALL BE CONFORMING TO ASTM SPECIFICATIONS D-2241 AND D-3139, FOR MATERIAL. ALL JOINTS SHALL BE SLIP-TYPE WITH RUBBER GASKETS CONFORMING TO ASTM-1869.
2. FITTINGS SHALL BE DUCTILE IRON CLASS 250 IN ACCORDANCE WITH AWWA C111-71 (ANSI A21.10).
3. ALL VALVES SHALL CONFORM TO AWWA C500.
4. CONSTRUCTION PRACTICES AND PROCEDURES SHALL CONFORM TO CURRENT AWWA STANDARDS AND BE APPROVED BY THE BRONSTON WATER ASSOCIATION.
5. AFTER INSTALLATION, WATER LINES SHALL BE DISINFECTED WITH A CHLORINE SOLUTION IN SUCH AMOUNTS AS TO PRODUCE A CONCENTRATION OF AT LEAST FIFTY (50) PPM AND A RESIDUAL OF AT LEAST TWENTY-FIVE (25) PPM AT THE END OF THE 24 HOURS AND FOLLOWED BY THROUGH FLUSHING.
6. MINIMUM COVER OF WATER LINES SHALL BE 30 INCHES. WATER LINE WITHIN COMMONWEALTH OF KENTUCKY RIGHT-OF-WAYS SHALL HAVE A MINIMUM COVER OF 42-INCHES.
7. CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL, STATE AND FEDERAL SAFETY AND ENVIRONMENTAL REGULATIONS GOVERNING UTILITY CONSTRUCTION.
8. ALL WATER LINE CROSSING PAVED SURFACE SHALL BE BACKFILLED FULL DEPTH WITH COMPACTED CRUSHED STONE.
9. EXISTING AND PROPOSED WATER MAIN LOCATIONS SHALL BE VERIFIED BY BRONSTON WATER ASSOCIATION PRIOR TO CONSTRUCTION.
10. ALL PIPE AND FITTINGS SHALL HAVE A MINIMUM OF 6-INCHES OF BEDDING OF DIRT UNDER AND ON BOTH SIDES OF PIPE UNLESS OTHERWISE SPECIFIED. ALL PIPE AND FITTING SHALL BE BACK-FILLED WITH DIRT UNLESS OTHERWISE SPECIFIED.
11. ALL FITTINGS: 90° BENDS, TEES, ETC., SHALL BE BLOCK WITH A MINIMUM OF 12-INCHES POURED CONCRETE AGAINST UNDISTURBED SOIL.
12. ALL GATE VALVES SHALL TURN RIGHT TO CLOSE AND TURN LEFT TO OPEN.
13. ALL VALVES SHALL BE C.I. VALVE BOXES EXTENDING 2-INCHES ABOVE SURFACE.
14. ALL FLUSH HYDRANTS SHALL BE STANDARD 2-WAY 5 1/4-INCHES BREAKAWAY TYPE WITH A MINIMUM 3 1/2-INCHES BURY AND TURN LEFT TO OPEN AND RIGHT TO CLOSE.
15. ALL PROPOSED WATER LINES SHALL HAVE A #12 COATED TRACER WIRE.
16. ALL FLUSH HYDRANTS, WATER VALVES AND FITTINGS SHALL HAVE RESTRAINER GLANDS (MEGALUGS®).
17. ALL WATER LINES SHALL BE PRESSURE TESTED TO 150 PSI FOR A MINIMUM OF FOUR (4) HOURS.
18. CONTRACTOR SHALL PROVIDE BACTERIAL SAMPLE RESULTS OF PROPOSED WATER LINES TO BRONSTON WATER ASSOCIATION.

OWNER

BRONSTON WATER ASSOCIATION
2013 WEST HIGHWAY 90
BRONSTON, KY 42518
(606) 561-5209

LINE/CABLE LOCATION SERVICES



RECORD DRAWINGS

WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
PULASKI COUNTY, KENTUCKY

GENERAL NOTES

| | | | |
|--|---------------------------------------------------------------------------------|------------------|---------|
| | Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | | |
| | DRAWN BY: JRC | DATE: APRIL 2016 | REVISED |
| | CHECKED BY: DSB | SCALE: N.T.S. | |
| | CHECKED BY: DMB | PROJECT: 1615 | |



STA. 0+00
CONNECT NEW 6-INCH WATER LINE TO EXISTING 6-INCH WATER LINE WITH 6-INCHx6-INCH TAPPING SLEEVE AND VALVE AND INSTALL A 3-INCH CHECK METER ASSEMBLY. SEE DETAIL, CM-1.
CONNECTION LOCATED 11' NORTH OF EDGE OF PAVEMENT ON OLD KY 90 11' WEST OF EDGE OF PAVEMENT ON GREEN HILL ESTATES ROAD

INSTALL METER RECONNECTION TO NEW 6-INCH WATER LINE WITH 3/4-INCH PE SERVICE TUBING (TYP.)

CONTRACTOR SHALL FREE BORE ALL ASPHALT AND CONCRETE RESIDENTIAL DRIVEWAYS IN DIRT AND OPEN CUT IN ROCK AS DIRECTED BY THE BRONSTON WATER ASSOCIATION AND ENGINEER. (TYP.)

RECORD DRAWINGS

| | | | | |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------|----------|-------------------|
| WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION PULASKI & WAYNE COUNTIES, KENTUCKY | | | | |
| GREEN HILL ESTATES WATER LINE REPLACEMENT | | | | |
| | Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | | | |
| | DRAWN BY: JRC CHECKED BY: JLM CHECKED BY: DSB | DATE: APRIL 2016 SCALE: 1" = 100' PROJECT: 1615 | REVISED: | SHEET 1 |





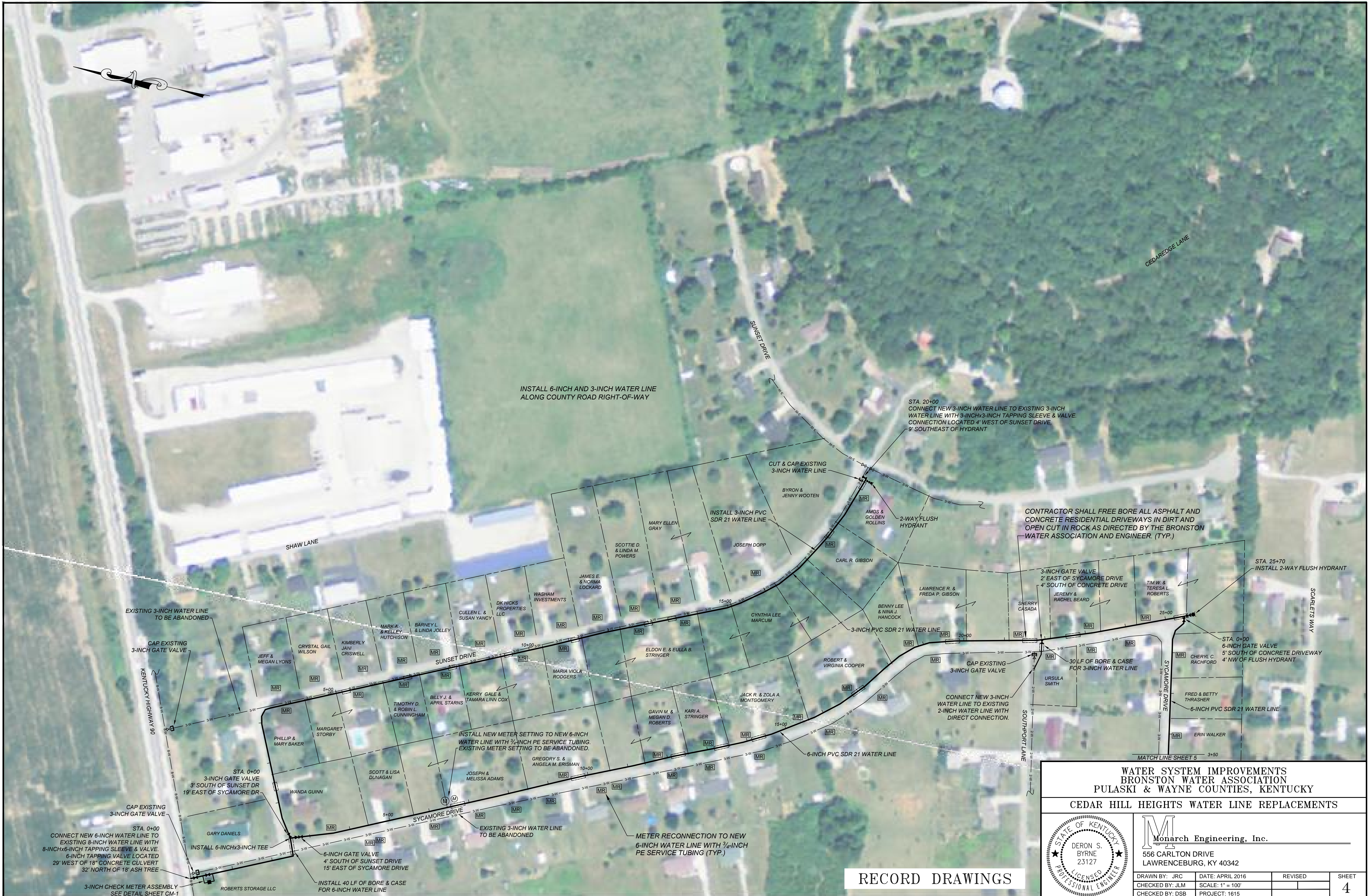
RECORD DRAWINGS

| | | | |
|------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------|-------|
| WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION PULASKI & WAYNE COUNTIES, KENTUCKY | | | |
| GREEN HILL ESTATES WATER LINE REPLACEMENT | | | |
| | | | |
| DERON S. BYRNE 23127 LICENSED PROFESSIONAL ENGINEER | | 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | |
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 100' | | 2 |
| CHECKED BY: DSB | PROJECT: 1615 | | |



RECORD DRAWINGS

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| WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION PULASKI & WAYNE COUNTIES, KENTUCKY GREEN HILL ESTATES WATER LINE REPLACEMENT | | | |
|  | |  Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | |
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 100' | | 3 |
| CHECKED BY: DSB | PROJECT: 1615 | | |



INSTALL 6-INCH AND 3-INCH WATER LINE
ALONG COUNTY ROAD RIGHT-OF-WAY

STA. 20+00
CONNECT NEW 3-INCH WATER LINE TO EXISTING 3-INCH
WATER LINE WITH 3-INCHx3-INCH TAPPING SLEEVE & VALVE.
CONNECTION LOCATED 4' WEST OF SUNSET DRIVE,
9' SOUTHEAST OF HYDRANT

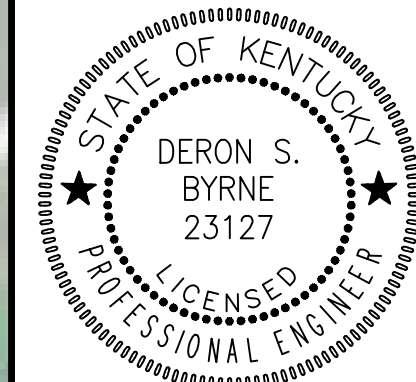
CONTRACTOR SHALL FREE BORE ALL ASPHALT AND
CONCRETE RESIDENTIAL DRIVEWAYS IN DIRT AND
OPEN CUT IN ROCK AS DIRECTED BY THE BRONSTON
WATER ASSOCIATION AND ENGINEER. (TYP.)

STA. 25+70
INSTALL 2-WAY FLUSH HYDRANT

STA. 0+00
6-INCH GATE VALVE
5' SOUTH OF CONCRETE DRIVEWAY
4' NW OF FLUSH HYDRANT

6-INCH PVC SDR 21 WATER LINE

**WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
PULASKI & WAYNE COUNTIES, KENTUCKY
CEDAR HILL HEIGHTS WATER LINE REPLACEMENTS**



Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

| | | | |
|-----------------|------------------|---------|-------|
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 100' | | 4 |
| CHECKED BY: DSB | PROJECT: 1615 | | |

RECORD DRAWINGS

EXISTING 3-INCH WATER LINE
TO BE ABANDONED

CAP EXISTING
3-INCH GATE VALVE

STA. 0+00
3-INCH GATE VALVE
3' SOUTH OF SUNSET DR
19' EAST OF SYCAMORE DR

CAP EXISTING
3-INCH GATE VALVE

CONNECT NEW 6-INCH WATER LINE TO
EXISTING 8-INCH WATER LINE WITH
8-INCHx6-INCH TAPPING SLEEVE & VALVE.
6-INCH TAPPING VALVE LOCATED
29' WEST OF 18" CONCRETE CULVERT
32' NORTH OF 18" ASH TREE

3-INCH CHECK METER ASSEMBLY
SEE DETAIL SHEET CM-1

INSTALL 6-INCHx3-INCH TEE

6-INCH GATE VALVE
4' SOUTH OF SUNSET DRIVE
15' EAST OF SYCAMORE DRIVE

INSTALL 40 LF OF BORE & CASE
FOR 6-INCH WATER LINE

INSTALL NEW METER SETTING TO NEW 6-INCH
WATER LINE WITH 3/4-INCH PE SERVICE TUBING.
EXISTING METER SETTING TO BE ABANDONED.

EXISTING 3-INCH WATER LINE
TO BE ABANDONED

METER RECONNECTION TO NEW
6-INCH WATER LINE WITH 3/4-INCH
PE SERVICE TUBING (TYP.)

CUT & CAP EXISTING
3-INCH WATER LINE

INSTALL 3-INCH PVC
SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

3-INCH PVC SDR 21 WATER LINE

CONNECT NEW 3-INCH
WATER LINE TO EXISTING
2-INCH WATER LINE WITH
DIRECT CONNECTION.

CAP EXISTING
3-INCH GATE VALVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

2-WAY FLUSH
HYDRANT

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

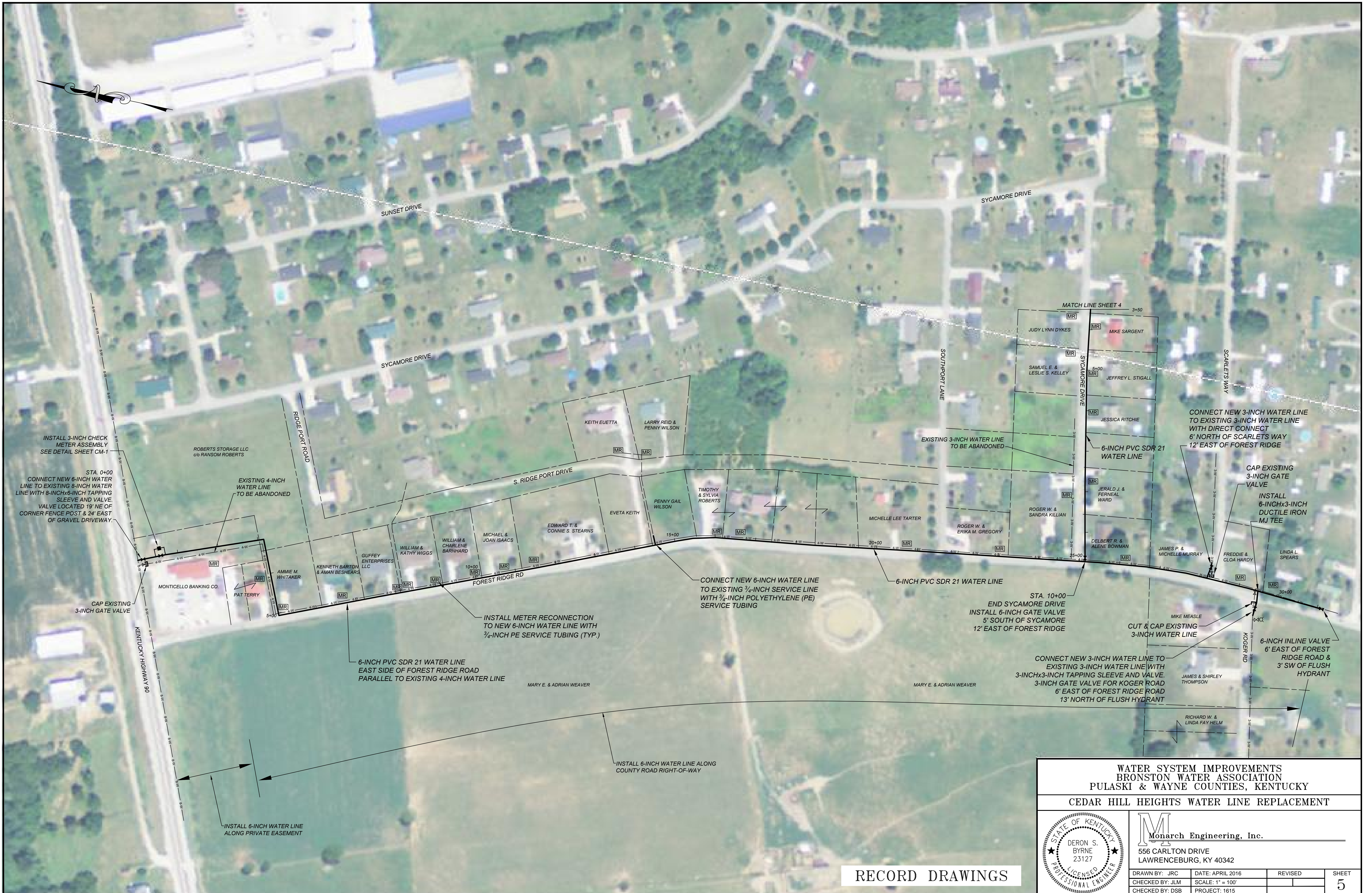
3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

30 LF OF BORE & CASE
FOR 3-INCH WATER LINE


3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE

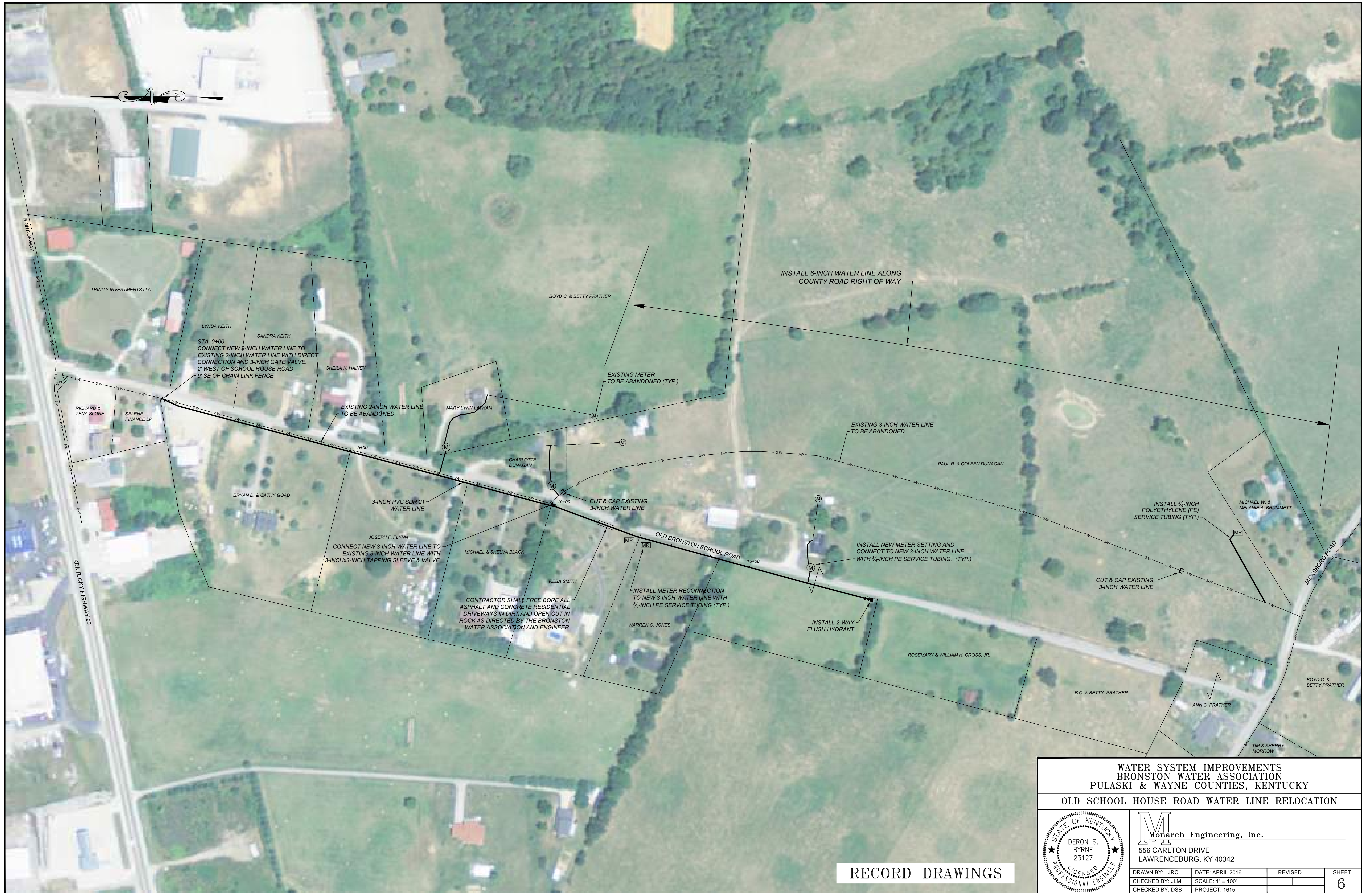
3-INCH GATE VALVE
2' EAST OF SYCAMORE DRIVE
4' SOUTH OF CONCRETE DRIVE





RECORD DRAWINGS

WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
PULASKI & WAYNE COUNTIES, KENTUCKY
CEDAR HILL HEIGHTS WATER LINE REPLACEMENT

| | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------|---------|-----------------|------------------|--|-----------------|---------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|
|  | <p style="text-align: center;">Monarch Engineering, Inc.</p> <p>556 CARLTON DRIVE LAWRENCEBURG, KY 40342</p> | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">DRAWN BY: JRC</td> <td style="width: 33%;">DATE: APRIL 2016</td> <td style="width: 33%;">REVISED</td> </tr> <tr> <td>CHECKED BY: JLM</td> <td>SCALE: 1" = 100'</td> <td></td> </tr> <tr> <td>CHECKED BY: DSB</td> <td>PROJECT: 1615</td> <td></td> </tr> </table> | DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | CHECKED BY: JLM | SCALE: 1" = 100' | | CHECKED BY: DSB | PROJECT: 1615 | | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">SHEET</td> <td style="width: 50%; text-align: center;">5</td> </tr> </table> | SHEET | 5 |
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | | | | | | | | | | |
| CHECKED BY: JLM | SCALE: 1" = 100' | | | | | | | | | | | |
| CHECKED BY: DSB | PROJECT: 1615 | | | | | | | | | | | |
| SHEET | 5 | | | | | | | | | | | |



RECORD DRAWINGS

| | | | |
|------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION PULASKI & WAYNE COUNTIES, KENTUCKY | | | |
| OLD SCHOOL HOUSE ROAD WATER LINE RELOCATION | | | |
|  | |  Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | |
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 100' | | 6 |
| CHECKED BY: DSB | PROJECT: 1615 | | |



STA. 0+00
 CONNECT NEW 3-INCH WATER LINE TO EXISTING
 3-INCH WATER LINE WITH 3-INCHx3-INCH TAPPING
 SLEEVE AND VALVE.
 VALVE LOCATED 15' NORTH OF FRAZIER ROAD
 4' EAST OF EDGE OF PAVEMENT ON MORROW ROAD
 LAT: 36° 57' 48.99" N
 LONG: 84° 43' 01.88" W

INSTALL 3-INCH WATER LINE
 ALONG COUNTY ROAD
 RIGHT-OF-WAY

DIRECTLY CONNECT NEW
 3-INCH WATER LINE TO
 EXISTING 3-INCH WATER LINE

EXISTING 3-INCH WATER LINE

EXISTING 1-INCH WATER LINE
 TO BE ABANDONED

3-INCH PVC SDR 21 WATER LINE

EXISTING METER
 TO BE RELOCATED TO HERE

EXISTING 2-INCH WATER LINE
 TO BE ABANDONED

MR = METER RECONNECTION

M = NEW METER SETTING

WATER SYSTEM IMPROVEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY
 MARROW N. ROAD/CUMBERLAND OAKS WATER LINE REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

RECORD DRAWINGS

| | | | |
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| CHECKED BY: DSB | PROJECT: 1615 | | |



3-INCH GATE VALVE
3' NORTH OF TWIN CIRCLE
12' NORTHWEST OF 18" CHERRY TREE

3-INCH GATE VALVE
8' WEST OF CONNECTOR
4' NORTHEAST OF HYDRANT

2-WAY FLUSH HYDRANT

CONTRACTOR SHALL FREE BORE ALL ASPHALT AND CONCRETE DRIVEWAYS AND SIDEWALKS IN DIRT AND OPEN CUT IN ROCK AS DIRECTED BY THE BRONSTON WATER ASSOCIATION AND ENGINEER. (TYP.)

3-INCH GATE VALVE
4' NORTH OF NEWELL AVE
5' WEST OF CONNECTOR

INSTALL 30 LF OF BORE & CASE FOR 3-INCH WATER LINE

3-INCH GATE VALVE
15' EAST OF CONNECTOR
3' SOUTH OF TWIN CIRCLE

INSTALL 30 LF OF BORE & CASE FOR 3-INCH WATER LINE

3-INCH GATE VALVE
2' NORTH OF NEWELL AVE
11' EAST OF CONNECTOR

INSTALL 3-INCH PVC SDR 17 WATER LINE

3-INCH GATE VALVE
7' NORTH OF WOODLAWN GROVE RD
7' NORTHWEST OF NEWELL AVENUE

STA. 4+00
INSTALL 2-WAY FLUSH HYDRANT

STA. 5+00
INSTALL 2-WAY FLUSH HYDRANT

3-INCH GATE VALVE
8' EAST OF NEWELL AVE
5' NORTH OF WOODLAWN

CUT & CAP EXISTING 3-INCH WATER LINE

CONNECT NEW 3-INCH WATER LINE TO EXISTING 3-INCH WATER LINE WITH 3-INCHx3-INCH TAPPING SLEEVE AND VALVE. VALVE LOCATED 10' EAST OF WOODLAWN GROVE RD 2' NORTH OF DAVID PARKER PROPERTY LINE

INSTALL 30 LF OF BORE & CASE FOR 3-INCH WATER LINE

INSTALL 30 LF OF BORE & CASE FOR 3-INCH WATER LINE

RECORD DRAWINGS

STA. 0+00
CONNECT NEW 3-INCH WATER LINE TO EXISTING 6-INCH WATER LINE WITH 6-INCHx3-INCH TAPPING SLEEVE AND VALVE. CONNECTION LOCATED 10' NORTH OF TWIN RIVER CIRCLE 9' WEST OF TWIN RIVER DRIVE
LAT: 36° 58' 18" N
LONG: 84° 36' 38.15" W

MR = METER RECONNECTION

M = NEW METER SETTING

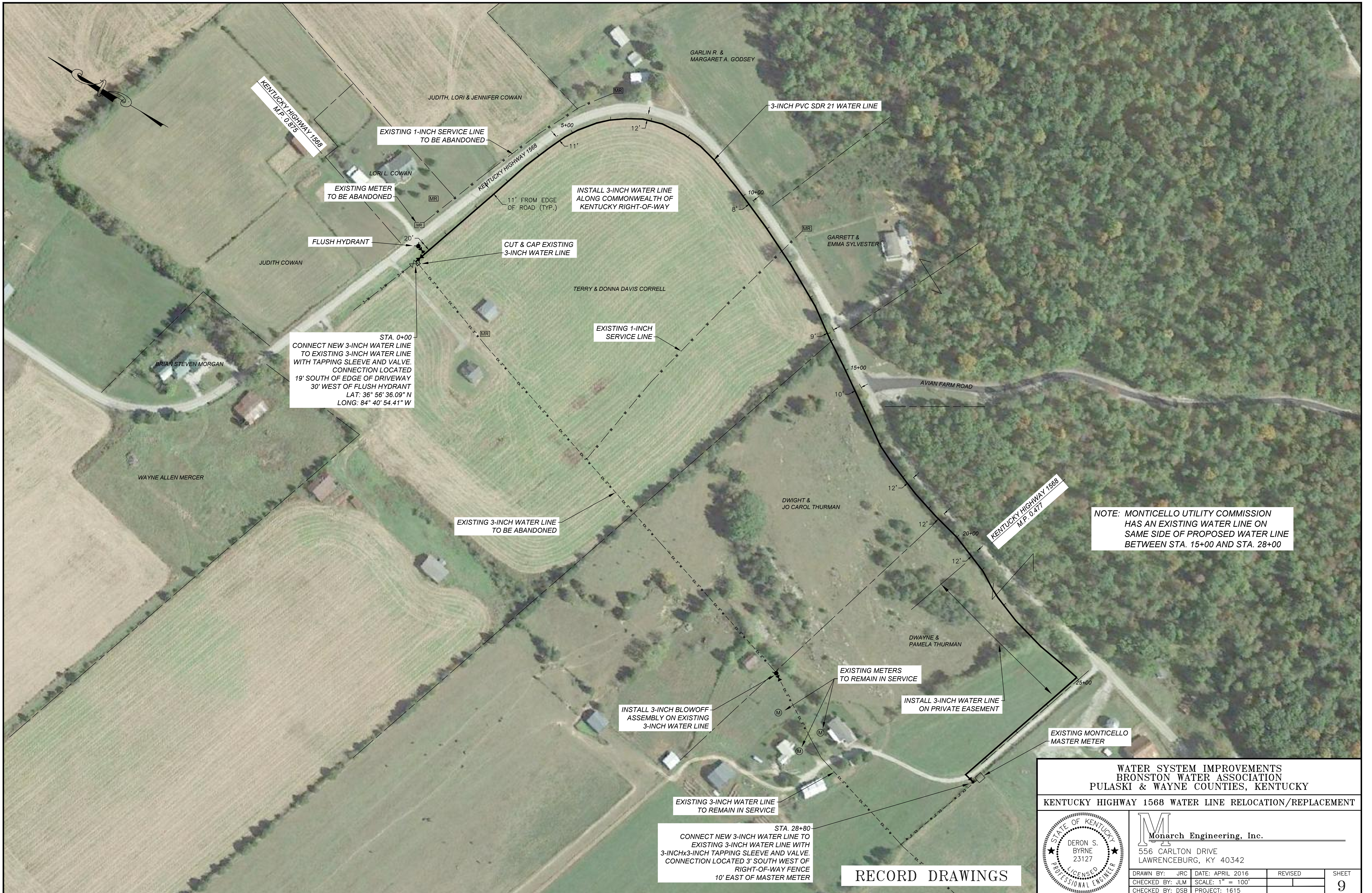
**WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
PULASKI & WAYNE COUNTIES, KENTUCKY**

TWIN RIVERS CIRCLE/WOODLAWN GROVE ROAD/NEWELL AVENUE

DERON S. BYRNE
23127

Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

| | | | |
|-----------------|------------------|---------|-------|
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 100' | | 8 |
| CHECKED BY: DSB | PROJECT: 1615 | | |



STA. 0+00
 CONNECT NEW 3-INCH WATER LINE
 TO EXISTING 3-INCH WATER LINE
 WITH TAPPING SLEEVE AND VALVE.
 CONNECTION LOCATED
 19' SOUTH OF EDGE OF DRIVEWAY
 30' WEST OF FLUSH HYDRANT
 LAT: 36° 56' 36.09" N
 LONG: 84° 40' 54.41" W

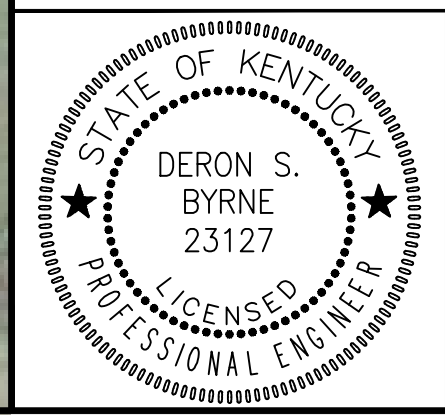
NOTE: MONTICELLO UTILITY COMMISSION
 HAS AN EXISTING WATER LINE ON
 SAME SIDE OF PROPOSED WATER LINE
 BETWEEN STA. 15+00 AND STA. 28+00

STA. 28+80
 CONNECT NEW 3-INCH WATER LINE TO
 EXISTING 3-INCH WATER LINE WITH
 3-INCHx3-INCH TAPPING SLEEVE AND VALVE.
 CONNECTION LOCATED 3' SOUTH WEST OF
 RIGHT-OF-WAY FENCE
 10' EAST OF MASTER METER

RECORD DRAWINGS

WATER SYSTEM IMPROVEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY

KENTUCKY HIGHWAY 1568 WATER LINE RELOCATION/REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

| | | | |
|-----------------|------------------|---------|-------|
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 100' | | 9 |
| CHECKED BY: DSB | PROJECT: 1615 | | |



STA. 12+62
INSTALL 3-INCH 3-WAY
FLUSH HYDRANT

EDWARD & DORCAS
HUNLEY

EXISTING 6-INCH WATER LINE
TO BE ABANDONED

3-INCH PVC SDR 17 WATER LINE

INSTALL 20 LF OF BORE & CASE
FOR 3-INCH WATER LINE

INSTALL 20 LF OF FREE BORE
FOR 3-INCH WATER LINE

INSTALL 120 LF OF FREE BORE
FOR 3-INCH WATER LINE

INSTALL 30 LF OF BORE & CASE
FOR 3-INCH WATER LINE

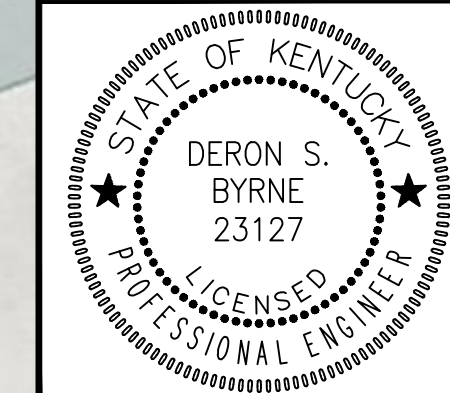
STA. 0+00
CONNECT NEW 3-INCH WATER LINE
TO EXISTING 6-INCH WATER LINE
WITH 6-INCHx3-INCH TAPPING
SLEEVE AND 3-INCH GATE VALVE.

EXISTING 6-INCH GATE VALVE

RECORD DRAWINGS

WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
PULASKI COUNTY, KENTUCKY

LITTLE READING ROAD WATER LINE EXTENSION



Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

| | | | |
|-----------------|-----------------|---------|-------|
| DRAWN BY: JRC | DATE: NOV 2017 | REVISED | SHEET |
| CHECKED BY: JLM | SCALE: 1" = 50' | | 10 |
| CHECKED BY: DSB | PROJECT: 1615 | | |



STA. 0+00
 CONNECT NEW 3-INCH WATER LINE TO
 EXISTING 8-INCH WATER LINE WITH
 8-INCHx3-INCH TAPPING SLEEVE AND VALVE.
 LAT: 36° 58' 58" N
 LONG: 84° 38' 52" W

SHUT OFF
 1-INCH CORP STOP

CUT & CAP EXISTING
 3-INCH WATER LINE

INSTALL CHECK
 METER ASSEMBLY

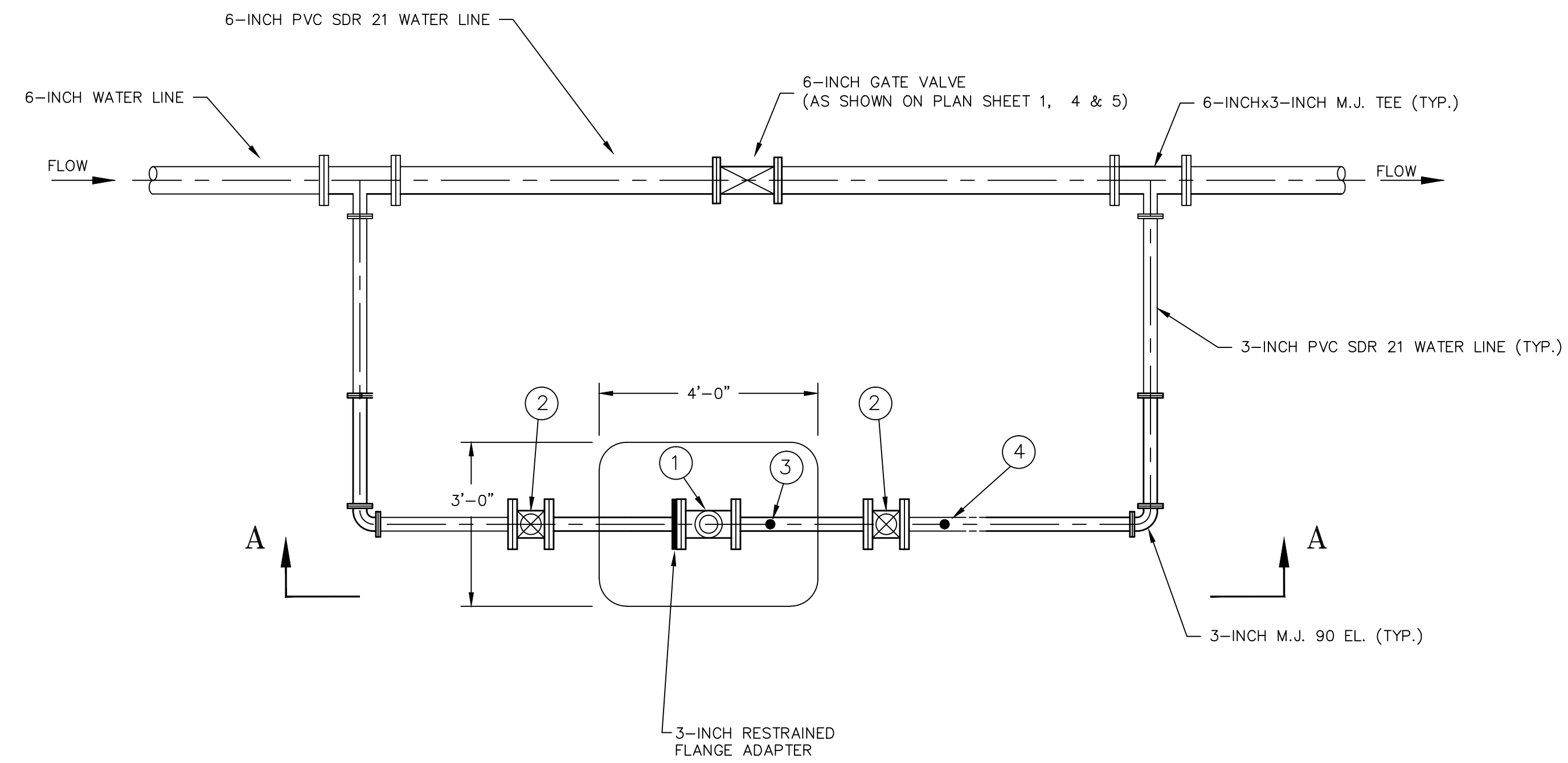
3-INCH PVC SDR 21 WATER LINE

EXISTING 3-INCH WATER LINE
 TO BE ABANDONED

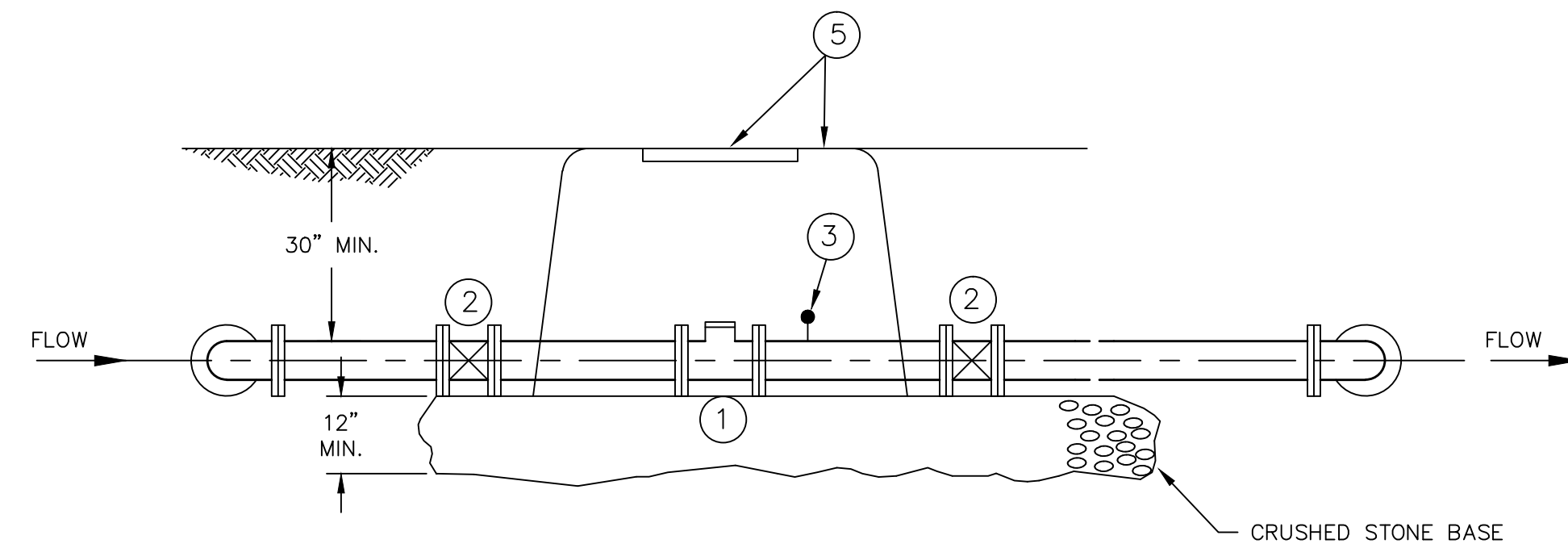
STA. 10+90
 INSTALL 2-WAY FLUSH
 HYDRANT ASSEMBLY

RECORD DRAWINGS

| | | | |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------|--------------------|
| WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION PULASKI COUNTY, KENTUCKY | | | |
| HILLVIEW AVENUE WATER LINE EXTENSION | | | |
| | Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | | |
| | DRAWN BY: JRC | DATE: NOV 2017 | REVISED |
| | CHECKED BY: JLM | SCALE: 1" = 50' | PROJECT: 1615 |
| | | | SHEET 11 |



CHECK METER
PLAN VIEW
 SCALE: 1/2" = 1'-0"



SECTION A-A
 SCALE: 1/2" = 1'-0"

LEGEND

1. 3-INCH FLANGED WATER METER BY BRONSTON WATER ASSOCIATION.
2. 3-INCH MECHANICAL JOINT RESILIENT WEDGE/SEATED GATE VALVE BY AMERICAN FLOW, MODEL 2506-MJ, OR APPROVED EQUAL, WITH VALVE BOX ASSEMBLY AND COVER.
3. PRESSURE GAUGE ASHCROFT 4 1/2" DURAGAUGE WITH 0-200 psi RANGE (OIL FILLED)
4. INSIDE PIPING AND FITTING SHALL BE 3-INCH D.I. WITH 150# FLGS.
5. 3-0"Wx4-0"Lx3-0"H PREFABRICATED CHECK METER VAULT TO BE PROVIDED BY BRONSTON WATER ASSOCIATION AND INSTALLED BY CONTRACTOR.

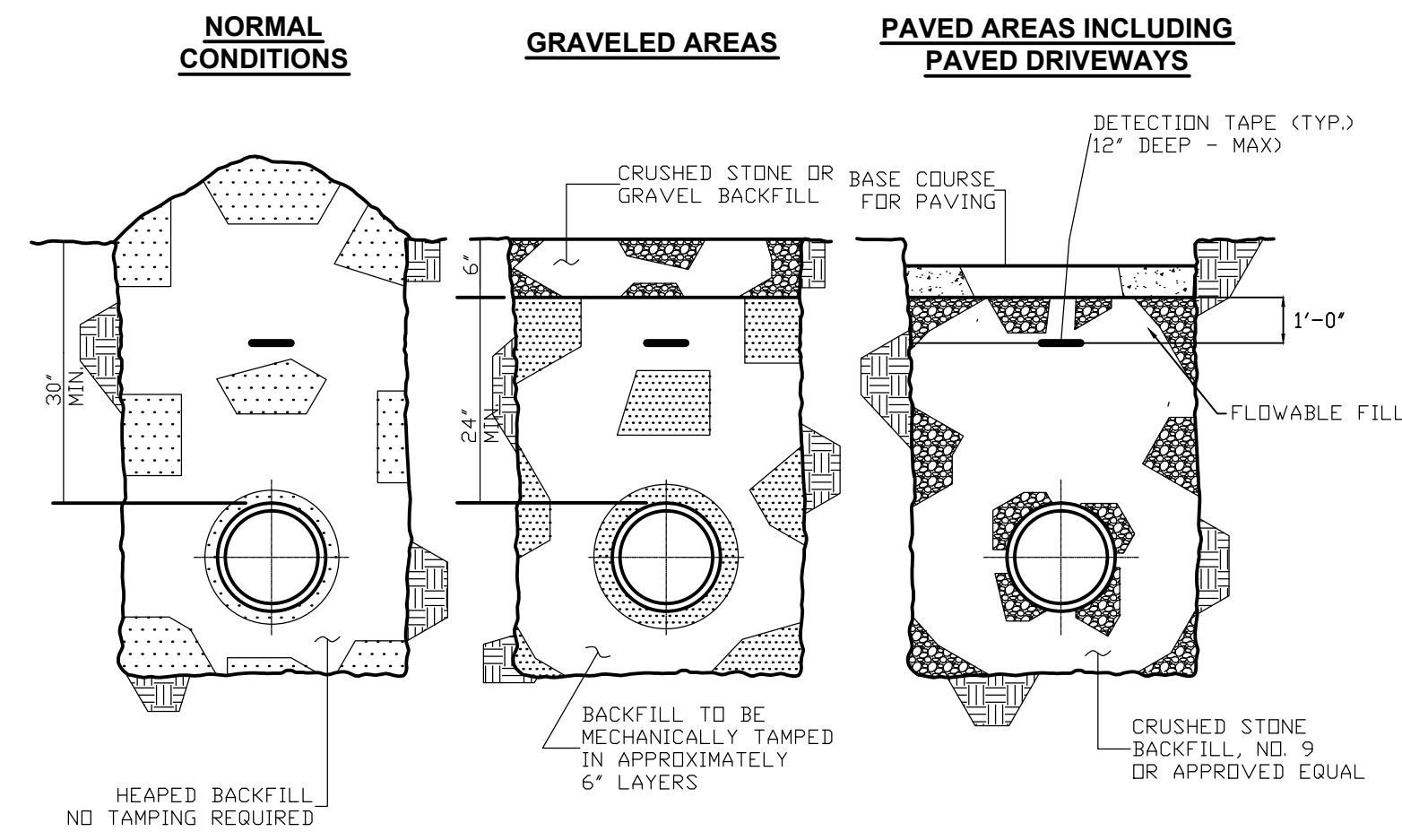
WATER SYSTEM IMPROVEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY

CHECK METER ASSEMBLY

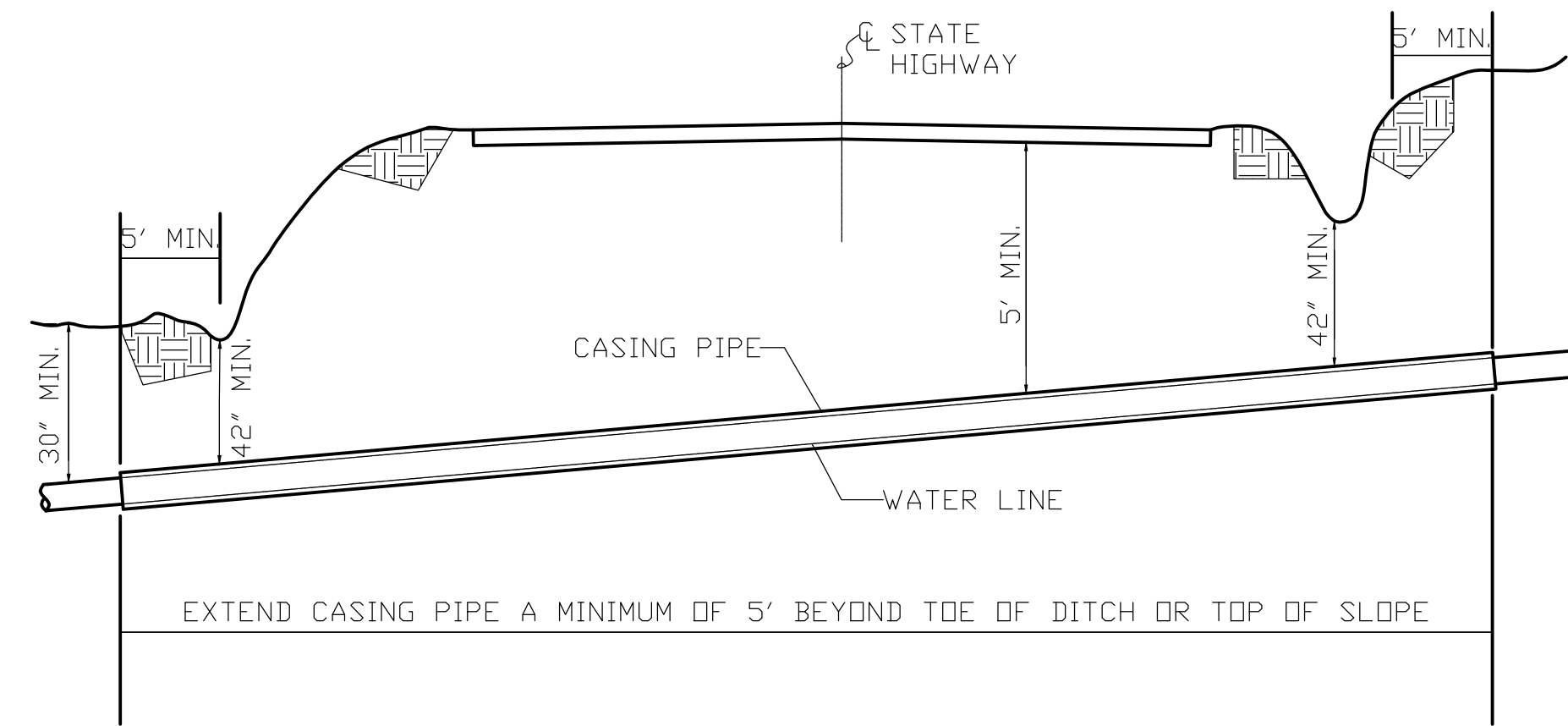


Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

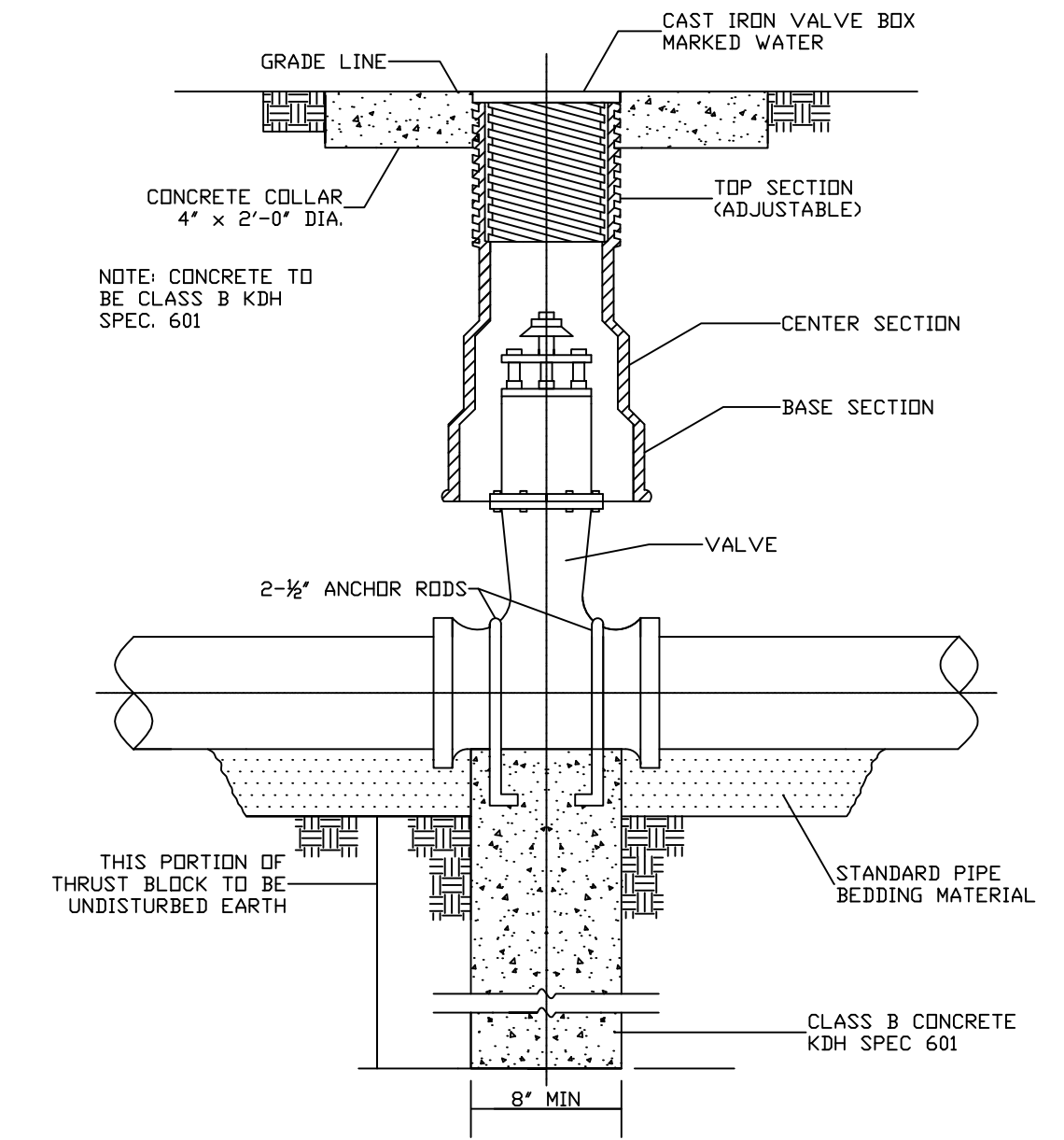
| | | | |
|-----------------|-------------------|---------|-------|
| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: DSB | SCALE: 1/2"=1'-0" | | CM-1 |
| CHECKED BY: DMB | PROJECT: 1615 | | |



BACKFILLING DETAILS
N.T.S

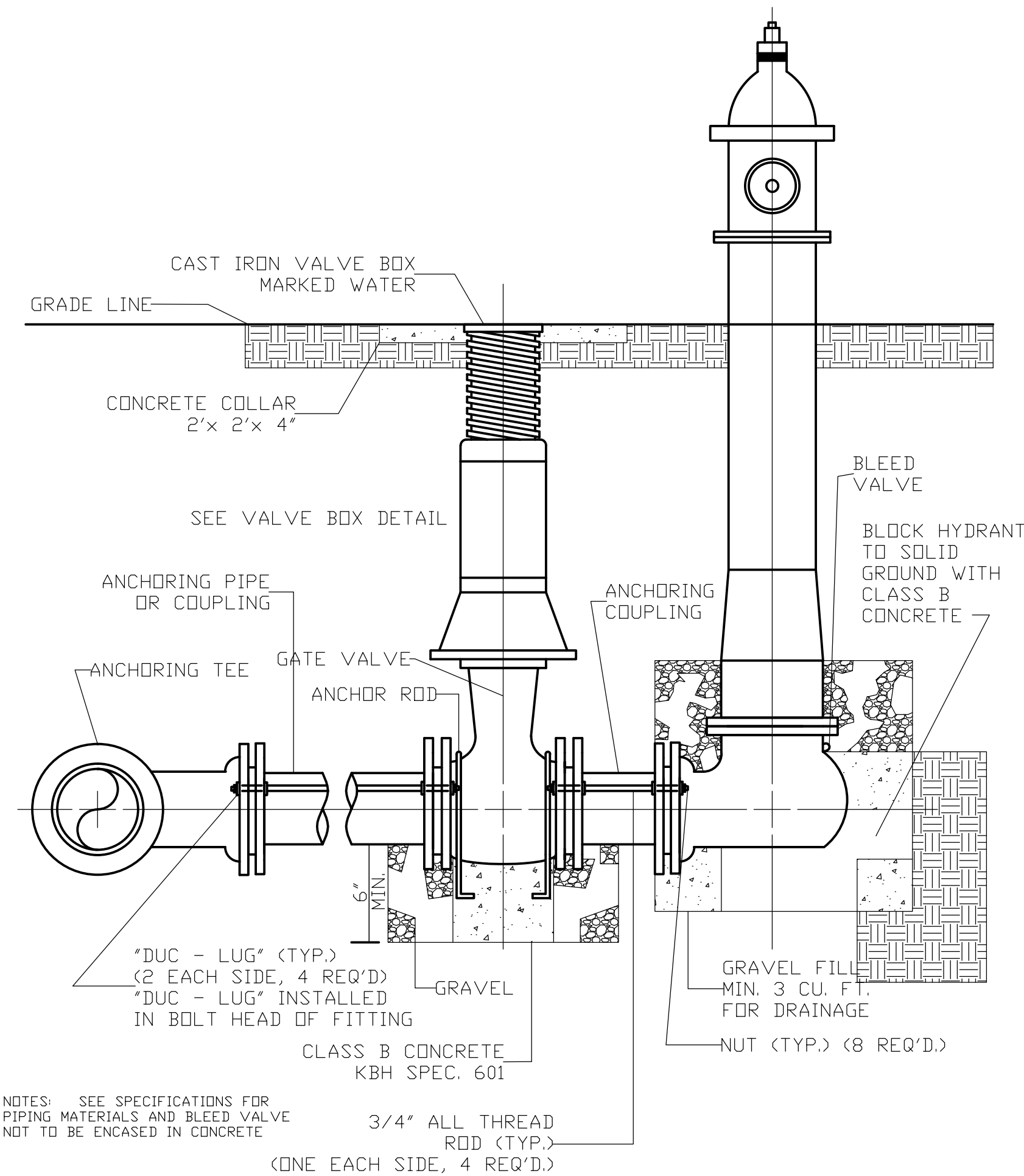


TYP. STATE HIGHWAY ENCASED BORE CROSSING
N.T.S

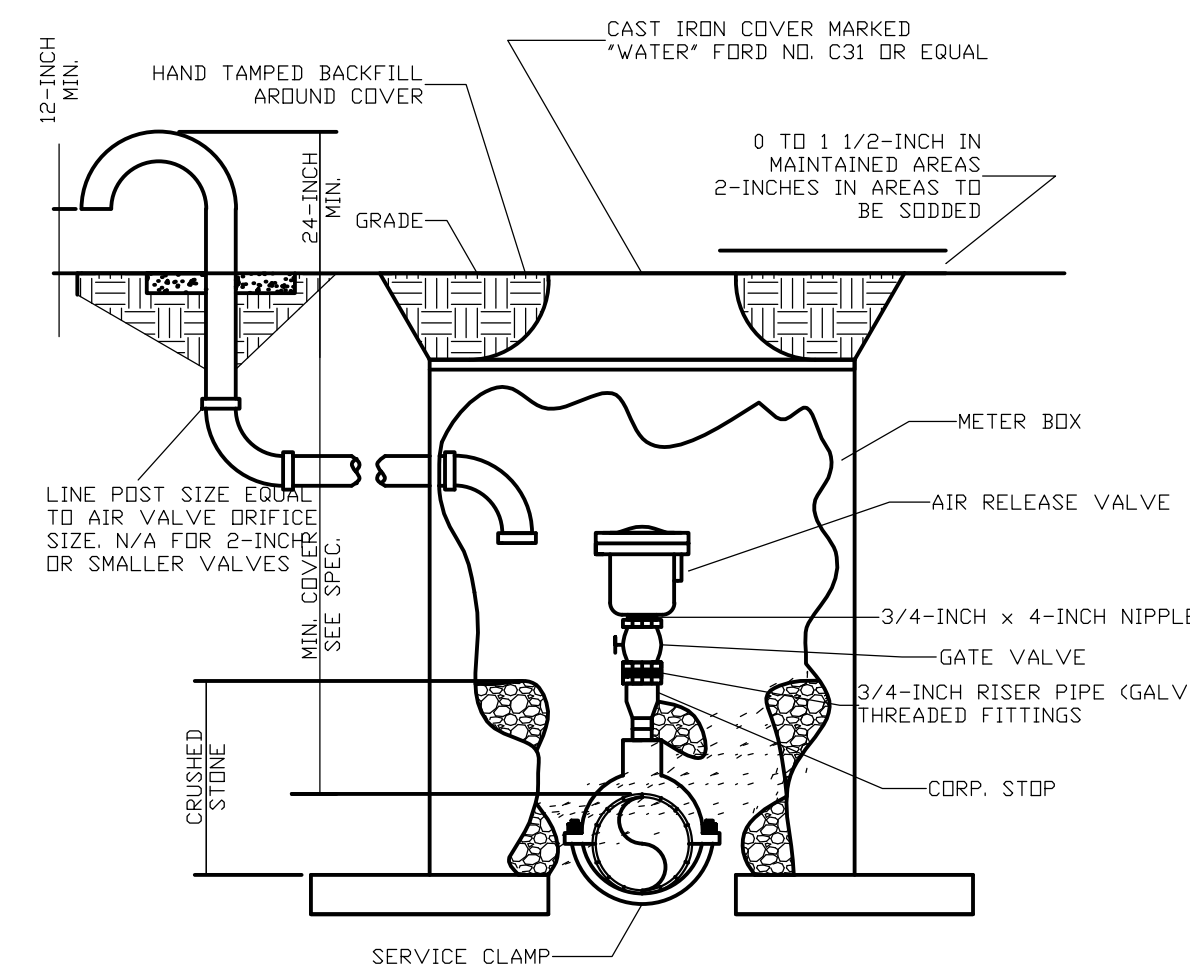


NOTE: SEE SPECIFICATION FOR PIPING MATERIALS AND PIPING JOINTS

GATE VALVE DETAIL
N.T.S

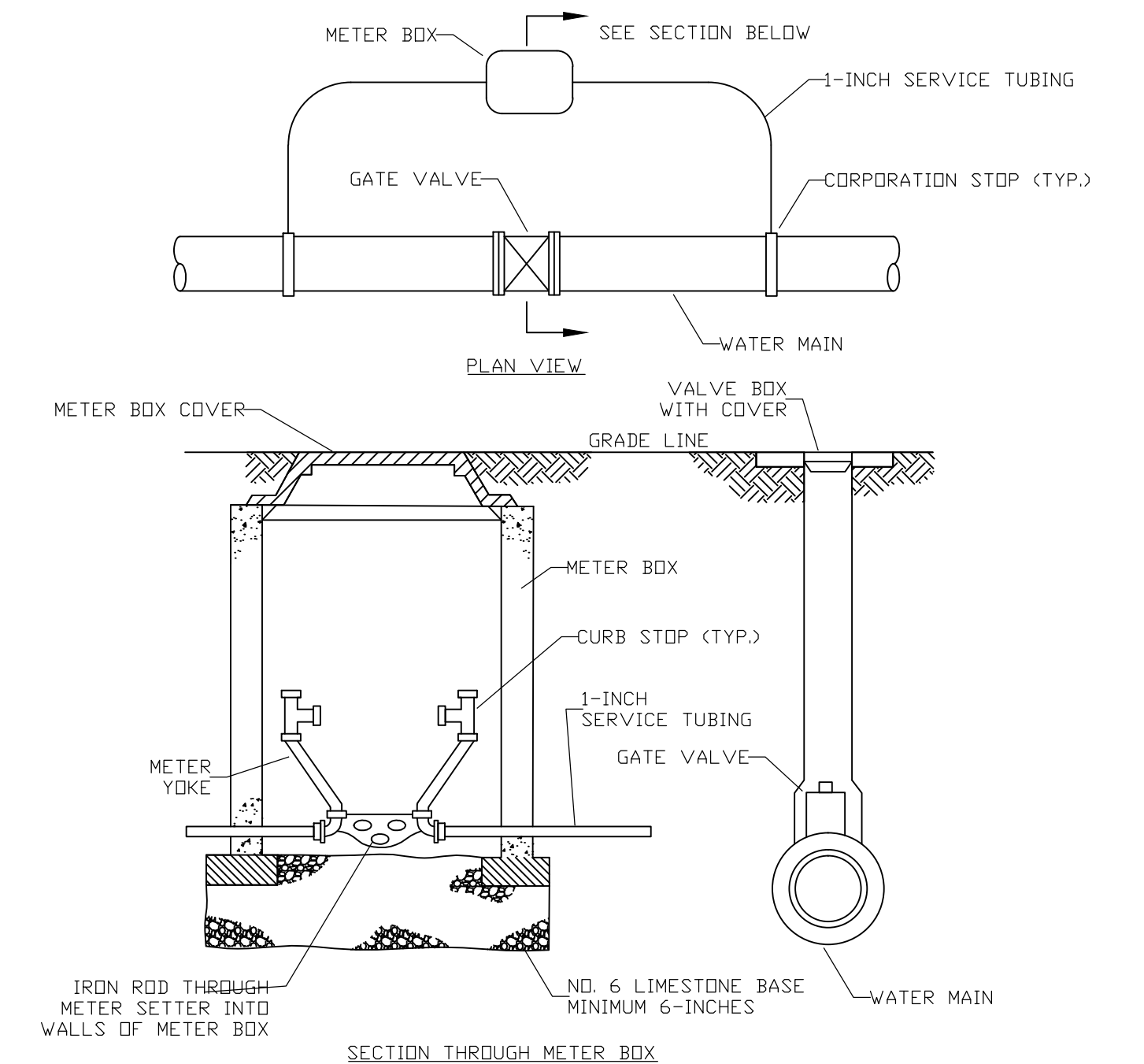


FLUSH HYDRANT DETAIL
N.T.S



NOTE: WHERE THE WATER LINE IS LOCATED IN A STREET OR ROAD, THE AIR RELEASE VALVE AND BOX ARE TO BE LOCATED OFF THE ROAD AS DIRECTED BY THE ENGINEER AND CONNECTED TO THE MAINLINE BY 3/4-INCH SERVICE PIPE.
NOTE: 2\"/>

AIR RELEASE VALVE
N.T.S

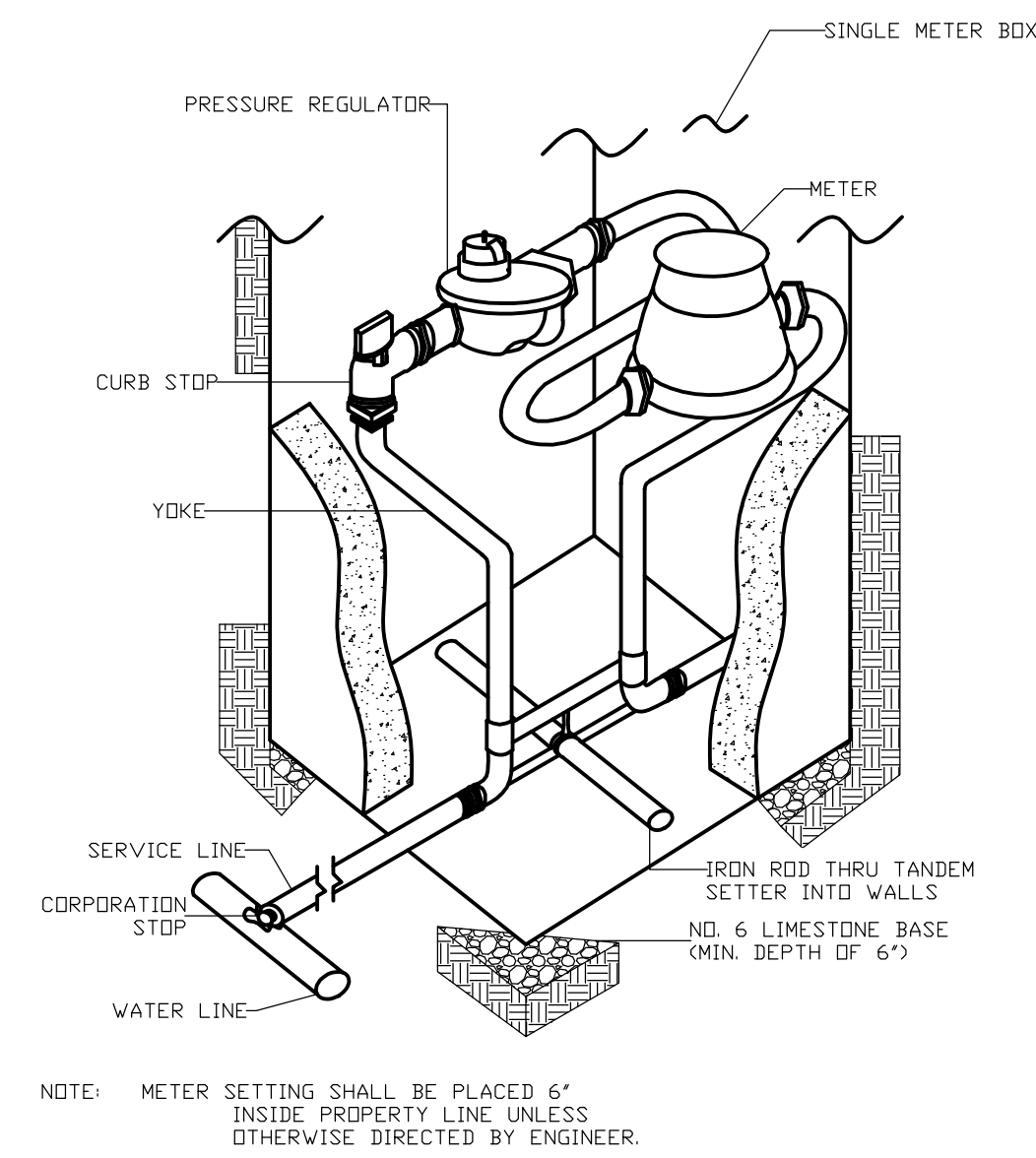


ISOLATION CHECK METER DETAIL
N.T.S

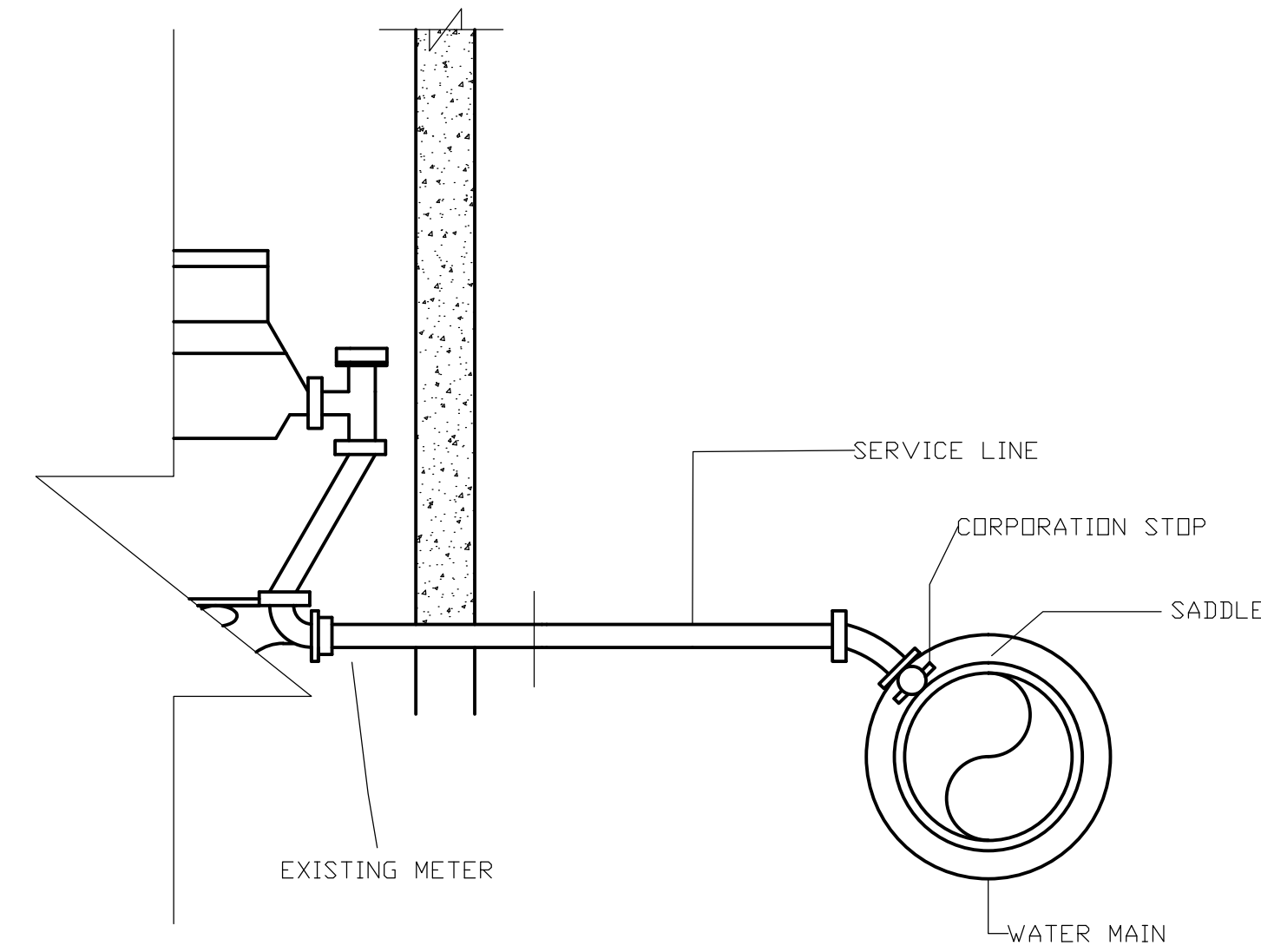
**WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
WAYNE & PULASKI COUNTIES, KENTUCKY**

STANDARD DRAWINGS

| | | | | |
|--|---------------------------------------------------------------------------------|------------------|---------|-------|
| | Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | | | |
| | DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| | CHECKED BY: DSB | SCALE: AS SHOWN | | SD-1 |
| | CHECKED BY: DMB | PROJECT: 1615 | | |

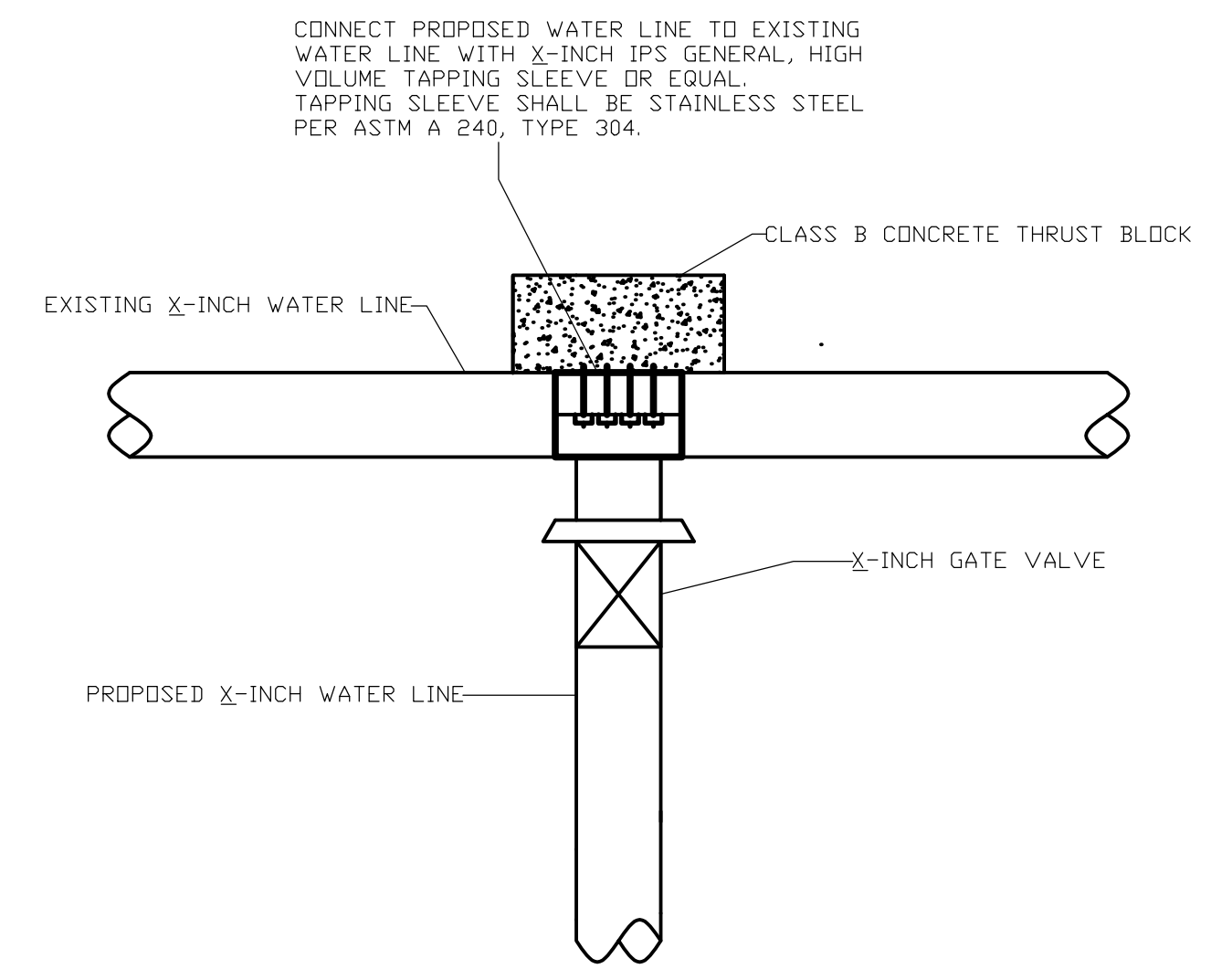


METER SETTING AND CONNECTION DETAIL
N.T.S



SERVICE RECONNECTION DETAIL
N.T.S

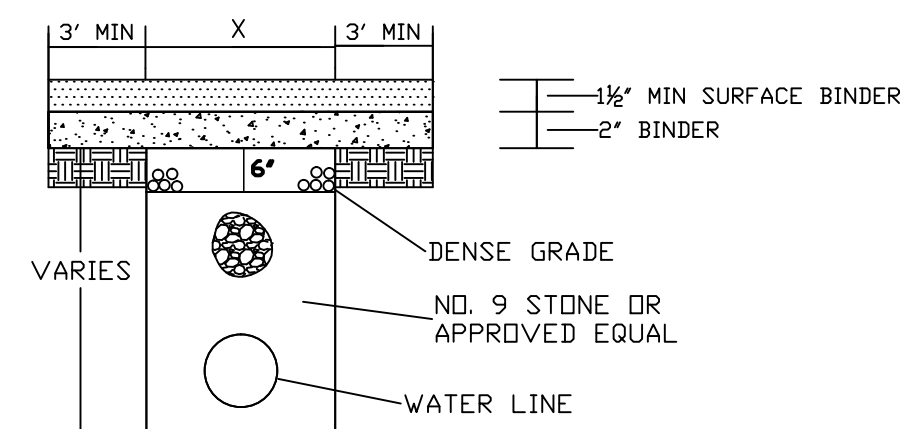
CONNECT NEW SERVICE LINE TO NEW WATER MAIN AND EXTEND TO AND CONNECT TO EXISTING METER.



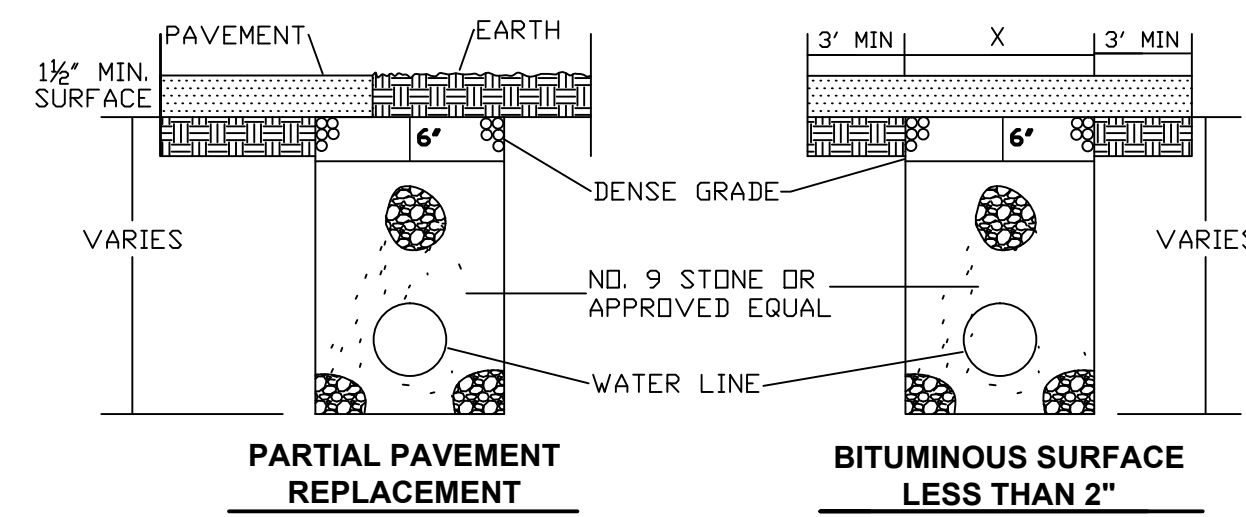
WATER LINE CONNECTION DETAIL
N.T.S

CONNECT PROPOSED WATER LINE TO EXISTING WATER LINE WITH X-INCH IPS GENERAL, HIGH VOLUME TAPPING SLEEVE OR EQUAL. TAPPING SLEEVE SHALL BE STAINLESS STEEL PER ASTM A 240, TYPE 304.

REPLACE BITUMINOUS PAVEMENT WITH SAME TYPE AND DEPTH AS EXISTING PAVEMENT

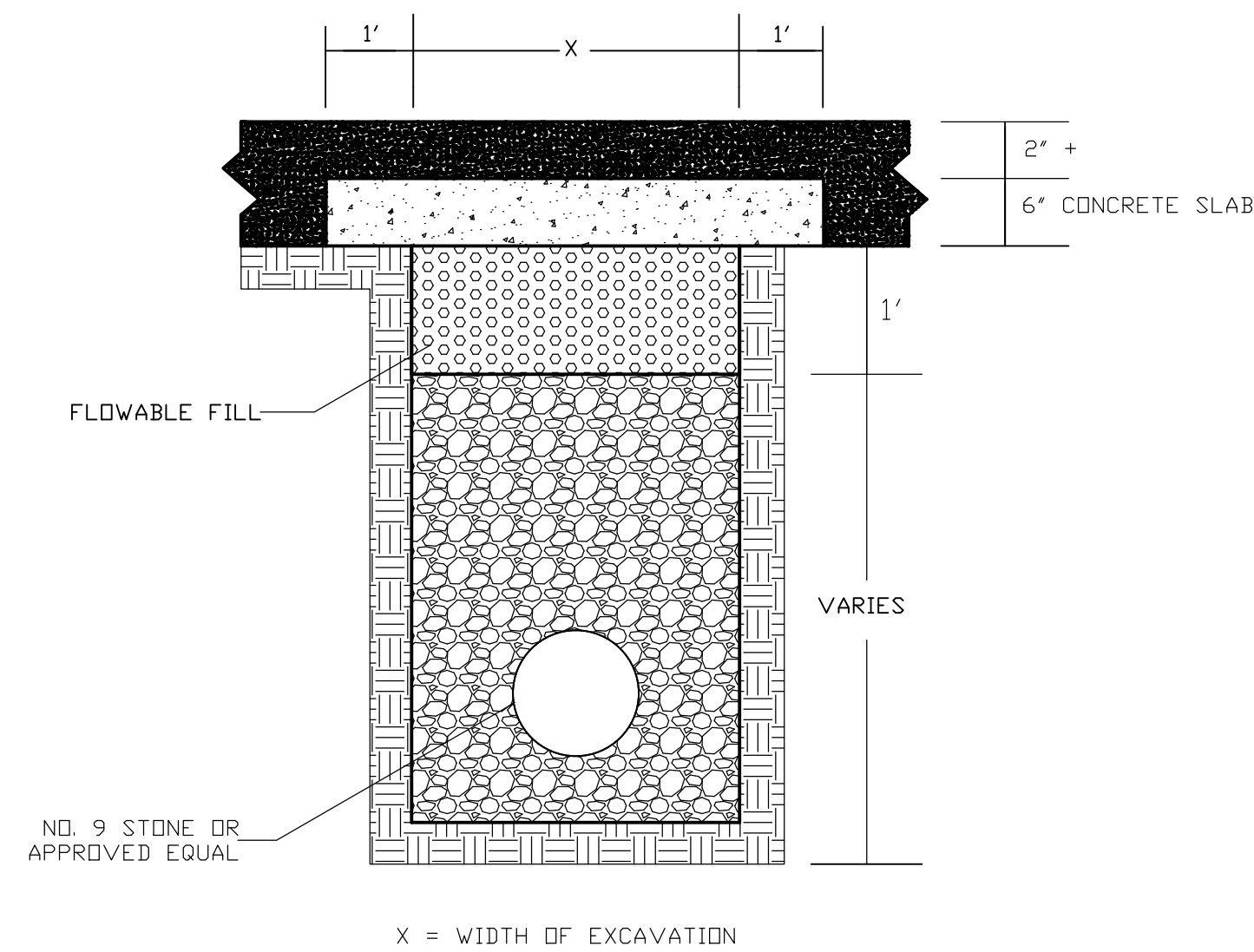


BITUMINOUS SURFACE 2" +

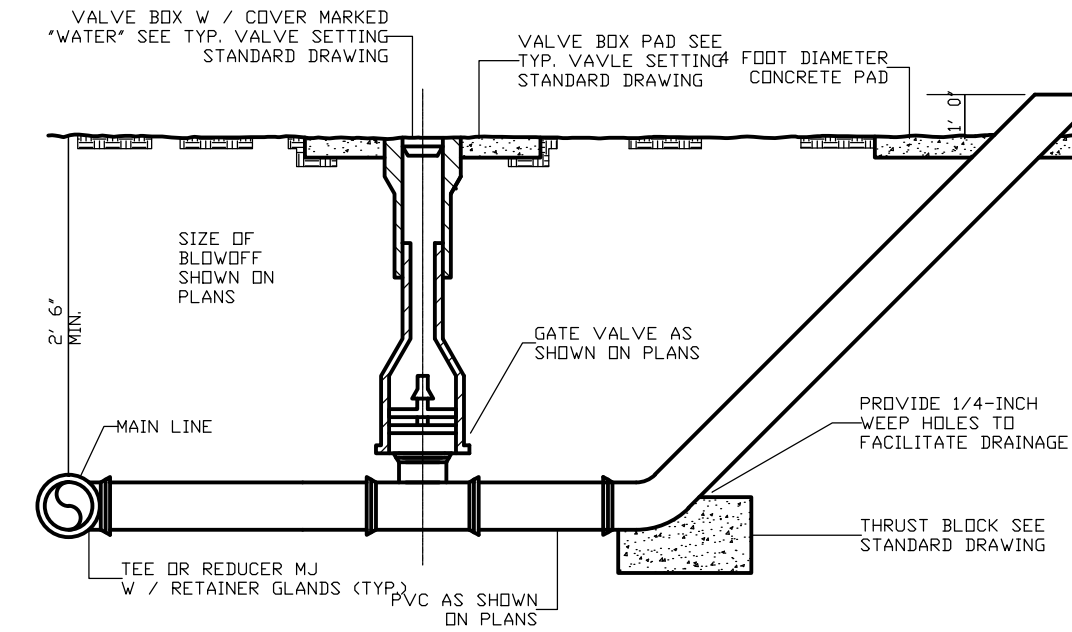


BITUMINOUS PAVEMENT REPLACEMENT DETAILS
N.T.S

ANY TRENCH THAT DISTURBS PAVEMENT SHALL BE BACKFILLED WITH STONE

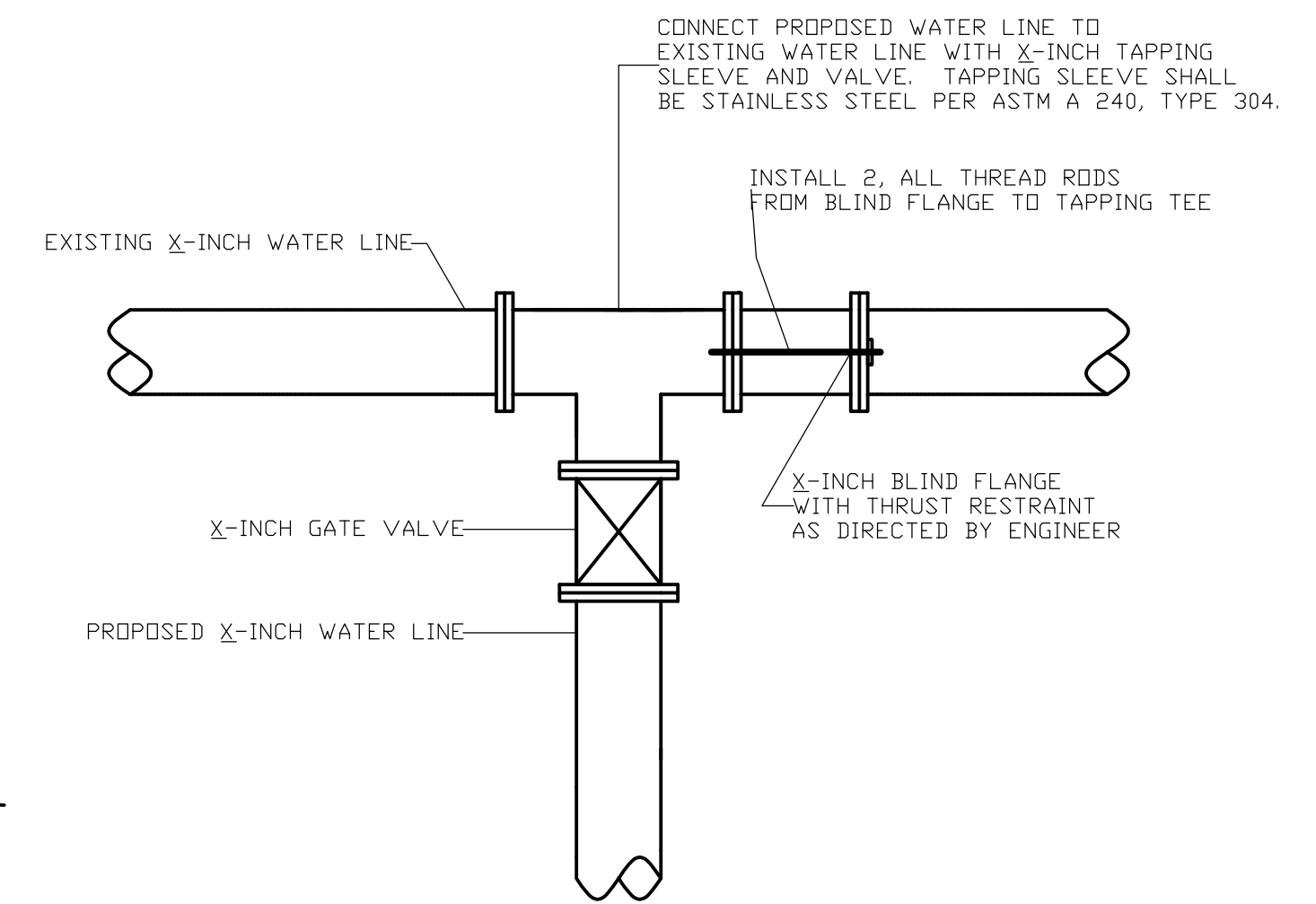


STATE HIGHWAY PAVEMENT REPLACEMENT
N.T.S



NOTE: WHERE BLOWOFF ASSEMBLIES ARE REQUIRED AT THE END OF A LINE NO TEE OR REDUCER IS REQUIRED. AT THESE LOCATIONS VALVES AND PIPES ARE TO BE THE SAME SIZE AS THE WATER MAIN.

BLOWOFF DETAIL
N.T.S



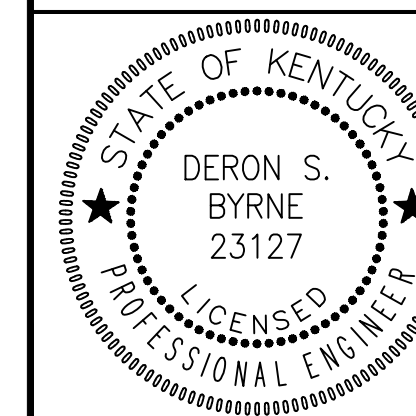
TYPE I CONNECTION DETAIL
N.T.S

CONNECT PROPOSED WATER LINE TO EXISTING WATER LINE WITH X-INCH TAPPING SLEEVE AND VALVE. TAPPING SLEEVE SHALL BE STAINLESS STEEL PER ASTM A 240, TYPE 304.

INSTALL 2, ALL THREAD RODS FROM BLIND FLANGE TO TAPPING TEE

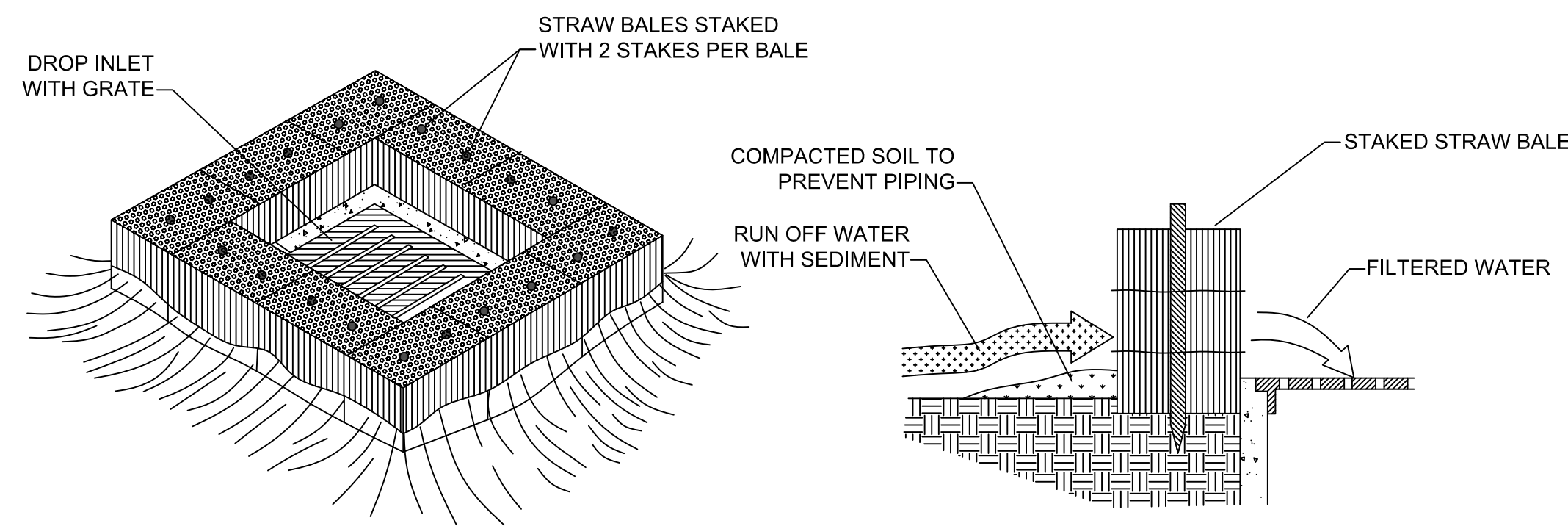
**WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
WAYNE & PULASKI COUNTIES, KENTUCKY**

STANDARD DRAWINGS

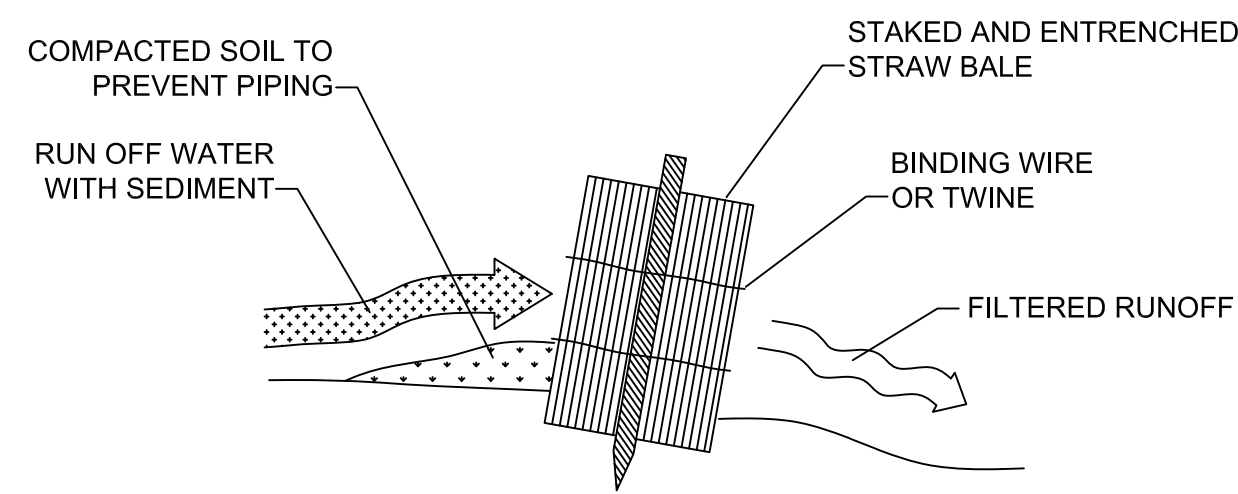


Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

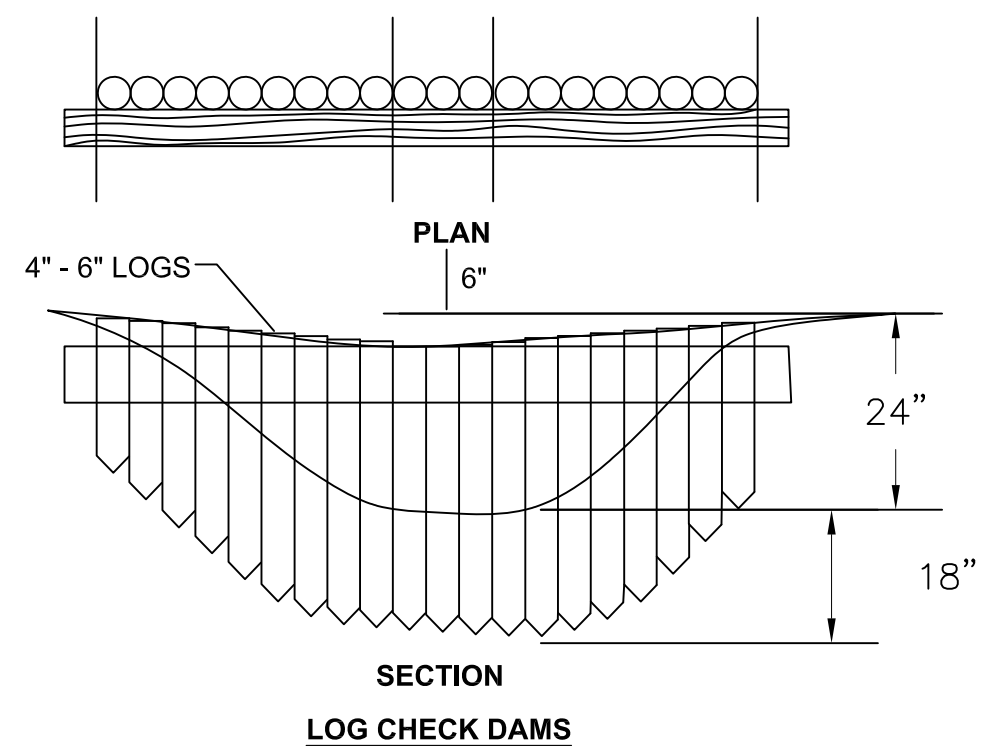
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| DRAWN BY: JRC | DATE: APRIL 2016 | REVISED | SHEET |
| CHECKED BY: DSB | SCALE: AS SHOWN | | SD-2 |
| CHECKED BY: DMB | PROJECT: 1615 | | |



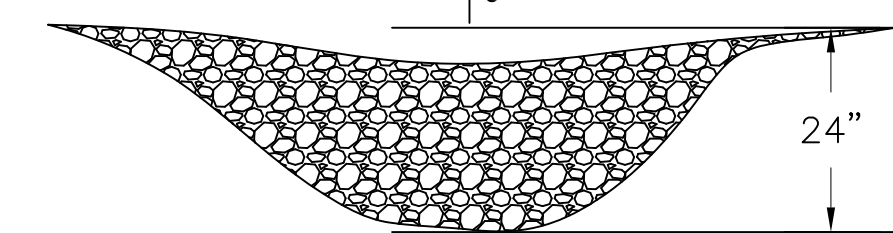
STRAW BALE DROP INLET SEDIMENT FILTER
N.T.S.



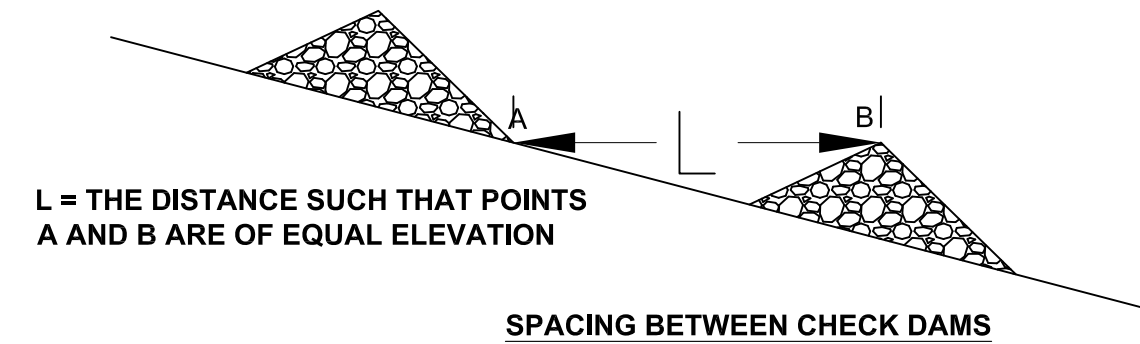
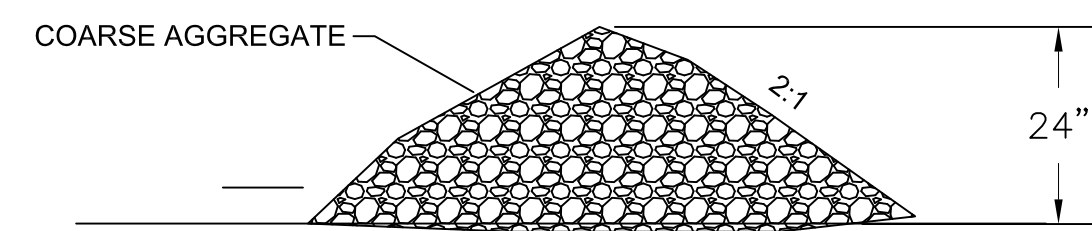
STRAW BALE INSTALLATION PROCEDURES
N.T.S.



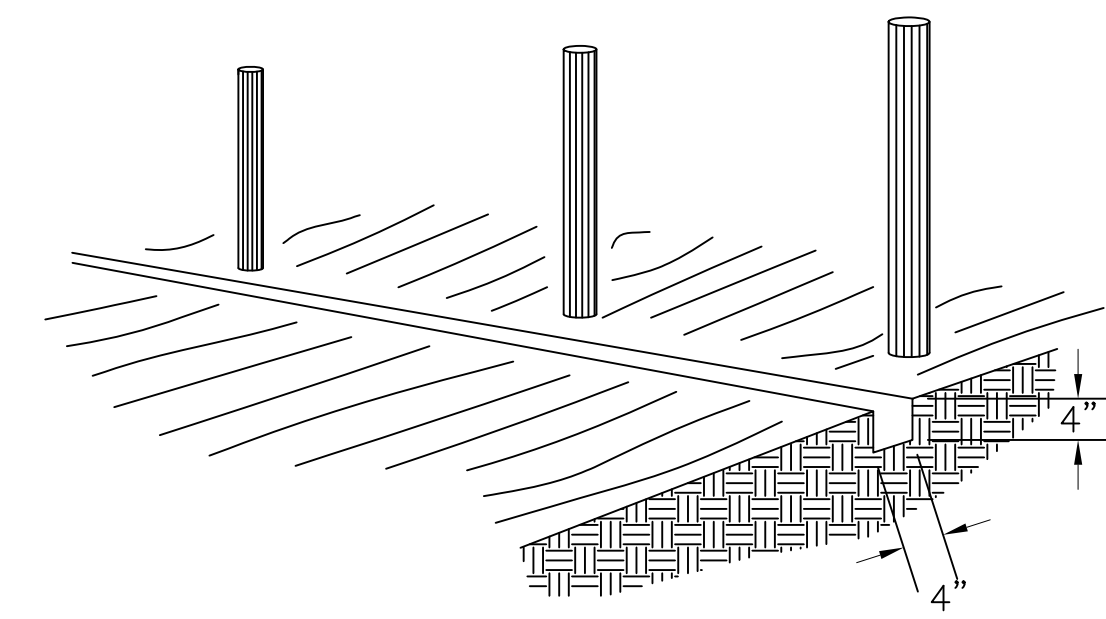
LOG CHECK DAMS



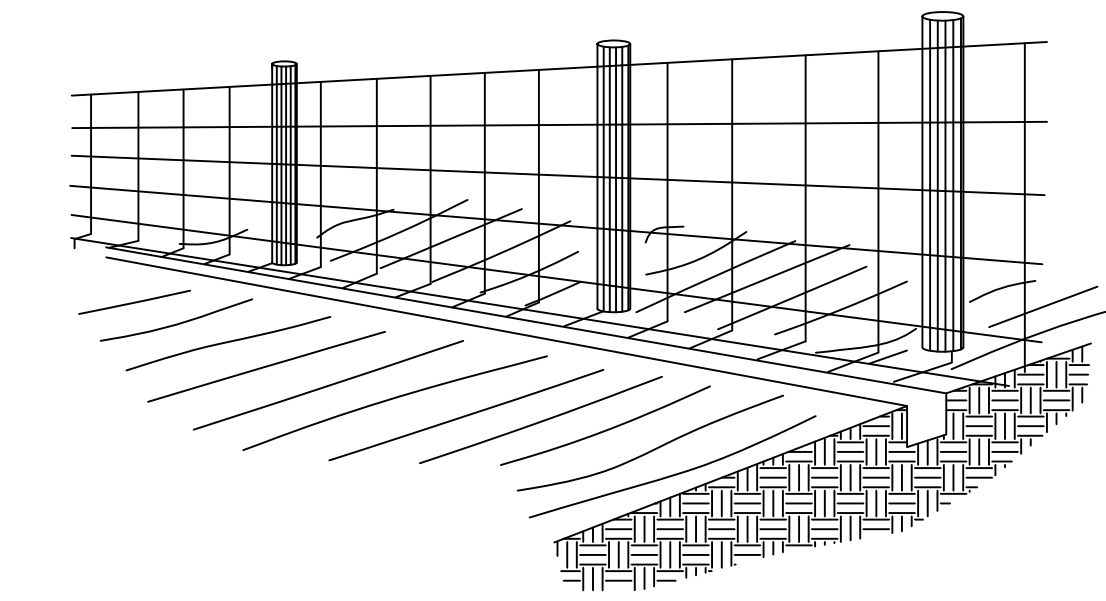
ROCK CHECK DAMS



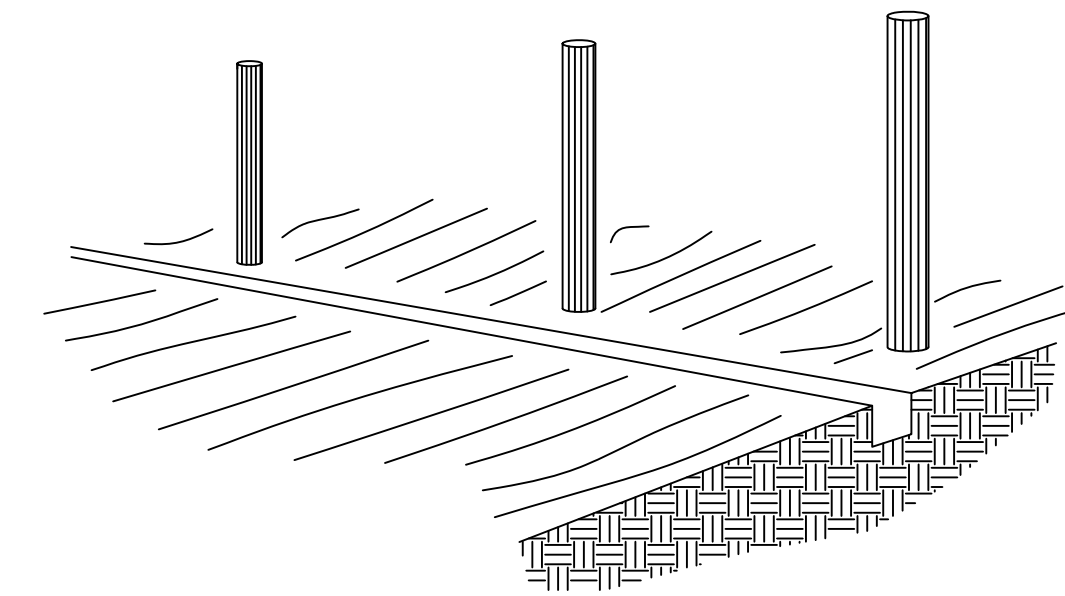
CHECK DAM DETAILS
N.T.S.



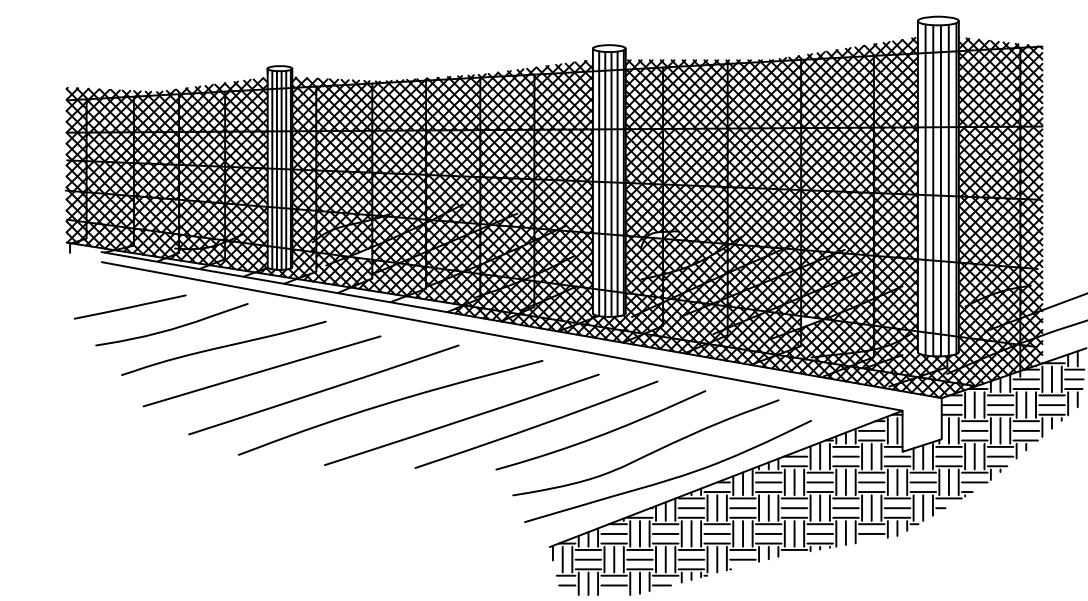
1. SET POSTS AND EXCAVATE A 4" x 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS



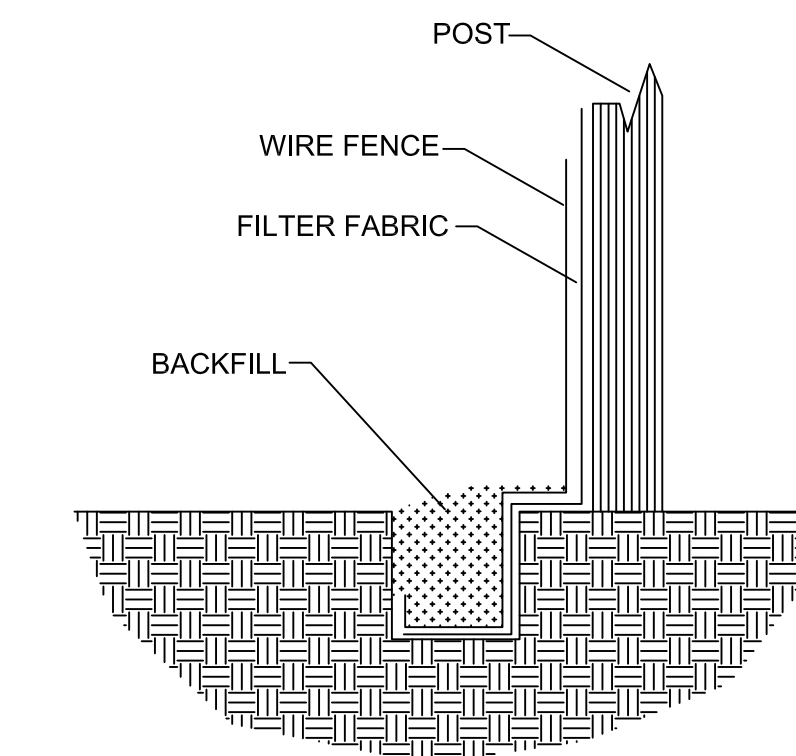
2. STAPLE WIRE FENCING TO POSTS



3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH



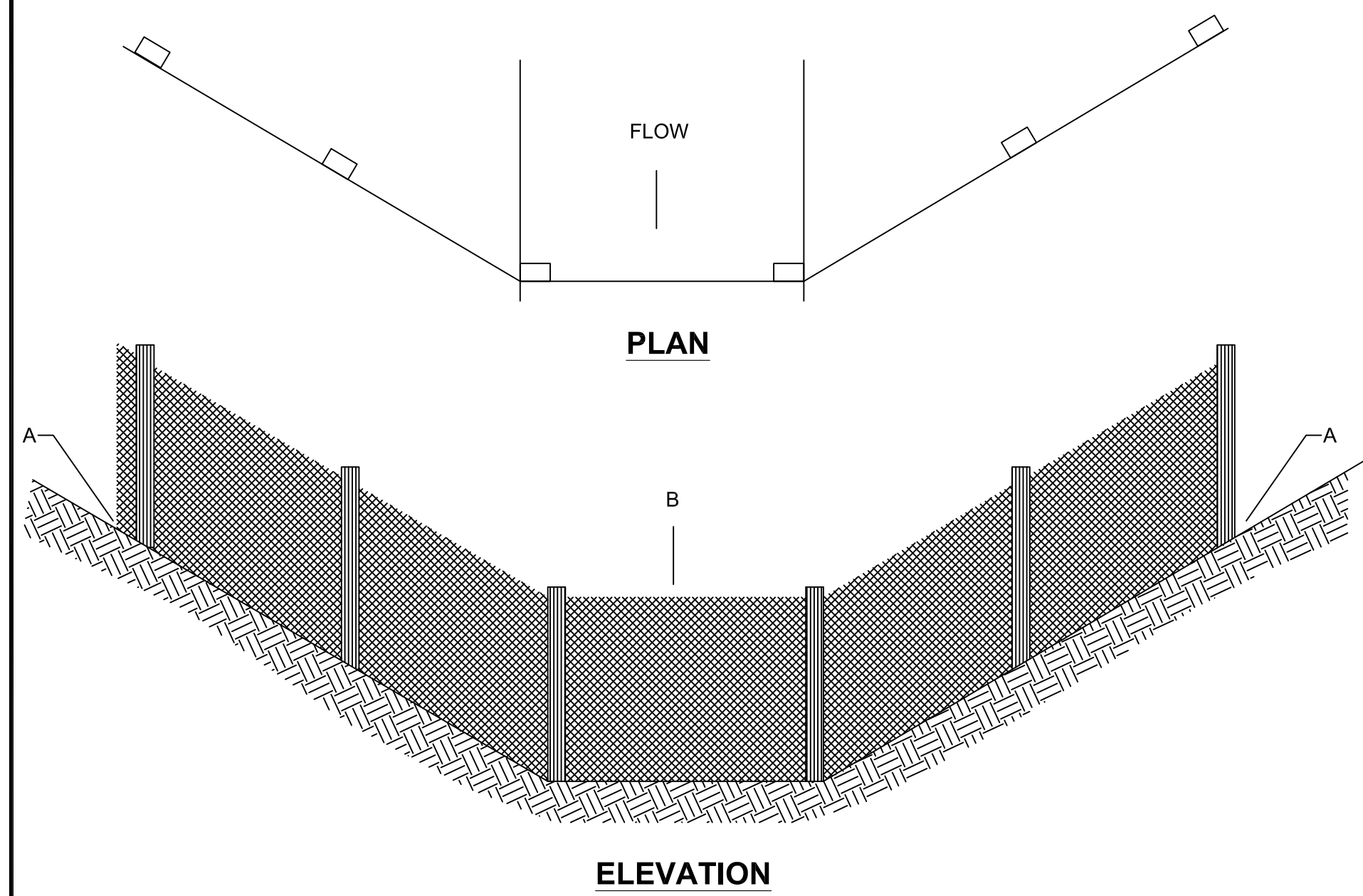
4. BACKFILL AND COMPACT THE EXCAVATED SOIL



EXTENSION OF FABRIC AND WIRE INTO THE TRENCH

SILT FENCE CONSTRUCTION PROCEDURES
N.T.S.

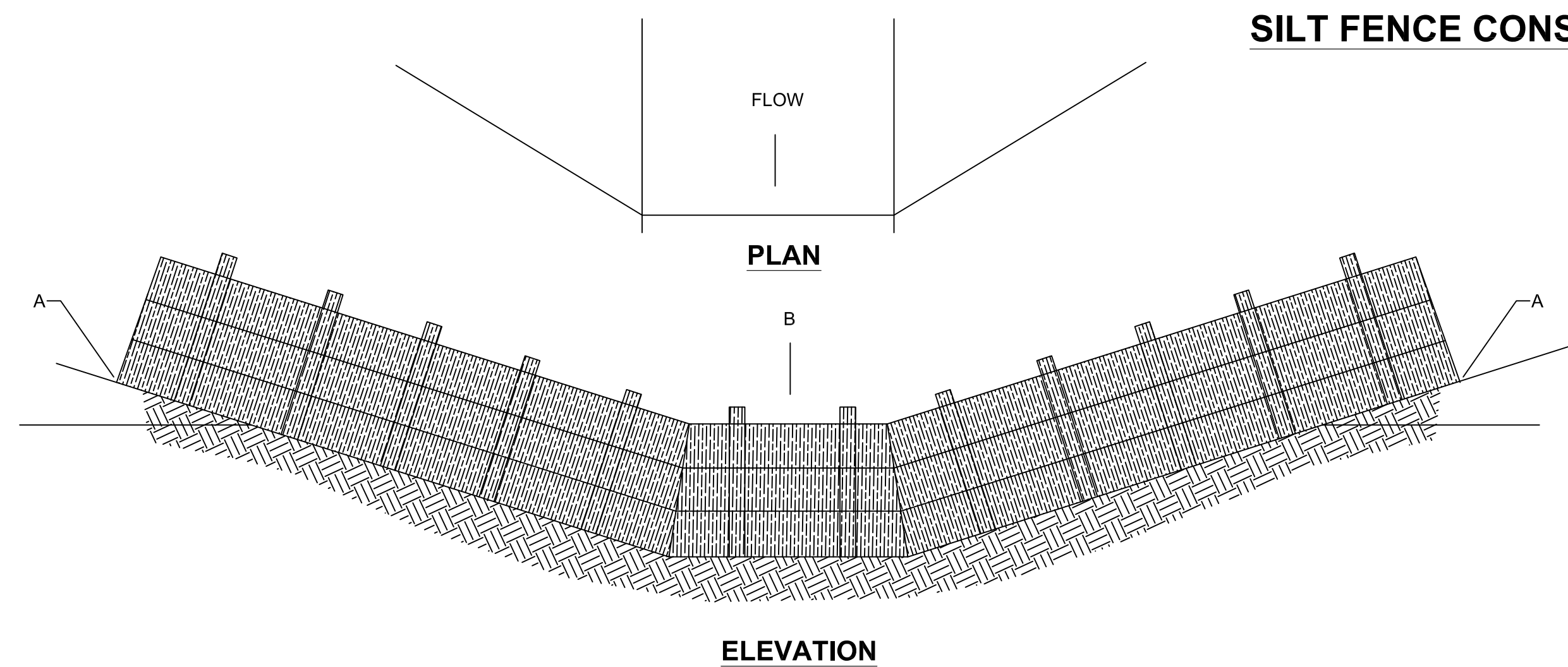
The Contractor shall do all work and take all measures necessary to control soil erosion resulting from construction operations, and shall prevent the flow of sediment from the construction site, and shall contain construction materials (including excavation and backfill) within their protected working area so as to prevent damage to the adjacent wetlands and water courses. The Contractor shall use any of the acceptable methods necessary to control soil erosion and prevent the flow of sediment to the maximum extent possible. These methods shall include, but not be limited to, the use of water diversion structures, diversion ditches, and settling basins.



ELEVATION

POINT A SHOULD BE HIGHER THAN POINT B

PLACEMENT OF FILTER BARRIER
N.T.S.



ELEVATION

POINT A SHOULD BE HIGHER THAN POINT B

PLACEMENT OF STRAW BALE BARRIER
N.T.S.

EROSION CONTROL DETAILS
N.T.S.

| | | | |
|-----------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------|--|
| WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION WAYNE & PULASKI COUNTIES, KENTUCKY | | | |
| EROSION CONTROL DETAILS | | | |
| | | | |
| 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | | DRAWN BY: JRC DATE: APRIL 2016 REVISED: SHEET: EC-1 CHECKED BY: DSB SCALE: AS SHOWN CHECKED BY: DMB PROJECT: 1615 | |

2017 WATER SYSTEM IMPROVEMENTS: BRONSTON WATER ASSOCIATION CONTRACT 2 500,000 GALLON WATER STORAGE TANK REPLACEMENT PULASKI COUNTY, KENTUCKY

TABLE OF CONTENTS

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| GENERAL NOTES | GN-1 |
| SITE PLAN | 1 |
| TANK DETAIL, TOPO MAP | 2 |
| STANDARD DRAWINGS | SD-1 |
| FENCE DETAIL | F-1 |
| EROSION CONTROL | EC-1 |

BRONSTON WATER ASSOCIATION

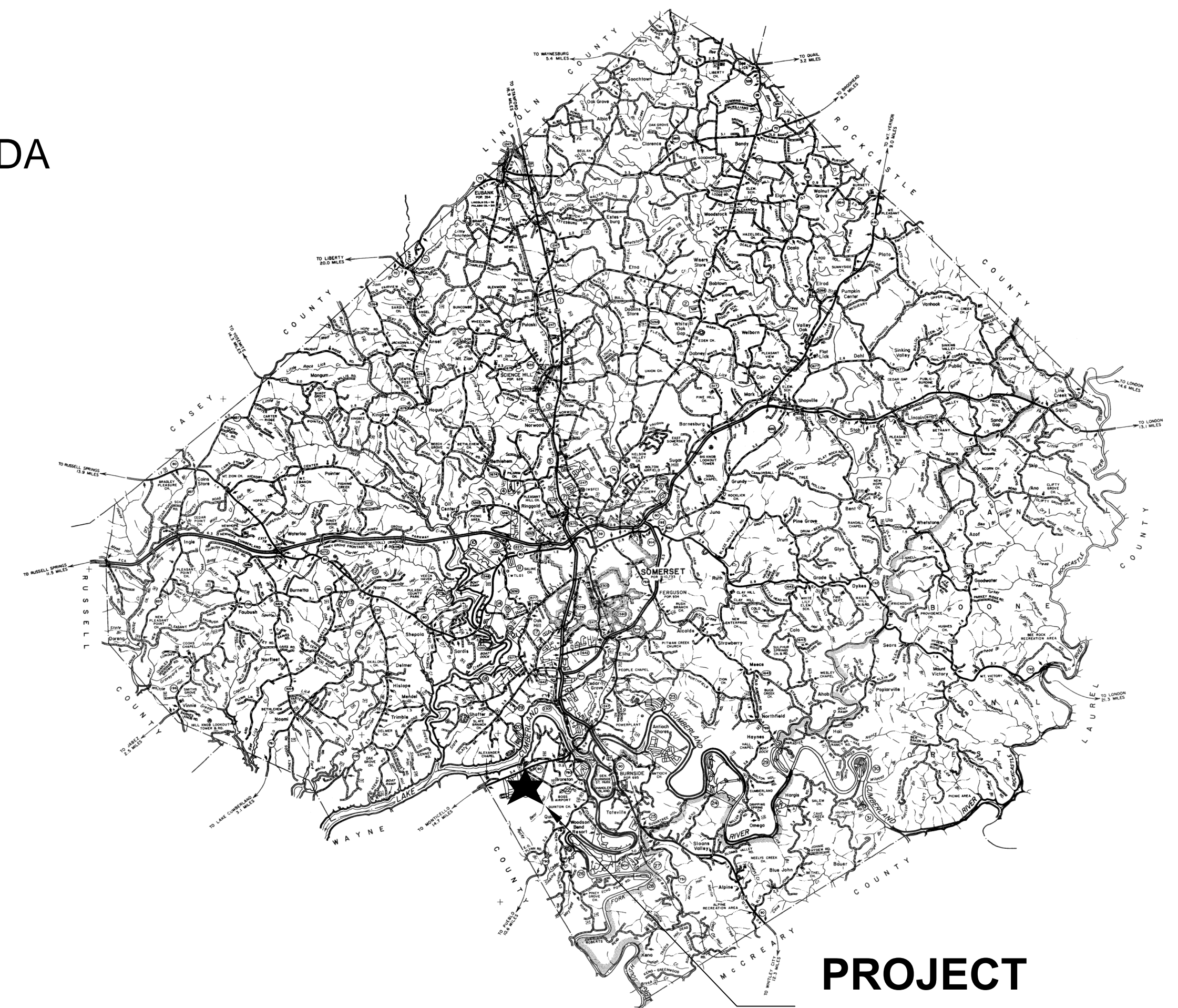
CARTER STEWART, PRESIDENT

| | |
|-------------|-----------------|
| CLINT KEITH | CHARLES CASSADA |
| ERIC KEITH | LELAND KEITH |

OFFICE SECRETARY - VICKIE RAMSEY
GENERAL MANAGER - DAVID SLAGLE
SUPERINTENDENT - J.C. NEW

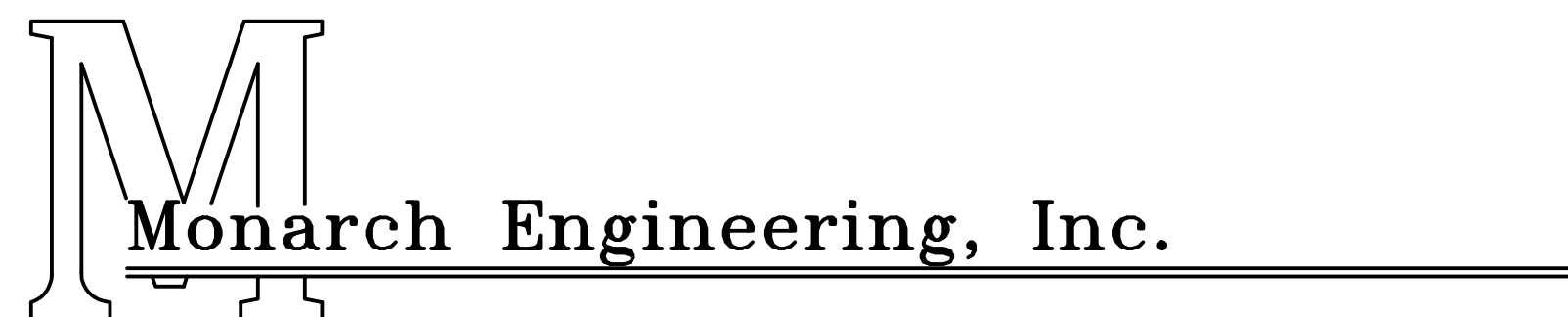
SEPT 2016

LOCATION MAP



**PROJECT
LOCATION**

THIS PROJECT FUNDED BY:
U.S.D.A. RURAL DEVELOPEMENT



556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

RECORD DRAWINGS

LOCATION AND SCOPE OF PROJECT

THE PROJECT LOCATION IS GENERALLY DEFINED AS BRONSTON, PULASKI COUNTY, KENTUCKY. THE WORK TO BE DONE UNDER THIS CONTRACT INCLUDES FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO CONSTRUCT THE 500,000 WATER STORAGE TANK IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS.

GENERAL NOTES

- IT IS THE INTENTION OF THESE PLANS TO CONSTRUCT ALL WORK IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE WESTERN PULASKI COUNTY WATER DISTRICT, PULASKI COUNTY AND THE KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION. WHERE THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS, PLANS, AND SPECIFICATIONS AND THE PERMIT REQUIREMENTS OF THE AGENCY CONTROLLING THE UTILITY OR RESPECTIVE RIGHTS-OF-WAY, THE MORE RESTRICTIVE SHALL GOVERN.
- THE CONTRACTOR AND ANY APPLICABLE SUBCONTRACTORS SHALL ATTEND A PRE-CONSTRUCTION MEETING AT A TIME AND PLACE ARRANGED BY THE ENGINEER, IN WHICH ALL AFFECTED PARTIES WILL BE PRESENT. ALSO, A PRE-DISTURBANCE WALK THROUGH WILL NEED TO BE ATTENDED BY THE CONTRACTOR.
- FOLLOWING THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR INSPECTION COORDINATION. NO WORK CAN COMMENCE UNTIL ALL PERMITS HAVE BEEN OBTAINED AND THE CONTRACTOR HAS BEEN GIVEN THE AUTHORITY TO PROCEED.
- THE CONTRACTOR SHALL NOTIFY KENTUCKY 811 AT LEAST 72 HOURS IN ADVANCE OF CONSTRUCTION, FOR LOCATION AND MARKING OF ALL EXISTING UTILITIES.
- LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING AND VERIFYING THE LOCATION, DEPTH, AND ELEVATION OF THE EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF LOCATIONS AND DEPTHS DIFFER SIGNIFICANTLY FROM THE PLANS.
- ALL ELEVATIONS REFER TO THE CURRENT NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88).
- THE ENGINEER HAS NOT PERFORMED PROPERTY OR RIGHT-OF-WAY SURVEYS FOR ANY OF THE AREAS INCLUDED IN THIS PROJECT. RIGHT-OF-WAY OR PROPERTY LINES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SHOWN FOR GENERAL ORIENTATION ONLY. PROPERTY CORNERS OR OTHER SURVEY MARKERS HAVE NOT BEEN LOCATED, UNLESS SPECIFICALLY CALLED OUT ON THE PLANS.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT THEIR OWN EXPENSE TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION OVER THE IMPACTED PROPERTY OR FACILITY.
- IF, IN THE OPINION OF THE ENGINEER, WORK HAS NOT PROGRESSED IN A REASONABLE AND TIMELY MANNER, THE ENGINEER SHALL HAVE THE RIGHT, WITH THE APPROVAL OF THE OWNER, TO DIRECT THE CONTRACTOR TO PROCEED WITH THE WORK OR ANY PORTION THEREOF IMMEDIATELY. IN THE EVENT THAT THE CONTRACTOR DOES NOT PROCEED WITH THE WORK IMMEDIATELY, AS DIRECTED BY THE ENGINEER, THE ENGINEER, UNDER THE DIRECTION OF THE OWNER, MAY ORDER ANY OR ALL OTHER OPERATIONS OF THE CONTRACTOR, UNDER THIS CONTRACT, TO CEASE UNTIL THE REQUESTED WORK IS PROCEEDING IN AN ACCEPTABLE MANNER. SHOULD THE CONTRACTOR FAIL TO COMPLY WITH THESE PROVISIONS, THE OWNER MAY, WITH OR WITHOUT NOTICE, CAUSE THE REQUIRED WORK TO BE DONE BY THE OWNER OR OTHERS AND WILL DEDUCT THE COST OF SAID WORK FROM ANY FUNDS DUE OR TO BECOME DUE TO THE CONTRACTOR UNDER THIS CONTRACT. THE PERFORMANCE OF SUCH WORK BY THE OWNER OR OTHERS SHALL SERVE IN NO WAY TO RELEASE THE CONTRACTOR FROM HIS GENERAL OF PARTICULAR LIABILITY FOR THE SAFETY OF THE PUBLIC OR COMPLETION OF THE WORK.
- ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. ANY SOIL TRACKED ONTO A PUBLIC ROADWAY SHALL BE REMOVED DAILY.
- ALL WORK SHALL BE INCORPORATED IN TO THOSE UNIT PRICES LISTED IN THE CONTRACT DOCUMENTS. ANY ITEMS NOT SPECIFICALLY LISTED IN THE UNIT PRICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT BE ELIGIBLE FOR SEPARATE PAYMENT OR COMPENSATION.

EROSION AND SEDIMENTATION CONTROL NOTES

- THE CONTRACTOR SHALL COMPLY WITH ALL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS OF THE BOTH THE STATE OF KENTUCKY AND THE U.S. ARMY CORPS OF ENGINEERS FOR ALL DISTURBED AREAS INCLUDED IN THE PROJECT.
- THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN A MANNER THAT WILL REDUCE ACCELERATED EROSION TO THE PRACTICAL MINIMUM AND PREVENT DAMAGING SILTATION TO EXISTING SEWERS AND WATER COURSES LEADING FROM THE PROJECT AREA.
- THE CONTRACTOR SHALL CONDUCT WORK IN SUCH A MANNER AS TO PREVENT THE ENTRY OF FUELS, OILS, BITUMINOUS MATERIALS, CHEMICALS, SEWERAGE, OR OTHER HARMFUL MATERIALS INTO NEARBY LAKES AND STREAMS.
- WASTE DISPOSAL AREAS SHALL BE SELECTED BY THE CONTRACTOR WITH FULL CONSIDERATION OF EROSION AND SEDIMENT CONTROL, SELECTION OF DISPOSAL SITE(S), AND CONTROL OF OPERATIONS, AND THE RESTORATION OF SAID AREAS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- EXCAVATIONS FROM THE PROJECT AREA INCLUDING THOSE IN CHANNELS AND WATERCOURSES SHALL NOT BE DEPOSITED IN OR NEAR RIVERS, STREAMS, OR PONDS WHERE IT MAY ENTER THE WATERWAY.
- AT THE COMPLETION OF EACH DAYS CONSTRUCTION, CARE SHOULD BE TAKEN TO ENSURE THAT MINIMAL EROSION WILL OCCUR IN TRENCHES AND TO STOCKPILED MATERIALS UNTIL RESUMPTION OF WORK.
- THE CONTRACTOR SHALL CONFINE CONSTRUCTION OPERATIONS TO THE MINIMUM AMOUNT OF WORKING SPACE PRACTICAL TO AID IN THE MINIMIZATION OF SOIL EROSION.
- THE PROJECT WILL BE CONTINUALLY OBSERVED BY VARIOUS STATE & LOCAL REGULATORY AGENCIES FOR EROSION CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE CONTRACTOR IMMEDIATELY UPON NOTICE OF SUCH DEFICIENCIES. FAILURE TO CORRECT THE DEFICIENCIES MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER AND THERE WILL BE NO CONTRACT TIME EXTENSION GRANTED FOR THIS TYPE OF STOPPAGE.
- TEMPORARY SOIL EROSION CONTROL MEASURES CONSISTING OF SILT FENCE, MULCHING, AND TARPING SHALL BE IMPLEMENTED THROUGHOUT THE ENTIRE CONSTRUCTION AREA OF THE PROJECT, AND SHALL BE REMOVED BY THE CONTRACTOR AFTER THE PERMANENT SOIL EROSION MEASURES HAVE BEEN ESTABLISHED.
- PERMANENT SOIL EROSION MEASURES CONSISTING OF AN APPROVED SEED MIXTURE AND MULCH BLANKET SHALL BE COMPLETED WITHIN FIVE (5) CALENDAR DAYS OF FINAL GRADING. IN THE EVENT IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE THE AREA DUE TO SITE CONDITIONS OR SEASONAL LIMITATIONS, THE TEMPORARY MEASURES SHALL REMAIN IN FORCE AND SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME IT IS PRACTICAL TO COMPLETE THE PERMANENT SOIL EROSION CONTROL MEASURES.
- THE ENGINEER SHALL HAVE FULL AUTHORITY TO TEMPORARILY SUSPEND WORK IN THE EVENT THAT ANY OF THE ABOVE REQUIREMENTS ARE NOT BEING MET BY THE CONTRACTOR, OR IF CONDITIONS INDICATE THAT ADDITIONAL TEMPORARY MEASURES ARE WARRANTED, IN THE OPINION OF THE ENGINEER OR REGULATORY AGENCIES.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL INLET FILTERS AT ALL STORM SEWER INLETS WHICH MAY BE PRESENT IN THE CONSTRUCTION AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ANY REQUIRED ACCESS ROAD SURFACES AND SOIL EROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA UNTIL THE FULL COMPLETION OF THE PROJECT.
- ALL NON-PAVED DISTURBED AREAS SHALL BE RESTORED AS INDICATED ON THE PLANS. IF NOT SPECIFICALLY STATED ON THE PLANS, RESTORATION SHALL CONSIST OF 4-INCHES OF TOPSOIL, FERTILIZER, SEED AND MULCH. UNLESS OTHERWISE STATED, ALL DISTURBED AREAS SHALL BE SEEDED WITH A SEED MIX APPROVED BY THE ENGINEER.

WORK LIMITS

IF INDICATED ON THE PLANS, THE CONTRACTOR SHALL KEEP ALL OPERATIONS WITHIN THE WORK LIMITS SHOWN. OTHERWISE, THE CONTRACTOR SHALL ESTABLISH CONSTRUCTION LIMITS WITHIN THE EXISTING AND/OR PROPOSED RIGHTS-OF-WAY AND EASEMENTS AS DIRECTED BY THE ENGINEER. THIS REQUIREMENT SHALL INCLUDE MATERIAL STOCKPILING AND EQUIPMENT STORAGE. THE CONTRACTOR MAY NOT EXIT THE ESTABLISHED PROJECT WORK LIMITS WITHOUT EXPLICIT PERMISSION FROM THE OWNER AND THE ENGINEER.

UTILITIES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH KENTUCKY LAW, THE CONTRACTOR SHALL SHALL DIAL KENTUCKY 811 A MINIMUM OF THREE (3) FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING WORK IN EACH CONSTRUCTION AREA WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE 'KY 811' ALERT SYSTEM. UTILITY LOCATIONS SHOWN ON THE PLANS ARE ONLY APPROXIMATE AND SHOULD BE LOCATED IN THE FIELD PRIOR TO ANY EXCAVATION.

WORK WITHIN STREAMS, CREEKS & WATERWAYS

ANY AND ALL WORK TO BE COMPLETED WITHIN STREAMS, CREEKS & WATERWAYS SHALL BE COMPLETED ONLY DURING TIMES OF LOW FLOW AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL STRICTLY LIMIT THE USE OF HEAVY EQUIPMENT WITHIN THE WATERCOURSE AT ALL TIMES. STREAM FLOW SHALL NOT BE RESTRICTED OR IMPEDED AT ANY TIME DURING THE COURSE OF CONSTRUCTION.

DISRUPTION OF SERVICE

THE CONTRACTOR SHALL COORDINATE ALL DISRUPTIONS OF SERVICE WITH THE OWNER AND ENGINEER. PRIOR TO ANY DISRUPTION, THE CONTRACTOR SHALL INFORM BOTH PARTIES OF HIS INTENTIONS, METHODS AND PROJECTED DURATION OF DISTURBANCE AND RECEIVE THEIR APPROVAL PRIOR TO INITIATING THE SPECIFIC WORK.

WORK WITHIN PUBLIC ROAD RIGHT-OF-WAYS

WHEN PERFORMING WORK ALONG OR ACROSS ANY PUBLIC ROADWAY, THE CONTRACTOR SHALL POST WARNING SIGNS PAINTED ORANGE AND THEY SHALL BE FOUR FEET BY FOUR FEET MOUNTED ON POSTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE SIGNS SHALL BE AS FOLLOWS:

- CAUTION PIPELINE CONSTRUCTION 1500 FEET
- CAUTION PIPELINE CONSTRUCTION 1000 FEET
- CAUTION PIPELINE CONSTRUCTION 500 FEET

ALL SIGNS, BARRICADES, LIGHTS, AND TRAFFIC CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

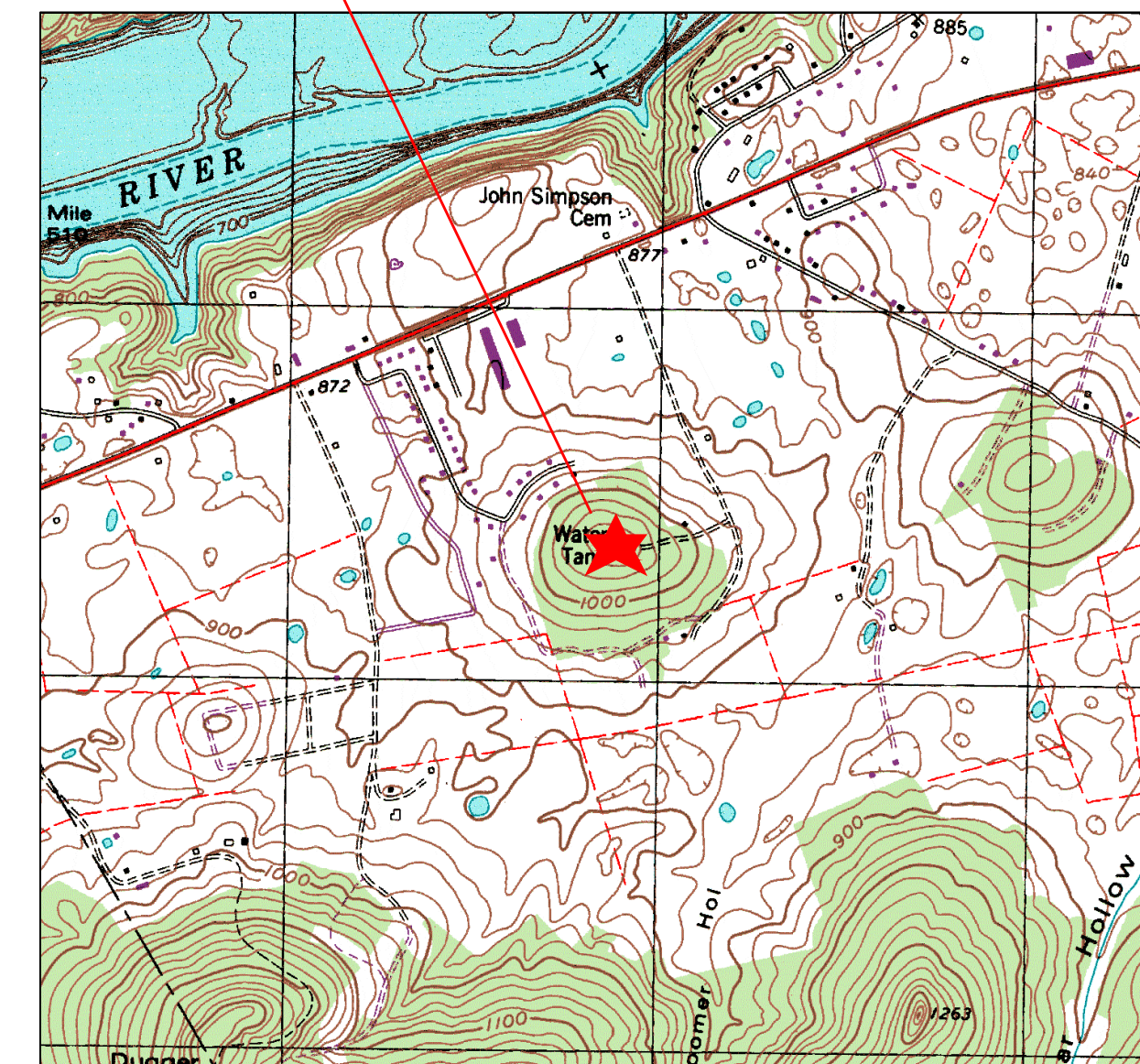
THE CONTRACTOR SHALL MAINTAIN TWO FLAG MEN AT ALL TIMES WHERE MACHINERY IS IN OPERATION WHERE THE FLOW OF TRAFFIC WILL BE DISTURBED. THERE IS NO EXCEPTION TO THIS REQUIREMENT. THE USE OF RADIOS WILL BE REQUIRED WHEN VISUAL CONTACT BETWEEN THE FLAGMEN DOES NOT EXIST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ENTIRE ROADWAY FREE AND CLEAR AT THE END OF EACH WORKING DAY. NO EQUIPMENT SHALL BE LEFT ON OR PARKED ALONG THE ROAD RIGHT OF WAY. AT THE COMPLETION OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES AND INSTALL ALL TRAFFIC CONTROL SIGNS, BARRICADES, AND LIGHTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PROJECT LOCATION MAPS

TANK SITE
 LAT: 36°58'25" N
 LONG: 84°39'10" W

TANK SITE



Monarch Engineering, Inc.

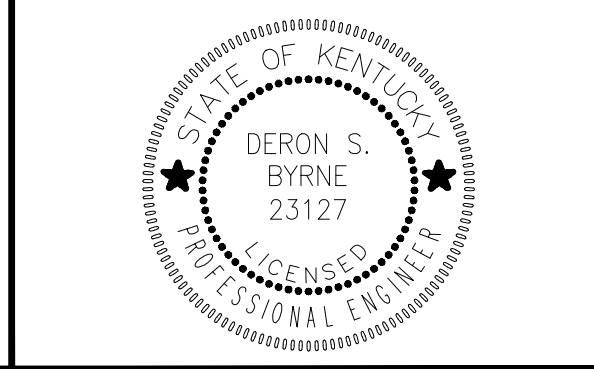
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DESCRIPTION:
 GENERAL NOTES - CONTRACT 2
 500K WATER STORAGE TANK REPLACEMENT

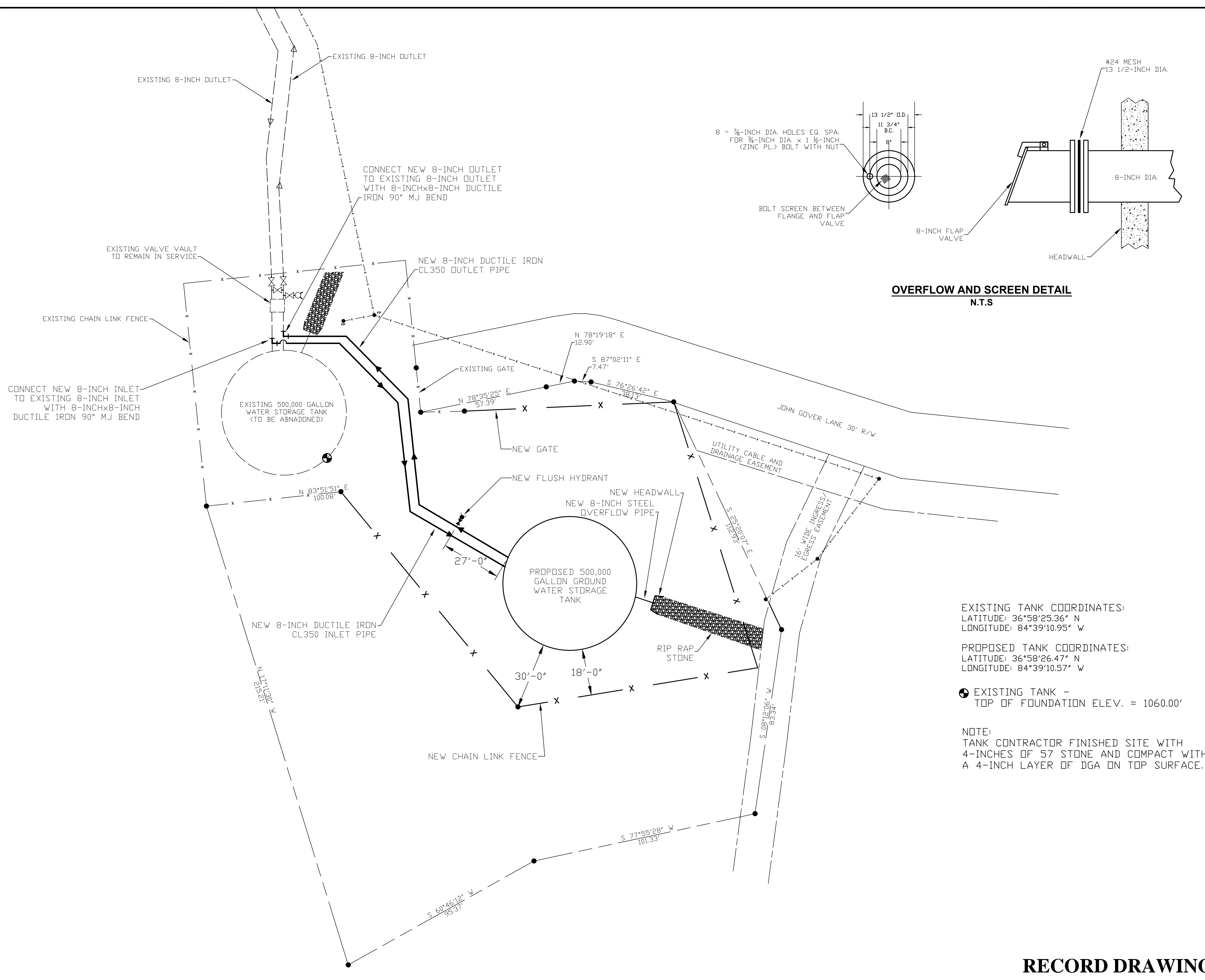
CUSTOMER:
 WESTERN PULASKI COUNTY WATER DISTRICT
 PULASKI COUNTY, KENTUCKY

PROJECT NO. 1534
 DATE: MARCH 2016
 DRAWN BY: JRC
 CHECKED BY: DSB
 CHECKED BY: DMB
 SCALE: AS NOTED

SHEET:
 GN-1



RECORD DRAWINGS



OVERFLOW AND SCREEN DETAIL
N.T.S

EXISTING TANK COORDINATES:
 LATITUDE: 36°58'25.36" N
 LONGITUDE: 84°39'10.95" W

PROPOSED TANK COORDINATES:
 LATITUDE: 36°58'26.47" N
 LONGITUDE: 84°39'10.57" W

⊕ EXISTING TANK -
 TOP OF FOUNDATION ELEV. = 1060.00'

NOTE:
 TANK CONTRACTOR FINISHED SITE WITH
 4-INCHES OF 57 STONE AND COMPACT WITH
 A 4-INCH LAYER OF DGA ON TOP SURFACE.

Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

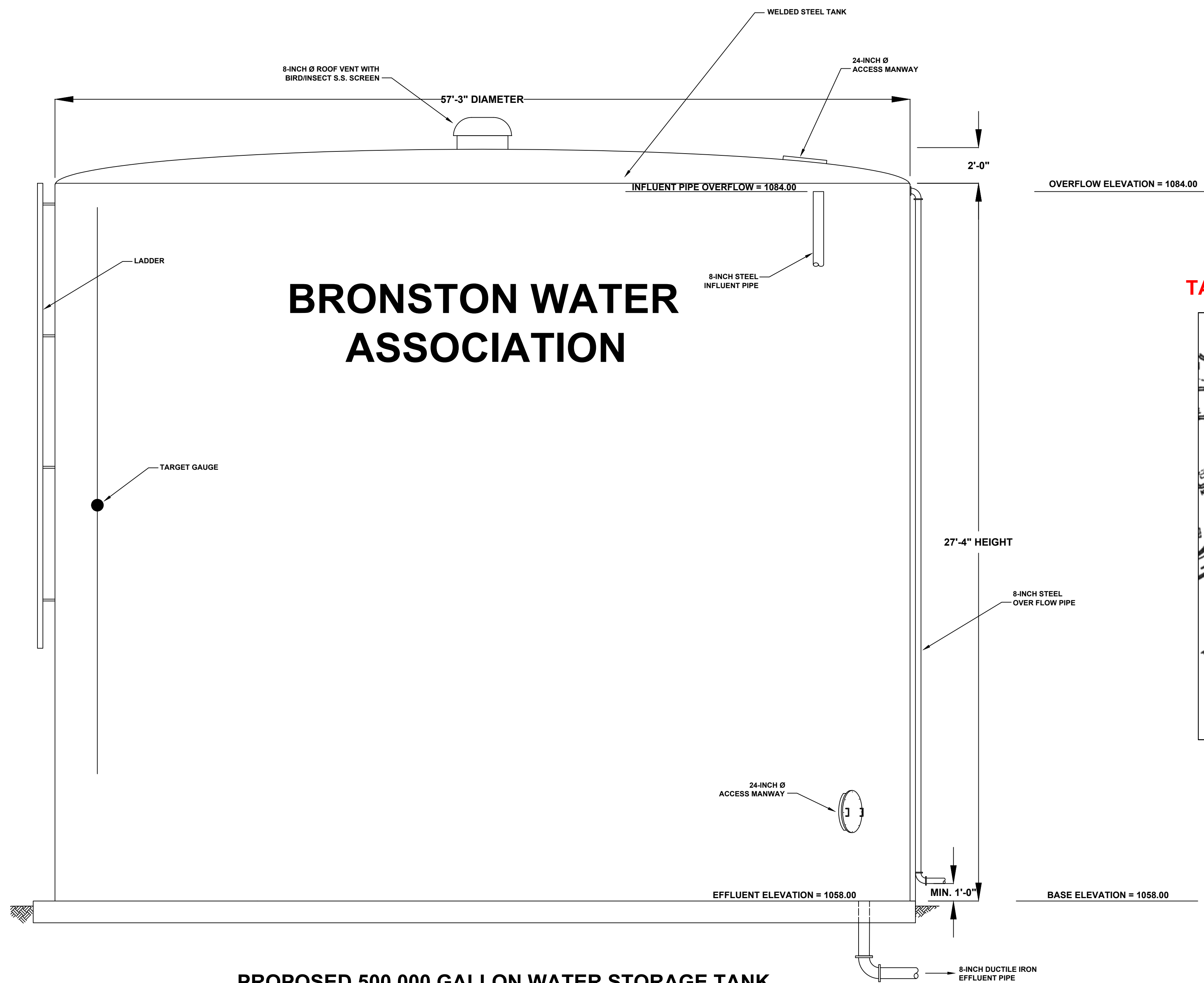
DESCRIPTION:
**CONTRACT 2 - 500,000 GALLON
 WATER STORAGE TANK REPLACEMENT**

CUSTOMER:
**BRONSTON WATER ASSOCIATION
 PULASKI COUNTY, KENTUCKY**

PROJECT NO. 1615
 DATE: SEPT 2016
 DRAWN BY: JRC
 CHECKED BY: DSB
 CHECKED BY: DMB
 SCALE: 1"=20'
 SHEET:
 1



RECORD DRAWINGS



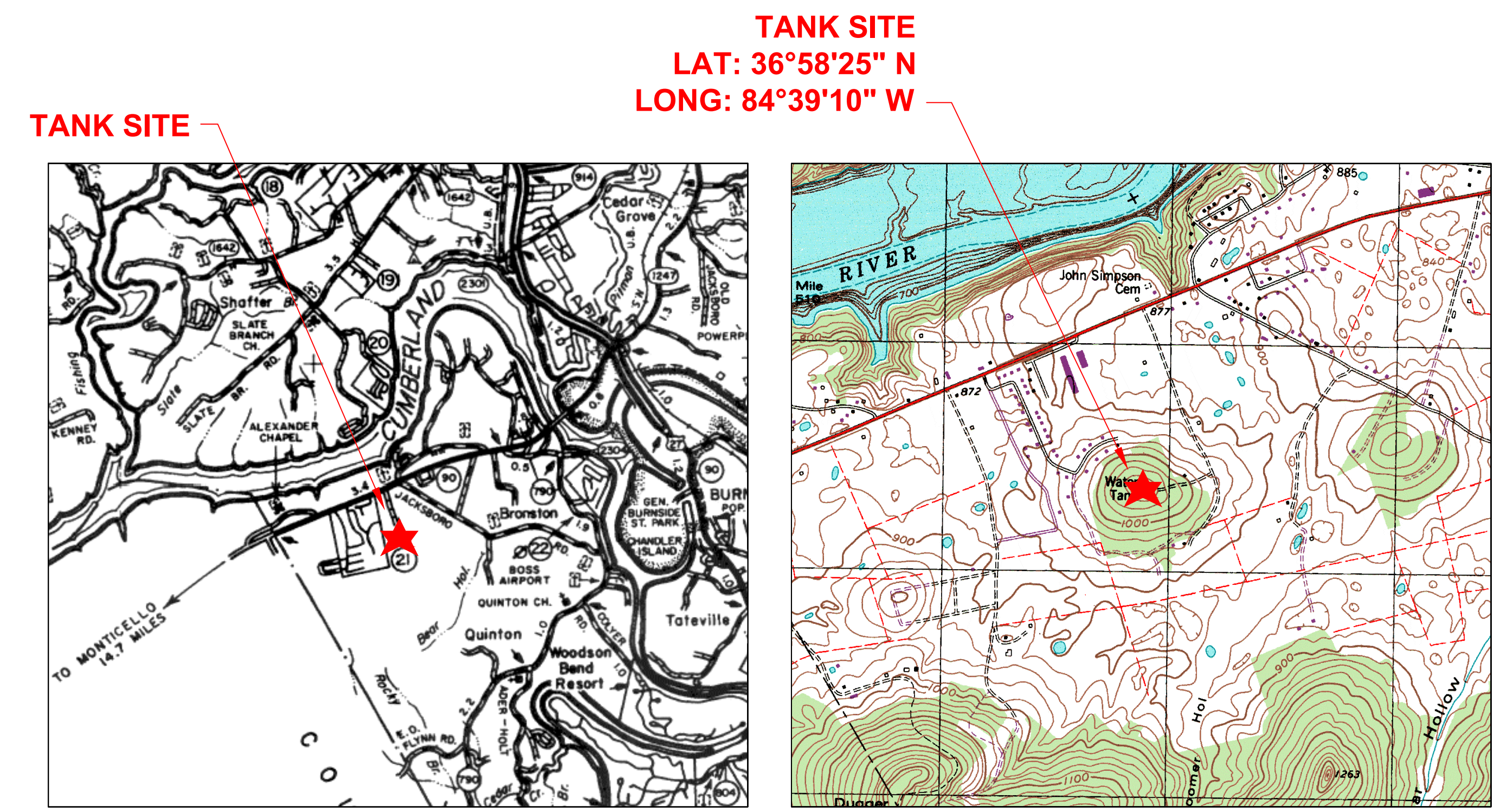
PROPOSED 500,000 GALLON WATER STORAGE TANK
SCALE: N.T.S.

TANK NOTES:

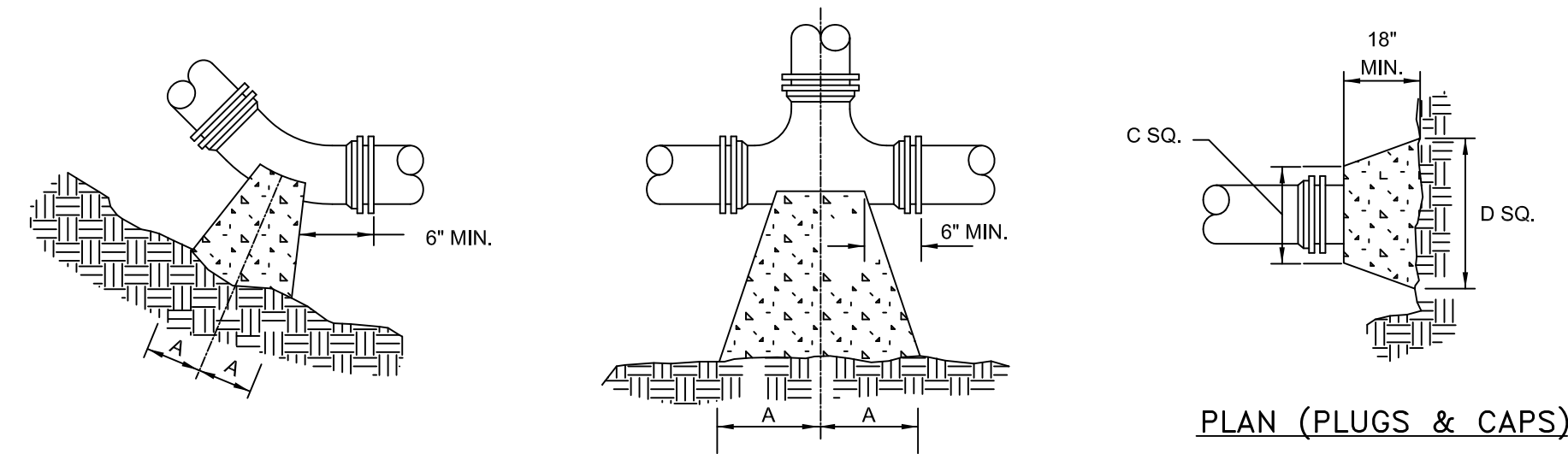
1. THE TANK FOUNDATION SHALL BE DESIGNED IN ACCORDANCE WITH AWWA STANDARD FOR WELDED STEEL TANKS AND/OR BOLTED STEEL TANKS FOR WATER STORAGE; (AWWA D100-84), (AWWA D103-09), (AWS D5.2-84). THE TANK FOUNDATION SHALL BE DESIGNED FOR A 100 MILE PER HOUR WIND AND A ZONE 1 EARTHQUAKE.
2. PLATE MATERIAL FOR TANK SHELL, TANK BOTTOM AND TANK ROOF SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
4. REINFORCING STEEL SHALL BE ASTM A615, A616 OR A617, GRADE 60.
5. REINFORCING STEEL FOR CONCRETE CAST AGAINST EARTH SHALL HAVE A MINIMUM COVER OF 3 INCHES. ALL OTHER REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2 INCHES.
6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AWWA STANDARD FOR WELDED STEEL TANKS AND/OR BOLTED STEEL TANKS FOR WATER STORAGE (AWWA D100-84), (AWWA D103-09).
7. ANCHOR BOLTS SHALL BE THREADED RODS CONFORMING TO THE REQUIREMENTS OF ASTM A36.

NOTES:

1. THE INLET/OUTLET PIPE SERVING THE TANK SHALL BE 8-INCH DUCTILE IRON, PRESSURE CLASS 350.
2. THE 8-INCH INLET SHALL EXTEND TO THE TOP OF THE TANK (ELEVATION 1084.00'). THE TANK EFFLUENT SHALL BE AT THE BASE OF THE TANK (ELEVATION 1058.00').
3. OVERFLOW PIPE SHALL EXTEND A MINIMUM OF TEN FEET FROM THE TANK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOUNDATION DESIGN.
5. TANK APPURTENANCES TO BE FIELD LOCATED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. TANK CONTRACTOR SHALL GRADE SITE TO ENSURE RUNOFF IS AWAY FROM FOUNDATION.
7. TANK CONTRACTOR SHALL FINISH TANK SITE WITH 4-INCHES OF 57 STONE AND COMPACT WITH A 4-INCH LAYER OF DGA ON TOP OF SURFACE.



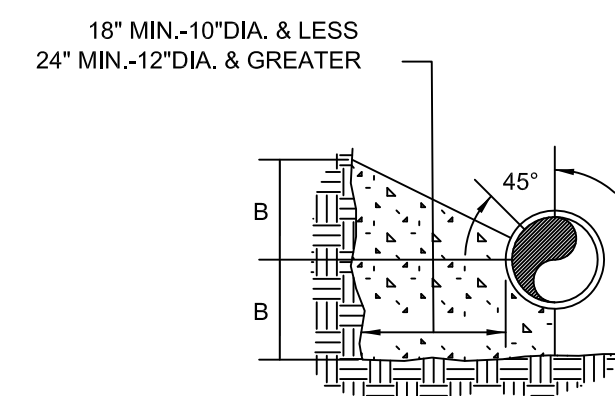
| | |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342 | |
| DESCRIPTION: CONTRACT 2 - 500,000 GALLON WATER STORAGE TANK REPLACEMENT | CUSTOMER: BRONSTON WATER ASSOCIATION PULASKI COUNTY, KENTUCKY |
| PROJECT NO. 1615 | |
| DATE: SEPT 2016 | |
| DRAWN BY: JRC | |
| CHECKED BY: DSB | |
| CHECKED BY: DMB | |
| SCALE: AS NOTED | |
| SHEET: <div style="text-align: center; font-size: 2em;">2</div> | |
| | |



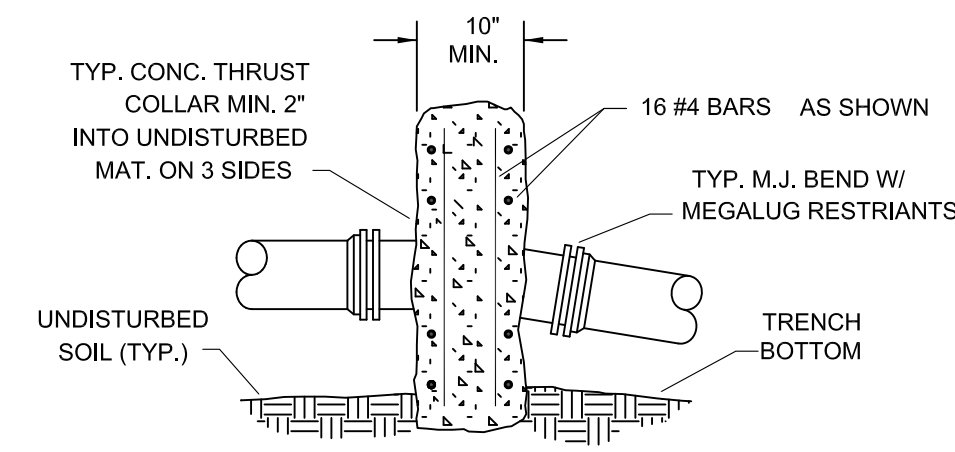
PLAN (HORIZONTAL BENDS)

PLAN (TEES)

PLAN (PLUGS & CAPS)



SECTION (HORIZONTAL BENDS & TEES)



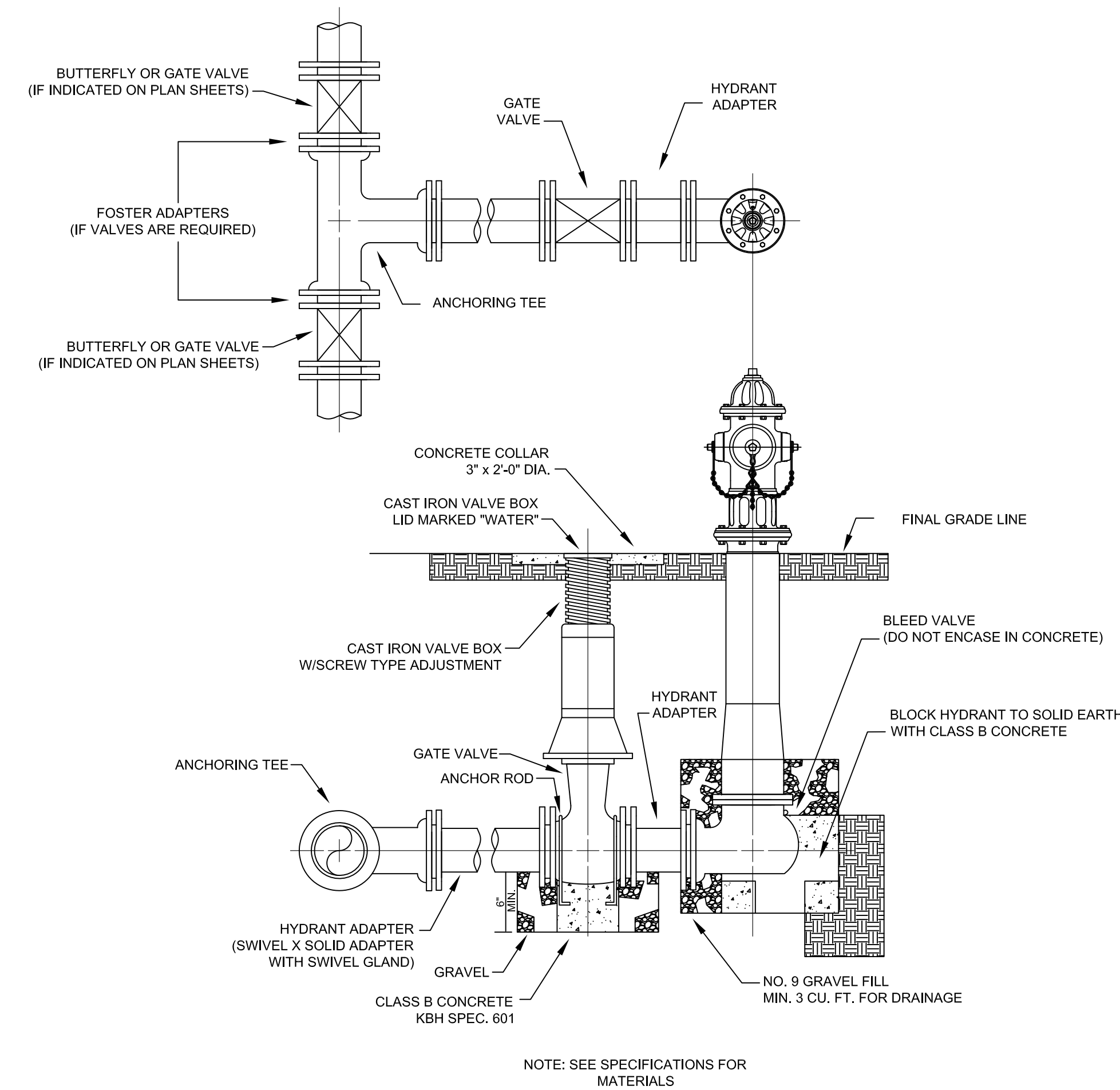
SECTION (VERTICAL BENDS)

NOTES:

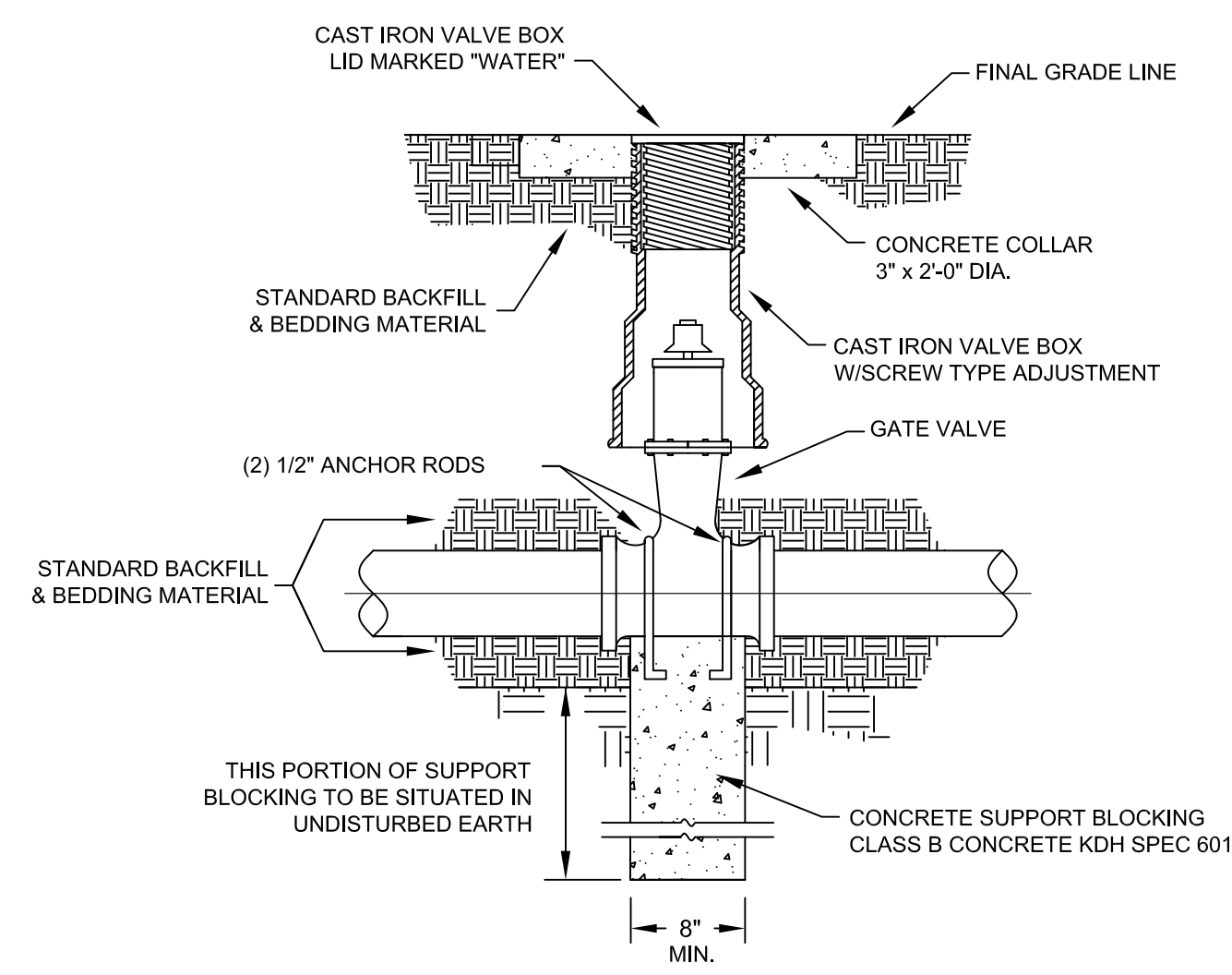
- FOR VERT. BEND DOWN IN EXCESS OF 11 1/4" BEND, ANCHORAGE SHALL BE DESIGNED BY ENGINEER.
- FOR VERT. BEND UPWARD, BLOCKING TO BE SIMILAR TO THAT FOR HORIZ. BEND.
- GLANDS & BOLTS SHALL REMAIN ACCESSIBLE AND MUST BE PROTECTED FROM CONCRETE BY PLASTIC SHEETING OR OTHERWISE.
- ALL THRUST BLOCK & SUPPORT CONCRETE SHALL BE 3000 PSI READY MIX
- THRUST BLOCKS WITH "B" DIMENSION GREATER THAN 30" SHALL HAVE THE RESTRAINED PIPE INSTALLED WITH A MINIMUM OF 4" OF COVER.
- DESIGN CRITERIA:
LINE PRESSURE = 200 psi
SOIL BEARING CAPACITY = 2000 psf
FACTOR OF SAFETY = 1.5

| PIPE SIZE | 90° BEND | | 45° BEND | | 22 1/2° BEND | | 11 1/4° BEND | | TEE | | PLUG | |
|-----------|----------|-----|----------|-----|--------------|-----|--------------|-----|------|-----|------|-----|
| | A | B | A | B | A | B | A | B | A | B | C | D |
| 4" | 8" | 12" | 8" | 8" | 6" | 6" | 6" | 6" | 11" | 9" | 10" | 6" |
| 6" | 18" | 12" | 8" | 10" | 8" | 8" | 8" | 8" | 11" | 10" | 12" | 18" |
| 8" | 18" | 13" | 10" | 10" | 8" | 8" | 8" | 8" | 11" | 12" | 12" | 24" |
| 10" | 20" | 16" | 12" | 14" | 8" | 12" | 8" | 12" | 14" | 16" | 16" | 30" |
| 12" | 20" | 16" | 12" | 14" | 8" | 12" | 8" | 12" | 14" | 16" | 16" | 30" |
| 16" | 26" | 20" | 16" | 18" | 11" | 13" | 11" | 13" | 18" | 20" | 20" | 36" |
| 24" | 82" | 42" | 62" | 30" | 44" | 22" | 22" | 16" | 82" | 42" | 82" | 42" |
| 30" | 185" | 42" | 100" | 42" | 52" | 42" | 40" | 30" | 185" | 42" | 185" | 42" |

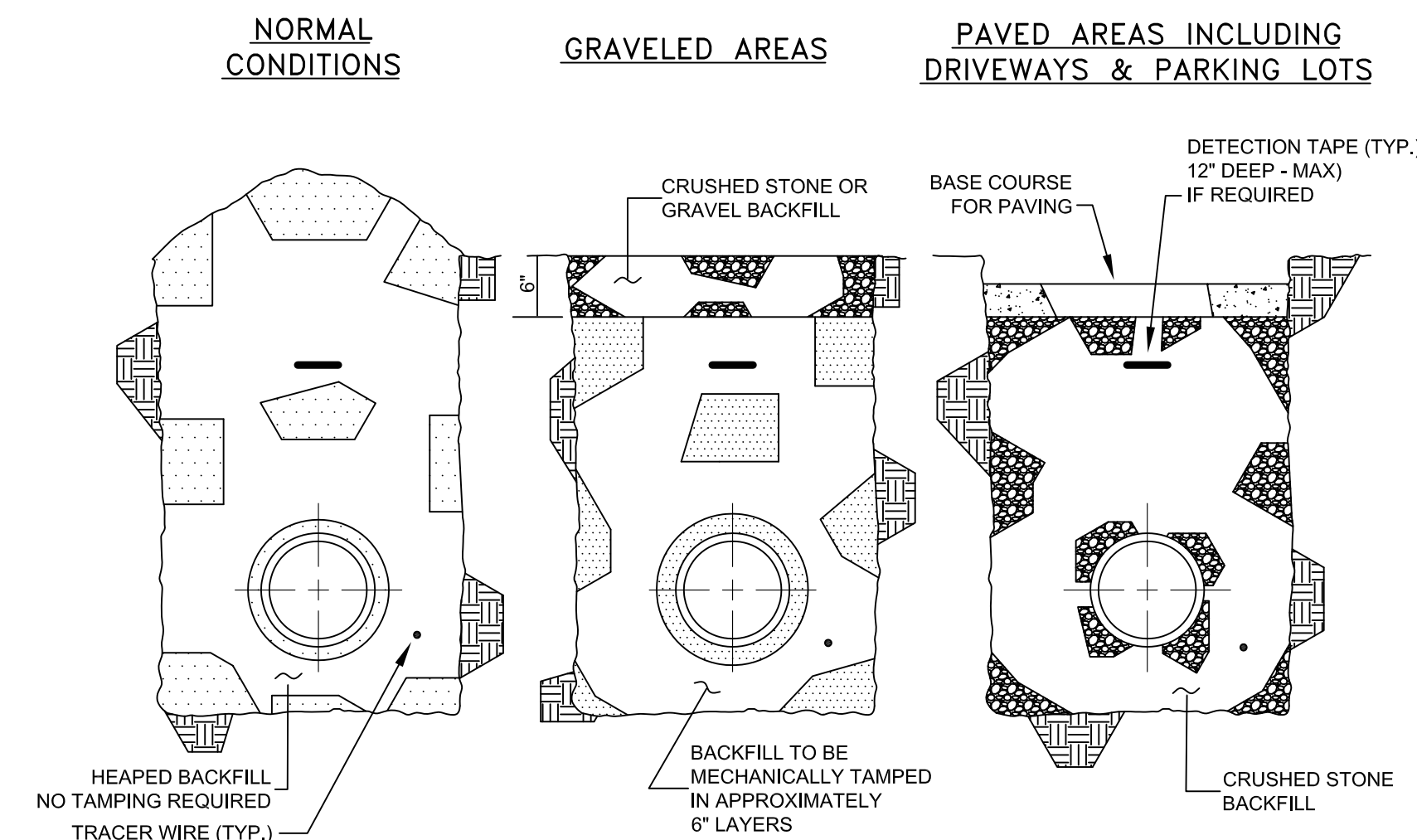
THRUST BLOCK DETAILS



FLUSH HYDRANT ASSEMBLY



GATE VALVE DETAIL



BACKFILLING

RECORD DRAWINGS

Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

STANDARD DRAWINGS

BRONSTON WATER ASSOCIATION
PULASKI COUNTY, KENTUCKY

DESCRIPTION:

CUSTOMER:

PROJECT NO. 1615

DATE: SEPT 2016

DRAWN BY: JRC

CHECKED BY: DSB

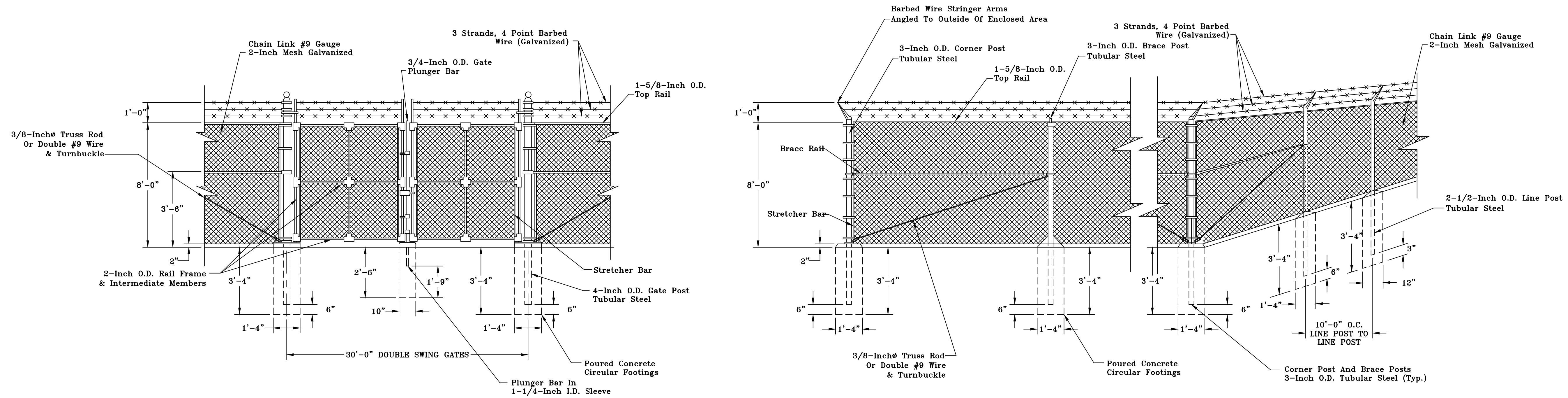
CHECKED BY: DMB

SCALE: N.T.S.

SHEET:

SD-1





CHAIN LINK FENCE ELEVATION

Scale: N. T. S.

FENCE DETAIL

DESCRIPTION:

BRONSTON WATER ASSOCIATION
PULASKI COUNTY, KENTUCKY

CUSTOMER:

PROJECT NO. 1615

DATE: SEPT 2016

DRAWN BY: JRC

CHECKED BY: DSB

CHECKED BY: DMB

SCALE: AS NOTED

SHEET:

F-1

RECORD DRAWINGS



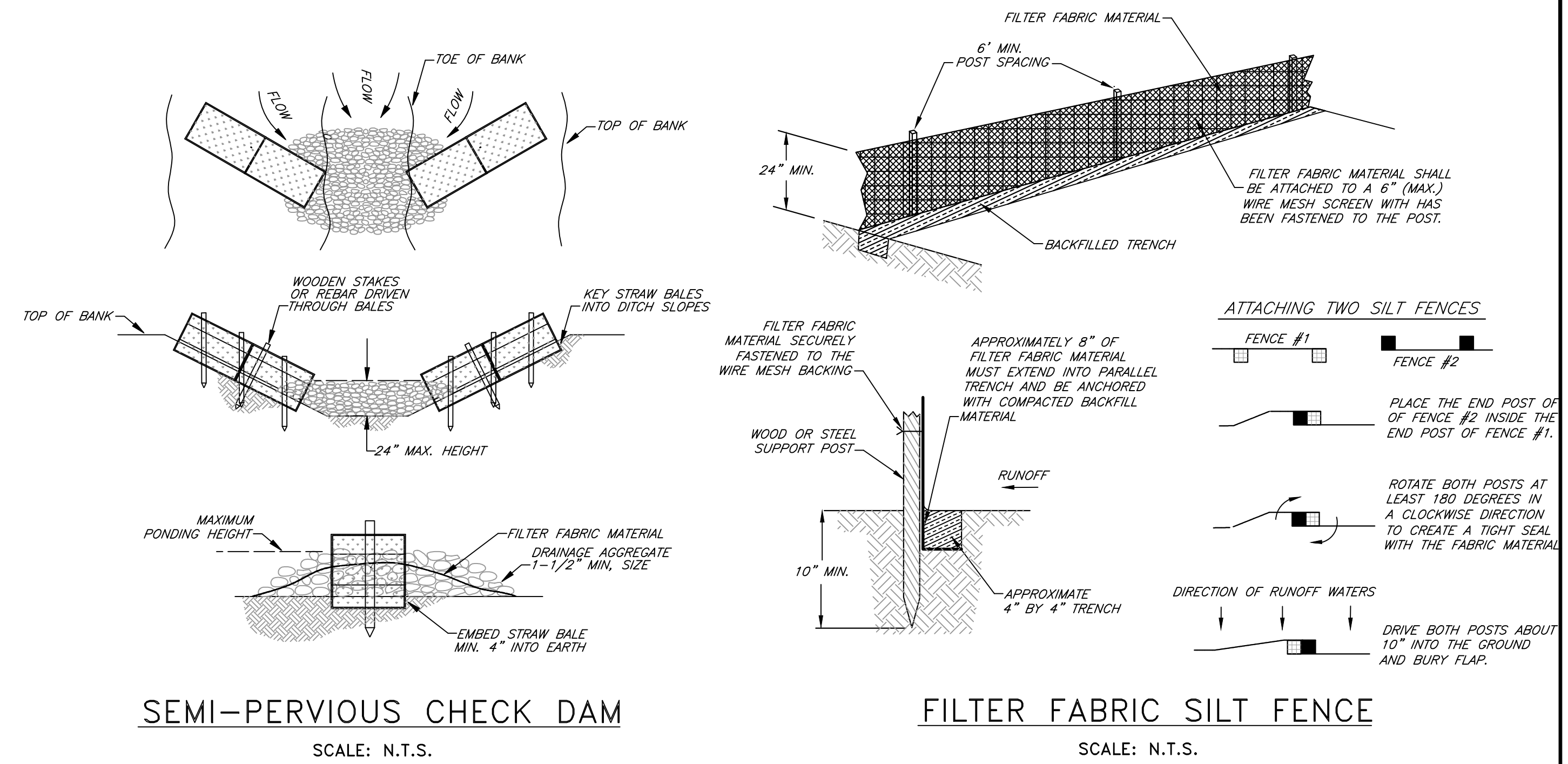


**EROSION CONTROL
& SITE PROTECTION PLAN**

SCALE: 1"=20'

LEGEND

| | | | |
|--------------------------------------|------------------------------------------|----------------------------------|--|
| PROPERTY LINES | ----- | SEMI-PERVIOUS CHECK DAM | |
| TEMPORARY CONSTRUCTION BARRIER FENCE | -----x----- | PROPOSED STRUCTURE | |
| FILTER FABRIC SILT FENCE | -----SF-----SF-----SF-----SF-----SF----- | SOIL STOCKPILE | |
| ANTICIPATED LIMITS OF DISTURBANCE | -----x----- | STABILIZED CONSTRUCTION ENTRANCE | |

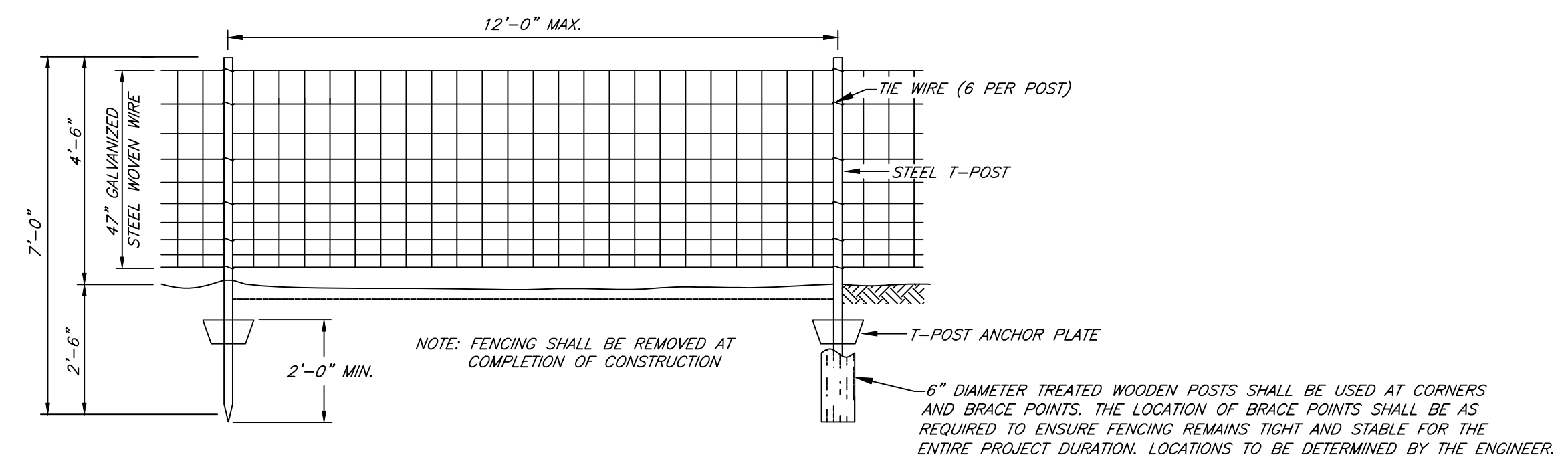


SEMI-PERVIOUS CHECK DAM

SCALE: N.T.S.

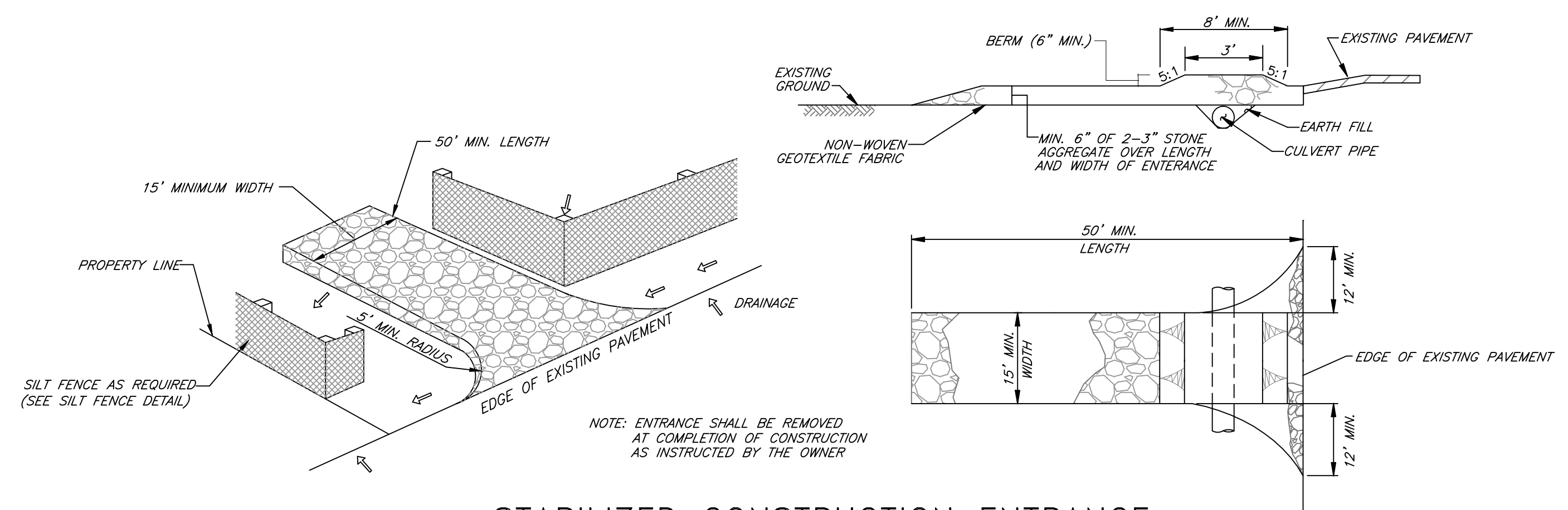
FILTER FABRIC SILT FENCE

SCALE: N.T.S.



**TEMPORARY
CONSTRUCTION BARRIER FENCE**

SCALE: N.T.S.



STABILIZED CONSTRUCTION ENTRANCE

SCALE: N.T.S.

- GEOTECHNICAL BORING LOCATIONS

NOTE: THE CONTRACTOR SHALL DO ALL WORK AND TAKE ALL MEASURES NECESSARY TO CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS. THE FLOW OF SEDIMENT AND ALL OTHER CONSTRUCTION MATERIALS INCLUDING EXCAVATION AND BACKFILL SHALL BE CONTAINED TO THE CONSTRUCTION SITE SO TO PROTECT ADJACENT WATERCOURSE AND WETLANDS. CONTRACTOR SHALL USE ANY APPROVED METHOD REQUIRED TO ACHIEVE THIS, AND AT A MINIMUM THOSE MEASURES DEPICTED HEREIN. THIS REQUIREMENT APPLIES TO ANY AND ALL DISTURBED AREAS WITHIN PROJECT AREA. THE COST OF EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE COST OF CONSTRUCTING OTHER PROJECT COMPONENTS.

Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DESCRIPTION:
CONTRACT 2 - 500,000 GALLON
WATER STORAGE TANK REPLACEMENT

CUSTOMER:
BRONSTON WATER ASSOCIATION
PULASKI COUNTY, KENTUCKY

PROJECT NO. 1615
DATE: SEPT 2016
DRAWN BY: JRC
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: 1"=20'

SHEET:
EC-1



RECORD DRAWINGS