

**RESOLUTION 17-15**

**A RESOLUTION TO APPROVE CHANGE ORDER FOR MS4 CIP #3, BUCKNER PLACE SUBDIVISION PROJECT**

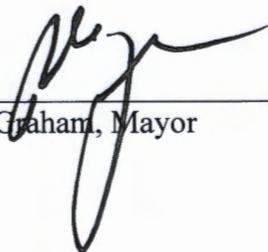
**WHEREAS**, the Spring Hill Board of Mayor and Aldermen awarded a contract to SBW Constructors for the MS4 CIP #3 Buckner Place Project on August 15, 2016; and

**WHEREAS**, there have been other areas of need identified such as relocation of electrical lines that are in conflict with the storm pipe and ditches which is covered in the original contract; and

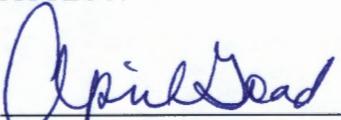
**WHEREAS**, in addition to the original contract, added storm pipe, added PIP structures, added Nyolplast structure and geotextile stabilization areas have been recommended by city staff and engineers in order to address concerns in the Buckner Place Subdivision ; and

**NOW, THEREFORE BE IT RESOLVED**, that the City of Spring Hill, Board of Mayor and Aldermen approves a Change Order for the MS4 CIP #3 Buckner Place Project at cost of \$71,380.00, as stated in the attached quote.

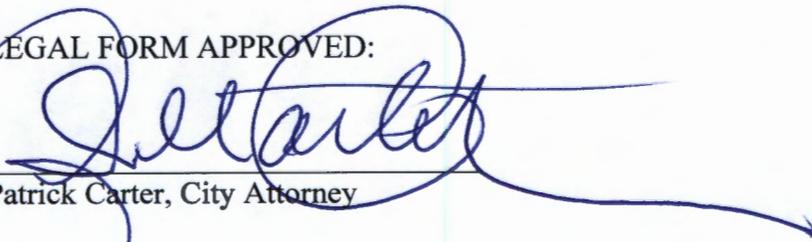
**Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 21<sup>st</sup> day of February, 2017.**

  
\_\_\_\_\_  
Rick Graham, Mayor

ATTEST:

  
\_\_\_\_\_  
April Goad, City Recorder

LEGAL FORM APPROVED:

  
\_\_\_\_\_  
Patrick Carter, City Attorney

## Proposed Change Order

To: Attn: Cory Hall  
Dempsey, Dilling, & Associates  
502 Hazelwood Drive  
Smyrna, TN 37167

Number: \_\_\_\_\_

Date: 2/2/2017

Project: Spring Hill - Buckner Pl.

**Description:** Included in this change order are all of the proposed scope changes provided by Cory Hall on 1/4/17 for the added storm pipe, added PIP structures, added Nyolplast structure and geotextile stabilization areas on the Buckner Place project. The regrading of ditches is to be done by the City of Spring Hill.

**The Proposed Change is as follows:**

| Description   | Qty. | Unit Measure | Unit Price   | Total              |
|---|------|--------------|--------------|--------------------|
| 1.) Sediment Sump Box at intersection of Short St. and Pedigo Pl.           | 1    | EA           | \$ 17,000.00 | \$ 17,000.00       |
| 2.) SF stabilization with geotextile fabric and Class A-1 Riprap            | 1081 | SF           | \$ 20.00     | \$ 21,620.00       |
| 3.) PIP junction box at Biggers & Windy Way<br>Price includes excavation    | 1    | EA           | \$ 12,000.00 | \$ 12,000.00       |
| 4.) Installation of 18" ADS Pipe  | 50   | LF           | \$ 90.00     | \$ 4,500.00        |
| 5.) Installation of Nyloplast storm structure at 2829 Biggers Dr.           | 1    | EA           | \$ 3,000.00  | \$ 3,000.00        |
| 6.) Installation of concrete collars necessary to connect different pipes   | 3    | EA           | \$ 2,500.00  | \$ 7,500.00        |
| 7.) Removal of Headwalls<br>(Headwalls will become property of Spring Hill) | 6    | EA           | \$ 500.00    | \$ 3,000.00        |
| 8.) Installation of 24" RCP - Outside of Roadway<br>-Contract Bid Item      | 40   | LF           | \$ 69.00     | \$ 2,760.00        |
| <b>Total:</b>   |      |              |              | <b>\$71,380.00</b> |

**Notes:**

- \* Item 1 - price includes regrading ditch to sump box
- \* Any items needing asphalt roadway repairs will be paid with the existing bid item for roadway repairs
- \* Item 8 - price for additional 24" RCP is confirmed to be the same price as the original bid price.
- \* To the best of SBW's knowledge, the qtys listed above are accurate and true. Actual qtys will be invoiced.

Submitted by: Ryan Nelson

Date: 2-2-17

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

## Proposed Change Order

To: Attn: Cory Hall  
 \_\_\_\_\_  
 Dempsey, Dilling, & Associates  
 \_\_\_\_\_  
 502 Hazelwood Drive  
 \_\_\_\_\_  
 Smyrna, TN 37167  
 \_\_\_\_\_

Number: \_\_\_\_\_

Date: 2/2/2017

Project: Spring Hill - Buckner Pl.

**Description:** Included in this change order are all labor, materials, and equipment needed to relocate electrical lines that is in conflict with the storm pipe and storm ditches. MTEMC labor and materials are also included in this change order proposal.

**The Proposed Change is as follows:**

| Description   | Qty. | Unit Measure | Unit Price  | Total              |
|---|------|--------------|-------------|--------------------|
| 1.) MTEMC cost to lower electrical lines for storm pipe | 3    | EA           | \$ 7,000.00 | \$ 21,000.00       |
| <b>Total:</b>   |      |              |             | <b>\$21,000.00</b> |

COVERED IN CONTRACT

**Notes:**

- \* Any area needing asphalt roadway repairs will be paid with the existing bid item for roadway repairs
- \* To the best of SBW's knowledge, the qtys listed above are accurate and true. Actual qtys will be invoiced.

Submitted by: Ryan Nelson  
 Date: 2-2-17

Approved by: \_\_\_\_\_  
 Date: \_\_\_\_\_

**RESOLUTION 16-110**

**A RESOLUTION TO AUTHORIZE A CONTRACT FOR BUCKNER PLACE  
SUBDIVISION MS4 CIP #3**

**WHEREAS**, to better serve the citizens of Spring Hill, the City of Spring Hill appropriated funding for Stormwater projects for the fiscal year 2016-2017; and

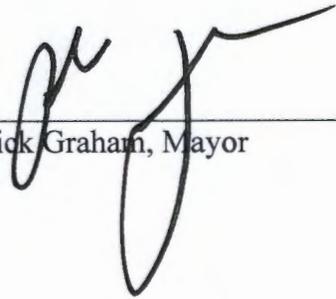
**WHEREAS**, Stormwater capabilities are in need of improvement in the Buckner Place area;

**WHEREAS**, city staff advertised and accepted proposals for Buckner Place Subdivision MS4 CIP #3 project on July 21, 2016; and

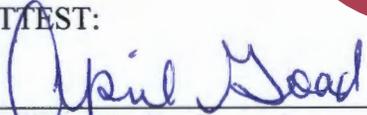
**WHEREAS**, City staff and Dempsey Dilling staff has viewed all proposals and has made a recommendation.

**NOW, THEREFORE, BE IT RESOLVED**, that the City of Spring Hill authorizes the a contract for Buckner Place Subdivision MS4 CIP #3 with SBW Constructors, LLC in the amount of \$584,304.00, as recommended by the Budget and Finance Advisory Committee on August 1, 2016.

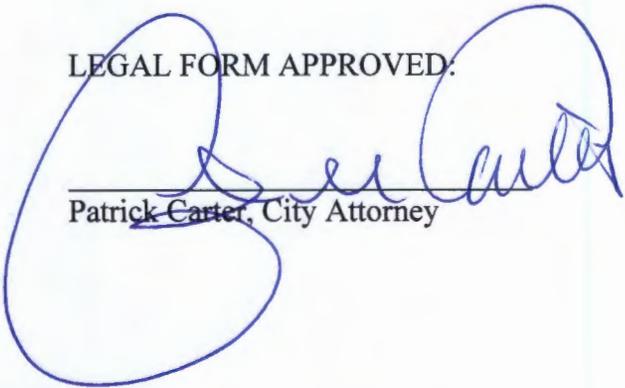
**Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on this 15<sup>th</sup> day of August, 2016.**

  
\_\_\_\_\_  
Rick Graham, Mayor

ATTEST:

  
\_\_\_\_\_  
April Good, City Recorder

LEGAL FORM APPROVED:

  
\_\_\_\_\_  
Patrick Carter, City Attorney



July 22, 2015

File No. 0100-379

Victor Lay (via email)  
City Administrator  
City of Spring Hill  
199 Town Center Parkway  
Spring Hill, Tennessee 37174

**RE: BUCKNER PLACE SUBDIVISION MS4 CIP #3  
BID REVIEW AND RECOMMENDATION**

Dear Mr. Lay:

Dempsey, Dilling & Associates, P.C. (DDA) has reviewed the bids submitted for the above-referenced project and the apparent low bidder is SBW Constructors, LLC in the amount of \$584,304.00. DDA has verified their references on previous stormwater projects. In addition, SBW Constructors has recently completed a water line project in Spring Hill on Duplex Road. Attached is a copy of the bid summary and bid tabulation.

Based on the review of the bid tabulation and project references, DDA recommends the City of Spring Hill accept the bid and award the contract to SBW Constructors, LLC in the amount of \$584,304.00.

Should you have any questions or comments, give me a call.

Sincerely,  
**DEMPSEY, DILLING & ASSOCIATES, P.C.**  
**ENGINEERING CONSULTANTS**

Cory D. Hall, P.E.  
CDH: 50081

Enclosure

cc: Honorable Mayor Rick Graham (via email)  
Jeremy Polk, Stormwater Coordinator (via email)  
Jeff Foster, Public Works Director (via email)  
Chris Saxe, Assistant Superintendent of Public Works (via email)  
April Goad, City Recorder (via email)

SUMMARY OF BIDS  
FOR  
CITY OF SPRING HILL, TENNESSEE  
MS4 CIP NO. 3, BUCKNER PLACE SUBDIVISION

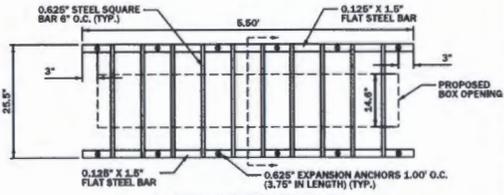
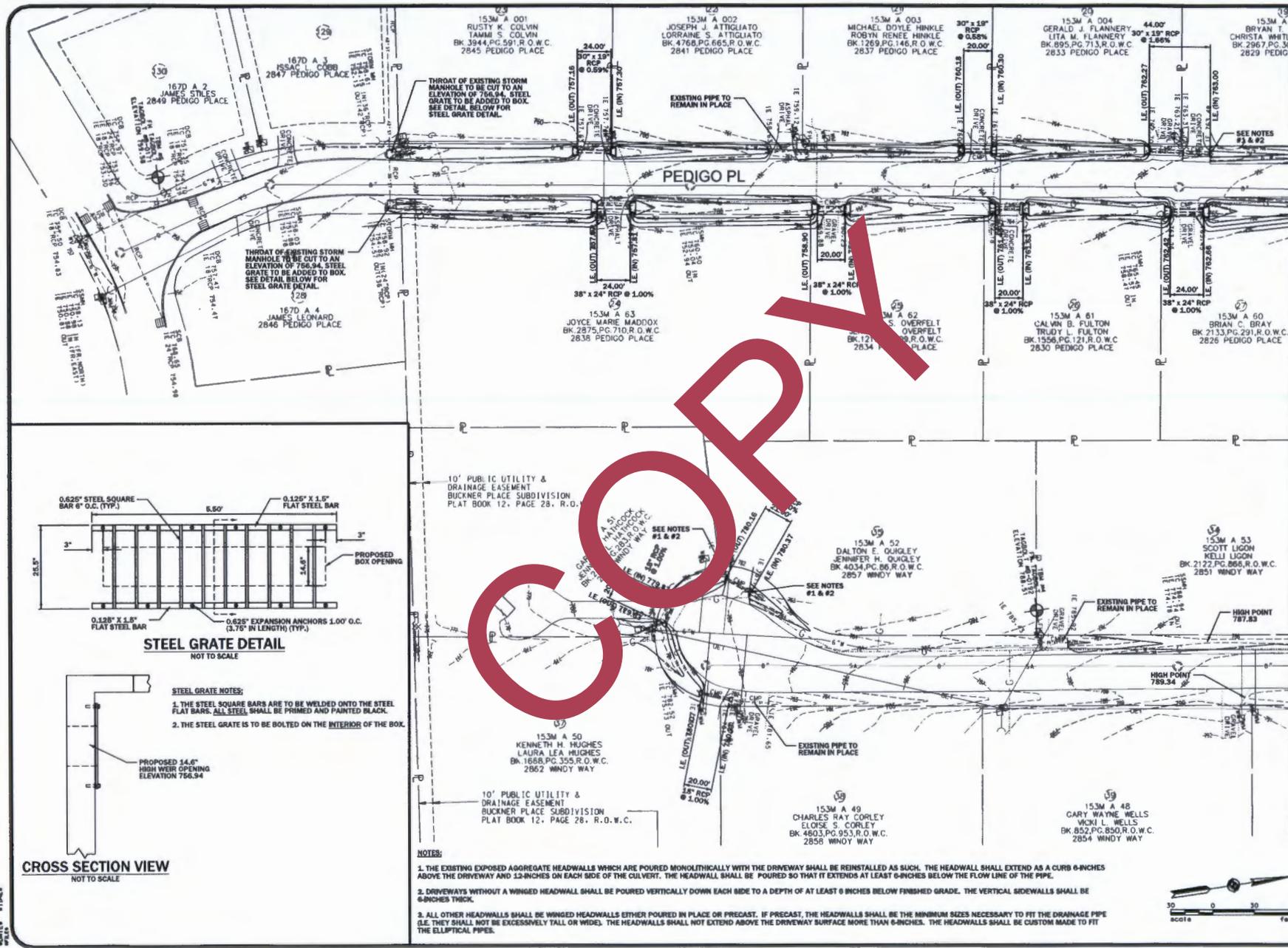
BID OPENING: JULY 21, 2016, 2:00 P.M.

| CONTRACTOR  | BASE BID     |
|---|--------------|
| Jarrett Builders<br>Nashville, TN                         | No Bid       |
| Sessions Paving Company<br>Nashville, TN                  | No Bid       |
| SBW Constructors, LLC<br>Cottontown, TN                   | \$544,304.00 |
| Curl Construction and Excavating, LLC<br>Wartrace, TN     | No Bid       |
| Civil Constructors, Inc.<br>Franklin, TN                  | \$615,180.00 |
| Parchman Construction Company, Inc<br>Cumberland City, TN | \$637,883.50 |
| Adams Contracting, LLC<br>Lexington, KY                   | \$613,120.0  |
|   |              |
|   |              |
|   |              |
|   |              |

**CITY OF SPRING HILL, WILLIAMSON COUNTY, TENNESSEE  
BUCKNER PLACE SUBDIVISION MS4 CIP #3 - BID TABULATION**

| ITEM NO. | DESCRIPTION                         | EST. QTY | UNITS | SBW CONSTRUCTORS LLC<br>COTTONTOWN, TN |              | ADAMS CONTRACTING, LLC<br>LEXINGTON, KY |              | CIVIL CONSTRUCTORS, INC.<br>FRANKLIN, TN |              | PARCHMAN CONSTRUCTION<br>CUMBERLAND CITY, TN |              |
|----------|-------------------------------------|----------|-------|--|--------------|---|--------------|--|--------------|--|--------------|
|          |                                     |          |       | UNIT PRICE                             | AMOUNT       | UNIT PRICE                              | AMOUNT       | UNIT PRICE                               | AMOUNT       | UNIT PRICE                                   | AMOUNT       |
| 1.       | Remove Existing Driveway Culvert    |          |       |  |              |   |              |  |              |  |              |
| a.       | 12" CMP                             | 61       | L.F.  | \$ 30.00                               | \$ 1,830.00  | \$ 30.00                                | \$ 1,830.00  | \$ 12.00                                 | \$ 732.00    | \$ 22.50                                     | \$ 1,372.50  |
| b.       | 15" CMP                             | 348      | L.F.  | \$ 10.00                               | \$ 3,480.00  | \$ 35.00                                | \$ 12,180.00 | \$ 12.00                                 | \$ 4,176.00  | \$ 22.50                                     | \$ 7,830.00  |
| c.       | 18" CMP                             | 175      | L.F.  | \$ 10.00                               | \$ 1,750.00  | \$ 40.00                                | \$ 7,000.00  | \$ 12.00                                 | \$ 2,100.00  | \$ 22.50                                     | \$ 3,937.50  |
| d.       | 24" CMP                             | 135      | L.F.  | \$ 13.00                               | \$ 1,755.00  | \$ 45.00                                | \$ 6,075.00  | \$ 14.00                                 | \$ 1,890.00  | \$ 22.50                                     | \$ 3,037.50  |
| 2.       | Remove Existing Roadway Culvert     |          |       |  |              |   |              |  |              |  |              |
| a.       | 18" CMP                             | 140      | L.F.  | \$ 13.00                               | \$ 1,820.00  | \$ 40.00                                | \$ 5,600.00  | \$ 12.00                                 | \$ 1,680.00  | \$ 45.00                                     | \$ 6,300.00  |
| b.       | 30" CMP                             | 260      | L.F.  | \$ 14.00                               | \$ 3,640.00  | \$ 50.00                                | \$ 13,000.00 | \$ 20.00                                 | \$ 5,200.00  | \$ 45.00                                     | \$ 11,700.00 |
| 3.       | Remove Existing Concrete Headwall   |          |       |  |              |   |              |  |              |  |              |
| a.       | 24" Winged                          | 1        | Each  | \$ 900.00                              | \$ 900.00    | \$ 850.00                               | \$ 850.00    | \$ 110.00                                | \$ 141.00    | \$ 550.00                                    | \$ 550.00    |
| b.       | 18" Straight                        | 4        | Each  | \$ 450.00                              | \$ 1,800.00  | \$ 850.00                               | \$ 3,400.00  | \$ 110.00                                | \$ 440.00    | \$ 550.00                                    | \$ 2,200.00  |
| 4.       | Culverts (outside roadway)          |          |       |  |              |   |              |  |              |  |              |
| a.       | 18" RCP                             | 426      | L.F.  | \$ 75.00                               | \$ 31,950.00 | \$ 75.00                                | \$ 31,950.00 | \$ 60.00                                 | \$ 25,560.00 | \$ 45.00                                     | \$ 19,170.00 |
| b.       | 24" RCP                             | 58       | L.F.  | \$ 69.00                               | \$ 4,002.00  | \$ 75.00                                | \$ 4,350.00  | \$ 86.00                                 | \$ 4,988.00  | \$ 58.00                                     | \$ 3,364.00  |
| c.       | 23" x 14" Elliptical RCP            | 116      | L.F.  | \$ 104.00                              | \$ 12,064.00 | \$ 100.00                               | \$ 11,600.00 | \$ 81.00                                 | \$ 9,396.00  | \$ 66.00                                     | \$ 7,656.00  |
| d.       | 30" x 19" Elliptical RCP            | 88       | L.F.  | \$ 95.00                               | \$ 8,360.00  | \$ 100.00                               | \$ 8,800.00  | \$ 130.00                                | \$ 11,440.00 | \$ 87.00                                     | \$ 7,656.00  |
| e.       | 38" x 24" Elliptical RCP            | 108      | L.F.  | \$ 120.00                              | \$ 12,960.00 | \$ 125.00                               | \$ 13,500.00 | \$ 160.00                                | \$ 17,280.00 | \$ 100.00                                    | \$ 10,800.00 |
| 5.       | Roadway Culverts (crossing roadway) |          |       |  |              |   |              |  |              |  |              |
| a.       | 18" RCP                             | 144      | L.F.  | \$ 75.00                               | \$ 10,800.00 | \$ 75.00                                | \$ 10,800.00 | \$ 88.00                                 | \$ 12,672.00 | \$ 81.00                                     | \$ 11,664.00 |
| b.       | 30" RCP                             | 80       | L.F.  | \$ 100.00                              | \$ 8,000.00  | \$ 100.00                               | \$ 8,000.00  | \$ 160.00                                | \$ 12,800.00 | \$ 125.00                                    | \$ 10,000.00 |
| c.       | 36" RCP                             | 36       | L.F.  | \$ 200.00                              | \$ 7,200.00  | \$ 125.00                               | \$ 4,500.00  | \$ 200.00                                | \$ 7,200.00  | \$ 141.00                                    | \$ 5,076.00  |
| 6.       | Concrete Winged Headwalls           |          |       |  |              |   |              |  |              |  |              |
| a.       | 18" RCP                             | 22       | Each  | \$ 900.00                              | \$ 19,800.00 | \$ 900.00                               | \$ 19,800.00 | \$ 1,575.00                              | \$ 34,650.00 | \$ 725.00                                    | \$ 15,950.00 |
| b.       | 24" RCP                             | 4        | Each  | \$ 900.00                              | \$ 3,600.00  | \$ 1,500.00                             | \$ 6,000.00  | \$ 1,795.00                              | \$ 7,180.00  | \$ 875.00                                    | \$ 3,500.00  |
| c.       | 30" RCP                             | 2        | Each  | \$ 1,700.00                            | \$ 3,400.00  | \$ 2,000.00                             | \$ 4,000.00  | \$ 1,725.00                              | \$ 3,450.00  | \$ 1,500.00                                  | \$ 3,000.00  |
| d.       | 23" x 14" Elliptical RCP            | 5        | Each  | \$ 1,400.00                            | \$ 7,000.00  | \$ 1,500.00                             | \$ 7,500.00  | \$ 1,975.00                              | \$ 9,875.00  | \$ 1,000.00                                  | \$ 5,000.00  |
| e.       | 30" x 19" Elliptical RCP            | 5        | Each  | \$ 1,400.00                            | \$ 7,000.00  | \$ 2,000.00                             | \$ 10,000.00 | \$ 2,360.00                              | \$ 11,800.00 | \$ 1,150.00                                  | \$ 5,750.00  |
| f.       | 38" x 24" Elliptical RCP            | 8        | Each  | \$ 1,850.00                            | \$ 14,800.00 | \$ 3,000.00                             | \$ 24,000.00 | \$ 2,830.00                              | \$ 22,640.00 | \$ 1,800.00                                  | \$ 14,400.00 |
| 7.       | Exposed Aggregate Concrete Headwall |          |       |  |              |   |              |  |              |  |              |
| a.       | 18" RCP                             | 8        | Each  | \$ 3,200.00                            | \$ 25,600.00 | \$ 1,800.00                             | \$ 14,400.00 | \$ 2,195.00                              | \$ 17,560.00 | \$ 825.00                                    | \$ 6,600.00  |
| b.       | Dual 18" RCP                        | 2        | Each  | \$ 4,000.00                            | \$ 8,000.00  | \$ 3,600.00                             | \$ 7,200.00  | \$ 3,120.00                              | \$ 6,240.00  | \$ 825.00                                    | \$ 1,650.00  |
| c.       | 24" RCP                             | 2        | Each  | \$ 3,300.00                            | \$ 6,600.00  | \$ 3,000.00                             | \$ 6,000.00  | \$ 2,425.00                              | \$ 4,850.00  | \$ 875.00                                    | \$ 1,750.00  |
| d.       | 23" x 14" Elliptical RCP            | 1        | Each  | \$ 3,400.00                            | \$ 3,400.00  | \$ 2,500.00                             | \$ 2,500.00  | \$ 2,530.00                              | \$ 2,530.00  | \$ 825.00                                    | \$ 825.00    |
| e.       | 30" x 19" Elliptical RCP            | 1        | Each  | \$ 3,925.00                            | \$ 3,925.00  | \$ 3,000.00                             | \$ 3,000.00  | \$ 2,960.00                              | \$ 2,960.00  | \$ 850.00                                    | \$ 850.00    |
| f.       | 38" x 24" Elliptical RCP            | 2        | Each  | \$ 4,450.00                            | \$ 8,900.00  | \$ 4,000.00                             | \$ 8,000.00  | \$ 3,465.00                              | \$ 6,930.00  | \$ 875.00                                    | \$ 1,750.00  |
| 8.       | Concrete Straight Headwall          |          |       |  |              |   |              |  |              |  |              |
| a.       | 18" RCP                             | 2        | Each  | \$ 1,475.00                            | \$ 2,950.00  | \$ 1,250.00                             | \$ 2,500.00  | \$ 1,520.00                              | \$ 3,040.00  | \$ 750.00                                    | \$ 1,500.00  |
| b.       | 36" RCP                             | 1        | Each  | \$ 3,450.00                            | \$ 3,450.00  | \$ 3,000.00                             | \$ 3,000.00  | \$ 2,540.00                              | \$ 2,540.00  | \$ 1,000.00                                  | \$ 1,000.00  |
| 9.       | Catch Basin (TDOT Type 42)          | 1        | Each  | \$ 5,100.00                            | \$ 5,100.00  | \$ 4,000.00                             | \$ 4,000.00  | \$ 4,300.00                              | \$ 4,300.00  | \$ 4,700.00                                  | \$ 4,700.00  |

| ITEM NO. | DESCRIPTION                                   | EST. QTY | UNITS | SBW CONSTRUCTORS LLC<br>COTTONTOWN, TN |              | ADAMS CONTRACTING, LLC<br>LEXINGTON, KY |              | CIVIL CONSTRUCTORS, INC.<br>FRANKLIN, TN |               | PARCHMAN CONSTRUCTION<br>CUMBERLAND CITY, TN |               |
|----------|---|----------|-------|--|--------------|---|--------------|--|---------------|--|---------------|
|          |   |          |       | UNIT PRICE                             | AMOUNT       | UNIT PRICE                              | AMOUNT       | UNIT PRICE                               | AMOUNT        | UNIT PRICE                                   | AMOUNT        |
| 10.      | Steel Grates on Inside of Existing Structures | 2        | Each  | \$ 3,700.00                            | \$ 7,400.00  | \$ 1,500.00                             | \$ 3,000.00  | \$ 1,100.00                              | \$ 2,200.00   | \$ 2,375.00                                  | \$ 4,750.00   |
| 11.      | RCP to CMP Connection                         |          |       |  |              |   |              |  |               |  |               |
| a.       | 24"   | 1        | Each  | \$ 750.00                              | \$ 750.00    | \$ 2,500.00                             | \$ 2,500.00  | \$ 220.00                                | \$ 220.00     | \$ 1,750.00                                  | \$ 1,750.00   |
| 12.      | Pipe Connection to Existing Storm Structure   | 1        | Each  | \$ 1,500.00                            | \$ 1,500.00  | \$ 2,500.00                             | \$ 2,500.00  | \$ 2,775.00                              | \$ 2,775.00   | \$ 1,250.00                                  | \$ 1,250.00   |
| 13.      | Regrade Ditch                                 | 7200     | L.F.  | \$ 5.00                                | \$ 36,000.00 | \$ 7.00                                 | \$ 50,400.00 | \$ 18.80                                 | \$ 135,360.00 | \$ 22.50                                     | \$ 162,000.00 |
| 14.      | Driveway Repair                               |          |       |  |              |   |              |  |               |  |               |
| a.       | Gravel Driveway                               | 1500     | S.F.  | \$ 1.00                                | \$ 1,500.00  | \$ 3.00                                 | \$ 4,500.00  | \$ 1.25                                  | \$ 1,875.00   | \$ 1.25                                      | \$ 1,875.00   |
| b.       | Concrete Driveway                             | 1200     | S.F.  | \$ 7.50                                | \$ 9,000.00  | \$ 13.00                                | \$ 15,600.00 | \$ 8.75                                  | \$ 10,500.00  | \$ 11.00                                     | \$ 13,200.00  |
| c.       | Exposed Aggregate Concrete Driveway           | 3100     | S.F.  | \$ 9.00                                | \$ 27,900.00 | \$ 16.00                                | \$ 49,600.00 | \$ 10.25                                 | \$ 31,775.00  | \$ 12.00                                     | \$ 37,200.00  |
| d.       | Asphalt Driveway                              | 900      | S.F.  | \$ 7.50                                | \$ 6,750.00  | \$ 10.00                                | \$ 9,000.00  | \$ 5.70                                  | \$ 5,130.00   | \$ 10.00                                     | \$ 9,000.00   |
| 15.      | Asphalt Roadway Repair                        | 200      | L.F.  | \$ 110.00                              | \$ 22,000.00 | \$ 45.00                                | \$ 9,000.00  | \$ 66.00                                 | \$ 13,200.00  | \$ 81.25                                     | \$ 16,250.00  |
| 16.      | Erosion Control                               | 1        | LS    | \$ 10,000.00                           | \$ 10,000.00 | \$ 10,000.00                            | \$ 10,000.00 | \$ 36,375.00                             | \$ 36,375.00  | \$ 15,000.00                                 | \$ 15,000.00  |
| 17.      | Scour/Slope Failure Repairs                   |          |       |  |              |   |              |  |               |  |               |
| a.       | Scour Area #1                                 | 1        | LS    | \$ 20,000.00                           | \$ 20,000.00 | \$ 13,000.00                            | \$ 13,000.00 | \$ 7,950.00                              | \$ 7,950.00   | \$ 9,450.00                                  | \$ 9,450.00   |
| b.       | Scour Area #2                                 | 1        | LS    | \$ 30,000.00                           | \$ 30,000.00 | \$ 23,000.00                            | \$ 23,000.00 | \$ 10,560.00                             | \$ 10,560.00  | \$ 14,175.00                                 | \$ 14,175.00  |
| c.       | Scour Area #3                                 | 1        | LS    | \$ 32,000.00                           | \$ 32,000.00 | \$ 26,000.00                            | \$ 26,000.00 | \$ 13,130.00                             | \$ 13,130.00  | \$ 21,600.00                                 | \$ 21,600.00  |
| d.       | Scour Area #4                                 | 1        | LS    | \$ 7,500.00                            | \$ 7,500.00  | \$ 10,000.00                            | \$ 10,000.00 | \$ 2,350.00                              | \$ 2,350.00   | \$ 1,820.00                                  | \$ 1,820.00   |
| e.       | Eroded Slope                                  | 1        | LS    | \$ 10,000.00                           | \$ 10,000.00 | \$ 12,000.00                            | \$ 12,000.00 | \$ 3,000.00                              | \$ 3,000.00   | \$ 8,950.00                                  | \$ 8,950.00   |
| f.       | Grouted Riprap Channel                        | 300      | L.F.  | \$ 145.00                              | \$ 43,500.00 | \$ 100.00                               | \$ 30,000.00 | \$ 70.00                                 | \$ 21,000.00  | \$ 66.00                                     | \$ 19,800.00  |
| 18.      | Erosion Control Blanket                       |          |       |  |              |   |              |  |               |  |               |
| a.       | Type I  | 11000    | S.Y.  | \$ 2.50                                | \$ 27,500.00 | \$ 1.25                                 | \$ 13,750.00 | \$ 1.50                                  | \$ 16,500.00  | \$ 3.50                                      | \$ 38,500.00  |
| b.       | Type II                                       | 1100     | S.Y.  | \$ 3.00                                | \$ 3,300.00  | \$ 1.00                                 | \$ 1,100.00  | \$ 2.00                                  | \$ 2,200.00   | \$ 4.00                                      | \$ 4,400.00   |
| 19.      | Riprap at 2 Existing Storm Structures         | 1        | LS    | \$ 4,500.00                            | \$ 4,500.00  | \$ 5,000.00                             | \$ 5,000.00  | \$ 930.00                                | \$ 930.00     | \$ 1,875.00                                  | \$ 1,875.00   |
| 20.      | Utility Service Relocation                    |          |       |  |              |   |              |  |               |  |               |
| a.       | Water Service Line                            | 10       | Each  | \$ 750.00                              | \$ 7,500.00  | \$ 1,000.00                             | \$ 10,000.00 | \$ 275.00                                | \$ 2,750.00   | \$ 375.00                                    | \$ 3,750.00   |
| b.       | Water Meter                                   | 10       | Each  | \$ 950.00                              | \$ 9,500.00  | \$ 750.00                               | \$ 7,500.00  | \$ 200.00                                | \$ 2,000.00   | \$ 450.00                                    | \$ 4,500.00   |
| c.       | Sewer Service Line                            | 10       | Each  | \$ 825.00                              | \$ 8,250.00  | \$ 1,000.00                             | \$ 10,000.00 | \$ 500.00                                | \$ 5,000.00   | \$ 1,875.00                                  | \$ 18,750.00  |
| d.       | Gas Service Line                              | 10       | Each  | \$ 600.00                              | \$ 6,000.00  | \$ 1,000.00                             | \$ 10,000.00 | \$ 250.00                                | \$ 2,500.00   | \$ 1,250.00                                  | \$ 12,500.00  |
| e.       | Concrete Encasement                           | 25       | C.Y.  | \$ 250.00                              | \$ 6,250.00  | \$ 225.00                               | \$ 5,625.00  | \$ 100.00                                | \$ 2,500.00   | \$ 150.00                                    | \$ 3,750.00   |
| 21.      | Layout and Easement Staking                   | 1        | LS    | \$ 9,500.00                            | \$ 9,500.00  | \$ 15,000.00                            | \$ 15,000.00 | \$ 25,160.00                             | \$ 25,160.00  | \$ 31,250.00                                 | \$ 31,250.00  |
| TOTAL    |   |          |       | \$58,400.00                            | \$58,400.00  | \$613,120.00                            | \$613,120.00 | \$615,180.00                             | \$615,180.00  | \$637,883.50                                 | \$637,883.50  |



**STEEL GRATE DETAIL**  
NOT TO SCALE

- STEEL GRATE NOTES:**
1. THE STEEL SQUARE BARS ARE TO BE WELDED ONTO THE STEEL FLAT BARS. ALL STEEL SHALL BE PRIMED AND PAINTED BLACK.
  2. THE STEEL GRATE IS TO BE BOLTED ON THE INTERIOR OF THE BOX.



**CROSS SECTION VIEW**  
NOT TO SCALE

- NOTES:**
1. THE EXISTING EXPOSED AGGREGATE HEADWALLS WHICH ARE POURED MONOLITHICALLY WITH THE DRIVEWAY SHALL BE REINSTALLED AS SUCH. THE HEADWALL SHALL EXTEND AS A CURB 6-INCHES ABOVE THE DRIVEWAY AND 12-INCHES ON EACH SIDE OF THE CULVERT. THE HEADWALL SHALL BE POURED SO THAT IT EXTENDS AT LEAST 6-INCHES BELOW THE FLOW LINE OF THE PIPE.
  2. DRIVEWAYS WITHOUT A WINGED HEADWALL SHALL BE POURED VERTICALLY DOWN EACH SIDE TO A DEPTH OF AT LEAST 6 INCHES BELOW FINISHED GRADE. THE VERTICAL SIDEWALLS SHALL BE 6-INCHES THICK.
  3. ALL OTHER HEADWALLS SHALL BE WINGED HEADWALLS EITHER POURED IN PLACE OR PRECAST. IF PRECAST, THE HEADWALLS SHALL BE THE MINIMUM SIZES NECESSARY TO FIT THE DRAINAGE PIPE (I.E. THEY SHALL NOT BE EXCESSIVELY TALL OR WIDE). THE HEADWALLS SHALL NOT EXTEND ABOVE THE DRIVEWAY SURFACE MORE THAN 6-INCHES. THE HEADWALLS SHALL BE CUSTOM MADE TO FIT THE ELLIPTICAL PIPES.

COPY

MATCH LINE SEE SHEET 06

**DEMPSEY, DILLING & ASSOCIATES, P.C.**  
 Engineering Consultants  
 502 Hazelwood Drive  
 Smyrna, Tennessee 37167  
 Ph: (615) 220-5800 fax: (615) 220-5888  
 www.dempseydilling.com

DATE: APRIL 2015  
 DRAWING BY: SHAMARUJ  
 CHECKED BY: JILL  
 APPROVED BY: JILL  
 PROJECT: MS4 CAPITAL IMPROVEMENT PROJECT #3  
 SUBDIVISION: BUCKNER PLACE SUBDIVISION  
 CITY: CITY OF SPRING HILL  
 COUNTY: WILLIAMSON COUNTY, TENNESSEE

| REV | DESCRIPTION | DATE |
|-----|-------------|------|
|     |             |      |
|     |             |      |
|     |             |      |

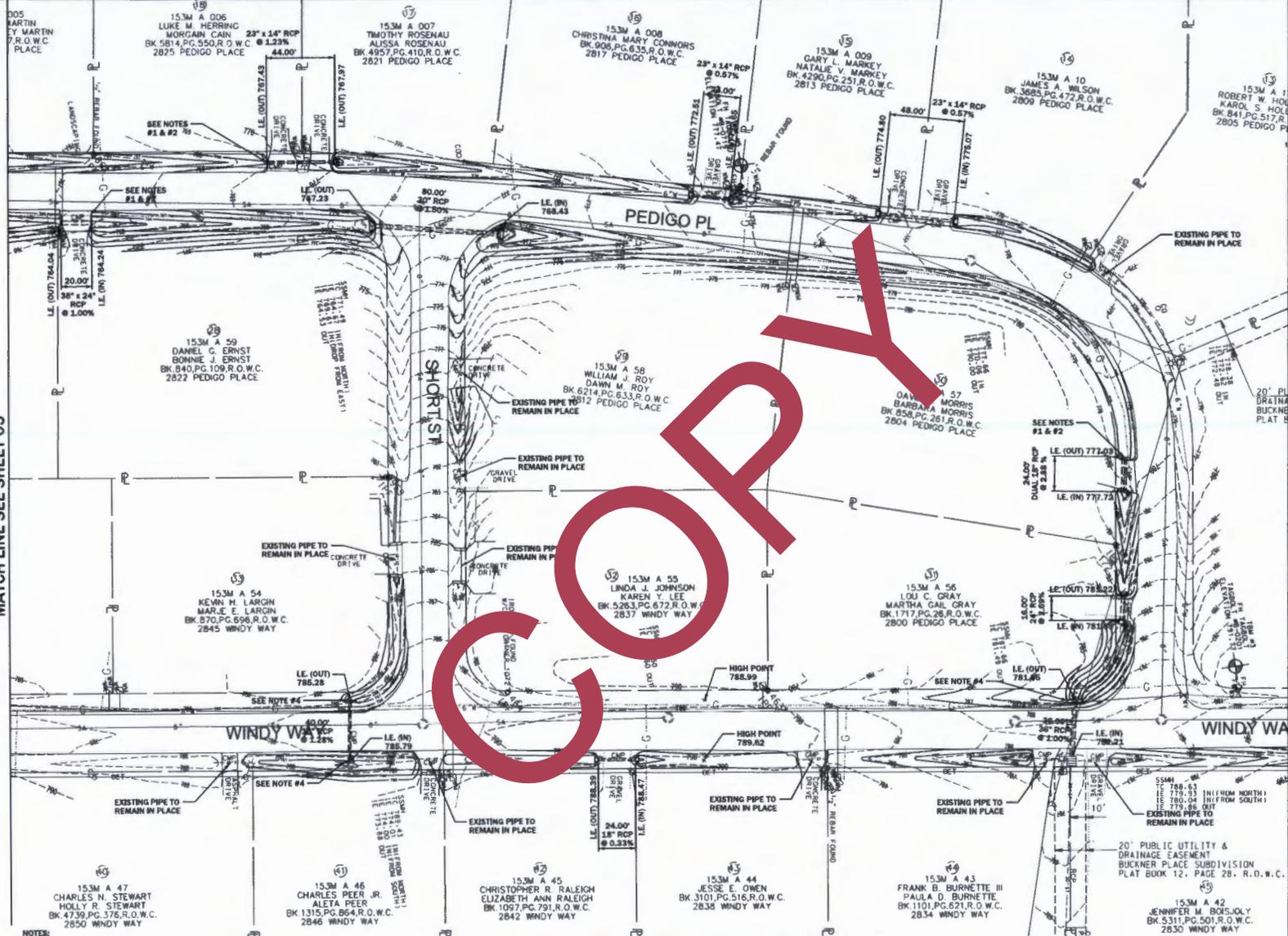
SHEET NO. **5**



MATCH LINE SEE SHEET 05

MATCH LINE SEE SHEET 07

COPY



- NOTES:**
1. THE EXISTING EXPOSED AGGREGATE HEADWALLS WHICH ARE POURED MONOLITHICALLY WITH THE DRIVEWAY SHALL BE REINSTALLED AS SUCH. THE HEADWALL SHALL EXTEND AS A CURB 6-INCHES ABOVE THE DRIVEWAY AND 12-INCHES ON EACH SIDE OF THE CULVERT. THE HEADWALL SHALL BE POURED SO THAT IT EXTENDS AT LEAST 6-INCHES BELOW THE FLOW LINE OF THE PIPE.
  2. DRIVEWAYS WITHOUT A WINGED HEADWALL SHALL BE POURED VERTICALLY DOWN EACH SIDE TO A DEPTH OF AT LEAST 6 INCHES BELOW FINISHED GRADE. THE VERTICAL SIDEWALLS SHALL BE 6-INCHES THICK.
  3. ALL OTHER HEADWALLS SHALL BE WINGED HEADWALLS EITHER POURED IN PLACE OR PRECAST. IF PRECAST, THE HEADWALLS SHALL BE THE MINIMUM SIZES NECESSARY TO FIT THE DRAINAGE PIPE (I.E. THEY SHALL NOT BE EXCESSIVELY TALL OR WIDE). THE HEADWALLS SHALL NOT EXTEND ABOVE THE DRIVEWAY SURFACE MORE THAN 6-INCHES. THE HEADWALLS SHALL BE CUSTOM MADE TO FIT THE ELLIPTICAL PIPES.
  4. ROADWAY CULVERT HEADWALL SHALL BE A STRAIGHT HEADWALL. REFER TO THE STANDARD DETAIL SHEET.



**DEMPEY, DILLING & ASSOCIATES, P.C.**  
 Engineering Consultants  
 502 Hazelwood Drive  
 Smyrna, Tennessee 37187  
 ph. (615) 220-5800 fax (615) 220-5886  
 www.dempseydilling.com



|              |           |
|--------------|-----------|
| DATE:        | JUNE 2013 |
| DRAWN BY:    | SPURKINS  |
| CHECKED BY:  | WJL       |
| APPROVED BY: |           |

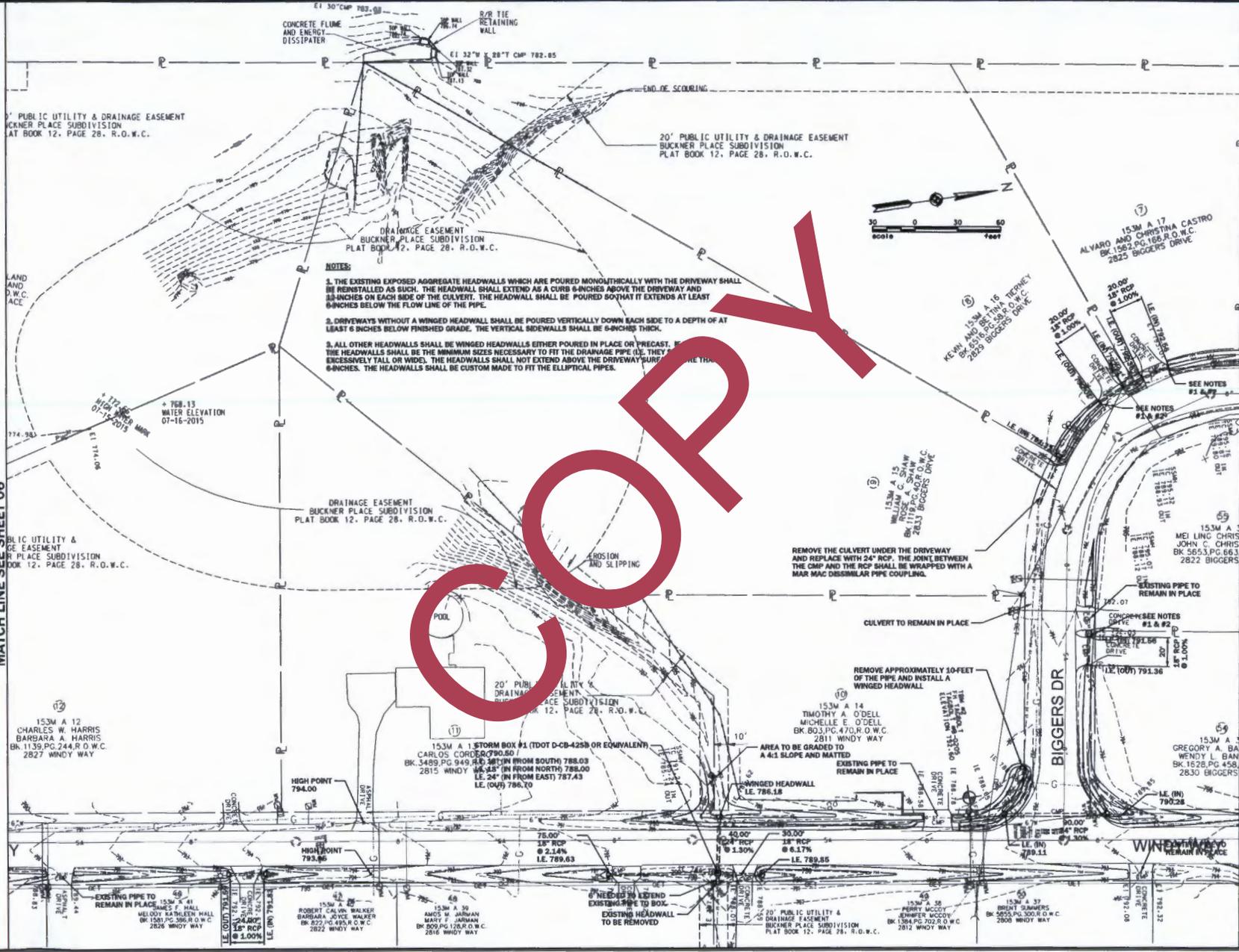
**PROPOSED LAYOUT SHEET 2**  
**MS4 CAPITAL IMPROVEMENT PROJECT #3**  
**BUCKNER PLACE SUBDIVISION**  
**CITY OF SPRING HILL**  
**WILLIAMSON COUNTY, TENNESSEE**

| REV | DESCRIPTION | DATE |
|-----|-------------|------|
|     |             |      |
|     |             |      |
|     |             |      |
|     |             |      |

SHEET NO. **6**

DATE: 07/26/15

MATCH LINE SEE SHEET 06



COPY

- NOTES:**
1. THE EXISTING EXPOSED AGGREGATE HEADWALLS WHICH ARE POURED MONOLITHICALLY WITH THE DRIVEWAY SHALL BE REINSTALLED AS SUCH. THE HEADWALL SHALL EXTEND AS A CURB 6-INCHES ABOVE THE DRIVEWAY AND 18-INCHES ON EACH SIDE OF THE CULVERT. THE HEADWALL SHALL BE POURED SO THAT IT EXTENDS AT LEAST 6-INCHES BELOW THE FLOW LINE OF THE PIPE.
  2. DRIVEWAYS WITHOUT A WINGED HEADWALL SHALL BE POURED VERTICALLY DOWN EACH SIDE TO A DEPTH OF AT LEAST 6 INCHES BELOW FINISHED GRADE. THE VERTICAL SIDEWALLS SHALL BE 6-INCHES THICK.
  3. ALL OTHER HEADWALLS SHALL BE WINGED HEADWALLS EITHER POURED IN PLACE OR PRECAST. IF THE HEADWALLS SHALL BE THE MINIMUM SIZES NECESSARY TO FIT THE DRAINAGE PIPE (I.E. THEY ARE EXCESSIVELY TALL OR WIDE). THE HEADWALLS SHALL NOT EXTEND ABOVE THE DRIVEWAY SURFACE MORE THAN 6-INCHES. THE HEADWALLS SHALL BE CUSTOM MADE TO FIT THE ELLIPTICAL PIPES.



MATCH LINE SEE SHEET 08

**PROPOSED LAYOUT SHEET 3**  
**MS4 CAPITAL IMPROVEMENT PROJECT #3**  
**BUCKNER PLACE SUBDIVISION**  
**CITY OF SPRING HILL**  
**WILLIAMSON COUNTY, TENNESSEE**

JOB NO.: 0308-078

| REV | DESCRIPTION | DATE |
|-----|-------------|------|
|     |             |      |
|     |             |      |
|     |             |      |

7



WILLIAM C. DILLING  
 ENGINEER  
 No. 0000000000

**DEMPSEY, DILLING & ASSOCIATES, P.C.**  
 Engineering Consultants  
 502 Hazelwood Drive  
 Smyrna, Tennessee 37167  
 ph. (615) 220-5800 fax (615) 220-5888  
 www.dempseydilling.com

