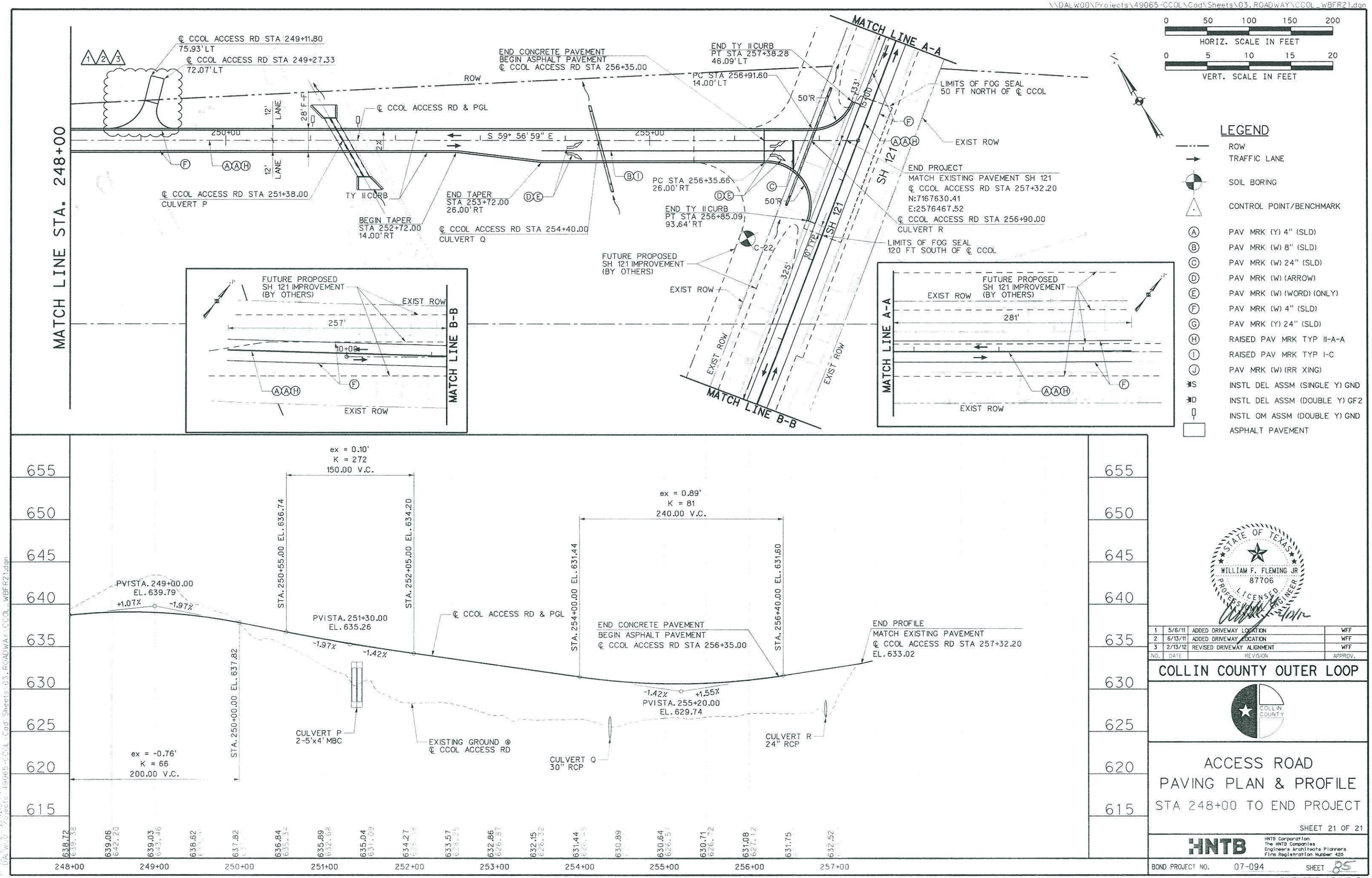



STATE OF TEXAS
WILLIAM F. FLEMING JR
87706
LICENSED
PROFESSIONAL ENGINEER
2/13/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/6/11 | ADDED DRIVEWAY LOCATION | WFF |
| 2 | 6/13/11 | ADDED DRIVEWAY LOCATION | WFF |
| 3 | 2/13/12 | REVISED DRIVEWAY ALIGNMENT | WFF |

# COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

## ACCESS ROAD PAVING PLAN & PROFILE

STA 248+00 TO END PROJECT

SHEET 21 OF 21

HNTB

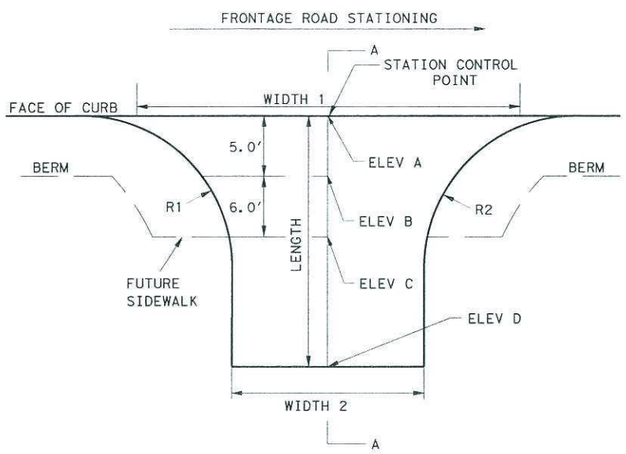
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

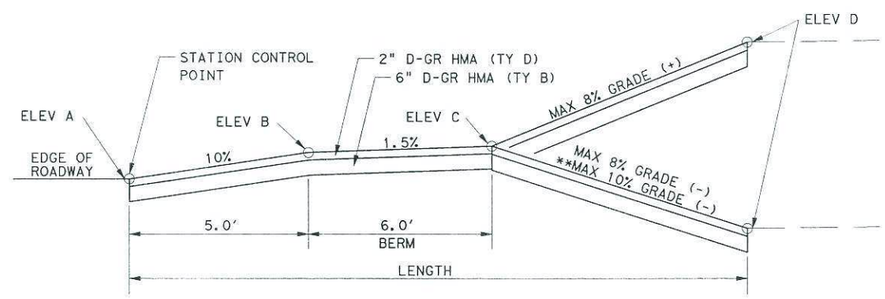
BOND PROJECT NO. 07-094 SHEET 85

# DRIVEWAY DETAILS & SUMMARY

| SHEET | LOCATION (STA) | EXIST TYPE | WIDTH 1 | WIDTH 2 | LENGTH | R1 | R2 | ELEV A | ELEV B | ELEV C | ELEV D | GRADE | DRIVEWAY AREA* | 530 / 2011 DRIVEWAYS (ACP) | 247 / 2061 FL BS (CMP IN PLC) (TY A GR 1) (6") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FT | FT | FT | FT | FT | | | | | | SY | SY | SY |
| **CCOL ACCESS ROAD** | | | | | | | | | | | | | | | |
| **SHEET 9 OF 21 | CCOL 108+79.97 | | 24.00 | 14.00 | 47.00 | 5 | 5 | 707.35 | 707.85 | 707.94 | 704.34 | -10.00% | 74 | 74 | |
| **SHEET 9 OF 21 | CCOL 108+97.33 | | 24.00 | 14.00 | 45.00 | 5 | 5 | 707.29 | 707.79 | 707.88 | 704.49 | -9.98% | 71 | 71 | |
| SHEET 15 OF 21 | CCOL 177+18.45 | ACP | 138.65 | 36.85 | 64.25 | 50 | 50 | 705.61 | 706.11 | 706.20 | 706.33 | 0.24% | 375 | 375 | |
| SHEET 15 OF 21 | CCOL 182+50.00 | | 138.65 | 36.00 | 50.89 | 50 | 50 | 707.61 | 708.11 | 708.20 | 705.41 | -6.99% | 328 | 328 | |
| SHEET 18 OF 21 | CCOL 218+60.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 640.60 | 641.10 | 641.19 | 643.73 | 6.51% | 97 | 64 | 33 |
| SHEET 19 OF 21 | CCOL 234+90.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 646.94 | 647.44 | 647.53 | 648.31 | 2.00% | 97 | 61 | 36 |
| SHEET 21 OF 21 | CCOL 249+07.36 | | 76.00 | 16.00 | 60.00 | 20 | 43 | 638.75 | 639.15 | 639.24 | 639.80 | 1.14% | 151 | 98 | 53 |
| **CR 365** | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 365 15+45.10 | ACP | 43.81 | 15.00 | 35.50 | 15 | 15 | 706.74 | 703.19 | - | - | -10.00% | 70 | 70 | |
| **CR 418** | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 418 15+96.18 | ACP | 45.14 | 15.00 | 15.25 | 50 | 50 | 706.94 | 705.72 | - | - | -8.00% | 40 | 40 | |
| TOTAL | | | | | | | | | | | | | 1303 | 1181 | 122 |

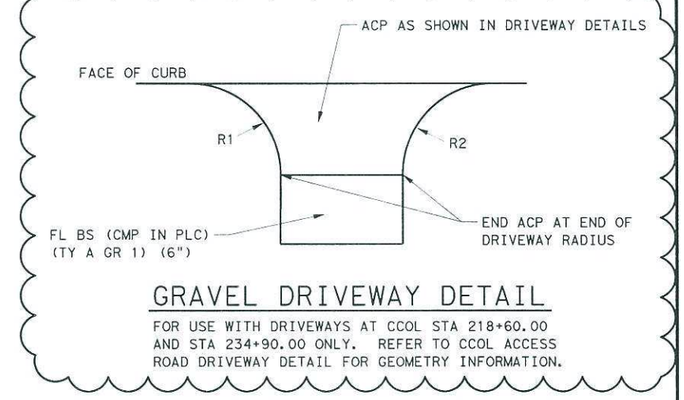
* FOR CONTRACTOR'S INFORMATION ONLY
** RAILROAD SERVICE ACCESS



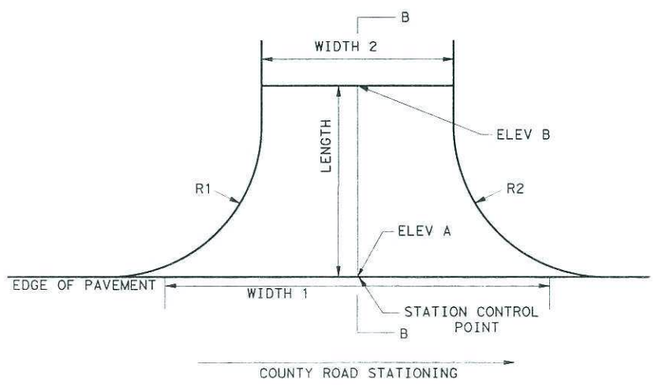

SECTION A-A

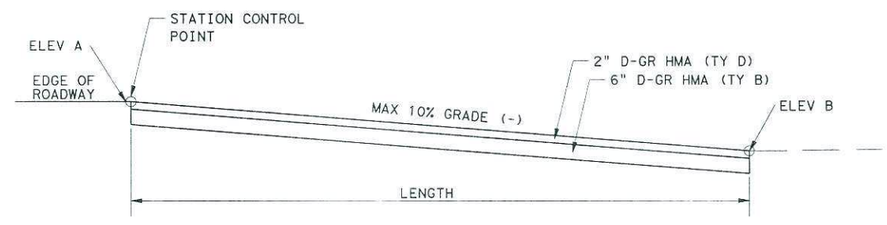
## CCOL ACCESS ROAD DRIVEWAY DETAIL




## GRAVEL DRIVEWAY DETAIL

FOR USE WITH DRIVEWAYS AT CCOL STA 218+60.00 AND STA 234+90.00 ONLY. REFER TO CCOL ACCESS ROAD DRIVEWAY DETAIL FOR GEOMETRY INFORMATION.




SECTION B-B

## COUNTY ROAD DRIVEWAY DETAIL

STATE OF TEXAS
WILLIAM F. FLEMING JR.
87706
LICENSED PROFESSIONAL ENGINEER
2/13/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS | WFF |
| 2 | 5/6/11 | ADDED DRIVEWAY LOCATION | WFF |
| 3 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | WFF |
| 4 | 2/13/12 | REVISED DRIVEWAY ALIGNMENT | WFF |

COLLIN COUNTY OUTER LOOP

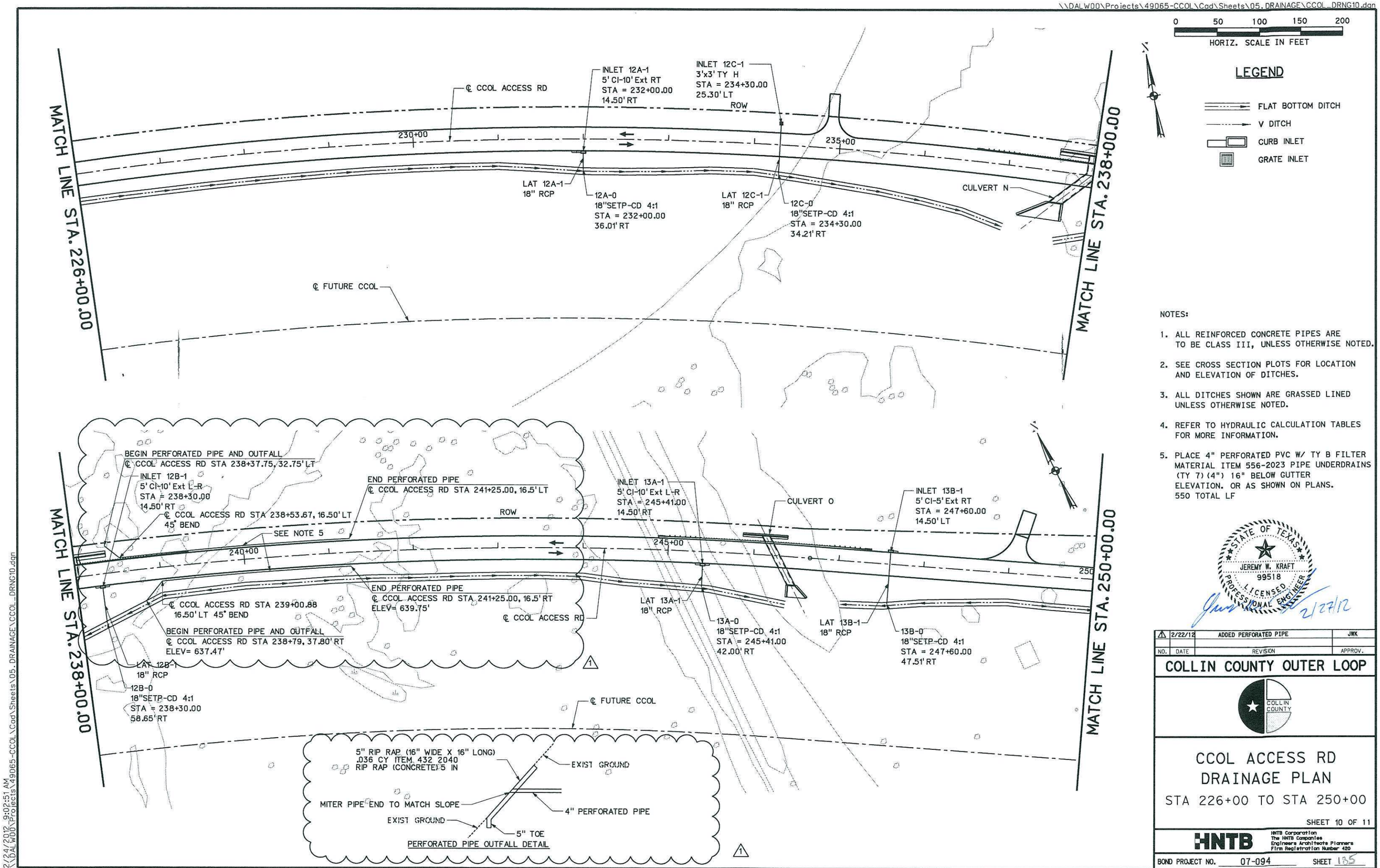
COLLIN COUNTY

DRIVEWAY DETAILS

SHEET 1 OF 1

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 100




NOTES:

1. ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III, UNLESS OTHERWISE NOTED.
2. SEE CROSS SECTION PLOTS FOR LOCATION AND ELEVATION OF DITCHES.
3. ALL DITCHES SHOWN ARE GRASSED LINED UNLESS OTHERWISE NOTED.
4. REFER TO HYDRAULIC CALCULATION TABLES FOR MORE INFORMATION.
5. PLACE 4" PERFORATED PVC W/ TY B FILTER MATERIAL ITEM 556-2023 PIPE UNDERDRAINS (TY 7)(4") 16" BELOW GUTTER ELEVATION. OR AS SHOWN ON PLANS. 550 TOTAL LF

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
2/27/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/22/12 | ADDED PERFORATED PIPE | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

CCOL ACCESS RD
DRAINAGE PLAN
STA 226+00 TO STA 250+00

SHEET 10 OF 11

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 135

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 234+00.00 | 33.63 | RT | 4' FB | 647.44 | -3.1% | RIPRAP | - | 7.72 |
| 234+50.00 | 37.92 | RT | 4' FB | 644.52 | -5.8% | RIPRAP | - | 7.72 |
| 235+50.00 | 47.10 | RT | 4' FB | 638.69 | -5.8% | RIPRAP | - | 15.43 |
| 236+00.00 | 53.23 | RT | 4' FB | 635.77 | -5.8% | RIPRAP | - | 7.72 |
| 236+89.78 | 70.83 | RT | 4' FB | 632.85 | -3.3% | RIPRAP | - | 13.85 |
| | | | | | | | | |
| 237+43.09 | 67.56 | RT | 4' FB | 633.44 | - | - | - | - |
| 238+50.00 | 46.91 | RT | 4' FB | 636.37 | 2.7% | RIPRAP | - | 16.50 |
| 239+00.00 | 34.12 | RT | 4' FB | 637.33 | 1.9% | BLOCK SOD | 55.56 | - |
| 239+50.00 | 32.95 | RT | 4' FB | 637.89 | 1.1% | BLOCK SOD | 55.56 | - |
| 240+00.00 | 31.32 | RT | 4' FB | 638.31 | 0.8% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 240+50.00 | 32.30 | RT | 4' FB | 638.70 | - | - | - | - |
| 241+00.00 | 31.87 | RT | 4' FB | 639.24 | 1.1% | BLOCK SOD | 55.56 | - |
| 241+50.00 | 32.09 | RT | 4' FB | 638.51 | -1.5% | BLOCK SOD | 55.56 | - |
| 242+00.00 | 33.50 | RT | 4' FB | 637.49 | -2.0% | BLOCK SOD | 55.56 | - |
| 242+50.00 | 33.26 | RT | 4' FB | 636.88 | -1.2% | BLOCK SOD | 55.56 | - |
| 243+00.00 | 33.00 | RT | 4' FB | 636.27 | -1.2% | BLOCK SOD | 55.56 | - |
| 243+50.00 | 33.03 | RT | 4' FB | 635.59 | -1.4% | BLOCK SOD | 55.56 | - |
| 244+00.00 | 33.98 | RT | 4' FB | 634.68 | -1.8% | BLOCK SOD | 55.56 | - |
| 244+50.00 | 35.04 | RT | 4' FB | 633.77 | -1.8% | BLOCK SOD | 55.56 | - |
| 245+00.00 | 42.31 | RT | 4' FB | 632.82 | -1.9% | BLOCK SOD | 55.56 | - |
| 245+50.00 | 44.29 | RT | 4' FB | 631.91 | -1.8% | BLOCK SOD | 55.56 | - |
| 246+43.00 | 57.44 | RT | 4' FB | 631.63 | -0.3% | BLOCK SOD | 103.33 | - |
| | | | | | | | | |
| 246+78.18 | 60.36 | RT | 4' FB | 632.13 | - | - | - | - |
| 247+50.00 | 51.16 | RT | 4' FB | 633.30 | 1.6% | BLOCK SOD | 79.80 | - |
| 248+00.00 | 43.51 | RT | 4' FB | 634.37 | 2.1% | BLOCK SOD | 55.56 | - |
| 248+50.00 | 39.26 | RT | 4' FB | 635.43 | 2.1% | BLOCK SOD | 55.56 | - |
| 249+00.00 | 35.01 | RT | 4' FB | 636.49 | 2.1% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 249+50.00 | 36.37 | RT | 4' FB | 635.73 | - | - | - | - |
| 250+00.00 | 36.96 | RT | 4' FB | 634.97 | -1.5% | BLOCK SOD | 55.56 | - |
| 250+50.00 | 35.52 | RT | 4' FB | 634.17 | -1.6% | BLOCK SOD | 55.56 | - |
| 251+17.63 | 51.75 | RT | 4' FB | 631.51 | -3.9% | RIPRAP | - | 10.44 |
| | | | | | | | | |
| 252+50.00 | 48.62 | RT | 4' FB | 627.54 | - | - | - | - |
| 253+00.00 | 56.22 | RT | 4' FB | 627.30 | -0.5% | BLOCK SOD | 55.56 | - |
| 253+50.00 | 54.94 | RT | 4' FB | 627.15 | -0.3% | BLOCK SOD | 55.56 | - |
| 254+00.00 | 55.56 | RT | 4' FB | 627.00 | -0.3% | BLOCK SOD | 55.56 | - |
| 254+50.00 | 62.25 | RT | 4' FB | 624.87 | -4.3% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 254+59.84 | 64.45 | RT | 4' FB | 625.88 | - | - | - | - |
| 255+50.00 | 55.63 | RT | 4' FB | 626.07 | 0.2% | BLOCK SOD | 100.18 | - |
| 256+00.00 | 57.23 | RT | 4' FB | 626.22 | 0.3% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 15+00.00 | 43.13 | LT | V | 631.53 | - | - | - | - |
| 15+50.00 | 34.52 | LT | V | 629.39 | -4.3% | BLOCK SOD | 33.33 | - |
| 16+00.00 | 34.39 | LT | V | 625.93 | -6.9% | RIPRAP | - | 4.63 |
| 16+50.00 | 35.84 | LT | V | 622.56 | -6.7% | RIPRAP | - | 4.63 |
| | | | | | | | | |
| 26+50.00 | 25.96 | LT | V | 604.27 | - | - | - | - |
| 27+00.00 | 22.50 | LT | V | 605.13 | 1.7% | BLOCK SOD | 33.33 | - |
| 27+50.00 | 22.50 | LT | V | 604.80 | -0.7% | BLOCK SOD | 33.33 | - |
| 28+00.00 | 25.13 | LT | V | 603.56 | -2.5% | BLOCK SOD | 33.33 | - |
| 28+50.00 | 31.85 | LT | V | 601.63 | -3.9% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 58+00.00 | 26.07 | LT | V | 625.04 | - | - | - | - |
| 58+50.00 | 22.53 | LT | V | 629.30 | 8.5% | RIPRAP | - | 4.63 |
| 59+00.00 | 22.53 | LT | V | 632.39 | 6.2% | RIPRAP | - | 4.63 |
| 59+50.00 | 22.53 | LT | V | 635.48 | 6.2% | RIPRAP | - | 4.63 |
| TOTAL | | | | | | | 1727.76 | 102.52 |

1

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 60+00.00 | 22.53 | LT | V | 638.56 | 6.2% | RIPRAP | - | 4.63 |
| 60+50.00 | 22.53 | LT | V | 641.55 | 6.0% | RIPRAP | - | 4.63 |
| 61+00.00 | 22.53 | LT | V | 644.16 | 5.2% | RIPRAP | - | 4.63 |
| 61+50.00 | 22.53 | LT | V | 646.36 | 4.4% | BLOCK SOD | 33.33 | - |
| 62+00.00 | 22.53 | LT | V | 648.15 | 3.6% | BLOCK SOD | 33.33 | - |
| 62+50.00 | 22.53 | LT | V | 649.55 | 2.8% | BLOCK SOD | 33.33 | - |
| 63+00.00 | 22.53 | LT | V | 650.54 | 2.0% | BLOCK SOD | 33.33 | - |
| 63+50.00 | 22.50 | LT | V | 651.13 | 1.2% | BLOCK SOD | 33.33 | - |
| 64+00.00 | 22.50 | LT | V | 651.31 | 0.4% | BLOCK SOD | 33.33 | - |
| 64+50.00 | 22.50 | LT | V | 651.09 | -0.4% | BLOCK SOD | 33.33 | - |
| 65+00.00 | 22.56 | LT | V | 650.47 | -1.2% | BLOCK SOD | 33.33 | - |
| 65+50.00 | 22.56 | LT | V | 649.45 | -2.0% | BLOCK SOD | 33.33 | - |
| 66+00.00 | 22.56 | LT | V | 648.02 | -2.9% | BLOCK SOD | 33.33 | - |
| 66+50.00 | 22.56 | LT | V | 646.29 | -3.5% | BLOCK SOD | 33.33 | - |
| 67+00.00 | 22.56 | LT | V | 644.54 | -3.5% | BLOCK SOD | 33.33 | - |
| 67+50.00 | 22.56 | LT | V | 642.79 | -3.5% | BLOCK SOD | 33.33 | - |
| 68+00.00 | 25.93 | LT | V | 639.92 | -5.7% | RIPRAP | - | 4.63 |
| 68+50.00 | 28.70 | LT | V | 637.22 | -5.4% | RIPRAP | - | 4.63 |
| | | | | | | | | |
| 72+19.00 | 35.06 | LT | V | | - | - | - | - |
| 72+50.00 | 34.62 | LT | V | 625.80 | ###### | BLOCK SOD | 20.67 | - |
| 73+00.00 | 33.54 | LT | V | 626.11 | 0.6% | BLOCK SOD | 33.33 | - |
| 73+50.00 | 32.68 | LT | V | 626.60 | 1.0% | BLOCK SOD | 33.33 | - |
| 74+00.00 | 30.68 | LT | V | 627.51 | 1.8% | BLOCK SOD | 33.33 | - |
| 74+50.00 | 28.52 | LT | V | 628.48 | 1.9% | BLOCK SOD | 33.33 | - |
| 75+00.00 | 27.26 | LT | V | 629.15 | 1.3% | BLOCK SOD | 33.33 | - |
| 75+50.00 | 25.50 | LT | V | 629.99 | 1.7% | BLOCK SOD | 33.33 | - |
| 76+00.00 | 25.50 | LT | V | 630.24 | 0.5% | BLOCK SOD | 33.33 | - |
| 76+50.00 | 25.50 | LT | V | 630.53 | 0.6% | BLOCK SOD | 33.33 | - |
| 77+00.00 | 26.03 | LT | V | 630.73 | 0.4% | BLOCK SOD | 33.33 | - |
| 77+50.00 | 26.80 | LT | V | 630.93 | 0.4% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 78+00.00 | 31.53 | LT | V | 629.86 | - | - | - | - |
| 78+50.00 | 34.89 | LT | V | 629.24 | -1.2% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 93+00.00 | 27.29 | LT | V | 687.10 | - | - | - | - |
| 93+50.00 | 25.55 | LT | V | 691.10 | 8.0% | BLOCK SOD | 33.33 | - |
| 94+00.00 | 24.37 | LT | V | 694.91 | 7.6% | BLOCK SOD | 33.33 | - |
| 94+50.00 | 25.81 | LT | V | 697.62 | 5.4% | BLOCK SOD | 33.33 | - |
| 95+00.00 | 24.77 | LT | V | 700.84 | 6.4% | BLOCK SOD | 33.33 | - |
| 95+50.00 | 26.34 | LT | V | 702.83 | 4.0% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 111+50.00 | 32.82 | LT | V | 697.07 | - | - | - | - |
| 112+00.00 | 31.45 | LT | V | 696.13 | -1.9% | BLOCK SOD | 33.33 | - |
| 112+50.00 | 30.18 | LT | V | 695.28 | -1.7% | BLOCK SOD | 33.33 | - |
| 113+00.00 | 29.01 | LT | V | 694.66 | -1.2% | BLOCK SOD | 33.33 | - |
| 113+50.00 | 28.62 | LT | V | 694.04 | -1.2% | BLOCK SOD | 33.33 | - |
| 114+00.00 | 29.02 | LT | V | 693.42 | -1.2% | BLOCK SOD | 33.33 | - |
| 114+50.00 | 30.06 | LT | V | 692.80 | -1.2% | BLOCK SOD | 33.33 | - |
| 115+00.00 | 31.16 | LT | V | 692.18 | -1.2% | BLOCK SOD | 33.33 | - |
| 115+50.00 | 32.27 | LT | V | 691.56 | -1.2% | BLOCK SOD | 33.33 | - |
| 116+00.00 | 33.00 | LT | V | 691.07 | -1.0% | BLOCK SOD | 33.33 | - |
| 116+50.00 | 33.67 | LT | V | 690.59 | -1.0% | BLOCK SOD | 33.33 | - |
| 117+00.00 | 34.33 | LT | V | 690.12 | -0.9% | BLOCK SOD | 33.33 | - |
| 117+50.00 | 34.51 | LT | V | 689.81 | -0.6% | BLOCK SOD | 33.33 | - |
| 118+00.00 | 34.66 | LT | V | 689.51 | -0.6% | BLOCK SOD | 33.33 | - |
| 118+50.00 | 34.81 | LT | V | 689.21 | -0.6% | BLOCK SOD | 33.33 | - |
| 119+00.00 | 34.96 | LT | V | 688.91 | -0.6% | BLOCK SOD | 33.33 | - |
| 119+50.00 | 35.11 | LT | V | 688.61 | -0.6% | BLOCK SOD | 33.33 | - |
| 120+00.00 | 35.26 | LT | V | 688.31 | -0.6% | BLOCK SOD | 33.33 | - |
| 120+50.00 | 35.32 | LT | V | 688.04 | -0.5% | BLOCK SOD | 33.33 | - |
| TOTAL | | | | | | | 1587.33 | 23.15 |

1

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 121+00.00 | 35.26 | LT | V | 687.81 | -0.5% | BLOCK SOD | 33.33 | - |
| 121+50.00 | 35.08 | LT | V | 687.62 | -0.4% | BLOCK SOD | 33.33 | - |
| 122+00.00 | 34.78 | LT | V | 687.47 | -0.3% | BLOCK SOD | 33.33 | - |
| 122+50.00 | 34.48 | LT | V | 687.32 | -0.3% | BLOCK SOD | 33.33 | - |
| 123+00.00 | 34.18 | LT | V | 687.17 | -0.3% | BLOCK SOD | 33.33 | - |
| 123+50.00 | 33.88 | LT | V | 687.02 | -0.3% | BLOCK SOD | 33.33 | - |
| 124+00.00 | 33.58 | LT | V | 686.87 | -0.3% | BLOCK SOD | 33.33 | - |
| 124+50.00 | 33.28 | LT | V | 686.72 | -0.3% | BLOCK SOD | 33.33 | - |
| 125+00.00 | 32.98 | LT | V | 686.57 | -0.3% | BLOCK SOD | 33.33 | - |
| 125+50.00 | 32.68 | LT | V | 686.42 | -0.3% | BLOCK SOD | 33.33 | - |
| 126+00.00 | 32.38 | LT | V | 686.27 | -0.3% | BLOCK SOD | 33.33 | - |
| 126+50.00 | 32.08 | LT | V | 686.12 | -0.3% | BLOCK SOD | 33.33 | - |
| 127+00.00 | 31.78 | LT | V | 685.97 | -0.3% | BLOCK SOD | 33.33 | - |
| 127+50.00 | 31.79 | LT | V | 685.82 | -0.3% | BLOCK SOD | 33.33 | - |
| 128+00.00 | 32.29 | LT | V | 685.67 | -0.3% | BLOCK SOD | 33.33 | - |
| 128+50.00 | 33.29 | LT | V | 685.52 | -0.3% | BLOCK SOD | 33.33 | - |
| 129+00.00 | 34.49 | LT | V | 685.37 | -0.3% | BLOCK SOD | 33.33 | - |
| 129+50.00 | 35.70 | LT | V | 685.22 | -0.3% | BLOCK SOD | 33.33 | - |
| 130+00.00 | 36.90 | LT | V | 685.07 | -0.3% | BLOCK SOD | 33.33 | - |
| 130+50.00 | 38.10 | LT | V | 684.92 | -0.3% | BLOCK SOD | 33.33 | - |
| 131+00.00 | 39.31 | LT | V | 684.77 | -0.3% | BLOCK SOD | 33.33 | - |
| 131+50.00 | 40.51 | LT | V | 684.62 | -0.3% | BLOCK SOD | 33.33 | - |
| 132+00.00 | 41.71 | LT | V | 684.47 | -0.3% | BLOCK SOD | 33.33 | - |
| 132+50.00 | 42.92 | LT | V | 684.32 | -0.3% | BLOCK SOD | 33.33 | - |
| 133+00.00 | 44.12 | LT | V | 684.17 | -0.3% | BLOCK SOD | 33.33 | - |
| 133+50.00 | 45.33 | LT | V | 684.02 | -0.3% | BLOCK SOD | 33.33 | - |
| 134+00.00 | 46.53 | LT | V | 683.87 | -0.3% | BLOCK SOD | 33.33 | - |
| 134+50.00 | 47.73 | LT | V | 683.72 | -0.3% | BLOCK SOD | 33.33 | - |
| 135+00.00 | 48.94 | LT | V | 683.57 | -0.3% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 173+00.00 | 28.81 | LT | V | 704.84 | - | - | - | - |
| 173+50.00 | 29.08 | LT | V | 704.39 | -0.9% | BLOCK SOD | 33.33 | - |
| 174+00.00 | 28.79 | LT | V | 704.14 | -0.5% | BLOCK SOD | 33.33 | - |
| 174+50.00 | 27.73 | LT | V | 704.18 | 0.1% | BLOCK SOD | 33.33 | - |
| 175+00.00 | 27.25 | LT | V | 704.03 | -0.3% | BLOCK SOD | 33.33 | - |
| 175+50.00 | 26.43 | LT | V | 703.96 | -0.1% | BLOCK SOD | 33.33 | - |
| 176+00.00 | 25.84 | LT | V | 703.88 | -0.2% | BLOCK SOD | 33.33 | - |
| 176+50.00 | 26.07 | LT | V | 703.73 | -0.3% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 209+00.00 | 29.86 | LT | V | 654.85 | - | - | - | - |
| 209+50.00 | 28.85 | LT | V | 653.85 | -2.0% | BLOCK SOD | 33.33 | - |
| 210+00.00 | 28.14 | LT | V | 652.85 | -2.0% | BLOCK SOD | 33.33 | - |
| 210+50.00 | 27.43 | LT | V | 651.85 | -2.0% | BLOCK SOD | 33.33 | - |
| 211+00.00 | 27.25 | LT | V | 650.68 | -2.3% | BLOCK SOD | 33.33 | - |
| 211+50.00 | 26.54 | LT | V | 649.67 | -2.0% | BLOCK SOD | 33.33 | - |
| 212+00.00 | 24.00 | LT | V | 649.28 | -0.8% | BLOCK SOD | 33.33 | - |
| 212+50.00 | 24.00 | LT | V | 648.05 | -2.5% | BLOCK SOD | 33.33 | - |
| 213+00.00 | 24.00 | LT | V | 646.81 | -2.5% | BLOCK SOD | 33.33 | - |
| 213+50.00 | 24.00 | LT | V | 645.57 | -2.5% | BLOCK SOD | 33.33 | - |
| 214+00.00 | 24.00 | LT | V | 644.33 | -2.5% | BLOCK SOD | 33.33 | - |
| 214+50.00 | 24.00 | LT | V | 643.10 | -2.5% | BLOCK SOD | 33.33 | - |
| 215+00.00 | 29.12 | LT | V | 640.15 | -5.9% | RIPRAP | - | 4.63 |
| 215+50.00 | 34.01 | LT | V | 637.36 | -5.6% | RIPRAP | - | 4.63 |
| | | | | | | | | |
| 233+00.00 | 26.81 | LT | V | 651.59 | - | - | - | - |
| 233+50.00 | 25.86 | LT | V | 650.64 | -1.9% | BLOCK SOD | 33.33 | - |
| 234+00.00 | 24.90 | LT | V | 649.31 | -2.7% | BLOCK SOD | 33.33 | - |
| 234+50.00 | 22.96 | LT | V | 648.11 | -2.4% | BLOCK SOD | 33.33 | - |
| 235+50.00 | 26.50 | LT | V | 643.38 | -4.7% | BLOCK SOD | 66.67 | - |
| 236+00.00 | 27.19 | LT | V | 641.77 | -3.2% | BLOCK SOD | 33.33 | - |
| 236+50.00 | 30.59 | LT | V | 639.56 | -4.4% | BLOCK SOD | 33.33 | - |
| COLUMN TOTAL | | | | | | | 1800.00 | 9.26 |
| SHEET TOTAL | | | | | | | 5115.09 | 134.93 |
| DITCH TOTAL | | | | | | | 19933 | 559 |

1

NOTES:

1. SEE MISCELLANEOUS DITCH DETAILS SHEET 3 OF 3 FOR DITCH LINING DETAILS.
2. SEE CROSS SECTION PLOTS FOR ADDITIONAL DITCH INFORMATION.
3. DITCH TYPE
   FB = FLAT BOTTOM DITCH
   V = V DITCH

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER

2/27/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/23/12 | REVISED DITCH FL ELEVATIONS | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

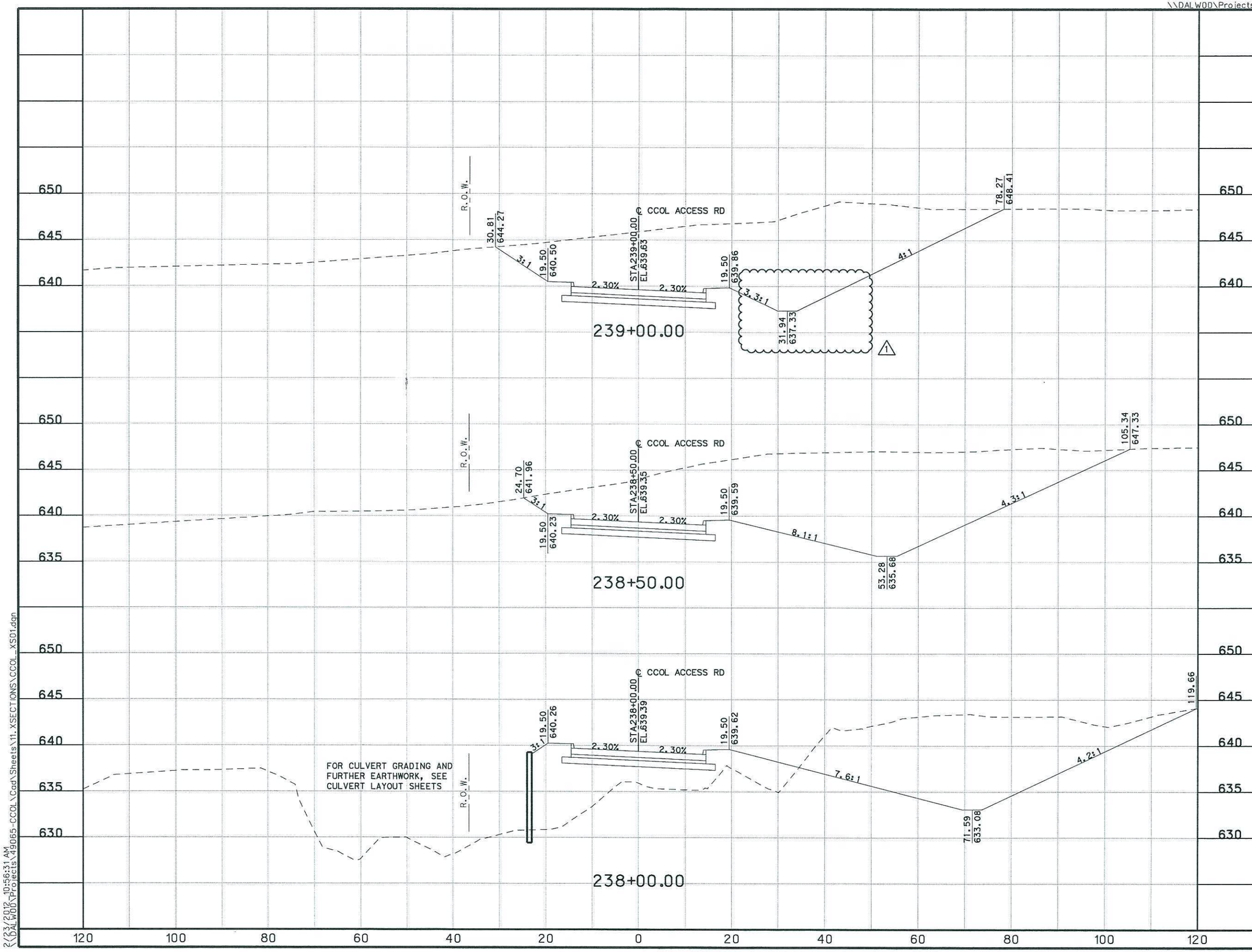
CCOL ACCESS RD
DITCH SCHEDULE

SHEET 3 OF 3

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 189




| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/23/12 | REVISED DITCH ELEVATION AND SLOPE | JWK |

COLLIN COUNTY OUTER LOOP

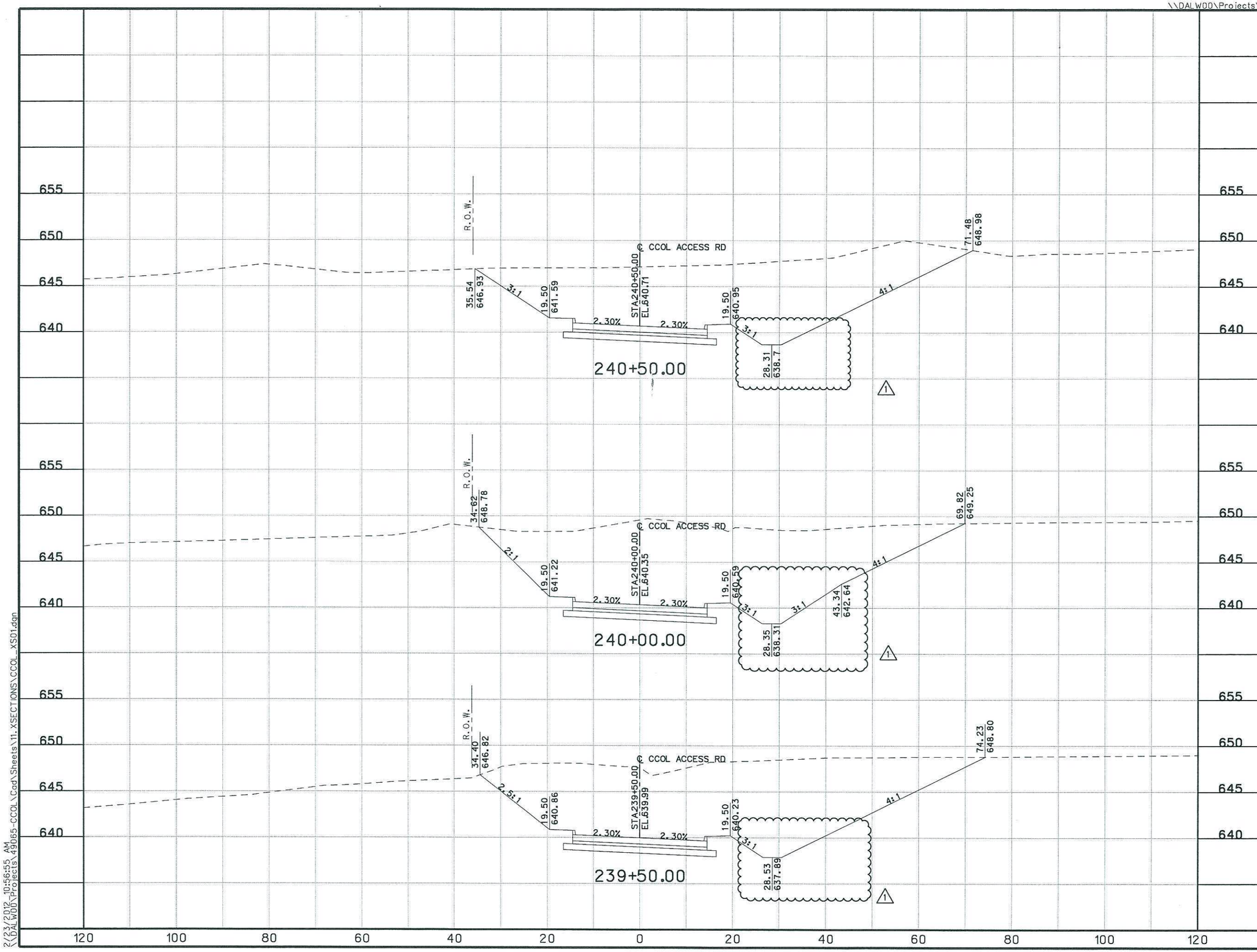
COLLIN COUNTY

CROSS SECTIONS

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

CONTRACT NO. 07-094 SHEET 161




0 10 20 30 40
HORIZ. SCALE IN FEET

0 5 10 15 20
VERT. SCALE IN FEET

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/23/12 | REVISED DITCH ELEVATION AND SLOPE | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

CROSS SECTIONS

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

CONTRACT NO. 07-094 SHEET 162

2/23/2012_10:56:55 AM

## SUMMARY OF EARTHWORK QUANTITIES

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 139+00.00 | 139+50.00 | 160 | 379 |
| 139+50.00 | 140+00.00 | 155 | 296 |
| 140+00.00 | 140+50.00 | 165 | 221 |
| 140+50.00 | 141+00.00 | 182 | 146 |
| 141+00.00 | 141+50.00 | 179 | 95 |
| 141+50.00 | 142+00.00 | 149 | 83 |
| 142+00.00 | 142+50.00 | 132 | 79 |
| 142+50.00 | 143+00.00 | 146 | 61 |
| 143+00.00 | 143+50.00 | 171 | 43 |
| 143+50.00 | 144+00.00 | 198 | 37 |
| 144+00.00 | 144+50.00 | 228 | 39 |
| 144+50.00 | 145+00.00 | 255 | 50 |
| 145+00.00 | 145+50.00 | 332 | 39 |
| 145+50.00 | 146+00.00 | 351 | 29 |
| 146+00.00 | 146+50.00 | 291 | 45 |
| 146+50.00 | 147+00.00 | 270 | 55 |
| 147+00.00 | 147+50.00 | 251 | 65 |
| 147+50.00 | 148+00.00 | 235 | 77 |
| 148+00.00 | 148+50.00 | 223 | 88 |
| 148+50.00 | 149+00.00 | 211 | 101 |
| 149+00.00 | 149+50.00 | 198 | 109 |
| 149+50.00 | 150+00.00 | 184 | 116 |
| 150+00.00 | 150+50.00 | 213 | 72 |
| 150+50.00 | 151+00.00 | 210 | 70 |
| 151+00.00 | 151+50.00 | 211 | 73 |
| 151+50.00 | 152+00.00 | 215 | 70 |
| 152+00.00 | 152+50.00 | 175 | 118 |
| 152+50.00 | 153+00.00 | 213 | 74 |
| 153+00.00 | 153+50.00 | 215 | 50 |
| 153+50.00 | 154+00.00 | 181 | 81 |
| 154+00.00 | 154+50.00 | 228 | 54 |
| 154+50.00 | 155+00.00 | 247 | 27 |
| 155+00.00 | 155+50.00 | 220 | 33 |
| 155+50.00 | 156+00.00 | 118 | 31 |
| 156+00.00 | 156+50.00 | 26 | 25 |
| 156+50.00 | 157+00.00 | 35 | 21 |
| 157+00.00 | 157+50.00 | 41 | 18 |
| 157+50.00 | 158+00.00 | 50 | 15 |
| 158+00.00 | 158+50.00 | 48 | 16 |
| 158+50.00 | 159+00.00 | 49 | 16 |
| 159+00.00 | 159+50.00 | 46 | 18 |
| 159+50.00 | 160+00.00 | 35 | 23 |
| 160+00.00 | 160+50.00 | 28 | 27 |
| 160+50.00 | 161+00.00 | 26 | 27 |
| 161+00.00 | 161+50.00 | 30 | 24 |
| 161+50.00 | 162+00.00 | 25 | 29 |
| 162+00.00 | 162+50.00 | 20 | 31 |
| 162+50.00 | 163+00.00 | 83 | 29 |
| 163+00.00 | 163+50.00 | 131 | 31 |
| 163+50.00 | 164+00.00 | 113 | 37 |
| 164+00.00 | 164+50.00 | 97 | 41 |
| 164+50.00 | 165+00.00 | 83 | 52 |
| 165+00.00 | 165+50.00 | 66 | 65 |
| 165+50.00 | 166+00.00 | 55 | 68 |
| 166+00.00 | 166+50.00 | 53 | 62 |
| 166+50.00 | 167+00.00 | 58 | 63 |
| 167+00.00 | 167+50.00 | 59 | 78 |
| 167+50.00 | 168+00.00 | 52 | 110 |
| 168+00.00 | 168+50.00 | 50 | 153 |
| 168+50.00 | 169+00.00 | 51 | 199 |
| 169+00.00 | 169+50.00 | 50 | 244 |
| COLUMN TOTAL | | 8,572 | 4,528 |

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 169+50.00 | 170+00.00 | 52 | 284 |
| 170+00.00 | 170+50.00 | 59 | 310 |
| 170+50.00 | 171+00.00 | 67 | 336 |
| 171+00.00 | 171+50.00 | 36 | 362 |
| 171+50.00 | 172+00.00 | 18 | 506 |
| 172+00.00 | 172+50.00 | 0 | 649 |
| 172+50.00 | 173+00.00 | 0 | 271 |
| 173+00.00 | 173+50.00 | 3 | 223 |
| 173+50.00 | 174+00.00 | 10 | 149 |
| 174+00.00 | 174+50.00 | 110 | 95 |
| 174+50.00 | 175+00.00 | 227 | 62 |
| 175+00.00 | 175+50.00 | 269 | 41 |
| 175+50.00 | 176+00.00 | 307 | 29 |
| 176+00.00 | 176+50.00 | 335 | 28 |
| 176+50.00 | 177+00.00 | 490 | 64 |
| 177+00.00 | 177+50.00 | 645 | 100 |
| 177+50.00 | 178+00.00 | 301 | 89 |
| 178+00.00 | 178+50.00 | 309 | 125 |
| 178+50.00 | 179+00.00 | 320 | 161 |
| 179+00.00 | 179+50.00 | 335 | 188 |
| 179+50.00 | 180+00.00 | 358 | 203 |
| 180+00.00 | 180+50.00 | 381 | 221 |
| 180+50.00 | 181+00.00 | 404 | 244 |
| 181+00.00 | 181+50.00 | 424 | 269 |
| 181+50.00 | 182+00.00 | 443 | 281 |
| 182+00.00 | 182+50.00 | 461 | 265 |
| 182+50.00 | 183+00.00 | 478 | 225 |
| 183+00.00 | 183+50.00 | 488 | 177 |
| 183+50.00 | 184+00.00 | 481 | 115 |
| 184+00.00 | 184+50.00 | 452 | 62 |
| 184+50.00 | 185+00.00 | 390 | 42 |
| 185+00.00 | 185+50.00 | 327 | 30 |
| 185+50.00 | 186+00.00 | 299 | 17 |
| 186+00.00 | 186+50.00 | 309 | 8 |
| 186+50.00 | 187+00.00 | 243 | 19 |
| 187+00.00 | 187+50.00 | 130 | 33 |
| 187+50.00 | 188+00.00 | 93 | 39 |
| 188+00.00 | 188+50.00 | 73 | 47 |
| 188+50.00 | 189+00.00 | 51 | 61 |
| 189+00.00 | 189+50.00 | 44 | 82 |
| 189+50.00 | 190+00.00 | 43 | 112 |
| 190+00.00 | 190+50.00 | 37 | 130 |
| 190+50.00 | 191+00.00 | 32 | 129 |
| 191+00.00 | 191+50.00 | 40 | 115 |
| 191+50.00 | 192+00.00 | 49 | 85 |
| 192+00.00 | 192+50.00 | 45 | 97 |
| 192+50.00 | 193+00.00 | 60 | 97 |
| 193+00.00 | 193+50.00 | 79 | 66 |
| 193+50.00 | 194+00.00 | 91 | 55 |
| 194+00.00 | 194+50.00 | 117 | 41 |
| 194+50.00 | 195+00.00 | 122 | 46 |
| 195+00.00 | 195+50.00 | 131 | 42 |
| 195+50.00 | 196+00.00 | 138 | 33 |
| 196+00.00 | 196+50.00 | 151 | 29 |
| 196+50.00 | 197+00.00 | 220 | 9 |
| 197+00.00 | 197+50.00 | 199 | 20 |
| 197+50.00 | 198+00.00 | 138 | 43 |
| 198+00.00 | 198+50.00 | 147 | 39 |
| 198+50.00 | 199+00.00 | 152 | 35 |
| 199+00.00 | 199+50.00 | 172 | 28 |
| 199+50.00 | 200+00.00 | 290 | 33 |
| COLUMN TOTAL | | 12,675 | 7,796 |

## SUMMARY OF EARTHWORK QUANTITIES

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 200+00.00 | 200+50.00 | 408 | 38 |
| 200+50.00 | 201+00.00 | 208 | 24 |
| 201+00.00 | 201+50.00 | 185 | 37 |
| 201+50.00 | 202+00.00 | 172 | 97 |
| 202+00.00 | 202+50.00 | 181 | 188 |
| 202+50.00 | 203+00.00 | 93 | 260 |
| 203+00.00 | 203+50.00 | 50 | 278 |
| 203+50.00 | 204+00.00 | 77 | 288 |
| 204+00.00 | 204+50.00 | 48 | 328 |
| 204+50.00 | 205+00.00 | 50 | 283 |
| 205+00.00 | 205+50.00 | 45 | 202 |
| 205+50.00 | 206+00.00 | 31 | 154 |
| 206+00.00 | 206+50.00 | 38 | 82 |
| 206+50.00 | 207+00.00 | 66 | 147 |
| 207+00.00 | 207+50.00 | 47 | 212 |
| 207+50.00 | 208+00.00 | 0 | 252 |
| 208+00.00 | 208+50.00 | 0 | 415 |
| 208+50.00 | 209+00.00 | 8 | 468 |
| 209+00.00 | 209+50.00 | 20 | 301 |
| 209+50.00 | 210+00.00 | 26 | 136 |
| 210+00.00 | 210+50.00 | 49 | 97 |
| 210+50.00 | 211+00.00 | 66 | 90 |
| 211+00.00 | 211+50.00 | 62 | 80 |
| 211+50.00 | 212+00.00 | 71 | 56 |
| 212+00.00 | 212+50.00 | 80 | 44 |
| 212+50.00 | 213+00.00 | 118 | 45 |
| 213+00.00 | 213+50.00 | 182 | 51 |
| 213+50.00 | 214+00.00 | 273 | 57 |
| 214+00.00 | 214+50.00 | 407 | 53 |
| 214+50.00 | 215+00.00 | 332 | 231 |
| 215+00.00 | 215+50.00 | 98 | 973 |
| 215+50.00 | 216+00.00 | 6 | 1472 |
| 216+00.00 | 216+50.00 | 0 | 1083 |
| 216+50.00 | 217+00.00 | 1167 | 433 |
| 217+00.00 | 217+50.00 | 2277 | 56 |
| 217+50.00 | 218+00.00 | 2015 | 0 |
| 218+00.00 | 218+50.00 | 1701 | 0 |
| 218+50.00 | 219+00.00 | 1268 | 0 |
| 219+00.00 | 219+50.00 | 560 | 130 |
| 219+50.00 | 220+00.00 | 87 | 664 |
| 220+00.00 | 220+50.00 | 308 | 631 |
| 220+50.00 | 221+00.00 | 600 | 116 |
| 221+00.00 | 221+50.00 | 529 | 27 |
| 221+50.00 | 222+00.00 | 501 | 8 |
| 222+00.00 | 222+50.00 | 509 | 1 |
| 222+50.00 | 223+00.00 | 371 | 20 |
| 223+00.00 | 223+50.00 | 218 | 38 |
| 223+50.00 | 224+00.00 | 169 | 54 |
| 224+00.00 | 224+50.00 | 119 | 121 |
| 224+50.00 | 225+00.00 | 66 | 129 |
| 225+00.00 | 225+50.00 | 28 | 97 |
| 225+50.00 | 226+00.00 | 8 | 117 |
| 226+00.00 | 226+50.00 | 9 | 131 |
| 226+50.00 | 227+00.00 | 9 | 148 |
| 227+00.00 | 227+50.00 | 14 | 130 |
| 227+50.00 | 228+00.00 | 34 | 75 |
| 228+00.00 | 228+50.00 | 68 | 34 |
| 228+50.00 | 229+00.00 | 104 | 15 |
| 229+00.00 | 229+50.00 | 132 | 9 |
| 229+50.00 | 230+00.00 | 152 | 7 |
| 230+00.00 | 230+50.00 | 150 | 7 |
| COLUMN TOTAL | | 16,670 | 11,720 |

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 230+50.00 | 231+00.00 | 122 | 12 |
| 231+00.00 | 231+50.00 | 110 | 21 |
| 231+50.00 | 232+00.00 | 117 | 32 |
| 232+00.00 | 232+50.00 | 110 | 42 |
| 232+50.00 | 233+00.00 | 86 | 42 |
| 233+00.00 | 233+50.00 | 54 | 40 |
| 233+50.00 | 234+00.00 | 56 | 34 |
| 234+00.00 | 234+50.00 | 140 | 15 |
| 234+50.00 | 235+00.00 | 192 | 4 |
| 235+00.00 | 235+50.00 | 288 | 6 |
| 235+50.00 | 236+00.00 | 193 | 43 |
| 236+00.00 | 236+50.00 | 56 | 462 |
| 236+50.00 | 237+00.00 | 13 | 958 |
| 237+00.00 | 237+50.00 | 13 | 931 |
| 237+50.00 | 238+00.00 | 447 | 608 |
| 238+00.00 | 238+50.00 | 1225 | 212 |
| 238+50.00 | 239+00.00 | 1396 1 | 0 |
| 239+00.00 | 239+50.00 | 1288 | 0 |
| 239+50.00 | 240+00.00 | 1316 | 0 |
| 240+00.00 | 240+50.00 | 1229 | 0 |
| 240+50.00 | 241+00.00 | 1003 | 0 |
| 241+00.00 | 241+50.00 | 742 | 0 |
| 241+50.00 | 242+00.00 | 548 | 0 |
| 242+00.00 | 242+50.00 | 433 | 0 |
| 242+50.00 | 243+00.00 | 400 | 0 |
| 243+00.00 | 243+50.00 | 311 | 11 |
| 243+50.00 | 244+00.00 | 230 | 19 |
| 244+00.00 | 244+50.00 | 215 | 23 |
| 244+50.00 | 245+00.00 | 277 | 34 |
| 245+00.00 | 245+50.00 | 265 | 128 |
| 245+50.00 | 246+00.00 | 191 | 246 |
| 246+00.00 | 246+50.00 | 99 | 340 |
| 246+50.00 | 247+00.00 | 75 | 260 |
| 247+00.00 | 247+50.00 | 218 | 67 |
| 247+50.00 | 248+00.00 | 340 | 10 |
| 248+00.00 | 248+50.00 | 513 | 0 |
| 248+50.00 | 249+00.00 | 695 | 0 |
| 249+00.00 | 249+50.00 | 661 | 0 |
| 249+50.00 | 250+00.00 | 389 | 21 |
| 250+00.00 | 250+50.00 | 137 | 65 |
| 250+50.00 | 251+00.00 | 88 | 177 |
| 251+00.00 | 251+50.00 | 58 | 386 |
| 251+50.00 | 252+00.00 | 0 | 606 |
| 252+00.00 | 252+50.00 | 23 | 641 |
| 252+50.00 | 253+00.00 | 37 | 649 |
| 253+00.00 | 253+50.00 | 14 | 711 |
| 253+50.00 | 254+00.00 | 5 | 672 |
| 254+00.00 | 254+50.00 | 21 | 658 |
| 254+50.00 | 255+00.00 | 31 | 570 |
| 255+00.00 | 255+50.00 | 41 | 458 |
| 255+50.00 | 256+00.00 | 45 | 460 |
| 256+00.00 | 256+50.00 | 43 | 515 |
| COLUMN TOTAL | | 16,599 | 11,189 |
| SHEET TOTAL | | 54,516 | 35,233 |

1

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/27/12 | DITCH GRADING REVISIONS | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

EARTHWORK SUMMARY

SHEET 2 OF 3

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 16

4/11/2012_9:34:05 AM

4/11/2012 9:34:05 AM
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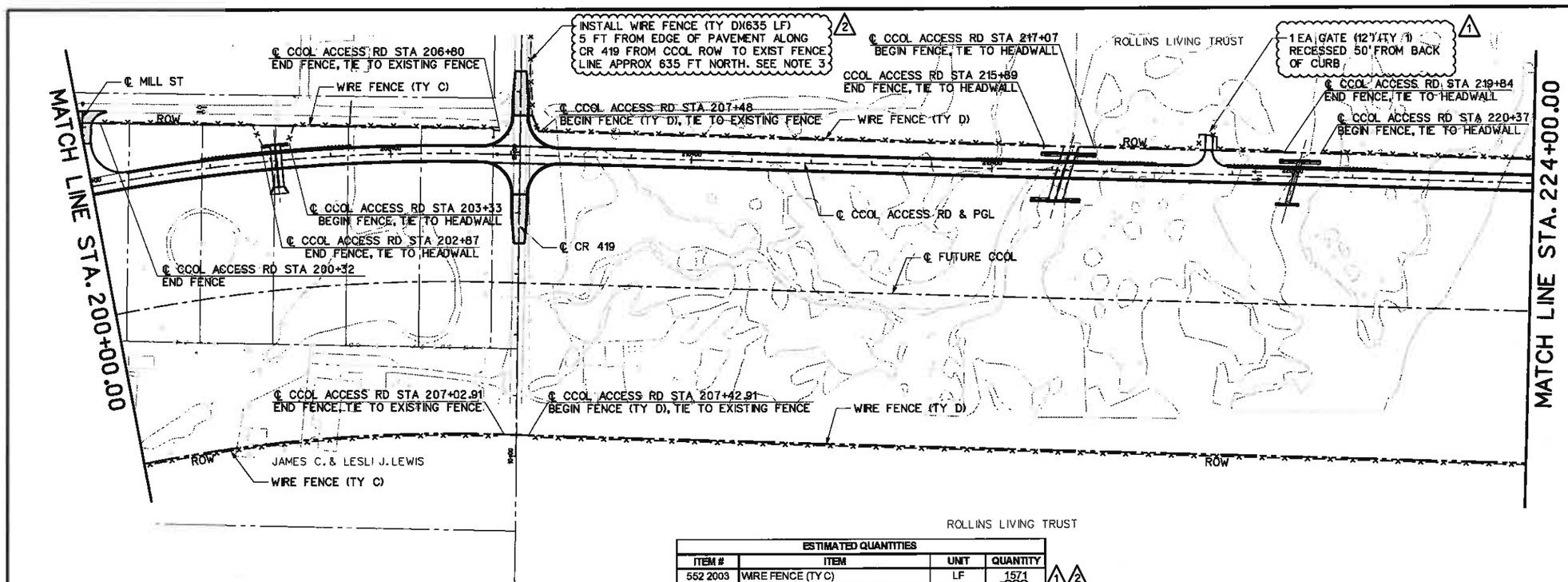
| Original Bi | | Change Order |
|---|---|---|
| VOL (CY) | AREA (SF) | VOL (CY) |
| 1044 | 0 | |
| 1044 | 7.3622 | 6.82 |
| 1071 | 13.4023 | 19.23 |
| 1027 | 22.3832 | 33.13 |
| 858 | 11.8531 | 31.70 |
| 688 | 0 | 10.98 |
| | | 101.85 |




0 100 200 300 400
HORIZ. SCALE IN FEET

## LEGEND

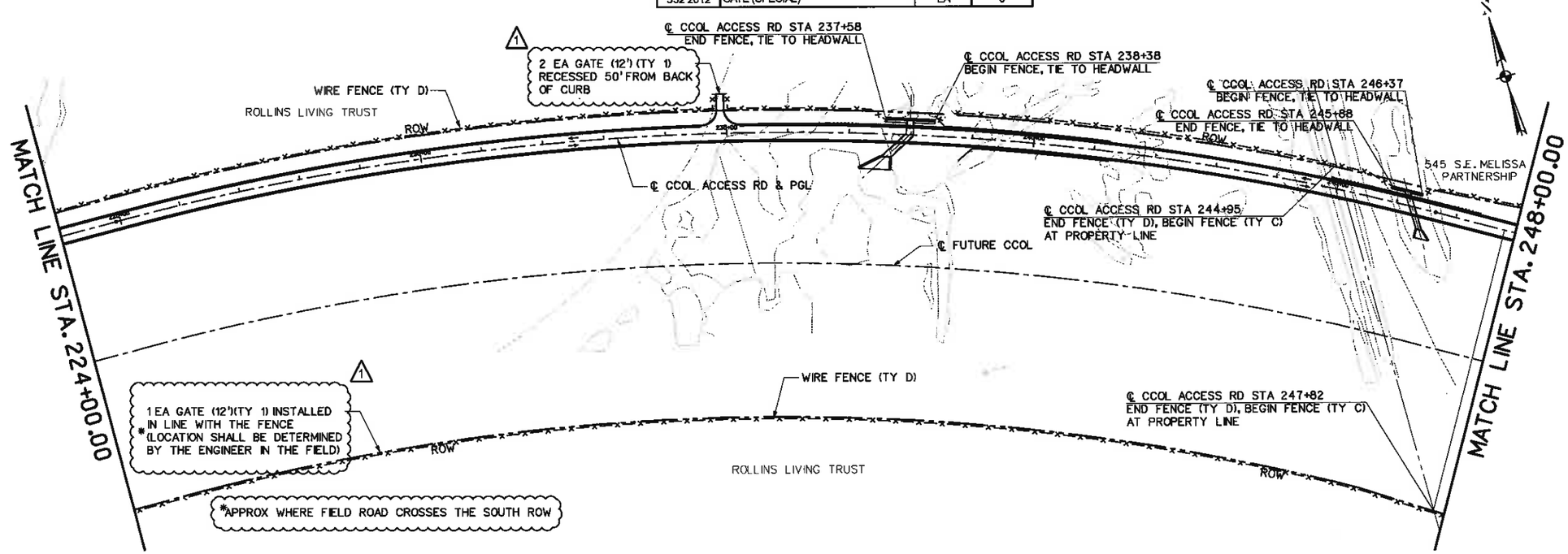
—x—x WIRE FENCE (TY C)

PROPERTY LINE

ROLLINS LIVING TRUST

| ESTIMATED QUANTITIES | | | |
|---|---|---|---|
| ITEM # | ITEM | UNIT | QUANTITY |
| 552 2003 | WIRE FENCE (TY C) | LF | 1571 |
| 552 2004 | WIRE FENCE (TY D) | LF | 8021 |
| 552 2006 | GATE (TY 1) | EA | 4 |
| 552 2012 | GATE (SPECIAL) | EA | 0 |

1 2




NOTES:

1. SEE PROPOSED TYPICAL SECTION SHEETS FOR ADDITIONAL INFORMATION CONCERNING THE INSTALLATION LOCATION OF THE WIRE FENCE
2. SEE STANDARD SHEET "WF(2)-96 MOD" FOR ADDITIONAL WIRE FENCE AND GATE DETAILS
3. WORK SHALL INCLUDE REMOVAL AND DISPOSAL OF THE EXISTING FENCE AND BRUSH AND TREES ALONG THE FENCE LINE. CONTRACTOR SHALL LEAVE A 24 LF OPENING FOR A GATE TO BE INSTALLED BY OTHERS. THE OPENING SHALL BE LOCATED IN THE FIELD BY THE ENGINEER.

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS AND GATES | WFF |
| 2 | 4/18/12 | ADDED FENCE ALONG CR 419 | JWK |

## COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

# ACCESS ROAD FENCING PLAN

SHEET 5 OF 6

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 307

## REMOVAL SUMMARY

| LOCATION | STATION | | 105 | 106 | 496 | 496 | 644 | 677 | 677 | 677 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2011 | 2001 | 2007 | 2039 | 2060 | 2001 | 2007 | 2020 |
| | | | REMOVING STAB BASE AND ASPH PAV (2" - 6") | OBLITERATING ABANDONED ROAD | REMOV STR (PIPE) | REMOV STR (BUILDING) | REMOVE SM RD SN SUP & AM | ELIM EXT PAV MRK & MRKS (4") | ELIM EXT PAV MRK & MRKS (24") | ELIM EXT PAV MRK & MRKS (36") (YLD |
| | BEGIN | END | SY | STA | LF | EA | EA | LF | LF | EA |
| SHEET 1 OF 6 | 10+00.00 | 58+00.00 | 1830 | 9.0 | 119 | 9 | 2 | 2941 | | 6 |
| SHEET 2 OF 6 | 58+00.00 | 104+00.00 | 685 | | | 1 | | | | |
| SHEET 3 OF 6 | 104+00.00 | 152+00.00 | 0 | | | | | 0 | | |
| SHEET 4 OF 6 | 152+00.00 | 200+00.00 | | | | | | | | |
| SHEET 5 OF 6 | 200+00.00 | 248+00.00 | 726 | 3.1 | 99 | 2 | | | | |
| SHEET 6 OF 6 | 248+00.00 | 257+32.20 | 179 | | | | | 3988 | | |
| SH 5 - SHEET 1 OF 1 | 5+00.00 | 36+00.00 | 5600 | | | | | 8350 | 128 | |
| TOTAL | | | 9020 | 12 | 218 | 12 | 2 | 15279 | 128 | 6 |

## FENCE SUMMARY

| LOCATION | STATION | | 552 | 552 | 552 | 552 |
|---|---|---|---|---|---|---|
| | | | 2003 | 2004 | 2005 | 2012 |
| | | | WIRE FENCE (TY C) | WIRE FENCE (TY D) | GATE (TY 1) | GATE (SPECIAL) |
| | BEGIN | END | LF | LF | EA | EA |
| SHEET 1 OF 6 | 10+00.00 | 58+00.00 | 8696 | | | |
| SHEET 2 OF 6 | 58+00.00 | 104+00.00 | 9003 | | 1 | |
| SHEET 3 OF 6 | 104+00.00 | 152+00.00 | 8904 | | | |
| SHEET 4 OF 6 | 152+00.00 | 200+00.00 | 9520 | 5 | 1 | 2 |
| SHEET 5 OF 6 | 200+00.00 | 248+00.00 | 1571 | 8021 | 4 | |
| SHEET 6 OF 6 | 248+00.00 | 257+32.20 | 1700 | | 4 2 3 4 | |
| TOTAL | | | 39394 2 3 | 8021 1 5 | 9 2 3 4 | 2 |

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS AND GATES | JWK |
| 2 | 5/6/11 | ADDED DRIVEWAY AND GATE | JWK |
| 3 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |
| 4 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | JWK |
| 5 | 4/18/12 | ADDED FENCE ALONG CR 419 | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

FENCE AND REMOVAL SUMMARY

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 428

BOND PROJECT NO. 07-094 SHEET 29

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4/18/2012_2:10:48 PM
\\DALW00\Projects\49065-CCOL\Cad\Sheets\12. QUANTITIES\CCOL_Removal.dgn

# STORM WATER POLLUTION PREVENTION PLAN SUMMARY

| SHEET | 160 | 164 | 164 | 164 | 168 | 506 | 506 | 506 | 506 | 506 | 506 | 506 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2003 | 2027 | 2041 | 2043 | 2001 | 2002 | 2003 | 2009 | 2016 | 2019 | 2034 | 2041 |
| | FURNISHING AND PLACING TOPSOIL (4") | CELL FBR MLCH SEED(PERM) (URBAN)(CLAY) | DRILL SEEDING (TEMP) (WARM) | DRILL SEEDING (TEMP) (COOL) | VEGETATIVE WATERING | ROCK FILTER DAMS (INSTALL) (TY 2) | ROCK FILTER DAMS (INSTALL) (TY 3) | ROCK FILTER DAMS (REMOVE) | CONSTRUCTION EXITS (INSTALL) (TY 1) | CONSTRUCTION EXITS (REMOVE) | TEMPORARY SEDIMENT CONTROL FENCE | TEMP SDMT CONT FENCE (INLET PROTECT) |
| | SY | SY | SY | SY | MG | LF | LF | LF | SY | SY | LF | LF |
| **TCP PHASE 1** | | | | | | | | | | | | |
| SHEET 1 OF 6 | 36,399 | 36,399 | 18200 | 18200 | 1590.6 | 60 | 60 | 120 | 1400 | 1400 | 4410 | 310 |
| SHEET 2 OF 6 | 39,322 | 39322 | 19661 | 19661 | 1718.3 | 200 | | 200 | 1400 | 1400 | 3245 | 400 |
| SHEET 3 OF 6 | 33,317 | 33317 | 16659 | 16659 | 1455.9 | 240 | 60 | 300 | 1400 | 1400 | 2290 | 280 |
| SHEET 4 OF 6 | 25,937 | 25937 | 12969 | 12969 | 1133.4 | 120 | | 120 | 1400 | 1400 | 6065 | 350 |
| SHEET 5 OF 6 | 36,366 | 36366 | 18183 | 18183 | 1589.2 | 260 | 20 | 280 | 1400 | 1400 | 3265 | 380 |
| SHEET 6 OF 6 | 7,268 | 7268 | 3634 | 3634 | 317.6 | 60 | | 60 | 700 | 700 | 895 | 80 |
| SH 5 - SHEET 1 OF 1 | 5,656 | 5656 | 2828 | 2828 | 247.2 | 40 | | 40 | | | | |
| FENCING PLAN SHT 6 OF 6 | | | | | | | | | 375 | 375 | | |
| **PROJECT TOTAL** | **184,265** | **184,265** | **92,134** | **92,134** | **8,052** | **980** | **140** | **1,120** | **8,075** | **8,075** | **20,170** | **1,800** |

2 1

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |
| 2 | 5/04/12 | REVISED VEGETATIVE WATERING QUANTITY | JWK |

## COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

SUMMARY OF SWPPP QUANTITIES

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET

5/4/2012_4:14:12 PM

# CULVERT SUMMARY

| CULVERT | CCOL ACCESS ROAD STATION | 110 | *400 | 400 | 402 | 432 | 432 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 464 | 464 | 464 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2002 | | 2005 | 2001 | 2002 | 2057 | 2003 | 2004 | 2006 | 2007 | 2008 | 2011 | 2014 | 2015 | 2024 | 2030 | 2032 | 2099 | 2003 | 2005 | 2007 |
| | | EXCAVATION (CHANNEL) | STRUCT EXCAV | CEM STABIL BKFL | TRENCH EXCAVATION PROTECTION | RIPRAP (CONC) (5 IN) | RIPRAP (STONE TY R) (DRY) (24 IN) | CONC BOX CULV (4 FT X 2 FT) | CONC BOX CULV (4 FT X 3 FT) | CONC BOX CULV (5 FT X 2 FT) | CONC BOX CULV (5 FT X 3 FT) | CONC BOX CULV (5 FT X 4 FT) | CONC BOX CULV (6 FT X 4 FT) | CONC BOX CULV (7 FT X 3 FT) | CONC BOX CULV (7 FT X 4 FT) | CONC BOX CULV (9 FT X 5 FT) | CONC BOX CULV (10 FT X 6 FT) | CONC BOX CULV (10 FT X 8 FT) | CONC BOX CULV (11 FT X 10 FT) | RC PIPE (CL III) (18 IN) | RC PIPE (CL III) (24 IN) | RC PIPE (CL III) (30 IN) |
| | | CY | CY | CY | LF | CY | CY | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF | LF |
| **Collin County Outer Loop Culvert Layout Sheets** | | | | | | | | | | | | | | | | | | | | | | | |
| **THROCKMORTON** | 23+10.00 | 10230 | 496 | | 36 | | 741 | | | | | | | | | | | | 238 | | | | |
| **A** | 41+80.00 | 560 | 306 | 65 | 84 | | 147 | | | | 226 | | | | | | | | | | | | |
| **B** | 72+05.00 | 125 | 74 | 27 | | 2 | 74 | | 79 | | | | | | | | | | | | | | |
| **C** | 80+77.00 | 446 | 205 | | | 7 | 168 | | | | | | | | | 84 | | | | | | | |
| **D** | 90+40.00 | 734 | 195 | | | 5 | 315 | | | | | | | 148 | | | | | | | | | |
| **E** | 106+18.00 | 324 | 260 | | | | 26 | | | 214 | | | | | | | | | | | | | |
| **F** | 106+95.00 | 84 | 34 | | | | 17 | | | | | | | | | | | | | 340 | | | |
| **G-1** | 108+05.00 | 76 | 37 | | | 2 | 16 | | | 75 | | | | | | | | | | | | | |
| **G-2** | 109+40.00 | 19 | 44 | | | | 16 | | | | | | | | | | | | | | 210 | | |
| **H** | 136+20.00 | 1602 | 1067 | | 85 | 25 | 492 | | | | | | | | | | 396 | | | | | | |
| **I** | 171+51.00 | 31 | 340 | | | | 33 | | | 240 | | | | | | | | | | | | | |
| **J** | 172+21.00 | 47 | 62 | | | | 23 | 156 | | | | | | | | | | | | | | | |
| **K** | 203+10.00 | 532 | 197 | 44 | | 5 | 237 | | | | | | | 138 | | | | | | | | | |
| **L** | 216+20.00 | 5477 | 330 | | 32 | | 239 | | | | | | | | | | | 160 | | | | | |
| **M** | 220+05.00 | 810 | 69 | 28 | | | 105 | | | | | | 75 | | | | | | | | | | |
| **N** | 237+20.00 | 1810 | 302 | | 52 | 12 | 278 | | | | | | | | | | 90 | | | | | | |
| **O** | 246+26.00 | 230 | 57 | | | 4 | 171 | | | | | | | | 67 | | | | | | | | |
| **P** | 251+38.00 | 276 | 170 | | | 11 | 253 | | | | | 162 | | | | | | | | | | | |
| **Q** | 254+40.00 | 26 | 26 | | | | 16 | | | | | | | | | | | | | | | | 105 |
| **R** | 256+90.00 | 5 | 11 | | | | 14 | | | | | | | | | | | | | | 148 | | |
| **FENCING PLAN SHT 6 OF 6** | | | | | | | | | | | | | | | | | | | | | 70 | | |
| **TOTAL** | | **23,444** | **4,282** | **164** | **289** | **73** | **3,381** | **156** | **79** | **529** | **226** | **162** | **75** | **286** | **67** | **84** | **486** | **160** | **238** | **340** | **428** 1 | | **105** |

* FOR CONTRACTOR'S INFORMATION ONLY, STRUCTURAL EXCAVATION IS SUBSIDIARY TO CULVERT BID ITEM

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |

**COLLIN COUNTY OUTER LOOP**

COLLIN COUNTY

SUMMARY OF CULVERT QUANTITIES

SHEET 1 OF 2

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 18

# STORM WATER POLLUTION PREVENTION PLAN SUMMARY

| SHEET | 160 | 164 | 164 | 164 | 168 | 506 | 506 | 506 | 506 | 506 | 506 | 506 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2003 | 2027 | 2041 | 2043 | 2001 | 2002 | 2003 | 2009 | 2016 | 2019 | 2034 | 2041 |
| | FURNISHING AND PLACING TOPSOIL (4") | CELL FBR MLCH SEED(PERM) (URBAN)(CLAY) | DRILL SEEDING (TEMP) (WARM) | DRILL SEEDING (TEMP) (COOL) | VEGETATIVE WATERING | ROCK FILTER DAMS (INSTALL) (TY 2) | ROCK FILTER DAMS (INSTALL) (TY 3) | ROCK FILTER DAMS (REMOVE) | CONSTRUCTION EXITS (INSTALL) (TY 1) | CONSTRUCTION EXITS (REMOVE) | TEMPORARY SEDIMENT CONTROL FENCE | TEMP SDMT CONT FENCE (INLET PROTECT) |
| | SY | SY | SY | SY | MG | LF | LF | LF | SY | SY | LF | LF |
| **TCP PHASE 1** | | | | | | | | | | | | |
| SHEET 1 OF 6 | 36,399 | 36,399 | 18200 | 18200 | 98.6 | 60 | 60 | 120 | 1400 | 1400 | 4410 | 310 |
| SHEET 2 OF 6 | 39,322 | 39322 | 19661 | 19661 | 106.5 | 200 | | 200 | 1400 | 1400 | 3245 | 400 |
| SHEET 3 OF 6 | 33,317 | 33317 | 16659 | 16659 | 90.2 | 240 | 60 | 300 | 1400 | 1400 | 2290 | 280 |
| SHEET 4 OF 6 | 25,937 | 25937 | 12969 | 12969 | 70.3 | 120 | | 120 | 1400 | 1400 | 6065 | 350 |
| SHEET 5 OF 6 | 36,366 | 36366 | 18183 | 18183 | 98.5 | 260 | 20 | 280 | 1400 | 1400 | 3265 | 380 |
| SHEET 6 OF 6 | 7,268 | 7268 | 3634 | 3634 | 19.7 | 60 | | 60 | 700 | 700 | 895 | 80 |
| SH 5 - SHEET 1 OF 1 | 5,656 | 5656 | 2828 | 2828 | 15.4 | 40 | | 40 | | | | |
| FENCING PLAN SHT 6 OF 6 | | | | | | | | | 375 | 375 | | |
| **PROJECT TOTAL** | **184,265** | **184,265** | **92,134** | **92,134** | **499** | **980** | **140** | **1,120** | **8,075** | **8,075** | **20,170** | **1,800** |

1

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |

## COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

SUMMARY OF SWPPP QUANTITIES

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 439

BOND PROJECT NO. 07-094 SHEET 28



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## REMOVAL SUMMARY

| LOCATION | STATION | | 105 | 106 | 496 | 496 | 644 | 677 | 677 | 677 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2011 | 2001 | 2007 | 2039 | 2060 | 2001 | 2007 | 2020 |
| | | | REMOVING STAB BASE AND ASPH PAV (2" - 6") | OBLITERATING ABANDONED ROAD | REMOV STR (PIPE) | REMOV STR (BUILDING) | REMOVE SM RD SN SUP & AM | ELIM EXT PAV MRK & MRKS (4") | ELIM EXT PAV MRK & MRKS (24") | ELIM EXT PAV MRK & MRKS (36") (YLD |
| | BEGIN | END | SY | STA | LF | EA | EA | LF | LF | EA |
| SHEET 1 OF 6 | 10+00.00 | 58+00.00 | 1830 | 9.0 | 119 | 9 | 2 | 2941 | | 6 |
| SHEET 2 OF 6 | 58+00.00 | 104+00.00 | 685 | | | 1 | | | | |
| SHEET 3 OF 6 | 104+00.00 | 152+00.00 | 0 | | | | | 0 | | |
| SHEET 4 OF 6 | 152+00.00 | 200+00.00 | | | | | | | | |
| SHEET 5 OF 6 | 200+00.00 | 248+00.00 | 726 | 3.1 | 99 | 2 | | | | |
| SHEET 6 OF 6 | 248+00.00 | 257+32.20 | 179 | | | | | 3988 | | |
| SH 5 - SHEET 1 OF 1 | 5+00.00 | 36+00.00 | 5600 | | | | | 8350 | 128 | |
| **TOTAL** | | | **9020** | **12** | **218** | **12** | **2** | **15279** | **128** | **6** |

## FENCE SUMMARY

| LOCATION | STATION | | 552 | 552 | 552 | 552 |
|---|---|---|---|---|---|---|
| | | | 2003 | 2004 | 2005 | 2012 |
| | | | WIRE FENCE (TY C) | WIRE FENCE (TY D) | GATE (TY 1) | GATE (SPECIAL) |
| | BEGIN | END | LF | LF | EA | EA |
| SHEET 1 OF 6 | 10+00.00 | 58+00.00 | 8696 | | | |
| SHEET 2 OF 6 | 58+00.00 | 104+00.00 | 9003 | | 1 | |
| SHEET 3 OF 6 | 104+00.00 | 152+00.00 | 8904 | | | |
| SHEET 4 OF 6 | 152+00.00 | 200+00.00 | 9520 | | 1 | 2 |
| SHEET 5 OF 6 | 200+00.00 | 248+00.00 | 1571 | 7386 | 4 | |
| SHEET 6 OF 6 | 248+00.00 | 257+32.20 | 1700 | | 3 2 3 | |
| **TOTAL** | | | 39394 2 3 | 7386 1 | 8 2 3 | 2 |

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS AND GATES | JWK |
| 2 | 5/8/11 | ADDED DRIVEWAY AND GATE | JWK |
| 3 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

FENCE AND REMOVAL SUMMARY

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 29

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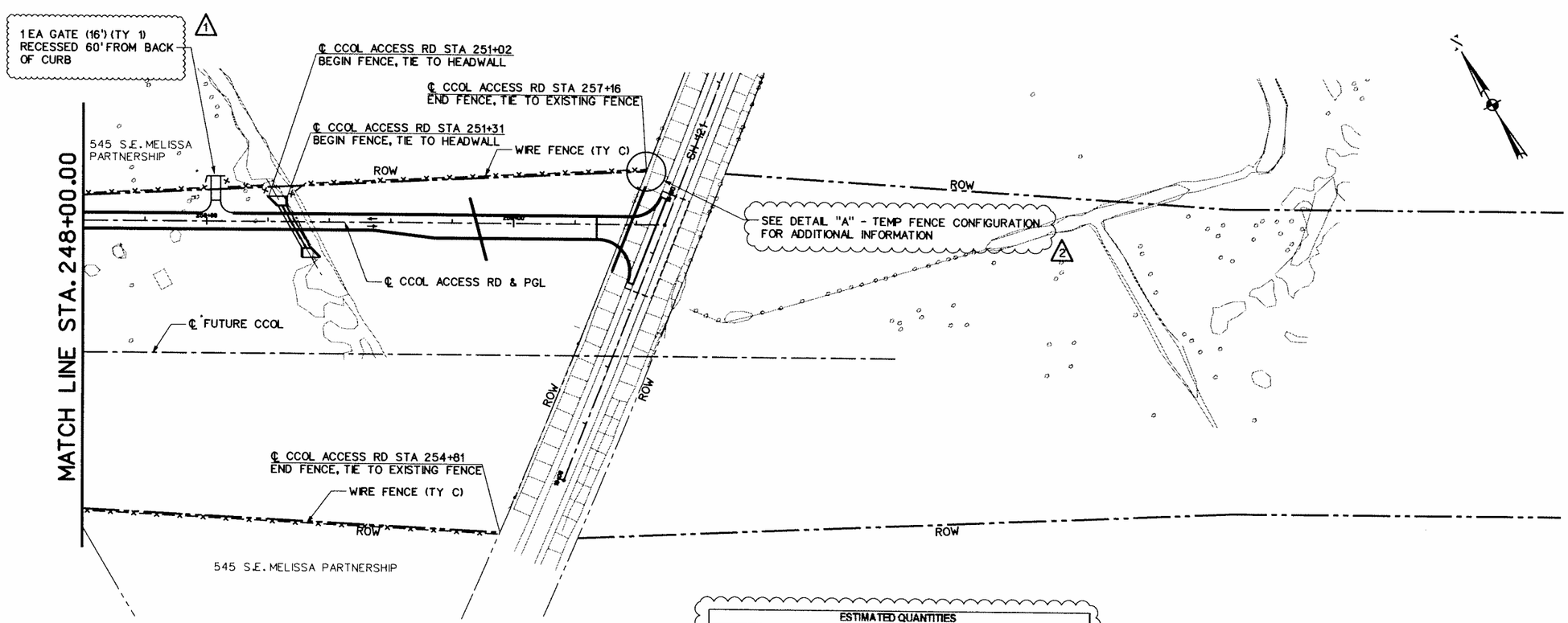


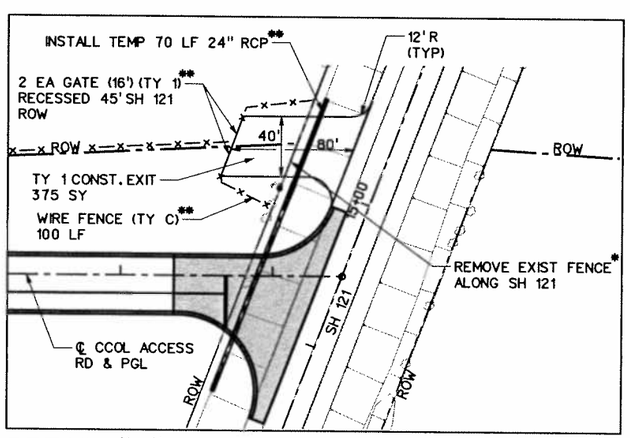

0 100 200 300 400
HORIZ. SCALE IN FEET

## LEGEND

—x—x WIRE FENCE (TY C)

——— PROPERTY LINE

| ESTIMATED QUANTITIES | | | |
|---|---|---|---|
| ITEM # | ITEM | UNIT | QUANTITY |
| 464 2005 | RC PIPE (CL III) (24 IN) | LF | 70 |
| 506 2016 | CONSTRUCTION EXITS(INSTALL)(TY 1) | SY | 375 |
| 506 2019 | CONSTRUCTION EXITS (REMOVE) | SY | 375 |
| 552 2003 | WIRE FENCE (TY C) | LF | 1700 |
| 552 2006 | GATE (TY 1) | EA | 3 |
| 552 2012 | GATE (SPECIAL) | EA | 0 |




* REMOVAL OF EXISTING FENCE SHALL BE SUBSIDIARY TO ITEM 506 CONSTRUCTION EXITS (INSTALL).

** REMOVAL OF ITEMS REQUIRED FOR THE TEMP FENCE CONFIGURATION SHALL BE SUBSIDIARY TO ITEM 506 CONSTRUCTION EXITS (REMOVE).

## DETAIL "A" - TEMP FENCE CONFIGURATION

TEMPORARY FENCE CONFIGURATION TO BE INSTALLED DURING CONSTRUCTION. AFTER CONSTRUCTION ACTIVITIES GATES AND RECESSED FENCE SHALL BE REMOVED AND THE FINAL FENCE SHALL BE INSTALLED AS SHOWN ON THE FENCE PLAN ABOVE. ANY MATERIALS REMOVED AFTER CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

NOTES:

1. SEE PROPOSED TYPICAL SECTION SHEETS FOR ADDITIONAL INFORMATION CONCERNING THE INSTALLATION LOCATION OF THE WIRE FENCE
2. SEE STANDARD SHEET "WF(2)-96 MOD" FOR ADDITIONAL WIRE FENCE AND GATE DETAILS

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
5/24/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/6/11 | ADDED GATE & FENCE AT NEW DRIVEWAY | WFF |
| 2 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |

# COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

## ACCESS ROAD FENCING PLAN

SHEET 6 OF 6

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 308

## REMOVAL SUMMARY

| LOCATION | STATION | | 105 | 106 | 496 | 496 | 644 | 677 | 677 | 677 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2011 | 2001 | 2007 | 2039 | 2060 | 2001 | 2007 | 2020 |
| | | | REMOVING STAB BASE AND ASPH PAV (2" - 6") | OBLITERATING ABANDONED ROAD | REMOV STR (PIPE) | REMOV STR (BUILDING) | REMOVE SM RD SN SUP & AM | ELIM EXT PAV MRK & MRKS (4") | ELIM EXT PAV MRK & MRKS (24") | ELIM EXT PAV MRK & MRKS (36") (YLD |
| | BEGIN | END | SY | STA | LF | EA | EA | LF | LF | EA |
| SHEET 1 OF 6 | 10+00.00 | 58+00.00 | 1830 | 9.0 | 119 | 9 | 2 | 2941 | | 6 |
| SHEET 2 OF 6 | 58+00.00 | 104+00.00 | 685 | | | 1 | | | | |
| SHEET 3 OF 6 | 104+00.00 | 152+00.00 | 0 | | | | | 0 | | |
| SHEET 4 OF 6 | 152+00.00 | 200+00.00 | | | | | | | | |
| SHEET 5 OF 6 | 200+00.00 | 248+00.00 | 726 | 3.1 | 99 | 2 | | | | |
| SHEET 6 OF 6 | 248+00.00 | 257+32.20 | 179 | | | | | 3988 | | |
| SH 5 - SHEET 1 OF 1 | 5+00.00 | 36+00.00 | 5600 | | | | | 8350 | 128 | |
| TOTAL | | | 9020 | 12 | 218 | 12 | 2 | 15279 | 128 | 6 |

## FENCE SUMMARY

| LOCATION | STATION | | 552 | 552 | 552 | 552 |
|---|---|---|---|---|---|---|
| | | | 2003 | 2004 | 2005 | 2012 |
| | | | WIRE FENCE (TY C) | WIRE FENCE (TY D) | GATE (TY 1) | GATE (SPECIAL) |
| | BEGIN | END | LF | LF | EA | EA |
| SHEET 1 OF 6 | 10+00.00 | 58+00.00 | 8696 | | | |
| SHEET 2 OF 6 | 58+00.00 | 104+00.00 | 9003 | | 1 | |
| SHEET 3 OF 6 | 104+00.00 | 152+00.00 | 8904 | | | |
| SHEET 4 OF 6 | 152+00.00 | 200+00.00 | 9520 | | 1 | 2 |
| SHEET 5 OF 6 | 200+00.00 | 248+00.00 | 1571 | 7386 | 4 | |
| SHEET 6 OF 6 | 248+00.00 | 257+32.20 | 1700 | | 4 2 3 4 | |
| TOTAL | | | 39394 2 3 | 7386 1 | 9 2 3 4 | 2 |

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS AND GATES | JWK |
| 2 | 5/6/11 | ADDED DRIVEWAY AND GATE | JWK |
| 3 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |
| 4 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

FENCE AND REMOVAL SUMMARY

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 29

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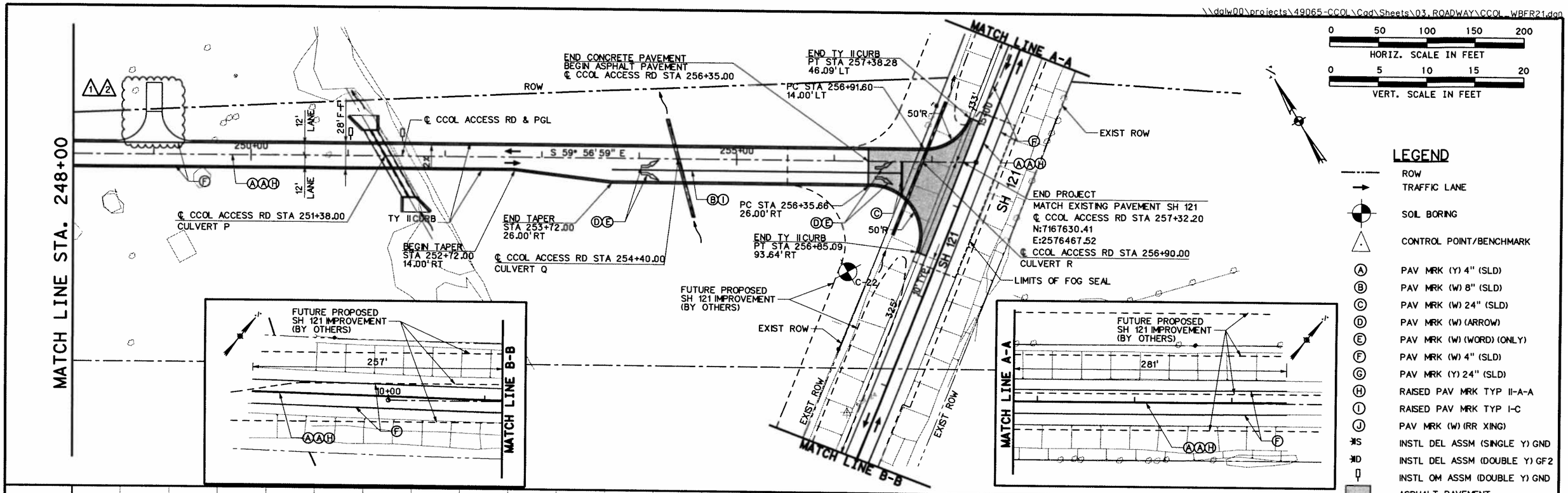
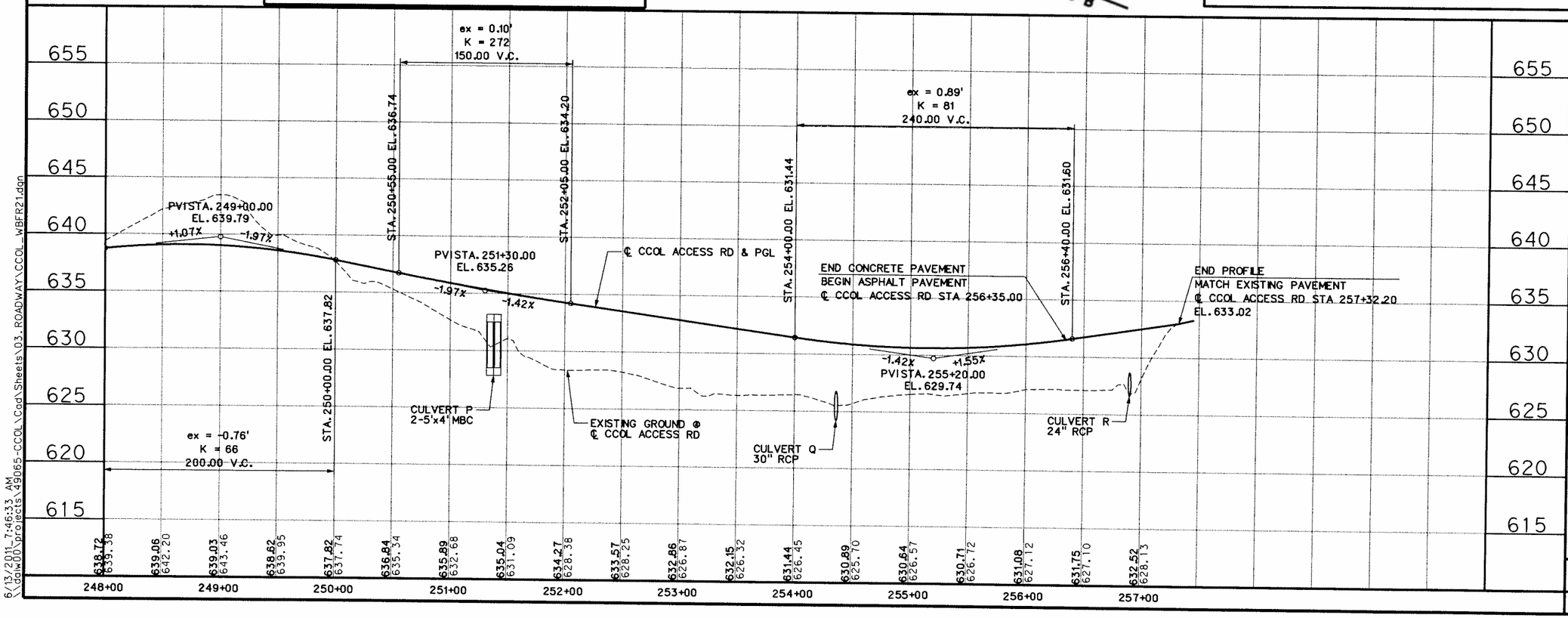



## LEGEND

| | |
|---|---|
| | ROW |
| | TRAFFIC LANE |
| | SOIL BORING |
| | CONTROL POINT/BENCHMARK |
| A | PAV MRK (Y) 4" (SLD) |
| B | PAV MRK (W) 8" (SLD) |
| C | PAV MRK (W) 24" (SLD) |
| D | PAV MRK (W) (ARROW) |
| E | PAV MRK (W) (WORD) (ONLY) |
| F | PAV MRK (W) 4" (SLD) |
| G | PAV MRK (Y) 24" (SLD) |
| H | RAISED PAV MRK TYP II-A-A |
| I | RAISED PAV MRK TYP I-C |
| J | PAV MRK (W) (RR XING) |
| S | INSTL DEL ASSM (SINGLE Y) GND |
| D | INSTL DEL ASSM (DOUBLE Y) GF2 |
| | INSTL OM ASSM (DOUBLE Y) GND |
| | ASPHALT PAVEMENT |




STATE OF TEXAS
WILLIAM F. FLEMING JR
87706
LICENSED
PROFESSIONAL ENGINEER
6/14/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/8/11 | ADDED DRIVEWAY LOCATION | WFF |
| 2 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | WFF |

# COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

## ACCESS ROAD
## PAVING PLAN & PROFILE
## STA 248+00 TO END PROJECT

SHEET 21 OF 21

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 85

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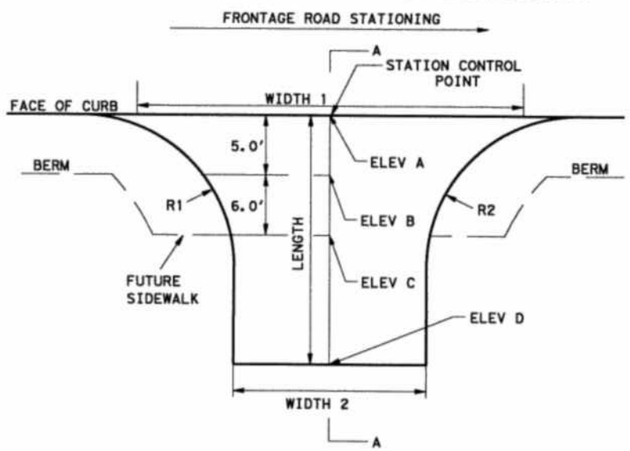
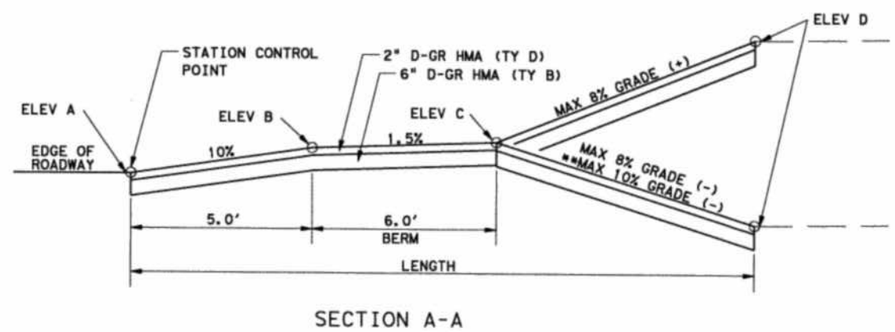
# DRIVEWAY DETAILS & SUMMARY

| SHEET | LOCATION (STA) | EXIST TYPE | WIDTH 1 | WIDTH 2 | LENGTH | R1 | R2 | ELEV A | ELEV B | ELEV C | ELEV D | GRADE | DRIVEWAY AREA* | 530 / 2011 DRIVEWAYS (ACP) | 247 / 2061 FL BS (CMP IN PLC) (TY A GR 1) (6") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FT | FT | FT | FT | FT | | | | | | SY | SY | SY |
| **CCOL ACCESS ROAD** | | | | | | | | | | | | | | | |
| **SHEET 9 OF 21 | CCOL 108+79.97 | | 24.00 | 14.00 | 47.00 | 5 | 5 | 707.35 | 707.85 | 707.94 | 704.34 | -10.00% | 74 | 74 | |
| **SHEET 9 OF 21 | CCOL 108+97.33 | | 24.00 | 14.00 | 45.00 | 5 | 5 | 707.29 | 707.79 | 707.88 | 704.49 | -9.98% | 71 | 71 | |
| SHEET 15 OF 21 | CCOL 177+18.45 | ACP | 138.65 | 36.85 | 64.25 | 50 | 50 | 705.61 | 706.11 | 706.20 | 706.33 | 0.24% | 375 | 375 | |
| SHEET 15 OF 21 | CCOL 182+50.00 | | 138.65 | 36.00 | 50.89 | 50 | 50 | 707.61 | 708.11 | 708.20 | 705.41 | -6.99% | 328 | 328 | |
| SHEET 18 OF 21 | CCOL 218+60.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 640.60 | 641.10 | 641.19 | 643.73 | 6.51% | 97 | 64 | 33 |
| SHEET 19 OF 21 | CCOL 234+90.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 646.94 | 647.44 | 647.53 | 648.31 | 2.00% | 97 | 61 | 36 |
| SHEET 21 OF 21 | CCOL 249+00.00 | | 56.00 | 16.00 | 60.00 | 30 | 30 | 638.78 | 639.28 | 639.37 | 642.05 | 5.47% | 151 | 97 | 54 |
| **CR 365** | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 365 15+45.10 | ACP | 43.81 | 15.00 | 35.50 | 15 | 15 | 706.74 | 703.19 | - | - | -10.00% | 70 | 70 | |
| **CR 418** | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 418 15+96.18 | ACP | 45.14 | 15.00 | 15.25 | 50 | 50 | 706.94 | 705.72 | - | - | -8.00% | 40 | 40 | |
| TOTAL | | | | | | | | | | | | | 1303 | 1180 | 123 |

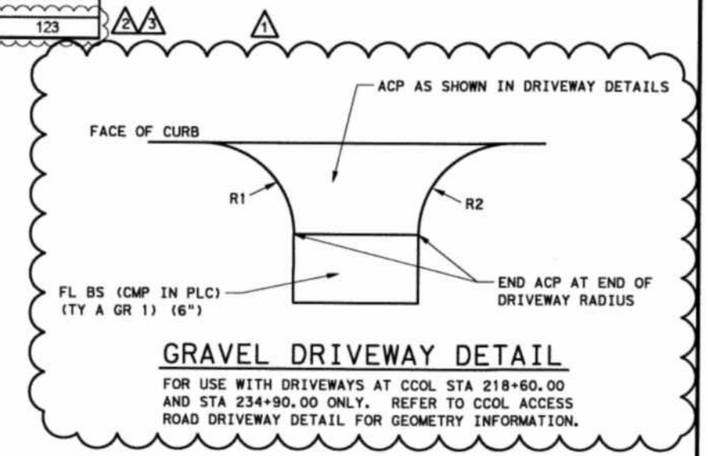
* FOR CONTRACTOR'S INFORMATION ONLY
** RAILROAD SERVICE ACCESS



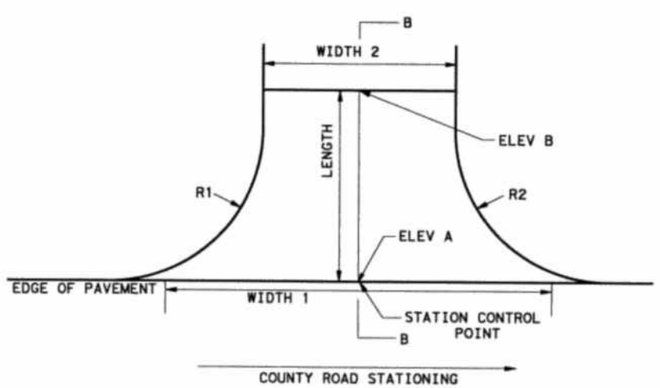

SECTION A-A

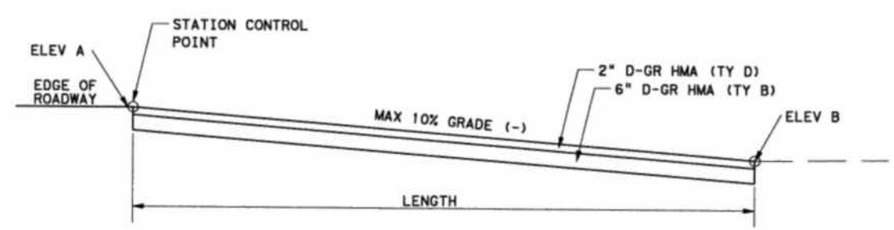
## CCOL ACCESS ROAD DRIVEWAY DETAIL




## GRAVEL DRIVEWAY DETAIL

FOR USE WITH DRIVEWAYS AT CCOL STA 218+60.00 AND STA 234+90.00 ONLY. REFER TO CCOL ACCESS ROAD DRIVEWAY DETAIL FOR GEOMETRY INFORMATION.




SECTION B-B

## COUNTY ROAD DRIVEWAY DETAIL

STATE OF TEXAS
WILLIAM F. FLEMING JR.
87706
LICENSED PROFESSIONAL ENGINEER
6/16/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/8/11 | REVISED DRIVEWAYS | WFF |
| 2 | 5/6/11 | ADDED DRIVEWAY LOCATION | WFF |
| 3 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | WFF |

COLLIN COUNTY OUTER LOOP

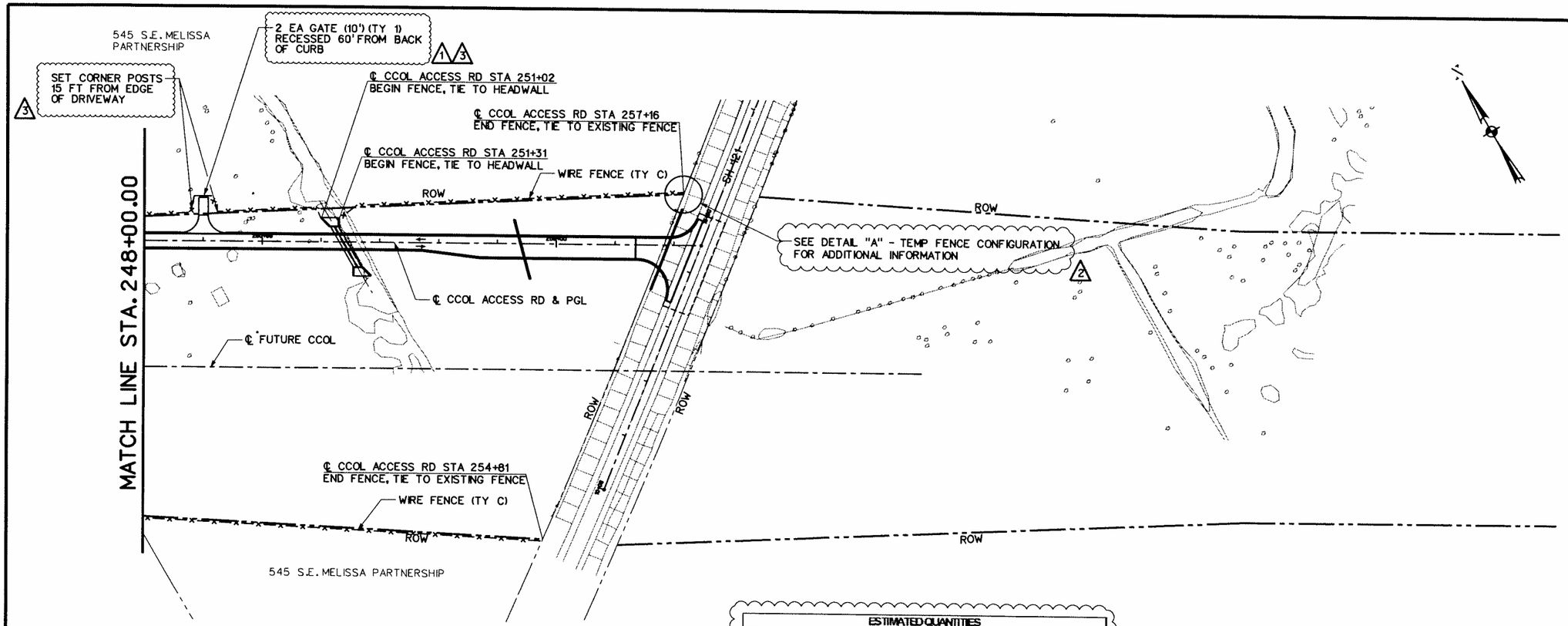
COLLIN COUNTY

DRIVEWAY DETAILS

SHEET 1 OF 1

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 100



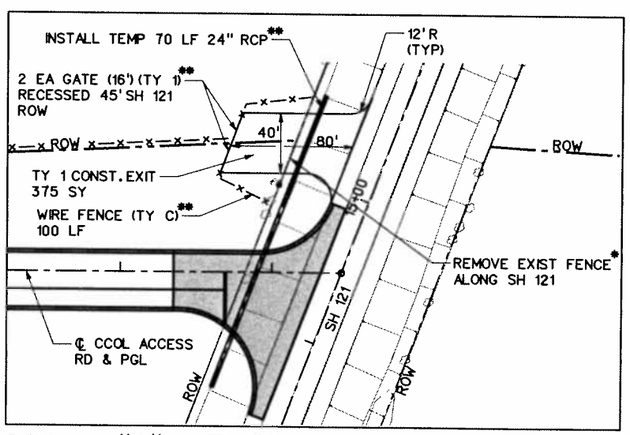

0 100 200 300 400
HORIZ. SCALE IN FEET

## LEGEND

—x—x WIRE FENCE (TY C)

——— PROPERTY LINE

| ESTIMATED QUANTITIES | | | |
|---|---|---|---|
| ITEM # | ITEM | UNIT | QUANTITY |
| 464 2005 | RC PIPE (CL III) (24 IN) | LF | 70 |
| 506 2016 | CONSTRUCTION EXITS(INSTALL)(TY 1) | SY | 375 |
| 506 2019 | CONSTRUCTION EXITS (REMOVE) | SY | 375 |
| 552 2003 | WIRE FENCE (TY C) | LF | 1700 |
| 552 2006 | GATE (TY 1) | EA | 4 |
| 552 2012 | GATE (SPECIAL) | EA | 0 |




* REMOVAL OF EXISTING FENCE SHALL BE SUBSIDIARY TO ITEM 506 CONSTRUCTION EXITS (INSTALL).

** REMOVAL OF ITEMS REQUIRED FOR THE TEMP FENCE CONFIGURATION SHALL BE SUBSIDIARY TO ITEM 506 CONSTRUCTION EXITS (REMOVE).

## DETAIL "A" - TEMP FENCE CONFIGURATION

TEMPORARY FENCE CONFIGURATION TO BE INSTALLED DURING CONSTRUCTION. AFTER CONSTRUCTION ACTIVITIES GATES AND RECESSED FENCE SHALL BE REMOVED AND THE FINAL FENCE SHALL BE INSTALLED AS SHOWN ON THE FENCE PLAN ABOVE. ANY MATERIALS REMOVED AFTER CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

NOTES:

1. SEE PROPOSED TYPICAL SECTION SHEETS FOR ADDITIONAL INFORMATION CONCERNING THE INSTALLATION LOCATION OF THE WIRE FENCE
2. SEE STANDARD SHEET "WF(2)-96 MOD" FOR ADDITIONAL WIRE FENCE AND GATE DETAILS

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED PROFESSIONAL ENGINEER
6/16/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/6/11 | ADDED GATE & FENCE AT NEW DRIVEWAY | WFF |
| 2 | 5/23/11 | ADDED TEMP GATE & FENCE AT SH 121 | WFF |
| 3 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | JWK |

# COLLIN COUNTY OUTER LOOP

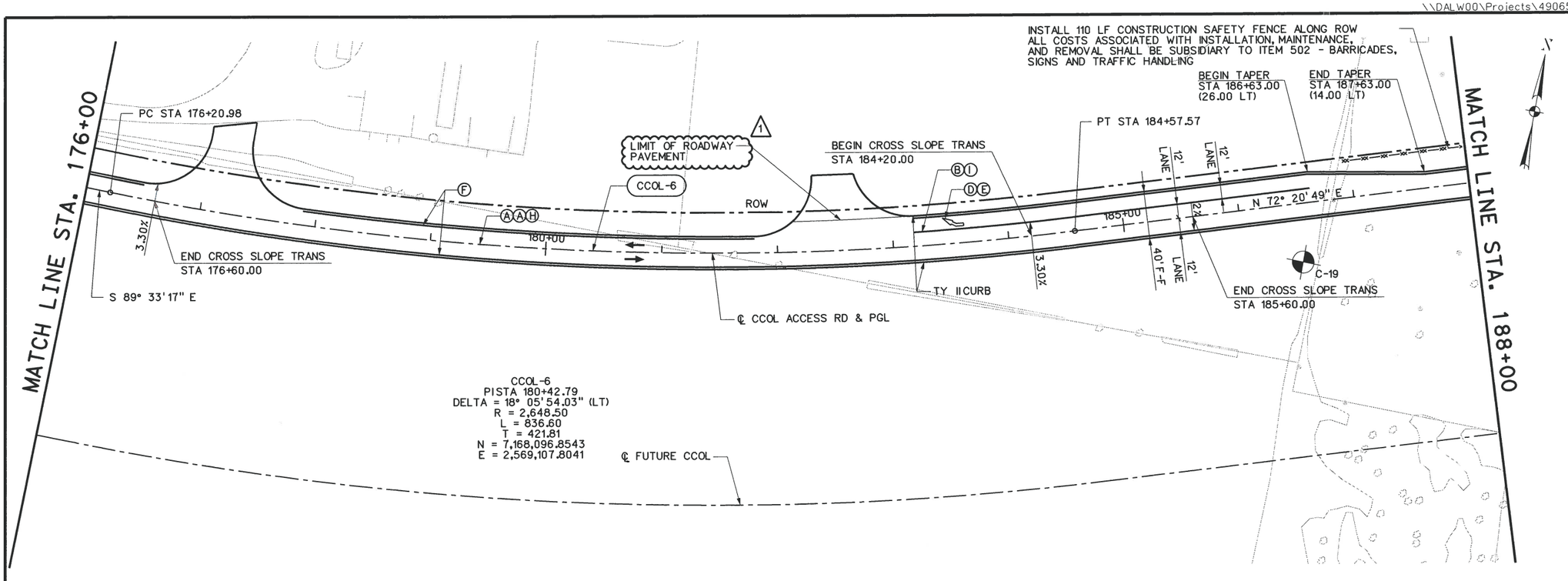
COLLIN COUNTY

## ACCESS ROAD FENCING PLAN

SHEET 6 OF 6

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 315

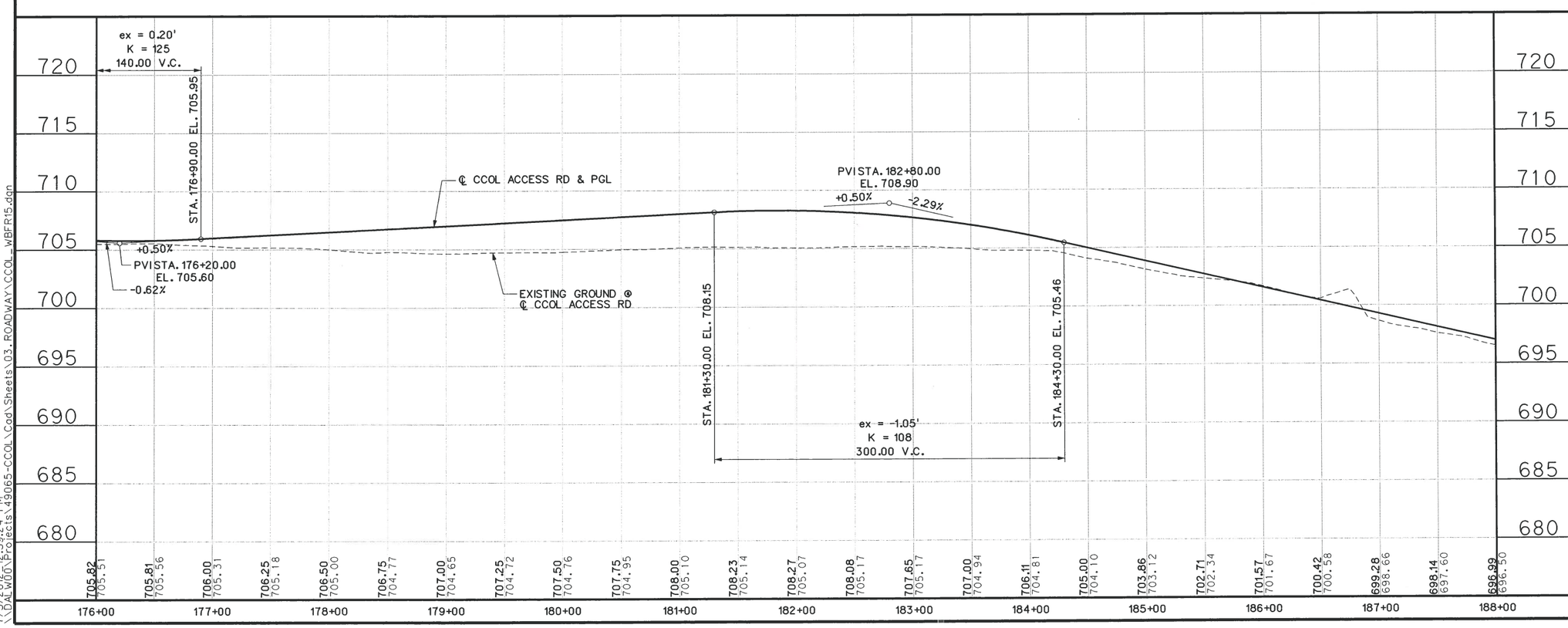



0 50 100 150 200
HORIZ. SCALE IN FEET

0 5 10 15 20
VERT. SCALE IN FEET

## LEGEND

- ROW
- TRAFFIC LANE
- SOIL BORING
- CONTROL POINT/BENCHMARK
- (A) PAV MRK (Y) 4" (SLD)
- (B) PAV MRK (W) 8" (SLD)
- (C) PAV MRK (W) 24" (SLD)
- (D) PAV MRK (W) (ARROW)
- (E) PAV MRK (W) (WORD) (ONLY)
- (F) PAV MRK (W) 4" (SLD)
- (G) PAV MRK (Y) 24" (SLD)
- (H) RAISED PAV MRK TYP II-A-A
- (I) RAISED PAV MRK TYP I-C
- (J) PAV MRK (W) (RR XING)
- S INSTL DEL ASSM (SINGLE Y) GND
- D INSTL DEL ASSM (DOUBLE Y) GF2
- INSTL OM ASSM (DOUBLE Y) GND




STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
7/5/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 7/05/12 | DEFINED ROADWAY LIMIT AT DRIVEWAY | JWK |

# COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

## ACCESS ROAD PAVING PLAN & PROFILE

STA 176+00 TO STA 188+00

SHEET 15 OF 21

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

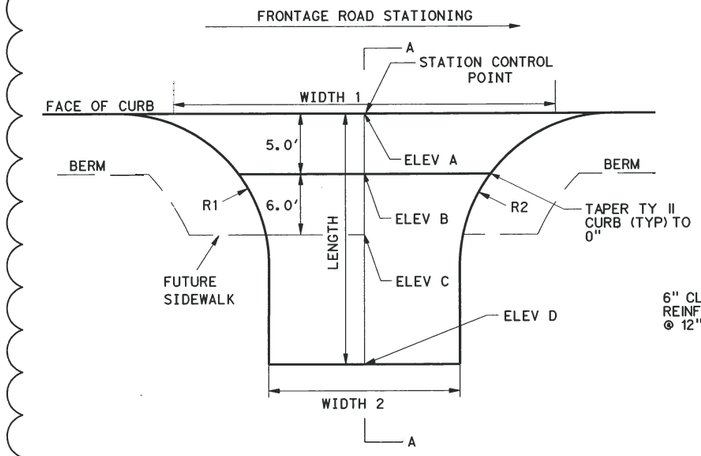
BOND PROJECT NO. 07-094 SHEET 79

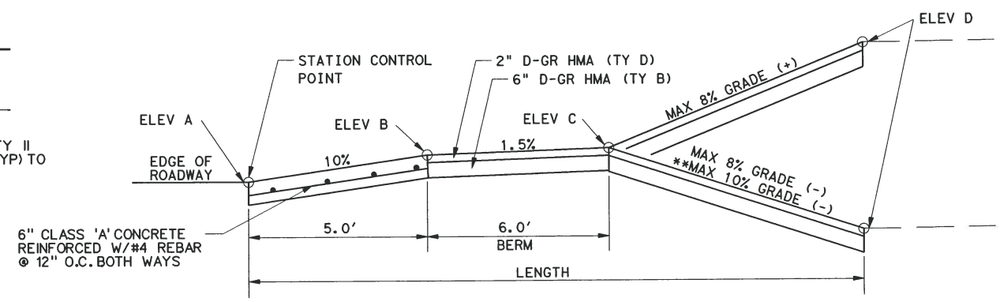
7/5/2012 12:59:24 PM
\\DALW00\Projects\49065-CCOL\Cad\Sheets\03.ROADWAY\CCOL_WBFR15.dgn

# DRIVEWAY DETAILS & SUMMARY

| SHEET | LOCATION (STA) | EXIST TYPE | WIDTH 1 | WIDTH 2 | LENGTH | R1 | R2 | ELEV A | ELEV B | ELEV C | ELEV D | GRADE | DRIVEWAY AREA* | 530 2010 DRIVEWAYS (CONC) | 530 2011 DRIVEWAYS (ACP) | 247 2061 FL BS (CMP IN PLC) (TY A GR 1) (6") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FT | FT | FT | FT | FT | | | | | | SY | SY | SY | SY |
| **CCOL ACCESS ROAD** | | | | | | | | | | | | | | | | |
| **SHEET 9 OF 21 | CCOL 108+79.97 | | 24.00 | 14.00 | 47.00 | 5 | 5 | 707.35 | 707.85 | 707.94 | 704.34 | -10.00% | 75 | 9 | 66 | |
| **SHEET 9 OF 21 | CCOL 108+97.33 | | 24.00 | 14.00 | 45.00 | 5 | 5 | 707.29 | 707.79 | 707.88 | 704.49 | -9.98% | 72 | 9 | 63 | |
| SHEET 15 OF 21 | CCOL 177+18.45 | ACP | 138.65 | 36.85 | 64.25 | 50 | 50 | 705.61 | 706.11 | 706.20 | 706.33 | 0.24% | 376 | 61 | 315 | |
| SHEET 15 OF 21 | CCOL 182+50.00 | | 138.65 | 36.00 | 50.89 | 50 | 50 | 707.61 | 708.11 | 708.20 | 705.41 | -6.99% | 236 | 49 | 187 | |
| SHEET 18 OF 21 | CCOL 218+60.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 640.60 | 641.10 | 641.19 | 643.73 | 6.51% | 98 | 24 | 41 | 33 |
| SHEET 19 OF 21 | CCOL 234+90.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 646.94 | 647.44 | 647.53 | 648.31 | 2.00% | 97 | 23 | 38 | 36 |
| SHEET 21 OF 21 | CCOL 249+07.36 | | 76.00 | 16.00 | 60.00 | 20 | 43 | 638.75 | 639.15 | 639.24 | 639.80 | 1.14% | 152 | 30 | 69 | 53 |
| **CR 365** | | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 365 15+45.10 | ACP | 43.81 | 15.00 | 35.50 | 15 | 15 | 706.74 | 703.19 | - | - | -10.00% | 70 | | 70 | |
| **CR 418** | | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 418 15+96.18 | ACP | 45.14 | 15.00 | 15.25 | 50 | 50 | 706.94 | 705.72 | - | - | -8.00% | 40 | | 40 | |
| TOTAL | | | | | | | | | | | | | 1216 | 205 | 889 | 122 |

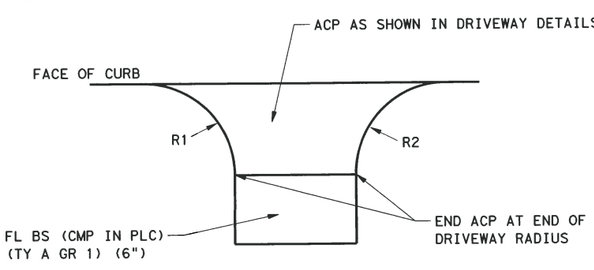
* FOR CONTRACTOR'S INFORMATION ONLY
** RAILROAD SERVICE ACCESS



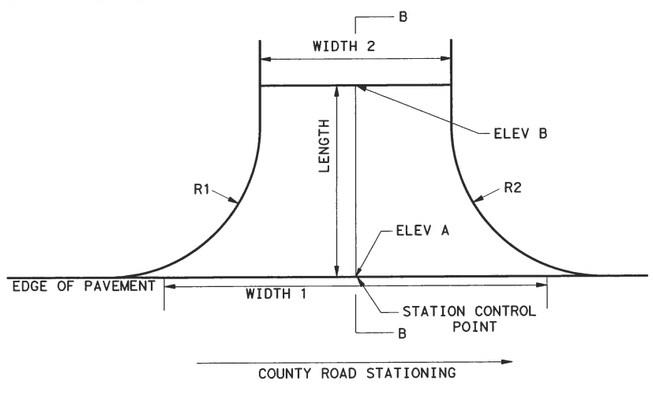

SECTION A-A

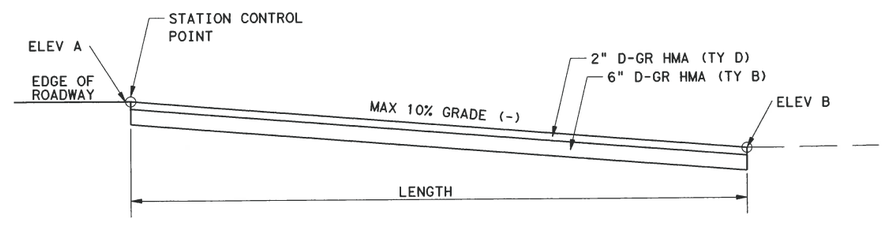
## CCOL ACCESS ROAD DRIVEWAY DETAIL




## GRAVEL DRIVEWAY DETAIL

FOR USE WITH DRIVEWAYS AT CCOL STA 218+60.00 AND STA 234+90.00 ONLY. REFER TO CCOL ACCESS ROAD DRIVEWAY DETAIL FOR GEOMETRY INFORMATION.




SECTION B-B

## COUNTY ROAD DRIVEWAY DETAIL

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED PROFESSIONAL ENGINEER
7/5/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS | WFF |
| 2 | 5/6/11 | ADDED DRIVEWAY LOCATION | WFF |
| 3 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | WFF |
| 4 | 2/13/12 | REVISED DRIVEWAY ALIGNMENT | WFF |
| 5 | 7/05/12 | ADDED PORTION OF CONCRETE DRIVEWAY | JWK |

COLLIN COUNTY OUTER LOOP

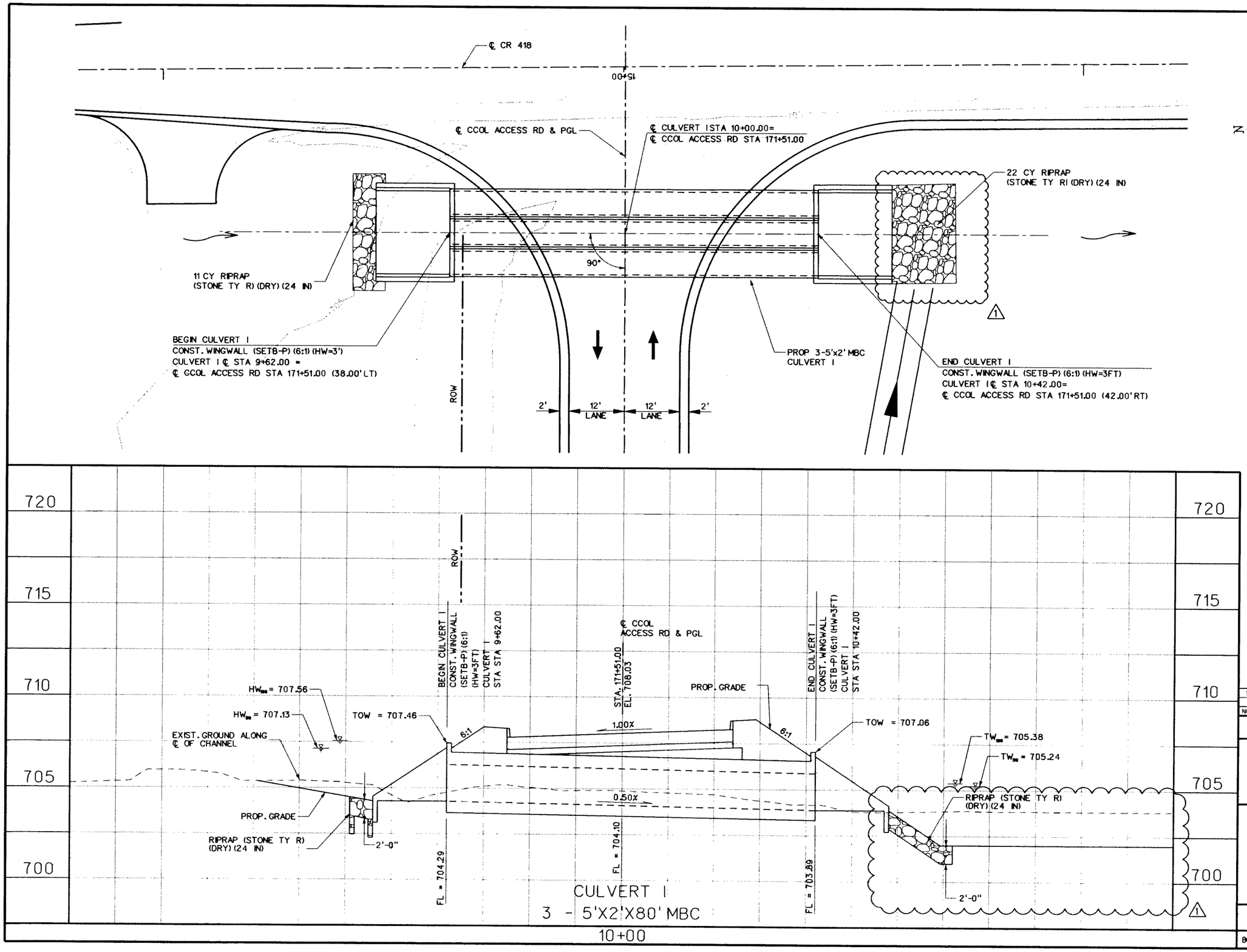
COLLIN COUNTY

DRIVEWAY DETAILS

SHEET 1 OF 1

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 100




0 10 20 30 40
HORIZ. SCALE IN FEET

0 5 10
VERT. SCALE IN FEET

N

HYDRAULIC DATA

| | |
|---|---|
| $Q_{ss}$ = 163 cfs | $Q_{ss}$ = 186 cfs |
| $V_{ss}$ = 8.02 fps | $V_{ss}$ = 8.35 fps |
| $TW_{ss}$ = 705.24 | $TW_{ss}$ = 705.38 |
| $HW_{ss}$ = 707.13 | $HW_{ss}$ = 707.56 |

NOTES:

ACCESS ROAD CULVERT
DESIGN FREQUENCY = 50 YR
CHECK FREQUENCY = 100 YR

HYDRAULIC ANALYSIS OF THE CULVERT WAS PERFORMED WITH THE FHWA HY-8 PROGRAM VERSION 7.1

SEE PAVING P&P SHEETS FOR ROADWAY GEOMETRY INFORMATION.

CONTRACTOR MUST COMPLY WITH THE MAX FILL HEIGHT TO THE END OF THE CULVERT.

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
4/15/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 4/15/11 | REVISED OUTFALL GRADING AT CULVERT I | |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

CULVERT LAYOUT

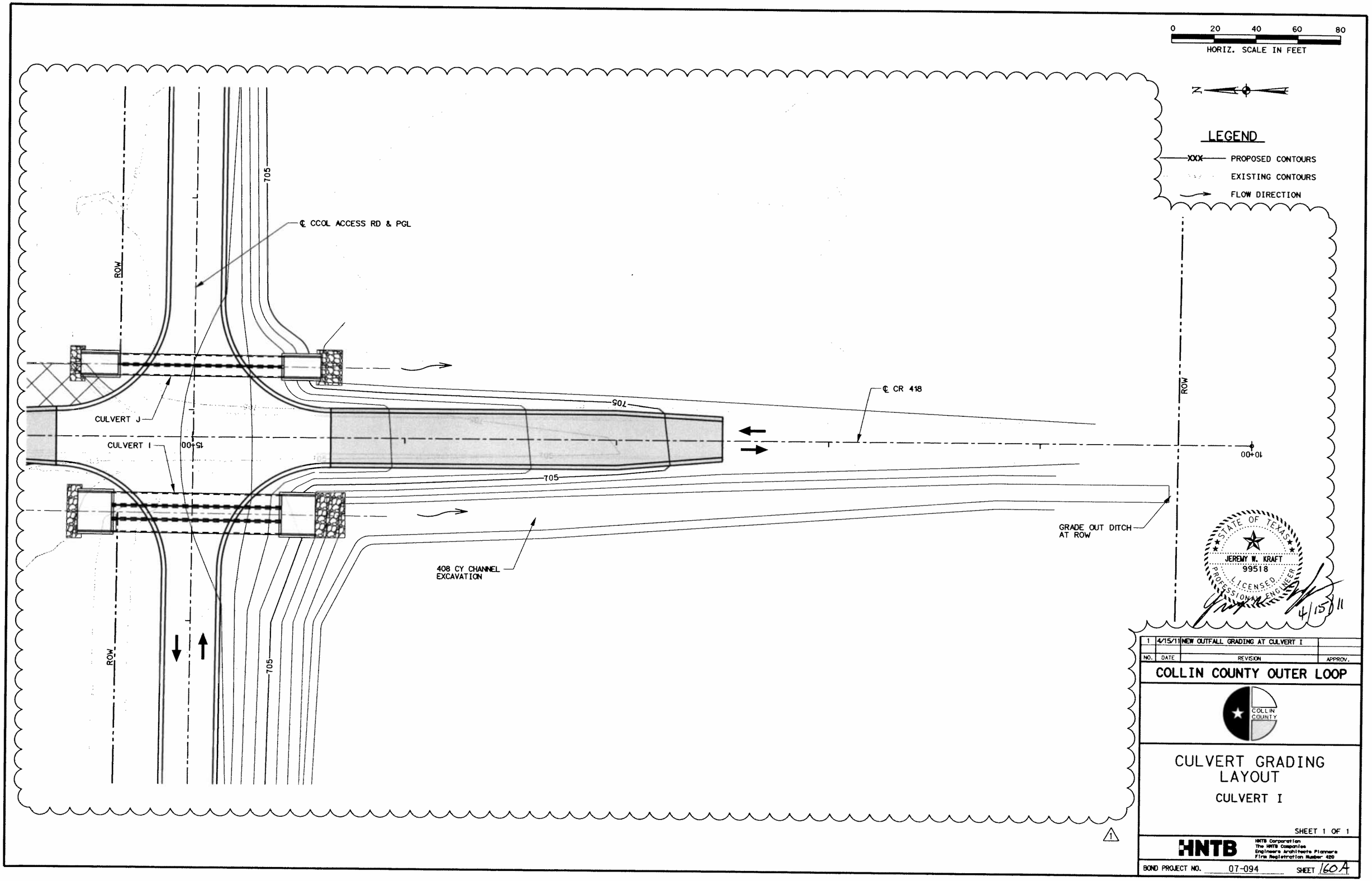
CULVERT I

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 45


0 20 40 60 80
HORIZ. SCALE IN FEET
N
LEGEND
PROPOSED CONTOURS
EXISTING CONTOURS
FLOW DIRECTION
℄ CCOL ACCESS RD & PGL
ROW
705
CULVERT J
CULVERT I
15+00
℄ CR 418
10+00
GRADE OUT DITCH AT ROW
408 CY CHANNEL EXCAVATION
STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
4/15/11
1
NO. DATE REVISION APPROV.
1 4/15/11 NEW OUTFALL GRADING AT CULVERT I
COLLIN COUNTY OUTER LOOP
COLLIN COUNTY
CULVERT GRADING LAYOUT
CULVERT I
SHEET 1 OF 1
HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420
BOND PROJECT NO. 07-094
SHEET 160A

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 128+50.00 | 42.50 | RT | 4' FB | 685.58 | -0.4% | BLOCK SOD | 55.56 | - |
| 129+00.00 | 44.22 | RT | 4' FB | 685.41 | -0.3% | BLOCK SOD | 55.56 | - |
| 129+50.00 | 45.94 | RT | 4' FB | 685.23 | -0.4% | BLOCK SOD | 55.56 | - |
| 130+00.00 | 47.66 | RT | 4' FB | 685.05 | -0.4% | BLOCK SOD | 55.56 | - |
| 130+50.00 | 49.38 | RT | 4' FB | 684.87 | -0.4% | BLOCK SOD | 55.56 | - |
| 131+00.00 | 51.10 | RT | 4' FB | 684.69 | -0.4% | BLOCK SOD | 55.56 | - |
| 131+50.00 | 52.81 | RT | 4' FB | 684.52 | -0.3% | BLOCK SOD | 55.56 | - |
| 132+00.00 | 54.53 | RT | 4' FB | 684.34 | -0.4% | BLOCK SOD | 55.56 | - |
| 132+50.00 | 56.25 | RT | 4' FB | 684.16 | -0.4% | BLOCK SOD | 55.56 | - |
| 133+00.00 | 57.97 | RT | 4' FB | 683.98 | -0.4% | BLOCK SOD | 55.56 | - |
| 133+50.00 | 59.97 | RT | 4' FB | 683.80 | -0.4% | BLOCK SOD | 55.56 | - |
| 134+00.00 | 63.61 | RT | 4' FB | 683.56 | -0.5% | BLOCK SOD | 55.56 | - |
| 134+50.00 | 69.47 | RT | 4' FB | 683.36 | -0.4% | BLOCK SOD | 55.56 | - |
| 135+00.00 | 76.76 | RT | 4' FB | 683.16 | -0.4% | BLOCK SOD | 55.56 | - |
| 136+28.18 | 95.57 | RT | 4' FB | 682.96 | -0.2% | BLOCK SOD | 142.42 | - |
| | | | | | | | | |
| 137+20.58 | 92.18 | RT | 4' FB | 682.78 | - | - | - | - |
| 138+00.00 | 85.55 | RT | 4' FB | 682.96 | 0.2% | BLOCK SOD | 88.24 | - |
| 138+50.00 | 76.42 | RT | 4' FB | 683.13 | 0.3% | BLOCK SOD | 55.56 | - |
| 139+00.00 | 66.22 | RT | 4' FB | 683.30 | 0.3% | BLOCK SOD | 55.56 | - |
| 139+50.00 | 59.71 | RT | 4' FB | 683.48 | 0.4% | BLOCK SOD | 55.56 | - |
| 140+00.00 | 55.09 | RT | 4' FB | 683.65 | 0.3% | BLOCK SOD | 55.56 | - |
| 140+50.00 | 53.02 | RT | 4' FB | 683.82 | 0.3% | BLOCK SOD | 55.56 | - |
| 141+00.00 | 50.95 | RT | 4' FB | 683.99 | 0.3% | BLOCK SOD | 55.56 | - |
| 141+50.00 | 48.89 | RT | 4' FB | 684.16 | 0.3% | BLOCK SOD | 55.56 | - |
| 142+00.00 | 46.90 | RT | 4' FB | 684.33 | 0.3% | BLOCK SOD | 55.56 | - |
| 142+50.00 | 45.70 | RT | 4' FB | 684.50 | 0.3% | BLOCK SOD | 55.56 | - |
| 143+00.00 | 45.45 | RT | 4' FB | 684.66 | 0.3% | BLOCK SOD | 55.56 | - |
| 143+50.00 | 46.17 | RT | 4' FB | 684.84 | 0.4% | BLOCK SOD | 55.56 | - |
| 144+00.00 | 47.79 | RT | 4' FB | 685.01 | 0.3% | BLOCK SOD | 55.56 | - |
| 144+50.00 | 49.58 | RT | 4' FB | 685.19 | 0.4% | BLOCK SOD | 55.56 | - |
| 145+00.00 | 50.45 | RT | 4' FB | 685.36 | 0.3% | BLOCK SOD | 55.56 | - |
| 145+50.00 | 50.19 | RT | 4' FB | 685.77 | 0.8% | BLOCK SOD | 55.56 | - |
| 146+00.00 | 49.93 | RT | 4' FB | 686.45 | 1.4% | BLOCK SOD | 55.56 | - |
| 146+50.00 | 49.67 | RT | 4' FB | 687.14 | 1.4% | BLOCK SOD | 55.56 | - |
| 147+00.00 | 49.42 | RT | 4' FB | 687.83 | 1.4% | BLOCK SOD | 55.56 | - |
| 147+50.00 | 49.16 | RT | 4' FB | 688.51 | 1.4% | BLOCK SOD | 55.56 | - |
| 148+00.00 | 48.90 | RT | 4' FB | 689.20 | 1.4% | BLOCK SOD | 55.56 | - |
| 148+50.00 | 48.64 | RT | 4' FB | 689.89 | 1.4% | BLOCK SOD | 55.56 | - |
| 149+00.00 | 48.38 | RT | 4' FB | 690.58 | 1.4% | BLOCK SOD | 55.56 | - |
| 149+50.00 | 48.12 | RT | 4' FB | 691.26 | 1.4% | BLOCK SOD | 55.56 | - |
| 150+00.00 | 47.87 | RT | 4' FB | 691.95 | 1.4% | BLOCK SOD | 55.56 | - |
| 150+50.00 | 47.61 | RT | 4' FB | 692.64 | 1.4% | BLOCK SOD | 55.56 | - |
| 151+00.00 | 47.35 | RT | 4' FB | 693.32 | 1.4% | BLOCK SOD | 55.56 | - |
| 151+50.00 | 47.09 | RT | 4' FB | 694.01 | 1.4% | BLOCK SOD | 55.56 | - |
| 152+00.00 | 46.83 | RT | 4' FB | 694.70 | 1.4% | BLOCK SOD | 55.56 | - |
| 152+50.00 | 46.58 | RT | 4' FB | 695.39 | 1.4% | BLOCK SOD | 55.56 | - |
| 153+00.00 | 46.32 | RT | 4' FB | 696.07 | 1.4% | BLOCK SOD | 55.56 | - |
| 153+50.00 | 46.06 | RT | 4' FB | 696.76 | 1.4% | BLOCK SOD | 55.56 | - |
| 154+00.00 | 45.80 | RT | 4' FB | 697.45 | 1.4% | BLOCK SOD | 55.56 | - |
| 154+50.00 | 45.54 | RT | 4' FB | 698.13 | 1.4% | BLOCK SOD | 55.56 | - |
| 155+00.00 | 45.28 | RT | 4' FB | 698.82 | 1.4% | BLOCK SOD | 55.56 | - |
| 155+50.00 | 45.03 | RT | 4' FB | 699.51 | 1.4% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 163+00.00 | 44.89 | RT | 4' FB | 703.85 | - | - | - | - |
| 163+50.00 | 44.58 | RT | 4' FB | 703.69 | -0.3% | BLOCK SOD | 55.56 | - |
| 164+00.00 | 44.28 | RT | 4' FB | 703.53 | -0.3% | BLOCK SOD | 55.56 | - |
| 164+50.00 | 43.97 | RT | 4' FB | 703.37 | -0.3% | BLOCK SOD | 55.56 | - |
| 165+00.00 | 43.67 | RT | 4' FB | 703.21 | -0.3% | BLOCK SOD | 55.56 | - |
| 165+50.00 | 43.37 | RT | 4' FB | 703.05 | -0.3% | BLOCK SOD | 55.56 | - |
| 166+00.00 | 43.06 | RT | 4' FB | 702.89 | -0.3% | BLOCK SOD | 55.56 | - |
| COLUMN TOTAL | | | | | | | 3286.22 | 0.00 |

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 166+50.00 | 43.06 | RT | 4' FB | 702.73 | -0.3% | BLOCK SOD | 55.56 | - |
| 167+00.00 | 43.56 | RT | 4' FB | 702.57 | -0.3% | BLOCK SOD | 55.56 | - |
| 167+50.00 | 44.55 | RT | 4' FB | 702.42 | -0.3% | BLOCK SOD | 55.56 | - |
| 168+00.00 | 46.05 | RT | 4' FB | 702.27 | -0.3% | BLOCK SOD | 55.56 | - |
| 168+50.00 | 47.74 | RT | 4' FB | 702.13 | -0.3% | BLOCK SOD | 55.56 | - |
| 169+00.00 | 49.44 | RT | 4' FB | 702.00 | -0.3% | BLOCK SOD | 55.56 | - |
| 169+50.00 | 51.14 | RT | 4' FB | 702.00 | 0.0% | BLOCK SOD | 55.56 | - |
| 170+00.00 | 52.75 | RT | 4' FB | 702.00 | 0.0% | BLOCK SOD | 55.56 | - |
| 170+50.00 | 54.25 | RT | 4' FB | 702.00 | 0.0% | BLOCK SOD | 55.56 | - |
| 171+40.21 | 63.06 | RT | 4' FB | 702.00 | 0.0% | BLOCK SOD | 100.23 | - |
| | | | | | | | | |
| 174+50.00 | 49.98 | RT | 4' FB | 700.31 | - | - | - | - |
| 175+00.00 | 49.94 | RT | 4' FB | 700.02 | -0.6% | BLOCK SOD | 55.56 | - |
| 175+50.00 | 50.05 | RT | 4' FB | 699.74 | -0.6% | BLOCK SOD | 55.56 | - |
| 176+00.00 | 50.66 | RT | 4' FB | 699.46 | -0.6% | BLOCK SOD | 55.56 | - |
| 176+50.00 | 51.80 | RT | 4' FB | 699.23 | -0.5% | BLOCK SOD | 55.56 | - |
| 177+50.00 | 54.80 | RT | 4' FB | 698.93 | -0.3% | BLOCK SOD | 111.11 | - |
| 178+00.00 | 56.40 | RT | 4' FB | 698.78 | -0.3% | BLOCK SOD | 55.56 | - |
| 178+50.00 | 58.00 | RT | 4' FB | 698.63 | -0.3% | BLOCK SOD | 55.56 | - |
| 179+00.00 | 59.60 | RT | 4' FB | 698.48 | -0.3% | BLOCK SOD | 55.56 | - |
| 179+50.00 | 61.20 | RT | 4' FB | 698.33 | -0.3% | BLOCK SOD | 55.56 | - |
| 180+00.00 | 62.80 | RT | 4' FB | 698.18 | -0.3% | BLOCK SOD | 55.56 | - |
| 180+50.00 | 64.40 | RT | 4' FB | 698.03 | -0.3% | BLOCK SOD | 55.56 | - |
| 181+00.00 | 66.00 | RT | 4' FB | 697.88 | -0.3% | BLOCK SOD | 55.56 | - |
| 181+50.00 | 67.52 | RT | 4' FB | 697.73 | -0.3% | BLOCK SOD | 55.56 | - |
| 182+00.00 | 68.28 | RT | 4' FB | 697.58 | -0.3% | BLOCK SOD | 55.56 | - |
| 182+50.00 | 68.12 | RT | 4' FB | 697.43 | -0.3% | BLOCK SOD | 55.56 | - |
| 183+00.00 | 67.02 | RT | 4' FB | 697.28 | -0.3% | BLOCK SOD | 55.56 | - |
| 183+50.00 | 65.00 | RT | 4' FB | 697.13 | -0.3% | BLOCK SOD | 55.56 | - |
| 184+00.00 | 62.05 | RT | 4' FB | 696.98 | -0.3% | BLOCK SOD | 55.56 | - |
| 184+50.00 | 58.09 | RT | 4' FB | 696.83 | -0.3% | BLOCK SOD | 55.56 | - |
| 185+00.00 | 53.85 | RT | 4' FB | 696.68 | -0.3% | BLOCK SOD | 55.56 | - |
| 185+50.00 | 49.61 | RT | 4' FB | 696.53 | -0.3% | BLOCK SOD | 55.56 | - |
| 186+00.00 | 45.58 | RT | 4' FB | 696.38 | -0.3% | BLOCK SOD | 55.56 | - |
| 186+50.00 | 40.73 | RT | 4' FB | 695.56 | -1.6% | BLOCK SOD | 55.56 | - |
| 187+00.00 | 40.49 | RT | 4' FB | 694.74 | -1.6% | BLOCK SOD | 55.56 | - |
| 187+50.00 | 40.26 | RT | 4' FB | 693.91 | -1.7% | BLOCK SOD | 55.56 | - |
| 188+00.00 | 40.04 | RT | 4' FB | 692.85 | -2.1% | BLOCK SOD | 55.56 | - |
| 188+50.00 | 39.81 | RT | 4' FB | 691.79 | -2.1% | BLOCK SOD | 55.56 | - |
| 189+00.00 | 39.59 | RT | 4' FB | 690.73 | -2.1% | BLOCK SOD | 55.56 | - |
| 189+50.00 | 39.37 | RT | 4' FB | 689.67 | -2.1% | BLOCK SOD | 55.56 | - |
| 190+00.00 | 39.14 | RT | 4' FB | 688.61 | -2.1% | BLOCK SOD | 55.56 | - |
| 190+50.00 | 38.92 | RT | 4' FB | 687.43 | -2.4% | BLOCK SOD | 55.56 | - |
| 191+00.00 | 40.27 | RT | 4' FB | 686.25 | -2.4% | BLOCK SOD | 55.56 | - |
| 191+50.00 | 40.39 | RT | 4' FB | 685.08 | -2.3% | BLOCK SOD | 55.56 | - |
| 192+00.00 | 40.51 | RT | 4' FB | 683.90 | -2.4% | BLOCK SOD | 55.56 | - |
| 192+50.00 | 40.63 | RT | 4' FB | 682.72 | -2.4% | BLOCK SOD | 55.56 | - |
| 193+00.00 | 40.75 | RT | 4' FB | 681.54 | -2.4% | BLOCK SOD | 55.56 | - |
| 193+50.00 | 40.87 | RT | 4' FB | 680.37 | -2.3% | BLOCK SOD | 55.56 | - |
| 194+00.00 | 40.99 | RT | 4' FB | 679.19 | -2.4% | BLOCK SOD | 55.56 | - |
| 194+50.00 | 40.96 | RT | 4' FB | 678.05 | -2.3% | BLOCK SOD | 55.56 | - |
| 195+00.00 | 40.94 | RT | 4' FB | 676.91 | -2.3% | BLOCK SOD | 55.56 | - |
| 195+50.00 | 40.92 | RT | 4' FB | 675.77 | -2.3% | BLOCK SOD | 55.56 | - |
| 196+00.00 | 40.90 | RT | 4' FB | 674.63 | -2.3% | BLOCK SOD | 55.56 | - |
| 196+50.00 | 39.91 | RT | 4' FB | 673.49 | -2.3% | BLOCK SOD | 55.56 | - |
| 197+00.00 | 38.92 | RT | 4' FB | 672.35 | -2.3% | BLOCK SOD | 55.56 | - |
| 197+50.00 | 38.12 | RT | 4' FB | 671.21 | -2.3% | BLOCK SOD | 55.56 | - |
| 198+00.00 | 38.10 | RT | 4' FB | 670.07 | -2.3% | BLOCK SOD | 55.56 | - |
| 198+50.00 | 38.08 | RT | 4' FB | 668.93 | -2.3% | BLOCK SOD | 55.56 | - |
| 199+00.00 | 38.06 | RT | 4' FB | 667.79 | -2.3% | BLOCK SOD | 55.56 | - |
| 199+50.00 | 38.10 | RT | 4' FB | 666.64 | -2.3% | BLOCK SOD | 55.56 | - |
| COLUMN TOTAL | | | | | | | 3378.01 | 0.00 |

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 200+50.00 | 38.33 | RT | 4' FB | 664.34 | -2.3% | BLOCK SOD | 111.11 | - |
| 201+00.00 | 39.35 | RT | 4' FB | 663.19 | -2.3% | BLOCK SOD | 55.56 | - |
| 201+50.00 | 41.27 | RT | 4' FB | 662.04 | -2.3% | BLOCK SOD | 55.56 | - |
| 202+00.00 | 49.44 | RT | 4' FB | 660.89 | -2.3% | BLOCK SOD | 55.56 | - |
| 202+83.67 | 65.18 | RT | 4' FB | 659.74 | -1.4% | BLOCK SOD | 92.97 | - |
| | | | | | | | | |
| 203+36.78 | 60.73 | RT | 4' FB | 658.87 | - | - | - | - |
| 204+00.00 | 48.60 | RT | 4' FB | 659.04 | 0.3% | BLOCK SOD | 70.24 | - |
| 204+50.00 | 43.63 | RT | 4' FB | 659.22 | 0.4% | BLOCK SOD | 55.56 | - |
| 205+00.00 | 42.03 | RT | 4' FB | 659.39 | 0.3% | BLOCK SOD | 55.56 | - |
| 205+50.00 | 40.43 | RT | 4' FB | 659.56 | 0.3% | BLOCK SOD | 55.56 | - |
| 206+00.00 | 38.34 | RT | 4' FB | 659.74 | 0.4% | BLOCK SOD | 55.56 | - |
| 206+50.00 | 35.25 | RT | 4' FB | 659.93 | 0.4% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 210+50.00 | 50.87 | RT | 4' FB | 649.81 | - | - | - | - |
| 211+00.00 | 48.07 | RT | 4' FB | 648.81 | -1.6% | BLOCK SOD | 55.56 | - |
| 211+50.00 | 45.25 | RT | 4' FB | 648.02 | -1.6% | BLOCK SOD | 55.56 | - |
| 212+00.00 | 44.42 | RT | 4' FB | 647.22 | -1.6% | BLOCK SOD | 55.56 | - |
| 212+50.00 | 46.77 | RT | 4' FB | 646.21 | -2.0% | BLOCK SOD | 55.56 | - |
| 213+00.00 | 54.41 | RT | 4' FB | 643.21 | -6.0% | RIPRAP | - | 7.72 |
| 213+50.00 | 59.47 | RT | 4' FB | 640.21 | -6.0% | RIPRAP | - | 7.72 |
| 214+00.00 | 65.54 | RT | 4' FB | 637.21 | -6.0% | RIPRAP | - | 7.72 |
| 214+50.00 | 71.14 | RT | 4' FB | 634.21 | -6.0% | RIPRAP | - | 7.72 |
| 215+63.56 | 70.81 | RT | 4' FB | 631.21 | -2.6% | RIPRAP | - | 17.52 |
| | | | | | | | | |
| 216+49.09 | 68.76 | RT | 4' FB | 630.57 | - | - | - | - |
| 217+50.00 | 51.36 | RT | 4' FB | 633.39 | 2.8% | RIPRAP | - | 15.57 |
| 218+00.00 | 42.61 | RT | 4' FB | 635.77 | 4.8% | RIPRAP | - | 7.72 |
| | | | | | | | | |
| 218+50.00 | 46.18 | RT | 4' FB | 635.52 | - | - | - | - |
| 219+00.00 | 49.75 | RT | 4' FB | 635.27 | -0.5% | BLOCK SOD | 55.56 | - |
| 219+66.35 | 52.79 | RT | 4' FB | 635.02 | -0.4% | BLOCK SOD | 73.72 | - |
| | | | | | | | | |
| 220+13.42 | 58.30 | RT | 4' FB | 637.18 | - | - | - | - |
| 221+00.00 | 53.62 | RT | 4' FB | 640.18 | 3.5% | RIPRAP | - | 13.36 |
| 221+50.00 | 49.02 | RT | 4' FB | 643.18 | 6.0% | RIPRAP | - | 7.72 |
| 222+00.00 | 46.03 | RT | 4' FB | 646.18 | 6.0% | RIPRAP | - | 7.72 |
| 222+50.00 | 44.66 | RT | 4' FB | 649.05 | 5.7% | RIPRAP | - | 7.72 |
| 223+00.00 | 42.38 | RT | 4' FB | 650.09 | 2.1% | BLOCK SOD | 55.56 | - |
| 223+50.00 | 43.10 | RT | 4' FB | 651.25 | 2.3% | BLOCK SOD | 55.56 | - |
| 224+00.00 | 42.31 | RT | 4' FB | 652.41 | 2.3% | BLOCK SOD | 55.56 | - |
| 224+50.00 | 39.62 | RT | 4' FB | 653.57 | 2.3% | BLOCK SOD | 55.56 | - |
| 225+00.00 | 35.71 | RT | 4' FB | 654.72 | 2.3% | BLOCK SOD | 55.56 | - |
| 225+50.00 | 32.31 | RT | 4' FB | 655.88 | 2.3% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 226+00.00 | 32.77 | RT | 4' FB | 655.62 | - | - | - | - |
| 226+50.00 | 32.91 | RT | 4' FB | 655.35 | -0.5% | BLOCK SOD | 55.56 | - |
| 227+00.00 | 33.09 | RT | 4' FB | 655.08 | -0.5% | BLOCK SOD | 55.56 | - |
| 227+50.00 | 32.74 | RT | 4' FB | 654.81 | -0.5% | BLOCK SOD | 55.56 | - |
| 228+00.00 | 32.43 | RT | 4' FB | 654.55 | -0.5% | BLOCK SOD | 55.56 | - |
| 228+50.00 | 31.92 | RT | 4' FB | 654.28 | -0.5% | BLOCK SOD | 55.56 | - |
| 229+00.00 | 31.42 | RT | 4' FB | 654.01 | -0.5% | BLOCK SOD | 55.56 | - |
| 229+50.00 | 30.94 | RT | 4' FB | 653.75 | -0.5% | BLOCK SOD | 55.56 | - |
| 230+00.00 | 30.90 | RT | 4' FB | 653.48 | -0.5% | BLOCK SOD | 55.56 | - |
| 230+50.00 | 30.87 | RT | 4' FB | 653.21 | -0.5% | BLOCK SOD | 55.56 | - |
| 231+00.00 | 31.28 | RT | 4' FB | 652.83 | -0.8% | BLOCK SOD | 55.56 | - |
| 231+50.00 | 34.66 | RT | 4' FB | 651.69 | -2.3% | BLOCK SOD | 55.56 | - |
| 232+00.00 | 38.01 | RT | 4' FB | 650.56 | -2.3% | BLOCK SOD | 55.56 | - |
| 232+50.00 | 38.29 | RT | 4' FB | 650.03 | -1.1% | BLOCK SOD | 55.56 | - |
| 233+00.00 | 37.00 | RT | 4' FB | 649.50 | -1.1% | BLOCK SOD | 55.56 | - |
| 233+50.00 | 34.13 | RT | 4' FB | 648.97 | -1.1% | BLOCK SOD | 55.56 | - |
| COLUMN TOTAL | | | | | | | 2236.93 | 108.19 |
| SHEET TOTAL | | | | | | | 8901.17 | 108.19 |

NOTES:

1. SEE MISCELLANEOUS DITCH DETAILS SHEET 3 OF 3 FOR DITCH LINING DETAILS.
2. SEE CROSS SECTION PLOTS FOR ADDITIONAL DITCH INFORMATION.
3. DITCH TYPE
   FB = FLAT BOTTOM DITCH
   V = V DITCH

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
4/15/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 4/15/11 | REVISED DITCH FL FOR OUTFALL AT CULVERT I | |

**COLLIN COUNTY OUTER LOOP**

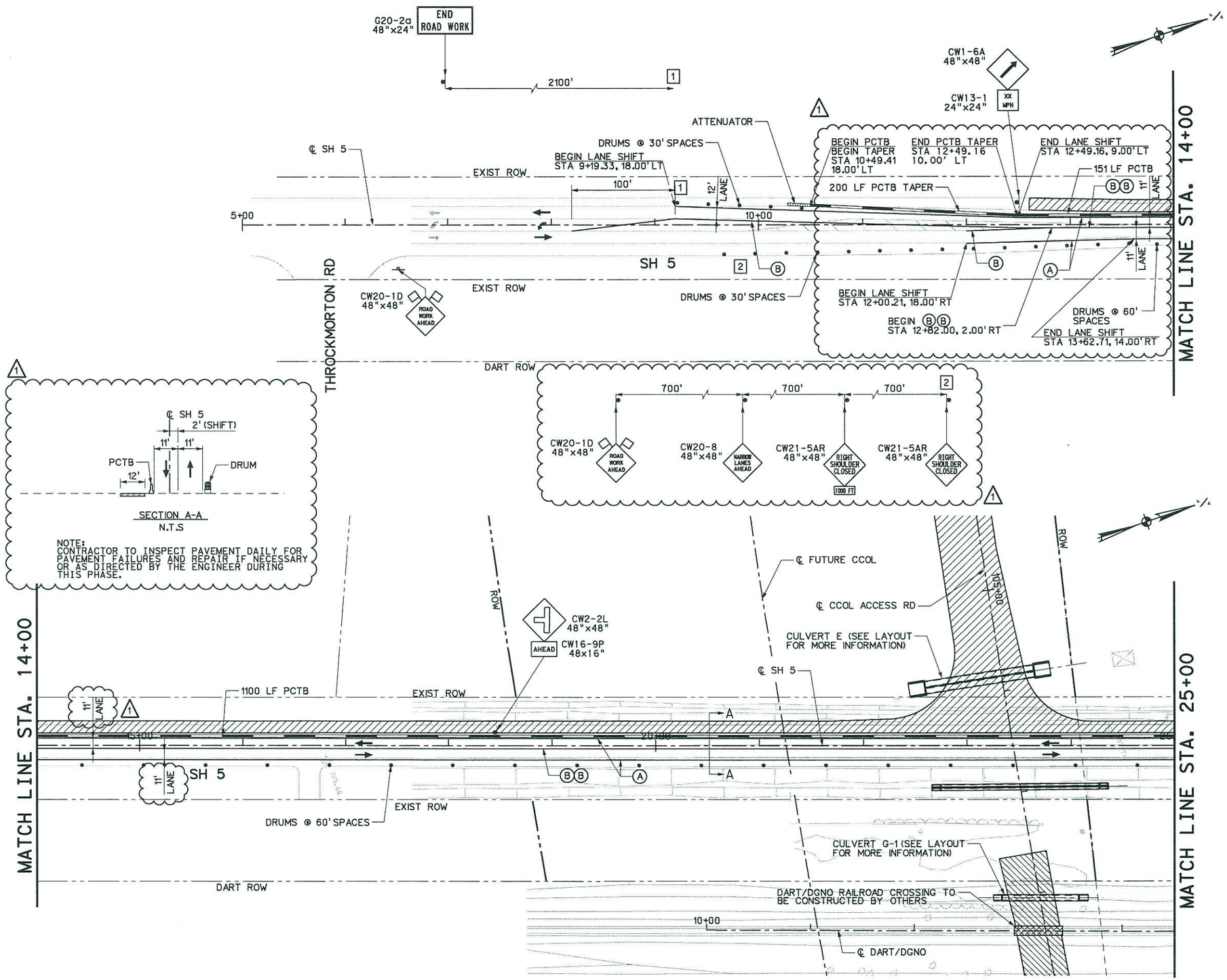
COLLIN COUNTY

CCOL ACCESS RD
DITCH SCHEDULE

SHEET 2 OF 3

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 188




0 50 100 150 200

HORIZ. SCALE IN FEET

## LEGEND

- CONSTRUCTING DETOURS
- PRECAST TRAFFIC BARRIER (PCTB)
- ATTENUATOR
- PVMT CONSTRUCTION (THIS PHASE)
- PREVIOUS CONSTRUCTION
- CONSTRUCTION BY OTHERS
- (A) WK ZN PAV REMOV W 4"(SLD)
- (B) WK ZN PAV REMOV Y 4"(SLD)
- (C) WK ZN PAV REMOV W 4"(BKN) & II-C-R RPMS
- (D) WK ZN PAV REMOV W 24"(SLD)
- TYPE III BARRICADE
- CHANNELIZATION DEVICE

NOTE:

1. SEE TRAFFIC CONTROL NARRATIVE FOR ADVANCED WARNING SIGNS.
2. SEE PLAN AND PROFILE FOR PERMANENT SIGNING AND STRIPING.

STATE OF TEXAS
WILLIAM F. FLEMING JR.
87706
LICENSED
PROFESSIONAL ENGINEER
8/22/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 7/28/11 | REVISED LANE WIDTHS AND CONFIGURATION | WFF |

# COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

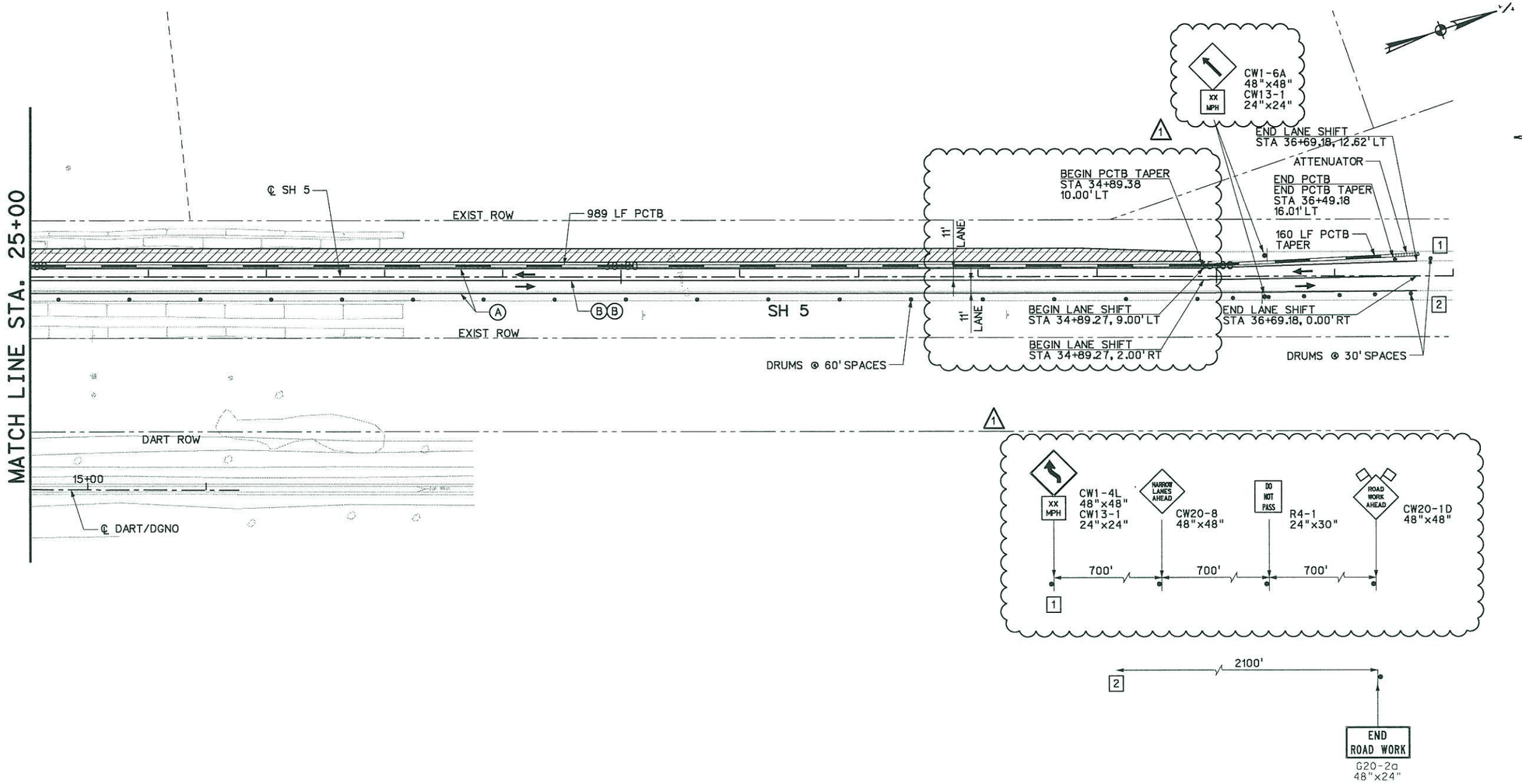
## SH 5
## TRAFFIC CONTROL
### PHASE I STAGE IB

SHEET 1 OF 2

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET




0 50 100 150 200
HORIZ. SCALE IN FEET

## LEGEND

- CONSTRUCTING DETOURS
- PRECAST TRAFFIC BARRIER (PCTB)
- ATTENUATOR
- PVMT CONSTRUCTION (THIS PHASE)
- PREVIOUS CONSTRUCTION
- CONSTRUCTION BY OTHERS
- (A) WK ZN PAV REMOV W 4"(SLD)
- (B) WK ZN PAV REMOV Y 4"(SLD)
- (C) WK ZN PAV REMOV W 4"(BKN) & II-C-R RPMS
- (D) WK ZN PAV REMOV W 24"(SLD)
- TYPE III BARRICADE
- CHANNELIZATION DEVICE

NOTE:

1. SEE TRAFFIC CONTROL NARRATIVE FOR ADVANCED WARNING SIGNS.
2. SEE PLAN AND PROFILE FOR PERMANENT SIGNING AND STRIPING.

STATE OF TEXAS
WILLIAM F. FLEMING JR.
87706
LICENSED PROFESSIONAL ENGINEER
8/22/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 7/28/11 | REVISED LANE WIDTHS AND CONFIGURATION | WFF |

# COLLIN COUNTY OUTER LOOP

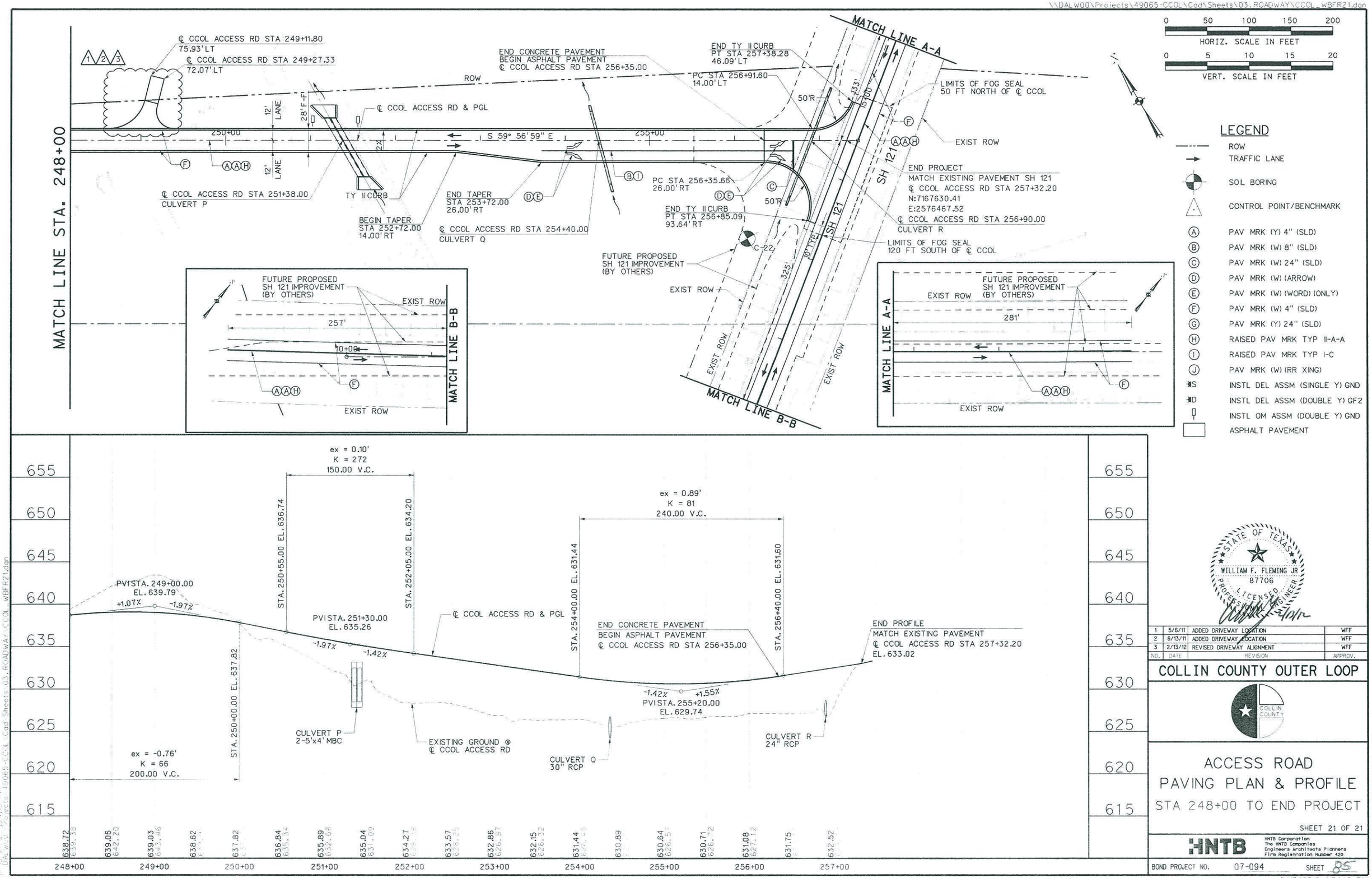
COLLIN COUNTY

## SH 5
## TRAFFIC CONTROL
PHASE I STAGE IB

SHEET 2 OF 2

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET




STATE OF TEXAS
WILLIAM F. FLEMING JR
87706
LICENSED
PROFESSIONAL ENGINEER
2/13/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 5/6/11 | ADDED DRIVEWAY LOCATION | WFF |
| 2 | 6/13/11 | ADDED DRIVEWAY LOCATION | WFF |
| 3 | 2/13/12 | REVISED DRIVEWAY ALIGNMENT | WFF |

# COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

## ACCESS ROAD PAVING PLAN & PROFILE

STA 248+00 TO END PROJECT

SHEET 21 OF 21

HNTB

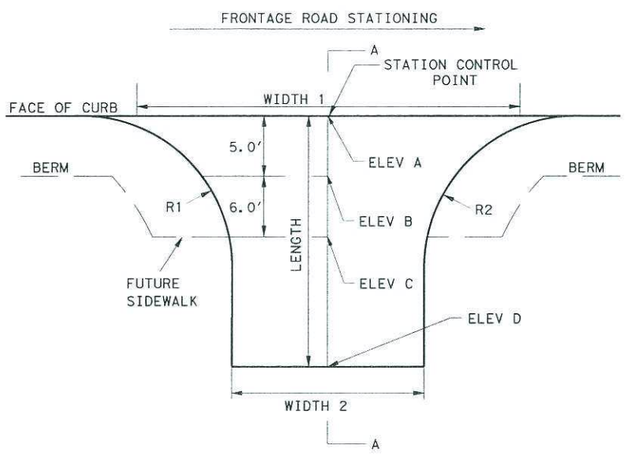
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

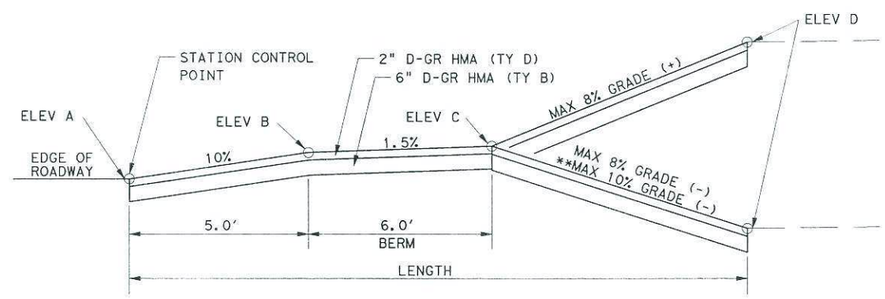
BOND PROJECT NO. 07-094 SHEET 85

# DRIVEWAY DETAILS & SUMMARY

| SHEET | LOCATION (STA) | EXIST TYPE | WIDTH 1 | WIDTH 2 | LENGTH | R1 | R2 | ELEV A | ELEV B | ELEV C | ELEV D | GRADE | DRIVEWAY AREA* | 530 / 2011 DRIVEWAYS (ACP) | 247 / 2061 FL BS (CMP IN PLC) (TY A GR 1) (6") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FT | FT | FT | FT | FT | | | | | | SY | SY | SY |
| **CCOL ACCESS ROAD** | | | | | | | | | | | | | | | |
| **SHEET 9 OF 21 | CCOL 108+79.97 | | 24.00 | 14.00 | 47.00 | 5 | 5 | 707.35 | 707.85 | 707.94 | 704.34 | -10.00% | 74 | 74 | |
| **SHEET 9 OF 21 | CCOL 108+97.33 | | 24.00 | 14.00 | 45.00 | 5 | 5 | 707.29 | 707.79 | 707.88 | 704.49 | -9.98% | 71 | 71 | |
| SHEET 15 OF 21 | CCOL 177+18.45 | ACP | 138.65 | 36.85 | 64.25 | 50 | 50 | 705.61 | 706.11 | 706.20 | 706.33 | 0.24% | 375 | 375 | |
| SHEET 15 OF 21 | CCOL 182+50.00 | | 138.65 | 36.00 | 50.89 | 50 | 50 | 707.61 | 708.11 | 708.20 | 705.41 | -6.99% | 328 | 328 | |
| SHEET 18 OF 21 | CCOL 218+60.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 640.60 | 641.10 | 641.19 | 643.73 | 6.51% | 97 | 64 | 33 |
| SHEET 19 OF 21 | CCOL 234+90.00 | | 62.00 | 12.00 | 50.00 | 25 | 25 | 646.94 | 647.44 | 647.53 | 648.31 | 2.00% | 97 | 61 | 36 |
| SHEET 21 OF 21 | CCOL 249+07.36 | | 76.00 | 16.00 | 60.00 | 20 | 43 | 638.75 | 639.15 | 639.24 | 639.80 | 1.14% | 151 | 98 | 53 |
| **CR 365** | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 365 15+45.10 | ACP | 43.81 | 15.00 | 35.50 | 15 | 15 | 706.74 | 703.19 | - | - | -10.00% | 70 | 70 | |
| **CR 418** | | | | | | | | | | | | | | | |
| SHEET 1 OF 1 | CR 418 15+96.18 | ACP | 45.14 | 15.00 | 15.25 | 50 | 50 | 706.94 | 705.72 | - | - | -8.00% | 40 | 40 | |
| TOTAL | | | | | | | | | | | | | 1303 | 1181 | 122 |

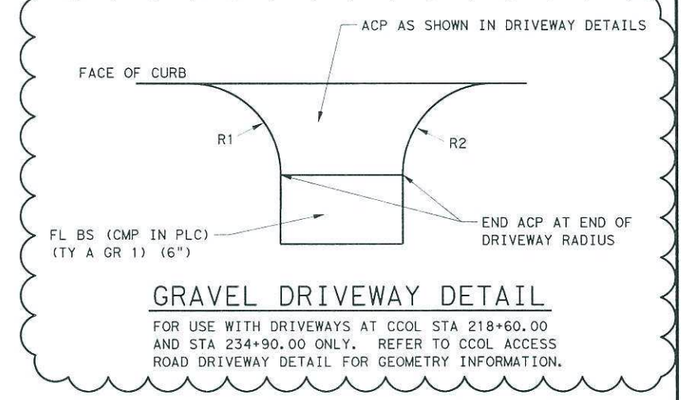
* FOR CONTRACTOR'S INFORMATION ONLY
** RAILROAD SERVICE ACCESS



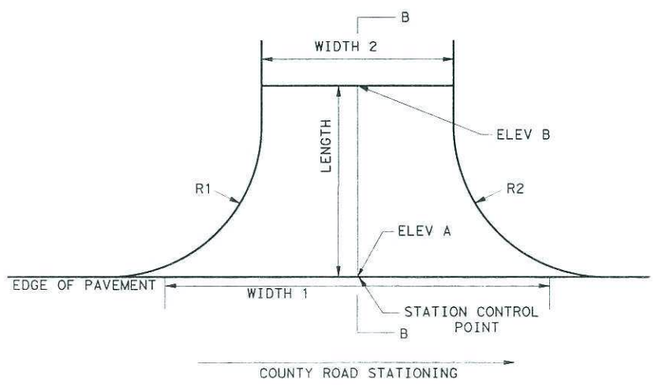

SECTION A-A

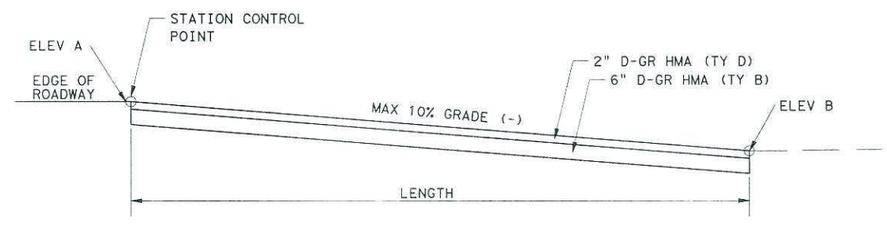
## CCOL ACCESS ROAD DRIVEWAY DETAIL




## GRAVEL DRIVEWAY DETAIL

FOR USE WITH DRIVEWAYS AT CCOL STA 218+60.00 AND STA 234+90.00 ONLY. REFER TO CCOL ACCESS ROAD DRIVEWAY DETAIL FOR GEOMETRY INFORMATION.




SECTION B-B

## COUNTY ROAD DRIVEWAY DETAIL

STATE OF TEXAS
WILLIAM F. FLEMING JR.
87706
LICENSED PROFESSIONAL ENGINEER
2/13/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/9/11 | REVISED DRIVEWAYS | WFF |
| 2 | 5/6/11 | ADDED DRIVEWAY LOCATION | WFF |
| 3 | 6/13/11 | REVISED DRIVEWAY LOCATION, ADDED GATE | WFF |
| 4 | 2/13/12 | REVISED DRIVEWAY ALIGNMENT | WFF |

COLLIN COUNTY OUTER LOOP

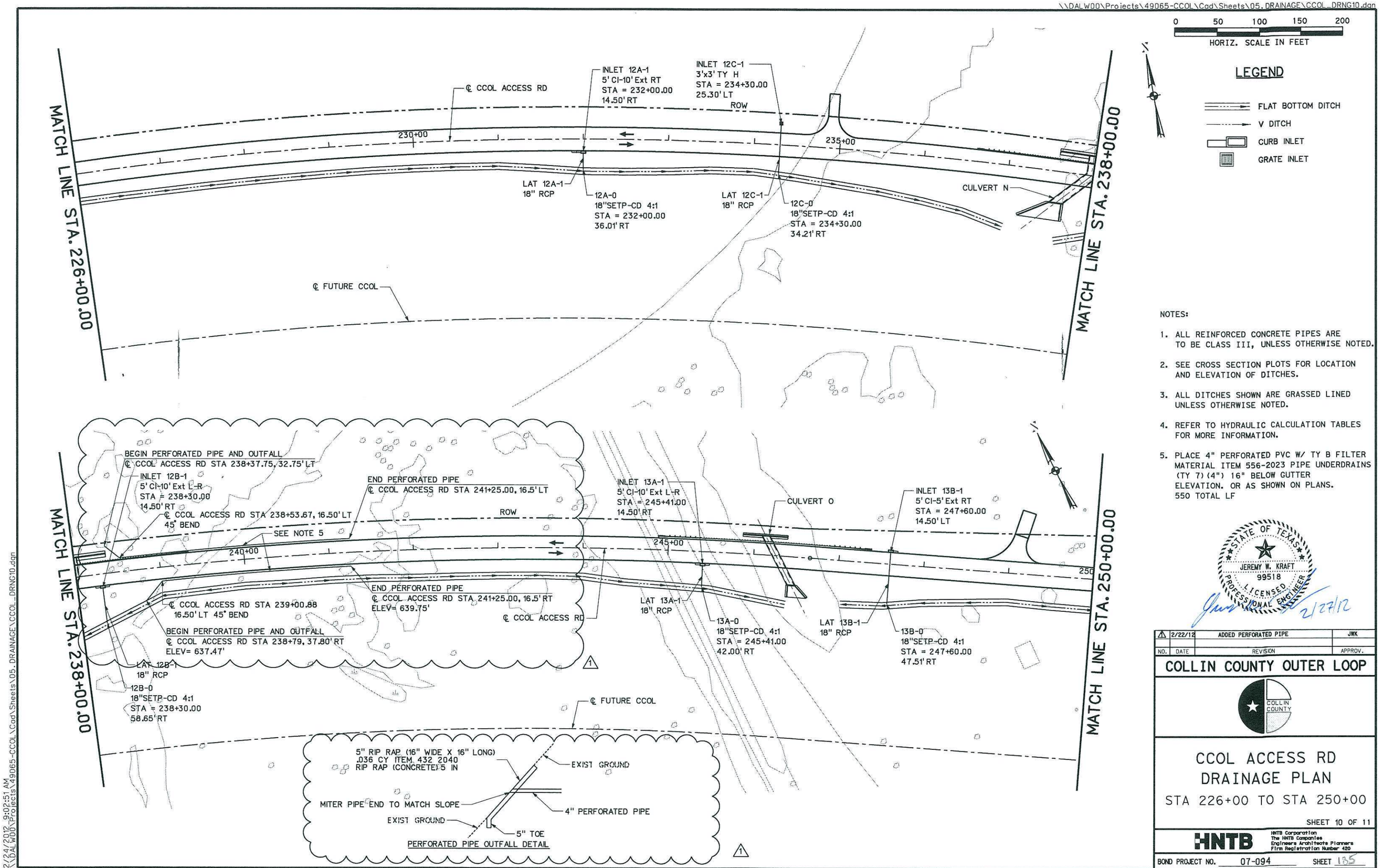
COLLIN COUNTY

DRIVEWAY DETAILS

SHEET 1 OF 1

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 100




NOTES:

1. ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III, UNLESS OTHERWISE NOTED.
2. SEE CROSS SECTION PLOTS FOR LOCATION AND ELEVATION OF DITCHES.
3. ALL DITCHES SHOWN ARE GRASSED LINED UNLESS OTHERWISE NOTED.
4. REFER TO HYDRAULIC CALCULATION TABLES FOR MORE INFORMATION.
5. PLACE 4" PERFORATED PVC W/ TY B FILTER MATERIAL ITEM 556-2023 PIPE UNDERDRAINS (TY 7)(4") 16" BELOW GUTTER ELEVATION. OR AS SHOWN ON PLANS. 550 TOTAL LF

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
2/27/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/22/12 | ADDED PERFORATED PIPE | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

CCOL ACCESS RD
DRAINAGE PLAN
STA 226+00 TO STA 250+00

SHEET 10 OF 11

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 135

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 234+00.00 | 33.63 | RT | 4' FB | 647.44 | -3.1% | RIPRAP | - | 7.72 |
| 234+50.00 | 37.92 | RT | 4' FB | 644.52 | -5.8% | RIPRAP | - | 7.72 |
| 235+50.00 | 47.10 | RT | 4' FB | 638.69 | -5.8% | RIPRAP | - | 15.43 |
| 236+00.00 | 53.23 | RT | 4' FB | 635.77 | -5.8% | RIPRAP | - | 7.72 |
| 236+89.78 | 70.83 | RT | 4' FB | 632.85 | -3.3% | RIPRAP | - | 13.85 |
| | | | | | | | | |
| 237+43.09 | 67.56 | RT | 4' FB | 633.44 | - | - | - | - |
| 238+50.00 | 46.91 | RT | 4' FB | 636.37 | 2.7% | RIPRAP | - | 16.50 |
| 239+00.00 | 34.12 | RT | 4' FB | 637.33 | 1.9% | BLOCK SOD | 55.56 | - |
| 239+50.00 | 32.95 | RT | 4' FB | 637.89 | 1.1% | BLOCK SOD | 55.56 | - |
| 240+00.00 | 31.32 | RT | 4' FB | 638.31 | 0.8% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 240+50.00 | 32.30 | RT | 4' FB | 638.70 | - | - | - | - |
| 241+00.00 | 31.87 | RT | 4' FB | 639.24 | 1.1% | BLOCK SOD | 55.56 | - |
| 241+50.00 | 32.09 | RT | 4' FB | 638.51 | -1.5% | BLOCK SOD | 55.56 | - |
| 242+00.00 | 33.50 | RT | 4' FB | 637.49 | -2.0% | BLOCK SOD | 55.56 | - |
| 242+50.00 | 33.26 | RT | 4' FB | 636.88 | -1.2% | BLOCK SOD | 55.56 | - |
| 243+00.00 | 33.00 | RT | 4' FB | 636.27 | -1.2% | BLOCK SOD | 55.56 | - |
| 243+50.00 | 33.03 | RT | 4' FB | 635.59 | -1.4% | BLOCK SOD | 55.56 | - |
| 244+00.00 | 33.98 | RT | 4' FB | 634.68 | -1.8% | BLOCK SOD | 55.56 | - |
| 244+50.00 | 35.04 | RT | 4' FB | 633.77 | -1.8% | BLOCK SOD | 55.56 | - |
| 245+00.00 | 42.31 | RT | 4' FB | 632.82 | -1.9% | BLOCK SOD | 55.56 | - |
| 245+50.00 | 44.29 | RT | 4' FB | 631.91 | -1.8% | BLOCK SOD | 55.56 | - |
| 246+43.00 | 57.44 | RT | 4' FB | 631.63 | -0.3% | BLOCK SOD | 103.33 | - |
| | | | | | | | | |
| 246+78.18 | 60.36 | RT | 4' FB | 632.13 | - | - | - | - |
| 247+50.00 | 51.16 | RT | 4' FB | 633.30 | 1.6% | BLOCK SOD | 79.80 | - |
| 248+00.00 | 43.51 | RT | 4' FB | 634.37 | 2.1% | BLOCK SOD | 55.56 | - |
| 248+50.00 | 39.26 | RT | 4' FB | 635.43 | 2.1% | BLOCK SOD | 55.56 | - |
| 249+00.00 | 35.01 | RT | 4' FB | 636.49 | 2.1% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 249+50.00 | 36.37 | RT | 4' FB | 635.73 | - | - | - | - |
| 250+00.00 | 36.96 | RT | 4' FB | 634.97 | -1.5% | BLOCK SOD | 55.56 | - |
| 250+50.00 | 35.52 | RT | 4' FB | 634.17 | -1.6% | BLOCK SOD | 55.56 | - |
| 251+17.63 | 51.75 | RT | 4' FB | 631.51 | -3.9% | RIPRAP | - | 10.44 |
| | | | | | | | | |
| 252+50.00 | 48.62 | RT | 4' FB | 627.54 | - | - | - | - |
| 253+00.00 | 56.22 | RT | 4' FB | 627.30 | -0.5% | BLOCK SOD | 55.56 | - |
| 253+50.00 | 54.94 | RT | 4' FB | 627.15 | -0.3% | BLOCK SOD | 55.56 | - |
| 254+00.00 | 55.56 | RT | 4' FB | 627.00 | -0.3% | BLOCK SOD | 55.56 | - |
| 254+50.00 | 62.25 | RT | 4' FB | 624.87 | -4.3% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 254+59.84 | 64.45 | RT | 4' FB | 625.88 | - | - | - | - |
| 255+50.00 | 55.63 | RT | 4' FB | 626.07 | 0.2% | BLOCK SOD | 100.18 | - |
| 256+00.00 | 57.23 | RT | 4' FB | 626.22 | 0.3% | BLOCK SOD | 55.56 | - |
| | | | | | | | | |
| 15+00.00 | 43.13 | LT | V | 631.53 | - | - | - | - |
| 15+50.00 | 34.52 | LT | V | 629.39 | -4.3% | BLOCK SOD | 33.33 | - |
| 16+00.00 | 34.39 | LT | V | 625.93 | -6.9% | RIPRAP | - | 4.63 |
| 16+50.00 | 35.84 | LT | V | 622.56 | -6.7% | RIPRAP | - | 4.63 |
| | | | | | | | | |
| 26+50.00 | 25.96 | LT | V | 604.27 | - | - | - | - |
| 27+00.00 | 22.50 | LT | V | 605.13 | 1.7% | BLOCK SOD | 33.33 | - |
| 27+50.00 | 22.50 | LT | V | 604.80 | -0.7% | BLOCK SOD | 33.33 | - |
| 28+00.00 | 25.13 | LT | V | 603.56 | -2.5% | BLOCK SOD | 33.33 | - |
| 28+50.00 | 31.85 | LT | V | 601.63 | -3.9% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 58+00.00 | 26.07 | LT | V | 625.04 | - | - | - | - |
| 58+50.00 | 22.53 | LT | V | 629.30 | 8.5% | RIPRAP | - | 4.63 |
| 59+00.00 | 22.53 | LT | V | 632.39 | 6.2% | RIPRAP | - | 4.63 |
| 59+50.00 | 22.53 | LT | V | 635.48 | 6.2% | RIPRAP | - | 4.63 |
| TOTAL | | | | | | | 1727.76 | 102.52 |

1

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 60+00.00 | 22.53 | LT | V | 638.56 | 6.2% | RIPRAP | - | 4.63 |
| 60+50.00 | 22.53 | LT | V | 641.55 | 6.0% | RIPRAP | - | 4.63 |
| 61+00.00 | 22.53 | LT | V | 644.16 | 5.2% | RIPRAP | - | 4.63 |
| 61+50.00 | 22.53 | LT | V | 646.36 | 4.4% | BLOCK SOD | 33.33 | - |
| 62+00.00 | 22.53 | LT | V | 648.15 | 3.6% | BLOCK SOD | 33.33 | - |
| 62+50.00 | 22.53 | LT | V | 649.55 | 2.8% | BLOCK SOD | 33.33 | - |
| 63+00.00 | 22.53 | LT | V | 650.54 | 2.0% | BLOCK SOD | 33.33 | - |
| 63+50.00 | 22.50 | LT | V | 651.13 | 1.2% | BLOCK SOD | 33.33 | - |
| 64+00.00 | 22.50 | LT | V | 651.31 | 0.4% | BLOCK SOD | 33.33 | - |
| 64+50.00 | 22.50 | LT | V | 651.09 | -0.4% | BLOCK SOD | 33.33 | - |
| 65+00.00 | 22.56 | LT | V | 650.47 | -1.2% | BLOCK SOD | 33.33 | - |
| 65+50.00 | 22.56 | LT | V | 649.45 | -2.0% | BLOCK SOD | 33.33 | - |
| 66+00.00 | 22.56 | LT | V | 648.02 | -2.9% | BLOCK SOD | 33.33 | - |
| 66+50.00 | 22.56 | LT | V | 646.29 | -3.5% | BLOCK SOD | 33.33 | - |
| 67+00.00 | 22.56 | LT | V | 644.54 | -3.5% | BLOCK SOD | 33.33 | - |
| 67+50.00 | 22.56 | LT | V | 642.79 | -3.5% | BLOCK SOD | 33.33 | - |
| 68+00.00 | 25.93 | LT | V | 639.92 | -5.7% | RIPRAP | - | 4.63 |
| 68+50.00 | 28.70 | LT | V | 637.22 | -5.4% | RIPRAP | - | 4.63 |
| | | | | | | | | |
| 72+19.00 | 35.06 | LT | V | | - | - | - | - |
| 72+50.00 | 34.62 | LT | V | 625.80 | ###### | BLOCK SOD | 20.67 | - |
| 73+00.00 | 33.54 | LT | V | 626.11 | 0.6% | BLOCK SOD | 33.33 | - |
| 73+50.00 | 32.68 | LT | V | 626.60 | 1.0% | BLOCK SOD | 33.33 | - |
| 74+00.00 | 30.68 | LT | V | 627.51 | 1.8% | BLOCK SOD | 33.33 | - |
| 74+50.00 | 28.52 | LT | V | 628.48 | 1.9% | BLOCK SOD | 33.33 | - |
| 75+00.00 | 27.26 | LT | V | 629.15 | 1.3% | BLOCK SOD | 33.33 | - |
| 75+50.00 | 25.50 | LT | V | 629.99 | 1.7% | BLOCK SOD | 33.33 | - |
| 76+00.00 | 25.50 | LT | V | 630.24 | 0.5% | BLOCK SOD | 33.33 | - |
| 76+50.00 | 25.50 | LT | V | 630.53 | 0.6% | BLOCK SOD | 33.33 | - |
| 77+00.00 | 26.03 | LT | V | 630.73 | 0.4% | BLOCK SOD | 33.33 | - |
| 77+50.00 | 26.80 | LT | V | 630.93 | 0.4% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 78+00.00 | 31.53 | LT | V | 629.86 | - | - | - | - |
| 78+50.00 | 34.89 | LT | V | 629.24 | -1.2% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 93+00.00 | 27.29 | LT | V | 687.10 | - | - | - | - |
| 93+50.00 | 25.55 | LT | V | 691.10 | 8.0% | BLOCK SOD | 33.33 | - |
| 94+00.00 | 24.37 | LT | V | 694.91 | 7.6% | BLOCK SOD | 33.33 | - |
| 94+50.00 | 25.81 | LT | V | 697.62 | 5.4% | BLOCK SOD | 33.33 | - |
| 95+00.00 | 24.77 | LT | V | 700.84 | 6.4% | BLOCK SOD | 33.33 | - |
| 95+50.00 | 26.34 | LT | V | 702.83 | 4.0% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 111+50.00 | 32.82 | LT | V | 697.07 | - | - | - | - |
| 112+00.00 | 31.45 | LT | V | 696.13 | -1.9% | BLOCK SOD | 33.33 | - |
| 112+50.00 | 30.18 | LT | V | 695.28 | -1.7% | BLOCK SOD | 33.33 | - |
| 113+00.00 | 29.01 | LT | V | 694.66 | -1.2% | BLOCK SOD | 33.33 | - |
| 113+50.00 | 28.62 | LT | V | 694.04 | -1.2% | BLOCK SOD | 33.33 | - |
| 114+00.00 | 29.02 | LT | V | 693.42 | -1.2% | BLOCK SOD | 33.33 | - |
| 114+50.00 | 30.06 | LT | V | 692.80 | -1.2% | BLOCK SOD | 33.33 | - |
| 115+00.00 | 31.16 | LT | V | 692.18 | -1.2% | BLOCK SOD | 33.33 | - |
| 115+50.00 | 32.27 | LT | V | 691.56 | -1.2% | BLOCK SOD | 33.33 | - |
| 116+00.00 | 33.00 | LT | V | 691.07 | -1.0% | BLOCK SOD | 33.33 | - |
| 116+50.00 | 33.67 | LT | V | 690.59 | -1.0% | BLOCK SOD | 33.33 | - |
| 117+00.00 | 34.33 | LT | V | 690.12 | -0.9% | BLOCK SOD | 33.33 | - |
| 117+50.00 | 34.51 | LT | V | 689.81 | -0.6% | BLOCK SOD | 33.33 | - |
| 118+00.00 | 34.66 | LT | V | 689.51 | -0.6% | BLOCK SOD | 33.33 | - |
| 118+50.00 | 34.81 | LT | V | 689.21 | -0.6% | BLOCK SOD | 33.33 | - |
| 119+00.00 | 34.96 | LT | V | 688.91 | -0.6% | BLOCK SOD | 33.33 | - |
| 119+50.00 | 35.11 | LT | V | 688.61 | -0.6% | BLOCK SOD | 33.33 | - |
| 120+00.00 | 35.26 | LT | V | 688.31 | -0.6% | BLOCK SOD | 33.33 | - |
| 120+50.00 | 35.32 | LT | V | 688.04 | -0.5% | BLOCK SOD | 33.33 | - |
| TOTAL | | | | | | | 1587.33 | 23.15 |

1

## DITCH SCHEDULE

| STATION | OFFSET | LT/RT | TYPE | FL ELEV | GRADE | LINING | ITEM 162 BLOCK SOD (SY) | ITEM 432 RIPRAP (CONC) (5 IN) (CY) |
|---|---|---|---|---|---|---|---|---|
| 121+00.00 | 35.26 | LT | V | 687.81 | -0.5% | BLOCK SOD | 33.33 | - |
| 121+50.00 | 35.08 | LT | V | 687.62 | -0.4% | BLOCK SOD | 33.33 | - |
| 122+00.00 | 34.78 | LT | V | 687.47 | -0.3% | BLOCK SOD | 33.33 | - |
| 122+50.00 | 34.48 | LT | V | 687.32 | -0.3% | BLOCK SOD | 33.33 | - |
| 123+00.00 | 34.18 | LT | V | 687.17 | -0.3% | BLOCK SOD | 33.33 | - |
| 123+50.00 | 33.88 | LT | V | 687.02 | -0.3% | BLOCK SOD | 33.33 | - |
| 124+00.00 | 33.58 | LT | V | 686.87 | -0.3% | BLOCK SOD | 33.33 | - |
| 124+50.00 | 33.28 | LT | V | 686.72 | -0.3% | BLOCK SOD | 33.33 | - |
| 125+00.00 | 32.98 | LT | V | 686.57 | -0.3% | BLOCK SOD | 33.33 | - |
| 125+50.00 | 32.68 | LT | V | 686.42 | -0.3% | BLOCK SOD | 33.33 | - |
| 126+00.00 | 32.38 | LT | V | 686.27 | -0.3% | BLOCK SOD | 33.33 | - |
| 126+50.00 | 32.08 | LT | V | 686.12 | -0.3% | BLOCK SOD | 33.33 | - |
| 127+00.00 | 31.78 | LT | V | 685.97 | -0.3% | BLOCK SOD | 33.33 | - |
| 127+50.00 | 31.79 | LT | V | 685.82 | -0.3% | BLOCK SOD | 33.33 | - |
| 128+00.00 | 32.29 | LT | V | 685.67 | -0.3% | BLOCK SOD | 33.33 | - |
| 128+50.00 | 33.29 | LT | V | 685.52 | -0.3% | BLOCK SOD | 33.33 | - |
| 129+00.00 | 34.49 | LT | V | 685.37 | -0.3% | BLOCK SOD | 33.33 | - |
| 129+50.00 | 35.70 | LT | V | 685.22 | -0.3% | BLOCK SOD | 33.33 | - |
| 130+00.00 | 36.90 | LT | V | 685.07 | -0.3% | BLOCK SOD | 33.33 | - |
| 130+50.00 | 38.10 | LT | V | 684.92 | -0.3% | BLOCK SOD | 33.33 | - |
| 131+00.00 | 39.31 | LT | V | 684.77 | -0.3% | BLOCK SOD | 33.33 | - |
| 131+50.00 | 40.51 | LT | V | 684.62 | -0.3% | BLOCK SOD | 33.33 | - |
| 132+00.00 | 41.71 | LT | V | 684.47 | -0.3% | BLOCK SOD | 33.33 | - |
| 132+50.00 | 42.92 | LT | V | 684.32 | -0.3% | BLOCK SOD | 33.33 | - |
| 133+00.00 | 44.12 | LT | V | 684.17 | -0.3% | BLOCK SOD | 33.33 | - |
| 133+50.00 | 45.33 | LT | V | 684.02 | -0.3% | BLOCK SOD | 33.33 | - |
| 134+00.00 | 46.53 | LT | V | 683.87 | -0.3% | BLOCK SOD | 33.33 | - |
| 134+50.00 | 47.73 | LT | V | 683.72 | -0.3% | BLOCK SOD | 33.33 | - |
| 135+00.00 | 48.94 | LT | V | 683.57 | -0.3% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 173+00.00 | 28.81 | LT | V | 704.84 | - | - | - | - |
| 173+50.00 | 29.08 | LT | V | 704.39 | -0.9% | BLOCK SOD | 33.33 | - |
| 174+00.00 | 28.79 | LT | V | 704.14 | -0.5% | BLOCK SOD | 33.33 | - |
| 174+50.00 | 27.73 | LT | V | 704.18 | 0.1% | BLOCK SOD | 33.33 | - |
| 175+00.00 | 27.25 | LT | V | 704.03 | -0.3% | BLOCK SOD | 33.33 | - |
| 175+50.00 | 26.43 | LT | V | 703.96 | -0.1% | BLOCK SOD | 33.33 | - |
| 176+00.00 | 25.84 | LT | V | 703.88 | -0.2% | BLOCK SOD | 33.33 | - |
| 176+50.00 | 26.07 | LT | V | 703.73 | -0.3% | BLOCK SOD | 33.33 | - |
| | | | | | | | | |
| 209+00.00 | 29.86 | LT | V | 654.85 | - | - | - | - |
| 209+50.00 | 28.85 | LT | V | 653.85 | -2.0% | BLOCK SOD | 33.33 | - |
| 210+00.00 | 28.14 | LT | V | 652.85 | -2.0% | BLOCK SOD | 33.33 | - |
| 210+50.00 | 27.43 | LT | V | 651.85 | -2.0% | BLOCK SOD | 33.33 | - |
| 211+00.00 | 27.25 | LT | V | 650.68 | -2.3% | BLOCK SOD | 33.33 | - |
| 211+50.00 | 26.54 | LT | V | 649.67 | -2.0% | BLOCK SOD | 33.33 | - |
| 212+00.00 | 24.00 | LT | V | 649.28 | -0.8% | BLOCK SOD | 33.33 | - |
| 212+50.00 | 24.00 | LT | V | 648.05 | -2.5% | BLOCK SOD | 33.33 | - |
| 213+00.00 | 24.00 | LT | V | 646.81 | -2.5% | BLOCK SOD | 33.33 | - |
| 213+50.00 | 24.00 | LT | V | 645.57 | -2.5% | BLOCK SOD | 33.33 | - |
| 214+00.00 | 24.00 | LT | V | 644.33 | -2.5% | BLOCK SOD | 33.33 | - |
| 214+50.00 | 24.00 | LT | V | 643.10 | -2.5% | BLOCK SOD | 33.33 | - |
| 215+00.00 | 29.12 | LT | V | 640.15 | -5.9% | RIPRAP | - | 4.63 |
| 215+50.00 | 34.01 | LT | V | 637.36 | -5.6% | RIPRAP | - | 4.63 |
| | | | | | | | | |
| 233+00.00 | 26.81 | LT | V | 651.59 | - | - | - | - |
| 233+50.00 | 25.86 | LT | V | 650.64 | -1.9% | BLOCK SOD | 33.33 | - |
| 234+00.00 | 24.90 | LT | V | 649.31 | -2.7% | BLOCK SOD | 33.33 | - |
| 234+50.00 | 22.96 | LT | V | 648.11 | -2.4% | BLOCK SOD | 33.33 | - |
| 235+50.00 | 26.50 | LT | V | 643.38 | -4.7% | BLOCK SOD | 66.67 | - |
| 236+00.00 | 27.19 | LT | V | 641.77 | -3.2% | BLOCK SOD | 33.33 | - |
| 236+50.00 | 30.59 | LT | V | 639.56 | -4.4% | BLOCK SOD | 33.33 | - |
| COLUMN TOTAL | | | | | | | 1800.00 | 9.26 |
| SHEET TOTAL | | | | | | | 5115.09 | 134.93 |
| DITCH TOTAL | | | | | | | 19933 | 559 |

1

NOTES:

1. SEE MISCELLANEOUS DITCH DETAILS SHEET 3 OF 3 FOR DITCH LINING DETAILS.
2. SEE CROSS SECTION PLOTS FOR ADDITIONAL DITCH INFORMATION.
3. DITCH TYPE
   FB = FLAT BOTTOM DITCH
   V = V DITCH

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER

2/27/12

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/23/12 | REVISED DITCH FL ELEVATIONS | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

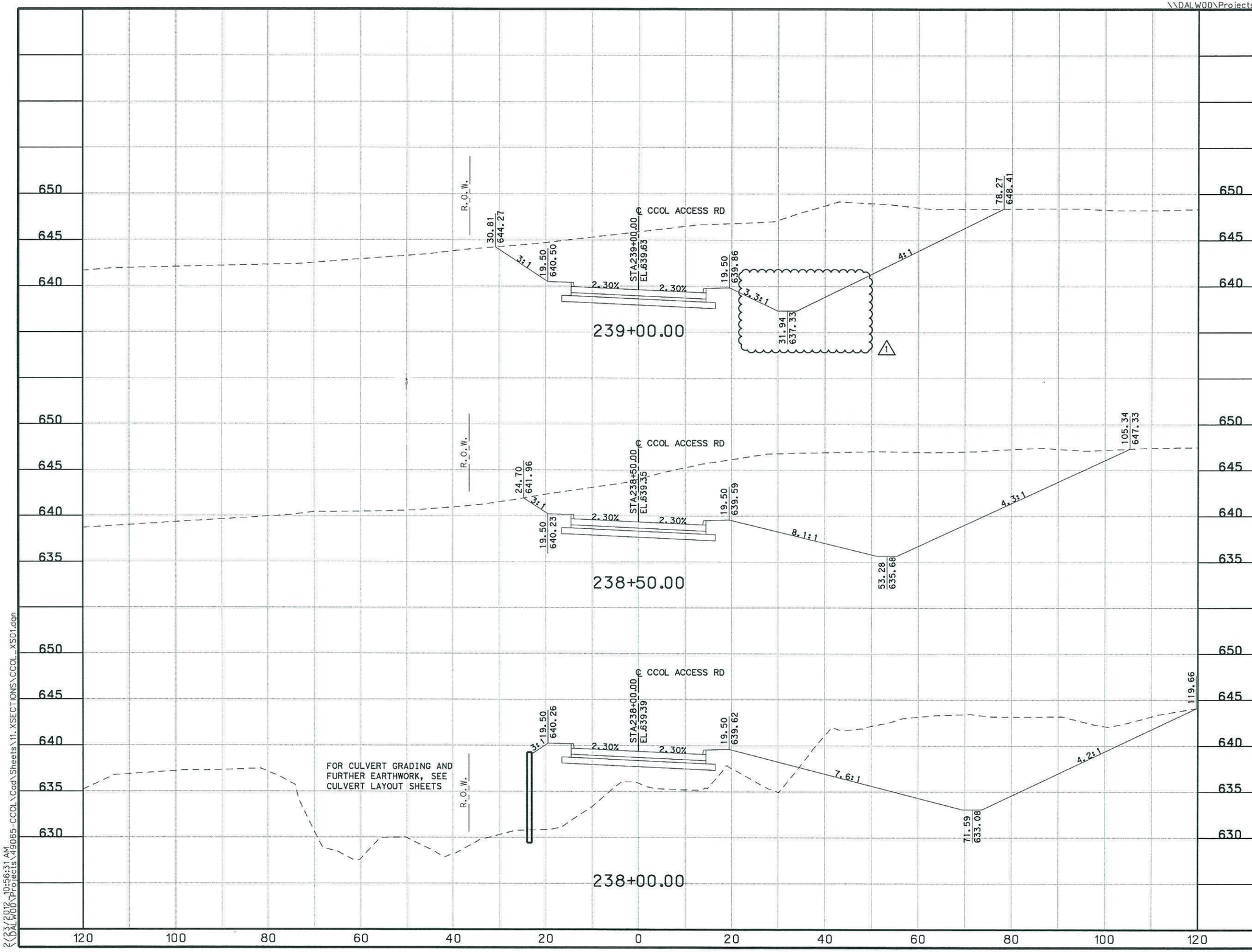
CCOL ACCESS RD
DITCH SCHEDULE

SHEET 3 OF 3

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 189




| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/23/12 | REVISED DITCH ELEVATION AND SLOPE | JWK |

COLLIN COUNTY OUTER LOOP

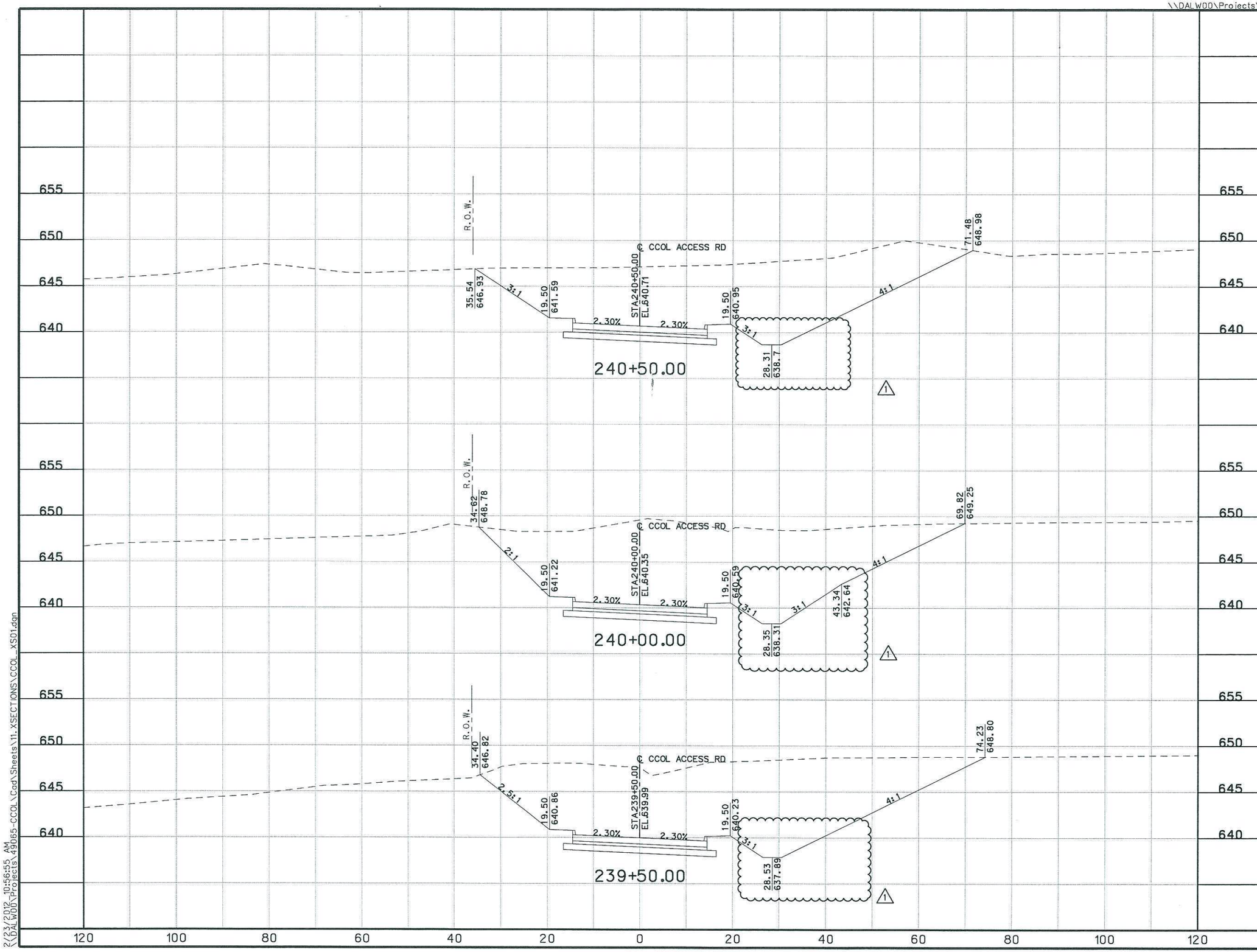
COLLIN COUNTY

CROSS SECTIONS

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

CONTRACT NO. 07-094 SHEET 161




0 10 20 30 40
HORIZ. SCALE IN FEET

0 5 10 15 20
VERT. SCALE IN FEET

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/23/12 | REVISED DITCH ELEVATION AND SLOPE | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

CROSS SECTIONS

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

CONTRACT NO. 07-094 SHEET 162

2/23/2012_10:56:55 AM

## SUMMARY OF EARTHWORK QUANTITIES

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 139+00.00 | 139+50.00 | 160 | 379 |
| 139+50.00 | 140+00.00 | 155 | 296 |
| 140+00.00 | 140+50.00 | 165 | 221 |
| 140+50.00 | 141+00.00 | 182 | 146 |
| 141+00.00 | 141+50.00 | 179 | 95 |
| 141+50.00 | 142+00.00 | 149 | 83 |
| 142+00.00 | 142+50.00 | 132 | 79 |
| 142+50.00 | 143+00.00 | 146 | 61 |
| 143+00.00 | 143+50.00 | 171 | 43 |
| 143+50.00 | 144+00.00 | 198 | 37 |
| 144+00.00 | 144+50.00 | 228 | 39 |
| 144+50.00 | 145+00.00 | 255 | 50 |
| 145+00.00 | 145+50.00 | 332 | 39 |
| 145+50.00 | 146+00.00 | 351 | 29 |
| 146+00.00 | 146+50.00 | 291 | 45 |
| 146+50.00 | 147+00.00 | 270 | 55 |
| 147+00.00 | 147+50.00 | 251 | 65 |
| 147+50.00 | 148+00.00 | 235 | 77 |
| 148+00.00 | 148+50.00 | 223 | 88 |
| 148+50.00 | 149+00.00 | 211 | 101 |
| 149+00.00 | 149+50.00 | 198 | 109 |
| 149+50.00 | 150+00.00 | 184 | 116 |
| 150+00.00 | 150+50.00 | 213 | 72 |
| 150+50.00 | 151+00.00 | 210 | 70 |
| 151+00.00 | 151+50.00 | 211 | 73 |
| 151+50.00 | 152+00.00 | 215 | 70 |
| 152+00.00 | 152+50.00 | 175 | 118 |
| 152+50.00 | 153+00.00 | 213 | 74 |
| 153+00.00 | 153+50.00 | 215 | 50 |
| 153+50.00 | 154+00.00 | 181 | 81 |
| 154+00.00 | 154+50.00 | 228 | 54 |
| 154+50.00 | 155+00.00 | 247 | 27 |
| 155+00.00 | 155+50.00 | 220 | 33 |
| 155+50.00 | 156+00.00 | 118 | 31 |
| 156+00.00 | 156+50.00 | 26 | 25 |
| 156+50.00 | 157+00.00 | 35 | 21 |
| 157+00.00 | 157+50.00 | 41 | 18 |
| 157+50.00 | 158+00.00 | 50 | 15 |
| 158+00.00 | 158+50.00 | 48 | 16 |
| 158+50.00 | 159+00.00 | 49 | 16 |
| 159+00.00 | 159+50.00 | 46 | 18 |
| 159+50.00 | 160+00.00 | 35 | 23 |
| 160+00.00 | 160+50.00 | 28 | 27 |
| 160+50.00 | 161+00.00 | 26 | 27 |
| 161+00.00 | 161+50.00 | 30 | 24 |
| 161+50.00 | 162+00.00 | 25 | 29 |
| 162+00.00 | 162+50.00 | 20 | 31 |
| 162+50.00 | 163+00.00 | 83 | 29 |
| 163+00.00 | 163+50.00 | 131 | 31 |
| 163+50.00 | 164+00.00 | 113 | 37 |
| 164+00.00 | 164+50.00 | 97 | 41 |
| 164+50.00 | 165+00.00 | 83 | 52 |
| 165+00.00 | 165+50.00 | 66 | 65 |
| 165+50.00 | 166+00.00 | 55 | 68 |
| 166+00.00 | 166+50.00 | 53 | 62 |
| 166+50.00 | 167+00.00 | 58 | 63 |
| 167+00.00 | 167+50.00 | 59 | 78 |
| 167+50.00 | 168+00.00 | 52 | 110 |
| 168+00.00 | 168+50.00 | 50 | 153 |
| 168+50.00 | 169+00.00 | 51 | 199 |
| 169+00.00 | 169+50.00 | 50 | 244 |
| COLUMN TOTAL | | 8,572 | 4,528 |

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 169+50.00 | 170+00.00 | 52 | 284 |
| 170+00.00 | 170+50.00 | 59 | 310 |
| 170+50.00 | 171+00.00 | 67 | 336 |
| 171+00.00 | 171+50.00 | 36 | 362 |
| 171+50.00 | 172+00.00 | 18 | 506 |
| 172+00.00 | 172+50.00 | 0 | 649 |
| 172+50.00 | 173+00.00 | 0 | 271 |
| 173+00.00 | 173+50.00 | 3 | 223 |
| 173+50.00 | 174+00.00 | 10 | 149 |
| 174+00.00 | 174+50.00 | 110 | 95 |
| 174+50.00 | 175+00.00 | 227 | 62 |
| 175+00.00 | 175+50.00 | 269 | 41 |
| 175+50.00 | 176+00.00 | 307 | 29 |
| 176+00.00 | 176+50.00 | 335 | 28 |
| 176+50.00 | 177+00.00 | 490 | 64 |
| 177+00.00 | 177+50.00 | 645 | 100 |
| 177+50.00 | 178+00.00 | 301 | 89 |
| 178+00.00 | 178+50.00 | 309 | 125 |
| 178+50.00 | 179+00.00 | 320 | 161 |
| 179+00.00 | 179+50.00 | 335 | 188 |
| 179+50.00 | 180+00.00 | 358 | 203 |
| 180+00.00 | 180+50.00 | 381 | 221 |
| 180+50.00 | 181+00.00 | 404 | 244 |
| 181+00.00 | 181+50.00 | 424 | 269 |
| 181+50.00 | 182+00.00 | 443 | 281 |
| 182+00.00 | 182+50.00 | 461 | 265 |
| 182+50.00 | 183+00.00 | 478 | 225 |
| 183+00.00 | 183+50.00 | 488 | 177 |
| 183+50.00 | 184+00.00 | 481 | 115 |
| 184+00.00 | 184+50.00 | 452 | 62 |
| 184+50.00 | 185+00.00 | 390 | 42 |
| 185+00.00 | 185+50.00 | 327 | 30 |
| 185+50.00 | 186+00.00 | 299 | 17 |
| 186+00.00 | 186+50.00 | 309 | 8 |
| 186+50.00 | 187+00.00 | 243 | 19 |
| 187+00.00 | 187+50.00 | 130 | 33 |
| 187+50.00 | 188+00.00 | 93 | 39 |
| 188+00.00 | 188+50.00 | 73 | 47 |
| 188+50.00 | 189+00.00 | 51 | 61 |
| 189+00.00 | 189+50.00 | 44 | 82 |
| 189+50.00 | 190+00.00 | 43 | 112 |
| 190+00.00 | 190+50.00 | 37 | 130 |
| 190+50.00 | 191+00.00 | 32 | 129 |
| 191+00.00 | 191+50.00 | 40 | 115 |
| 191+50.00 | 192+00.00 | 49 | 85 |
| 192+00.00 | 192+50.00 | 45 | 97 |
| 192+50.00 | 193+00.00 | 60 | 97 |
| 193+00.00 | 193+50.00 | 79 | 66 |
| 193+50.00 | 194+00.00 | 91 | 55 |
| 194+00.00 | 194+50.00 | 117 | 41 |
| 194+50.00 | 195+00.00 | 122 | 46 |
| 195+00.00 | 195+50.00 | 131 | 42 |
| 195+50.00 | 196+00.00 | 138 | 33 |
| 196+00.00 | 196+50.00 | 151 | 29 |
| 196+50.00 | 197+00.00 | 220 | 9 |
| 197+00.00 | 197+50.00 | 199 | 20 |
| 197+50.00 | 198+00.00 | 138 | 43 |
| 198+00.00 | 198+50.00 | 147 | 39 |
| 198+50.00 | 199+00.00 | 152 | 35 |
| 199+00.00 | 199+50.00 | 172 | 28 |
| 199+50.00 | 200+00.00 | 290 | 33 |
| COLUMN TOTAL | | 12,675 | 7,796 |

## SUMMARY OF EARTHWORK QUANTITIES

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 200+00.00 | 200+50.00 | 408 | 38 |
| 200+50.00 | 201+00.00 | 208 | 24 |
| 201+00.00 | 201+50.00 | 185 | 37 |
| 201+50.00 | 202+00.00 | 172 | 97 |
| 202+00.00 | 202+50.00 | 181 | 188 |
| 202+50.00 | 203+00.00 | 93 | 260 |
| 203+00.00 | 203+50.00 | 50 | 278 |
| 203+50.00 | 204+00.00 | 77 | 288 |
| 204+00.00 | 204+50.00 | 48 | 328 |
| 204+50.00 | 205+00.00 | 50 | 283 |
| 205+00.00 | 205+50.00 | 45 | 202 |
| 205+50.00 | 206+00.00 | 31 | 154 |
| 206+00.00 | 206+50.00 | 38 | 82 |
| 206+50.00 | 207+00.00 | 66 | 147 |
| 207+00.00 | 207+50.00 | 47 | 212 |
| 207+50.00 | 208+00.00 | 0 | 252 |
| 208+00.00 | 208+50.00 | 0 | 415 |
| 208+50.00 | 209+00.00 | 8 | 468 |
| 209+00.00 | 209+50.00 | 20 | 301 |
| 209+50.00 | 210+00.00 | 26 | 136 |
| 210+00.00 | 210+50.00 | 49 | 97 |
| 210+50.00 | 211+00.00 | 66 | 90 |
| 211+00.00 | 211+50.00 | 62 | 80 |
| 211+50.00 | 212+00.00 | 71 | 56 |
| 212+00.00 | 212+50.00 | 80 | 44 |
| 212+50.00 | 213+00.00 | 118 | 45 |
| 213+00.00 | 213+50.00 | 182 | 51 |
| 213+50.00 | 214+00.00 | 273 | 57 |
| 214+00.00 | 214+50.00 | 407 | 53 |
| 214+50.00 | 215+00.00 | 332 | 231 |
| 215+00.00 | 215+50.00 | 98 | 973 |
| 215+50.00 | 216+00.00 | 6 | 1472 |
| 216+00.00 | 216+50.00 | 0 | 1083 |
| 216+50.00 | 217+00.00 | 1167 | 433 |
| 217+00.00 | 217+50.00 | 2277 | 56 |
| 217+50.00 | 218+00.00 | 2015 | 0 |
| 218+00.00 | 218+50.00 | 1701 | 0 |
| 218+50.00 | 219+00.00 | 1268 | 0 |
| 219+00.00 | 219+50.00 | 560 | 130 |
| 219+50.00 | 220+00.00 | 87 | 664 |
| 220+00.00 | 220+50.00 | 308 | 631 |
| 220+50.00 | 221+00.00 | 600 | 116 |
| 221+00.00 | 221+50.00 | 529 | 27 |
| 221+50.00 | 222+00.00 | 501 | 8 |
| 222+00.00 | 222+50.00 | 509 | 1 |
| 222+50.00 | 223+00.00 | 371 | 20 |
| 223+00.00 | 223+50.00 | 218 | 38 |
| 223+50.00 | 224+00.00 | 169 | 54 |
| 224+00.00 | 224+50.00 | 119 | 121 |
| 224+50.00 | 225+00.00 | 66 | 129 |
| 225+00.00 | 225+50.00 | 28 | 97 |
| 225+50.00 | 226+00.00 | 8 | 117 |
| 226+00.00 | 226+50.00 | 9 | 131 |
| 226+50.00 | 227+00.00 | 9 | 148 |
| 227+00.00 | 227+50.00 | 14 | 130 |
| 227+50.00 | 228+00.00 | 34 | 75 |
| 228+00.00 | 228+50.00 | 68 | 34 |
| 228+50.00 | 229+00.00 | 104 | 15 |
| 229+00.00 | 229+50.00 | 132 | 9 |
| 229+50.00 | 230+00.00 | 152 | 7 |
| 230+00.00 | 230+50.00 | 150 | 7 |
| COLUMN TOTAL | | 16,670 | 11,720 |

| CCOL STATION FROM | CCOL STATION TO | 110 2001 EXCAVATION (ROADWAY) CY | 132 2006 EMBANKMENT (FINAL)(DENS CONT)(TY C) CY |
|---|---|---|---|
| 230+50.00 | 231+00.00 | 122 | 12 |
| 231+00.00 | 231+50.00 | 110 | 21 |
| 231+50.00 | 232+00.00 | 117 | 32 |
| 232+00.00 | 232+50.00 | 110 | 42 |
| 232+50.00 | 233+00.00 | 86 | 42 |
| 233+00.00 | 233+50.00 | 54 | 40 |
| 233+50.00 | 234+00.00 | 56 | 34 |
| 234+00.00 | 234+50.00 | 140 | 15 |
| 234+50.00 | 235+00.00 | 192 | 4 |
| 235+00.00 | 235+50.00 | 288 | 6 |
| 235+50.00 | 236+00.00 | 193 | 43 |
| 236+00.00 | 236+50.00 | 56 | 462 |
| 236+50.00 | 237+00.00 | 13 | 958 |
| 237+00.00 | 237+50.00 | 13 | 931 |
| 237+50.00 | 238+00.00 | 447 | 608 |
| 238+00.00 | 238+50.00 | 1225 | 212 |
| 238+50.00 | 239+00.00 | 1396 1 | 0 |
| 239+00.00 | 239+50.00 | 1288 | 0 |
| 239+50.00 | 240+00.00 | 1316 | 0 |
| 240+00.00 | 240+50.00 | 1229 | 0 |
| 240+50.00 | 241+00.00 | 1003 | 0 |
| 241+00.00 | 241+50.00 | 742 | 0 |
| 241+50.00 | 242+00.00 | 548 | 0 |
| 242+00.00 | 242+50.00 | 433 | 0 |
| 242+50.00 | 243+00.00 | 400 | 0 |
| 243+00.00 | 243+50.00 | 311 | 11 |
| 243+50.00 | 244+00.00 | 230 | 19 |
| 244+00.00 | 244+50.00 | 215 | 23 |
| 244+50.00 | 245+00.00 | 277 | 34 |
| 245+00.00 | 245+50.00 | 265 | 128 |
| 245+50.00 | 246+00.00 | 191 | 246 |
| 246+00.00 | 246+50.00 | 99 | 340 |
| 246+50.00 | 247+00.00 | 75 | 260 |
| 247+00.00 | 247+50.00 | 218 | 67 |
| 247+50.00 | 248+00.00 | 340 | 10 |
| 248+00.00 | 248+50.00 | 513 | 0 |
| 248+50.00 | 249+00.00 | 695 | 0 |
| 249+00.00 | 249+50.00 | 661 | 0 |
| 249+50.00 | 250+00.00 | 389 | 21 |
| 250+00.00 | 250+50.00 | 137 | 65 |
| 250+50.00 | 251+00.00 | 88 | 177 |
| 251+00.00 | 251+50.00 | 58 | 386 |
| 251+50.00 | 252+00.00 | 0 | 606 |
| 252+00.00 | 252+50.00 | 23 | 641 |
| 252+50.00 | 253+00.00 | 37 | 649 |
| 253+00.00 | 253+50.00 | 14 | 711 |
| 253+50.00 | 254+00.00 | 5 | 672 |
| 254+00.00 | 254+50.00 | 21 | 658 |
| 254+50.00 | 255+00.00 | 31 | 570 |
| 255+00.00 | 255+50.00 | 41 | 458 |
| 255+50.00 | 256+00.00 | 45 | 460 |
| 256+00.00 | 256+50.00 | 43 | 515 |
| COLUMN TOTAL | | 16,599 | 11,189 |
| SHEET TOTAL | | 54,516 | 35,233 |

1

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 2/27/12 | DITCH GRADING REVISIONS | JWK |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

EARTHWORK SUMMARY

SHEET 2 OF 3

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 16

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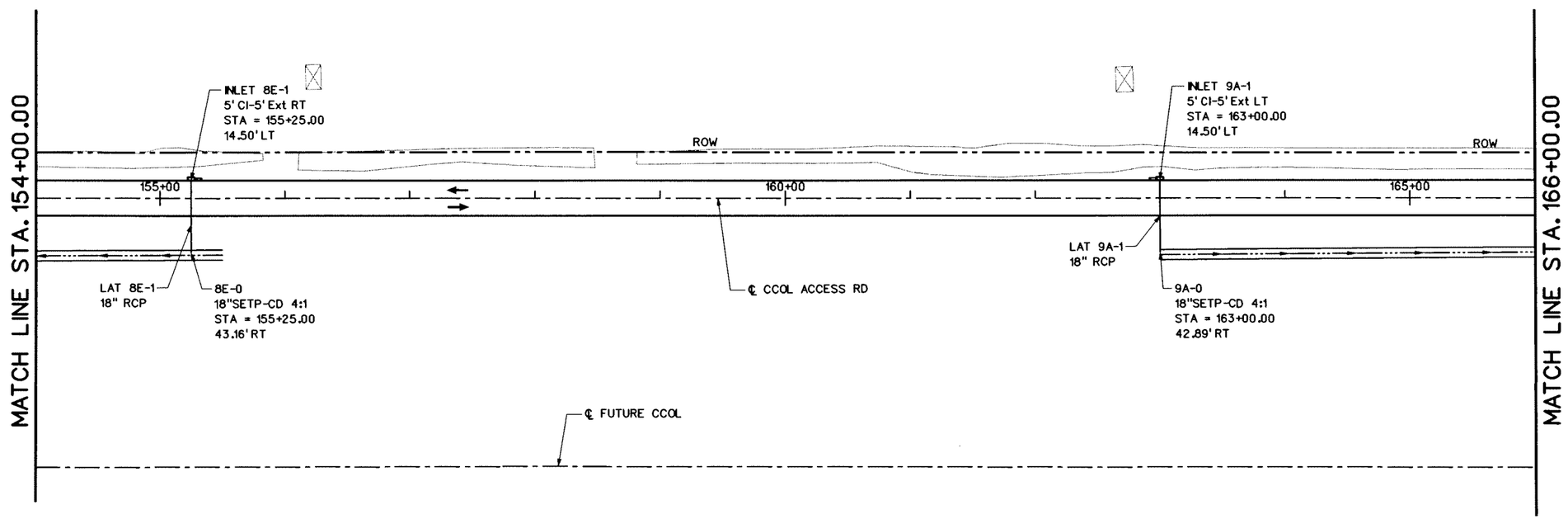
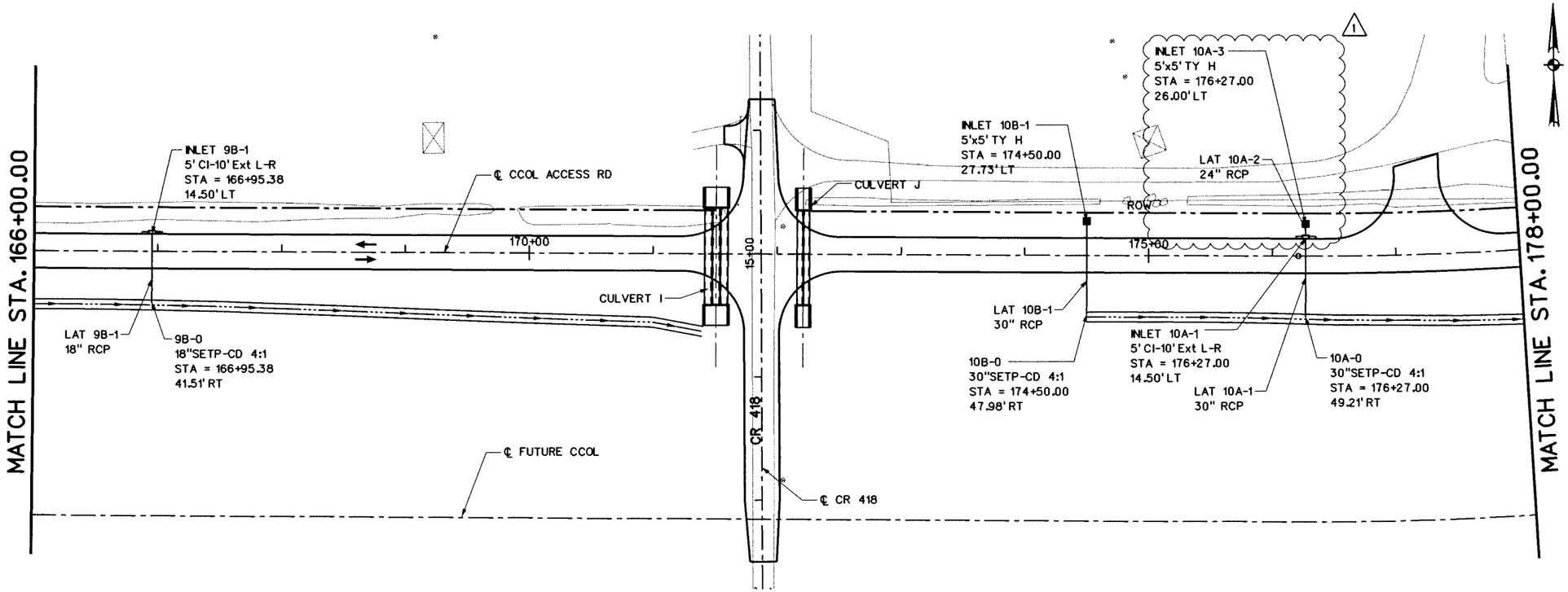
HORIZ. SCALE IN FEET

N

## LEGEND

- FLAT BOTTOM DITCH
- V DITCH
- CURB INLET
- GRATE INLET

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NOTES:

1. ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III, UNLESS OTHERWISE NOTED.
2. SEE CROSS SECTION PLOTS FOR LOCATION AND ELEVATION OF DITCHES.
3. ALL DITCHES SHOWN ARE GRASSED LINED UNLESS OTHERWISE NOTED.
4. REFER TO HYDRAULIC CALCULATION TABLES FOR MORE INFORMATION.

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
3/17/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/17/11 | REVISED INLET 10A-3 | |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

# CCOL ACCESS RD DRAINAGE PLAN

STA 154+00 TO STA 178+00

SHEET 7 OF 11

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 182

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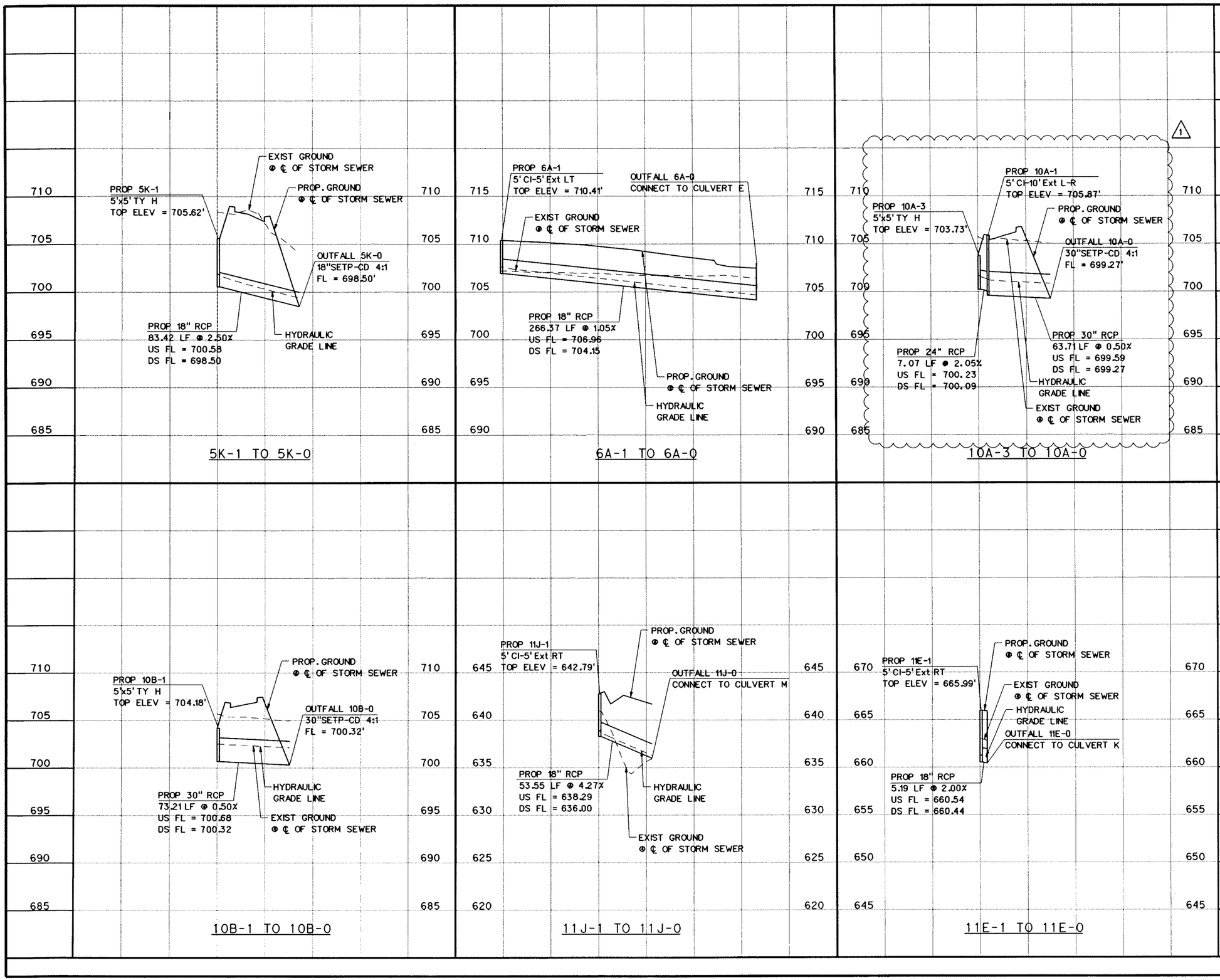


0 50 100 150 200
HORIZ. SCALE IN FEET

0 5 10 15 20
VERT. SCALE IN FEET

NOTES:

1. ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III, UNLESS OTHERWISE NOTED.
2. SEE CROSS SECTION PLOTS FOR LOCATION AND ELEVATION OF DITCHES.
3. REFER TO HYDRAULIC CALCULATION TABLES FOR MORE INFORMATION.
4. SEE DRAINAGE PLAN SHEETS FOR ADDITIONAL SEWER INFORMATION.
5. SEE STORM SEWER LATERAL TABLES FOR ALL OTHER LATERAL PROFILE DATA.

STATE OF TEXAS
JEREMY W. KRAFT
99518
LICENSED
PROFESSIONAL ENGINEER
3/17/11

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/17/11 | REVISED INLET 10A-3 | |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

CCOL ACCESS ROAD
STORM SEWER PROFILES

SHEET 2 OF 3

HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET 19

# STORM SEWER SUMMARY

| PIPE ID | UP STREAM NODE ID | DOWN STREAM NODE ID | *400 STRUCT EXCAV | 400 2005 CEM STABIL BKFL | 402 2001 TRENCH EXCAVATION PROTECTION | 432 2036 RIPRAP (STONE TY R) (DRY)(12 IN) | 464 2003 RC PIPE (CL III) (18 IN) | 464 2005 RC PIPE (CL III) (24 IN) | 464 2007 RC PIPE (CL III) (30 IN) | 467 2222 SET (TY II) (18 IN) (RCP) (4:1) (C) | 467 2224 SET (TY II) (24 IN) (RCP) (4:1) (C) | 467 2225 SET (TY II) (30 IN) (RCP) (4:1) (C) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | LF | CY | LF | LF | LF | EA | EA | EA | |
| 1A-1 | 1A-1 | 1A-0 | 13 | - | 48 | 10 | 71.33 | - | - | 1 | - | - | |
| 1B-1 | 1B-1 | 1B-0 | 22 | - | - | 12 | - | 66.41 | - | - | 1 | - | |
| 1B-2 | 1B-2 | 1B-1 | 13 | 5 | - | - | 30.00 | - | - | - | - | - | |
| 1B-3 | 1B-3 | 1B-1 | 7 | - | - | - | - | 16.35 | - | - | - | - | |
| 1C-1 | 1C-1 | 1C-0 | 15 | - | - | 10 | 71.75 | - | - | 1 | - | - | |
| 1D-1 | 1D-1 | 1D-0 | 11 | - | 5 | 10 | 79.58 | - | - | 1 | - | - | |
| 2A-1 | 2A-1 | 2A-0 | 14 | - | 10 | 10 | 78.87 | - | - | 1 | - | - | |
| 3A-1 | 3A-1 | 3A-0 | 13 | - | - | 10 | 65.24 | - | - | 1 | - | - | |
| 3B-1 | 3B-1 | 3B-0 | 10 | - | - | 10 | 56.45 | - | - | 1 | - | - | |
| 3C-1 | 3C-1 | 3C-0 | 9 | - | - | 10 | 58.90 | - | - | 1 | - | - | |
| 3D-1 | 3D-1 | 3D-0 | 26 | - | - | 10 | 57.80 | - | - | 1 | - | - | |
| 3E-1 | 3E-1 | 3E-0 | 13 | - | - | 10 | 71.83 | - | - | 1 | - | - | |
| 5A-1 | 5A-1 | 5A-0 | 15 | - | - | 10 | 79.37 | - | - | 1 | - | - | |
| 5B-1 | 5B-1 | 5B-0 | 14 | - | - | 10 | 75.42 | - | - | 1 | - | - | |
| 5C-1 | 5C-1 | 5C-0 | 19 | - | - | 10 | 70.46 | - | - | 1 | - | - | |
| 5D-1 | 5D-1 | 5D-0 | 14 | - | - | 10 | 77.97 | - | - | 1 | - | - | |
| 5E-1 | 5E-1 | 5E-0 | 10 | - | - | 10 | 43.67 | - | - | 1 | - | - | |
| 5F-1 | 5F-1 | 5F-0 | 7 | - | - | 10 | 39.89 | - | - | 1 | - | - | |
| 5G-1 | 5G-1 | 5G-0 | 12 | - | 33 | 10 | 63.38 | - | - | 1 | - | - | |
| 5H-1 | 5H-1 | 5H-0 | 18 | - | - | 10 | 83.20 | - | - | 1 | - | - | |
| 5I-1 | 5I-1 | 5I-0 | 42 | - | - | 16 | - | - | 94.79 | | - | 1 | |
| 5J-1 | 5J-1 | 5J-0 | 19 | - | - | 10 | 72.48 | - | - | 1 | - | - | 1 |
| 5K-1 | 5K-1 | 5K-0 | 52 | | 67 | 10 | 83.42 | - | - | 1 | - | - | |
| 6A-1 | 6A-1 | 6A-0 | 68 | - | - | - | 266.37 | - | - | - | - | - | |
| 7A-1 | 7A-1 | 7A-0 | 8 | - | - | 10 | 57.87 | - | - | 1 | - | - | |
| 7B-1 | 7B-1 | 7B-0 | 8 | - | - | 10 | 58.27 | - | - | 1 | - | - | |
| 7C-1 | 7C-1 | 7C-0 | 9 | - | - | 10 | 57.36 | - | - | 1 | - | - | |
| 7D-1 | 7D-1 | 7D-0 | 7 | - | - | 10 | 56.06 | - | - | 1 | - | - | |
| 7E-1 | 7E-1 | 7E-0 | 12 | - | - | 10 | 68.31 | - | - | 1 | - | - | |
| 8A-1 | 8A-1 | 8A-0 | 14 | - | - | 10 | 75.20 | - | - | 1 | - | - | |
| 8B-1 | 8B-1 | 8B-0 | 12 | - | 21 | 10 | 61.20 | - | - | 1 | - | - | |
| 8C-1 | 8C-1 | 8C-0 | 14 | - | - | 10 | 65.30 | - | - | 1 | - | - | |
| 8D-1 | 8D-1 | 8D-0 | 13 | - | - | 10 | 62.98 | - | - | 1 | - | - | |
| 8E-1 | 8E-1 | 8E-0 | 13 | - | - | 10 | 60.66 | - | - | 1 | - | - | |
| 9A-1 | 9A-1 | 9A-0 | 13 | - | - | 10 | 60.39 | - | - | 1 | - | - | |
| 9B-1 | 9B-1 | 9B-0 | 10 | - | - | 10 | 59.01 | - | - | 1 | - | - | 1 |
| 10A-1 | 10A-1 | 10A-0 | 30 | - | - | 16 | - | - | 63.71 | - | - | 1 | |
| 10A-2 | 10A-3 | 10A-1 | 5 | - | - | - | - | 7.07 | - | - | - | - | |
| 10B-1 | 10B-1 | 10B-0 | 40 | - | - | 16 | - | - | 77.71 | - | - | 1 | |
| 11A-1 | 11A-1 | 11A-0 | 16 | - | - | 10 | 61.08 | - | - | 1 | - | - | |
| 11B-1 | 11B-1 | 11B-0 | 9 | - | - | 10 | 54.64 | - | - | 1 | - | - | |
| 11C-1 | 11C-1 | 11C-0 | 12 | - | - | 10 | 56.49 | - | - | 1 | - | - | |
| 11D-1 | 11D-1 | 11D-0 | 6 | - | - | 10 | 22.56 | - | - | 1 | - | - | |
| 11E-1 | 11E-1 | 11E-0 | 3 | - | 53 | 10 | 7.69 | - | - | 1 | - | - | |
| 11F-1 | 11F-1 | 11F-0 | 3 | - | - | 10 | 19.89 | - | - | 1 | - | - | |
| 11G-1 | 11G-1 | 11G-0 | 6 | - | 8 | 10 | 66.37 | - | - | 1 | - | - | |
| 11H-1 | 11H-1 | 11H-0 | 17 | - | - | 10 | 86.64 | - | - | 1 | - | - | |
| 11I-1 | 11I-1 | 11I-0 | 32 | - | - | 10 | 70.33 | - | - | 1 | - | - | |
| 11J-1 | 11J-1 | 11J-0 | 37 | 16 | 41 | 10 | 56.05 | - | - | 1 | - | - | |
| 11K-1 | 11K-1 | 11K-0 | 10 | - | - | 10 | 57.88 | - | - | 1 | - | - | |
| 11N-1 | 11N-1 | 11N-0 | 28 | - | - | 16 | - | - | 56.00 | - | - | 1 | |
| 12A-1 | 12A-1 | 12A-0 | 7 | - | 8 | 10 | 22.51 | - | - | 1 | - | - | |
| 12B-1 | 12B-1 | 12B-0 | 8 | - | - | 10 | 42.50 | - | - | 1 | - | - | 1 |
| 12C-1 | 12C-1 | 12C-0 | 15 | | - | 10 | 58.01 | - | - | 1 | - | - | |
| 13A-1 | 13A-1 | 13A-0 | 5 | - | - | 10 | 28.50 | - | - | 1 | - | - | |
| 13B-1 | 13B-1 | 13B-0 | 12 | - | - | 10 | 65.01 | - | - | 1 | - | - | |
| 14A-1 | 14A-1 | 14A-0 | 12 | - | - | 10 | 65.20 | - | - | 1 | - | - | |
| 14B-1 | 14B-1 | 14B-0 | 13 | - | - | 10 | 72.00 | - | - | 1 | - | - | |
| | | SHEET TOTAL | 915 | 21 | 294 | 566 | 3,253 | 90 | 292 | 49 | 1 | 4 | |

* FOR CONTRACTOR'S INFORMATION ONLY, STRUCTURAL EXCAVATION IS SUBSIDIARY TO THE PIPE OR CULVERT BID ITEM

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/17/11 | REVISED INLET INFORMATION | |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

SUMMARY OF STORM SEWER QUANTITIES

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET

# INLET SUMMARY

| INLET ID | LOCATION | | 465 2001 | 465 2003 | 465 2007 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | CHAIN/STA | OFFSET | INLET (COMPL) (TY C) | INLET (COMPL) (TY H) | INLET EXT (TY C) | GRATE* | INLET DEPTH | INLET WIDTH | COMMENTS |
| | | | EA | EA | EA | | FT | FT | |
| CI-1A-1 | CCOL 21+00.00 | 14.5' LT | 1 | - | 2 | - | 4.50 | 3.00 | |
| CI-1B-2 | CCOL 28+20.00 | 14.5' LT | 1 | | 2 | - | 4.50 | 3.00 | |
| GI-1B-3 | CCOL 28+50.00 | 31.85' LT | - | 1 | - | 1 | 3.00 | 5.00 | 5' x 5' |
| CI-1C-1 | CCOL 32+19.00 | 14.5' LT | 1 | | 2 | - | 5.00 | 3.00 | |
| GI-1D-1 | CCOL 16+50.00 | 35.84' LT | - | 1 | - | 1 | 3.00 | 3.00 | 3' x 3' |
| CI-2A-1 | CCOL 40+57.00 | 14.5' LT | 1 | - | 2 | - | 4.50 | 3.00 | |
| CI-3A-1 | CCOL 48+00.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-3B-1 | CCOL 50+70.00 | 14.5' LT | 1 | - | 2 | - | 4.00 | 3.00 | |
| CI-3C-1 | CCOL 54+00.00 | 14.5' LT | 1 | - | 1 | - | 4.60 | 3.00 | |
| CI-3D-1 | CCOL 58+75.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| GI-3E-1 | CCOL 58+00.00 | 26.07' LT | - | 1 | - | 1 | 3.00 | 3.00 | 3' x 3' |
| CI-5A-1 | CCOL 69+00.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-5B-1 | CCOL 72+84.00 | 14.5' LT | 1 | - | 2 | - | 4.50 | 3.00 | |
| CI-5C-1 | CCOL 76+50.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-5D-1 | CCOL 81+50.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-5E-1 | CCOL 85+75.00 | 14.5' RT | 1 | - | 2 | - | 4.80 | 3.00 | |
| CI-5F-1 | CCOL 91+00.00 | 14.5' RT | 1 | - | 2 | - | 4.50 | 3.00 | |
| CI-5G-1 | CCOL 97+00.00 | 14.5' LT | 1 | - | - | - | 4.50 | 3.00 | |
| GI-5H-1 | CCOL 68+50.00 | 28.7' LT | - | 1 | - | 1 | 4.50 | 3.00 | 3' x 3' |
| GI-5I-1 | CCOL 78+50.00 | 34.89' LT | - | 1 | - | 1 | 3.50 | 5.00 | 5' x 5' |
| ~~GI-5J-1~~ | ~~CCOL 93+00.00~~ | ~~27.30' LT~~ | ~~-~~ | ~~1~~ | ~~-~~ | ~~1~~ | ~~3.50~~ | ~~4.00~~ | ~~4' x 4'~~ |
| GI-5K-1 | CR365 13+68.00 | 32.5' RT | | 1 | | 1 | 5.00 | 5.00 | 5' x 5' |
| ~~CI-6A-1~~ | ~~CCOL 103+10.00~~ | ~~14.5' LT~~ | ~~1~~ | ~~-~~ | ~~1~~ | ~~-~~ | ~~3.50~~ | ~~3.00~~ | |
| CI-7A-1 | CCOL 114+00.00 | 14.5' LT | 1 | - | 1 | - | 4.00 | 3.00 | |
| CI-7B-1 | CCOL 119+00.00 | 14.5' LT | 1 | - | 1 | - | 4.00 | 3.00 | |
| CI-7C-1 | CCOL 124+00.00 | 14.5' LT | 1 | - | 1 | - | 4.00 | 3.00 | |
| CI-7D-1 | CCOL 127+70.00 | 14.5' LT | 1 | - | 2 | - | 3.50 | 3.00 | |
| CI-7E-1 | CCOL 131+50.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-8A-1 | CCOL 139+50.00 | 14.5' LT | 1 | - | - | - | 4.50 | 3.00 | |
| CI-8B-1 | CCOL 142+52.00 | 14.5' LT | 1 | - | 2 | - | 4.50 | 3.00 | |
| CI-8C-1 | CCOL 146+25.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-8D-1 | CCOL 150+75.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-8E-1 | CCOL 155+25.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-9A-1 | CCOL 163+00.00 | 14.5' LT | 1 | - | 1 | - | 4.00 | 3.00 | |
| CI-9B-1 | CCOL 166+95.38 | 14.5' LT | 1 | - | 2 | - | 3.50 | 3.00 | |
| ~~CI-10A-1~~ | ~~CCOL 176+27.00~~ | ~~14.5' LT~~ | ~~1~~ | ~~-~~ | ~~2~~ | ~~-~~ | ~~6.30~~ | ~~3.00~~ | |
| GI-10A-3 | CCOL 176+27.00 | 26.00' LT | - | 1 | - | 1 | 3.50 | 5.00 | 5' x 5' |
| ~~GI-10B-1~~ | ~~CCOL 174+50.00~~ | ~~27.73' LT~~ | ~~-~~ | ~~1~~ | ~~-~~ | ~~1~~ | ~~3.50~~ | ~~5.00~~ | ~~5' x 5'~~ |
| CI-11A-1 | CCOL 186+00.00 | 26.5' LT | 1 | - | 1 | - | 4.60 | 3.00 | |
| CI-11B-1 | CCOL 190+00.00 | 14.5' LT | 1 | - | 1 | - | 3.80 | 3.00 | |
| CI-11C-1 | CCOL 194+00.00 | 14.5' LT | 1 | - | 1 | - | 4.00 | 3.00 | |
| CI-11D-1 | CCOL 199+00.00 | 14.5' RT | 1 | - | 1 | - | 4.00 | 3.00 | |
| CI-11E-1 | CCOL 202+95.00 | 14.5' RT | 1 | - | 1 | - | 5.50 | 3.00 | |
| CI-11F-1 | CCOL 206+48.00 | 14.5' RT | 1 | - | 1 | - | 3.80 | 3.00 | |
| CI-11G-1 | CCOL 210+50.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-11H-1 | CCOL 214+50.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.50 | |
| CI-11I-1 | CCOL 217+35.00 | 14.5' LT | 1 | - | 2 | - | 5.00 | 3.00 | |
| CI-11J-1 | CCOL 219+50.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| ~~CI-11K-1~~ | ~~CCOL 223+00.00~~ | ~~14.5' LT~~ | ~~1~~ | | | | ~~4.40~~ | ~~3.00~~ | |
| CI-11N-1 | MILL 10+90.00 | 28.5' LT | | 1 | | 1 | 3.50 | 5.00 | 5' x 5' |
| ~~CI-12A-1~~ | ~~CCOL 232+00.00~~ | ~~14.5' RT~~ | ~~1~~ | ~~-~~ | ~~2~~ | ~~-~~ | ~~4.00~~ | ~~3.00~~ | |
| ~~CI-12B-1~~ | ~~CCOL 238+30.00~~ | ~~14.5' RT~~ | ~~1~~ | ~~-~~ | ~~2~~ | ~~-~~ | ~~5.50~~ | ~~3.00~~ | |
| GI-12C-1 | CCOL 234+30.00 | 25.3' LT | | 1 | | 1 | 2.50 | 3.00 | 3' x 3' |
| ~~CI-13A-1~~ | ~~CCOL 245+41.00~~ | ~~14.5' RT~~ | ~~1~~ | ~~-~~ | ~~2~~ | ~~-~~ | ~~4.50~~ | ~~3.00~~ | |
| CI-13B-1 | CCOL 247+60.00 | 14.5' LT | 1 | - | 1 | - | 4.50 | 3.00 | |
| CI-14A-1 | CCOL 252+55.00 | 14.5' LT | 1 | - | 2 | - | 4.50 | 3.00 | |
| CI-14B-1 | CCOL 255+15.00 | 14.5' LT | 1 | - | 2 | - | 4.60 | 3.00 | |
| SHEET TOTAL | | | 46 | 11 | 61 | 11 | | | |

* FOR CONTRACTOR'S INFORMATION ONLY

| NO. | DATE | REVISION | APPROV. |
|---|---|---|---|
| 1 | 3/17/11 | REVISED INLET INFORMATION | |

COLLIN COUNTY OUTER LOOP

COLLIN COUNTY

SUMMARY OF INLET QUANTITIES

SHEET 1 OF 1

HNTB

HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Firm Registration Number 420

BOND PROJECT NO. 07-094 SHEET