

DESIGN DESIGNATION  
A.D.T. 5,400 (2012)  
A.D.T. 11,322 (2030)  
V- DESIGN SPEED  
35 mph  
POSTED SPEED  
30 mph (WITH EXCEPTIONS)  
DESIGNATION: COLLECTOR

## LEGEND

| DESCRIPTION                                   | EXISTING   | NEW      |
|-----------------------------------------------|------------|----------|
| RIGHT-OF-WAY                                  | EXIST. R/W | NEW R/W  |
| PROPERTY LINE                                 | P          | P.D.E.   |
| PERMANENT DRAINAGE EASEMENT                   |            | P.T.S.E. |
| PERMANENT TRAFFIC SIGNAL EASEMENT             |            | T.C.E.   |
| TEMPORARY CONSTRUCTION EASEMENT               |            | P.S.E.   |
| PERMANENT SLOPE EASEMENT                      |            | P.U.E.   |
| PERMANENT UTILITY EASEMENT                    |            |          |
| UTILITY POLE (TYPE SPECIFIED)                 |            |          |
| UNDERGROUND CONDUIT OR CABLE (TYPE SPECIFIED) |            |          |
| WATER                                         | W          |          |
| GAS                                           | G          |          |
| TELEPHONE                                     | T          |          |
| FORCE MAIN                                    | FM         |          |
| POWER                                         |            |          |
| TELEPHONE RISER                               |            |          |
| GUY WIRE                                      |            |          |
| LIGHT STANDARD                                |            |          |
| TRAFFIC SIGNAL                                |            |          |
| TRAFFIC CONTROLLER                            |            |          |
| TRAFFIC PULL BOX                              |            |          |
| PIPE LINE (OWNER SPECIFIED)                   |            |          |
| Y-DITCH                                       |            |          |
| TRAPEZOIDAL CHANNEL                           |            |          |
| GAS VALVE                                     | GV         |          |
| WATER VALVE                                   | WV         |          |
| WATER METER                                   | WM         |          |
| SEWER YENT                                    | SY         |          |
| FIRE HYDRANT                                  | HYD        |          |
| SANITARY SEWER                                | S          |          |
| STORM SEWER                                   | SS         |          |
| SEWER MANHOLE                                 |            |          |
| GRADED INLET                                  |            |          |
| CURB INLET (SINGLE)                           |            |          |
| CURB INLET (MULTIPLE UNIT)                    |            |          |
| IDENT. OF NEW OR MOD. DRAINAGE STRUCTURE      |            |          |
| PIPE WITH FLARED END SECTION                  |            |          |
| CONSTRUCTION LIMITS                           |            |          |
| CONCRETE PAVEMENT                             |            |          |
| ASPHALTIC CONCRETE PAVEMENT                   |            |          |
| CONCRETE PAVEMENT REMOVAL                     |            |          |
| TREE OR SHRUB (DESIGNAGE DIA. AND TYPE)       |            |          |
| HEDGE                                         |            |          |
| TREELINE                                      |            |          |
| FENCE                                         |            |          |
| GUARDRAIL                                     |            |          |
| RAILROAD                                      |            |          |
| SIGN                                          |            |          |
| BUILDING                                      |            |          |
| BUILDING REMOVAL                              |            |          |
| MAILBOX                                       |            |          |
| FOUND PROPERTY PIN                            |            |          |

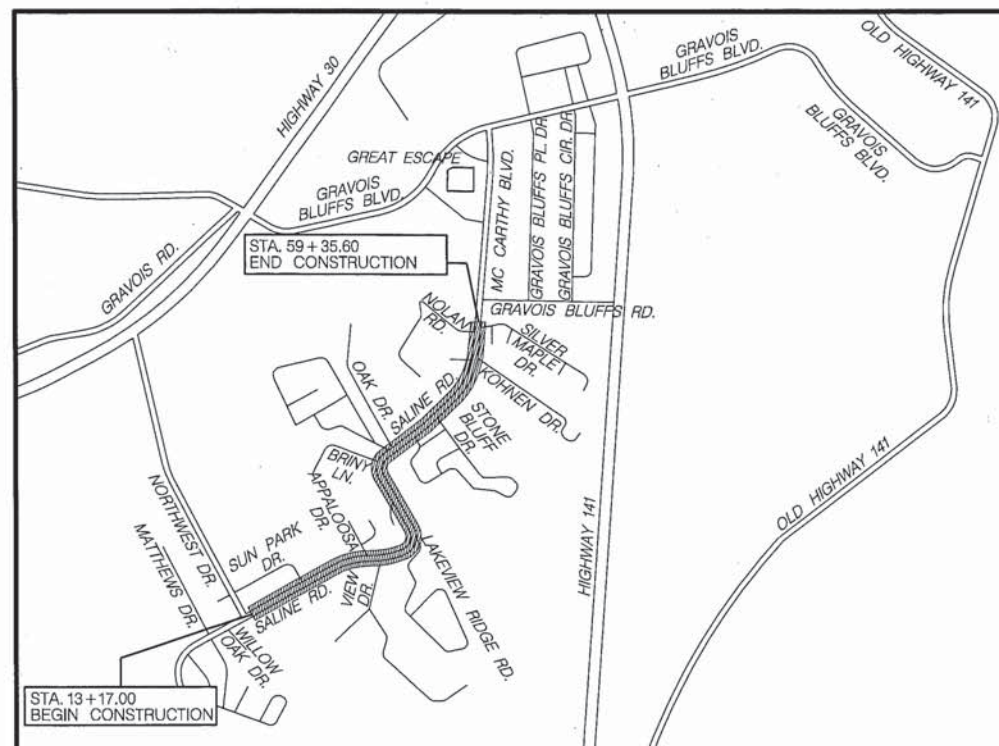
## ABBREVIATIONS

|                             |                 |                                            |                |
|-----------------------------|-----------------|--------------------------------------------|----------------|
| ADJUST TO GRADE             | (ATG)           | MODULAR BLOCK RETAINING WALL               | MBRW           |
| ADJUST TO GRADE BY OTHERS   | (ATGBO)         | NOT TO SCALE                               | NTS            |
| AHEAD                       | AHD.            | PAGE                                       | PG.            |
| ASPHALT                     | ASPH.           | PAVEMENT                                   | PVMT.          |
| BACK                        | BK.             | PERMANENT                                  | PERM.          |
| BACK OF CURB                | BOC             | POWER POLE WITH LIGHT                      | PP/LS          |
| BEGINNING OF PROJECT        | BOP             | PROFILE GRADE LINE                         | PGL            |
| BITUMINOUS                  | BIT.            | PROPOSED                                   | PPRS. OR PROP. |
| BUILDING                    | BLDG.           | RADIUS                                     | R. OR RAD.     |
| CENTER TO CENTER            | (C-C)           | RIGHT OF WAY                               | R/W OR ROW     |
| CONCRETE                    | CONC.           | ROAD                                       | RD.            |
| DO NOT DISTURB              | DND             | SIDEWALK                                   | SDWK.          |
| DRIVE                       | DR.             | SHOULDER                                   | SHLD.          |
| EACH                        | EA.             | STATION                                    | STA.           |
| EASEMENT                    | ESMT.           | SUPERELEVATION RATE                        | SE             |
| EDGE OF PAVEMENT            | EOP             | TEMPORARY                                  | TEMP.          |
| ELEVATION                   | ELEV. OR EL.    | TO BE ABANDONED                            | (TBA)          |
| END OF PROJECT              | EOP             | TO BE ABANDONED AND FILLED                 | (TBA&F)        |
| ENTRANCE                    | ENTR.           | TO BE REMOVED                              | (TBR)          |
| EXISTING                    | EXST. OR EXIST. | TO BE REMO'D AND RELOCATED (BY CONTRACTOR) | (TBR&REL)      |
| FACE TO BASELINE            | (F-B)           | TO BE REMO'D AND REPLACED                  | (TBR&R)        |
| FACE TO CENTERLINE          | (F-C)           | TO BE REMO'D AND REPLACED BY OTHERS        | (TBR&R)        |
| FACE OF CURB                | FOC             | TO BE REMO'D TO CONSTR. LIMITS             | (TBR TO CL)    |
| FACE TO FACE                | (F-F)           | TURF REINFORCEMENT MAT                     | TRM            |
| GATE POST                   | GP              | TYPICAL                                    | TYP.           |
| MANHOLE                     | MH              | USE IN PLACE                               | (UIP)          |
| MAXIMUM SUPERELEVATION RATE | MSE             | VERTICAL POINT OF CURVATURE                | VPC            |
| MINIMUM                     | MIN.            | VERTICAL POINT OF INTERSECTION             | VPI            |
|                             |                 | VERTICAL POINT OF TANGENCY                 | VPT            |

# SALINE ROAD IMPROVEMENTS PHASE I

COUNTY OF JEFFERSON, MISSOURI

## STP-5403(642) / TIP#5589-12 CONSTRUCTION PLANS



## LOCATION MAP



SCALES:  
1" = 20' HORIZONTAL - PLAN  
1" = 20' H & 1" = 5' V - PROFILE  
1" = 5' H & V - CROSS SECTIONS

### PROJECT NOTES:

- THE UTILITIES SHOWN ON THE DRAWINGS WERE LOCATED VISUALLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES BEFORE DIGGING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT BOTH MISSOURI ONE CALL (DIGRIT) AND EACH INDIVIDUAL UTILITY THAT MAY NOT BE A PART OF THE MISSOURI ONE-CALL PROGRAM, TO ARRANGE FOR INDIVIDUAL UTILITY LOCATES. UTILITY CONTACTS FOR THIS PROJECT INCLUDE:

|                                                                                                          |                                                                                               |                                                                                                    |                                                                                                    |                                                                                      |                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| AT&T<br>Barry Foster<br>122 N. Second Street<br>Festus, MO 63028<br>(314) 931-7506                       | Ameren U.E.<br>James C. Hovis<br>6450 Highway MM<br>House Springs, MO 63051<br>(636) 671-6155 | Laclede Gas<br>Brian Langebacher<br>3950 Forest Park Ave.<br>St. Louis, MO 63108<br>(314) 768-7767 | Northeast Public Sewer<br>Dennis Arnold<br>1041 Gravois Road<br>Fenton, MO 63026<br>(636) 343-5090 | AT&T<br>Joe Pippin<br>13075 Manchester Road<br>Des Peres, MO 63131<br>(314) 957-3740 | Old AT&T Longlines Intercity & AT&T Fiber<br>PJ McDermott<br>3rd Floor<br>1425 Oak Street<br>Kansas City, MO 64106<br>(816) 275-4014 |
| Charter Communications<br>Cory Birk<br>815 Charter Commons<br>Town & Country, MO 63017<br>(636) 387-6643 | PWSD No. 3<br>Cheryl Moellering<br>1469 Old Hwy 21<br>Arnold, MO 63010<br>(636) 296-7053      |                                                                                                    |                                                                                                    |                                                                                      |                                                                                                                                      |

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR HIGHWAY CONSTRUCTION (LATEST VERSION) AND THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST VERSION), BOTH AVAILABLE FOR DOWNLOAD OFF THE MODOT WEBSITE.

## SHEET INDEX

| SHEET NAME       | NO.   | DESCRIPTION                  |
|------------------|-------|------------------------------|
| CVR-01           | 1     | COVER SHEET                  |
| QTY-01 to QTY-06 | 2-7   | SUMMARY OF QUANTITIES        |
| TYP-01 to TYP-03 | 8-10  | TYPICAL SECTIONS AND DETAILS |
| REF-01           | 11    | REFERENCE TIES               |
| DET-01           | 12    | DETAIL - OSTERHAGEN PARCEL   |
| PNP-01 to PNP-10 | 13-22 | PLAN AND PROFILE SHEETS      |
| DRN-01 to DRN-07 | 23-29 | PIPE PROFILE SHEETS          |
| STR-01 to STR-05 | 30-34 | STRIPING AND SIGNAGE SHEETS  |
| WAL-01 to WAL-03 | 35-37 | RETAINING WALL SHEETS        |
| ERO-01 to ERO-05 | 38-42 | EROSION CONTROL SHEETS       |
| TCP-01 to TCP-20 | 43-62 | TRAFFIC CONTROL PLAN         |
| SAN-01           | 63    | SANITARY SEWER REVISIONS     |
| XS-01 to XS-36   | 64-99 | MAINLINE CROSS SECTIONS      |



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### APPROVED:

JASON JONAS, P.E.  
DIRECTOR OF PUBLIC WORKS

### LENGTH OF PROJECT

|                          |                             |
|--------------------------|-----------------------------|
| BEGINNING OF PROJECT     | STA. 13+17.00               |
| END OF PROJECT           | STA. 59+35.60               |
| APPARENT LENGTH          | 4,618.60 FEET               |
| EQUATIONS AND EXCEPTIONS | NONE                        |
| TOTAL CORRECTIONS        | NONE                        |
| NET LENGTH OF PROJECT    | 4,618.60 FEET<br>0.87 MILES |



| SUMMARY OF QUANTITIES - STP-5403(642)         |                                                                               |      |          |
|-----------------------------------------------|-------------------------------------------------------------------------------|------|----------|
| ITEM NO.                                      | DESCRIPTION                                                                   | UNIT | QUANTITY |
| ROADWAY ITEMS                                 |                                                                               |      |          |
| 201-20.10                                     | CLEARING AND GRUBBING                                                         | L.S. | 1        |
| 202-20.10                                     | REMOVAL OF IMPROVEMENTS                                                       | L.S. | 1        |
| 203-10.00                                     | CLASS A EXCAVATION                                                            | C.Y. | 14,145   |
| 203-20.00                                     | CLASS C EXCAVATION (ROCK BENCHING)                                            | C.Y. | 549      |
| 203-60.00                                     | COMPACTING EMBANKMENT                                                         | C.Y. | 1,436    |
| 206-30.00                                     | CLASS 3 EXCAVATION                                                            | C.Y. | 3,623    |
| 206-31.00                                     | CLASS 3 EXCAVATION IN ROCK                                                    | C.Y. | 1,543    |
| 207-99.09                                     | LINEAR GRADING, SPECIAL                                                       | L.F. | 1,000    |
| 304-05.04                                     | TYPE 5 AGGREGATE FOR BASE (4" THICK)                                          | S.Y. | 19,287   |
| 310-60.03                                     | GRAVEL (A) OR CHAT ( C)                                                       | S.Y. | 294      |
| 405-10.10**                                   | TEMPORARY PAVEMENT, 6-INCH THICK ASPHALT                                      | S.Y. | 1,246    |
| 401-12.09                                     | BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)                                   | TON  | 1,712.2  |
| 401-30.00                                     | BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)                                    | TON  | 6,802.3  |
| 407-10.05                                     | TACK COAT                                                                     | GAL. | 710      |
| 408-10.10                                     | PRIME-LIQUID ASPHALT RC 70 OR MC 30                                           | GAL. | 4,920    |
| 502-11.06                                     | CONCRETE PAVEMENT (6" NON-REINFORCED)                                         | S.Y. | 468      |
| 603-10.30*                                    | ADJUST WATER SERVICE VALVE AND BOX TO GRADE                                   | EACH | 18       |
| 603-10.31**                                   | ADJUST WATER METER                                                            | EACH | 13       |
| 603-10.99*                                    | ADJUST GAS SERVICE VALVE TO GRADE                                             | EACH | 4        |
| 604-05.08*                                    | 8" YARD INLINE DRAIN                                                          | EACH | 2        |
| 604-12.01*                                    | SINGLE CURB INLET, UNTRAPPED                                                  | EACH | 6        |
| 604-14.04*                                    | AREA INLET, SINGLE, OPEN 4 SIDES, UNTRAPPED                                   | EACH | 1        |
| 604-20.00**                                   | REMOVE AND REPLACE HYDRANT                                                    | EACH | 2        |
| 604-20.10                                     | ADJUSTING MANHOLE TO GRADE                                                    | EACH | 1        |
| 604-20.11**                                   | MISCELLANEOUS (PULLBOXES, OTHER)                                              | EACH | 5        |
| 604-80.06*                                    | SLOTTED DRAIN (6")                                                            | L.F. | 90       |
| 606-10.10                                     | GUARDRAIL TYPE A                                                              | L.F. | 572      |
| 606-30.15                                     | TYPE A CRASHWORTHY END TERMINAL                                               | EACH | 1        |
| 606-66.10                                     | END ANCHOR                                                                    | EACH | 1        |
| 607-10.10A                                    | 42" CHAIN LINK FENCE                                                          | L.F. | 276      |
| 607-10.10B                                    | 6" WOOD PRIVACY FENCE                                                         | L.F. | 495      |
| 607-10.10C                                    | 48" WHITE VINYL PRIVACY FENCE                                                 | L.F. | 72       |
| 607-10.30                                     | WALK GATE (CHAIN LINK)                                                        | EACH | 1        |
| 607-10.50                                     | CHAIN LINK FENCE ON RETAINING WALL                                            | L.F. | 82       |
| 608-50.06**                                   | PAVED APPROACH (6")                                                           | S.Y. | 1,105.3  |
| 608-60.04                                     | CONCRETE SIDEWALK, 4 IN.                                                      | S.Y. | 17.6     |
| 608-70.00                                     | CONCRETE STEPS                                                                | S.F. | 190.0    |
| 609-10.10                                     | CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S                                 | L.F. | 61       |
| 609-10.52                                     | CURB AND GUTTER TYPE B                                                        | L.F. | 8,710    |
| 609-20.12                                     | INTEGRAL CURB (6 IN. HEIGHT AND UNDER) TYPE B                                 | L.F. | 32       |
| 609-20.13                                     | INTEGRAL CURB TYPE M                                                          | L.F. | 47       |
| 609-20.32                                     | CONCRETE CURB LOW PROFILE TYPE F                                              | L.F. | 76       |
| 609-30.15                                     | ASPHALT CURB (4 INCH)                                                         | L.F. | 75       |
| 611-99.05                                     | ROCK BLANKET TYPE 2                                                           | S.Y. | 92.3     |
| 618-10.00                                     | MOBILIZATION                                                                  | L.S. | 1        |
| 622-10.01                                     | COLDMILING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) | S.Y. | 233      |
| 627-40.00                                     | CONTRACTOR FURNISHED SURVEYING AND STAKING                                    | L.S. | 1        |
| 712-35.00                                     | RAILING FOR STEPS                                                             | L.F. | 30       |
| 720-10.00                                     | MECHANICALLY STABILIZED EARTH WALL SYSTEMS                                    | S.F. | 1,483    |
| 720-99.04                                     | MECHANICALLY STABILIZED EARTH WALL SYSTEMS - LARGE BLOCK                      | S.F. | 2,282    |
| 726-10.12                                     | 12 IN. PIPE GROUP A                                                           | L.F. | 232      |
| 726-10.15                                     | 15 IN. PIPE GROUP A                                                           | L.F. | 2,668    |
| 726-10.18                                     | 18 IN. PIPE GROUP A                                                           | L.F. | 636      |
| 726-10.24                                     | 24 IN. PIPE GROUP A                                                           | L.F. | 530      |
| 726-10.36                                     | 36 IN. PIPE GROUP A                                                           | L.F. | 16       |
| 726-11.15**                                   | TEMPORARY 15" CORRUGATED METAL PIPE                                           | L.F. | 135      |
| 726-54.04*                                    | 4" POLYVINYL CHLORIDE PIPE                                                    | L.F. | 65       |
| 726-54.08*                                    | 8" POLYVINYL CHLORIDE PIPE                                                    | L.F. | 144      |
| 731-00.42*                                    | PRECAST CONCRETE MANHOLE (42")                                                | EACH | 3        |
| 731-10.42                                     | PRECAST CONCRETE DROP INLET 4 FT X2 FT                                        | FT.  | 5        |
| 731-99.02**                                   | PRECAST DROP INLET WITH GRATE AND FRAME                                       | EACH | 52       |
| 732-06.15A                                    | 15 IN. OR ALLOWED SUBSTITUTE GROUP A FLARED END SECTION                       | EACH | 3        |
| 732-06.24A                                    | 24 IN. OR ALLOWED SUBSTITUTE GROUP A FLARED END SECTION                       | EACH | 3        |
| 806-10.19                                     | SILT FENCE                                                                    | L.F. | 4,060    |
| 806-10.25                                     | INLET CHECK                                                                   | EACH | 58       |
| 806-41.24                                     | TYPE 5 EROSION CONTROL BLANKET                                                | S.Y. | 1,142    |
| SIGNING, STRIPING, SIGNALS AND LIGHTING ITEMS |                                                                               |      |          |
| 616-10.05                                     | CONSTRUCTION SIGNS                                                            | S.F. | 612      |
| 616-10.28                                     | CHANNELIZER                                                                   | EACH | 207      |
| 616-10.31                                     | TYPE III MOVEABLE BARRICADE WITH LIGHT                                        | EACH | 13       |
| 616-10.98                                     | CHANGEABLE MESSAGE SIGN, CONTRACTOR FURNISHED (RENTAL)                        | EACH | 4        |
| 617-36.00D                                    | TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED                      | L.F. | 392      |
| 620-60.00B                                    | 4 IN. WHITE ACRYLIC WATERBORNE PAVEMENT MARKING PAINT                         | L.F. | 15,531   |
| 620-60.01B                                    | 4 IN. YELLOW ACRYLIC WATERBORNE PAVEMENT MARKING PAINT                        | L.F. | 15,716   |
| 620-61.24                                     | ACRYLIC WATERBORNE PAVEMENT MARKING PAINT, 24 IN., WHITE                      | L.F. | 12       |
| 903-50.10**                                   | PERMANENT SIGNING                                                             | S.F. | 323      |
| LANDSCAPING                                   |                                                                               |      |          |
| 804-10.00                                     | TOPSOIL                                                                       | C.Y. | 1089.3   |
| 805-10.00A                                    | SEEDING-COOL SEASON MIXTURES                                                  | ACRE | 2.0      |

NOTES:

ALL BID ITEMS REFER TO LATEST EDITION OF MISSOURI STANDARDS FOR HIGHWAY CONSTRUCTION, BY MODOT

\* = REFER TO LATEST EDITION OF ST. LOUIS COUNTY STANDARDS FOR HIGHWAY CONSTRUCTION

\*\* = JOB SPECIAL PROVISIONS, AS ATTACHED IN THE PROJECT MANUAL

CONSTRUCTION SIGNS ARE FOR USE IN TRAFFIC CONTROL AND ARE TEMPORARY. RELOCATION OF THE SIGNS DURING VARIOUS STAGES OF CONSTRUCTION IS CONSIDERED INCIDENTAL TO QUANTITY OF CONSTRUCTION SIGNAGE.

BID FOR PIPE INCLUDES EXCAVATION AND GRANULAR BACKFILL AS REQUIRED IN THE SPECIFICATIONS

STANDARDS TO BE USED FOR THIS PROJECT

The Missouri Department of Transportation's Standard Specifications for Highway Construction have been adopted for use on this project. Current editions of these plans can be downloaded from MoDOT's website at [www.modot.org](http://www.modot.org). The following sections are specifically applicable to this project.

|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| 604.40 | 606.00 | 606.30 | 607.10 | 607.11 | 608.10 |
| 608.20 | 609.00 | 609.70 | 614.11 | 614.30 | 616.10 |
| 620.00 | 726.30 | 731.00 | 731.10 | 732.00 | 806.10 |
| 903.03 |        |        |        |        |        |

ENTRANCE PAVEMENT REMOVAL

| SHEET   | STATION | STATION | ROUTE  | LOCATION | PAVEMENT AREA (SF) | PAVEMENT AREA (SY) |
|---------|---------|---------|--------|----------|--------------------|--------------------|
| PLN-01  | 13+79   | 14+12   | SALINE | RT       | 238                | 26                 |
| PLN-01  | 14+18   | 14+50   | SALINE | RT       | 377                | 42                 |
| PLN-02  | 18+99   | 19+69   | SALINE | LT       | 1362               | 151                |
| PLN-03  | 22+37   | 22+59   | SALINE | RT       | 153                | 17                 |
| PLN-04  | 25+67   | 25+88   | SALINE | RT       | 228                | 25                 |
| PLN-04  | 26+22   | 27+05   | SALINE | LT       | 1727               | 192                |
| PLN-04  | 26+77   | 26+95   | SALINE | RT       | 61                 | 7                  |
| PLN-04  | 27+60   | 27+85   | SALINE | LT       | 332                | 37                 |
| PLN-04  | 27+83   | 28+37   | SALINE | RT       | 1099               | 122                |
| PLN-05  | 31+28   | 32+89   | SALINE | RT       | 3077               | 342                |
| PLN-06  | 36+11   | 37+04   | SALINE | LT       | 1915               | 213                |
| PLN-06  | 40+62   | 41+14   | SALINE | LT       | 1660               | 184                |
| PLN-06  | 40+69   | 40+92   | SALINE | RT       | 775                | 86                 |
| PLN-06  | 40+97   | 41+64   | SALINE | RT       | 3067               | 341                |
| PLN-07  | 42+01   | 42+94   | SALINE | LT       | 2680               | 298                |
| PLN-07  | 43+24   | 43+62   | SALINE | RT       | 270                | 30                 |
| PLN-07  | 43+50   | 43+78   | SALINE | LT       | 388                | 43                 |
| PLN-07  | 44+58   | 45+67   | SALINE | RT       | 1707               | 190                |
| PLN-07  | 44+59   | 46+21   | SALINE | LT       | 2276               | 253                |
| PLN-07  | 46+40   | 46+61   | SALINE | LT       | 226                | 25                 |
| PLN-08  | 47+64   | 48+55   | SALINE | RT       | 1700               | 189                |
| PLN-08  | 47+98   | 48+23   | SALINE | LT       | 210                | 23                 |
| PLN-08  | 48+89   | 49+26   | SALINE | RT       | 551                | 61                 |
| PLN-08  | 49+49   | 49+66   | SALINE | RT       | 146                | 16                 |
| PLN-08  | 49+81   | 50+01   | SALINE | LT       | 159                | 18                 |
| PLN-09  | 53+35   | 53+60   | SALINE | LT       | 487                | 54                 |
| PLN-09  | 55+22   | 55+99   | SALINE | LT       | 770                | 86                 |
| PLN-09  | 55+43   | 55+98   | SALINE | RT       | 1210               | 134                |
| PLN-09  | 56+72   | 57+09   | SALINE | LT       | 575                | 64                 |
| PLN-09  | 57+43   | 57+77   | SALINE | RT       | 495                | 55                 |
| PLN-09  | 57+77   | 58+13   | SALINE | RT       | 763                | 85                 |
| PLN-10  | 58+52   | 59+37   | SALINE | RT       | 1452               | 161                |
| TOTAL = |         |         |        |          |                    | 3571               |

CLEARING AND GRUBBING

| SHEET   | STATION | STATION | ROUTE  | LOCATION | CLEARING & GRUBBING (SF) | CLEARING & GRUBBING (ACRE) |
|---------|---------|---------|--------|----------|--------------------------|----------------------------|
| PNP-02  | 14+88   | 15+15   | SALINE | LT       | 319                      | 0.01                       |
| PNP-02  | 15+92   | 16+50   | SALINE | RT       | 439                      | 0.02                       |
| PNP-02  | 19+16   | 19+46   | SALINE | RT       | 94                       | 0.01                       |
| PNP-03  | 22+12   | 22+36   | SALINE | RT       | 159                      | 0.01                       |
| PNP-04  | 27+38   | 27+61   | SALINE | LT       | 91                       | 0.01                       |
| PNP-04  | 29+56   | 30+19   | SALINE | LT       | 211                      | 0.01                       |
| PNP-05  | 31+31   | 32+57   | SALINE | RT       | 3797                     | 0.09                       |
| PNP-05  | 34+92   | 35+60   | SALINE | RT       | 231                      | 0.01                       |
| PNP-06  | 36+50   | 37+01   | SALINE | LT       | 442                      | 0.02                       |
| PNP-06  | 37+24   | 39+69   | SALINE | RT       | 1786                     | 0.05                       |
| PNP-06  | 40+08   | 40+33   | SALINE | LT       | 111                      | 0.01                       |
| PNP-07  | 42+38   | 42+51   | SALINE | LT       | 37                       | 0.01                       |
| PNP-07  | 44+78   | 44+97   | SALINE | LT       | 186                      | 0.01                       |
| PNP-09  | 53+84   | 54+45   | SALINE | LT       | 358                      | 0.01                       |
| PNP-09  | 55+66   | 56+22   | SALINE | RT       | 521                      | 0.02                       |
| PNP-09  | 56+62   | 57+47   | SALINE | RT       | 334                      | 0.01                       |
| PNP-10  | 58+00   | 58+22   | SALINE | LT       | 339                      | 0.01                       |
| TOTAL = |         |         |        |          |                          | 0.3                        |

SIDEWALK AND CURB REMOVAL

| SHEET   | STATION | STATION | ROUTE  | LOCATION | CONCRETE CURB (LF) | SIDEWALK AREA (SY) |
|---------|---------|---------|--------|----------|--------------------|--------------------|
| PNP-02  | 15+59   | 15+62   | SALINE | RT       |                    | 5                  |
| PNP-02  | 19+00   | 19+20   | SALINE | LT       | 59                 |                    |
| PNP-02  | 19+51   | 19+53   | SALINE | LT       | 11                 |                    |
| PNP-04  | 26+24   | 26+31   | SALINE | LT       | 42                 |                    |
| PNP-04  | 26+45   | 26+99   | SALINE | LT       | 77                 |                    |
| PNP-06  | 36+11   | 36+48   | SALINE | LT       | 59                 |                    |
| PNP-06  | 36+26   | 36+50   | SALINE | LT       | 52                 |                    |
| PNP-06  | 36+50   | 36+79   | SALINE | LT       | 64                 |                    |
| PNP-06  | 40+78   | 40+94   | SALINE | RT       | 33                 |                    |
| PNP-06  | 41+03   | 41+50   | SALINE | LT       |                    | 13                 |
| PNP-07  | 41+50   | 42+08   | SALINE | LT       |                    | 13                 |
| PNP-07  | 44+73   | 44+96   | SALINE | RT       | 37                 |                    |
| PNP-07  | 45+32   | 45+52   | SALINE | RT       | 33                 |                    |
| PNP-08  | 47+78   | 47+92   | SALINE | RT       | 26                 |                    |
| PNP-08  | 48+29   | 48+40   | SALINE | RT       | 26                 |                    |
| PNP-10  | 58+20   | 58+34   | SALINE | LT       | 35                 |                    |
| PNP-10  | 58+62   | 58+75   | SALINE | LT       | 34                 |                    |
| PNP-10  | 58+68   | 58+89   | SALINE | RT       | 40                 |                    |
| PNP-10  | 59+17   | 59+37   | SALINE | RT       | 32                 |                    |
| TOTAL = |         |         |        |          | 660                | 31                 |

ROADWAY PAVEMENT REMOVAL

| SHEET   | STATION | STATION | ROUTE  | PAVEMENT AREA (SF) | PAVEMENT AREA (SY) |
|---------|---------|---------|--------|--------------------|--------------------|
| ROADWAY |         |         |        |                    |                    |
| PNP-01  | 13+17   | 14+50   | SALINE | 3387               | 376                |
| PNP-02  | 14+50   | 20+00   | SALINE | 13437              | 1493               |
| PNP-03  | 20+00   | 25+50   | SALINE | 12975              | 1442               |
| PNP-04  | 25+50   | 31+00   | SALINE | 13838              | 1538               |
| PNP-05  | 31+00   | 36+00   | SALINE | 14115              | 1568               |
| PNP-06  | 36+00   | 41+50   | SALINE | 15024              | 1669               |
| PNP-07  | 41+50   | 47+00   | SALINE | 14085              | 1565               |
| PNP-08  | 47+00   | 52+50   | SALINE | 14129              | 1570               |
| PNP-09  | 52+50   | 58+00   | SALINE | 13326              | 1481               |
| PNP-10  | 58+00   | 59+37   | SALINE | 4374               | 486                |
| TOTAL = |         |         |        |                    | 13188              |

EARTHWORK

| LOCATION                          | 203-10.00<br>CLASS A<br>EXCAVATION<br>(C.Y.) | 203-20.00<br>CLASS C<br>EXCAVATION<br>(ROCK BENCH)<br>(C.Y.) | 203-60.00<br>COMPACTING<br>EMBANKMENT<br>(C.Y.) |
|-----------------------------------|----------------------------------------------|--------------------------------------------------------------|-------------------------------------------------|
| SALINE                            | 12,839                                       |                                                              | 1,336                                           |
| ROCK BENCH-STA 28+32 TO STA 30+95 |                                              | 549                                                          |                                                 |
| DRIVEWAY ADD YARDAGES             | 1,306                                        |                                                              | 100                                             |
| TOTALS =                          | 14,145                                       | 549                                                          | 1,436                                           |

MOBILIZATION = 1 LUMP SUM

381 SALINE RD. IMPROVEMENTS = 1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING AND STAKING = 1 LUMP SUM

DRAWN BY: EBS  
APPROVED: JSD  
CAD DATE: 12/3/2014  
CAD FILE: \\vrgefs004\Date\7510022\CAD\Date\qty\_01.dgn

JOB DATE: 02/2012 - 12/2014  
JOB NUMBER: 7510022  
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| NO. | DATE | BY | REVISION DESCRIPTION |
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16020 SHINGLEY RIDGE ROAD, SUITE 205  
ST. LOUIS, MISSOURI 63017  
PHONE: (636) 518-0880  
CORPORATE LICENSE #2002008808

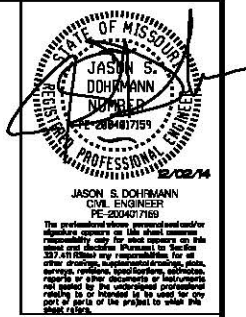


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

QUANTITIES  
(Sheet 1 of 6)

SHEET NO.  
QTY-01  
2 of 99





MAINLINE ASPHALT ROADWAY PAVEMENT AND RELATED ITEMS

| SHEET    | STATION | STATION | STREET | LENGTH<br>(L.F.) | PAVEMENT<br>WIDTH<br>(FT) | 304-05.04<br>TYPE 5<br>AGGREGATE<br>FOR BASE (4"<br>THICK)<br>(SY) | 401-12.09<br>BITUMINOUS<br>PAVEMENT<br>MIXTURE<br>PG64-22 (BP-1)<br>(TON) | 401-30.00<br>BITUMINOUS<br>PAVEMENT<br>MIXTURE<br>PG64-22 (BASE)<br>(TON) | 407-10.05<br>TACK COAT<br>(GAL) | 408-10.10<br>PRIME LIQUID<br>ASPHALT<br>(GAL) | NOTES                                          |
|----------|---------|---------|--------|------------------|---------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------|-----------------------------------------------|------------------------------------------------|
|          |         |         |        |                  |                           |                                                                    |                                                                           |                                                                           | 0.05gal/sy                      | 0.35gal/sy                                    |                                                |
| PNP-01   | BOP     | 14+50   | SALINE | 133              | 26.0                      | 436                                                                | 39.6                                                                      | 168.1                                                                     | 16                              | 115                                           | INCLUDES WIDENING AT 13+00 LEFT                |
| PNP-02   | 14+50   | 20+00   | SALINE | 550              | 26.0                      | 1875                                                               | 174.2                                                                     | 740.5                                                                     | 73                              | 508                                           | INCLUDES APPROACH TO 19+34.53 DRIVE            |
| PNP-03   | 20+00   | 25+50   | SALINE | 550              | 26.0                      | 1772                                                               | 161.3                                                                     | 685.7                                                                     | 67                              | 471                                           |                                                |
| PNP-04   | 25+50   | 31+00   | SALINE | 550              | 26.0                      | 1966                                                               | 183.5                                                                     | 779.8                                                                     | 76                              | 535                                           | INCL. APPROACHES TO 26+64.38 & 27+99.44 DRIVES |
| PNP-05   | 31+00   | 36+00   | SALINE | 500              | 26.0                      | 2005                                                               | 153.2                                                                     | 651.1                                                                     | 64                              | 447                                           | INCL. APPROACHES TO 32+35.43 & 36+43.73 DRIVES |
| PNP-06   | 36+00   | 41+50   | SALINE | 550              | 26.0                      | 1890                                                               | 210.3                                                                     | 893.8                                                                     | 88                              | 613                                           | INCL. APPROACHES TO 40+78.58 & 40+87.39 DRIVES |
| PNP-07   | 41+50   | 47+00   | SALINE | 550              | 26.0                      | 1916                                                               | 178.1                                                                     | 757.0                                                                     | 74                              | 520                                           | INCL. APPROACHES TO 42+17.98 & 42+75.74 DRIVES |
| PNP-08   | 47+00   | 52+50   | SALINE | 550              | 26.0                      | 1772                                                               | 161.3                                                                     | 685.7                                                                     | 67                              | 471                                           |                                                |
| PNP-09   | 52+50   | 58+00   | SALINE | 550              | 26.0                      | 1826                                                               | 167.4                                                                     | 711.4                                                                     | 70                              | 488                                           | INCLUDES APPROACH TO 55+89.24 DRIVE            |
| PNP-10   | 58+00   | EOP     | SALINE | 136              | 26.0                      | 709                                                                | 72.3                                                                      | 307.2                                                                     | 30                              | 211                                           | INCL. APPROACHES TO 58+48.06 & 58+89.34 DRIVES |
| TOTALS = |         |         |        |                  |                           | 16167                                                              | 1501.2                                                                    | 6380.3                                                                    | 630                             | 4380                                          |                                                |

DRIVE APPROACH, DRIVEWAY PAVEMENT, AND SIDEROAD PAVEMENT

| SHEET     | STATION  | SIDE | STREET | WIDTH<br>(FT) | 304-05.04<br>TYPE 5<br>AGGREGATE<br>BASE (4" THICK)<br>(S.Y.) | 502-11.06<br>CONCRETE<br>PAVEMENT (6"<br>NON-<br>REINFORCED)<br>(SY) | 310-60.03<br>GRAVEL (A)<br>CHAT<br>(SY) | 622-10.01<br>COLD MILLING<br>BITUMINOUS<br>PAVEMENT FOR<br>REMOVAL OF<br>SURFACING<br>(SY) | 608-50.06**<br>PAVED<br>APPROACH (6")<br>(S.Y.) | 401-12.09<br>BITUMINOUS<br>PAVEMENT<br>MIXTURE<br>PG64-22 (BP-1)<br>(TONS) | 401-30.00<br>BITUMINOUS<br>PAVEMENT<br>MIXTURE<br>PG64-22 (BASE)<br>(TONS) | 407-10.05<br>TACK LIQUID<br>ASPHALT<br>(GAL) | 408-10.10<br>PRIME LIQUID<br>ASPHALT<br>(GAL) | 608-60.04<br>CONCRETE<br>SIDEWALK, 4 IN.<br>(S.Y.) | NOTES                               |
|-----------|----------|------|--------|---------------|---------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------|----------------------------------------------------|-------------------------------------|
|           |          |      |        |               |                                                               |                                                                      |                                         |                                                                                            |                                                 |                                                                            |                                                                            | 0.05gal/sy                                   | 0.35gal/sy                                    |                                                    |                                     |
| PNP-01    | 13+92.57 | RT   | SALINE | 22.0          | 58.1                                                          |                                                                      | 13                                      |                                                                                            | 21.6                                            | 5.1                                                                        | 10.1                                                                       | 2                                            | 15                                            |                                                    |                                     |
| PNP-01    | 14+40.75 | RT   | SALINE | 18.0          | 24.5                                                          |                                                                      | 28                                      |                                                                                            | 13.4                                            | 1.6                                                                        | 3.1                                                                        | 1                                            | 5                                             |                                                    |                                     |
| PNP-02    | 14+85.41 | RT   | SALINE | 14.0          | 19.9                                                          |                                                                      | 23                                      |                                                                                            | 15.0                                            | 1.2                                                                        | 2.4                                                                        | 1                                            | 4                                             |                                                    |                                     |
| PNP-02    | 15+59.25 | RT   | SALINE | 3.0           | 13.0                                                          |                                                                      |                                         |                                                                                            |                                                 |                                                                            | 0.0                                                                        |                                              |                                               | 8.0                                                |                                     |
| PNP-02    | 19+34.53 | LT   | SALINE | 31.1          |                                                               |                                                                      |                                         | 233                                                                                        |                                                 | 27.9                                                                       | 55.8                                                                       |                                              |                                               |                                                    |                                     |
| PNP-03    | 21+00.56 | RT   | SALINE | 14.0          | 19.1                                                          |                                                                      |                                         |                                                                                            | 15.0                                            | 1.1                                                                        | 2.3                                                                        |                                              | 3                                             |                                                    |                                     |
| PNP-03    | 21+75.02 | RT   | SALINE | 14.0          | 17.0                                                          |                                                                      |                                         |                                                                                            | 15.0                                            | 0.9                                                                        | 1.8                                                                        |                                              | 3                                             |                                                    |                                     |
| PNP-03    | 22+48.57 | RT   | SALINE | 15.0          | 18.3                                                          |                                                                      |                                         |                                                                                            | 15.8                                            | 1.0                                                                        | 2.0                                                                        |                                              | 3                                             |                                                    |                                     |
| PNP-03    | 23+45.30 | LT   | SALINE | 16.0          | 39.2                                                          |                                                                      |                                         |                                                                                            | 13.6                                            | 3.2                                                                        | 6.4                                                                        | 1                                            | 9                                             |                                                    |                                     |
| PNP-03    | 23+60.78 | RT   | SALINE | 18.0          | 28.4                                                          |                                                                      | 9                                       |                                                                                            | 13.4                                            | 2.0                                                                        | 4.0                                                                        | 1                                            | 6                                             |                                                    |                                     |
| PNP-03    | 24+80.80 | RT   | SALINE | 14.0          | 19.9                                                          |                                                                      | 7                                       |                                                                                            | 15.1                                            | 1.2                                                                        | 2.4                                                                        | 1                                            | 4                                             |                                                    |                                     |
| PNP-04    | 25+77.68 | RT   | SALINE | 18.0          | 21.1                                                          |                                                                      |                                         |                                                                                            | 13.4                                            | 1.2                                                                        | 2.4                                                                        |                                              | 3                                             |                                                    |                                     |
| PNP-04    | 26+56.08 | RT   | SALINE | 14.0          | 19.6                                                          |                                                                      | 12                                      |                                                                                            | 15.1                                            | 1.2                                                                        | 2.3                                                                        |                                              | 3                                             |                                                    |                                     |
| PNP-04    | 26+64.38 | LT   | SALINE | 24.0          | 37.1                                                          | 34.3                                                                 |                                         |                                                                                            |                                                 |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-04    | 26+85.46 | RT   | SALINE | 16.0          | 22.1                                                          |                                                                      | 14                                      |                                                                                            | 13.7                                            | 1.4                                                                        | 2.7                                                                        | 1                                            | 4                                             |                                                    |                                     |
| PNP-04    | 27+64.57 | LT   | SALINE | 16.0          | 35.4                                                          | 22.8                                                                 |                                         |                                                                                            | 17.4                                            |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-04    | 27+99.44 | RT   | SALINE | 22.0          | 83.3                                                          |                                                                      |                                         |                                                                                            |                                                 | 9.1                                                                        | 18.2                                                                       | 4                                            | 26                                            |                                                    |                                     |
| PNP-05    | 32+35.43 | RT   | SALINE | 22.0          | 415.3                                                         | 341.1                                                                |                                         |                                                                                            |                                                 |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-06    | 36+44    | LT   | SALINE | 11.5          | 70.1                                                          | 46.8                                                                 |                                         |                                                                                            | 22.4                                            |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-06    | 40+32    | LT   | SALINE | VARIES        | 242.5                                                         |                                                                      |                                         |                                                                                            | 29.1                                            | 23.8                                                                       | 47.6                                                                       | 10                                           | 69                                            |                                                    |                                     |
| PNP-06    | 40+78.58 | RT   | SALINE | 22.0          | 147.0                                                         |                                                                      |                                         |                                                                                            | 58.0                                            | 9.7                                                                        | 19.4                                                                       | 4                                            | 28                                            |                                                    |                                     |
| PNP-06    | 40+87.39 | LT   | SALINE | 22.0          | 129.0                                                         |                                                                      |                                         |                                                                                            |                                                 | 14.2                                                                       | 28.4                                                                       | 6                                            | 41                                            |                                                    |                                     |
| PNP-07    | 42+17.98 | LT   | SALINE | 22.0          | 79.8                                                          |                                                                      |                                         |                                                                                            |                                                 | 8.8                                                                        | 17.6                                                                       | 4                                            | 26                                            |                                                    |                                     |
| PNP-07    | 42+75.74 | LT   | SALINE | 22.0          | 49.3                                                          |                                                                      |                                         |                                                                                            |                                                 | 5.3                                                                        | 10.6                                                                       | 2                                            | 15                                            |                                                    |                                     |
| PNP-07    | 43+64.16 | LT   | SALINE | 28.5          | 39.5                                                          | 23.1                                                                 |                                         |                                                                                            | 27.1                                            |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-07    | 44+71.88 | LT   | SALINE | 16.0          | 124.9                                                         |                                                                      |                                         |                                                                                            | 13.8                                            | 12.5                                                                       | 25.0                                                                       | 5                                            | 36                                            |                                                    |                                     |
| PNP-07    | 45+14.29 | RT   | SALINE | 35.0          | 141.2                                                         |                                                                      |                                         |                                                                                            | 164.1                                           |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-07    | 45+20.29 | LT   | SALINE | 34.0          | 134.4                                                         |                                                                      |                                         |                                                                                            | 32.2                                            | 11.1                                                                       | 22.2                                                                       | 5                                            | 32                                            |                                                    | INCL. AGG. & ASPHALT FOR 46+01.15   |
| PNP-07    | 46+01.15 | LT   | SALINE | 15.0          |                                                               |                                                                      |                                         |                                                                                            | 17.3                                            |                                                                            | 0.0                                                                        |                                              |                                               |                                                    | AGG. & ASPHALT INCLUDED IN 45+20.29 |
| PNP-07    | 46+48.52 | LT   | SALINE | 14.0          | 20.4                                                          |                                                                      | 22                                      |                                                                                            | 15.0                                            | 1.3                                                                        | 2.5                                                                        | 1                                            | 4                                             |                                                    |                                     |
| PNP-08    | 48+08.81 | LT   | SALINE | 14.0          | 24.0                                                          |                                                                      |                                         |                                                                                            | 15.0                                            | 1.6                                                                        | 3.2                                                                        | 1                                            | 5                                             |                                                    |                                     |
| PNP-08    | 48+09.95 | RT   | SALINE | 37.0          | 153.6                                                         |                                                                      |                                         |                                                                                            | 178.0                                           |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-08    | 48+95.50 | LT   | SALINE | 18.0          | 24.4                                                          |                                                                      | 34                                      |                                                                                            | 19.3                                            | 1.5                                                                        | 3.1                                                                        | 1                                            | 5                                             |                                                    |                                     |
| PNP-08    | 49+05.06 | RT   | SALINE | 26.0          |                                                               |                                                                      |                                         |                                                                                            | 25.2                                            |                                                                            | 0.0                                                                        |                                              |                                               |                                                    |                                     |
| PNP-08    | 49+56.42 | RT   | SALINE | 14.0          | 16.3                                                          |                                                                      |                                         |                                                                                            | 15.0                                            | 0.8                                                                        | 1.6                                                                        |                                              | 2                                             |                                                    |                                     |
| PNP-08    | 49+89.94 | LT   | SALINE | 14.0          | 16.2                                                          |                                                                      |                                         |                                                                                            | 15.0                                            | 0.8                                                                        | 1.6                                                                        |                                              | 2                                             |                                                    |                                     |
| PNP-08    | 51+06.52 | RT   | SALINE | 14.0          | 19.3                                                          |                                                                      | 10                                      |                                                                                            | 15.0                                            | 1.1                                                                        | 2.3                                                                        |                                              | 3                                             |                                                    |                                     |
| PNP-08    | 51+15.17 | LT   | SALINE | 22.0          | 25.9                                                          |                                                                      | 43                                      |                                                                                            | 22.8                                            | 1.5                                                                        | 2.9                                                                        | 1                                            | 4                                             |                                                    | INCL. GRAVEL BETWEEN DRIVES         |
| PNP-08    | 51+54.53 | LT   | SALINE | 22.0          | 26.2                                                          |                                                                      |                                         |                                                                                            | 22.3                                            | 1.5                                                                        | 3.1                                                                        | 1                                            | 4                                             |                                                    |                                     |
| PNP-08    | 51+94.36 | LT   | SALINE | 12.0          | 17.1                                                          |                                                                      | 52                                      |                                                                                            | 13.3                                            | 1.0                                                                        | 2.0                                                                        | 1                                            | 3                                             |                                                    |                                     |
| PNP-09    | 53+25.32 | RT   | SALINE | 24.0          | 32.6                                                          |                                                                      | 28                                      |                                                                                            | 23.2                                            | 2.2                                                                        | 4.5                                                                        | 1                                            | 7                                             |                                                    |                                     |
| PNP-09    | 53+44.78 | LT   | SALINE | 19.0          | 75.9                                                          |                                                                      |                                         |                                                                                            | 17.7                                            | 7.2                                                                        | 14.4                                                                       | 3                                            | 21                                            |                                                    | INCL. AREA BETWEEN DRIVES           |
| PNP-09    | 53+55.26 | LT   | SALINE | 14.8          | 103.0                                                         |                                                                      |                                         |                                                                                            | 14.0                                            | 9.9                                                                        | 19.8                                                                       | 4                                            | 29                                            |                                                    |                                     |
| PNP-09    | 55+37.83 | LT   | SALINE | 24.0          | 41.6                                                          |                                                                      |                                         |                                                                                            | 23.3                                            | 3.2                                                                        | 6.4                                                                        | 1                                            | 9                                             |                                                    |                                     |
| PNP-09    | 55+86.43 | LT   | SALINE | 16.0          | 44.1                                                          |                                                                      |                                         |                                                                                            | 13.7                                            | 3.6                                                                        | 7.3                                                                        | 2                                            | 11                                            |                                                    |                                     |
| PNP-09    | 55+89.24 | RT   | SALINE | 21.8          | 124.5                                                         |                                                                      |                                         |                                                                                            |                                                 | 13.7                                                                       | 27.4                                                                       | 6                                            | 40                                            |                                                    |                                     |
| PNP-09    | 56+92.87 | LT   | SALINE | 49.0          | 172.1                                                         |                                                                      |                                         |                                                                                            | 31.6                                            | 6.1                                                                        | 12.2                                                                       | 3                                            | 21                                            | 10                                                 | QUANTITIES BY JEFFERSON CO.         |
| PNP-09    | 57+54.49 | RT   | SALINE | 14.0          | 44.6                                                          |                                                                      |                                         |                                                                                            | 15.0                                            | 3.8                                                                        | 7.6                                                                        | 2                                            | 11                                            |                                                    |                                     |
| PNP-09/10 | 57+89.04 | RT   | SALINE | 21.0          | 74.1                                                          |                                                                      |                                         |                                                                                            | 23.4                                            | 6.7                                                                        | 13.4                                                                       | 3                                            | 20                                            |                                                    |                                     |
| TOTALS =  |          |      |        |               | 3119.9                                                        | 468.1                                                                | 294                                     | 233                                                                                        | 1105.3                                          | 211.0                                                                      | 422.0                                                                      | 80                                           | 540                                           | 18                                                 |                                     |

LINEAR GRADING, SPECIAL

| SHEET  | TYPE       | STATION    | SIDE | ACTUAL<br>LENGTH | 207-99.09<br>LINEAR<br>GRADING,<br>SPECIAL<br>(L.F.) |
|--------|------------|------------|------|------------------|------------------------------------------------------|
| PNP-04 | PRIV. ROAD | 26+64.58   | LT.  | 53               | 53                                                   |
| PNP-04 | PRIV. ROAD | 27+99.44   | LT.  | 52               | 52                                                   |
| PNP-05 | PRIV. ROAD | 32+35.43   | RT.  | 180              | 180                                                  |
| PNP-06 | PRIV. ROAD | 36+43.73   | LT.  | 68               | 68                                                   |
| PNP-06 | DRIVEWAY   | 40+32.16   | LT.  | 114              | 114                                                  |
| PNP-06 | PRIV. ROAD | 40+78.58   | RT.  | 76               | 76                                                   |
| PNP-06 | PRIV. ROAD | 40+87.39   | LT.  | 73               | 73                                                   |
| PNP-07 | PRIV. ROAD | 42+17.96   | LT.  | 54               | 54                                                   |
| PNP-07 | PRIV. ROAD | 42+75.74   | LT.  | 45               | 45                                                   |
| PNP-08 | DRIVEWAY   | 51+54.53 * | LT.  | 38               | 38                                                   |
| PNP-08 | DRIVEWAY   | 51+94.36   | LT.  | 38               | 38                                                   |
| PNP-08 | DRIVEWAY   | 53+44.78   | LT.  | 35               | 35                                                   |
| PNP-08 | DRIVEWAY   | 53+55.76   | LT.  | 66               | 66                                                   |
| PNP-09 | PRIV. ROAD | 55+89.24   | RT.  | 55               | 55                                                   |
| PNP-09 | DRIVEWAY   | 56+92.87   | LT.  | 44               | 44                                                   |
|        |            |            |      | SUBTOTAL         | 991                                                  |
|        |            |            |      | TOTALS =         | 1000                                                 |

\* ACCOUNTS FOR GRAVEL CONNECTOR BETWEEN THE TWO DRIVEWAYS

SANITARY SEWER ITEMS

| LOCATION                                                | 731-00.42*<br>PRECAST<br>CONCRETE<br>MANHOLE, 42"<br>(EACH) | 726-54.04*<br>4" POLYVINYL<br>CHLORIDE PIPE<br>(L.F.) |
|---------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------|
|                                                         |                                                             |                                                       |
| STA. 40+52, 50' RT. (INTERSECTION SALINE AT FIELDCREST) | 1                                                           |                                                       |
| LATERAL RECONNECTION (SALINE AT FIELDCREST DR.)         |                                                             | 65                                                    |
| TOTALS =                                                | 1                                                           | 65                                                    |

DRAWN BY: EBS      JOB DATE: 02/2012 - 12/2014  
APPROVED: JSD      JOB NUMBER: 75110022  
CAD DATE: 12/3/2014      8:54:07 AM  
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16020 SWINGLEY RIDGE ROAD, SUITE 205  
ST. LOUIS, MISSOURI 63017  
PHONE: (636) 518-0890  
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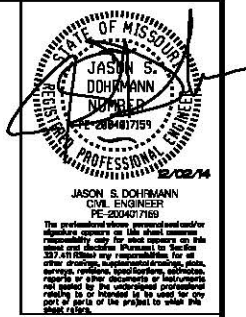


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP\*5589-12

QUANTITIES  
(Sheet 2 of 6)

SHEET NO.  
**QTY-02**  
3 of 99





DRAINAGE PIPE, STRUCTURES, AND RELATED

| ROADWAY  | FROM<br>STRUCTURE | TO<br>STRUCTURE | STATION | OFFSET | SIDE | 8" YARD<br>INLINE<br>DRAIN<br>(EA) | SINGLE<br>CURB<br>INLET,<br>(EA) | AREA<br>INLET,<br>SINGLE,<br>OPEN 4<br>SIDES,<br>(EA) | SLOTTED<br>DRAIN (6")<br>(LF) | PRECAST<br>DROP INLET<br>WITH<br>GRATE AND<br>FRAME<br>(EA) | ROCK<br>BLANKET<br>TYPE 2<br>(SY) | PRECAST<br>CONCRETE<br>MANHOLE,<br>42"<br>(EA) | PRECAST<br>CONCRETE<br>DROP INLET<br>4 FT X 2 FT<br>(FT) | 15" GROUP<br>A FLARED<br>END<br>SECTION<br>(EA.) | 24" GROUP<br>A FLARED<br>END<br>SECTION<br>(EA.) | 36 IN. PIPE<br>GROUP A<br>(LF) | 24 IN. PIPE<br>GROUP A<br>(LF) | 18 IN. PIPE<br>GROUP A<br>(LF) | 15 IN. PIPE<br>GROUP A<br>(LF) | 12 IN. PIPE<br>GROUP A<br>(LF) | 8"<br>POLYVINYL<br>CHLORIDE<br>PIPE<br>(LF) | CLASS 3<br>EXCAVATION<br>(CY) | CLASS 3<br>EXCAVATION<br>IN ROCK<br>(CY) |                                                    |
|----------|-------------------|-----------------|---------|--------|------|------------------------------------|----------------------------------|-------------------------------------------------------|-------------------------------|-------------------------------------------------------------|-----------------------------------|------------------------------------------------|----------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------------------|-------------------------------|------------------------------------------|----------------------------------------------------|
| SAUNE    | GI 13             | GI 12           | 13+25   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 24                             |                                |                                             | 27.2                          |                                          |                                                    |
| SAUNE    | GI 12             | FES 11          | 13+25   | 14.3   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 33                             |                                |                                             | 33.1                          |                                          |                                                    |
| SAUNE    | FES 11            |                 | 12+95   | 29.2   | LT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          | 1                                                |                                                  |                                |                                |                                |                                |                                |                                             | 1.5                           |                                          |                                                    |
| SAUNE    | GI 23             | GI 22           | 17+80   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 134                            |                                |                                             | 116.5                         |                                          |                                                    |
| SAUNE    | GI 22             | GI 21           | 19+17   | 12.0   | LT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                | 5                                                        |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 27.7                          |                                          |                                                    |
| SAUNE    | GI 21             | FES 20          | 19+17   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 19                             |                                |                                             | 20.5                          |                                          |                                                    |
| SAUNE    | FES20             |                 | 19+21   | 29.4   | RT   |                                    |                                  |                                                       |                               |                                                             | 58.9                              |                                                |                                                          |                                                  | 1                                                |                                |                                |                                |                                |                                |                                             | 1.5                           |                                          |                                                    |
| SAUNE    | CI 111            | EXFES           | 19+15   | 46.0   | LT   |                                    | 1                                |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  | 16                             |                                |                                |                                |                                |                                             | 24.4                          |                                          |                                                    |
| SAUNE    | GI 110            | EXFES           | 19+54   | 12.0   | LT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             |                               |                                          | USE EXISTING GRATE & ATG                           |
| SAUNE    | GI 49             | GI 48           | 41+50   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 29.8                          |                                          |                                                    |
| SAUNE    | GI 48             | GI 47           | 41+50   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 126                            |                                |                                             | 147                           |                                          |                                                    |
| SAUNE    | GI 47             | GI 46           | 40+10   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 78                             |                                |                                             | 84.1                          |                                          |                                                    |
| SAUNE    | CI 44             | AI 43           | 40+97   | 34.8   | LT   |                                    | 1                                |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 45                             |                                             | 64.7                          |                                          |                                                    |
| SAUNE    | AI 43             | MH 41           | 40+60   | 42.0   | LT   |                                    |                                  | 1                                                     |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 73                             |                                             | 85.6                          |                                          |                                                    |
| SAUNE    | GI 42             | MH 41           | 39+99   | 48.6   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 19                             |                                             | 11.6                          |                                          |                                                    |
| SAUNE    | MH 41             | GI 45           | 40+00   | 30.2   | LT   |                                    |                                  |                                                       |                               |                                                             |                                   | 1                                              |                                                          |                                                  |                                                  |                                |                                |                                |                                | 87                             |                                             | 87.7                          |                                          |                                                    |
| SAUNE    | GI 45             | GI 46           | 39+24   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 25.7                          |                                          |                                                    |
| SAUNE    | GI 46             | GI 64           | 39+24   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 37                             |                                |                                             | 37.2                          |                                          |                                                    |
| SAUNE    | EX CI             | GI 64           | 38+85   | 26.0   | RT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                | 13                                          | 4                             |                                          | INCLUDES FITTINGS AND BENDS                        |
| SAUNE    | GI 64             | GI 63           | 38+85   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 76                             |                                |                                             | 73.4                          |                                          |                                                    |
| SAUNE    | GI 63             | GI 62           | 38+07   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 120                            |                                |                                             | 126.1                         |                                          |                                                    |
| SAUNE    | GI 61             | GI 62           | 36+85   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 15.9                          |                                          |                                                    |
| SAUNE    | GI 62             | GI 55           | 36+85   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 122                            |                                |                                             | 147.5                         |                                          |                                                    |
| SAUNE    | GI 55             | GI 54           | 35+60   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 184                            |                                |                                             | 120                           | 120                                      |                                                    |
| SAUNE    | GI 57             | GI 54           | 33+73   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             |                               | 34.6                                     |                                                    |
| SAUNE    | GI 54             | GI 53           | 33+73   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 110                            |                                |                                             |                               | 179.4                                    |                                                    |
| SAUNE    | GI 53             | GI 52           | 32+65   | 12.5   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 56                             |                                |                                             |                               | 86.2                                     | OPEN TO THE BACK SIDE PER<br>DETAIL - NO ADD'L PAY |
| SAUNE    | GI 51             | GI 52           | 32+06   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 27.3                          |                                          |                                                    |
| SAUNE    | CI 56             | GI 52           | 32+07   | 42.7   | RT   |                                    | 1                                |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 29                             |                                |                                             | 41.1                          |                                          |                                                    |
| SAUNE    | GI 52             | GI 58           | 32+11   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 58                             |                                |                                             | 69.5                          |                                          |                                                    |
| SAUNE    | GI 58             | GI 37           | 31+55   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 58                             |                                |                                             | 67.7                          |                                          |                                                    |
| SAUNE    | GI 37             | GI 36           | 31+00   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 86                             |                                |                                             | 107.6                         |                                          |                                                    |
| SAUNE    | GI 41             | GI 36           | 30+15   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 37.6                          |                                          |                                                    |
| SAUNE    | GI 36             | GI 35           | 30+15   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 185                            |                                |                                             | 314.2                         |                                          |                                                    |
| SAUNE    | GI 40             | GI 35           | 28+33   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 20.1                          | 20.1                                     |                                                    |
| SAUNE    | GI 35             | GI 34           | 28+30   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 215.6                         | 215.6                                    |                                                    |
| SAUNE    | GI 39             | GI 34           | 25+30   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 297                            |                                |                                             | 15.9                          | 15.9                                     |                                                    |
| SAUNE    | GI 34             | GI 33           | 25+30   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 81.6                          | 81.6                                     |                                                    |
| SAUNE    | GI 33             | GI 32           | 23+95   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 162                            |                                |                                             | 106.2                         | 106.2                                    |                                                    |
| SAUNE    | GI 38             | GI 32           | 22+30   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 18.2                          | 18.2                                     |                                                    |
| SAUNE    | GI 32             | GI 31           | 22+30   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 255.6                         |                                          |                                                    |
| SAUNE    | GI 31             | FES 30          | 19+55   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 273                            | 18                             |                                             | 17.8                          |                                          |                                                    |
| SAUNE    | FES 30            |                 | 19+46   | 28.9   | RT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 2.5                           |                                          |                                                    |
| SAUNE    | GI 75             | GI 71           | 44+65   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  | 1                                                |                                |                                |                                |                                | 33                             |                                             | 41.7                          |                                          |                                                    |
| SAUNE    | EX CI             | MH 74           | 45+30   | 49.7   | RT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 3.5                           |                                          |                                                    |
| SAUNE    | MH 74             | GI 73           | 45+42   | 25.0   | RT   |                                    |                                  |                                                       |                               |                                                             |                                   | 1                                              |                                                          |                                                  |                                                  |                                |                                |                                | 25                             |                                | 8                                           | 40.2                          |                                          |                                                    |
| SAUNE    | GI 73             | GI 72           | 45+66   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 22                             |                                |                                             | 35                            |                                          |                                                    |
| SAUNE    | S-D               | GI 72           | 45+20   | 17.7   | LT   |                                    |                                  |                                                       | 33                            |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 14.1                          |                                          |                                                    |
| SAUNE    | GI 72             | GI 71           | 45+66   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 75                             |                                |                                             | 120.1                         |                                          |                                                    |
| SAUNE    | GI 71             | FES 70          | 44+89   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                | 25                             |                                |                                             | 34.6                          |                                          |                                                    |
| SAUNE    | FES 70            |                 | 44+91   | 37.7   | LT   |                                    |                                  |                                                       |                               |                                                             | 16.7                              |                                                |                                                          |                                                  | 1                                                |                                |                                |                                |                                |                                |                                             | 2.5                           |                                          |                                                    |
| SAUNE    | GI 90             | GI 89           | 50+75   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 99                             |                                             | 95.6                          |                                          |                                                    |
| SAUNE    | GI 100            | GI 89           | 51+75   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 22                             |                                             | 29.4                          |                                          |                                                    |
| SAUNE    | GI 89             | GI 88           | 51+75   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 131                            |                                             | 178.1                         |                                          |                                                    |
| SAUNE    | GI 99             | GI 88           | 53+05   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 22                             |                                             | 28.7                          |                                          |                                                    |
| SAUNE    | GI 88             | GI 87           | 53+05   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 75                             |                                             | 89.6                          |                                          |                                                    |
| SAUNE    | GI 98             | GI 87           | 53+80   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 22                             |                                             | 27.1                          |                                          |                                                    |
| SAUNE    | YD 102            | YD 101          | 53+26   | 40.9   | LT   | 1                                  |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                | 21                                          | 8.6                           |                                          |                                                    |
| SAUNE    | YD 101            | GI 98           | 53+49   | 45.7   | LT   | 1                                  |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                | 44                                          | 18.9                          |                                          |                                                    |
| SAUNE    | GI 87             | GI 86           | 53+80   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 78                             |                                             | 101.8                         |                                          |                                                    |
| SAUNE    | GI 97             | GI 86           | 54+58   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 22                             |                                             | 7.8                           |                                          |                                                    |
| SAUNE    | GI 86             | GI 85           | 54+58   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 154                            |                                             | 172.4                         |                                          |                                                    |
| SAUNE    | FES 96            | CI 95           | 55+52   | 52.6   | RT   |                                    |                                  |                                                       |                               |                                                             |                                   |                                                |                                                          | 1                                                |                                                  |                                |                                |                                |                                | 30                             |                                             | 15.1                          |                                          |                                                    |
| SAUNE    | CI 95             | CI 94           | 55+65   | 24.0   | RT   |                                    | 1                                |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 29                             |                                             | 40.6                          |                                          |                                                    |
| SAUNE    | CI 94             | GI 85           | 55+97   | 27.9   | RT   |                                    | 1                                |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 21                             |                                             | 39.7                          |                                          |                                                    |
| SAUNE    |                   | GI 93           | 55+86   | 17.8   | LT   |                                    |                                  |                                                       | 17                            |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                | 21                                          | 6.7                           |                                          |                                                    |
| SAUNE    | GI 93             | GI 85           | 56+14   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 22                             |                                             | 27.9                          |                                          |                                                    |
| SAUNE    | GI 85             | GI 84           | 56+14   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 109                            |                                             | 131.3                         |                                          |                                                    |
| SAUNE    | GI 92             | GI 84           | 57+25   | 12.0   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 22                             |                                             | 26.1                          |                                          |                                                    |
| SAUNE    | GI 84             | GI 83           | 57+25   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 63                            |                                          |                                                    |
| SAUNE    | GI 83             | GI 82           | 57+70   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 43                             |                                             | 68.7                          |                                          |                                                    |
| SAUNE    | CI 91             | GI 82           | 58+44   | 15.3   | RT   |                                    | 1                                |                                                       |                               |                                                             |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 48                             |                                             | 23.4                          |                                          |                                                    |
| SAUNE    | GI 82             | GI 81           | 58+19   | 12.0   | RT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                |                                             | 38.9                          |                                          |                                                    |
| SAUNE    | GI 81             | FES 80          | 58+19   | 13.9   | LT   |                                    |                                  |                                                       |                               | 1                                                           |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                | 24                             |                                             | 38.6                          |                                          |                                                    |
| SAUNE    | FES 80            |                 | 58+09   | 36.8   | LT   |                                    |                                  |                                                       |                               |                                                             | 16.7                              |                                                |                                                          |                                                  | 1                                                |                                |                                |                                |                                |                                |                                             | 2.5                           |                                          |                                                    |
| SAUNE    | OSTERHAGEN PARCEL |                 | 56+93   | 49.0   | LT   |                                    |                                  |                                                       |                               | 40                                                          |                                   |                                                |                                                          |                                                  |                                                  |                                |                                |                                |                                |                                | 14                                          | 5.0                           |                                          | QUANTITY BY JEFFERSON CO.                          |
| TOTALS = |                   |                 |         |        |      | 2                                  | 6                                | 1                                                     | 90                            | 52                                                          | 92.3                              | 2                                              | 5                                                        | 3                                                | 3                                                | 16                             | 530                            | 636                            | 2668                           | 232                            | 144                                         | 3623.4                        | 1542.8                                   |                                                    |

GRANULAR BACKFILL IS  
CONSIDERED INCIDENTAL  
TO ALL PIPE, STRUCTURE,  
AND PAY ITEMS SHOWN  
ON THIS SHEET AND NO  
DIRECT PAYMENT WILL  
BE MADE.

DRAWN BY: EBS      JOB DATE: 02/2012 - 12/2014  
APPROVED: JSD      JOB NUMBER: 75110022  
CAD DATE: 12/1/2014      4:23:17 PM  
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16020 SWINGLEY RIDGE ROAD, SUITE 205  
ST. LOUIS, MISSOURI 63017  
PHONE: (636) 518.0880  
CORPORATE LICENSE #2002008808



SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

QUANTITIES  
(Sheet 3 of 6)

SHEET NO.  
**QTY-03**  
4 of 99

| TCP SGNAGE BY STAGE        |                        |             |                         |        |    |    |    |    |    |    |    |                                                               |                                     |                                                                          |
|----------------------------|------------------------|-------------|-------------------------|--------|----|----|----|----|----|----|----|---------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------|
| SIGN NUMBER<br>(TCP PLANS) | SIGN NUMBER<br>(MUTCD) | SIZE        | SIGN AREA<br><br>(S.F.) | PHASES |    |    |    |    |    |    |    | TOTAL NUMBER<br>REQUIRED FOR<br>PROJECT<br>(ASSUME<br>RE-USE) | 616-10.05                           | REMARKS                                                                  |
|                            |                        |             |                         | 1A     | 1B | 2A | 2B | 2C | 3A | 3B | 3C |                                                               | CONSTRUCTION<br>SIGNS<br><br>(S.F.) |                                                                          |
| 1                          | W020-1                 | 36 X 36     | 9.00                    | 6      | 7  | 10 | 4  | 10 | 9  | 9  | 5  | 10                                                            | 90                                  | ROAD WORK AHEAD                                                          |
| 2                          | W5-1                   | 36 X 36     | 9.00                    | 1      | 1  | 1  |    | 1  | 1  | 1  |    | 1                                                             | 9                                   | ROAD NARROWS                                                             |
| 3                          | W8-9                   | 36 X 36     | 9.00                    | 3      | 2  | 2  | 1  | 2  | 2  | 2  |    | 3                                                             | 27                                  | SHOULDER DROP-OFF                                                        |
| 4                          | R1-1                   | 30 X 30     | 6.25                    | 4      | 5  | 6  | 2  | 8  | 6  | 5  | 2  | 8                                                             | 50                                  | STOP                                                                     |
| 5                          | R6-1L                  | 36 X 12     | 3.00                    | 2      | 2  | 4  | 1  | 4  | 1  | 1  |    | 4                                                             | 12                                  | ONE WAY-LEFT                                                             |
| 6                          | R6-1R                  | 36 X 12     | 3.00                    | 3      | 2  | 3  |    | 3  | 5  | 5  | 1  | 5                                                             | 15                                  | ONE WAY-RIGHT                                                            |
| 7                          | R11-2                  | 48 X 30     | 10.00                   | 1      | 2  | 2  |    | 2  | 1  | 1  |    | 2                                                             | 20                                  | ROAD CLOSED                                                              |
| 8                          | W20-3                  | 36 X 36     | 9.00                    | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1                                                             | 9                                   | ROAD CLOSED AHEAD                                                        |
| 9                          | G20-5aP                | 24 X 18     | 3.00                    | 3      | 3  | 2  | 2  | 2  | 4  | 4  | 1  | 4                                                             | 12                                  | WORK ZONE                                                                |
| 9                          | R2-1                   | 24 X 30     | 5.00                    | 3      | 3  | 2  | 2  | 2  | 4  | 4  | 1  | 4                                                             | 20                                  | SPEED LIMIT 25                                                           |
| 10                         | G20-2                  | 36 X 18     | 4.50                    | 2      | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 2                                                             | 9                                   | END ROAD WORK                                                            |
| 11                         | SP-1                   | 60 X 30     | 12.50                   | 2      | 2  |    |    |    |    |    |    | 2                                                             | 25                                  | SALINE ROAD CLOSED TO THRU SOUTHBOUND TRAFFIC<br>AT LAKEVIEW RIDGE DRIVE |
| 12                         | SP-2                   | 60 X 30     | 12.50                   |        |    | 2  | 2  | 2  |    |    |    | 2                                                             | 25                                  | SOUTHBOUND SALINE ROAD CLOSED AT STONE BLUFF<br>DRIVE FOLLOW DETOUR      |
| 13                         | SP-3                   | 60 X 30     | 12.50                   |        |    |    |    |    | 2  | 2  | 2  | 2                                                             | 25                                  | SOUTHBOUND SALINE ROAD CLOSED AT SILVER MAPLE<br>DRIVE FOLLOW DETOUR     |
| 14                         | M4-9                   | 30 X 24     | 5.00                    | 4      | 4  | 4  | 4  | 4  | 3  | 3  | 3  | 4                                                             | 20                                  | DETOUR STRAIGHT                                                          |
| 15                         | M4-9                   | 30 X 24     | 5.00                    | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1                                                             | 5                                   | DETOUR TURN RIGHT                                                        |
| 16                         | M4-9                   | 30 X 24     | 5.00                    | 1      | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 2                                                             | 10                                  | DETOUR RIGHT                                                             |
| 17                         | M4-9                   | 30 X 24     | 5.00                    | 1      | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 2                                                             | 10                                  | DETOUR TURN LEFT                                                         |
| 18                         | M4-9                   | 30 X 24     | 5.00                    | 3      | 3  | 4  | 4  | 4  | 3  | 3  | 3  | 4                                                             | 20                                  | DETOUR LEFT                                                              |
| 19                         | M-04-8a                | 30 X 24     | 5.00                    | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1                                                             | 5                                   | END DETOUR                                                               |
| 20                         | R11-3a                 | 60 X 30     | 12.50                   | 1      | 1  |    |    |    |    |    |    | 1                                                             | 13                                  | ROAD CLOSED 0.8 MILES AHEAD LOCAL TRAFFIC ONLY                           |
| 21                         | R11-3a                 | 60 X 30     | 12.50                   | 1      | 1  | 1  | 1  | 1  |    | 1  | 1  | 1                                                             | 13                                  | ROAD CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY                           |
| 22                         | R11-3a                 | 60 X 30     | 12.50                   |        |    | 1  | 1  | 1  | 1  |    | 1  | 1                                                             | 13                                  | ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY                           |
| 23                         | R1-2                   | 30 X 30X 30 | 3.90                    |        |    | 2  | 1  | 1  |    |    |    | 2                                                             | 8                                   | YIELD                                                                    |
| 23                         | R1-2aP                 | 36 X 30     | 7.50                    |        |    | 2  | 1  | 1  |    |    |    | 2                                                             | 15                                  | TO ONCOMING TRAFFIC                                                      |
| 24                         | R5-1                   | 30 X 30     | 6.25                    | 3      | 3  | 5  | 1  | 3  | 4  | 4  |    | 5                                                             | 31                                  | DO NOT ENTER                                                             |
| 24                         | R5-1a                  | 36 X 24     | 6.00                    | 3      | 3  | 5  | 1  | 3  | 4  | 4  |    | 5                                                             | 30                                  | WRONG WAY                                                                |
| 25                         | W1-4R                  | 48 X 48     | 16.00                   |        |    | 1  |    |    |    | 1  | 1  | 1                                                             | 16                                  | REVERSE CURVE RIGHT                                                      |
| 26                         | W1-4L                  | 48 X 48     | 16.00                   |        | 1  | 1  |    |    |    | 1  |    | 1                                                             | 16                                  | REVERSE CURVE LEFT                                                       |
| 27                         | R3-2                   | 24 X 24     | 4.00                    | 2      | 2  | 3  | 1  | 3  | 5  | 4  | 1  | 5                                                             | 20                                  | NO LEFT TURN                                                             |
| 28                         | R3-1                   | 24 X 24     | 4.00                    | 2      | 3  | 2  | 1  | 4  |    |    | 1  | 4                                                             | 16                                  | NO RIGHT TURN                                                            |
| 29                         | W4-4bP                 | 36 X 18     | 4.50                    |        | 1  | 1  |    | 1  | 1  | 1  |    | 1                                                             | 5                                   | ONCOMING TRAFFIC DOES NOT STOP                                           |
| TOTALS =                   |                        |             |                         |        |    |    |    |    |    |    |    |                                                               | 612                                 |                                                                          |

| TEMPORARY PAVEMENT/DRAINAGE/PAVEMENT MARKING |             |         |         |        |                                       |                                              |                                                                                   |                                                                                       |                                                                                         |                                                                  |
|----------------------------------------------|-------------|---------|---------|--------|---------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------|
| TCP PHASE                                    | SHEET       | STATION | STATION | ROUTE  | TEMPORARY<br>PAVEMENT<br>AREA<br>(SF) | 405-10.10**<br>TEMPORARY<br>PAVEMENT<br>(SY) | 620-60.00B<br>4 IN. WHITE ACRYLIC<br>WATERBORNE<br>PAVEMENT MARKING<br>PAINT (LF) | 620-60.01B<br>4 IN. YELLOW<br>ACRYLIC<br>WATERBORNE<br>PAVEMENT MARKING<br>PAINT (LF) | 620-61.24<br>ACRYLIC<br>WATERBORNE<br>PAVEMENT MARKING<br>PAINT, 24 IN. , WHITE<br>(LF) | 726-11.15**<br>TEMPORARY 15"<br>CORRUGATED<br>METAL PIPE<br>(LF) |
| 1A                                           | TCP-03      | 12+35   | 20+00   | SALINE |                                       |                                              | 775                                                                               | 775                                                                                   |                                                                                         |                                                                  |
| 1A                                           | TCP-03      | 14+38   | 17+19   | SALINE | 473                                   | 53                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 1A                                           | TCP-04      | 20+00   | 31+00   | SALINE |                                       |                                              | 1110                                                                              | 1110                                                                                  |                                                                                         |                                                                  |
| 1A                                           | TCP-04      | 21+61   | 21+91   | SALINE |                                       |                                              |                                                                                   |                                                                                       |                                                                                         | 30                                                               |
| 1A                                           | TCP-04      | 21+00   | 23+18   | SALINE | 221                                   | 25                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 1A                                           | TCP-04      | 22+38   | 22+59   | SALINE |                                       |                                              |                                                                                   |                                                                                       |                                                                                         | 21                                                               |
| 1A                                           | TCP-04 & 05 | 24+94   | 32+34   | SALINE | 3284                                  | 365                                          |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 1A                                           | TCP-04      | 25+67   | 25+88   | SALINE |                                       |                                              |                                                                                   |                                                                                       |                                                                                         | 21                                                               |
| 1A                                           | TCP-04      | 26+43   | 26+69   | SALINE |                                       |                                              |                                                                                   |                                                                                       |                                                                                         | 25                                                               |
| 1A                                           | TCP-04      | 26+73   | 26+98   | SALINE |                                       |                                              |                                                                                   |                                                                                       |                                                                                         | 25                                                               |
| 1A                                           | TCP-04      | 30+28   | 30+39   | SALINE |                                       |                                              |                                                                                   |                                                                                       |                                                                                         | 13                                                               |
| 1A                                           | TCP-05      | 31+00   | 32+93   | SALINE |                                       |                                              | 203                                                                               | 203                                                                                   |                                                                                         |                                                                  |
| 1B                                           | TCP-06      | 11+00   | 13+17   | SALINE |                                       |                                              | 511                                                                               |                                                                                       |                                                                                         |                                                                  |
| 1B                                           | TCP-08      | 31+50   | 32+23   | SALINE | 460                                   | 51                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 2A                                           | TCP-10      | 31+00   | 36+50   | SALINE |                                       |                                              | 600                                                                               | 550                                                                                   |                                                                                         |                                                                  |
| 2A                                           | TCP-10      | 31+50   | 36+36   | SALINE | 784                                   | 87                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 2A                                           | TCP-11      | 36+50   | 44+77   | SALINE |                                       |                                              | 840                                                                               | 840                                                                                   |                                                                                         |                                                                  |
| 2A                                           | TCP-11      | 41+31   | 43+85   | SALINE | 758                                   | 84                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 2B                                           | TCP-12      | 40+76   | 40+86   | SALINE |                                       |                                              |                                                                                   |                                                                                       | 12                                                                                      |                                                                  |
| 2B                                           | TCP-12      | 40+74   | 40+88   | SALINE | 231                                   | 26                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 2C                                           | TCP-13      | 30+95   | 36+50   | SALINE |                                       |                                              | 565                                                                               | 565                                                                                   |                                                                                         |                                                                  |
| 2C                                           | TCP-14      | 36+50   | 43+85   | SALINE |                                       |                                              | 745                                                                               | 745                                                                                   |                                                                                         |                                                                  |
| 2C                                           | TCP-14      | 42+99   | 43+65   | SALINE | 321                                   | 36                                           |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| 3A                                           | TCP-16      | 42+99   | 52+50   | SALINE |                                       |                                              | 961                                                                               | 961                                                                                   |                                                                                         |                                                                  |
| 3A                                           | TCP-16      | 52+50   | 59+69   | SALINE |                                       |                                              | 729                                                                               | 729                                                                                   |                                                                                         |                                                                  |
| 3A                                           | TCP-16 & 17 | 43+00   | 58+65   | SALINE | 4679                                  | 520                                          |                                                                                   |                                                                                       |                                                                                         |                                                                  |
| TOTAL                                        |             |         |         |        |                                       | 1246                                         | 7039                                                                              | 6478                                                                                  | 12                                                                                      | 135                                                              |

| HANDRAIL |         |         |        |      |                                                 |               |
|----------|---------|---------|--------|------|-------------------------------------------------|---------------|
| SHEET    | STATION | STATION | STREET | SIDE | 712-35.00<br>RAILING FOR<br>STEPS<br><br>(L.F.) | REMARKS       |
| WAL-02   | 15+59   | 15+59   | SALINE | RT   | 8                                               | MBW5          |
| WAL-02   | 15+63   | 15+64   | SALINE | RT   | 8                                               | MBW6          |
| DET-01   | 56+93   | 56+93   | SALINE | LT   | 14                                              | OSTERHAGEN ** |
| TOTAL =  |         |         |        |      | 30                                              |               |

\*\* QUANTITIES CALCULATED AND PROVIDED BY JEFFERSON COUNTY

| TRAFFIC CONTROL ITEMS |             |                                                    |                                                                          |                                                                                 |                                                                                   |                         |
|-----------------------|-------------|----------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------|
| PHASE                 | SHEET       | 616-10.28<br>CHANNELIZER<br>(SEE NOTE)<br><br>(EA) | 616-10.31<br>TYPE III<br>MOVEABLE<br>BARRICADE<br>WITH LIGHT<br><br>(EA) | 616-10.98<br>CHANGEABLE<br>MESSAGE SIGN,<br>CONTRACTOR<br>FURNISHED<br><br>(EA) | 617-36.00D<br>TEMPORARY<br>TRAFFIC<br>BARRIER,<br>CONTRACTOR<br>FURNISHED<br>(LF) | REMARKS                 |
| PHASE 1A              | TCP03-TCP05 | 95                                                 | 4                                                                        | 3                                                                               | 392                                                                               | PHASE SPECIFIC          |
| PHASE 1B              | TCP06-TCP08 | 122                                                | 4                                                                        | 3                                                                               | 0                                                                                 | PHASE SPECIFIC          |
| PHASE 2A              | TCP10-TCP11 | 89                                                 | 13                                                                       | 4                                                                               | 126                                                                               | PHASE SPECIFIC          |
| PHASE 2B              | TCP12       | 20                                                 | 9                                                                        | 4                                                                               | 0                                                                                 | PHASE SPECIFIC          |
| PHASE 2C              | TCP13-TCP14 | 123                                                | 8                                                                        | 4                                                                               | 0                                                                                 | PHASE SPECIFIC          |
| PHASE 3A              | TCP16-TCP17 | 187                                                | 6                                                                        | 4                                                                               | 0                                                                                 | PHASE SPECIFIC          |
| PHASE 3B              | TCP18-TCP19 | 149                                                | 6                                                                        | 4                                                                               | 0                                                                                 | PHASE SPECIFIC          |
| PHASE 3C              | TCP20       | 21                                                 | 6                                                                        | 4                                                                               | 0                                                                                 | PHASE SPECIFIC          |
| DISCRETIONARY         |             | 20                                                 |                                                                          |                                                                                 |                                                                                   |                         |
| MAX OVERALL           |             | 207                                                | 13                                                                       | 4                                                                               | 392                                                                               | GENERAL TRAFFIC CONTROL |

NOTE: CHANNELIZER AMOUNT IS ESTIMATED AND TO BE USED AT THE DISCRETION OF THE ENGINEER  
ON SITE FOR SPECIFIC TRAFFIC CONTROL SITUATIONS AS NEEDED

| RETAINING WALL SYSTEMS |         |         |        |      |                                                                                 |                                                                                                 |                                              |          |
|------------------------|---------|---------|--------|------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------|----------|
| SHEET                  | STATION | STATION | STREET | SIDE | 720-10.00<br>MECHANICALLY<br>STABILIZED<br>EARTH WALL<br>SYSTEMS<br><br>(S.F.)* | 720-99.04<br>MECHANICALLY<br>STABILIZED<br>EARTH WALL<br>SYSTEMS -<br>LARGE BLOCK<br><br>(S.F.) | 608.70.00<br>CONCRETE<br>STEPS<br><br>(S.F.) | REMARKS  |
|                        |         |         |        |      |                                                                                 |                                                                                                 |                                              |          |
| WAL-01                 | 52+00   | 53+99   | SALINE | RT   | 601                                                                             |                                                                                                 |                                              | MBW1     |
| WAL-01                 | 54+32   | 54+54   | SALINE | RT   | 136                                                                             |                                                                                                 |                                              | MBW2     |
| WAL-02                 | 15+05   | 15+57   | SALINE | RT   | 220                                                                             |                                                                                                 | 150.0                                        | MBW3     |
| WAL-02                 | 15+64   | 16+31   | SALINE | RT   | 245                                                                             |                                                                                                 |                                              | MBW4     |
| WAL-02                 | 15+59   | 15+58   | SALINE | RT   | 76                                                                              |                                                                                                 |                                              | MBW5     |
| WAL-02                 | 15+63   | 15+64   | SALINE | RT   | 76                                                                              |                                                                                                 |                                              | MBW6     |
| WAL-03                 | 53+33   | 53+29   | SALINE | LT   | 129                                                                             |                                                                                                 |                                              | MBW7     |
| DET-01                 | 56+93   | 56+93   | SALINE | LT   |                                                                                 | 2112                                                                                            | 40                                           | MLB8 **  |
| DET-01                 | 56+93   | 56+93   | SALINE | LT   |                                                                                 | 122                                                                                             |                                              | MLB9 **  |
| DET-01                 | 56+93   | 56+93   | SALINE | LT   |                                                                                 | 48                                                                                              |                                              | MLB10 ** |
| TOTAL =                |         |         |        |      | 1483                                                                            | 2282                                                                                            | 190.0                                        |          |

\*WALL QUANTITY IS MEASURED FROM FOUNDATION TO TOP OF WALL

\*\* QUANTITIES CALCULATED AND PROVIDED BY JEFFERSON COUNTY

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APPROVED: JSD JOB NUMBER: 75110022  
CAD DATE: 12/1/2014 4:23:27 PM  
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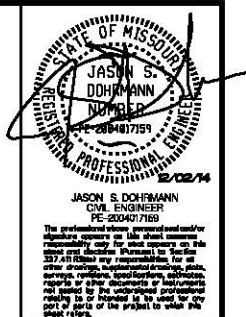
**HRGreen**  
16020 SWINGLEY RIDGE ROAD, SUITE 205  
ST. LOUIS, MISSOURI 63017  
PHONE: (636) 518.0990  
CORPORATE LICENSE #2002006608



**SALINE ROAD IMPROVEMENTS-PHASE 1**  
**COUNTY OF JEFFERSON, MISSOURI**  
**5403(642)/TIP#5589-12**

**QUANTITIES**  
(Sheet 4 of 6)

SHEET NO.  
**QTY-04**  
5 of 99







## PERMANENT SIGNS

| SHEET    | STATION | OFFSET   | MUTCD      | SIZE           | 903-50.10**<br>PERMANENT<br>SIGNING<br>(S.F.) | REMARKS                                  |
|----------|---------|----------|------------|----------------|-----------------------------------------------|------------------------------------------|
| STR-01   | 14+80   | RT       | R2-1       | 24X30          | 5.00                                          | 30 MPH SPEED LIMIT SIGN                  |
| STR-01   | 16+80   | LT       | W3-1a      | 30X30          | 6.25                                          | STOP AHEAD                               |
| STR-02   | 26+20   | 18' LT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-02   | 26+20   | 18' LT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/APPALOOSA                         |
| STR-02   | 28+20   | 18' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-02   | 28+20   | 18' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/VIEW                              |
| STR-02   | 28+90   | RT       | W1-1L      | 30X30          | 6.25                                          | LEFT TURN                                |
| STR-02   | 28+90   | RT       | W13-1      | 18X18          | 2.25                                          | 15 MPH SPEED PLAQUE                      |
| STR-02   | 30+50   | RT       | W1-1aL     | 36X36          | 9.00                                          | COMBINATION LEFT TURN/ADVISORY SPEED 15  |
| STR-02   | 30+80   | RT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 31+20   | RT       | S3-1       | 36X36          | 9.00                                          | SCHOOL BUS STOP AHEAD                    |
| STR-03   | 31+20   | RT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 31+60   | RT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 32+00   | RT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 32+50   | 24' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-03   | 32+50   | 24' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/LAKEVIEW RIDGE                    |
| STR-03   | 33+00   | RT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 33+40   | RT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 33+70   | LT       | W1-1aR     | 36X36          | 9.00                                          | COMBINATION RIGHTTURN/ADVISORY SPEED 15  |
| STR-03   | 35+50   | LT       | W1-1R      | 30X30          | 6.25                                          | RIGHT TURN                               |
| STR-03   | 35+50   | LT       | W13-1      | 18X18          | 2.25                                          | 15 MPH SPEED PLAQUE                      |
| STR-03   | 36+20   | 23' LT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-03   | 36+20   | 23' LT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/HORIZON                           |
| STR-03   | 36+60   | 34.5' LT | W14-2      | 30X30          | 6.25                                          | NO OUTLET                                |
| STR-03   | 36+60   | 34.5' LT | R12-1      | 24X30          | 5.00                                          | WEIGHT LIMIT                             |
| STR-03   | 37+20   | RT       | S3-1       | 36X36          | 9.00                                          | SCHOOL BUS STOP AHEAD                    |
| STR-03   | 37+80   | RT       | W1-1R      | 30X30          | 6.25                                          | RIGHT TURN                               |
| STR-03   | 37+80   | RT       | W13-1      | 18X18          | 2.25                                          | 20 MPH SPEED PLAQUE                      |
| STR-03   | 39+20   | RT       | W1-1aR     | 36X36          | 9.00                                          | COMBINATION RIGHT TURN/ADVISORY SPEED 20 |
| STR-03   | 39+20   | LT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 39+60   | LT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-03   | 40+00   | LT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-04   | 40+40   | RT       | W14-2      | 30X30          | 6.25                                          | NO OUTLET                                |
| STR-04   | 40+40   | RT       | R12-1      | 24X30          | 5.00                                          | WEIGHT LIMIT                             |
| STR-04   | 40+40   | LT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-04   | 40+70   | 26' LT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-04   | 40+70   | 26' LT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/BRINY                             |
| STR-04   | 41+00   | 28' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-04   | 41+00   | 28' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/FIELDCREST                        |
| STR-04   | 41+20   | LT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-04   | 41+60   | LT       | W1-1aL     | 36X36          | 9.00                                          | COMBINATION TURN/ADVISORY SPEED 20       |
| STR-04   | 41+60   | LT       | W1-8       | 18X24 (TWO EA) | 6.00                                          | CHEVRON ALIGNMENT                        |
| STR-04   | 42+00   | 22' LT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-04   | 42+00   | 22' LT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/PINE RIDGE                        |
| STR-04   | 42+60   | 21' LT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-04   | 42+60   | 21' LT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/OAK                               |
| STR-04   | 43+40   | LT       | W1-1L      | 30X30          | 6.25                                          | LEFT TURN                                |
| STR-04   | 43+40   | LT       | W13-1      | 18X18          | 2.25                                          | 20 MPH SPEED PLAQUE                      |
| STR-04   | 45+45   | 20' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-04   | 45+45   | 20' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/PLANET                            |
| STR-04   | 48+41   | 21' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-04   | 48+41   | 21' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/STONE BLUFF                       |
| STR-04   | 49+90   | RT       | W1-2L      | 30X30          | 6.25                                          | CURVE LEFT                               |
| STR-04   | 49+90   | RT       | W13-1      | 18X18          | 2.25                                          | 25 MPH SPEED PLAQUE                      |
| STR-05   | 56+00   | 21' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-05   | 56+00   | 21' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/KOHNEN                            |
| STR-05   | 56+50   | LT       | W1-2R      | 30X30          | 6.25                                          | CURVE RIGHT                              |
| STR-05   | 56+50   | LT       | W13-1      | 18X18          | 2.25                                          | 25 MPH SPEED PLAQUE                      |
| STR-05   | 57+60   | LT       | R2-1       | 24X30          | 5.00                                          | 30 MPH SPEED LIMIT SIGN                  |
| STR-05   | 58+20   | 19' LT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-05   | 58+20   | 19' LT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/NOLAN                             |
| STR-05   | 59+30   | 22' RT   | R1-1       | 30X30          | 6.25                                          | STOP                                     |
| STR-05   | 59+30   | 22' RT   | SIGN BLADE | 24X6 (TWO EA)  | 2.00                                          | SALINE/SILVER MAPLE                      |
| TOTALS = |         |          |            |                | 323                                           |                                          |

## PAVEMENT MARKING

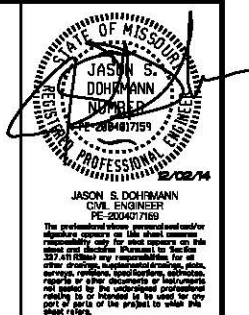
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|--------|---------|---------|----------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| STR-01 | 13+16   | 14+50   | SALINE   | 266                                                                                      | 266                                                                                     |
| STR-01 | 14+50   | 20+00   | SALINE   | 1100                                                                                     | 1021                                                                                    |
| STR-02 | 20+00   | 25+50   | SALINE   | 1100                                                                                     | 1100                                                                                    |
| STR-02 | 25+50   | 31+00   | SALINE   | 1100                                                                                     | 965                                                                                     |
| STR-03 | 31+00   | 36+50   | SALINE   | 1100                                                                                     | 1005                                                                                    |
| STR-03 | 36+50   | 40+00   | SALINE   | 700                                                                                      | 670                                                                                     |
| STR-04 | 40+00   | 45+50   | SALINE   | 1100                                                                                     | 822                                                                                     |
| STR-04 | 45+50   | 51+00   | SALINE   | 1100                                                                                     | 1100                                                                                    |
| STR-05 | 51+00   | 56+00   | SALINE   | 1000                                                                                     | 962                                                                                     |
| STR-05 | 56+00   | 59+36   | SALINE   | 672                                                                                      | 581                                                                                     |
| TOTAL= |         |         |          | 9238                                                                                     | 8492                                                                                    |

## ADJUSTMENTS

| SHEET   | STATION | OFFSET | LOCATION | 603-10.30*<br>ADJUST WATER<br>SERVICE VALVE<br>AND BOX TO<br>GRADE<br>(EACH) | 603-10.31**<br>ADJUST WATER<br>METER<br>(EACH) | 603-10.99*<br>ADJUST GAS<br>SERVICE VALVE<br>TO GRADE<br>(EACH) | 604-20.00**<br>REMOVE AND<br>REPLACE<br>HYDRANT<br>(EACH) | 604-20.11**<br>MISCELLANEOUS<br>(PULLBOXES,<br>OTHER)<br>(EACH) | REMARKS  |
|---------|---------|--------|----------|------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------|----------|
| PNP-01  | 13+61   | 26.8   | RT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-01  | 13+63   | 26.3   | RT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-02  | 15+25   | 20.9   | LT       |                                                                              |                                                | 1                                                               |                                                           |                                                                 |          |
| PNP-02  | 19+54   | 11.9   | LT       |                                                                              |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-02  | 19+61   | 26.7   | LT       |                                                                              |                                                | 1                                                               |                                                           |                                                                 |          |
| PNP-03  | 24+86   | 2.0    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-03  | 25+44   | 17.3   | RT       |                                                                              |                                                |                                                                 |                                                           | 1                                                               | SEPTIC   |
| PNP-04  | 27+14   | 11.3   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-04  | 27+93   | 37.9   | RT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-04  | 29+07   | 17.4   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-05  | 32+14   | 7.0    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-05  | 32+22   | 8.4    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-05  | 34+19   | 20.2   | LT       |                                                                              |                                                |                                                                 |                                                           | 1                                                               | PULLBOX  |
| PNP-06  | 36+31   | 39.8   | LT       |                                                                              |                                                |                                                                 | 1                                                         |                                                                 |          |
| PNP-06  | 36+33   | 39.8   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-06  | 36+40   | 10.7   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-06  | 36+47   | 77.3   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-06  | 40+67   | 39.0   | RT       |                                                                              |                                                |                                                                 |                                                           | 1                                                               | SANITARY |
| PNP-07  | 41+98   | 15.0   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-07  | 41+99   | 10.6   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-07  | 42+59   | 23.1   | LT       |                                                                              |                                                |                                                                 |                                                           | 1                                                               | PULLBOX  |
| PNP-07  | 42+90   | 14.8   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-07  | 43+04   | 9.7    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-07  | 43+97   | 22.1   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-07  | 44+38   | 23.7   | RT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-07  | 46+56   | 22.7   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-08  | 46+14   | 19.2   | RT       |                                                                              |                                                | 1                                                               |                                                           |                                                                 |          |
| PNP-08  | 48+49   | 6.9    | RT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-08  | 48+71   | 13.7   | RT       |                                                                              |                                                | 1                                                               |                                                           |                                                                 |          |
| PNP-08  | 49+27   | 24.0   | RT       |                                                                              |                                                |                                                                 |                                                           | 1                                                               | PULLBOX  |
| PNP-08  | 49+65   | 18.8   | RT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-08  | 50+22   | 22.7   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-08  | 51+24   | 17.4   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 53+53   | 11.5   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 54+67   | 12.3   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 55+20   | 10.2   | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 55+20   | 14.3   | LT       |                                                                              |                                                |                                                                 | 1                                                         |                                                                 |          |
| PNP-09  | 55+73   | 6.6    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 55+76   | 9.7    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 56+11   | 7.0    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| PNP-09  | 56+53   | 19.9   | LT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-10  | 58+20   | 21.1   | RT       |                                                                              | 1                                              |                                                                 |                                                           |                                                                 |          |
| PNP-10  | 59+25   | 6.4    | LT       | 1                                                                            |                                                |                                                                 |                                                           |                                                                 |          |
| TOTAL = |         |        |          | 18                                                                           | 13                                             | 4                                                               | 2                                                         | 5                                                               |          |

## CONCRETE CURBS (ALL TYPES)

| SHEET    | STATION | STATION | STREET | SIDE | 609-10.10<br>CONCRETE<br>CURB TYPE S<br>(LF) | 609-10.52<br>CURB AND<br>GUTTER<br>TYPE B<br>(LF) | 609-20.12<br>INTEGRAL CURB<br>TYPE B<br>(LF) | 609-20.13<br>INTEGRAL CURB<br>TYPE M<br>(MODIFIED)<br>(LF) | 609-20.32<br>CONCRETE<br>CURB LOW<br>PROFILE TYPE F<br>(LF) | 609-30.15<br>ASPHALT CURB<br>(4 INCH)<br>(LF) |
|----------|---------|---------|--------|------|----------------------------------------------|---------------------------------------------------|----------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------|
| PNP-01   | BOP     | 14+50   | SALINE | LT   |                                              | 133                                               |                                              |                                                            |                                                             |                                               |
| PNP-01   | BOP     | 14+50   | SALINE | RT   |                                              | 84                                                |                                              |                                                            |                                                             |                                               |
| PNP-02   | 14+50   | 20+00   | SALINE | LT   |                                              | 565                                               |                                              |                                                            |                                                             |                                               |
| PNP-02   | 14+50   | 20+00   | SALINE | RT   |                                              | 527                                               |                                              |                                                            |                                                             |                                               |
| PNP-03   | 20+00   | 25+50   | SALINE | LT   |                                              | 533                                               |                                              |                                                            |                                                             |                                               |
| PNP-03   | 20+00   | 25+50   | SALINE | RT   |                                              | 440                                               |                                              |                                                            |                                                             |                                               |
| PNP-04   | 25+50   | 31+00   | SALINE | LT   |                                              | 545                                               |                                              |                                                            |                                                             |                                               |
| PNP-04   | 25+50   | 31+00   | SALINE | RT   |                                              | 490                                               |                                              |                                                            |                                                             |                                               |
| PNP-05   | 31+00   | 36+00   | SALINE | LT   |                                              | 482                                               |                                              |                                                            |                                                             |                                               |
| PNP-05   | 31+00   | 36+00   | SALINE | RT   |                                              | 743                                               |                                              |                                                            |                                                             |                                               |
| PNP-06   | 36+00   | 41+50   | SALINE | LT   |                                              | 602                                               |                                              |                                                            |                                                             |                                               |
| PNP-06   | 36+00   | 41+50   | SALINE | RT   |                                              | 533                                               |                                              |                                                            |                                                             |                                               |
| PNP-06   | 36+30   | 36+49   | SALINE | LT   |                                              |                                                   |                                              | 20                                                         |                                                             |                                               |
| PNP-06   | 36+52   | 36+79   | SALINE | LT   |                                              |                                                   |                                              | 27                                                         |                                                             |                                               |
| PNP-06   | 40+19   | 40+46   | SALINE | LT   |                                              |                                                   |                                              |                                                            |                                                             | 75                                            |
| PNP-07   | 41+50   | 47+00   | SALINE | LT   |                                              | 475                                               |                                              |                                                            |                                                             |                                               |
| PNP-07   | 41+50   | 47+00   | SALINE | RT   |                                              | 464                                               |                                              |                                                            |                                                             |                                               |
| PNP-08   | 47+00   | 52+50   | SALINE | LT   |                                              | 405                                               |                                              |                                                            |                                                             |                                               |
| PNP-08   | 47+00   | 52+50   | SALINE | RT   |                                              | 393                                               |                                              |                                                            |                                                             |                                               |
| PNP-08   | 51+07   | 51+42   | SALINE | LT   |                                              |                                                   |                                              |                                                            | 47                                                          |                                               |
| PNP-08   | 51+18   | 51+43   | SALINE | LT   |                                              |                                                   |                                              |                                                            | 29                                                          |                                               |
| PNP-09   | 52+50   | 58+00   | SALINE | LT   |                                              | 426                                               |                                              |                                                            |                                                             |                                               |
| PNP-09   | 52+50   | 58+00   | SALINE | RT   |                                              | 505                                               |                                              |                                                            |                                                             |                                               |
| PNP-09   | 53+46   | 53+56   | SALINE | LT   | 22                                           |                                                   |                                              |                                                            |                                                             |                                               |
| PNP-09   | 53+67   | 53+72   | SALINE | LT   | 38                                           |                                                   |                                              |                                                            |                                                             |                                               |
| PNP-10   | 58+00   | EOP     | SALINE | LT   |                                              | 154                                               |                                              |                                                            |                                                             |                                               |
| PNP-10   | 58+00   | EOP     | SALINE | RT   |                                              | 122                                               |                                              |                                                            |                                                             |                                               |
| PNP-10   | 58+00   | EOP     | SALINE | RT   |                                              | 90                                                | 32                                           |                                                            |                                                             |                                               |
| TOTALS = |         |         |        |      | 61                                           | 8710                                              | 32                                           | 47                                                         | 76                                                          | 75                                            |



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APPROVED: JSD JOB NUMBER: 75110022  
CAD DATE: 12/1/2014 4:23:47 PM  
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## NO. DATE BY REVISION DESCRIPTION

| NO. | DATE | BY | REVISION DESCRIPTION |
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16020 SWINGLEY RIDGE ROAD, SUITE 205  
ST. LOUIS, MISSOURI 63017  
PHONE: (636) 518-0890  
CORPORATE LICENSE #2002008808

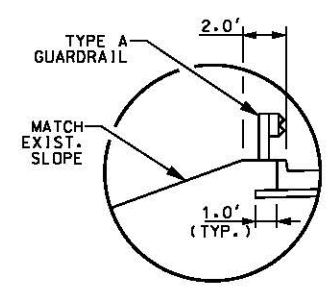
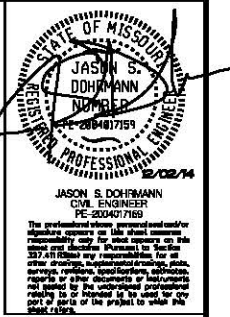


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP\*5589-12

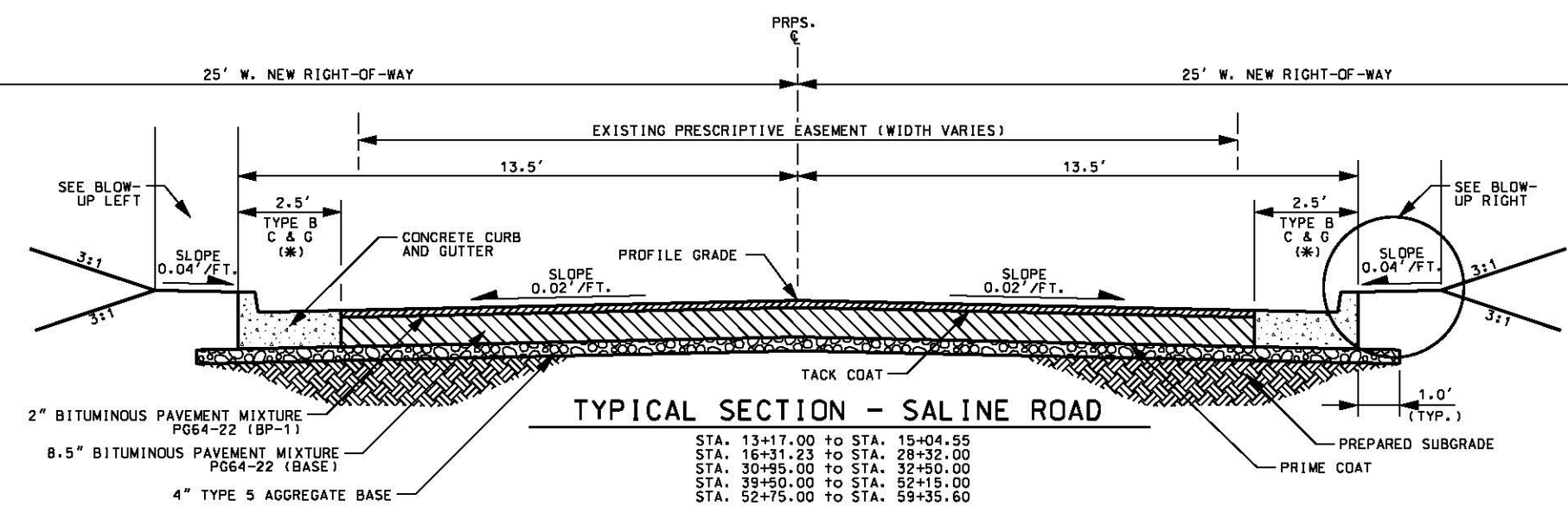
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(Sheet 6 of 6)

SHEET NO.  
QTY-06  
7 of 99

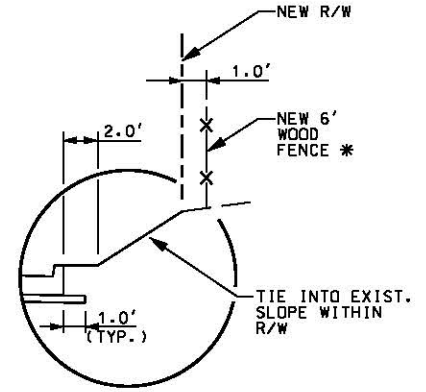
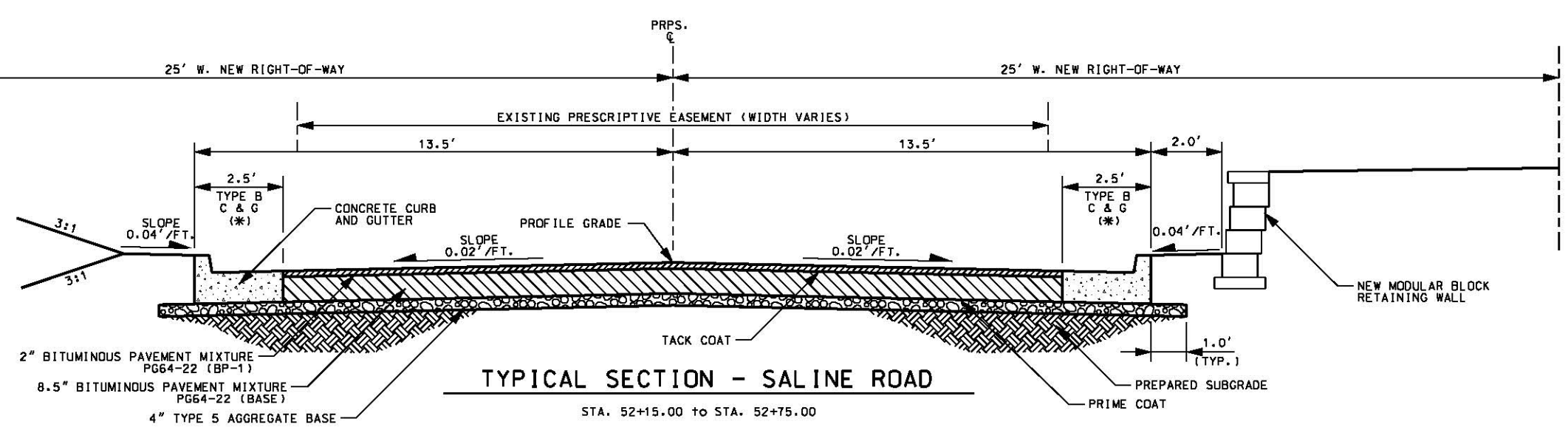
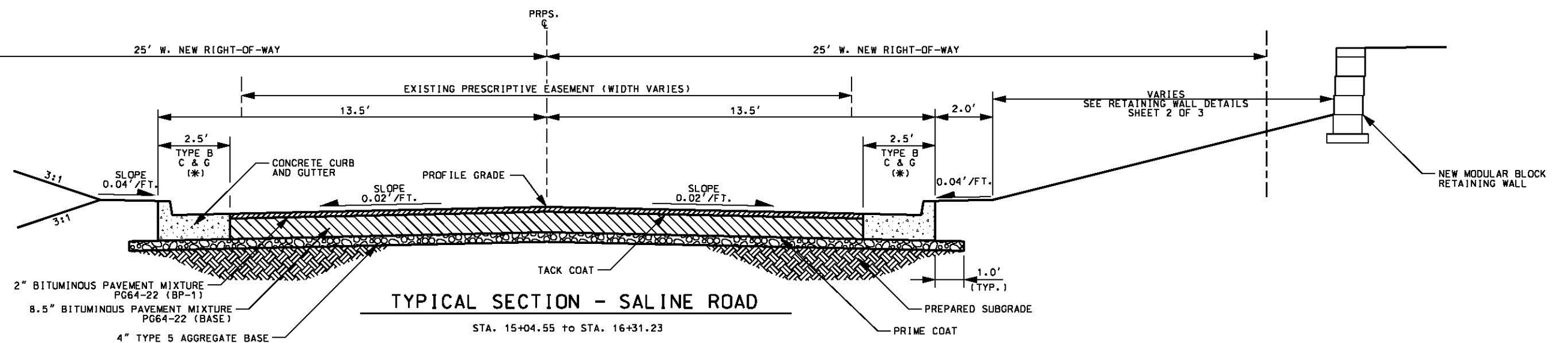




**GUARDRAIL SECTION**  
STA. 30+30.00 to STA. 36+25.00



(\*) CURB & GUTTER TAPERS TO 3-FT WIDE AT INLET LOCATIONS. SEE MODOT STANDARD DETAIL SHEET 731.10R, TYPE D, SHEET 4 OF 8



**TRM SECTION**  
STA. 32+50.00 to STA. 39+50.00 (RT)  
\* STA. 33+89.00 to STA. 38+88.00 (RT)  
\* STA. 38+50.00 to STA. 39+50.00 (LT)  
\* STA. 42+95.00 to STA. 43+90.00 (LT)  
NOTE: TURF REINFORCEMENT MAT (TRM) USED IN CONJUNCTION WITH FENCE WHERE NEW SLOPES EXCEED 3:1

DRAWN BY: EBS  
APPROVED: JSD  
CAD DATE: 12/3/2014  
CAD FILE: \\vrgedfs004\Date\7510022\CA\Date\typ\_01.dgn

JOB DATE: 02/2012 - 12/2014  
JOB NUMBER: 7510022  
7:08:16 AM

| NO. | DATE | BY | REVISION DESCRIPTION |
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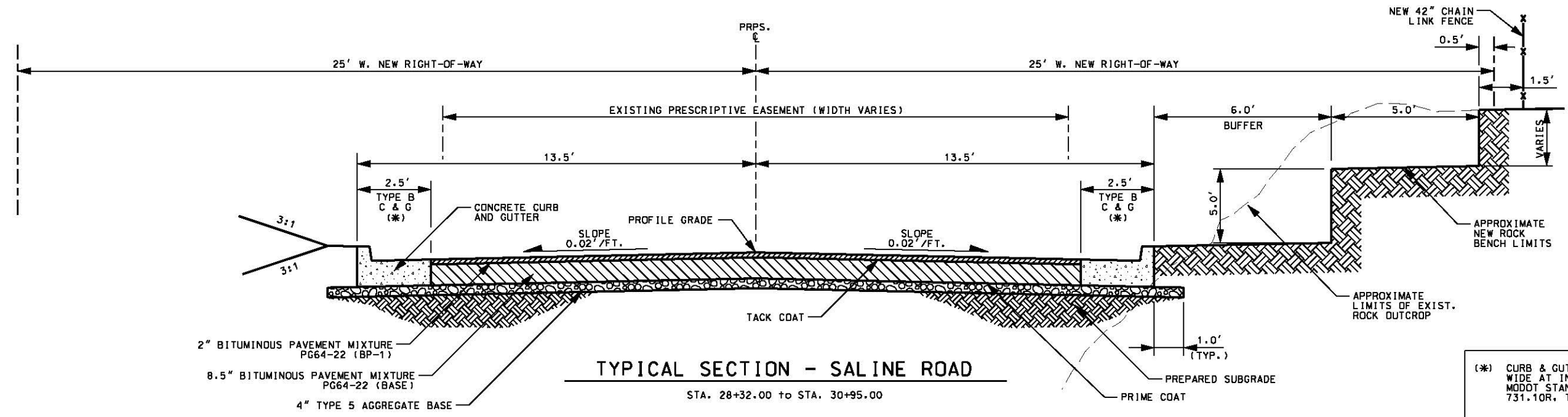
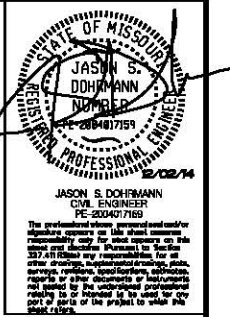
**HRGreen**  
16020 SWINGLEY RIDGE ROAD, SUITE 205  
ST. LOUIS, MISSOURI 63017  
PHONE: (636) 518-0990  
CORPORATE LICENSE #200200808



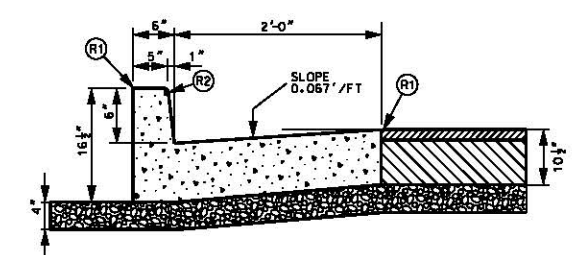
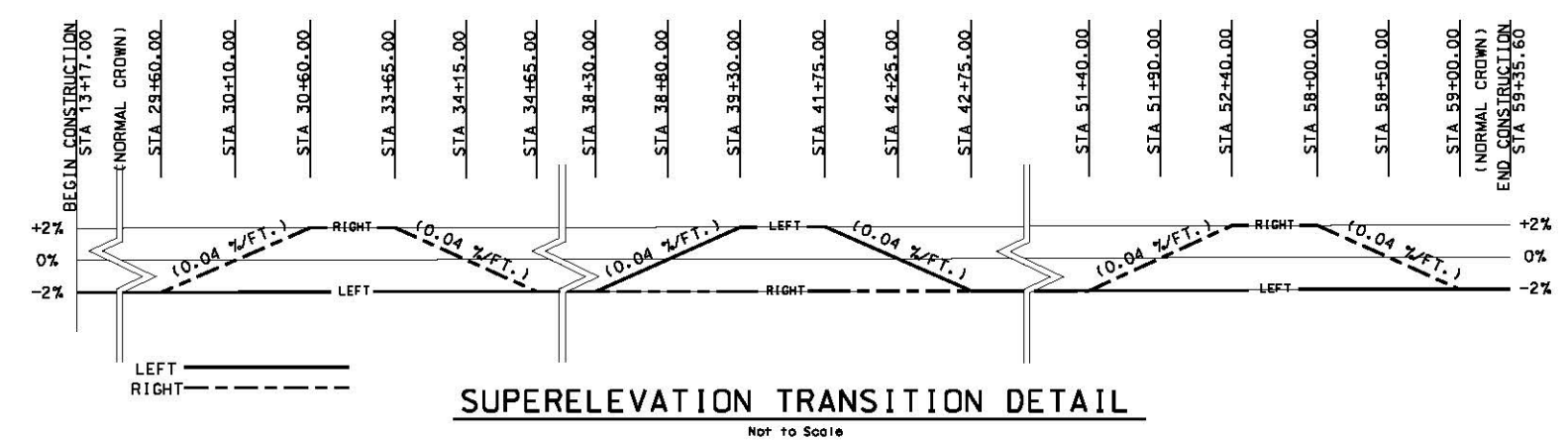
**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

**TYPICAL SECTIONS AND DETAILS**  
(Sheet 1 of 3)

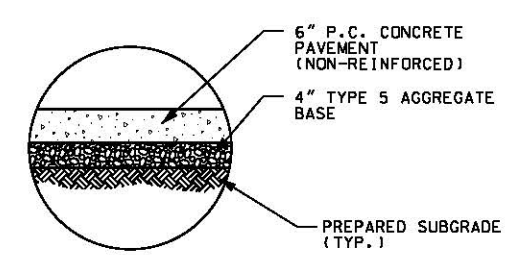
SHEET NO.  
**TYP-01**  
8 of 99



(\*) CURB & GUTTER TAPERS TO 3-FT WIDE AT INLET LOCATIONS. SEE MODOT STANDARD DETAIL SHEET 731.10R, TYPE D, SHEET 4 OF 8

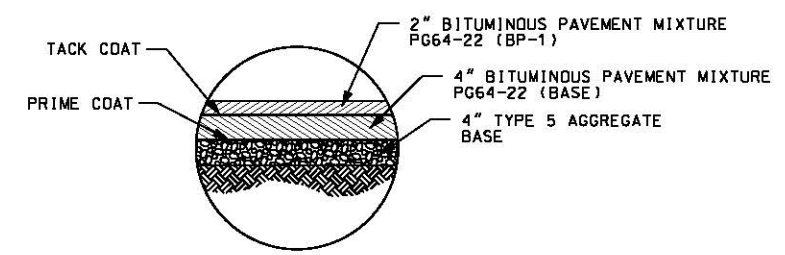


LEGEND  
(R1) ROUND TO 1/4" RADIUS. (EXCEPT FOR SAWED JOINTS)  
(R2) ROUND TO 3/4" RADIUS.



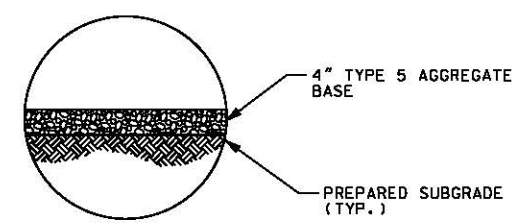
CONCRETE DRIVEWAY EXTENSION

- NOTES:
- CONTRACTOR SHALL REMOVE AND REPLACE EXISTING CONCRETE DRIVEWAYS TO THE NEAREST JOINT, AS SHOWN ON PLANS. IF JOINT IS DAMAGED DURING EXCAVATION OF THE EXISTING DRIVEWAY, A FULL DEPTH SAWCUT WILL BE REQUIRED AT THE NEAREST, SUITABLE LOCATION BEHIND THE DAMAGED JOINT, AT NO ADDITIONAL COST TO THE COUNTY.
  - EXTENSIONS SHOWN IN THE DETAILS ABOVE CORRESPOND TO THE PAVEMENT BEHIND THE APPROACH PAVEMENT LIMITS, AS SHOWN IN THE DRIVEWAY PROFILE DETAILS ON SHEET TYP-03.

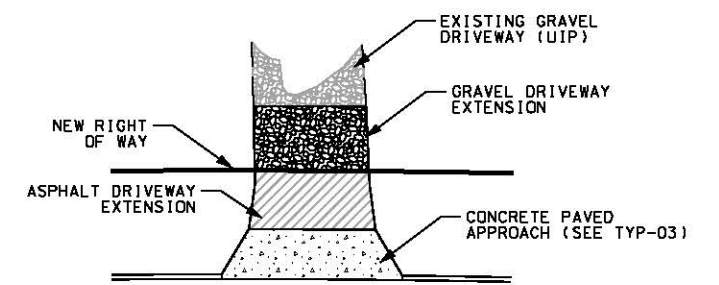


ASPHALT DRIVEWAY EXTENSION

- NOTE: CONTRACTOR SHALL REMOVE AND REPLACE EXISTING ASPHALT DRIVEWAYS AS SHOWN ON PLANS. IF ANY PART OF THE EXISTING DRIVEWAY NOT TO BE REMOVED IS DAMAGED DURING EXCAVATION, A FULL DEPTH SAWCUT WILL BE REQUIRED AT THE NEAREST, SUITABLE LOCATION BEHIND THE DAMAGED SECTION, AT NO ADDITIONAL COST TO THE COUNTY.



CROSS SECTION



PLAN

GRAVEL DRIVEWAY EXTENSION

- NOTES:
- CONTRACTOR SHALL PLACE GRAVEL DRIVEWAYS AS SHOWN ON PLANS. IF ANY PART OF THE EXISTING GRAVEL DRIVE, OUTSIDE OF THE CONSTRUCTION LIMITS, IS DAMAGED DURING CONSTRUCTION, THE DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE COUNTY.
  - ABOVE DETAIL TO BE USED FOR ALL GRAVEL DRIVEWAYS WITHIN THE PROJECT LIMITS, UNLESS OTHERWISE NOTED ON THE PLANS.

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APPROVED: JSD JOB NUMBER: 75110022  
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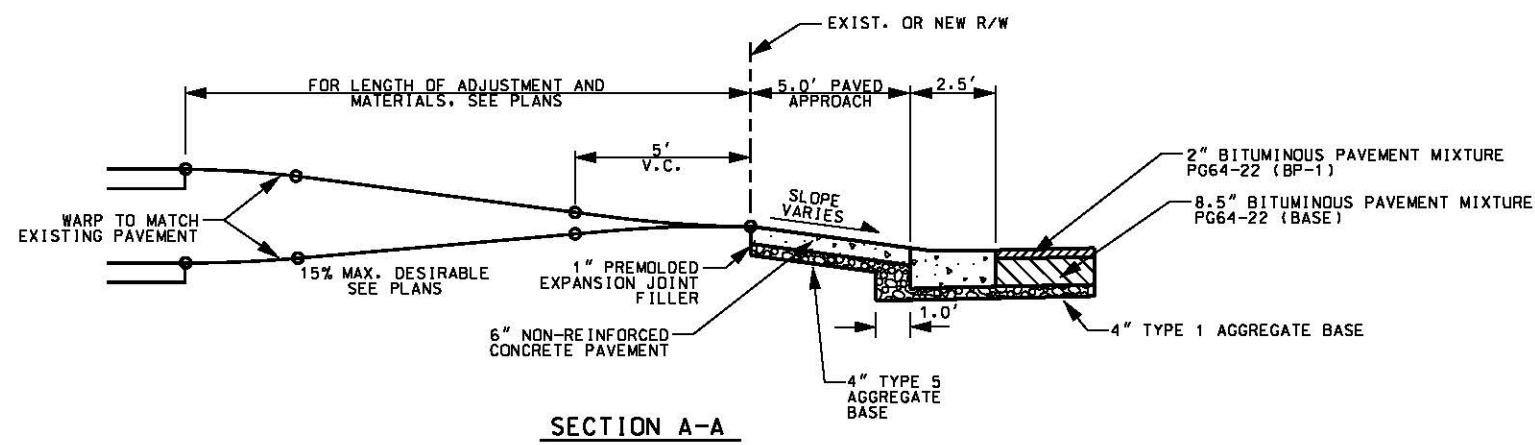
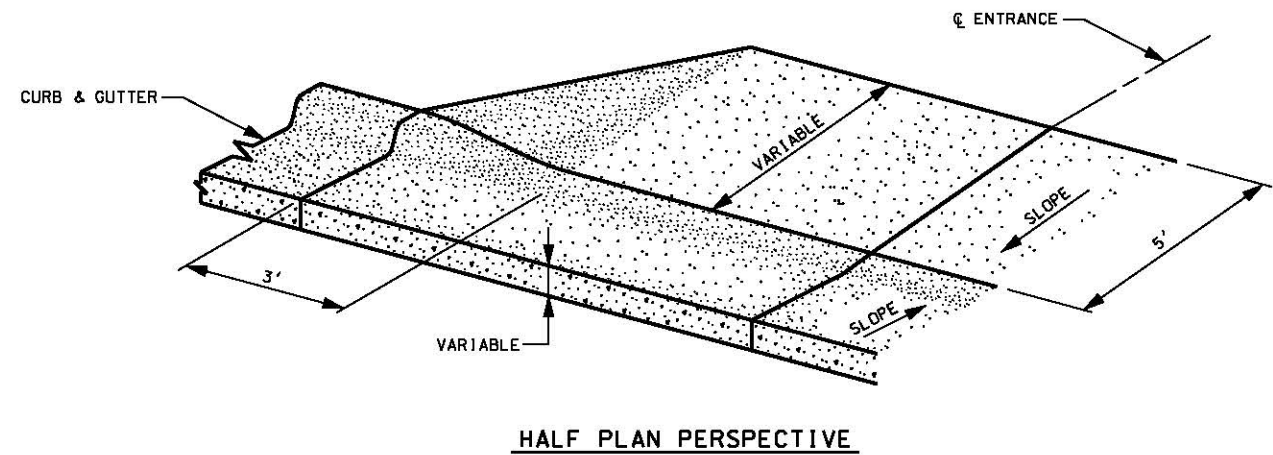
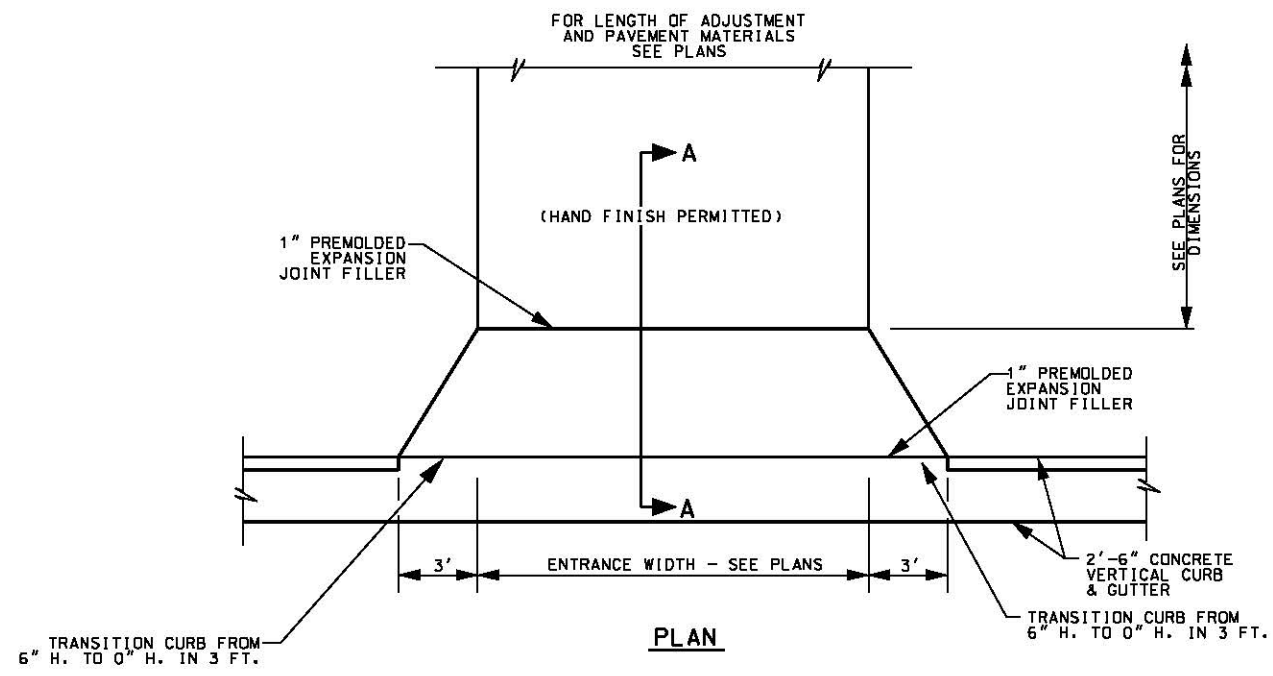
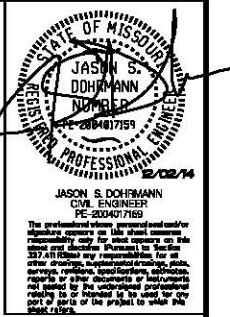
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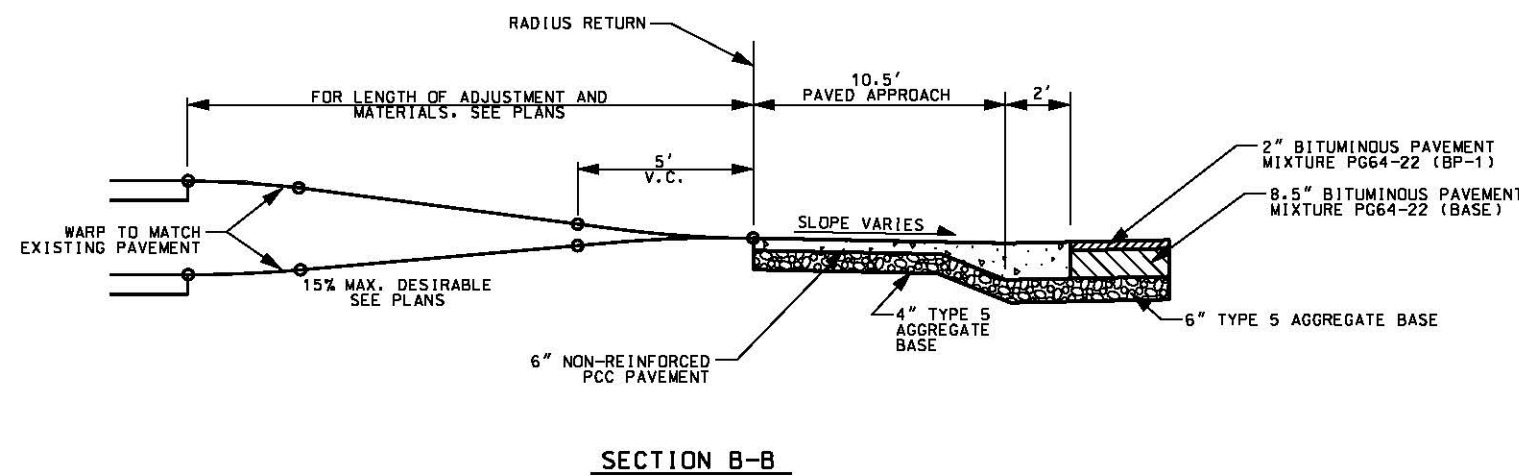
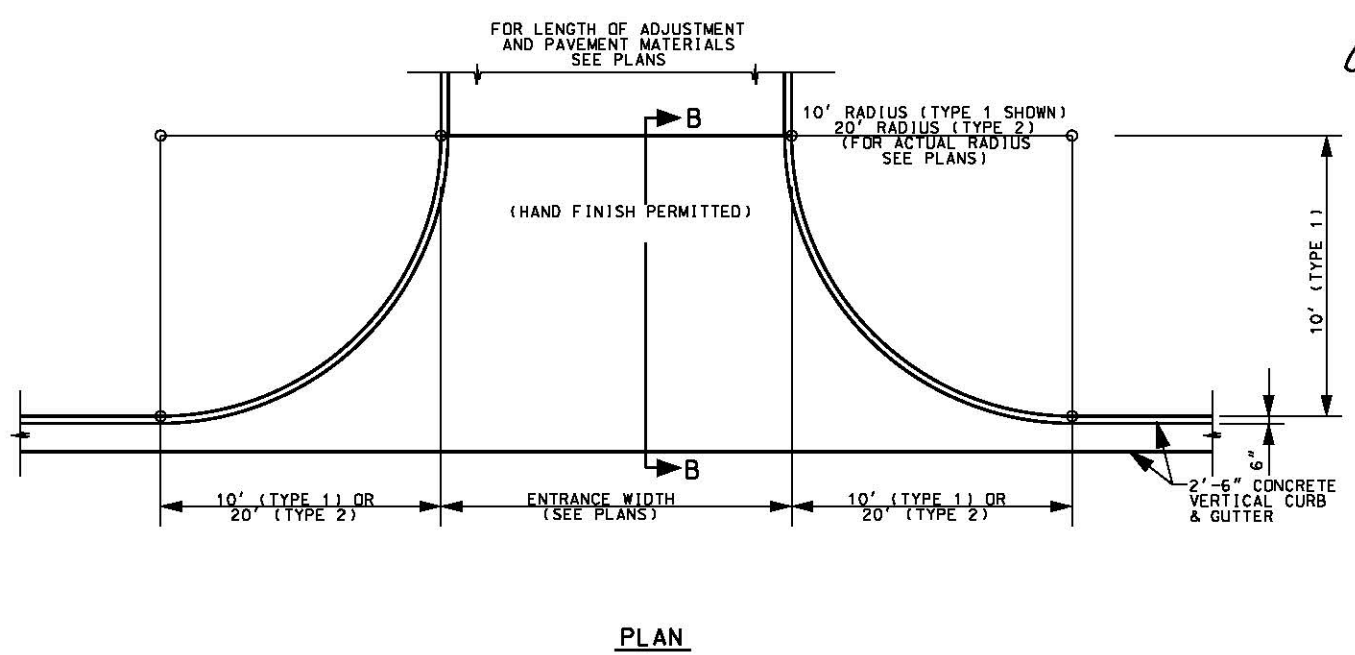
SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

TYPICAL SECTIONS AND DETAILS  
DRIVEWAY/ CURB/ SUPERELEVATION  
(Sheet 2 of 3)

SHEET NO.  
**TYP-02**  
9 of 99



SECTION A-A  
RESIDENTIAL ENTRANCE WITH VERTICAL CURB



SECTION B-B  
COMMERCIAL ENTRANCE WITH VERTICAL CURB  
NOT TO SCALE

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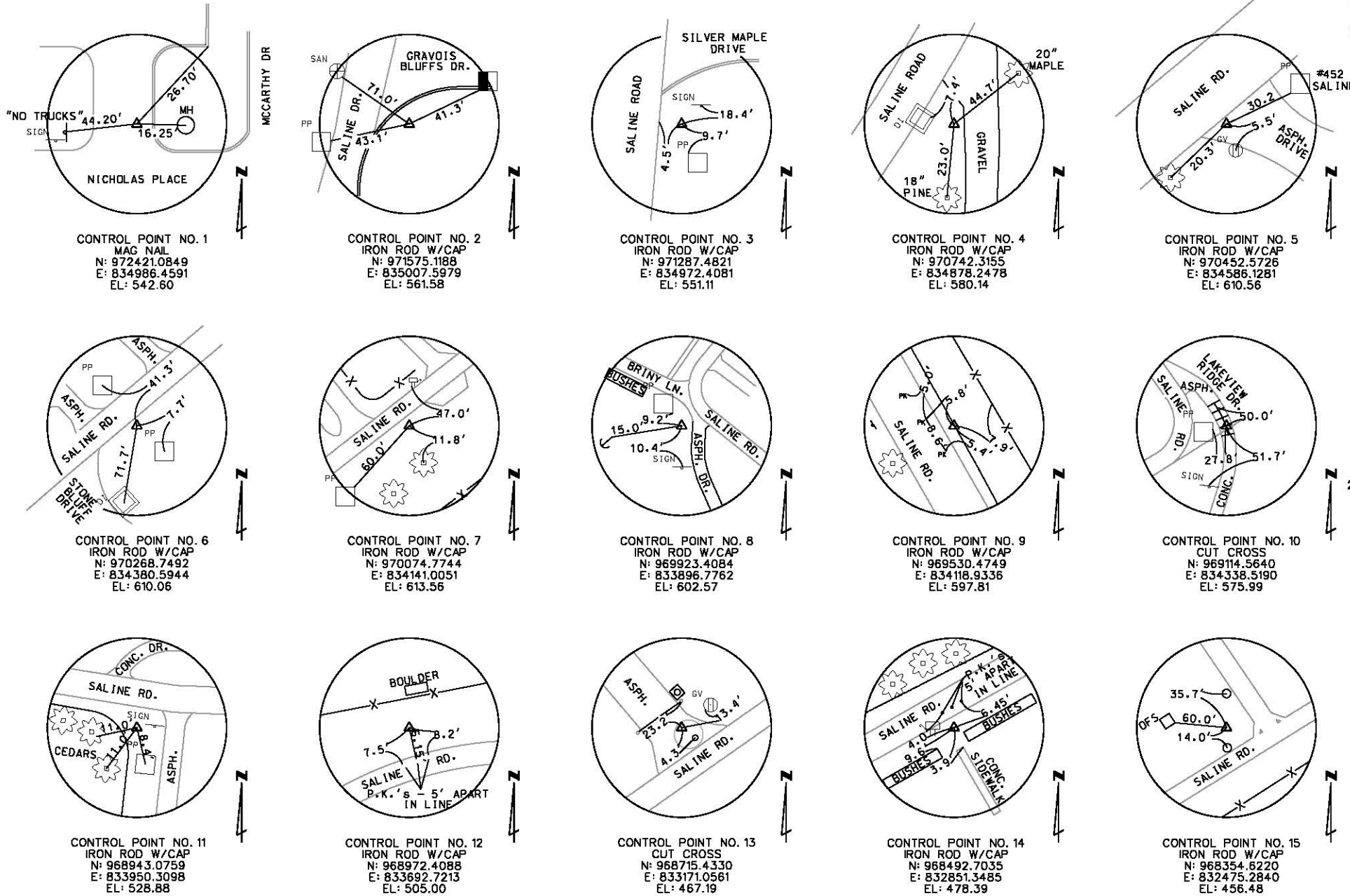


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

TYPICAL SECTIONS AND DETAILS  
DRIVEWAY ENTRANCE DETAILS  
(Sheet 3 of 3)

SHEET NO.  
TYP-03  
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## GENERAL NOTES

1. THE UNDERGROUND UTILITIES SHOWN HEREON ARE TAKEN FROM UTILITY LOCATIONS AS MARKED IN THE FIELD BY DIGRITE, TICKET NUMBERS: \*121450584 (05/24/2012), \*121502008 (05/29/2012), \*121502046 (05/29/2012) AND \*121502097 (05/29/2012).

AMEREN MISSOURI: MARKED BY UTILITY LOCATOR AS SHOWN HEREON. BASE MAPS NOT AVAILABLE.

ATT DISTRIBUTION: MARKED BY UTILITY LOCATOR AS SHOWN HEREON. BASE MAPS NOT AVAILABLE.

CHARTER COMMUNICATIONS: MARKED BY UTILITY LOCATOR AS SHOWN HEREON. BASE MAPS NOT AVAILABLE.

CITY OF FENTON: NO RESPONSE FROM UTILITY LOCATOR. BASE MAPS NOT AVAILABLE.

JEFFERSON COUNTY PWSD 3: FACILITIES MOSTLY MARKED IN THE FIELD AND ARE SHOWN HEREON. PORTIONS OF JEFFERSON COUNTY PWSD 3 FACILITIES ARE SHOWN FROM AVAILABLE BASE MAPS AND ARE SHOWN AS APPROXIMATE HEREON.

LACLEDE GAS: FACILITIES PARTIALLY MARKED IN THE FIELD AND ARE SHOWN HEREON. REST OF LACLEDE GAS FACILITIES ARE SCALED FROM BASE MAPS AND ARE SHOWN AS APPROXIMATE HEREON.

MISSOURIAMERICAN WATER CO.: NO RESPONSE BY UTILITY LOCATOR. SHOWN HEREON AS APPROXIMATE BY SCALED FROM BASE MAPS PROVIDED BY MISSOURIAMERICAN WATER.

NORTHEAST PUBLIC SEWER DISTRICT: SHOWN HEREON BY CONNECTING ABOVE GROUND STRUCTURES AND BY SCALED FROM BASE MAPS PROVIDED BY NORTHEAST PUBLIC SEWER DISTRICT.

PHILLIPS 66 PIPELINE: LOCATOR ADVISED TO CONNECT PIPELINE WARNING SIGNS AS THE ACTUAL FACILITIES SHOULD FALL IMMEDIATELY BELOW THESE SIGNS. SIGNS WERE LOCATED AND CONNECTED AS SHOWN HEREON.

ST. LOUIS METROPOLITAN SEWER DISTRICT: ALL CLEAR PER FACSIMILE MESSAGE FROM MSD, ALTHOUGH BASE MAP SHOWS FORCE MAIN AT NORTH END OF PROJECT. SCALED AS SHOWN HEREON.

2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

## ALIGNMENT INFORMATION

| POINT NO | POINT | STATION  | CIRCULAR CURVE DATA |           |         |         | COORDINATES  |              |
|----------|-------|----------|---------------------|-----------|---------|---------|--------------|--------------|
|          |       |          | DELTA               | RADIUS    | TANGENT | LENGTH  | N            | E            |
| 100      | POT   | 9+99.41  |                     |           |         |         | 968,232.6514 | 832,349.1289 |
|          | PC    | 23+36.18 |                     |           |         |         | 968,890.2809 | 833,512.9458 |
|          | PI    | 25+29.39 | 35° 41' 56.13" RT.  | 600.00'   | 193.21' | 373.84' | 968,985.3317 | 833,681.1588 |
|          | PT    | 27+10.02 |                     |           |         |         | 968,964.3654 | 833,873.2283 |
|          | CC    |          |                     |           |         |         | 968,367.9085 | 833,808.1189 |
|          | PC    | 27+10.02 |                     |           |         |         | 968,964.3654 | 833,873.2283 |
|          | PI    | 28+19.63 | 27° 22' 45.63" LT.  | 450.00'   | 109.61' | 215.04' | 968,952.4707 | 833,982.1932 |
|          | PT    | 29+25.05 |                     |           |         |         | 968,992.0193 | 834,084.4221 |
|          | CC    |          |                     |           |         |         | 969,411.7080 | 833,922.0603 |
|          | PC    | 30+56.91 |                     |           |         |         | 969,039.5933 | 834,207.3982 |
|          | PI    | 31+63.12 | 74° 22' 19.29" LT.  | 140.00'   | 106.21' | 181.73' | 969,077.9150 | 834,306.4539 |
|          | PT    | 32+38.63 |                     |           |         |         | 969,183.6341 | 834,296.2341 |
|          | CC    |          |                     |           |         |         | 969,170.1632 | 834,156.8837 |
|          | PC    | 32+38.63 |                     |           |         |         | 969,183.6341 | 834,296.2341 |
|          | PI    | 33+07.30 | 30° 22' 04.46" LT.  | 253.00'   | 68.66'  | 134.10' | 969,251.9780 | 834,289.6273 |
|          | PT    | 33+72.73 |                     |           |         |         | 969,307.6049 | 834,249.3757 |
|          | CC    |          |                     |           |         |         | 969,159.2902 | 834,044.4080 |
|          | PC    | 34+83.15 |                     |           |         |         | 969,397.0617 | 834,184.6446 |
|          | PI    | 35+51.87 | 07° 51' 43.85" RT.  | 1,000.00' | 68.72'  | 137.22' | 969,452.7338 | 834,144.3603 |
|          | PT    | 36+20.37 |                     |           |         |         | 969,513.3931 | 834,112.0700 |
|          | CC    |          |                     |           |         |         | 969,983.2859 | 834,994.7936 |
|          | PC    | 39+24.27 |                     |           |         |         | 969,781.8511 | 833,969.2705 |
|          | PI    | 40+78.28 | 80° 47' 14.91" RT.  | 181.00'   | 154.01' | 255.21' | 969,917.5985 | 833,896.9028 |
|          | PT    | 41+79.48 |                     |           |         |         | 970,010.7975 | 834,019.5108 |
|          | CC    |          |                     |           |         |         | 969,866.7017 | 834,129.0435 |
|          | PC    | 44+98.98 |                     |           |         |         | 970,204.1419 | 834,273.8651 |
|          | PI    | 45+80.16 | 04° 38' 57.21" LT.  | 2,000.00' | 81.19'  | 162.29' | 970,253.2736 | 834,338.5002 |
|          | PT    | 46+61.26 |                     |           |         |         | 970,307.4826 | 834,398.9403 |
|          | CC    |          |                     |           |         |         | 971,796.3602 | 833,063.5589 |
|          | PC    | 50+60.04 |                     |           |         |         | 970,573.7438 | 834,695.8088 |
|          | PI    | 51+41.74 | 06° 14' 06.52" LT.  | 1,500.00' | 81.70'  | 163.24' | 970,628.2929 | 834,756.6263 |
|          | PT    | 52+23.28 |                     |           |         |         | 970,689.1251 | 834,811.1615 |
|          | CC    |          |                     |           |         |         | 971,690.4018 | 833,694.2707 |
|          | PC    | 52+33.27 |                     |           |         |         | 970,696.5673 | 834,817.8333 |
|          | PI    | 53+40.78 | 34° 09' 00.33" LT.  | 350.00'   | 107.51' | 208.61' | 970,776.6165 | 834,889.5963 |
|          | PT    | 54+41.88 |                     |           |         |         | 970,883.1479 | 834,904.0485 |
|          | CC    |          |                     |           |         |         | 970,930.1985 | 834,557.2255 |
|          | PC    | 57+59.02 |                     |           |         |         | 971,197.4030 | 834,946.6809 |
|          | PI    | 58+09.01 | 02° 51' 48.98" LT.  | 2,000.00' | 49.99'  | 99.96'  | 971,246.9390 | 834,953.4011 |
|          | PT    | 58+58.98 |                     |           |         |         | 971,296.7489 | 834,957.6381 |
|          | CC    |          |                     |           |         |         | 971,466.2637 | 832,964.8348 |
| 101      | POT   | 62+44.78 |                     |           |         |         | 971,681.1633 | 834,990.3377 |

## SURVEY CONTROL NOTES

1. COORDINATE SYSTEM BASED ON THE MISSOURI STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE.
2. HORIZONTAL CONTROL STATEMENT: STATE PLANE COORDINATES ON THIS PROJECT WERE ESTABLISHED UTILIZING THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUSLY OPERATING REFERENCE STATIONS DURING JUNE 2012, AND ARE BASED ON THE MISSOURI COORDINATE SYSTEM OF 1983, EAST ZONE. THE AVERAGE COMBINED PROJECT GRID FACTOR IS 0.999913626 AS CALCULATED BY TRIMBLE GEOMATICS OFFICE.
3. PROJECT COORDINATES ARE MODIFIED MISSOURI STATE PLANE COORDINATES AND WERE ESTABLISHED BY APPLYING THE INVERSE OF THE PROJECT GRID FACTOR (1.000086381).
4. ALL ELEVATIONS SHOWN HEREON ARE BASED ON NAVD-88 DATUM AND ESTABLISHED UTILIZING THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUS OPERATING STATIONS DURING MAY, 2012.

## BENCHMARK INFORMATION

TBM "A" - ELEVATION 562.83

CUT "SQUARE" ON WEST SIDE OF LIGHT STANDARD BASE APPROXIMATELY 75 FEET EAST OF THE CENTERLINE-CENTERLINE OF MCCARTHY BLVD. AND MITCHELL DRIVE.

TBM "B" - ELEVATION 613.76

COTTON PICKER SPINDLE IN SOUTHWEST FACE OF UTILITY POLE \*218421 APPROXIMATELY 30 FEET SOUTHEAST OF CENTERLINE OF SALINE ROAD AND 110 FEET NORTHEAST OF THE SOUTH ENTRANCE TO STONE BLUFF DRIVE.

TBM "C" - ELEVATION 457.20

COTTON PICKER SPINDLE IN SOUTH FACE OF UTILITY POLE \*222439 APPROXIMATELY 40 FEET NORTH OF CENTERLINE OF SALINE ROAD AND 115 FEET EAST OF MATTHEW DRIVE.

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APPROVED: JSD  
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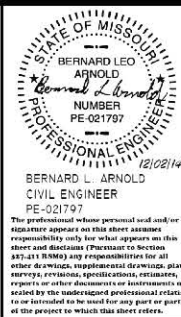
SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
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BENCHMARKS / CONTROL POINTS  
MAINLINE ALIGNMENT  
(Sheet 1 of 1)

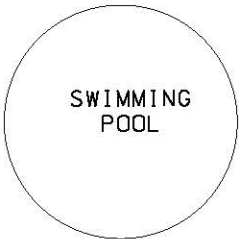
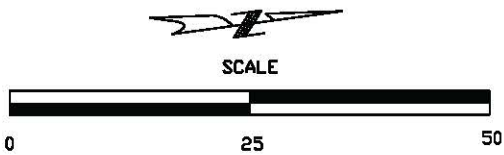
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DETAILS ON THIS SHEET WERE DESIGNED AND APPROVED BY JEFFERSON COUNTY ENGINEERS AND ARE NOT COVERED BY THE SEAL OF THE PROFESSIONAL ENGINEER APPEARING ON THE COVER SHEET OF THIS SET OF PLANS



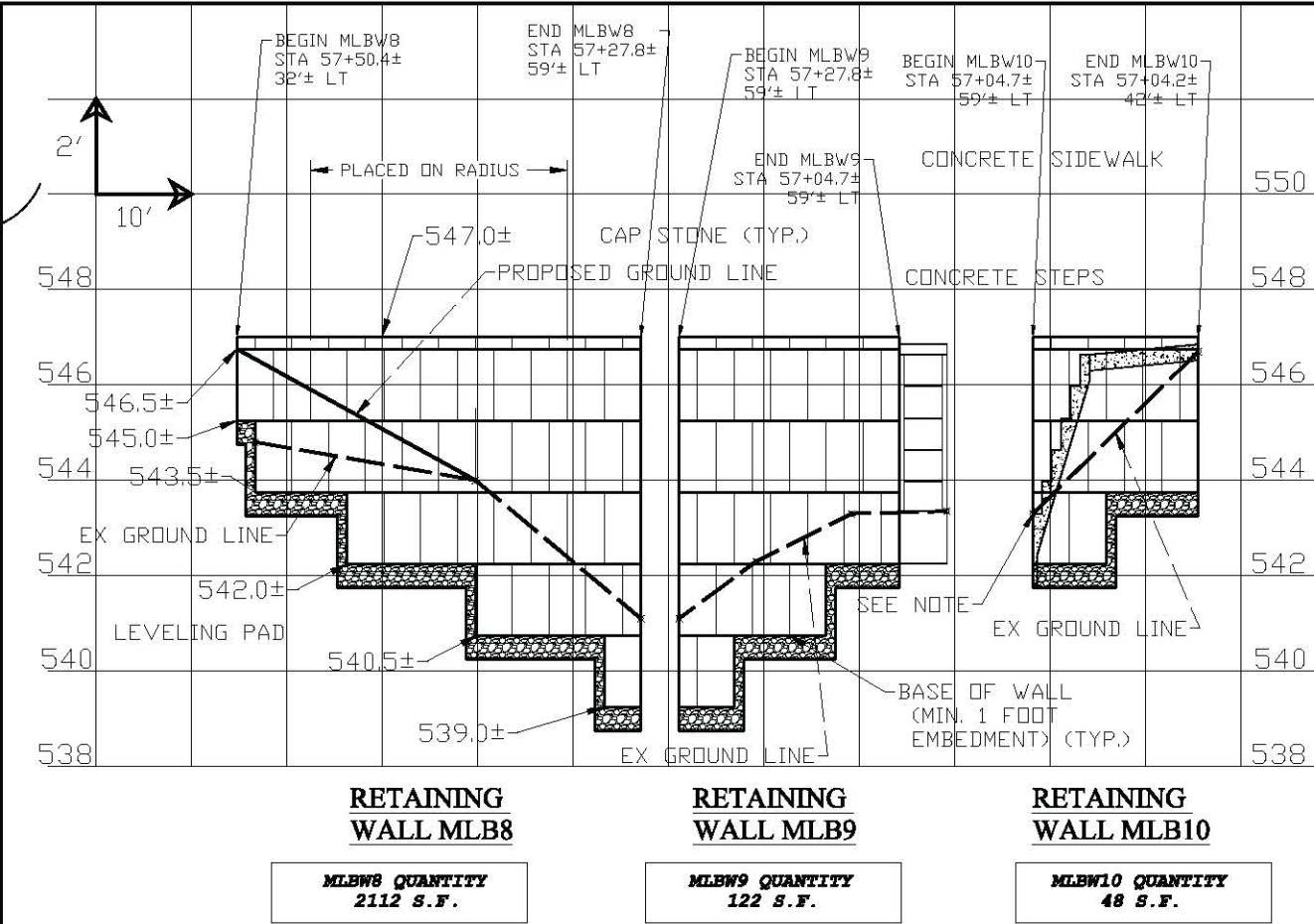
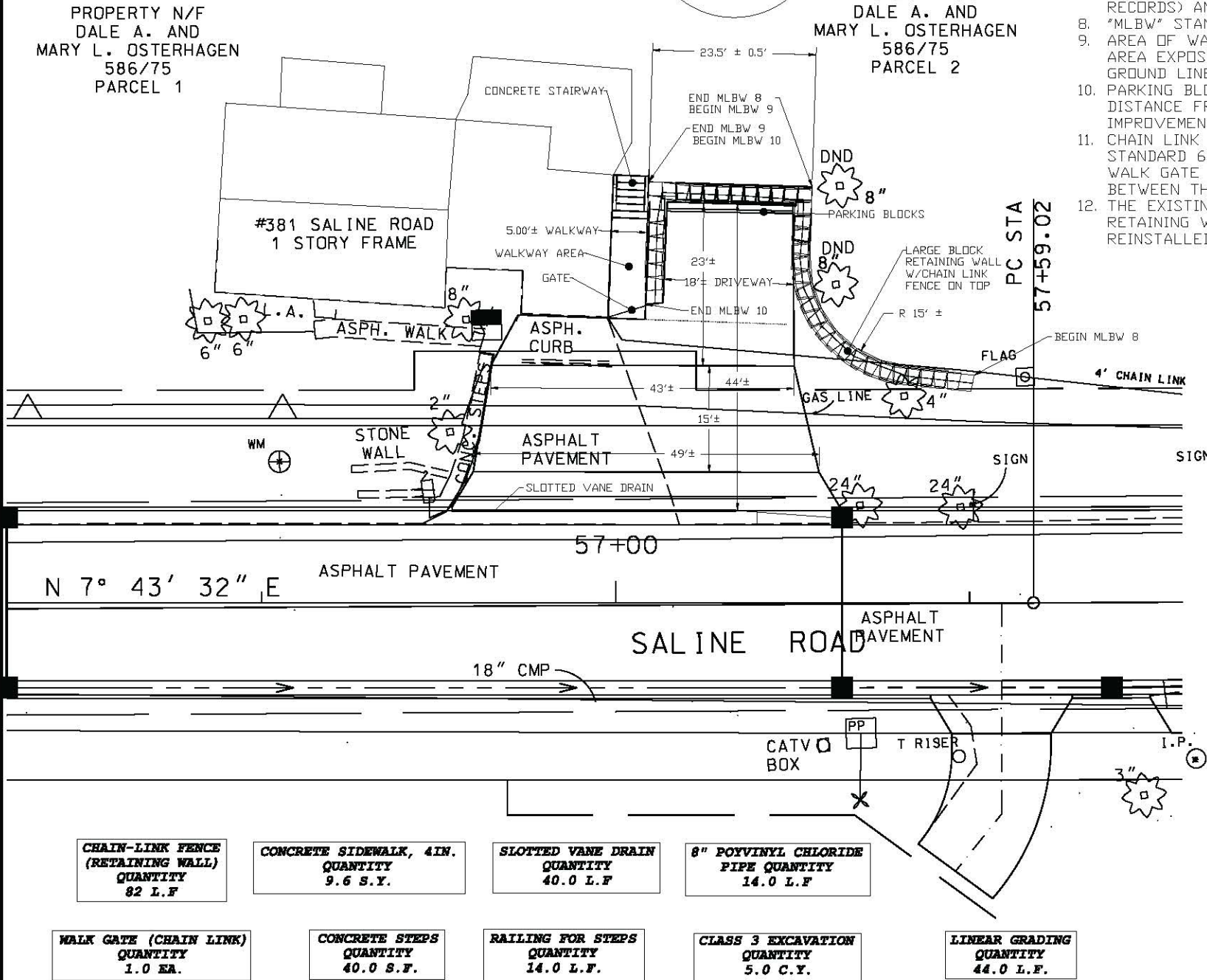
NOTE: A RIGHT OF ENTRY HAS BEEN SECURED TO CONSTRUCT REVISED DRIVEWAY LIMITS. CONTRACTOR SHALL COOPERATE WITH PROPERTY OWNER DURING CONSTRUCTION OF DRIVEWAY AND SHALL KEEP HEAVY EQUIPMENT LOAD AWAY FROM RESIDENCE. SLOPE DRIVEWAY AWAY FROM RESIDENCE.



PROPERTY N/F  
DALE A. AND  
MARY L. OSTERHAGEN  
586/75  
PARCEL 2

NOTES:

1. SEE MODOT DETAIL 608.20D FOR CONCRETE STAIRS AND HANDRAIL. EACH HANDRAIL POST SHALL BE CENTERED IN A 6" WALL, INSTEAD OF A 4" WALL.
2. THE ELEVATION OF BOTTOM STEP OF CONCRETE STAIRS SHALL BE SET  $\frac{1}{2}$ " OF ELEVATION OF ADJACENT WOOD DECK.
3. POROUS BACKFILL, IN ACCORDANCE WITH SEC 206.4.11, SHALL BE USED FOR ANY FILL MATERIAL REQUIRED BETWEEN THE RETAINING WALL AND THE HOUSE FOUNDATION. A PERFORATED DRAIN SHALL BE INSTALLED WITH AN OUTLET MEETING THE APPROVAL OF THE ENGINEER. SPECIAL CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE HOUSE FOUNDATION.
4. THE MODULAR BLOCK RETAINING WALL FOR THIS LOCATION SHALL BE "LARGE BLOCK WALL SYSTEM" AND SHALL MEET THE REQUIREMENTS OF THE CURRENT VERSION OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (MODOT).
5. NO PORTION OF THE MODULAR BLOCK RETAINING WALL SHALL OVERLAP THE EXISTING GAS MAIN LINE.
6. ALL STATIONING AND OFFSETS GIVEN FROM SALINE ROAD CENTERLINE TO WALL FACE UNLESS OTHERWISE NOTED.
7. MODULAR LARGE BLOCK RETAINING WALL TO BE DESIGNED PER MANUFACTURER'S DETAILS BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI. CONTRACTOR IS REQUIRED TO SUBMIT SEALED WALL DESIGN, INCLUDING ALL PLANS, DESIGN CALCS, SUBSURFACE INFORMATION (BORING LOGS OR OTHER FACTUAL RECORDS) AND OTHER PERTINENT INFORMATION TO THE ENGINEER OF RECORD FOR REVIEW.
8. "MLBW" STANDS FOR MODULAR LARGE BLOCK RETAINING WALL.
9. AREA OF WALL TO BE PAID FOR IS AREA OF "FACE AREA EXPOSED" AS SHOWN PER PLAN DETAILS. THE "FACE AREA EXPOSED" QUANTITY SHALL BE BASED ON THE AREA BETWEEN THE TOP OF THE WALL AND THE "EX. GROUND LINE" (PRECEDING OTHER FINAL IMPROVEMENTS).
10. PARKING BLOCKS, MEETING THE APPROVAL OF THE ENGINEER, SHALL BE INSTALLED AT AN APPROPRIATE OFFSET DISTANCE FROM MLBW9. THE COST OF THE PARKING BLOCKS SHALL BE INCLUDED IN THE COST OF THE DRIVEWAY IMPROVEMENT PAY ITEMS.
11. CHAIN LINK FENCE SHALL BE INSTALLED ON THE TOP OF THE PERIMETER OF THE RETAINING WALL PER STANDARD 607.11H, OR PER WALL MANUFACTURER DETAILS AND MEETING THE APPROVAL OF THE ENGINEER. A WALK GATE (WITH HINGES AND LATCHING HARDWARE) OF THE APPROPRIATE WIDTH SHALL BE INSTALLED BETWEEN THE RETAINING WALL FENCE AND THE WALL OF HOUSE.
12. THE EXISTING CHAIN LINK FENCE SHALL BE TEMPORARILY REMOVED AS NECESSARY TO CONSTRUCT THE RETAINING WALL. UPON COMPLETION OF THE RETAINING WALL, THE EXISTING CHAIN LINK FENCE SHALL BE REINSTALLED AND MODIFIED AS NECESSARY TO PROVIDE A POSITIVE ENCLOSURE.



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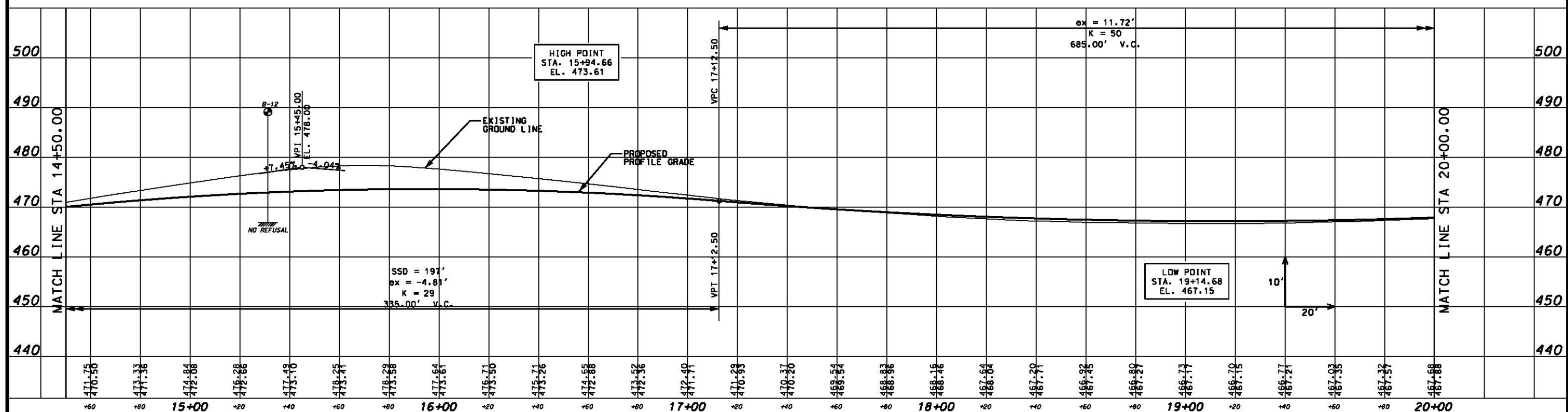
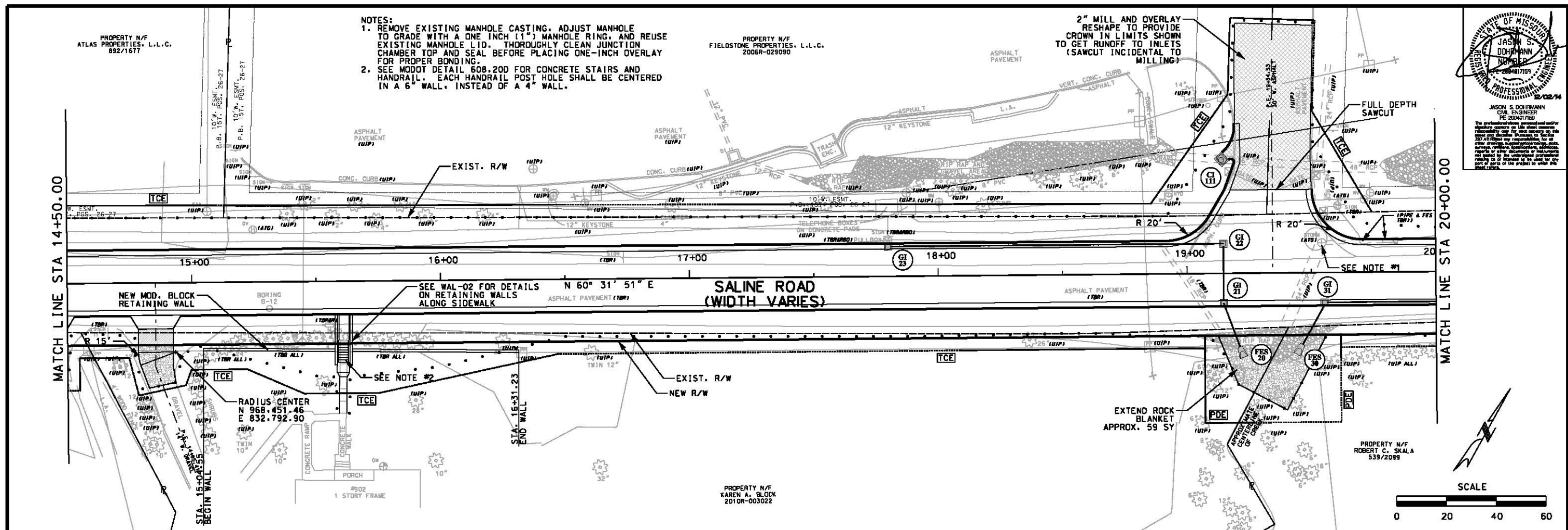
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COUNTY OF JEFFERSON, MISSOURI  
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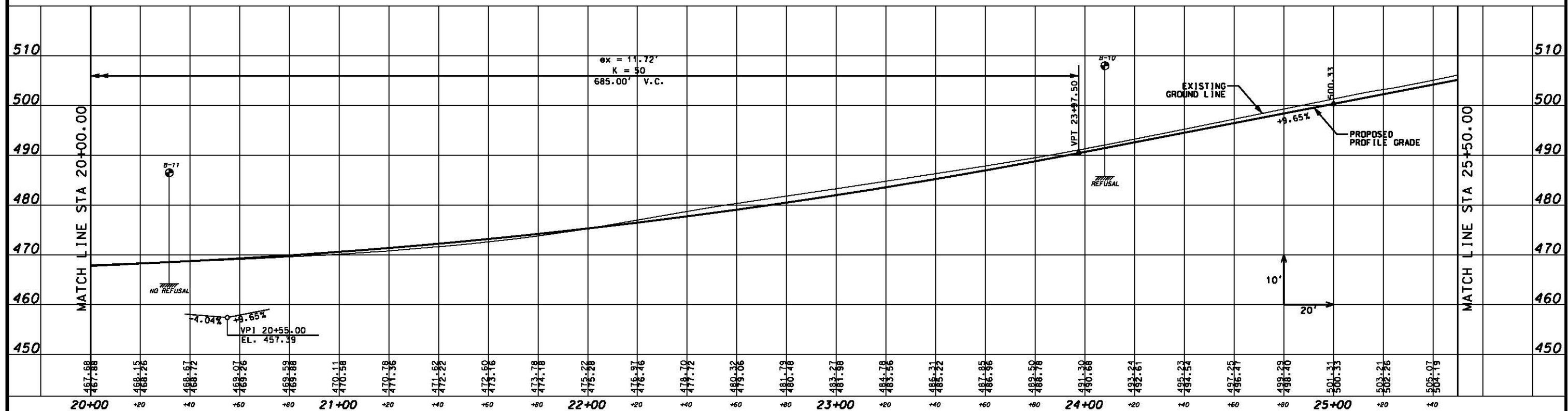
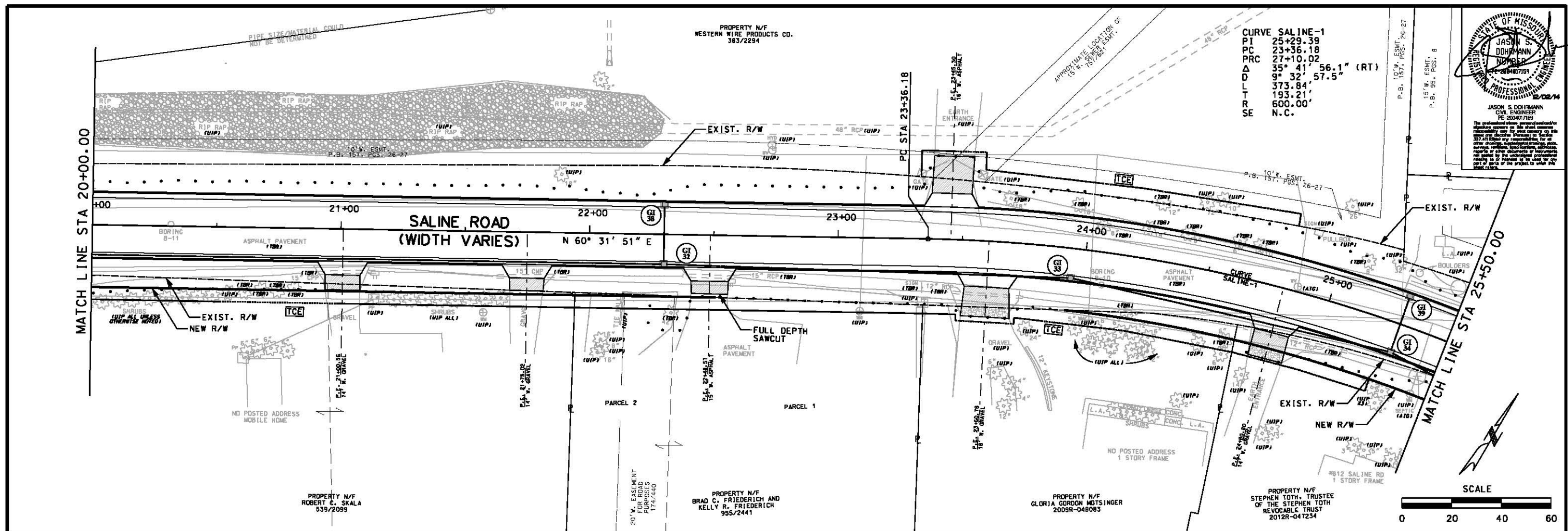
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(Sheet 1 of 1)

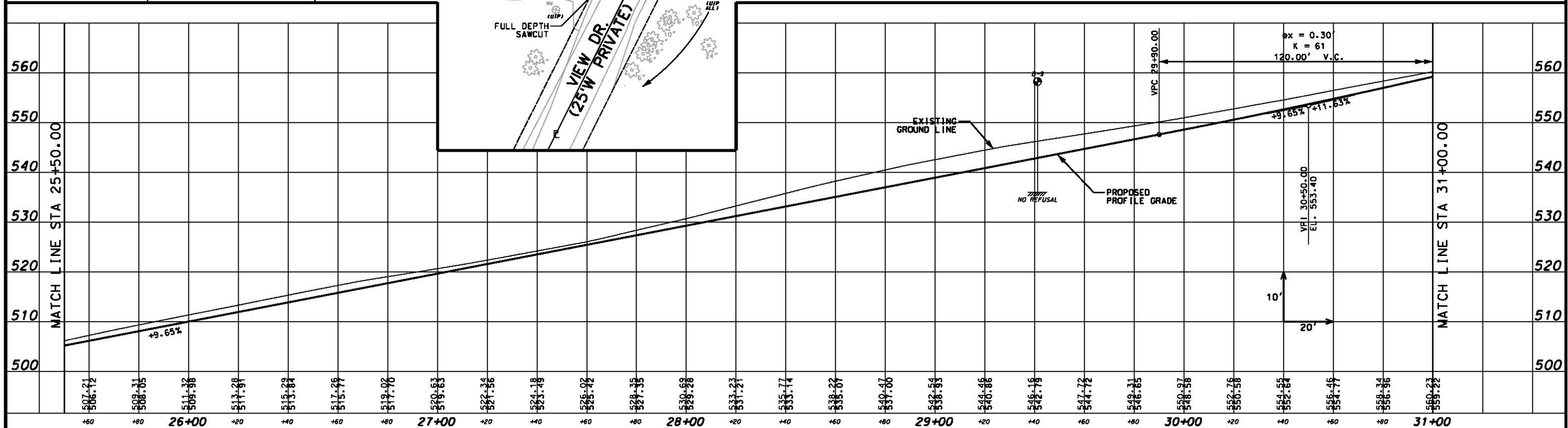
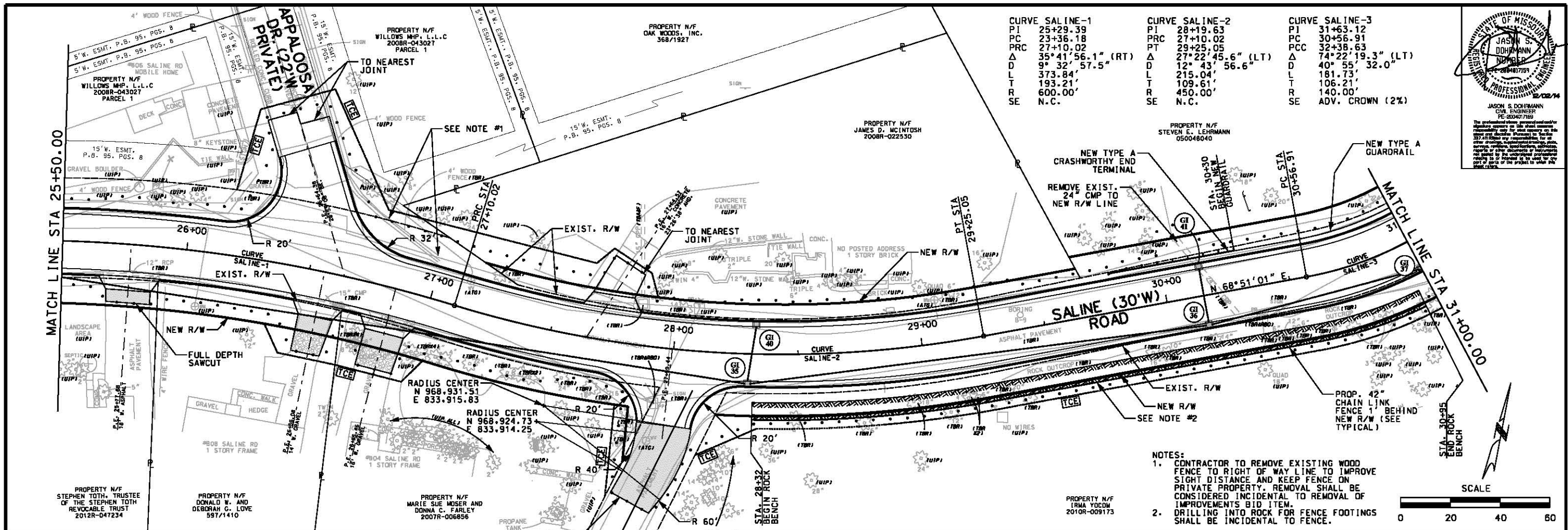
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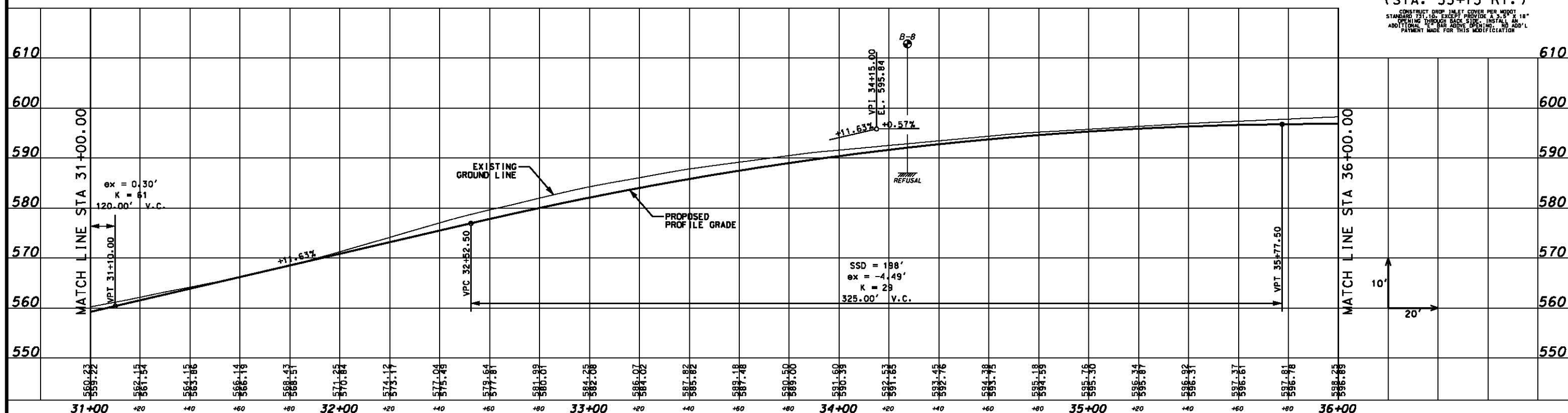
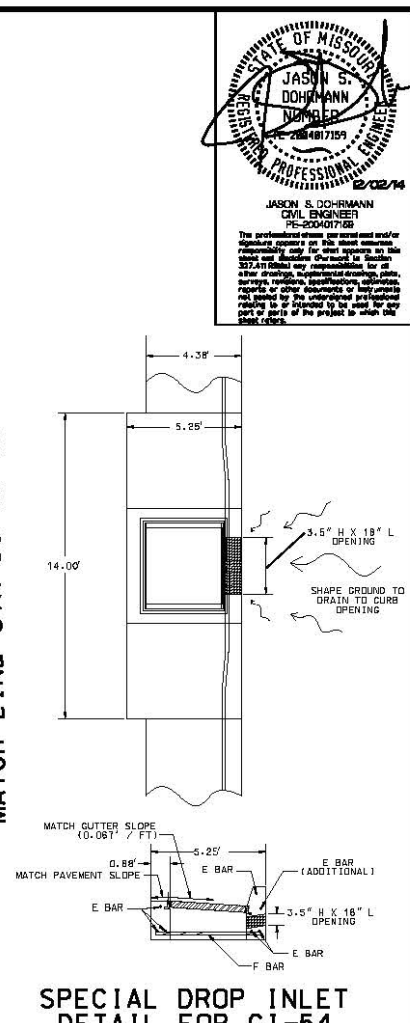
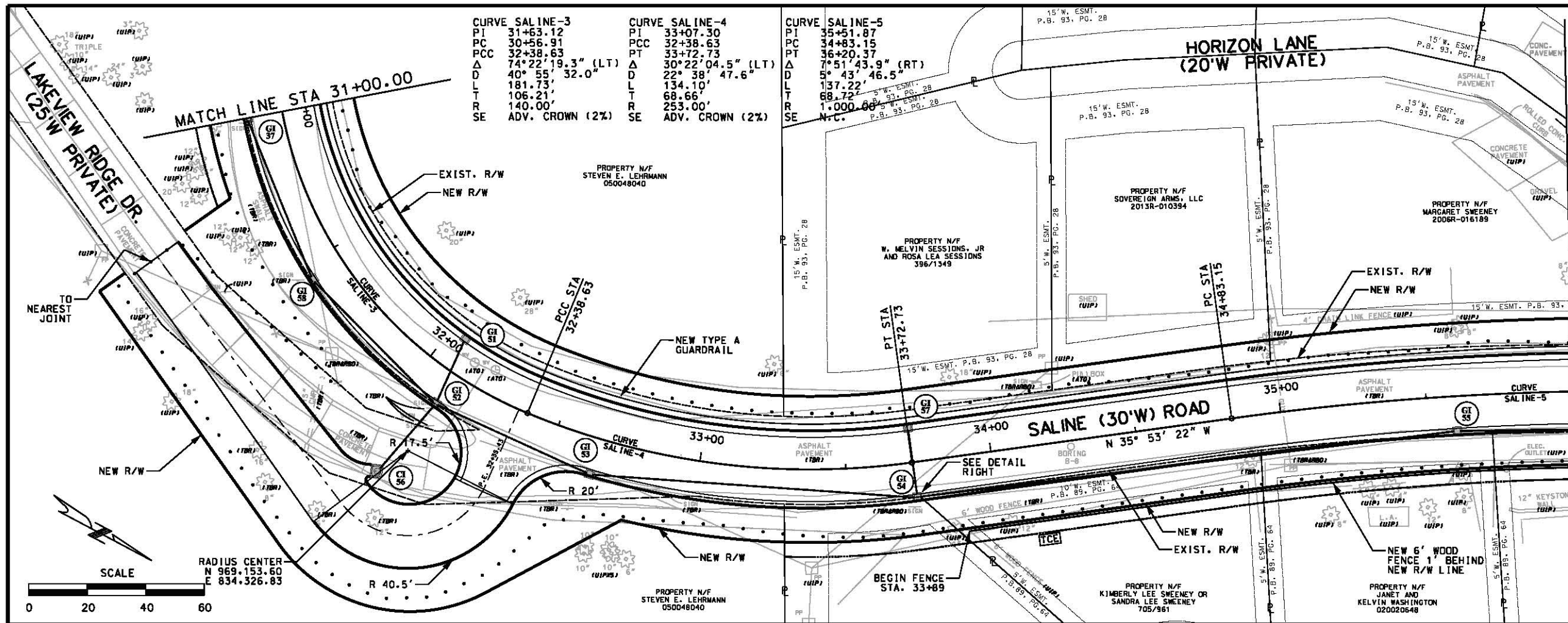


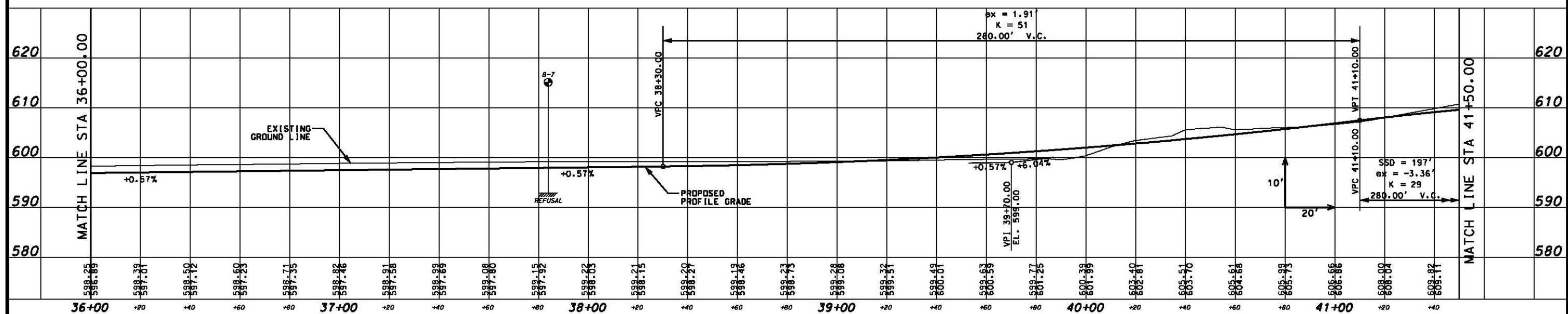
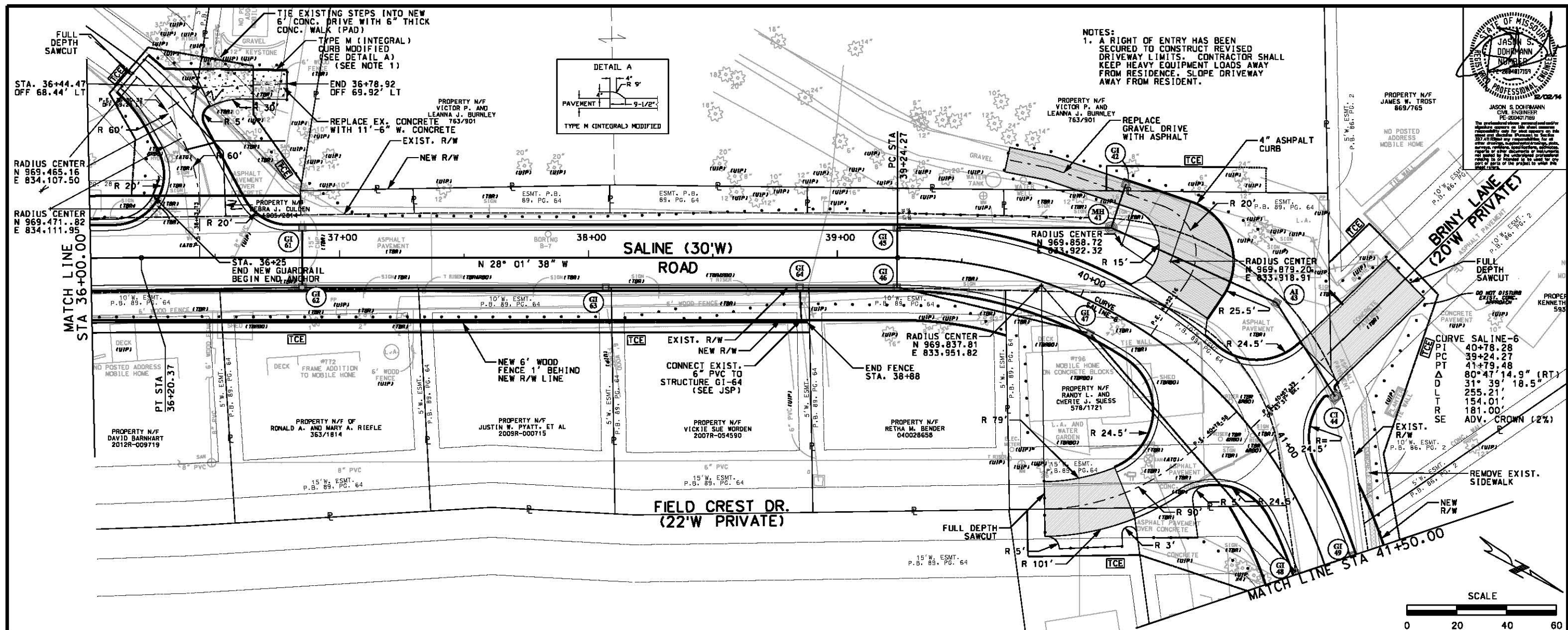


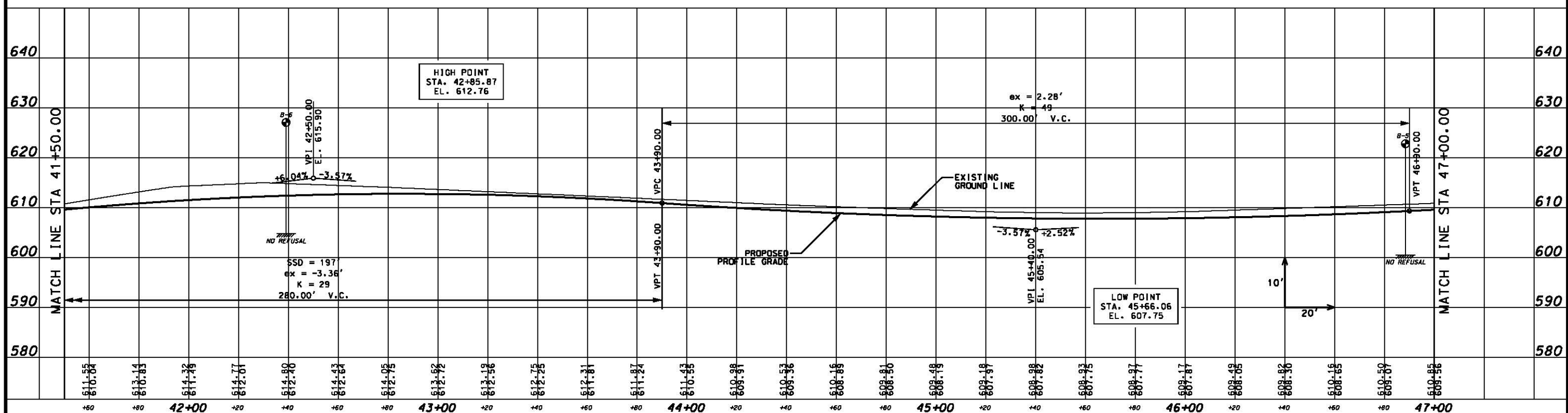
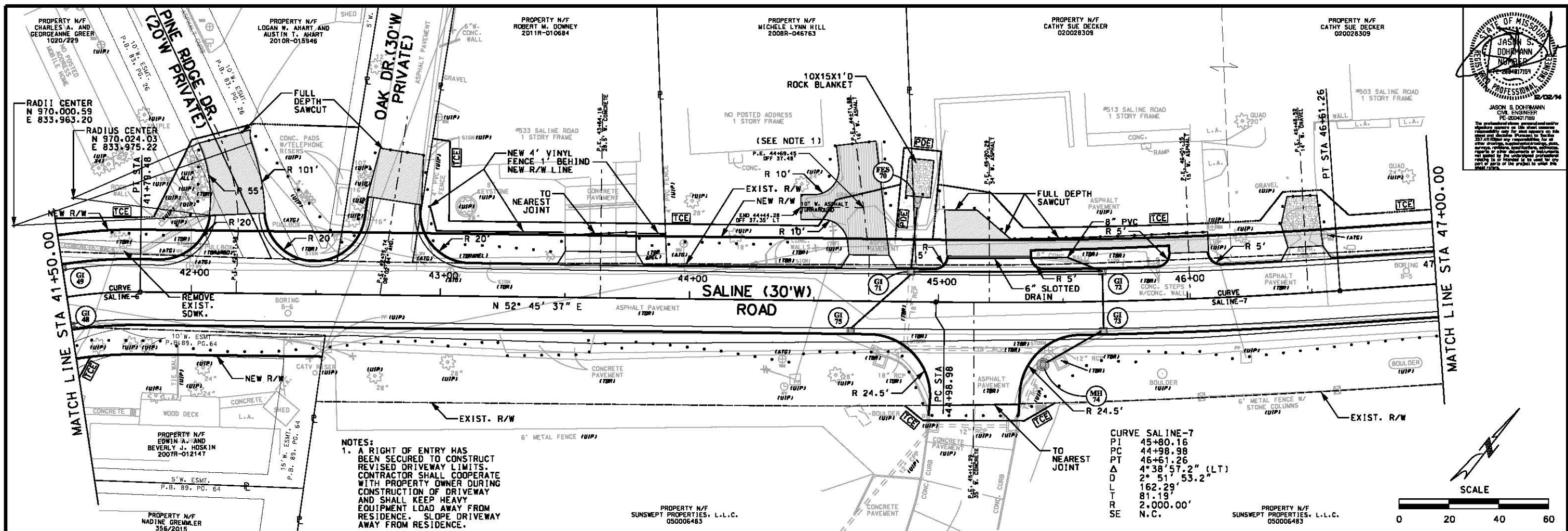




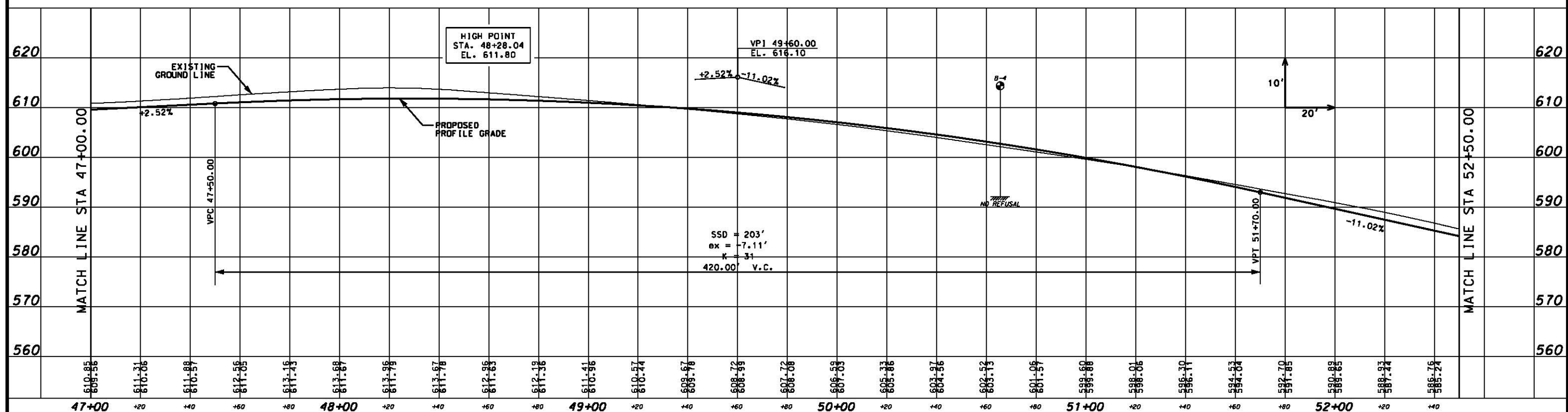
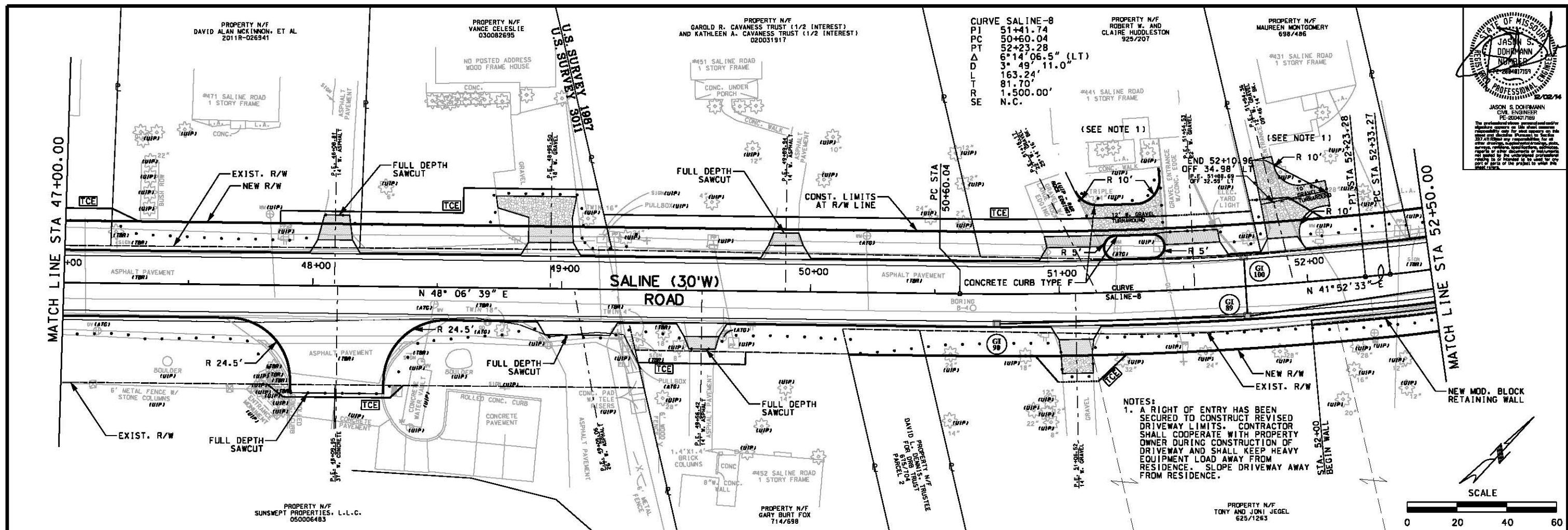


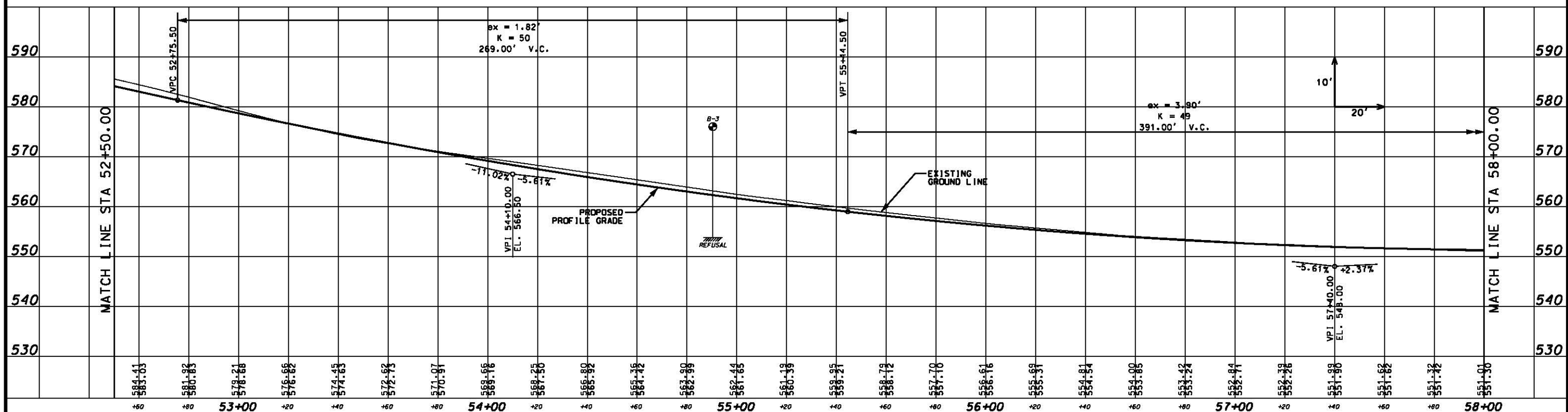
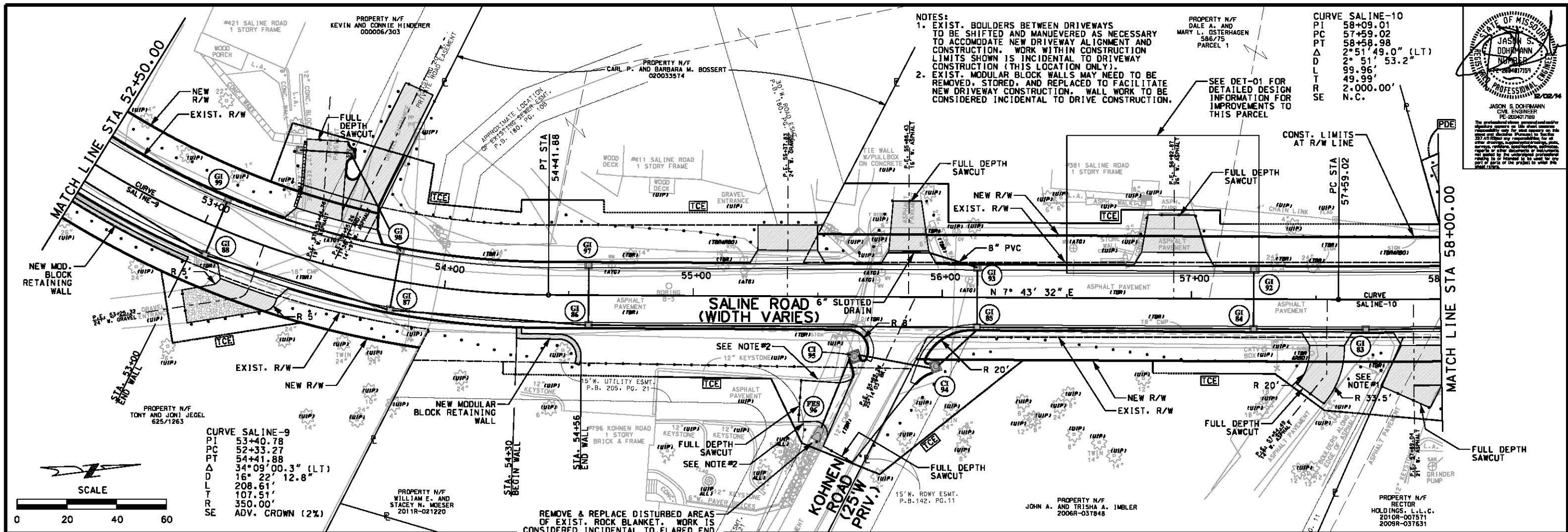


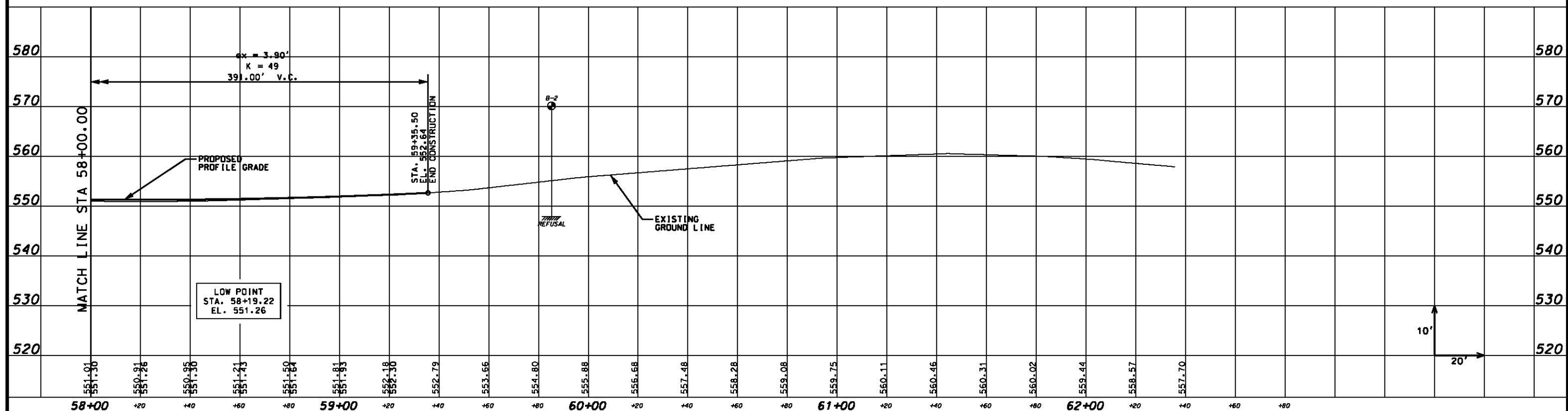
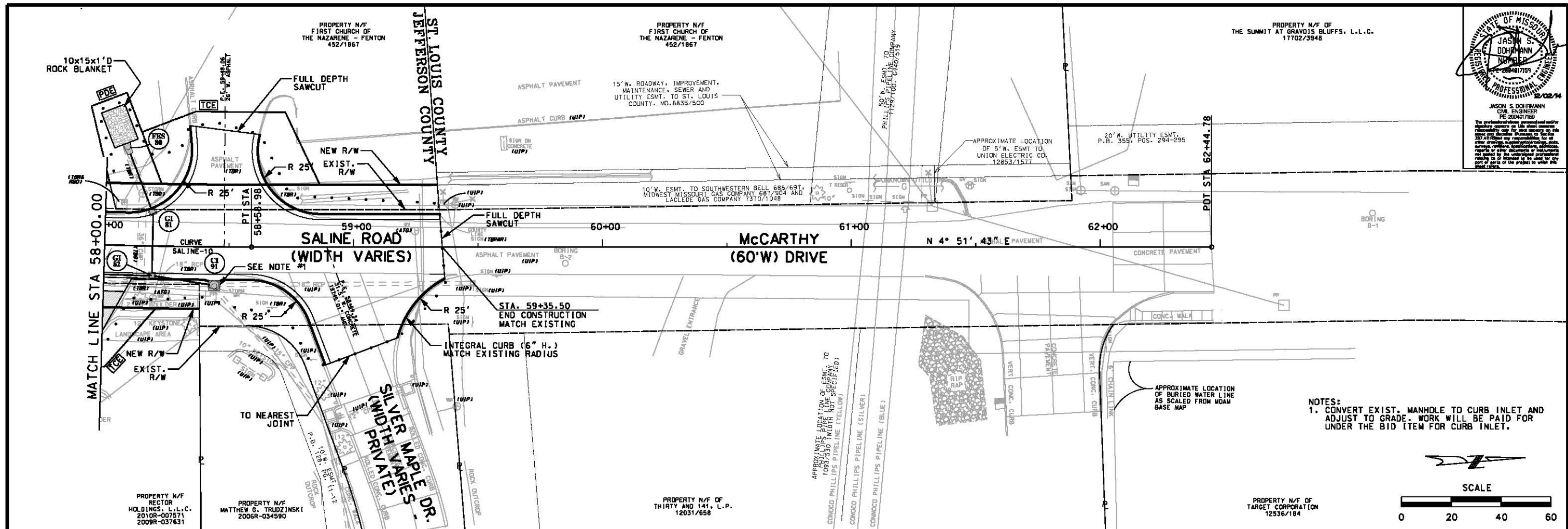








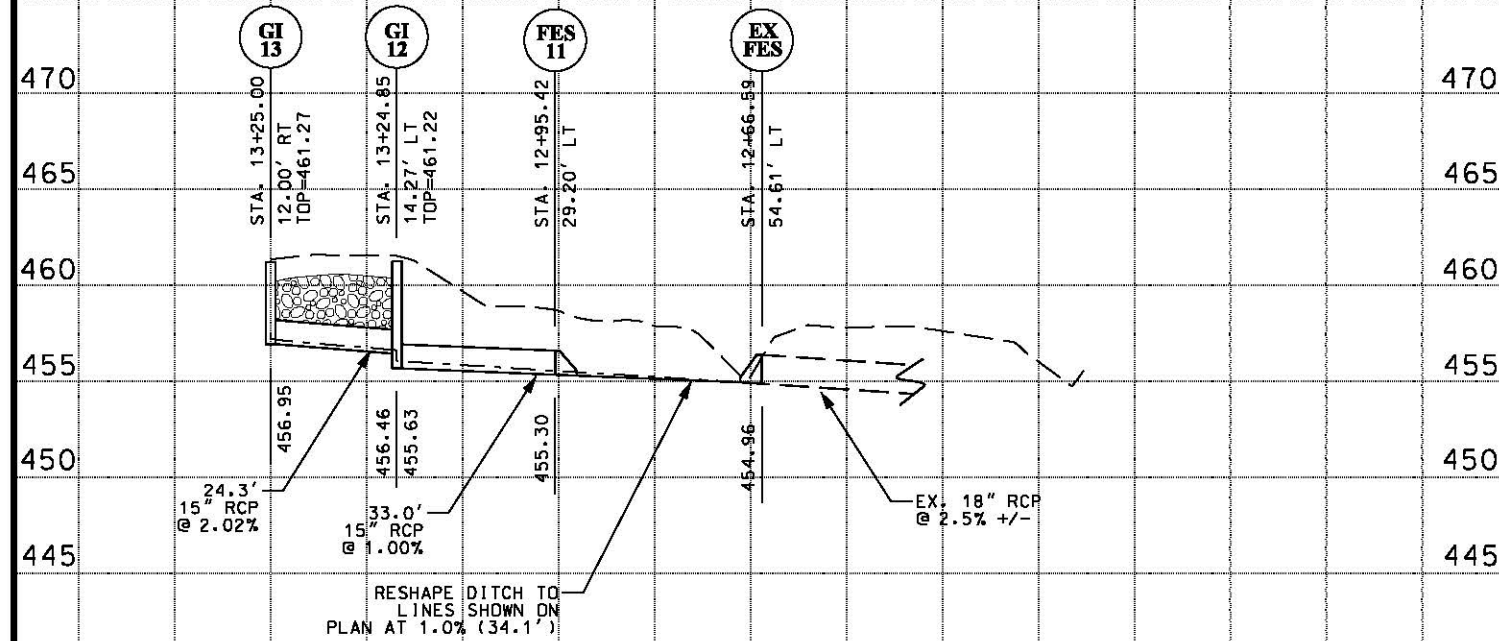






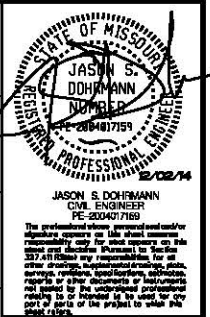
# **NETWORK 1**

**SALINE ROAD**  
STA. 11+61.53 to 13+25.00



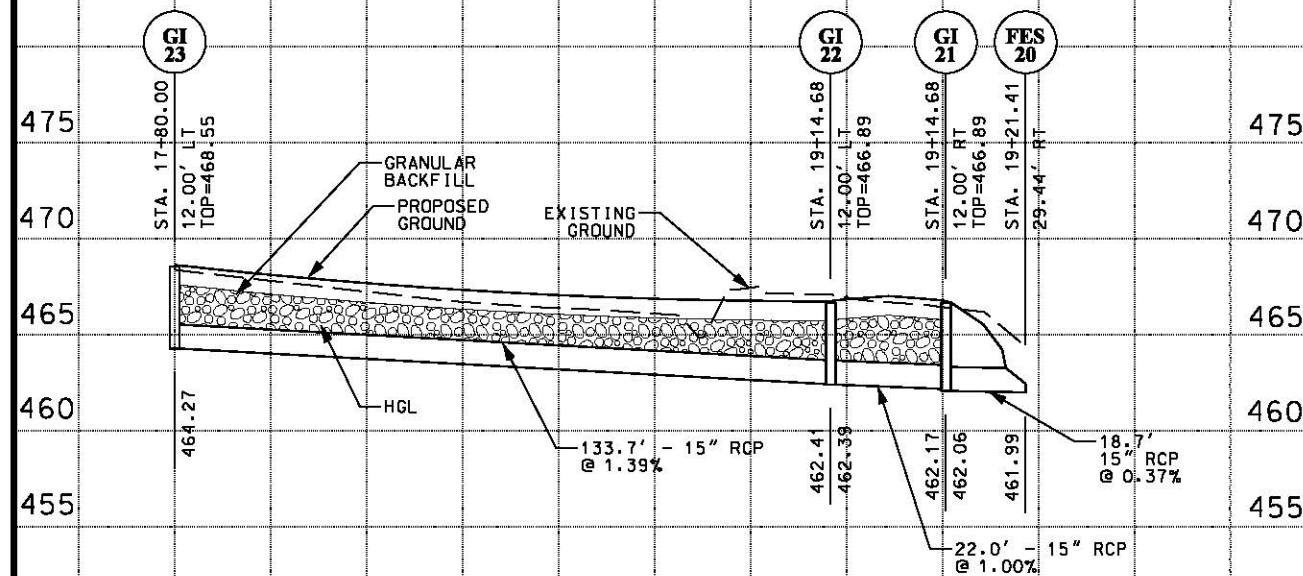
## **GENERAL DRAINAGE NOTES:**

1. ALL GRATE INLETS ARE INTENDED TO BE 2'X2' GRATE INLETS WITH SIDE INTAKES UNLESS OTHERWISE NOTED.
2. ALL INLET BASES SHALL BE MODOT 2'X2' TYPE S-1 INLET BASES UNLESS OTHERWISE SPECIFIED. NO ADD'L PAYMENT WILL BE MADE FOR ANY MODIFICATIONS OR NON-STANDARD INLET BASES NEEDED TO CONSTRUCT THE PLANS AS SHOWN / BID.
3. ALL MANHOLES SHALL BE 42-INCH DIAMETER BASES UNLESS OTHERWISE NOTED. MANHOLES CAN BE CAST IN PLACE OR PRECAST, IN ACCORDANCE WITH THE JOB SPECIFICATIONS.
4. GRANULAR BACKFILL IS REQUIRED FOR ALL INSTANCES WHERE NEW PIPE WILL BE LOCATED UNDER ROADWAY PAVEMENT, AS SHOWN HEREIN. GRANULAR BACKFILL IS CONSIDERED INCIDENTAL TO COST OF LAYING PIPE AND NO DIRECT PAY WILL BE MADE.
5. EXISTING WATER AND SANITARY CONNECTIONS WILL NOT BE MODIFIED WITH THIS WORK.
6. HGL IS DEFINED AS HYDRAULIC GRADE LINE.
7. ALL STATIONS AND OFFSETS ARE GIVEN TO AND MEASURED FROM THE CENTERLINE OF SALINE ROAD TO THE CENTER OF THE STRUCTURE, UNLESS OTHERWISE NOTED HEREIN. ALL TOP ELEVATIONS FOR GRATE INLETS ARE GIVEN AT THE FACE OF CURB UNLESS OTHERWISE NOTED HEREIN.
8. UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONSIDERED AS SUCH.



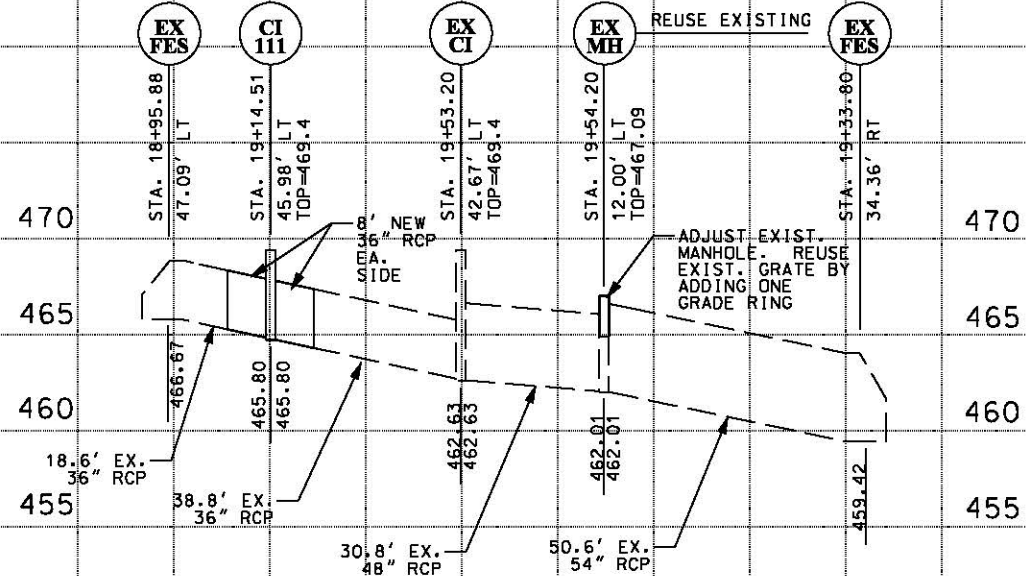
# **NETWORK 2A**

**SALINE ROAD**  
STA. 17+80.00 to 19+21.00



# **NETWORK 2B**

**SALINE ROAD**  
STA. 18+95.88 to 19+54.20



DRAWN BY: EBS  
APPROVED: JSD  
CAD DATE: 12/1/2014  
CAD FILE: \\HRCWDFS004\data\75110022\CAD\Drawn\drn\_01.dgn

JOB DATE: 02/2012 - 12/2014  
JOB NUMBER: 75110022

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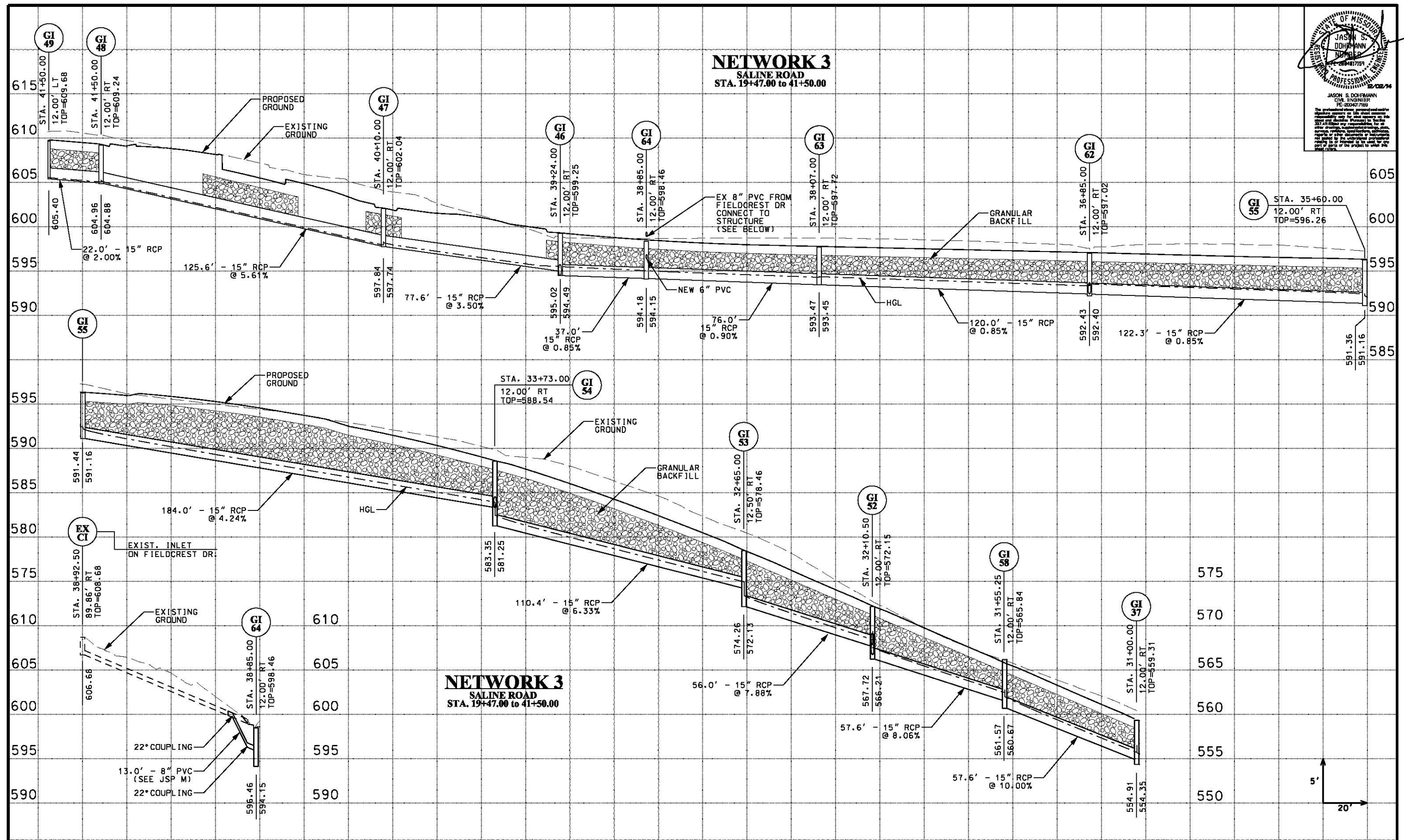
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**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

**STORM SEWER PROFILES**  
NETWORKS 1 & 2  
(Sheet 1 of 7)

SHEET NO.  
**DRN-01**  
23 of 99



JASON S. DOHMANN  
 CIVIL ENGINEER  
 PE-200407169  
 MISSOURI PROFESSIONAL ENGINEER  
 2/02/14  
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 APPROVED: JSD  
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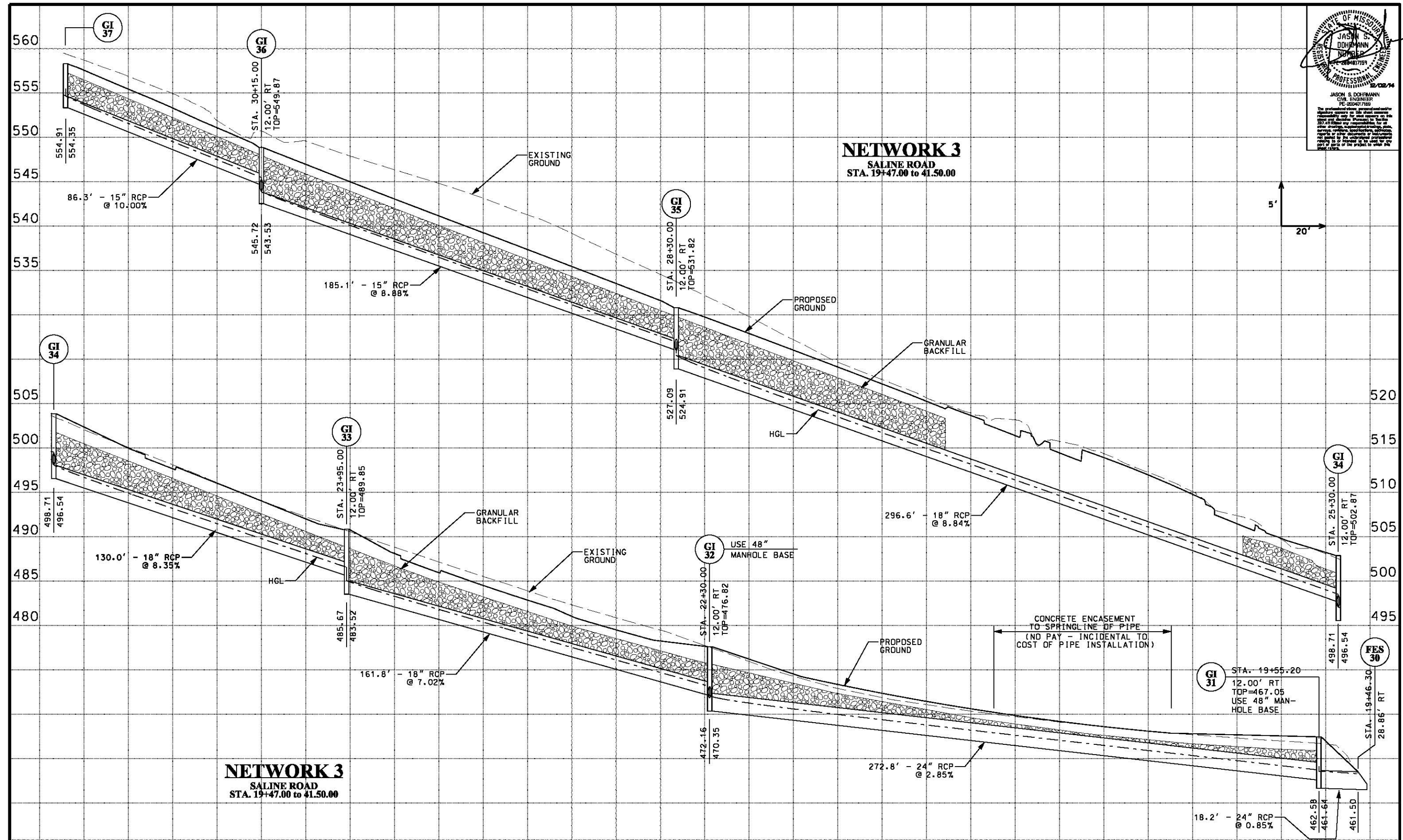
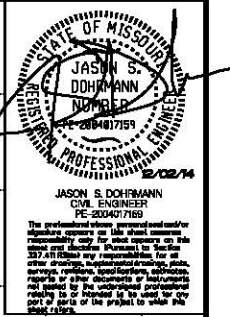
**H3**  
 HRCGreen  
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SALINE ROAD IMPROVEMENTS-PHASE 1  
 COUNTY OF JEFFERSON, MISSOURI  
 5403(642)/TIP#5589-12

STORM SEWER PROFILES  
 NETWORK 3  
 (Sheet 2 of 7)

SHEET NO.  
**DRN-02**  
 24 of 99



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APPROVED: JSD  
CAD DATE: 12/1/2014  
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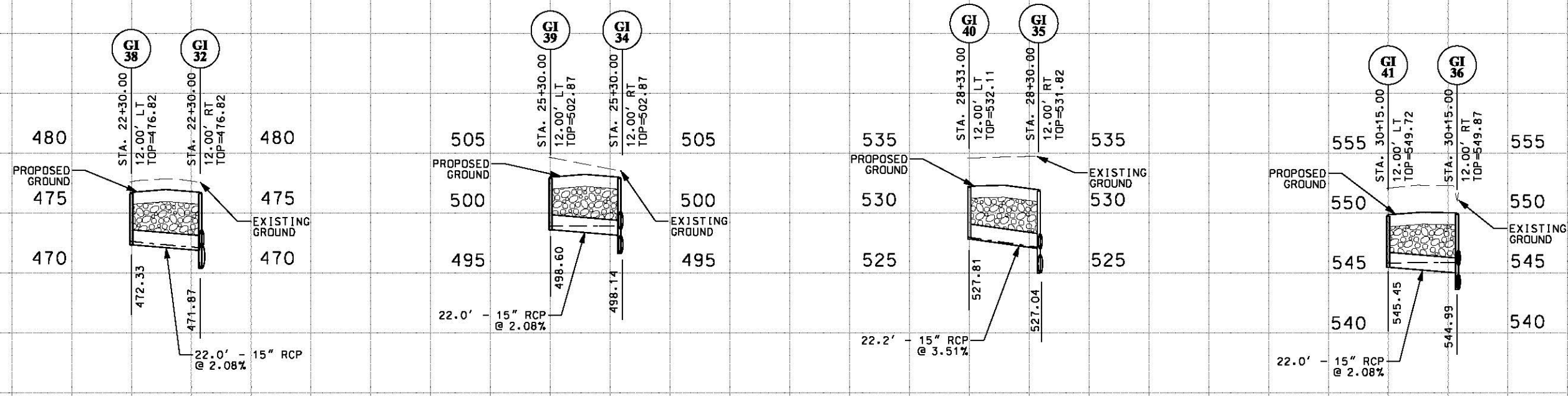
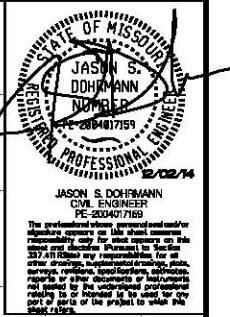
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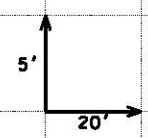
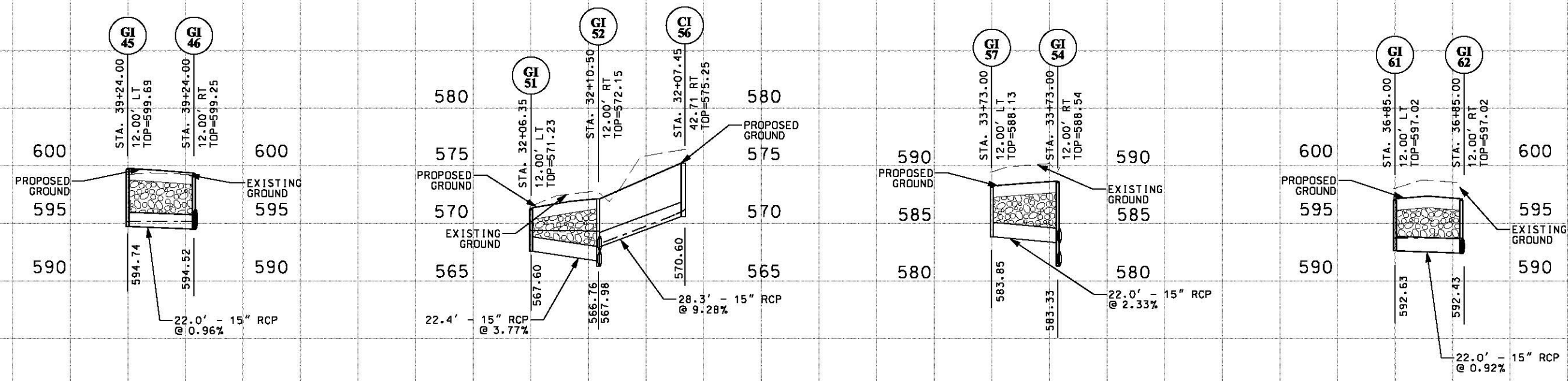
**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

**STORM SEWER PROFILES**  
**NETWORK 3**  
(Sheet 3 of 7)





**NETWORK 3**  
**SALINE ROAD**  
**PIPE CROSSINGS**  
**STA. 19+47.00 to 41.50.00**



DRAWN BY: EBS  
APPROVED: JSD  
CAD DATE: 12/1/2014  
CAD FILE: \\HRCWDFS004\data\75110022\CAD\Drawn\_04.dgn

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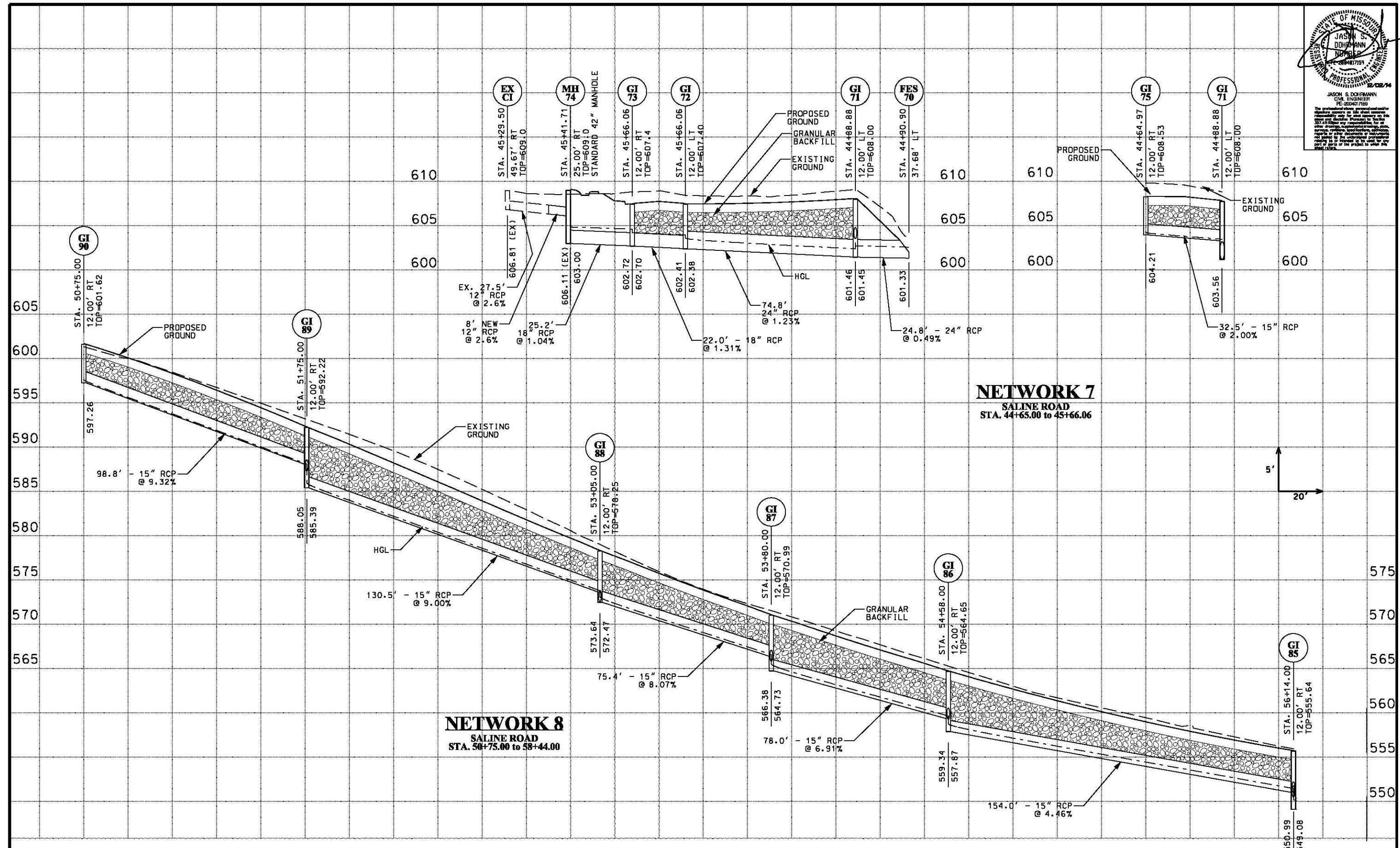
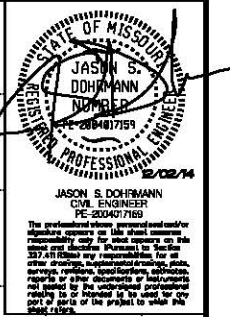
**HRGreen**  
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**SALINE ROAD IMPROVEMENTS-PHASE 1**  
**COUNTY OF JEFFERSON, MISSOURI**  
**5403(642)/TIP#5589-12**

**STORM SEWER PROFILES**  
**NETWORK 3**  
**(Sheet 4 of 7)**

**SHEET NO.**  
**DRN-04**  
**26 of 99**



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APPROVED: JSD JOB NUMBER: 75110022  
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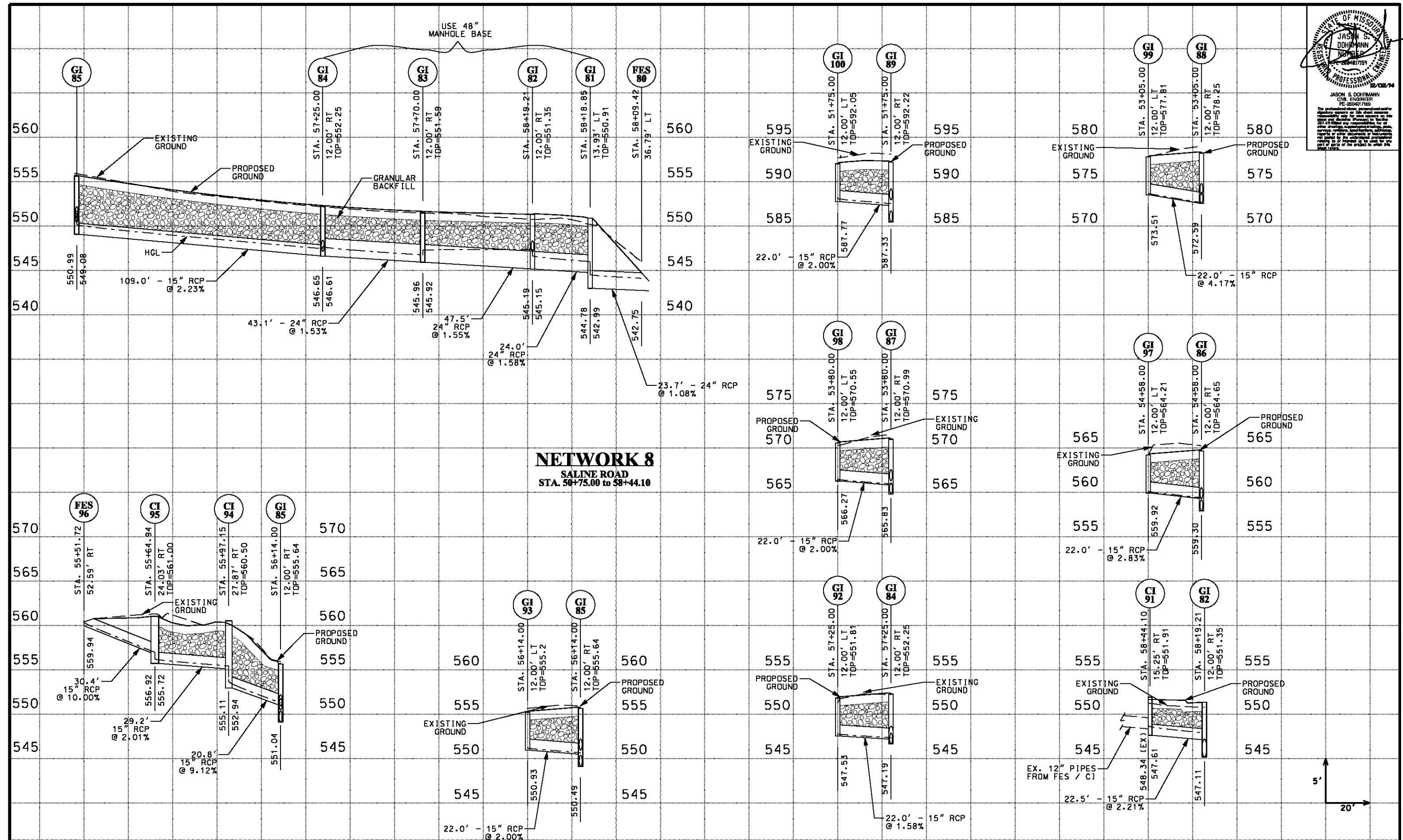
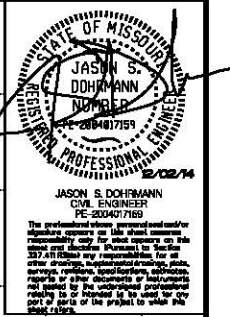


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**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

**STORM SEWER PROFILES**  
NETWORKS 6, 7, & 8  
(Sheet 5 of 7)



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CAD DATE: 12/1/2014  
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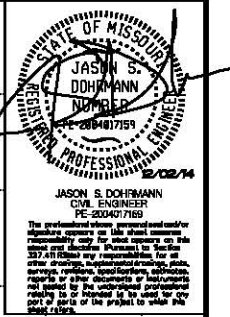
**H3**  
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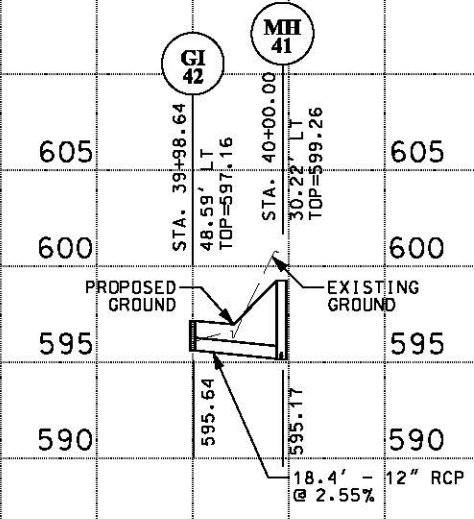
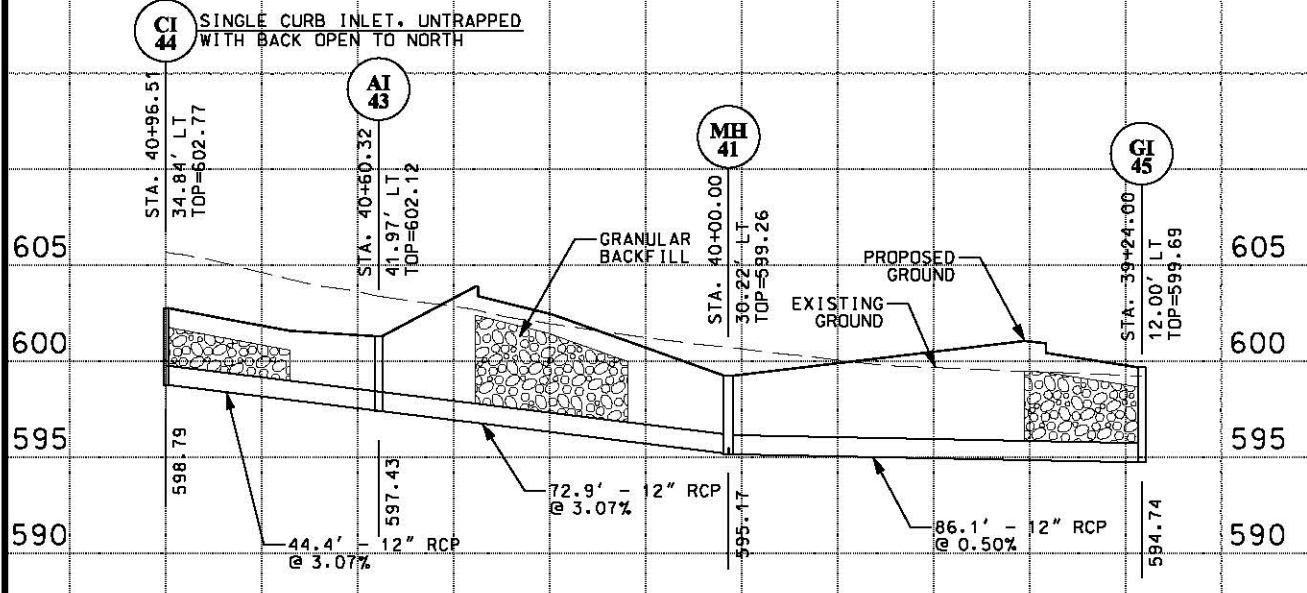
**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

**STORM SEWER PROFILES**  
**NETWORK 8**  
(Sheet 6 of 7)

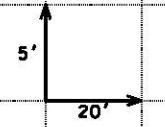
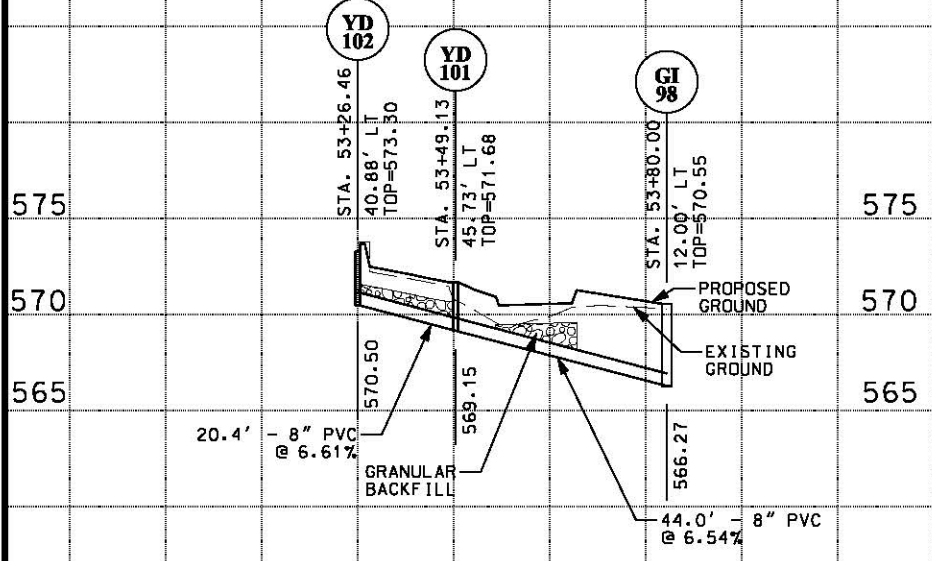




**NETWORK 4**  
SALINE ROAD  
STA. 39+98.64 to 41+98.18



**NETWORK 8**  
SALINE ROAD  
STA. 53+26.46 to 53+80.00  
YARD DRAINS



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JOB DATE: 02/2012 - 12/2014  
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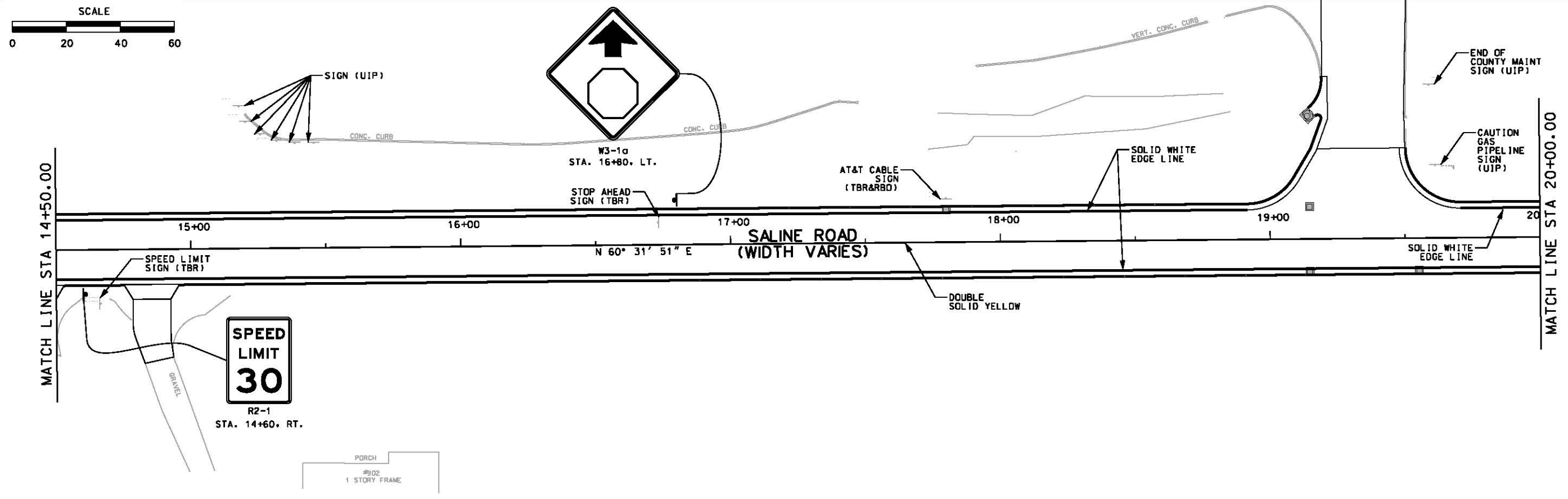
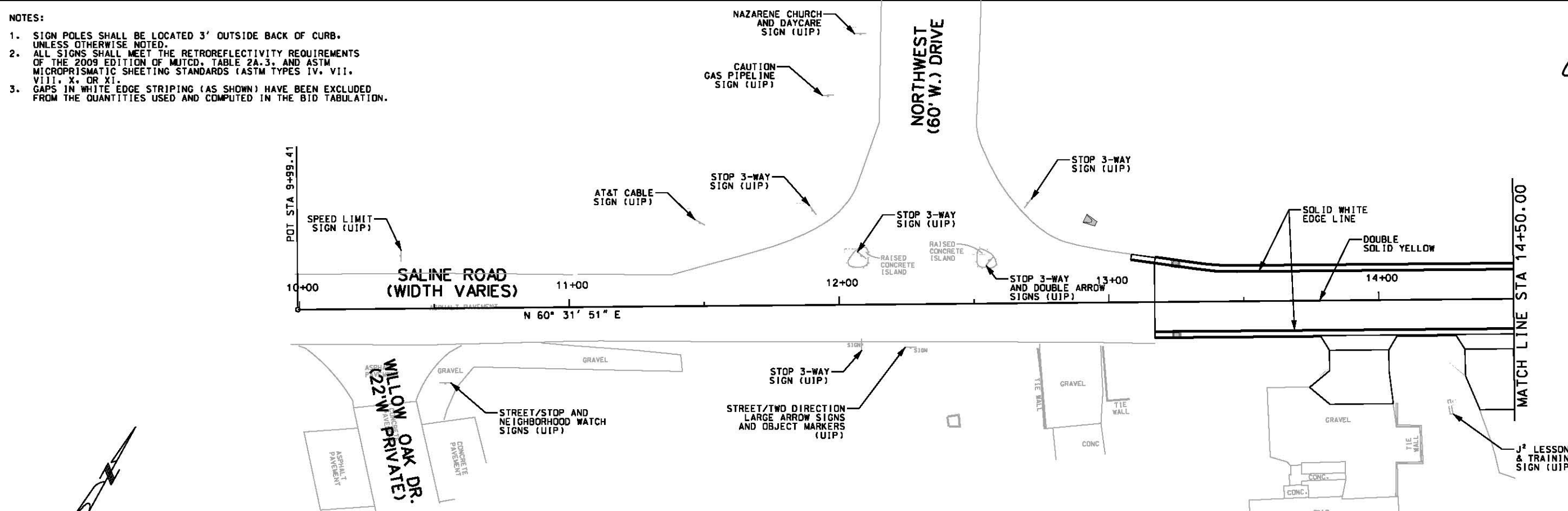
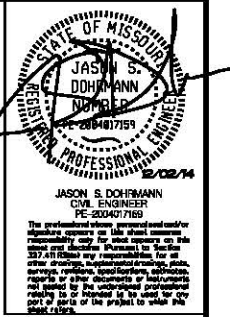


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

STORM SEWER PROFILES  
NETWORKS 4 & 8  
(Sheet 7 of 7)

SHEET NO.  
**DRN-07**  
29 of 99

- NOTES:
1. SIGN POLES SHALL BE LOCATED 3' OUTSIDE BACK OF CURB, UNLESS OTHERWISE NOTED.
  2. ALL SIGNS SHALL MEET THE RETROREFLECTIVITY REQUIREMENTS OF THE 2009 EDITION OF MUTCD, TABLE 2A.3, AND ASTM MICROPRISMATIC SHEETING STANDARDS (ASTM TYPES IV, VII, VIII, X, OR XI).
  3. GAPS IN WHITE EDGE STRIPING (AS SHOWN) HAVE BEEN EXCLUDED FROM THE QUANTITIES USED AND COMPUTED IN THE BID TABULATION.



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 APPROVED: JSD  
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JOB DATE: SEPT. 11, 2012  
 JOB NUMBER: 75110022  
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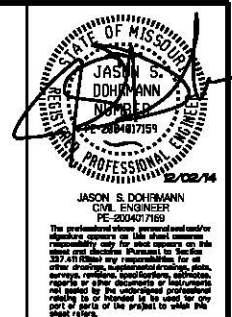
**SALINE ROAD IMPROVEMENTS-PHASE 1**  
 COUNTY OF JEFFERSON, MISSOURI  
 5403(642)/TIP#5589-12

**STRIPING AND SIGNAGE SHEETS**  
 (Sheet 1 of 5)

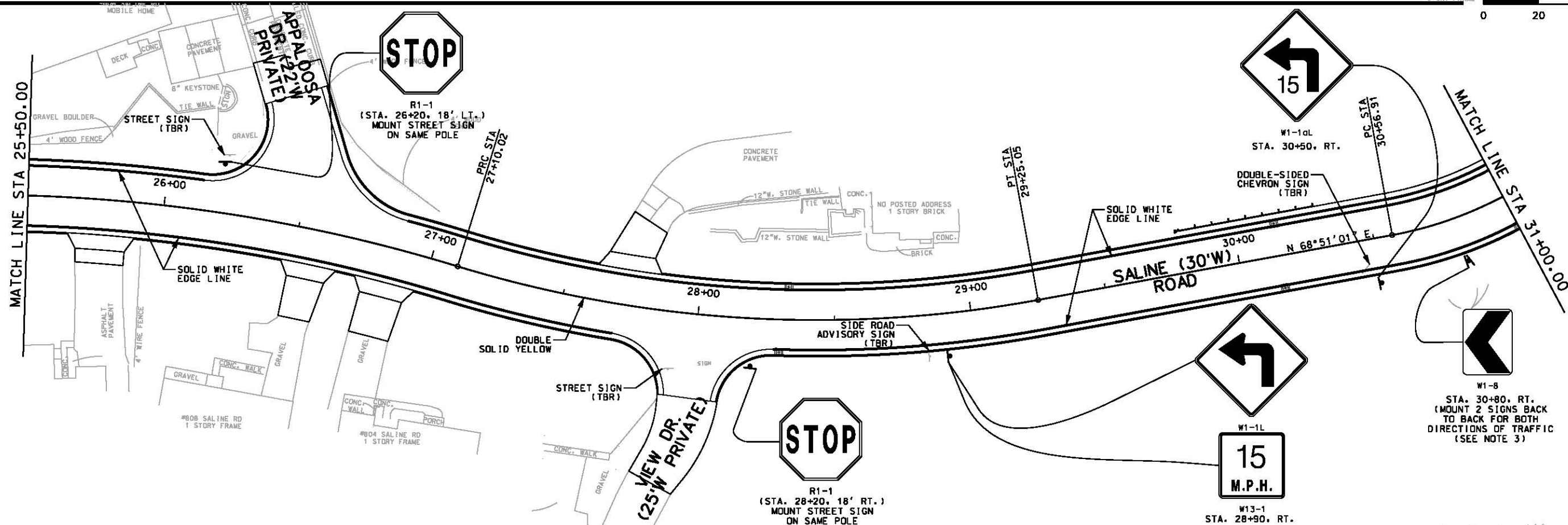
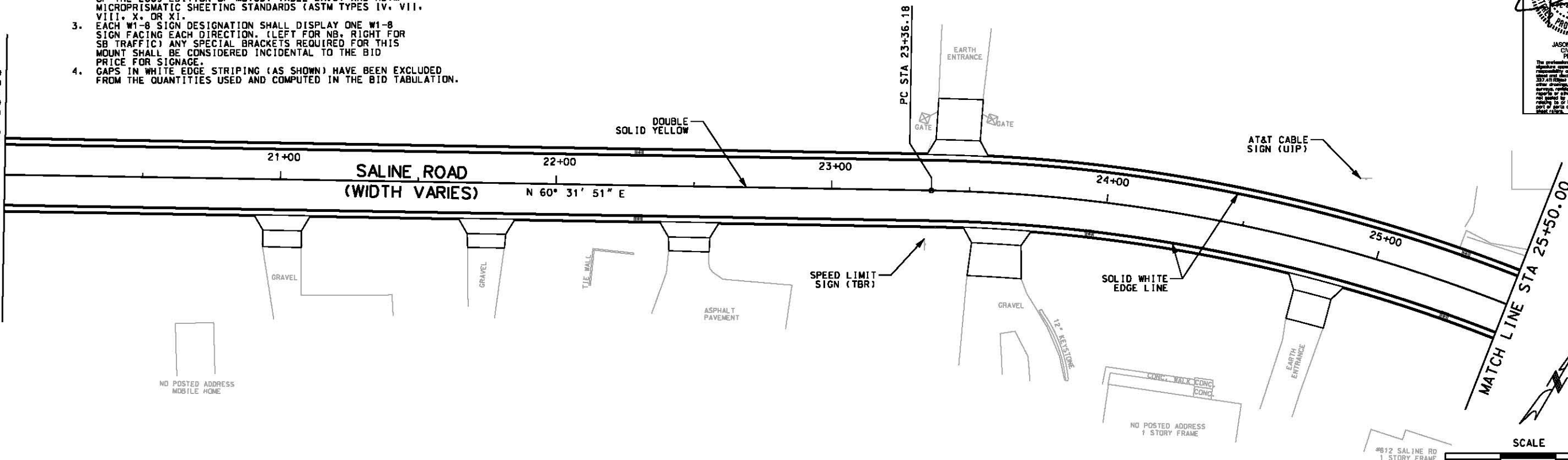
SHEET NO.  
**STR-01**  
 30 of 94

NOTES:

1. SIGN POLES SHALL BE LOCATED 3' OUTSIDE BACK OF CURB, UNLESS OTHERWISE NOTED.
2. ALL SIGNS SHALL MEET THE RETROREFLECTIVITY REQUIREMENTS OF THE 2009 EDITION OF MUTCD, TABLE 2A.3, AND ASTM MICROPRISMATIC SHEETING STANDARDS (ASTM TYPES IV, VII, VIII, X, OR XI).
3. EACH W1-8 SIGN DESIGNATION SHALL DISPLAY ONE W1-8 SIGN FACING EACH DIRECTION. (LEFT FOR NB, RIGHT FOR SB TRAFFIC) ANY SPECIAL BRACKETS REQUIRED FOR THIS MOUNT SHALL BE CONSIDERED INCIDENTAL TO THE BID PRICE FOR SIGNAGE.
4. GAPS IN WHITE EDGE STRIPING (AS SHOWN) HAVE BEEN EXCLUDED FROM THE QUANTITIES USED AND COMPUTED IN THE BID TABULATION.



MATCH LINE STA 20+00.00



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JOB DATE: SEPT. 11, 2012  
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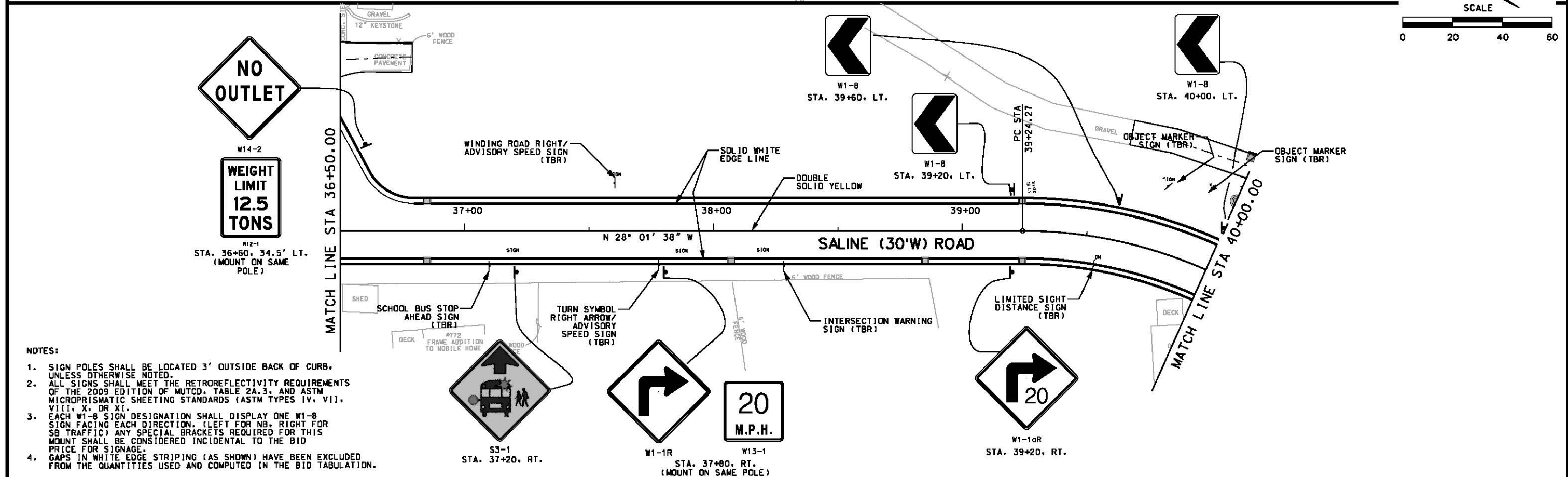
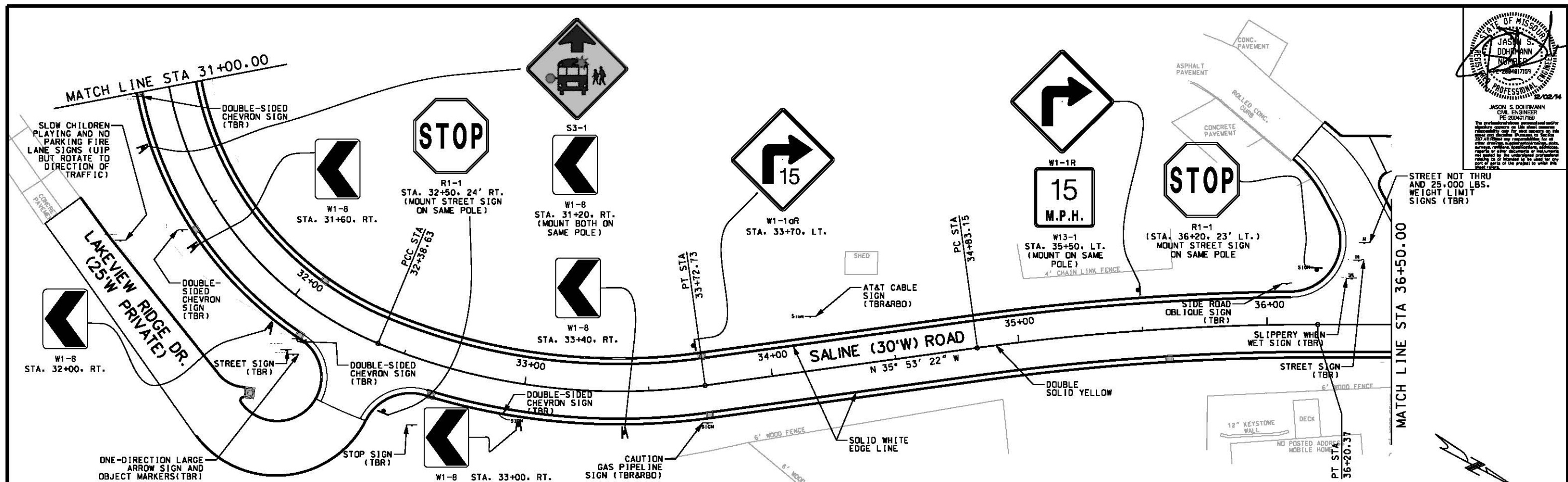


SALINE ROAD IMPROVEMENTS-PHASE 1  
 COUNTY OF JEFFERSON, MISSOURI  
 5403(642)/TIP#5589-12

STRIPING AND SIGNAGE SHEETS  
 (Sheet 2 of 5)

SHEET NO.  
**STR-02**  
 31 of 94





- NOTES:
- SIGN POLES SHALL BE LOCATED 3' OUTSIDE BACK OF CURB, UNLESS OTHERWISE NOTED.
  - ALL SIGNS SHALL MEET THE RETROREFLECTIVITY REQUIREMENTS OF THE 2009 EDITION OF MUTCD, TABLE 2A.3, AND ASTM MICROPRISMATIC SHEETING STANDARDS (ASTM TYPES IV, VII, VIII, X, OR XI).
  - EACH W1-8 SIGN DESIGNATION SHALL DISPLAY ONE W1-8 SIGN FACING EACH DIRECTION. (LEFT FOR NB, RIGHT FOR SB TRAFFIC) ANY SPECIAL BRACKETS REQUIRED FOR THIS MOUNT SHALL BE CONSIDERED INCIDENTAL TO THE BID PRICE FOR SIGNAGE.
  - GAPS IN WHITE EDGE STRIPING (AS SHOWN) HAVE BEEN EXCLUDED FROM THE QUANTITIES USED AND COMPUTED IN THE BID TABULATION.

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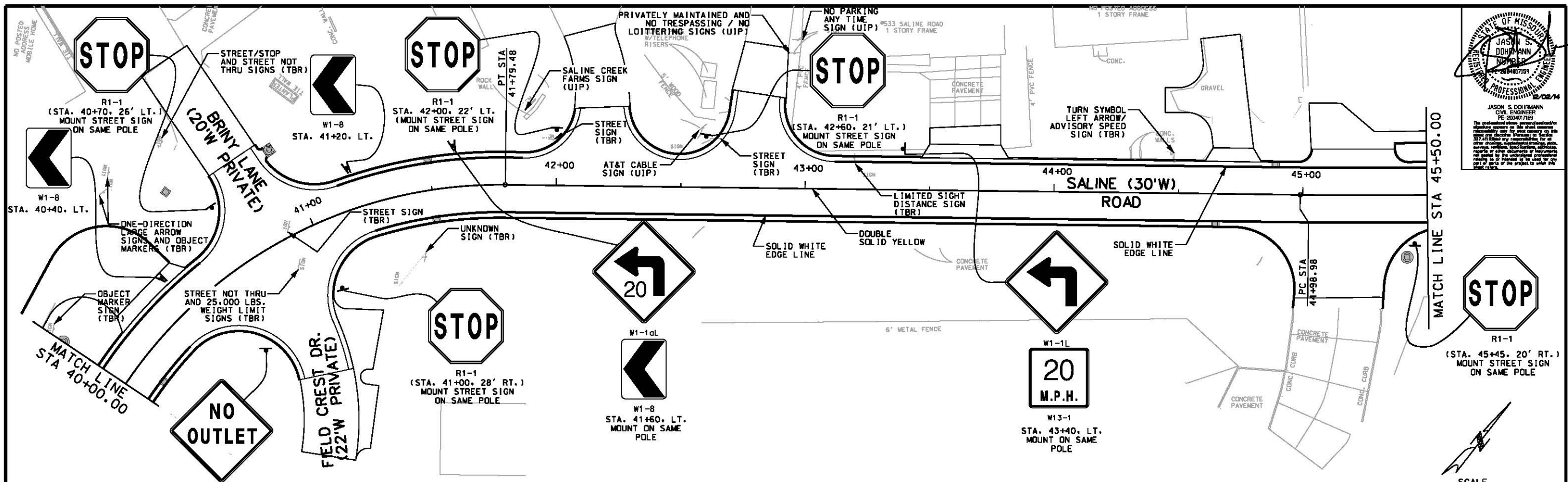
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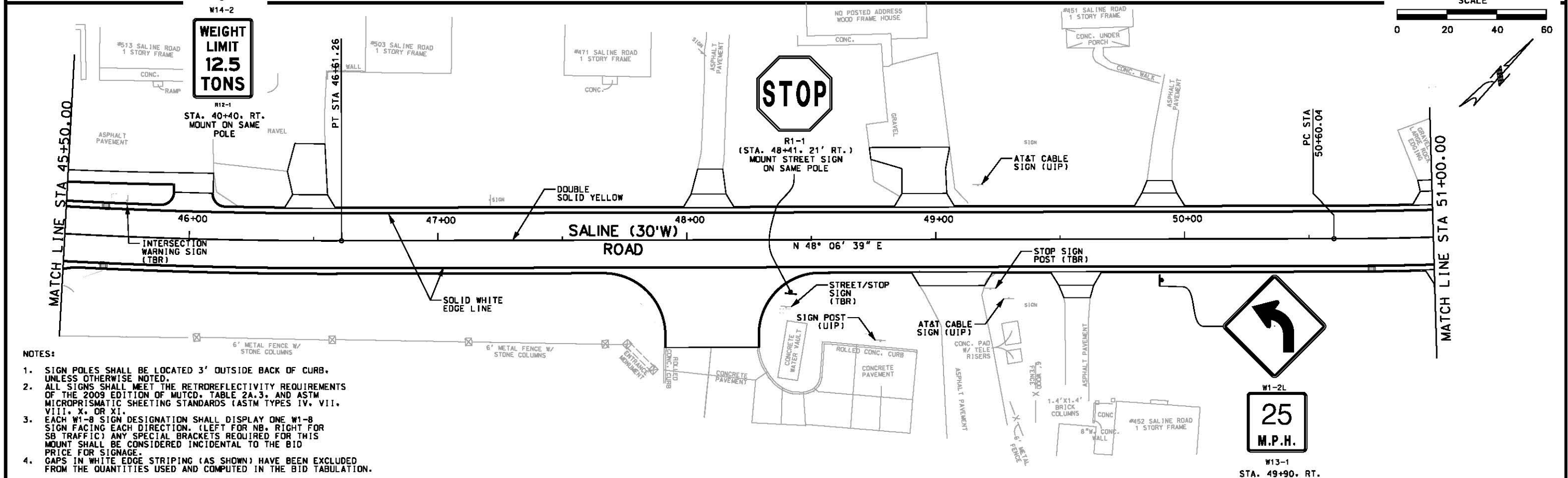
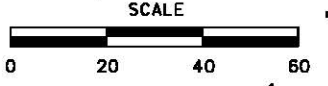
SALINE ROAD IMPROVEMENTS-PHASE 1  
 COUNTY OF JEFFERSON, MISSOURI  
 5403(642)/TIP#5589-12

STRIPING AND SIGNAGE SHEETS  
 (Sheet 3 of 5)

SHEET NO.  
**STR-03**  
 32 of 94



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 CIVIL ENGINEER  
 PE-200407169  
 MISSOURI PROFESSIONAL ENGINEER  
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 purpose without the written consent of the  
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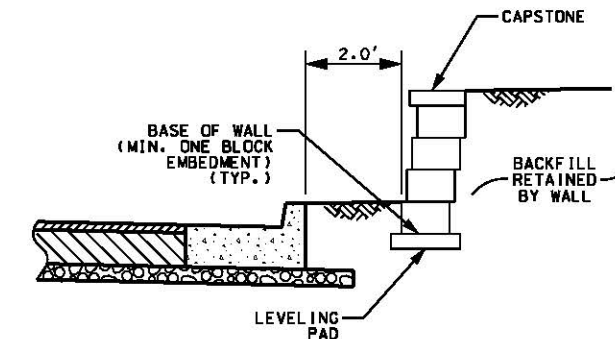
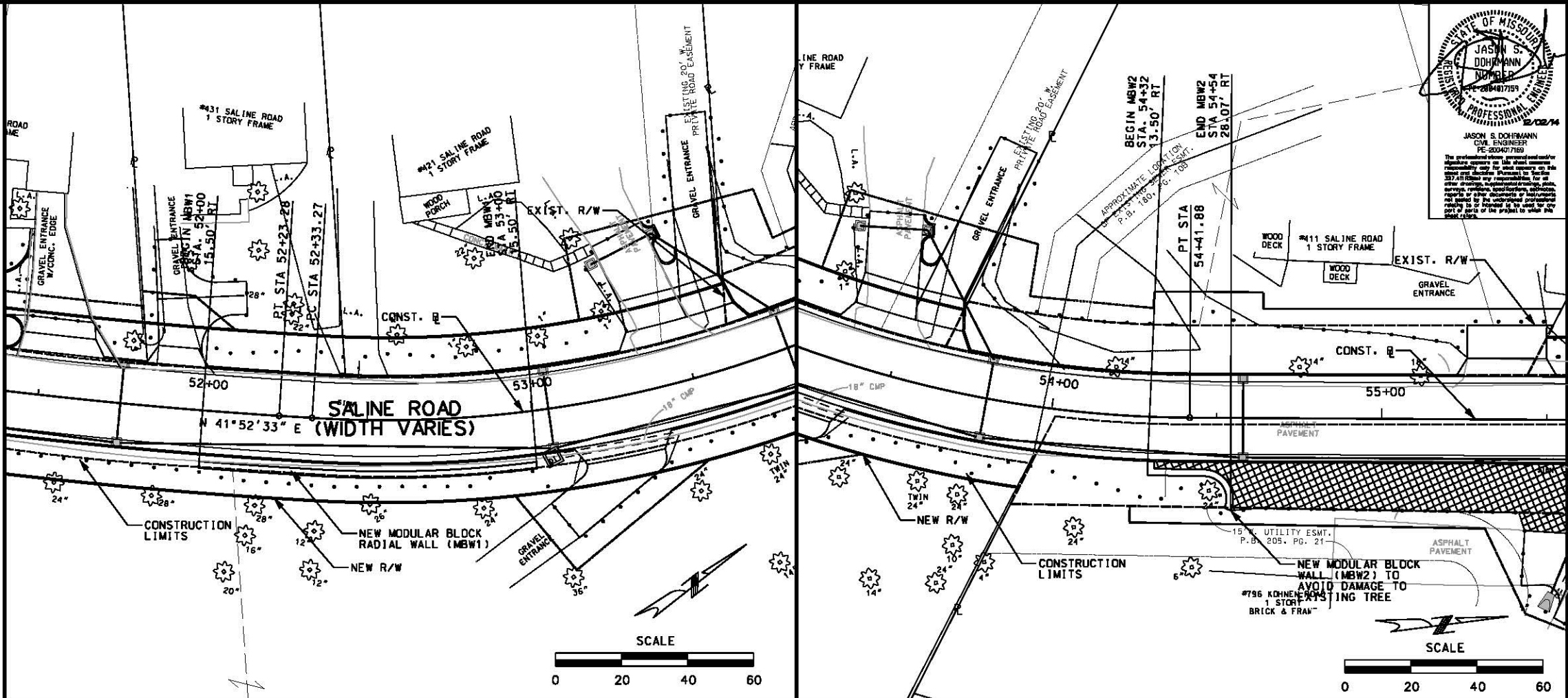
- NOTES:
- SIGN POLES SHALL BE LOCATED 3' OUTSIDE BACK OF CURB, UNLESS OTHERWISE NOTED.
  - ALL SIGNS SHALL MEET THE RETROREFLECTIVITY REQUIREMENTS OF THE 2009 EDITION OF MUTCD, TABLE 2A.3, AND ASTM MICROPRISMATIC SHEETING STANDARDS (ASTM TYPES IV, VII, VIII, X, OR XI).
  - EACH W1-8 SIGN DESIGNATION SHALL DISPLAY ONE W1-8 SIGN FACING EACH DIRECTION. (LEFT FOR NB, RIGHT FOR SB TRAFFIC) ANY SPECIAL BRACKETS REQUIRED FOR THIS MOUNT SHALL BE CONSIDERED INCIDENTAL TO THE BID PRICE FOR SIGNAGE.
  - GAPS IN WHITE EDGE STRIPING (AS SHOWN) HAVE BEEN EXCLUDED FROM THE QUANTITIES USED AND COMPUTED IN THE BID TABULATION.





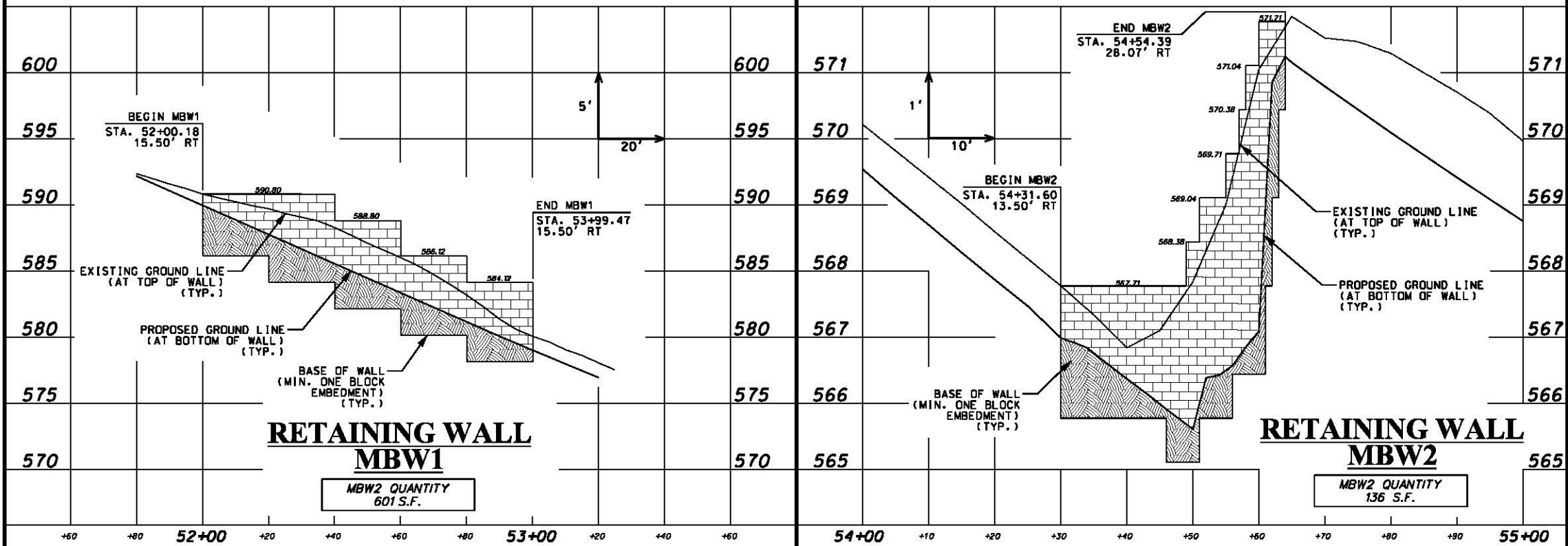
GENERAL NOTES:

1. MODULAR BLOCK RETAINING WALLS SHALL MEET THE REQUIREMENTS OF THE CURRENT VERSION OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (MODOT).
2. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEY DATA AND RECORDS. THE OWNER DOES NOT WARRANT THE LOCATION OF THESE FACILITIES AS PRECISE. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND PRECISE LOCATION OF ALL FACILITIES AND TO AVOID DAMAGE.
3. ALL STATIONING AND OFFSETS GIVEN FROM SALINE ROAD CENTERLINE TO WALL FACE UNLESS OTHERWISE NOTED.
4. MODULAR BLOCK RETAINING WALL TO BE DESIGNED PER MANUFACTURER'S DETAILS BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI. CONTRACTOR IS REQUIRED TO SUBMIT SEALED WALL DESIGN, INCLUDING ALL PLANS, DESIGN CALCS, SUBSURFACE INFORMATION, (BORING LOGS OR OTHER FACTUAL RECORDS) AND OTHER PERTINENT INFORMATION TO THE ENGINEER OF RECORD FOR REVIEW.
5. "MBW" STANDS FOR MODULAR BLOCK RETAINING WALL.
6. AREA OF WALL TO BE PAID FOR IS AREA OF "FACE AREA EXPOSED" AS SHOWN WITH THE BRICK PATTERN BELOW.



TYPICAL SECTION THRU WALL

N.T.S.  
MBW1 - STA. 52+00.18 to STA. 53+99.47 RT  
MBW2 - STA. 54+31.60 to STA. 54+54.39 RT



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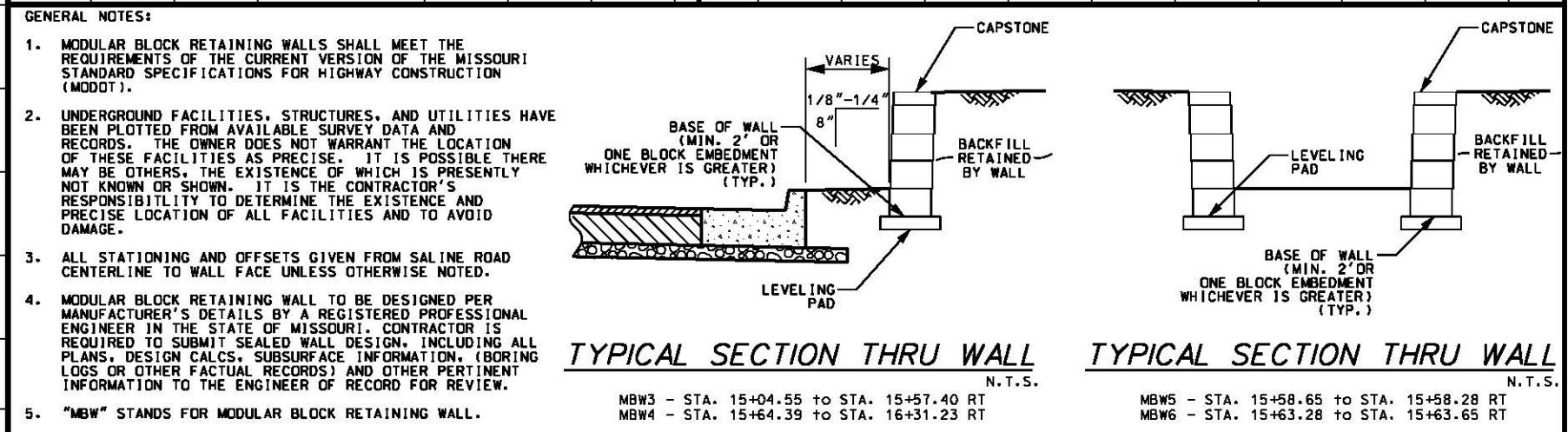
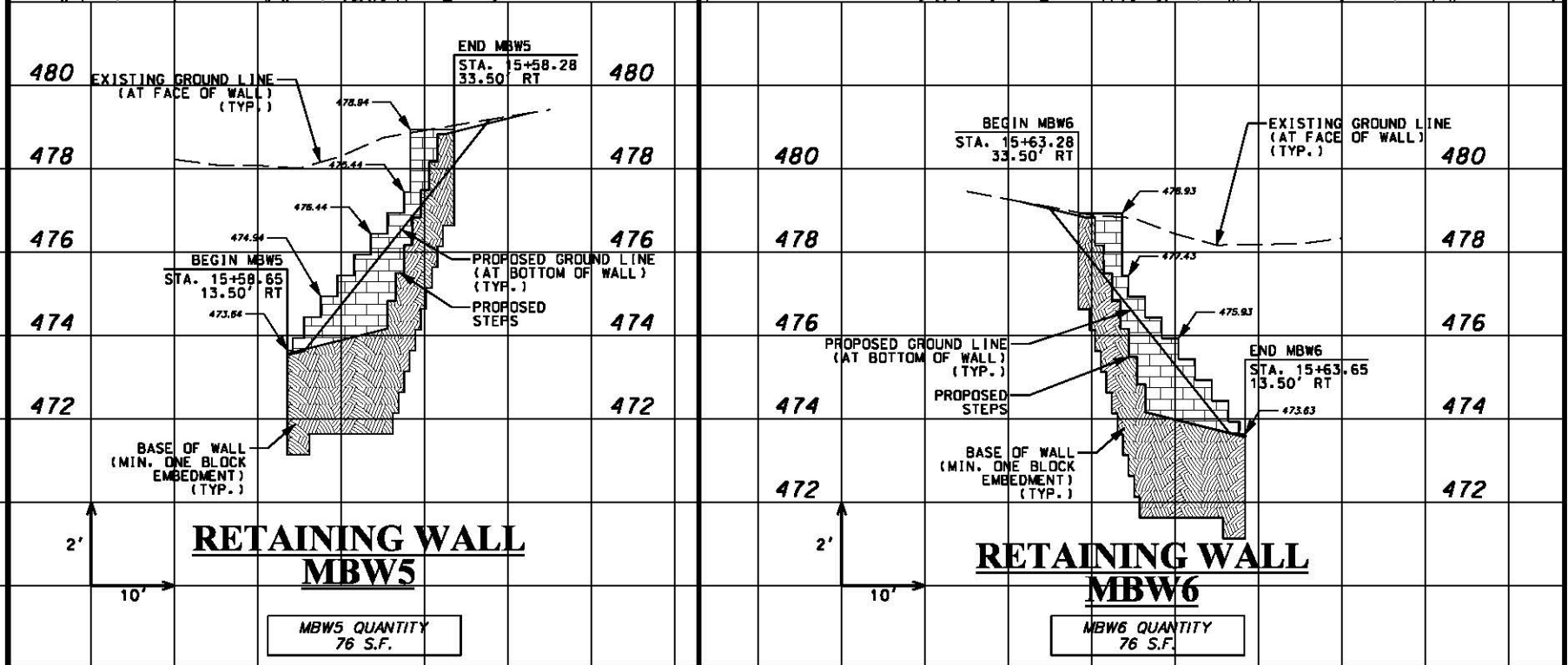
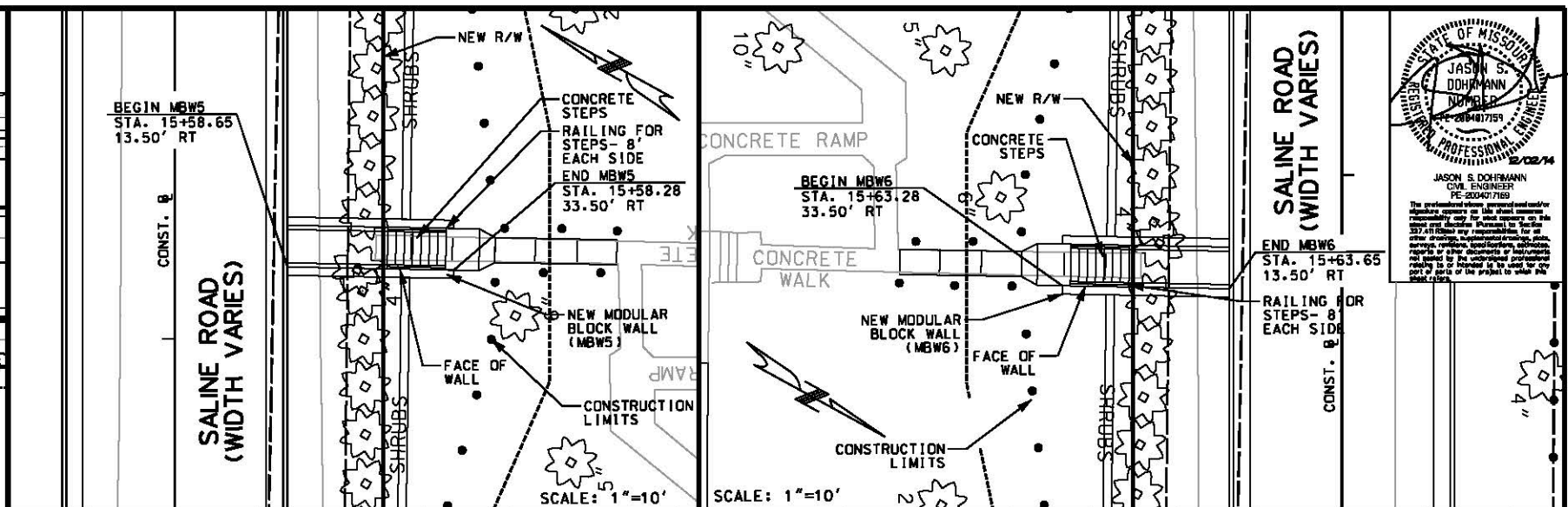
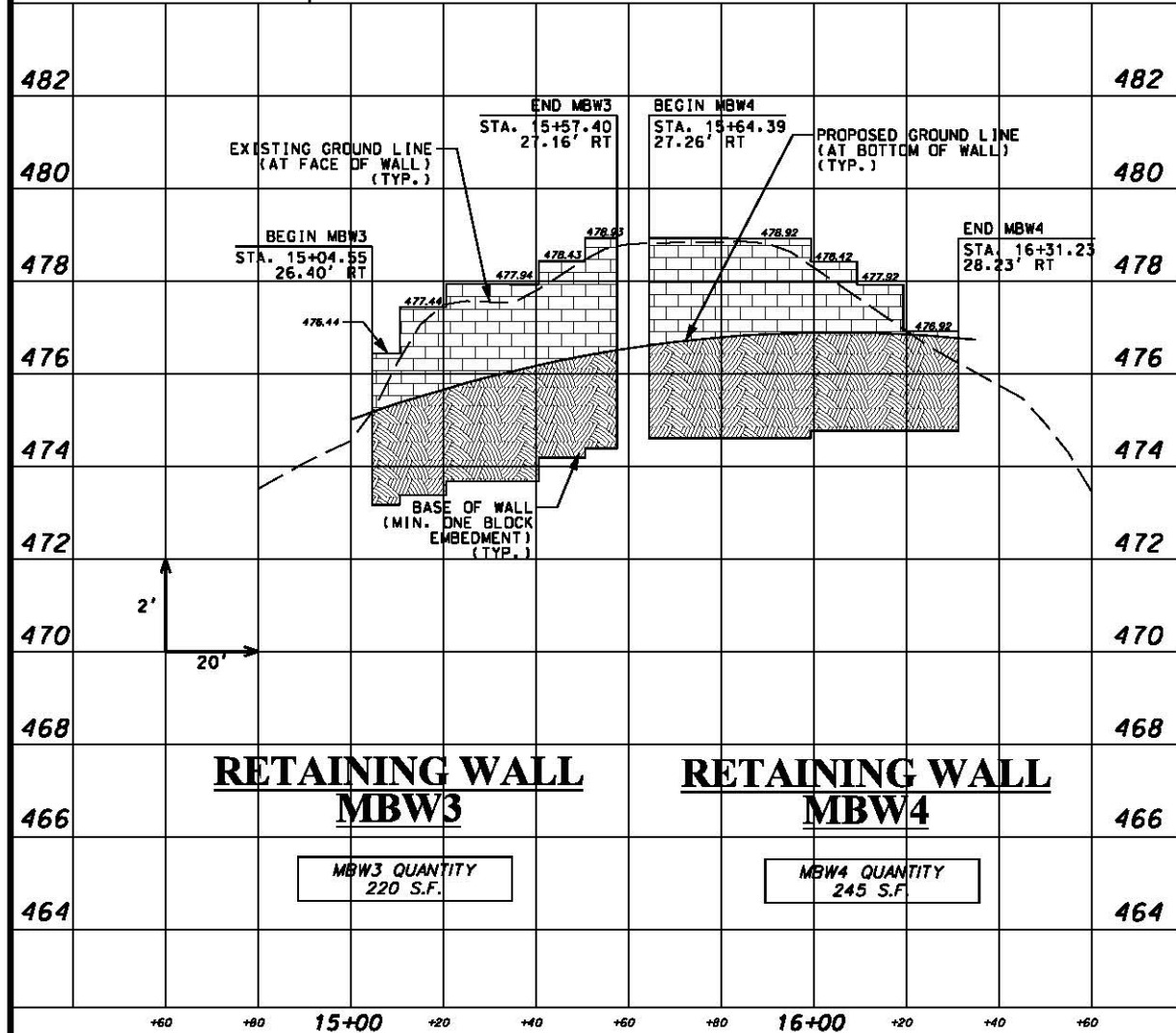
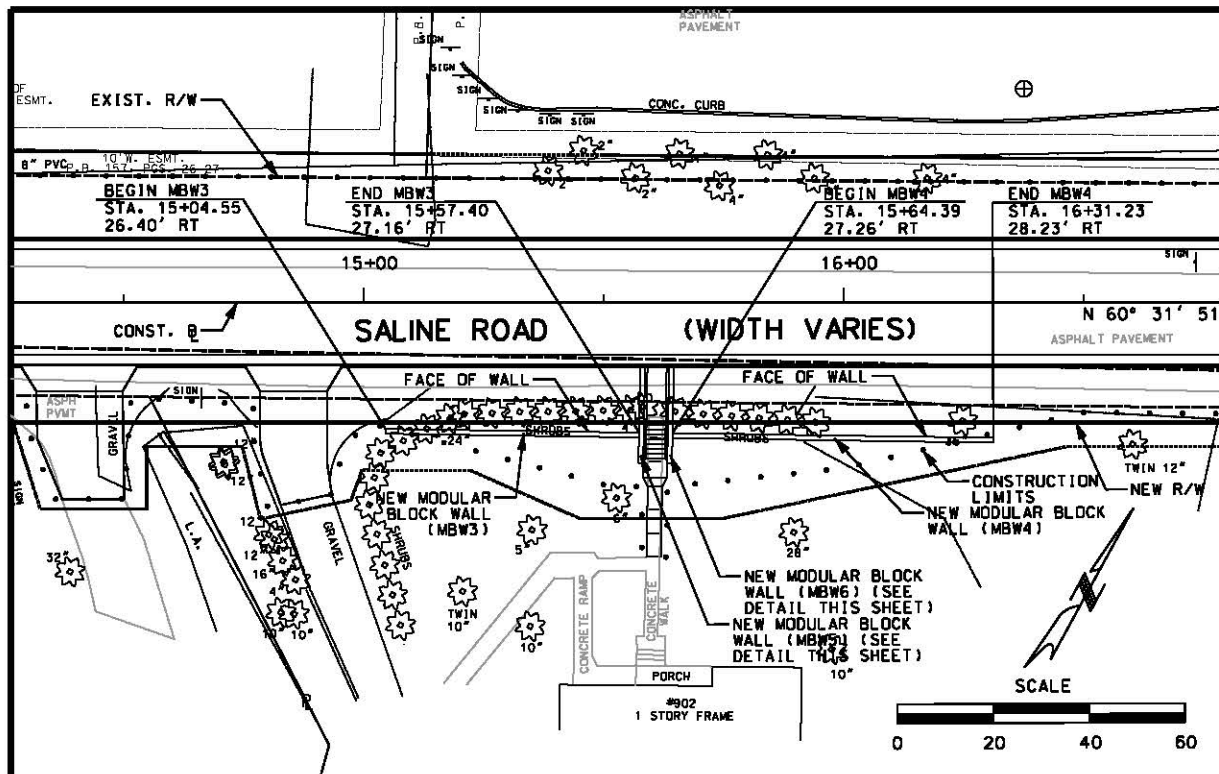
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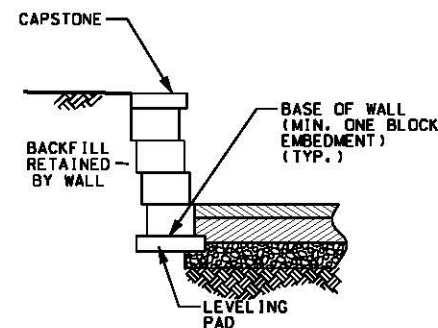
SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

RETAINING WALL DETAILS  
MBW 1 & MBW 2  
(Sheet 1 of 3)

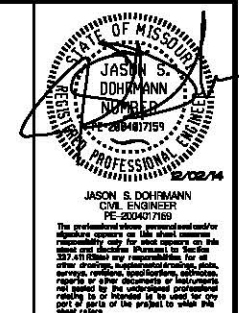
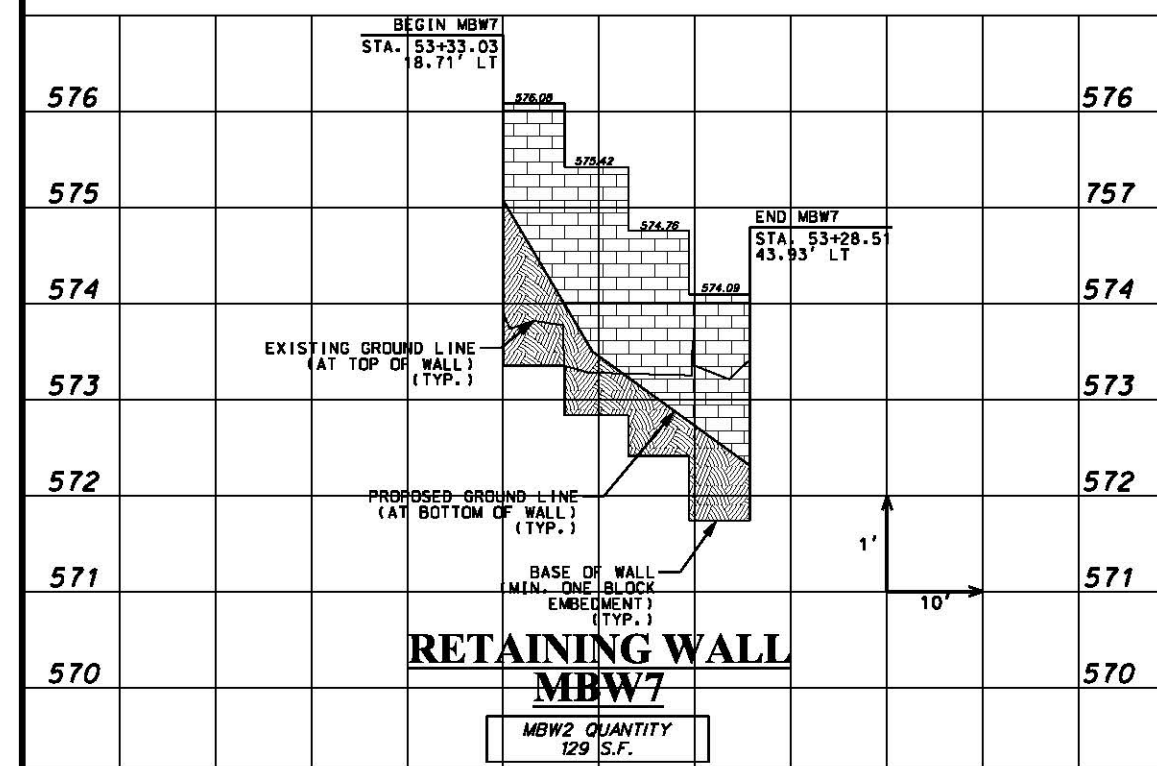
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**WAL-01**  
35 of 99



1. MODULAR BLOCK RETAINING WALLS SHALL MEET THE REQUIREMENTS OF THE CURRENT VERSION OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (MDDOT).
2. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEY DATA AND RECORDS. THE OWNER DOES NOT WARRANT THE LOCATION OF THESE FACILITIES AS PRECISE. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND PRECISE LOCATION OF ALL FACILITIES AND TO AVOID DAMAGE.
3. ALL STATIONING AND OFFSETS GIVEN FROM SALINE ROAD CENTERLINE TO WALL FACE UNLESS OTHERWISE NOTED.
4. MODULAR BLOCK RETAINING WALL TO BE DESIGNED PER MANUFACTURER'S DETAILS BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI. CONTRACTOR IS REQUIRED TO SUBMIT SEALED WALL DESIGN, INCLUDING ALL PLANS, DESIGN CALCS, SUBSURFACE INFORMATION, (BORING LOGS OR OTHER FACTUAL RECORDS) AND OTHER PERTINENT INFORMATION TO THE ENGINEER OF RECORD FOR REVIEW.
5. "MBW" STANDS FOR MODULAR BLOCK RETAINING WALL.
6. AREA OF WALL TO BE PAID FOR IS AREA OF "FACE AREA EXPOSED" AS SHOWN WITH THE BRICK PATTERN BELOW.



MBW7 - STA. 53+33.03 to STA. 53+28.51 RT



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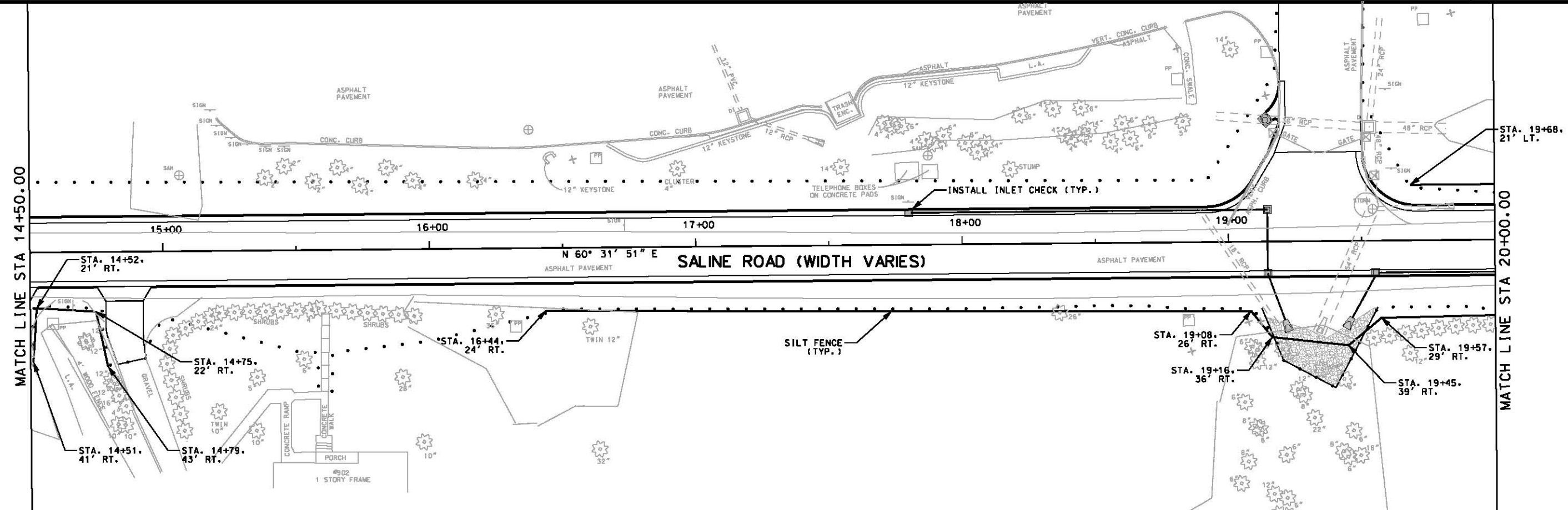
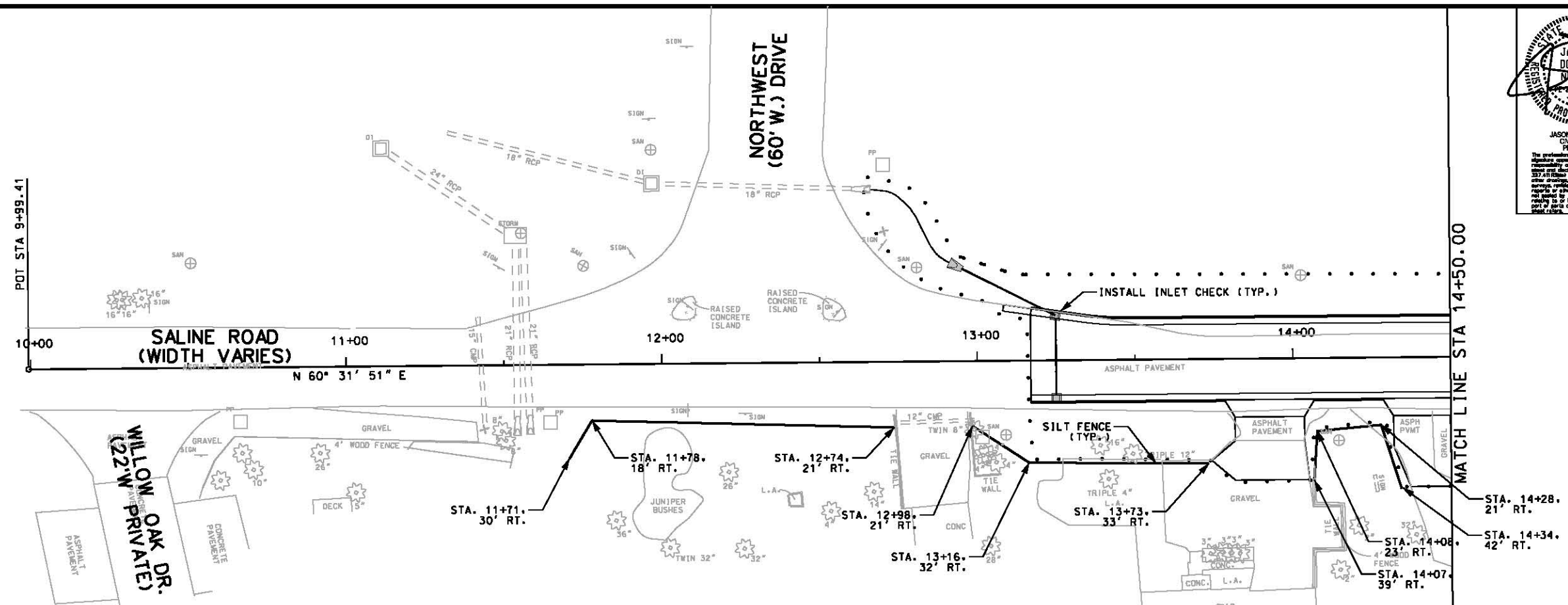
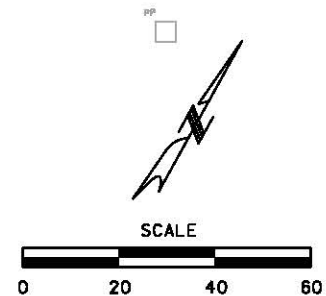
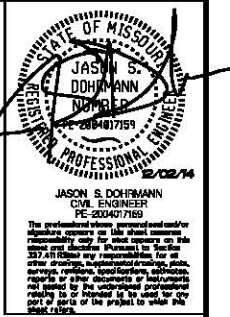


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP\*5589-12

RETAINING WALL DETAILS  
MBW 7  
(Sheet 3 of 3)

SHEET NO.  
**WAL-03**  
37 of 99





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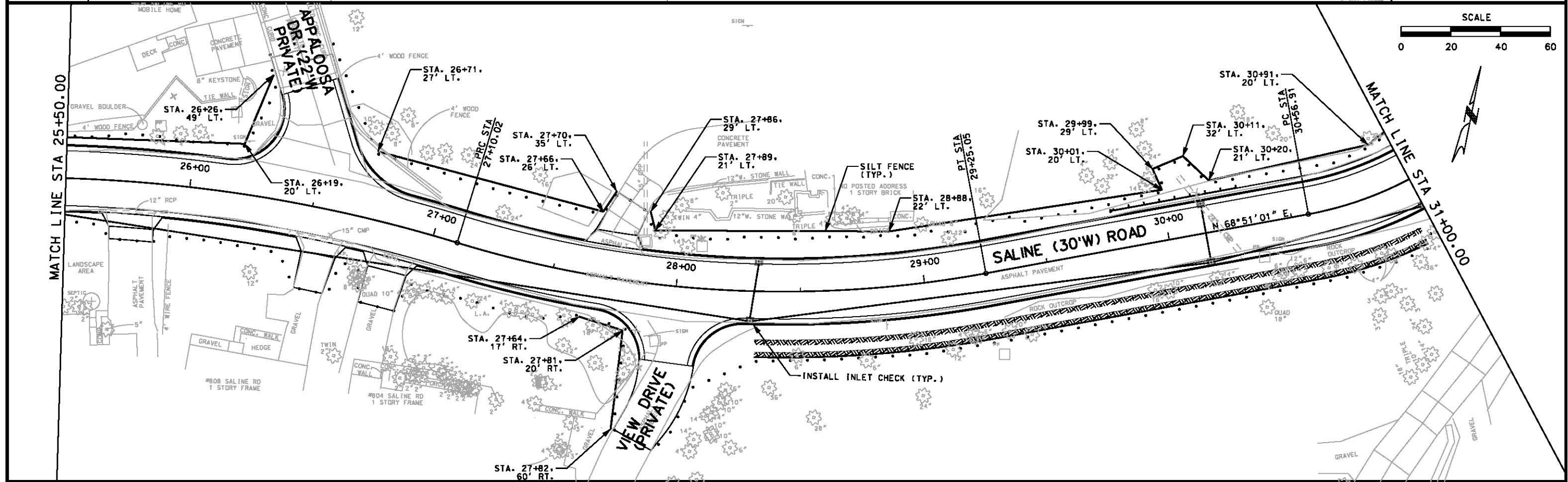
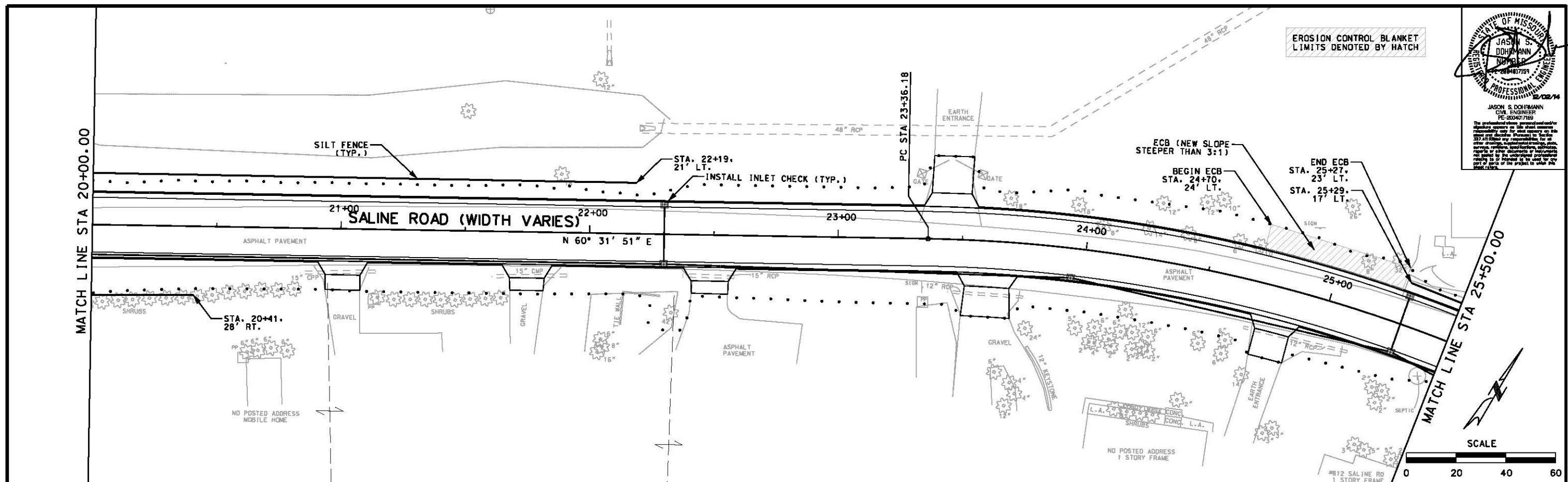
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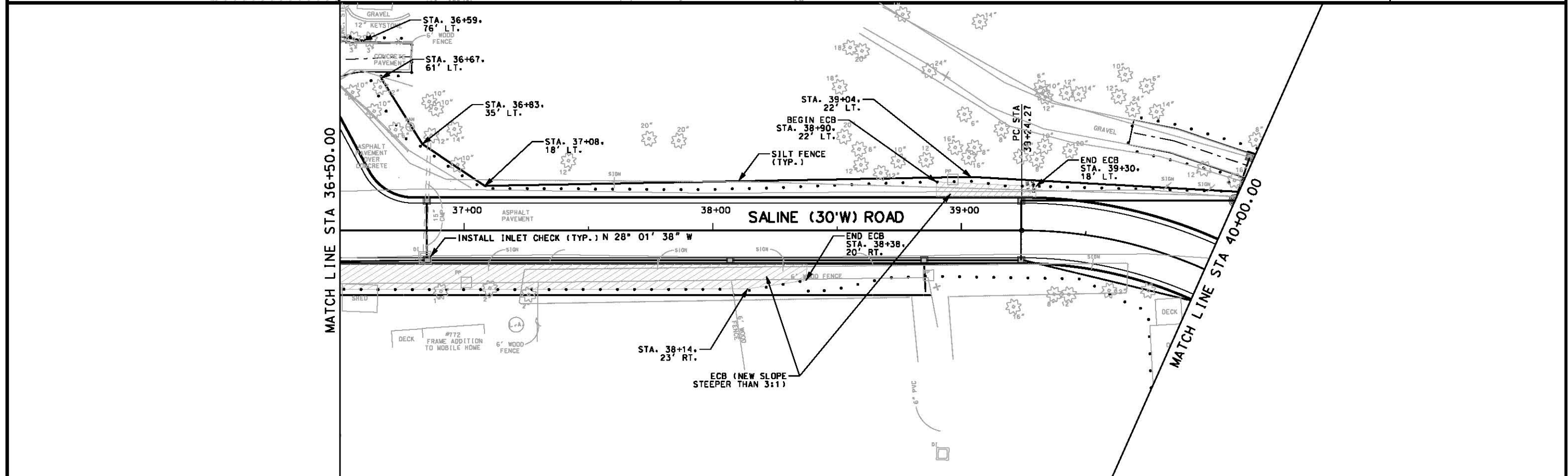
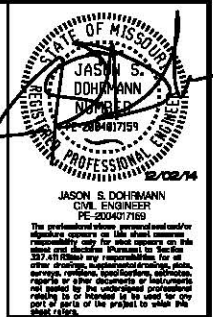
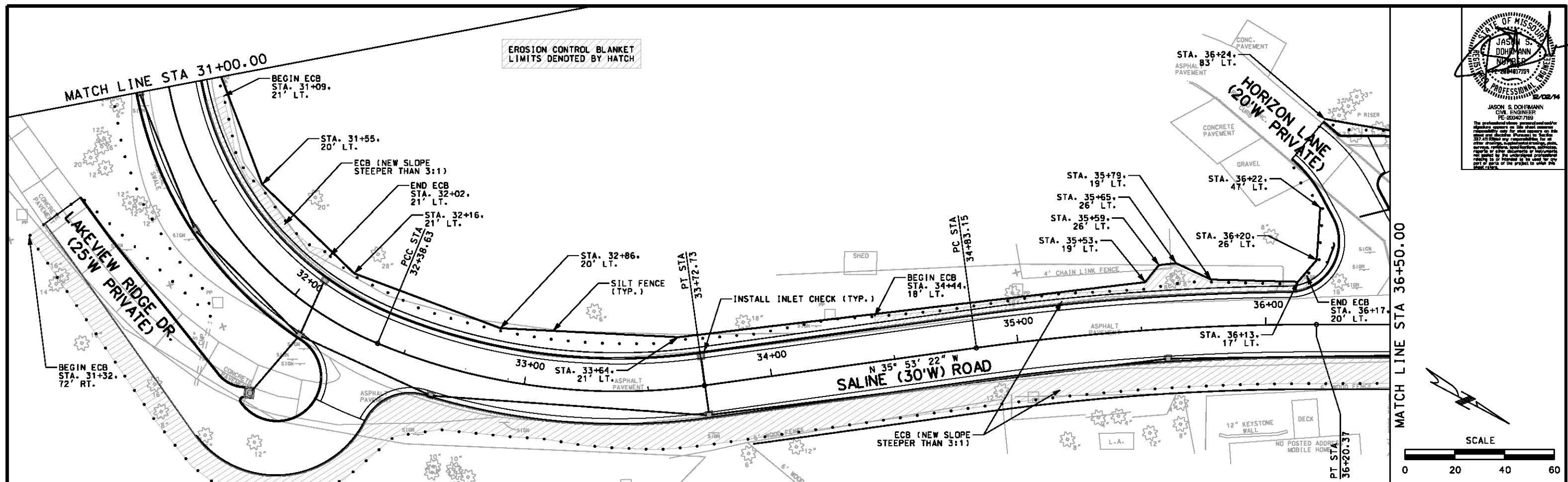


**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

**EROSION CONTROL SHEETS**  
(Sheet 1 of 5)

SHEET NO.  
**ERO-01**  
38 of 94











#### GENERAL NOTES

- 1) THE TEMPORARY PAVEMENT MARKINGS SHALL CONSIST OF PAVEMENT MARKINGS, EITHER BY PAINTING OR BY APPLICATION OF PERFORMED REMOVABLE TAPE, AS A METHOD TO DELINEATE TRAFFIC LANE ON PAVEMENT USED FOR HANDLING TRAFFIC DURING CONSTRUCTION. ON NEW PAVEMENTS OR EXISTING PAVEMENTS THAT ARE TO REMAIN IN PLACE, PREFORMED REMOVABLE TAPE SHALL BE USED. ON PAVEMENTS THAT ARE TO BE OBLITERATED AT THE COMPLETION OF EITHER THE CURRENT PHASE OF CONSTRUCTION AND/OR THE COMPLETION OF EITHER THE CURRENT PHASE OF CONSTRUCTION AND/OR THE COMPLETION OF THE PROJECT, PAVEMENT MARKING SHALL BE USED. THE MARKING PAINT AND/OR TAPE SHALL BE REFLECTORIZED AND BE OF GOOD COMMERCIAL QUALITY, AND BE APPROVED BY THE ENGINEER. ALL PREFORMED MARKING TAPE/OR PAINT USED ON THE PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE AS DIRECTED BY THE ENGINEER. FOR THE PURPOSES OF THE QUANTITY DEVELOPMENT, IT IS ASSUMED THAT ALL LOCATIONS USE PAINT, AND NO DISTINCTION HAS BEEN MADE BETWEEN THE COST OF PAINT AND/OR TAPE. THE COST OF REMOVAL OF THESE ITEMS, IF NECESSARY, WILL BE CONSIDERED TO BE COMPLETELY COVERED BY THE UNIT PRICES BID FOR THE ITEM. ALL PAVEMENT MARKINGS, INCLUDING THOSE EXISTING FROM PREVIOUS TRAFFIC HANDLING PHASES, WHICH CONFLICT WITH NEW MARKINGS BEING APPLIED, SHALL BE OBLITERATED. THE COST OF OBLITERATION WILL BE CONSIDERED INCIDENTAL TO THE ITEM BID FOR TEMPORARY PAVEMENT STRIPING AND REMOVAL.
- 2) ALL BARRELS USED ON THIS PROJECT SHALL BE FLEXIBLE, NONMETALLIC TRIM LINE CHANNELIZERS.
- 3) CONTRACTOR FURNISHED SIGNS SHALL BE MAINTAINED AND KEPT CLEAN FOR THE DURATION OF THE PROJECT AND SHALL BE MOUNTED AS SHOWN ON THE MODOT STANDARD DRAWING "TEMPORARY TRAFFIC CONTROL DEVICES" (616.10A0) AND PAYMENT SHALL BE CONSIDERED COMPLETELY COVERED BY THE BID ITEM FOR STANDARD TRAFFIC CONTROL DEVICES.
- 4) EDGE DROP-OFFS ADJACENT TO THE PAVEMENT (NEW OR TEMPORARY) GREATER THAN 2 INCHES SHALL HAVE EDGE TREATMENT INSTALLED, WHICH SHALL BE CONSTRUCTED OF TYPE 5 AGGREGATE BASE. QUANTITIES HAVE BEEN INCLUDED FOR THE PROJECT. NO PAYMENT WILL BE MADE FOR THE REMOVAL OF THE TYPE 5 AGGREGATE BASE MATERIAL. THE CONTRACTOR SHALL, AT THE END OF EACH DAY'S WORK, PROVIDE THE TREATMENT AS STATED ABOVE FOR EACH PHASE OF WORK, OR AS DIRECTED BY THE ENGINEER.
- 5) THE CONTRACTOR (AT HIS EXPENSE) SHALL CONSTRUCT ALL DRIVEWAYS IN A MANNER WHICH PROVIDES ACCESS TO EACH PROPERTY AT ALL TIMES. THIS INCLUDES STAGED DRIVEWAY CONSTRUCTION, TEMPORARY ROCK ACCESS, OR OTHER MEANS.
- 6) PROPER TRAFFIC CONTROL DEVICES AND FLAGGERS SHALL BE IN PLACE PRIOR TO THE INSTALLATION OF STORM SEWER PIPE WHICH CROSS ACTIVE TRAFFIC LANES. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE ON SITE TO MONITOR ALL CROSSINGS, 24 HOURS A DAY AND 7 DAYS A WEEK, UNTIL A STABLE TEMPORARY HARD SURFACE IS ESTABLISHED. THE CONTRACTOR'S REPRESENTATIVE SHALL BE CAPABLE TO MAKE ANY REPAIRS TO THE CROSSINGS, WHICH MAY DAMAGE VEHICLES.
- 7) TEMPORARY TRAFFIC BARRIER TO CONFORM TO ST. LOUIS COUNTY STANDARD DRAWING C617.00.

#### PHASE 1A

- 1) INSTALL TRAFFIC CONTROL AND EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
- 2) PERFORM CLEARING AND GRUBBING THROUGHOUT PROJECT LIMITS.
- 3) PERFORM GRADING AND ROCK EXCAVATION FOR TEMPORARY PAVEMENT.
- 4) INSTALL TEMPORARY PAVEMENT AND TEMPORARY DRAINAGE PIPES AS SHOWN.
- 5) INSTALL TRAFFIC CONTROL DEVICES AND SIGNAGE FOR DETOUR. SWITCH NORTHBOUND TRAFFIC TO TEMPORARY PAVEMENT AND CLOSE ROADWAY TO SOUTHBOUND TRAFFIC.
- 6) CONSTRUCT STORM SEWER PIPES AND STRUCTURES FROM:  
CI 111 TO GI 110  
GI 13 TO APPROX. 16 FEET DOWNSTREAM OF GI 13  
GI 23 TO FES 20  
GI 38 TO APPROX. 14 FEET DOWNSTREAM OF GI 38  
GI 39 TO APPROX. 14 FEET DOWNSTREAM OF GI 39  
GI 40 TO APPROX. 14 FEET DOWNSTREAM OF GI 40  
GI 41 TO APPROX. 14 FEET DOWNSTREAM OF GI 41
- 7) PERFORM REMOVALS AND EARTHWORK.
- 8) CONSTRUCT CURB AND GUTTERS BETWEEN STA 13+17 TO 31+50 LT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 13+17 TO 32+00 LT.
- 9) CONSTRUCT SUNPAK DRIVE AND APPALOOSA DRIVE PAVEMENT STAGED SO THAT TRAFFIC IS NOT INTERRUPTED.
- 10) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.

#### PHASE 1B

- 1) INSTALL EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
- 2) PERFORM GRADING FOR TEMPORARY PAVEMENT.
- 3) INSTALL TEMPORARY PAVEMENT AS SHOWN.
- 4) INSTALL TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO NEW LANE CONFIGURATION.
- 5) CONSTRUCT STORM SEWER PIPES AND STRUCTURES FROM:  
FES 10 TO APPROX. 8 FEET UPSTREAM OF GI 12  
FES 30 TO GI 52  
GI 32 TO APPROX. 8 FEET UPSTREAM OF GI 32  
GI 34 TO APPROX. 8 FEET UPSTREAM OF GI 34  
GI 35 TO APPROX. 8 FEET UPSTREAM OF GI 35  
GI 36 TO APPROX. 8 FEET UPSTREAM OF GI 36
- 6) PERFORM REMOVALS AND EARTHWORK.
- 7) CONSTRUCT CURB AND GUTTERS BETWEEN STA 13+17 TO 31+80 RT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS, RETAINING WALLS, AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 11+59 TO 32+00 RT.
- 8) CONSTRUCT VIEW DRIVE PAVEMENT STAGED SO THAT TRAFFIC IS NOT INTERRUPTED.
- 9) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.
- 10) CONSTRUCT TYPE C BITUMINOUS CONCRETE WEARING COURSE BETWEEN STA 13+17 TO 31+00 LT AND RT.
- 11) INSTALL PERMANENT PAVEMENT MARKINGS AND SIGNAGE BETWEEN STA 10+00 TO 31+00 LT AND RT.

#### PHASE 2A

- 1) INSTALL TRAFFIC CONTROL AND EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
- 2) PERFORM GRADING FOR TEMPORARY PAVEMENT.
- 3) INSTALL TEMPORARY PAVEMENT AS SHOWN.
- 4) INSTALL TRAFFIC CONTROL DEVICES AND SIGNAGE FOR DETOUR. SWITCH NORTHBOUND TRAFFIC TO TEMPORARY PAVEMENT AND CLOSE ROADWAY TO SOUTHBOUND TRAFFIC.
- 5) CONSTRUCT STORM SEWER PIPES AND STRUCTURES FROM:  
GI 52 TO APPROX. 14 FEET UPSTREAM FROM GI 52  
CI 56 TO GI 52  
GI 52 TO APPROX. 14 FEET UPSTREAM FROM GI 48  
GI 54 TO APPROX. 14 FEET UPSTREAM FROM GI 54  
GI 62 TO APPROX. 14 FEET UPSTREAM FROM GI 62  
GI 46 TO APPROX. 14 FEET UPSTREAM FROM GI 46
- 6) PERFORM REMOVALS AND EARTHWORK.
- 7) CONSTRUCT CURB AND GUTTERS BETWEEN STA 32+00 TO 43+00 RT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 32+00 TO 41+15 RT, 39+87 TO 41+15 LT, AND 41+45 TO 43+50 RT.
- 8) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.

#### PHASE 2B

- 1) PERFORM GRADING FOR TEMPORARY PAVEMENT.
- 2) INSTALL TEMPORARY PAVEMENT AS SHOWN.
- 3) INSTALL TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO NEW LANE CONFIGURATION.
- 4) PERFORM REMOVALS AND EARTHWORK.
- 5) CONSTRUCT CURB AND GUTTERS, TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS, AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 41+15 TO 41+45 RT AND AREA SHOWN ON FIELD CREST DRIVE.
- 6) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.

#### PHASE 2C

- 1) INSTALL EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
- 2) PERFORM GRADING FOR TEMPORARY PAVEMENT.
- 3) INSTALL TEMPORARY PAVEMENT AS SHOWN.
- 4) INSTALL TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO NEW LANE CONFIGURATION.
- 5) CONSTRUCT STORM SEWER PIPES AND STRUCTURES FROM:  
GI 51 TO APPROX. 8 FEET DOWNSTREAM OF GI 51  
GI 57 TO APPROX. 8 FEET DOWNSTREAM OF GI 57  
GI 61 TO APPROX. 8 FEET DOWNSTREAM OF GI 61  
GI 45 TO APPROX. 8 FEET DOWNSTREAM OF GI 45  
GI 49 TO APPROX. 8 FEET DOWNSTREAM OF GI 49
- 6) PERFORM REMOVALS AND EARTHWORK.
- 7) CONSTRUCT CURB AND GUTTERS BETWEEN STA 31+80 TO 32+00 RT AND STA 31+50 TO 43+50 LT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS, RETAINING WALLS, AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 32+00 TO 43+50 LT AND AREA SHOWN ON LAKEVIEW RIDGE DRIVE.
- 8) CONSTRUCT HORIZON LANE, BRINY LANE, PINE RIDGE DRIVE, AND OAK DRIVE PAVEMENT STAGED SO THAT TRAFFIC IS NOT INTERRUPTED.
- 9) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.
- 10) CONSTRUCT TYPE C BITUMINOUS CONCRETE WEARING COURSE BETWEEN STA 31+00 TO 42+85 LT AND RT.
- 11) INSTALL PERMANENT PAVEMENT MARKINGS BETWEEN STA 31+00 TO 42+85 LT AND RT.

#### PHASE 3A

- 1) INSTALL TRAFFIC CONTROL AND EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
- 2) PERFORM GRADING FOR TEMPORARY PAVEMENT.
- 3) INSTALL TEMPORARY PAVEMENT AS SHOWN.
- 4) INSTALL TRAFFIC CONTROL DEVICES AND SIGNAGE FOR DETOUR. SWITCH NORTHBOUND TRAFFIC TO TEMPORARY PAVEMENT AND CLOSE ROADWAY TO SOUTHBOUND TRAFFIC.
- 5) CONSTRUCT STORM SEWER PIPES AND STRUCTURES FROM:  
MH 74 TO FES 70 (PLATE AND COVER GI 73)  
GI 71 TO APPROX. 22 FEET UPSTREAM OF GI 71  
GI 100 TO APPROX. 14 FEET DOWNSTREAM OF GI 100  
GI 99 TO APPROX. 14 FEET DOWNSTREAM OF GI 99  
GI 98 TO APPROX. 14 FEET DOWNSTREAM OF GI 98  
GI 97 TO APPROX. 14 FEET DOWNSTREAM OF GI 97  
GI 93 TO APPROX. 14 FEET DOWNSTREAM OF GI 93  
GI 92 TO APPROX. 14 FEET DOWNSTREAM OF GI 92
- 6) PERFORM REMOVALS AND EARTHWORK.
- 7) USE EXISTING 36 INCH RCP AT 58+25 IN PLACE TO PROVIDE DRAINAGE FOR WEST SIDE OF ROADWAY.
- 8) CONSTRUCT CURB AND GUTTERS BETWEEN STA 43+00 TO 58+07 LT AND STA 58+23 TO 59+35.60 LT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 43+00 TO 58+07 LT AND STA 58+27 TO 59+35.60.
- 9) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.

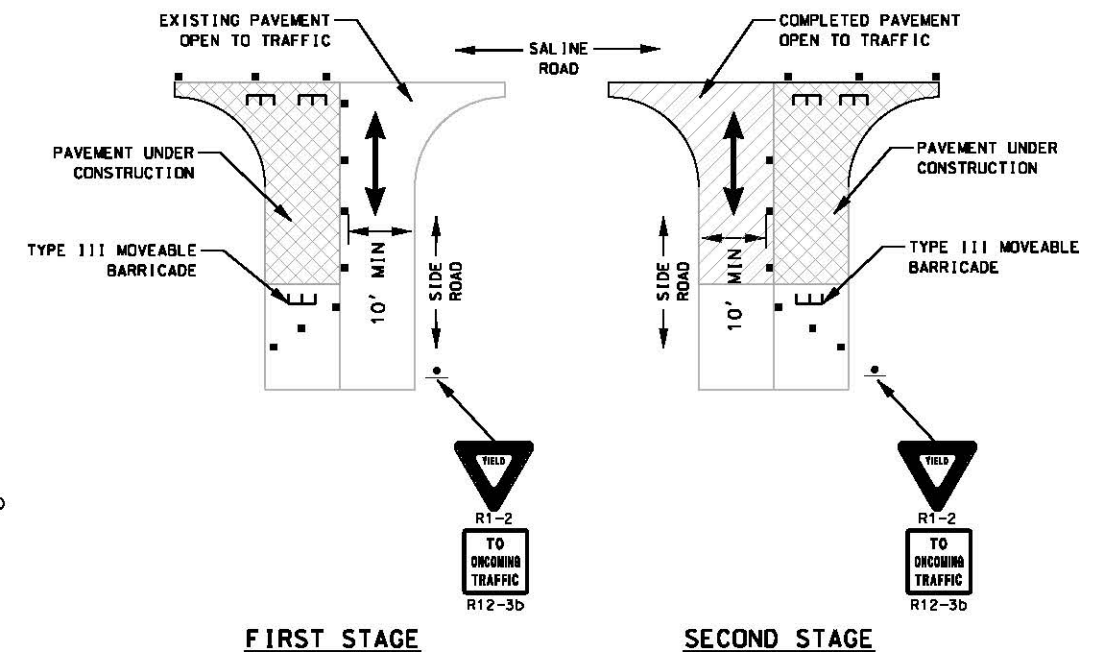
#### PHASE 3B

- 1) INSTALL EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
- 2) PERFORM GRADING FOR TEMPORARY PAVEMENT.
- 3) INSTALL TEMPORARY PAVEMENT AS SHOWN.
- 4) INSTALL TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO NEW LANE CONFIGURATION.
- 5) CONSTRUCT STORM SEWER PIPES AND STRUCTURES FROM:  
GI 75 TO APPROX. 11 DOWNSTREAM OF GI 75  
GI 90 TO FES 80  
GI 89 TO APPROX. 8 FEET UPSTREAM OF GI 89  
GI 88 TO APPROX. 8 FEET UPSTREAM OF GI 88  
GI 87 TO APPROX. 8 FEET UPSTREAM OF GI 87  
GI 86 TO APPROX. 8 FEET UPSTREAM OF GI 86  
GI 85 TO APPROX. 8 FEET UPSTREAM OF GI 85  
GI 84 TO APPROX. 8 FEET UPSTREAM OF GI 84  
CI 91 TO GI 92
- 6) PERFORM REMOVALS AND EARTHWORK.
- 7) CONSTRUCT CURB AND GUTTERS BETWEEN 43+00 TO 59+35.60 RT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, SIDE STREET PAVEMENT, DRIVEWAYS, RETAINING WALLS, AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 43+50 TO 59+35.60 RT.
- 8) CONSTRUCT STONE BLUFF DRIVE (NORTH) AND STONE BLUFF DRIVE (SOUTH), KOHNEN ROAD, AND SILVER MAPLE PAVEMENT SO THAT TRAFFIC IS NOT INTERRUPTED. THE RECONSTRUCTION OF STONE BLUFF DRIVE (NORTH) AND STONE BLUFF (SOUTH) SHALL NOT OCCUR CONCURRENTLY.
- 9) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.

#### PHASE 3C

- 1) INSTALL TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO NEW LANE CONFIGURATION.
- 2) CONSTRUCT CURB AND GUTTERS BETWEEN TO STA 58+07 TO 58+23 LT; CONSTRUCT TYPE X BITUMINOUS CONCRETE BASE COURSE, AND MISCELLANEOUS ITEMS AS SHOWN BETWEEN STA 58+07 TO 58+27 LT.
- 3) INSTALL PERMANENT OR TEMPORARY VEGETATION AS DIRECTED BY THE ENGINEER.
- 4) CONSTRUCT TYPE C BITUMINOUS CONCRETE WEARING COURSE BETWEEN STA 42+85 TO 59+35.60 LT AND RT.
- 5) INSTALL PERMANENT PAVEMENT MARKINGS BETWEEN STA 42+85 TO 59+35.60 LT AND RT.

### SIDE STREET STAGING DETAIL



FIRST STAGE

SECOND STAGE

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SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
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TRAFFIC CONTROL PLANS  
PHASING NOTES AND DETAILS  
(Sheet 1 of 20)

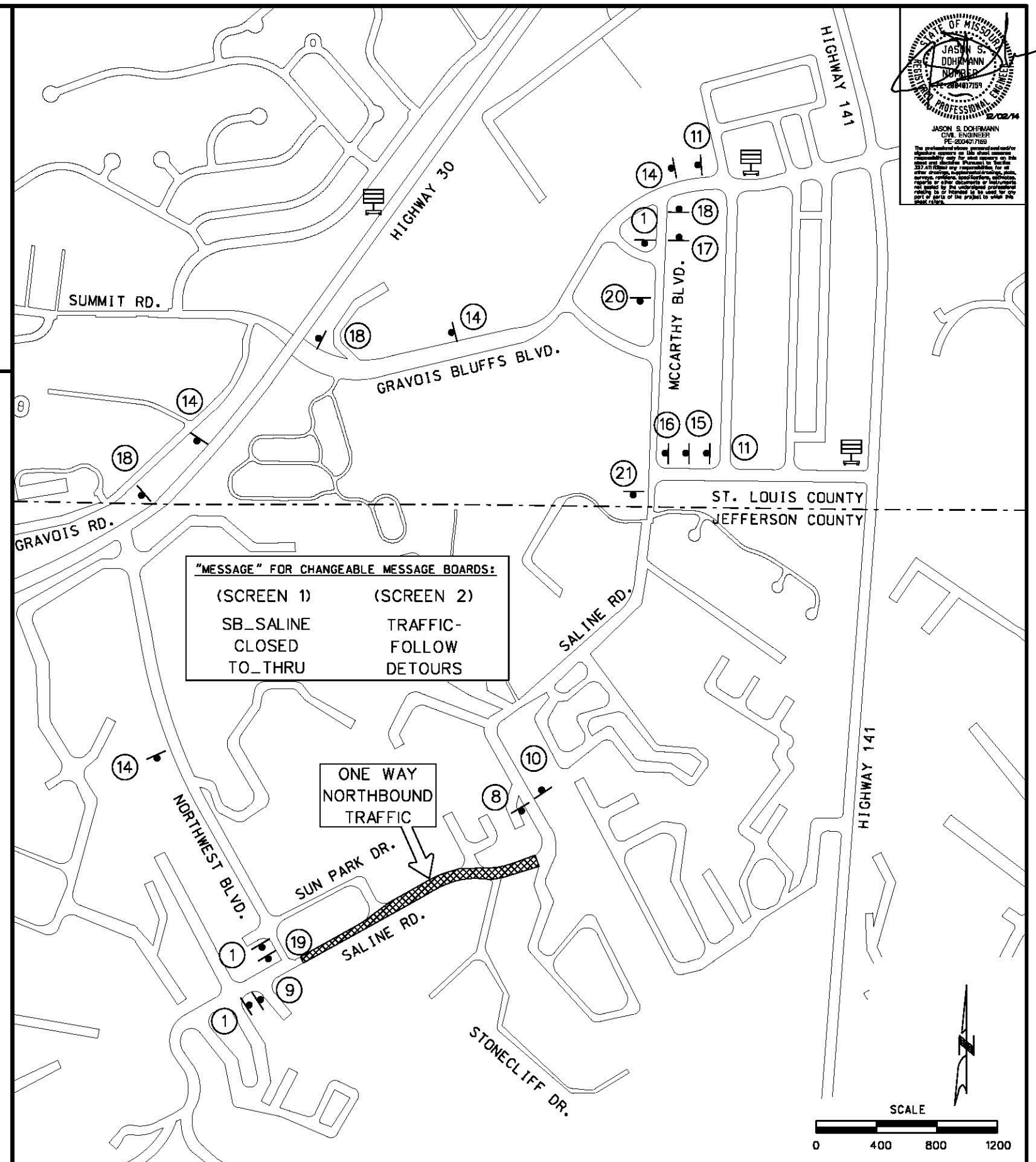
SHEET NO.  
**TCP-01**  
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# TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- ▬ SIGN (DOUBLE SIDED)
- CHANNELIZER
- ▬ MOVEABLE BARRICADE (MB)
- ▬ CHANGEABLE MESSAGE BOARD
- ▨ EXISTING PAVEMENT UTILIZED AS MAINLINE TRAVELWAY
- ▩ UNDER CONSTRUCTION
- TEMPORARY PAVEMENT (6" BITUMINOUS BASE ON ROLLED SUBBASE. SEE JOB SPECIAL PROVISIONS FOR CONTRACTOR REQUIREMENTS WITH RESPECT TO MAINTENANCE)
- ▬ TEMPORARY TRAFFIC BARRIER

|                                                                             |                                                                              |                                                                            |                                                                                                  |                                                                                             |                                                                                              |                                                                             |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1<br>ROAD WORK AHEAD<br>W20-1<br>(36"x36")                                  | 2<br>ROAD NARROWS<br>W5-1<br>(36"x36")                                       | 3<br>SHOULDER DROP-OFF<br>W8-9<br>(36"x36")                                | 4<br>STOP<br>R1-1<br>(30"x30")                                                                   | 5<br>ONE WAY<br>R6-1L<br>(36"x12")                                                          | 6<br>ONE WAY<br>R6-1R<br>(36"x12")                                                           | 7<br>ROAD CLOSED<br>R11-2<br>(48"x30")                                      |
| 8<br>ROAD CLOSED AHEAD<br>W20-3<br>(36"x36")                                | 9<br>G20-5aP<br>(24"x18")<br>WORKZONE<br>SPEED LIMIT 25<br>R2-1<br>(24"x30") | 10<br>END ROAD WORK<br>G20-2<br>(36"x18")                                  | 11<br>SALINE ROAD CLOSED TO THRU SOUTHBOUND TRAFFIC AT LAKEVIEW RIDGE DRIVE<br>SP-1<br>(60"x30") | 12<br>SOUTHBOUND SALINE ROAD CLOSED AT STONE BLUFF DRIVE FOLLOW DETOUR<br>SP-2<br>(60"x30") | 13<br>SOUTHBOUND SALINE ROAD CLOSED AT SILVER MAPLE DRIVE FOLLOW DETOUR<br>SP-3<br>(60"x30") | 14<br>DETOUR<br>M4-9<br>(30"x24")                                           |
| 15<br>DETOUR<br>M4-9<br>(30"x24")                                           | 16<br>DETOUR<br>M4-9<br>(30"x24")                                            | 17<br>DETOUR<br>M4-9<br>(30"x24")                                          | 18<br>DETOUR<br>M4-9<br>(30"x24")                                                                | 19<br>END DETOUR<br>MD4-8a<br>(30"x24")                                                     | 20<br>ROAD CLOSED 0.8 MILES AHEAD LOCAL TRAFFIC ONLY<br>R11-3a<br>(60"x30")                  | 21<br>ROAD CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY<br>R11-3a<br>(60"x30") |
| 22<br>ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY<br>R11-3a<br>(60"x30") | 23<br>YIELD<br>R1-2<br>(36"x36"x36")                                         | 24<br>DO NOT ENTER<br>R5-1<br>(30"x30")<br>WRONG WAY<br>R5-1a<br>(36"x24") | 25<br>W1-4R<br>(48"x48")                                                                         | 26<br>W1-4L<br>(48"x48")                                                                    | 27<br>R3-2<br>(24"x24")                                                                      | 28<br>R3-1<br>(24"x24")                                                     |
|                                                                             | 29<br>ONCOMING TRAFFIC DOES NOT STOP<br>W4-4bP<br>(36"x18")                  |                                                                            |                                                                                                  |                                                                                             |                                                                                              |                                                                             |



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JASON S. DOHMANN  
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PE-200407169  
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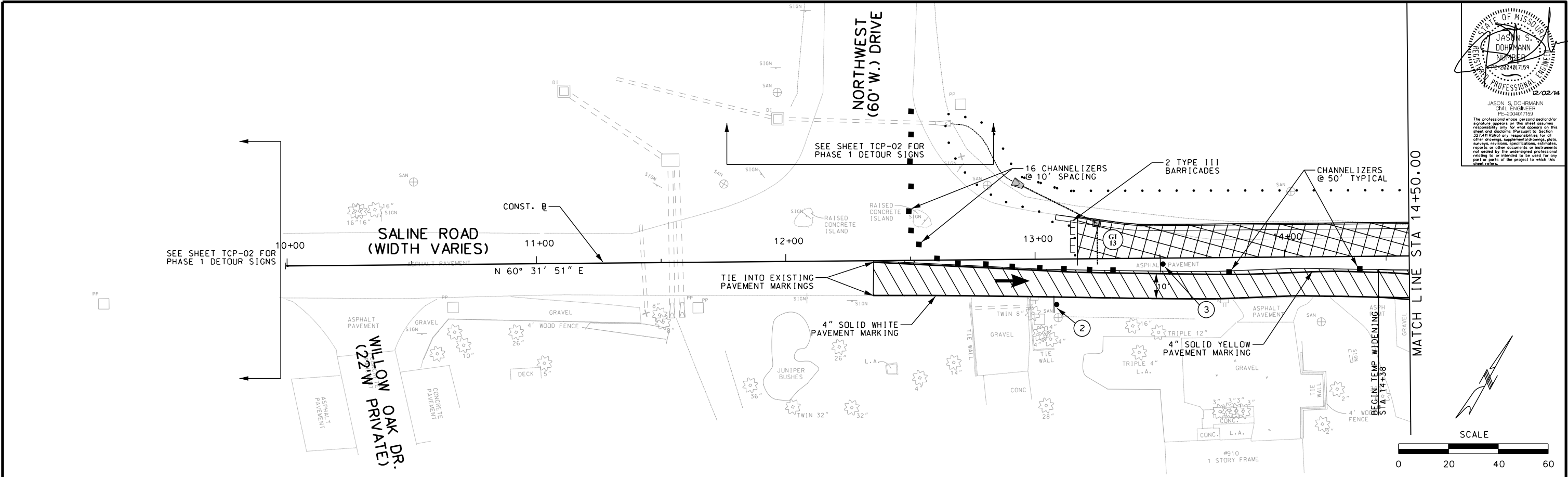
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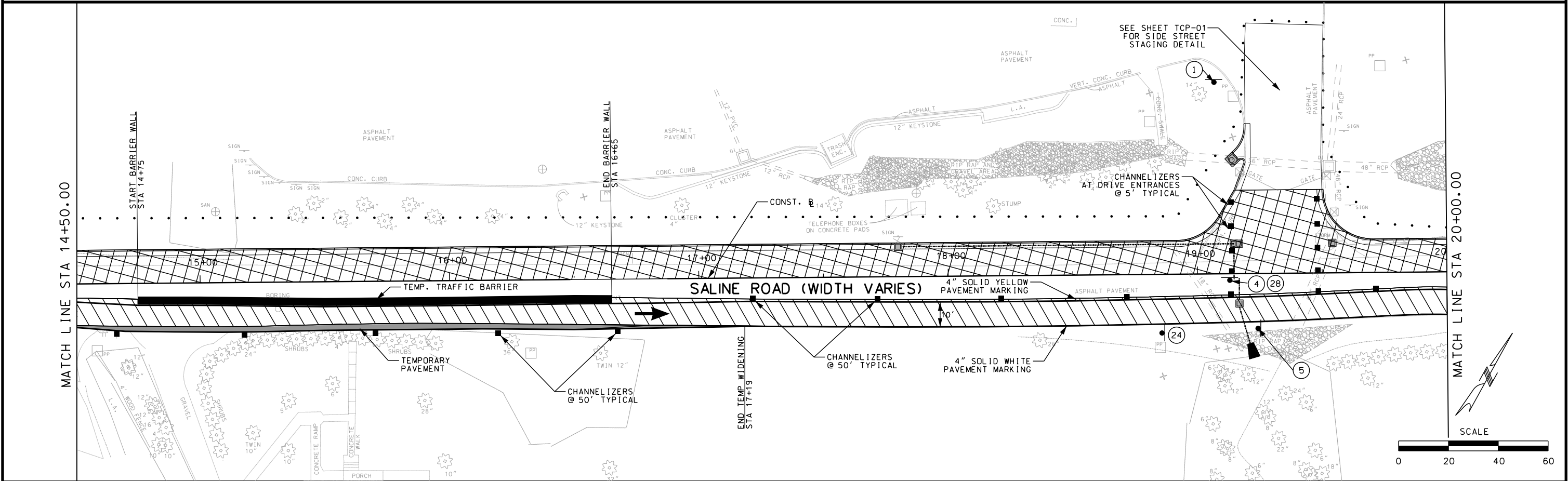
SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
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TRAFFIC CONTROL PLANS  
DETOUR SIGNS - PHASE 1  
(Sheet 2 of 20)

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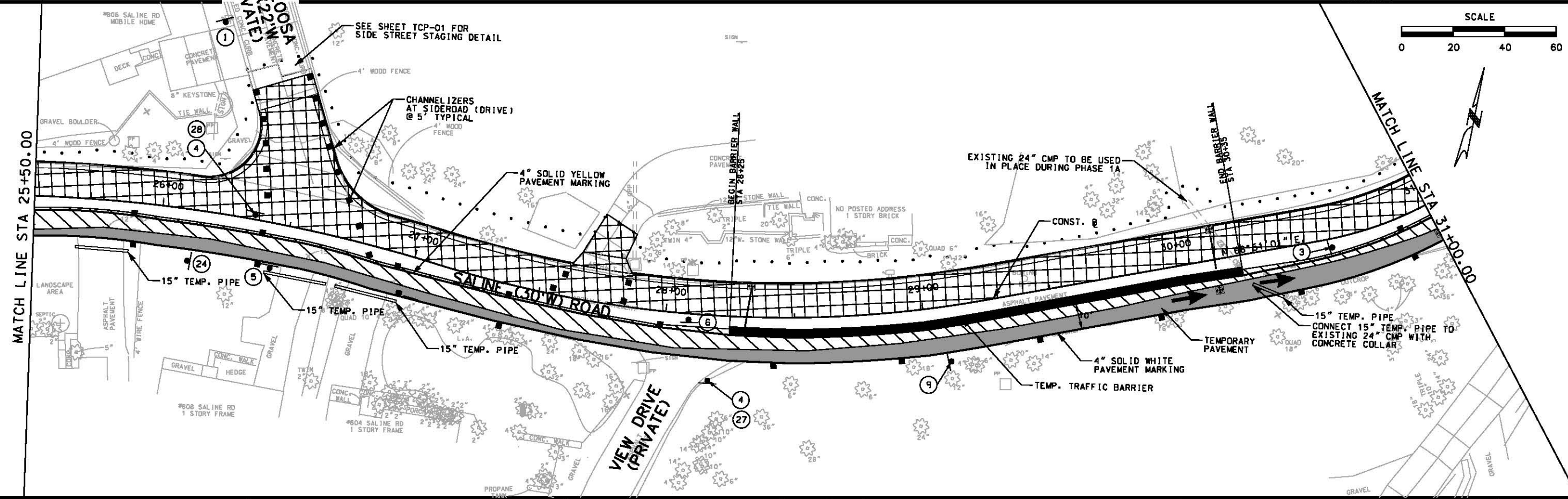
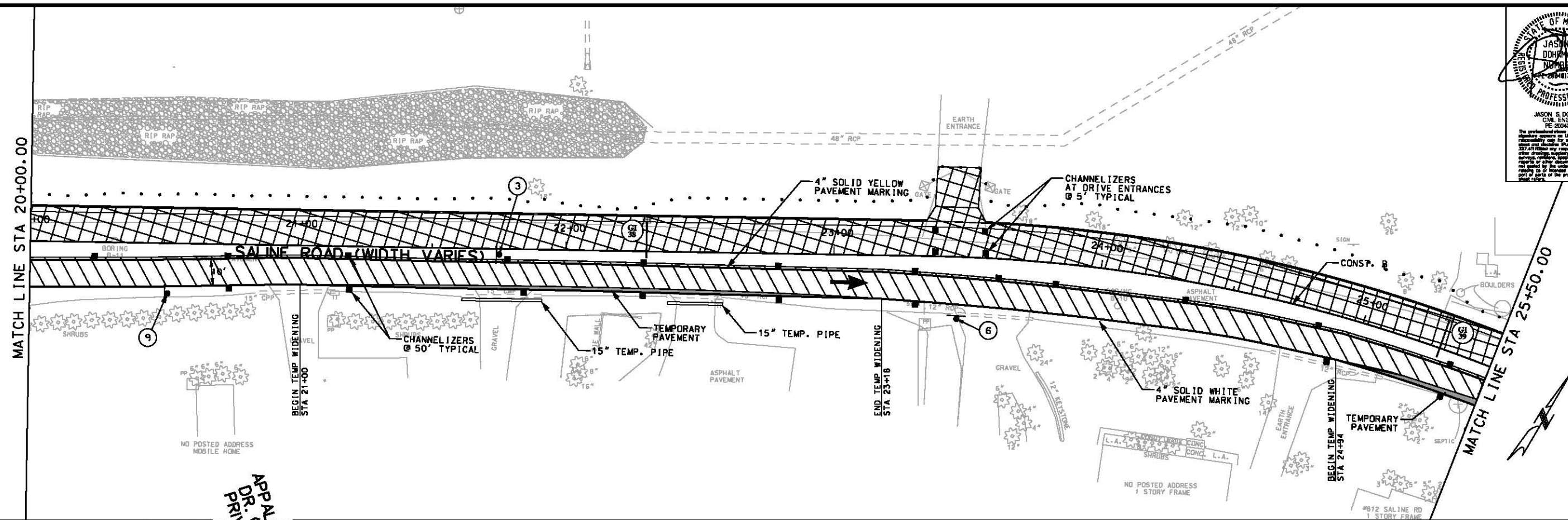


SALINE ROAD IMPROVEMENTS-PHASE 1  
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TRAFFIC CONTROL PLANS  
 PHASE 1A  
 (Sheet 3 of 20)

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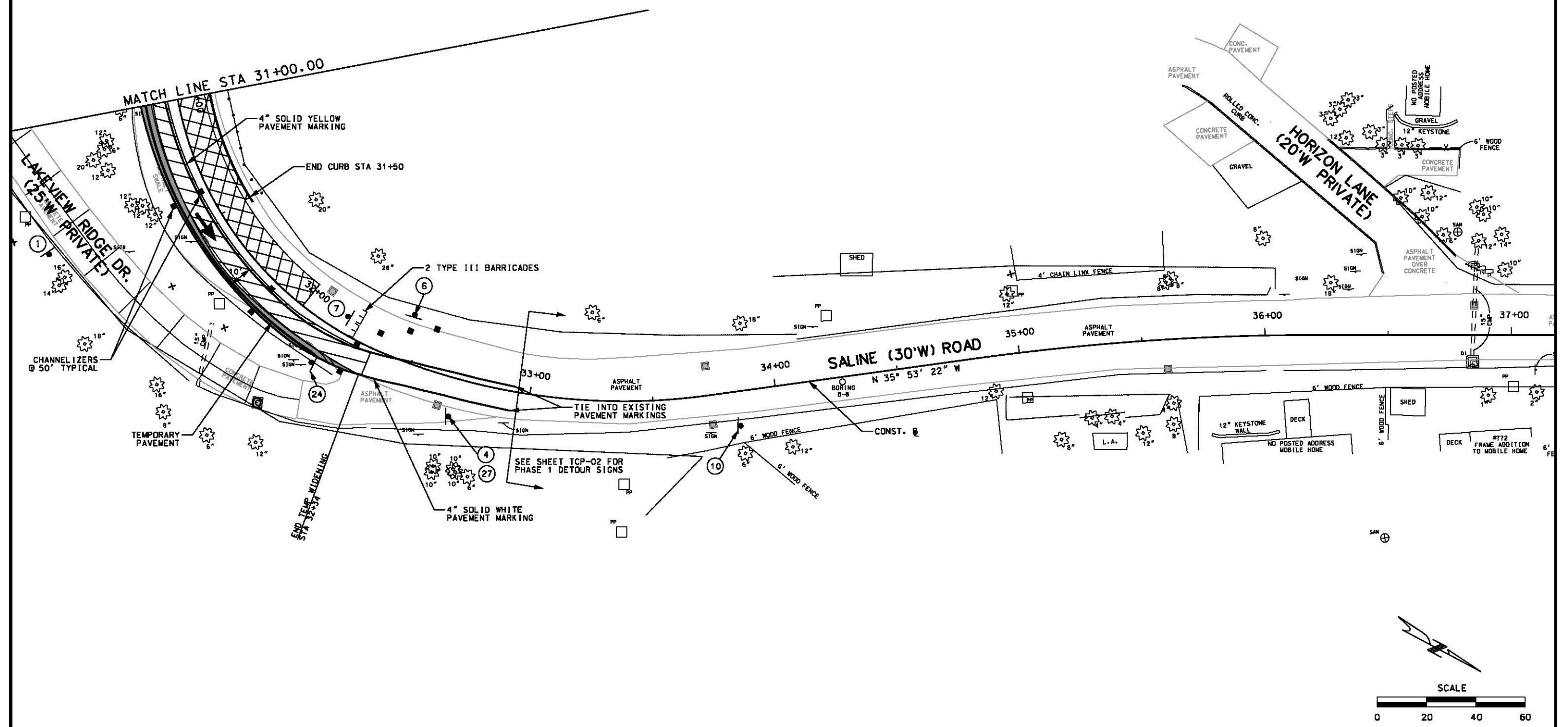
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 PHASE 1A  
 (Sheet 4 of 20)

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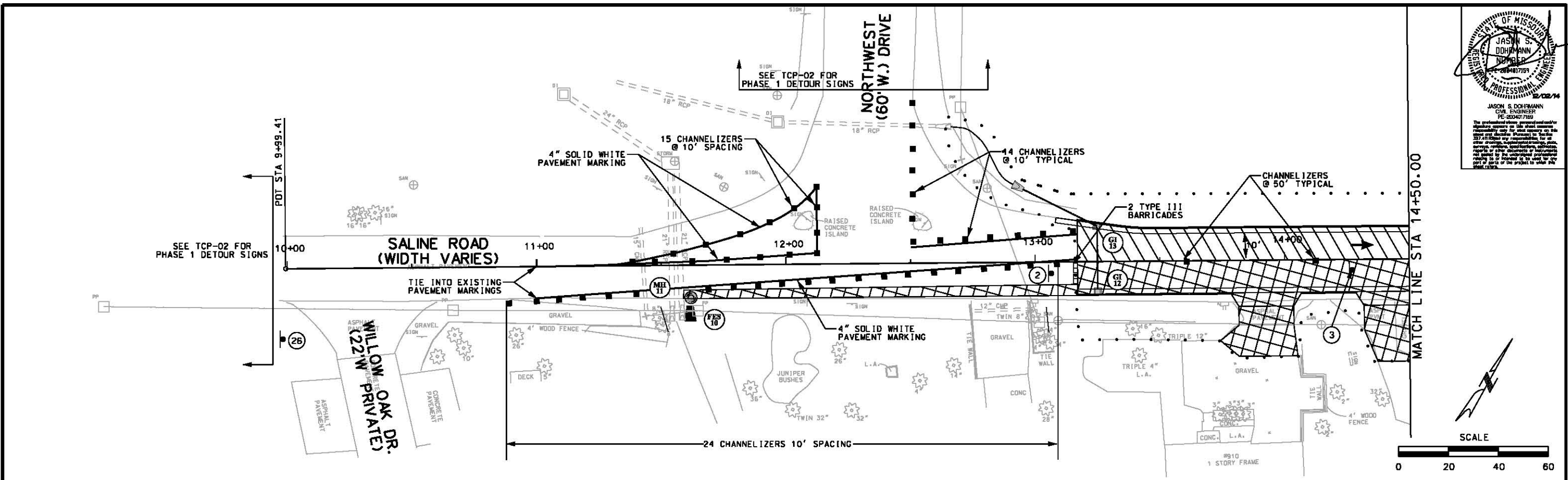
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 5403(642)/TIP#5589-12

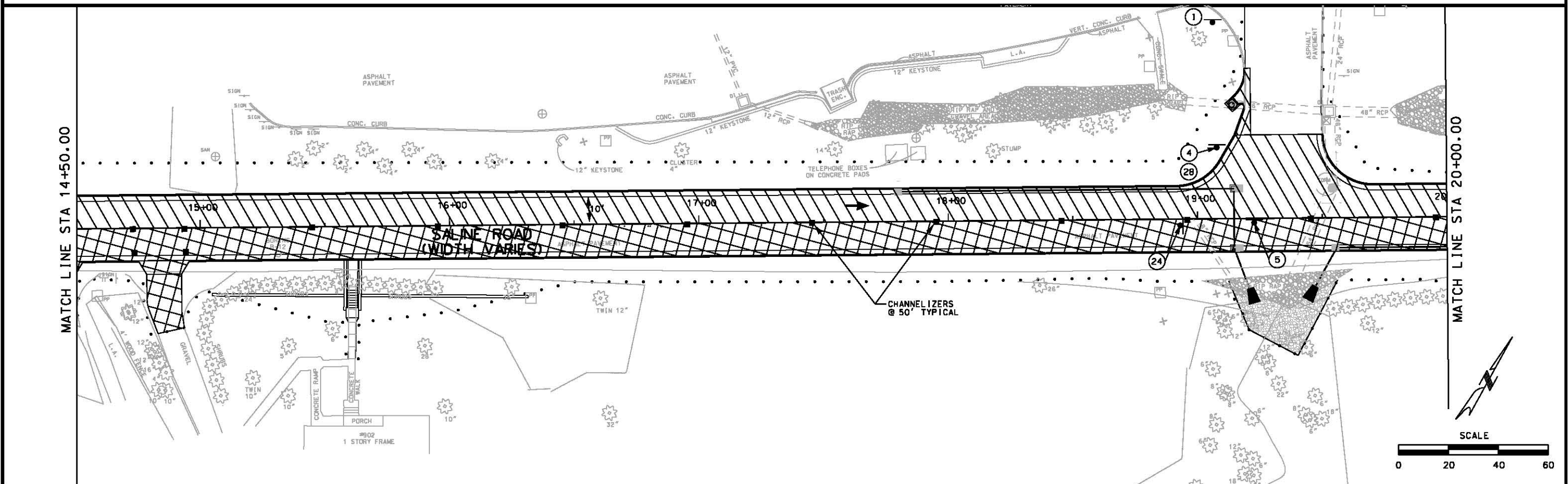
TRAFFIC CONTROL PLANS  
 PHASE 1A  
 (Sheet 5 of 20)

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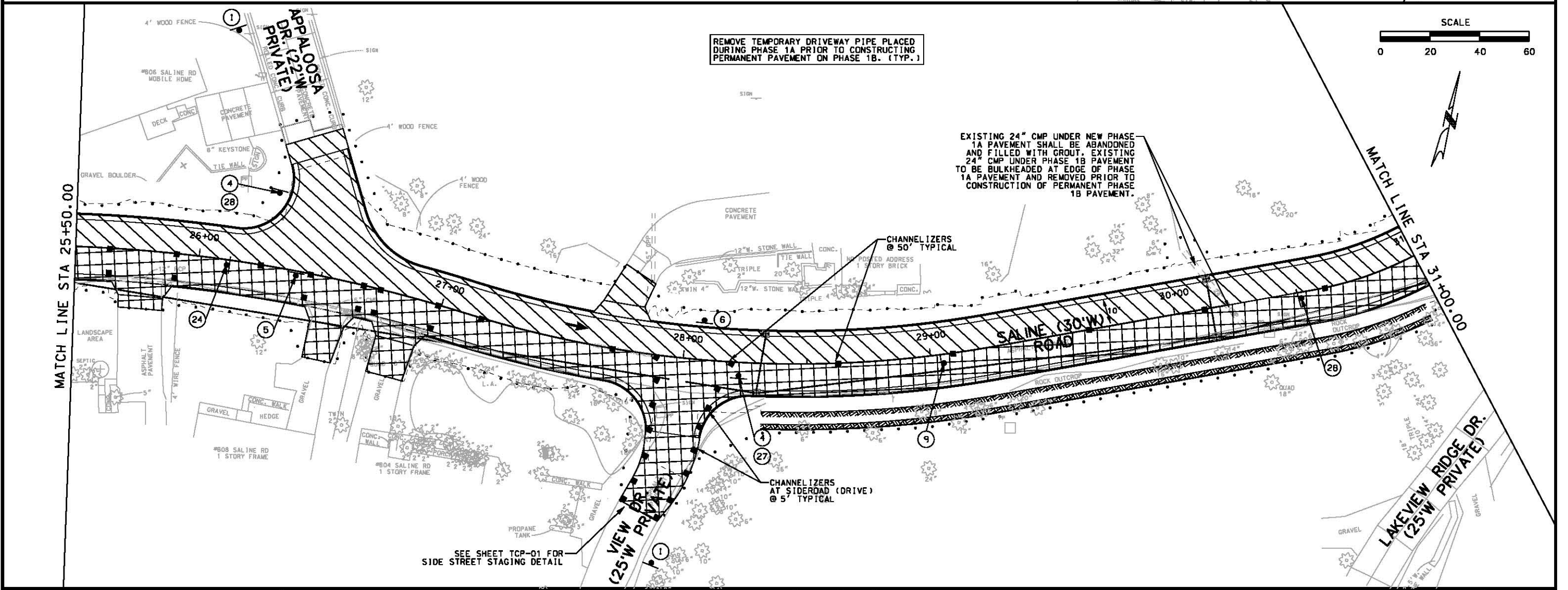
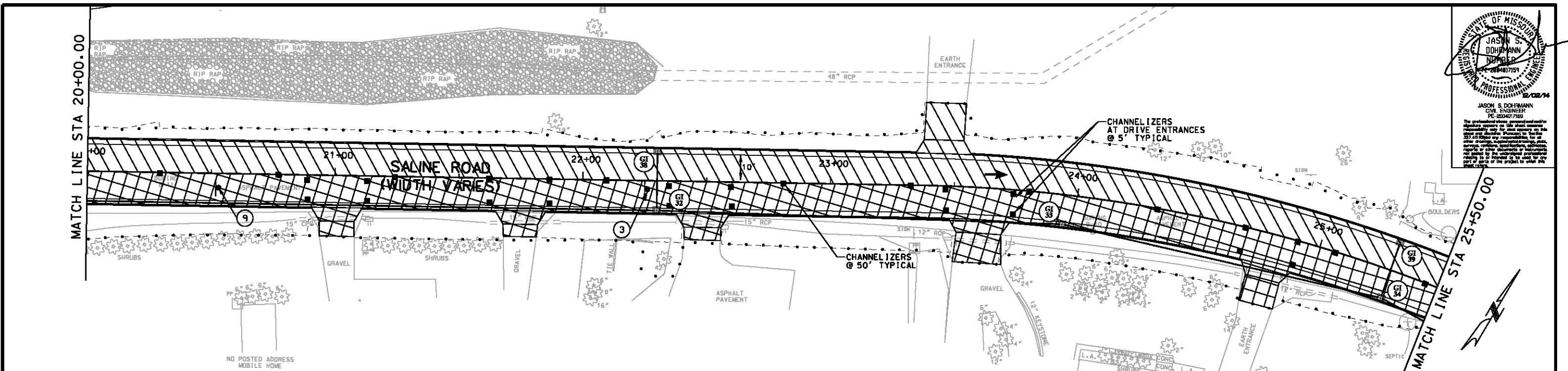


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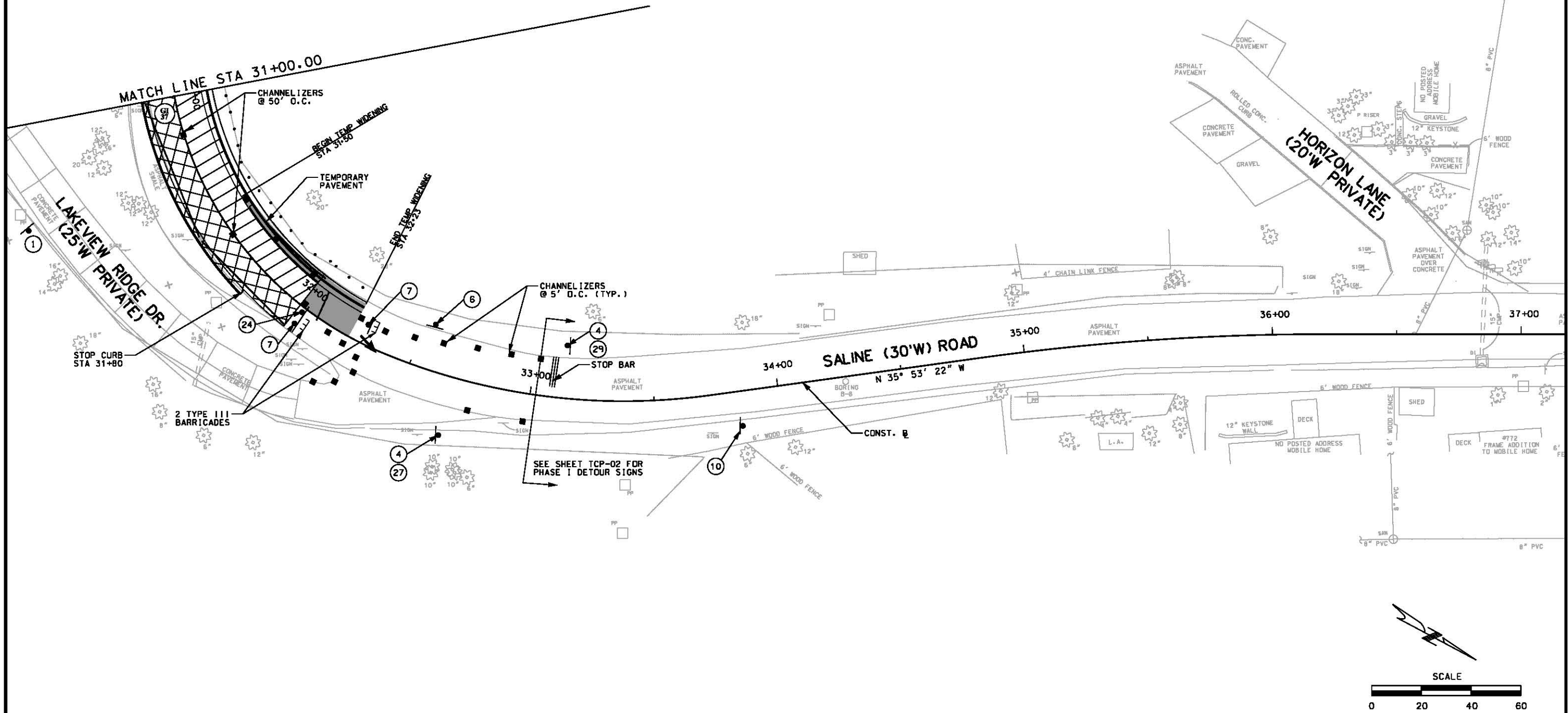


**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
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**TRAFFIC CONTROL PLANS**  
PHASE 1B  
(Sheet 7 of 20)

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COUNTY OF JEFFERSON, MISSOURI  
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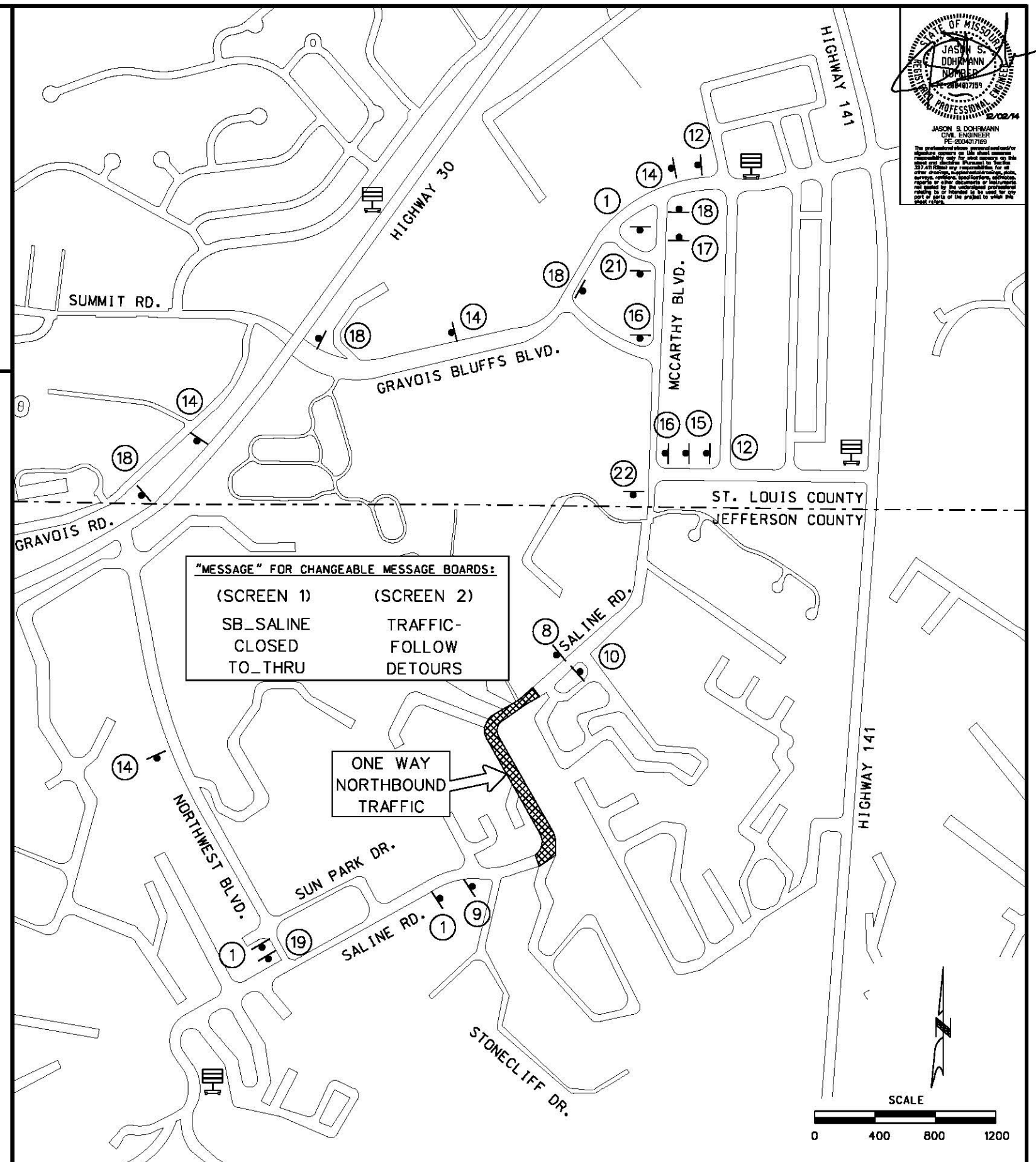
TRAFFIC CONTROL PLANS  
PHASE 1B  
(Sheet 8 of 20)

SHEET NO.  
**TCP-08**  
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# TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- CHANNELIZER
- MOVEABLE BARRICADE (MB)
- CHANGEABLE MESSAGE BOARD
- EXISTING PAVEMENT UTILIZED AS MAINLINE TRAVELWAY
- UNDER CONSTRUCTION
- TEMPORARY PAVEMENT (6" BITUMINOUS BASE ON ROLLED SUBBASE. SEE JOB SPECIAL PROVISIONS FOR CONTRACTOR REQUIREMENTS WITH RESPECT TO MAINTENANCE)
- TEMPORARY TRAFFIC BARRIER

|                                                                             |                                                                              |                                                                            |                                                                                                  |                                                                                             |                                                                                              |                                                                             |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1<br>ROAD WORK AHEAD<br>W20-1<br>(36"x36")                                  | 2<br>ROAD NARROWS<br>W5-1<br>(36"x36")                                       | 3<br>SHOULDER DROP-OFF<br>W8-9<br>(36"x36")                                | 4<br>STOP<br>R1-1<br>(30"x30")                                                                   | 5<br>ONE WAY<br>R6-1L<br>(36"x12")                                                          | 6<br>ONE WAY<br>R6-1R<br>(36"x12")                                                           | 7<br>ROAD CLOSED<br>R11-2<br>(48"x30")                                      |
| 8<br>ROAD CLOSED AHEAD<br>W20-3<br>(36"x36")                                | 9<br>G20-5aP<br>(24"x18")<br>WORKZONE<br>SPEED LIMIT 25<br>R2-1<br>(24"x30") | 10<br>END ROAD WORK<br>G20-2<br>(36"x18")                                  | 11<br>SALINE ROAD CLOSED TO THRU SOUTHBOUND TRAFFIC AT LAKEVIEW RIDGE DRIVE<br>SP-1<br>(60"x30") | 12<br>SOUTHBOUND SALINE ROAD CLOSED AT STONE BLUFF DRIVE FOLLOW DETOUR<br>SP-2<br>(60"x30") | 13<br>SOUTHBOUND SALINE ROAD CLOSED AT SILVER MAPLE DRIVE FOLLOW DETOUR<br>SP-3<br>(60"x30") | 14<br>DETOUR<br>M4-9<br>(30"x24")                                           |
| 15<br>DETOUR<br>M4-9<br>(30"x24")                                           | 16<br>DETOUR<br>M4-9<br>(30"x24")                                            | 17<br>DETOUR<br>M4-9<br>(30"x24")                                          | 18<br>DETOUR<br>M4-9<br>(30"x24")                                                                | 19<br>END DETOUR<br>MD4-8a<br>(30"x24")                                                     | 20<br>ROAD CLOSED 0.8 MILES AHEAD LOCAL TRAFFIC ONLY<br>R11-3a<br>(60"x30")                  | 21<br>ROAD CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY<br>R11-3a<br>(60"x30") |
| 22<br>ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY<br>R11-3a<br>(60"x30") | 23<br>YIELD<br>R1-2<br>(36"x36"x36")                                         | 24<br>DO NOT ENTER<br>R5-1<br>(30"x30")<br>WRONG WAY<br>R5-1a<br>(36"x24") | 25<br>W1-4R<br>(48"x48")                                                                         | 26<br>W1-4L<br>(48"x48")                                                                    | 27<br>R3-2<br>(24"x24")                                                                      | 28<br>R3-1<br>(24"x24")                                                     |
|                                                                             | 29<br>ONCOMING TRAFFIC DOES NOT STOP<br>W4-4bP<br>(36"x18")                  |                                                                            |                                                                                                  |                                                                                             |                                                                                              |                                                                             |



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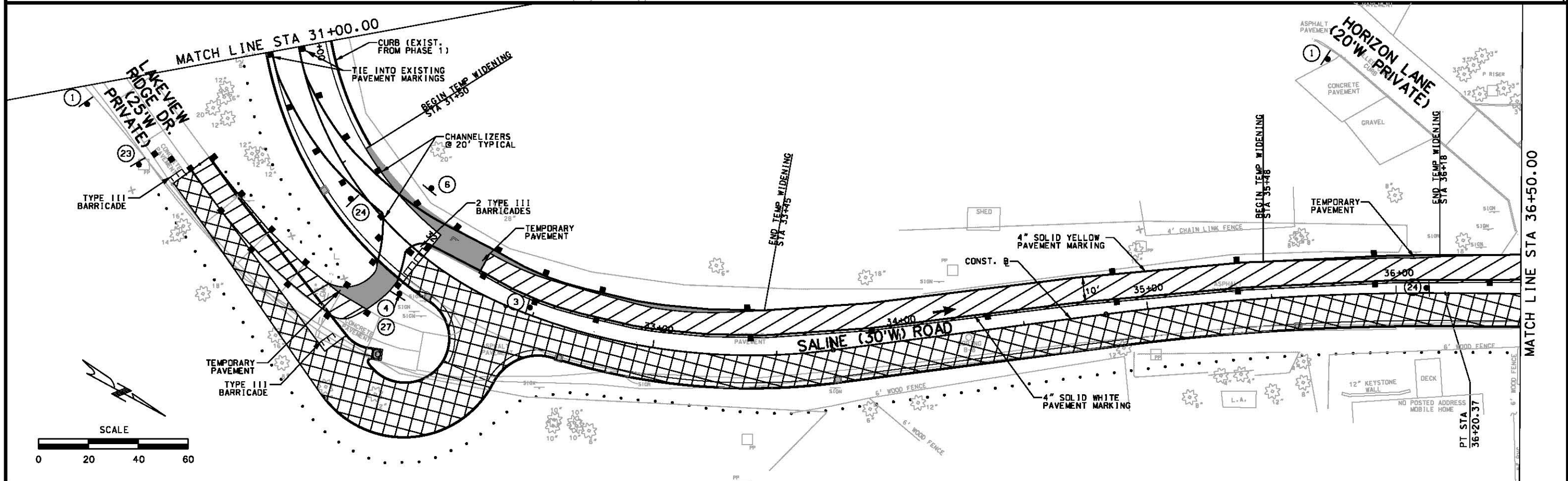
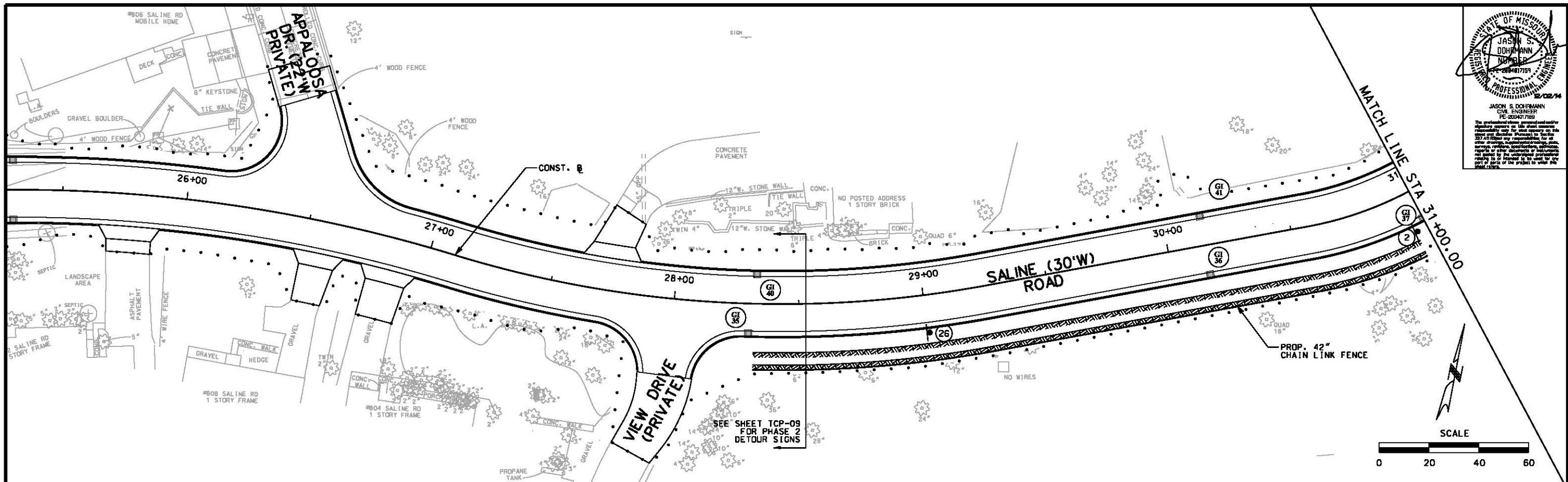
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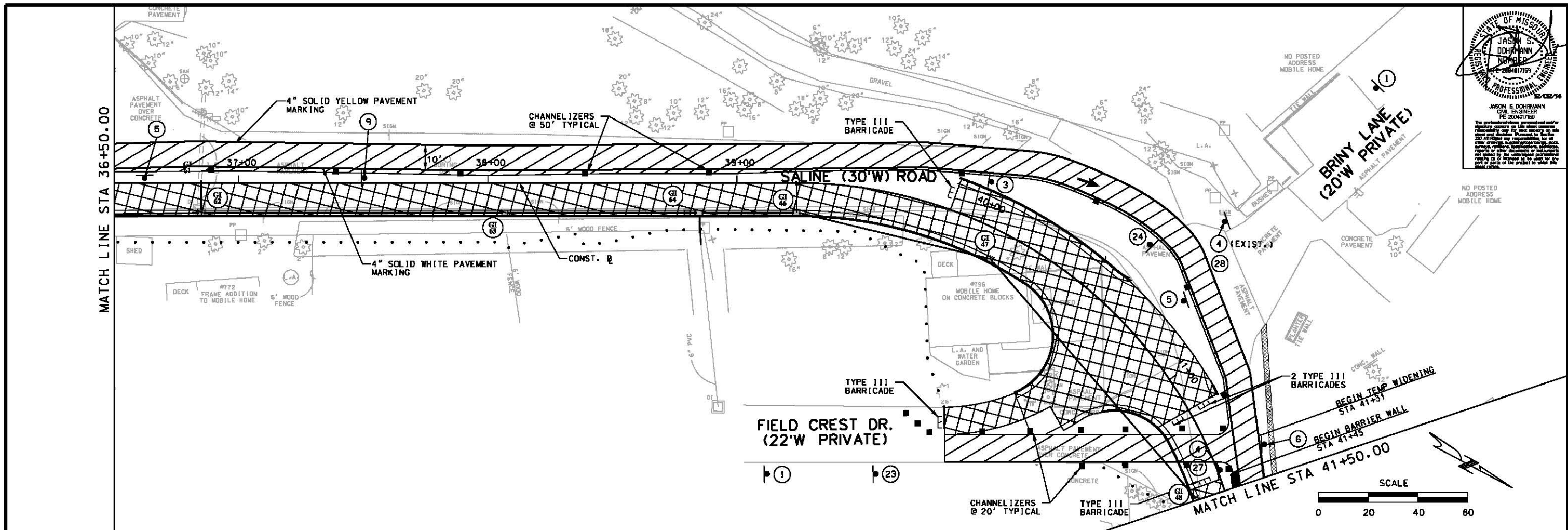
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TRAFFIC CONTROL PLANS  
DETOUR SIGNS - PHASE 2  
(Sheet 9 of 20)

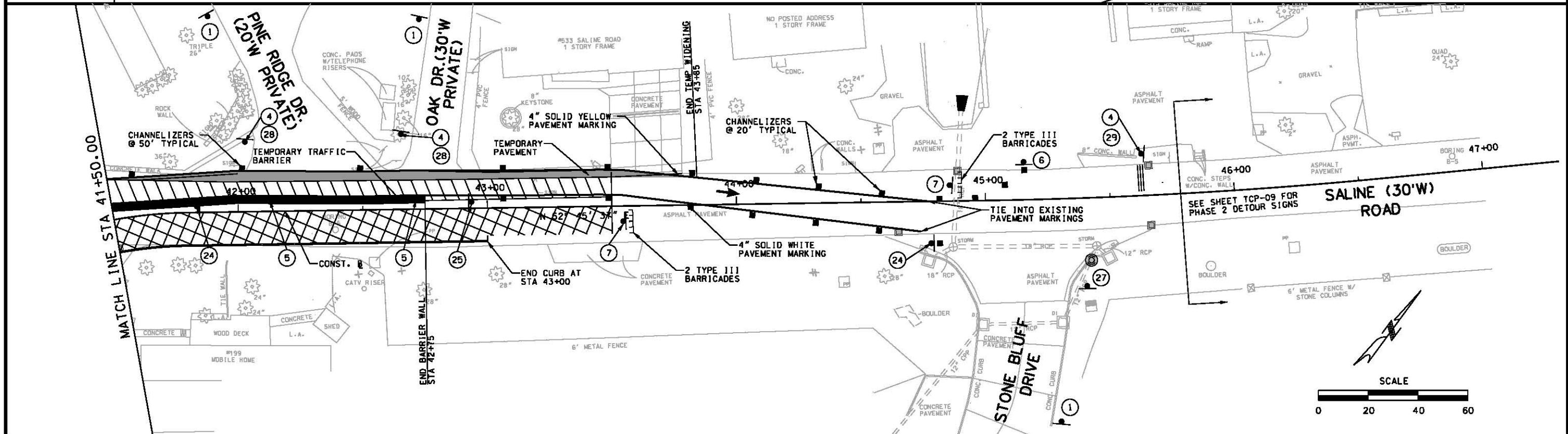
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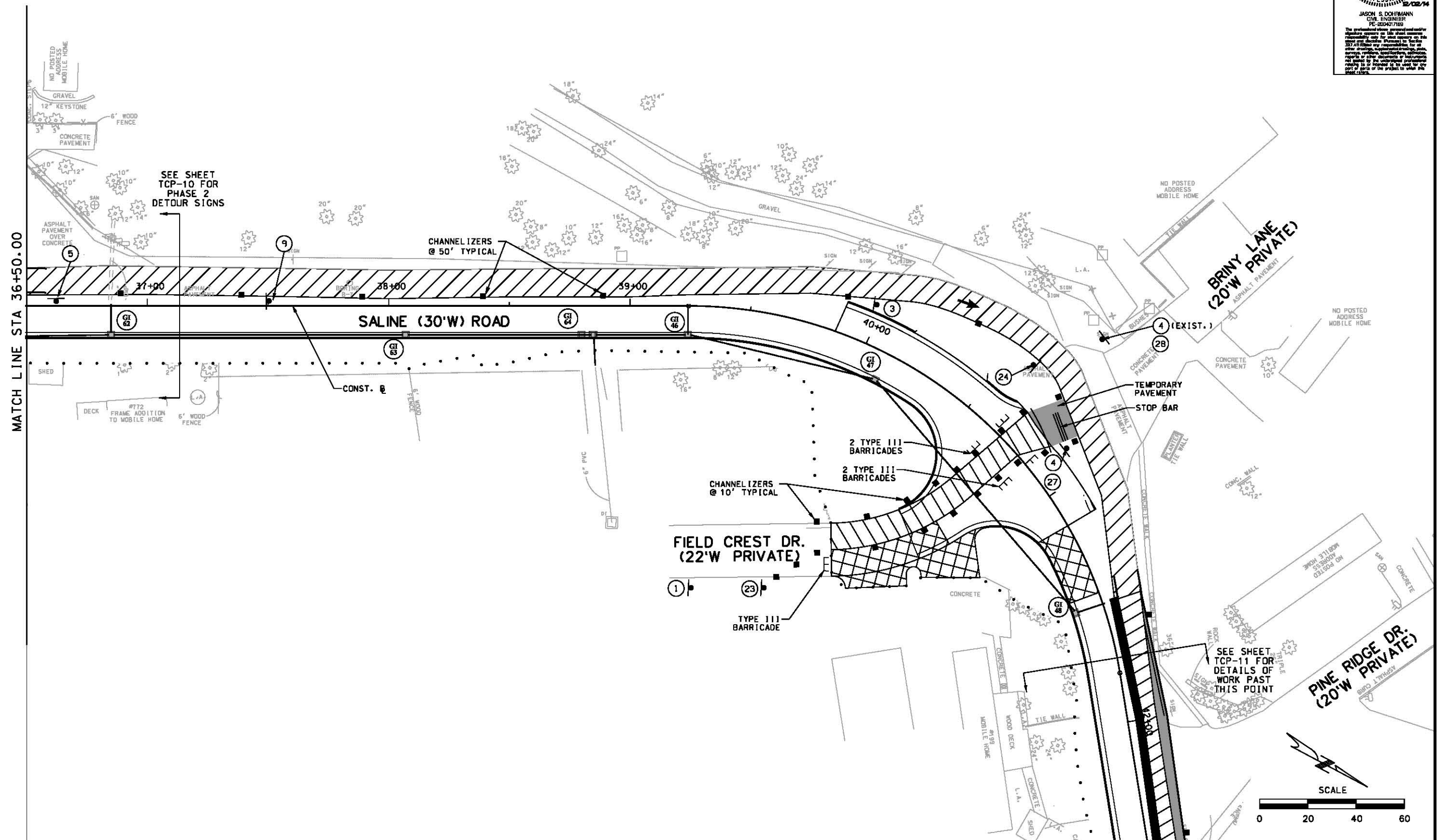




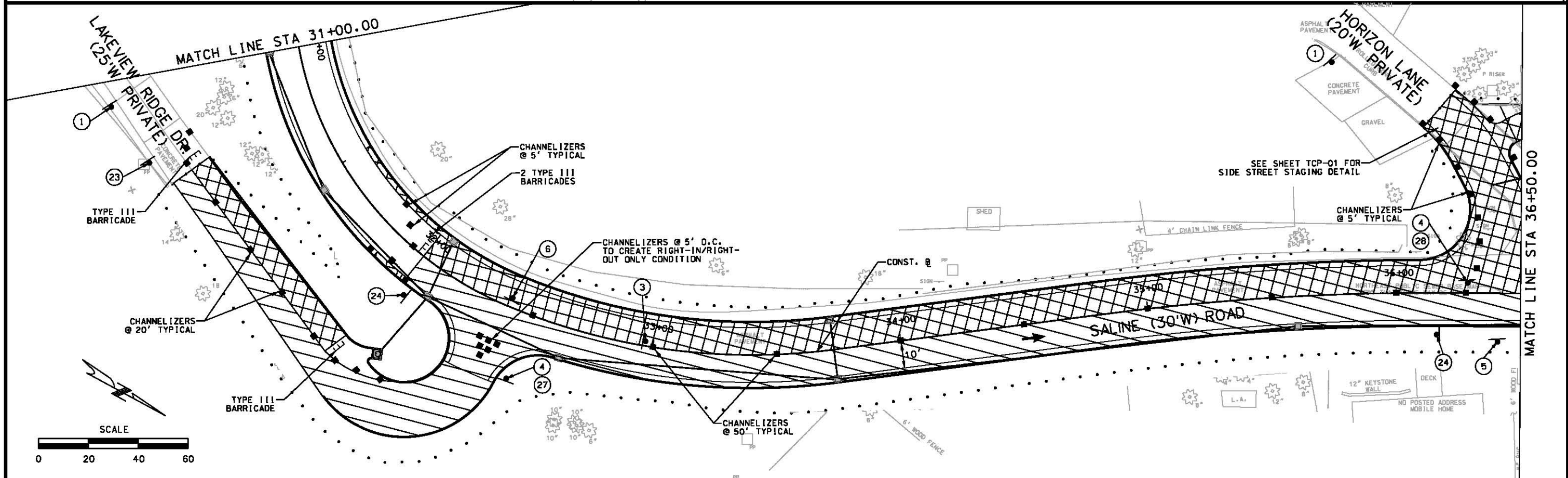
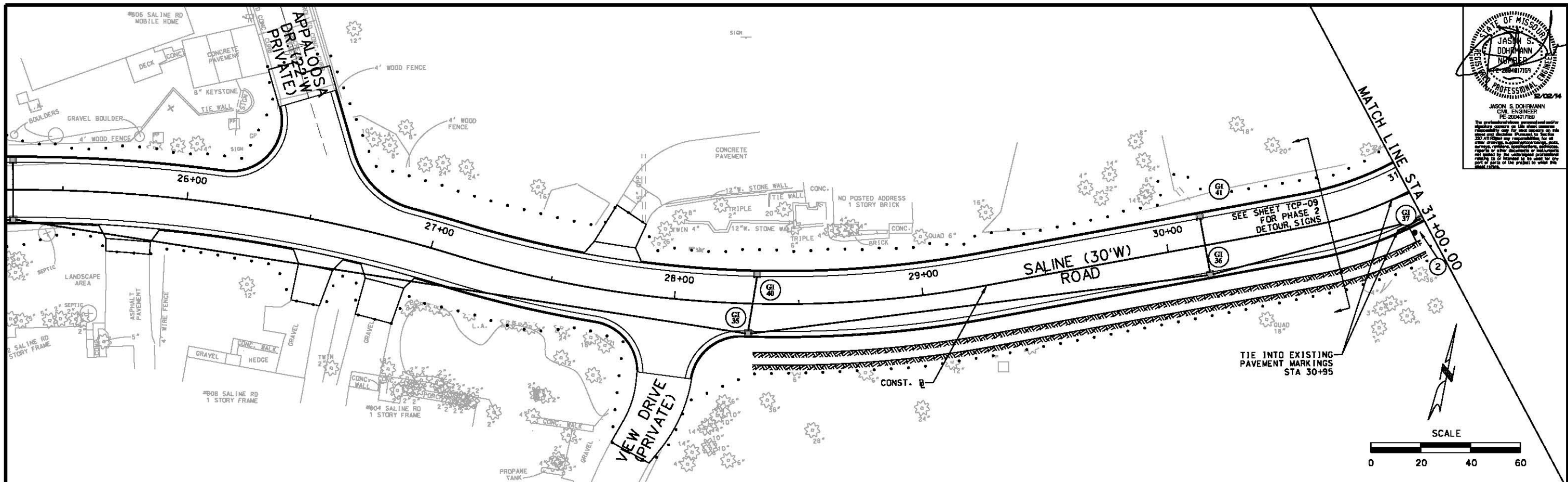


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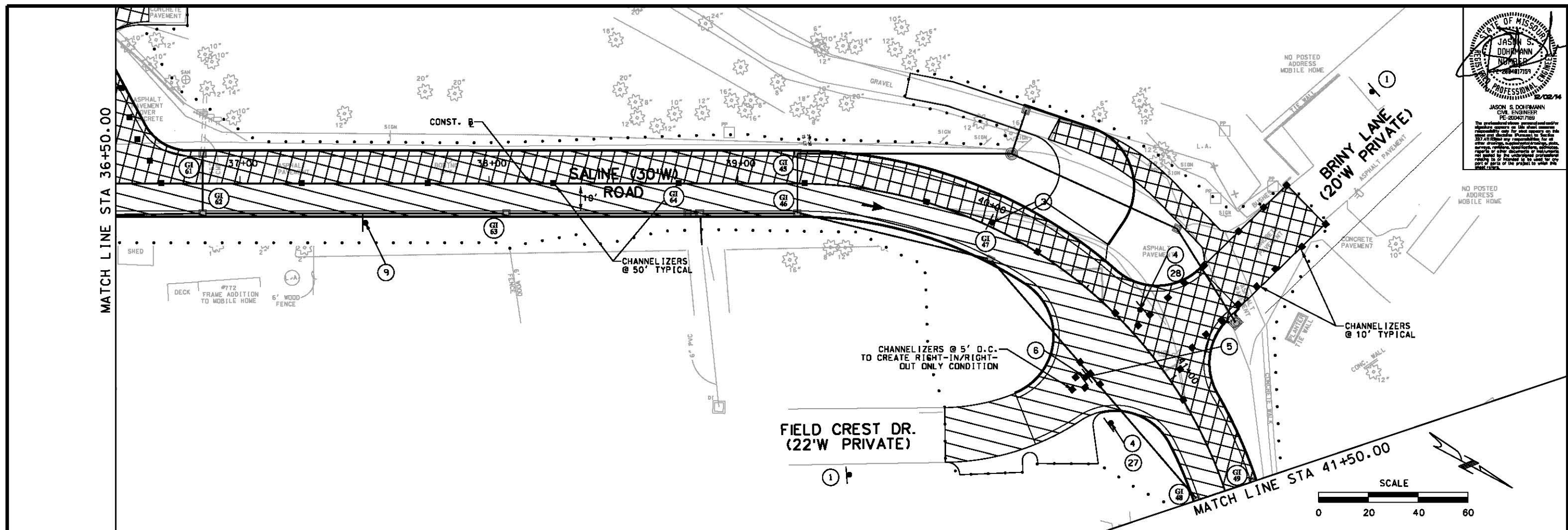




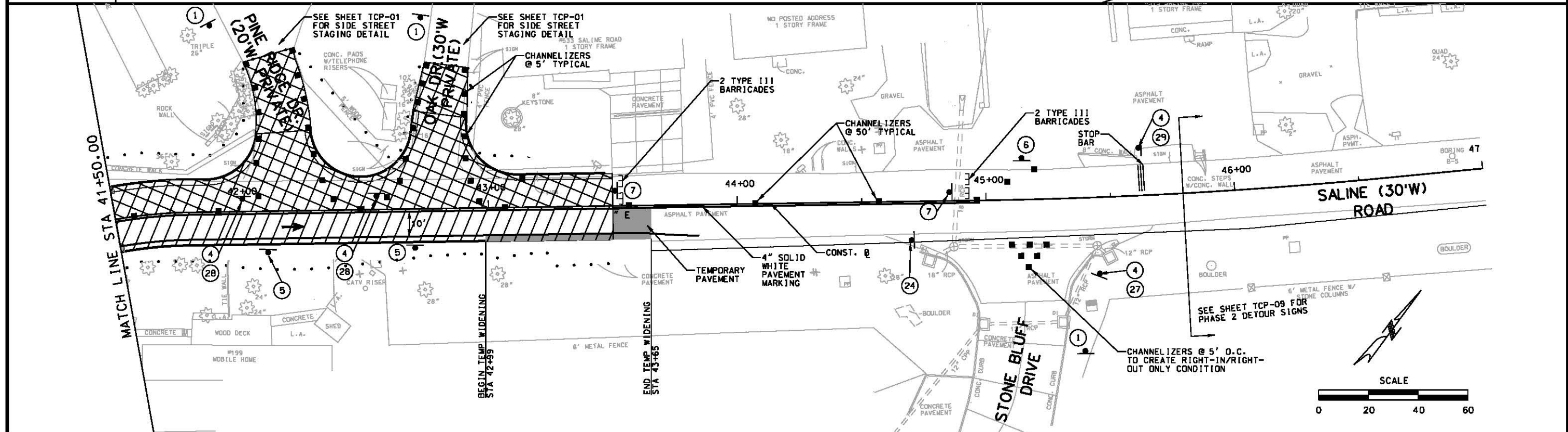
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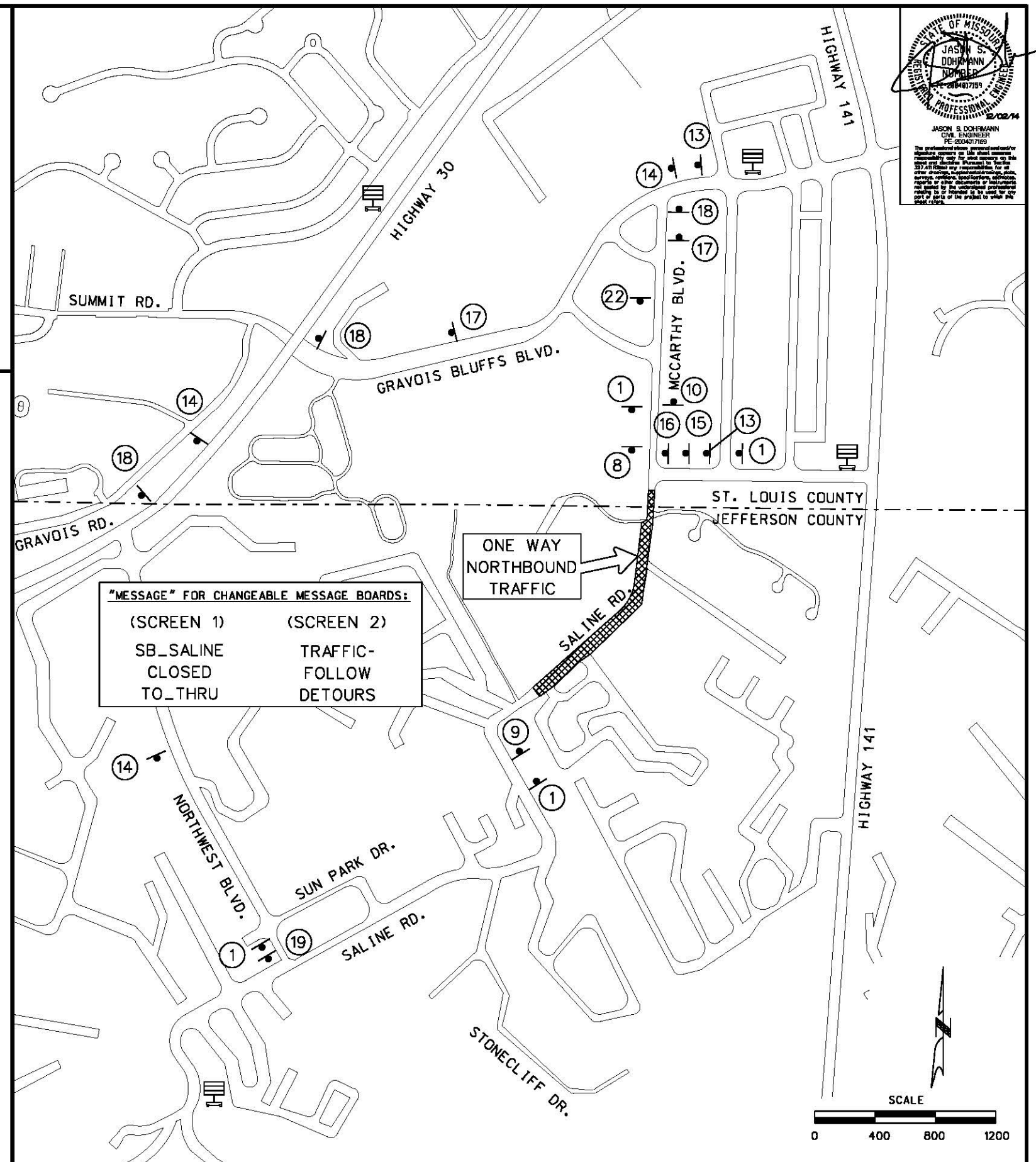
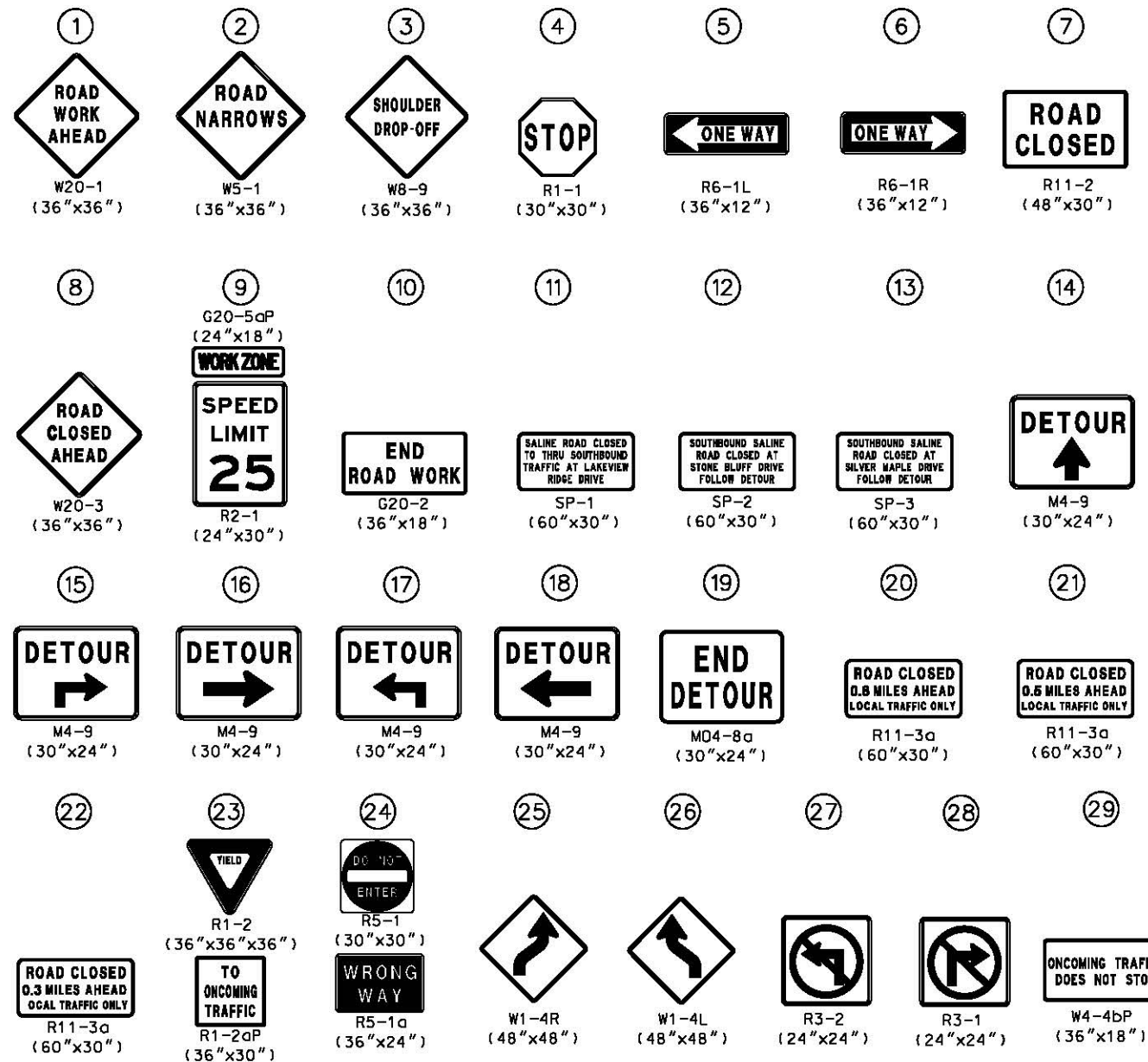


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 MISSOURI  
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# TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- ▬ SIGN (DOUBLE SIDED)
- CHANNELIZER
- ▬ MOVEABLE BARRICADE (MB)
- ▬ CHANGEABLE MESSAGE BOARD
- ▨ EXISTING PAVEMENT UTILIZED AS MAINLINE TRAVELWAY
- ▩ UNDER CONSTRUCTION
- TEMPORARY PAVEMENT (6" BITUMINOUS BASE ON ROLLED SUBBASE. SEE JOB SPECIAL PROVISIONS FOR CONTRACTOR REQUIREMENTS WITH RESPECT TO MAINTENANCE)
- ▬ TEMPORARY TRAFFIC BARRIER



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PE-200407169  
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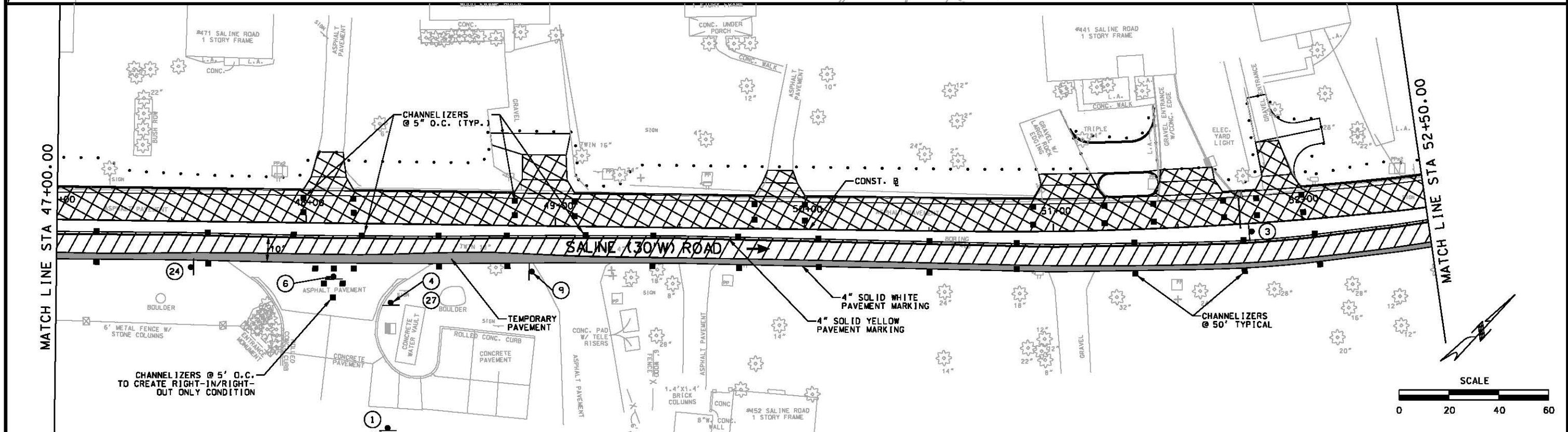
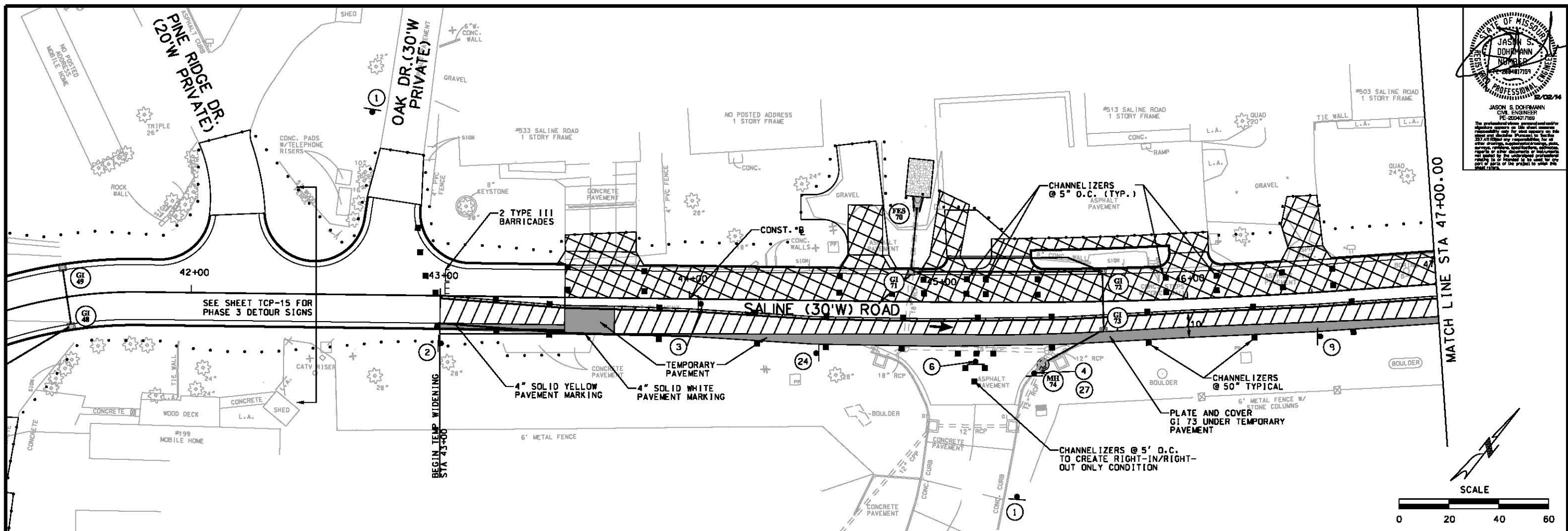
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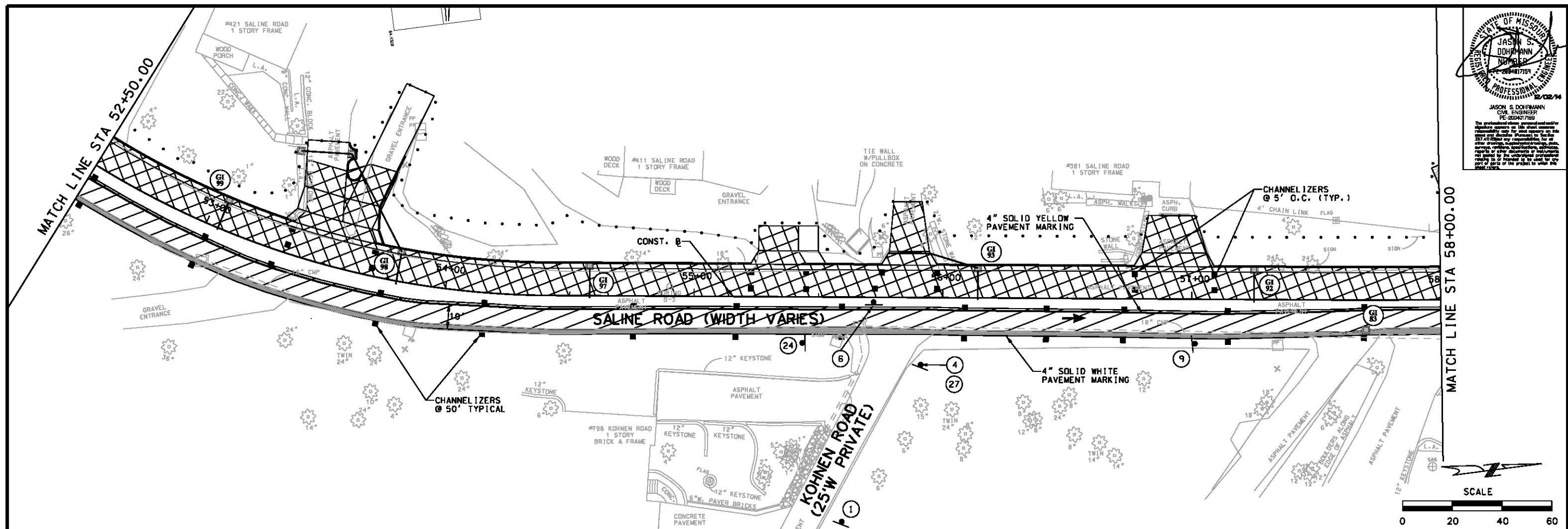
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TRAFFIC CONTROL PLANS  
DETOUR SIGNS - PHASE 3  
(Sheet 15 of 20)

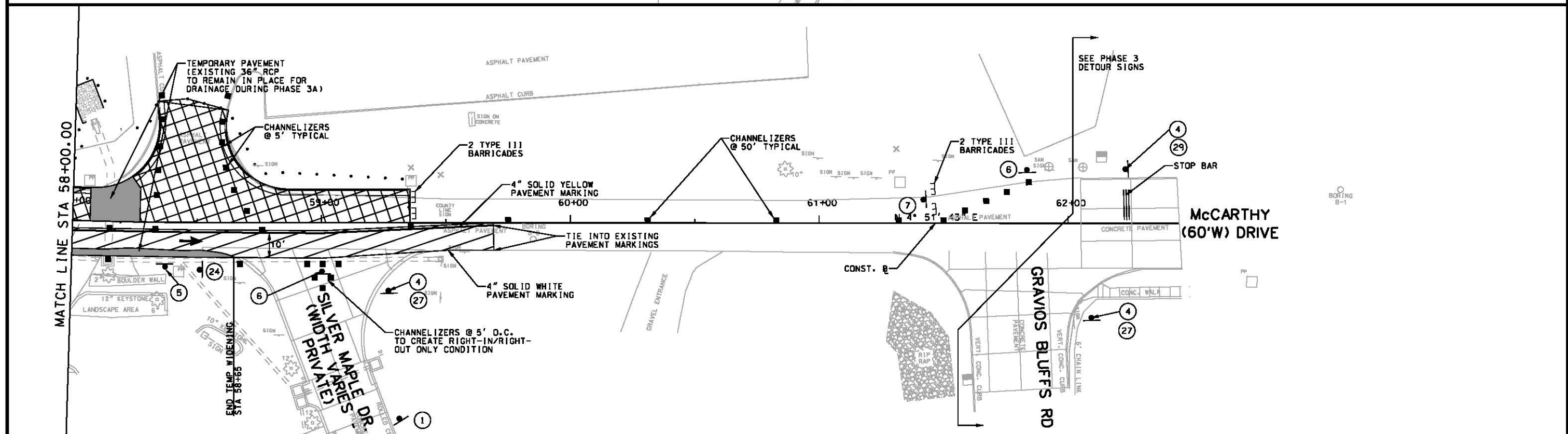
SHEET NO.  
TCP-15  
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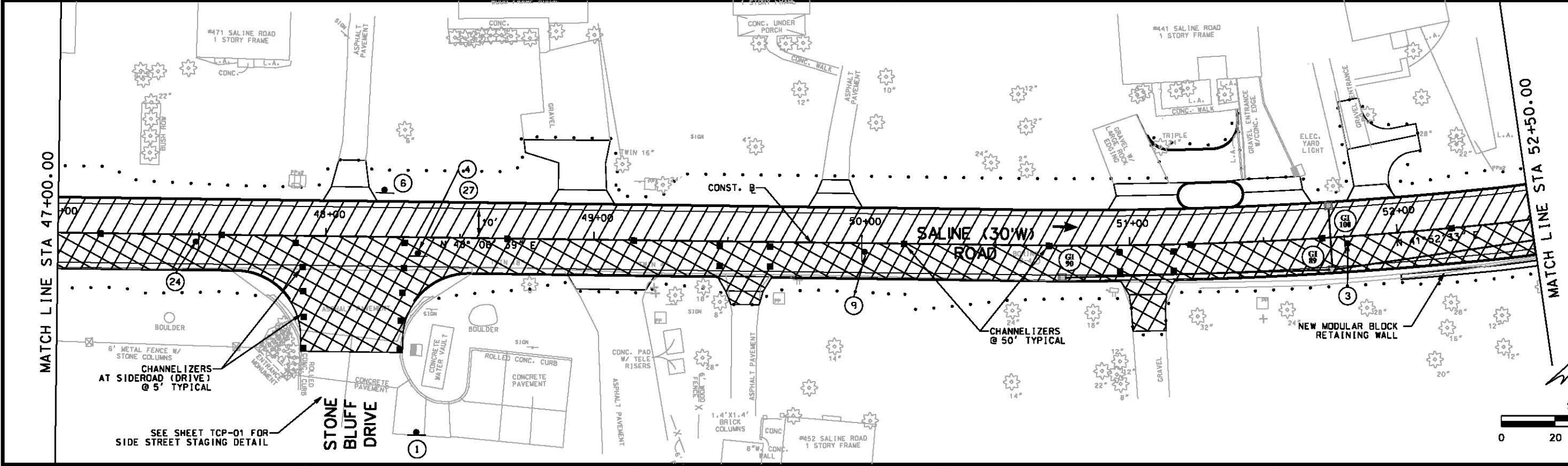
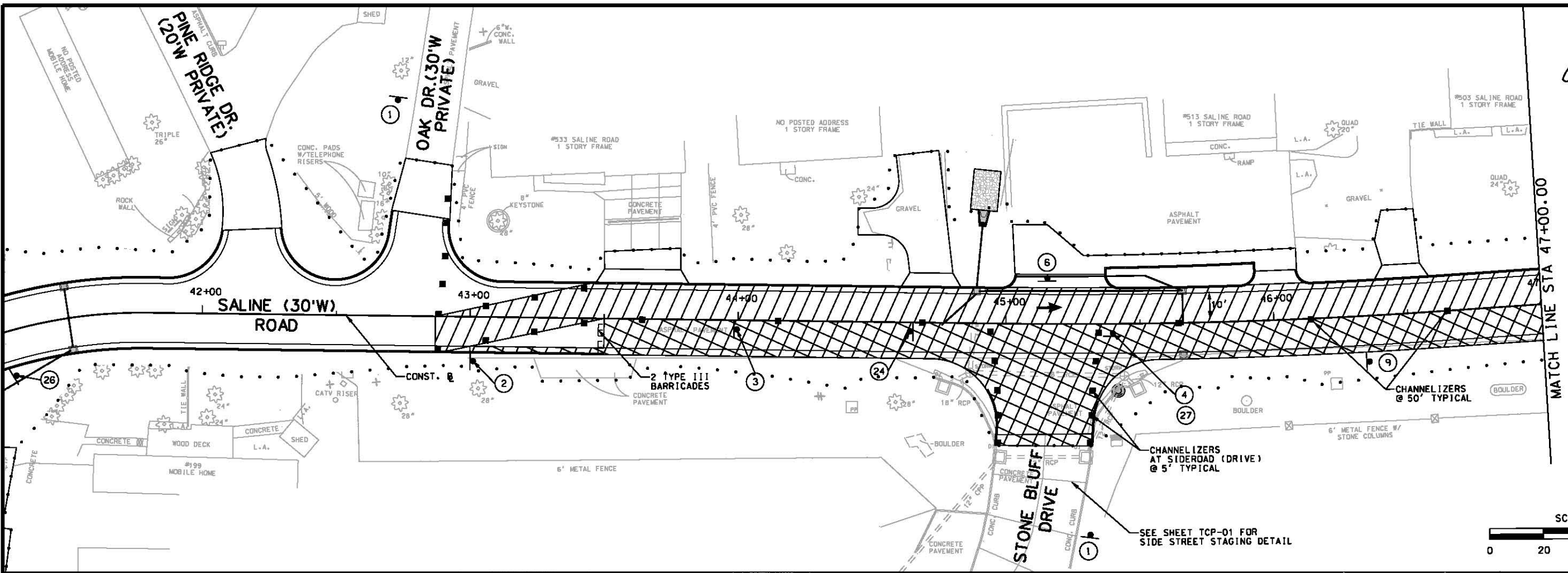


JASON S. DOHMANN  
 CIVIL ENGINEER  
 PE-500407169  
 MISSOURI PROFESSIONAL ENGINEER  
 2/02/14  
 The professional whose approval and/or signature appears on this sheet represents that he/she is a duly licensed professional engineer in the State of Missouri and that he/she is responsible for the design and construction of the project shown on this sheet. The professional shall not be held responsible for the design and construction of the project shown on this sheet if the project is not in accordance with the Missouri Professional Engineering Act.



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JASON S. DOHMANN  
LICENSED PROFESSIONAL ENGINEER  
NO. 200407169  
DATE 02/14

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JOB NUMBER: 75110022  
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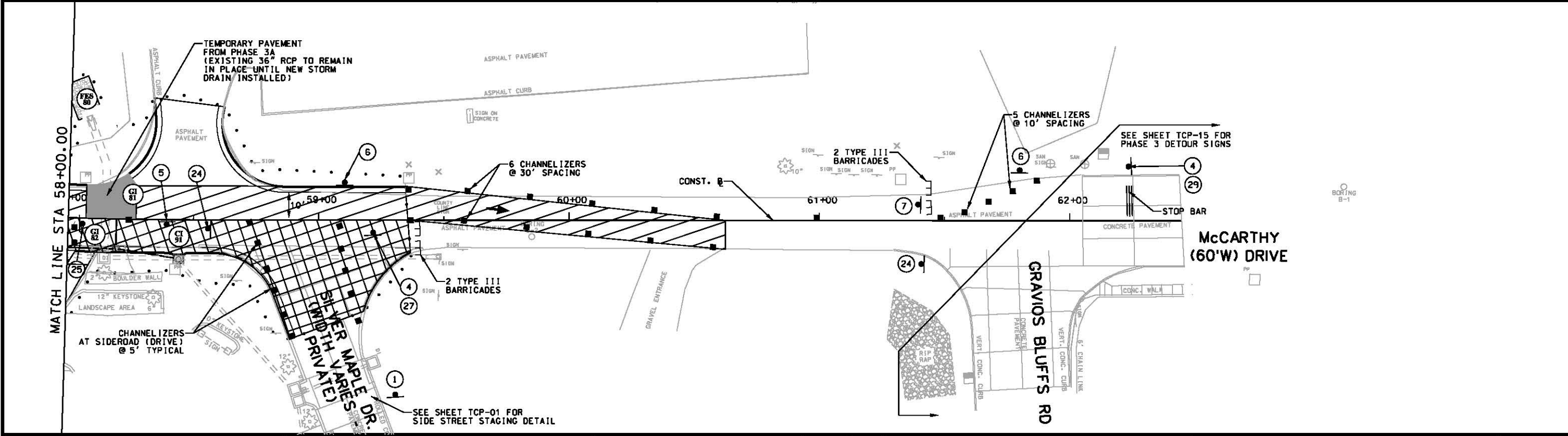
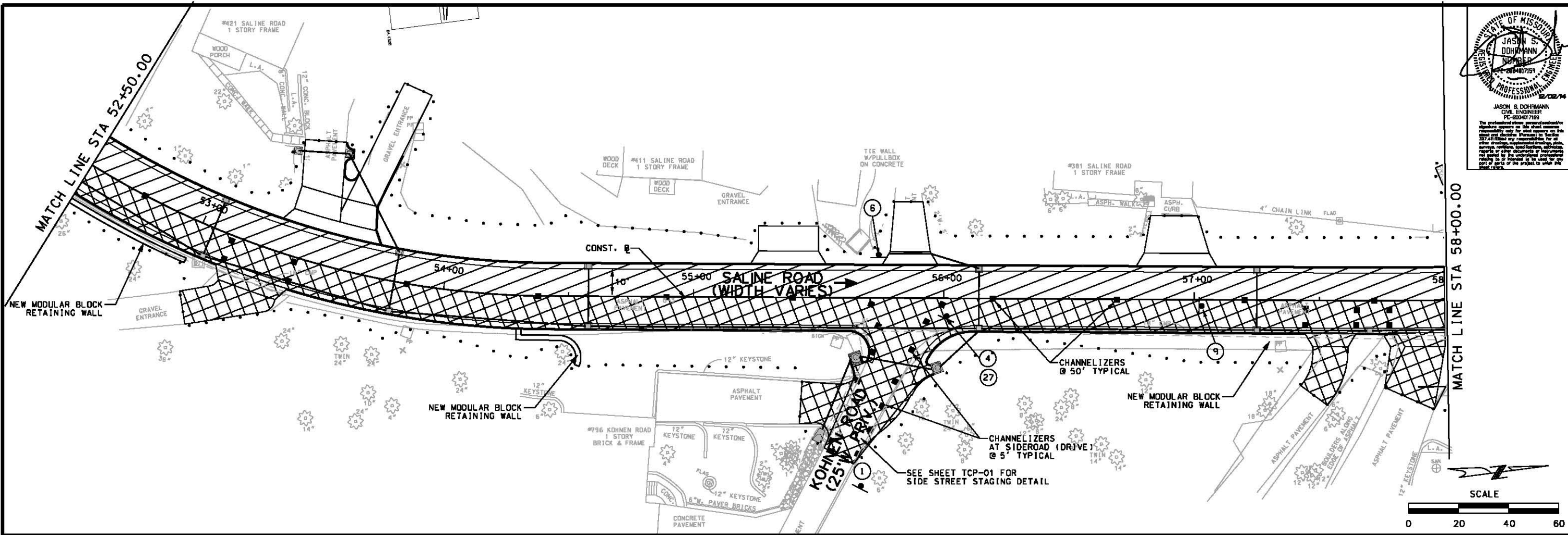
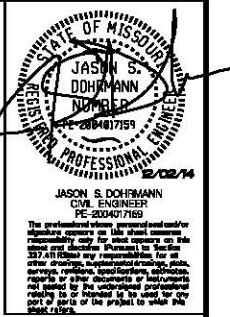
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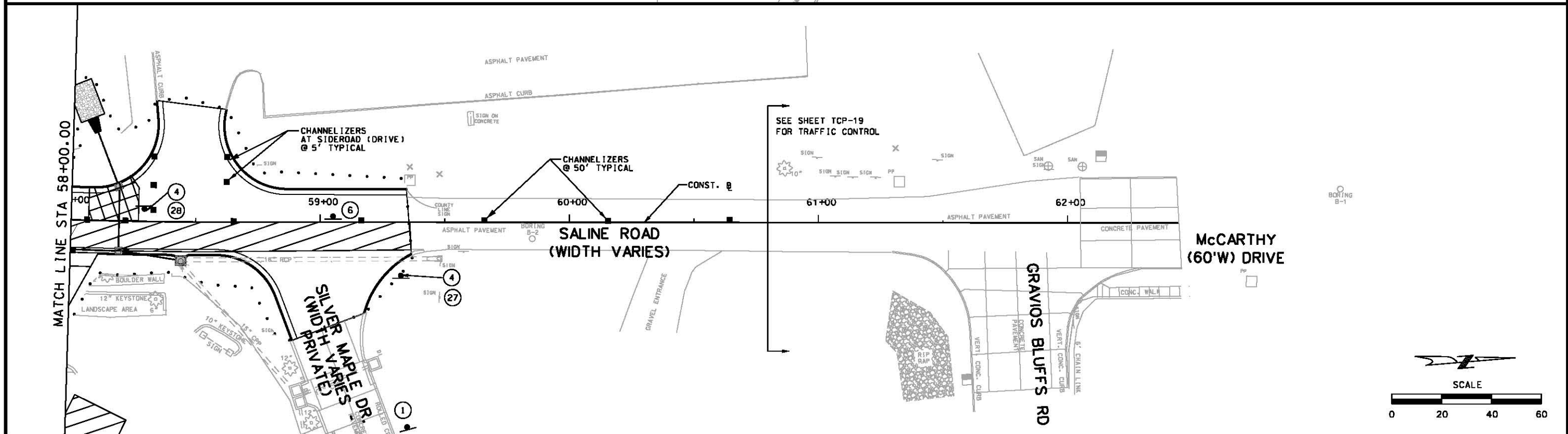
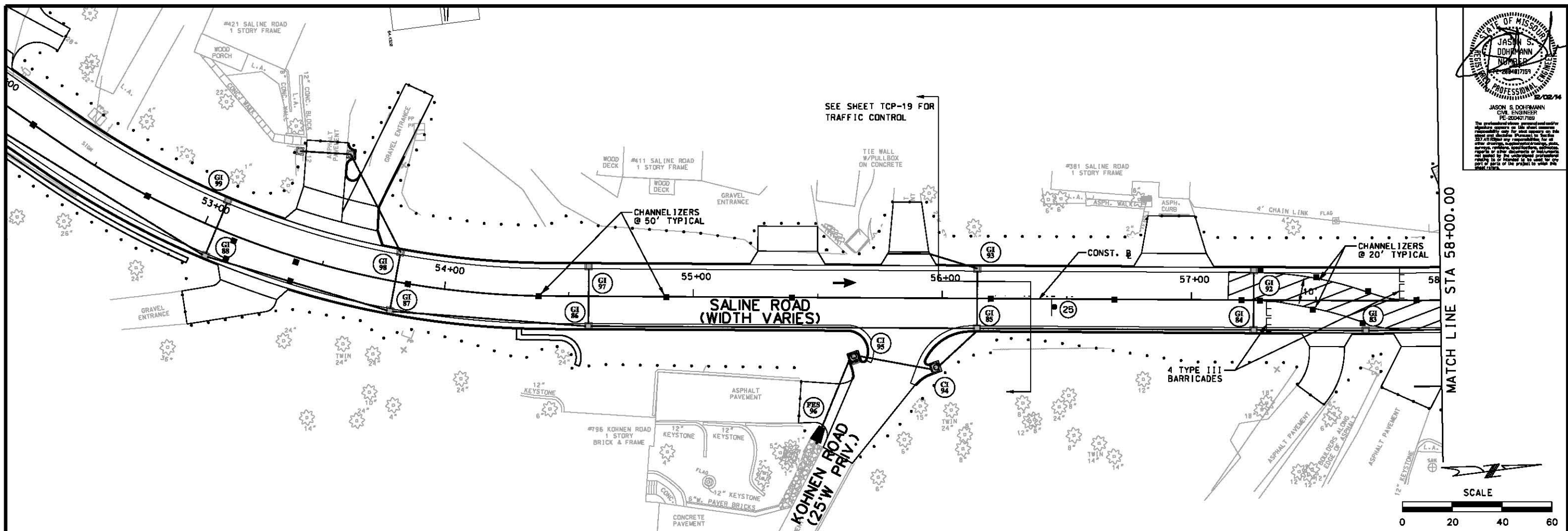
**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

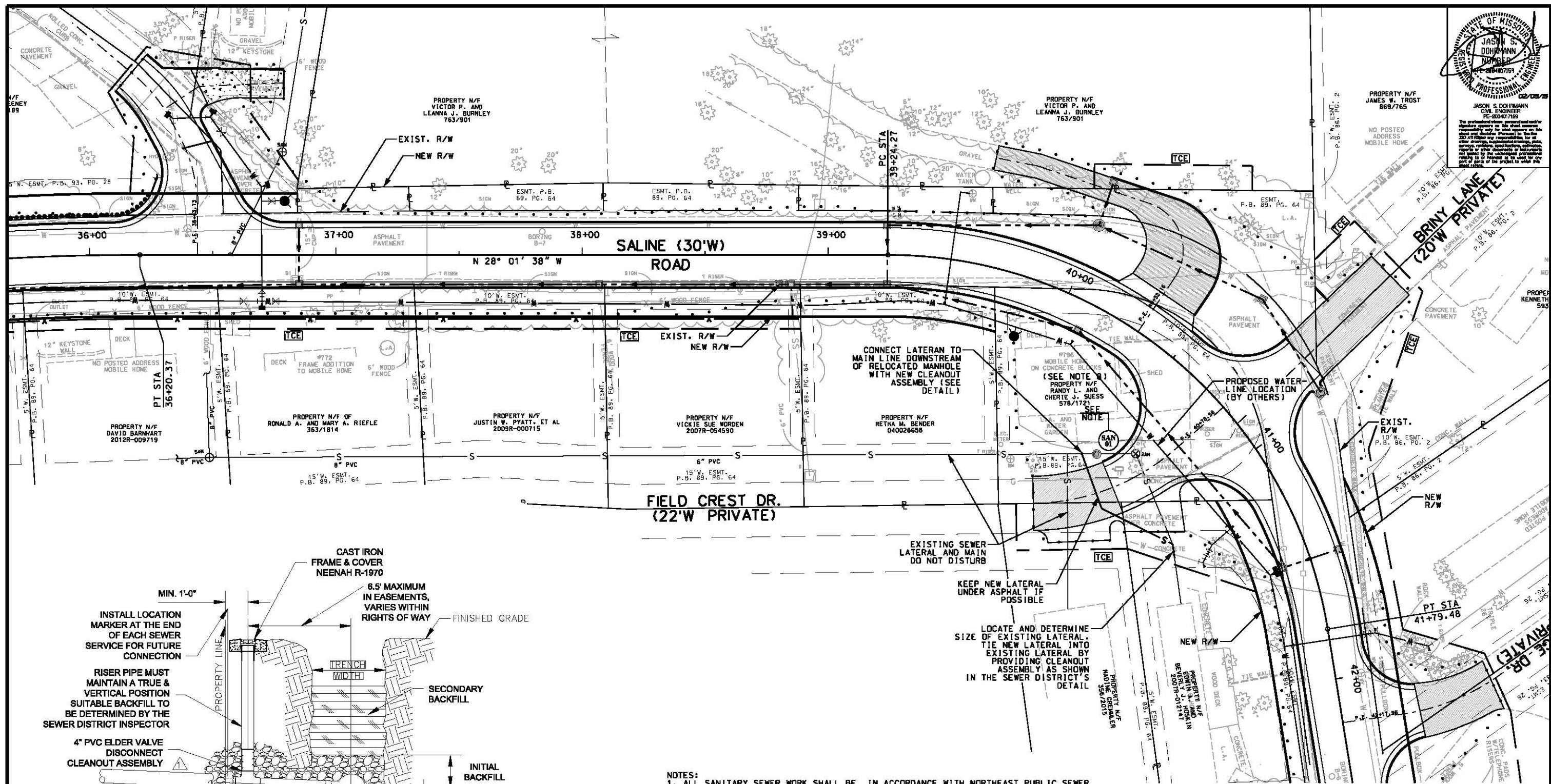
**TRAFFIC CONTROL PLANS**  
PHASE 3B  
(Sheet 18 of 20)

SHEET NO.  
**TCP-18**  
60 of 99

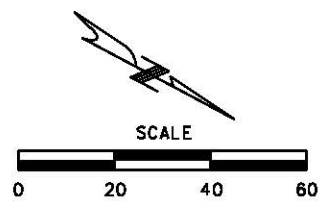








- NOTES:**
1. ALL SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH NORTHEAST PUBLIC SEWER DISTRICT'S STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONTACT THE SEWER DISTRICT BEFORE BEGINNING THE SANITARY SEWER WORK.
  2. SANITARY MANHOLE TO BE CONSTRUCTED OVER THE EXISTING SANITARY MAIN.
  3. SANITARY SEWER TO BE A 42" DIAMETER MANHOLE MEETING THE SPECIFICATIONS OF THE NORTHEAST SEWER DISTRICT.
  4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF THE EXISTING MAIN AND MANHOLE TO BE REMOVED AS A PART OF THIS WORK.
  5. APPROXIMATE LOCATION OF THE NEW MANHOLE STA. 40+52.50' RT. HOWEVER, MANHOLE LOCATION WILL DEPEND ON ACTUAL FOUND LOCATION OF THE EXISTING LINE.
  6. FOR THE PURPOSES OF ESTIMATING, A 4-INCH PVC LATERAL IS ASSUMED.
  7. CLEANOUTS ARE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTING THE LATERAL TIE-INS, AND NO SPECIFIC MEASUREMENT OR PAYMENT WILL BE MADE FOR THESE ITEMS.
  8. THE BUILDING NOTED ON THE PLANS AS THE "SUESS" PROPERTY HAS BEEN REMOVED BY OTHERS, BUT THE ABANDONED HOUSE SEWER LATERAL HAS NOT BEEN VERIFIED AS BEING PROPERLY CAPPED. THE CONTRACTOR SHALL CONTACT THE SEWER DISTRICT TO DETERMINE THE APPROXIMATE LOCATION OF THIS HOUSE SEWER LATERAL AND EXCAVATE THIS LINE TO DETERMINE THE CONDITION OF THE OF THE "CAPPING". IF NEED BE, THE CONTRACTOR SHALL CAP THIS LATERAL PER THE DIRECTIONS OF THE SEWER DISTRICT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE SANITARY SEWER MANHOLE.



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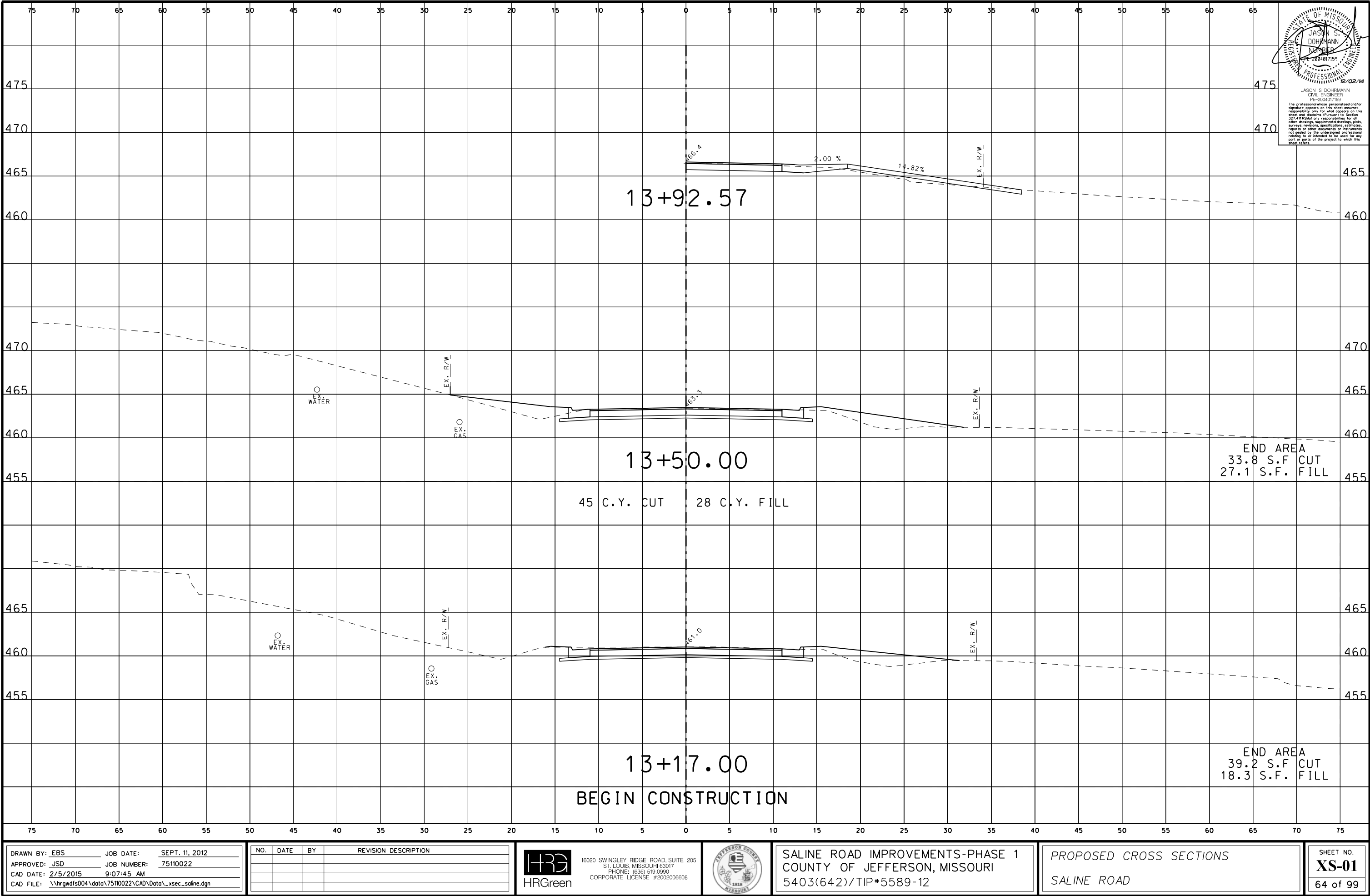
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**SANITARY SEWER REVISIONS**  
 MAINLINE ALIGNMENT  
 (Sheet 1 of 1)

SHEET NO.  
**SAN-01**  
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STATE OF MISSOURI  
JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 200407159  
2/02/14

JASON S. DOHRMANN  
CIVIL ENGINEER  
PE-200407159

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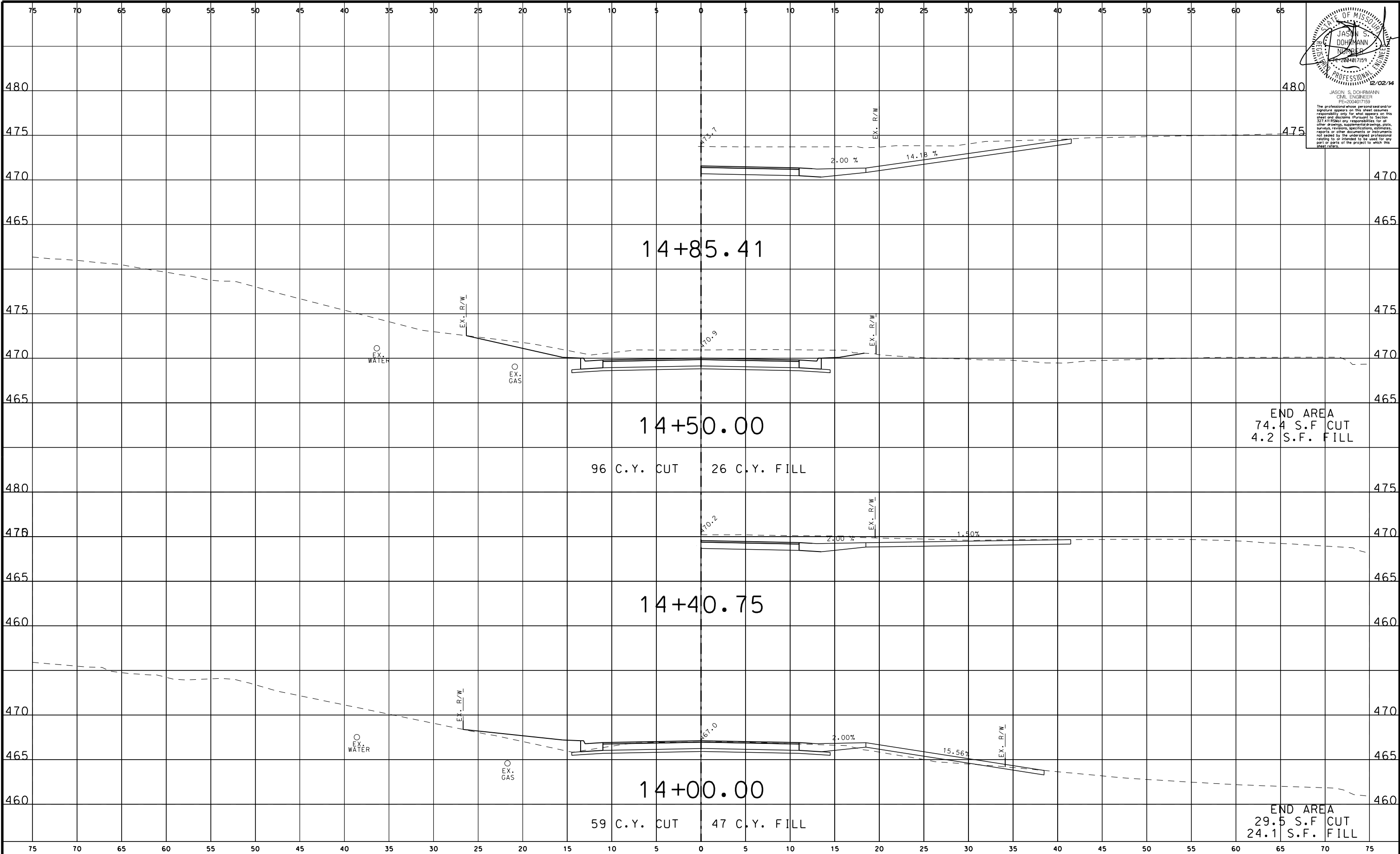
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SHEET NO.  
**XS-01**  
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JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 200407159  
EXPIRATION DATE 12/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
FE-200407159  
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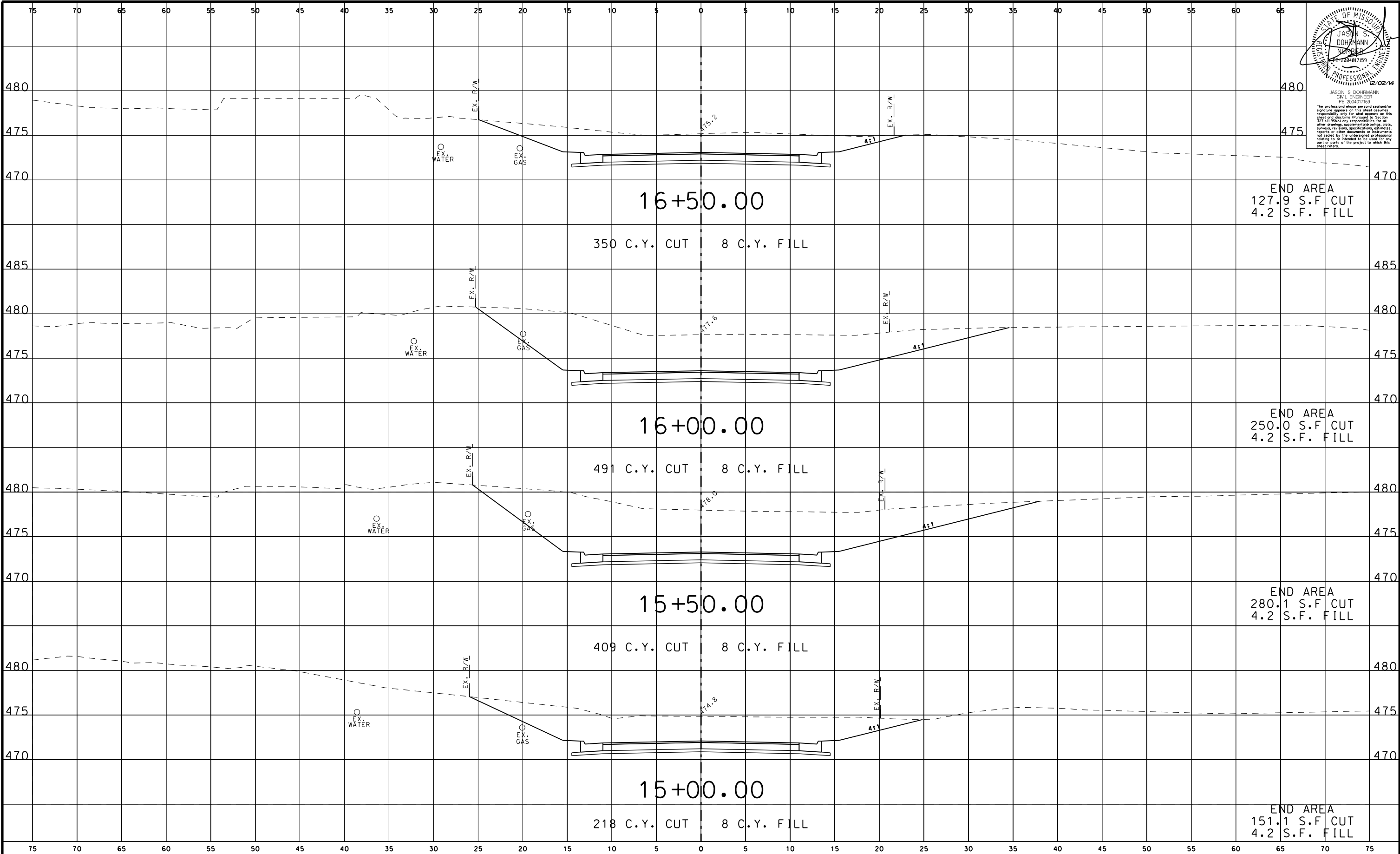
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-02**  
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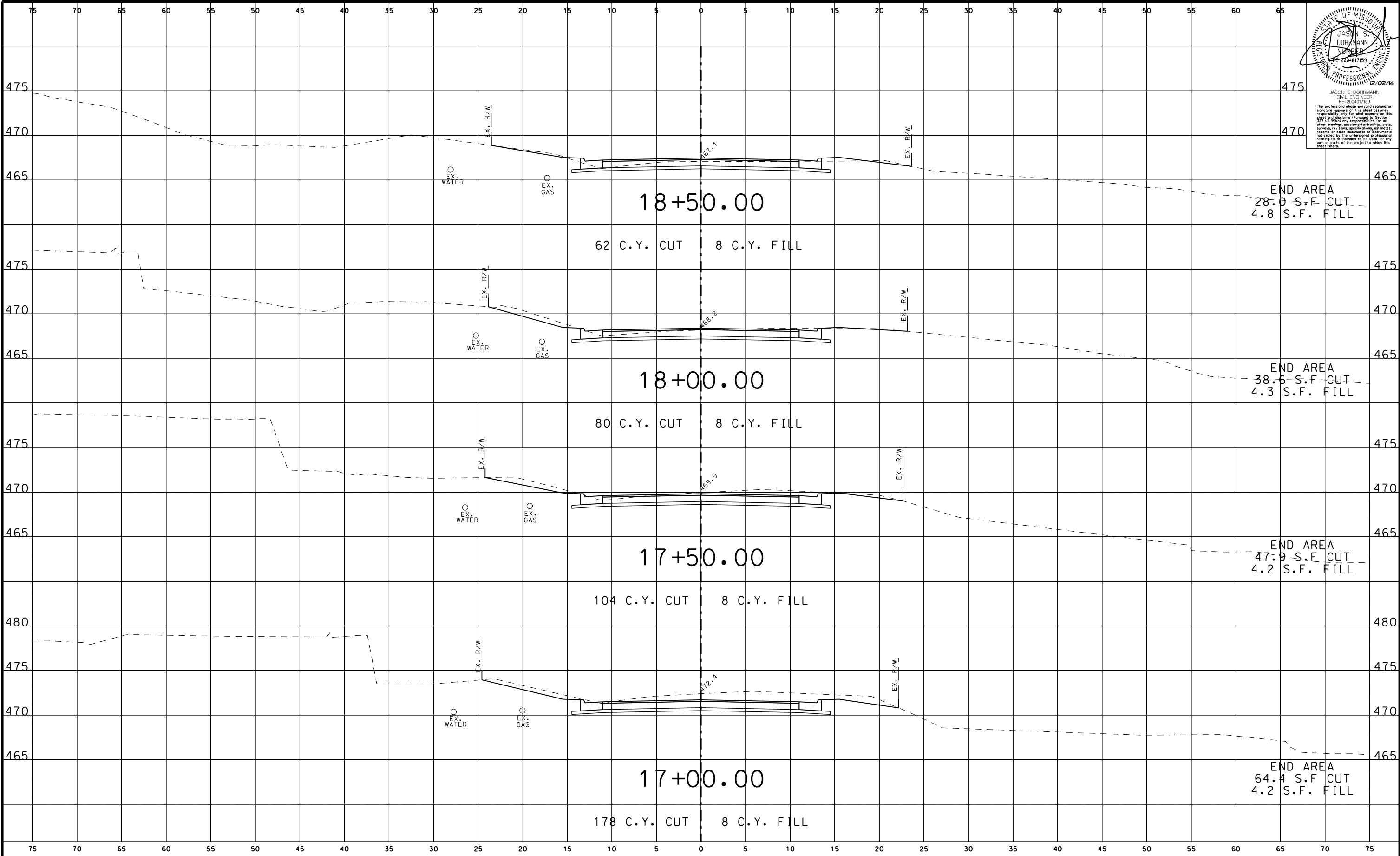
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-03**  
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JASON S. DOHRMANN  
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NO. 2084017159  
2/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
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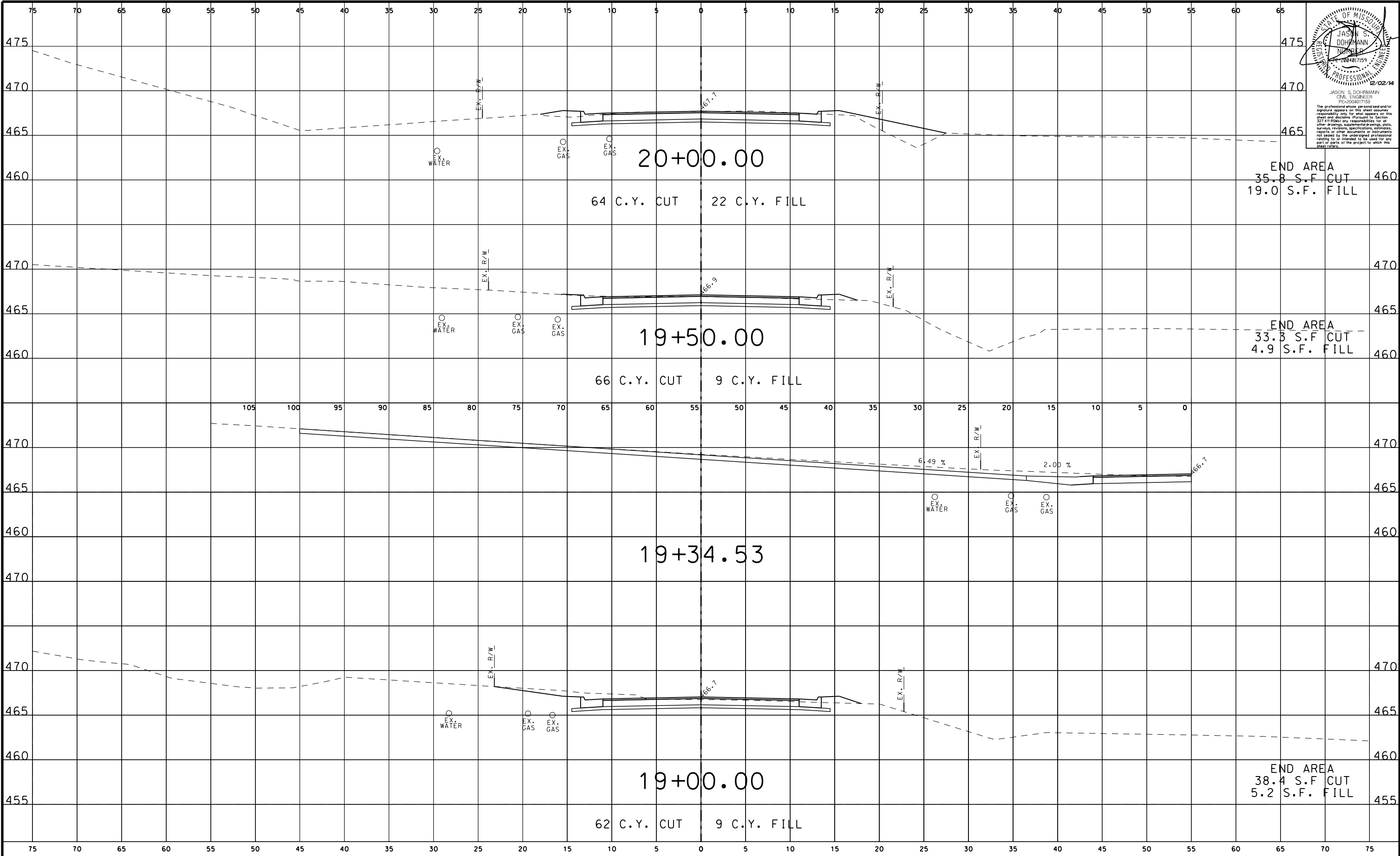


**SALINE ROAD IMPROVEMENTS-PHASE 1**  
COUNTY OF JEFFERSON, MISSOURI  
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-04**  
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STATE OF MISSOURI  
JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 2084017159  
2/02/14  
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PE-2004017159  
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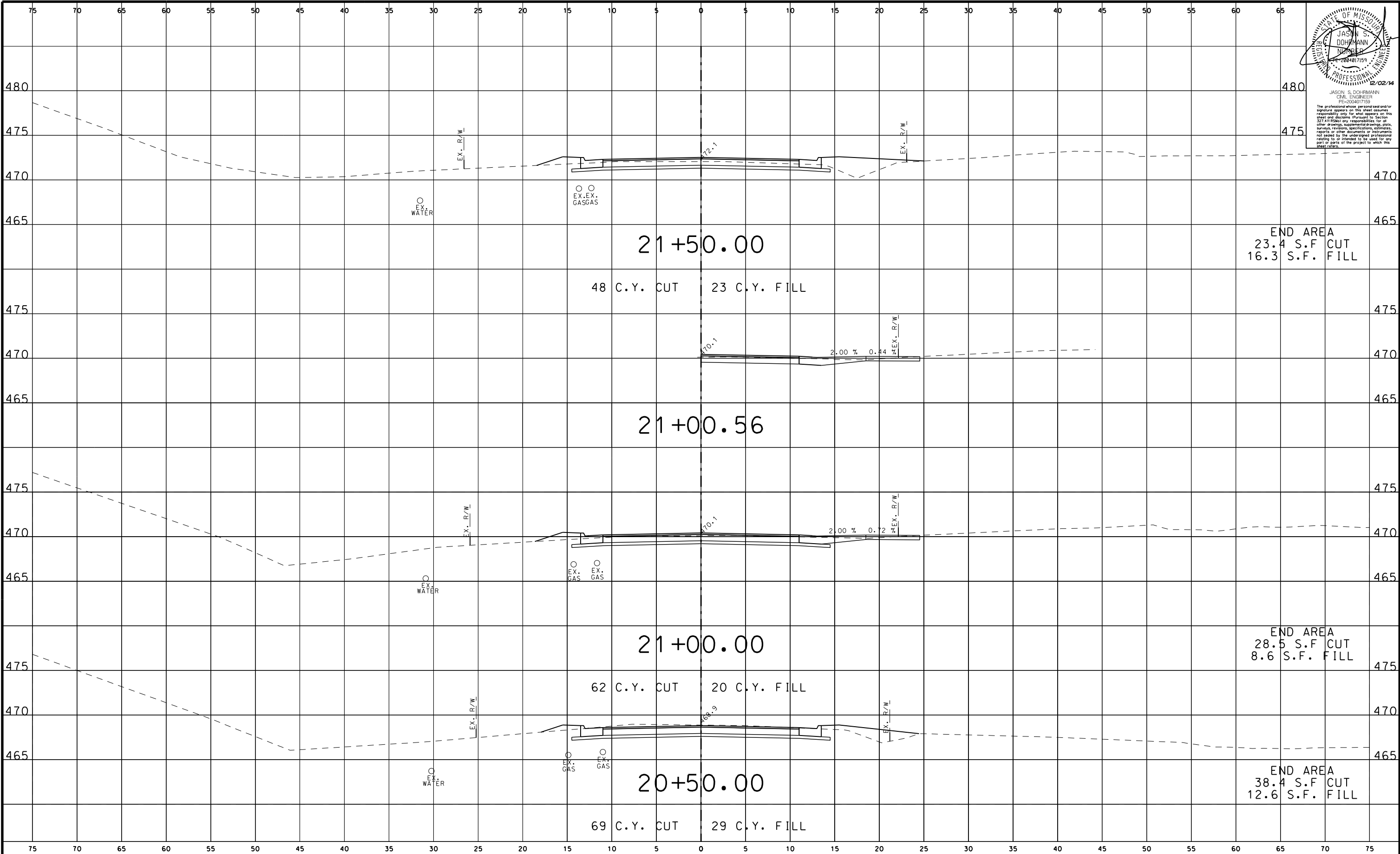
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**XS-05**  
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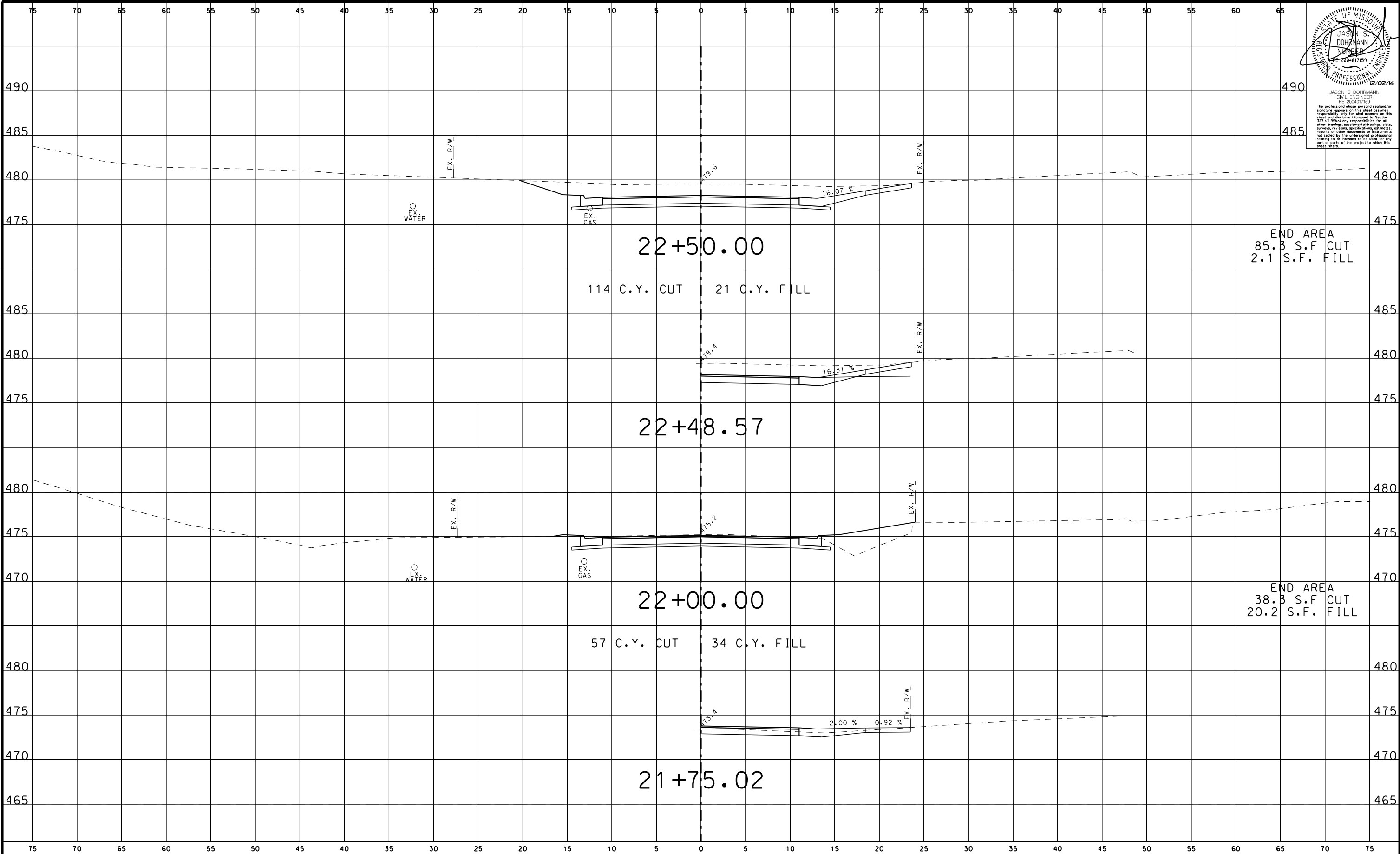
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-06**  
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END AREA  
85.3 S.F. CUT  
2.1 S.F. FILL

END AREA  
38.3 S.F. CUT  
20.2 S.F. FILL

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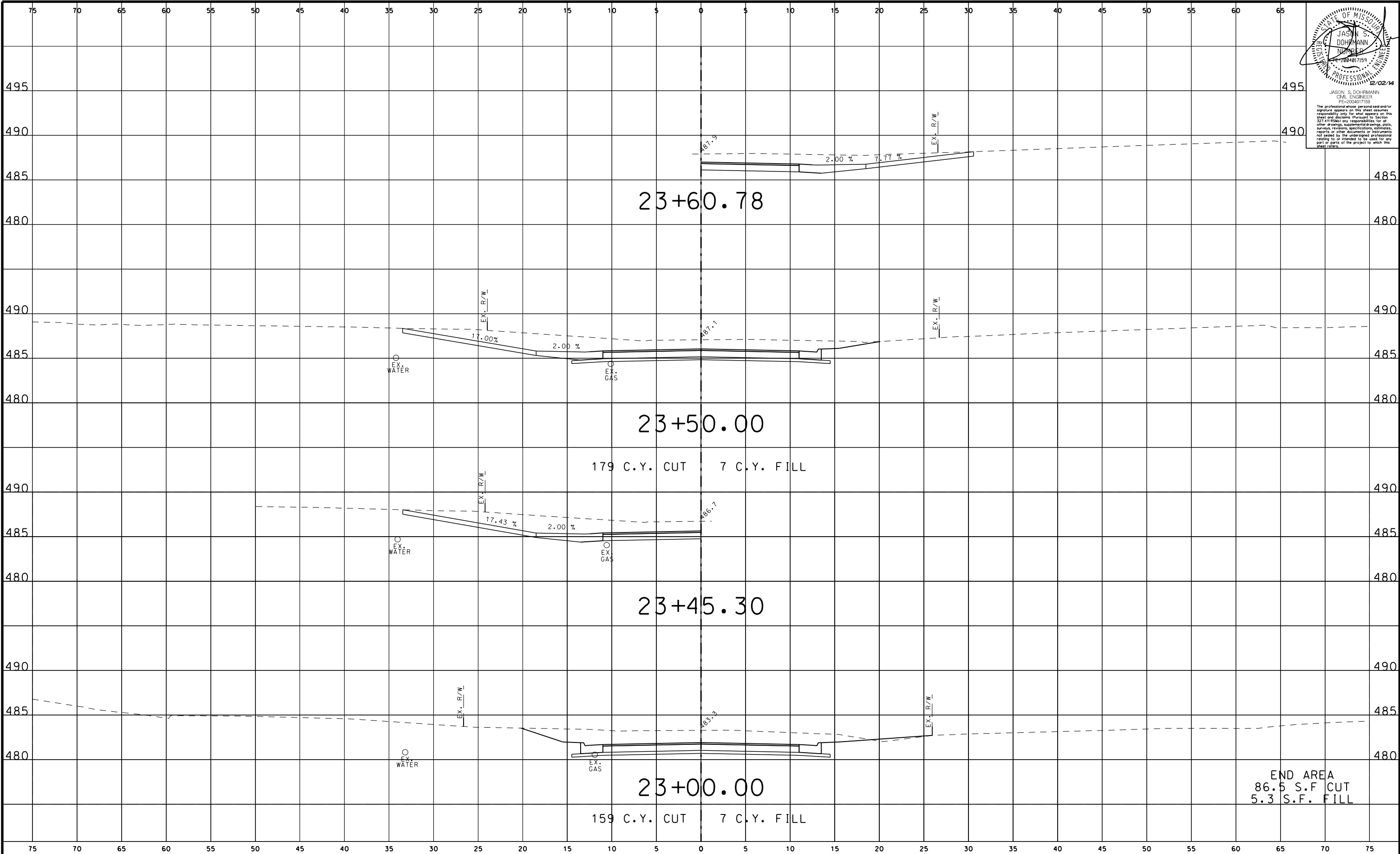


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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-07**  
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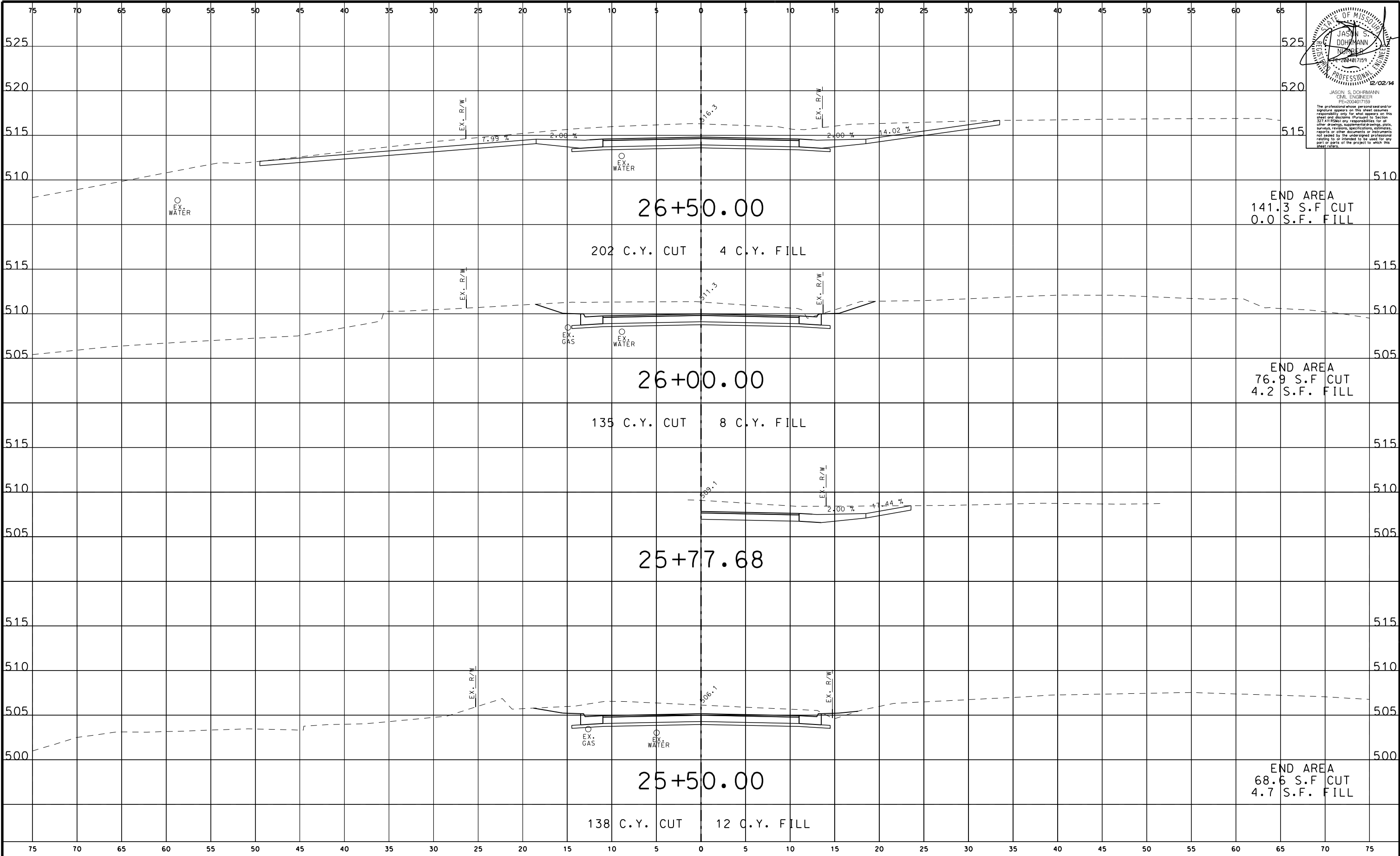


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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-08**  
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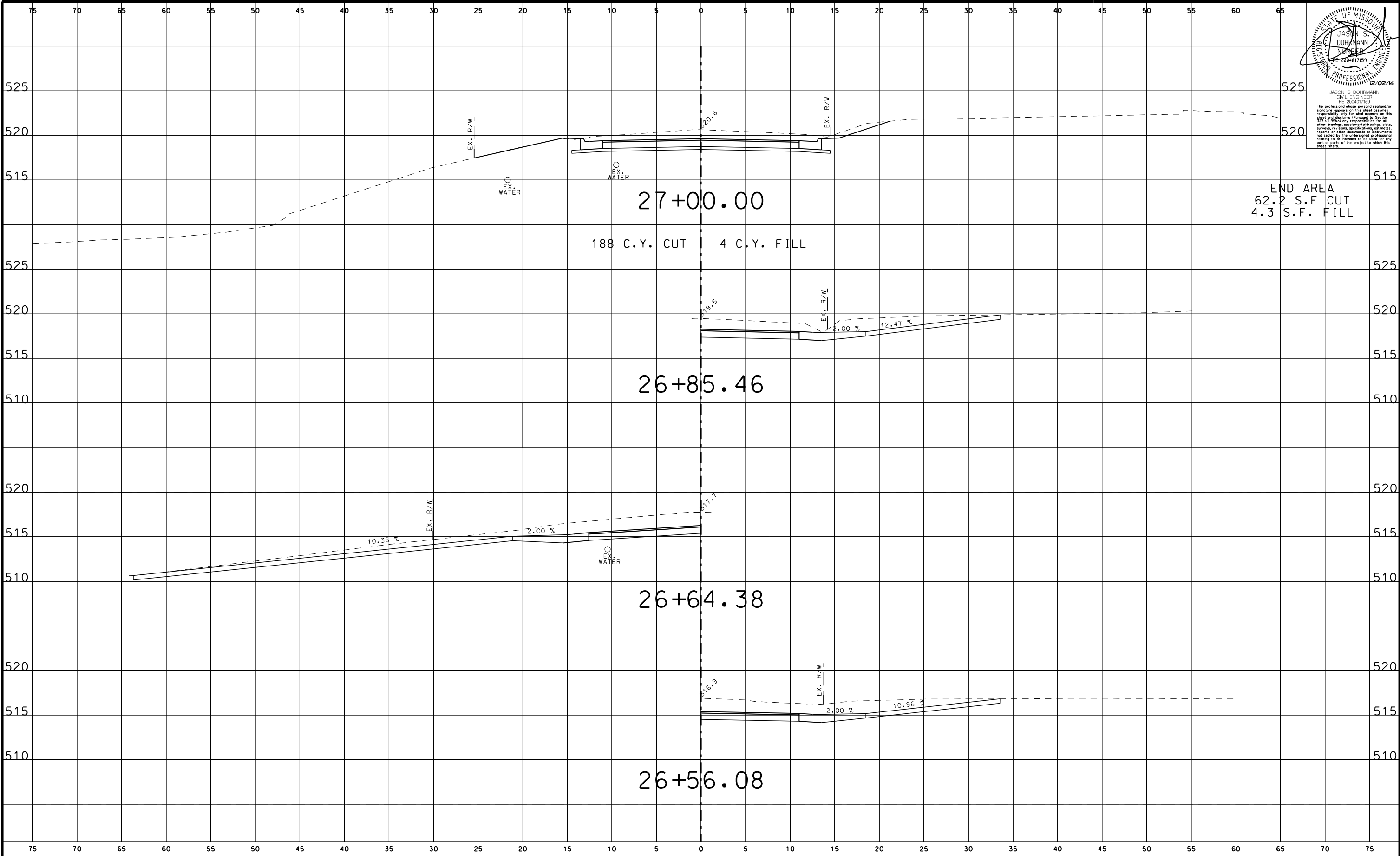


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END AREA  
62.2 S.F. CUT  
4.3 S.F. FILL

188 C.Y. CUT 4 C.Y. FILL

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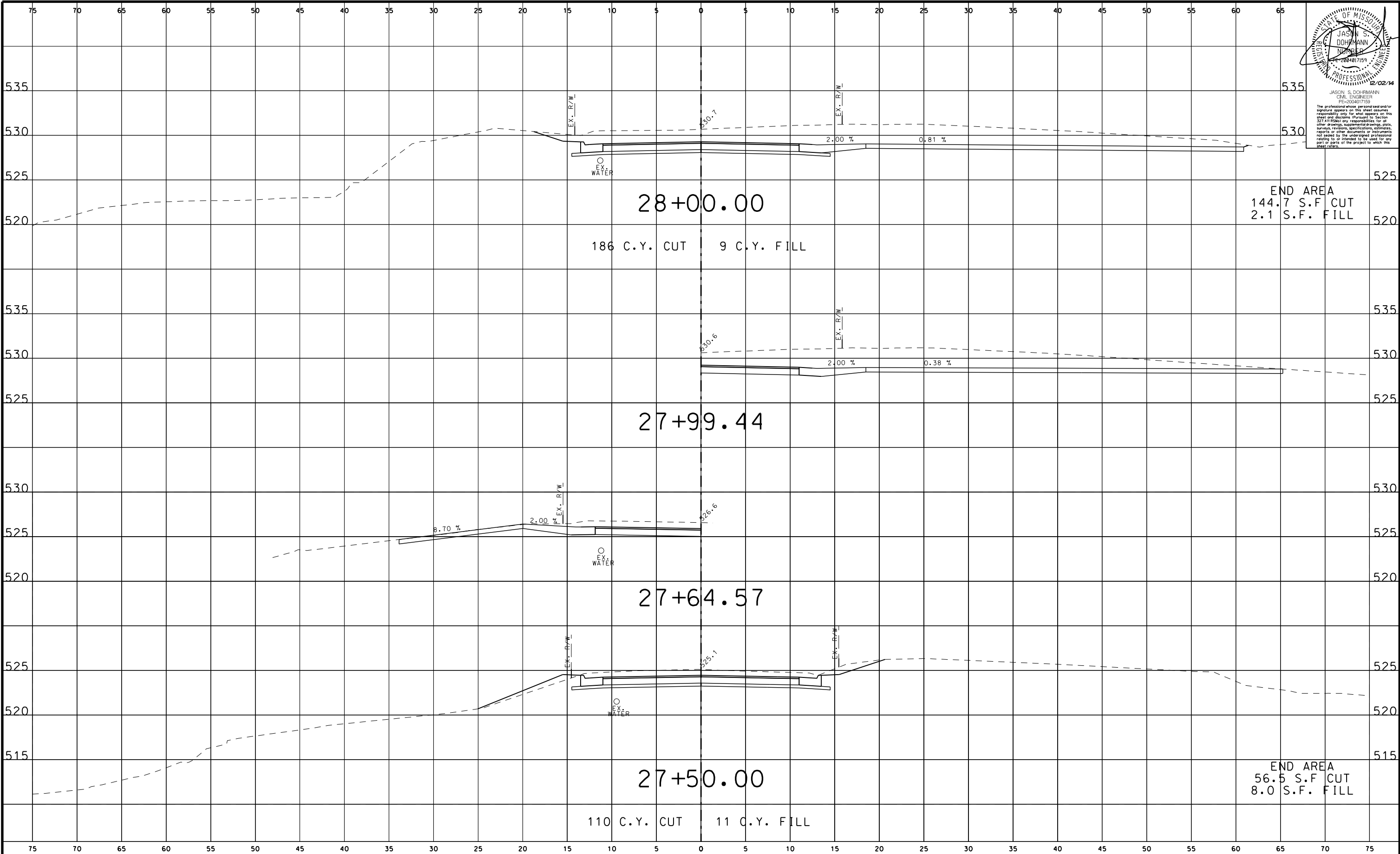
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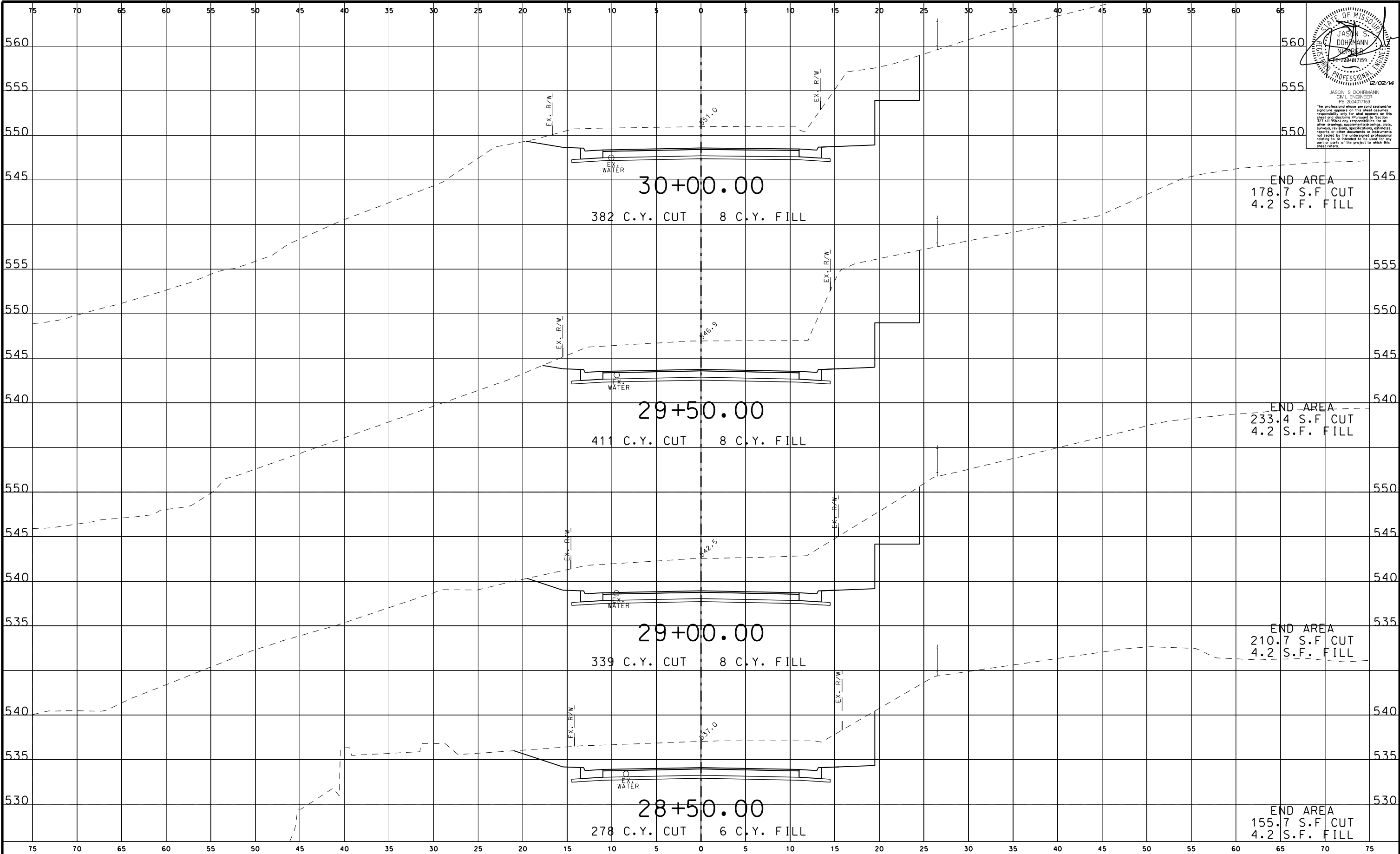
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COUNTY OF JEFFERSON, MISSOURI  
5403(642)/TIP#5589-12

PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-12**  
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STATE OF MISSOURI  
JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 2084017159  
2/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
PE-2004017159  
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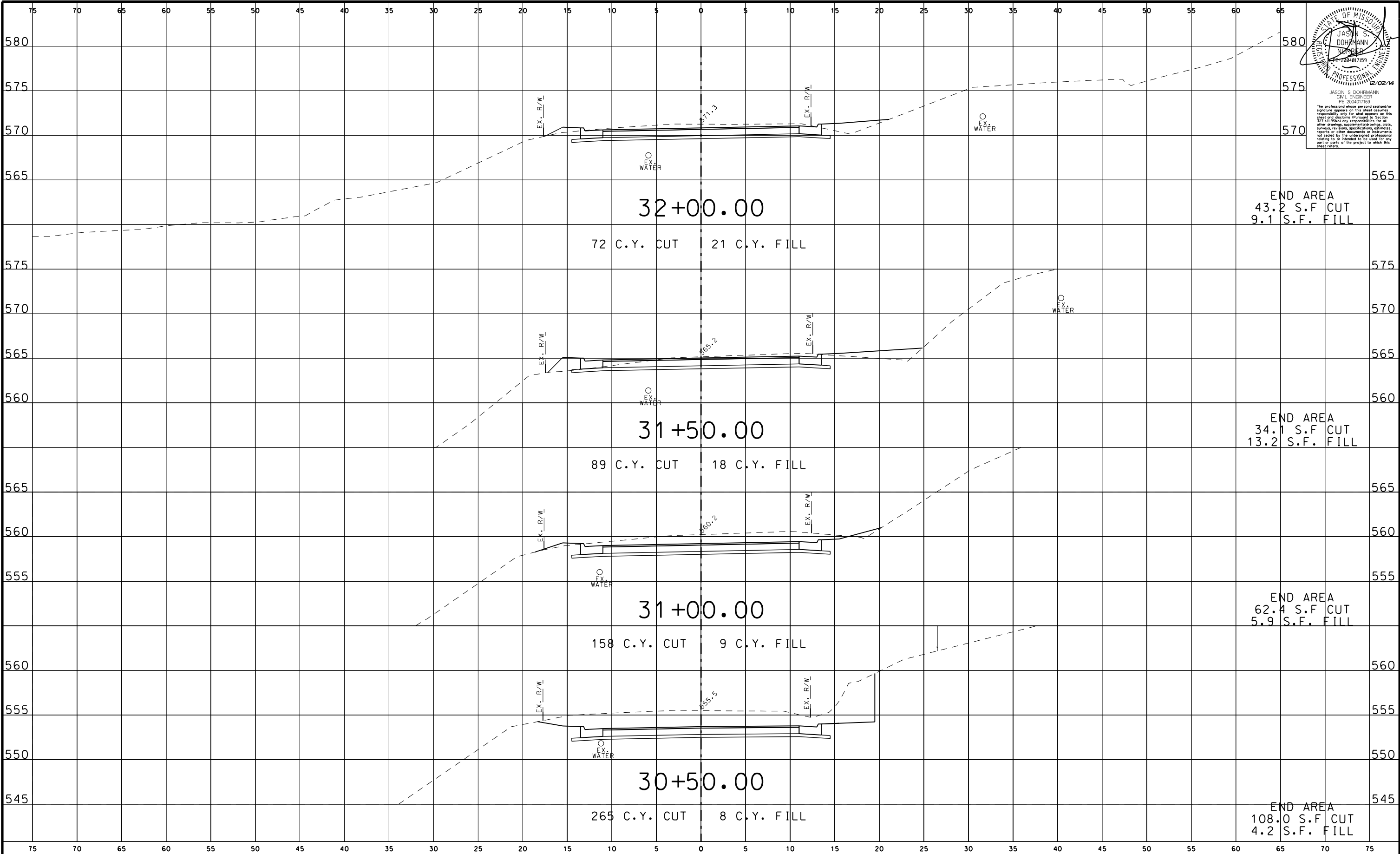


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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-13**  
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JASON S. DOHRMANN  
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No. 200407159  
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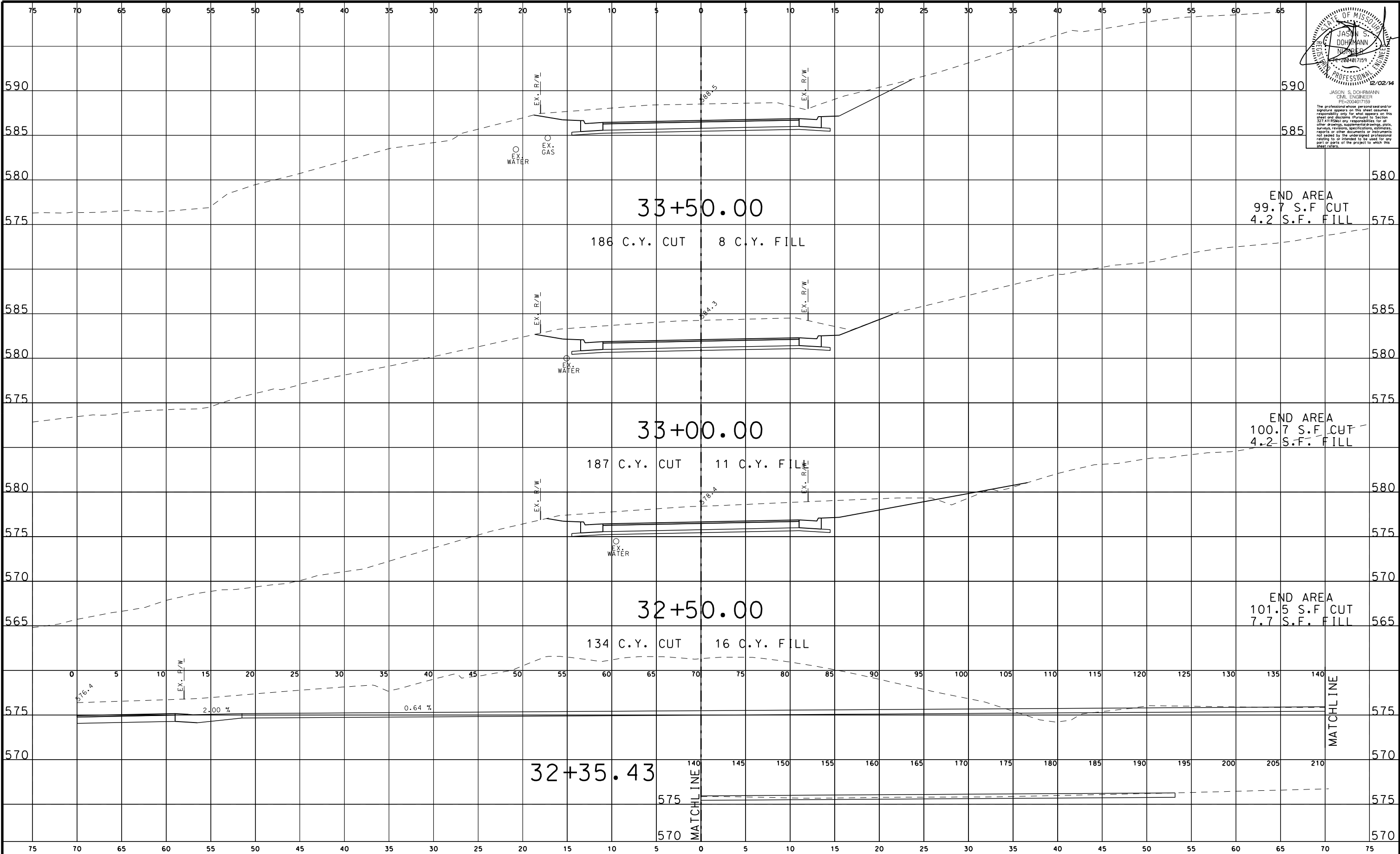
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-14**  
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STATE OF MISSOURI  
JASON S. DOHRMANN  
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NO. 2084017159  
2/02/14  
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FE-200407159  
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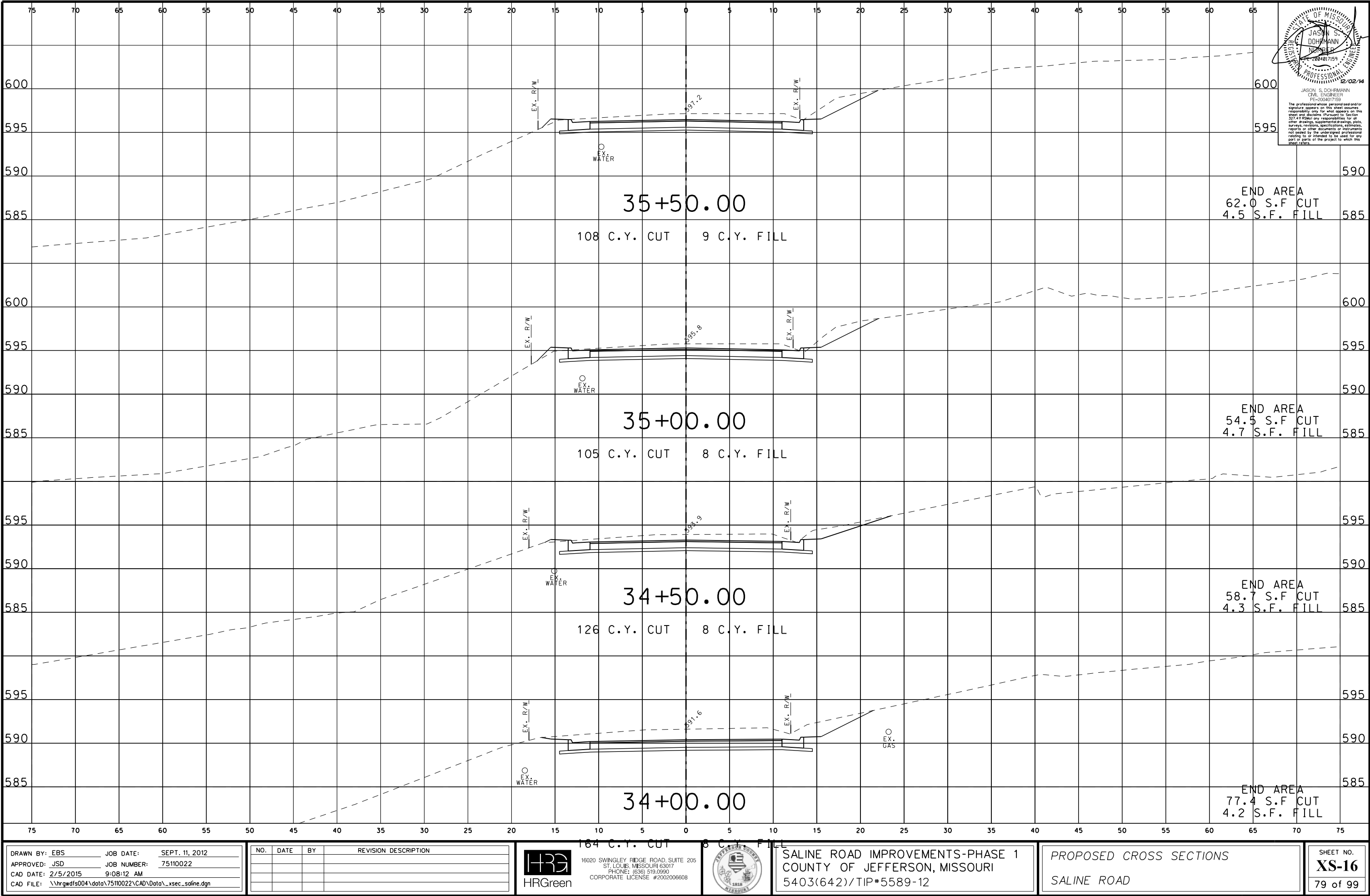
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-15**  
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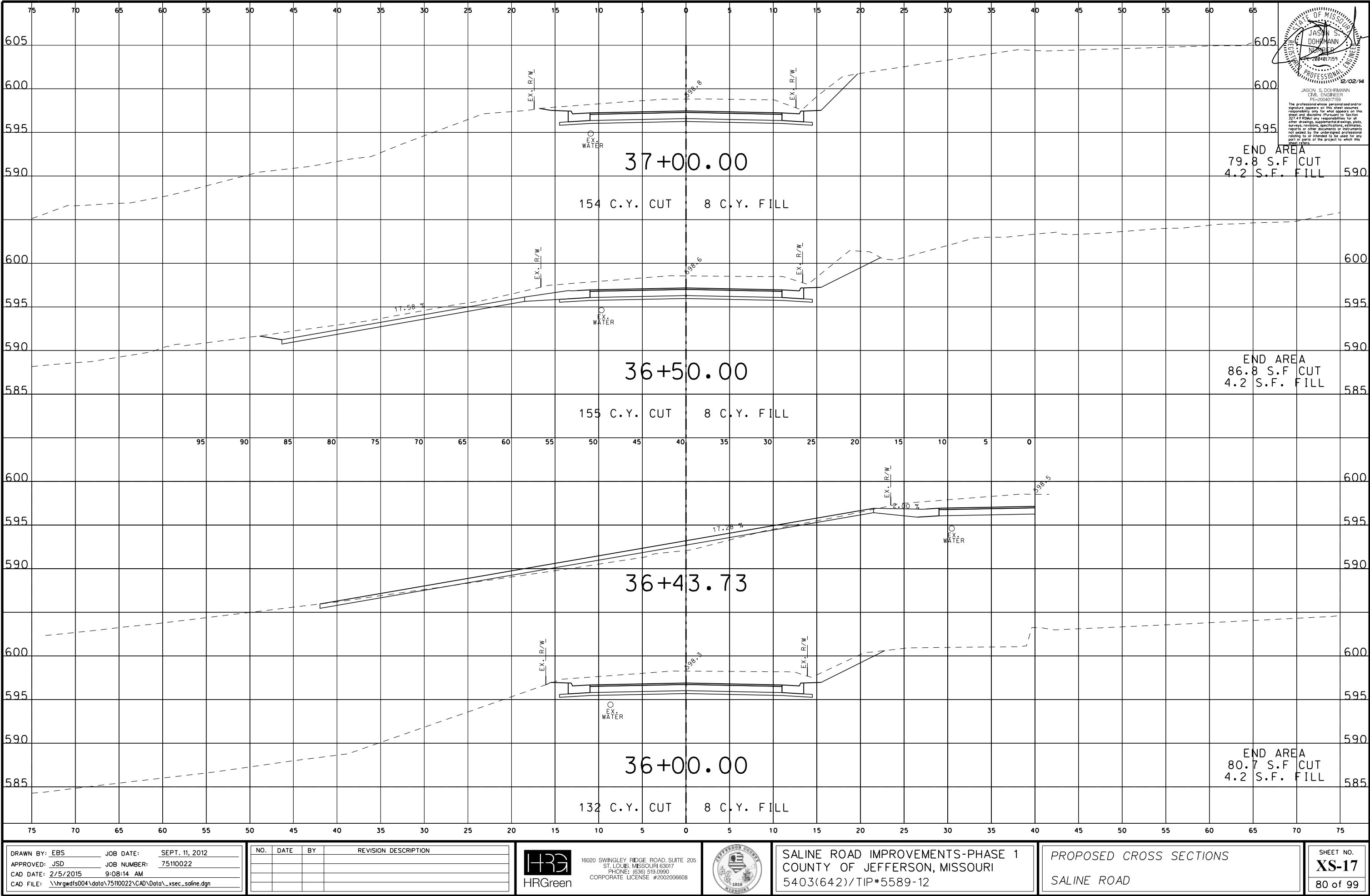


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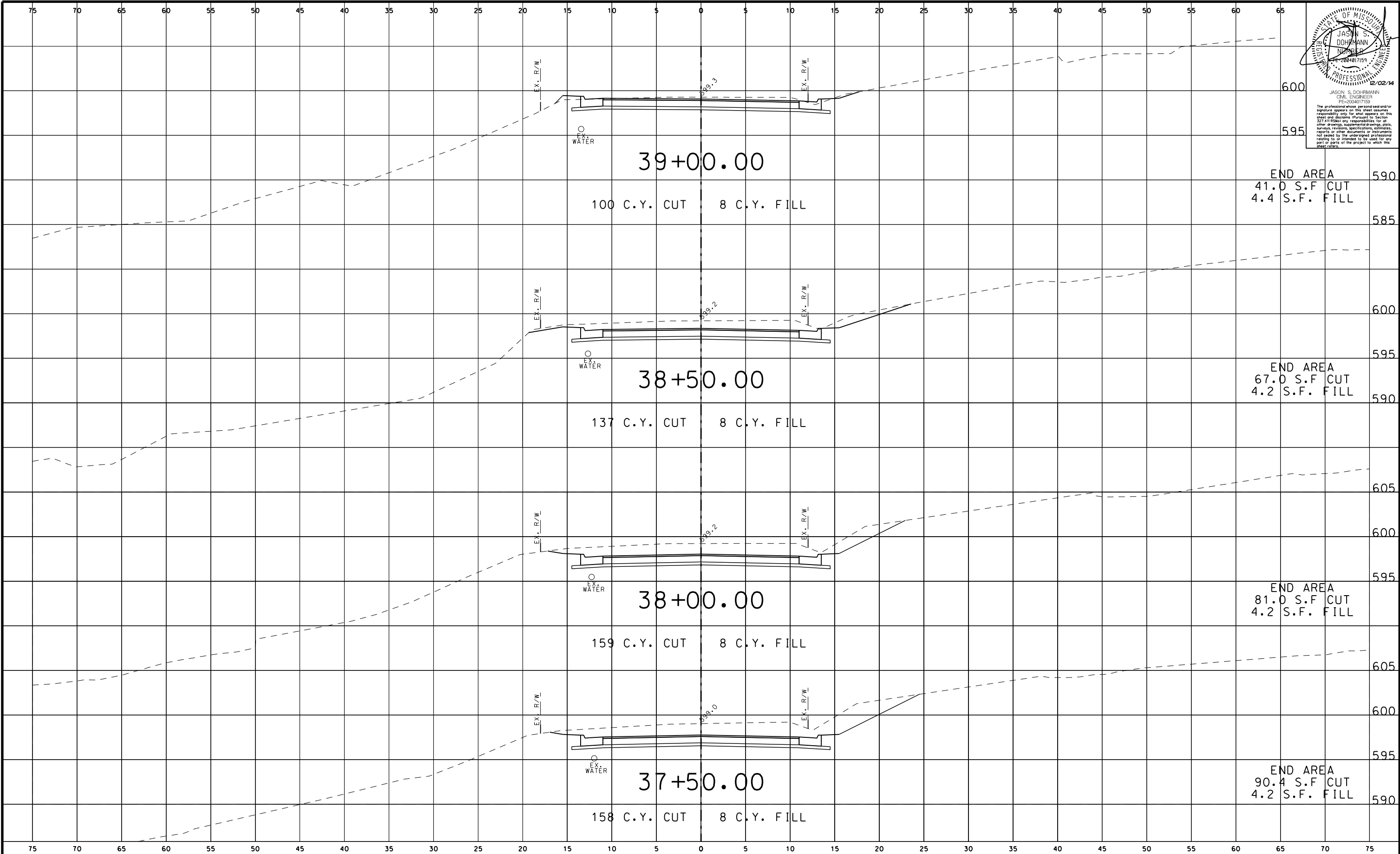


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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-17**  
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JASON S. DOHRMANN  
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NO. 200407159  
EXPIRATION DATE 12/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
PE-200407159  
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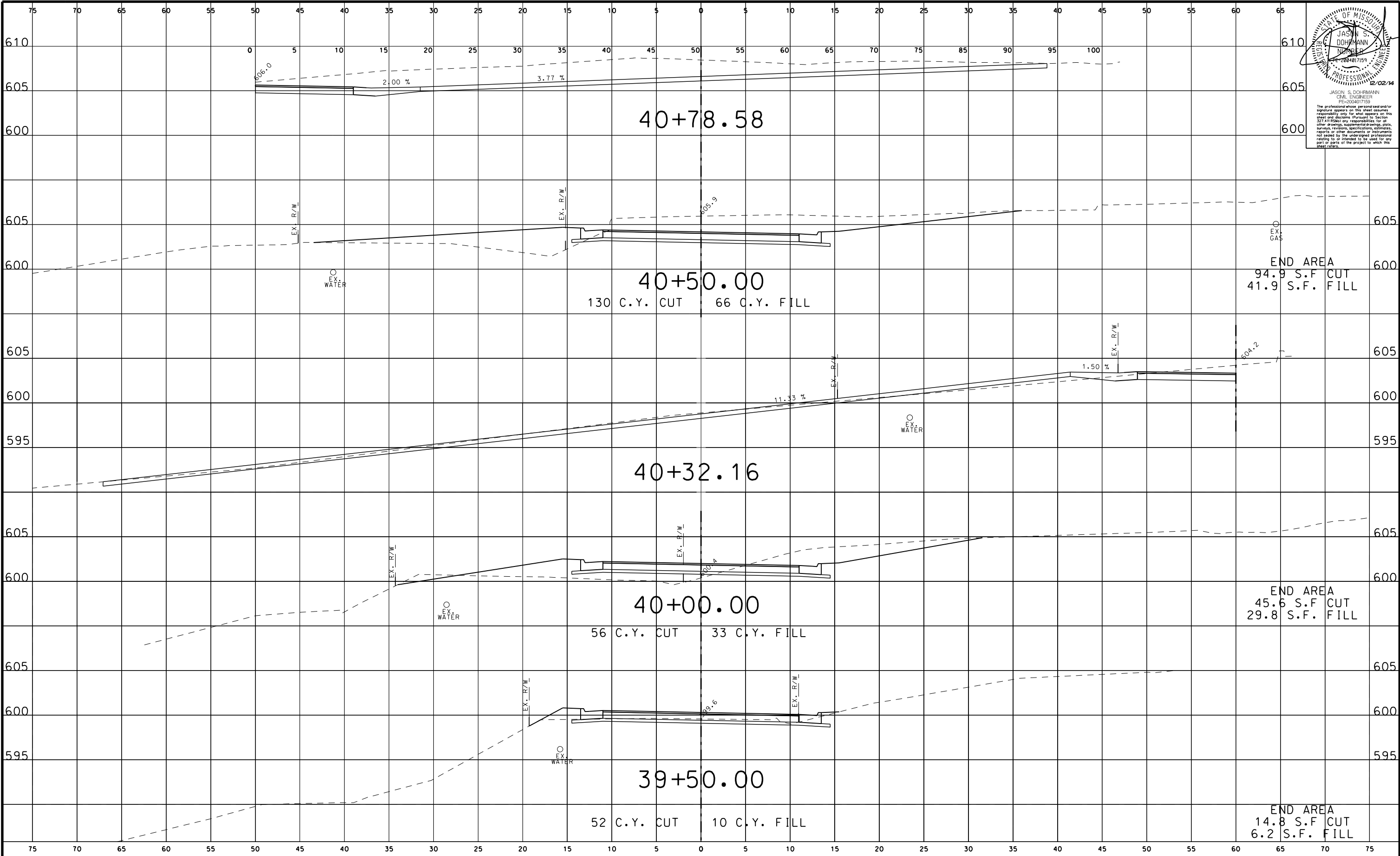
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*PROPOSED CROSS SECTIONS*  
**SALINE ROAD**

SHEET NO.  
**XS-18**  
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STATE OF MISSOURI  
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REGISTERED PROFESSIONAL ENGINEER  
NO. 200407159  
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CIVIL ENGINEER  
FE-200407159  
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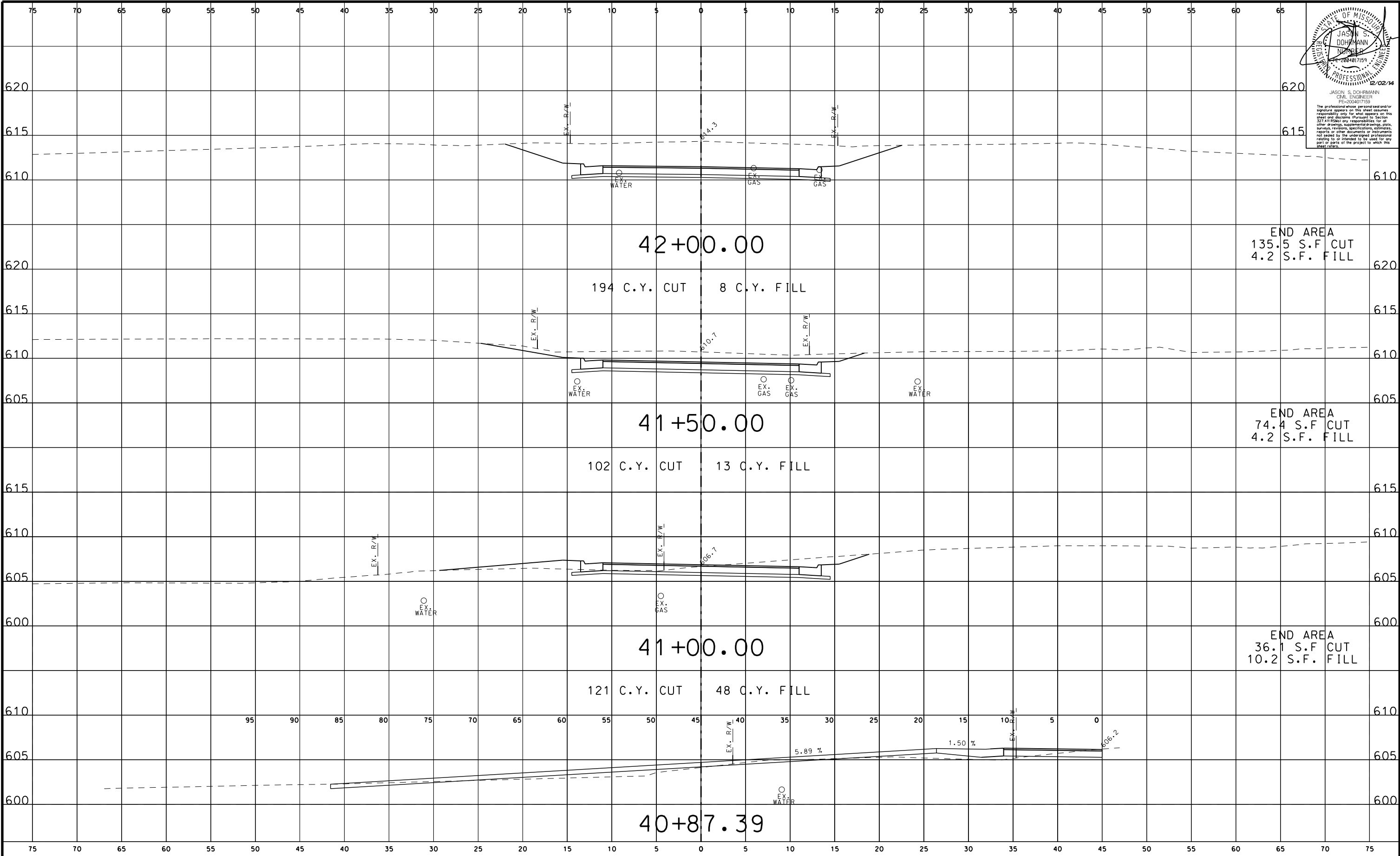
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-19**  
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NO. 2084017159  
2/02/14  
JASON S. DOHRMANN  
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FE-2004017159  
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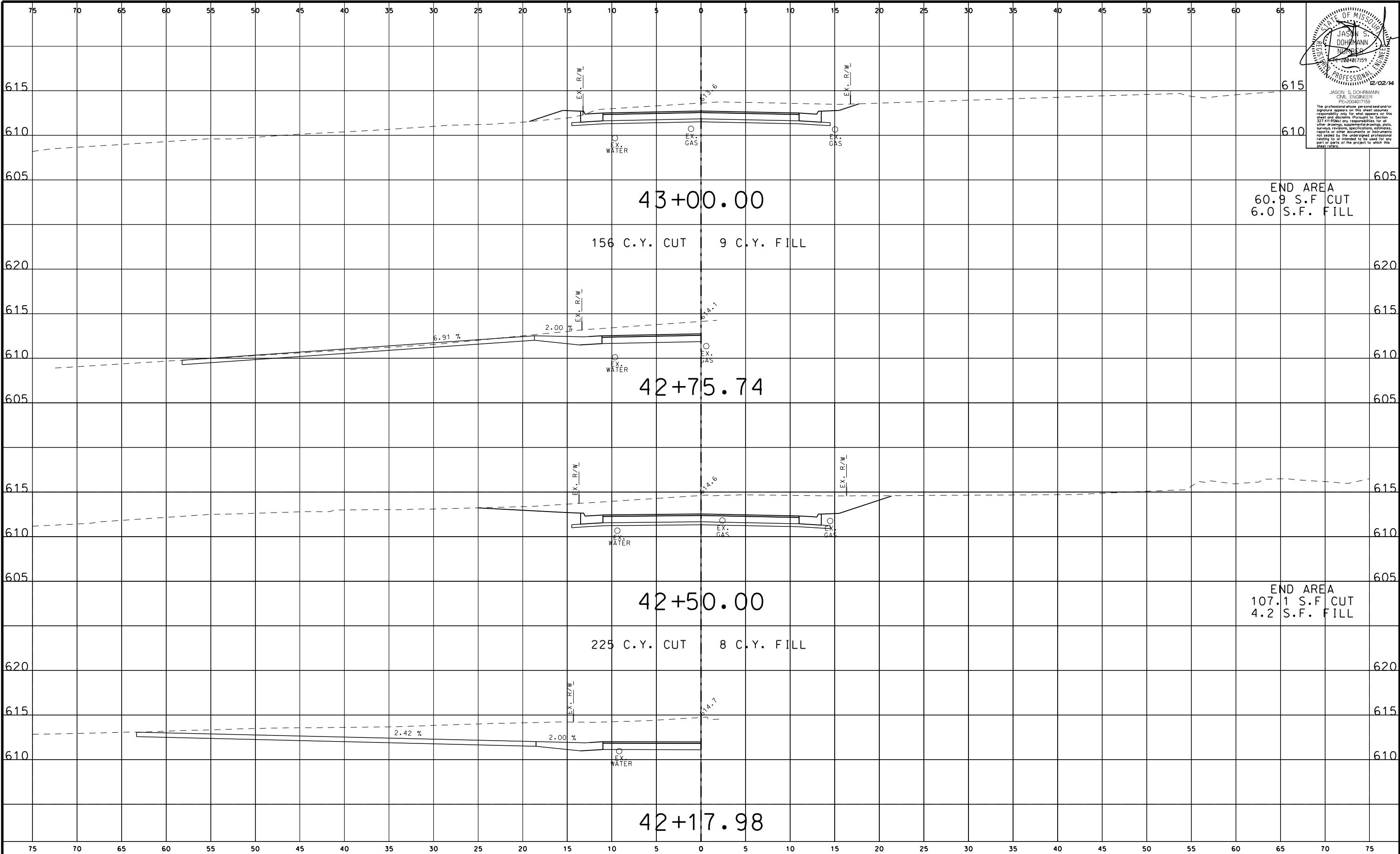
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-20**  
83 of 99



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JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 200407159  
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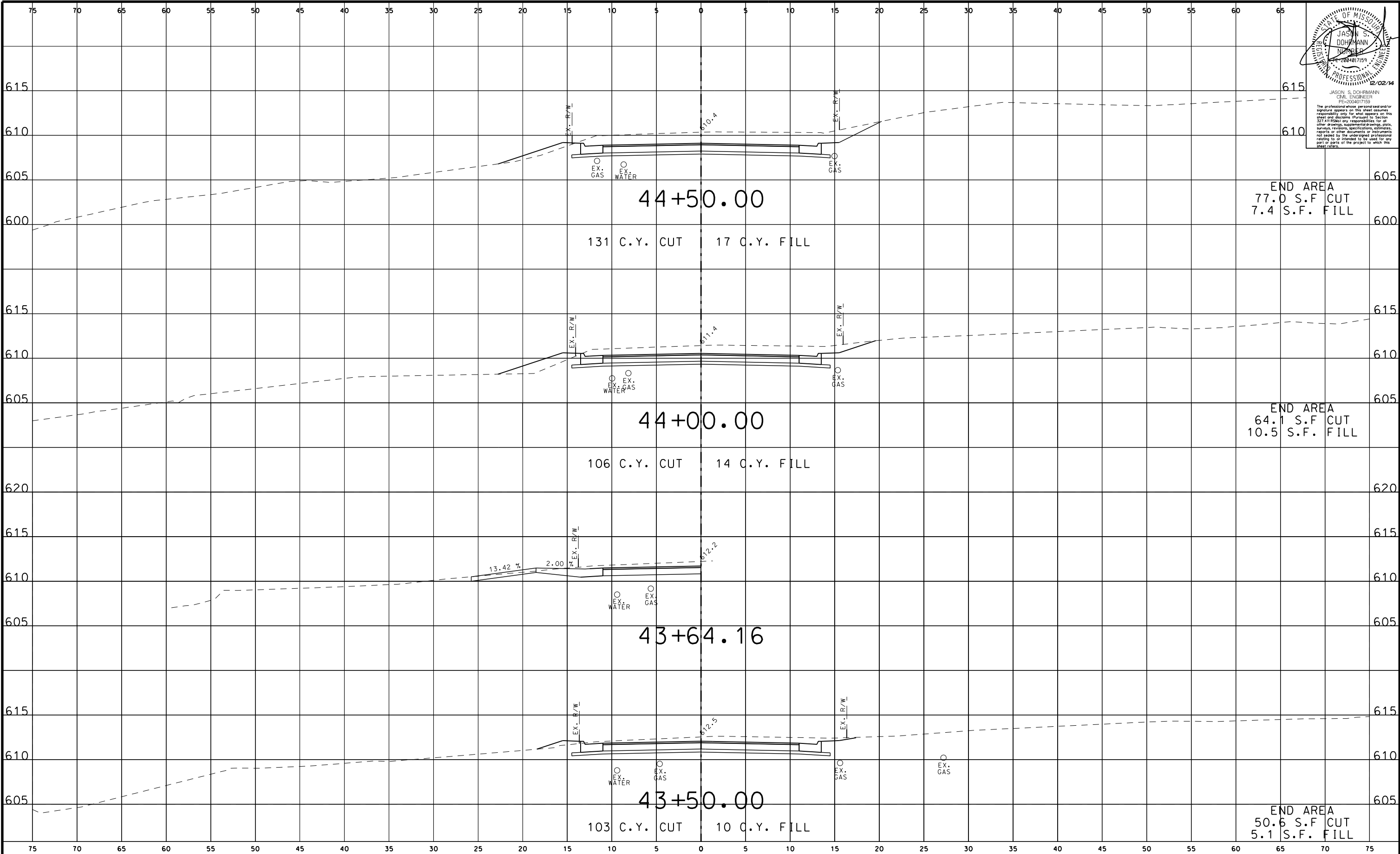


SALINE ROAD IMPROVEMENTS-PHASE 1  
COUNTY OF JEFFERSON, MISSOURI  
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-21**  
84 of 99





STATE OF MISSOURI  
JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 2084017159  
2/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
FE-200407159  
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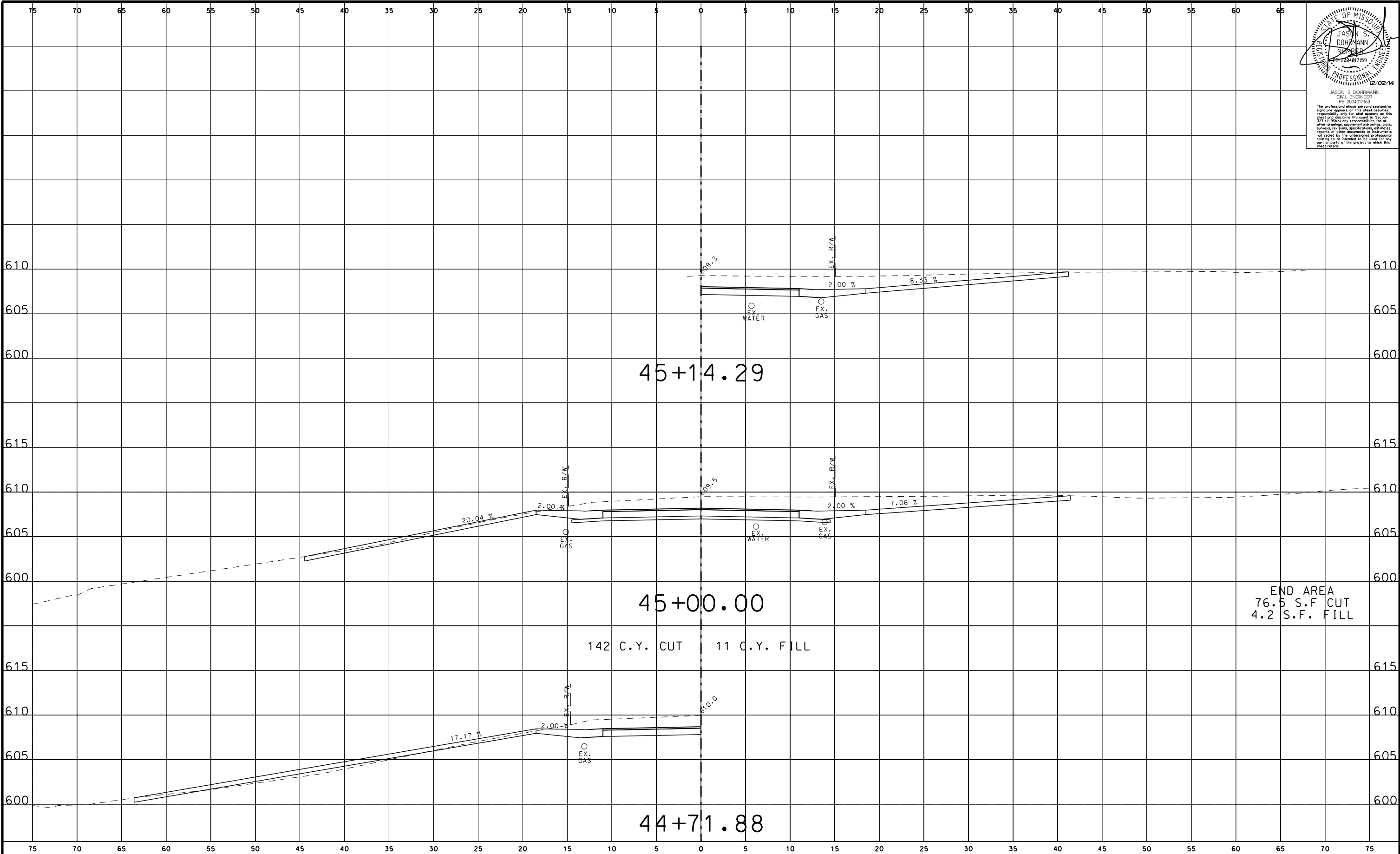
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-22**  
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STATE OF MISSOURI  
JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 2084017159  
EXPIRATION DATE 12/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
PE-2004017159  
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END AREA  
76.5 S.F. CUT  
4.2 S.F. FILL

142 C.Y. CUT 11 C.Y. FILL

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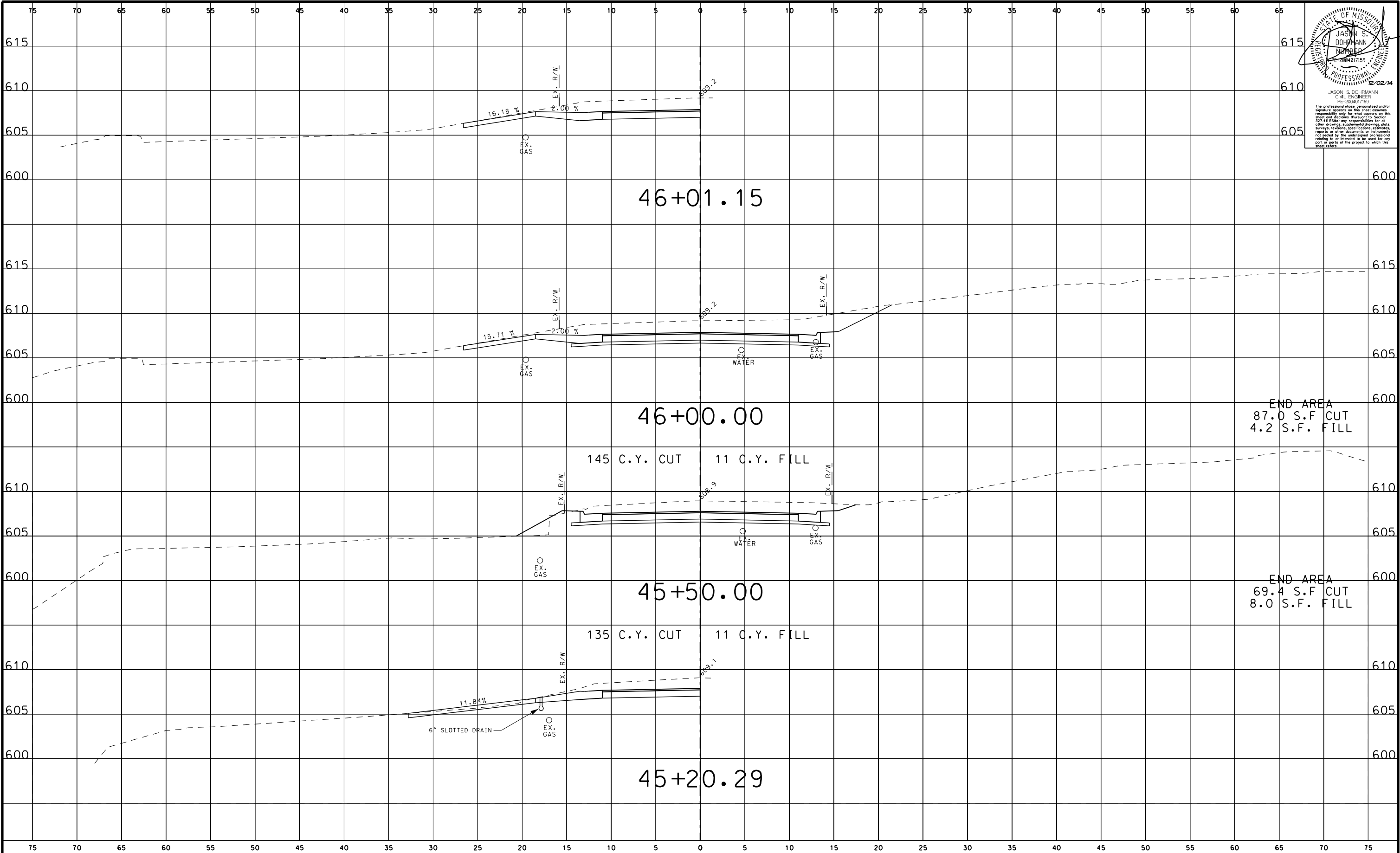
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*PROPOSED CROSS SECTIONS*  
**SALINE ROAD**

SHEET NO.  
**XS-23**  
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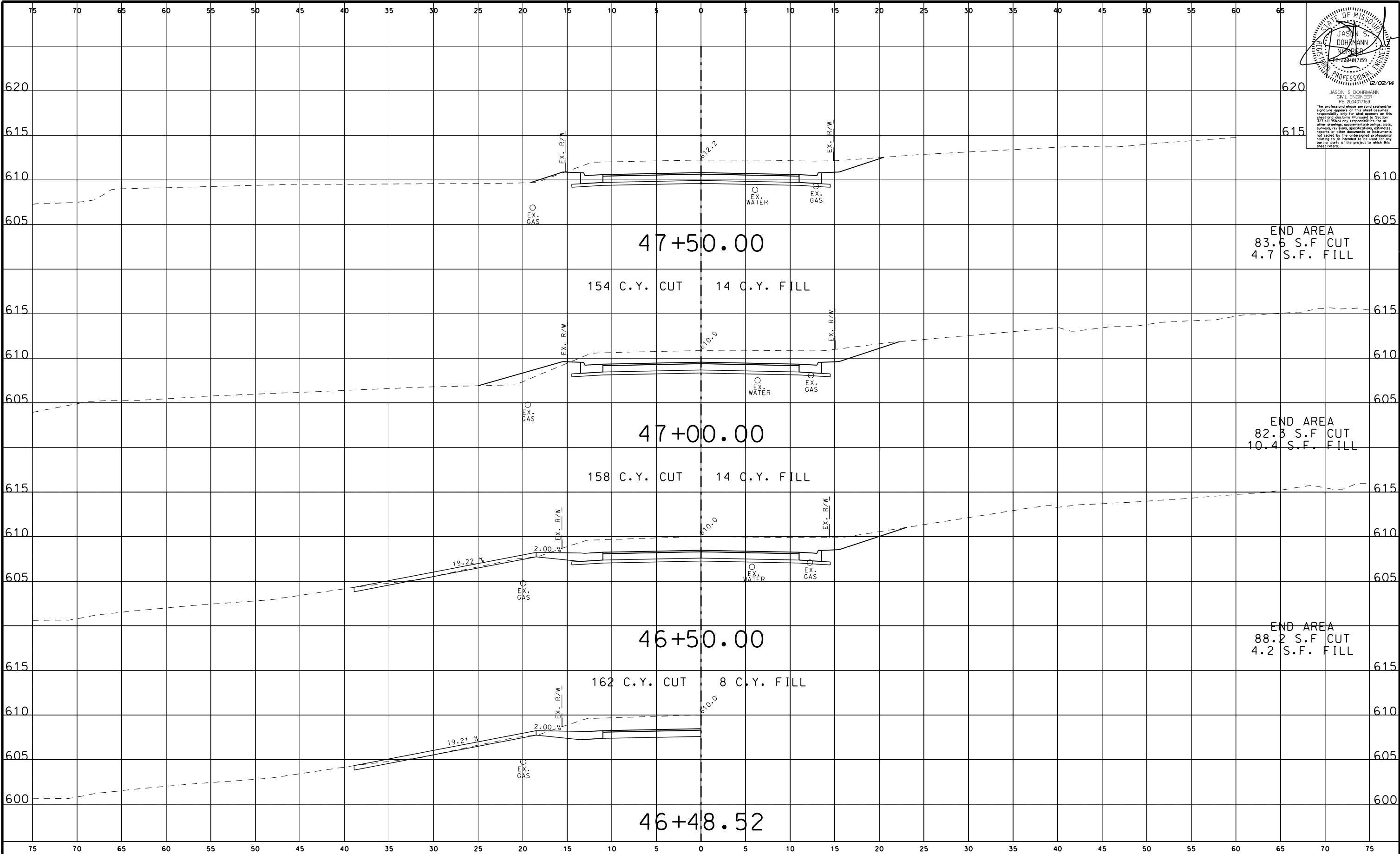
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-24**  
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JASON S. DOHRMANN  
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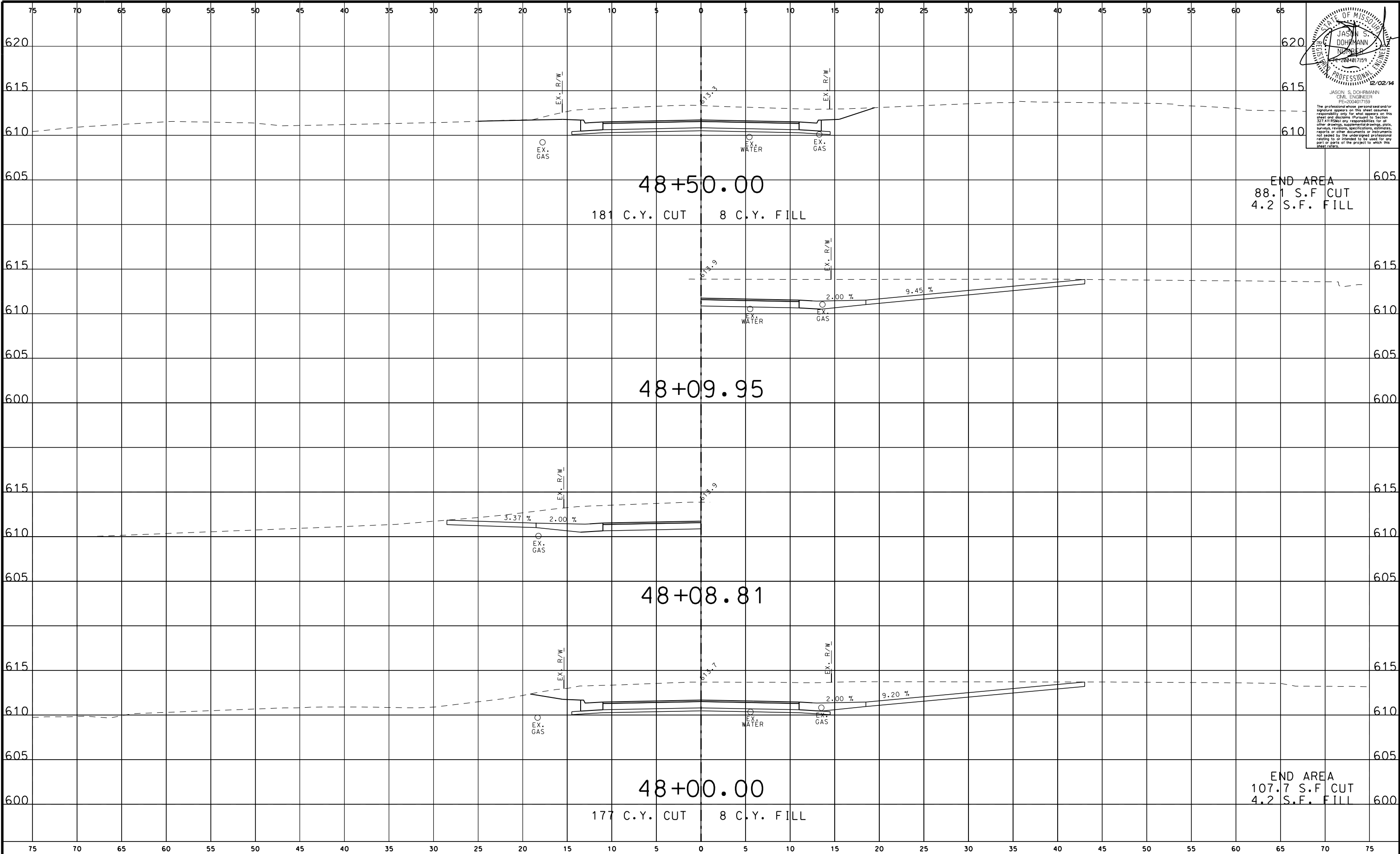


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SALINE ROAD

SHEET NO.  
**XS-25**  
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JASON S. DOHRMANN  
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NO. 2084017159  
2/02/14  
JASON S. DOHRMANN  
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PE-2004017159  
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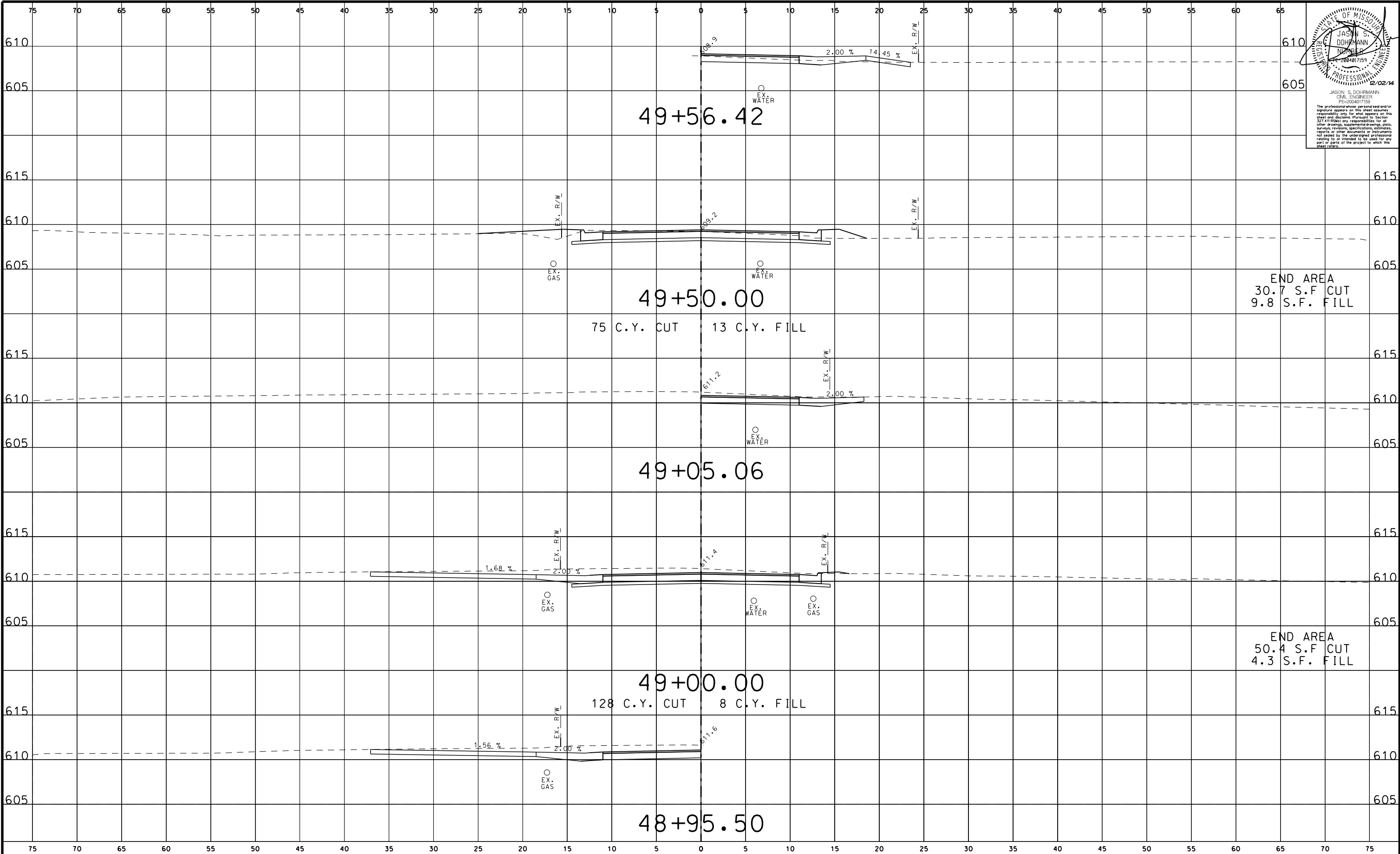
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PROPOSED CROSS SECTIONS  
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SHEET NO.  
**XS-26**  
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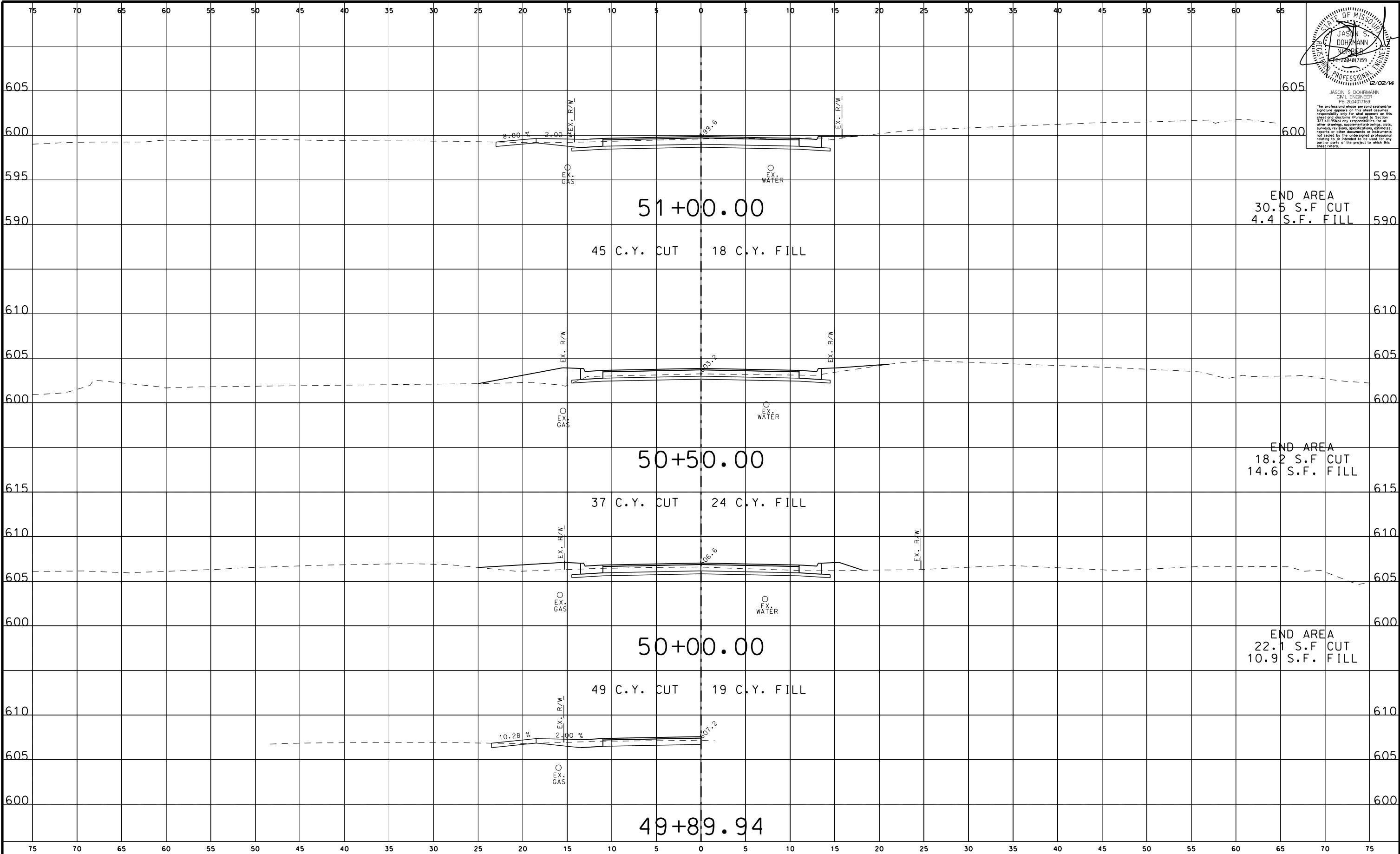
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-27**  
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JASON S. DOHRMANN  
REGISTERED PROFESSIONAL ENGINEER  
NO. 200407159  
2/02/14  
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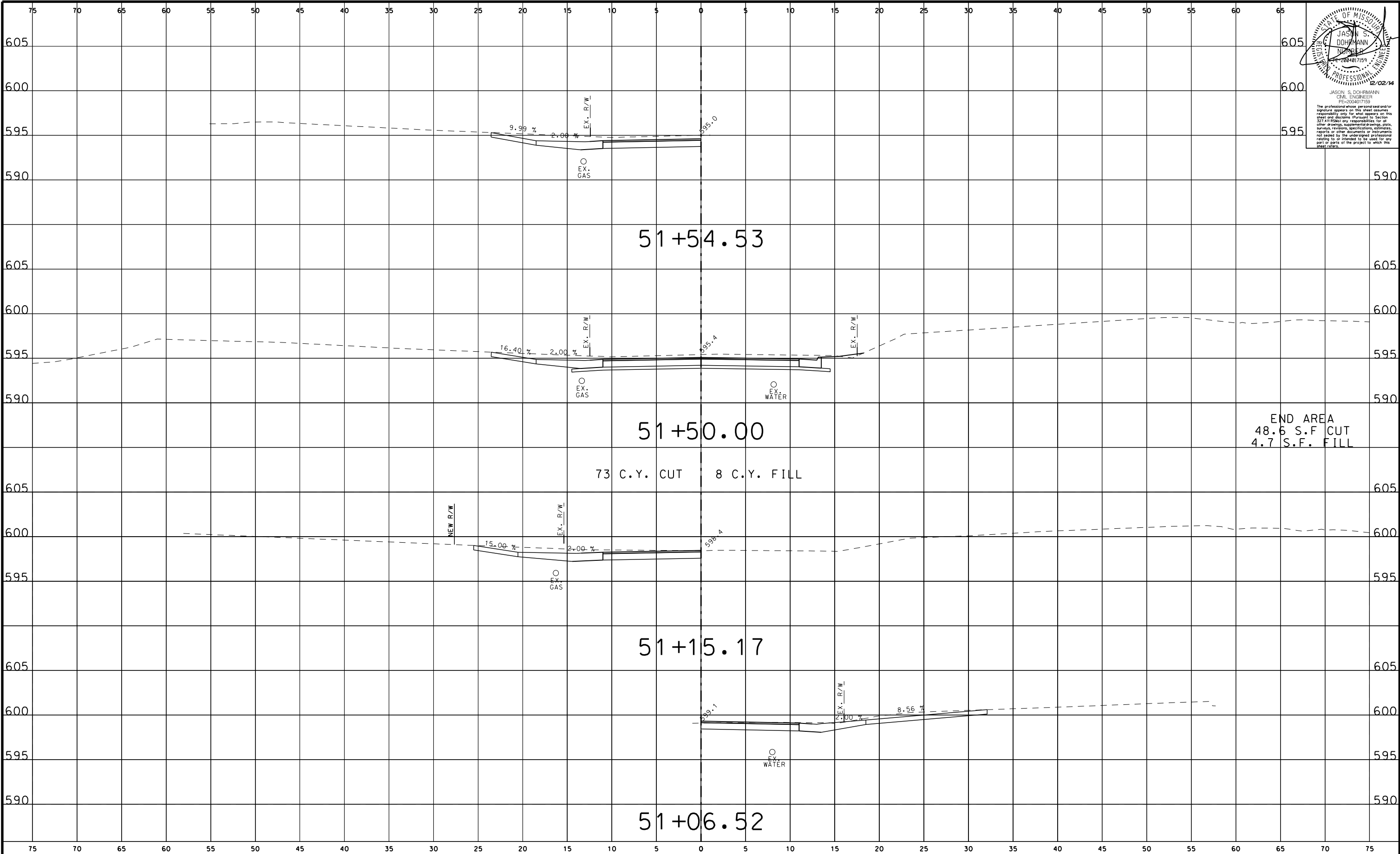
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5403(642)/TIP#5589-12

PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-28**  
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JASON S. DOHRMANN  
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NO. 200407159  
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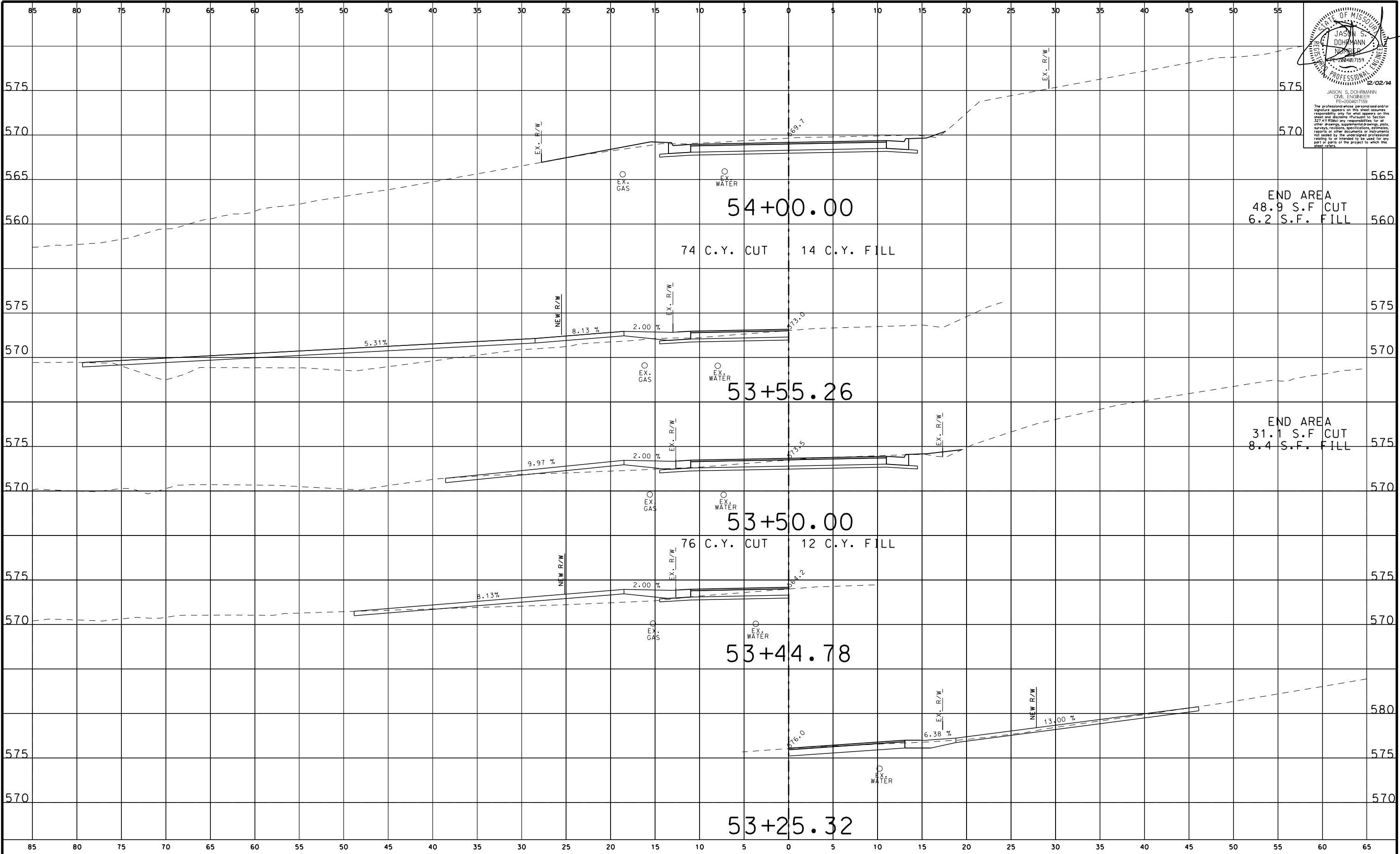
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-29**  
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STATE OF MISSOURI  
JASON S. DOHRMANN  
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NO. 200407159  
2/02/14

JASON S. DOHRMANN  
CIVIL ENGINEER  
FE-200407159

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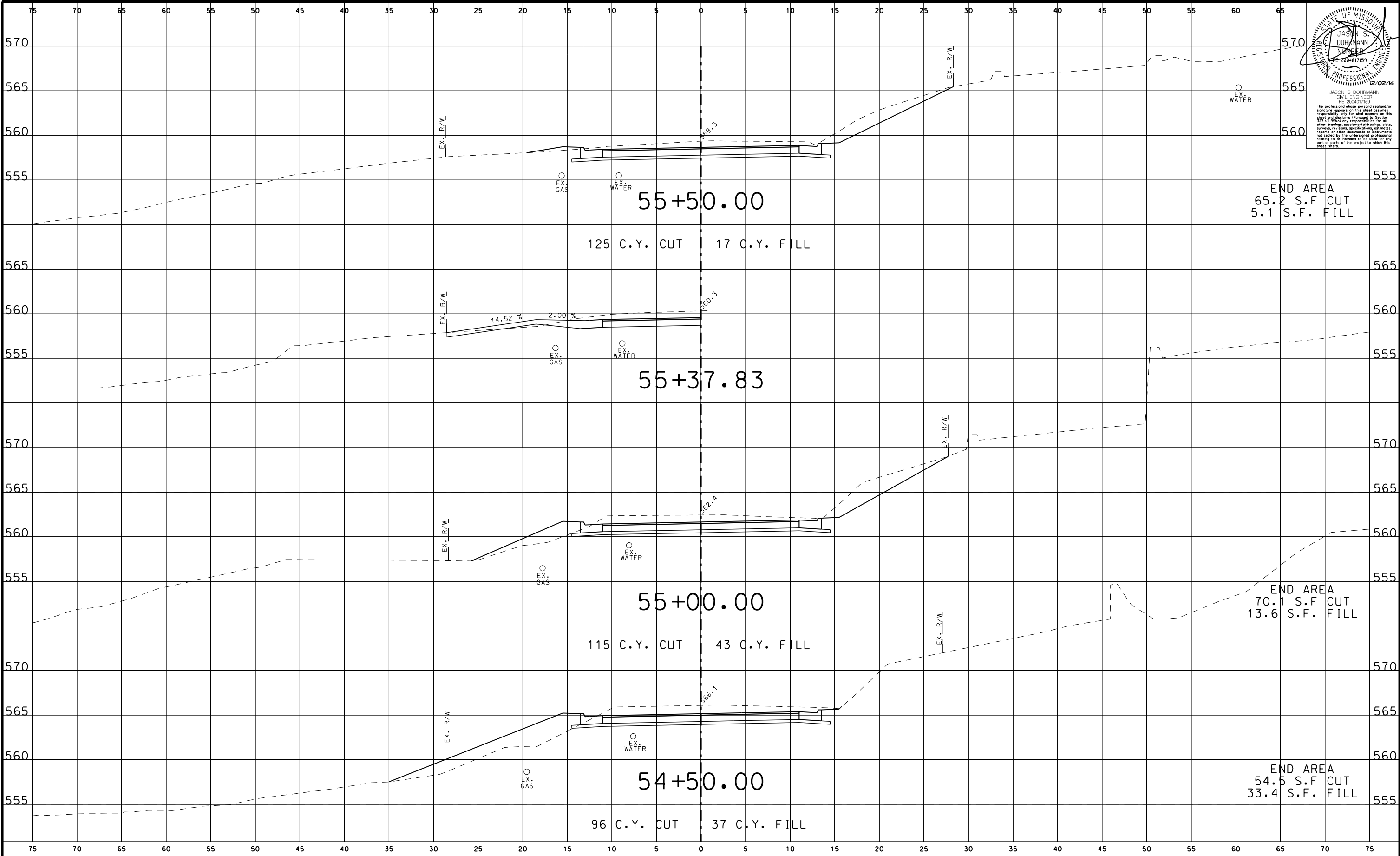
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-31**  
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JASON S. DOHRMANN  
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NO. 2084017159  
2/02/14  
JASON S. DOHRMANN  
CIVIL ENGINEER  
PE-2004017159  
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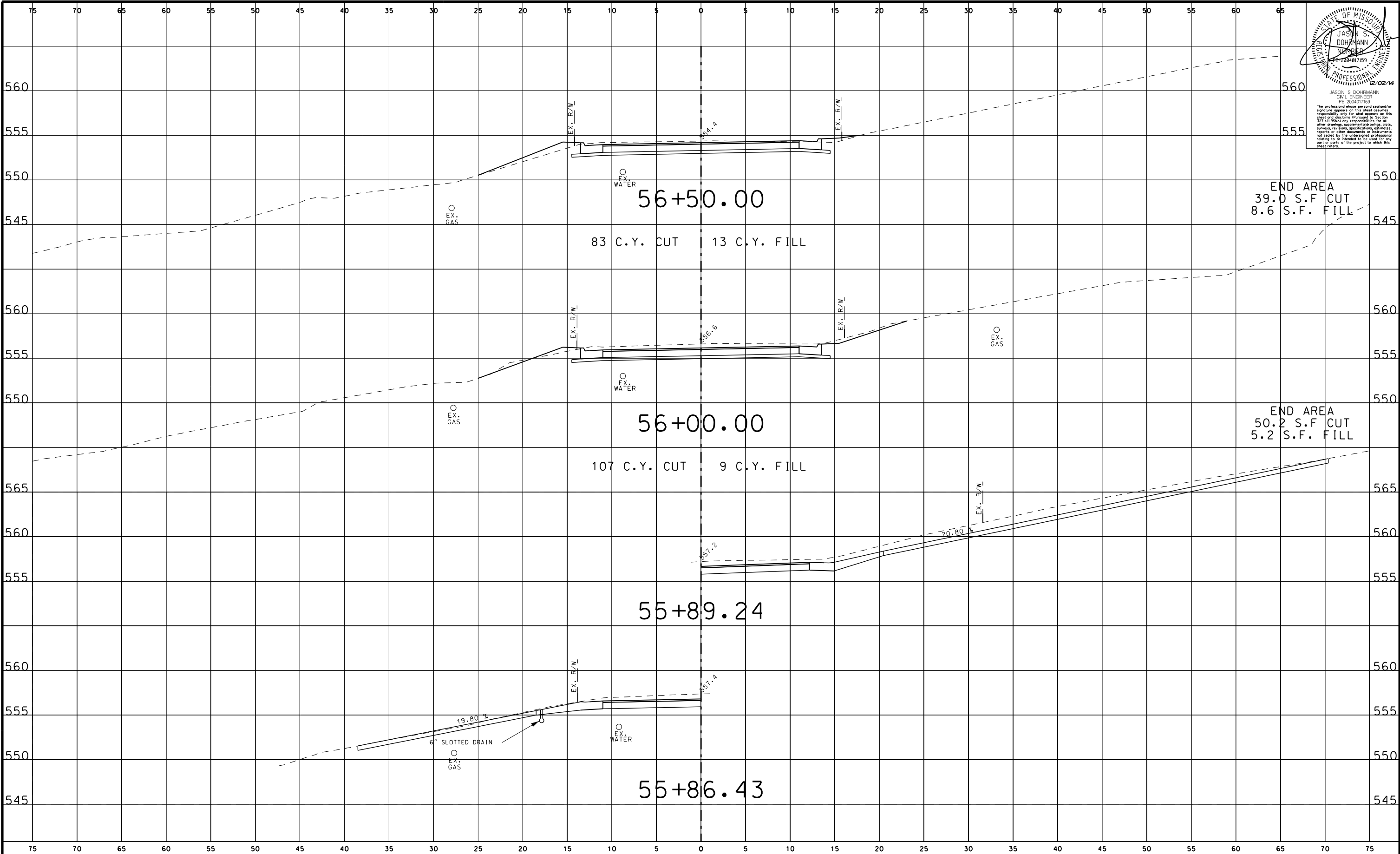
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-32**  
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NO. 2084017159  
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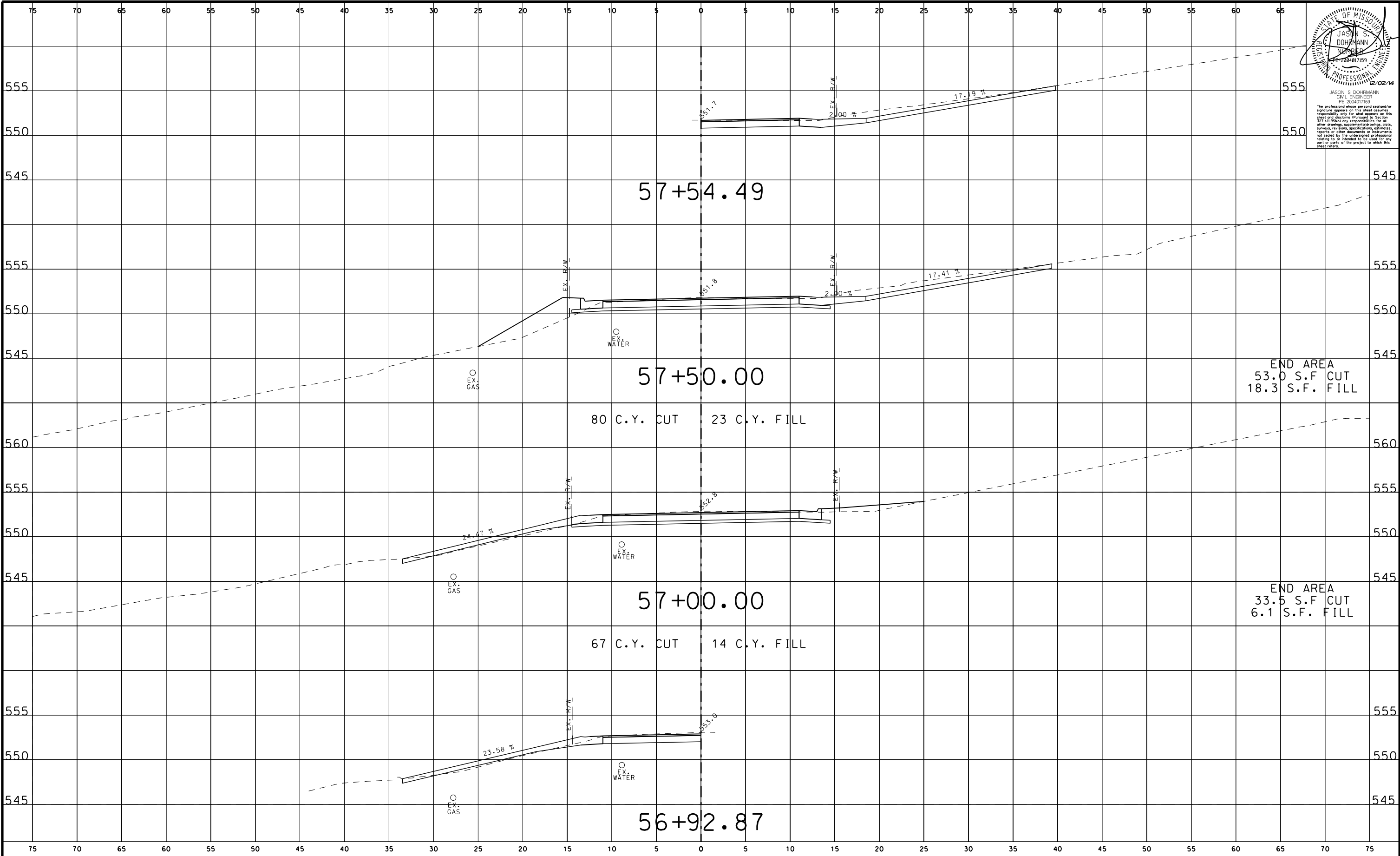


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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-33**  
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NO. 200407159  
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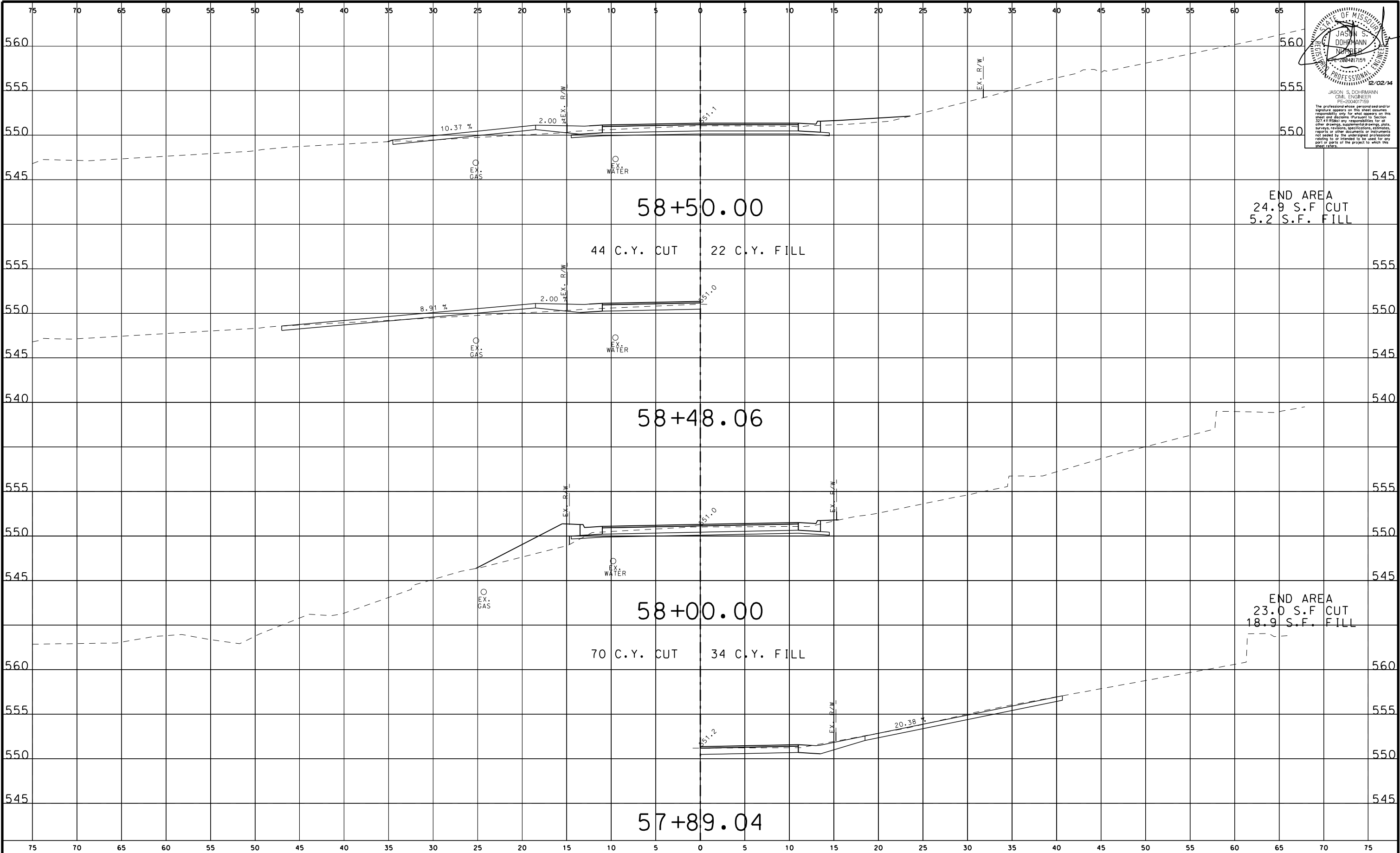
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**PROPOSED CROSS SECTIONS**  
**SALINE ROAD**

SHEET NO.  
**XS-34**  
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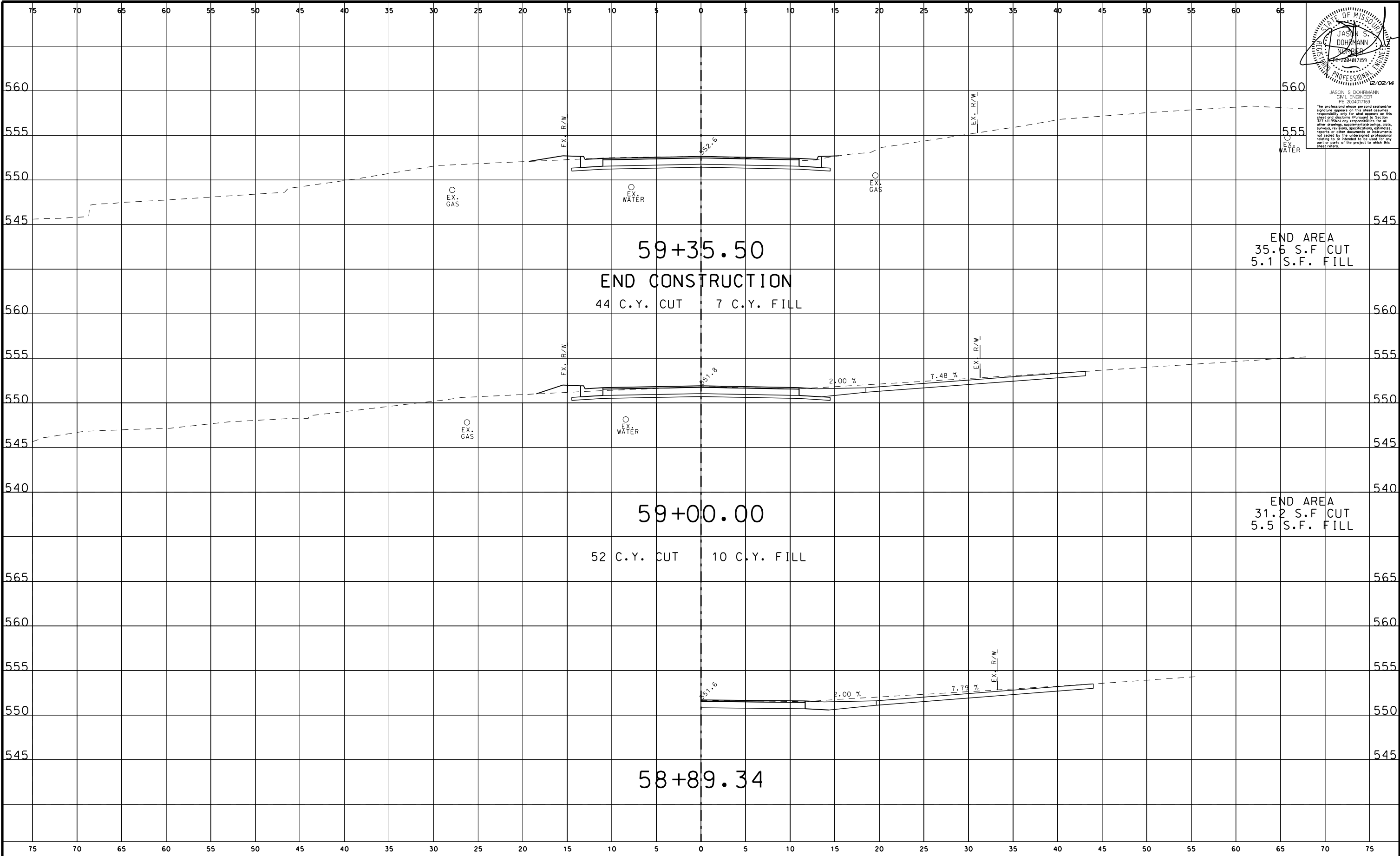
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PROPOSED CROSS SECTIONS  
SALINE ROAD

SHEET NO.  
**XS-35**  
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**PROPOSED CROSS SECTIONS**  
SALINE ROAD

SHEET NO.  
**XS-36**  
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