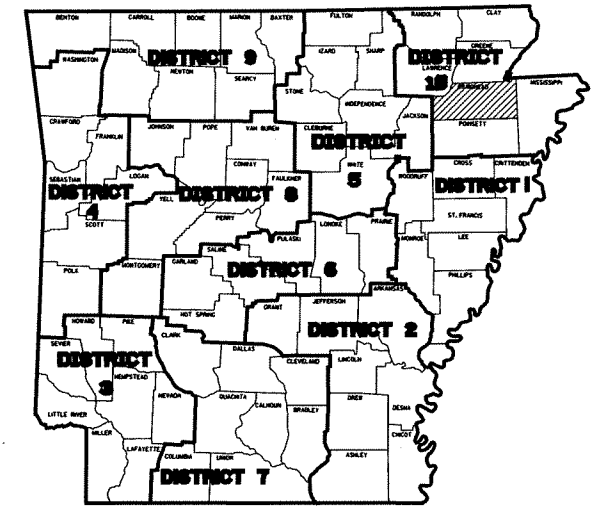


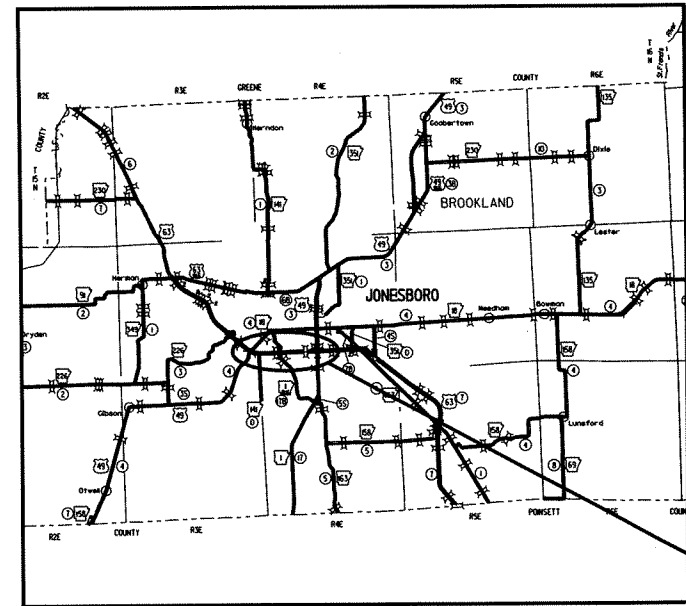
JOB 100737

| DATE REVISED | DATE FILED | DATE REVISED | DATE FILED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
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| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 1 | 50 |

② JONESBORO AREA TRAFFIC OPS. IMPVTS. (S)



ARK. HWY. DIST. NO. 10



PROJECT LOCATION

"A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS
JONESBORO AREA TRAFFIC OPS.
IMPVTS. (S)
CRAIGHEAD COUNTY
ROUTE 63 SECTIONS 6 & 7
FAP STPP-A144(2)
JOB 100737

VICINITY MAP

STA. 55+56.31 @ PARKER RD.
END CONSTRUCTION - SITE NO. 1

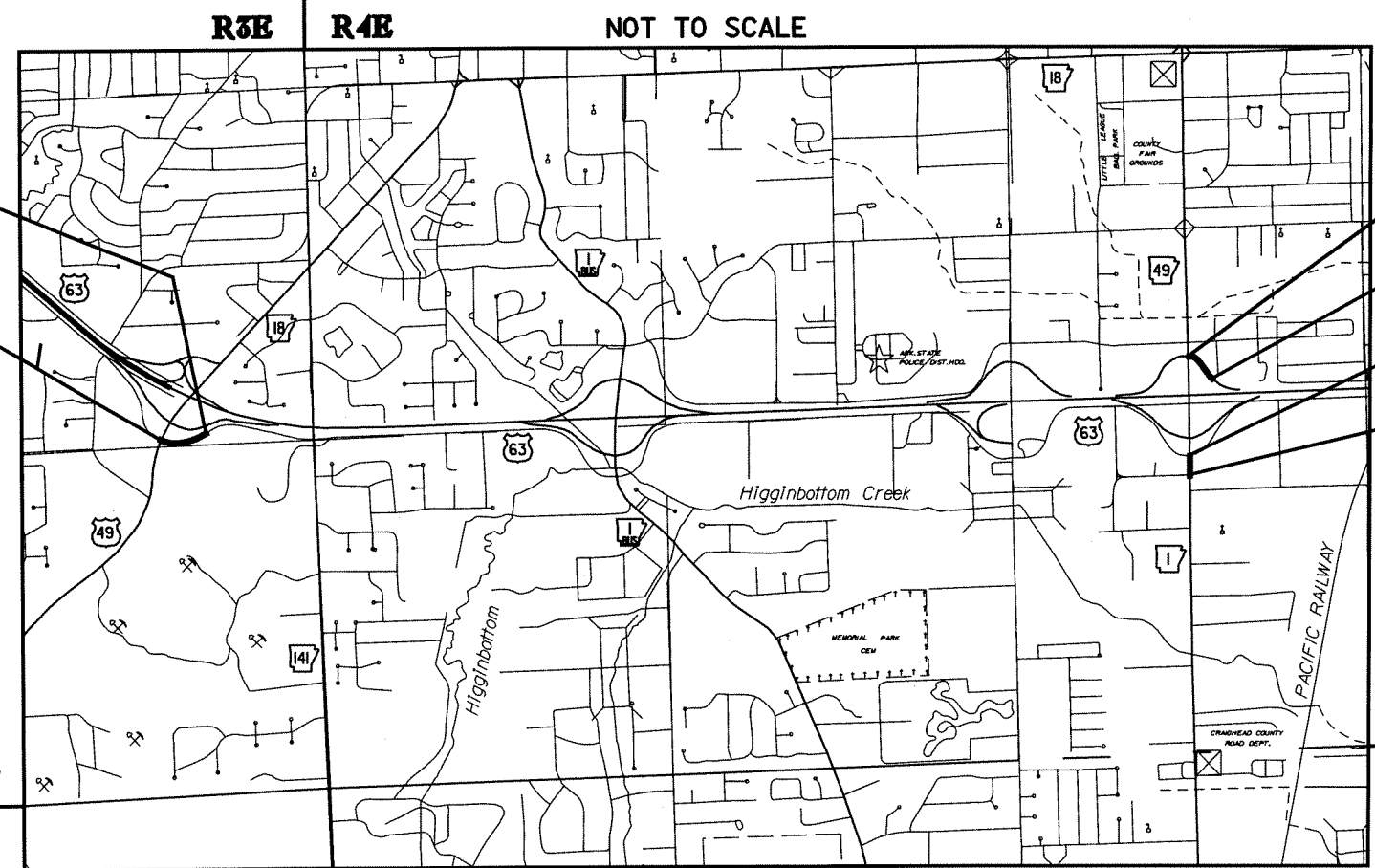
STA. 50+50.00 @ PARKER RD.
BEGIN CONSTRUCTION - SITE NO. 1

STA. 45+32.00 @ HWY. 63 NB EXIT RAMP
BEGIN CONSTRUCTION - SITE NO. 3

STA. 50+20.00 @ HWY. 63 NB EXIT RAMP
END CONSTRUCTION - SITE NO. 3

STA. 19+51.00 @ HWY. 1
END CONSTRUCTION - SITE NO. 2

STA. 15+25.00 @ HWY. 1
BEGIN CONSTRUCTION - SITE NO. 2



DESIGN TRAFFIC DATA - HWY. 63

| | |
|--------------------------|--------|
| DESIGN YEAR | 2031 |
| 20H ADT | 33,000 |
| 2031 ADT | 59,600 |
| 2031 DHV | 6,556 |
| DIRECTIONAL DISTRIBUTION | 0.60 |
| TRUCKS | 10% |
| DESIGN SPEED - EXIT RAMP | 50 MPH |

DESIGN TRAFFIC DATA - HWY. 1/49 (STADIUM BLVD.)

| | |
|--------------------------|--------|
| DESIGN YEAR | 2031 |
| 20H ADT | 16,200 |
| 2031 ADT | 29,300 |
| 2031 DHV | 3,223 |
| DIRECTIONAL DISTRIBUTION | 0.60 |
| TRUCKS | 5% |
| DESIGN SPEED | 40 MPH |

DESIGN TRAFFIC DATA - PARKER RD.

| | |
|--------------------------|--------|
| DESIGN YEAR | 2031 |
| 20H ADT | 6,000 |
| 2031 ADT | 10,800 |
| 2031 DHV | 888 |
| DIRECTIONAL DISTRIBUTION | 0.60 |
| TRUCKS | 3% |
| DESIGN SPEED | 40 MPH |

LENGTH COMPUTED ALONG C.L.

| | PARKER / HWY. 49 (SITE NO. 1) | HWY. 1 (SITE NO. 2) | HWY. 63 NB EXIT (SITE NO. 3) | TOTAL | |
|-------------------------|-------------------------------|---------------------|------------------------------|-------------|-------------|
| GROSS LENGTH OF PROJECT | 506.31 FT. | 426.00 FT. | 488.00 FT. | 1420.31 FT. | 0.269 MILES |
| NET LENGTH OF ROADWAY | 506.31 FT. | 426.00 FT. | 488.00 FT. | 1420.31 FT. | 0.269 MILES |
| NET LENGTH OF BRIDGES | 0.00 FT. | 0.00 FT. | 0.00 FT. | 0.00 FT. | 0.000 MILES |
| NET LENGTH OF PROJECT | 506.31 FT. | 426.00 FT. | 488.00 FT. | 1420.31 FT. | 0.269 MILES |

| SITE NO. 1 | | |
|----------------------|------------|------------|
| | LAT. | LONG. |
| BEGIN OF PROJECT | 35°48'26"N | 90°43'18"W |
| MID-POINT OF PROJECT | 35°48'26"N | 90°43'16"W |
| END OF PROJECT | 35°48'26"N | 90°43'12"W |

| SITE NO. 2 | | |
|----------------------|------------|------------|
| | LAT. | LONG. |
| BEGIN OF PROJECT | 35°48'14"N | 90°40'10"W |
| MID-POINT OF PROJECT | 35°48'16"N | 90°40'10"W |
| END OF PROJECT | 35°48'17"N | 90°40'10"W |

| SITE NO. 3 | | |
|----------------------|------------|------------|
| | LAT. | LONG. |
| BEGIN OF PROJECT | 35°48'31"N | 90°40'10"W |
| MID-POINT OF PROJECT | 35°48'29"N | 90°40'06"W |
| END OF PROJECT | 35°48'27"N | 90°40'04"W |

T14N
T13N



P.E. 100737
F.A.P. 56C0-A144-002

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
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| | | | | 6 | ARK. | | | |
| | | | | | | | JOB NO. 100737 | 2 50 |

② INDEX OF SHEETS AND GOVERNING SPECIFICATIONS

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

INDEX OF SHEETS

| SHEET NO. | TITLE | DRWG. NO. | DATE |
|-----------|---|-----------|----------|
| 1 | TITLE SHEET | | |
| 2 | INDEX OF SHEETS AND GOVERNING SPECIFICATIONS | | |
| 3 | GENERAL AND TRAFFIC SIGNAL NOTES | | |
| 4-5 | TYPICAL SECTIONS OF IMPROVEMENT | | |
| 6-8 | TEMPORARY EROSION CONTROL DETAILS | | |
| 9-11 | MAINTENANCE OF TRAFFIC DETAILS | | |
| 12-14 | PERMANENT PAVEMENT MARKINGS | | |
| 15-16 | QUANTITIES | | |
| 17 | SUMMARY OF QUANTITIES AND REVISIONS | | |
| 18-19 | SURVEY CONTROL DETAILS | | |
| 20-25 | PLAN AND PROFILE SHEETS | | |
| 26 | SYSTEM MAP | | |
| 27-29 | SIGNALIZATION PLAN SHEETS | | |
| 30-35 | SIGNALIZATION DETAILS | | |
| 36 | CURBING DETAILS | CG-1 | 11-29-07 |
| 37 | PAVEMENT MARKING DETAILS | PM-1 | 11-17-10 |
| 38 | TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC | SE-1 | 1-9-87 |
| 39 | TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC | SE-2 | 10-18-96 |
| 40 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | TC-1 | 11-17-10 |
| 41 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | TC-2 | 3-11-10 |
| 42 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | TC-3 | 10-15-09 |
| 43 | TEMPORARY EROSION CONTROL DEVICES | TEC-1 | 11-18-98 |
| 44 | TEMPORARY EROSION CONTROL DEVICES | TEC-3 | 11-3-94 |
| 45-50 | CROSS SECTIONS | | |

| NUMBER | TITLE |
|------------|---|
| ERRATA | ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS |
| FHWA-1273 | FHWA-1273 REVISIONS |
| FHWA-1273 | REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS |
| FHWA-1273 | SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS |
| FHWA-1273 | SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140) |
| FHWA-1273 | SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES |
| FHWA-1273 | SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS |
| FHWA-1273 | SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS |
| FHWA-1273 | SUPPLEMENT - WAGE RATE DETERMINATION |
| 100-2 | MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) |
| 105-1 | CONSTRUCTION CONTROL MARKINGS |
| 105-2 | EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES |
| 107-1 | WORKER VISIBILITY |
| 108-1 | LIQUIDATED DAMAGES |
| 303-1 | AGGREGATE BASE COURSE |
| 404-1 | PRODUCTION VERIFICATION OF ASPHALT CONCRETE HOT MIX |
| 409-1 | MINERAL AGGREGATES |
| 410-3 | DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS |
| 600-1 | WATER FOR VEGETATION |
| 603-1 | MAINTENANCE OF TRAFFIC |
| 604-1 | RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES |
| 711-1 | CONCRETE PULL BOX |
| 714-1 | DESIGN AND MATERIAL REQUIREMENTS FOR TRAFFIC SIGNAL MAST ARMS AND POLES |
| 719-2 | THERMOPLASTIC PAVEMENT MARKING MATERIAL |
| JOB 100737 | BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT |
| JOB 100737 | CABINET DRAWER ASSEMBLY |
| JOB 100737 | DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES |
| JOB 100737 | EDGE CARD VIDEO PROCESSOR |
| JOB 100737 | ELECTRICAL CONDUCTORS-IN-CONDUIT |
| JOB 100737 | INTERNET BIDDING |
| JOB 100737 | LED TRAFFIC SIGNAL HEAD |
| JOB 100737 | LOOP WIRING-CLASSIFIED |
| JOB 100737 | LOUVERS FOR SIGNAL HEADS |
| JOB 100737 | LUMINAIRE ASSEMBLY (CUTOFF TYPE) |
| JOB 100737 | REMOVAL OF TRAFFIC SIGNAL EQUIPMENT |
| JOB 100737 | SERVICE POINT ASSEMBLY |
| JOB 100737 | SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS |
| JOB 100737 | SYSTEM LOCAL CONTROLLER |
| JOB 100737 | TRAFFIC SIGNAL CONTROLLER (MODIFICATION) |
| JOB 100737 | UTILITY ADJUSTMENTS |
| JOB 100737 | VIDEO DETECTOR (COLOR) |
| JOB 100737 | WARM MIX ASPHALT |



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2 GENERAL AND TRAFFIC SIGNAL NOTES

TRAFFIC SIGNAL NOTES

1. PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2002) NATIONAL ELECTRICAL CODE, NFPA 101 (2000) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.
2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (EGC) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND EGC TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.
3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY TO A SERVICE POLE WITH EXTERNAL RAIN TIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROLLER, THE CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (2c/#6 USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S MAIN BREAKER AS PART OF THIS CONTRACT. CONDUIT IS PAID FOR AS A SEPARATE ITEM OF THIS CONTRACT. TWO CIRCUIT BREAKERS, CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2c/#12 AWG UF RATED, TYPICAL) SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE-IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.
4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.
5. TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.
6. CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.
7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH AASHTO, THE ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS AND DETAILS AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
8. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD AS SHOWN IN THE DETAILS MAY BE USED.
9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.
10. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ONLY AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY (SEE NOTES ON SPECIAL DETAILS). PAYMENT WILL BE INCLUDED IN SECTION 714, AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
11. ALL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE 3" DIAMETER UNLESS SPECIFIED ON THE PLANS.
12. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.
13. HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER. EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTUATE THE ASSOCIATED PHASE. COMBINATION (COMB.) DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE COUNT/OCCUPANCY DATA.
14. TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHAFT HEIGHT. WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED, 38 FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINAIRE ARM, A HEIGHT OF 21' SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL 6 FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.
15. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS 6 FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE" FOR MINIMUM DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE FACE OF A NON-BREAKAWAY POLE OR OBSTRUCTION. TRAFFIC SIGNAL POLES OR ANY OTHER NON-BREAKAWAY OBSTRUCTION SHALL NOT BE INSTALLED WITHIN THE CLEAR ZONE.
16. AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEDMENT MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO ACHIEVING PLAN EMBEDMENT AND AT LEAST HALF OF THE REMAINING PLAN EMBEDMENT LENGTH IS KEYED INTO COMPETENT ROCK.
17. CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT THE POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714-TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION.
18. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.
19. ONE VIDEO PROGRAMMING MODULE SHALL BE PROVIDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.
20. TRAFFIC SIGNAL CONTRACTOR MUST NOTIFY RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK. NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED OR APPROVED WITHOUT THIS PRIOR NOTIFICATION.
21. ALL STEEL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4th EDITION (2001) WITH 2003 AND 2006 INTERIMS.
22. CONTRACTOR SHALL PROVIDE CONTROLLER AND LOCAL RADIO TO THE DEPARTMENT'S TRAFFIC ENGINEERING STAFF AT THE MAINTENANCE DIVISION, FOR SETUP AND TIMING BEFORE IT IS PLACED INTO OPERATION.

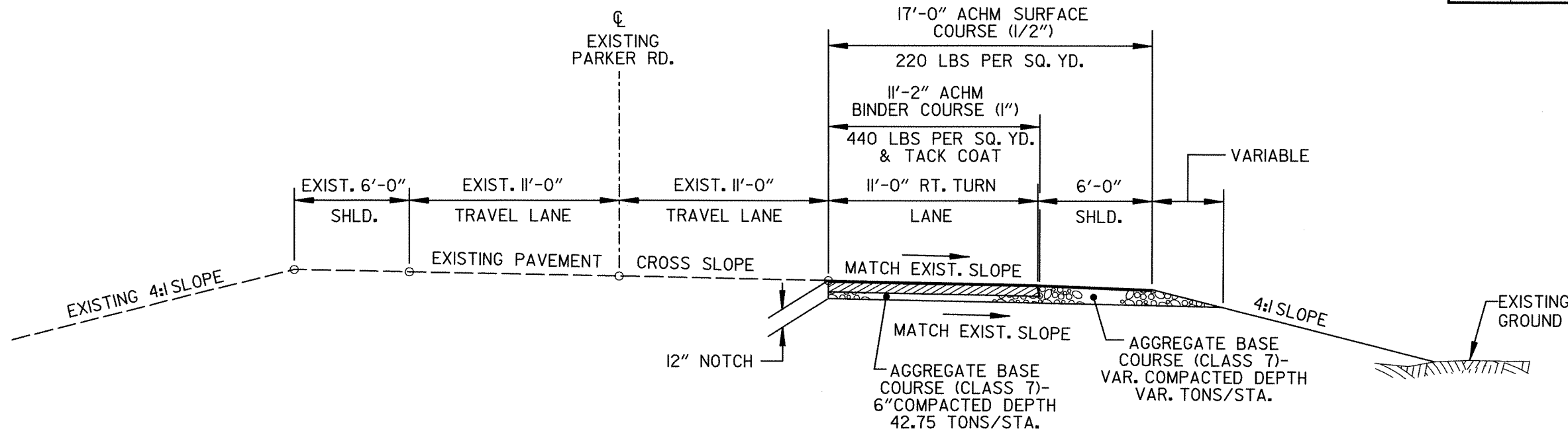
GENERAL NOTES

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
4. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
5. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
6. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
7. THE CONTRACTOR SHALL CONTACT ALL FIBER OPTIC COMPANIES INVOLVED ON THIS PROJECT AT LEAST FIVE (5) WORKING DAYS BEFORE CONSTRUCTION, INCLUDING REMOVING AND INSTALLING ANY FENCING, AND TAKE EVERY PRECAUTION NECESSARY TO AVOID CONFLICT WITH THE FIBER OPTIC CABLES. THE CONTRACTOR SHALL TELEPHONE ARKANSAS ONE-CALL SYSTEM AT 1-800-482-8998 TO DETERMINE THE LOCATION OF THE BURIED FIBER OPTIC CABLES.
8. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.



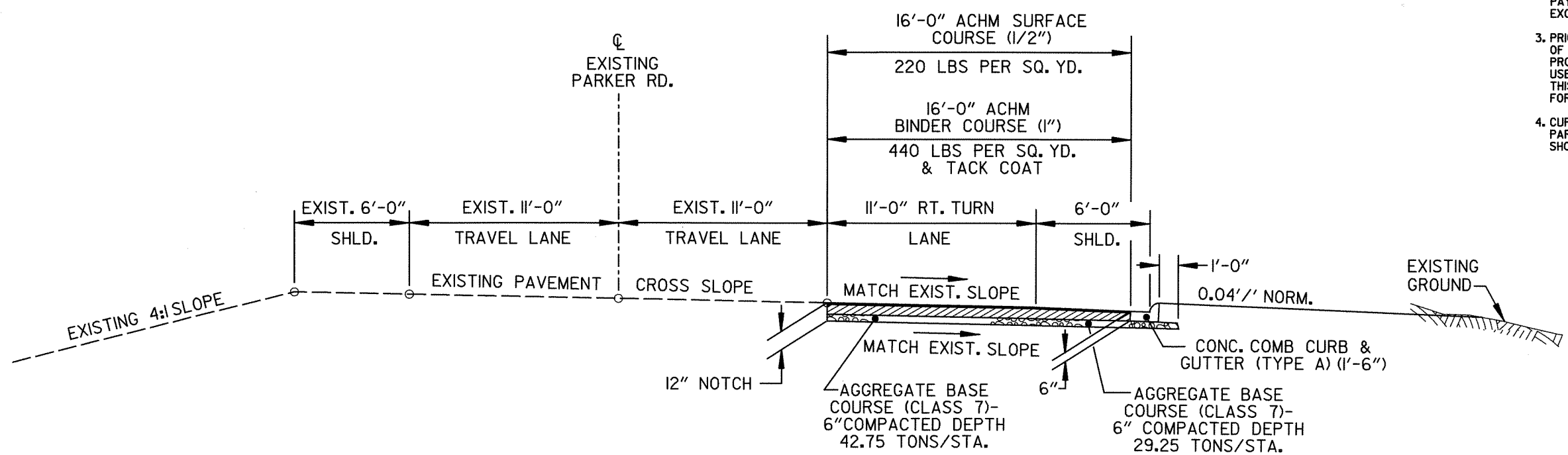
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2 TYPICAL SECTIONS OF IMPROVEMENT

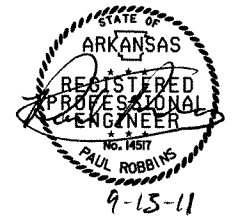


NOTCH & WIDENING SUPERELEVATION SECTION WESTBOUND PARKER RD. SITE NO. 1
 (SHOWN IN DIRECTION OF TRAFFIC)
 STA. 51+24.00 - STA. 55+56.31

- NOTES:
- REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
 - THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS 1" OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
 - PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB OR CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.
 - CURB AND GUTTER CONSTRUCTED ON OUTSIDE LT. SHOULDER OF PARKER ROAD SHALL EXTEND AROUND THE RADIUS OF HWY. 49 AS SHOWN ON PLANS.



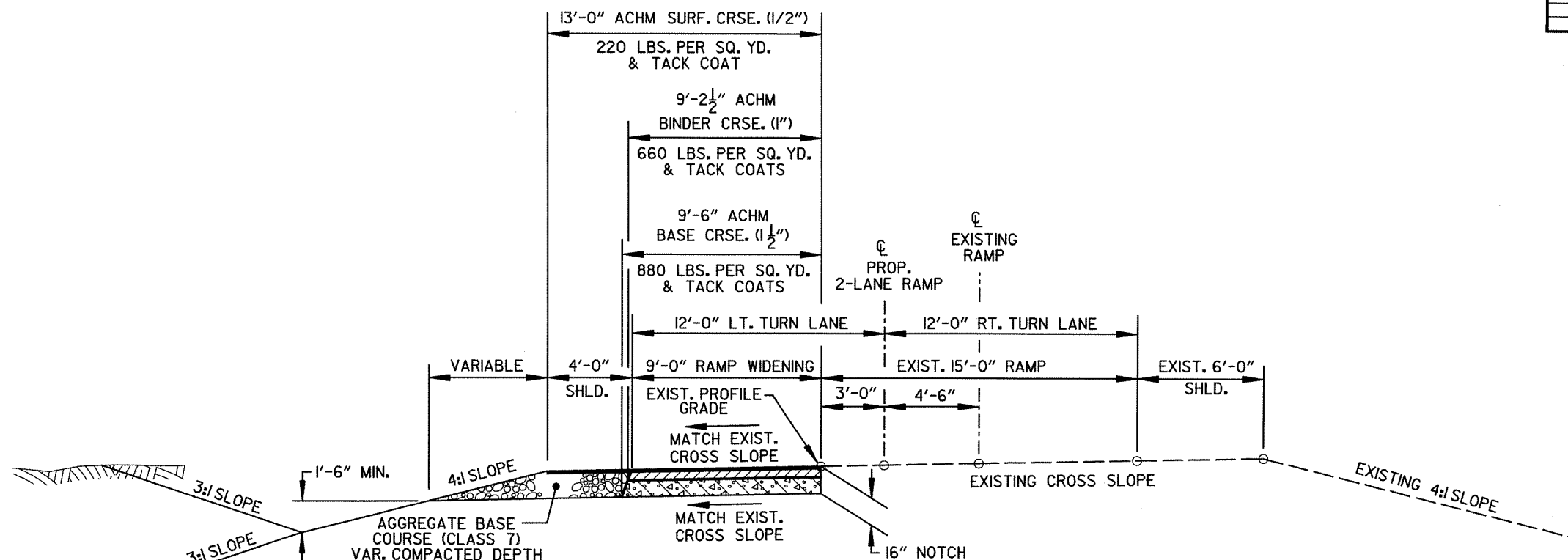
NOTCH & WIDENING SUPERELEVATION SECTION WITH CURB AND GUTTER WESTBOUND PARKER RD. SITE NO. 1
 (SHOWN IN DIRECTION OF TRAFFIC)
 STA. 50+50.00 - STA. 51+24.00



SITE NO. 1
 TYPICAL SECTIONS OF IMPROVEMENT

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
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② TYPICAL SECTIONS OF IMPROVEMENT

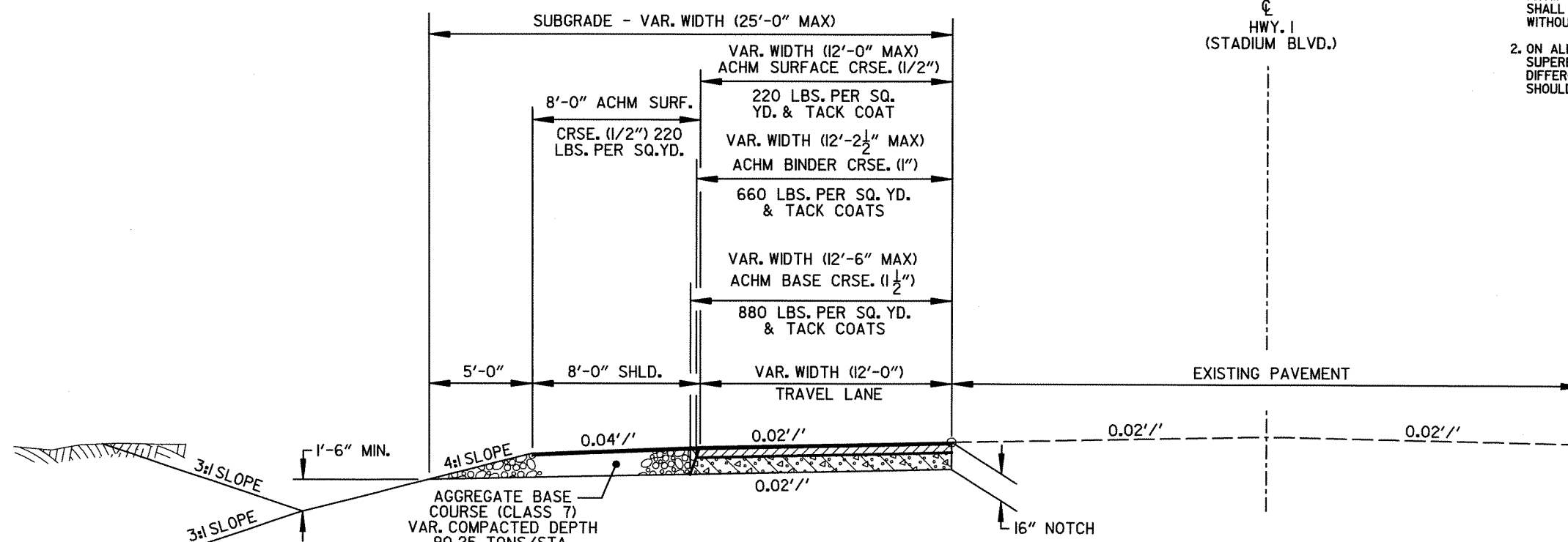


**TYPICAL SECTION-SUPERELEVATION
HWY. 63/HWY. 49 NB EXIT-RAMP WIDENING
RT. TURN LANE**

SITE NO. 3
(SHOWN IN DIRECTION OF TRAFFIC)
STA. 45+32.00 - STA. 50+20.00

NOTES:

- REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
- ON ALL SUPERELEVATED CURVES AND THROUGH SUPERELEVATED TRANSITIONS (LS), ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 0.08'/'.



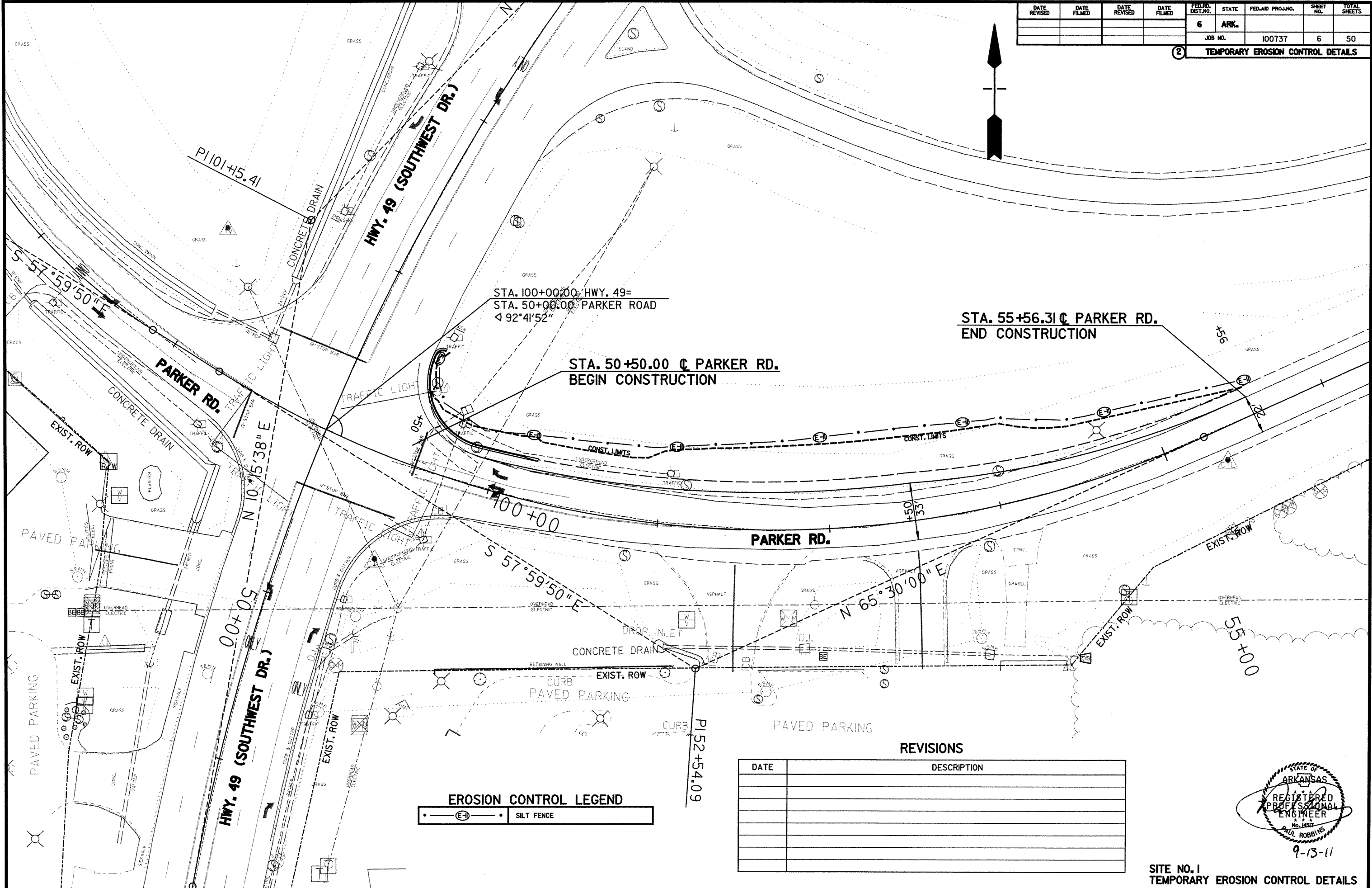
**TYPICAL SECTION-TANGENT
HWY. 1 (STADIUM BLVD.) WIDENING WEST SIDE**

SITE NO. 2
(SHOWN IN DIRECTION OF TRAFFIC)
STA. 15+25.00 - STA. 19+51.00



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| | | | | | | | JOB NO. 100737 | 6 | 50 |

② TEMPORARY EROSION CONTROL DETAILS



STA. 100+00.00 HWY. 49=
STA. 50+00.00 PARKER ROAD
492°41'52"

STA. 55+56.31 C PARKER RD.
END CONSTRUCTION

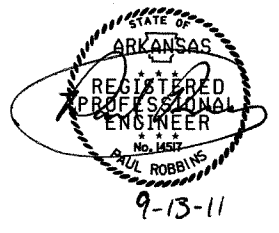
STA. 50+50.00 C PARKER RD.
BEGIN CONSTRUCTION

EROSION CONTROL LEGEND

| | |
|--|------------|
| | SILT FENCE |
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REVISIONS

| DATE | DESCRIPTION |
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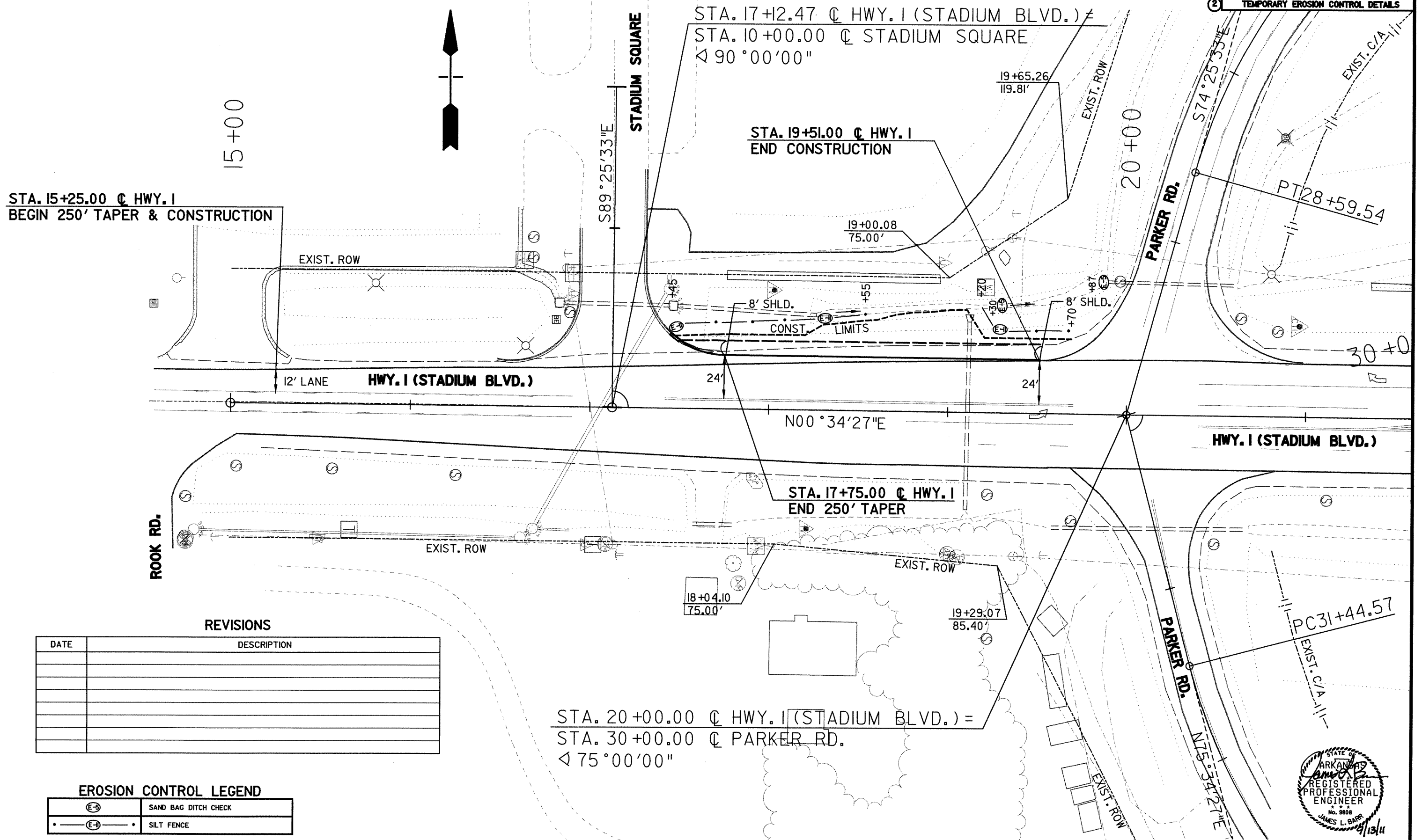
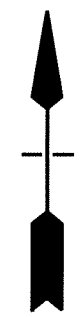


SITE NO. 1
TEMPORARY EROSION CONTROL DETAILS

9-13-11

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | 7 | 50 |
| | | | | JOB NO. | 100737 | | | |

② TEMPORARY EROSION CONTROL DETAILS



STA. 15+25.00 \odot HWY. 1
BEGIN 250' TAPER & CONSTRUCTION

STA. 17+25.33 \odot HWY. 1 (STADIUM BLVD.) =
STA. 10+00.00 \odot STADIUM SQUARE
 \sphericalangle 90°00'00"

STA. 19+51.00 \odot HWY. 1
END CONSTRUCTION

STA. 17+75.00 \odot HWY. 1
END 250' TAPER

STA. 20+00.00 \odot HWY. 1 (STADIUM BLVD.) =
STA. 30+00.00 \odot PARKER RD.
 \sphericalangle 75°00'00"

REVISIONS

| DATE | DESCRIPTION |
|------|-------------|
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EROSION CONTROL LEGEND

| | |
|--|----------------------|
| | SAND BAG DITCH CHECK |
| | SILT FENCE |



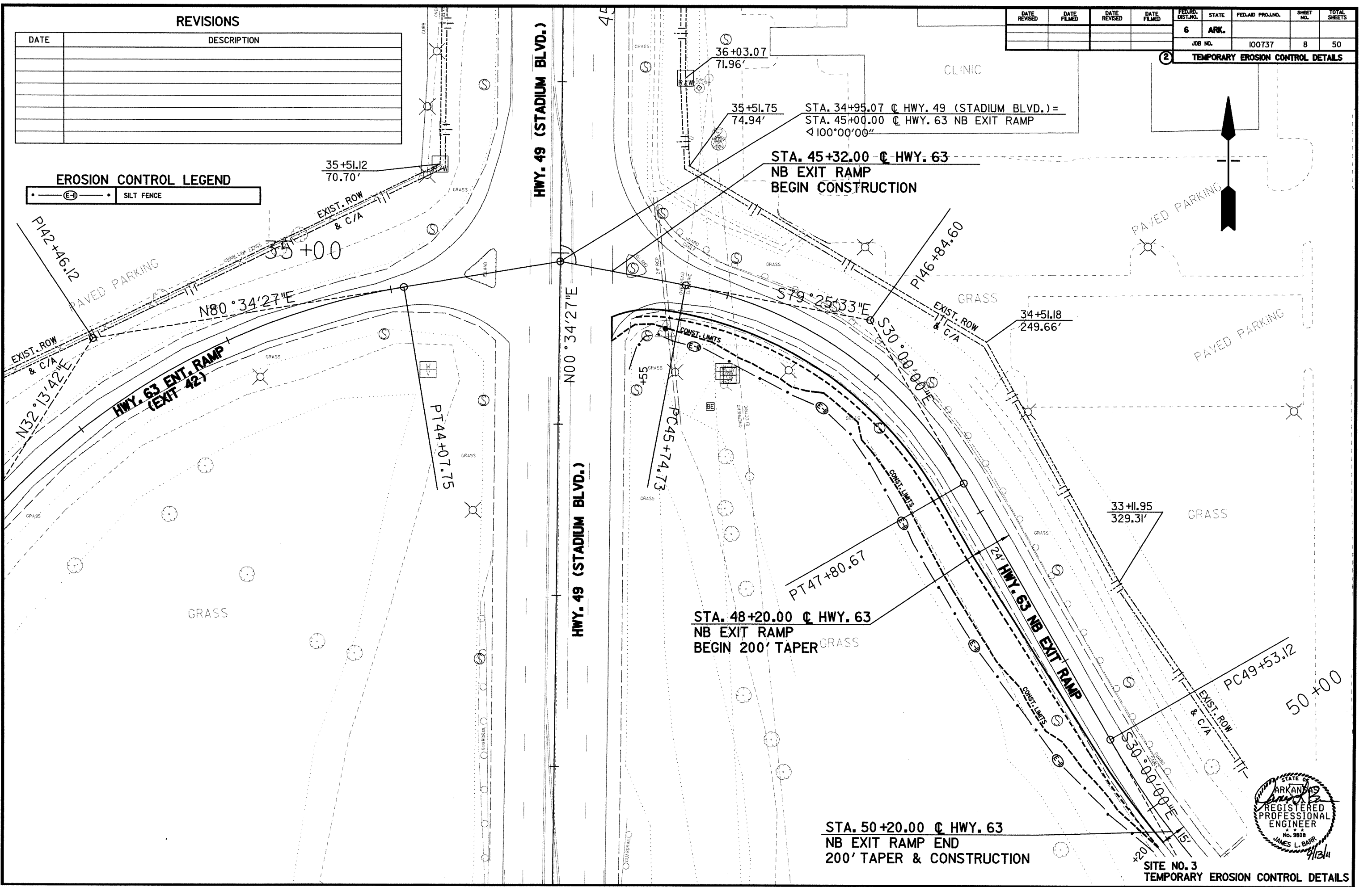
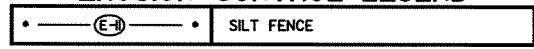
REVISIONS

| DATE | DESCRIPTION |
|------|-------------|
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| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | 8 | 50 |

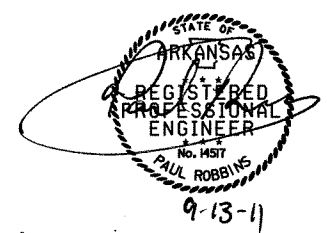
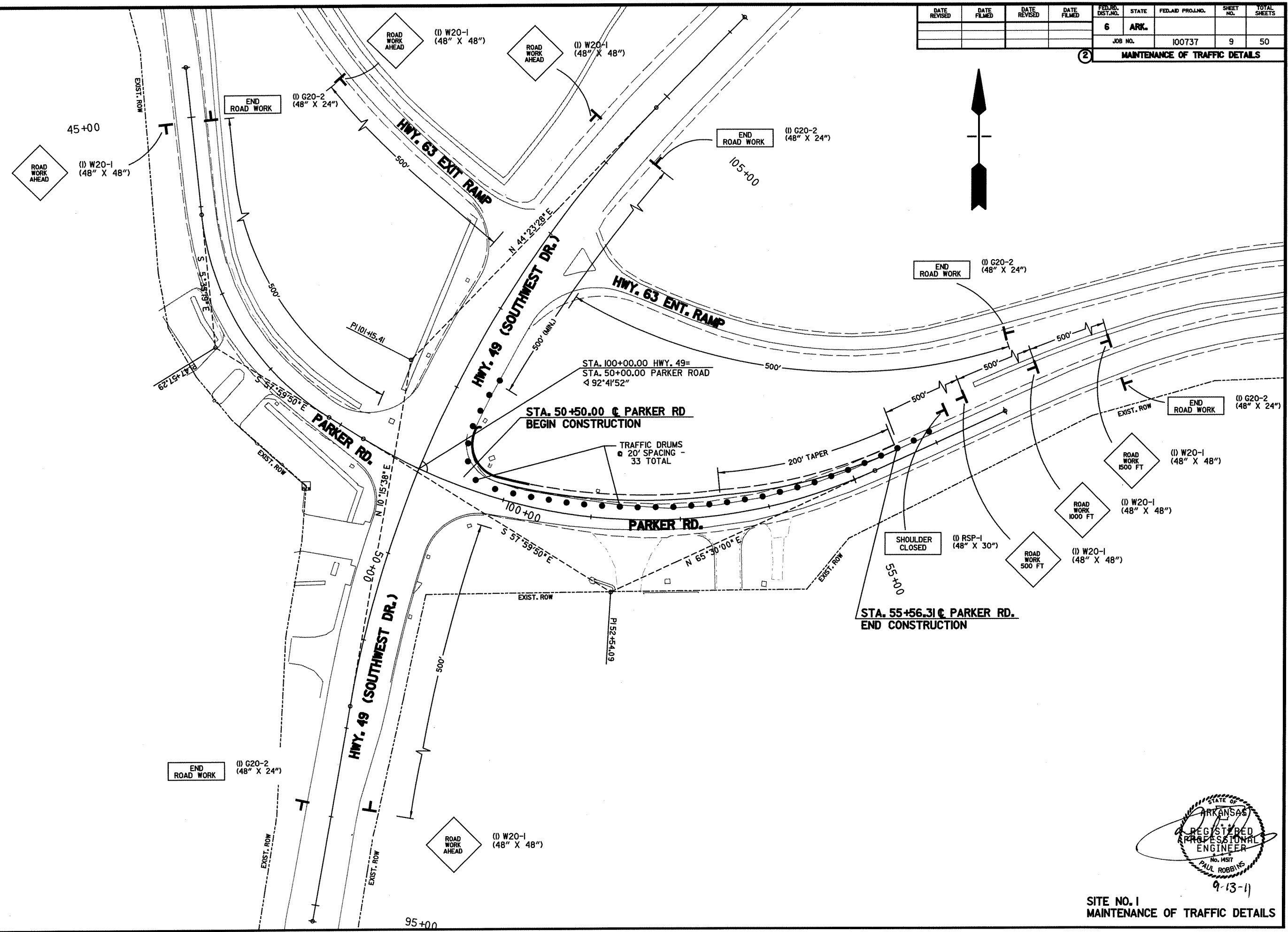
② TEMPORARY EROSION CONTROL DETAILS

EROSION CONTROL LEGEND



SITE NO. 3
TEMPORARY EROSION CONTROL DETAILS

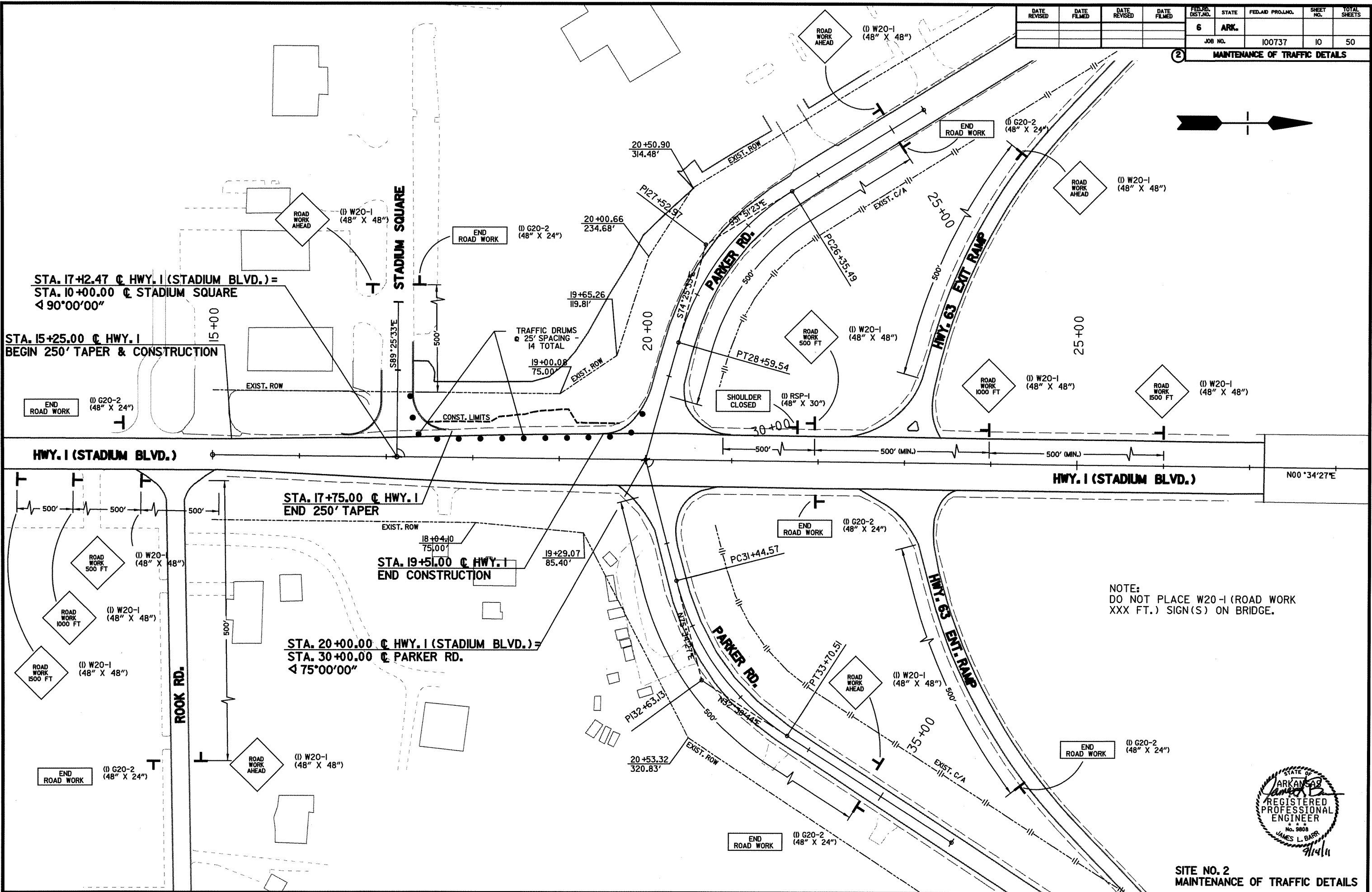
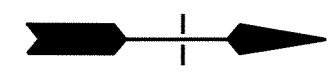
| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|----------------------------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 9 | 50 |
| ② MAINTENANCE OF TRAFFIC DETAILS | | | | | | | | |



9-13-11
 SITE NO. 1
 MAINTENANCE OF TRAFFIC DETAILS

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | 10 | 50 | |

2 MAINTENANCE OF TRAFFIC DETAILS



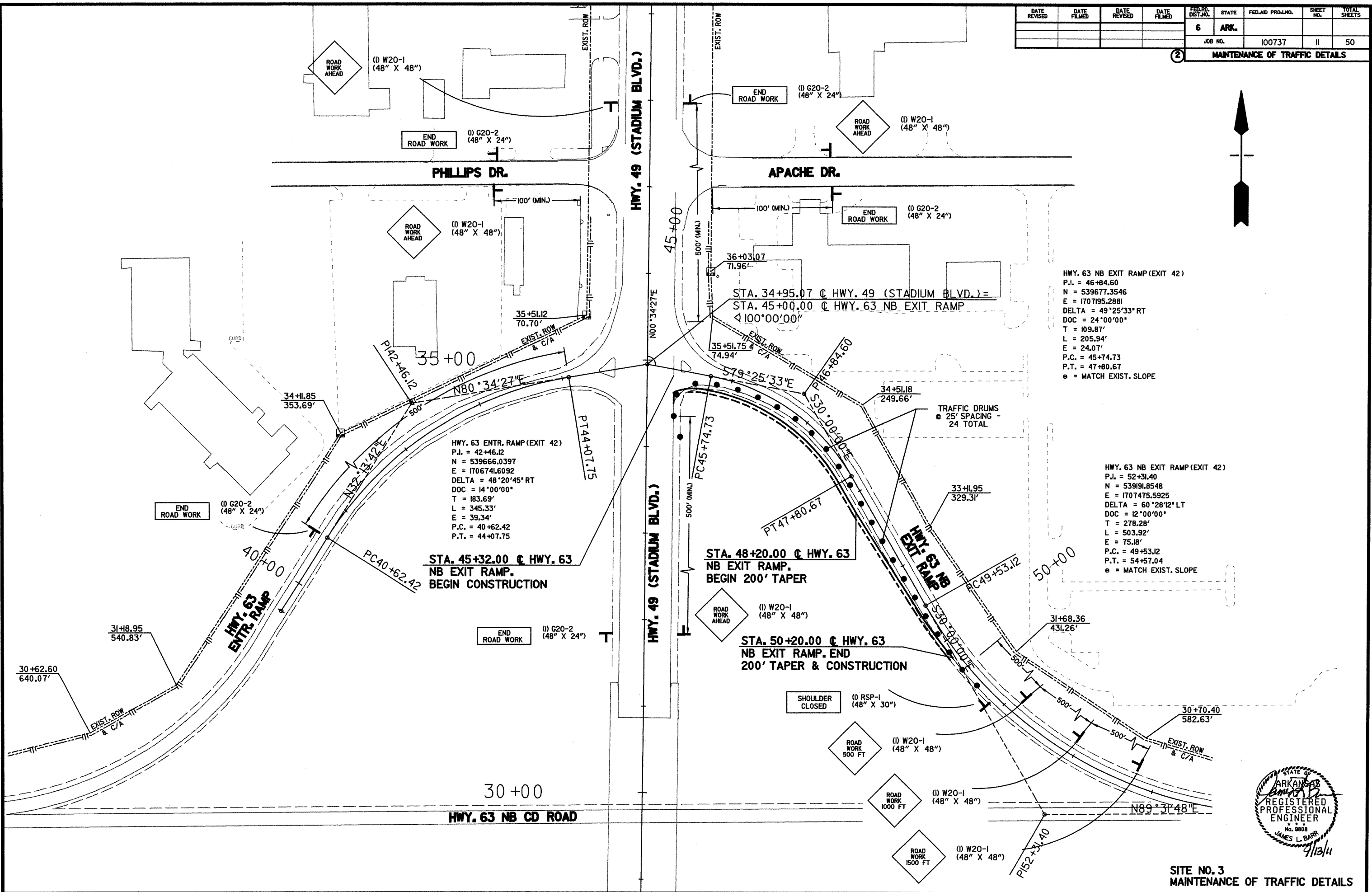
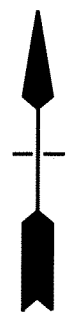
NOTE:
DO NOT PLACE W20-1 (ROAD WORK XXX FT.) SIGN(S) ON BRIDGE.



SITE NO. 2
MAINTENANCE OF TRAFFIC DETAILS

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | | 100737 | II | 50 |

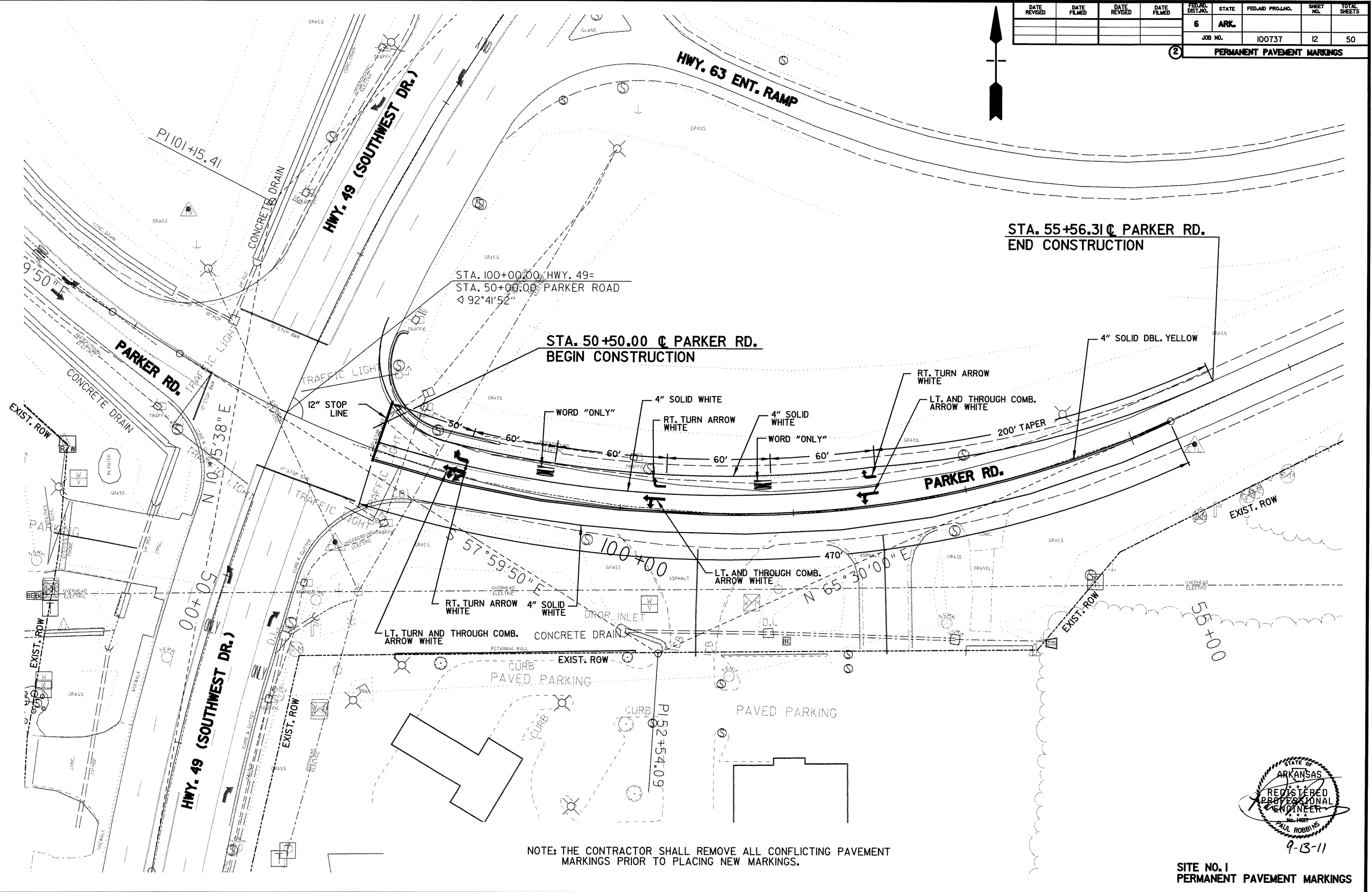
② MAINTENANCE OF TRAFFIC DETAILS



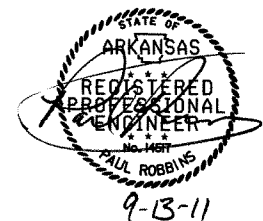
SITE NO. 3
 MAINTENANCE OF TRAFFIC DETAILS

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 12 | 50 |

2 PERMANENT PAVEMENT MARKINGS



NOTE: THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS PRIOR TO PLACING NEW MARKINGS.



SITE NO. 1
PERMANENT PAVEMENT MARKINGS

| DATE REVISION | DATE FILMED | DATE REVISION | DATE FILMED | FED. AID DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|---------------|-------------|---------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 13 | 50 |

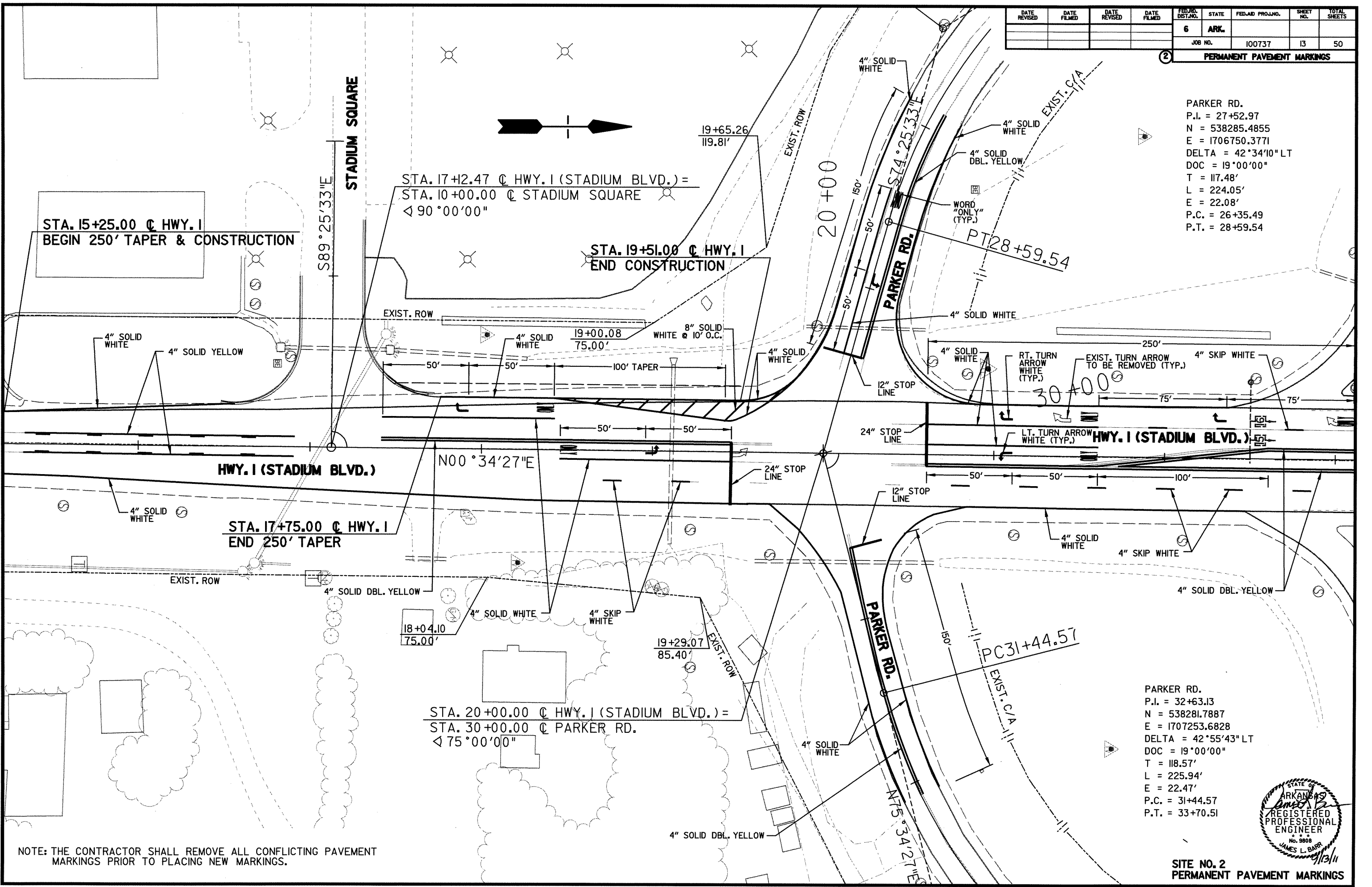
② PERMANENT PAVEMENT MARKINGS

PARKER RD.
P.I. = 27+52.97
N = 538285.4855
E = 1706750.3771
DELTA = 42°34'10" LT
DOC = 19°00'00"
T = 117.48'
L = 224.05'
E = 22.08'
P.C. = 26+35.49
P.T. = 28+59.54

PARKER RD.
P.I. = 32+63.13
N = 538281.7887
E = 1707253.6828
DELTA = 42°55'43" LT
DOC = 19°00'00"
T = 118.57'
L = 225.94'
E = 22.47'
P.C. = 31+44.57
P.T. = 33+70.51



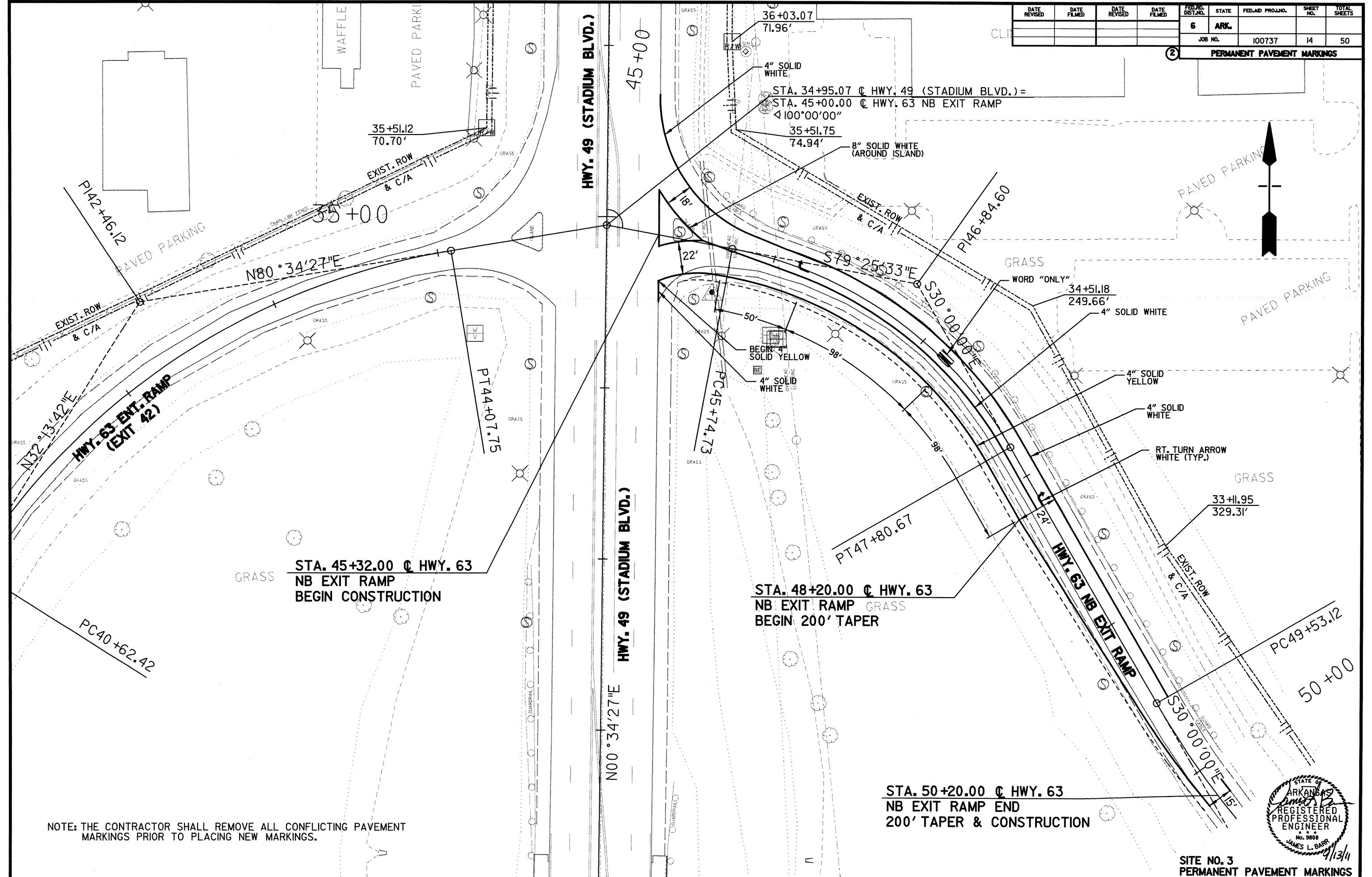
SITE NO. 2
PERMANENT PAVEMENT MARKINGS



NOTE: THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS PRIOR TO PLACING NEW MARKINGS.

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 14 | 50 |

PERMANENT PAVEMENT MARKINGS



NOTE: THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS PRIOR TO PLACING NEW MARKINGS.



SITE NO. 3
PERMANENT PAVEMENT MARKINGS

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | 15 | 50 | |

② QUANTITIES

| | | PERMANENT EROSION CONTROL | | | | | TEMPORARY EROSION CONTROL | | | | | |
|---|---------|---------------------------|-------------|-------------|-------------|-------------|----------------------------|-------------------|-------------|------------|-------------------|------------------------------|
| STATION | STATION | LOCATION | SEEDING | LIME | MULCH COVER | WATER | SECOND SEEDING APPLICATION | TEMPORARY SEEDING | MULCH COVER | WATER | SILT FENCE (E-11) | *SEDIMENT REMOVAL & DISPOSAL |
| | | | ACRE | TON | ACRE | M.GAL. | ACRE | ACRE | ACRE | M.GAL. | LINE FT. | CU. YD. |
| 50+50 | 55+56 | | 0.16 | 0.32 | 0.16 | 16.3 | 0.16 | 0.16 | 0.16 | 3.3 | 510 | 19 |
| *ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER. | | | | | | | | | | | | |
| TOTALS: | | | 0.16 | 0.32 | 0.16 | 16.3 | 0.16 | 0.16 | 0.16 | 3.3 | 510 | 19 |

BASIS OF ESTIMATE:
LIME 2 TONS / ACRE OF SEEDING
WATER 102.0 M.G. / ACRE OF SEEDING.
WATER 20.4 M.G. / ACRE OF TEMPORARY SEEDING.

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION ON U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

*QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

ADVANCE WARNING SIGNS AND DEVICES

| SIGN NUMBER | DESCRIPTION | SIGN SIZE | MAXIMUM NUMBER REQUIRED | TOTAL SIGNS REQUIRED | | TRAFFIC DRUMS |
|----------------|--------------------|-----------|-------------------------|----------------------|-----------|---------------|
| | | | | NO. | SQ. FT. | |
| W20-1 | ROAD WORK 1500 FT. | 48"x48" | 1 | 1 | 16 | |
| W20-1 | ROAD WORK 1000 FT. | 48"x48" | 1 | 1 | 16 | |
| W20-1 | ROAD WORK 500 FT. | 48"x48" | 1 | 1 | 16 | |
| W20-1 | ROAD WORK AHEAD | 48"x48" | 4 | 4 | 64 | |
| G20-2 | END ROAD WORK | 48"x24" | 5 | 5 | 40 | |
| RSP-1 | SHOULDER CLOSED | 48"x30" | 1 | 1 | 10 | |
| | TRAFFIC DRUMS | | | | | 33 |
| TOTALS: | | | | 162 | 33 | |

SUMMARY OF TRAFFIC SIGNAL QUANTITIES

| ITEM NO. | ITEM | QUANTITY | UNIT |
|----------|-------------------------------|----------|----------|
| 704 | FEEDER WIRE | 162 | LIN. FT. |
| 710 | NON-METALLIC CONDUIT (2") | 146 | LIN. FT. |
| SS & 711 | CONCRETE PULL BOX (TYPE 1 HD) | 2 | EACH |
| SP | LOOP WRING CLASS III (2) | 1048 | LIN. FT. |

EARTHWORK

| STATION | STATION | LOCATION / DESCRIPTION | UNCLASSIFIED EXCAVATION | COMPACTED EMBANKMENT |
|----------------|---------|------------------------|-------------------------|----------------------|
| | | | CU. YD. | |
| 50+50 | 55+56 | PARKER RD. WIDENING | 184 | 195 |
| TOTALS: | | | 184 | 195 |

SEE SECTION 104.03 OF THE STD. SPECS.
NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

| DESCRIPTION | REMOVAL OF PERMANENT PAVEMENT MARKINGS | THERMOPLASTIC PAVEMENT MARKINGS | | | | |
|---|--|---------------------------------|------------|-----------|----------|--------|
| | | 4" | | 12" WHITE | WORDS | ARROWS |
| | | WHITE | YELLOW | | | |
| | LIN.FT. | LIN.FT. | | | EACH | |
| REMOVAL OF PERMANENT PAVEMENT MARKINGS | 1701 | | | | | |
| RAISED PAVEMENT MARKERS TYPE II | | | | | | |
| THERMOPLASTIC PAVEMENT MARKINGS WHITE (4") | | 1274 | | | | |
| THERMOPLASTIC PAVEMENT MARKINGS YELLOW (4") | | | 940 | | | |
| THERMOPLASTIC PAVEMENT MARKINGS WHITE (12") | | | | 35 | | |
| THERMOPLASTIC PAVEMENT MARKINGS WORDS | | | | | 2 | |
| THERMOPLASTIC PAVEMENT MARKINGS ARROWS | | | | | 6 | |
| TOTALS: | 1701 | 1274 | 940 | 35 | 2 | |

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2003 EDITION.

CONCRETE COMBINATION CURB AND GUTTER

| STATION | STATION | LOCATION | TYPE A (1' 6") |
|---------------|---------|------------|----------------|
| | | | LIN. FT. |
| 50+44 | 51+24 | PARKER RD. | 108 |
| TOTAL: | | | 108 |

BASE AND SURFACING

| STATION | STATION | LOCATION | LENGTH FEET | AGGREGATE BASE COURSE (CLASS 7) | | TACK COAT | | | | ACHM BINDER COURSE (1") | | | | ACHM SURFACE COURSE (1/2") | | | |
|----------------|---------|---|-------------|---------------------------------|--------------|-----------------|--------|------------------|-------------|-------------------------|--------|----------------|--------------|----------------------------|--------|----------------|--------------|
| | | | | TON / STATION | TON | TOTAL WID. FEET | SQ.YD. | GALLONS / SQ.YD. | GALLON | AVG. WID. FEET | SQ.YD. | POUND / SQ.YD. | PG 70-22 TON | AVG. WID. FEET | SQ.YD. | POUND / SQ.YD. | PG 70-22 TON |
| 50+50 | 51+24 | PARKER RD. RT. TURN LANE WIDENING W/CURB & GUTTER | 74.0 | VAR. | 53.3 | 16.0 | 131.6 | 0.03 | 3.9 | 16.0 | 131.6 | 440.0 | 29.0 | 16.0 | 131.6 | 220.0 | 14.5 |
| 51+24 | 55+56 | PARKER RD. RT. TURN LANE WIDENING | 432.0 | VAR. | 388.0 | 17.0 | 816.0 | 0.03 | 24.5 | 11.2 | 537.6 | 440.0 | 118.3 | 17.0 | 816.0 | 220.0 | 89.8 |
| TOTALS: | | | | | 441.3 | | | | 28.4 | | | | 147.3 | | | | 104.3 |

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2") 94.7% MIN. AGGR 5.3% ASPHALT BINDER
ACHM BINDER COURSE (1") 95.8% MIN. AGGR 4.2% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 160 FOR PG 70-22
TACK COAT 0.03 GAL. PER SQ. YD.



| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 16 | 50 |

2 QUANTITIES

| | | PERMANENT EROSION CONTROL | | | | | TEMPORARY EROSION CONTROL | | | | | *SEDIMENT REMOVAL & DISPOSAL CU. YD. | |
|----------------|---------|---------------------------|-----------------|-------------|---------------------|-----------------|------------------------------------|---------------------------|---------------------|-----------------|---------------------------------------|---|----------------------------------|
| STATION | STATION | LOCATION | SEEDING ACRE | LIME TON | MULCH COVER ACRE | WATER M.GAL. | SECOND SEEDING APPLICATION ACRE | TEMPORARY SEEDING ACRE | MULCH COVER ACRE | WATER M.GAL. | SAND BAG DITCH CHECKS (E-6) BAG | | SILT FENCE (E-11) LIN. FT. |
| 17+45 | 19+70 | HWY. 1 (STADIUM BLVD.) | 0.04 | 0.08 | 0.04 | 4.1 | 0.04 | 0.04 | 0.04 | 0.8 | 44 | | 168 |
| 45+55 | 50+20 | HWY. 63 NB EXIT RAMP | 0.12 | 0.24 | 0.12 | 12.2 | 0.12 | 0.12 | 0.12 | 2.4 | - | 458 | 17 |
| TOTALS: | | | 0.16 | 0.32 | 0.16 | 16.3 | 0.16 | 0.16 | 0.16 | 3.2 | 44 | 626 | 25 |

BASIS OF ESTIMATE:
 LIME 2 TONS / ACRE OF SEEDING
 WATER 102.0 M.G. / ACRE OF SEEDING
 WATER 20.4 M.G. / ACRE OF TEMPORARY SEEDING.

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION OF U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

ADVANCE WARNING SIGNS AND DEVICES

| SIGN NUMBER | DESCRIPTION | SIGN SIZE | MAXIMUM NUMBER REQUIRED | TOTAL SIGNS REQUIRED | | TRAFFIC DRUMS EACH |
|----------------|--------------------|-----------|-------------------------|----------------------|-----------|-----------------------|
| | | | | NO. | SQ. FT. | |
| W20-1 | ROAD WORK 1500 FT. | 48"x48" | 3 | 3 | 48.0 | |
| W20-1 | ROAD WORK 1000 FT. | 48"x48" | 3 | 3 | 48.0 | |
| W20-1 | ROAD WORK 500 FT. | 48"x48" | 3 | 3 | 48.0 | |
| W20-1 | ROAD WORK AHEAD | 48"x48" | 9 | 9 | 144.0 | |
| G20-2 | END ROAD WORK | 48"x24" | 12 | 12 | 96.0 | |
| RSP-1 | SHOULDER CLOSED | 48"x30" | 2 | 2 | 20.0 | |
| | TRAFFIC DRUMS | | | | | 38 |
| TOTALS: | | | | 404.0 | 38 | |

NOTE: QUANTITIES SHOWN FOR SITE NO. 2 & 3 TO BE CONSTRUCTED INDEPENDENTLY OF THE OTHER. SIGN AND DEVICE QUANTITIES WILL CHANGE IF CONTRACTOR CONSTRUCTS BOTH SITE NO. 2 & 3 TOGETHER.

PERMANENT PAVEMENT MARKING

| DESCRIPTION | REMOVAL OF PERMANENT PAVEMENT MARKINGS | | THERMOPLASTIC PAVEMENT MARKING | | | | | | | | |
|---|--|-------------|--------------------------------|-------------|------------|-----------|-----------|----------|----------|--|--|
| | ARROWS EACH | LIN. FT. | 4" | | | | | | | | |
| | | | WHITE | YELLOW | 8" WHITE | 12" WHITE | 24" WHITE | WORDS | ARROWS | | |
| REMOVAL OF PERMANENT PAVEMENT MARKINGS | | 1230 | | | | | | | | | |
| REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS) | 3 | | | | | | | | | | |
| THERMOPLASTIC PAVEMENT MARKING WHITE (4") | | | 3441 | | | | | | | | |
| THERMOPLASTIC PAVEMENT MARKING YELLOW (4") | | | | 2671 | | | | | | | |
| THERMOPLASTIC PAVEMENT MARKING WHITE (8") | | | | | 183 | | | | | | |
| THERMOPLASTIC PAVEMENT MARKING WHITE (12") | | | | | | 40 | | | | | |
| THERMOPLASTIC PAVEMENT MARKING WHITE (24") | | | | | | | 70 | | | | |
| THERMOPLASTIC PAVEMENT MARKING WORDS | | | | | | | | 7 | | | |
| THERMOPLASTIC PAVEMENT MARKING ARROWS | | | | | | | | | 8 | | |
| TOTALS: | 3 | 1230 | 3441 | 2671 | 183 | 40 | 70 | 7 | 8 | | |

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2003 EDITION.

BASE AND SURFACING

| STATION | STATION | LOCATION | LENGTH FEET | AGGREGATE BASE COURSE (CLASS 7) | | TACK COAT | | | | ACHM BASE COURSE (1 1/2") | | | | ACHM BINDER COURSE (1") | | | | ACHM SURFACE COURSE (1/2") | | | | |
|----------------|---------|-----------------------------|----------------|---------------------------------|--------------|------------------------|---------|-------------------|--------|---------------------------|---------|-----------------|-----------------|-------------------------|---------|-----------------|-----------------|----------------------------|---------|-----------------|-----------------|-------|
| | | | | TON / STATION | TON | TOTAL WID. FEET | SQ. YD. | GALLONS / SQ. YD. | GALLON | AVG. WID. FEET | SQ. YD. | POUND / SQ. YD. | PG 70-22 TON | AVG. WID. FEET | SQ. YD. | POUND / SQ. YD. | PG 70-22 TON | AVG. WID. FEET | SQ. YD. | POUND / SQ. YD. | PG 70-22 TON | |
| | | | | 17+50 | 19+51 | HWY. 1 (STADIUM BLVD.) | 201.0 | 90.25 | 181.4 | 4.03 | 90.0 | 0.03 | 10.8 | 4.03 | 90.0 | 880.0 | 39.6 | 4.03 | 90.0 | 660.0 | 29.7 | 12.03 |
| 45+32 | 48+20 | HWY. 63 NB EXIT RAMP | 288.0 | VAR. | 250.6 | 9.5 | 304.0 | 0.03 | 36.5 | 9.5 | 304.0 | 880.0 | 133.8 | 9.2 | 294.4 | 660.0 | 97.2 | 13.0 | 416.0 | 220.0 | 45.8 | |
| 48+20 | 50+20 | HWY. 63 NB EXIT RAMP -TAPER | 200.0 | VAR. | 174.0 | 4.8 | 106.7 | 0.03 | 12.8 | 4.8 | 106.7 | 880.0 | 46.9 | 4.6 | 102.2 | 660.0 | 33.7 | 4.5 | 100.0 | 220.0 | 11.0 | |
| TOTALS: | | | | | 606.0 | | | | | 60.1 | | | 220.3 | | | | 160.6 | | | | 86.4 | |

BASIS OF ESTIMATE:
 ACHM SURFACE COURSE (1/2") 94.7% MIN. AGGR 5.3% ASPHALT BINDER
 ACHM BINDER COURSE (1") 95.8% MIN. AGGR 4.2% ASPHALT BINDER
 ACHM BASE COURSE (1 1/2") 96.2% MIN. AGGR 3.8% ASPHALT BINDER
 MAXIMUM NUMBER OF GYRATIONS = 160 FOR PG 70-22

EARTHWORK

| STATION | STATION | LOCATION / DESCRIPTION | UNCLASSIFIED EXCAVATION | COMPACTED EMBANKMENT |
|----------------|---------|------------------------|-------------------------|----------------------|
| | | | CU. YD. | |
| 17+50 | 19+51 | HWY. 1 (STADIUM BLVD.) | 125 | - |
| 45+32 | 50+20 | HWY. 63 NB EXIT RAMP | 304 | 54 |
| TOTALS: | | | 429 | 54 |

NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.

REMOVAL AND DISPOSAL OF ITEMS

| STATION | STATION | LOCATION | CURB AND GUTTER |
|---------------|---------|------------------------|-----------------|
| | | | LIN. FT. |
| 17+45 | 17+72 | HWY. 1 (STADIUM BLVD.) | 22 |
| TOTAL: | | | 22 |

CONCRETE COMBINATION CURB AND GUTTER

| STATION | STATION | LOCATION | TYPE A (1' 6") |
|---------------|---------|------------------------|----------------|
| | | | LIN. FT. |
| 17+45 | 17+50 | HWY. 1 (STADIUM BLVD.) | 6 |
| TOTAL: | | | 6 |



SITE NO. 2 & 3
QUANTITIES

SUMMARY OF QUANTITIES

| ITEM NUMBER | ITEM | QUANTITY | UNIT |
|---------------|---|----------|----------|
| 202 | REMOVAL AND DISPOSAL OF CURB AND GUTTER | 22 | LIN. FT. |
| 210 | UNCLASSIFIED EXCAVATION | 613 | CU. YD. |
| 210 | COMPACTED EMBANKMENT | 249 | CU. YD. |
| SS & 303 | AGGREGATE BASE COURSE (CLASS 7) | 1047 | TON |
| 401 | TACK COAT | 89 | GAL. |
| SP. SS. & 405 | MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2") | 212 | TON |
| SP. SS. & 405 | ASPHALT BINDER (PG 70-22) IN ACHM BASE COURSE (1 1/2") | 8 | TON |
| SP. SS. & 406 | MINERAL AGGREGATE IN ACHM BINDER COURSE (1") | 295 | TON |
| SP. SS. & 406 | ASPHALT BINDER (PG 70-22) IN ACHM BINDER COURSE (1") | 13 | TON |
| SP. SS. & 407 | MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2") | 181 | TON |
| SP. SS. & 407 | ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (1/2") | 10 | TON |
| 601 | MOBILIZATION | 1.00 | LUMP SUM |
| SS & 603 | MAINTENANCE OF TRAFFIC | 1.00 | LUMP SUM |
| SS & 604 | SIGNS | 566 | SQ. FT. |
| SS & 604 | TRAFFIC DRUMS | 71 | EACH |
| 604 | REMOVAL OF PERMANENT PAVEMENT MARKINGS | 2931 | LIN. FT. |
| 604 | REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS) | 3 | EACH |
| 620 | LIME | 1 | TON |
| 620 | SEEDING | 0.32 | ACRE |
| 620 | MULCH COVER | 0.64 | ACRE |
| SS & 620 | WATER | 39.1 | M.GAL. |
| 621 | TEMPORARY SEEDING | 0.32 | ACRE |
| 621 | SILT FENCE | 1136 | LIN. FT. |
| 621 | SAND BAG DITCH CHECKS | 44 | BAG |
| 621 | SEDIMENT REMOVAL AND DISPOSAL | 44 | CU. YD. |
| 623 | SECOND SEEDING APPLICATION | 0.32 | ACRE |
| 634 | CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1'6") | 114 | LIN. FT. |
| 635 | ROADWAY CONSTRUCTION CONTROL | 1.00 | LUMP SUM |
| SP & 701 | SYSTEM LOCAL CONTROLLER TS 2-TYPE2 (8 PHASES) | 1 | EACH |
| 704 | FEEDER WIRE | 162 | LIN. FT. |
| SP & 706 | TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY) | 10 | EACH |
| SP & 706 | TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY) | 3 | EACH |
| 708 | TRAFFIC SIGNAL CABLE (5C/14 A.W.G.) | 856 | LIN. FT. |
| 708 | TRAFFIC SIGNAL CABLE (12C/14 A.W.G.) | 23 | LIN. FT. |
| 708 | TRAFFIC SIGNAL CABLE (20C/14 A.W.G.) | 587 | LIN. FT. |
| 709 | GALVANIZED STEEL CONDUIT (1.25") | 36 | LIN. FT. |
| 710 | NON-METALLIC CONDUIT (2") | 161 | LIN. FT. |
| 710 | NON-METALLIC CONDUIT (3") | 439 | LIN. FT. |
| SS & 711 | CONCRETE PULL BOX (TYPE 1) | 1 | EACH |
| SS & 711 | CONCRETE PULL BOX (TYPE 1 HD) | 2 | EACH |
| SS & 711 | CONCRETE PULL BOX (TYPE 2 HD) | 5 | EACH |
| SS & 714 | TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (48') | 2 | EACH |
| SS & 714 | TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (58') | 2 | EACH |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING WHITE (4") | 4715 | LIN. FT. |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING WHITE (8") | 183 | LIN. FT. |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING WHITE (12") | 75 | LIN. FT. |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING WHITE (24") | 70 | LIN. FT. |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING YELLOW (4") | 3611 | LIN. FT. |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING (WORDS) | 9 | EACH |
| SS & 719 | THERMOPLASTIC PAVEMENT MARKING (ARROWS) | 14 | EACH |
| SP & 733 | VEHICLE DETECTOR RACK (16 CHANNEL) | 1 | EACH |
| 733 | VIDEO CABLE | 1264 | LIN. FT. |
| SP & 733 | VIDEO DETECTOR (CLR) | 6 | EACH |
| SP & 733 | VIDEO EDGE CARD EXTENDER | 1 | EACH |
| 733 | VIDEO MONITOR (CLR) | 1 | EACH |
| SP & 733 | VIDEO PROCESSOR, EDGE CARD (2 CAMERA) | 4 | EACH |
| SP | ANTENNA CABLE (TYPE 6) | 70 | LIN. FT. |
| SP | ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC) | 523 | LIN. FT. |
| SP | ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.) | 40 | LIN. FT. |
| SP | LOCAL RADIO WITH ANTENNA | 1 | EACH |
| SP | LOOP WIRING CLASS III (2) | 1048 | LIN. FT. |
| SP | LOUVERS | 16 | EACH |
| SP | LUMINAIRE ASSEMBLY | 1 | EACH |
| SP | REMOVAL OF TRAFFIC SIGNAL EQUIPMENT | 1.00 | LUMP SUM |
| SP | SERVICE POINT ASSEMBLY (1 CIRCUIT) | 1 | EACH |
| SP | TRAFFIC SIGNAL CONTROLLER (MODIFICATION) | 1 | EACH |

| | | | | | | | | |
|-------------|-------------|-------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| DATE REVISD | DATE FILMED | DATE REVISD | DATE FILMED | FED. AD. DIST. NO. | STATE | FED. AD. PROJ. NO. | SHEET NO. | TOTAL SHEETS |
| | | | | 6 | ARK. | | | |
| JOB NO. | | | 100737 | | | 17 | 50 | |

SUMMARY OF QUANTITIES & REVISIONS

| DATE | REVISION | SHEET NUMBER |
|------|----------|--------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

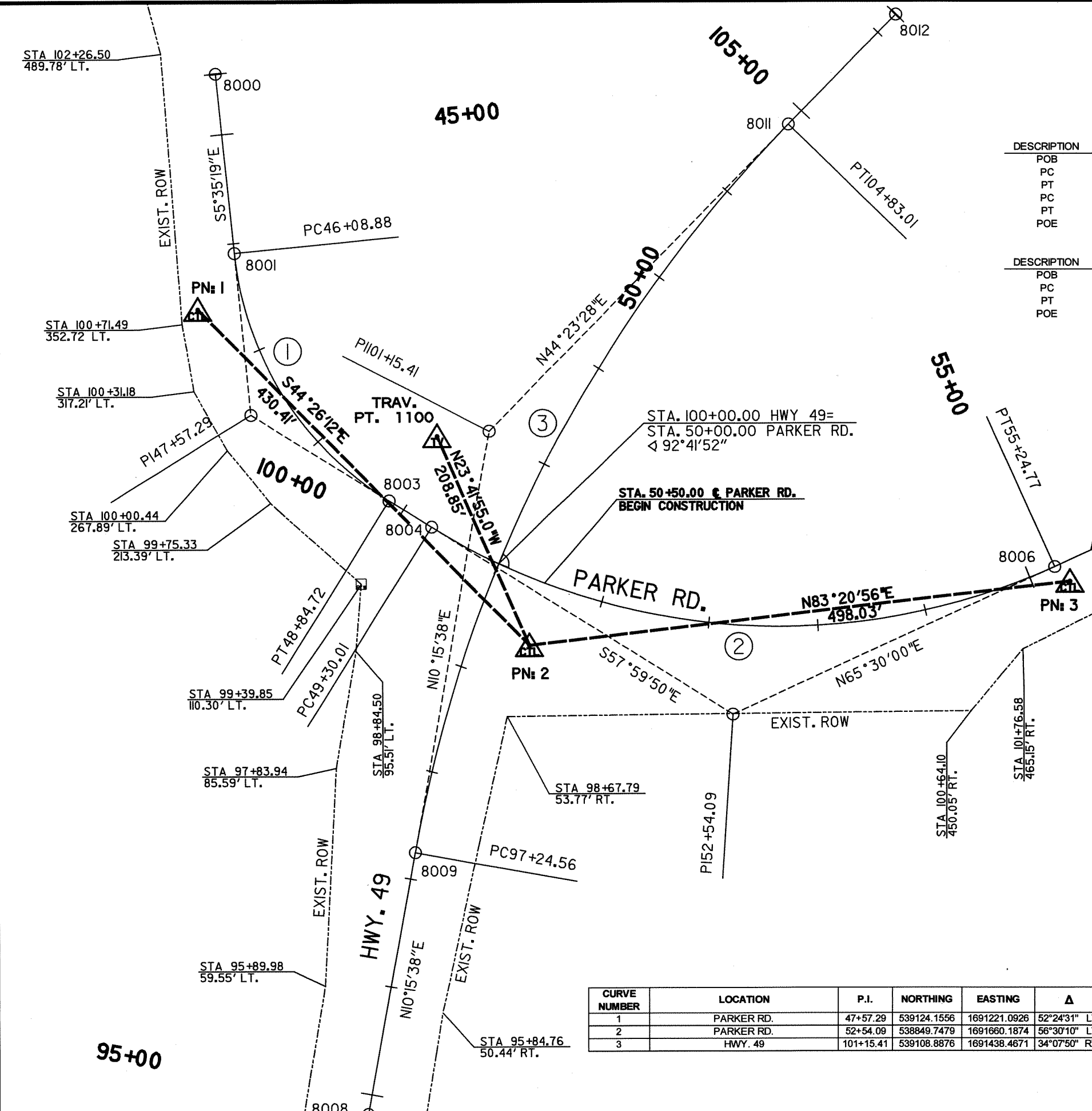
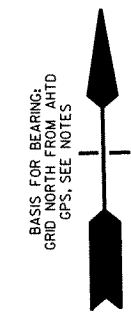


| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | 18 | 50 | |

② SURVEY CONTROL DETAILS

| CONSTRUCTION C.L. | | | | |
|-------------------|----------------------|----------|-------------|--------------|
| DESCRIPTION | HORIZONTAL ALIGNMENT | | PARKER RD. | |
| | POINT | STATION | NORTHING | EASTING |
| POB | 8000 | 44+44.36 | 539435.6029 | 1691190.6180 |
| PC | 8001 | 46+08.88 | 539271.8627 | 1691206.6397 |
| PT | 8003 | 48+84.72 | 539045.5026 | 1691346.9496 |
| PC | 8004 | 49+30.01 | 539021.5000 | 1691385.3574 |
| PT | 8006 | 55+24.77 | 538984.1429 | 1691955.0913 |
| POE | 8007 | 56+84.15 | 539050.2362 | 1692100.1203 |

| DESCRIPTION | HORIZONTAL ALIGNMENT | | HWY. 49 | |
|-------------|----------------------|-----------|-------------|--------------|
| | POINT | STATION | NORTHING | EASTING |
| POB | 8008 | 94+81.92 | 538485.5281 | 1691325.6275 |
| PC | 8009 | 97+24.56 | 538724.2836 | 1691368.8466 |
| PT | 8011 | 104+83.01 | 539388.1856 | 1691711.8897 |
| POE | 8012 | 106+23.21 | 539488.3667 | 1691809.9634 |



SURVEY CONTROL COORDINATES

Project Name: s100739s02
Date: 7/121/2011

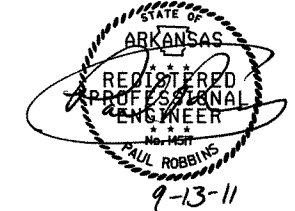
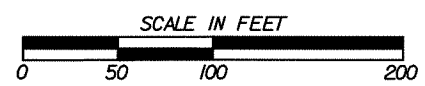
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

| Point Name | Northing | Easting | Elev | Feature | Description |
|------------|-------------|--------------|--------|---------|--------------------------|
| 1 | 539220.4800 | 1691173.1701 | 391.57 | CTL | 5/8" Rebar w/2' AHTD cap |
| 2 | 538913.1239 | 1691474.4655 | 383.95 | CTL | 5/8" Rebar w/2' AHTD cap |
| 3 | 538970.8354 | 1691969.1863 | 368.58 | CTL | 5/8" Rebar w/2' AHTD cap |
| 1100 | 539104.3830 | 1691390.5520 | 388.22 | TV | 8" MAG nail |

(other markings indicated in the point description of the individual point).
ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF 0.9999349540 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME: s100672g1.CTL
HORIZONTAL DATUM: NAD 83 (1997)
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

BASIS OF BEARINGS:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: AHTD GPS PN:160012 (Pr-J CTL *102), NGS PID: HC 65+19
CONVERGENCE ANGLE: 0-45-30 RIGHT AT PN:6
LT: 35-48-21.4 LG: 090-41-49.2
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

| CURVE NUMBER | LOCATION | P.I. | NORTHING | EASTING | Δ | D | R | T | L | E | P.C. | P.T. |
|--------------|------------|-----------|-------------|--------------|---------------|-----------|----------|---------|---------|--------|----------|-----------|
| 1 | PARKER RD. | 47+57.29 | 539124.1556 | 1691221.0926 | 52°24'31" LT. | 19°00'00" | 301.56' | 148.41' | 275.83' | 34.54' | 46+08.88 | 48+84.72 |
| 2 | PARKER RD. | 52+54.09 | 538849.7479 | 1691660.1874 | 56°30'10" LT. | 9°30'00" | 603.11' | 324.08' | 594.77' | 81.56' | 49+30.11 | 55+24.77 |
| 3 | HWY. 49 | 101+15.41 | 539108.8876 | 1691438.4671 | 34°07'50" RT. | 4°30'00" | 1273.24' | 758.46' | 758.46' | 58.64' | 97+24.56 | 104+83.01 |



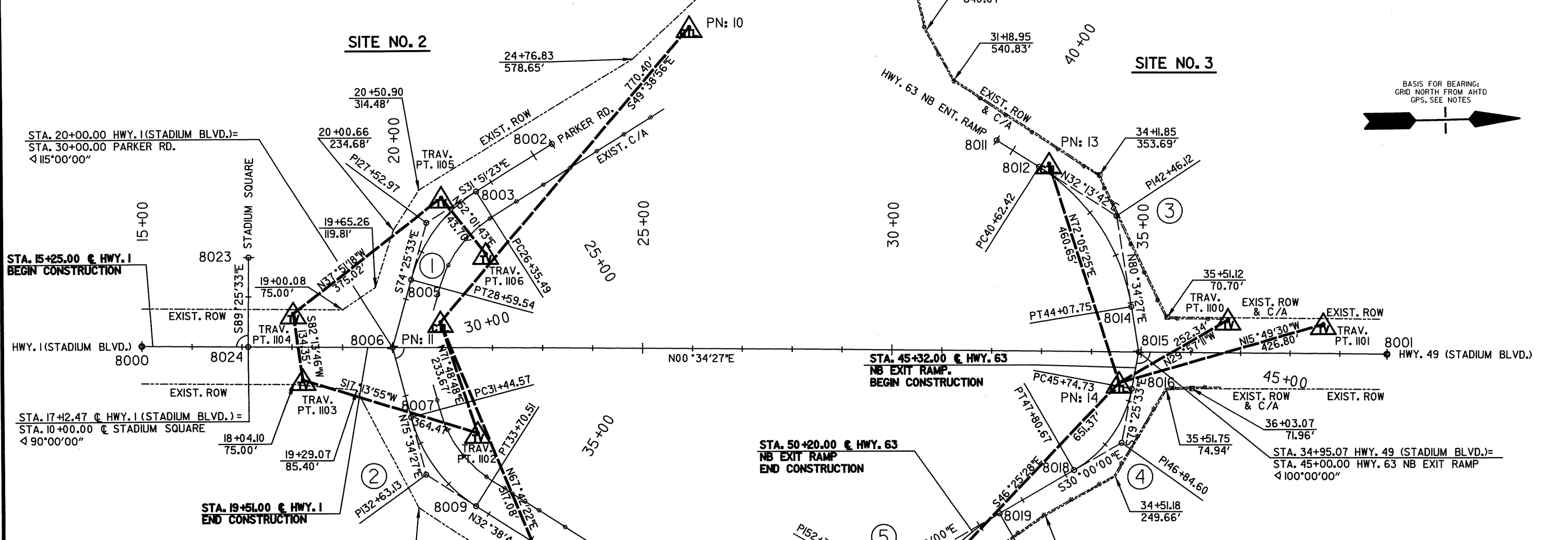
SITE NO. 1
SURVEY CONTROL DETAILS

95+00

| CURVE NUMBER | LOCATION | P.I. | NORTHING | EASTING | Δ | D | R | T | L | E | P.C. | P.T. |
|--------------|----------------------|----------|-------------|--------------|-----------------|-----------|---------|---------|---------|--------|----------|----------|
| 1 | PARKER RD. | 27+52.97 | 538285.4855 | 1706750.3771 | 42°34'10" Left | 19°00'00" | 301.56' | 117.48' | 224.05' | 22.08' | 26+35.49 | 28+59.54 |
| 2 | PARKER RD. | 32+63.13 | 538281.7887 | 1707253.6828 | 42°55'43" Left | 19°00'00" | 301.56' | 118.57' | 225.94' | 22.47' | 31+44.57 | 33+70.51 |
| 3 | HWY. 63 NB ENT. RAMP | 42+46.12 | 539666.0397 | 1706741.6092 | 48°20'45" Right | 14°00'00" | 409.26' | 183.69' | 345.33' | 39.34' | 40+62.42 | 44+07.75 |
| 4 | HWY. 63 NB EXT RAMP | 46+84.60 | 539677.3546 | 1707195.2881 | 49°25'32" Right | 24°00'00" | 238.73' | 109.87' | 205.94' | 24.07' | 45+74.73 | 47+80.67 |
| 5 | HWY. 63 NB EXT RAMP | 52+31.40 | 539191.8548 | 1707475.5925 | 60°28'12" Left | 12°00'00" | 477.46' | 278.28' | 503.92' | 75.18' | 49+53.12 | 54+57.04 |

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | I00737 | | 19 | 50 |

2 SURVEY CONTROL DETAILS



HORIZONTAL ALIGNMENT CONSTRUCTION C.L. HWY. 49/HWY. 1 (STADIUM BLVD.)

| DESCRIPTION | POINT | STATION | NORTHING | EASTING |
|-------------|-------|----------|-------------|--------------|
| POB | 8000 | 15+00.00 | 537716.2591 | 1706993.8291 |
| POE | 8001 | 39+95.07 | 540211.2052 | 1707018.8341 |

HORIZONTAL ALIGNMENT PARKER RD.

| DESCRIPTION | POINT | STATION | NORTHING | EASTING |
|-------------|-------|----------|-------------|--------------|
| POB | 8002 | 24+58.86 | 538536.9948 | 1706594.0922 |
| PC | 8003 | 26+35.49 | 538385.2696 | 1706688.3724 |
| PT | 8005 | 28+59.54 | 538253.9439 | 1706863.5431 |
| PI | 8006 | 30+00.00 | 538216.2339 | 1706998.8400 |
| PC | 8007 | 31+44.57 | 538252.2500 | 1707138.8518 |
| PT | 8009 | 33+70.51 | 538381.6270 | 1707317.6441 |
| POE | 8010 | 35+97.76 | 538572.9781 | 1707440.2329 |

HORIZONTAL ALIGNMENT HWY. 63 NB EXT/ENT RAMP

| DESCRIPTION | POINT | STATION | NORTHING | EASTING |
|-------------|-------|----------|-------------|--------------|
| POB | 8011 | 39+62.35 | 539425.9924 | 1706590.2772 |
| PC | 8012 | 40+62.42 | 539510.6474 | 1706643.6459 |
| PT | 8014 | 44+07.75 | 539696.1233 | 1706922.8234 |
| PI | 8015 | 45+00.00 | 539711.2303 | 1707013.8232 |
| PC | 8016 | 45+74.73 | 539697.5166 | 1707087.2843 |
| PT | 8018 | 47+80.67 | 539582.2049 | 1707250.2230 |
| PC | 8019 | 49+53.12 | 539432.6537 | 1707336.4512 |
| PT | 8021 | 54+57.04 | 539194.1379 | 1707753.8650 |
| POE | 8022 | 55+06.06 | 539194.5401 | 1707802.8854 |

HORIZONTAL ALIGNMENT STADIUM SQUARE

| DESCRIPTION | POINT | STATION | NORTHING | EASTING |
|-------------|-------|----------|-------------|--------------|
| POB | 8023 | 8+21.25 | 537930.5089 | 1706817.2176 |
| POE | 8024 | 10+00.00 | 537928.7175 | 1706995.9584 |

SURVEY CONTROL COORDINATES

Project Name: s100737s01
Date: 7/13/2011
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL.
PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

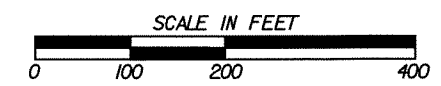
| POINT NAME | NORTHING | EASTING | ELEVATION | FEATURE | DESCRIPTION * |
|------------|-------------|--------------|-----------|---------|---------------------|
| 10 | 539811.5994 | 1706362.1302 | 262.38 | CTL | 5/8" REBAR W/2" CAP |
| 11 | 538312.7870 | 1706949.2556 | 259.77 | CTL | 5/8" REBAR W/2" CAP |
| 12 | 538508.9448 | 1707427.6548 | 260.58 | CTL | 5/8" REBAR W/2" CAP |
| 13 | 539530.4424 | 1706637.1164 | 262.89 | CTL | 5/8" REBAR W/2" CAP |
| 14 | 539672.1019 | 1707075.4311 | 262.31 | CTL | 5/8" REBAR W/2" CAP |
| 15 | 539223.1106 | 1707547.3248 | 261.59 | CTL | 5/8" REBAR W/2" CAP |
| 1100 | 539890.7370 | 1706949.4410 | 260.03 | TV | 60d MAG NAIL |
| 1101 | 540082.7230 | 1706959.0420 | 258.12 | TV | MAG NAIL |
| 1102 | 538385.7190 | 1707171.2330 | 257.93 | TV | 8" SPIKE |
| 1103 | 538037.6040 | 1707063.2610 | 257.99 | TV | 8" SPIKE |
| 1104 | 538019.4390 | 1706930.1440 | 258.82 | TV | 8" SPIKE |
| 1105 | 538315.5440 | 1706700.0070 | 259.65 | TV | 8" SPIKE |
| 1106 | 538403.9590 | 1706813.2890 | 258.74 | TV | 8" SPIKE |

* Note - 5/8" Rebar with 2" Aluminum Cap stamped Arkansas Hwy. & Transportation Department, Job 100672, PN ##, or as indicated (other markings indicated in the point description of the individual point). ALL DISTANCES ARE GROUND.

SURVEY CONTROL NOTES

USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF 0.9999349540 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES. THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME s100672gi.CTL
HORIZONTAL DATUM: NAD 83 (1997)
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

BASIS OF BEARINGS:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 160012, HC 65+19
CONVERGENCE ANGLE: 0-45-30 RIGHT AT PN:6
LT:35-48-21.4 LG:090-41-49.2
NORTHING 538557.0933 EASTING 1698687.5309
GRID AZMUTH = ASTRONOMICAL AZMUTH - CONVERGENCE ANGLE.



SITE NO. 2 & 3 SURVEY CONTROL DETAILS

| DATE REVISED | DATE FILED | DATE REVISED | DATE FILED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|----------------|------------|--------------|------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| JOB NO. 100737 | | | | | | | 20 | 50 |



2 PLAN AND PROFILE

PARKER RD.
P.I. = 47+57.29
N = 539124.1556
E = 1691221.0926
DELTA = 52°24'31" LT.
DOC = 19°00'00"
T = 148.41'
L = 275.83'
R = 301.56'
E = 34.54'
P.C = 46+08.88
P.T. = 48+84.72

HWY. 49
P.I. = 101+45.41
N = 539108.8876
E = 1691438.4671
DELTA = 34°07'50" RT.
DOC = 4°30'00"
T = 390.85'
L = 758.46'
R = 1273.24'
E = 58.64'
P.C = 97+24.56
P.T. = 104+83.01

STA. 50+44 TO STA. 51+24 CONSTRUCT CONCRETE CURB AND GUTTER (TYPE A) (11-6") = 143 LIN. FT.

NOTE: CURB & GUTTER CONSTRUCTED ON OUTSIDE LT. SHOULDER OF PARKER RD. SHALL EXTEND AROUND RADIUS OF HWY. 49 AS SHOWN ON PLANS.

LEGEND
 TYPE I HD PULL BOX
 2" N.M.C.-NON-METALLIC CONDUIT

REMOVING & REINSTALLING SIGNS (BY AHTD)

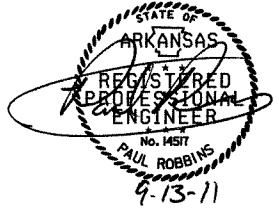
STA. 50+86.50 PARKER RD. LT. = 1 EACH
STA. 52+14.75 PARKER RD. LT. = 1 EACH
STA. 54+03.26 PARKER RD. LT. = 1 EACH

REMOVING & REINSTALLING STREET LIGHTS (BY CITY)

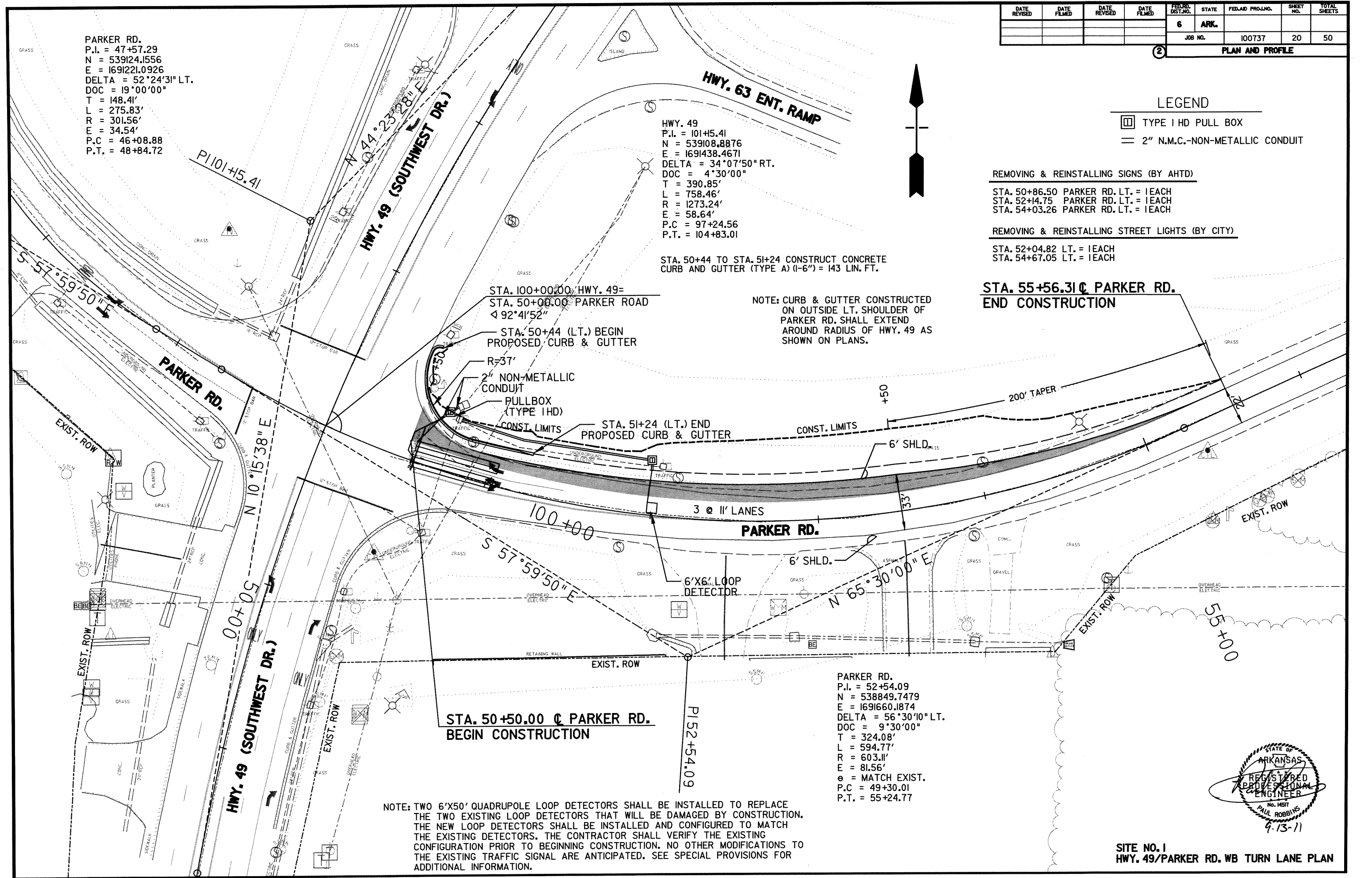
STA. 52+04.82 LT. = 1 EACH
STA. 54+67.05 LT. = 1 EACH

STA. 55+56.31 @ PARKER RD. END CONSTRUCTION

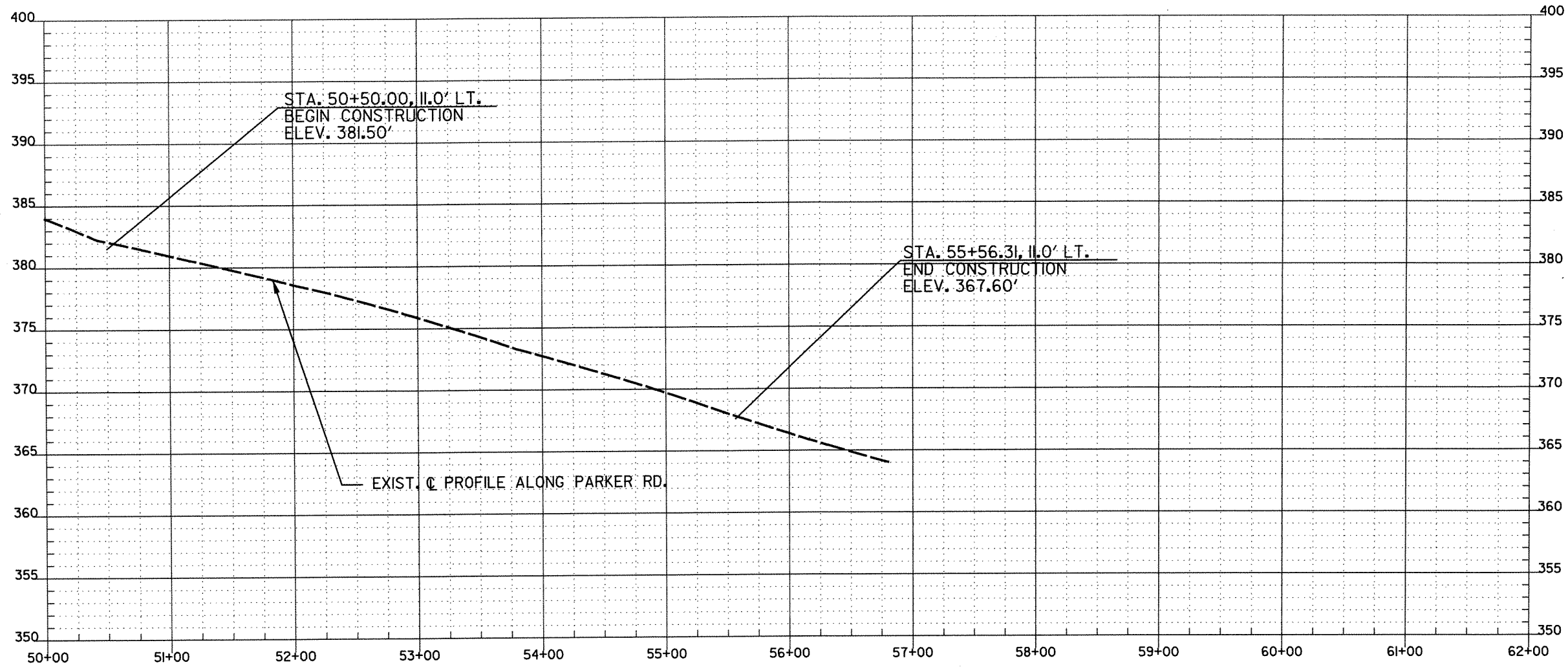
NOTE: TWO 6'X50' QUADRUPOLE LOOP DETECTORS SHALL BE INSTALLED TO REPLACE THE TWO EXISTING LOOP DETECTORS THAT WILL BE DAMAGED BY CONSTRUCTION. THE NEW LOOP DETECTORS SHALL BE INSTALLED AND CONFIGURED TO MATCH THE EXISTING DETECTORS. THE CONTRACTOR SHALL VERIFY THE EXISTING CONFIGURATION PRIOR TO BEGINNING CONSTRUCTION. NO OTHER MODIFICATIONS TO THE EXISTING TRAFFIC SIGNAL ARE ANTICIPATED. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.



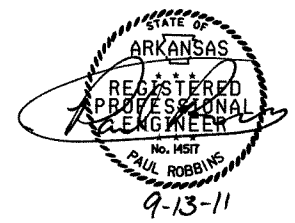
SITE NO. 1
HWY. 49/PARKER RD. WB TURN LANE PLAN



| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS | |
|--------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|------------------|
| | | | | 6 | ARK. | | | | |
| | | | | JOB NO. | I00737 | | 21 | 50 | |
| | | | | | | | | 2 | PLAN AND PROFILE |



NOTE: THE FINISHED GRADE OF THE PARKER RD. RIGHT TURN LANE WILL BE AN EXTENSION OF THE EXIST. C PROFILE GRADE. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.



SITE NO. 1
HWY. 49/PARKER RD. WB TURN LANE PROFILE

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | 22 | 50 |
| | | | | JOB NO. | | 100737 | 22 | 50 |

2 PLAN & PROFILE

PARKER RD.
 P.I. = 27+52.97
 N = 538285.4855
 E = 1706750.3771
 DELTA = 42°34'10" LT
 DOC = 19'00'00"
 T = 117.48'
 L = 224.05'
 E = 22.08'
 P.C. = 26+35.49
 P.T. = 28+59.54

STA. 17+45 TO STA. 17+50 CONSTRUCT
 CONCRETE CURB AND GUTTER (TYPE
 A) (1+6") = 6 LIN. FT.
 STA. 17+87 - IN PLACE
 18"X78' R.C. PIPE CULVERT
 LT. - RETAIN

STA. 17+12.47 @ HWY. I (STADIUM BLVD.) =
 STA. 10+00.00 @ STADIUM SQUARE
 Δ 90°00'00"

STA. 19+51.00 @ HWY. I
 END CONSTRUCTION

STA. 20+2A - IN PLACE
 18"X70' R.C. PIPE CULVERT
 LT. WITH FES - RETAIN

S89°25'33"E

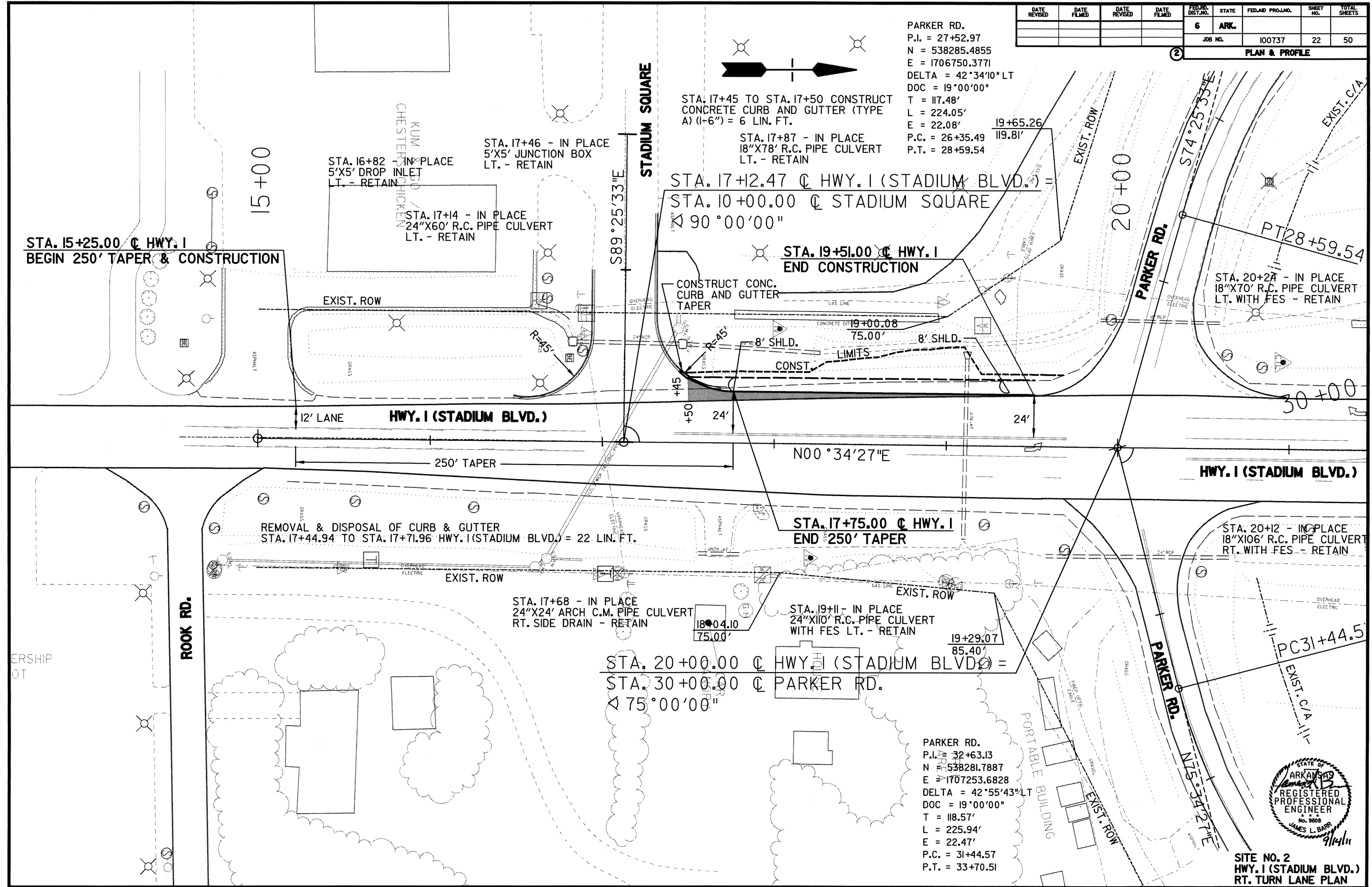
N00°34'27"E

STA. 20+00.00 @ HWY. I (STADIUM BLVD.) =
 STA. 30+00.00 @ PARKER RD.
 Δ 75°00'00"

PARKER RD.
 P.I. = 32+63.13
 N = 538281.7887
 E = 1707253.6828
 DELTA = 42°55'43" LT
 DOC = 19'00'00"
 T = 118.57'
 L = 225.94'
 E = 22.47'
 P.C. = 31+44.57
 P.T. = 33+70.51

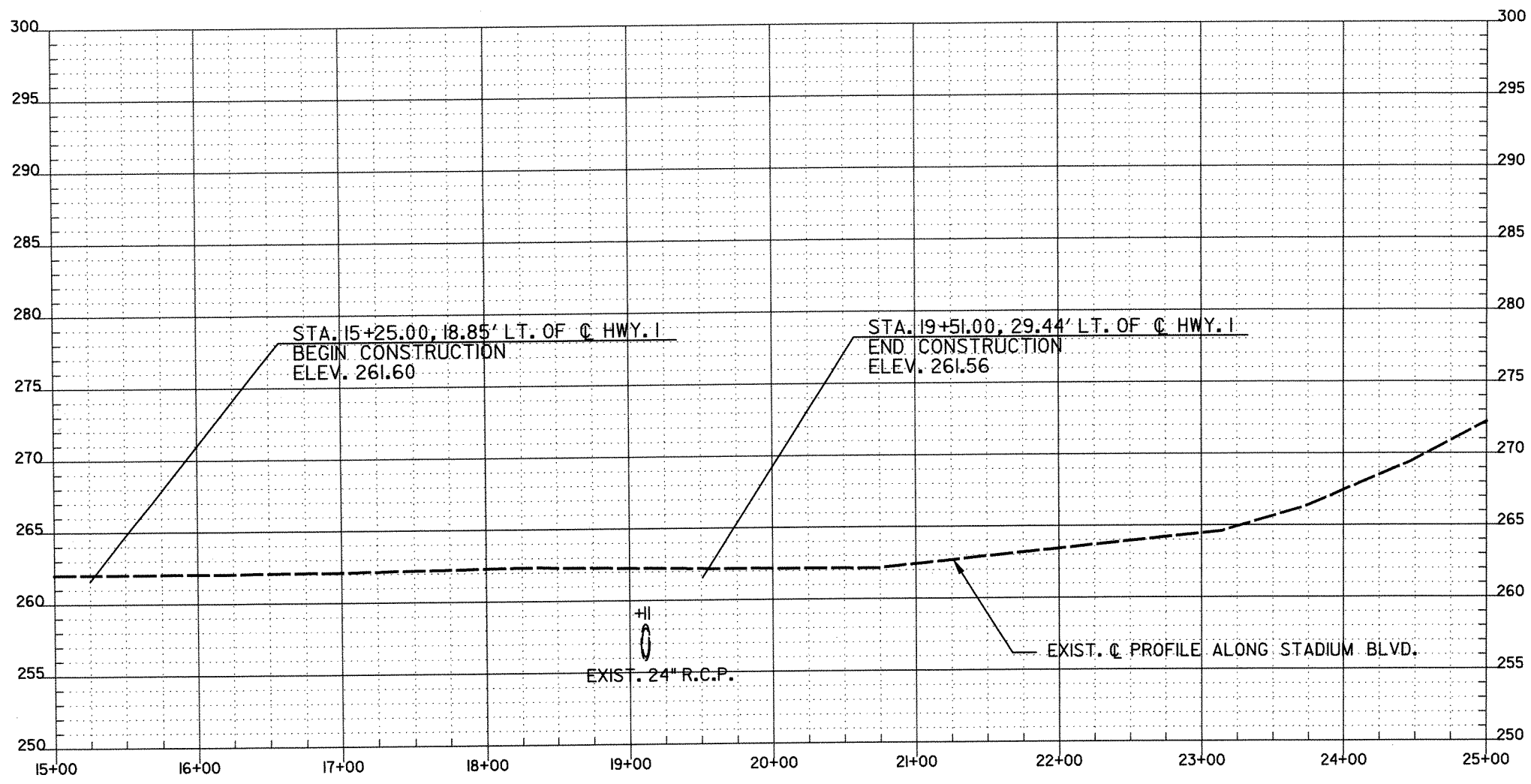


SITE NO. 2
 HWY. I (STADIUM BLVD.)
 RT. TURN LANE PLAN



| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | | | JOB NO. 100737 | 23 | 50 |

② PLAN & PROFILE



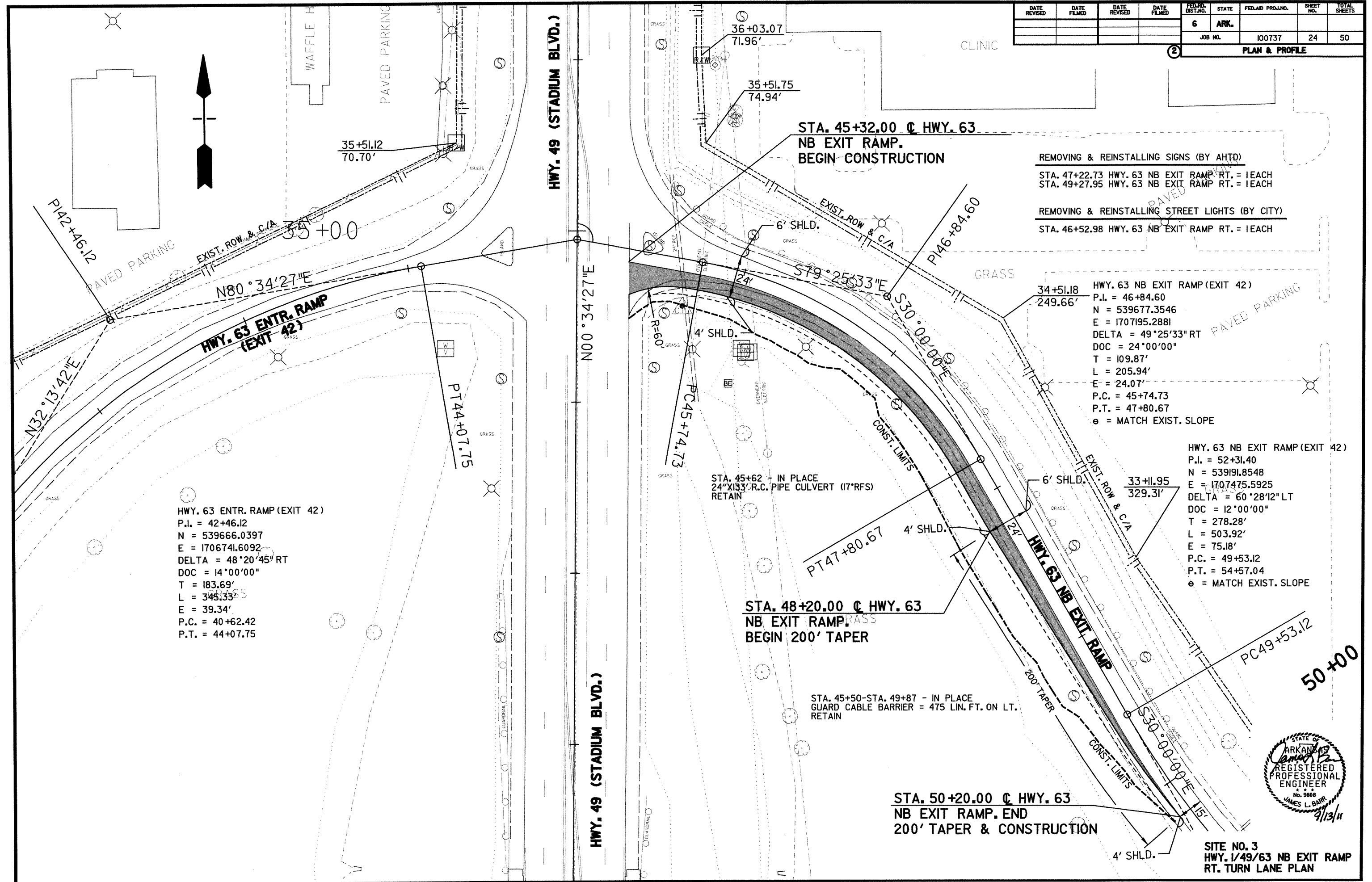
NOTE: THE FINISHED GRADE OF THE STADIUM BLVD. RIGHT TURN LANE WILL BE AN EXTENSION OF THE EXIST. C PROFILE GRADE. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.



SITE NO. 2
 HWY. 1 (STADIUM BLVD.)
 RT. TURN LANE PROFILE

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | | 100737 | 24 | 50 |

② PLAN & PROFILE



HWY. 63 ENTR. RAMP (EXIT 42)
P.I. = 42+46.12
N = 539666.0397
E = 1706741.6092
DELTA = 48°20'45" RT
DOC = 14°00'00"
T = 183.69'
L = 345.33'
E = 39.34'
P.C. = 40+62.42
P.T. = 44+07.75

REMOVING & REINSTALLING SIGNS (BY AHTD)
STA. 47+22.73 HWY. 63 NB EXIT RAMP RT. = 1 EACH
STA. 49+27.95 HWY. 63 NB EXIT RAMP RT. = 1 EACH

REMOVING & REINSTALLING STREET LIGHTS (BY CITY)
STA. 46+52.98 HWY. 63 NB EXIT RAMP RT. = 1 EACH

HWY. 63 NB EXIT RAMP (EXIT 42)
P.I. = 46+84.60
N = 539677.3546
E = 1707195.2881
DELTA = 49°25'33" RT
DOC = 24°00'00"
T = 109.87'
L = 205.94'
E = 24.07'
P.C. = 45+74.73
P.T. = 47+80.67
e = MATCH EXIST. SLOPE

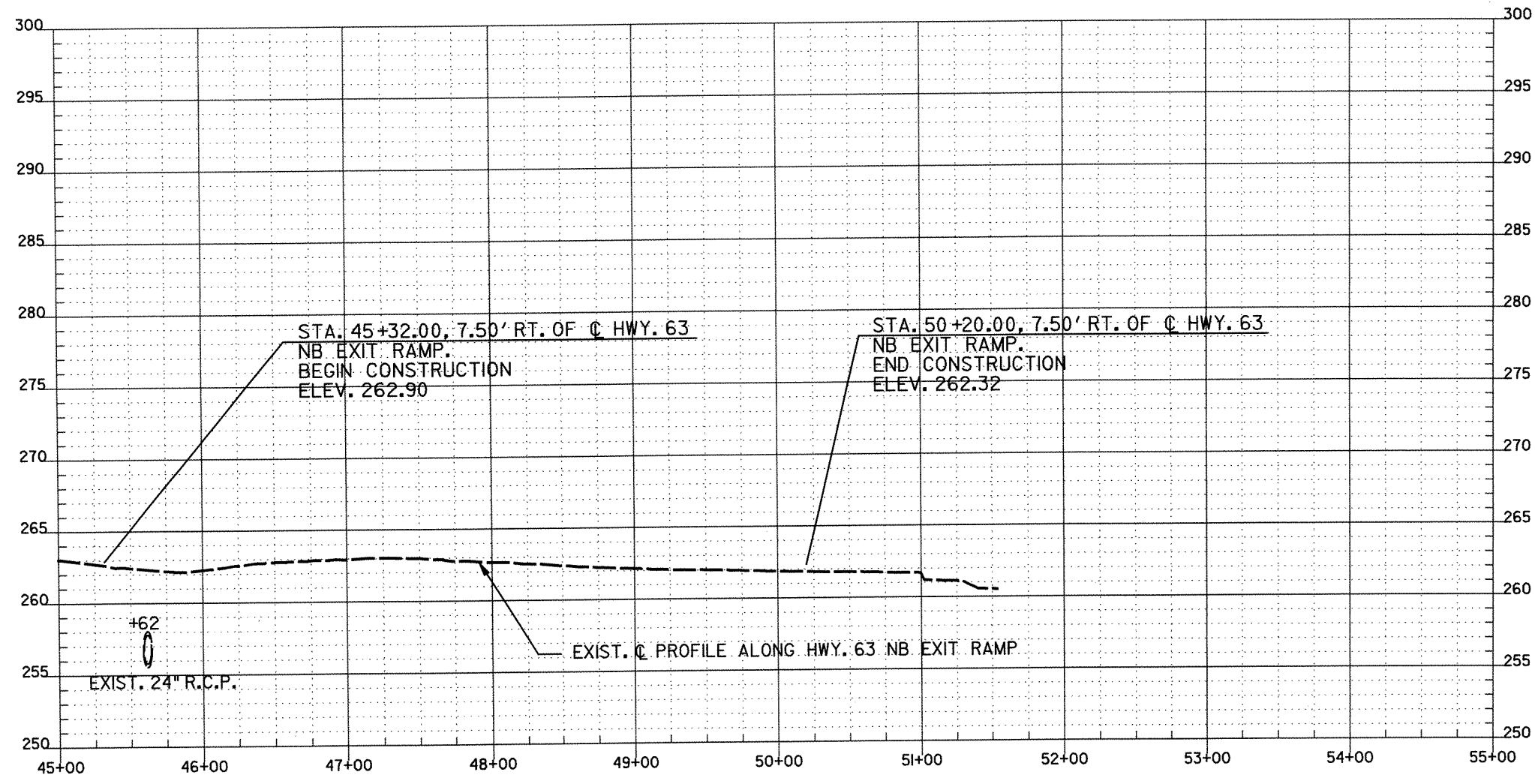
HWY. 63 NB EXIT RAMP (EXIT 42)
P.I. = 52+31.40
N = 539191.8548
E = 1707475.5925
DELTA = 60°28'12" LT
DOC = 12°00'00"
T = 278.28'
L = 503.92'
E = 75.18'
P.C. = 49+53.12
P.T. = 54+57.04
e = MATCH EXIST. SLOPE



SITE NO. 3
HWY. 1/49/63 NB EXIT RAMP
RT. TURN LANE PLAN

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | | | JOB NO. 100737 | 25 | 50 |

② PLAN & PROFILE



NOTE: THE FINISHED GRADE OF THE STADIUM BLVD. RIGHT TURN LANE WILL BE AN EXTENSION OF THE EXIST. C. PROFILE GRADE. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.



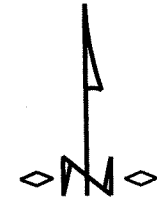
SITE NO. 3
 HWY. 1/49/63 NB EXIT RAMP
 RT. TURN LANE PROFILE

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | | 100737 | 26 | 50 |

② SYSTEM MAP

SYSTEM MAP

NEAR THE INTERSECTION OF N. CARAWAY RD. & GREENSBORO RD.
(MASTER CONTROLLER)



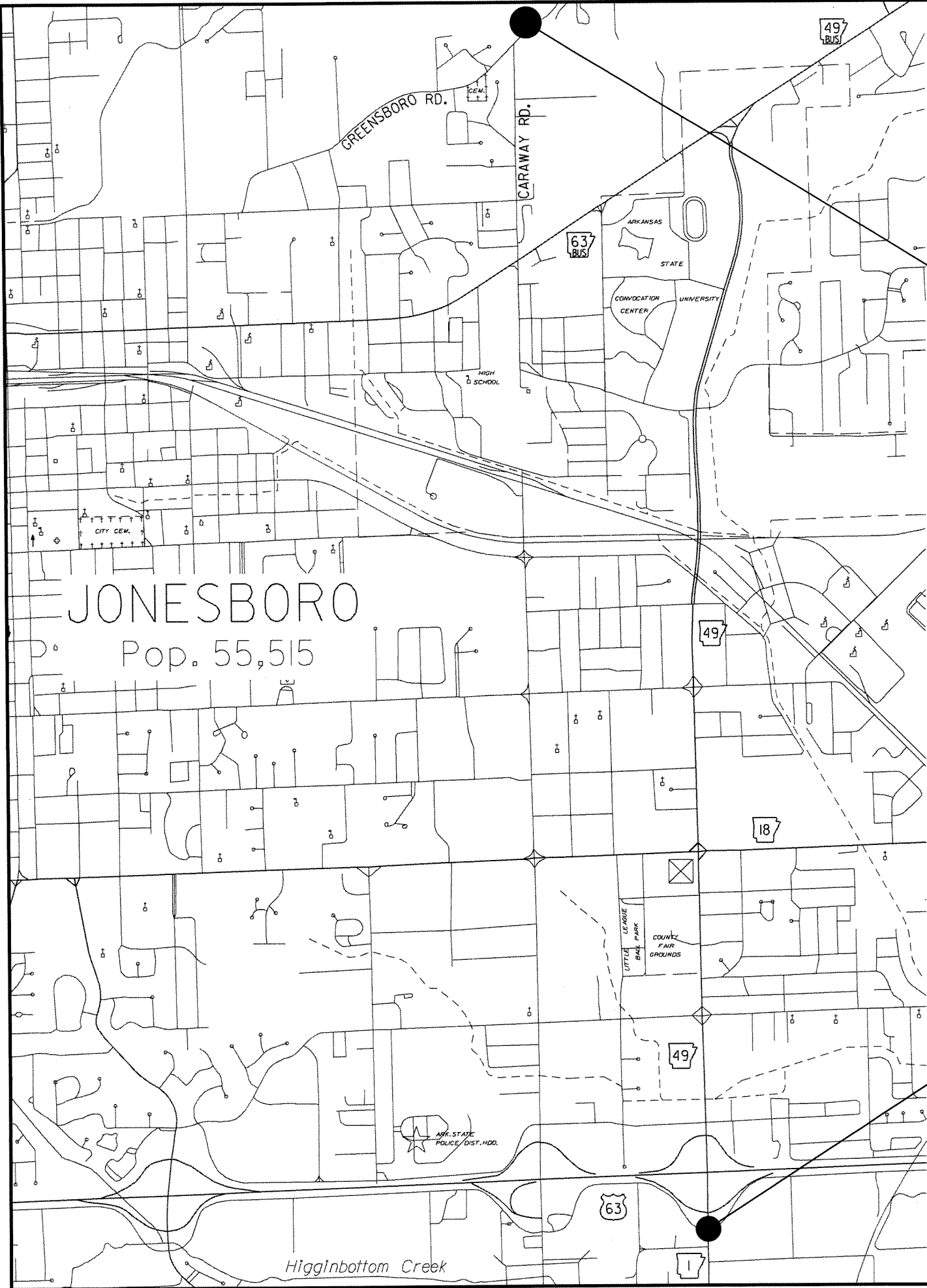
HWY. 1 (STADIUM BLVD.) & PARKER RD.
(TRAFFIC SIGNAL)



LOCATION: HWY. 1/49/63 & PARKER ROAD SIGNAL
 CITY: JONESBORO
 COUNTY: CRAIGHEAD
 DISTRICT: 10

DATE: 8/10/11 FILE NAME: e100737.SYS

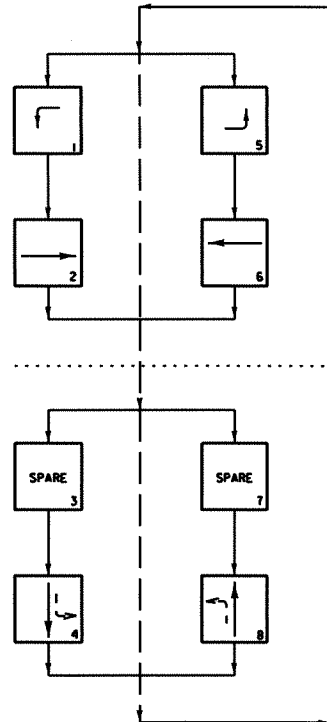
DRAWN BY: F&H



JONESBORO
Pop. 55,515

Higginbottom Creek

PHASING DIAGRAM



LEGEND

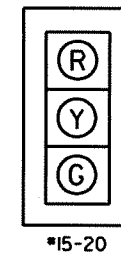
- TYPE 1 PULL BOX
- ▣ TYPE 2 HD PULL BOX
- ⊠ CONTROL CABINET
- ⊞ SIGNAL HEAD
- N.M.C.-NON-METALLIC CONDUIT
- ⊙ VIDEO DETECTOR

NOTE: INSTALL LOUVERS (R, Y, G) ON SIGNAL FACE #8 AND (R, Y, G) ON SIGNAL FACES #9, 10, 16 & 17 SUCH THAT THE INDICATIONS ARE NOT VISIBLE FROM THE ADJACENT SIGNAL.

STA. 17+2.47 @ HWY. 1 (STADIUM BLVD.) = STA. 10+00.00 @ STADIUM SQUARE
 ∠ 90°00'00"

EXIST. LED SIGNAL FACES

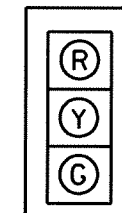
(RETAIN)



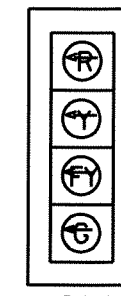
#15-20

LED SIGNAL FACES

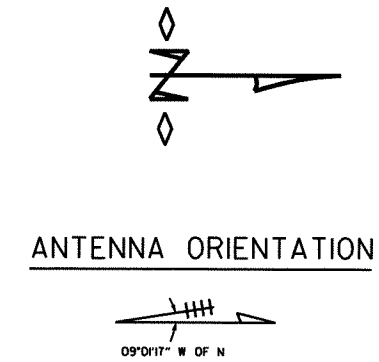
12" LENSES



#1,2,4,5,6,7,9,10,11,12,13



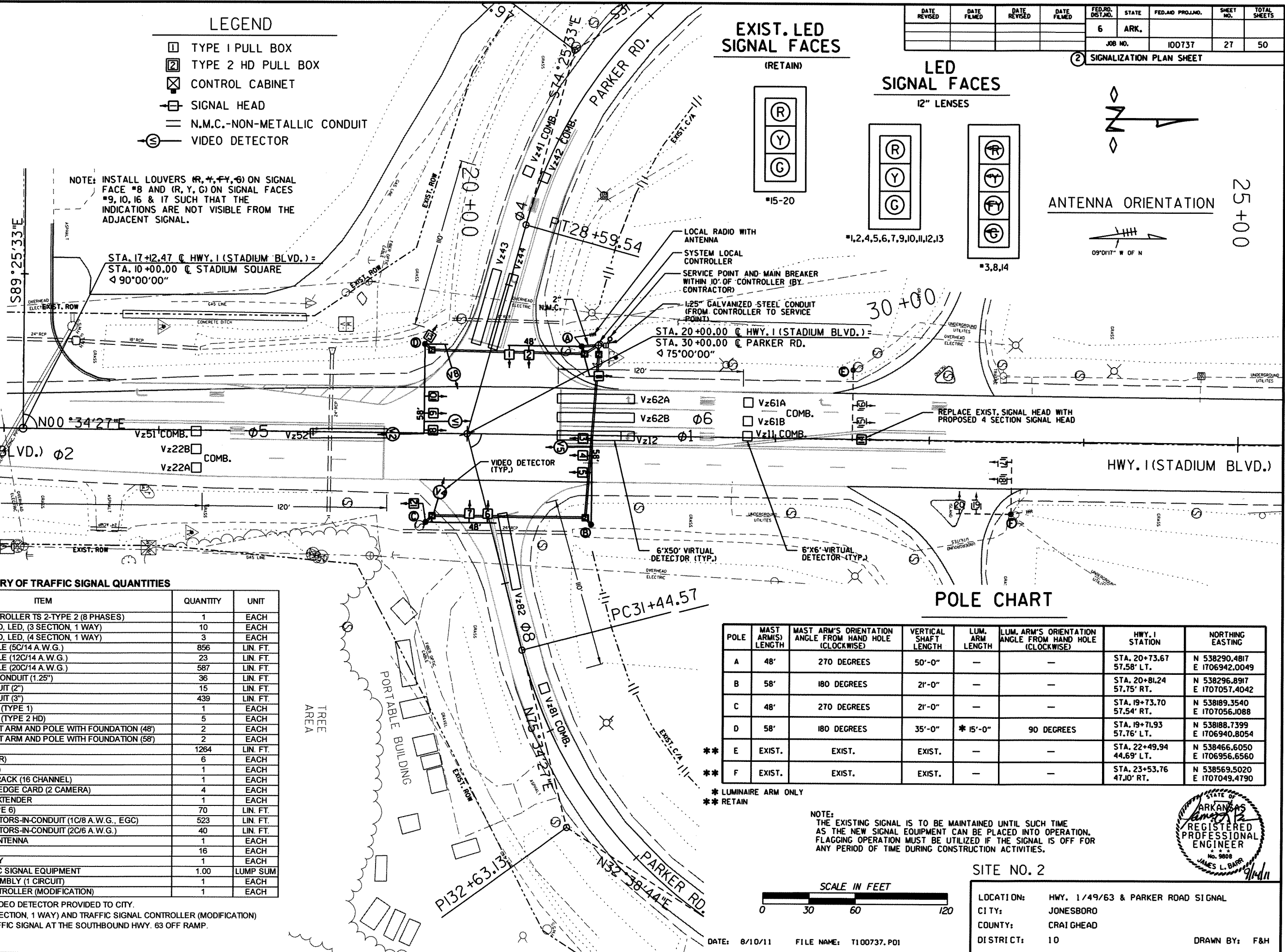
#3,8,14



25+00

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | 27 | 50 |

② SIGNALIZATION PLAN SHEET



SUMMARY OF TRAFFIC SIGNAL QUANTITIES

| ITEM NO. | ITEM | QUANTITY | UNIT |
|----------|--|----------|----------|
| SP & 701 | SYSTEM LOCAL CONTROLLER TS 2-TYPE 2 (8 PHASES) | 1 | EACH |
| SP & 706 | TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY) | 10 | EACH |
| SP & 706 | TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY) | 3 | EACH |
| 708 | TRAFFIC SIGNAL CABLE (5C/14 A.W.G.) | 856 | LIN. FT. |
| 708 | TRAFFIC SIGNAL CABLE (12C/14 A.W.G.) | 23 | LIN. FT. |
| 708 | TRAFFIC SIGNAL CABLE (20C/14 A.W.G.) | 587 | LIN. FT. |
| 709 | GALVANIZED STEEL CONDUIT (1.25") | 36 | LIN. FT. |
| 710 | NON-METALLIC CONDUIT (2") | 15 | LIN. FT. |
| 710 | NON-METALLIC CONDUIT (3") | 439 | LIN. FT. |
| SS & 711 | CONCRETE PULL BOX (TYPE 1) | 1 | EACH |
| SS & 711 | CONCRETE PULL BOX (TYPE 2 HD) | 5 | EACH |
| SS & 714 | TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (48') | 2 | EACH |
| SS & 714 | TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (58') | 2 | EACH |
| 733 | VIDEO CABLE | 1264 | LIN. FT. |
| SP & 733 | VIDEO DETECTOR (CLR) | 6 | EACH |
| 733 | VIDEO MONITOR (CLR) | 1 | EACH |
| SP & 733 | VEHICLE DETECTOR RACK (16 CHANNEL) | 1 | EACH |
| SP & 733 | VIDEO PROCESSOR, EDGE CARD (2 CAMERA) | 4 | EACH |
| SP & 733 | VIDEO EDGE CARD EXTENDER | 1 | EACH |
| SP | ANTENNA CABLE (TYPE 6) | 70 | LIN. FT. |
| SP | ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC) | 523 | LIN. FT. |
| SP | ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.) | 40 | LIN. FT. |
| SP | LOCAL RADIO WITH ANTENNA | 1 | EACH |
| SP | LOUVERS | 16 | EACH |
| SP | LUMINAIRE ASSEMBLY | 1 | EACH |
| SP | REMOVAL OF TRAFFIC SIGNAL EQUIPMENT | 1.00 | LUMP SUM |
| SP | SERVICE POINT ASSEMBLY (1 CIRCUIT) | 1 | EACH |
| SP | TRAFFIC SIGNAL CONTROLLER (MODIFICATION) | 1 | EACH |

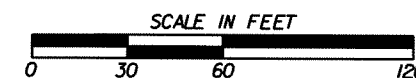
** ONE SPARE VIDEO PROCESSOR & VIDEO DETECTOR PROVIDED TO CITY.
 ** ONE TRAFFIC SIGNAL HEAD, LED, (4SECTION, 1 WAY) AND TRAFFIC SIGNAL CONTROLLER (MODIFICATION) TO BE USED WITH THE EXISTING TRAFFIC SIGNAL AT THE SOUTHBOUND HWY. 63 OFF RAMP.

POLE CHART

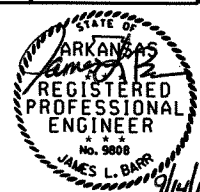
| POLE | MAST ARM(S) LENGTH | MAST ARM'S ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE) | VERTICAL SHAFT LENGTH | LUM. ARM LENGTH | LUM. ARM'S ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE) | HWY. 1 STATION | NORTHING EASTING |
|------|--------------------|---|-----------------------|-----------------|---|-----------------------------|---------------------------------|
| A | 48' | 270 DEGREES | 50'-0" | — | — | STA. 20+73.67 57.58' LT. | N 538290.4817 E 1706942.0049 |
| B | 58' | 180 DEGREES | 21'-0" | — | — | STA. 20+81.24 57.75' RT. | N 538296.8917 E 1707057.4042 |
| C | 48' | 270 DEGREES | 21'-0" | — | — | STA. 19+73.70 57.54' RT. | N 538189.3540 E 1707056.1088 |
| D | 58' | 180 DEGREES | 35'-0" | * 15'-0" | 90 DEGREES | STA. 19+71.93 57.76' LT. | N 538188.7399 E 1706940.8054 |
| E | EXIST. | EXIST. | EXIST. | — | — | STA. 22+49.94 44.69' LT. | N 538466.6050 E 1706956.6560 |
| F | EXIST. | EXIST. | EXIST. | — | — | STA. 23+53.76 47.10' RT. | N 538569.5020 E 1707049.4790 |

* LUMINAIRE ARM ONLY
 ** RETAIN

NOTE: THE EXISTING SIGNAL IS TO BE MAINTAINED UNTIL SUCH TIME AS THE NEW SIGNAL EQUIPMENT CAN BE PLACED INTO OPERATION. FLAGGING OPERATION MUST BE UTILIZED IF THE SIGNAL IS OFF FOR ANY PERIOD OF TIME DURING CONSTRUCTION ACTIVITIES.



DATE: 8/10/11 FILE NAME: T100737.P01



SITE NO. 2

LOCATION: HWY. 1/49/63 & PARKER ROAD SIGNAL
 CITY: JONESBORO
 COUNTY: CRAIGHEAD
 DISTRICT: 10

DRAWN BY: F&H

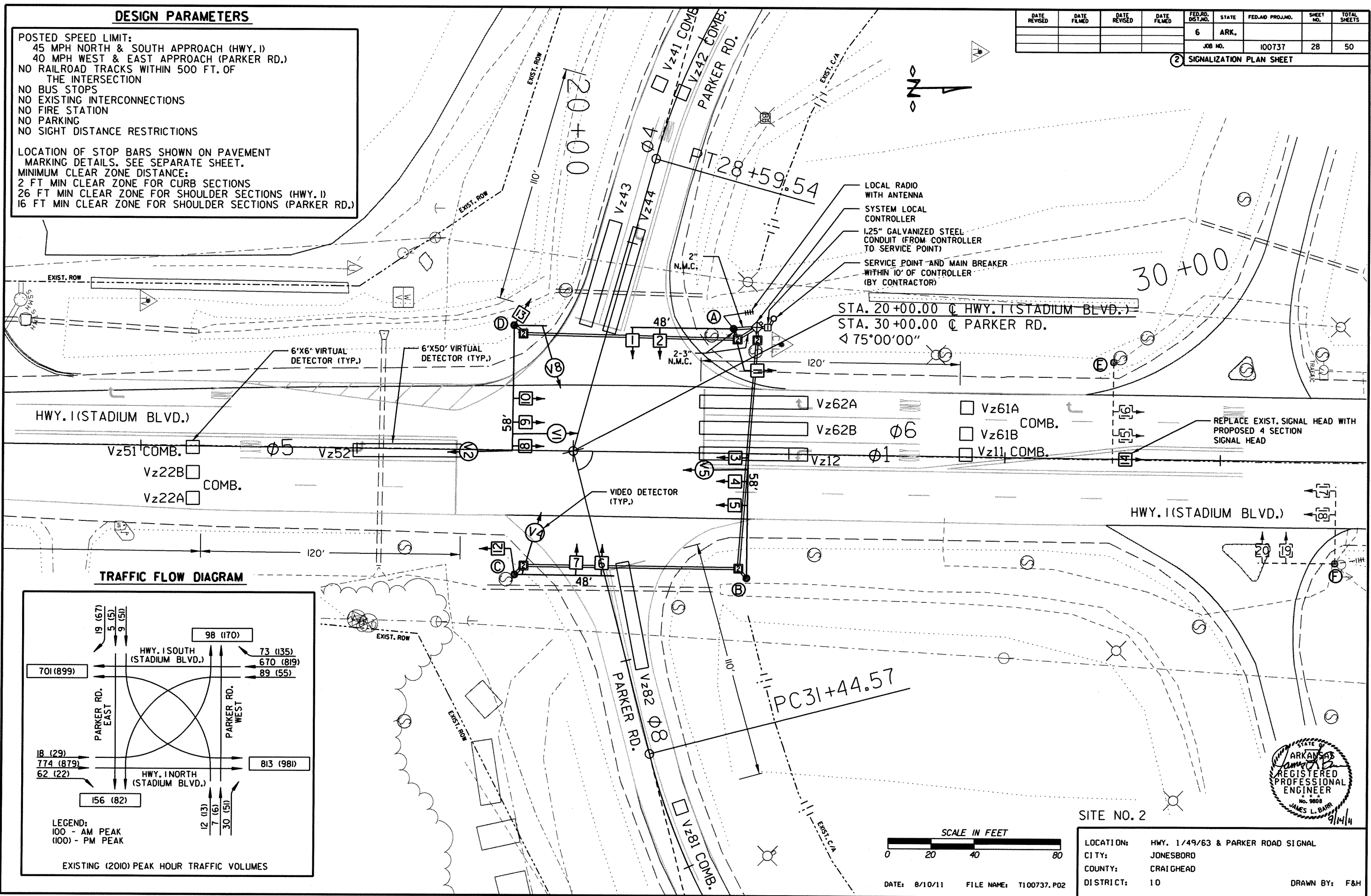
DESIGN PARAMETERS

POSTED SPEED LIMIT:
 45 MPH NORTH & SOUTH APPROACH (HWY. 1)
 40 MPH WEST & EAST APPROACH (PARKER RD.)
 NO RAILROAD TRACKS WITHIN 500 FT. OF THE INTERSECTION
 NO BUS STOPS
 NO EXISTING INTERCONNECTIONS
 NO FIRE STATION
 NO PARKING
 NO SIGHT DISTANCE RESTRICTIONS

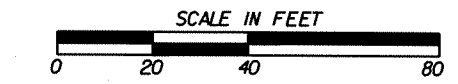
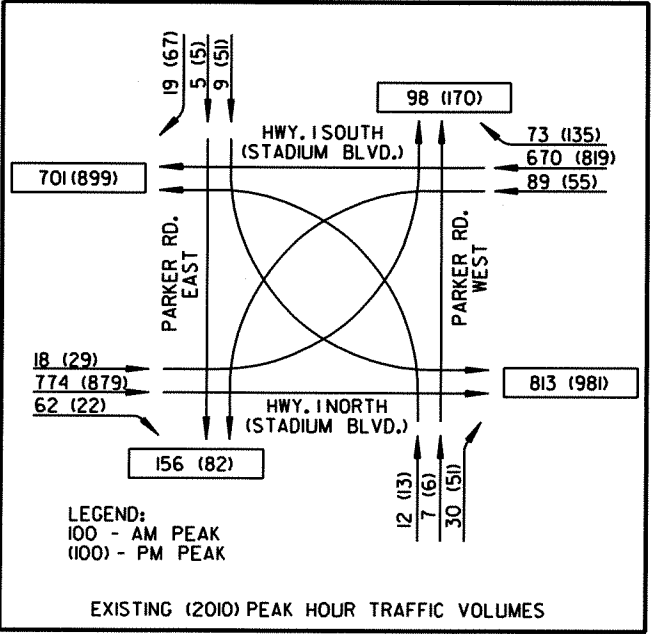
LOCATION OF STOP BARS SHOWN ON PAVEMENT MARKING DETAILS. SEE SEPARATE SHEET.
 MINIMUM CLEAR ZONE DISTANCE:
 2 FT MIN CLEAR ZONE FOR CURB SECTIONS
 26 FT MIN CLEAR ZONE FOR SHOULDER SECTIONS (HWY. 1)
 16 FT MIN CLEAR ZONE FOR SHOULDER SECTIONS (PARKER RD.)

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | I00737 | | 28 | 50 |

2 SIGNALIZATION PLAN SHEET



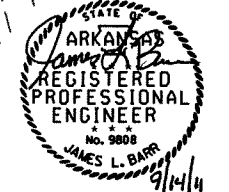
TRAFFIC FLOW DIAGRAM



DATE: 8/10/11 FILE NAME: T100737.P02

SITE NO. 2

LOCATION: HWY. 1/49/63 & PARKER ROAD SIGNAL
 CITY: JONESBORO
 COUNTY: CRAIGHEAD
 DISTRICT: 10
 DRAWN BY: F&H



| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. NO. DIST. NO. | STATE | FED. AD PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|-------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | I00737 | | 29 | 50 |

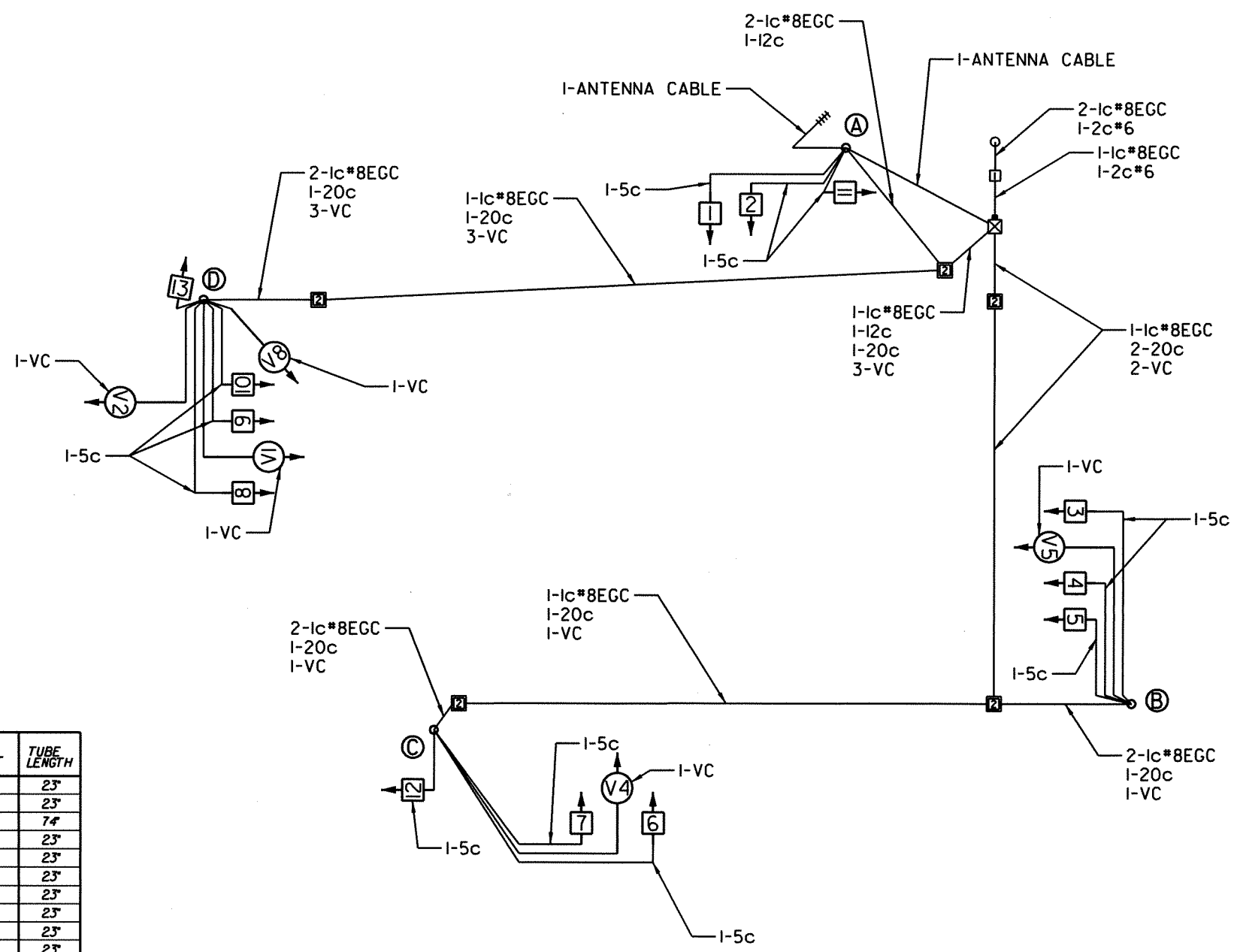
2 SIGNALIZATION PLAN SHEET

INTERVAL CHART

| SIGNAL FACES | INTERVALS | | | | | | | | | | FLASH SEQ. |
|--------------|-----------|------|-----|------|-----|------|-----|------|-----|------|------------|
| | 1+5 | CLR. | 1+6 | CLR. | 2+5 | CLR. | 2+6 | CLR. | 4+8 | CLR. | |
| 1 | R | R | R | R | R | R | R | R | G | Y | R |
| 2 | R | R | R | R | R | R | R | R | G | Y | R |
| 3 | -G | * | -FY | *** | -G | * | -FY | *** | -R | -R | -R |
| 4 | R | R | R | R | G | ** | G | ** | R | R | R |
| 5 | R | R | R | R | G | ** | G | ** | R | R | R |
| 6 | R | R | R | R | R | R | R | R | G | Y | R |
| 7 | R | R | R | R | R | R | R | R | G | Y | R |
| 8 | -G | * | -G | * | -FY | *** | -FY | *** | -R | -R | -R |
| 9 | R | R | G | ** | R | R | G | ** | R | R | R |
| 10 | R | R | G | ** | R | R | G | ** | R | R | R |
| 11 | R | R | G | ** | R | R | G | ** | R | R | R |
| 12 | R | R | R | R | G | ** | G | ** | R | R | R |
| 13 | R | R | R | R | R | R | R | R | G | Y | R |

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
 ** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
 *** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

WIRING DIAGRAM



- NOTES:
- A SEPARATE 5c/14 AWG SHALL BE PROVIDED FROM EACH 3 SECTION HEAD TO THE BASE OF POLE.
 - ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA ON CABINET.
 - THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

DETECTOR CHART

| DETECTOR ID. NUMBER | DIRECTION & LOCATION | TYPE | DET. NUM. | HARDWARE INPUTS | | | PROGRAM ASSIGNMENTS | | | COMMENT | TUBE LENGTH |
|---------------------|----------------------|-------|-----------|-----------------|----------------|----------------|---------------------|-----------|-----------------|---------|-------------|
| | | | | CAB. TER. NUM. | AMP. CHN. NUM. | CON. INP. NUM. | LOCAL | | MSTR. SYS. DET. | | |
| | | | | | | | PHS. | SYS. DET. | | | |
| Vz11 | SB LT ADV | COMB. | - | 1 | DI | 1 | 1 | - | VIDEO 1 | 23" | |
| Vz12 | SB LT PRES | LOCAL | - | 2 | V1 | 1 | - | - | VIDEO 1 | 23" | |
| Vz21A&B | SB ADV | LOCAL | - | 8 | V2 | 2 | - | - | VIDEO 2 | 74" | |
| Vz22A&B | SB NEAR | COMB. | - | 7 | D2 | 2 | 2 | - | VIDEO 5 | 23" | |
| Vz41 | WB ADV | COMB. | - | 9 | D4 | 4 | 4 | - | VIDEO 4 | 23" | |
| Vz42 | WB LT ADV | COMB. | - | 10 | D7 | 4 | 7 | - | VIDEO 4 | 23" | |
| Vz43 | WB PRES | LOCAL | - | 11 | V4 | 4 | - | - | VIDEO 4 | 23" | |
| Vz44 | WB LT PRES | LOCAL | - | 12 | V7 | 4 | - | - | VIDEO 4 | 23" | |
| Vz51 | NB LT ADV | COMB. | - | 5 | D5 | 5 | 5 | - | VIDEO 5 | 23" | |
| Vz52 | NB LT PRES | LOCAL | - | 6 | V5 | 5 | - | - | VIDEO 5 | 23" | |
| Vz61A&B | NB ADV | COMB. | - | 3 | D6 | 6 | 6 | - | VIDEO 1 | 23" | |
| Vz62A&B | NB PRES | LOCAL | - | 4 | V6 | 6 | - | - | VIDEO 1 | 23" | |
| Vz81 | EB ADV | COMB. | - | 13 | D8 | 8 | 8 | - | VIDEO 8 | 23" | |
| Vz82 | EB PRES | LOCAL | - | 14 | V8 | 8 | - | - | VIDEO 8 | 23" | |

CONTROLLER INPUT ABBREVIATIONS:
 V - VEHICLE INPUT
 D - SYSTEM OR AUXILIARY INPUT
 P - PEDESTRIAN INPUT

SPARE: 15J6



SITE NO. 2

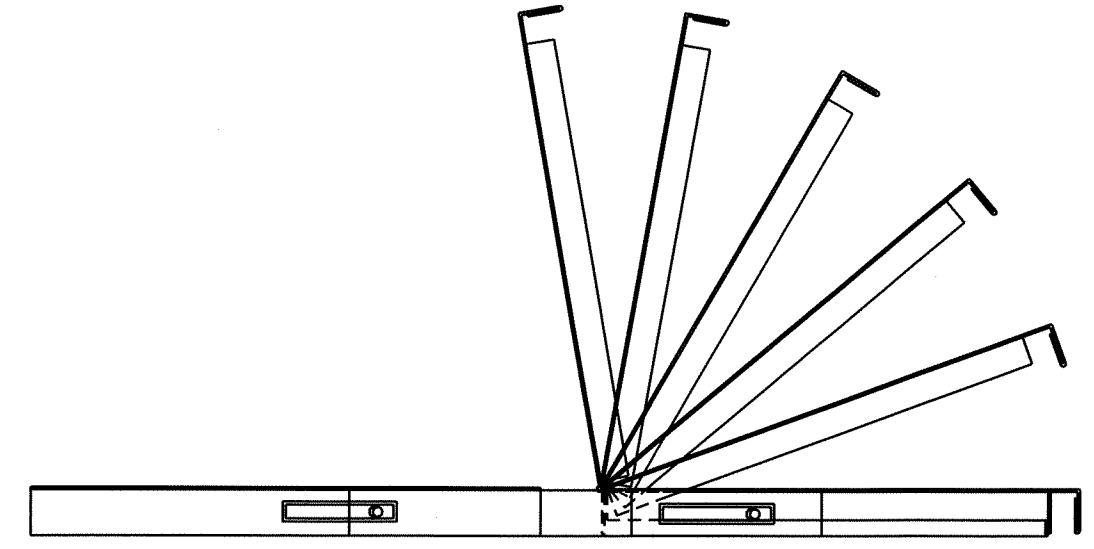
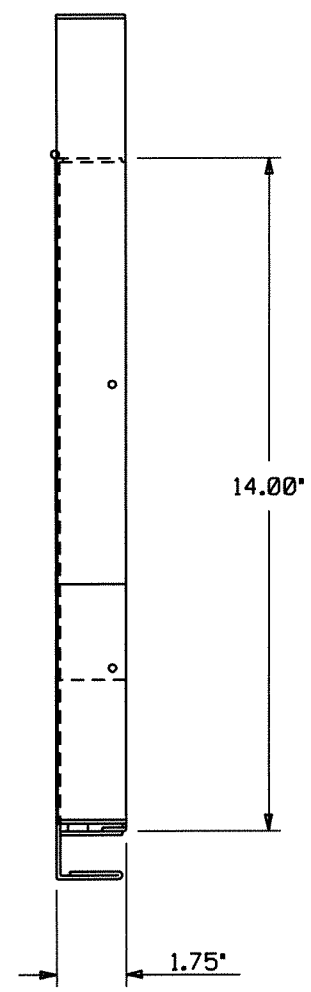
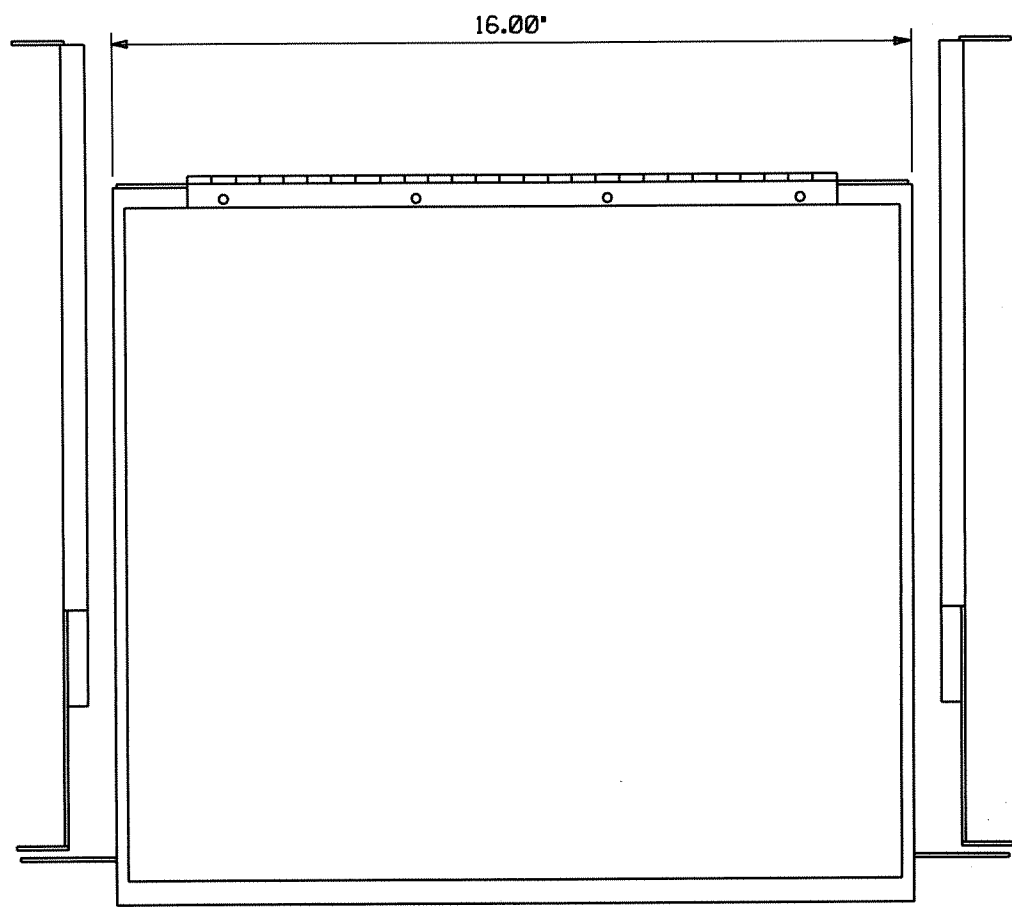
LOCATION: HWY. 1/49/63 & PARKER ROAD SIGNAL
 CITY: JONESBORO
 COUNTY: CRAIGHEAD
 DISTRICT: 10
 DRAWN BY: F&H

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 30 | 50 |

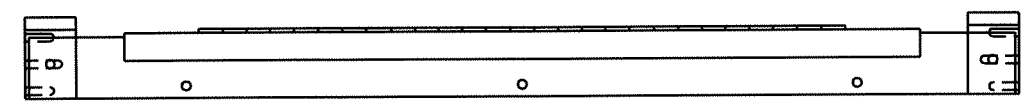
② SIGNALIZATION DETAILS



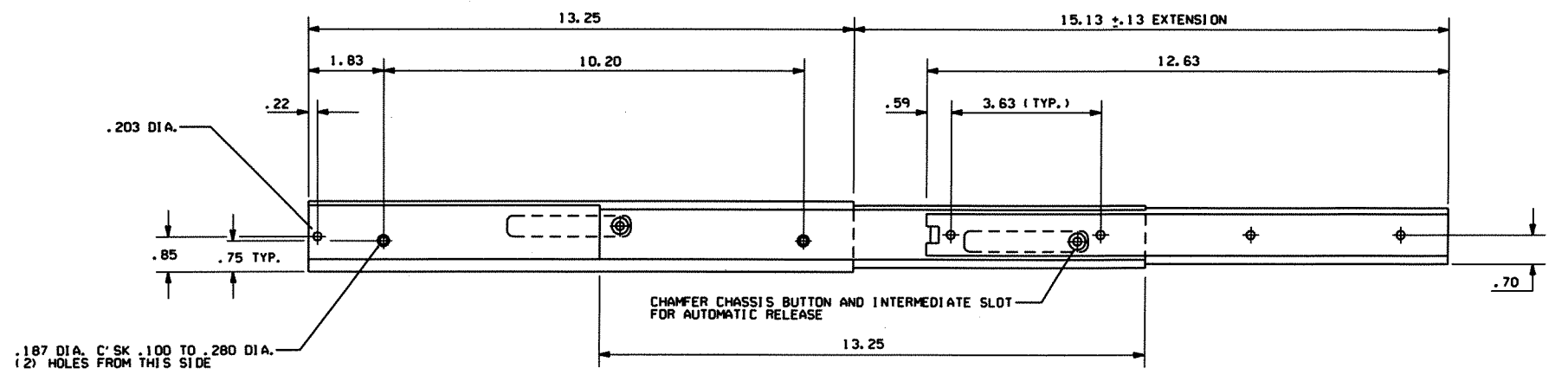
DRAWER PLAN VIEW



- NOTES:
 1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.
 2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.
 3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



FRONT VIEW



RIGHT SIDE ASSEMBLY

A.H.T.D. STANDARD DETAILS

ARKANSAS STATE HIGHWAY COMMISSION

SIGNALIZATION DETAIL
(Controller Cabinet Utility Drawer)

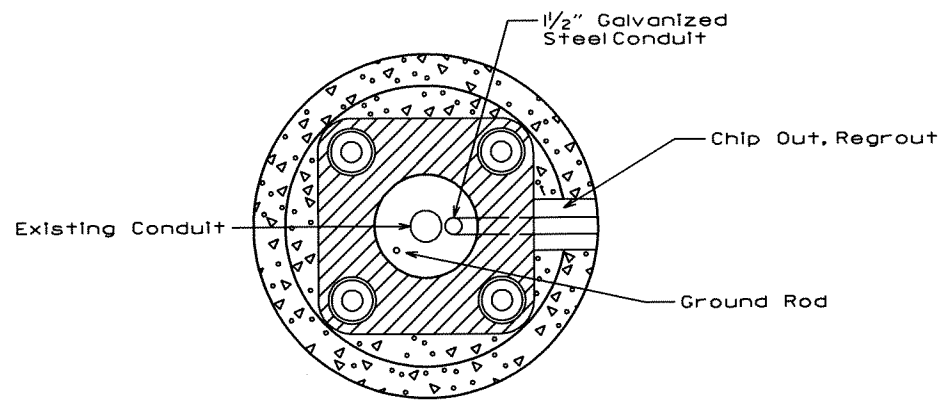
| DATE | REVISION | DATE FILM |
|---------|----------|-----------|
| 6-15-05 | ISSUED | |
| | | |

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | | | | JOB NO. | 100737 |
| | | | | | | | | 31 |
| | | | | | | | | 50 |

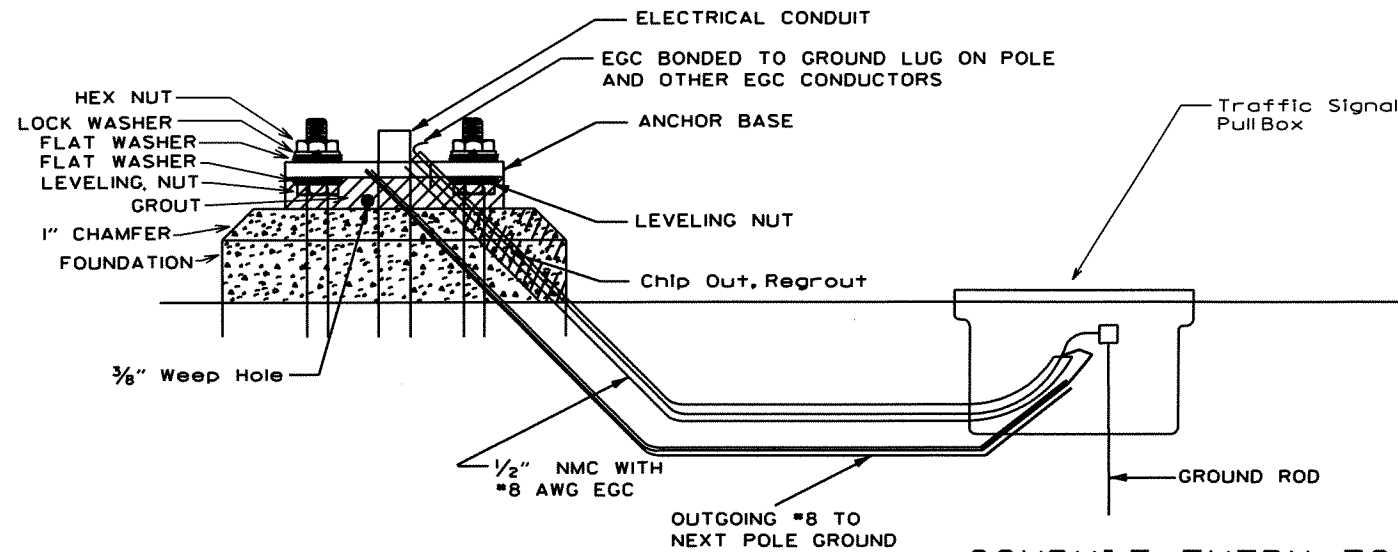
2 SIGNALIZATION DETAILS



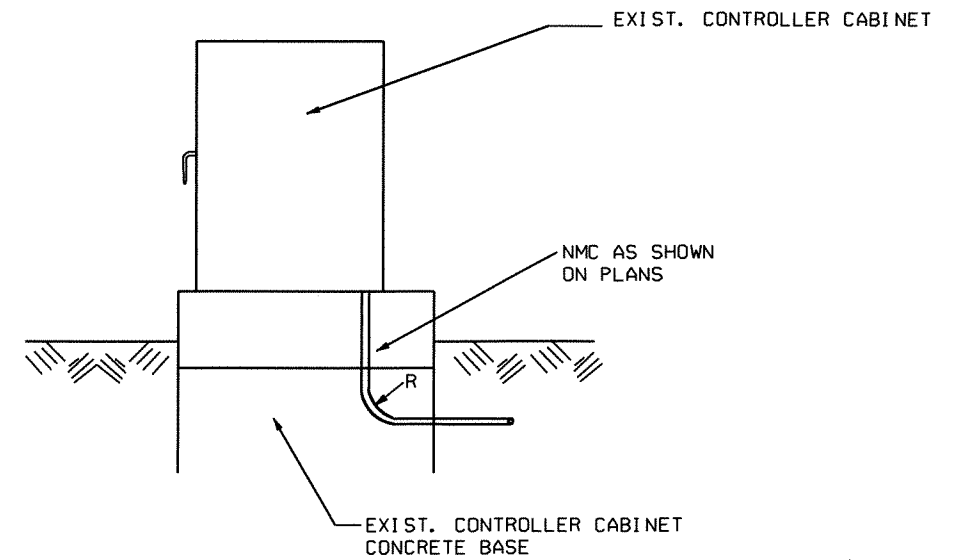
CONDUIT ENTRY TO EXISTING POLE BASE



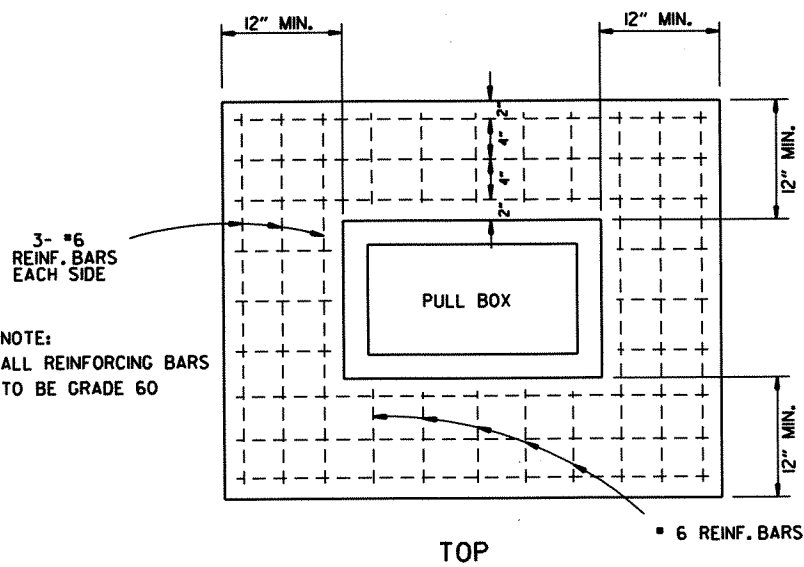
ANCHOR BASE



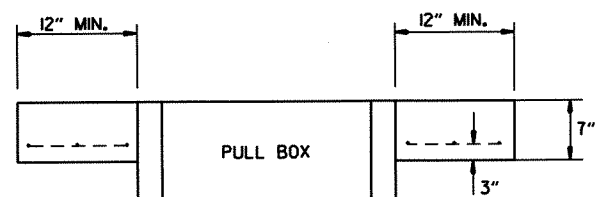
CONDUIT ENTRY TO EXISTING CONTROLLER CABINET



NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

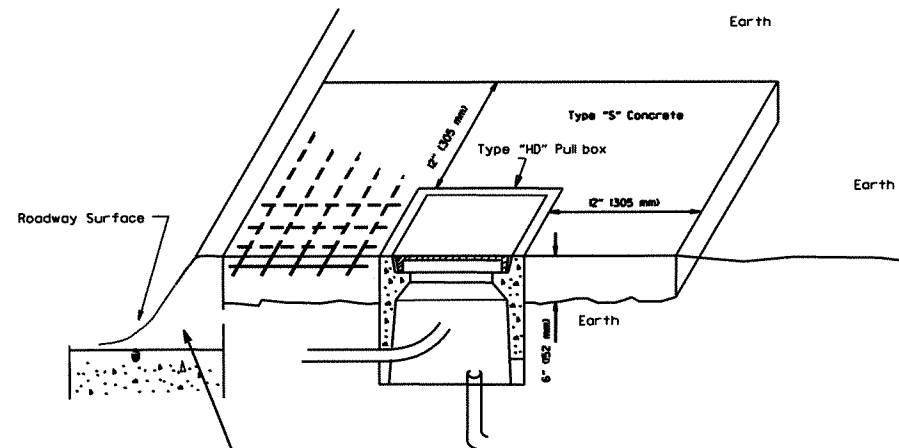


NOTE: ALL REINFORCING BARS TO BE GRADE 60



ELEVATION

Type "HD" Concrete Pull Box Detail



2" CLEAR FROM TOP (TOLERANCE +/- 0.5")

Note: All Type 1 and Type 2 HD pullboxes are installed with an apron of concrete 12" (305 mm) wide and 6" (152 mm) in depth. All payment shall be included in the price of the Type HD pull box. Pull box shall be installed flush to surrounding grade unless otherwise instructed by the engineer. The concrete shall be Class "S." Three #6 reinforcing bars in the apron on all sides of the pullbox is required in concrete.

| DATE | REVISION | DATE FILM |
|----------|---------------------------------|-----------|
| 5-21-09 | REVISED GROUNDING | |
| 7-31-08 | ADDED & REVISED CONDUIT ENTRY | |
| 6-23-04 | REVISED CLEARANCE AT CURB ENTRY | |
| 1-4-02 | ADDED REINFORCING TO BOX APRON | |
| 7-2-01 | REVISED | |
| 12-27-99 | REVISED NOTES | |
| 11-18-98 | ISSUED | |

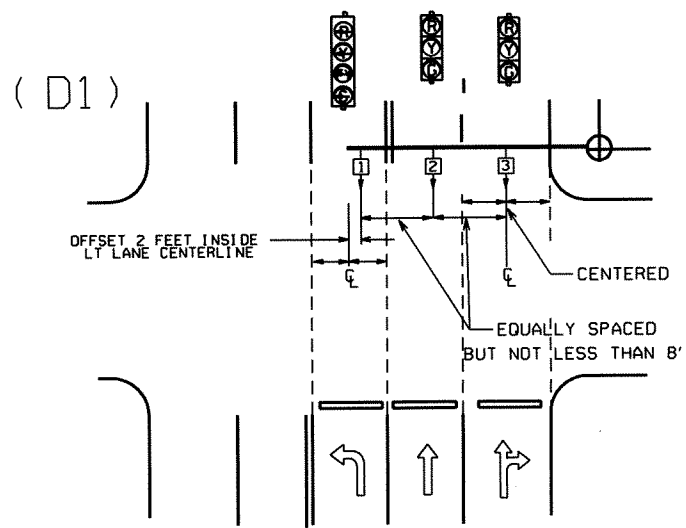
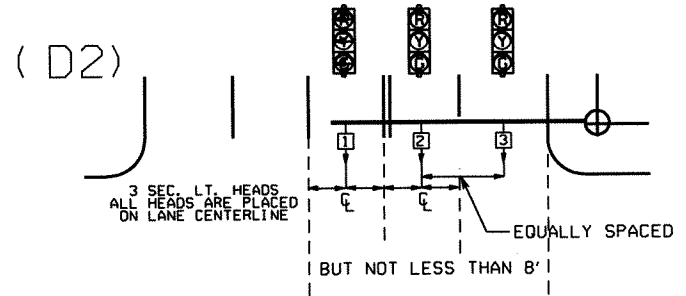
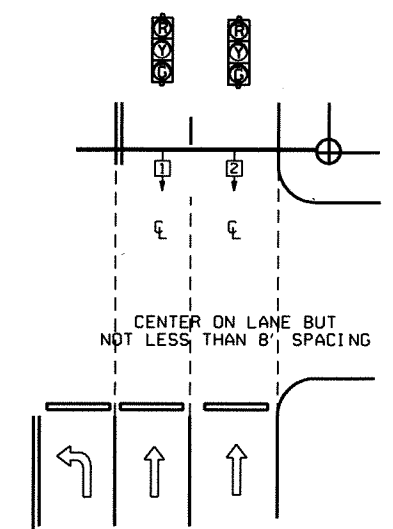
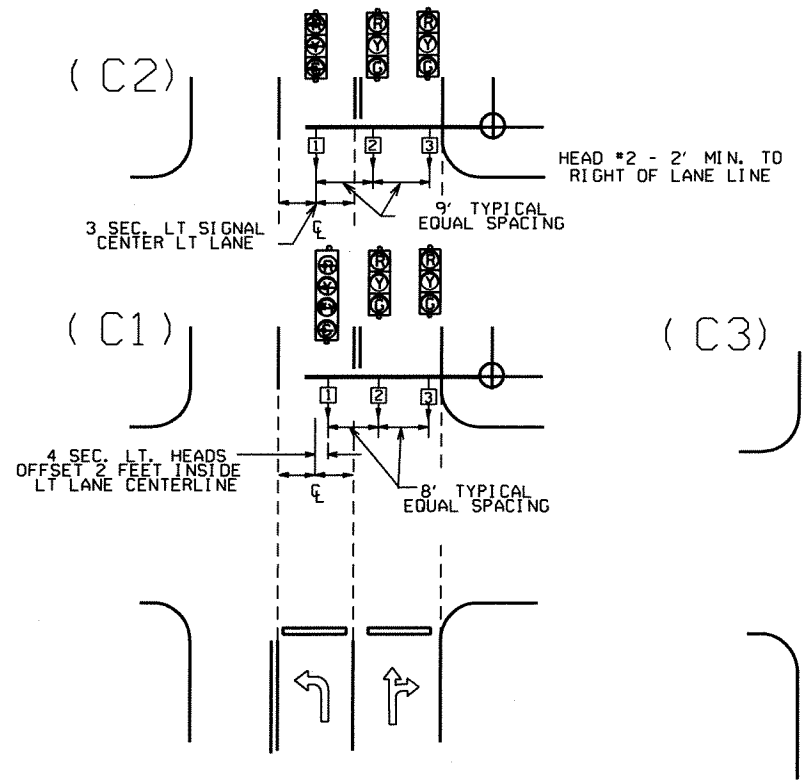
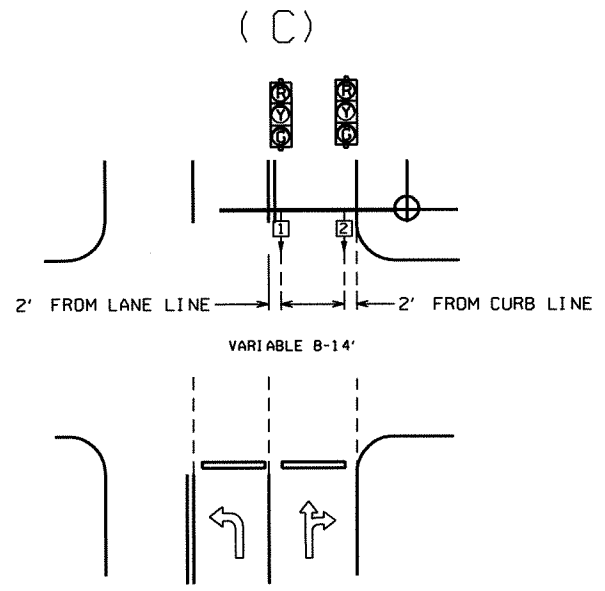
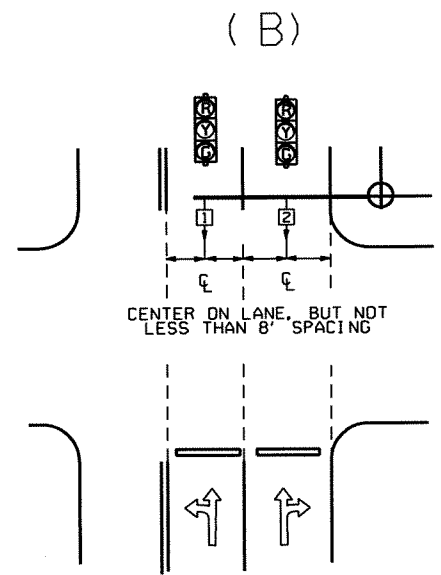
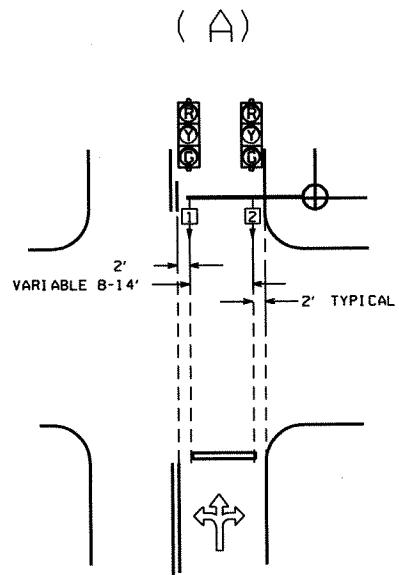
A.H.T.D. STANDARD DETAILS

ARKANSAS STATE HIGHWAY COMMISSION

SIGNALIZATION DETAIL
(Heavy Duty Pull Box)

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | 32 | 50 | |

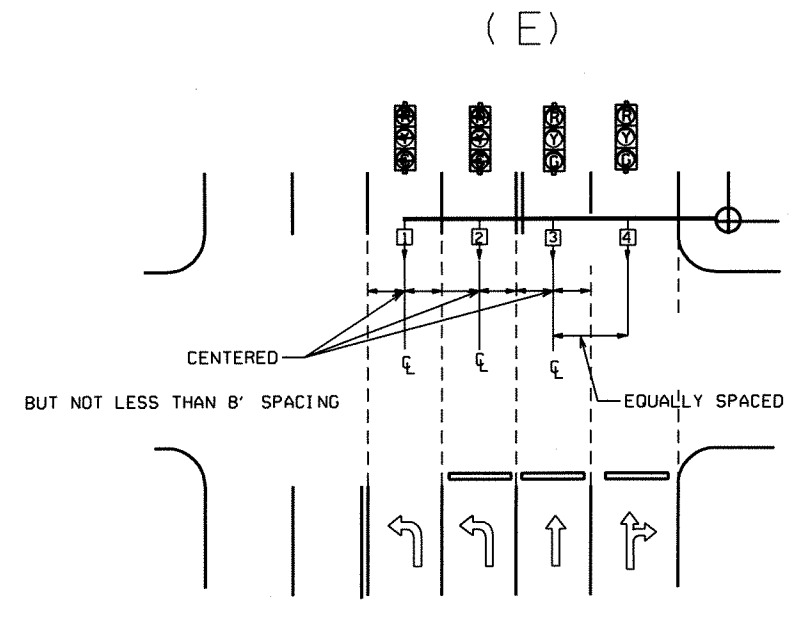
2 SIGNALIZATION DETAILS



NOTE: WHERE LEFT TURN HEAD (HEAD 1 ON D1 AND D2) IS NOT CALLED FOR ON PLANS, MAST ARM LENGTH MAY STILL BE ALLOWED FOR FUTURE INSTALLATION. HEADS FOR THROUGH MOVEMENTS SHALL STILL BE ALIGNED WITH THROUGH LANES AS SHOWN ON DETAILS

GENERAL NOTES:

- FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.
- SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.
- ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.
- MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-1 OF 2009 MUTCD.



℄ = CENTER OF LANE FROM APPROACH SIDE

A.H.T.D. STANDARD DETAILS

ARKANSAS STATE HIGHWAY COMMISSION

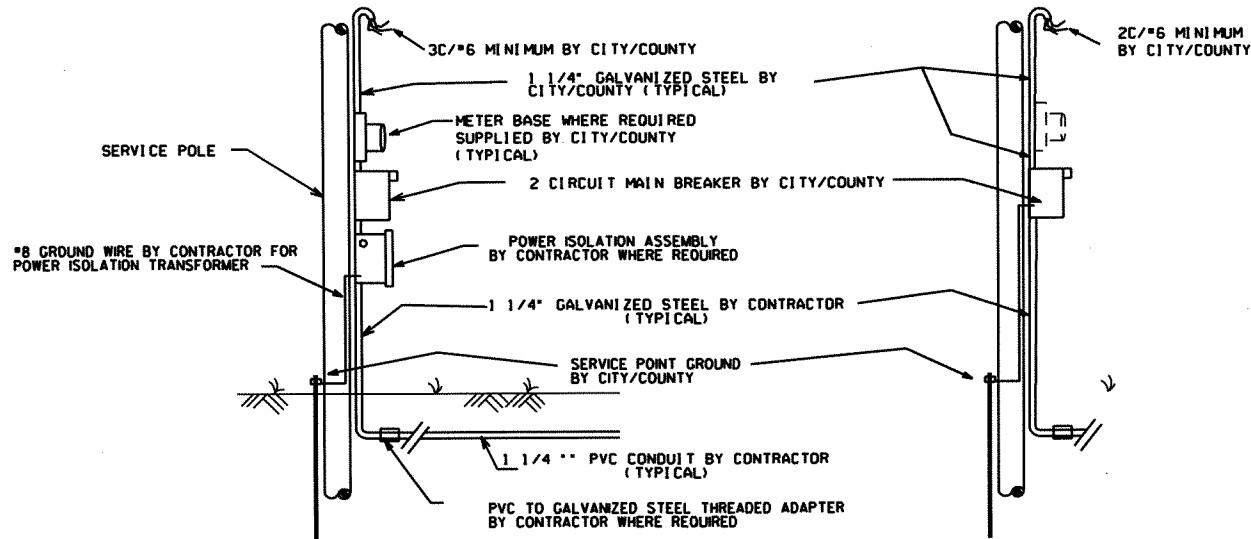
SIGNALIZATION DETAIL
(Signal Head Placement)

| DATE | REVISION | DATE FILM |
|---------|------------|-----------|
| 3-11-10 | 2009 MUTCD | |
| 12-9-99 | ISSUED | |

MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

WITH POWER ISOLATION ASSEMBLY

WITHOUT POWER ISOLATION ASSEMBLY



NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY)

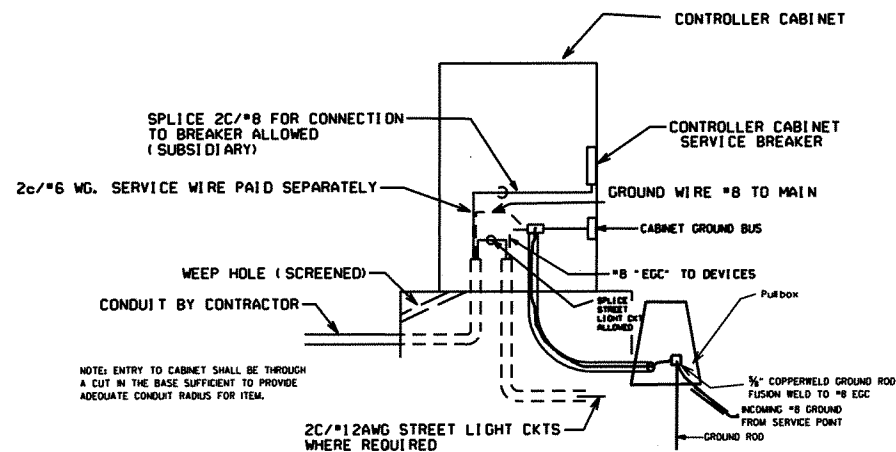
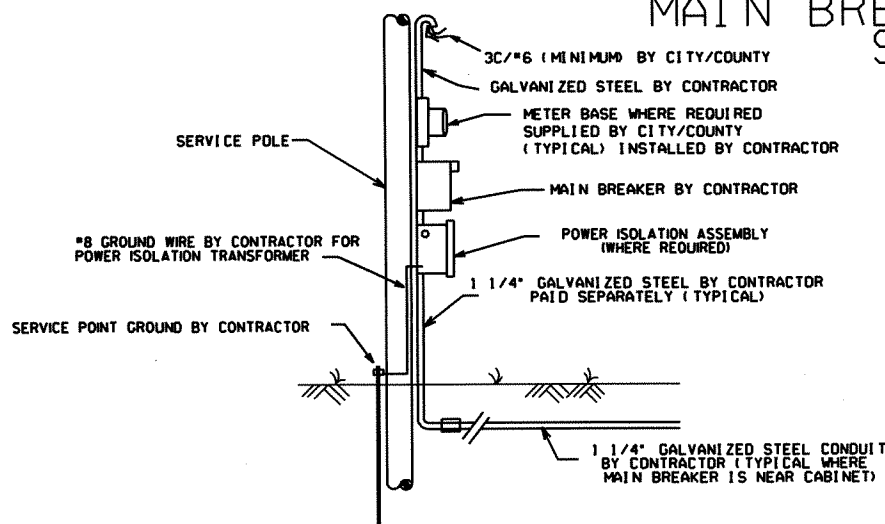
Electrical service typically falls into two categories: MAIN BREAKER NEAR CONTROLLER CABINET; and MAIN BREAKER NOT NEAR CONTROLLER CABINET. The Contractor's and the City's or County's responsibility varies accordingly as indicated on these details.

1. ALL SITUATIONS: Electrical service shall be provided by the City/County to a service pole with external raintight breaker (MAIN BREAKER) at a mutually acceptable point within the right-of-way. Service point includes galvanized steel conduit to a point 18' below ground line, two circuit main breaker, power isolation assembly where required, meter loop if required by local utility, electrical conductors and weatherhead. Where street lighting is included as part of signal installation, street lighting circuit (2c/12 awg UF rated, typical) shall be kept separate from the circuit serving traffic signal. Service wire and wiring from the controller to main breaker is provided by the Contractor as a part of this contract. Wire and wiring from main breaker, and connection to the utility is the responsibility of the City/County.

2. MAIN BREAKER NOT NEAR CONTROLLER CABINET: The Main Breaker assembly, galvanized steel conduit, weatherhead and wire above Main Breaker and connection to the utility shall be provided by City/County. Contractor shall provide as part of contract Secondary Breaker, conduit, wire and wiring to the Main Breaker.

3. MAIN BREAKER NEAR CONTROLLER CABINET: All components of the service point with the exception of the wire and wiring above the Main Breaker is furnished and installed by the Contractor. Wiring from Main Breaker including connection to the utility, is the responsibility of the City/County. If meter loop is required, meter base and hardware is provided by the City/County and installed by the contractor.

MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED



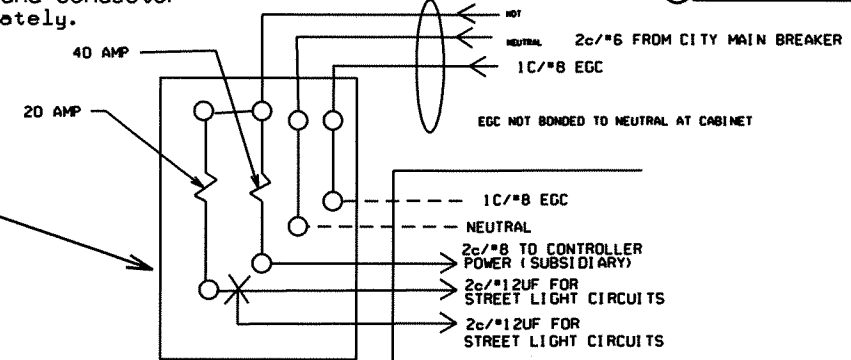
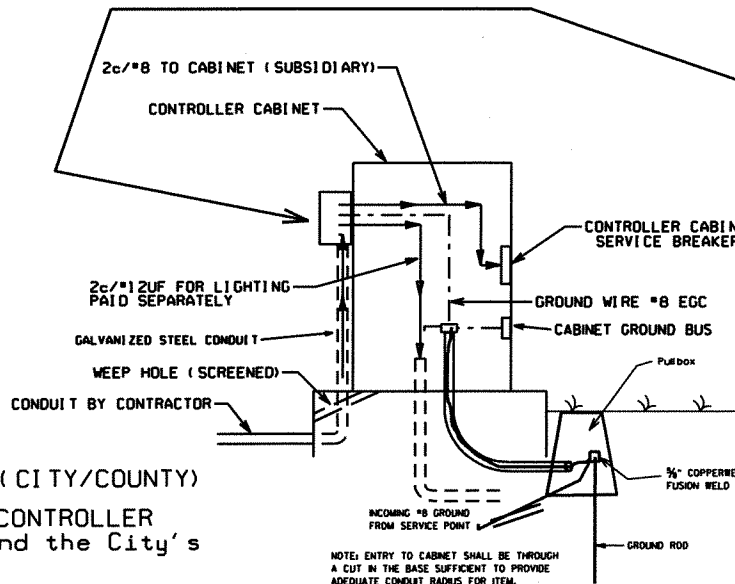
Ground Rod-A 10' x 3/8" ground rod shall be installed in the pull box for each pole and the controller. Payment for the ground rod and 1/2" NMC shall be included in Item 701. The pull box and conductor box shall be paid for separately.

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 33 | 50 |

SIGNALIZATION DETAILS



SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)

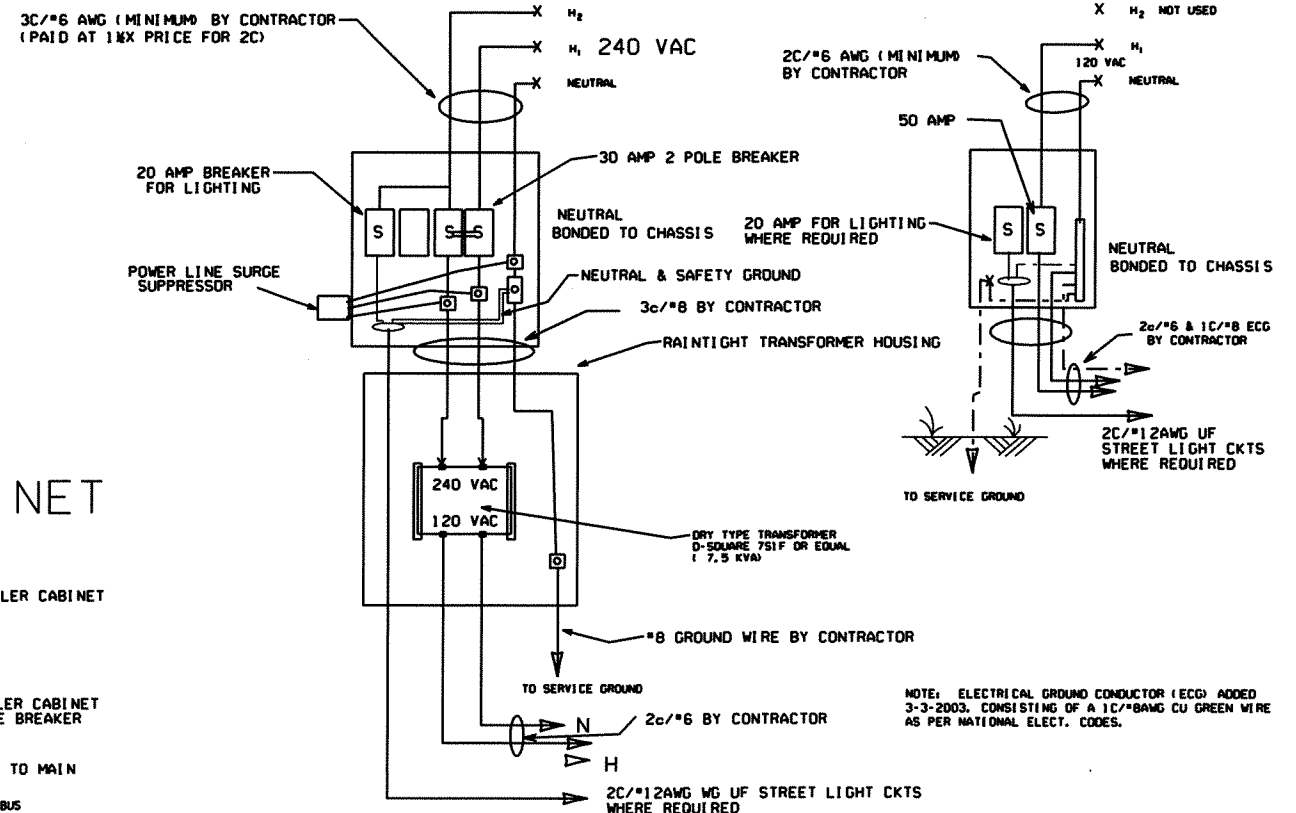


MAIN BREAKER WIRING (TYPICAL)

Service Ground is typically tied to neutral at the Main Breaker. As such, controller ground IS NOT tied to Neutral at secondary Breaker or in controller cabinet.

WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER

WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER



| DATE | REVISION | DATE FILM |
|----------|-------------------|-----------|
| 5-21-09 | REVISED GROUNDING | |
| 7-31-08 | REVISED GROUNDING | |
| 3-3-03 | ADDED EGC NOTE | |
| 9-26-01 | REVISED | |
| 12-27-99 | REVISED | |
| 7-28-99 | REVISED | |
| 2-5-99 | ISSUED | |

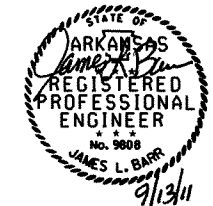
NOTE: ELECTRICAL GROUND CONDUCTOR (EGC) ADDED 3-3-2003, CONSISTING OF A 1C/8AWG CU GREEN WIRE AS PER NATIONAL ELECT. CODES.

A.H.T.D. STANDARD DETAILS
ARKANSAS STATE HIGHWAY COMMISSION
SIGNALIZATION DETAIL
(Service Point)

LOOP DETECTOR INSTALLATION AND TESTING

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AND PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | | | JOB NO. 100737 | 35 | 50 |

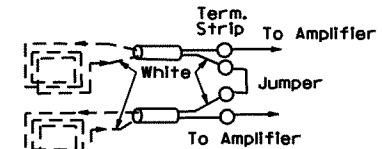
② SIGNALIZATION DETAILS



NOTES:

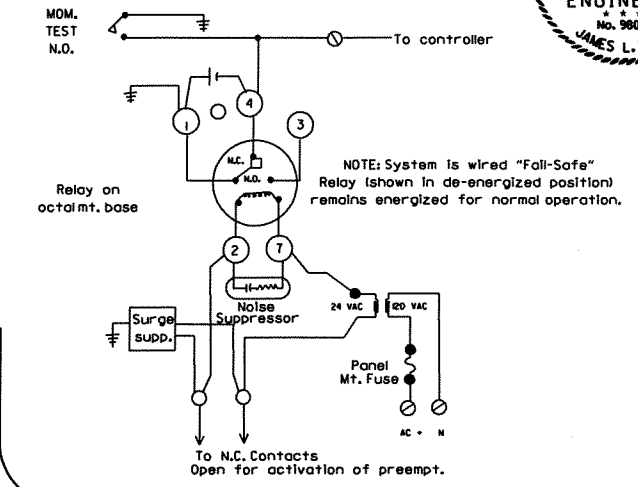
1. Loops with a perimeter greater than 40' shall have two turns. Loops with a perimeter less than or equal to 40' shall have three turns, unless otherwise noted on the plans. Quadrupole loops shall be two turns (2-4-2 configuration) unless otherwise noted.
2. Loop and feeder wire shall be continuous without splices except at the loop/feeder wire splice as shown. Splice shall be rosin soldered and waterproofed with an accepted splice kit. Drain wire shall be grounded in cabinet and insulated at loop to feeder splice.
3. The loop to feeder splice, feeder jacket and jacket of loop wire in duct shall be completely sealed and waterproofed.
4. Contractor may make connections to signal cable and loop to feeder connection at terminal strips mounted to pole inside hand hold cover as shown in detail. Terminals must be easily accessible, but protected against accidental contact. Connection of power carrying circuits must be separated from loop or logic circuits. All connections to terminal strips shall utilize spade lugs or as approved by the Engineer.
5. Each loop shall have a separate "feeder wire" unless otherwise noted. All feeder wires shall be labeled as to loop number as designated on the plans.
6. All loop wire entering pull boxes shall be enclosed in conduit. Each loop wire shall enter pull box or pole base through a separate piece of one inch (1") conduit.
7. Loop wire from loop to conduit is not twisted. Loop wire in the conduit must be twisted two to five turns per foot.
8. Warranty period for loops shall not commence until tested by the contractor and accepted by the Engineer. Contractor shall perform test and provide a record to the Engineer as listed in the Detector Loop Testing procedure.
9. Unless otherwise approved by the Engineer, backer rod shall be installed in short sections spaced not more than 18" apart and wedged into slot to hold cable in place. Cable shall be totally encapsulated in sealer.
10. "Hot Pour" sealer shall not be allowed with 705-Loop Wiring in Duct.
11. Where underground splices of signal cable are required, connections shall be soldered and completely waterproofed to the satisfaction of the Engineer. Waterproofing shall extend a minimum of two inches past the signal cable jacket and shall completely cover all individual conductors of the signal cable. Waterproofing does not apply to connections made in pole bases.
12. Contractor shall connect a separate neutral for each load switch represented on each signal pole. Only one neutrals required for pedestrian signals. A separate 5c (typical) is provided for pedestrian push buttons.
13. Traffic controller cabinet and layout shall be such that it is not necessary to shut down power or remove load switches in order to easily test or modify detector inputs to controller. Controller cabinet shall be wired such power to load switches cannot backfeed to load switch power buss during flash operation.

SERIES CONNECTED LOOPS

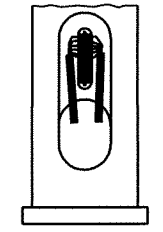


Wind loops counterclockwise; tag wire exiting slot and tie to white lead of feeder wire; when loops are tied to same vehicle detector, series connect in cabinet as shown.

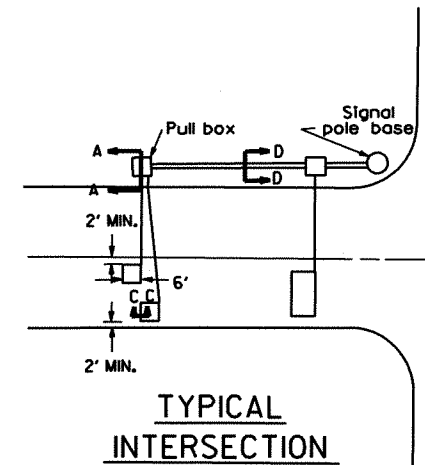
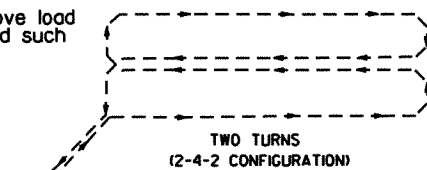
TRAFFIC SIGNAL PRE-EMPTION INTERFACE WIRING DIAGRAM



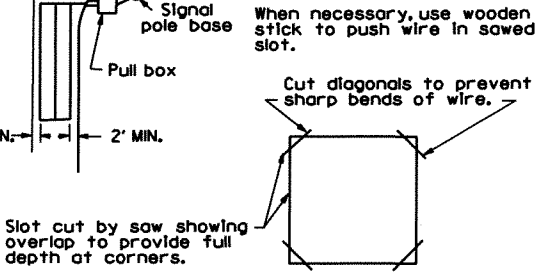
HANDHOLE TERMINAL



QUADRUPOLE LOOP



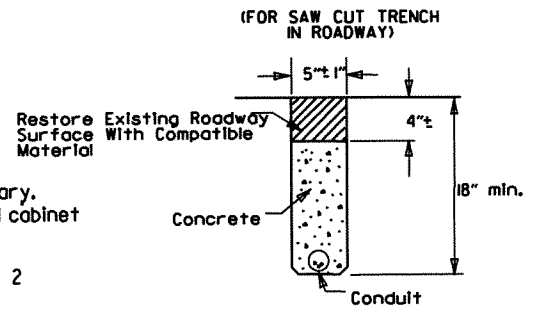
TYPICAL INTERSECTION



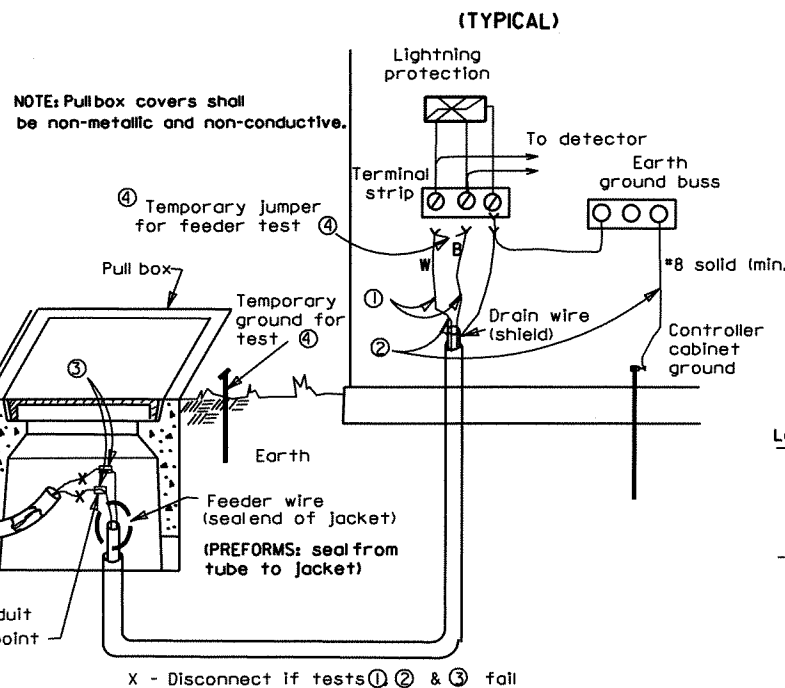
TYPICAL PROCEDURE FOR DETECTOR LOOP TESTING

- ① Disconnect and test continuity (< 10 ohms) If continuity is bad, go to test 3
 - ② Test insulation (@ 500 volt test > 10 Meg-ohm) If tests 1 & 2 are good, no further testing is necessary. Recorded results consist of tests 1 & 2 from control cabinet with feeder wire connected to loop.
 - ③ Open splice (do not break connection) repeat test 1 & 2 If test 3 is bad, go to test 4
 - ④ Break splice, install jumper in cabinet, repeat tests 1 & 2 separately for feeder and for loop
- Failures typically result from broken wire in pavement, faulty insulation of loop or feeder wire, or poorly insulated splice connection.

TRENCHING DETAIL



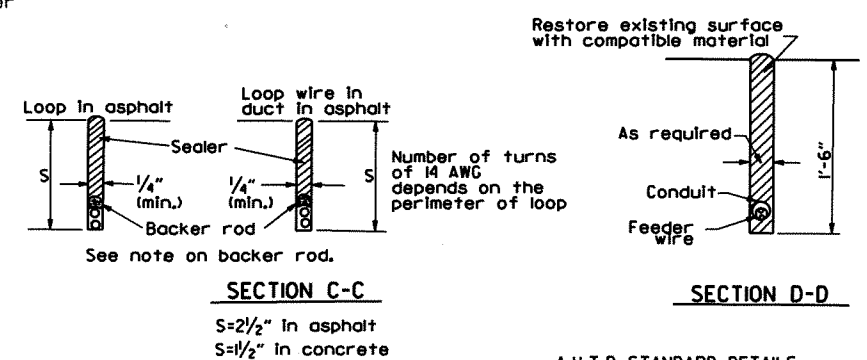
NOTE: Conduit shall be installed in curb as shown or as directed by the Engineer. End of conduit shall be water-tight.



SECTION A-A

1'-6" concrete combination curb and gutter
 PREFORMS - SAW COMPLETELY THROUGH CURB
 ALTERNATE - WHEN INSTALLING PREFORMS ON SUBSTRATE, LEAD-INS MAY BE INSTALLED IN CONDUIT UNDERNEATH THE CURB AND GUTTER.

TYPICAL SECTIONS FOR PULSE AND PRESENCE LOOP DETECTORS



SECTION C-C

S=2 1/2" in asphalt
 S=1 1/2" in concrete

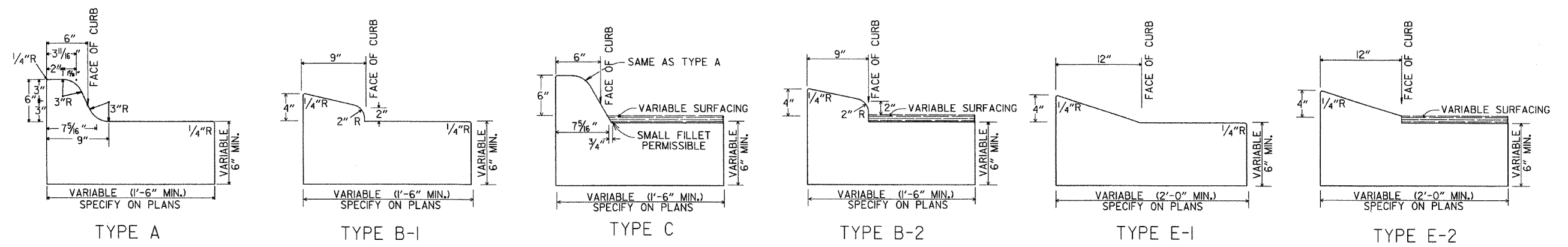
SECTION D-D

A.H.T.D. STANDARD DETAILS

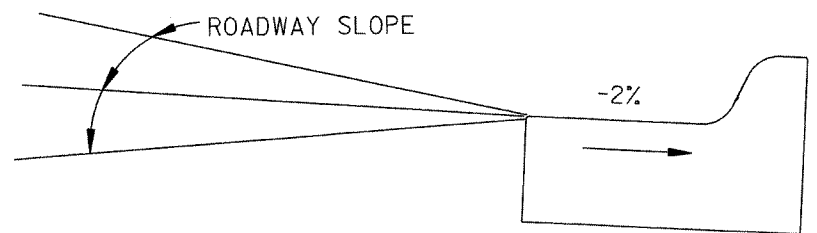
SPECIAL NOTE
 IF FEEDER WIRE JACKET IS LEFT UNSEALED and WATER IS ALLOWED TO ENTER JACKET, CONTRACTOR WILL BE REQUIRED TO REPLACE FEEDER AT NO COST TO THE DEPARTMENT.

| DATE | REVISION | DATE FILM |
|----------|---------------------------------|-----------|
| 5-17-01 | REVISED | |
| 4-11-01 | REVISED | |
| 2-4-00 | REVISED PRE-EMPTION TEST SWITCH | |
| 11-18-98 | REVISED NOTES | |
| 11-21-95 | ISSUED | |

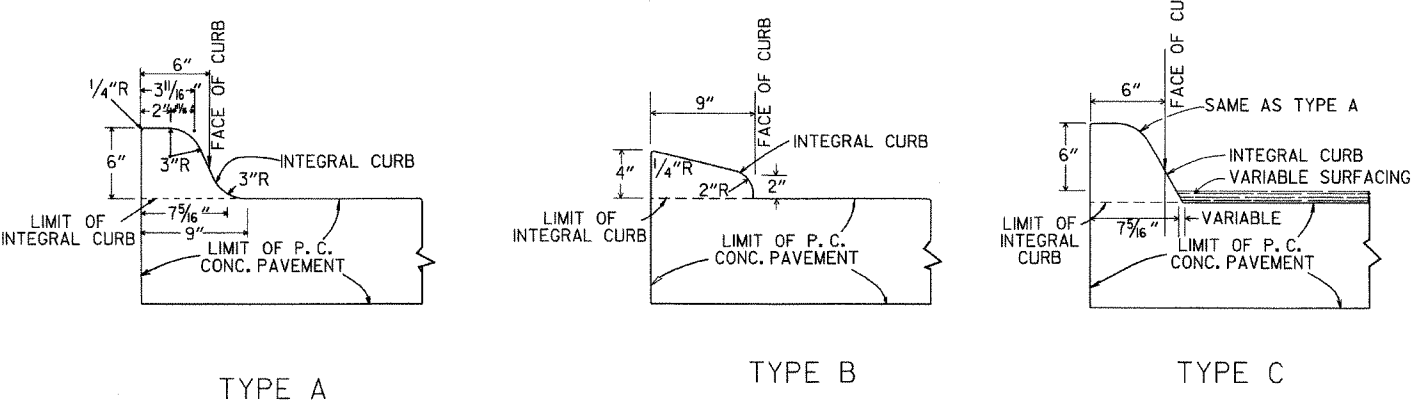
| |
|---|
| ARKANSAS STATE HIGHWAY COMMISSION |
| SIGNALIZATION DETAIL (Loop Detector Installation) |



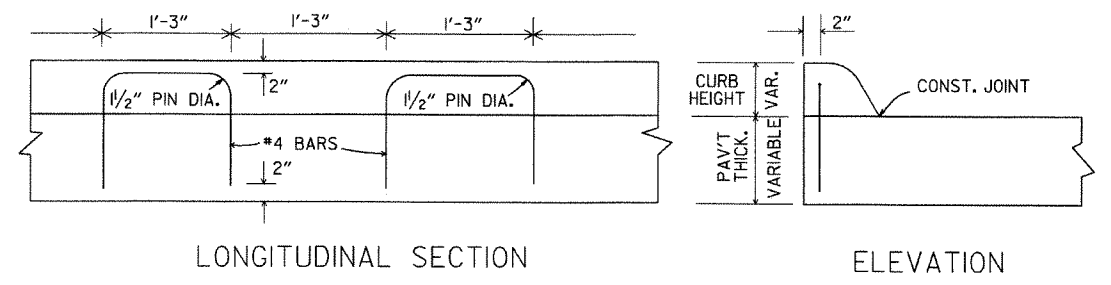
CONCRETE COMBINATION CURB AND GUTTER



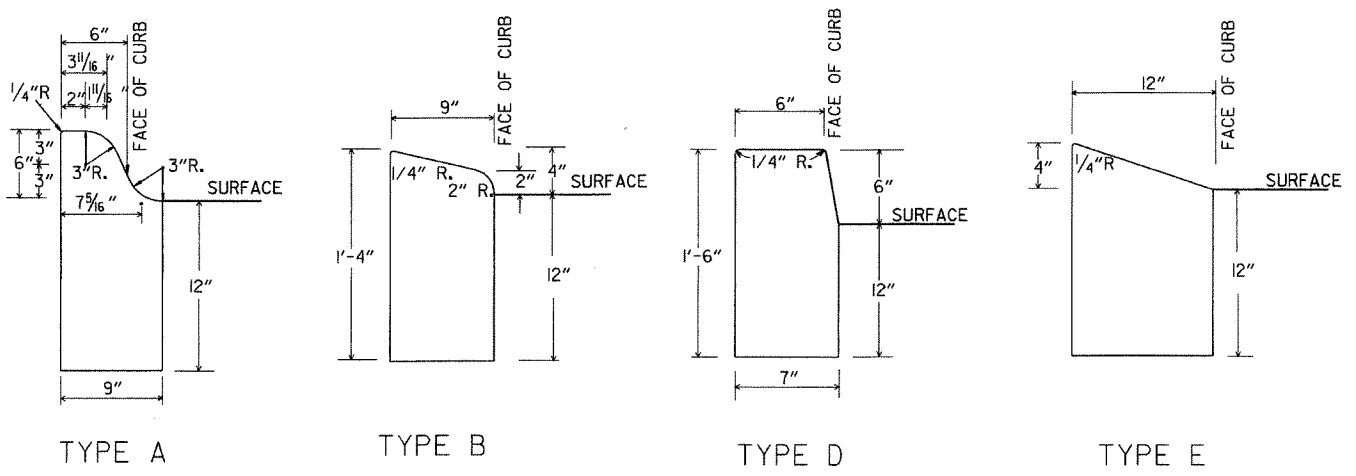
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



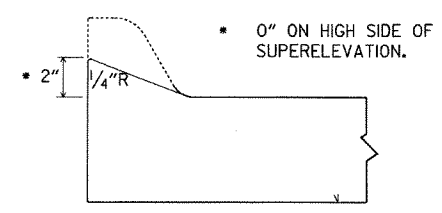
INTEGRAL CURB



ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

DETAILS OF MODIFIED CURB

| DATE | REVISION | DATE FILMED |
|----------|--|-------------|
| 11-29-07 | REVISED GUTTER SLOPE & MODIFIED CURB DETAILS | |
| 11-10-05 | ADDED DETAILS OF TYPE E CURBS | |
| 11-16-01 | REVISED CONCRETE CURB TYPE B | |
| 11-18-98 | REVISED MODIFIED CURB | |
| 6-2-94 | ADDED NOTE TO SPECIAL MODIFIED CURB | |
| 8-5-93 | CORRECTED GUTTER SLOPE | 8-5-93 |
| 10-1-92 | ADDED DETAILS OF GUTTER SLOPE | 10-1-92 |
| 5-24-90 | ADDED DETAILS OF MODIFIED CURB | 5-24-90 |
| 11-30-89 | VARIABLE DEPTH TYPE A & B 1 | 11-30-89 |
| 7-15-88 | REVISED MODIFIED CURB | 630-7-15-88 |
| 11-1-73 | REVISED MODIFIED CURB | 500-11-1-73 |
| 10-2-72 | REVISED AND REDRAWN | 512-10-2-72 |

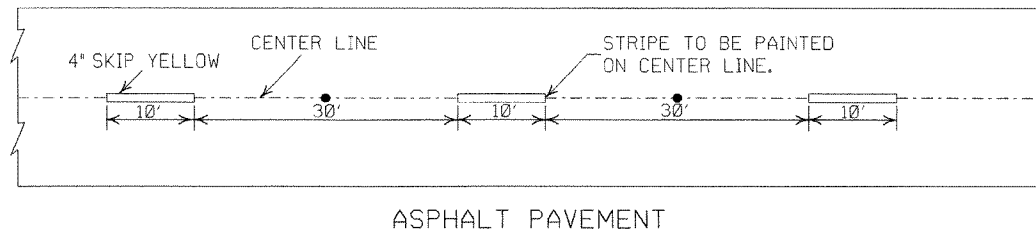
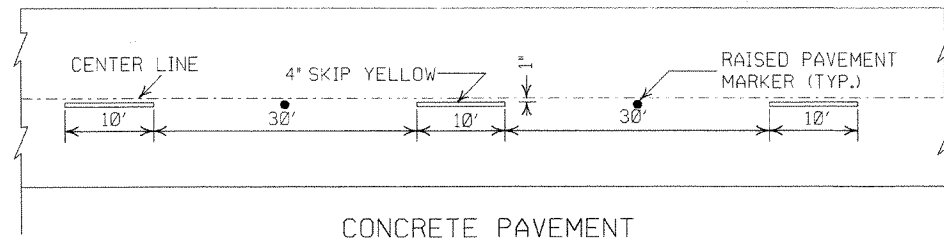
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

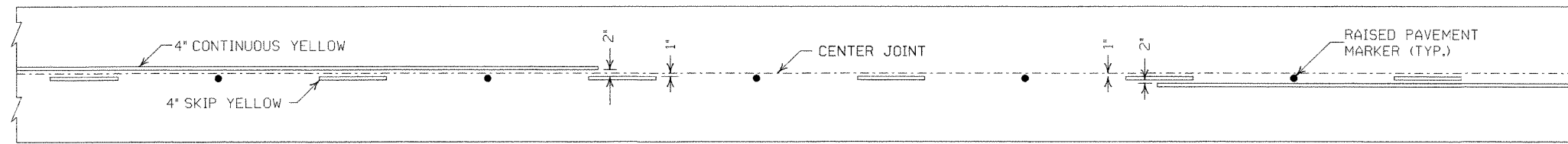
STANDARD DRAWING CG-1

NOTES:

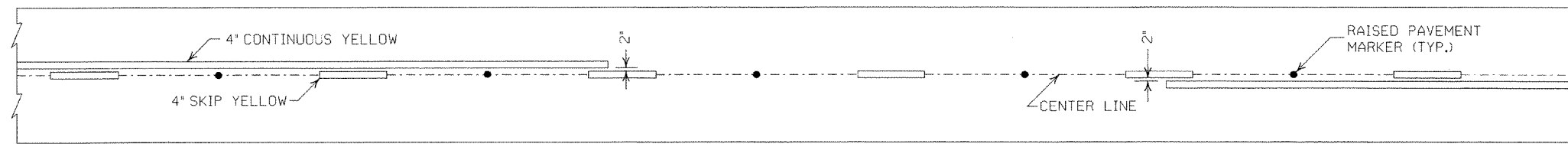
1. ALL LINES SHALL HAVE A WIDTH OF 4 INCHES.
2. THE THICKNESS AND RATE OF PAINT APPLICATION SHALL BE AS SPECIFIED IN SECTION 718 OF THE STANDARD SPECIFICATIONS.
3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
4. RAISED PAVEMENT MARKERS SHALL BE CENTERED BETWEEN SKIP LINES ON 40 FEET SPACING UNLESS OTHERWISE SHOWN ON THE PLANS.



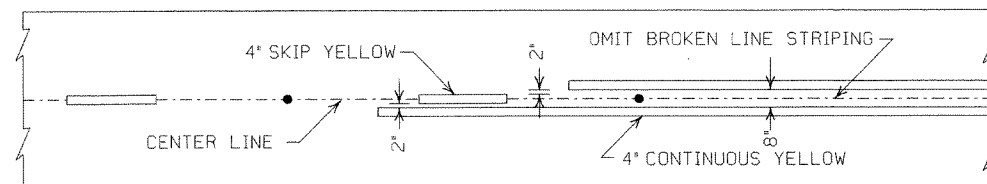
BROKEN LINE STRIPING



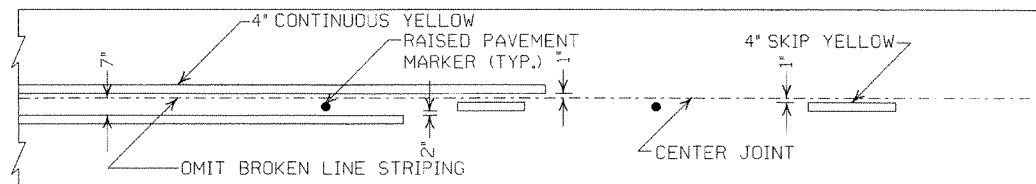
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

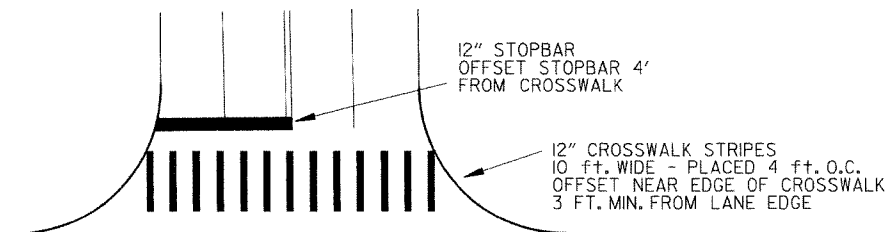


ASPHALT PAVEMENT



CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES



CROSSWALK AND STOPBAR DETAILS

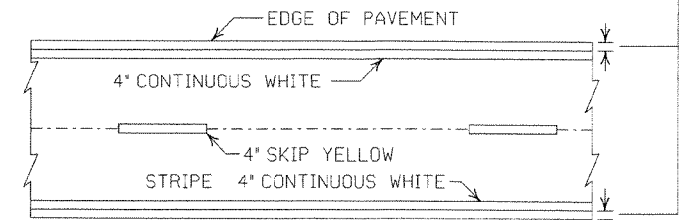
GENERAL NOTES:

THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND RAISED PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

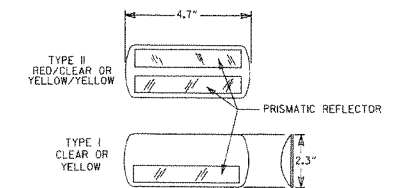
THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT



PAVEMENT EDGE LINE MARKING



NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

| DATE | REVISION | FILMED |
|----------|---|-----------|
| 11-17-10 | REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS | |
| 11-18-04 | REVISED NOTE 2 & GENERAL NOTES | |
| 8-22-02 | ADDED CROSSWALK & STOPBAR DTLS. | |
| 7-02-98 | ADDED DETAILS OF STD. RAISED PAV'T. MARKERS | |
| 4-26-96 | REV. NOTES 3&4; ADDED R.P.M. | |
| 9-30-80 | DRAWN | 1-9-30-80 |
| | | FILMED |

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

| DEGREE OF CURVE | e | 30 MPH | | 40 MPH | | 50 MPH | | 55 MPH | | 60 MPH | | 70 MPH | |
|-----------------|-------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| | | MINIMUM | DESIRABLE | MINIMUM | DESIRABLE | MINIMUM | DESIRABLE | MINIMUM | DESIRABLE | MINIMUM | DESIRABLE | MINIMUM | DESIRABLE |
| 0° 15' | N.C. | | | | | | | | | | | | |
| 0° 30' | N.C. | | | | | | | | | | | | |
| 0° 45' | N.C. | | | | | | | | | | | | |
| 1° 00' | N.C. | | | | | | | | | | | | |
| 1° 15' | N.C. | | | | | | | | | | | | |
| 1° 30' | N.C. | | | | | | | | | | | | |
| 1° 45' | N.C. | | | | | | | | | | | | |
| 2° 00' | R.C. | | | 175 | | | | | | | | | |
| 2° 15' | R.C. | | | | | | | | | | | | |
| 2° 30' | 0.021 | | | | | | | | | | | | |
| 2° 45' | 0.023 | | | | | | | | | | | | |
| 3° 00' | 0.025 | 150 | | | | | | | | | | | |
| 3° 15' | 0.027 | | | | | | | | | | | | |
| 3° 30' | 0.029 | | | | | | | | | | | | |
| 3° 45' | 0.031 | | | | | | | | | | | | |
| 4° 00' | 0.033 | | 200 | | | | | | | | | | |
| 4° 30' | 0.037 | | | | | | | | | | | | |
| 5° 00' | 0.040 | | | | | | | | | | | | |
| 5° 30' | 0.043 | | | | | | | | | | | | |
| 6° 00' | 0.046 | | | | | | | | | | | | |
| 6° 30' | 0.050 | | | | | | | | | | | | |
| 7° 00' | 0.053 | | | | | | | | | | | | |
| 7° 30' | 0.056 | | | | | | | | | | | | |
| 8° 00' | 0.058 | | | | | | | | | | | | |
| 8° 30' | 0.061 | | | | | | | | | | | | |
| 9° 00' | 0.063 | | | | | | | | | | | | |
| 10° 00' | 0.068 | 160 | | | | | | | | | | | |
| 11° 00' | 0.072 | 170 | | | | | | | | | | | |
| 12° 00' | 0.076 | 175 | | | | | | | | | | | |
| 13° 00' | 0.080 | 180 | | | | | | | | | | | |
| 14° 00' | 0.083 | 190 | | | | | | | | | | | |
| 15° 00' | 0.086 | 195 | | | | | | | | | | | |
| 16° 00' | 0.089 | 200 | | | | | | | | | | | |
| 17° 00' | 0.091 | 200 | | | | | | | | | | | |
| 18° 00' | 0.093 | 205 | | | | | | | | | | | |
| 19° 00' | 0.095 | 210 | | | | | | | | | | | |
| 20° 00' | 0.097 | 215 | | | | | | | | | | | |
| 21° 00' | 0.098 | 215 | | | | | | | | | | | |
| 22° 00' | 0.099 | 215 | | | | | | | | | | | |
| 23° 00' | 0.099 | 215 | | | | | | | | | | | |
| 24° 00' | 0.100 | 220 | | | | | | | | | | | |

D MAX = 24° 45'

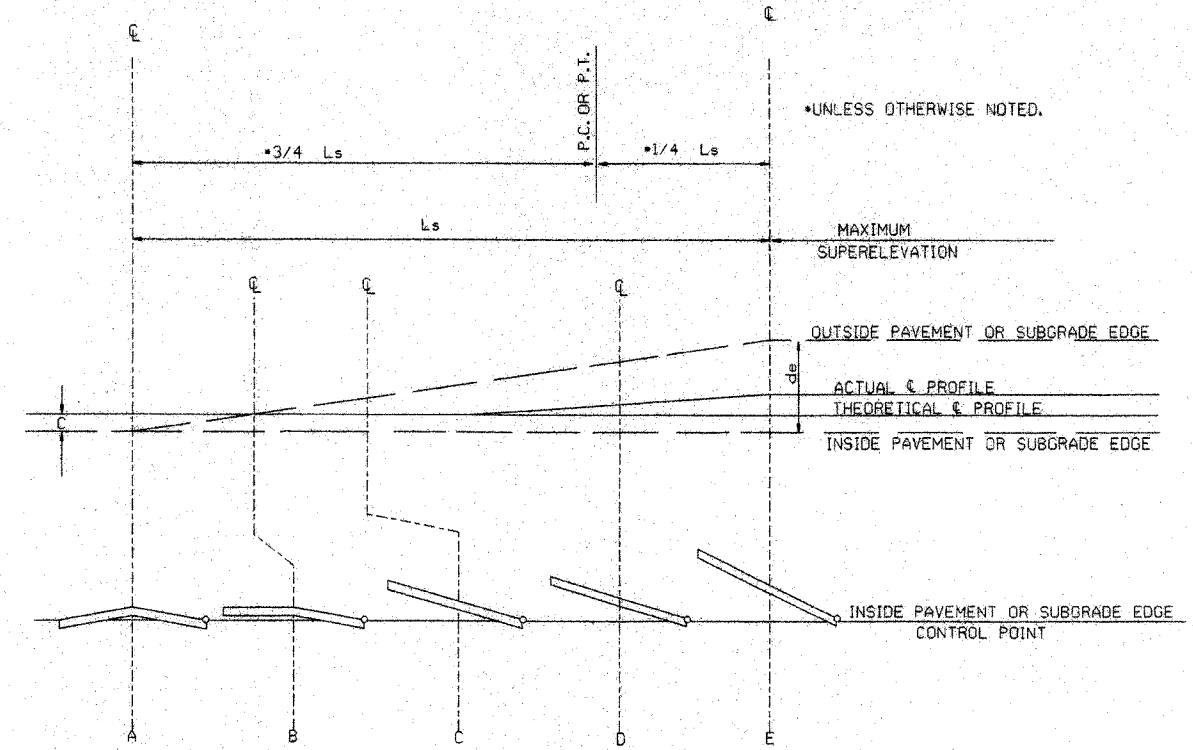
ABBREVIATIONS

- NC - NORMAL CROWN
- RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
- e - RATE OF SUPERELEVATION (FT. PER FT.)
- Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
- L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
- d - WIDTH OF PAVEMENT (FT.) OR WIDTH OF SUBGRADE (FT.)
- C - NORMAL CROWN (FT.)

GENERAL NOTES

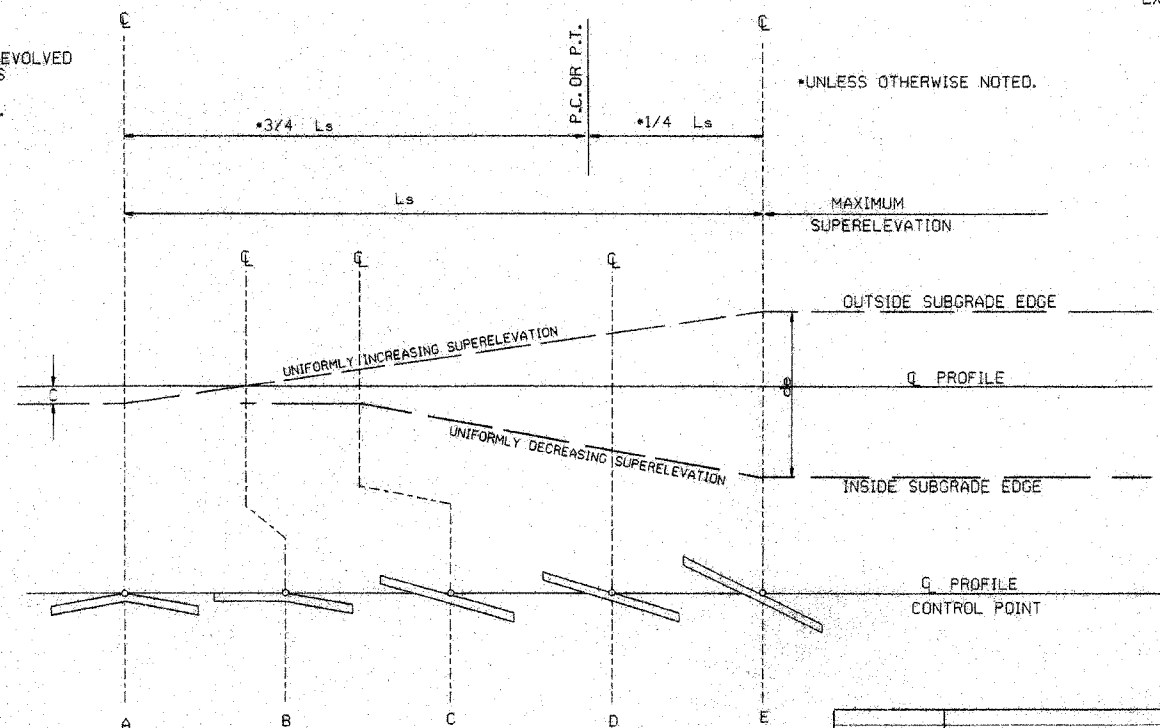
1. ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. PAVEMENTS WIDER THAN 2 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLLOWS:
 - 3 LANE UNDIVIDED - - - - +20%
 - 4 LANE UNDIVIDED - - - - +50%
 - 5 LANE UNDIVIDED - - - - +80%
 - 6 LANE UNDIVIDED - - - - +100%

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.
RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.




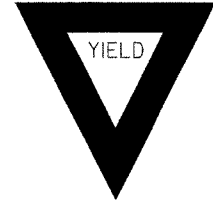
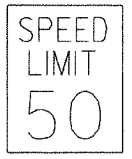
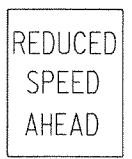

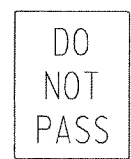

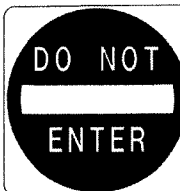

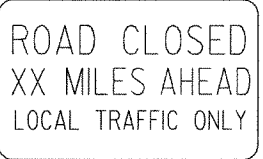
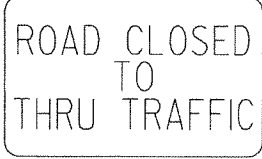
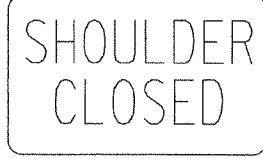
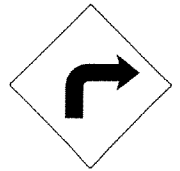
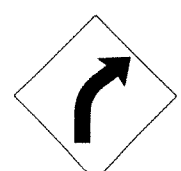
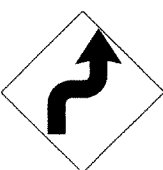

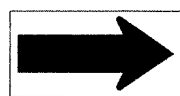
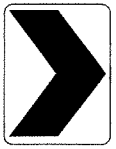
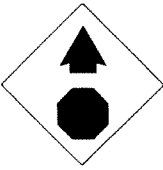
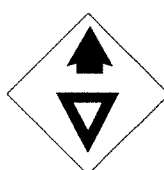
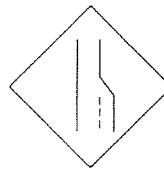

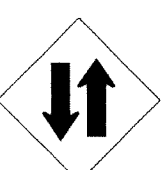

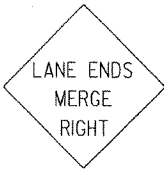



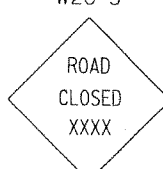

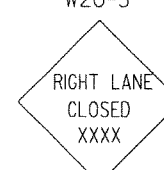
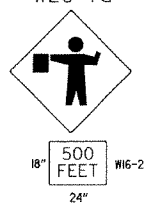

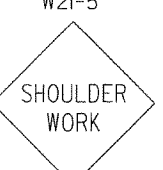
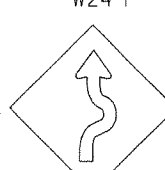
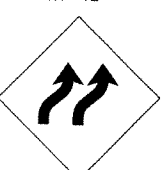


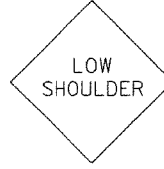

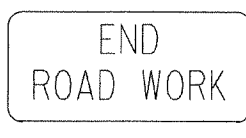
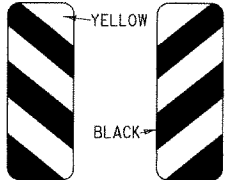


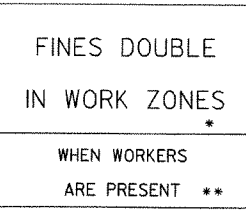
STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

| | |
|---|------------|
| ARKANSAS STATE HIGHWAY COMMISSION | |
| TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC | |
| 10-18-96 ADDED FORMULA | 10-18-96 |
| 01-09-87 ISSUED | 534-1-9-87 |
| DATE | REVISION |
| STANDARD DRAWING SE-2 | |

ADVANCE DISTANCES
(XXXX)

| | |
|---------|--------------|
| 500 FT | 1/2 MILE |
| 1000 FT | 3/4 MILE |
| 1500 FT | 1 MILE AHEAD |

| | | | | | | | |
|--|---|--|---|--|---|---|---|
| <p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p> | <p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p> | <p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p> | <p>R2-5A</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p> | <p>R2-5C</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p> | <p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p> | <p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p> | |
| <p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p> | <p>R11-2</p>  <p>48"x30"</p> | <p>R11-3A</p>  <p>60"x30"</p> | <p>R11-4</p>  <p>60"x30"</p> | <p>RSP-1</p>  <p>48"x30"</p> | <p>WI-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p> | <p>WI-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p> | |
| <p>WI-3</p>  <p>STD. 48"x48"</p> | <p>WI-4</p>  <p>STD. 48"x48"</p> | <p>WI-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p> | <p>WI-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p> | <p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p> | <p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p> | <p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p> | |
| <p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p> | <p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p> | <p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p> | <p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p> | <p>W13-1</p>  <p>STD. 24"x24"</p> | <p>W20-1</p>  <p>STD. 48"x48"</p> | <p>W20-2</p>  <p>STD. 48"x48"</p> | <p>W20-3</p>  <p>STD. 48"x48"</p> |
| <p>W20-4</p>  <p>STD. 48"x48"</p> | <p>W20-5</p>  <p>STD. 48"x48"</p> | <p>W20-7a</p>  <p>18" 500 FEET 24" W16-2</p> <p>STD. 36"x36" FWY. 48"x48"</p> | <p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p> | <p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p> | <p>W24-1</p>  <p>STD. 36"x36"</p> | <p>WI-4b</p>  <p>STD. 48"x48"</p> | <p>R56-1</p>  <p>STD. 18"x18"</p> |
| <p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p> | <p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p> | <p>G20-1</p>  <p>60"x24"</p> | <p>G20-2</p>  <p>48"x24"</p> | <p>OM-3L OM-3R</p>  <p>12"x36"</p> | <p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p> | <p>M4-10</p>  <p>48"x18"</p> | <p>R55-1</p>  <p>36"x60"</p> <p>* USE 6" C LETTERS ** USE 4" D LETTERS</p> |

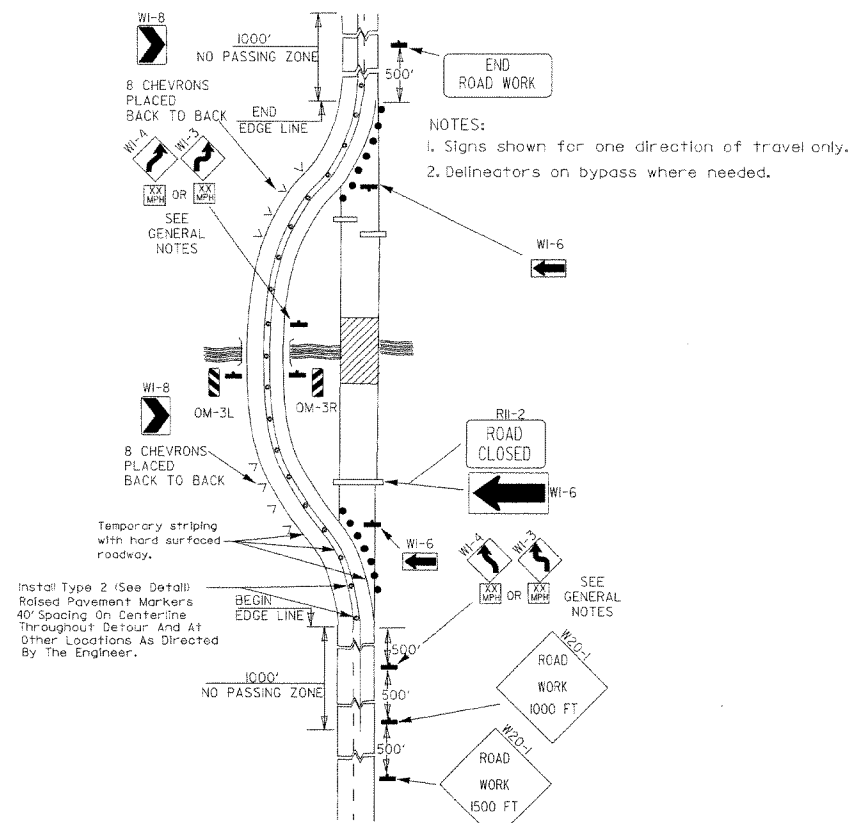
GENERAL NOTES:

- ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
- EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
- POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE, SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
- ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6" SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.

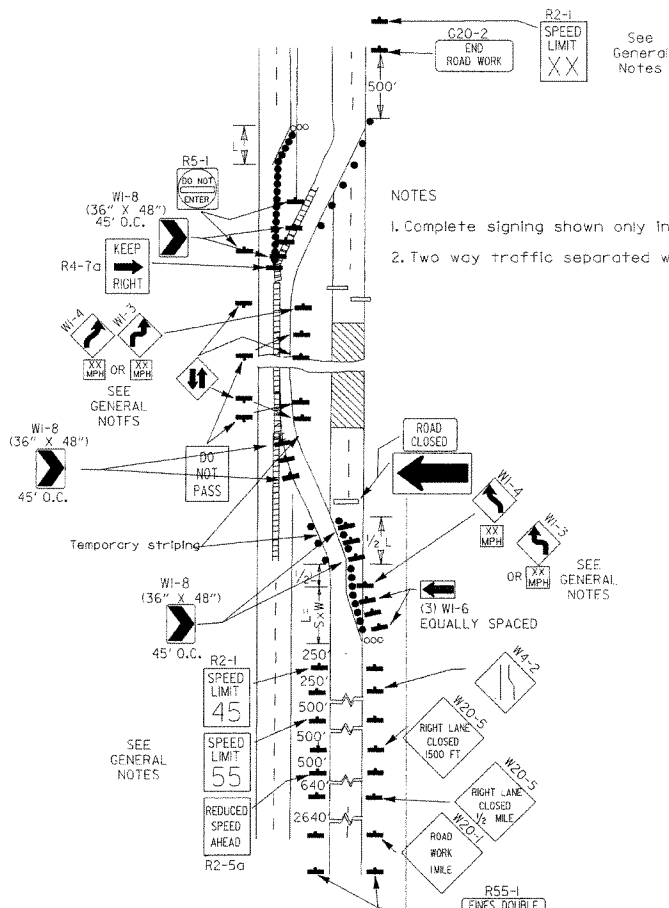
- FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
- MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
- R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

* NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

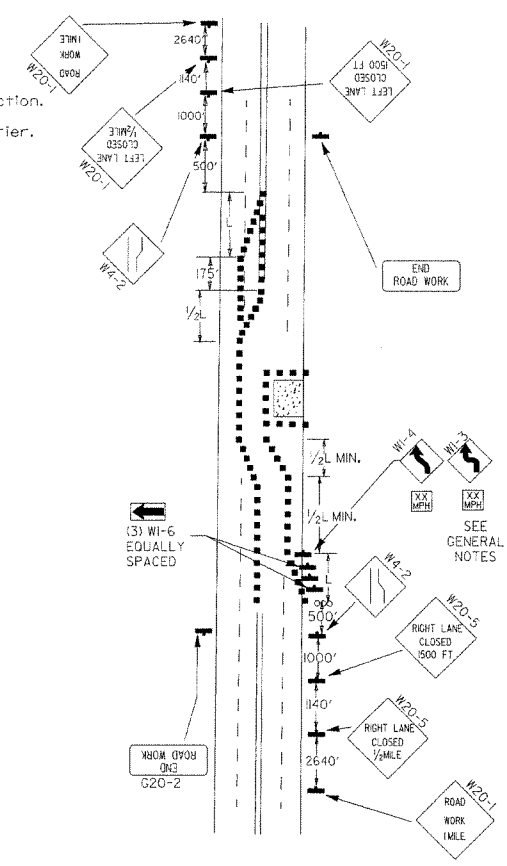
| | | |
|----------|---|--------|
| 11-17-10 | DELETED W8-9a & ADDED W8-9 | |
| 10-15-09 | ADDED REFERENCE TO MASH & ADDED SIGN W24-1 | |
| 4-17-08 | REVISED SIGN DESIGNATIONS | |
| 11-18-04 | REVISED NOTES | |
| 10-9-03 | REVISED NOTE 1 | |
| 11-16-01 | REVISED NOTE 7 | |
| 9-28-00 | REVISED NOTE | |
| 11-18-98 | ADDED NOTE | |
| 6-26-97 | REVISED NOTE 5 | |
| 4-03-97 | REVISED NOTE 5 | |
| 10-18-96 | ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7 | |
| 10-12-95 | ADDED R55-1 | |
| 6-8-95 | REVISED TO CORRECT SIGN ILLUSTRATIONS | 6-8-95 |
| 2-2-95 | REVISED PER PART VI, MUTCD SEPT. 3, 1993 | |
| 8-15-91 | DRAWN AND PLACED IN USE | |
| DATE | REVISION | FILMED |



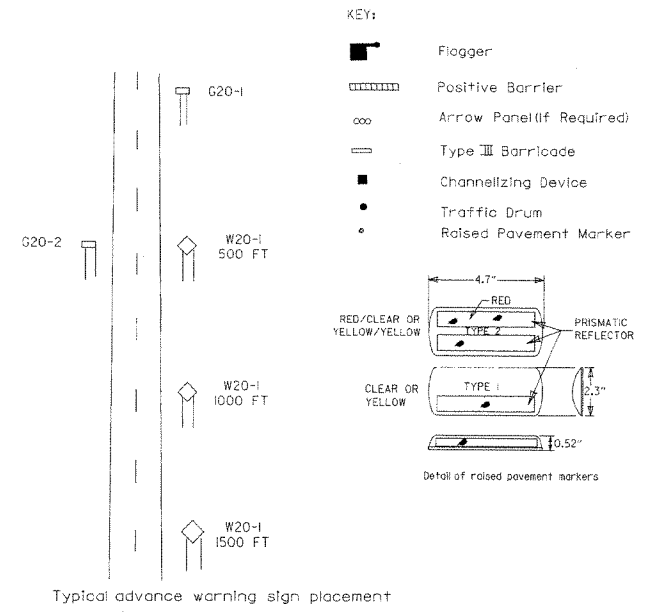
(A) Typical application of traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.



(B) Typical application - 4-lane divided roadway where one roadway is closed.

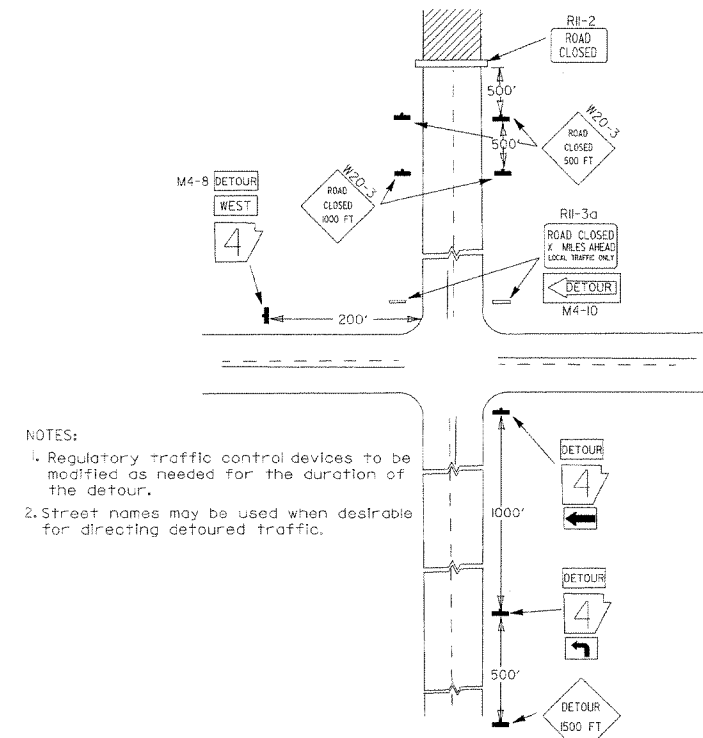


(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.

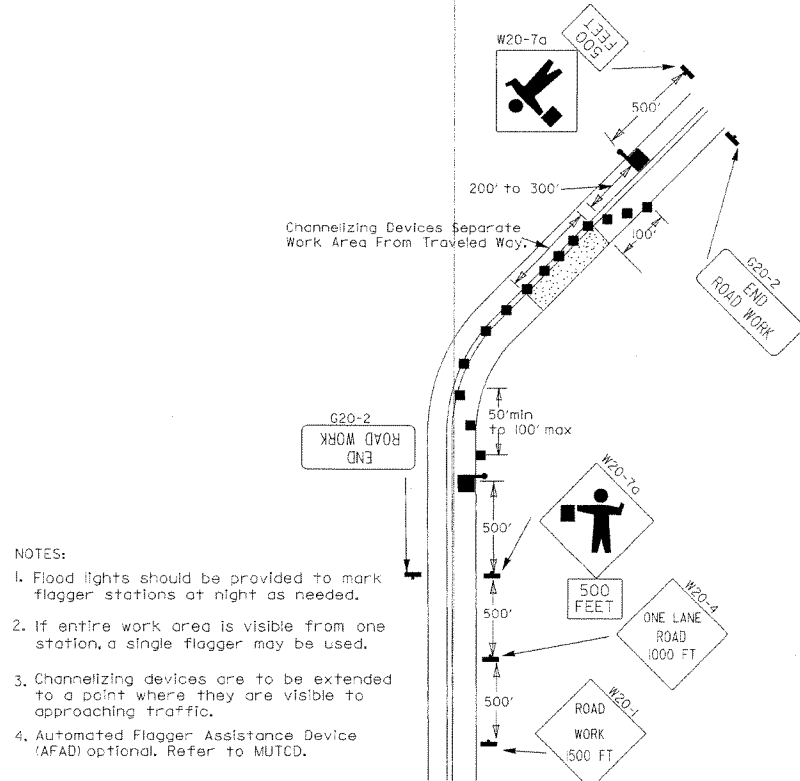


Taper formulae:
 $L = S \times W$ for speeds of 45mph or more.
 $L = \frac{WS^2}{60}$ for speeds of 40mph or less.
 Where:
 L = Minimum length of taper.
 S = Numerical value of posted speed limit prior to work or 85th percentile speed.
 W = Width of offset.

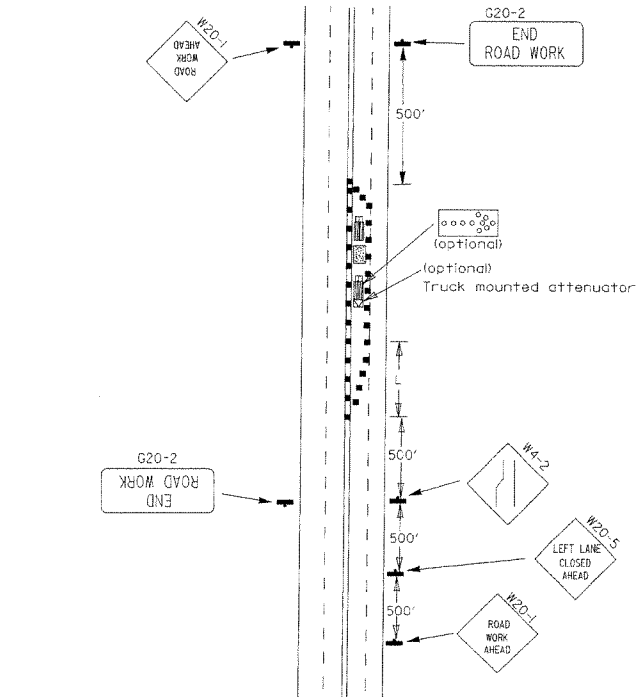
- GENERAL NOTES:
- Advisory speed posted on W1-3 or W1-4 curve warning signs to be determined at site. Use W1-4 when speed is greater than 30mph and W1-3 when 30mph or less.
 - When the existing speed limit is 45mph and the plans require a speed limit of 55mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-145mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1(45) shall be installed to match original speed limit.
 - When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(45) shall be omitted. Additional R2-155mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1(65) shall be installed to match original speed limit.
 - The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit, or as directed by the Engineer.
 - Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
 - Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
 - Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.



(D) Typical application - roadway closed beyond detour point.



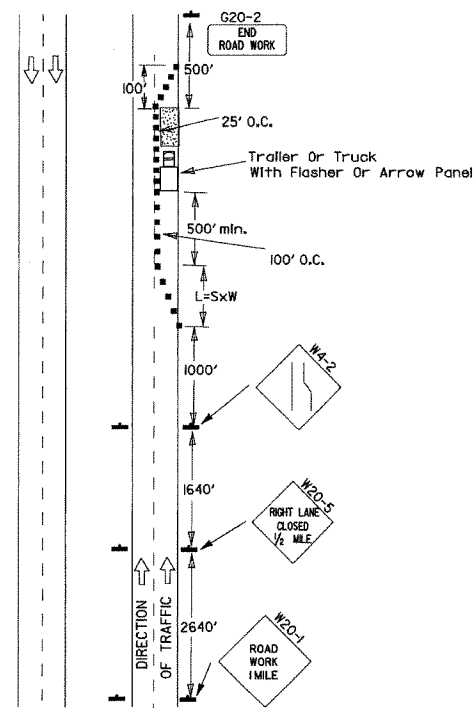
(E) Typical application of traffic control devices on 2-lane highway where one lane is closed and flagging is provided.



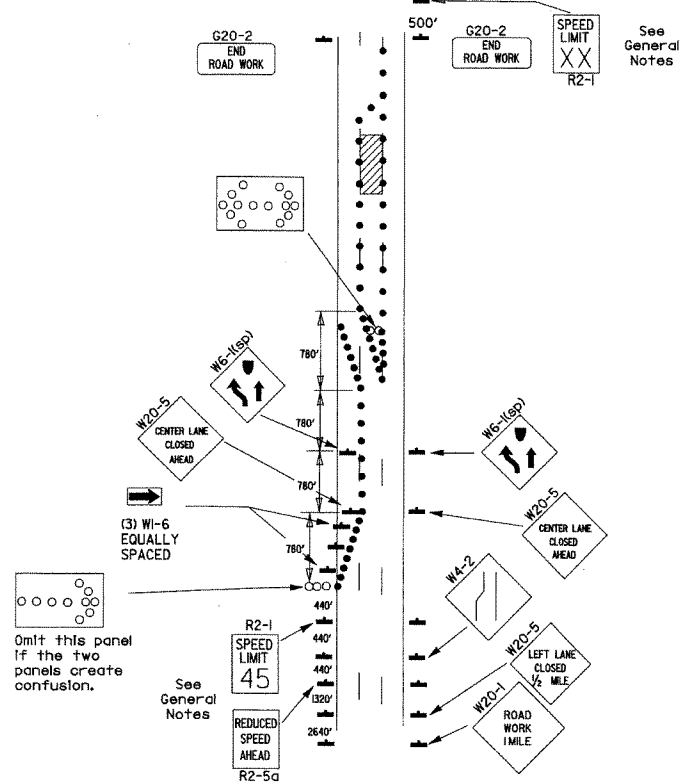
(F) Typical application - 4-lane undivided roadway with inside lane closed.

| DATE | REVISION | FILMED |
|----------|--|--------|
| 3-11-10 | ADDED (AFAD) | |
| 11-20-08 | REVISED SIGN DESIGNATIONS | |
| 11-18-04 | ADDED GENERAL NOTE | |
| 10-18-96 | ADDED R55-1 | |
| 4-26-96 | CORRECTED (a) BEHIND G20-2 | |
| 6-8-95 | CORRECTED SIGN IDENT. ON W1-4A | 6-8-95 |
| 2-2-95 | REVISED PER PART VI MUTCD, SEPT. 3, 1993 | |
| 8-15-91 | DRAWN AND PLACED IN USE | |

ARKANSAS STATE HIGHWAY COMMISSION
 STANDARD TRAFFIC CONTROLS
 FOR HIGHWAY CONSTRUCTION
 STANDARD DRAWING TC-2

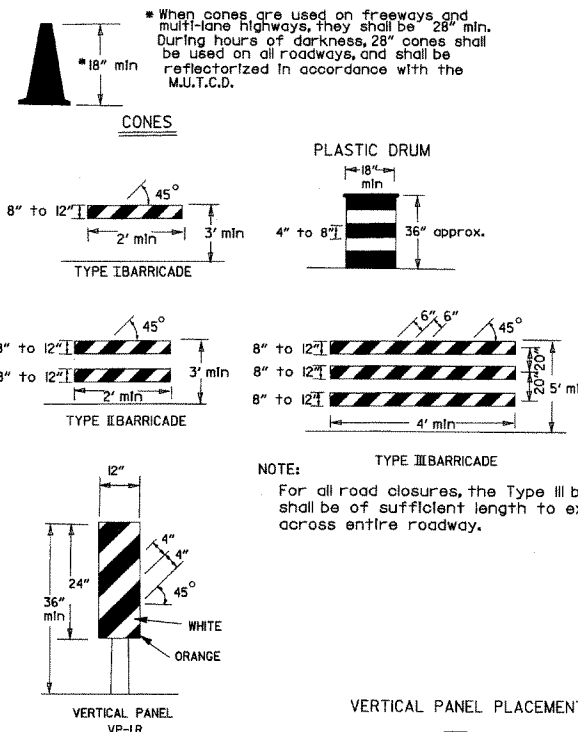


(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



(B) Typical application - 3-lane oneway roadway where center lane is closed.

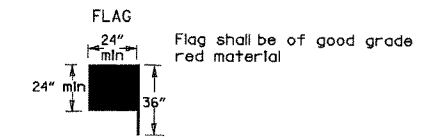
Channelizing devices



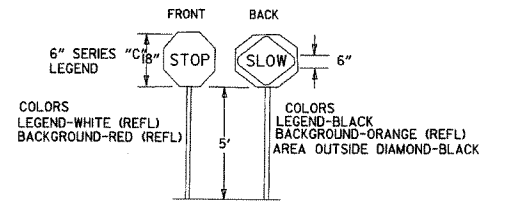
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

| VERTICAL DIFFERENTIAL | LOCATIONS | TRAFFIC CONTROL |
|-----------------------|------------------------|---|
| 1" to 3" | Centerline, lane lines | W8-II |
| 1" to 3" | Edge of shoulder | W8-9 |
| Greater than 3" | Lane lines | Standard lane closure required |
| Greater than 3" | Edge of traveled lane | *RSP-I and vertical panels, drums or concrete barrier |
| Greater than 3" | Edge of shoulder | *Vertical panels, drums or concrete barrier |

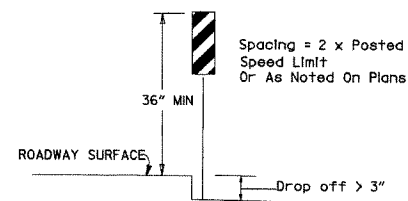
* When shown on the plans concrete barrier will be used. When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.



STOP SLOW PADDLE



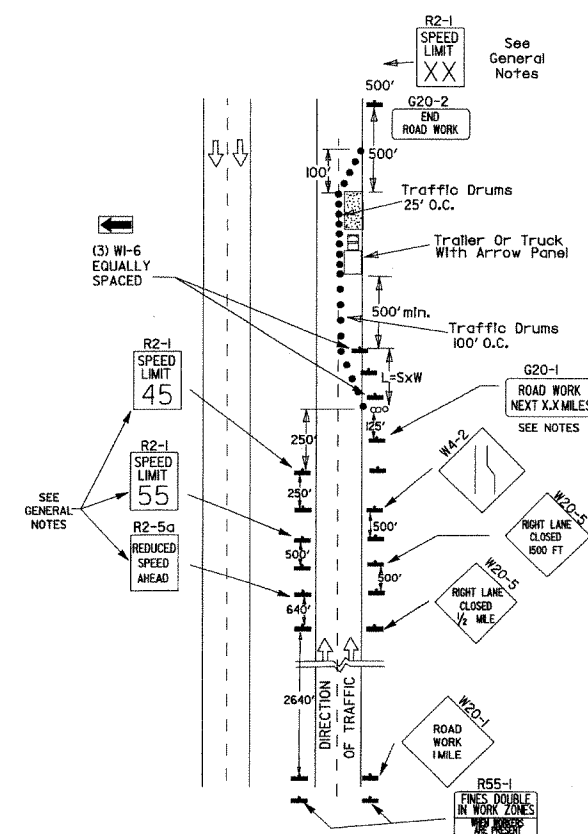
VERTICAL PANEL PLACEMENT



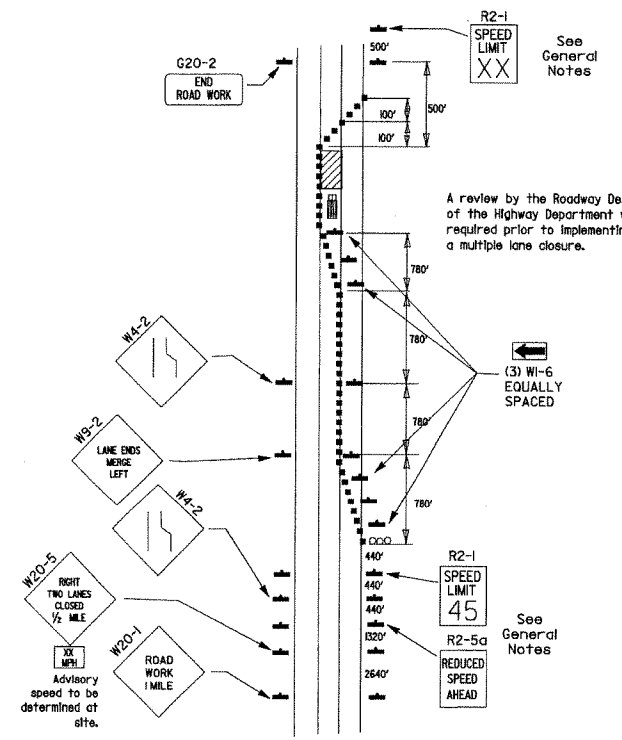
- KEY:
- Arrow Panel (if Required)
 - Channelizing Device
 - Traffic drum

GENERAL NOTES:

- A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
- When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-145mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1XX shall be installed to match original speed limit.
- When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(65) shall be omitted. Additional R2-155mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1XX shall be installed to match original speed limit.
- The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
- Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
- Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
- The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1 (1 MILE) signs are not required in advance of lane closures that begin inside the project limits.
- Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
- All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual For Assessing Safety Hardware (MASH).
- Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

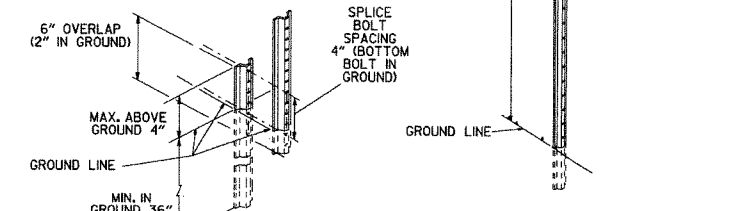


(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.



(D) Typical application - closing multiple lanes of a multilane highway.

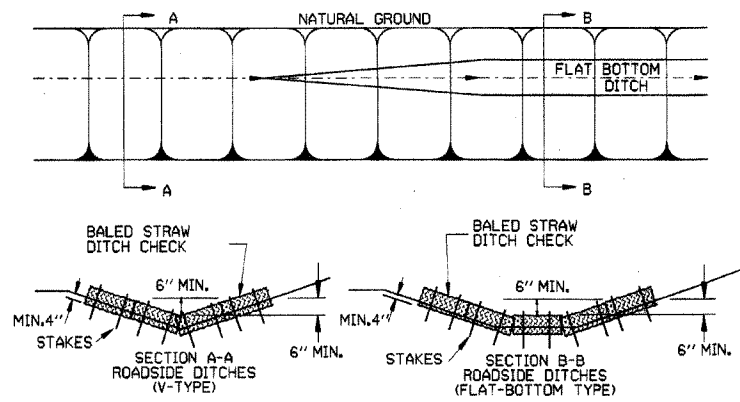
NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2) NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS. SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.



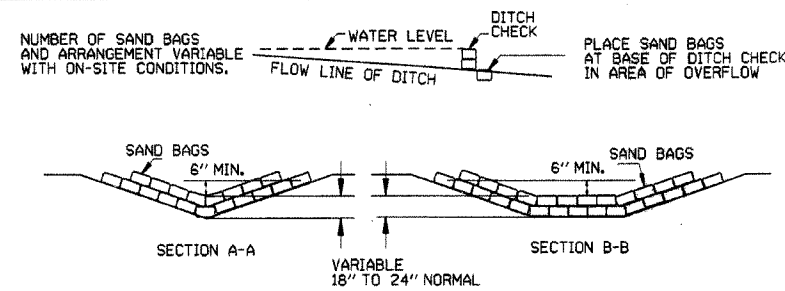
| DATE | REVISION | FILMED |
|----------|---|--------|
| 10-15-09 | ADDED REFERENCE TO MASH | |
| 11-20-08 | REVISED SIGN DESIGNATIONS | |
| 11-18-04 | ADDED NOTE | |
| 10-1-98 | ADDED NOTE | |
| 4-03-97 | ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE | |
| 10-18-96 | ADDED R55-1 | |
| 10-12-95 | MOVED UPPER SPLICE | |
| 6-8-95 | REVISED SPLICE DETAIL, TEXT | 6-8-95 |
| 2-2-95 | REVISED PER PART VI, MUTCD, SEPT. 3, 1993 | |
| 8-15-91 | DRAWN AND PLACED IN USE | |

GENERAL NOTES

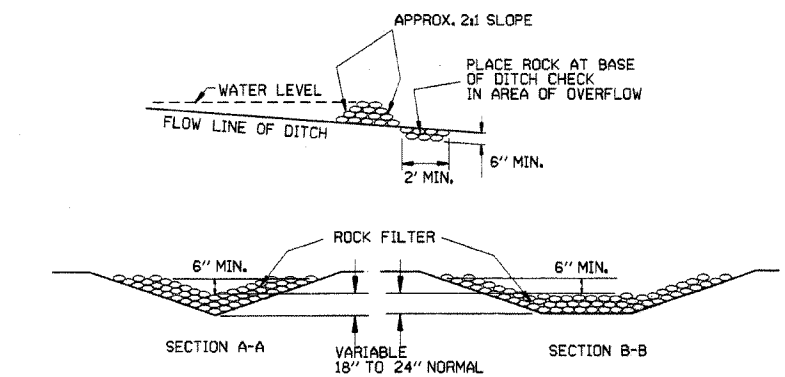
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. STRAW BALES SHALL BE KEYED INTO SOIL A MINIMUM OF 4" AND NO GAPS SHALL BE LEFT BETWEEN BALES.



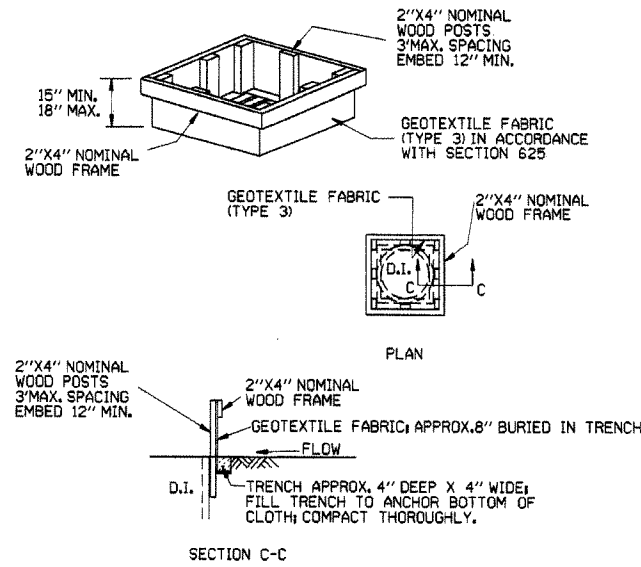
BALED STRAW DITCH CHECK (E-1)



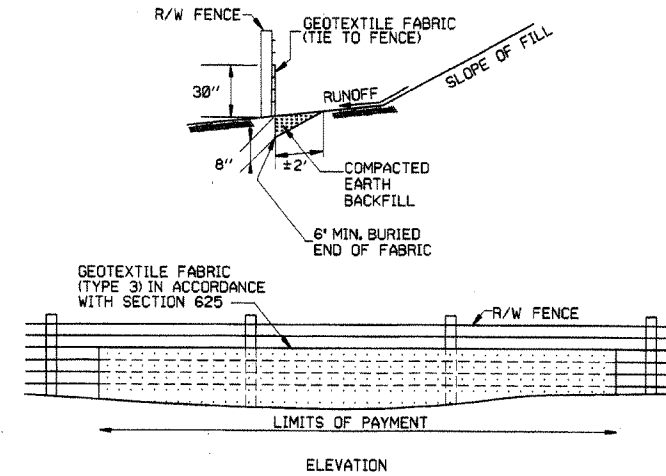
SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



DROP INLET SILT FENCE (E-7)

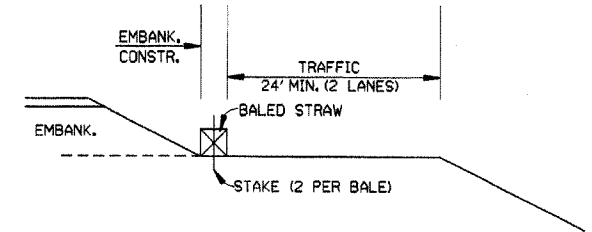


SILT FENCE ON R/W FENCE (E-4)

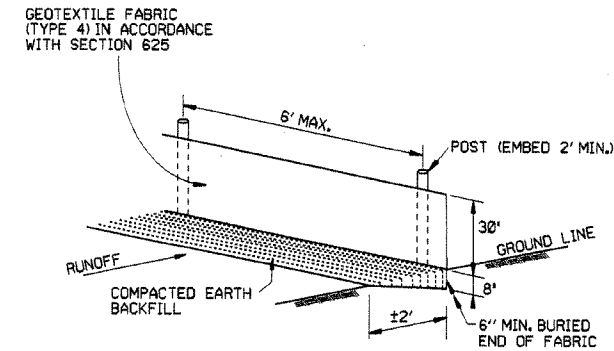
GENERAL NOTES
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. NO GAPS SHALL BE LEFT BETWEEN BALES.
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)



SILT FENCE (E-11)

GENERAL NOTES
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

| | | | |
|----------|---|-------------|-----------------------------------|
| 11-18-98 | ADDED NOTES | 11-18-98 | ARKANSAS STATE HIGHWAY COMMISSION |
| 7-02-98 | ADDED BALED STRAW FILTER BARRIER (E-2) | | |
| 7-20-95 | REVISED SILT FENCE E-4 AND E-11 | 7-20-95 | |
| 7-15-94 | Rev. E-4 & E-11 Min. 13' Buried End of Fabric | | |
| 6-2-94 | Revised E-1, 4, 7, & 11 Deleted E-2 & 3 | 6-2-94 | |
| 4-1-93 | REDRAWN | | |
| 10-1-92 | REDRAWN | | |
| 8-2-76 | ISSUED R.D.M. | 298-7-28-76 | |
| DATE | REVISION | FILMED | |

TEMPORARY EROSION CONTROL DEVICES

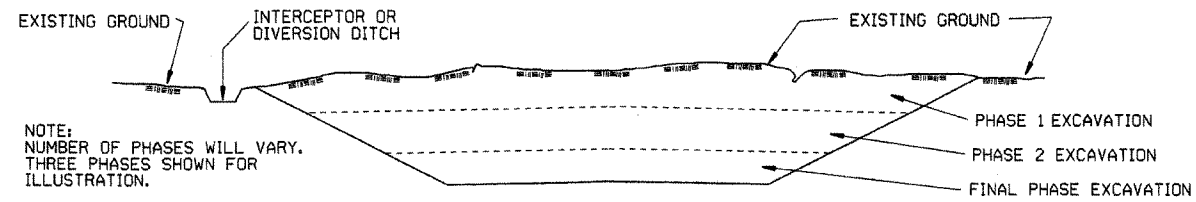
STANDARD DRAWING TEC-1

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES, DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

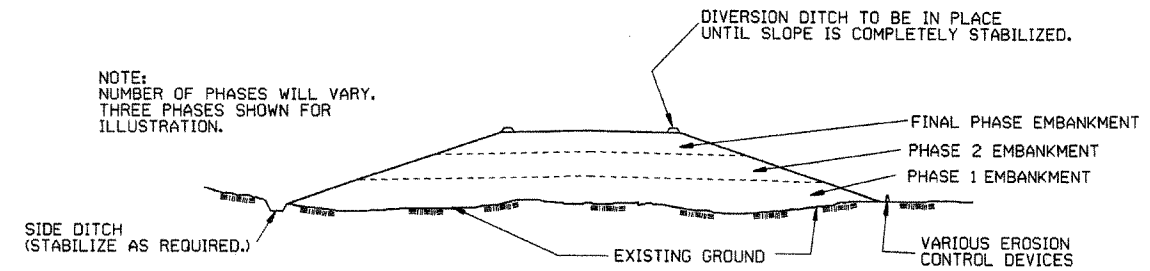
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES. CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

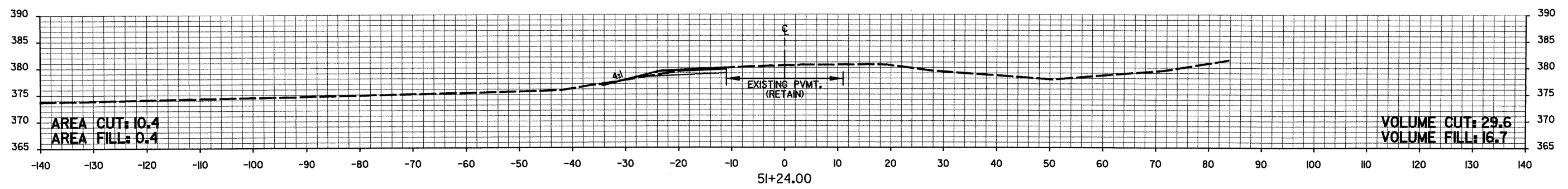
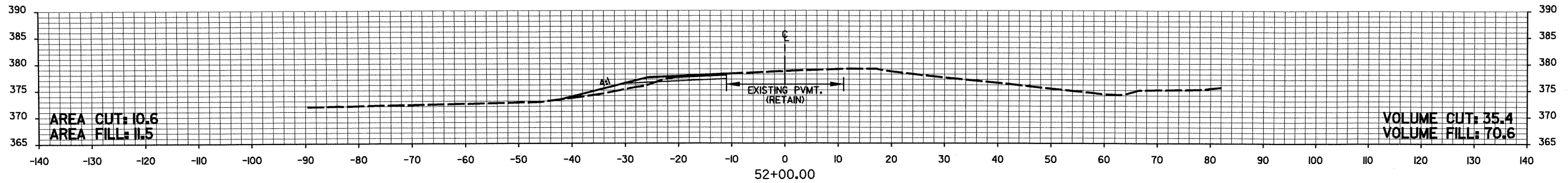
CONSTRUCTION SEQUENCE

1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

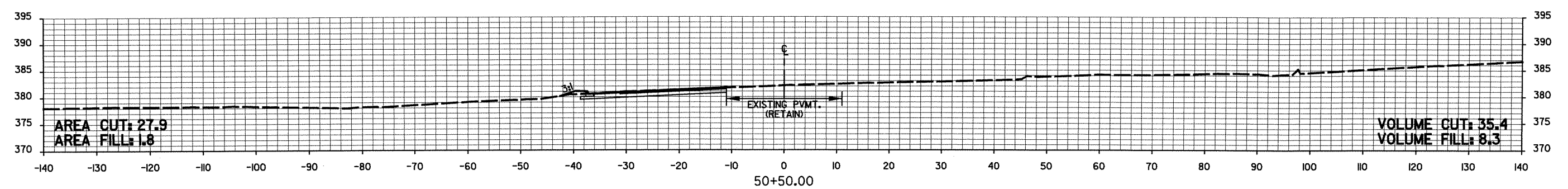
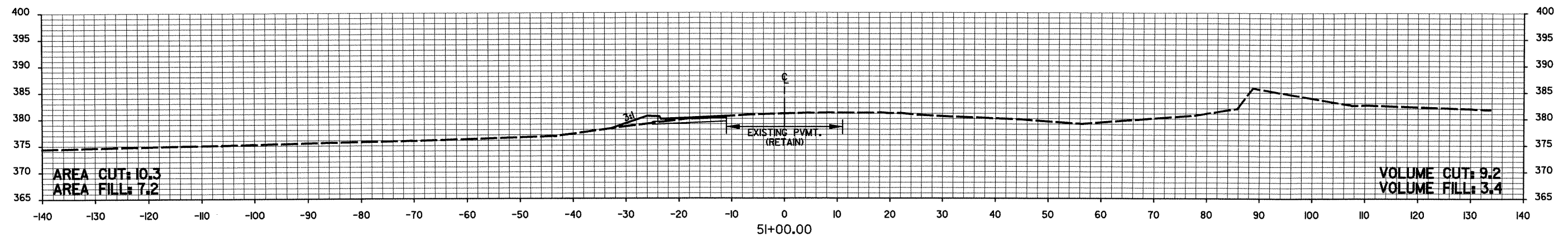
| | | | |
|----------|--------------------|-----------------------------------|--------|
| | | ARKANSAS STATE HIGHWAY COMMISSION | |
| | | TEMPORARY EROSION CONTROL DEVICES | |
| | | STANDARD DRAWING TEC-3 | |
| 11-03-94 | CORRECTED SPELLING | | |
| 6-2-94 | Drawn & Issued | | 6-2-94 |
| DATE | REVISION | | FILMED |

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| JOB NO. | | | | | | 100737 | 45 | 50 |

② CROSS SECTIONS



STA. 51+24.00 END CONC. COMB. CURB & GUTTER

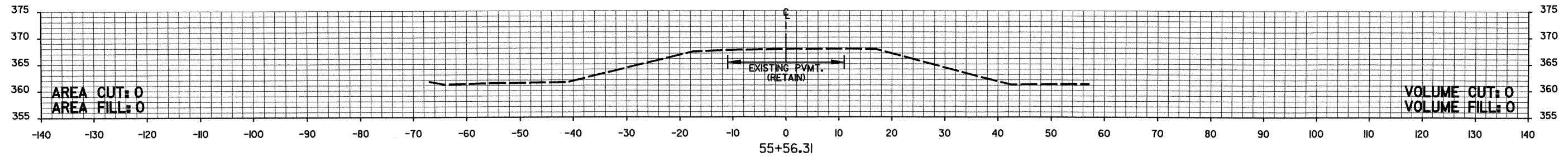


STA. 50+50.00 BEGIN CONSTRUCTION

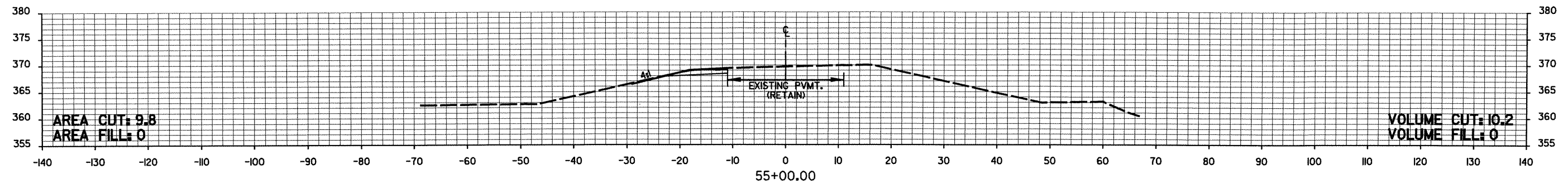
SITE NO. 1
 STA. 50+50.00 TO STA. 52+00.00
 PARKER RD. WB TURN LANE

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|----------------|--------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | 100737 | | 46 | 50 |

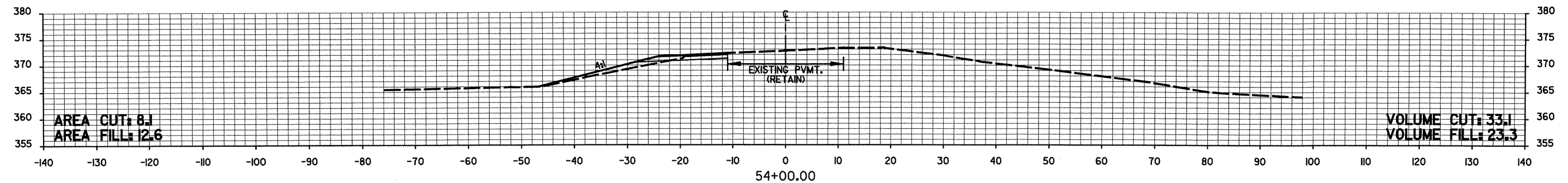
② CROSS SECTIONS



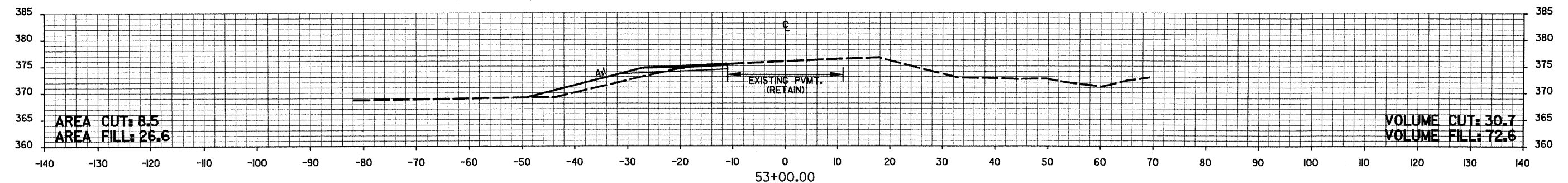
STA. 55+56.31 END CONSTRUCTION



STA. 55+00.00



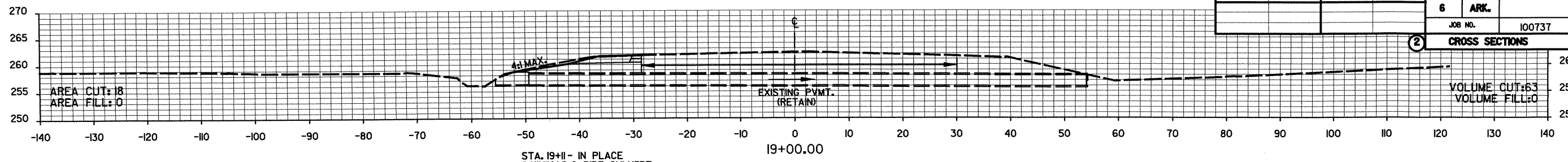
STA. 53+50.00 BEGIN 200' TAPER



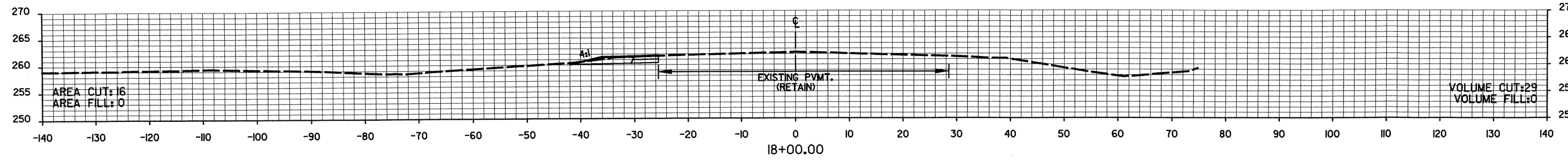
SITE NO. 1
 STA. 53+00.00 TO STA. 55+56.31
 PARKER RD. WB TURN LANE

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|----------------|-------------|--------------|-------------|----------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| JOB NO. I00737 | | | | | | | 47 | 50 |

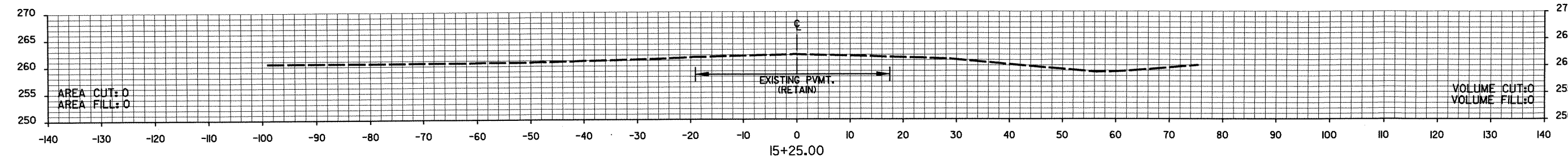
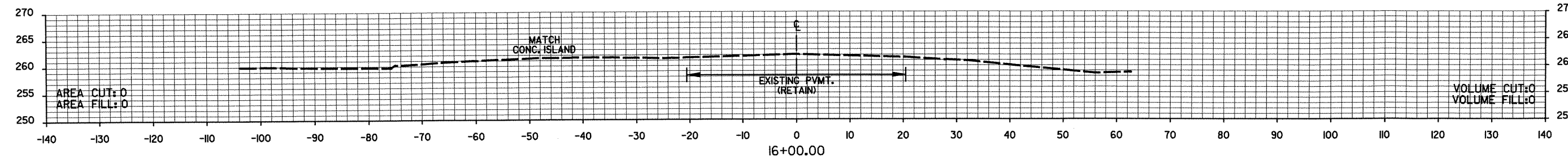
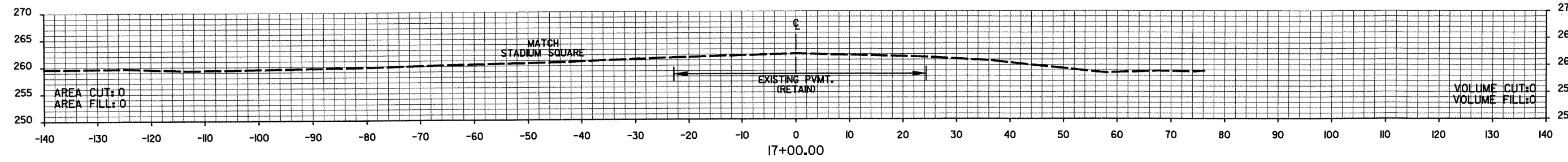
2 CROSS SECTIONS



STA. 19+11 - IN PLACE
24"X110' R.C. PIPE CULVERT
WITH FES LT. - RETAIN



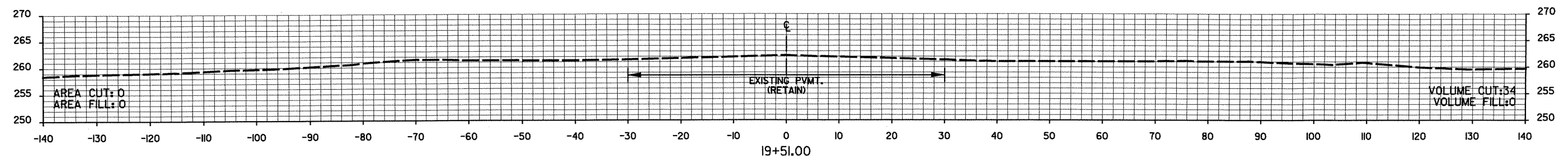
STA. 17+75.00 END 250' TAPER



STA. 15+25.00 BEGIN CONSTRUCTION

SITE NO. 2
STA. 15+25.00 TO STA. 19+00.00
HWY. 1 (STADIUM BLVD.) WIDENING

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS | |
|------------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|----|
| | | | | 6 | ARK. | | | | |
| JOB NO. | | | | | | | 100737 | 48 | 50 |
| ② CROSS SECTIONS | | | | | | | | | |

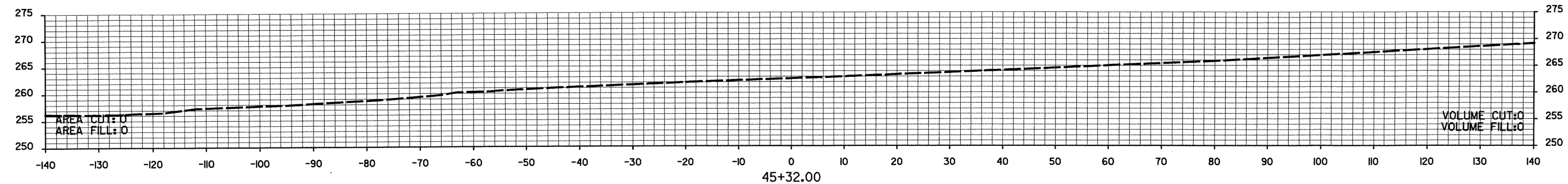
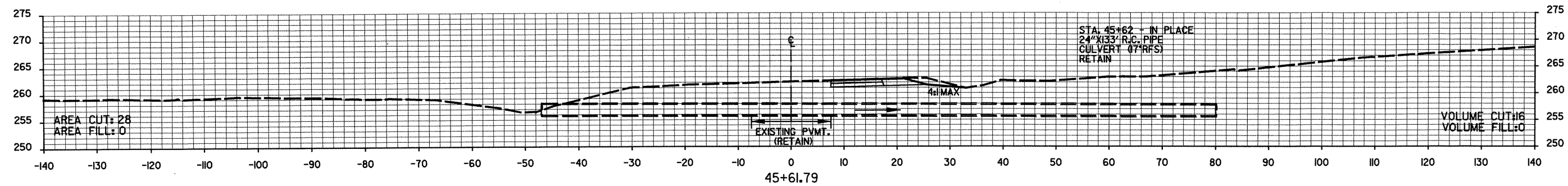
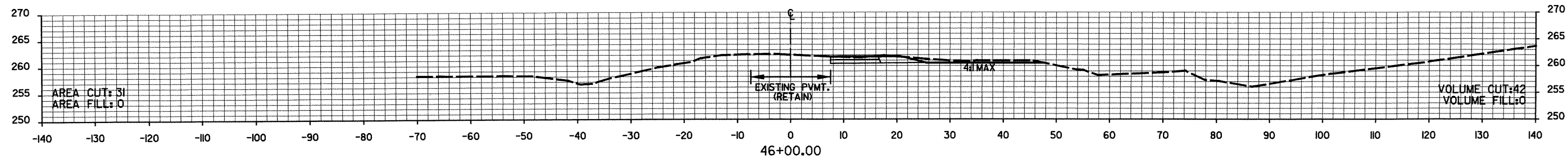
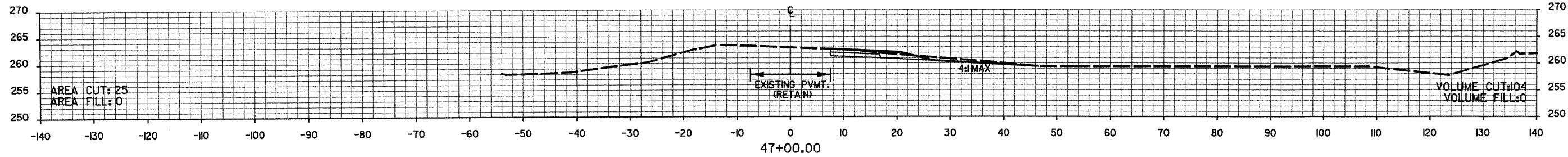


STA. 19+51.00 END CONSTRUCTION

SITE NO. 2
 STA. 19+51.00 TO STA. 19+51.00
 HWY. 1 (STADIUM BLVD.) WIDENING

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | | | JOB NO. 100737 | 49 | 50 |

2 CROSS SECTIONS

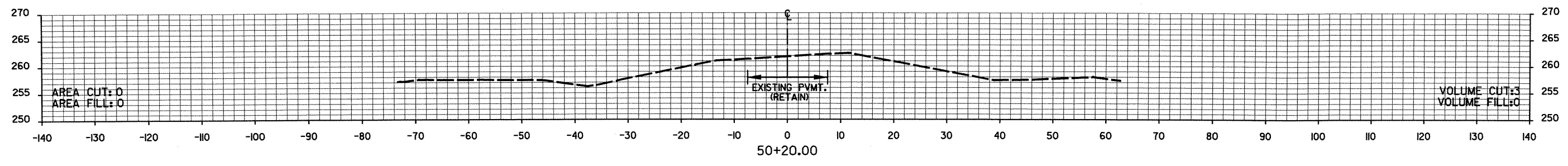


STA. 45+32.00 BEGIN CONSTRUCTION

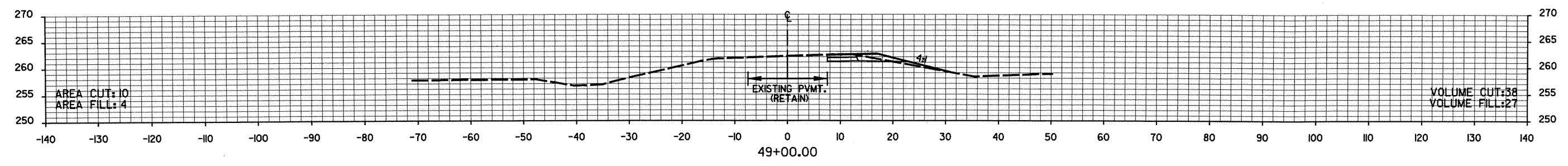
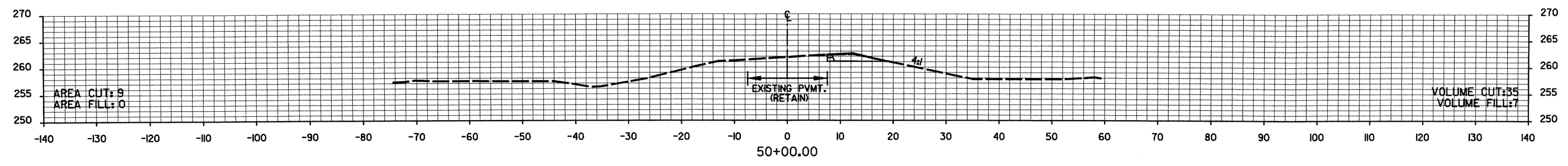
SITE NO. 3
 STA. 45+32.00 TO STA. 47+00.00
 HWY. 63 NB EXIT RAMP TURN LANE

| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|--------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | | | JOB NO. I00737 | 50 | 50 |

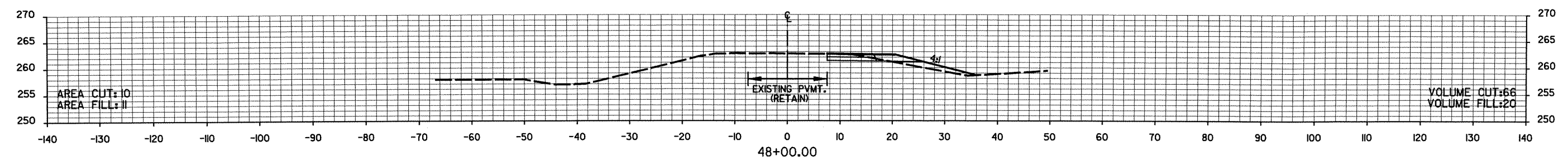
2 CROSS SECTIONS



STA. 50+20.00 END CONSTRUCTION



STA. 48+20.00 BEGIN TAPER



SITE NO. 3
STA. 48+00.00 TO STA. 50+20.00
HWY. 63 NB EXIT RAMP TURN LANE