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.		061547	1	323
				(2) HWY. 7S - HWY. 5 (S)				

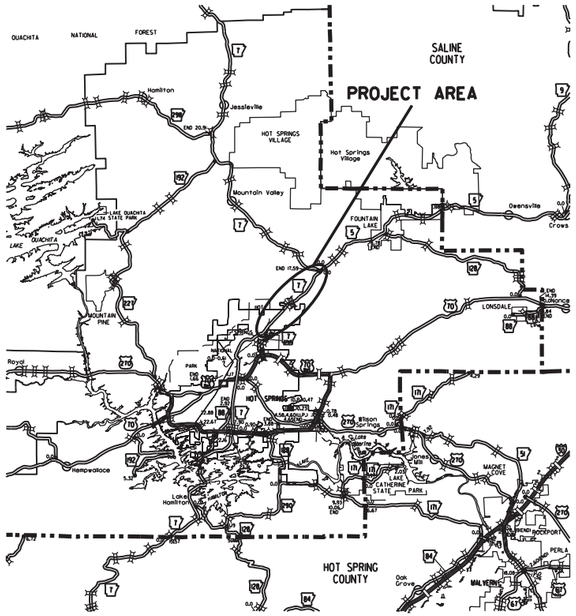
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

HWY. 7S - HWY. 5 (S)

GARLAND COUNTY
ROUTE 7 SECTION 9

JOB 061547

FED. AID PROJ. NHPP-9210(35)



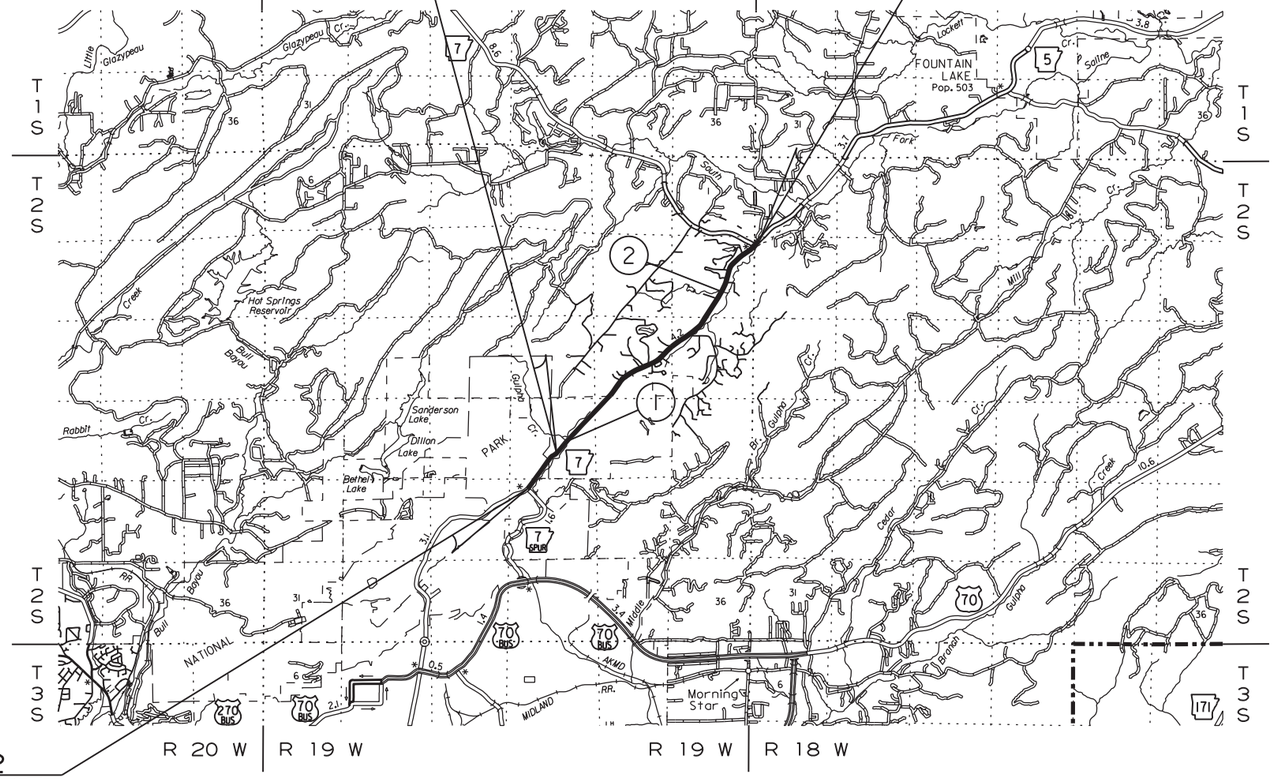
VICINITY MAP



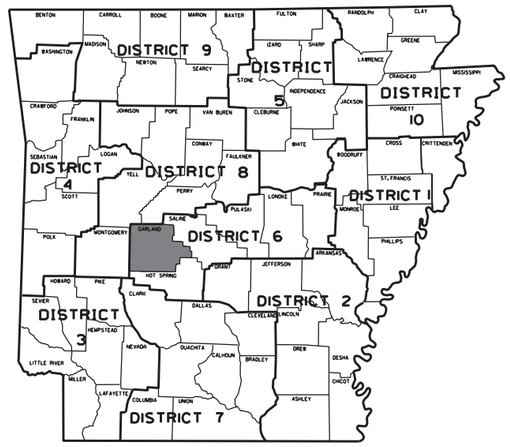
NOT TO SCALE

STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

STA. 334+00.00
END CONSTRUCTION
END JOB 061547



LOG MILE 13.42
BEGIN JOB 061547
BEGIN OVERLAY



ARK. HWY. DIST. NO. 6

STRUCTURES OVER 20'-0" SPAN

(1) STA. 146+56 CONSTRUCT
QUAD. 9' x 6' x 126' R.C. BOX
ON 45° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 1830 CFS; D.A. = 1.23 SQ. MI.
SPAN = 55'-3"

(2) STA. 289+26 CONSTRUCT
DBL. 12' x 7' x 89' R.C. BOX
ON 15° RT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 1330 CFS; D.A. = 0.91 SQ. MI.
SPAN = 26'-9"

DESIGN TRAFFIC DATA

DESIGN YEAR	2040
2020 ADT	10500
2040 ADT	14000
2040 DHV	1540
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	11%
DESIGN SPEED	45 MPH

	BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 34°32'08"	N 34°33'26"	N 34°34'45"
LONGITUDE	W 93°01'54"	W 93°00'19"	W 92°58'50"

LENGTH OF PROJECT CALCULATED ALONG C.L.

GROSS LENGTH OF PROJECT			22632.95	FEET	OR	4.287	MILES
NET	:	: ROADWAY	22550.95	:		4.271	MILES
NET	:	: BRIDGES	82.00	:		0.016	MILES
NET	:	: PROJECT	22632.95	:		4.287	MILES

APPROVED

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 7836
M. E. BANKS

Banks, Emanuel
Jul 27 2020 6:29 AM

DEPUTY DIRECTOR
AND CHIEF ENGINEER

dn40219 7/14/2020
R061547.DGN 7/21/2020

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.		061547	2	323

(2) INDEX OF SHEETS AND STANDARD DRAWINGS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS AND STANDARD DRAWINGS
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES
4 - 10	TYPICAL SECTIONS OF IMPROVEMENT
11 - 24	SPECIAL DETAILS
25 - 49	TEMPORARY EROSION CONTROL DETAILS
50 - 69	MAINTENANCE OF TRAFFIC DETAILS
70 - 72	PERMANENT PAVEMENT MARKING DETAILS
73 - 82	QUANTITIES
83 - 84	SUMMARY OF QUANTITIES AND REVISIONS
85 - 94	SURVEY CONTROL DETAILS
95 - 129	PLAN AND PROFILE SHEETS
130	TRAFFIC SIGNAL QUANTITIES
131	TRAFFIC SIGNAL NOTES
132 - 135	SIGNALIZATION PLAN SHEETS
136	ILLUMINATION NOTES AND QUANTITIES
137	ILLUMINATION LAYOUT
138	ILLUMINATION TABLES
139 - 140	ILLUMINATION DETAILS
141 - 323	CROSS SECTIONS

NOTE: CROSS SECTIONS NOT NORMALLY INCLUDED IN PLANS SOLD TO PROSPECTIVE BIDDERS, BUT MAY BE HAD UPON REQUEST.

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CDP-1	CONCRETE DITCH PAVING	12-08-16
CG-1	CURBING DETAILS	11-29-07
DR-1	DETAILS OF DRIVEWAYS & ISLANDS	11-07-19
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES	11-16-01
FPC-9E	DETAILS OF DROP INLETS (TYPE C)	08-22-02
FPC-9M	DETAILS OF DROP INLET (TYPE MO)	08-22-02
MB-1	MAILBOX DETAILS	11-18-04
PBC-1	PRECAST CONCRETE BOX CULVERTS	01-28-15
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)	02-27-14
PCP-2	PLASTIC PIPE CULVERT (PVC F949)	02-27-14
PCP-3	PLASTIC PIPE CULVERT (POLYPROPYLENE)	02-27-20
PM-1	PAVEMENT MARKING DETAILS	02-27-20
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
RCB-1	REINFORCED CONCRETE BOX CULVERT DETAILS	07-26-12
RCB-2	EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS	11-20-03
RCB-3	METHOD OF EXTENDING EXISTING R.C. BOX CULVERTS	10-12-95
SD-5	CONTROLLER CABINET UTILITY DRAWER	09-12-13
SD-6	HEAVY DUTY PULL BOX	11-16-17
SD-8	SIGNAL HEAD PLACEMENT	12-08-16
SD-9	SERVICE POINT	11-07-19
SD-11	STEEL POLE WITH MASTARM	11-16-17
SE-3	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC (4% MAXIMUM)	11-07-19
SI-1	DETAILS OF SPECIAL ITEMS	10-25-18
SI-3	CONCRETE WALK (TYPE SPECIAL)	05-12-16
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	02-27-20
TC-4	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TC-5	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
WF-2	WIRE FENCE WATER GAPS	04-20-79
WF-3	CHAIN LINK FENCE	11-17-10
WF-4	WIRE FENCE TYPE C AND D	08-22-02
WR-1	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	11-10-05
W-X003-1	DETAILS OF STANDARD WINGS FOR REINFORCED CONCRETE BOX CULVERTS	05-10-66
R-100X-0	DETAILS OF STANDARD BARREL SECTIONS FOR REINFORCED CONCRETE BOX CULVERTS	02-08-63

6/22/2020

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(2) GOVERNING SPECS. AND GENERAL NOTES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 29 2020 7:58 AM
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GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

NUMBER	TITLE
ERRATA____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
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 - TRAINING PROGRAM - JOB 061547
FHWA-1273__	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273__	SUPPLEMENT - WAGE RATE DETERMINATION
100-3_____	CONTRACTOR'S LICENSE
100-4_____	DEPARTMENT NAME CHANGE
102-2_____	ISSUANCE OF PROPOSALS
108-1_____	LIQUIDATED DAMAGES
108-2_____	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1_____	PROTECTION OF WATER QUALITY AND WETLANDS
210-1_____	UNCLASSIFED EXCAVATION
303-1_____	AGGREGATE BASE COURSE
306-1_____	QUALITY CONTROL AND ACCEPTANCE
400-1_____	TACK COATS
400-4_____	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5_____	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6_____	LIQUID ANTI-STRIP ADDITIVE
404-3_____	DESIGN OF ASPHALT MIXTURES
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2_____	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
505-1_____	PORTLAND CEMENT CONCRETE DRIVEWAY
600-2_____	INCIDENTAL CONSTRUCTION
603-1_____	LANE CLOSURE NOTIFICATION
604-1_____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3_____	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
605-1_____	CONCRETE DITCH PAVING
606-1_____	PIPE CULVERTS FOR SIDE DRAINS
620-1_____	MULCH COVER
621-1_____	FILTER SOCKS
632-1_____	CONCRETE ISLAND
633-1_____	CONCRETE WALKS, CONCRETE STEPS, AND HAND RAILING
634-1_____	CURBING
700-2_____	TRAFFIC CONTROL FACILITIES
800-1_____	STRUCTURES
804-2_____	REINFORCING STEEL FOR STRUCTURES
JOB 061547__	ACTUATED CONTROLLER
JOB 061547__	ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)
JOB 061547__	ASSESSMENT OF WORKING DAYS – MAINTENANCE OF TRAFFIC
JOB 061547__	BIDDING REQUIREMENTS AND CONDITIONS
JOB 061547__	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 061547__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 061547__	CABINET DRAWER ASSEMBLY
JOB 061547__	CARGO PREFERENCE ACT REQUIREMENTS
JOB 061547__	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB 061547__	CONCRETE PULL BOX
JOB 061547__	CONCRETE WALKS (TYPE SPECIAL)
JOB 061547__	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 061547__	CONSTRUCTION PROJECT INFORMATION SIGN
JOB 061547__	COORDINATION OF WORK
JOB 061547__	CULVERT CLEAN OUT
JOB 061547__	DELAY IN RIGHT OF WAY OCCUPANCY
JOB 061547__	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 061547__	EDGE CARD VIDEO PROCESSOR
JOB 061547__	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 061547__	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 061547__	EXTENSION FOR PIPE CULVERTS
JOB 061547__	FLEXIBLE BEGINNING OF WORK - CALENDAR DAY CONTRACT
JOB 061547__	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 061547__	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 061547__	LED LUMINAIRE ASSEMBLY (BUG U0 TYPE)
JOB 061547__	LED ROADWAY ILLUMINATION POLE
JOB 061547__	LED TRAFFIC SIGNAL HEAD
JOB 061547__	MAINTENANCE OF TRAFFIC
JOB 061547__	MANDATORY ELECTRONIC CONTRACT
JOB 061547__	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 061547__	OFF-SITE RESTRAINING CONDITIONS FOR NORTHERN LONG-EARED BATS
JOB 061547__	PARTNERING REQUIREMENTS
JOB 061547__	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS (IRI)
JOB 061547__	PLASTIC PIPE
JOB 061547__	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 061547__	PROSECUTION AND PROGRESS WITH BID SCHEDULE
JOB 061547__	RETROREFLECTIVE BACKPLATES
JOB 061547__	SEQUENCE OF CONSTRUCTION
JOB 061547__	SERVICE POINT ASSEMBLY (ROUNDABOUT LIGHTING)
JOB 061547__	SERVICE POINT ASSEMBLY (TRAFFIC CONTROL DEVICES)
JOB 061547__	SHORING FOR CULVERTS
JOB 061547__	SITE USE (A+C METHOD) – CALENDAR DAY CONTRACT
JOB 061547__	SOIL STABILIZATION
JOB 061547__	STORM WATER POLLUTION PREVENTION PLAN
JOB 061547__	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 061547__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 061547__	TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS)
JOB 061547__	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)
JOB 061547__	UTILITY ADJUSTMENTS
JOB 061547__	VALUE ENGINEERING
JOB 061547__	VIDEO DETECTOR (COLOR)
JOB 061547__	WARM MIX ASPHALT

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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
5. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
6. 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 ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
8. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
9. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
10. 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.
11. THIS PROJECT IS COVERED UNDER A SECTION 404 NATIONWIDE 23 PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECFICATIONS, EDITION OF 2014, FOR PERMIT REQUIREMENTS.

6/22/2020

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GOVERNING SPECIFICATIONS AND GENERAL NOTES

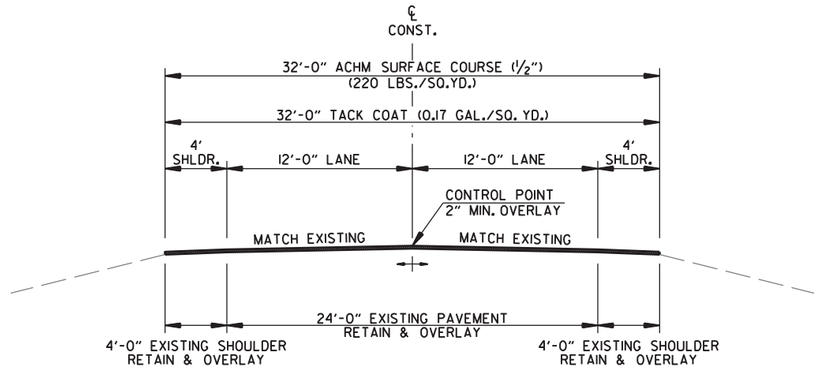
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				JOB NO.		061547	4	323

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

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HWY. 7 - OVERLAY SECTION
LOG MILE 13.42 TO LOG MILE 14.02

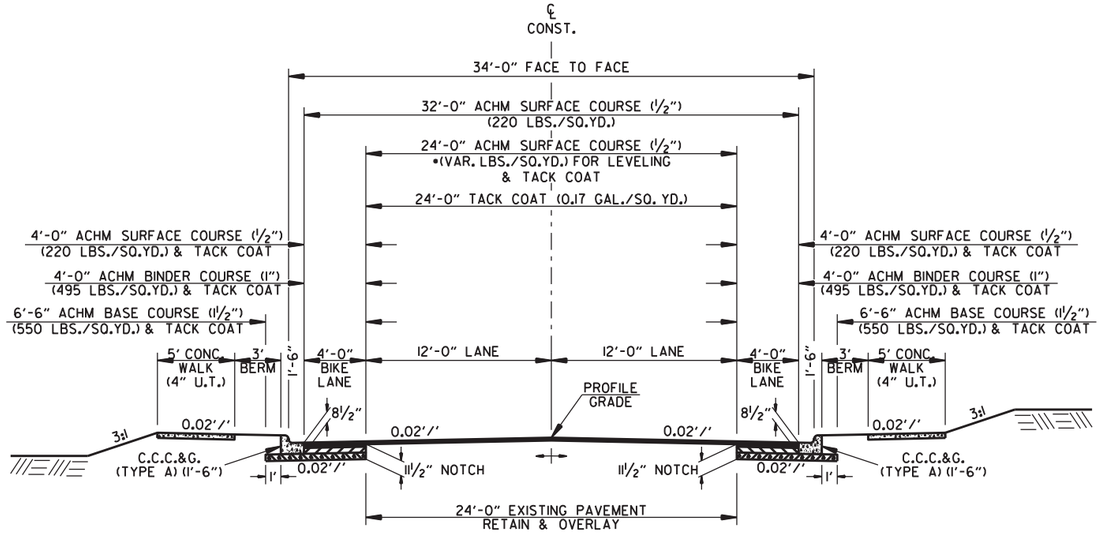
NOTES:

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.

ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.

THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE 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.



•TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 7 - TWO-LANE NOTCH, WIDEN, AND OVERLAY SECTION
STA. 140+60.65 TO STA. 141+55.00

TRANSITION:
STA. 141+55.00 TO STA. 144+25.00

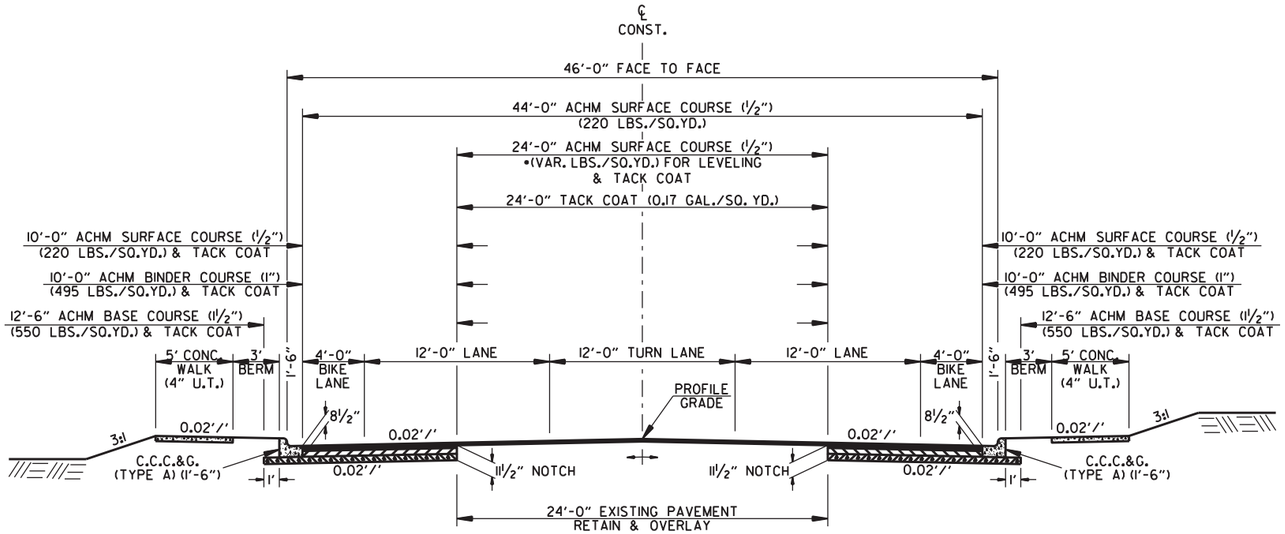
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TYPICAL SECTIONS OF IMPROVEMENT

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				JOB NO.		061547	5	323

(2) TYPICAL SECTIONS OF IMPROVEMENT



HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION

STA. 144+25.00 TO STA. 145+87.00
STA. 147+22.00 TO STA. 288+81.00
STA. 289+65.00 TO STA. 322+09.82

•TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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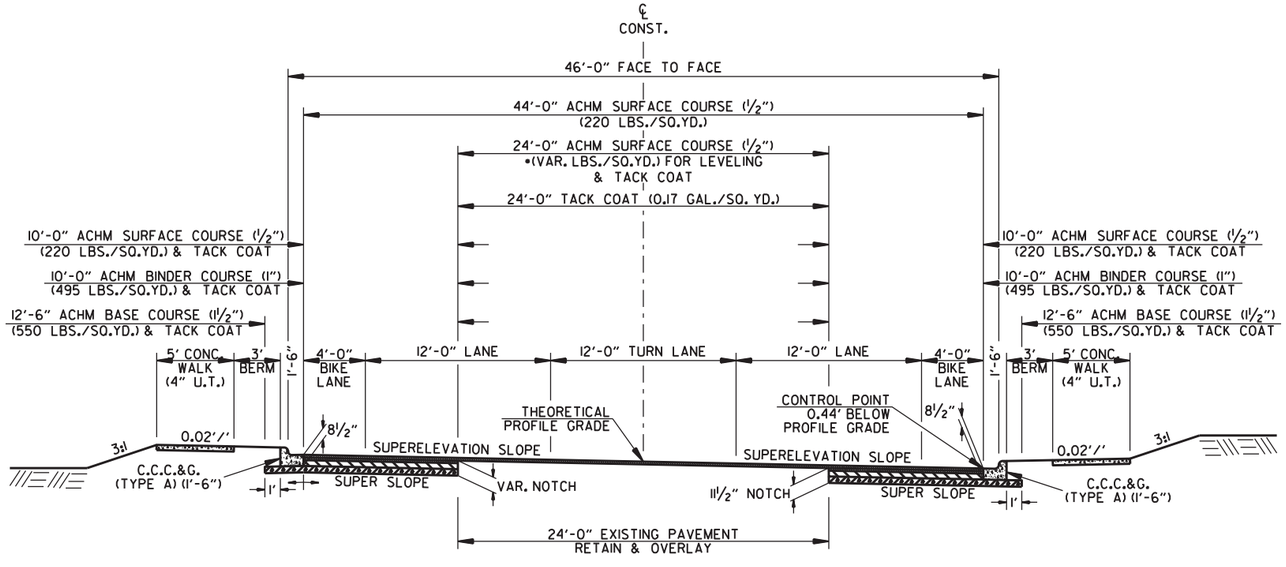
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HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION
SUPERELEVATION

•TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

6/22/2020

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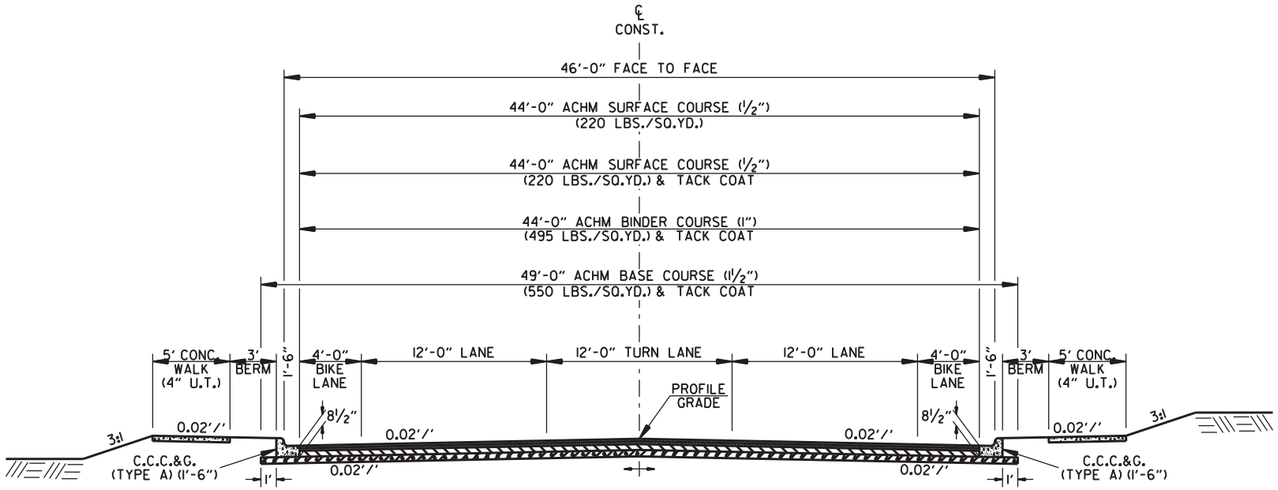
TYPICAL SECTIONS OF IMPROVEMENT

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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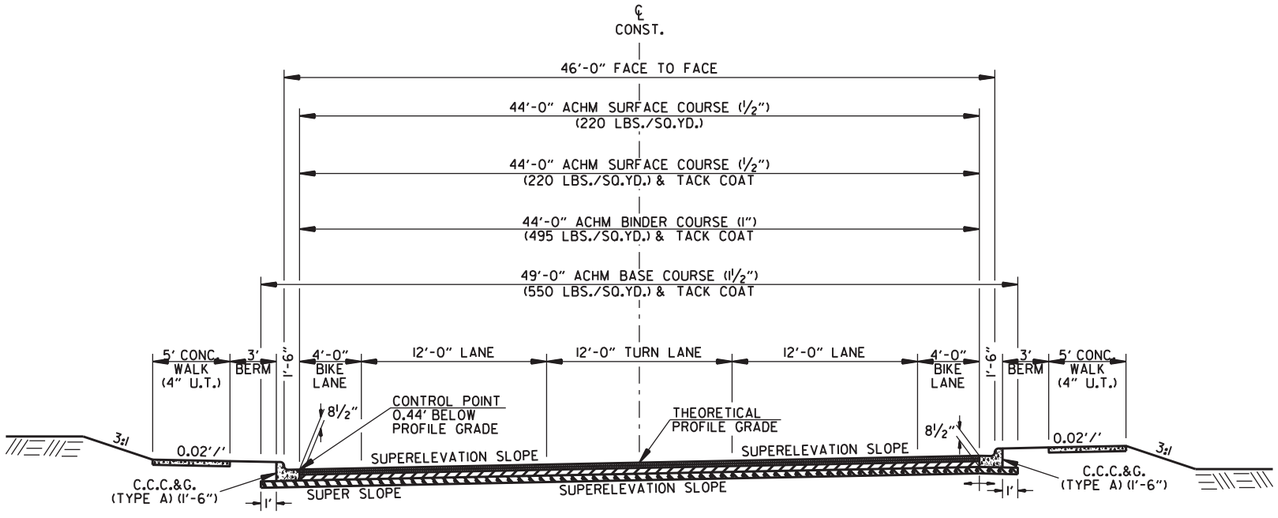
HWY. 7 - THREE-LANE FULL DEPTH SECTION
STA. 145+87.00 TO STA. 147+22.00
STA. 288+81.00 TO STA. 289+65.00

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.

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PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE 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.



HWY. 7 - THREE-LANE FULL DEPTH SECTION
SUPERELEVATION

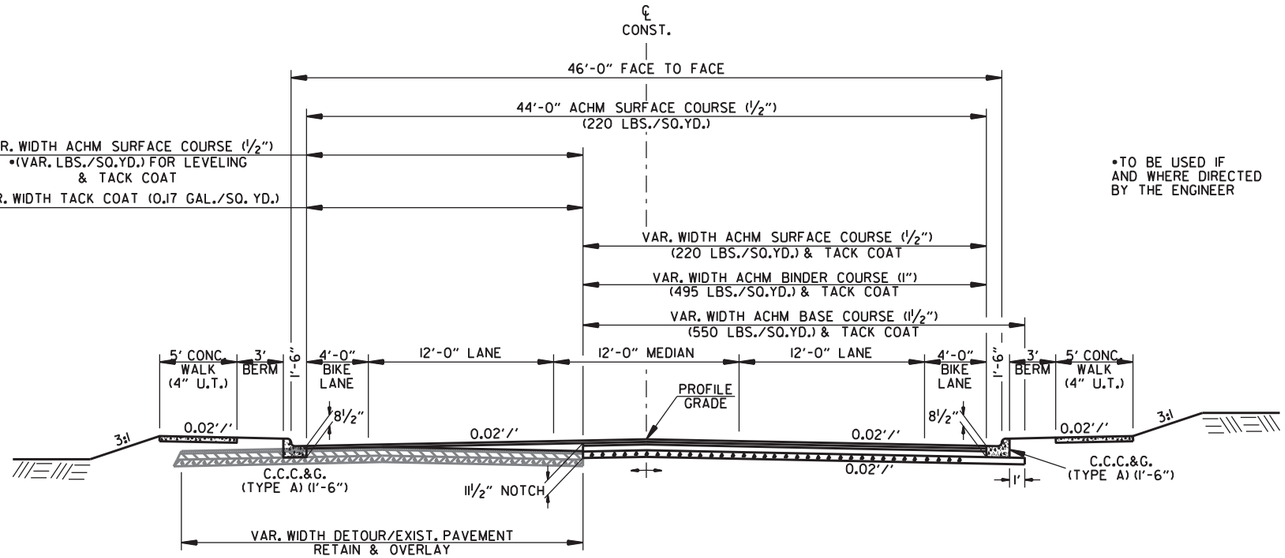
6/22/2020

R06547.DGN

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
				6	ARK.			
				JOB NO.		061547	7	323

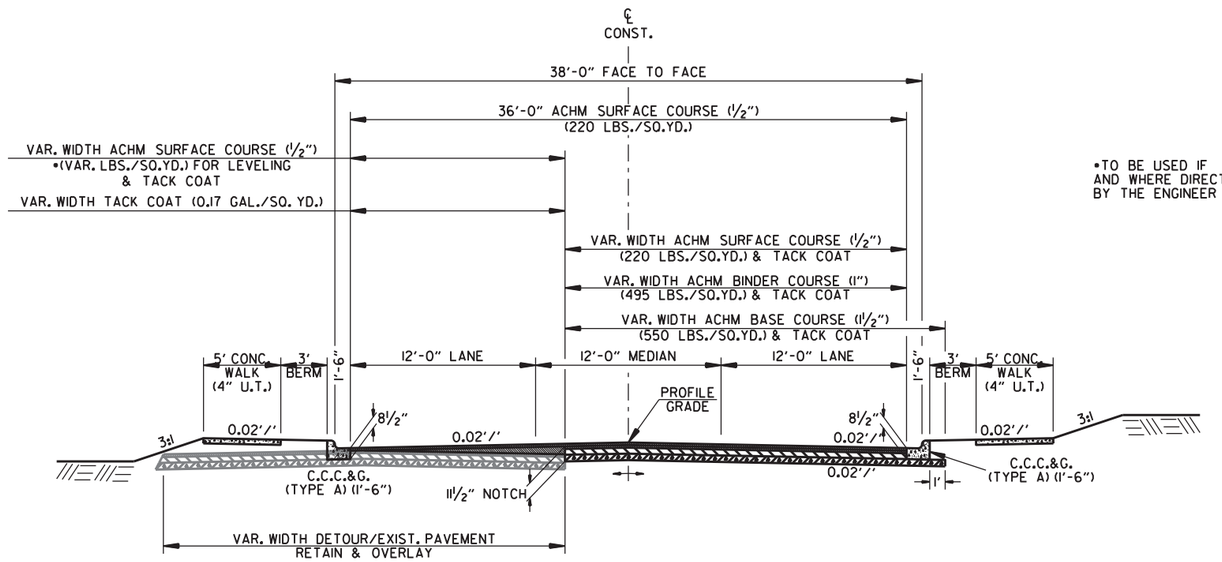
(2) TYPICAL SECTIONS OF IMPROVEMENT



•TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 7 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION
STA. 322+09.82 TO STA. 324+90.00

TRANSITION:
STA. 324+90.00 TO STA. 325+18.00



•TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

HWY. 7 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION
HWY. 5 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION

STA. 325+18.00 TO STA. 326+06.76
STA. 328+06.76 TO STA. 329+85.48
STA. 701+00.00 TO STA. 703+09.36

NOTES:

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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TYPICAL SECTIONS OF IMPROVEMENT

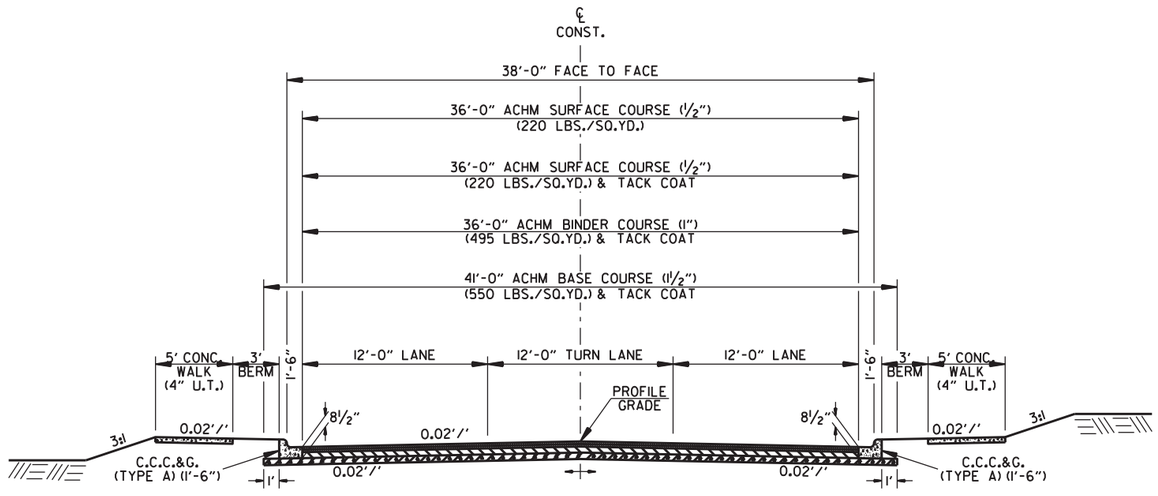
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	8	323

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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HWY. 5 - THREE-LANE FULL DEPTH SECTION
HWY. 70 - FULL DEPTH SECTION

STA. 329+85.48 TO STA. 332+22.64
STA. 610+95.00 TO STA. 611+33.46

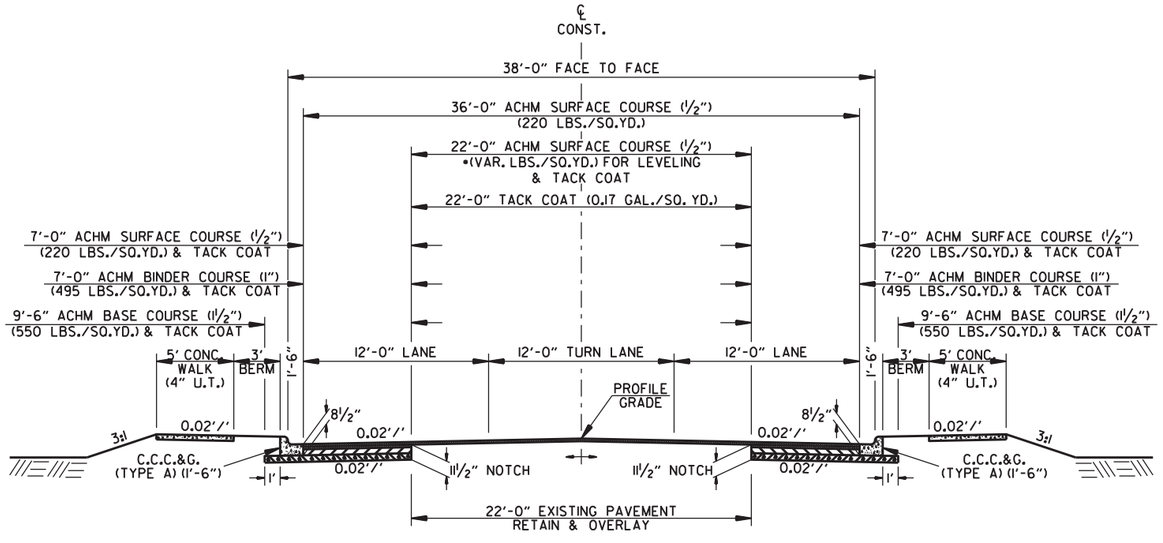
NOTES:

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HWY. 5 - NOTCH, WIDEN, AND OVERLAY SECTION
STA. 332+22.64 TO STA. 334+00.00

•TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

6/22/2020

R061547.DGN

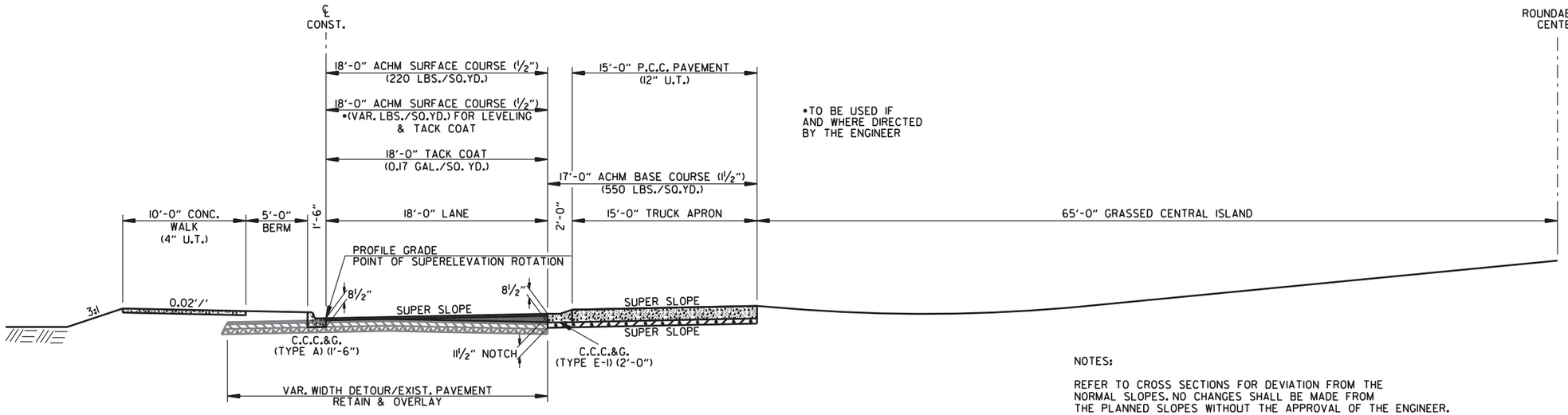
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	9	323

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:01 PM



ROUNDABOUT - NOTCH, WIDEN, AND OVERLAY SECTION
STA. 0+00.00 TO STA. 1+07.73
STA. 4+83.52 TO STA. 6+28.32

NOTES:

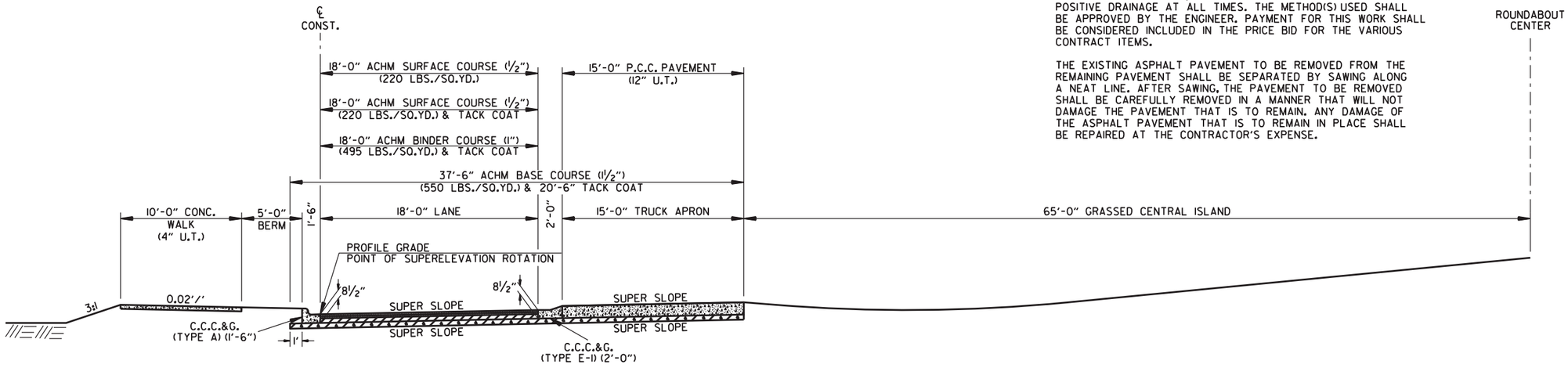
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ROUNDABOUT - FULL DEPTH SECTION
STA. 1+07.73 TO STA. 4+83.52

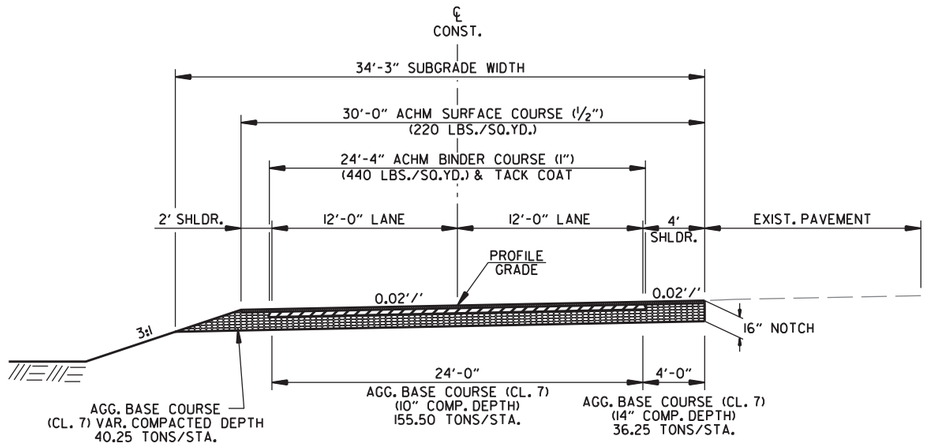
6/22/2020

R061547.DGN

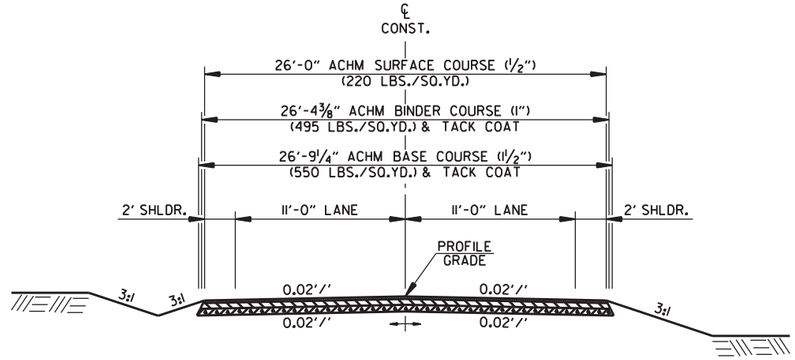
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	10	323

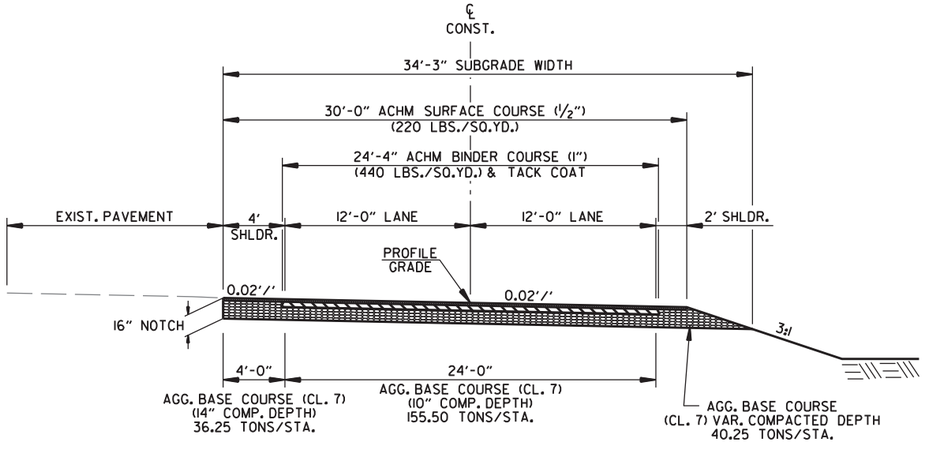
(2) TYPICAL SECTIONS OF IMPROVEMENT



DETOUR 1- FULL DEPTH SECTION
STA. 400+00.00 TO STA. 407+58.46



DETOUR 3 - FULL DEPTH SECTION
STA. 801+61.92 TO STA. 808+63.11



DETOUR 2 - FULL DEPTH SECTION
STA. 500+00.00 TO STA. 505+86.78

NOTES:

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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Trinity Smith

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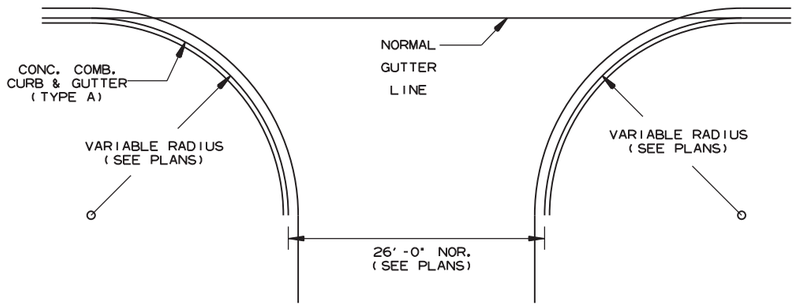
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	11	323

(2) SPECIAL DETAILS

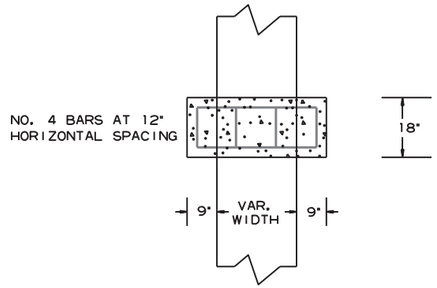
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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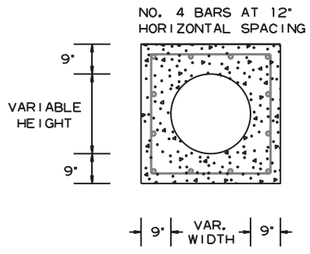
NOTE:
PAVEMENT STRUCTURE FOR STATE HIGHWAYS, CITY STREETS, & COUNTY ROADS TO BE SAME AS MAIN LANES.

DETAIL OF TURNOUTS, ASPHALT STREETS, COUNTY ROADS & STATE HIGHWAYS CURB & GUTTER SECTION

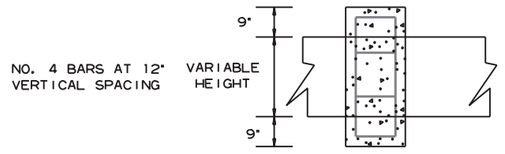


TOP VIEW

MIN 3" COVER

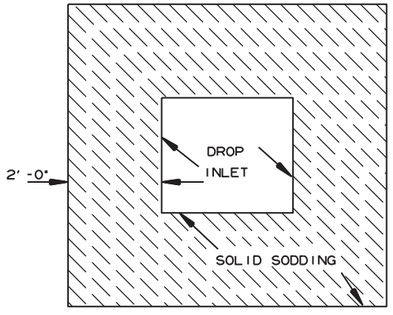


FRONT VIEW



SIDE VIEW

PIPE EXTENSION REINFORCED CONCRETE COLLAR DETAIL



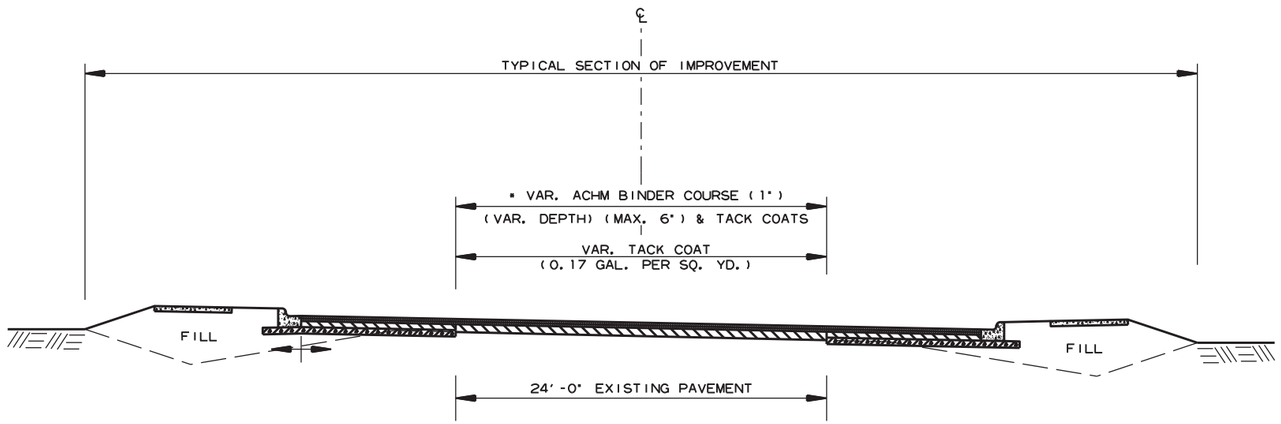
DETAIL FOR SOLID SODDING AROUND DROP INLETS

6/22/2020

R06547.DGN

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.		061547	12	323

(2) SPECIAL DETAILS



METHOD OF RAISING GRADE

STA. 214+00.00 TO STA. 225+00.00
STA. 264+00.00 TO STA. 271+00.00
STA. 301+00.00 TO STA. 306+00.00
STA. 331+80.00 TO STA. 332+69.00

NOTES:

(1) THIS DETAIL TO BE USED ONLY WHERE DIRECTED BY THE ENGINEER.

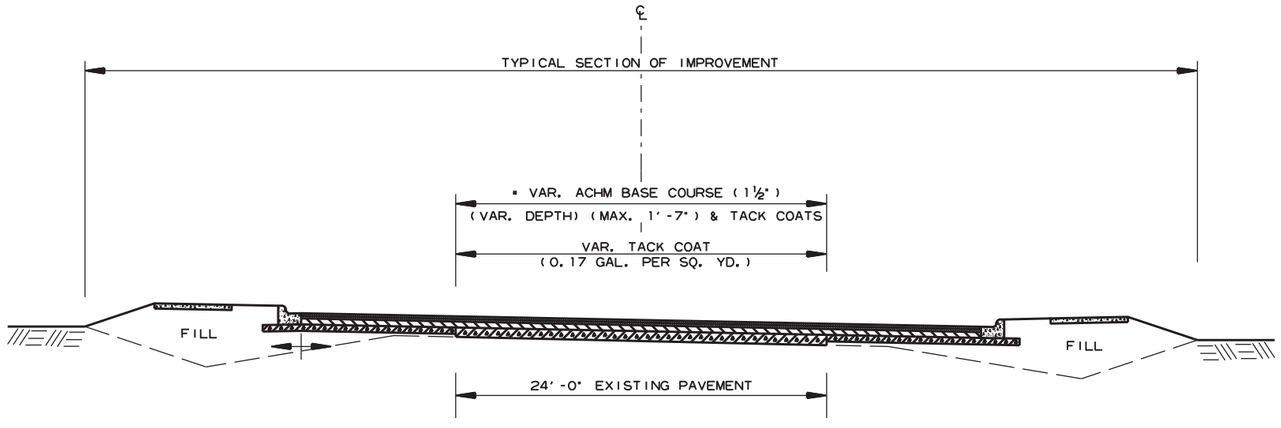
(2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.

(3) IN LOCATIONS WHERE THE DISTANCE BETWEEN THE PROPOSED SUBGRADE AND THE EXISTING ASPHALT ROADWAY IS MORE THAN ONE FOOT, SCARIFICATION OF THE EXISTING ASPHALT ROADWAY WILL BE REQUIRED AS STATED IN SECTION 210, SUBSECTION 210.09, OF THE STANDARD SPECIFICATIONS.

STATE OF ARKANSAS
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METHOD OF RAISING GRADE

STA. 323+00.00 TO STA. 325+35.37

NOTES:

(1) THIS DETAIL TO BE USED ONLY WHERE DIRECTED BY THE ENGINEER.

(2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.

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6/22/2020

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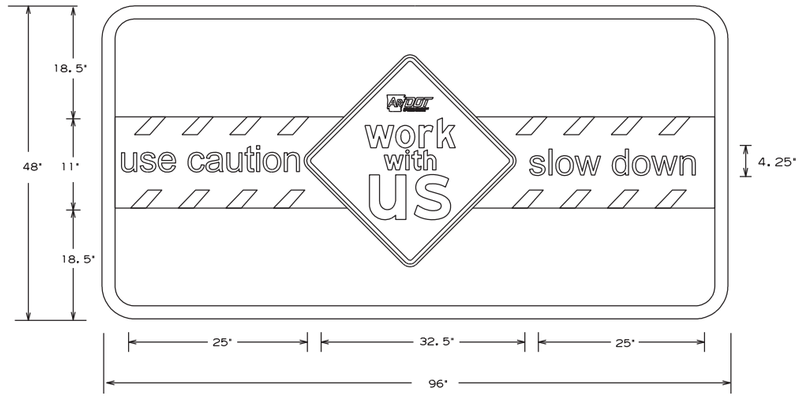
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				6	ARK.			
				JOB NO.		061547	13	323

(2) SPECIAL DETAILS



6.0" Radius, 1.3" Border, Black on Orange;
"Job XXXXXX" C 2K; "Start Date Mo Year" C 2K;
"Est Completion Mo Year" C 2K; "IDRIVE ARKANSAS.COM" Arial;

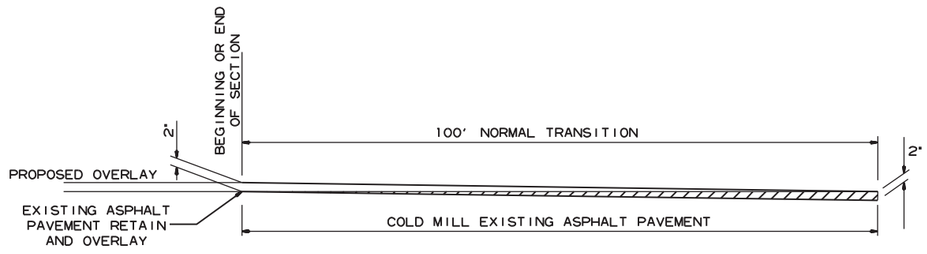
CONSTRUCTION PROJECT INFORMATION SIGN



1.5" WHITE BORDER, 1.5" RADII, GREEN BACKGROUND
"use caution/slow down" 4.25" NIVEAU GROTESK, REGULAR FONT
"work with us" FRUTIGER LT 75 BLACK FONT

NOTE: DIGITAL ART WORK FILE AVAILABLE FROM ARDOT MAINTENANCE DIVISION SIGN SHOP 501-569-2665.
THIS SIGN SHALL BE PLACED 500' PRECEDING THE FIRST ADVANCE WARNING SIGN, IN THE DIRECTION OF TRAFFIC.

WORK WITH US SIGN



DETAIL FOR TRANSITIONS

STATE OF ARKANSAS
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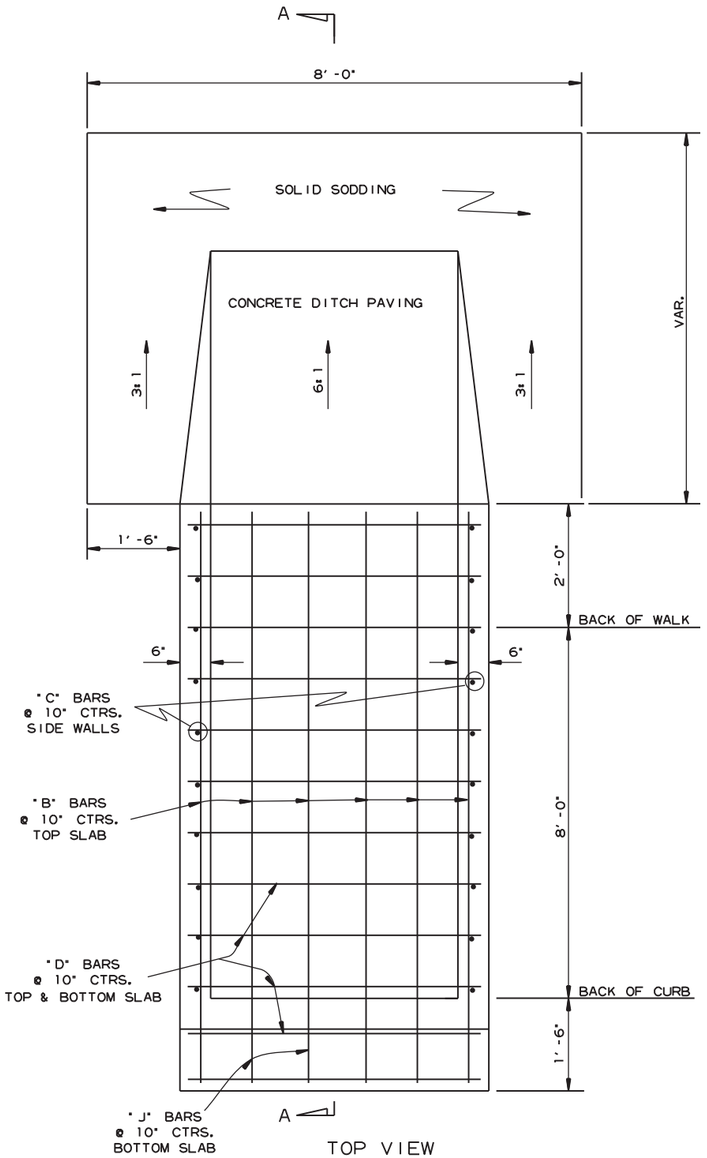
SPECIAL DETAILS

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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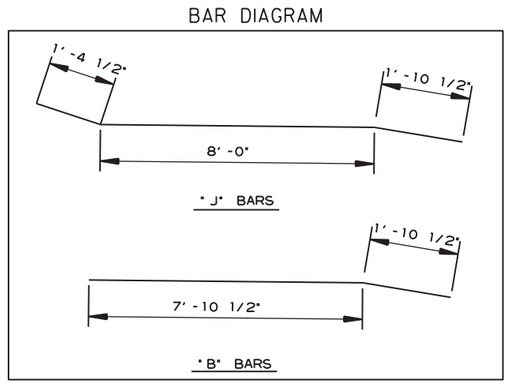
(2) SPECIAL DETAILS

STATE OF ARKANSAS
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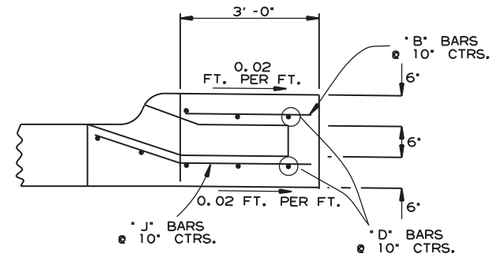


TOP VIEW

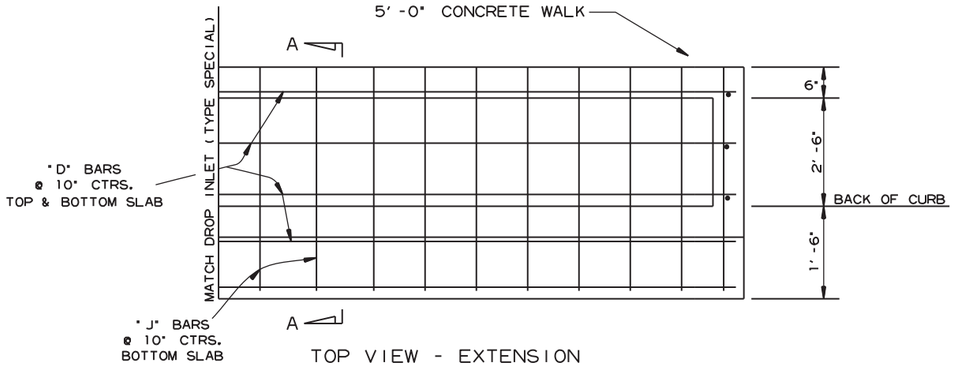


CLASS A CONC.	REINF. STEEL-RDWY. GRADE 60
CU. YDS.	POUND
2.53	207

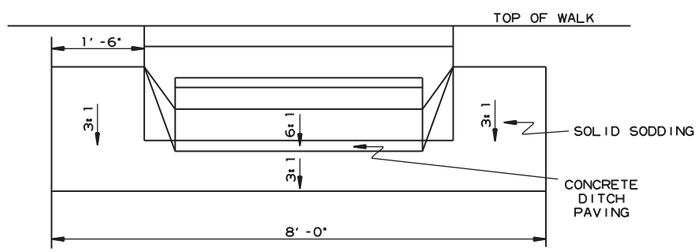
QUANTITIES FOR INFORMATION ONLY
DROP INLET (TYPE SPECIAL)



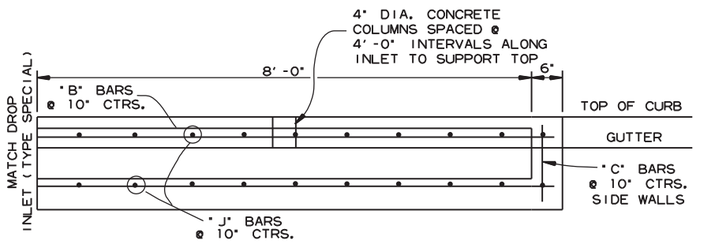
SECTION A-A - EXTENSION



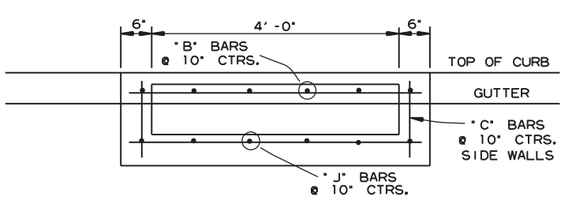
TOP VIEW - EXTENSION



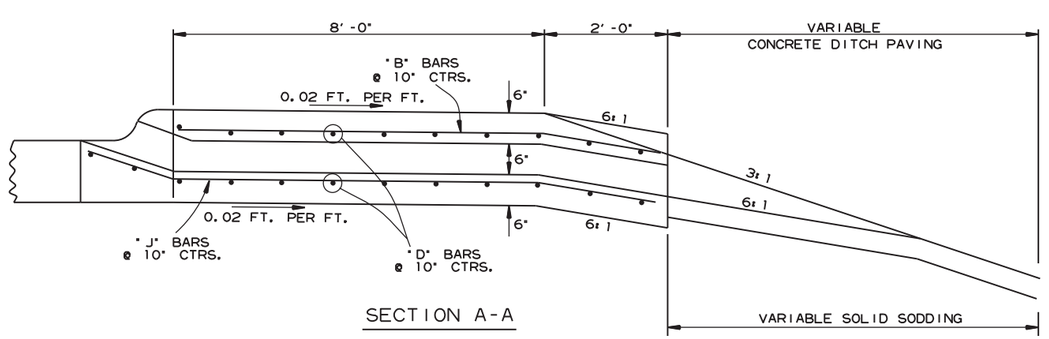
BACK VIEW



FRONT VIEW - EXTENSION



FRONT VIEW



SECTION A-A

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. ALL REINF. BARS SHALL BE #4 AND HAVE 1 1/2" COVER.
3. DROP INLETS AND EXTENSIONS ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
4. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
5. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
6. CONCRETE DITCH PAVING & SOLID SODDING SHALL BE PAID FOR SEPARATELY.
7. CONSTRUCT EXTENSIONS UPSTREAM OF DROP INLET UNLESS OTHERWISE SPECIFIED.

6/22/2020

R061547.DGN

DROP INLET (TYPE SPECIAL)

SPECIAL DETAILS

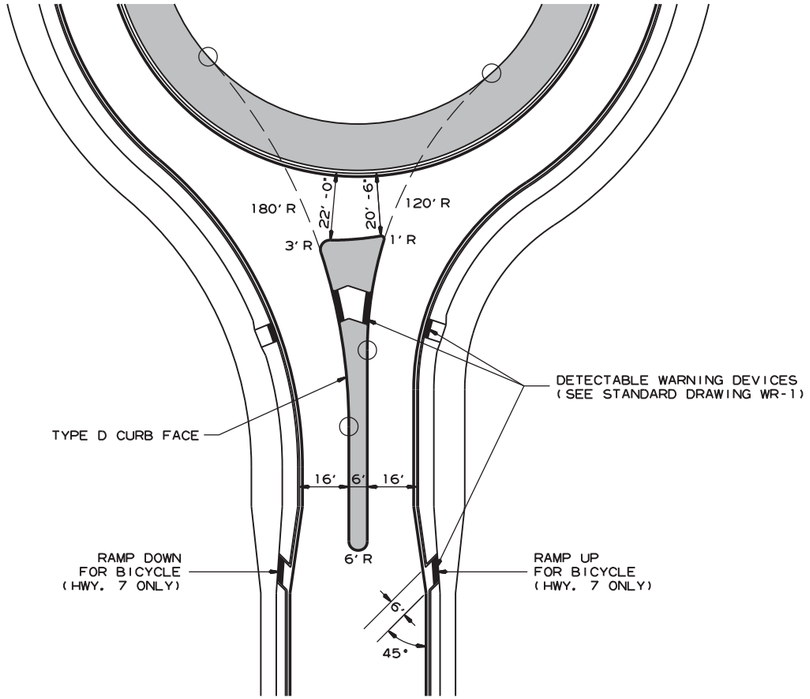
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	15	323

(2) SPECIAL DETAILS

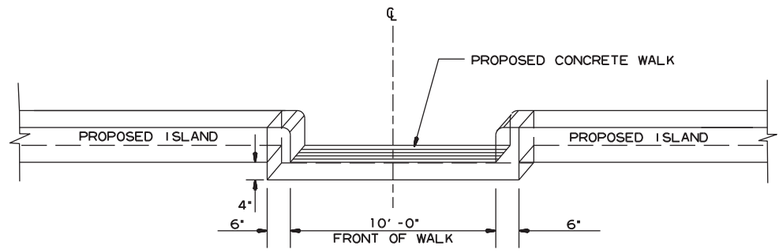
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

Jul 24 2020 2:04 PM
DocuSign



ROUNDABOUT APPROACH DETAIL



FACE SHALL MEET REQUIREMENTS OF TYPE D CURB

NOTE: CONCRETE WALK THROUGH ISLAND SHALL BE POURED MONOLITHICALLY. ALL MATERIALS REQUIRED TO CONSTRUCT CONCRETE WALK THRU ISLAND SHALL BE INCLUDED IN THE PRICE BID FOR CONCRETE ISLAND.

CONCRETE WALK THROUGH ISLAND DETAIL

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	16	323
				①		SPECIAL DETAILS		

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
39'-1"	6'-0"	0'-9"	0'-8"	45	3:1	53'-8 7/8"	2'-0"	6'-10"	2'-0"	0	60	3'-2"	3'-2"	3'-9"	0'-6"	0'-5 1/8"	14'-6"	29'-0"	16'-4 3/4"	36'-10 1/4"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
13.49	1156

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY			F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY			F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	15	L	Min	3'-0"	-	-	-	-	-	-	-	-	4	18	4	Min	4	18	4	14'-2"	4	18	10	L	Min	4'-7"	4	8	17'-3"	6	18	10	Min	-	-	-	Min	4	2	14'-10"	4	2	15'-4"	6	12	6	L	3'-4"	399
					Max	7'-8"												4'-10"									Max	9'-3"							2'-8"				-									
				X	Min	0'-9"												Max								X	Min	2'-4"							Max				Max							X	1'-8"	
					Max	0'-9"												9'-4"									Max	2'-4"							2'-8"				-									
				Y	Min	2'-4"																				Y	Min	2'-6"																				
					Max	7'-0"																					Max	7'-0"																				
WING B	4	12	29	L	Min	3'-0"	-	-	-	-	-	-	-	-	4	18	4	Min	4	18	4	28'-8"	4	18	20	L	Min	4'-7"	4	8	37'-8"	6	18	20	Min	-	-	-	Min	4	2	28'-11"	4	2	31'-9"	6	12	6	L	3'-4"	757
					Max	8'-3"												9'-10"									Max	9'-3"							2'-8"				-									
				X	Min	0'-9"												Max								X	Min	2'-4"							Max				Max							X	1'-8"	
					Max	1'-4"												9'-10"									Max	2'-4"							3'-3"				-									
				Y	Min	2'-4"																				Y	Min	2'-4"																				
					Max	7'-0"																					Max	7'-0"																				

INLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																																						
45	3	5	9	6	21'-6"	11	3	11	6.5	8	39'-1"	7'-10"	6	9	Max	49	4	4	Max	110	4	6	Max	74	4	8	Max	55	5	7	75	7'-6"	4	12	136	7'-6"	4	10	95	Max	4	10	95	Max	4	12	6	LONG	4	12	12	LONG
															38'-9"				38'-9"				38'-9"				38'-9"											40'-11"			40'-11"				40'-6"			31'-2"
															Min				Min				Min				Min											Min			Min				SHORT			MID
															2'-1"				2'-1"				2'-1"				2'-1"											1'-10"			1'-10"				2'-2"			21'-5"
															38'-9"	3			38'-9"	6			38'-9"	4			38'-9"	3																			12	SHORT
																																																	11'-7"

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D
5	28'-7"	12	5	28'-7"	12	4	1'-10"	0'-10"	57

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	REINFORCING STEEL (GR 60) (Includes HDWL) ① LBS.
73.04	10725

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

MID-SECTION

BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	>40.0 ft - 78.0 ft
2	>78.0 ft - 116.0 ft
3	>116.0 ft - 154.0 ft
4	>154.0 ft - 192.0 ft
5	>192.0 ft - 230.0 ft
6	>230.0 ft - 268.0 ft
7	>268.0 ft - 306.0 ft
8	>306.0 ft -344.0 ft

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

Ellis, Rick
Jul 14 2020 12:32 PM
DocuSigned by: Charles R. Ellis

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: DPT DATE: 6/5/2020
CHECKED BY: TMG DATE: 6/10/2020

This drawing to be used in conjunction with
SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE',
SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF MULTI-BARREL R.C. BOX CULVERT',
SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF WINGWALLS', and
STANDARD DRAWING RCB-2.
For additional information and outlet sections, see Sheet 2 of 2.

INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK	SIDE WALL THK	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
	D	S	H	T	B	C	W	OW	OH	SL																																								

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
TOTAL	

HDWL DEPTH. HD	ADDITIONAL REINF. FOR HDWL LBS.	"h" HDWL BARS SIZE	"h" HDWL BARS Y	"h" HDWL BARS LENGTH	"h" HDWL BARS NO. REQ'D

Design Fill Depth	Range of Actual Fill Depth
2	0.0 ft - 2.0 ft
5	>2.0 ft - 5.0 ft
10	>5.0 ft - 10.0 ft
15	>10.0 ft - 15.0 ft
20	>15.0 ft - 20.0 ft
25	>20.0 ft - 25.0 ft
30	>25.0 ft - 30.0 ft
35	>30.0 ft - 35.0 ft
40	>35.0 ft - 40.0 ft

Data shown for Mid-Section, Slope Section(s), and Skewed End Section is based on the design fill depth shown in the table, see PLAN AND PROFILE SHEETS for actual fill depth.

MID-SECTION

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
	D	S	H	T	B	C	W	OW	OH	SL																																								
A	5	9	6	11	11	6.5	8	39'-1"	7'-10"	83	4	38'-9"	7	39'-8"	4	38'-9"	16	62	4	38'-9"	4	39'-7"	4	38'-9"	12	83	5	7	284	7'-6"	4	12	498	7'-6"	4	10	95	4	10	95	4	12	12	4	12	36

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
277.14	33235

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
QUADRUPLE BARREL BOX CULVERT
Sta. 146+56

SPECIAL DETAILS

Ver. 1.17 b061547_cl.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	17	323

ⓘ SPECIAL DETAILS

Charles R. Ellis
Jul 14 2020 12:30 PM CDT
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: DPT DATE: 6/5/2020
CHECKED BY: TMG DATE: 6/10/2020

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B	CLASS "S" CONCRETE (Includes apron) OUTLET	REINFORCING STEEL (Includes apron and laps if required) OUTLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
39'-1"	6'-0"	0'-9"	0'-8"	45	3:1	53'-8 7/8"	2'-0"	6'-10"	2'-0"	0	60	3'-2"	3'-2"	3'-9"	0'-6"	0'-5 1/8"	14'-6"	29'-0"	16'-4 3/4"	36'-10 1/4"	15.32	1156

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	15	L Min 3'-0" / Max 7'-8" / X Min 0'-9" / Max 0'-9" / Y Min 2'-4" / Max 7'-0"	-	-	-	L - / X - / Y -	-	-	-	L - / X - / Y -	4	18	4	Min 4'-10" / Max 9'-4"	4	18	4	14'-2"	4	18	10	L Min 4'-9" / Max 9'-3" / X Min 2'-4" / Max 2'-4" / Y Min 2'-6" / Max 7'-0"	4	17'-3"	6	18	10	Min 2'-8" / Max 2'-8"	-	-	-	Min - / Max -	4	2	14'-10"	4	2	15'-4"	6	12	6	L 3'-4" / X 1'-8"	399
WING B	4	12	29	L Min 3'-0" / Max 8'-3" / X Min 0'-9" / Max 1'-4" / Y Min 2'-4" / Max 7'-0"	-	-	-	L - / X - / Y -	-	-	-	L - / X - / Y -	4	18	4	Min 9'-10" / Max 18'-10"	4	18	4	28'-8"	4	18	20	L Min 4'-7" / Max 9'-3" / X Min 2'-4" / Max 2'-4" / Y Min 2'-4" / Max 7'-0"	4	37'-8"	6	18	20	Min 2'-8" / Max 3'-3"	-	-	-	Min - / Max -	4	2	28'-11"	4	2	31'-9"	6	12	6	L 3'-4" / X 1'-8"	757

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

ⓘ Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

OUTLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINF. "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINF. "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINF. "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINF. "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINF. "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINF. "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DIST. REINF. "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DIST. REINF. "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DIST. REINF. "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DIST. REINF. "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH
45	3:1	5	9	6	21'-6"	11	3	11	6.5	8	39'-1"	7'-10"	6	9	Max 38'-9" / Min 2'-1"	49	4	4	Max 38'-9" / Min 2'-1"	110	4	6	Max 38'-9" / Min 2'-1"	74	4	8	Max 38'-9" / Min 2'-1"	55	5	7	75	7'-6"	4	12	136	7'-6"	4	10	95	Max 40'-11" / Min 1'-10"	4	10	95	Max 40'-11" / Min 1'-10"	4	12	6	LONG 40'-6" / SHORT 2'-2"	4	12	12	LONG 31'-2" / MID 21'-5" / SHORT 11'-7"

CLASS "S" CONCRETE (Includes HDWL)	REINFORCING STEEL (GR 60) (Includes HDWL)
CU. YDS.	LBS.
73.04	10725

"k1" HDWL BARS			"k2" HDWL BARS			"h" HDWL BARS			
SIZE	LENGTH	NO. REQ'D	SIZE	LENGTH	NO. REQ'D	SIZE	LENGTH	Y	NO. REQ'D
5	28'-7"	12	5	28'-7"	12	4	1'-10"	0'-10"	57

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK	SIDE WALL THK	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINF. LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D	BOTTOM SLAB REINF. LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D	SIDE WALL REINF. "f0" LENGTH = OH - 4" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINF. "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DIST. REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DIST. REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DIST. REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DIST. REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL	SIZE	L	SIZE	L	SIZE	L	SPACING	NO. REQ'D	SIZE	L	SIZE	L	SIZE	L	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL	"h" HDWL BARS			
HD	LBS.	SIZE	Y	LENGTH	NO. REQ'D

CLASS "S" CONCRETE	REINFORCING STEEL (GR. 60)
CU. YDS.	LBS.
TOTAL	

The required number of bars and lengths shown are for estimating purpose only.
The actual number and length required shall be determined in field.

Unless otherwise noted, all dimensions are in inches.

SHEET 2 OF 2
DETAILS OF R.C. BOX CULVERT
QUADRUPLE BARREL BOX CULVERT
Sta. 146+56

SPECIAL DETAILS

Ver. 1.17 b061547_cl.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	18	323
				①		SPECIAL DETAILS		

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
25'-10"	7'-0"	0'-9"	0'-8"	15	3:1	25'-6 1/2"	2'-0"	7'-10"	2'-4"	15	45	3'-2"	3'-7 3/4"	4'-1"	0'-8 7/8"	1'-0"	17'-0"	23'-0"	20'-5 3/8"	26'-5 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
11.76	1118

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1 LENGTHS	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F4 LENGTHS	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F6 LENGTHS	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F8 LENGTHS	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	17	L	Min 3'-6"	4	12	4	L 3'-7"	-	-	-	L -	4	18	6	Min 3'-5"	Min 12'-9"	4	18	4	16'-8"	4	18	12	L	Min 4'-11"	4	8	21'-3"	6	18	11	Min 2'-8"	Max 3'-1"	-	-	-	Min -	4	2	17'-5"	4	2	18'-1"	6	12	7	L 3'-4"	481
					Max 9'-2"																					X	Max 10'-3"												Max -									X 1'-8"	
				X	Min 0'-9"				X 1'-2"				X -				Min 3'-5"								X	Min 2'-4"																					
					Max 1'-3"												Max 12'-9"									Max 2'-4"																					
				Y	Min 2'-10"				Y 2'-6"				Y -													Y	Min 2'-8"																					
					Max 8'-0"																						Max 8'-0"																					
WING B	4	12	23	L	Min 3'-5"	4	12	5	L 3'-11"	-	-	-	L -	4	18	6	Min 4'-9"	Min 17'-3"	4	18	4	22'-8"	4	18	16	L	Min 4'-11"	4	8	27'-3"	6	18	16	Min 2'-8"	Max 3'-7"	-	-	-	Min -	4	2	23'-2"	4	2	25'-4"	6	12	7	L 3'-4"	637
					Max 9'-7"																					X	Max 10'-3"												Max -									X 1'-8"	
				X	Min 0'-9"				X 1'-6"				X -				Min 5'-3"								X	Min 2'-4"																					
					Max 1'-8"												Max 17'-9"									Max 2'-4"																					
				Y	Min 2'-9"				Y 2'-6"				Y -													Y	Min 2'-8"																					
					Max 8'-0"																						Max 8'-0"																					

MID-SECTION BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	>40.0 ft - 78.0 ft
2	>78.0 ft - 116.0 ft
3	>116.0 ft - 154.0 ft
4	>154.0 ft - 192.0 ft
5	>192.0 ft - 230.0 ft
6	>230.0 ft - 268.0 ft
7	>268.0 ft - 306.0 ft
8	>306.0 ft -344.0 ft

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

Jul 14 2020 12:30 PM

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: DPT DATE: 6/5/2020
CHECKED BY: TMG DATE: 6/10/2020

This drawing to be used in conjunction with
SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE',
SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF MULTI-BARREL R.C. BOX CULVERT',
SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF WINGWALLS', and
STANDARD DRAWING RCB-2.
For additional information and outlet sections, see Sheet 2 of 2.

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

INLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																																																			
15	3:1	5	12	7	5'-6"	11.5	3	11.5	7	8	25'-10"	8'-11"	7	9	Max 25'-6" Min 6'-0" 25'-6"	7 3	8	8	Max 25'-6" Min 6'-0" 25'-6"	8 3	5	4.5	Max 25'-6" Min 6'-0" 25'-6"	14 6	4	5.5	Max 25'-6" Min 6'-0" 25'-6"	12 5	6	8	17	8'-7"	4	12	12	8'-7"	4	9	67	Max 8'-9" Min 1'-10"	4	9	67	Max 8'-9" Min 1'-10"	4	12	7	LONG 8'-8" SHORT 1'-11"	4	12	14	5'-4"

"k1" HDWL BARS			"k2" HDWL BARS			"h" HDWL BARS			
SIZE	LENGTH	NO. REQ'D	SIZE	LENGTH	NO. REQ'D	SIZE	LENGTH	Y	NO. REQ'D
4	26'-5"	6	4	26'-5"	6	4	1'-10"	0'-10"	28

CLASS "S" CONCRETE (Includes HDWL)	① REINFORCING STEEL (GR 60) (Includes HDWL)
CU. YDS.	LBS.
13.15	2630

INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL																		

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	19	323

ⓘ SPECIAL DETAILS

Jul 14 2020 12:30 PM

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: DPT DATE: 6/5/2020
CHECKED BY: TMG DATE: 6/10/2020

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
25'-10"	7'-0"	0'-9"	0'-8"	15	3:1	25'-6 1/2"	2'-0"	7'-10"	2'-4"	15	45	3'-2"	3'-7 3/4"	4'-1"	0'-8 7/8"	1'-0"	17'-0"	23'-0"	20'-5 3/8"	26'-5 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
12.83	1118

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY			F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS			F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS			F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY			F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY			F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY			F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS			F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	17	L	Min	3'-6"	4	12	4	L	3'-7"	-	-	-	-	L	-	4	18	6	Min		4	18	4	16'-8"	4	18	12	L	Min	4'-11"	4	8	21'-3"	6	18	11	Min		-	-	-	Min		4	2	17'-5"	4	2	18'-1"	6	12	7	L	3'-4"	481
					Max	9'-2"																3'-5"									Max	10'-3"							2'-8"				-											
				X	Min	0'-9"				X	1'-2"					X	-				Max								X	Min	2'-4"							Max													X	1'-8"	
					Max	1'-3"																12'-9"									Max	2'-4"							3'-1"				-											
				Y	Min	2'-10"				Y	2'-6"					Y	-				Min								Y	Min	2'-8"							Min															
					Max	8'-0"																									Max	8'-0"																					
WING B	4	12	23	L	Min	3'-5"	4	12	5	L	3'-11"	-	-	-	-	L	-	4	18	6	Min		4	18	4	22'-8"	4	18	16	L	Min	4'-11"	4	8	27'-3"	6	18	16	Min		-	-	-	Min		4	2	23'-2"	4	2	25'-4"	6	12	7	L	3'-4"	637
					Max	9'-7"																4'-9"									Max	10'-3"							2'-8"				-											
				X	Min	0'-9"				X	1'-6"					X	-				Max								X	Min	2'-4"							Max													X	1'-8"	
					Max	1'-8"																17'-3"									Max	2'-4"							3'-7"				-											
				Y	Min	2'-9"				Y	2'-6"					Y	-				Min								Y	Min	2'-8"							Min															
					Max	8'-0"																									Max	8'-0"																					

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

ⓘ Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

OUTLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																																																						
15	3:1	5	12	7	5'-6"	11.5	3	11.5	7	8	25'-10"	8'-11"	7	9	Max 25'-6" / Min 6'-0" / 25'-6"	7 / 3	8	8	Max 25'-6" / Min 6'-0" / 25'-6"	8 / 3	5	4.5	Max 25'-6" / Min 6'-0" / 25'-6"	14 / 6	4	5.5	Max 25'-6" / Min 6'-0" / 25'-6"	12 / 5	6	8	17	8'-7"	4	12	12	8'-7"	4	9	67	Max 8'-9" / Min 1'-10"	4	9	67	Max 8'-9" / Min 1'-10"	4	12	7	LONG 8'-8" / SHORT 1'-11"	4	12	14	5'-4"

CLASS "S" CONCRETE (Includes HDWL)	ⓘ REINFORCING STEEL (GR 60) (Includes HDWL)
CU. YDS.	LBS.
13.15	2630

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D
4	26'-5"	6	4	26'-5"	6	4	1'-10"	0'-10"	28

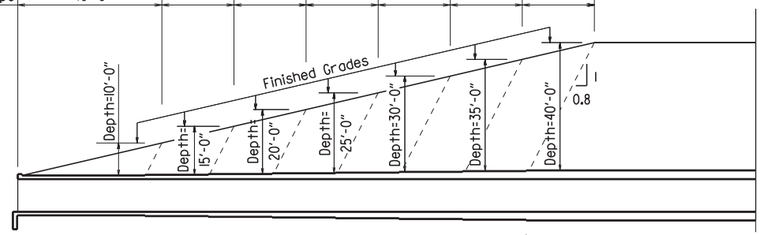
OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	"g" SPACING	"g" NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	"e" SPACING	"e" NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	"d1" SPACING	"d1" NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	"d2" SPACING	"d2" NO. REQ'D
	D	S	H	T	B	C	W	OW	OH	SL																		

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	20	323

(1) SPECIAL DETAILS

2:1 Slope	20'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"		
3:1 Slope	30'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"		
4:1 Slope	40'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"		



Slope Section Length @ 2:1 Slope	A=12'-0"	B=6'-0"	C=6'-0"	D=6'-0"	E=6'-0"	F=6'-0"	G=6'-0"	Mid-Section Length - Varies
Slope Section Length @ 3:1 Slope	A=22'-0"	B=11'-0"	C=11'-0"	D=11'-0"	E=11'-0"	F=11'-0"	G=11'-0"	Mid-Section Length - Varies
Slope Section Length @ 4:1 Slope	A=32'-0"	B=16'-0"	C=16'-0"	D=16'-0"	E=16'-0"	F=16'-0"	G=16'-0"	Mid-Section Length - Varies

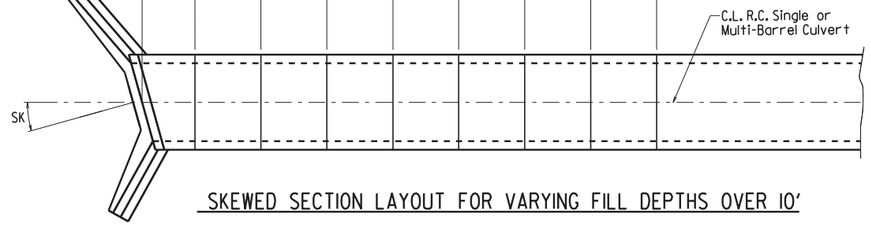
LONGITUDINAL SECTION LENGTH SCHEDULE FOR VARYING FILL DEPTHS OVER 10'

Lengths for Non-Skewed Boxes

Note: For fill depths 10' and under, use Mid-Section full length of box culvert.

*LL = Skewed End Section Length - See "Skewed End Section Details" Length LL varies with skew angle, overall box width and fill depth and may eliminate the need for some slope section lengths as shown.

Section Length	*LL		C	D	E	F	G	Mid-Section Length - Varies
Section Length	*LL	B	C	D	E	F	G	Mid-Section Length - Varies
Section Length	*LL	A	B	C	D	E	F	G	Mid-Section Length - Varies
		Depth 10'-0"	Depth 15'-0"	Depth 20'-0"	Depth 25'-0"	Depth 30'-0"	Depth 35'-0"	Depth 40'-0"	



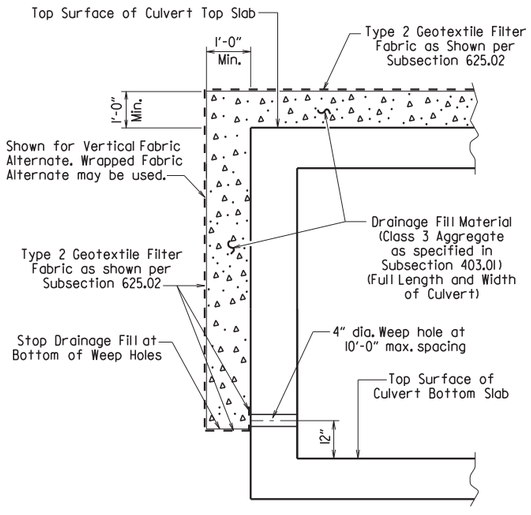
SKEWED SECTION LAYOUT FOR VARYING FILL DEPTHS OVER 10'

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LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

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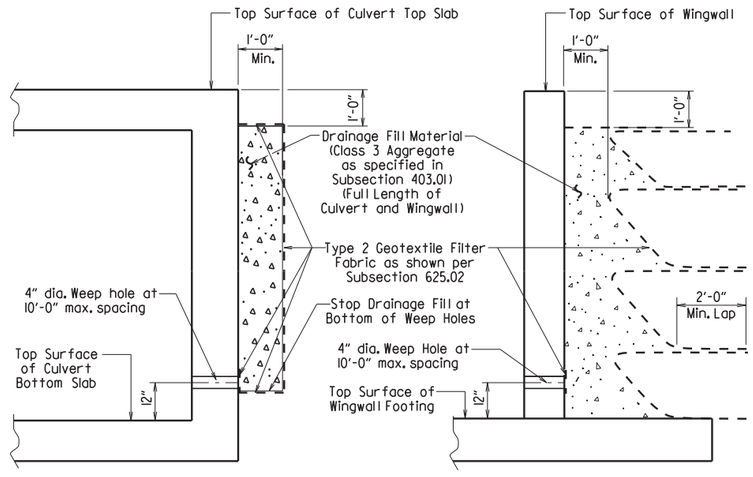
Charles R. Ellis

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CULVERT DRAINAGE DETAIL FOR ROCK FILL

This detail shall be used when rock fill is specified for embankment construction.

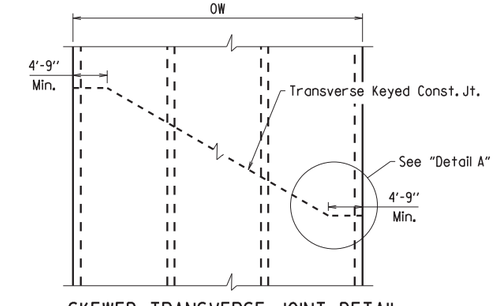


For Details of Excavation and Pay Limits, see Standard Drawing RCB-2.

VERTICAL FABRIC ALTERNATE
(Shown for Culvert, Similar for Wingwall)

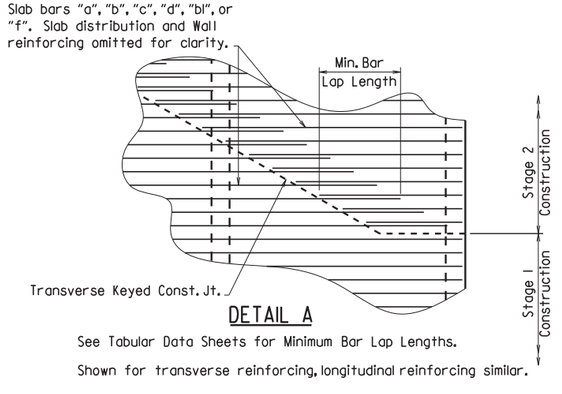
WRAPPED FABRIC ALTERNATE
(Shown for Wingwall, Similar for Culvert)

WINGWALL & CULVERT DRAINAGE DETAIL



SKEWED TRANSVERSE JOINT DETAIL

This detail shall be used to construct a skewed transverse joint only for Multi-Barrel Culverts and only when required by the Maintenance of Traffic Plans. Otherwise, transverse joints should be made normal to the centerline of the barrel.



DETAIL A

See Tabular Data Sheets for Minimum Bar Lap Lengths.

Shown for transverse reinforcing, longitudinal reinforcing similar.

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Standard Construction Specifications unless otherwise noted in the Plans.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Fifth Edition (2010) with 2010 interim revisions.

LIVE LOADING: HL-93

All concrete shall be Class S with a minimum 28-day compressive strength of 3,500 psi and shall be poured in the dry. All exposed corners to have ¾" chamfers.

Reinforcing Steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M31 or M322, Type A, with mill test reports.

Reinforcing Steel Tolerances: The tolerances for reinforcing steel shall meet those listed in 'Manual of Standard Practice' published by Concrete Reinforcing Steel Institute (CRSI) except that the tolerance for truss bars such as Figure 3 on page 7-4 of the CRSI Manual shall be minus zero to plus 1/2 inch.

Excavation and backfilling shall be in accordance with the requirements of Section 801.

Membrane Waterproofing shall conform to the requirements of Section 815. Membrane Waterproofing shall be Type C and as directed by the Engineer applied to all construction joints in the top slab and the sidewalls of R.C. Box culverts and to the construction joint between wingwalls and R.C. Box culvert walls.

Weep Holes in box culvert walls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. The drain opening shall be 4" diameter and shall be placed 12" above the top of the bottom slab.

Weep Holes in wingwalls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. There shall be a minimum of two (2) weep holes in each wingwall. The drain opening shall be 4" diameter and shall be placed 12" above the top of the wingwall footing.

The barrel components of the culvert may be constructed using continuous pours. For longer culvert construction, the Contractor may use multiple pours with transverse construction joints spaced a minimum of 50 feet apart unless superseded by stage construction or site constraints as approved by the Engineer. Construction joints between footings and walls shall be made only where shown in the Plans. Joints shall be keyed and shall be normal to the centerline of barrel except as noted. Reinforcing shall be continuous through joints unless noted otherwise. Reinforcing through stage construction joints shall provide the minimum bar lap length shown on the Tabular Data Sheets. All longitudinal construction joints shall be submitted to the Engineer for approval.

Membrane Waterproofing, Weep Holes, Geotextile Filter Fabric, and Drainage Fill Material will not be paid for directly but shall be considered subsidiary to Class S Concrete.

When the top slab of the box culvert serves as finished roadway surface, curing and finishing shall be in accordance with subsections 802.17 and 802.20 for bridge roadway surface and a tine finish shall be applied in accordance with subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Curing and finishing shall not be paid for directly, but shall be considered incidental to the item "Class S Concrete-Roadway". Class 1 Protective Surface Treatment shall be applied to the roadway surface and this work shall be paid for under the unit price bid for "Class 1 Protective Surface Treatment".

When precast reinforced concrete box culverts are substituted for cast in place box culverts, they shall be manufactured according to ASTM C 1577 and meet the requirements of Section 607. When the top slab of the box culvert serves as the finished roadway surface, a precast reinforced concrete box culvert substitution is not allowed.

SHEET 1 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT

GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE

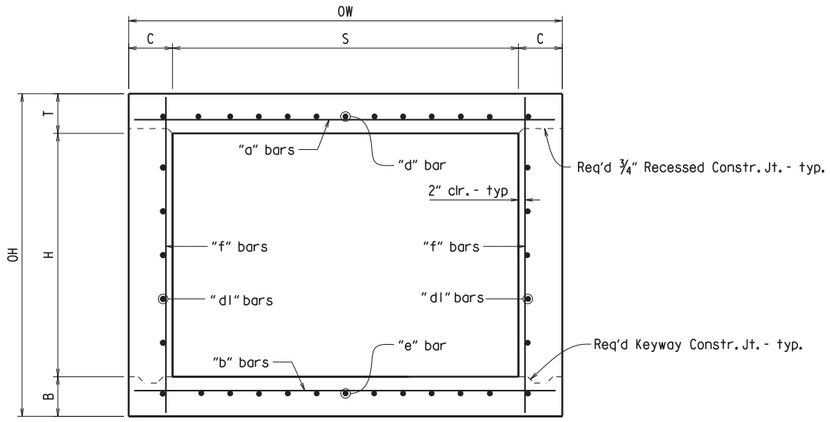
SPECIAL DETAILS

LRFD

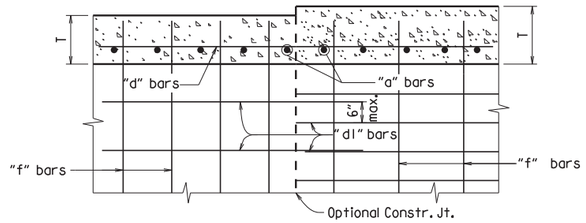
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	21	323
				(1)		SPECIAL DETAILS		

Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



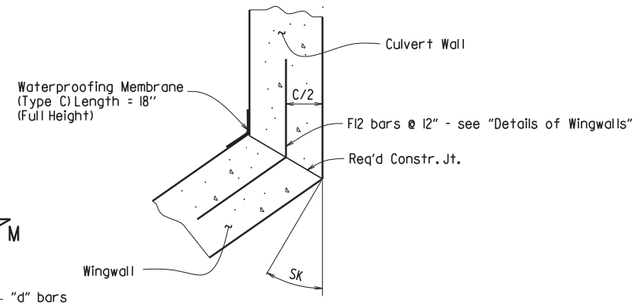
TYPICAL SECTION M-M



Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

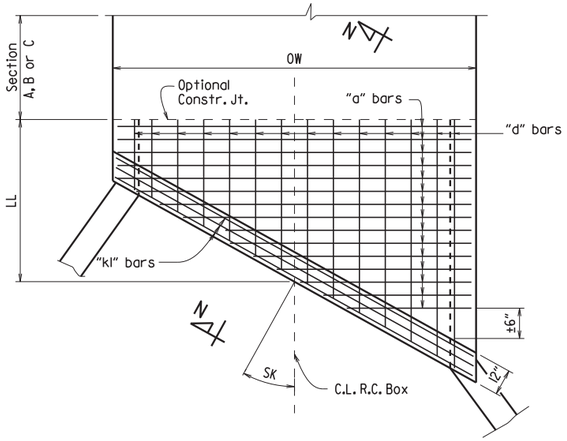
LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR

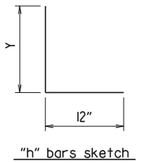


WINGWALL ATTACHMENT

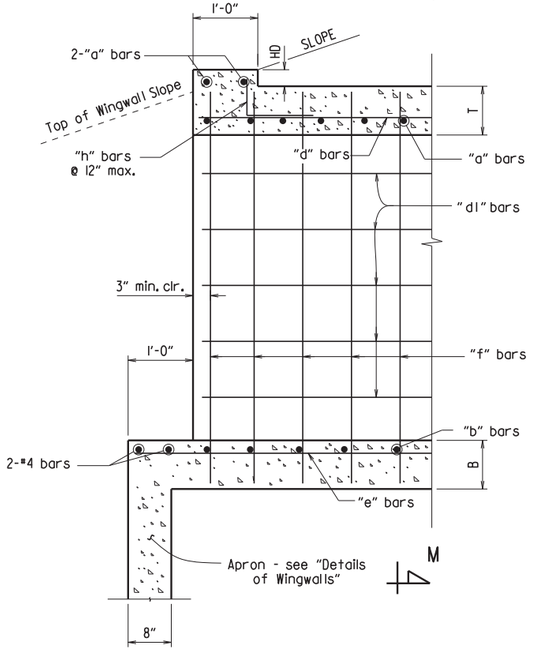
See "Details of Wingwalls" for additional information and wingwall details.



TOP SLAB REINFORCEMENT

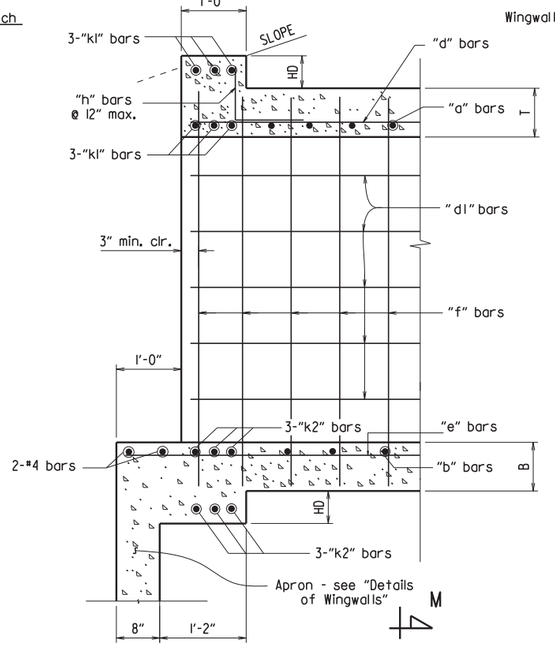


"h" bars sketch



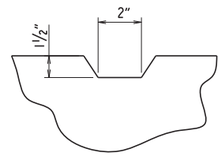
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



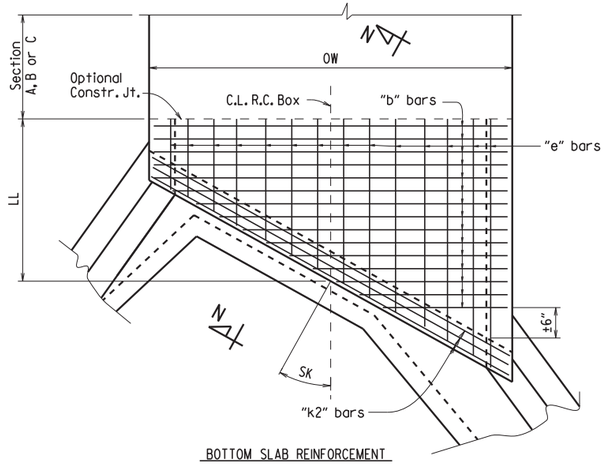
PART LONGITUDINAL SECTION N-N

(Skewed Ends)



TYPICAL KEYWAY DETAIL

(All Construction Joints)



BOTTOM SLAB REINFORCEMENT

SKEWED END SECTION DETAILS

SHEET 2 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT

DETAILS OF SINGLE BARREL
R.C. BOX CULVERT

SPECIAL DETAILS

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No. 9235
CHARLES R. ELLIS

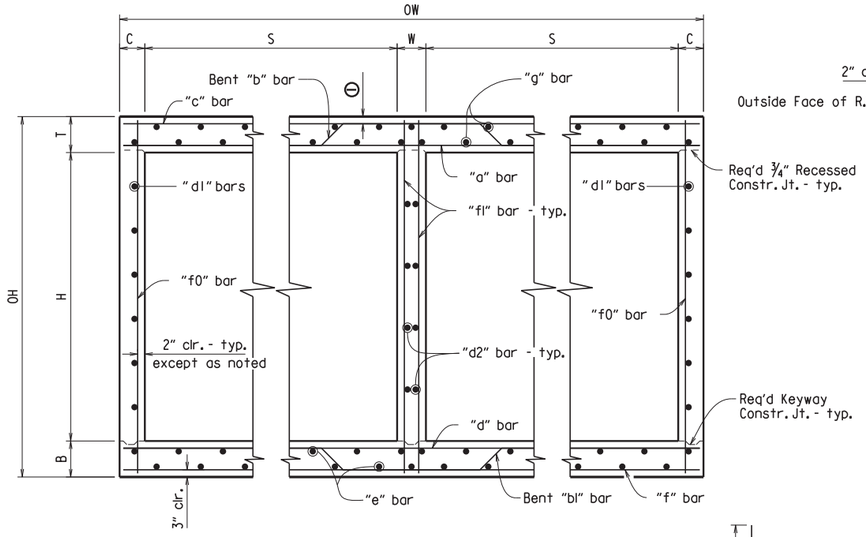
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				6	ARK.			
				JOB NO.		061547	22	323

① SPECIAL DETAILS

① 2" clr. for fill depth (D) greater than 2 ft.
2½" clr. for fill depth (D) equal to or less than 2 ft.

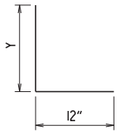
Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



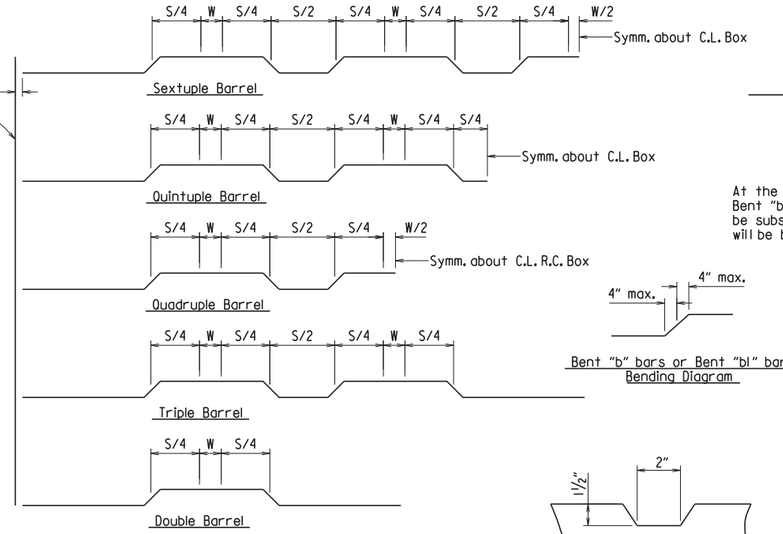
TYPICAL SECTION M-M

Top Slab
Straight "c" bars shall alternate with Bent "b" bars in top.
Straight "a" bars shall alternate with Bent "b" bars in bottom.

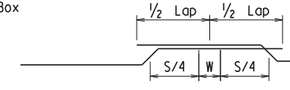
Bottom Slab
Straight "d" bars shall alternate with Bent "bl" bars in top.
Straight "f" bars shall alternate with Bent "bl" bars in bottom.



"h" bars sketch



Bent "b" bars or Bent "bl" bars sketch



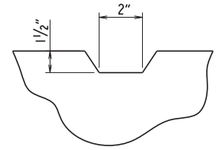
Lap Detail
For Bent "b" bars and Bent "bl" bars

Bent "b" bars or Bent "bl" bars Bending Diagram

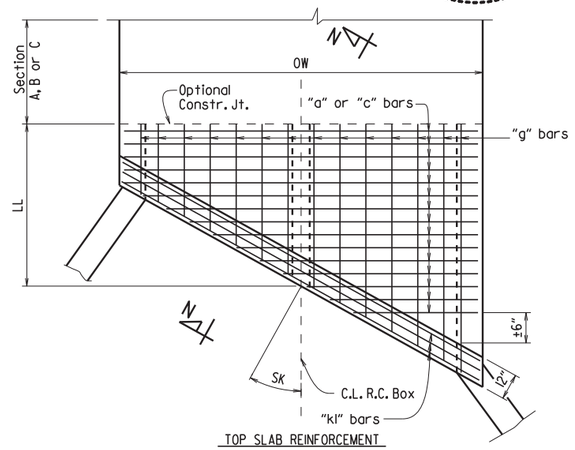
At the Contractor's option in lieu of providing Bent "b" or Bent "bl" bars, one bar top and bottom of equivalent size may be substituted for each bent bar. Payment for the reinforcing will be based on the weight of the "b" or "bl" bar.

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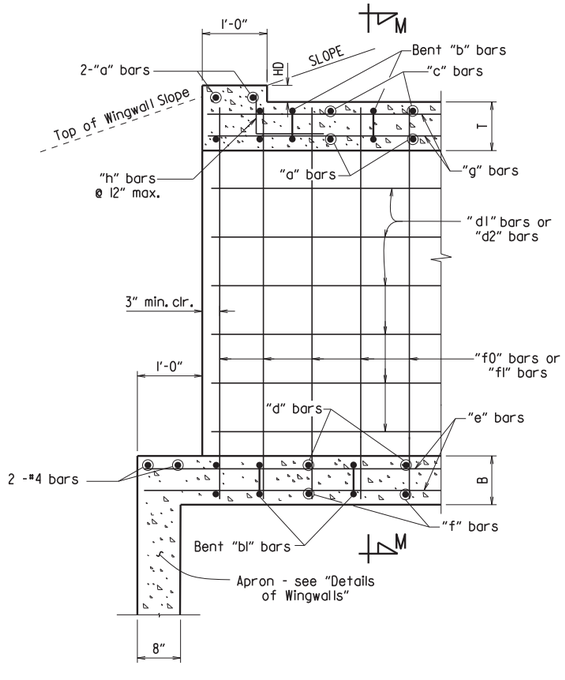
STATE OF ARKANSAS
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LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS



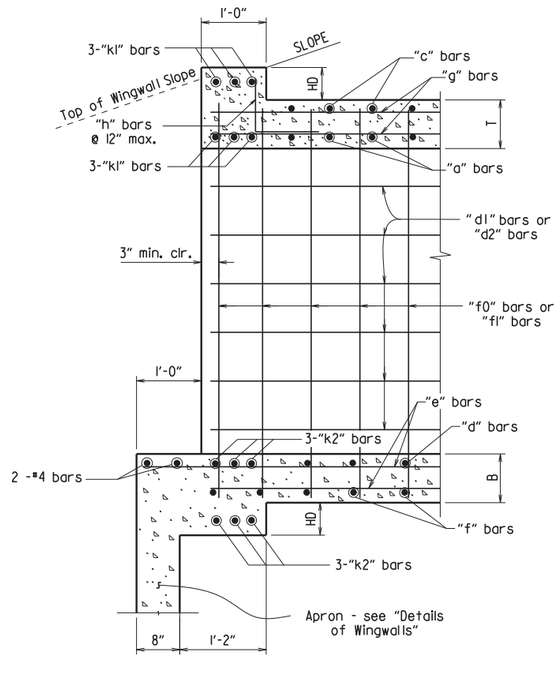
TYPICAL KEYWAY DETAIL
(All Construction Joints)



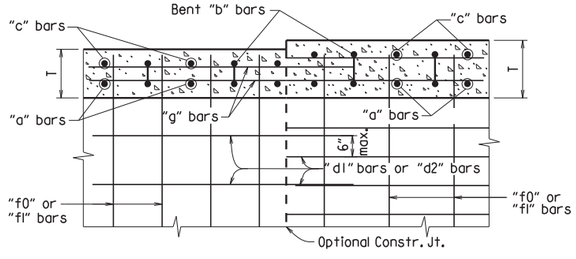
TOP SLAB REINFORCEMENT
Straight "c" bars in top.
Straight "a" bars in bottom.



PART LONGITUDINAL SECTION
(Non-Skewed Ends)

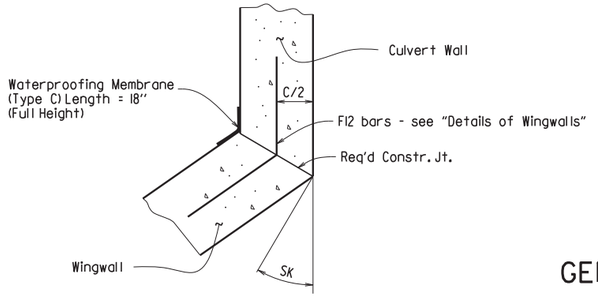


PART LONGITUDINAL SECTION N-N
(Skewed Ends)

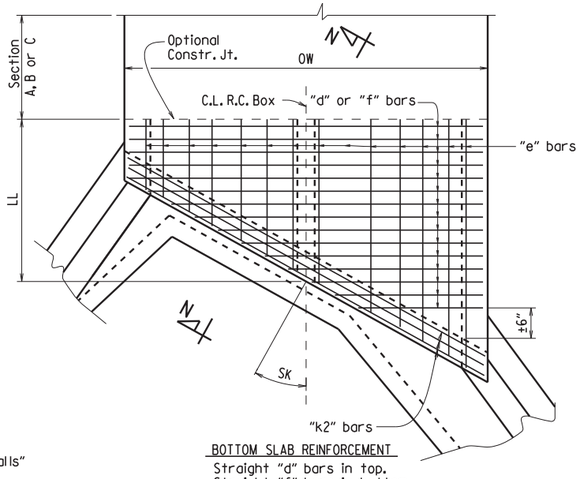


Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS
TOP SLAB SHOWN, BOTTOM SLAB SIMILAR



WINGWALL ATTACHMENT
See "Details of Wingwalls" for additional information and wingwall details.



BOTTOM SLAB REINFORCEMENT
Straight "d" bars in top.
Straight "f" bars in bottom.

SKEWED END SECTION DETAILS

SHEET 3 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT

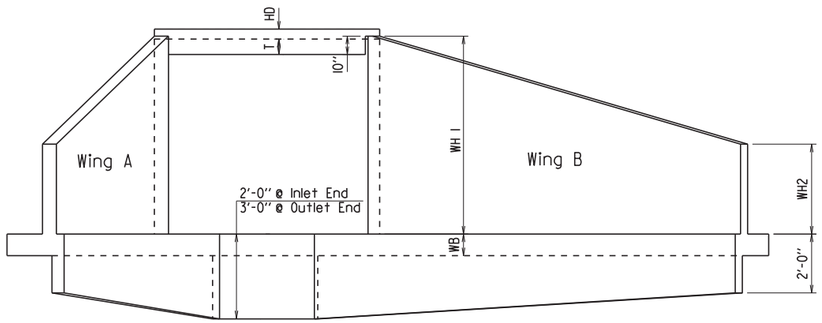
DETAILS OF MULTI-BARREL R.C. BOX CULVERT

SPECIAL DETAILS

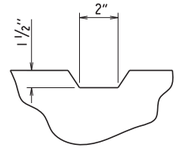
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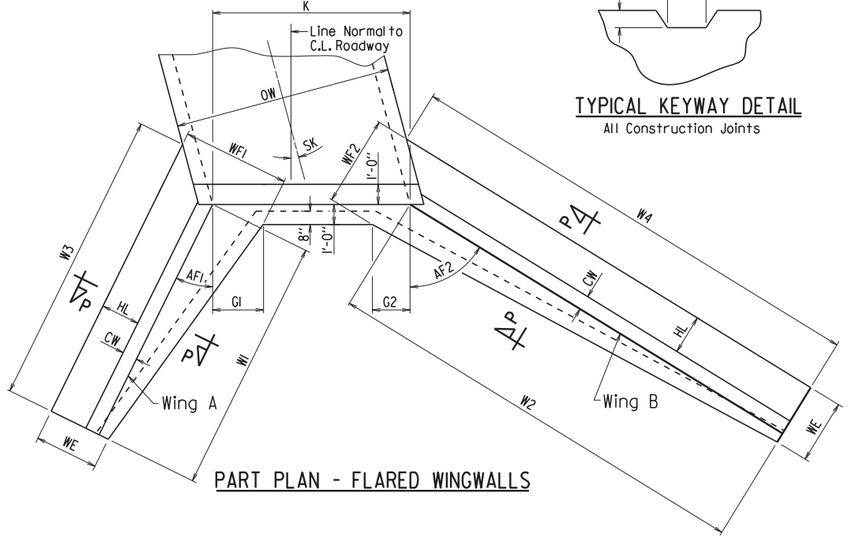
① SPECIAL DETAILS



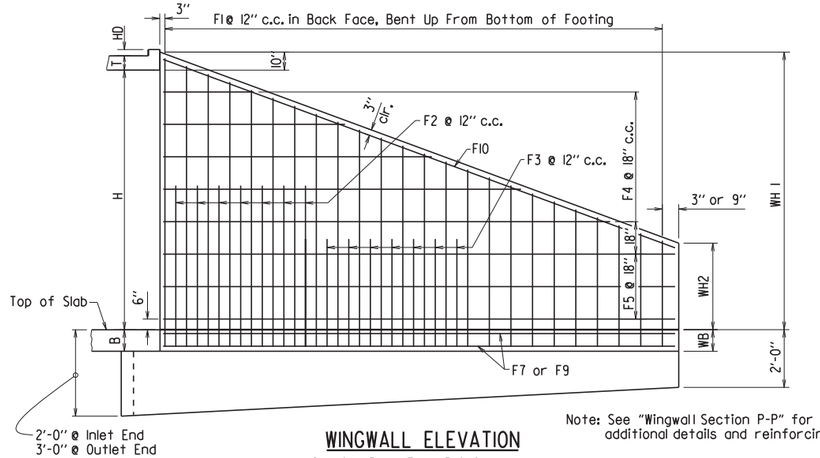
END ELEVATION
Flared Wingwalls Shown



TYPICAL KEYWAY DETAIL
All Construction Joints

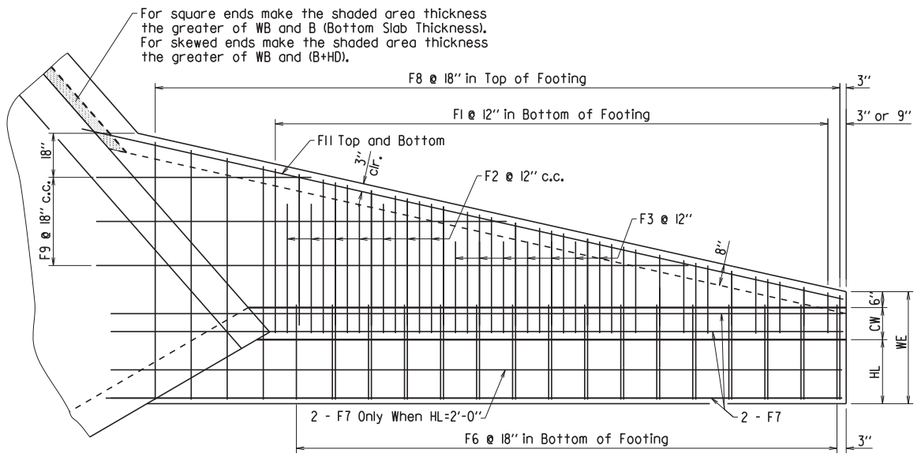


PART PLAN - FLARED WINGWALLS

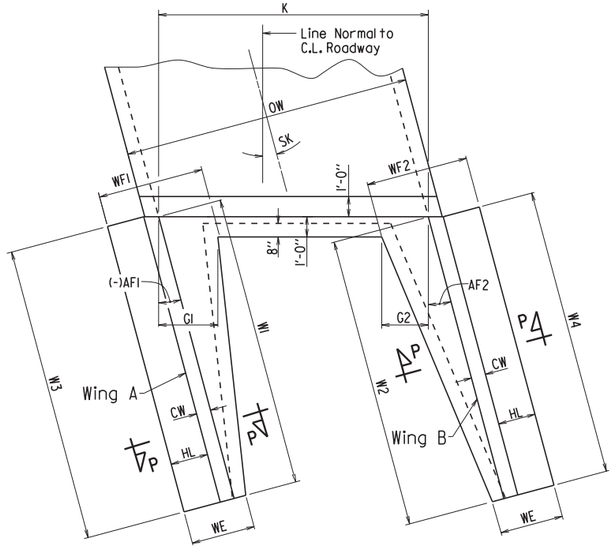


WINGWALL ELEVATION
Showing Back Face Reinforcement

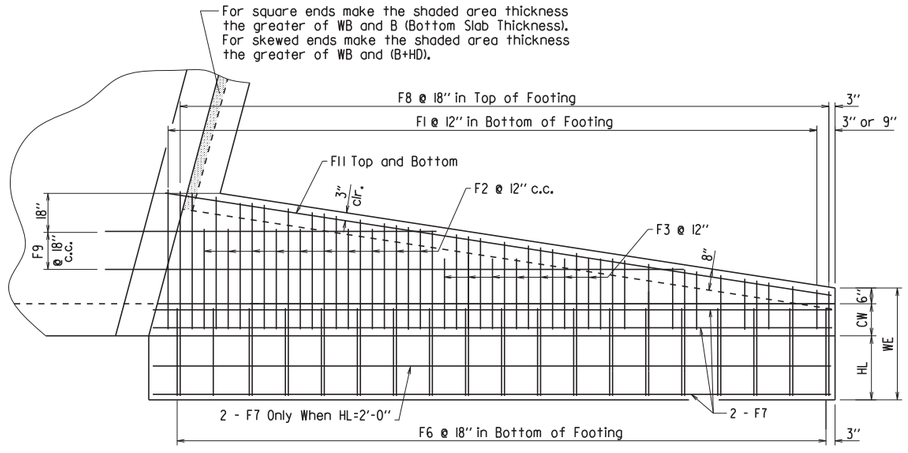
Note: See "Wingwall Section P-P" for additional details and reinforcing.



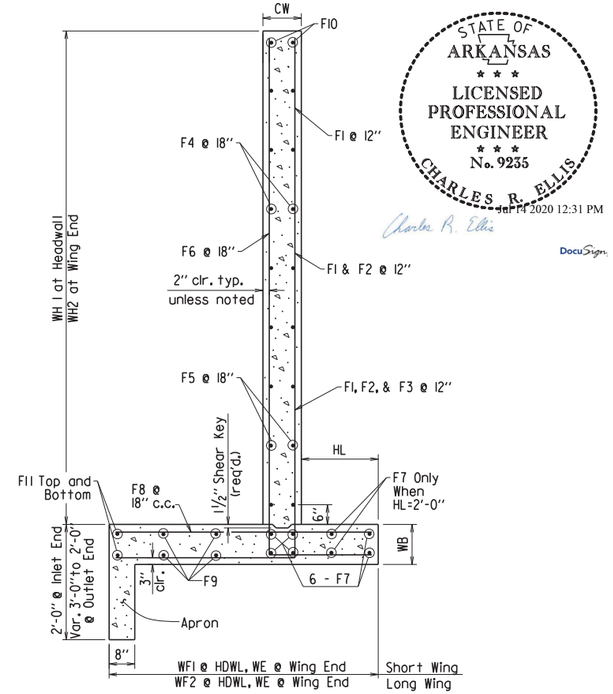
PLAN - FLARED WINGWALLS
Showing Footing Reinforcement



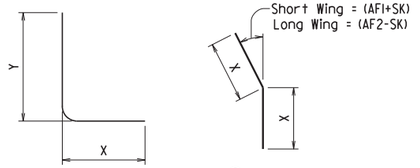
PART PLAN - PARALLEL WINGWALLS



PLAN - PARALLEL WINGWALLS
Showing Footing Reinforcement



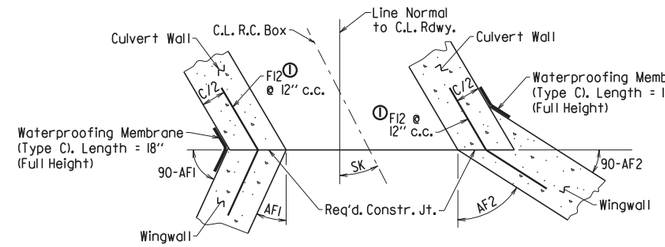
WINGWALL SECTION P-P



F1, F2, F3, & F6 BARS

①F12 BAR

①F12 is a straight bar for parallel wingwalls



CONSTRUCTION JOINTS
Flared Wingwalls Shown

SHEET 4 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT
DETAILS OF WINGWALLS
SPECIAL DETAILS

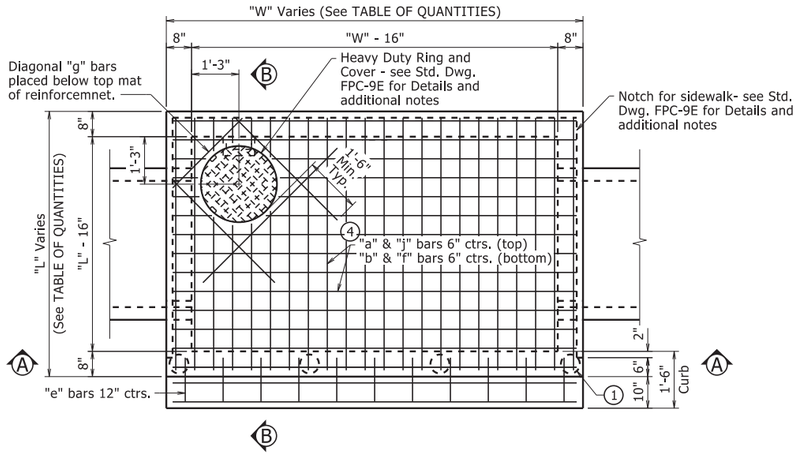
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
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Charles R. Ellis
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	24	323
				(1)		SPECIAL DETAILS		

Jul 14 2020 12:31 PM

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS



PLAN VIEW OF DROP INLET (TYPE C SPECIAL)

(4) Top Slab Reinforcement Shown
See "SECTION A-A" & "SECTION B-B"
for Bottom Slab Reinforcement

BAR DIAGRAM

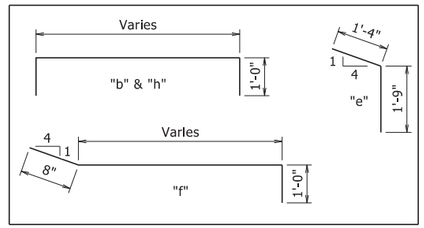
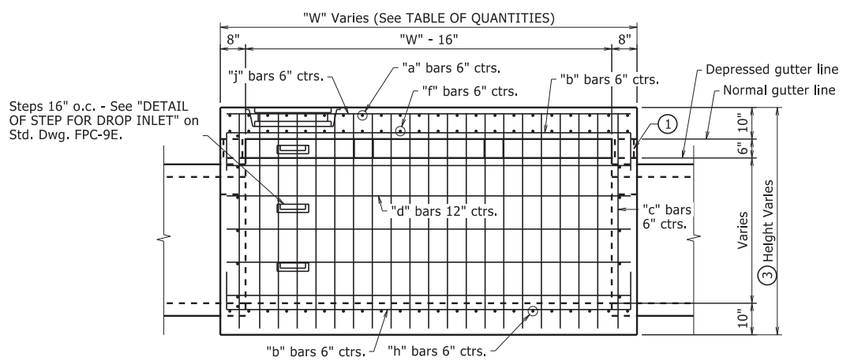


TABLE OF QUANTITIES

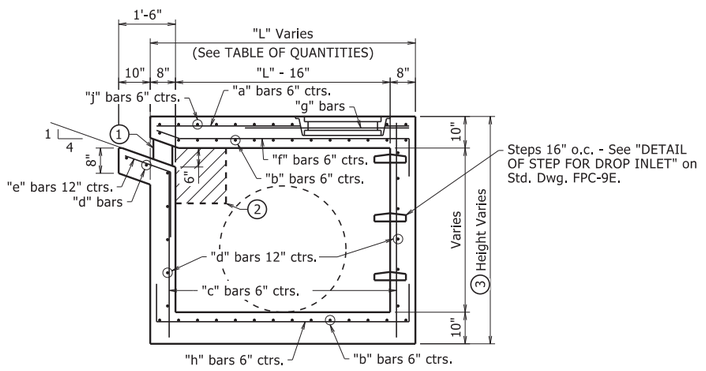
SIZE ("W" x "L")	HEIGHT 5'-0"		PLUS OR MINUS PER LIN. FT. OF HEIGHT	
	CLASS "S" CONCRETE	REINFORCING STEEL (GRADE 60)	CLASS "S" CONCRETE	REINFORCING STEEL (GRADE 60)
	CU. YDS.	LBS.	CU. YDS.	LBS.
11' x 7'	7.59	2,307	0.82	69
8' x 7'	5.77	1,766	0.67	57
7' x 7'	5.17	1,586	0.63	54
9' x 8'	7.10	2,159	0.77	65
8' x 8'	6.43	1,961	0.72	61

Quantities are approximate and are shown for bidding purposed only.

Deduct from quantity computed for each pipe entering drop inlet		
Pipe Inside Dia.	CLASS "S" CONCRETE Cu. Yds.	REINFORCING STEEL (GRADE 60) LBS.
18	0.07	6
24	0.11	9
30	0.16	13
42	0.30	23
48	0.38	29
54	0.47	36
60	0.57	44
66	0.68	53
72	0.80	62
78	0.93	72



SECTION A-A



SECTION B-B

General Notes

All concrete shall be Class "S" with a minimum 28-day compressive strength of 3,500 psi and shall be poured in the dry. All exposed corners shall be chamfered ¾" unless otherwise noted.

Reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports. All reinforcing bars shall be #6 and shall have a minimum of 2" cover.

Pipes may enter box from any angle or elevation as approved by the Engineer. Reinforcing bars shall be cut to clear pipe by 1½".

For additional information, See Std. Dwg. FPC-9E

(1) 6" diameter columns spaced at 4'-0" max. Additional columns are required in corners when built with extensions.

(2) This portion of inlet wall omitted when built with extensions.

(3) For Box Heights, see roadway plans.

TYPE C SPECIAL DROP INLETS
STA 302+55 LT.
STA 303+11 LT. & RT.
STA 323+02 LT. & RT.

SPECIAL DETAILS

PRINT DATE: 7/14/2020

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.		061547	25	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:04 PM
DocuSign

STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-11 = SILT FIXED

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R06547.DGN

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.		061547	26	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:05 PM
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-11 = SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

6/22/2020

R061547.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL 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.		061547	27	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:05 PM
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-11 = SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

195 200 205 210 215 220 225

OAK CREEK DR
CLARENCE CT
KEEPSAKE LN
DEVANE PL.
B/G SAM LN
GRIMMETT LOOP
BELVEDERE OAKS CIR
BELVEDERE DR

PROP. R/W
EXIST. R/W
RET/WALL
P.I. 202+12.22
P.C. 200+80.72
P.I. 203+40.77
P.I. 204+20.5
P.I. 210+20.93
P.T. 211+79.38
P.C. 208+61.75
N 37°15'09" E
N 58°03'06" E
N 67°34'50" E

6/22/2020
R061547.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL 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.		061547	28	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Trinity Smith
Jul 24 2020 2:06 PM
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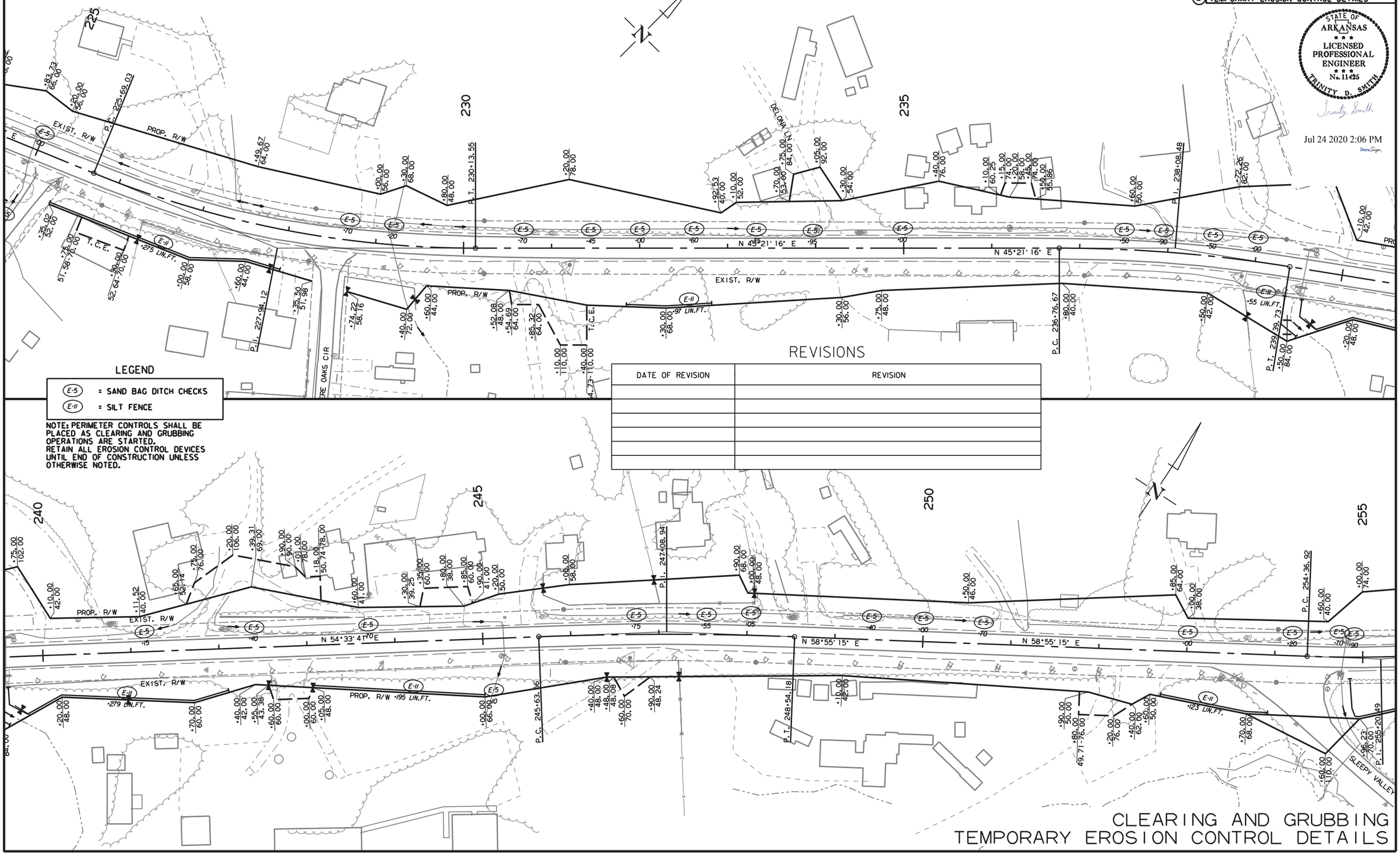
LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-11) = SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

REVISIONS

DATE OF REVISION	REVISION



6/22/2020

R061547.DGN

CLEARING AND GRUBBING TEMPORARY EROSION CONTROL 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.		061547	29	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

Jul 24 2020 2:07 PM
DocuSign

255 260 265

P.I. 254+36.92
P.T. 256+03.87
P.C. 262+09.84
P.I. 265+14.73
P.I. 235+20.49
T.C.E.
PROP. R/W
EXIST. R/W
N 52°14'34" E
N 33°56'59" E
SLEEPY VALLEY RD
264 LIN.FT.
175 LIN.FT.
166 LIN.FT.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-11 = SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED.
RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

270 275 280 285

P.I. 269+85.96
Δ = 0°21'56" LT.
T.C.E.
PROP. R/W
EXIST. R/W
N 33°35'03" E
50 LIN.FT.
ARBOR DALE PL

6/22/2020

R061547.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL 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.		061547	30	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:07 PM
DocuSigned by:

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-11 = SILT FILTER

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

285 290 295 300 305 310 315

PROP. R/W
EXIST. R/W
N 33° 35' 03" E
N 29° 05' 53" E
N 16° 42' 00" E
N 48° 55' 22" E
P.C. 287+65.80
P.T. 289+45.24
P.I. 288+55.56
P.C. 304+96.00
P.I. 307+02.87
P.T. 308+98.78
P.I. 295+02.94
P.T. 296+40.16
T.C.E.
RETAINING WALL
CAMPUS DR
FASON DR
46 LIN.FT.
52 LIN.FT.
45 LIN.FT.

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

6/22/2020
R061547.DGN

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.		061547	31	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:08 PM
DocuSign

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-II) = SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

6/22/2020

R061547.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL 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.		061547	32	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

STAGE 1
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	33	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	34	323

(2) TEMPORARY EROSION CONTROL DETAILS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-11) = SILT FENCE
(E-13) = FILTER SOCK

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

Jul 24 2020 2:10 PM
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STA. 334+00.00
END CONSTRUCTION
END JOB 061547

STAGE 3
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	35	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECKS

(E-II) = SILT FENCE

STAGE 4
DETOUR 1
TEMPORARY EROSION CONTROL DETAILS

STAGE 4
DETOUR 2
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	36	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:11 PM
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STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

STAGE 5
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	37	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

STAGE 5
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	38	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 11 2020 12:47 PM

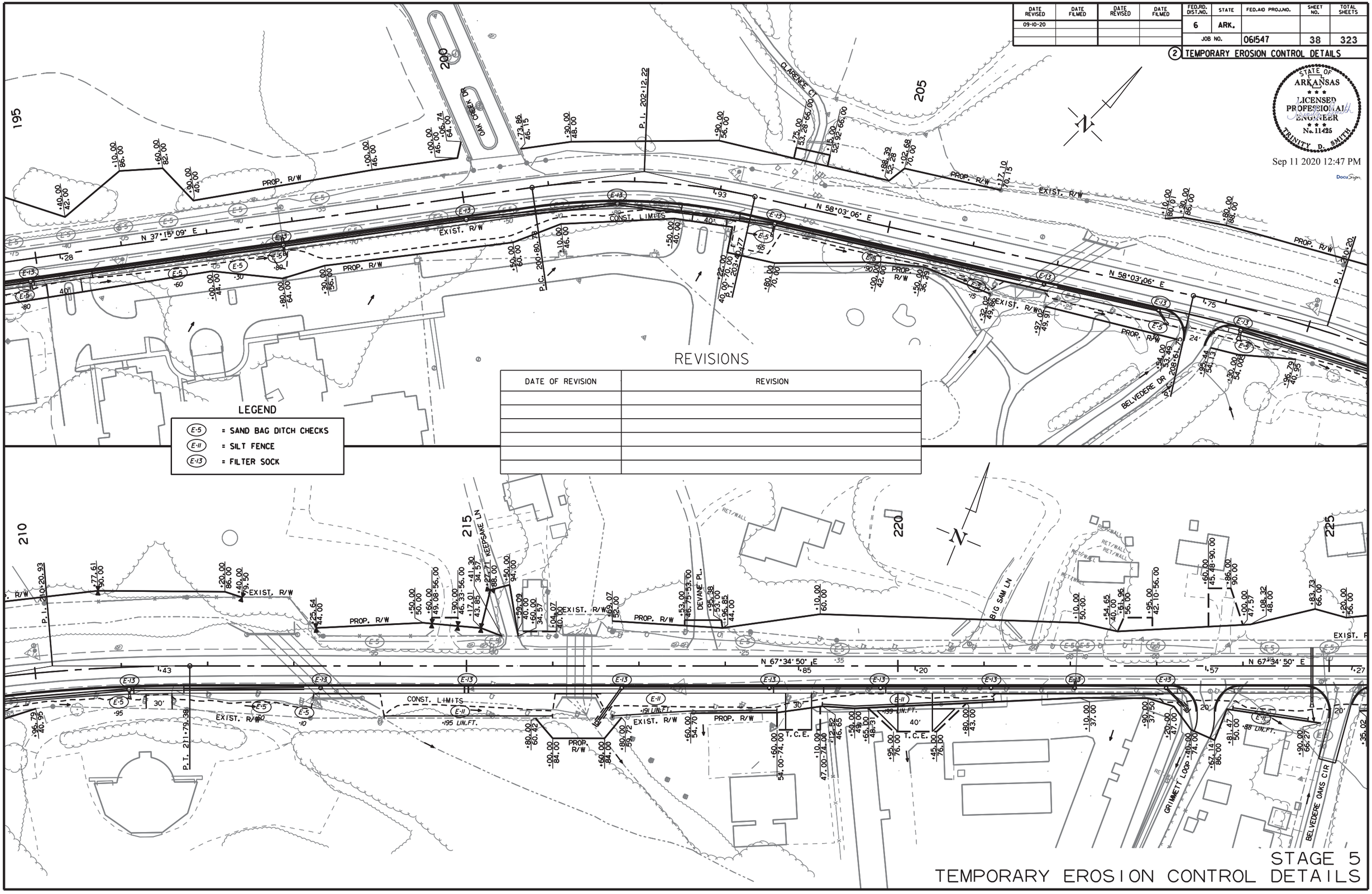
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK



STAGE 5
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	39	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Trinity Smith
Jul 24 2020 2:12 PM
DocuSign

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

REVISIONS

DATE OF REVISION	REVISION

STAGE 5
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	40	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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255 260 265

CONST. LIMITS
EXIST. R/W
PROP. R/W
SLEEPY VALLEY RD
N 52°14'34" E
N 33°56'59" E
P.T. 256+03.87
P.C. 262+09.84
T.C.E.
264 LIN.FT.
166 LIN.FT.
175 LIN.FT.
88 LIN.FT.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

270 275 280 285

P.I. 269+85.96
Δ = 0°21'56" LT.
ARBOR DALE PL
538 LIN.FT.
90 LIN.FT.
156 LIN.FT.

STAGE 5
TEMPORARY EROSION CONTROL DETAILS

6/22/2020
R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	41	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 11 2020 12:43 PM
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-11) = SILT FENCE
(E-13) = FILTER SOCK

285 290 295 300 305 310 315

PROP. R/W
EXIST. R/W
CONST. LIMITS
N 33°35'03" E
N 29°05'53" E
N 16°42'00" E
N 48°55'22" E
P.I. 288+55.55
P.I. 295+02.94
P.I. 307+02.87
P.T. 296+40.16
P.C. 287+65.80
P.C. 299+45.24
T.C.E.
RETWALL
CAMPUS DR
FASON DR
234 LIN.FT.
110 LIN.FT.
52 LIN.FT.
177 LIN.FT.

STAGE 5
TEMPORARY EROSION CONTROL DETAILS

6/22/2020
R061547.DGN

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.		061547	42	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

6/22/2020

R061547.DGN

STAGE 5
TEMPORARY EROSION CONTROL 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.		061547	43	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Trinity Smith
Jul 24 2020 2:15 PM
DocuSign

STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

STAGE 6
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	44	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Trinity Smith
Jul 24 2020 2:15 PM
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

STAGE 6
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	45	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 11 2020 12:43 PM
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

6/22/2020

R061547.DGN

STAGE 6
TEMPORARY EROSION CONTROL 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.		061547	46	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Trinity Smith
Jul 24 2020 2:17 PM
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LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

REVISIONS

DATE OF REVISION	REVISION

STAGE 6
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

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.		061547	47	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

STAGE 6
TEMPORARY EROSION CONTROL DETAILS

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	48	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECKS
(E-11) = SILT FENCE
(E-13) = FILTER SOCK

6/22/2020

R061547.DGN

STAGE 6
TEMPORARY EROSION CONTROL 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.		061547	49	323

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

6/22/2020

R061547.DGN

STAGE 6
TEMPORARY EROSION CONTROL DETAILS

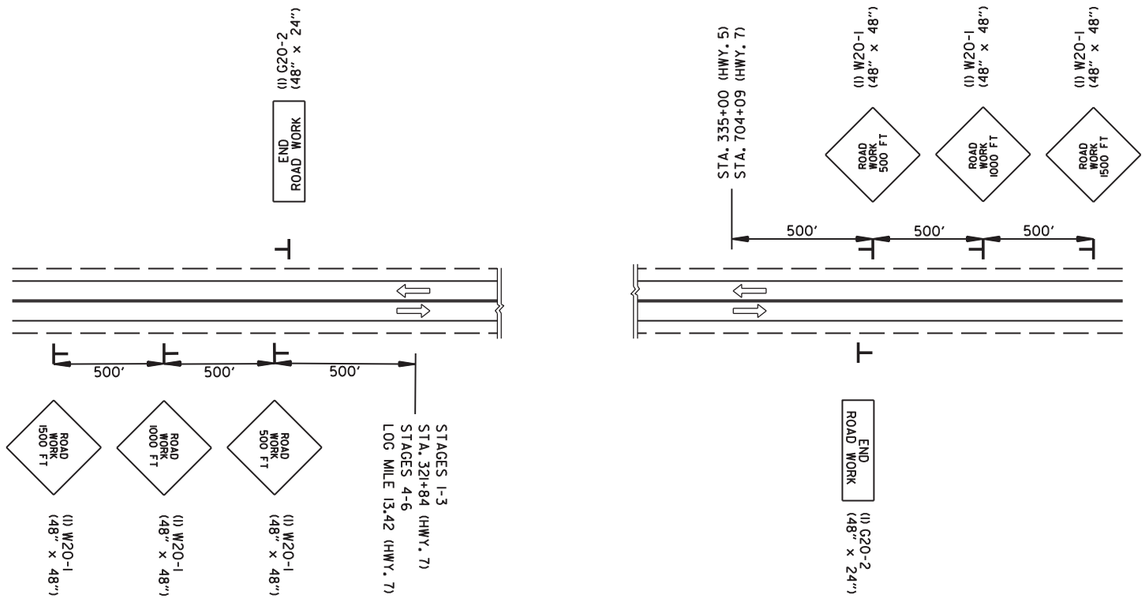
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				6	ARK.			
				JOB NO.		061547	50	323

(2) MAINTENANCE OF TRAFFIC DETAILS

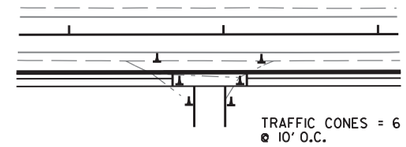
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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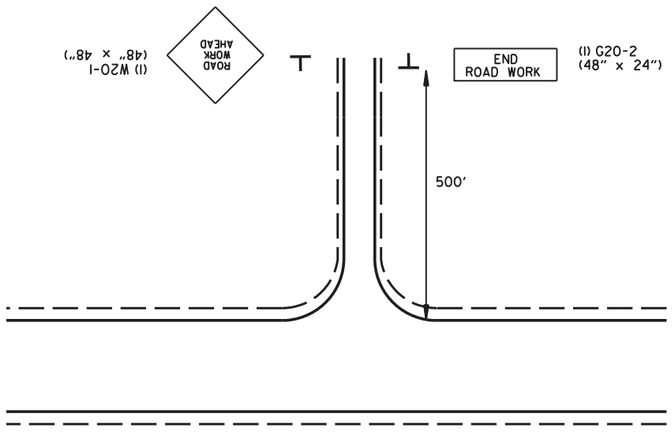


ADVANCE WARNING (ALL STAGES)



DRIVEWAY/TRAFFIC CONE DETAIL

BUMP	(8) W8-1 (30" X 30")	ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER
RIGHT SHOULDER CLOSED	(4) W21-5a (36" x 36")	ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER
DO NOT PASS	(18) R4-1 (24" X 30")	ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



ADVANCE WARNING - SIDE ROADS
(ALL STAGES)

L.M. 13.42 RT., HWY. 7S
L.M. 13.42 LT., STONEBRIDGE RD.
STA. 145+29 LT., FOX PASS CUTOFF
STA. 176+89 RT., BELVEDERE DR.
STA. 200+55 LT., OAK CREEK DR.
STA. 203+95 LT., CLARENCE CT.
STA. 208+75 RT., BELVEDERE DR.
STA. 215+40 LT., KEEPSAKE LN.
STA. 217+74 LT., DEVANE PL.
STA. 221+09 LT., BIG SAM LN.
STA. 223+57 RT., GRIMMETT LOOP
STA. 225+27 RT., BELVEDERE OAKS CIR.
STA. 228+59 RT., BELVEDERE OAKS CIR.
STA. 234+13 LT., DELONA LN.
STA. 254+34 RT., SLEEPY VALLEY RD.
STA. 283+79 LT., ARBOR DALE PL.
STA. 298+49 LT., CAMPUS DR.
STA. 304+12 LT., FASON DR.
STA. 317+67 LT., MONDOU RD.
STA. 332+69 LT., ROCKDALE RD.

6/22/2020

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ADVANCE WARNING
MAINTENANCE OF TRAFFIC DETAILS

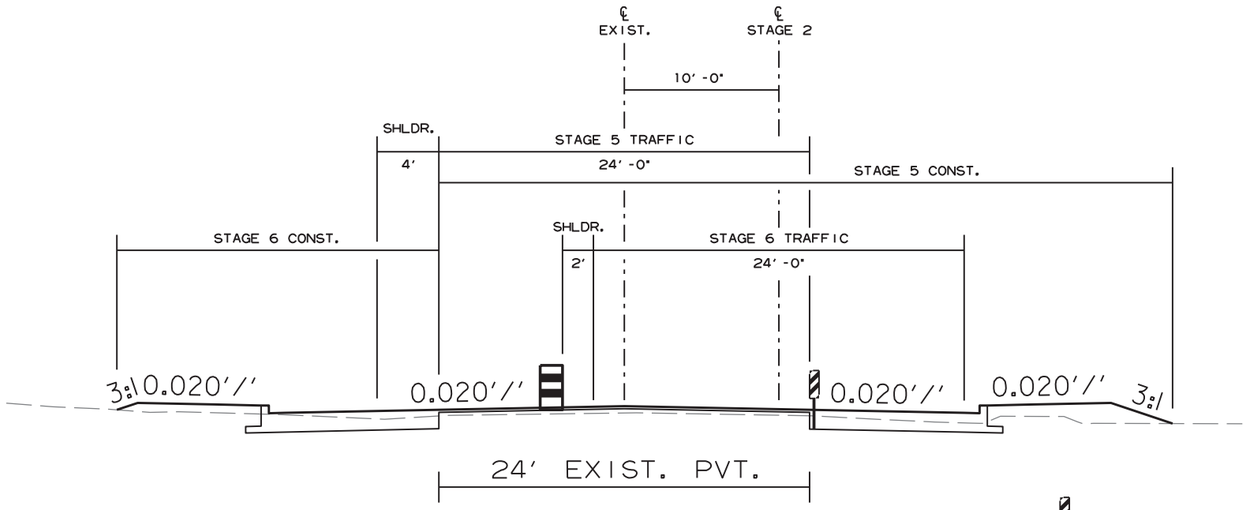
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	51	323

(2) MAINTENANCE OF TRAFFIC DETAILS

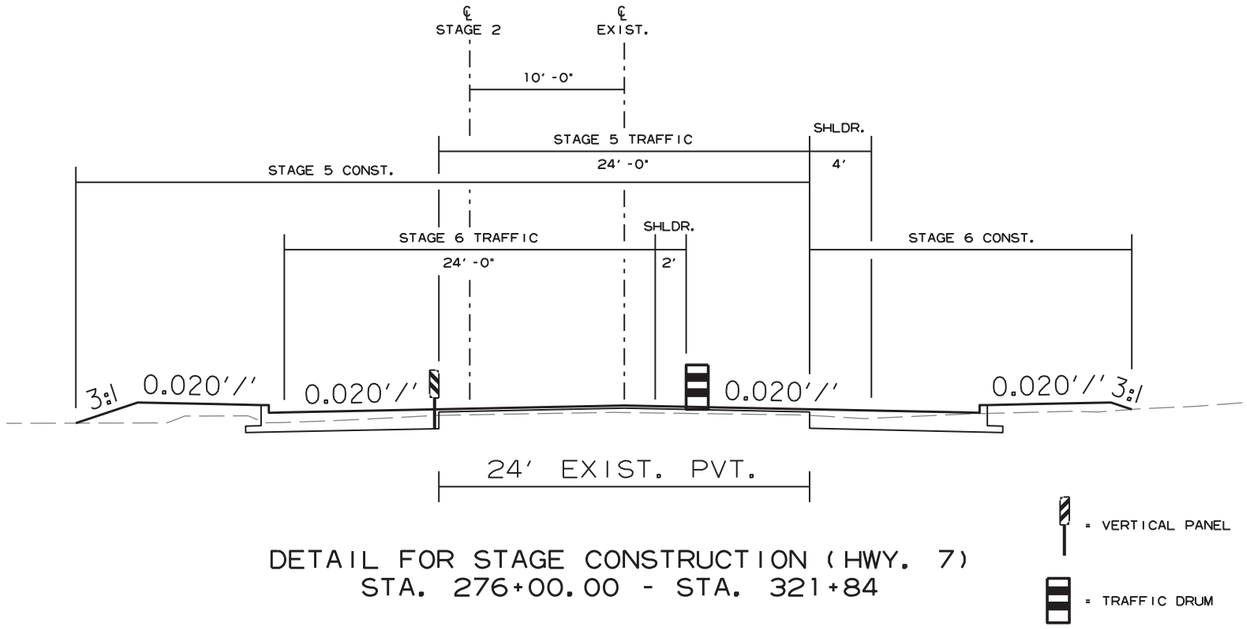
STATE OF ARKANSAS
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No. 11425
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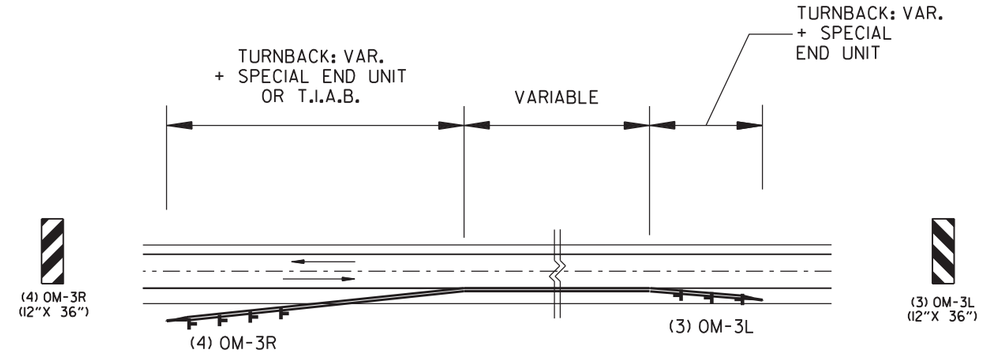
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DETAIL FOR STAGE CONSTRUCTION (HWY. 7)
STA. 140+40.65 - STA. 278+00.00



DETAIL FOR STAGE CONSTRUCTION (HWY. 7)
STA. 276+00.00 - STA. 321+84



REFER ALSO TO STANDARD DRAWING TC-5 FOR DETAILS OF PLACEMENT OF PCCB TURNBACKS.

NOTE: OM-3L & OM-3R SIGNS SHALL BE EQUALLY SPACED ALONG P.C.C.B. TURNBACK.

DETAIL OF OBJECT MARKERS
AT PRECAST CONCRETE BARRIER TURNBACKS

6/22/2020

R061547.DGN

ALL STAGES
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.		061547	52	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STAGE 1 CONSTRUCTION SEQUENCE:

INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE BEGINNING AND END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAIL.

MAINTAIN TRAFFIC ON EXISTING LANES.

USE VERTICAL PANELS TO DELINEATE THE WORK ZONE.
USE TRAFFIC CONES TO DELINEATE DRIVEWAYS.

NOTCH AND WIDEN HWY. 7 LT. AND HWY. 5 LT. AS SHOWN IN THE STAGE 1 MAINTENANCE OF TRAFFIC DETAILS. CONSTRUCT DETOUR 3 AS SHOWN IN THE STAGE 1 MAINTENANCE OF TRAFFIC DETAILS.

APPLY LEVELING COURSE TO EXISTING LANES IF AND WHERE DIRECTED BY THE ENGINEER.

STAGE 1 QUANTITIES

TRAFFIC CONES = 6 EACH
VERTICAL PANELS = 28 EACH

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VERTICAL PANELS SPACED 25' O.C.

VERTICAL PANELS SPACED 35' O.C.

TRAFFIC CONES

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

6/22/2020

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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.		061547	53	323

(2) MAINTENANCE OF TRAFFIC DETAILS

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LICENSED PROFESSIONAL ENGINEER
No. 11425
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STAGE 2 CONSTRUCTION SEQUENCE:

INSTALL CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS.

USE VERTICAL PANELS AND TRAFFIC DRUMS SPACED 25' O.C. TO DELINEATE THE WORK ZONE. USE TRAFFIC CONES TO DELINEATE DRIVEWAYS.

NOTCH AND WIDEN HWY. 7 RT., HWY. 5 RT., AND DETOUR 3 RT. AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS. CONSTRUCT ROUNDABOUT AND HWY. 70 APPROACH AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS.

APPLY LEVELING COURSE TO DETOUR 3 IF AND WHERE DIRECTED BY THE ENGINEER.

STAGE 2 QUANTITIES

TRAFFIC DRUMS = 4 EACH
TRAFFIC CONES = 18 EACH
VERTICAL PANELS = 49 EACH
CONSTRUCTION PAVEMENT MARKINGS = 6974 LIN. FT.

STOP (3) R1-1 (30" x 30") TO BE USED AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS

VERTICAL PANELS SPACED 25' O.C.

TRAFFIC DRUMS SPACED 25' O.C.

DBL. YELLOW CONST. PVMT. MARKING

WHITE CONST. PVMT. MARKING

TRAFFIC CONES

50' LANE TAPER

ROAD CLOSED (1) R11-2 (48" X 30")

(1) 8' BARR. TYP. III RT.
(1) 8' BARR. TYP. III RT.

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

6/22/2020

R061547.DGN

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.		061547	54	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STAGE 3 CONSTRUCTION SEQUENCE:

INSTALL CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 3 MAINTENANCE OF TRAFFIC DETAILS.

USE VERTICAL PANELS SPACED 25' O.C. TO DELINEATE THE WORK ZONE. USE TRAFFIC CONES TO DELINEATE DRIVEWAYS.

NOTCH AND CONSTRUCT HWY. 7 LT. AND RT., HWY. 5 LT., AND ROUNDABOUT LT. AS SHOWN IN THE STAGE 3 MAINTENANCE OF TRAFFIC DETAILS.

STAGE 3 QUANTITIES

TRAFFIC CONES = 12 EACH
VERTICAL PANELS = 34 EACH
CONSTRUCTION PAVEMENT MARKINGS = 5261 LIN. FT.

STATE OF ARKANSAS
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No. 11425
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WHITE CONST. PVMT. MARKING
YELLOW CONST. PVMT. MARKING
TRAFFIC CONES
VERTICAL PANELS SPACED 25' O.C.
105' LANE TAPER
270' LANE TAPER
EXIST. R/W
BEGIN PROP. C/A
END PROP. C/A
BEGIN PROP. C/A
END PROP. C/A
ROCKDALE RD
ROCKDALE RD
ROCKDALE 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.		061547	55	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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ROAD CLOSED — (1) R11-2 (48" X 30") — (1) 8' BARR. TYP. III RT. — (1) 8' BARR. TYP. III RT.

TRAFFIC CONES — VERTICAL PANELS SPACED 35' O.C. — TEMP. CONST. LIMITS — FOX PASS CUTOFF — PROP. R/W — EXIST. R/W — PROP R/W — RET. WALL — T.C.E.

ROAD CLOSED — (1) R11-2 (48" X 30") — (1) 8' BARR. TYP. III LT. — (1) 8' BARR. TYP. III LT.

STAGE 4 DETOUR 1 MAINTENANCE OF TRAFFIC DETAILS

ROAD CLOSED — (1) R11-2 (48" X 30") — (1) 8' BARR. TYP. III RT. — (1) 8' BARR. TYP. III RT.

ARBOR DALE PL — PROP. R/W — EXIST. R/W — PROP. R/W — T.C.E. — VERTICAL PANELS SPACED 35' O.C. — TRAFFIC CONES

ROAD CLOSED — (1) R11-2 (48" X 30") — (1) 8' BARR. TYP. III LT. — (1) 8' BARR. TYP. III LT.

STAGE 4 CONSTRUCTION SEQUENCE:

INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE BEGINNING AND END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAIL.

MAINTAIN TRAFFIC ON EXISTING LANES.

NOTCH AND WIDEN FOR DETOUR 1 ON LT. AND DETOUR 2 ON RT. USING VERTICAL PANELS SPACED 35' O.C. USE TRAFFIC CONES TO DELINEATE FOX PASS CUTOFF.

CONSTRUCT DETOUR.

STAGE 4 QUANTITIES

TRAFFIC CONES = 18 EACH
VERTICAL PANELS = 30 EACH

STAGE 4 DETOUR 2 MAINTENANCE OF TRAFFIC DETAILS

6/22/2020

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				6	ARK.			
				JOB NO.		061547	56	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

STAGE 5 CONSTRUCTION SEQUENCE:

INSTALL CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 5 MAINTENANCE OF TRAFFIC DETAILS.

USE VERTICAL PANELS AND TRAFFIC DRUMS SPACED 35' O.C. TO DELINEATE THE WORK ZONE. USE TRAFFIC CONES TO DELINEATE DRIVEWAYS.

MAINTAIN TRAFFIC ON EXISTING LANES. SHIFT TRAFFIC TO DETOURS 1 AND 2 AS SHOWN IN THE STAGE 5 MAINTENANCE OF TRAFFIC DETAILS.

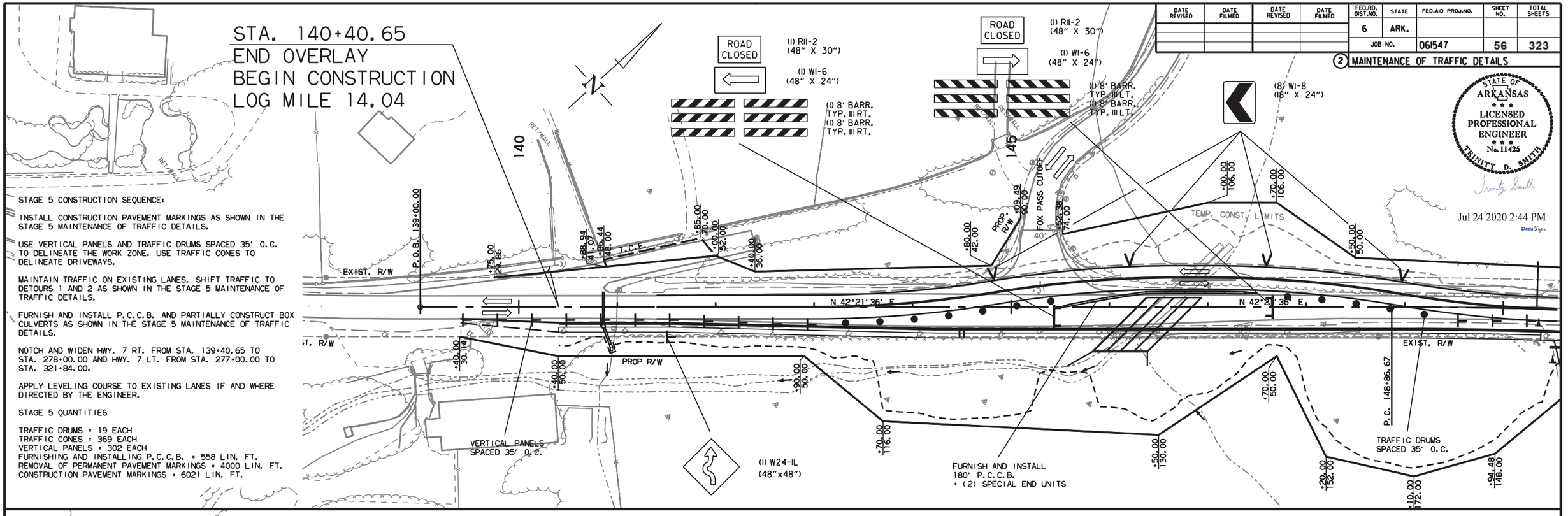
FURNISH AND INSTALL P.C.C.B. AND PARTIALLY CONSTRUCT BOX CULVERTS AS SHOWN IN THE STAGE 5 MAINTENANCE OF TRAFFIC DETAILS.

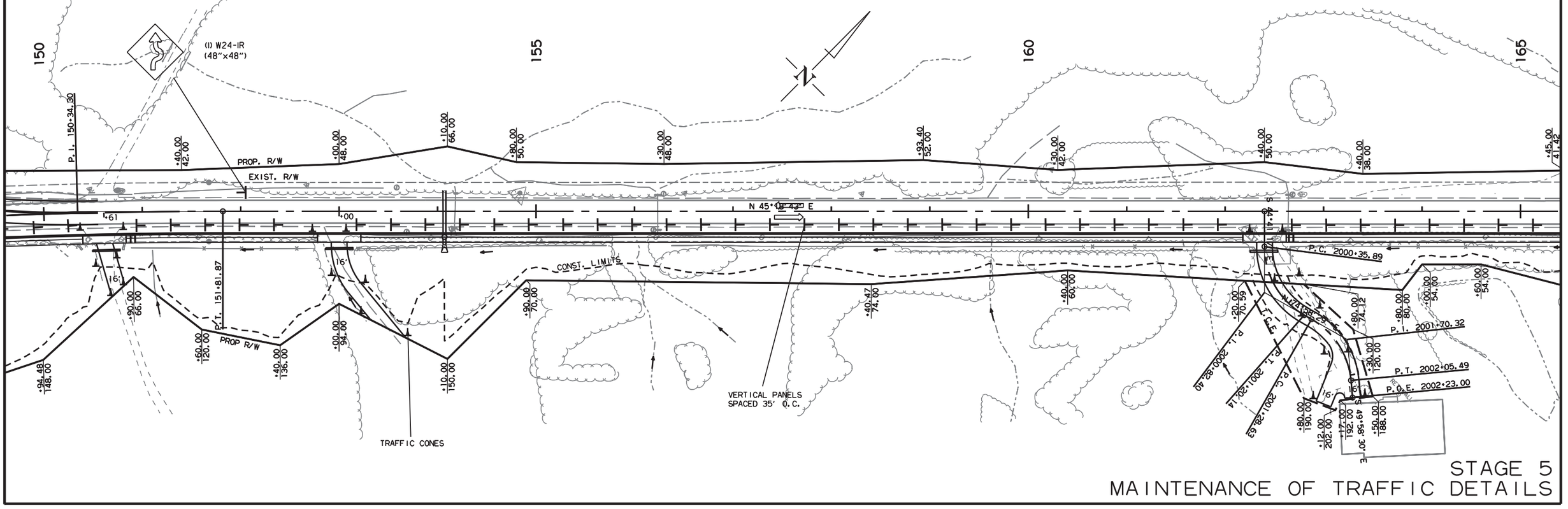
NOTCH AND WIDEN HWY. 7 RT. FROM STA. 139+40.65 TO STA. 278+00.00 AND HWY. 7 LT. FROM STA. 277+00.00 TO STA. 321+84.00.

APPLY LEVELING COURSE TO EXISTING LANES IF AND WHERE DIRECTED BY THE ENGINEER.

STAGE 5 QUANTITIES

TRAFFIC DRUMS = 19 EACH
TRAFFIC CONES = 369 EACH
VERTICAL PANELS = 302 EACH
FURNISHING AND INSTALLING P.C.C.B. = 558 LIN. FT.
REMOVAL OF PERMANENT PAVEMENT MARKINGS = 4000 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS = 6021 LIN. FT.





6/22/2020

R061547.DGN

STAGE 5
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.		061547	57	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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Jul 24 2020 2:45 PM

PROP. R/W
EXIST. R/W
N 45°18'43" E
CONST. LIMITS
PROP R/W
TRAFFIC CONES
VERTICAL PANELS SPACED 35' O.C.
BELVEDERE DR
T.C.E.
RET.WALL
P.C. 186+95.55
P.T. 192+32.85
P.I. 189+64.69

6/22/2020

R061547.DGN

STAGE 5
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	58	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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TRAFFIC CONES
VERTICAL PANELS SPACED 35' O.C.
CONST. LIMITS
EXIST. R/W
PROP. R/W
N 37°15'09" E
N 58°03'06" E
N 67°34'50" E
OAK CREEK DR
CLARENCE CT
BELVEDERE DR
KEEPSAKE LN
DEVANE PL.
BIG SAM LN
GRIMMETT LOOP
BELVEDERE OAKS CIR

6/22/2020
R061547.DGN

STAGE 5
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.		061547	59	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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225 230 235

EXIST. R/W
PROP. R/W
P.C. 225+69.03
P.I. 227+94.12
P.T. 230+13.55
DELONA LN
P.I. 238+08.48
P.C. 236+76.67
P.T. 239+39.73
T.C.E.
CONST. LIMITS
N 45°21' 16" E
N 45°21' 16" E
EXIST. R/W
PROP. R/W
VERTICAL PANELS SPACED 35' O.C.
TRAFFIC CONES
FURNISH AND INSTALL
140' P.C.C.B.
(2) SPECIAL END UNITS

240 245 250 255

PROP. R/W
EXIST. R/W
P.I. 247+08.94
P.C. 245+63.56
P.T. 248+54.18
P.C. 254+36.92
P.I. 255+20.49
N 54°33' 41" E
N 58°55' 15" E
N 58°55' 15" E
EXIST. R/W
CONST. LIMITS
PROP. R/W
VERTICAL PANELS SPACED 35' O.C.
TRAFFIC CONES
SLEEPY VALLEY

6/22/2020

R061547.DGN

STAGE 5
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.		061547	60	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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255 260 265

P.T. 256+03.87
P.C. 262+09.84
P.T. 265+14.73
P.I. 264+36.92
P.I. 269+85.96
Δ = 0°21'56" LT.

CONST. LIMITS
PROP. R/W
EXIST. R/W
SLEEPY VALLEY RD
N 52°14'34" E
N 33°56'59" E
T.C.E.
TRAFFIC CONES
VERTICAL PANELS SPACED 35' O.C.

270 275 280 285

N 33°35'03" E
ARBOR DALE PL
(1) W24-1R (48"x48")

6/22/2020
R061547.DGN

STAGE 5
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	61	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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Sep 11 2020 12:44 PM
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285 290 295 300 305 310 315

ROAD CLOSED (I) RII-2 (48" X 30") (I) WI-6 (48" X 24")

(I) 8' BARR. TYP. III LT. (I) 8' BARR. TYP. III LT.

FURNISH AND INSTALL 160' P.C.C.B. + (2) SPECIAL END UNITS

ROAD CLOSED (I) RII-2 (48" X 30") (I) WI-6 (48" X 24")

(I) 8' BARR. TYP. III RT. (I) 8' BARR. TYP. III RT.

(I) W24-IL (48"x48")

VERTICAL PANELS SPACED 35' O.C.

TRAFFIC CONES

(8) WI-8 (18" X 24")

PROP. R/W

CONST. LIMITS

N 33° 35' 03" E

N 29° 05' 53" E

P.C. 287+65.80

P.I. 288+55.55

P.I. 289+45.24

P.S. 293+64.64

P.T. 296+40.16

P.I. 295+02.94

P.I. 307+02.87

P.C. 304+90.00

P.T. 308+96.78

N 48° 55' 22" E

N 6° 42' 00" E

CAMP SPUR DR

FASON DR

EXIST. R/W

RETAINING WALL

T.C.E.

P.C.E.

6/22/2020

R061547.DGN

STAGE 5
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.		061547	62	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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TRAFFIC CONES

VERTICAL PANELS SPACED 35' O.C.

ROAD CLOSED

(1) R11-2 (48" X 30")

(1) 8' BARR. TYP. III RT.

(1) 8' BARR. TYP. III RT.

EXIST. R/W

P.C. 315+81.98

P.I. 317+63.40

P.C. 322+09.82

P.I. 323+50.10

P.I. 334+79.99

P.C. 328+91.90

P.R.C. 330+69.36

P.I. 610+41.96

P.C. 702+04.36

P.I. 702+56.20

P.I. 704+95.97

P.C. 704+50.00

BEGIN PROP. C/A

END PROP. C/A

N 57°59'37" E

N 19°20'29" E

N 60°39'31" W

N 59°28'53" W

N 60°33'36" W

Δ = 1°28'08" Lt.

Δ = 2°04'43" Rt.

6/22/2020

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STAGE 5
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.		061547	63	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:48 PM

STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

STAGE 6 CONSTRUCTION SEQUENCE:

INSTALL CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 6 MAINTENANCE OF TRAFFIC DETAILS.

USE VERTICAL PANELS AND TRAFFIC DRUMS SPACED 35' O.C. TO DELINEATE THE WORK ZONE. USE TRAFFIC CONES TO DELINEATE DRIVEWAYS.

SHIFT TRAFFIC
AS SHOWN IN THE STAGE 5 MAINTENANCE OF TRAFFIC DETAILS.

REMOVE DETOURS, RELOCATE P.C.C.B., AND CONSTRUCT REMAINING PORTIONS OF BOX CULVERTS AS SHOWN IN THE STAGE 6 MAINTENANCE OF TRAFFIC DETAILS.

NOTCH AND WIDEN HWY. 7 LT. FROM STA. 139+40.65 TO STA. 277+00.00 AND HWY. 7 RT. FROM STA. 278+00.00 TO STA. 321+84.00.

OVERLAY FROM L.M. 13.42 TO STA. 140+40.65, APPLY FINAL 2" LIFT OF ACHM SURFACE COURSE, AND INSTALL PERMANENT PAVEMENT MARKINGS AS SHOWN IN THE PERMANENT PAVEMENT MARKING DETAILS.

STAGE 6 QUANTITIES

TRAFFIC DRUMS = 421 EACH
TRAFFIC CONES = 397 EACH
VERTICAL PANELS = 25 EACH
RELOCATING P.C.C.B. = 518 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS = 56230 LIN. FT.

ROAD CLOSED
(1) R11-2 (48" X 30")
(1) W1-6 (48" X 24")
(1) 8' BARR. TYP. III LT.
(1) 8' BARR. TYP. III LT.
TRAFFIC CONES
VERTICAL PANELS SPACED 35' O.C.
ROAD CLOSED
(1) R11-2 (48" X 30")
(1) W1-6 (48" X 24")
(1) 8' BARR. TYP. III RT.
(1) 8' BARR. TYP. III RT.
TRAFFIC DRUMS SPACED 35' O.C.
FOX PASS CUTOFF
TEMP. CONST. LIMITS
EXIST. R/W
P.O.B. 139+00.00
PROP R/W
270' LANE TAPER
RELOCATE 180' P.C.C.B. + (2) SPECIAL END UNITS
EXIST. R/W
P.C. 148+86.67
N 42°21'36" E
N 42°21'36" E

TRAFFIC CONES
TRAFFIC DRUMS SPACED 35' O.C.
P.I. 150+34.30
PROP. R/W
EXIST. R/W
CONST. LIMITS
45°18'43" E
P.C. 2000+35.89
P.I. 151+81.87
PROP R/W
CONST. LIMITS
P.I. 2000+82.40
P.I. 2001+20.14
P.C. 2001+28.63
P.I. 2001+70.32
P.T. 2002+05.49
P.O.E. 2002+23.00
S 49°58'30" E

6/22/2020
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STAGE 6
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.		061547	64	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS SPACED 35' O.C.
TRAFFIC CONES
PROP. R/W
EXIST. R/W
CONST. LIMITS
PROP R/W
BELVEDERE DR
T.C.E.
N 45°18'43" E
RET/WALL
P.C. 186+95.55
P.T. 192+32.85

6/22/2020
R061547.DGN

STAGE 6
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	65	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS SPACED 35' O.C.

TRAFFIC CONES

CONST. LIMITS

EXIST. R/W

PROP. R/W

OAK CREEK DR

CLARENCE CT

BELVEDERE DR

KEEPSAKE LN

DEVANE PL.

BIG SAM LN

GRIMMETT LOOP

BELVEDERE OAKS CIR

RET/WALL

6/22/2020

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STAGE 6
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.		061547	66	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:50 PM

TRAFFIC CONES
TRAFFIC DRUMS SPACED 35' O.C.
CONST. LIMITS
EXIST. R/W
PROP. R/W
RELOCATE 100' P.C.C.B. + (2) SPECIAL END UNITS
DELONA LN
N 45°21' 16" E
P.I. 230+13.55
P.I. 238+08.48
P.C. 236+76.67
P.I. 239+39.73
T.C.E.
RETAINING WALL
CHERE OAKS CIR
N 54°38' 41" E
N 58°55' 15" E
P.I. 247+08.94
P.C. 245+63.56
P.I. 248+54.18
P.C. 254+36.92
P.I. 255+20.49
SLEEPY VALLEY

6/22/2020

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STAGE 6
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.		061547	67	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC CONES
TRAFFIC DRUMS SPACED 35' O.C.
CONST. LIMITS
PROP. R/W
EXIST. R/W
SLEEPY VALLEY RD
ARBOR DALE PL
VERTICAL PANELS SPACED 35' O.C.
1,000' LANE TAPER

STAGE 6
MAINTENANCE OF TRAFFIC DETAILS

6/22/2020

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	68	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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ROAD CLOSED
(1) R11-2 (48" X 30")
(1) W1-6 (48" X 24")
(1) 8' BARR. TYP. III LT.
(1) 8' BARR. TYP. III LT.
RELOCATE 160' P.C.C.B. + (2) SPECIAL END UNITS
PROP. R/W
CONST. LIMITS
EXIST. R/W
RETWALL
CAMPUS DR
FASON DR
P.I. 289+45.24
P.I. 288+55.55
P.I. 295+02.94
P.I. 296+40.16
P.I. 307+02.87
P.C. 304+90.00
P.T. 308+96.78
TRAFFIC CONES
TRAFFIC DRUMS SPACED 35' O.C.
ROAD CLOSED
(1) R11-2 (48" X 30")
(1) W1-6 (48" X 24")
(1) 8' BARR. TYP. III RT.
(1) 8' BARR. TYP. III RT.
N 33°35'03" E
N 29°05'53" E
N 16°42'00" E
N 48°55'22" E
285
290
295
300
305
310
315

6/22/2020

R061547.DGN

STAGE 6
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.		061547	69	323

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS SPACED 35' O.C.

TRAFFIC CONES

VERTICAL PANELS SPACED 35' O.C.

ROAD CLOSED

(1) RII-2 (48" X 30")

(1) 8' BARR. TYP. III RT.

(1) 8' BARR. TYP. III RT.

EXIST. R/W

225' LANE TAPER

MONROE RD

BEGIN PROP. C/A

END PROP. C/A

P.C. 315+81.98

P.I. 317+63.40

P.C. 322+09.82

P.I. 323+50.10

P.I. 324+79.66

P.C. 328+91.90

P.R.C. 330+69.36

P.I. 330+86.95

P.C.C. 331+16.16

P.I. 702+56.20

P.C. 702+04.36

P.I. 610+41.96

P.I. 704+95.97

P.I. 706+50.00

N 59°28'53" W

N 60°33'36" W

N 19°20'29" E

N 39°20'29" E

N 39°49'05" E

N 60°39'31" W

6/22/2020

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STAGE 6
MAINTENANCE OF TRAFFIC DETAILS

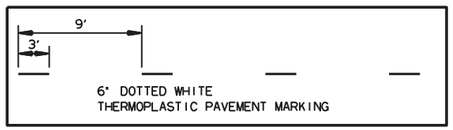
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	70	323

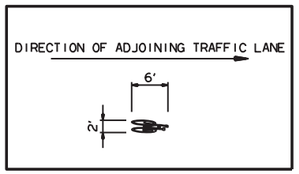
(2) PERMANENT PAVEMENT MARKING DETAILS

LEGEND

- = 6" WHITE THERMOPLASTIC PAVEMENT MARKING
- = 6" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING
- = 12" WHITE (STOP LINE) THERMOPLASTIC PAVEMENT MARKING
- = 12" WHITE (CROSSWALK) THERMOPLASTIC PAVEMENT MARKING
- = 6" SKIP YELLOW WITH 6" YELLOW THERMOPLASTIC PAVEMENT MARKING & RAISED PAVEMENT MARKERS (TYPE II)(YELLOW/YELLOW) SPACED 80' O.C.
- = THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)
- = THERMOPLASTIC PAVEMENT MARKING (WORD)
- = THERMOPLASTIC PAVEMENT MARKING (ARROW)
- = THERMOPLASTIC PAVEMENT MARKING (BIKE EMBLEM)

NOTE: USE THE CORRESPONDING PAVEMENT MARKINGS LISTED ABOVE UNLESS OTHERWISE SPECIFIED IN THE PERMANENT PAVEMENT MARKING DETAILS.

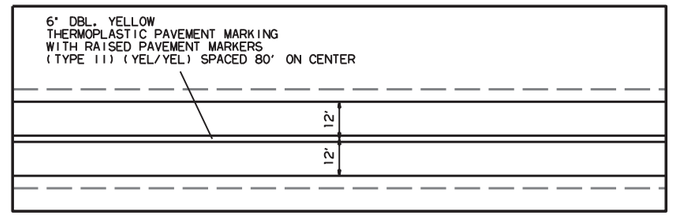




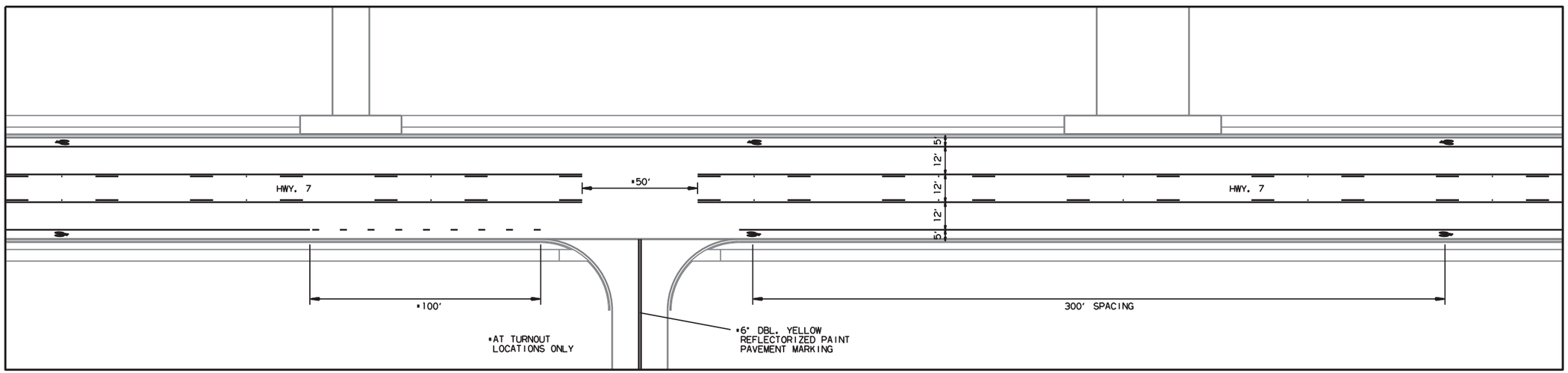
BIKE EMBLEM
DETAIL

PERMANENT PAVEMENT MARKINGS

RAISED PAVEMENT MARKERS TYPE II (YEL/YEL) (80' O.C.) = 451 EACH
THERMOPLASTIC PAVEMENT MARKING WHITE (6") = 34379 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING WHITE (8") = 235 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING WHITE (12") = 694 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING YELLOW (6") = 46058 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING YELLOW (8") = 556 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING (YIELD LINE) = 69 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING (WORDS) = 2 EACH
THERMOPLASTIC PAVEMENT MARKING (ARROWS) = 3 EACH
THERMOPLASTIC PAVEMENT MARKING (BIKE EMBLEMS) = 121 EACH
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10") = 97 LIN. FT.
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6") = 1785 LIN. FT.
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (10") = 663 LIN. FT.



HWY. 7 OVERLAY STRIPING DETAIL



HWY. 7 STRIPING DETAIL

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:52 PM
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6/22/2020

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PERMANENT PAVEMENT MARKING DETAILS

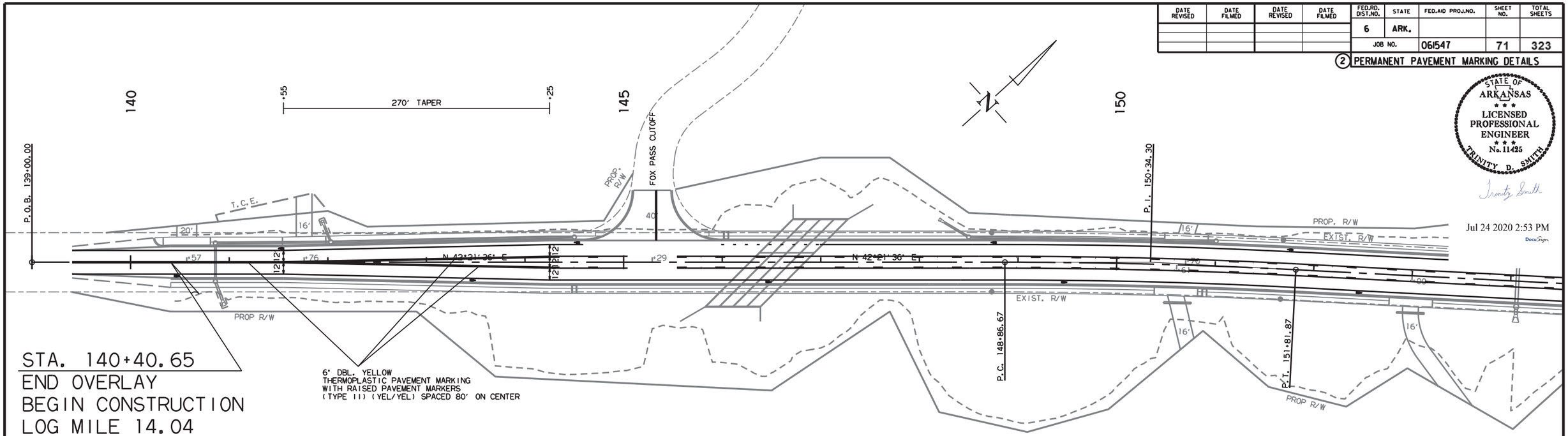
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

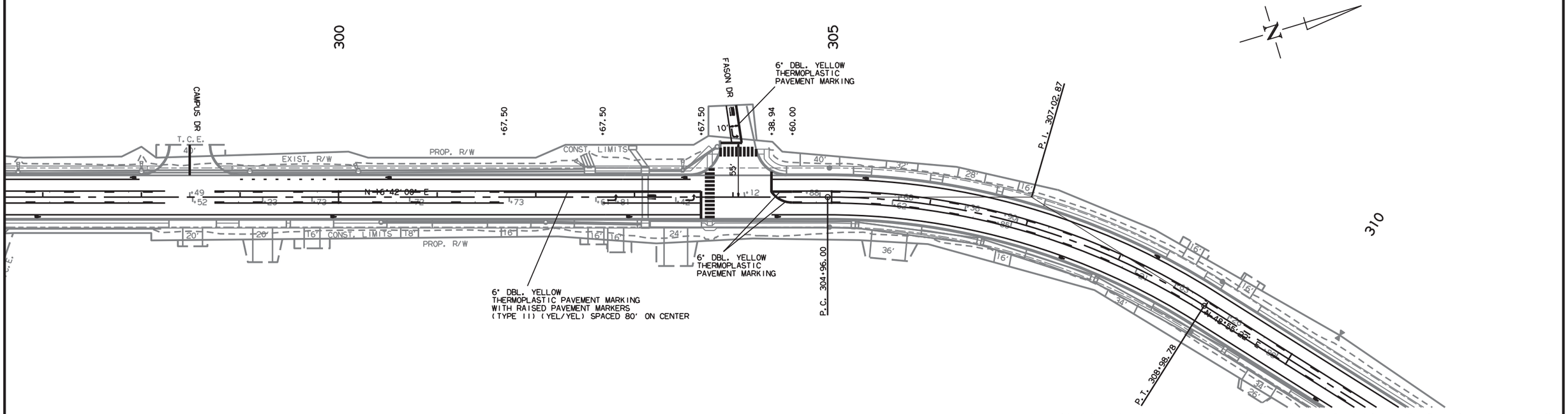
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	71	323

(2) PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:53 PM





6/22/2020

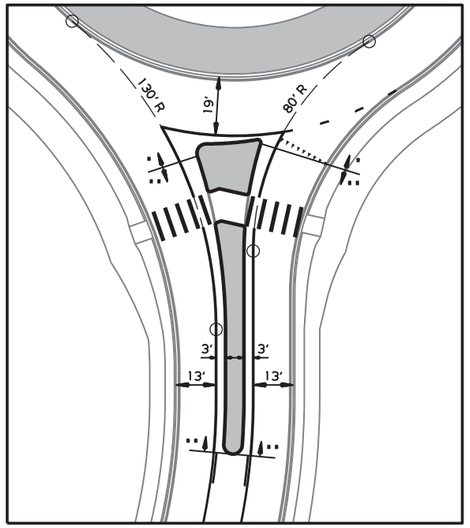
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PERMANENT PAVEMENT MARKING DETAILS

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.		061547	72	323

(2) PERMANENT PAVEMENT MARKING DETAILS

- 8" WHITE THERMOPLASTIC PAVEMENT MARKING AND 10" WHITE REFLECTORIZED PAINT ON CURB
- 8" YELLOW THERMOPLASTIC PAVEMENT MARKING AND 10" YELLOW REFLECTORIZED PAINT ON CURB



APPROACH STRIPING DETAIL

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:53 PM

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKING WITH RAISED PAVEMENT MARKERS (TYPE 11) (YEL/YEL) SPACED 80' ON CENTER

6" YELLOW THERMOPLASTIC PAVEMENT MARKING WITH RAISED PAVEMENT MARKERS (TYPE 11) (YEL/YEL) SPACED 80' ON CENTER

105' TAPER

HWY. 7

HWY. 5

HWY. 70

ROCKDALE RD

EXIST. R/W

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

6/22/2020

R061547.DGN

PERMANENT PAVEMENT MARKING 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.		061547	73	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:55 PM
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ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	VERTICAL PANELS	TRAFFIC DRUMS	TRAFFIC CONE	BARRICADES (TYPE III)		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER
																RIGHT	LEFT		
			LIN. FT. - EACH							NO.	SQ. FT.			EACH				LIN. FT.	
W20-1	ROAD WORK 1500 FT.	48"x48"	3	3	3	3	3	3	3	3	48.0								
W20-1	ROAD WORK 1000 FT.	48"x48"	3	3	3	3	3	3	3	3	48.0								
W20-1	ROAD WORK 500 FT.	48"x48"	3	3	3	3	3	3	3	3	48.0								
W20-1	ROAD WORK AHEAD	48"x48"	20	20	20	20	20	20	20	20	320.0								
G20-2	END ROAD WORK	48"x24"	23	23	23	23	23	23	23	23	184.0								
R11-2	ROAD CLOSED	48"x30"		1	1	3	5	5	5	5	50.0								
OM-3L	OBJECT MARKER	12"x36"					9	9	9	9	27.0								
OM-3R	OBJECT MARKER	12"x36"					12	12	12	12	36.0								
W1-6	LARGE ARROW	48"x24"					4	4	4	4	32.0								
W1-8	CHEVRONS	18"x24"					16		16	16	48.0								
R4-1	DO NOT PASS	24"x30"	18	18	18	18	18	18	18	18	90.0								
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	4	4	4	4	4	4	4	4	36.0								
W8-1	BUMP	30"x30"	8	8	8	8	8	8	8	8	50.0								
W24-1R	DOUBLE REVERSE CURVE RT.	48"x48"					2		2	2	32.0								
W24-1L	DOUBLE REVERSE CURVE LT.	48"x48"					2		2	2	32.0								
R1-1	STOP	30"x30"		3					3	3	18.8								
SPECIAL	WORK WITH US SIGN (USE CAUTION, SLOW DOWN)	96"x48"	3	3	3	3	3	3	3	3	96.0								
SPECIAL	CONSTRUCTION PROJECT INFORMATION	96"x48"	3	3	3	3	3	3	3	3	96.0								
	CONSTRUCTION PROJECT INFORMATION UPDATE											15							
	VERTICAL PANELS		28	49	34	30	302	25	302				302						
	TRAFFIC DRUMS			4			19	421	421					421					
	TRAFFIC CONES		6	18	12	13	369	397	397						397				
	TYPE III BARRICADE-RT. (8')			1	1	5	5	5	5							40			
	TYPE III BARRICADE-LT. (8')			1	1	5	5	5	5								40		
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER						558		558									558	
	RELOCATING PRECAST CONCRETE BARRIER							518	518										518
TOTALS:											1291.8	15	302	421	397	40	40	558	518

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

THE QUANTITY OF VERTICAL PANELS PROVIDED IN THE CONTRACT IS FOR ONE SIDE OF THE ROADWAY FOR 2 MILES. THIS IS THE MAXIMUM QUANTITY REQUIRED TO ALLOW THE CONTRACTOR TO NOTCH ONE MILE, BACKFILL TO A POINT WHERE THE VERTICAL DIFFERENTIAL IS 4" OR LESS, AND THEN NOTCH ANOTHER ONE-MILE SECTION. THIS IS THE MAXIMUM NUMBER OF VERTICAL PANELS THAT WILL BE PAID FOR. REFER TO SECTION 603.02 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 2	STAGE 3	STAGE 5	STAGE 6	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	THERMOPLASTIC PAVEMENT MARKING									REFLECTORIZED PAINT PAVEMENT MARKING		
								TYPE II	6"		8"		12"	YIELD LINE	WORDS	ARROWS	BIKE EMBLEMS	6"	10"	
								(YELLOW/YELLOW)	WHITE	YELLOW	WHITE	YELLOW	WHITE					YELLOW	WHITE	YELLOW
	LIN. FT. - EACH					LIN. FT.		EACH	LIN. FT.						EACH			LIN. FT.		
REMOVAL OF PERMANENT PAVEMENT MARKINGS			4000			4000														
CONSTRUCTION PAVEMENT MARKINGS	6974	5261	6021	56230			74486													
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)					492			492												
THERMOPLASTIC PAVEMENT MARKING WHITE (6")					40926				40926											
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")					52605					52605										
THERMOPLASTIC PAVEMENT MARKING WHITE (8")					235						235									
THERMOPLASTIC PAVEMENT MARKING YELLOW (8")					556							556								
THERMOPLASTIC PAVEMENT MARKING WHITE (12")					694								694							
THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)					69									69						
THERMOPLASTIC PAVEMENT MARKING (WORDS)					2										2					
THERMOPLASTIC PAVEMENT MARKING (ARROWS)					3											3				
THERMOPLASTIC PAVEMENT MARKING (BIKE EMBLEMS)					121												121			
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")					1785													1785		
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")					97														97	
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (10")					663															663
TOTALS:						4000	74486	492	40926	52605	235	556	694	69	2	3	121	1785	97	663

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

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	74	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 11 2020 12:45 PM
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CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
141+00	175+00	HWY. 7 LT. & RT.	34	34
177+00	180+00	HWY. 7 RT.	3	3
181+00	183+50	HWY. 7 LT.	3	3
185+00	210+00	HWY. 7 LT. & RT.	25	25
213+00	215+50	HWY. 7 LT.	3	3
218+00	257+00	HWY. 7 LT. & RT.	39	39
259+00	275+00	HWY. 7 LT. & RT.	16	16
280+50	293+70	HWY. 7 LT. & RT.	14	14
307+00	313+50	HWY. 7 LT.	7	7
315+00	316+70	HWY. 7 LT.	2	2
322+70	323+70	HWY. 7 LT.	1	1
324+80	326+50	HWY. 7 LT. & RT.	2	2
327+50	332+50	HWY. 5 LT. & RT.	5	5
TOTALS:			154	154

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
150+88	172+84	HWY. 7 RT.	2261	
193+79	194+03	HWY. 7 RT.		1
210+76	212+40	HWY. 7 LT.	168	
213+26	215+39	HWY. 7 LT.	202	
222+10	223+29	HWY. 7 RT.	148	
226+39	227+88	HWY. 7 RT.	193	
228+70	229+48	HWY. 7 RT.	109	
238+90	247+23	HWY. 7 RT.	882	
245+71	248+08	HWY. 7 LT.	231	
256+92	258+72	HWY. 7 RT.	106	
280+75	283+00	HWY. 7 LT.	225	
284+67	286+01	HWY. 7 LT.	144	
288+26	288+81	HWY. 7 LT.	57	
290+23	293+64	HWY. 7 LT.	369	
296+48	298+64	HWY. 7 RT.	228	
310+31	313+50	HWY. 7 LT.	369	
315+30	316+50	HWY. 7 LT.	177	
322+50	322+80	HWY. 7 RT.	116	
TOTALS:			5985	1

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	CURB	CURB AND GUTTER	RETAINING WALLS	CONCRETE PAVEMENT	CONCRETE ISLANDS	WELLS	COLUMNS	CONCRETE DRIVEWAYS	WALKS	SIGN FOUNDATIONS	HEADWALLS	FLARED END SECTIONS	GUARDRAIL	BUILDINGS	SIGNS	PLANTERS	LUMINAIRE POLE AND FOUNDATION
			LIN. FT.	LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	EACH	EACH	SQ. YD.	SQ. YD.	EACH	EACH	EACH	LIN. FT.	EACH	EACH	EACH	EACH
141+00	141+00	HWY. 7 LT.											1						
144+60	144+60	HWY. 7 LT.										1					1		
150+33	150+83	HWY. 7 RT.			13				2										
154+18	156+24	HWY. 7 LT. & RT.											4						
162+28	163+37	HWY. 7 LT. & RT.							2	463			2						
167+00	167+25	HWY. 7 RT.							2										
170+40	185+10	HWY. 7 LT. & RT.			175				2		361		4						
188+36	189+18	HWY. 7 RT.																4	
190+90	210+10	HWY. 7 LT. & RT.	40	25						592		14	1				5		
214+60	215+75	HWY. 7 LT.							2			2					1		
220+63	221+72	HWY. 7 LT. & RT.			52							4					2		
222+07	222+07	HWY. 7 LT. & RT.											2						
223+62	223+62	HWY. 7 RT.										2					1		
224+94	222+94	HWY. 7 LT. & RT.											2						
225+67	226+31	HWY. 7 RT.										2				1	1		
226+74	226+74	HWY. 7 LT.															1		
229+19	229+19	HWY. 7 LT.											1						
233+80	234+60	HWY. 7 LT.										2					1		
239+90	243+50	HWY. 7 LT. & RT.			90							3					4		
245+24	245+72	HWY. 7 LT. & RT.							1			2	2				1		
246+42	247+01	HWY. 7 LT.			59														
250+78	251+75	HWY. 7 LT.				32						1					1		
253+65	253+65	HWY. 7 RT.										2					1		
254+78	254+78	HWY. 7 LT. & RT.											2						
256+50	258+97	HWY. 7 LT.				14						2				1			
259+44	261+10	HWY. 7 RT.								364		6				1	3		
269+53	271+22	HWY. 7 LT.										1				2	1		
275+14	277+70	HWY. 7 LT. & RT.										10	2				2		
280+95	291+33	HWY. 7 RT.		473	100							15					11	5	
294+07	294+49	HWY. 7 RT.								132									
296+03	296+75	HWY. 7 LT.											1	1					
297+98	299+23	HWY. 7 LT.	97							162		1	1				1	1	
299+58	303+82	HWY. 7 RT.			55				1			5				1	3	1	
302+55	302+55	HWY. 7 LT.											1						
302+68	302+68	HWY. 7 LT. & RT.											2						
305+46	306+75	HWY. 7 LT.	38						1	203		2					3	1	
306+50	308+50	HWY. 7 RT.										3					1		2
309+70	311+49	HWY. 7 RT.								198		1					1		
313+52	315+12	HWY. 7 LT.										4					3		1
315+28	315+28	HWY. 7 LT. & RT.											2						
315+55	316+90	HWY. 7 LT.										1					1	1	
318+03	318+03	HWY. 7 LT.															1		
318+15	318+80	HWY. 7 RT.										3					5		
318+85	322+11	HWY. 7 LT.		304						122		1					1		
322+35	333+67	HWY. 7 LT. & RT.	337			496	55	1				13	2		166	6	7		2
TOTALS:			512	802	544	542	55	1	13	1236	361	103	32	1	166	12	64	13	5

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL GUARDRAIL TERMINALS AND TERMINAL ANCHOR POSTS.

6/22/2020

R061547.DGN

QUANTITIES

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.		061547	75	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REMOVAL AND DISPOSAL OF CULVERTS AND DROP INLETS

STATION	DESCRIPTION	PIPE CULVERTS	BOX CULVERTS	JUNCTION BOXES	DROP INLETS
		EACH	EACH	EACH	EACH
146+56	HWY. 7 - R.C. BOX CULVERT		1		
150+61	HWY. 7 RT. - SIDE DRAIN	1			
150+70	HWY. 7 LT. - SIDE DRAIN	1			
153+00	HWY. 7 RT. - SIDE DRAIN	1			
166+01	HWY. 7 - CROSS DRAIN	1			
167+13	HWY. 7 RT. - SIDE DRAIN	1			
171+89	HWY. 7 - CROSS DRAIN	1			
175+15	HWY. 7 LT. - JUNCTION BOX AND PIPE OUTLET	1		1	
175+54	HWY. 7 LT. - JUNCTION BOX AND PIPE OUTLET	1		1	
175+70	HWY. 7 RT. - SIDE DRAIN	1			
176+89	HWY. 7 RT. - SIDE DRAIN	1			
177+70	HWY. 7 LT. - JUNCTION BOX AND PIPE INLET AND OUTLET	2		1	
181+88	HWY. 7 LT. - SIDE DRAIN	1			
184+50	HWY. 7 LT. - SIDE DRAIN	1			
193+24	HWY. 7 RT. - SIDE DRAIN	1			
193+91	HWY. 7 RT. - SIDE DRAIN	1			
195+28	HWY. 7 RT. - SIDE DRAIN	1			
202+93	HWY. 7 RT. - SIDE DRAIN	1			
203+40	HWY. 7 RT. - SIDE DRAIN	1			
208+75	HWY. 7 RT. - SIDE DRAIN	1			
211+43	HWY. 7 RT. - SIDE DRAIN	1			
215+40	HWY. 7 LT. - SIDE DRAIN	1			
217+74	HWY. 7 LT. - SIDE DRAIN	1			
221+09	HWY. 7 LT. - SIDE DRAIN	1			
221+47	HWY. 7 RT. - SIDE DRAIN	1			
221+75	HWY. 7 LT. - SIDE DRAIN	1			
222+77	HWY. 7 LT. - SIDE DRAIN	1			
224+60	HWY. 7 LT. - SIDE DRAIN	1			
226+95	HWY. 7 LT. - SIDE DRAIN	1			
228+88	HWY. 7 LT. - SIDE DRAIN	1			
233+70	HWY. 7 LT. - SIDE DRAIN	1			
234+13	HWY. 7 LT. - SIDE DRAIN	1			
236+30	HWY. 7 LT. - SIDE DRAIN	1			
238+17	HWY. 7 LT. - SIDE DRAIN	1			
244+60	HWY. 7 LT. - SIDE DRAIN	1			
248+20	HWY. 7 LT. - SIDE DRAIN	1			
250+97	HWY. 7 LT. - SIDE DRAIN	1			
253+13	HWY. 7 LT. - SIDE DRAIN	1			
257+87	HWY. 7 RT. - SIDE DRAIN	1			
262+66	HWY. 7 RT. - JUNCTION BOX			1	
263+39	HWY. 7 LT. - SIDE DRAIN	1			
271+35	HWY. 7 LT. - SIDE DRAIN	1			
289+23	HWY. 7 - R.C. BOX CULVERT		1		
289+98	HWY. 7 LT. - SIDE DRAIN	1			
296+75	HWY. 7 LT. - SIDE DRAIN	1			
298+00	HWY. 7 LT. - SIDE DRAIN	1			
298+49	HWY. 7 LT. - SIDE DRAIN	2			
303+42	HWY. 7 RT. - SIDE DRAIN	1			
304+31	HWY. 7 LT. - DROP INLET AND PIPE INLET AND OUTLET	2			1
304+88	HWY. 7 LT. - SIDE DRAIN	1			
305+62	HWY. 7 RT. - SIDE DRAIN	1			
305+68	HWY. 7 LT. - SIDE DRAIN	1			
306+36	HWY. 7 LT. - SIDE DRAIN	1			
306+85	HWY. 7 RT. - SIDE DRAIN	2			
306+90	HWY. 7 LT. - SIDE DRAIN	1			
308+21	HWY. 7 RT. - SIDE DRAIN	2			
308+63	HWY. 7 LT. - SIDE DRAIN	1			
309+26	HWY. 7 LT. - SIDE DRAIN	1			
309+88	HWY. 7 RT. - SIDE DRAIN	2			
311+32	HWY. 7 RT. - SIDE DRAIN	2			
312+86	HWY. 7 LT. - SIDE DRAIN	1			
312+89	HWY. 7 RT. - SIDE DRAIN	2			
313+71	HWY. 7 LT. - SIDE DRAIN	1			
314+29	HWY. 7 LT. - SIDE DRAIN	1			
314+67	HWY. 7 LT. - SIDE DRAIN	1			
317+14	HWY. 7 LT. - SIDE DRAIN	1			
317+67	HWY. 7 LT. - SIDE DRAIN	1			
318+18	HWY. 7 RT. - SIDE DRAIN	1			
319+02	HWY. 7 RT. - SIDE DRAIN	1			
319+38	HWY. 7 LT. - SIDE DRAIN	1			
322+18	HWY. 7 RT. - SIDE DRAIN	1			
323+26	HWY. 7 - CROSS DRAIN	3			
326+07	HWY. 7 - DROP INLET AND R.C. BOX CULVERT OUTLET		1		1
328+03	HWY. 7 RT. - DROP INLET AND PIPE INLET AND OUTLET	2			1
332+08	HWY. 7 LT. - SIDE DRAIN	1			
332+69	HWY. 7 LT. - SIDE DRAIN	1			
333+00	HWY. 7 LT. - SIDE DRAIN	1			
701+84	HWY. 7 RT. - SIDE DRAIN	1			
TOTALS:		**85**	**3**	**4**	**3**

NOTE: QUANTITIES SHOWN ABOVE SHALL INCLUDE REMOVAL & DISPOSAL OF ALL HEADWALLS AND FLARED END SECTIONS IF APPLICABLE.

SOIL LOG

STATION	LATITUDE			LONGITUDE			LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC		FEET				
144+00	34	32	35.30	93	1	25.70	16' RT.	0-5	21	6	A-4(0)	BR/GR
144+00	34	32	35.30	93	1	25.60	28' RT.	0-5	24	7	A-4(1)	BR/GR
152+00	34	32	41.30	93	1	19.60	6' LT.	0-5	31	12	A-6(4)	BR/GR
160+00	34	32	46.70	93	1	12.60	5' RT.	0-4Z	29	11	A-6(3)	BR/GR
160+00	34	32	46.70	93	1	12.50	20' RT.	0-5	27	9	A-4(1)	BR/GR
168+00	34	32	52.50	93	1	5.80	6' RT.	0-5	30	12	A-6(4)	BR/GR
168+00	34	32	52.40	93	1	5.70	20' RT.	0-3.5Z	33	14	A-6(6)	BR/GR
176+00	34	32	58.00	93	1	59.40	5' LT..	0-4.5Z	24	9	A-4(2)	BR/GR
176+00	34	32	58.10	93	1	59.50	17' LT.	0-5	ND	NP	A-4(0)	BR/GR
184+00	34	33	3.90	93	0	52.10	5' RT.	0-5	35	18	A-6(8)	BR/GR
184+00	34	33	3.80	93	0	52.00	20' RT.	0-4Z	26	8	A-4(1)	BR/GR
192+00	34	33	9.70	93	0	46.00	5' LT.	0-3.5Z	22	9	A-4(1)	BR/GR
192+00	34	33	9.80	93	0	46.10	18' LT.	0-5	19	6	A-4(0)	BR/GR
200+00	34	33	15.90	93	0	40.20	6' RT.	0-3Z	24	9	A-4(2)	BR/GR
200+00	34	33	15.80	93	0	40.10	20' RT.	0-5	67	38	A-7-6(39)	BROWN
208+00	34	33	20.80	93	0	32.90	6' LT.	0-5	24	7	A-4(3)	BR/GR
208+00	34	33	20.90	93	0	32.90	16' LT.	0-5	24	8	A-4(1)	BR/GR
208+00	34	33	21.00	93	0	33.00	29' LT.	0-5	27	9	A-4(2)	BR/GR
215+00	34	33	23.80	93	0	25.20	6' RT.	0-5	27	12	A-6(3)	BR/GR
215+00	34	33	23.70	93	0	25.20	17' RT.	0-5	25	9	A-4(2)	BR/GR
215+00	34	33	23.60	93	0	25.10	30' RT.	0-5	26	9	A-4(3)	BR/GR
224+00	34	33	27.40	93	0	15.30	5' LT.	0-5	33	15	A-6(8)	BROWN
224+00	34	33	27.50	93	0	15.40	18' LT.	0-5	35	17	A-6(11)	BROWN
232+00	34	33	31.50	93	0	7.80	6' RT.	0-5	25	8	A-4(3)	BR/GR
232+00	34	33	31.40	93	0	7.60	20' RT.	0-5	24	7	A-4(1)	BR/GR
240+00	34	33	37.10	93	0	0.80	6' LT.	0-5	25	8	A-4(1)	BR/GR
240+00	34	33	37.10	93	0	0.80	14' LT.	0-5	24	8	A-4(1)	BR/GR
240+00	34	33	37.20	93	0	0.80	20' LT.	0-5	23	8	A-4(1)	BR/GR
248+00	34	33	41.60	92	59	52.80	5' RT.	0-5	22	6	A-4(0)	BR/GR
248+00	34	33	41.50	92	59	52.80	15' RT.	0-5	21	6	A-4(0)	BR/GR
248+00	34	33	41.50	92	59	52.70	22' RT.	0-5	22	6	A-4(0)	BR/GR
256+00	34	33	46.10	92	59	44.50	6' LT.	0-5	18	2	A-2-4(0)	BR/GR
256+00	34	33	46.20	92	59	44.60	14' LT.	0-5	21	5	A-4(0)	BR/GR
256+00	34	33	46.30	92	59	44.60	21' LT.	0-5	19	3	A-2-4(0)	BR/GR
264+00	34	33	51.10	92	59	37.10	6' RT.	0-5	24	8	A-4(1)	BR/GR
264+00	34	33	51.10	92	59	37.00	14' RT.	0-5	20	4	A-4(0)	BR/GR
264+00	34	33	51.00	92	59	37.00	22' RT.	0-5	21	3	A-4(0)	BR/GR
272+00	34	33	57.40	92	59	32.20	5' LT.	0-5	23	5	A-4(0)	BR/GR
272+00	34	33	57.50	92	59	32.30	13' LT.	0-5	20	4	A-4(0)	BR/GR
272+00	34	33	57.50	92	59	32.30	18' LT.	0-5	23	6	A-4(0)	BR/GR
280+00	34	34	4.20	92	59	26.70	6' RT.	0-5	24	9	A-4(3)	BR/GR
280+00	34	34	4.20	92	59	26.60	15' RT.	0-5	23	7	A-4(2)	BR/GR
280+00	34	34	4.20	92	59	26.50	19' RT.	0-5	24	9	A-4(2)	BR/GR
288+00	34	34	10.70	92	59	21.70	6' LT.	0-5	22	7	A-4(2)	BR/GR
288+00	34	34	10.80	92	59	21.80	13' LT.	0-5	21	5	A-4(0)	BR/GR
288+00	34	34	10.80	92	59	21.80	20' LT.	0-5	23	7	A-4(1)	BR/GR
296+00	34	34	17.80	92	59	17.10	6' RT.	0-5	24	7	A-4(2)	BR/GR
296+00	34	34	17.80	92	59	17.00	15' RT.	0-5	25	8	A-4(2)	BR/GR
296+00	34	34	17.80	92	59	16.90	27' RT.	0-5	28	10	A-4(3)	BR/GR
304+00	34	34	25.20	92	59	14.60	6' LT.	0-5	23	6	A-4(2)	BR/GR
312+00	34	34	31.50	92	59	9.10	6' RT.	0-5	20	5	A-4(1)	BR/GR
312+00	34	34	31.40	92	59	9.00	13' RT.	0-5	19	4	A-4(0)	BR/GR
312+00	34	34	31.40	92	59	9.00	19' RT.	0-5	20	4	A-4(0)	BR/GR
320+00	34	34	36.60	92	59	1.50	6' LT.	0-5	21	5	A-4(0)	BR/GR
320+00	34	34	36.60	92	59	1.50	13' LT.	0-5	21	5	A-4(1)	BR/GR
320+00	34	34	36.70	92	59	1.60	20' LT.	0-5	23	5	A-4(1)	BR/GR

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.
Z- AUGER REFUSAL
NP - NON-PLASTIC
ND - NOT DETERMINABLE

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
146+56	HWY. 7 - HDWL. OF R.C. BOX CULVERT ON RT.	1
239+58	HWY. 7 - HDWL. OF R.C. BOX CULVERT ON RT.	1
289+23	HWY. 7 - HDWL. OF R.C. BOX CULVERT ON RT.	1
TOTAL:		**3**

NOTE: SHOWN FOR INFORMATION ONLY. BENCH MARKS SHALL BE FURNISHED AND PLACED BY STATE FORCES.

EROSION CONTROL MATTING

STATION	STATION	LOCATION	LENGTH	CLASS 3
			LIN. FT.	SQ. YD.
144+40.00	145+40.00	HWY. 7 LT.	100.00	88.89
156+00.00	159+70.00	HWY. 7 RT.	370.00	328.89
162+60.00	164+00.00	HWY. 7 RT.	140.00	124.44
172+04.00	174+00.00	HWY. 7 RT.	196.00	174.22
205+20.00	207+20.00	HWY. 7 LT.	200.00	177.78
235+90.00	237+70.00	HWY. 7 LT.	180.00	160.00
257+20.00	257+84.00	HWY. 7 LT.	64.00	56.89
316+50.00	317+50.00	HWY. 7 RT.	100.00	88.89
330+50.00	331+00.00	HWY. 7 LT.	50.00	44.44
TOTAL:				**1244.44**

NOTE: AVERAGE WIDTH = 8'-0"

6/22/2020

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	76	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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EARTHWORK

	STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	* SOIL STABILIZATION
				CU. YD.		TON
	ENTIRE	PROJECT	STAGE 1 - ROUNDABOJT & APPROACHES	3238	7699	
	ENTIRE	PROJECT	STAGE 2 - ROUNDABOJT & APPROACHES	194	16588	
	ENTIRE	PROJECT	STAGE 3 - ROUNDABOJT & APPROACHES	888	1626	
	400+00.00	407+58.46	STAGE 4 - DETOUR 1	984	629	
	500+00.00	505+86.78	STAGE 4 - DETOUR 2	117	1067	
	139+40.65	321+84.00	STAGE 5 - HWY. 7	23561	20225	
	139+40.65	321+84.00	STAGE 6 - HWY. 7	16445	13220	
	ENTIRE	PROJECT	APPROACHES	915	2405	
	146+56.00	146+56.00	CHANNEL CHANGE - TRI. 12' x 6' x 126' R.C. BOX CULVERT	3000		
	239+58.00	239+58.00	CHANNEL CHANGE - 7' x 4' x 45' R.C. BOX CULVERT EXTENSION	100		
	259+15.00	259+15.00	CHANNEL CHANGE - HWY. 7 RT.	10		
	289+23.00	289+23.00	CHANNEL CHANGE - DBL. 12' x 7' x 89' R.C. BOX CULVERT	1350		
	139+00.00	142+00.00	HWY. 7 LT. - DRIVEWAY OBLITERATION	130		
	323+60.00	332+60.00	HWY. 7/5 RT. - PAVEMENT OBLITERATION	2340		
*	ENTIRE	PROJECT	TO BE USED IF AND WHERE			200
			DIRECTED BY THE ENGINEER			
	TOTALS:			**53272**	**63459**	**200**

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH	"W"	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
146+00.00	146+71.00	HWY. 7 LT.	71.00	6.32	49.86	31.56	0.40
146+43.00	147+60.00	HWY. 7 RT.	117.00	6.32	82.16	52.00	0.66
147+52.00	148+20.00	HWY. 7 LT.	68.00	6.32	47.75	30.22	0.38
154+07.00	155+00.00	HWY. 7 RT.	93.00	6.32	65.31	41.33	0.52
166+00.00	166+97.00	HWY. 7 RT.	97.00	6.32	68.12	43.11	0.54
172+04.00	172+50.00	HWY. 7 LT.	46.00	6.32	32.30	20.44	0.26
178+08.00	178+50.00	HWY. 7 LT.	42.00	6.32	29.49	18.67	0.24
178+30.00	180+00.00	HWY. 7 RT.	170.00	6.32	119.38	75.56	0.95
182+15.00	182+50.00	HWY. 7 LT.	35.00	6.32	24.58	15.56	0.20
182+50.00	183+00.00	HWY. 7 RT.	50.00	6.32	35.11	22.22	0.28
197+70.00	197+86.00	HWY. 7 RT.	16.00	6.32	11.24	7.11	0.09
221+90.00	222+08.00	HWY. 7 LT.	18.00	6.32	12.64	8.00	0.10
223+90.00	224+80.00	HWY. 7 LT.	90.00	6.32	63.20	40.00	0.50
234+60.00	235+40.00	HWY. 7 LT.	80.00	6.32	56.18	35.56	0.45
237+70.00	239+49.00	HWY. 7 LT.	179.00	6.32	125.70	79.56	1.00
239+70.00	240+00.00	HWY. 7 LT.	30.00	6.32	21.07	13.33	0.17
244+80.00	245+24.00	HWY. 7 LT.	44.00	6.32	30.90	19.56	0.25
247+00.00	247+90.00	HWY. 7 LT.	90.00	6.32	63.20	40.00	0.50
259+00.00	259+25.00	HWY. 7 RT.	25.00	6.32	17.56	11.11	0.14
288+50.00	288+80.00	HWY. 7 LT.	30.00	6.32	21.07	13.33	0.17
289+31.00	289+70.00	HWY. 7 LT.	39.00	6.32	27.39	17.33	0.22
290+26.00	293+65.00	HWY. 7 LT.	339.00	3.25	122.42	150.67	1.90
315+00.00	315+70.00	HWY. 7 LT.	70.00	6.32	49.16	31.11	0.39
318+30.00	318+80.00	HWY. 7 LT.	50.00	6.32	35.11	22.22	0.28
322+60.00	323+20.00	HWY. 7 LT.	60.00	6.32	42.13	26.67	0.34
323+60.00	324+10.00	HWY. 7 LT.	50.00	6.32	35.11	22.22	0.28
329+10.00	330+50.00	HWY. 7 LT.	140.00	6.32	98.31	62.22	0.78
331+85.00	332+50.00	HWY. 7 LT.	65.00	6.32	45.64	28.89	0.36
333+10.00	333+50.00	HWY. 7 LT.	40.00	6.32	28.09	17.78	0.22
TOTALS:					**1460.18**	**997.34**	**12.57**

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL						TEMPORARY EROSION CONTROL							
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	SOLID SODDING	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS (E-5)	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	FILTER SOCK (12") (E-13)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	SQ.YD.	ACRE	ACRE	M.GAL.	BAG	CU.YD.	LIN. FT.	LIN. FT.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING										3410		1285		203
ENTIRE	PROJECT	STAGE 1							3.61	3.61	73.6	418		951	57	56
ENTIRE	PROJECT	STAGE 2							3.08	3.08	62.8			959	120	40
ENTIRE	PROJECT	STAGE 3	2.51	5.02	2.51	270.1	2.51	1116	1.35	1.35	27.5				20	1
ENTIRE	PROJECT	STAGE 4							0.85	0.85	17.3	132		411		21
ENTIRE	PROJECT	STAGE 5	6.50	13.00	6.50	726.2	6.50	5014	11.33	11.33	231.1	1584		2657	726	197
ENTIRE	PROJECT	STAGE 6	5.05	10.10	5.05	579.0	5.05	5073	8.80	8.80	179.5	990		1600	833	135
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			3.52	7.04	3.52	359.0	3.52		29.02	29.02	592.0	1628	1113	1966	439	534
TOTALS:			**17.58**	**35.16**	**17.58**	**1934.3**	**17.58**	**11203**	**58.04**	**58.04**	**1183.8**	**8162**	**1113**	**9829**	**2195**	**1187**

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
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./LOCATION

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 ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

6/22/2020

R061547.DGN

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	77	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 11 2020 12:45 PM

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CONCRETE WALKS & HAND RAILING

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS	CONCRETE WALKS (TYPE SPECIAL)	ARCHITECTURAL FINISH	TEXTURED COATING FINISH	HAND RAILING
			LIN. FT.	SQ.YD.	SQ.YD.	SQ. FT.	SQ. YD.	LIN. FT.
140+41	206+33	HWY. 7 RT.	6592	3273				
140+41	207+22	HWY. 7 LT.	6681	3299				
206+33	206+97	HWY. 7 RT.	64		35	148	16	64
206+97	213+24	HWY. 7 RT.	627	274				
207+22	207+85	HWY. 7 LT.	63		35	149	17	63
207+85	212+24	HWY. 7 LT.	439	247				
212+24	213+03	HWY. 7 LT.	79		44	228	25	79
213+03	215+61	HWY. 7 LT.	258	89				
213+24	214+00	HWY. 7 RT.	76		42	172	19	76
214+00	216+04	HWY. 7 RT.	204	113				
215+61	216+56	HWY. 7 LT.	95		46	221	25	95
216+04	216+56	HWY. 7 RT.	52		29	140	16	52
216+56	221+10	HWY. 7 RT.	454	182				
216+56	241+00	HWY. 7 LT.	2444	1024				
221+10	223+08	HWY. 7 RT.	198		110	557	62	198
223+08	292+00	HWY. 7 RT.	6892	2908				
241+00	241+50	HWY. 7 LT.	50		28			
241+50	242+90	HWY. 7 LT.	140	29				
242+90	243+80	HWY. 7 LT.	90		50	192	21	
243+80	254+87	HWY. 7 LT.	1107	449				
254+87	256+00	HWY. 7 LT.	113		62	342	38	
256+00	265+90	HWY. 7 LT.	990	471				
265+90	266+24	HWY. 7 LT.	34		19			
266+24	266+80	HWY. 7 LT.	56	7				
266+80	269+00	HWY. 7 LT.	220		122	455	51	
269+00	290+34	HWY. 7 LT.	2134	1074				
290+34	293+60	HWY. 7 LT.	326		181	1087	121	
292+00	294+03	HWY. 7 RT.	203		113	356	40	203
293+60	294+65	HWY. 7 LT.	105	27				
294+51	295+04	HWY. 7 RT.	53		30	222	25	53
294+65	295+70	HWY. 7 LT.	105		57	166	18	
295+46	296+07	HWY. 7 RT.	61		34	224	25	61
295+70	326+25	HWY. 7 LT.	3055	1295				
296+07	296+60	HWY. 7 RT.	53	6				
296+60	298+20	HWY. 7 RT.	160		89	335	37	160
298+20	326+17	HWY. 7 RT.	2797	1147				
327+88	334+00	HWY. 5 RT.	612	363				
327+96	334+00	HWY. 5 LT.	604	338				
610+95	611+44	HWY. 70 RT.	49	55				
610+95	611+52	HWY. 70 LT.	57	69				
700+82	702+84	HWY. 7 RT.	202	191				
700+89	702+84	HWY. 7 LT.	195	218				
0+70	05+71	ROUNDABOUT	501	147				
TOTALS:				**17295**	**1126**	**4994**	**556**	**1104**

CONCRETE COMBINATION CURB AND GUTTER

STATION	STATION	LOCATION	TYPE A (1' 6")	TYPE E-1 (2' 0")
			LIN. FT.	LIN. FT.
140+41	145+09	HWY. 7 LT.	518	
140+41	176+74	HWY. 7 RT.	3646	
145+49	200+11	HWY. 7 LT.	5515	
177+03	208+62	HWY. 7 RT.	3186	
200+71	203+84	HWY. 7 LT.	348	
204+06	215+29	HWY. 7 LT.	1161	
208+88	223+46	HWY. 7 RT.	1489	
215+51	217+63	HWY. 7 LT.	246	
217+85	220+98	HWY. 7 LT.	347	
221+20	233+85	HWY. 7 LT.	1300	
223+68	224+99	HWY. 7 RT.	174	
225+26	228+48	HWY. 7 RT.	355	
228+70	253+84	HWY. 7 RT.	2533	
234+12	283+58	HWY. 7 LT.	4968	
254+60	326+22	HWY. 7 RT.	7215	
284+00	298+28	HWY. 7 LT.	1455	
298+70	303+86	HWY. 7 LT.	555	
304+24	317+68	HWY. 7 LT.	1383	
317+95	326+29	HWY. 7 LT.	859	
327+84	334+00	HWY. 5 RT.	627	
327+91	332+56	HWY. 5 LT.	503	
332+82	334+00	HWY. 5 LT.	132	
610+95	611+49	HWY. 70 RT.	66	
610+95	611+56	HWY. 70 LT.	75	
700+77	703+09	HWY. 7 RT.	256	
700+85	703+09	HWY. 7 LT.	238	
0+00	06+28	ROUNDABOUT	120	509
TOTALS:			**39270**	**509**

CONCRETE ISLAND

STATION	LOCATION	CURB FACE TYPE	CONCRETE ISLAND
			SQ.YD.
260+00	HWY. 7 RT. - FORESLOPE	D	109
281+45	HWY. 7 RT. - FORESLOPE	D	57
282+50	HWY. 7 RT. - FORESLOPE	D	139
283+90	HWY. 7 RT. - FORESLOPE	D	147
285+15	HWY. 7 RT. - FORESLOPE	D	59
286+10	HWY. 7 RT. - FORESLOPE	D	80
312+10	HWY. 7 RT. - FORESLOPE	D	175
319+05	HWY. 7 LT. - FORESLOPE	D	45
320+25	HWY. 7 LT. - FORESLOPE	D	167
325+50	HWY. 7 - APPROACH ISLAND	D	97
328+50	HWY. 5 - APPROACH ISLAND	D	97
611+10	HWY. 70 - APPROACH ISLAND	D	53
701+50	HWY. 7 - APPROACH ISLAND	D	90
TOTAL:			**1315**

MAILBOXES

LOCATION	MAILBOXES	MAILBOX SUPPORTS	
		(SINGLE)	(DOUBLE)
	EACH		
ENTIRE PROJECT	123	81	21
TOTALS:	**123**	**81**	**21**

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS
			LIN. FT.
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER			11500
TOTAL:			**11500**

* NOTE: QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.

UNDERDRAINS SHALL BE STJBBED INTO THE PROPOSED DROP INLET IF AND WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS TO BE INCLUDED IN THE UNIT PRICE BID FOR 4" PIPE UNDERDRAIN.

6/22/2020

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QUANTITIES

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.		061547	78	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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WHEELCHAIR RAMPS

STATION	LOCATION	TYPE 2	TYPE 3
		SQ.YD.	
144+81	HWY. 7 LT.		6.2
145+76	HWY. 7 LT.		6.2
176+50	HWY. 7 RT.		6.2
177+29	HWY. 7 RT.		6.2
199+99	HWY. 7 LT.		5.4
200+83	HWY. 7 LT.		5.4
203+71	HWY. 7 LT.		3.6
204+19	HWY. 7 LT.		3.6
208+49	HWY. 7 RT.		5.4
209+02	HWY. 7 RT.		5.4
215+16	HWY. 7 LT.		5.4
215+64	HWY. 7 LT.		5.4
217+51	HWY. 7 LT.		5.4
217+98	HWY. 7 LT.		5.4
220+86	HWY. 7 LT.		5.4
221+33	HWY. 7 LT.		5.4
223+33	HWY. 7 RT.		5.4
223+81	HWY. 7 RT.		5.4
224+88	HWY. 7 RT.		5.4
225+38	HWY. 7 RT.		5.4
228+37	HWY. 7 RT.		5.4
228+81	HWY. 7 RT.		5.4
233+74	HWY. 7 LT.		5.4
234+24	HWY. 7 LT.		5.4
253+62	HWY. 7 RT.		7.1
254+72	HWY. 7 RT.		5.4
283+46	HWY. 7 LT.		5.4
284+12	HWY. 7 LT.		5.4
298+15	HWY. 7 LT.		5.4
298+83	HWY. 7 LT.		5.4
303+77	HWY. 7 LT.	12.2	
303+77	HWY. 7 RT.		3.3
304+25	HWY. 7 LT.		3.7
317+56	HWY. 7 LT.		5.4
318+07	HWY. 7 LT.		5.4
324+94	HWY. 7 LT.		4.2
324+94	HWY. 7 RT.		4.2
325+75	HWY. 7 LT.		4.1
325+75	HWY. 7 RT.		4.2
328+36	HWY. 5 LT.		4.2
328+36	HWY. 5 RT.		4.1
332+41	HWY. 5 LT.		5.5
332+98	HWY. 5 LT.		5.5
611+04	HWY. 70 LT.		4.1
611+04	HWY. 70 RT.		4.2
701+31	HWY. 7 LT.		4.2
701+31	HWY. 7 RT.		4.1
702+80	HWY. 7 LT.		5.4
702+80	HWY. 7 RT.		5.4
TOTALS:		12.2	244.5

FENCING

STATION	STATION	LOCATION	WIRE FENCE (TYPE C)	WIRE FENCE (TYPE D)	* 4' CHAIN LINK FENCE	* 5' CHAIN LINK FENCE	* 16'-0" GATES
			LIN. FT.				EACH
170+40	172+84	HWY. 7 RT.			230		
210+78	212+40	HWY. 7 LT.			168		
213+26	215+17	HWY. 7 LT.			162		
215+17	215+28	HWY. 7 LT.		45			
226+40	227+88	HWY. 7 RT.			156		
228+70	229+48	HWY. 7 RT.		86			
238+99	247+23	HWY. 7 RT.			737		1
245+71	248+07	HWY. 7 LT.			253		
258+04	258+72	HWY. 7 RT.			68		
280+75	283+00	HWY. 7 LT.		225			
284+67	286+01	HWY. 7 LT.		134			
310+31	313+50	HWY. 7 LT.				312	1
315+29	316+50	HWY. 7 LT.				118	1
322+50	332+45	HWY. 7 RT.	1042				
322+50	704+45	HWY. 7 LT.	697				
704+45	332+45	HWY. 7 RT./HWY. 5 LT.	861				
TOTALS:			2600	490	1774	430	3

* DENOTES ALTERNATE BID ITEM.

CULVERT CLEAN OUT

STATION	LOCATION	EACH
197+86	HWY. 7 - CROSS DRAN	1
222+07	HWY. 7 - CROSS DRAN	1
239+58	HWY. 7 - R.C. BOX CU_VERT	1
245+24	HWY. 7 - CROSS DRAN	1
TOTAL:		4

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	2030
ENGINEER	
TOTAL:	2030

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

STATION	LOCATION	WIDTH	LENGTH	TON
		FEET		
140+86	HWY. 7	7.92	22	14
154+07	HWY. 7	9.67	22	17
166+00	HWY. 7	8.50	22	15
171+94	HWY. 7	23.00	22	40
224+80	HWY. 7	8.50	22	15
229+24	HWY. 7	8.50	22	15
254+90	HWY. 7	12.00	22	21
262+79	HWY. 7	9.67	22	17
277+50	HWY. 7	9.08	22	16
303+11	HWY. 7	13.17	22	23
323+02	HWY. 7	12.00	22	21
323+26	HWY. 7	24.33	22	43
TOTAL:				257

AVG. DEPTH = 13"

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
334+00.00	335+00.00	HWY. 7	22.00	244.44
703+09.36	704+09.36	HWY. 7	22.00	244.44
TOTAL:				488.88

NOTE: AVERAGE MILLING DEPTH 1".

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	107
DIRECTED BY THE ENGINEER	
TOTAL:	107

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	107	214
DIRECTED BY THE ENGINEER		
TOTALS:	107	214

BASIS OF ESTIMATE:
ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC…25 TON/MILE
TACK COAT FOR MAINTENANCE OF TRAFFIC……..50 GAL./MILE

NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

6/22/2020

R061547.DGN

QUANTITIES

DRIVEWAYS & TURNOUTS

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB		PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS				STANDARD DRAWINGS
										18"	24"	30"	42"	
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.				
140+57	LT.	HWY. 7	20	140+33	140+81		29.80	3.28	12.17					
141+76	LT.	HWY. 7	16	141+54	141+98		77.56	8.53	31.67					
145+29	LT.	HWY. 7 - FOX PASS CUTOFF	40				339.37	37.33	138.58					
150+61	RT.	HWY. 7	16	150+39	150+83		426.65	46.93	174.22	28				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
150+70	LT.	HWY. 7	16	150+48	150+92		20.52	2.26	8.38					
153+00	RT.	HWY. 7	16	152+78	153+22		203.24	22.36	82.99	28				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
162+40	RT.	HWY. 7	16	162+18	162+62	339.13					28			PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
165+67	LT.	HWY. 7	24	165+41	165+93		65.33	7.19	26.68					
167+13	RT.	HWY. 7	20	166+89	167+37		72.04	7.92	29.42		32			PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
169+45	LT.	HWY. 7	24	169+19	169+71		86.67	9.53	35.39					
171+61	RT.	HWY. 7	16	171+39	171+83		59.91	6.59	24.46					
176+89	RT.	HWY. 7 - BELVEDERE DR.	24				312.65	34.39	127.67				80	PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
177+74	LT.	HWY. 7	30	177+45	178+03		29.77	3.27	12.16					
181+88	LT.	HWY. 7	16	181+66	182+10		50.17	5.52	20.49					
183+55	LT.	HWY. 7	16	183+33	183+77		35.02	3.85	14.30					
184+97	LT.	HWY. 7	18	184+74	185+20		49.00	5.39	20.01					
189+67	RT.	HWY. 7	40	189+33	190+01		82.04	9.02	33.50					
190+65	RT.	HWY. 7	40	190+31	190+99		39.02	4.29	15.93					
193+24	RT.	HWY. 7	20	193+00	193+48		72.96	8.03	29.79					
193+91	RT.	HWY. 7	22	193+66	194+16		44.64	4.91	18.23					
195+28	RT.	HWY. 7	40	194+94	195+62	70.89								
200+55	LT.	HWY. 7 - OAK CREEK DR.	54			254.62								
202+93	RT.	HWY. 7	40	202+59	203+27	39.24								
203+95	LT.	HWY. 7 - CLARENCE CT.	20				142.72	15.70	58.28					
206+00	LT.	HWY. 7	16	205+78	206+22		68.66	7.55	28.04			42		PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
208+75	RT.	HWY. 7 - BELVEDERE DR.	24				129.19	14.21	52.75					
211+43	RT.	HWY. 7	30	211+14	211+72		57.57	6.33	23.51					
214+75	LT.	HWY. 7	16	214+53	214+97		43.56	4.79	17.79					
215+40	LT.	HWY. 7 - KEEPSAKE LN.	20				203.92	22.43	83.27					
217+74	LT.	HWY. 7 - DEVANE PL.	20				113.83	12.52	46.48					
218+85	RT.	HWY. 7	30	218+56	219+14		141.67	15.58	57.85					
220+20	RT.	HWY. 7	40	219+86	220+54		267.91	29.47	109.40					
221+09	LT.	HWY. 7 - BIG SAM LN.	20				113.83	12.52	46.48					
221+75	LT.	HWY. 7	20	221+51	221+99		44.62	4.91	18.22					
222+77	LT.	HWY. 7	16	222+55	222+99		43.72	4.81	17.85					
223+57	RT.	HWY. 7 - GRIMMETT LOOP	20				182.99	20.13	74.72					
223+80	LT.	HWY. 7	16	223+58	224+02		105.30	11.58	43.00					
225+27	RT.	HWY. 7 - BELVEDERE OAKS CIR.	20				269.39	29.63	110.00					
226+03	RT.	HWY. 7	34	225+72	226+34		144.58	15.90	59.04					
226+95	LT.	HWY. 7	16	226+73	227+17		61.33	6.75	25.04	30				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
228+05	RT.	HWY. 7	16	227+83	228+27		33.24	3.66	13.57					
228+59	RT.	HWY. 7 - BELVEDERE OAKS CIR.	20				264.39	29.08	107.96					
228+88	LT.	HWY. 7	16	228+66	229+10		46.97	5.17	19.18	28				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
230+67	RT.	HWY. 7	16	230+45	230+89		58.03	6.38	23.70					
231+10	RT.	HWY. 7	16	230+88	231+32		142.29	15.65	58.10					
234+13	LT.	HWY. 7 - DELONA LN.	20				204.87	22.54	83.66					
236+30	LT.	HWY. 7	18	236+07	236+53		85.00	9.35	34.71	28				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
236+84	RT.	HWY. 7	40	236+50	237+18	43.78								
238+17	LT.	HWY. 7	28	237+89	238+45		116.67	12.83	47.64		50			PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
240+30	LT.	HWY. 7	40	239+96	240+64		43.16	4.75	17.62					
242+04	LT.	HWY. 7	16	241+82	242+26		136.80	15.05	55.86					
242+48	LT.	HWY. 7	16	242+26	242+70		181.46	19.96	74.10					
242+80	RT.	HWY. 7	32	242+50	243+10		101.33	11.15	41.38					
244+60	LT.	HWY. 7	40	244+26	244+94		126.67	13.93	51.72	52				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
245+53	LT.	HWY. 7	18	245+30	245+76		45.16	4.97	18.44					
246+72	RT.	HWY. 7	20	246+48	246+96		92.29	10.15	37.69					
248+20	LT.	HWY. 7	22	247+95	248+45		39.06	4.30	15.95					
248+75	LT.	HWY. 7	18	248+52	248+98		31.14	3.43	12.72					
250+97	LT.	HWY. 7	18	250+74	251+20		38.18	4.20	15.59					
252+14	RT.	HWY. 7	22	251+89	252+39		113.84	12.52	46.48					
253+13	LT.	HWY. 7	16	252+91	253+35		12.07	1.33	4.93					
254+34	RT.	HWY. 7 - SLEEPY VALLEY RD.	20				509.48	56.04	208.04					
257+20	RT.	HWY. 7	24	256+94	257+46		136.72	15.04	55.83					
257+87	RT.	HWY. 7	24	257+61	258+13		190.88	21.00	77.94					
258+15	LT.	HWY. 7	16	257+93	258+37		50.67	5.57	20.69	30				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
258+84	RT.	HWY. 7	16	258+62	259+06		64.89	7.14	26.50					
259+13	LT.	HWY. 7	16	258+91	259+35		70.29	7.73	28.70					
260+78	RT.	HWY. 7	40	260+44	261+12	68.22								
262+19	RT.	HWY. 7	40	261+85	262+53		105.64	11.62	43.14					
263+39	LT.	HWY. 7	16	263+17	263+61		146.86	16.15	59.97					
263+50	RT.	HWY. 7	40	263+16	263+84		129.33	14.23	52.81					
266+53	LT.	HWY. 7	16	266+31	266+75		68.44	7.53	27.95					
266+76	RT.	HWY. 7	24	266+50	267+02		78.71	8.66	32.14					
267+46	RT.	HWY. 7	24	267+20	267+72		79.97	8.80	32.65					
268+26	RT.	HWY. 7	16	268+04	268+48		97.07	10.68	39.64					
271+28	RT.	HWY. 7	16	271+06	271+50		71.82	7.90	29.33					
271+35	LT.	HWY. 7	16	271+13	271+57		131.56	14.47	53.72					
281+82	RT.	HWY. 7	36	281+50	282+14		135.14	14.87	55.18					
283+14	RT.	HWY. 7	36	282+82	283+46		139.67	15.36	57.03					
283+79	LT.	HWY. 7 - ARBOR DALE PL.	40				271.38	29.85	110.81					
284+67	RT.	HWY. 7	40	284+33	285+01		82.22	9.04	33.57					
285+59	RT.	HWY. 7	40	285+25	285+93		82.22	9.04	33.57					
286+60	RT.	HWY. 7	40	286+26	286+94		126.67	13.93	51.72					
290+00	LT.	HWY. 7	40	289+66	290+34		100.00	11.00	40.83	52				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
291+64	RT.	HWY. 7	24	291+38	291+90		161.93	17.81	66.12					
293+96	LT.	HWY. 7	26	293+69	294+23		44.72	4.92	18.26					
294+27	RT.	HWY. 7	22	294+02	294+52	69.28								
295+25	RT.	HWY. 7	16	295+03	295+47		79.95	8.79	32.65					
296+28	RT.	HWY. 7	16	296+06	296+50		101.71	11.19	41.53					
298+49	LT.	HWY. 7 - CAMPUS DR.	40			182.49								
298+52	RT.	HWY. 7	20	298+28	298+76		41.11	4.52	16.79					
299+23	RT.	HWY. 7	20	298+99	299+47		76.67	8.43	31.31					
299+73	RT.	HWY. 7	16	299+51	299+95		36.44	4.01	14.88					
300+72	RT.	HWY. 7	18	300+49	300+95		20.12	2.21	8.22					
301+73	RT.	HWY. 7	16	301+51	301+95		16.11	1.77	6.58					
302+61	RT.	HWY. 7	16	302+39	302+83		29.33	3.23	11.98					
302+81	RT.	HWY. 7	16	302+59	303+03		43.56	4.79	17.79					
303+42	RT.	HWY. 7	24	303+16	303+68		102.67	11.29	41.92					
304+12	LT.	HWY. 7 - FASON DR.	34				176.13	19.37	71.92					
304+88	LT.	HWY. 7	40	304+54	305+22		57.42	6.32	23.45					
305+62	RT.	HWY. 7	36	305+30	305+94		114.04	12.54	46.57					
305+68	LT.	HWY. 7	32	305+38	305+98	27.34								
306+36	LT.	HWY. 7	28	306+08	306+64	32.23								
306+85	RT.	HWY. 7	16	306+63	307+07		23.45	2.58	9.58					
306+90	LT.	HWY. 7	16	306+68	307+12		19.15	2.11	7.82					
308+21	RT.	HWY. 7	34	307+90	308+52		42.31	4.65	17.28					
308+63	LT.	HWY. 7	16	308+41	308+85		32.89	3.62	13.43					
309+26	LT.	HWY. 7	16	309+04	309+48		32.89	3.62	13.43					
309+88	RT.	HWY. 7	34	309+57	310+19	73.44								
311+32	RT.	HWY. 7	24	311+06	311+58	30.00								
312+86	LT.	HWY. 7	16	312+64	313+08		35.22	3.87	14.38					
312+89	RT.	HWY. 7	16	312+67	313+11		40.05	4.41	16.35					
313+71	LT.	HWY. 7	32	313+41	314+01		33.49	3.68	13.68					
314+29	LT.	HWY. 7	28	314+01	314+57		31.17	3.43	12.73					
314+67	LT.	HWY. 7 - MONDOU RD.	16				118.17	13.00	48.25					
315+82	LT.	HWY. 7	16	315+60	316+04		50.60	5.57	20.66					
317+14	LT.	HWY. 7	34	316+83	317+45		102.23	11.25	41.74		48			PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
317+67	LT.	HWY. 7	20	317+43	317+91		19.48	2.14	7.95		62			PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
318+18	RT.	HWY. 7	28	317+90	318+46		113.56	12.49	46.37					
319+02	RT.	HWY. 7	32	318+72	319+32		127.24	14.00	51.96					
319+38	LT.	HWY. 7	24	319+12	319+64		28.00	3.08	11.43					
322+18	RT.	HWY. 7	40	321+84	322+52		126.09	13.87	51.49					
332+69	LT.	HWY. 5 - ROCKDALE RD.	20				178.40	19.62	72.85					
333+00	LT.	ROCKDALE RD. DRIVEWAY	16				86.36	9.50	35.26	56				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
333+74	RT.	HWY. 5	16	333+52	333+96		103.98	11.44	42.46					
701+84	RT.	HWY. 7	16	701+62	702+06		34.83	3.83	14.22					
402+31	LT.	DETOUR - FOX PASS CUTOFF	40				339.37	37.33	138.58					
* ENTIRE PROJECT TEMPORARY DRIVES									1240.00					
TOTALS:						**1230.66**	**11834.24**	**1301.73**	**6072.39**	**332**	**220**	**42**	**80**	

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....95.2% MIN. AGGR.....4.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, WILL BE ALLOWED TO SUBSTITUTE A HIGHER PERFORMANCE GRADE ASPHALT SURFACE COURSE FOR DRIVEWAYS AND MINOR SIDE STREET CONSTRUCTION AT NO ADDITIONAL COST TO THE DEPARTMENT.

* QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

** FOR INFORMATION ONLY

NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
NOTE: FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

QUANTITIES

Sep 11 2020 12:45 PM

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 11435 TIMOTHY D. SMITH

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.		79	323
				JOB NO. 060547				

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.		061547	80	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 2:59 PM
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STRUCTURES (BOX 1 OF 2)

| STATION | DESCRIPTION | REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18" | 24" | 30" | 36" | 42" | 54" | 84" | 22"X14" | 29"X18" | 51"X31" | (CLASS IV) 18" | 24" | 30" | 36" | 48" | 60" | 72" | (CLASS V) 18" | 24" | 30" | 36" | 42" | 60 | 72" | 51"X31" LIN. FT. | SIDE DRAIN 12" | PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18" | 24" | 30" | 36" | 48" | 60" | 72" | 78" EACH | FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18" | 24" | 30" | 36" | 42" | 54" | 60" | 72" | 84" | 22"X14" | 29"X18" | 51"X31" EACH | TEMPORARY CULVERTS 72" | 84" LIN. FT. | DROP INLETS TYPE C | E | MO | SPECIAL | EXT. 4' | 8' EACH | JUNCT. BOXES (TYPE E) | YARD DRAINS | SPAN | HEIGHT LIN. FT. | LENGTH | CLASS S CONCRETE ROADWAY CU.YD. | REINF. STEEL-ROADWAY (GRADE 60) POUND | UNCL.EXC. FOR STR.-ROADWAY CU.YD. | SOLID SODDING SQ.YD. | WATER M.GAL. | STD. DWG. NOS. |
|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	81	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 11 2020 12:46 PM

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STRUCTURES (BOX 2 OF 2)

| STATION | DESCRIPTION | REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18" | 24" | 30" | 36" | 42" | 54" | 84" | 22"X14" | 29"X18" | 51"X31" | (CLASS IV) 18" | 24" | 30" | 36" | 60" | 72" | (CLASS V) 18" | 24" | 30" | 36" | 42" | 60" | 72" | 51"X31" LIN.FT. | SIDE DRAIN 12" | PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18" | 24" | 30" | 36" | 48" | 60" | 72" | 78" EACH | FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18" | 24" | 30" | 36" | 42" | 54" | 60" | 72" | 84" | 22"X14" | 29"X18" | 51"X31" EACH | TEMPORARY CULVERTS 72" | 84" LIN.FT. | DROP INLETS TYPE C | E | MO | SPECIAL EXT. 4' | 8' EACH | JUNCT. BOXES (TYPE E) | YARD DRAINS | SPAN | HEIGHT LIN.FT. | LENGTH | CLASS S CONCRETE ROADWAY CU.YD. | REINF. STEEL- ROADWAY (GRADE 60) POUND | UNCL.EXC. FOR STR.- ROADWAY CU.YD. | SOLID SODDING SQ.YD. | WATER M.GAL. | STD. DWG. NOS. |
|---|---|---|---|---|---|---|---|---

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.		061547	82	323

(2) QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

Jul 24 2020 3:00 PM
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BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")								PORTLAND CEMENT CONCRETE PAVEMENT	
						(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)																					
				TON / STATION	TON	TOTAL WID.	SQ.YD.	GALLON	TOTAL WID.	SQ.YD.	GALLON	TOTAL GALLONS	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	TOTAL PG 70-22	AVG. WID.	12" U.T.
			FEET			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON	FEET	SQ. YD.
MAIN LANES																														
13.42*	14.02*	HWY. 7 - OVERLAY SECTION	3168.00						32.00	11264.00	1914.88	1914.88													32.00	11264.00	220.00	1239.04	1239.04		
139+40.65	140+40.65	HWY. 7 - TRANSITION	100.00	VAR.	127.50	12.00	133.33	6.67	24.00	266.67	45.33	52.00	8.00	88.89	550.00	24.44	8.00	88.89	495.00	22.00	8.00	88.89	220.00	9.78	32.00	355.56	220.00	39.11	48.89		
140+40.65	141+55.00	HWY. 7 - TWO-LANE NOTCH, WIDEN, AND OVERLAY SECTION	114.35			29.00	368.46	18.42				18.42	13.00	165.17	550.00	45.42	8.00	101.64	495.00	25.16	8.00	101.64	220.00	11.18	32.00	406.58	220.00	44.72	55.90		
141+55.00	144+25.00	HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION (TAPER)	270.00			VAR.	865.20	43.26				43.26	VAR.	388.40	550.00	106.81	VAR.	238.40	495.00	59.00	VAR.	238.40	220.00	26.22	38.00	1140.00	220.00	125.40	151.62		
144+25.00	145+87.00	HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION	162.00			39.50	711.00	35.55				35.55	16.50	297.00	550.00	81.68	11.50	207.00	495.00	51.23	11.50	207.00	220.00	22.77	44.00	792.00	220.00	87.12	109.89		
145+87.00	147+22.00	HWY. 7 - THREE-LANE FULL DEPTH SECTION	135.00			137.00	2055.00	102.75				102.75	49.00	735.00	550.00	202.13	44.00	660.00	495.00	163.35	44.00	660.00	220.00	72.60	44.00	660.00	220.00	72.60	145.20		
147+22.00	148+00.00	HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION	78.00			VAR.	525.07	26.25				26.25	VAR.	203.91	550.00	56.08	VAR.	160.58	495.00	39.74	VAR.	160.58	220.00	17.66	44.00	381.33	220.00	41.95	59.61		
148+00.00	288+81.00	HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION	14081.00			65.00	101696.11	5084.81				5084.81	25.00	39113.89	550.00	10756.32	20.00	31291.11	495.00	7744.55	20.00	31291.11	220.00	3442.02	44.00	68840.44	220.00	7572.45	11014.47		
288+81.00	289+65.00	HWY. 7 - THREE-LANE FULL DEPTH SECTION	84.00			137.00	1278.67	63.93				63.93	49.00	457.33	550.00	125.77	44.00	410.67	495.00	101.64	44.00	410.67	220.00	45.17	44.00	410.67	220.00	45.17	90.34		
289+65.00	322+09.82	HWY. 7 - THREE-LANE NOTCH, WIDEN, AND OVERLAY SECTION	3244.82			65.00	23434.81	1171.74				1171.74	25.00	9013.39	550.00	2478.68	20.00	7210.71	495.00	1784.65	20.00	7210.71	220.00	793.18	44.00	15863.56	220.00	1744.99	2538.17		
322+09.82	323+60.27	HWY. 7 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION	150.45			VAR.	1122.93	56.15				56.15	VAR.	423.05	550.00	116.34	VAR.	349.94	495.00	86.61	VAR.	349.94	220.00	38.49	44.00	735.53	220.00	80.91	119.40		
323+60.27	326+06.76	HWY. 7 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION	246.49			VAR.	2426.33	121.32				121.32	VAR.	851.63	550.00	234.20	VAR.	787.35	495.00	194.87	VAR.	787.35	220.00	86.61	VAR.	1144.12	220.00	125.85	212.46		
328+06.76	329+85.48	HWY. 5 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION	178.72			VAR.	2240.60	112.03				112.03	VAR.	779.36	550.00	214.32	VAR.	730.62	495.00	180.83	VAR.	730.62	220.00	80.37	VAR.	730.62	220.00	80.37	160.74		
329+85.48	332+22.64	HWY. 5 - FULL DEPTH SECTION	237.16			113.00	2977.68	148.88				148.88	41.00	1080.40	550.00	297.11	36.00	948.64	495.00	234.79	36.00	948.64	220.00	104.35	36.00	948.64	220.00	104.35	208.70		
332+22.64	333+72.76	HWY. 5 - NOTCH, WIDEN, AND OVERLAY SECTION (TRANSITION)	150.12			VAR.	957.54	47.88				47.88	VAR.	343.22	550.00	94.39	VAR.	307.16	495.00	76.02	VAR.	307.16	220.00	33.79	36.00	600.48	220.00	66.05	99.84		
333+72.76	334+00.00	HWY. 5 - NOTCH, WIDEN, AND OVERLAY SECTION	27.24			47.00	142.25	7.11				7.11	19.00	57.51	550.00	15.82	14.00	42.37	495.00	10.49	14.00	42.37	220.00	4.66	36.00	108.96	220.00	11.99	16.65		
334+00.00	335+00.00	HWY. 5 - TRANSITION	100.00	VAR.	52.00	21.00	233.33	11.67	24.00	266.67	45.33	57.00	7.00	77.78	550.00	21.39	7.00	77.78	495.00	19.25	7.00	77.78	220.00	8.56	36.33	403.67	220.00	44.40	52.96		
610+95.00	611+33.46	HWY. 70 - FULL DEPTH SECTION	38.46			VAR.	722.90	36.15				36.15	VAR.	267.30	550.00	73.51	VAR.	227.80	495.00	56.38	VAR.	227.80	220.00	25.06	VAR.	227.80	220.00	25.06	50.12		
701+00.00	703+09.36	HWY. 7 - APPROACH NOTCH, WIDEN, AND OVERLAY SECTION	209.36			VAR.	903.48	45.17				45.17	VAR.	342.14	550.00	94.09	VAR.	280.67	495.00	69.47	VAR.	280.67	220.00	30.87	VAR.	846.02	220.00	93.06	123.93		
703+09.36	704+09.36	HWY. 7 - TRANSITION	100.00	VAR.	52.00	15.00	166.67	8.33	22.00	244.44	41.55	49.88	5.00	55.56	550.00	15.28	5.00	55.56	495.00	13.75	5.00	55.56	220.00	6.11	33.33	370.33	220.00	40.74	46.85		
0+00.00	0+50.68	ROUNDABOUT - NOTCH, WIDEN, AND OVERLAY SECTION	50.68										17.00	95.73	550.00	26.33									18.00	101.36	220.00	11.15	11.15	15.00	84.47
0+50.68	1+07.73	ROUNDABOUT - NOTCH, WIDEN, AND OVERLAY SECTION	57.05			27.00	171.15	8.56				8.56	27.25	172.73	550.00	47.50	9.00	57.05	495.00	14.12	9.00	57.05	220.00	6.28	18.00	114.10	220.00	12.55	18.83	15.00	95.08
1+07.73	4+83.52	ROUNDABOUT - FULL DEPTH SECTION	375.79			56.50	2359.13	117.96				117.96	37.50	1565.79	550.00	430.59	18.00	751.58	495.00	186.02	18.00	751.58	220.00	82.67	18.00	751.58	220.00	82.67	165.34	15.00	626.32
4+83.52	5+30.61	ROUNDABOUT - NOTCH, WIDEN, AND OVERLAY SECTION	47.09			27.00	141.27	7.06				7.06	27.25	142.58	550.00	39.21	9.00	47.09	495.00	11.65	9.00	47.09	220.00	5.18	18.00	94.18	220.00	10.36	15.54	15.00	78.48
5+30.61	6+28.32	ROUNDABOUT - NOTCH, WIDEN, AND OVERLAY SECTION	97.71										17.00	184.56	550.00	50.75									18.00	195.42	220.00	21.50	21.50	15.00	162.85
400+00.00	402+58.60	DETOUR 1 - FULL DEPTH SECTION	258.60	VAR.	243.89	VAR.	239.75	11.99				11.99					VAR.	239.75	440.00	52.75					VAR.	284.39	220.00	31.28	31.28		
402+58.60	405+23.34	DETOUR 1 - FULL DEPTH SECTION	264.74	232.00	614.20	24.33	715.68	35.78				35.78					24.33	715.68	440.00	157.45					30.00	882.47	220.00	97.07	97.07		
405+23.34	407+58.46	DETOUR 1 - FULL DEPTH SECTION	235.12	VAR.	242.15	VAR.	252.80	12.64				12.64					VAR.	252.80	440.00	55.62					VAR.	304.83	220.00	33.53	33.53		
500+00.00	501+76.76	DETOUR 2 - FULL DEPTH SECTION	176.76	VAR.	175.75	VAR.	179.30	8.97				8.97					VAR.	179.30	440.00	39.45					VAR.	218.25	220.00	24.01	24.01		
501+76.76	504+13.30	DETOUR 2 - FULL DEPTH SECTION	236.54	232.00	548.77	24.33	639.45	31.97				31.97					24.33	639.45	440.00	140.68					30.00	788.47	220.00	86.73	86.73		
504+13.30	505+86.78	DETOUR 2 - FULL DEPTH SECTION	173.48	VAR.	168.21	VAR.	168.57	8.43				8.43					VAR.	168.57	440.00	37.09					VAR.	206.64	220.00	22.73	22.73		
801+61.92	803+55.94	DETOUR 3 - FULL DEPTH SECTION	194.02			53.13	1145.36	57.27				57.27	26.77	577.10	550.00	158.70	26.36	568.26	495.00	140.64					26.00	560.50	220.00	61.66	61.66		
803+55.94	804+55.94	DETOUR 3 - FULL DEPTH SECTION (TAPER)	100.00			73.13	812.56	40.63				40.63	36.77	408.56	550.00	112.35	36.36	404.00	495.00	99.99					36.00	400.00	220.00	44.00	44.00		
804+55.94	806+64.90	DETOUR 3 - FULL DEPTH SECTION	208.96			93.13	2162.27	108.11				108.11	46.77	1085.90	550.00	298.62	46.36	1076.38	495.00	266.40					46.00	1068.02	220.00	117.48	117.48		
806+64.90	808+63.11	DETOUR 3 - FULL DEPTH SECTION	198.21			VAR.	1116.01	55.80				55.80	VAR.	562.52	550.00	154.69	VAR.	553.49	495.00	136.99					VAR.	545.56	220.00	60.01	60.01		
ADDITIONAL FOR LEVELING																														
140+40.65	141+55.00	HWY. 7 - LEVELING	114.35			24.00	304.93	15.25	24.00	304.93	51.84	67.09									24.00	304.93	VAR.	33.54				33.54		
141+55.00	144+25.00	HWY. 7 - LEVELING	270.00			28.00	840.00	42.00	28.00	840.00	142.80	184.80									28.00	840.00	VAR.	92.40				92.40		
144+25.00	145+87.00	HWY. 7 - LEVELING	162.00			32.00	576.00	28.80	32.00	576.00	97.92	126.72									32.00	576.00	VAR.	63.36				63.36		
147+22.00	214+00.00	HWY. 7 - LEVELING	6678.00			24.00	17808.00	890.40	24.00	17808.00	3027.36	3917.76									24.00	17808.00	VAR.	2671.20				2671.20		
214+00.00	225+00.00	HWY. 7 - GRADE RAISE	1100.00			72.00	8800.00	440.00	24.00	2933.33	498.67	938.67					24.00	2933.33	VAR.	836.00	24.00	2933.33	220.00	322.67				322.67		
225+00.00	264+00.00	HWY. 7 - LEVELING	3900.00			48.00	20800.00	1040.00	24.00	10400.00	1768.00	2808.00									24.00	10400.00	VAR.	2215.20				2215.20		
264+00.00	271+00.00	HWY. 7 - GRADE RAISE	700.00			72.00	5600.00	280.00	24.00	1866.67	317.33	597.33					24.00	1866.67	VAR.	560.00	24.00	1866.67	220.00	205.33				205.33		
271+00.00	288+81.00	HWY. 7 - LEVELING	1781.00			24.00	4749.33	237.47	24.00	4749.33	807.39	1044.86									24.00	4749.33	VAR.	653.03				653.03		
289+65.00	301+00.00	HWY. 7 - LEVELING	1135.00			24.00	3026.67	151.33	24.00	3026.67	514.53	665.86									24.00	3026.67	VAR.	454.00				454.00		
301+00.00	306+00.00	HWY. 7 - GRADE RAISE	500.00			72.00	4000.00	200.00	24.00	1333.33	226.67	426.67					24.00	1333.33	VAR.	416.67	24.00	1333.33	220.00	146.67				146.67		
306+00.00	323+00.00	HWY. 7 - LEVELING	1700.00			48.00	9066.67	453.33	24.00	4533.33	770.67	1224.00									24.00	4533.33	VAR.	816.00				816.00		
323+00.00	325+35.37	HWY. 7 - GRADE RAISE	235.37			124.00	3242.88	162.14	40.00	1046.09	177.84	339.98	28.00	732.26	VAR.	230.66	28.00	732.26	495.00	181.23	40.00	1046.09	VAR.	115.07				115.07		
331+80.00	332+69.00	HWY. 5 - GRADE RAISE	89.00			44.00	435.11	21.76	22.00	217.56	36.99	58.75					24.00	237.33	VAR.	19.58	22.00	217.56	220.00	23.93				23.93		
332+69.00	334+00.00	HWY. 5 - LEVELING	131.00			22.00	320.22	16.01	22.00	320.22	54.44	70.45									22.00	320.22	VAR.	35.22				35.22		
701+00.00	703+09.36	HWY. 7 - LEVELING	209.36			VAR.	887.84	44.39	VAR	887.84	150.93	195.32									VAR.	887.84	VAR.	97.66				97.66		
0+00.00	1+07.73	ROUNDABOUT - LEVELING	107.73			VAR.	162.97	8.15	VAR	162.97	27.70	35.85									VAR.	162.97	VAR.	17.93				17.93		
4+83.52	6+28.32	ROUNDABOUT - LEVELING	144.80			VAR.	235.19	11.76	VAR	235.19	39.98	51.74									VAR.	235.19	VAR.	25.87				25.87		
TOTALS:					2224.47		233920.47	11696.03		63283.24	10758.15	22454.18		60268.66		16603.18		56933.21		14286.11		96274.07		12942.66		112746.08		12402.06	25344.72		1047.20

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....95.2% MIN. AGGR.....4.8% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.6% MIN. AGGR.....4.4% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.0% MIN. AGGR.....4.0% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 160 FOR PG 70-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.
* DENOTES LOG MILE

6/22/2020

R061547.DGN

SUMMARY OF QUANTITIES (BOX 1 OF 2)

ITEM NUMBER	ITEM		QUANTITY	UNIT
201	CLEARING		154	STATION
201	GRUBBING		154	STATION
202	REMOVAL AND DISPOSAL OF CURB		512	LIN. FT.
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER		802	LIN. FT.
202	REMOVAL AND DISPOSAL OF WELL		1	EACH
202	REMOVAL AND DISPOSAL OF FENCE		5985	LIN. FT.
202	REMOVAL AND DISPOSAL OF GATES		1	EACH
202	REMOVAL AND DISPOSAL OF RETAINING WALLS		544	LIN. FT.
202	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT		542	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE ISLANDS		55	SQ. YD.
202	REMOVAL AND DISPOSAL OF COLUMNS		13	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE DRIVEWAYS		2236	SQ. YD.
202	REMOVAL AND DISPOSAL OF WALKS		361	SQ. YD.
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS		103	EACH
202	REMOVAL AND DISPOSAL OF JUNCTION BOXES		4	EACH
202	REMOVAL AND DISPOSAL OF DROP INLETS		3	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS		85	EACH
202	REMOVAL AND DISPOSAL OF BOX CULVERTS		3	EACH
202	REMOVAL AND DISPOSAL OF FLARED END SECTIONS		1	EACH
202	REMOVAL AND DISPOSAL OF HEADWALLS		32	EACH
202	REMOVAL AND DISPOSAL OF GUARDRAIL		166	LIN. FT.
202	REMOVAL AND DISPOSAL OF LUMINAIRE POLE AND FOUNDATION		5	EACH
202	REMOVAL AND DISPOSAL OF BUILDINGS		12	EACH
202	REMOVAL AND DISPOSAL OF SIGNS		64	EACH
202	REMOVAL AND DISPOSAL OF PLANTERS		13	EACH
SS & 210	UNCLASSIFIED EXCAVATION		53272	CU. YD.
210	COMPACTED EMBANKMENT		63459	CU. YD.
SP & 210	SOIL STABILIZATION		200	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)		8297	TON
SS & 401	TACK COAT		22668	GAL.
SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		15939	TON
SP, SS, & 405	ASPHALT BINDER (PG 70-22) IN ACHM BASE COURSE (1 1/2")		664	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		13657	TON
SP, SS, & 406	ASPHALT BINDER (PG 70-22) IN ACHM BINDER COURSE (1")		629	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		25367	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")		62	TON
SP, SS, & 407	ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (1/2")		1217	TON
412	COLD MILLING ASPHALT PAVEMENT		489	SQ. YD.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		107	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY		107	TON
SP & 501	PORTLAND CEMENT CONCRETE PAVEMENT (12" UNIFORM THICKNESS)		1047	SQ. YD.
SS & 505	PORTLAND CEMENT CONCRETE DRIVEWAY		1231	SQ. YD.
601	MOBILIZATION		1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	EACH
SP, SS, & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
603	72" TEMPORARY CULVERT		104	LIN. FT.
603	84" TEMPORARY CULVERT		96	LIN. FT.
SS & 604	SIGNS		1292	SQ. FT.
SP, SS, & 604	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE		15	EACH
SS & 604	BARRICADES		80	LIN. FT.
SS & 604	TRAFFIC DRUMS		421	EACH
SS & 604	TRAFFIC CONE		397	EACH
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		558	LIN. FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER		518	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS		74480	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		4000	LIN. FT.
SS & 604	VERTICAL PANELS		302	EACH
SS & 605	CONCRETE DITCH PAVING (TYPE B)		1460	SQ. YD.
SP	CULVERT CLEAN OUT		4	EACH
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		728	LIN. FT.
* 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	8362	LIN. FT.
* 606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	8362	LIN. FT.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		58	LIN. FT.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		216	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		196	LIN. FT.
* 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	2574	LIN. FT.
* 606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	2574	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		20	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		452	LIN. FT.
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		86	LIN. FT.
* 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	3164	LIN. FT.
* 606	30" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	3164	LIN. FT.
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		38	LIN. FT.
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		68	LIN. FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		48	LIN. FT.
* 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	416	LIN. FT.
* 606	36" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	416	LIN. FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		68	LIN. FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		62	LIN. FT.
606	42" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		84	LIN. FT.
606	42" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		40	LIN. FT.
* 606	48" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	192	LIN. FT.
* 606	48" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	192	LIN. FT.
606	54" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		12	LIN. FT.
* 606	60" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	818	LIN. FT.
* 606	60" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	818	LIN. FT.
606	60" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		48	LIN. FT.
606	60" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		70	LIN. FT.
* 606	72" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	1342	LIN. FT.
* 606	72" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (16 GAUGE)	(ALTERNATE NO. 2)	1342	LIN. FT.
606	72" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		200	LIN. FT.
606	72" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		48	LIN. FT.
* 606	78" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	620	LIN. FT.
* 606	78" ASPHALT COATED CORRUGATED STEEL PIPE CULVERTS (14 GAUGE)	(ALTERNATE NO. 2)	620	LIN. FT.
606	84" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		6	LIN. FT.
606	22" X 14" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)		6	LIN. FT.
606	29" X 18" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)		2	LIN. FT.
606	51" X 31" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)		20	LIN. FT.
606	51" X 31" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS V)		126	LIN. FT.
SS & 606	12" SIDE DRAIN		1214	LIN. FT.
SP, SS, & 606	18" SIDE DRAIN		332	LIN. FT.
SP, SS, & 606	24" SIDE DRAIN		220	LIN. FT.
SP, SS, & 606	30" SIDE DRAIN		42	LIN. FT.
SP, SS, & 606	42" SIDE DRAIN		80	LIN. FT.
606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		40	EACH
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		13	EACH
606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		7	EACH
606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		3	EACH
606	42" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		4	EACH
606	54" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		1	EACH
606	60" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		1	EACH
606	72" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		4	EACH
606	84" FLARED END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS		1	EACH
606	22" X 14" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS		3	EACH
606	29" X 18" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS		1	EACH
606	51" X 31" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS		4	EACH
606	SELECTED PIPE BEDDING		2030	CU. YD.
SS & 609	DROP INLETS (TYPE C)		19	EACH
SS & 609	DROP INLETS (TYPE E)		1	EACH
SS & 609	DROP INLETS (TYPE MO)		136	EACH
SS & 609	DROP INLETS (TYPE SPECIAL)		24	EACH
SS & 609	JUNCTION BOXES (TYPE E)		8	EACH
SS & 609	DROP INLET EXTENSIONS (4')		74	EACH
SS & 609	DROP INLET EXTENSIONS (8')		38	EACH
SS & 609	YARD DRAINS		13	EACH
SS & 611	4" PIPE UNDERDRAINS		11500	LIN. FT.
615	PAVEMENT REPAIR OVER CULVERTS (ASPHALT)		257	TON
619	WIRE FENCE (TYPE C)		2600	LIN. FT.
619	WIRE FENCE (TYPE D)		490	LIN. FT.
* 619	4' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	1774	LIN. FT.
* 619	4' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	1774	LIN. FT.
* 619	5' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	430	LIN. FT.
* 619	5' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	430	LIN. FT.
* 619	16' STEEL GATES	(ALTERNATE NO. 1)	3	EACH
* 619	16' ALUMINUM GATES	(ALTERNATE NO. 2)	3	EACH
620	LIME		35	TON
620	SEEDING		17.58	ACRE
SS & 620	MULCH COVER		75.62	ACRE
620	WATER		3143.7	M. GAL.
621	TEMPORARY SEEDING		58.04	ACRE
621	SILT FENCE		9829	LIN. FT.
621	SAND BAG DITCH CHECKS		8162	BAG
621	SEDIMENT REMOVAL AND DISPOSAL		1187	CU. YD.
621	ROCK DITCH CHECKS		1113	CU. YD.
SS & 621	FILTER SOCK (12")		2195	LIN. FT.
623	SECOND SEEDING APPLICATION		17.58	ACRE
624	SOLID SODDING		13244	SQ. YD.
626	EROSION CONTROL MATTING (CLASS 3)		1244	SQ. YD.

* DENOTES ALTERNATE BID ITEMS.

SUMMARY OF QUANTITES AND REVISIONS

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED
09-10-20			

(2) SUMMARY OF QUANTITES AND REVISIONS

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	06I547	83	323

JOB NO.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11435
TIMOTHY D. SMITH

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
08-21-20				6	ARK.			
09-10-20				JOB NO.		061547	84	323
				(2) SUMMARY OF QUANTITES AND REVISIONS				

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
SS & 632	CONCRETE ISLAND	1315	SQ. YD.
SS & 633	CONCRETE WALKS	17295	SQ. YD.
SP, SS, & 633	CONCRETE WALKS (TYPE SPECIAL)	1126	SQ. YD.
SS & 633	HAND RAILING	1104	LIN. FT.
SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	39270	LIN. FT.
SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE E-1) (2' 0")	509	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
637	MAILBOXES	123	EACH
637	MAILBOX SUPPORTS (SINGLE)	81	EACH
637	MAILBOX SUPPORTS (DOUBLE)	21	EACH
641	WHEELCHAIR RAMPS (TYPE 2)	12	SQ. YD.
641	WHEELCHAIR RAMPS (TYPE 3)	245	SQ. YD.
SP & 701	ACTUATED CONTROLLER TS2-TYPE 2 (8 PHASES)	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	7	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	2	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	4	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1585	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	116	LIN. FT.
708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	35	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	222	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	431	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	160	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/8 A.W.G., E.G.C.)	2018	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	45	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/12 A.W.G., E.G.C.)	770	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	446	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	1989	LIN. FT.
710	NON-METALLIC CONDUIT (3")	302	LIN. FT.
711	CONCRETE PULL BOX (TYPE 1 HD)	1	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	3	EACH
SP & 711	CONCRETE PULL BOX (TYPE 2 HD)	18	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (0')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38'-32')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	3	EACH
SP	LED ROADWAY ILLUMINATION POLE (14,000 LUMENS, COBRA HEAD, SHOE BASE, 30')	14	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	2	EACH
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")	97	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")	1785	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (10")	663	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	40926	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	235	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	694	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	52605	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (8")	556	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	2	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	3	EACH
719	THERMOPLASTIC PAVEMENT MARKING (BIKE EMBLEMS)	121	EACH
SP & 719	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)	69	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	492	EACH
SP	18" STREET NAME SIGN	3	EACH
SP & 733	VIDEO DETECTOR (CLR)	6	EACH
733	VIDEO CABLE	753	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	25	CU. YD.
SS & 802	CLASS S CONCRETE-ROADWAY	37.94	CU. YD.
SP	ARCHITECTURAL FINISH	4994	SQ. FT.
SP	TEXTURED COATING FINISH	556	SQ. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	3535	POUND
	STRUCTURES OVER 20' SPAN		
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	319	CU. YD.
SS & 802	CLASS S CONCRETE-ROADWAY	683.03	CU. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	93799	POUND

STATE OF ARKANSAS
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REVISIONS

DATE	REVISION	SHEET NUMBER
8/21/2020	ADDED "DELAY IN RIGHT OF WAY OCCUPANCY" SPECIAL PROVISION TO BID PACKET.	84
9/10/2020	WIDENED THE DRIVEWAY AT STA. 290+00 LT. FROM 16' TO 40', CHANGED THE BEGINNING OF THE CONCRETE WALK (TYPE SPECIAL) FROM STA. 221+81 TO STA. 221+10 RT, RELOCATED THE DRIVEWAY FROM STA. 221+47 TO STA. 220+20 RT., REVISED THE COORDINATION OF WORK AND SEQUENCE OF CONSTRUCTION SPECIAL PROVISIONS, AND REMOVED THE REMOVAL AND DISPOSAL OF PUMPS AND UNDERGROUND STORAGE TANK SYSTEMS QUANTITIES.	38, 41, 45, 48, 58, 61, 65, 68, 74, 76, 77, 79, 81, 83, 84, 105, 107, 115, 116, 199, 200, 277, & 278

6/22/2020

R061547.DGN

SURVEY CONTROL COORDINATES

Project Name: 061329
Date: 1/17/2014
Coordinate System: Arkansas State Plane Coordinates
Based on AHTD GPS PTS : *260026-260026A,260027-260027A,260028-260028A*
Projected to Ground Coordinates
Units: U.S. Survey Foot

COORDINATES LISTED BELOW ARE GROUND (Localized) COORDINATES !!!!

23	1994948.2056	0.042	1002377.2305	0.038	601.64	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:23
24	1995510.6584	0.037	1002811.1710	0.033	611.57	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:24
25	1996121.6106	0.026	1003241.3651	0.020	633.61	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:25
26	1996524.1699	0.010	1003814.3337	0.010	627.81	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:26
27	1997090.6920	0.020	1004335.4325	0.020	639.34	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:27
28	1997652.7681	0.023	1004825.4981	0.023	651.81	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:28
29	1998148.3198	0.017	1005379.2293	0.017	665.87	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:29
30	1998694.7576	0.014	1005930.2356	0.014	676.67	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:30
31	1999142.1471	0.014	1006399.0453	0.014	687.81	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:31
32	1999731.7321	0.014	1006925.4361	0.015	707.35	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:32
33	2000042.6651	0.019	1007304.3758	0.017	716.93	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:33
34	2000583.6720	0.027	1007710.4798	0.024	696.46	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:34
35	2001158.5041	0.031	1008147.4201	0.025	680.86	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:35
36	2001519.2857	0.025	1008732.0493	0.017	670.93	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:36
37	2001767.4934	0.009	1009439.7865	0.008	665.58	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:37
38	2002065.5613	0.031	1010168.0186	0.018	664.78	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:38
39	2002407.0943	0.043	1010647.2965	0.027	663.90	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:39
40	2002934.3167	0.047	1011199.4038	0.033	644.86	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:40
41	2003378.9617	0.043	1011838.8154	0.031	636.40	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:41
42	2003737.5027	0.030	1012429.4666	0.024	628.24	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:42
43	2004201.1882	0.014	1013051.0572	0.013	623.27	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:43
44	2004689.6788	0.022	1013465.5544	0.027	619.15	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:44
45	2005332.1988	0.030	1013887.7637	0.043	602.65	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:45
46	2005967.5376	0.031	1014270.7517	0.049	598.15	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:46
47	2006594.2913	0.025	1014709.9978	0.045	594.31	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:47
48	2007269.6740	0.017	1015023.0371	0.030	594.10	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:48
49	2007979.0170	0.009	1015189.2215	0.008	583.02	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:49
50	2008457.5986	0.019	1015635.8479	0.021	572.92	0.000	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:50
51	2008850.3584	0.022	1016122.2736	0.023	570.43	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:51
52	2009151.6453	0.023	1016593.4421	0.022	567.09	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:52
53	1997019.1694	0.019	1004132.5176	0.024	638.59	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:53
54	1997517.7420	0.000	1003875.7142	0.000	645.36	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:54
55	2010159.3560	0.009	1015688.8905	0.009	595.39	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:55
56	2010356.9459	0.019	1015046.6591	0.012	607.15	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:56
57	2010334.6736	0.018	1014471.3397	0.011	611.58	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:57
58	2010636.3775	0.021	1013365.2972	0.015	639.51	0.007	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:58
59	2010264.8820	0.000	1012440.6440	0.000	662.65	0.008	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:59
60	2009767.6814	0.038	1012048.4441	0.053	671.66	0.008	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:60
61	2009500.5614	0.025	1016866.4963	0.017	565.10	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:61
62	2009733.2022	0.020	1016334.7351	0.016	590.19	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:62
63	2009937.7636	0.042	1017386.7033	0.028	561.66	0.006	CTL	5/8" x 24" Rebar with 2" Aluminum cap Stamped PN:63

*Standard Primary Control Monument - Rebar and Cap - Standard - 5/8"x 24" Rebar with 2"Aluminum Cap stamped: "(include all common information here)" plus other markings indicated in the point description of the individual point. AHTD monuments will be stamped "Arkansas Hwy & Trans Dept" with "PN: ###" & "Job ######". Monuments that are set by Consultants will be stamped "Arkansas Hwy & Trans Dept" with "PN:###", "Job######", & "PS####". The consultant Professional Surveyor in charge will stamp his/her PS license number on the cap.

**Standard GPS Control Point Monument - 5/8" x 48" Rebar with 2.5"Aluminum Cap stamped: "(include all common information here)" plus other markings indicated in the point description of the individual point. These monuments will be stamped "Ark. State Hwy Trans. Dept.", "GPS Survey", & "Point No. ######".

SX, SY, SZ – Represents the standard error estimate of the coordinate values of each point at the 67% confidence level (one sigma) based on the least squares analysis of the control network. See the AASHTO SDMS Technical Data Guide data tag definition for SX:, SY:, and SZ: for additional information. These values shall be used when control points are added and the entire network is reprocessed using least square analysis. A value of 0.001 is defined as fixed (no adjustment) in the least square analysis process. A value of 30 is defined as location by handheld GPS device or scaled from USGS Quadmap.

Reference Control points (1500 series) shall be used to re-establish horizontal datum if the primary control has been destroyed. These reference control points shall not be used for vertical control unless the elevation has been established from the project datum with 3-wire level techiniques.

All additional project control shall be occupied, measured, and adjusted with direct survey ties to at least two of the control points listed in the table above. New survey control shall not be independent of the survey control listed above. This includes horizontal coordinates and elevations.

Positional Accuracy:
- Horizontal - GPS (1.0 cm± 1PPM) — *PN: 100-105*
- Horizontal - Primary (2.0cm± 20PPM): — *PN:1-66*
- Horizontal - Secondary (3 cm ± 50PPM): — *PN:N/A*
- Vertical - NGS 1st Order (±4mm x √dist in km) — *PN:N/A*
- Vertical - NGS 2nd Order (±6mm x √dist in km) — *PN:995-999*
- Vertical - NGS 3rd Order (±8mm x √dist in km) — *PN:905-932*

Horizontal Datum: NAD 1983 (1997) State Plane Zone: 0302 - South Zone

The adjustment year is based on metadata in the SDMS Control file

A project CAF of: 0.999934611 has been used to compute the above coordinates.

The project CAF shall have a minimum precision of 9 digits right of the decimal.

This CAF is intended for use within the project limits only.

Grid Distance = Ground Distance X CAF

If Coordinates are listed as Ground:

To compute Grid Coordinates, multiply the Ground Coordinates by CAF about the origin of X=0 & Y=0

If Coordinates are listed as Grid:

To compute Ground Coordinates, divide the Grid Coordinates by CAF about the origin of X=0 & Y=0

Vertical Datum: NAVD 1988 based NGS BM Y 58, 523, AND W 104

A project Elevation Factor of: 0.999969651 has been computed and incorporated in the above CAF.

This is based on the average elevation of the project: 634.50 Feet

3-Wire Leveling techniques have been used to establish elevations on

Points: 1-66, 100-105, 905-932 From NGS BM: Y 58, 523, AND W 104

Basis of Bearing: Grid Bearings based on AHTD GPS points: *260026-260026A,260027-260027A,260028-260028A*

Convergence Angle is: 00 34 11 LEFT at PN: 102

LT: 34-32-53.2 N LG: 093-01-05.3 W

Grid Azimuth = Astronomical Azimuth - Convergence Angle

Note: Information in Italics is for clarification only. It is not to be part of the actual Control Table or Control Detail Sheets.

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11435
TIMOTHY D. SMITH

SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		85	323

JOB NO. 061547

② SURVEY CONTROL DETAILS

SURVEY CONTROL 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.		061547	86	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

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HWY. 7

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	139+00.00	1996485.2314	1003754.7339
8001	PC	148+86.67	1997214.3045	1004419.5366
8003	PT	151+81.87	1997427.2190	1004623.9714
8004	PC	186+95.55	1999898.1951	1007122.0109
8006	PT	192+32.85	2000301.6268	1007476.2135
8007	PC	200+80.78	2000976.5595	1007989.4914
8009	PT	203+40.77	2001150.7365	1008180.5886
8010	PC	208+61.75	2001426.4173	1008622.6580
8012	PT	211+79.38	2001571.3556	1008904.8722
8013	PC	225+69.03	2002101.3516	1010189.4931
8015	PT	230+13.55	2002345.3722	1010557.7132
8016	PC	236+76.67	2002811.3553	1011029.4978
8018	PT	239+39.73	2002980.4117	1011230.6715
8019	PC	245+63.56	2003342.1276	1011738.9316
8021	PT	248+54.18	2003501.4711	1011981.8889
8022	PC	254+36.92	2003802.2966	1012480.9822
8024	PT	256+03.87	2003896.6094	1012618.6286
8025	PC	262+09.84	2004267.6561	1013097.7159
8027	PT	265+14.73	2004489.3383	1013305.1353
8028	PI	269+85.96	2004880.2371	1013568.3020
8029	PC	287+65.80	2006362.9776	1014552.8381
8031	PT	289+45.24	2006516.1968	1014646.1473
8032	PC	293+64.64	2006882.6696	1014850.1069
8034	PT	296+40.16	2007135.9741	1014957.1018
8035	PC	304+96.00	2007955.7171	1015203.0365
8037	PT	308+98.78	2008289.7968	1015418.4298
8038	PC	315+81.98	2008738.7120	1015933.4427
8040	PT	317+63.40	2008846.6183	1016079.0474
8041	PC	322+09.82	2009083.2262	1016457.6063
8043	PT	324+79.66	2009289.9428	1016623.0257
8044	PI	327+06.76	2009504.2219	1016698.2396
8044	POB	327+06.76	2009504.2219	1016698.2396
8055	PC	702+04.36	2009633.7713	1016540.1949
8057	PT	702+56.20	2009663.0182	1016497.4661
8058	PI	704+45.00	2009755.8159	1016333.0454
8059	PI	106+50.00	2009782.4622	1016289.5944
8060	PC	111+28.37	2010022.0061	1015875.5217
8062	PT	112+23.90	2010069.4954	1015792.6371
8063	PC	113+00.86	2010107.4777	1015725.7003
8065	PT	123+94.88	2010327.5219	1014671.8793
8066	POE	125+00.00	2010316.5635	1014567.3287

HWY. 5

POINT NO.	TYPE	STATION	NORTHING	EASTING
8044	PI	327+06.76	2009504.2219	1016698.2396
8045	PC	328+91.90	2009647.4039	1016815.6061
8047	PRC	330+69.36	2009720.6146	1016970.9176
8049	PT	333+72.76	2009829.3878	1017246.3928
8050	POE	335+00.00	2009916.6143	1017339.0336

HWY. 70

POINT NO.	TYPE	STATION	NORTHING	EASTING
8051	POB	604+00.00	2008887.6636	1017191.1127
8052	PC	604+51.62	2008938.8342	1017184.3509
8054	PT	610+41.96	2009410.3855	1016865.1704
8044	POE	612+33.46	2009504.2219	1016698.2396

ROUNDABOUT

POINT NO.	TYPE	STATION	NORTHING	EASTING
8067	PC	0+00.00	2009567.6160	1016620.9015
8068	PCC	3+14.16	2009440.8277	1016775.5777
8067	PT	0+00.00	2009567.6160	1016620.9015

162+40 DRIVEWAY

POINT NO.	TYPE	STATION	NORTHING	EASTING
8069	POB	2000+00.00	1998171.3436	1005376.2460
8070	PC	2000+35.89	1998145.8243	1005401.4888
8072	PT	2001+20.14	1998124.8191	1005479.1044
8073	PC	2001+28.63	1998127.0193	1005487.3011
8075	PT	2002+05.49	1998111.0155	1005559.4907
8076	POE	2002+23.00	1998099.7567	1005572.8965

DETOUR 1

POINT NO.	TYPE	STATION	NORTHING	EASTING
8077	PC	400+00.00	1996780.8017	1004024.2486
8079	PRC	401+85.61	1996927.4649	1004137.6832
8081	PT	403+71.23	1997074.1280	1004251.1177
8082	PC	404+02.93	1997097.5530	1004272.4776
8084	PRC	405+97.53	1997229.5501	1004415.1462
8086	PT	407+58.46	1997337.0068	1004534.7685

DETOUR 2

POINT NO.	TYPE	STATION	NORTHING	EASTING
8087	PC	500+00.00	2006249.8486	1014477.7208
8089	PRC	501+25.70	2006346.1300	1014558.1359
8091	PT	502+96.26	2006480.7161	1014661.8782
8092	PC	503+19.63	2006501.1430	1014673.2468
8094	PRC	504+53.21	2006624.3429	1014724.0746
8096	PT	505+86.78	2006747.5428	1014774.9024

DETOUR 3

POINT NO.	TYPE	STATION	NORTHING	EASTING
8097	PC	800+00.00	2009077.1017	1016447.8074
8099	PRC	804+55.94	2009474.1472	1016597.6388
8100	PT	806+07.67	2009600.2564	1016655.7853
8101	POE	808+63.11	2009703.5386	1016889.4171

6/22/2020

R06547.DGN

SURVEY CONTROL 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.		061547	87	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

140 | 400 | 145 | 405

STA. 143+00.00 HWY. 7 =
STA. 400+00.00 DETOUR 1

DETOUR 1
P.I. = 400+93.01
Δ = 9°16'51" LT.
D = 5°00'00"
T = 93.01'
L = 185.61'
P.C. = 400+00.00
P.R.C. = 401+85.61
NO SUPER

DETOUR 1
P.I. = 405+00.46
Δ = 9°43'48" RT.
D = 5°00'00"
T = 97.53'
L = 194.60'
P.C. = 404+02.93
P.R.C. = 405+97.53
NO SUPER

DETOUR 1
P.I. = 406+78.13
Δ = 8°02'48" LT.
D = 5°00'00"
T = 80.60'
L = 160.93'
P.R.C. = 405+97.53
P.T. = 407+58.46
NO SUPER

P.O.B. 139+00.00
8000
SURVEY BASELINE N 54°54'31" E
700.25'
PN25 PDIAHTD STD.MON STAMPED PN
N 42°21'36" E
986.67'
P.C. 400+00.00
8077
N 42°21'36" E
93.01'
HWY. 7
P.I. 400+93.01
P.R.C. 401+85.61
N 33°04'45" E
93.01'
P.I. 402+78.63
8079
N 33°04'45" E
93.01'
N 42°21'36" E
93.01'
8081
N 42°21'36" E
31.70'
8082
N 42°21'36" E
97.53'
DETOUR 1
P.I. 405+00.46
P.R.C. 405+97.53
N 52°05'24" E
97.53'
8084
N 52°05'24" E
80.60'
P.I. 150+34.30
P.T. 407+58.46
N 44°02'36" E
80.60'
8086
8001
N 42°21'36" E
147.63'
SURVEY BASELINE N 42°36'31" E
769.73'
SURVEY BASELINE N 41°05'05" E
745.72'
P.I. 400+93.01
P.T. 403+71.23
P.C. 404+02.93
P.C. 148+86.67
P.C. 406+78.13
P.I. 406+78.13
P.T. 151+81.87

DETOUR 1
P.I. = 402+78.63
Δ = 9°16'51" RT.
D = 5°00'00"
T = 93.02'
L = 185.62'
P.R.C. = 401+85.61
P.T. = 403+71.23
NO SUPER

PN27 PDIAHTD STD.MON STAMPED PN

HWY. 7
P.I. = 150+34.30
Δ = 2°57'07" RT.
D = 1°00'00"
T = 147.63'
L = 295.20'
P.C. = 148+86.67
P.T. = 151+81.87
NO SUPER

150 | 155 | 160 | 165

STA. 150+55.00 HWY. 7 =
STA. 407+58.46 DETOUR 1

P.I. 150+34.30
P.T. 407+58.46
E N 44°02'36" E
80.60'
8086
N 45°18'43" E
147.63'
8003
P.I. 406+78.13
P.T. 151+81.87

PN28 PDIAHTD STD.MON STAMPED PN28
SURVEY BASELINE N 41°05'05" E
745.72'
SURVEY BASELINE N 48°10'25" E
743.09'
HWY. 7

STA. 162+40.00 HWY. 7 =
STA. 2000+00.00 DRIVEWAY 162+40
Δ = 90°00'00"

PN29 PDIAHTD STD.MON STAMPED PN29
N 45°18'43" E
3513.68'
6908
P.O.B. 2000+00.00
S 44°41'17" E
35.89'
SURVEY BASELINE N 45°14'19" E
776.02'
P.C. 2000+35.89
8070
S 44°41'17" E
46.50'
P.I. 2000+82.40
N 74°58'29" E
8.49'
P.T. 2001+20.14
N 74°58'29" E
41.69'
8072
8073
P.I. 2001+70.32
S 49°58'30" E
41.69'
N 74°58'29" E
46.50'
P.C. 2001+28.63
P.T. 2002+05.49
8075
P.O.E. 2002+23.00
S 49°58'30" E
17.51'
8076
162+40 DRIVEWAY

162+40 DRIVEWAY
P.I. = 2000+82.40
Δ = 60°20'15" LT.
R = 80'
T = 46.50'
L = 84.25'
P.C. = 2000+35.89
P.T. = 2001+20.14
NO SUPER

162+40 DRIVEWAY
P.I. = 2001+70.32
Δ = 55°03'02" RT.
R = 80'
T = 41.69'
L = 76.86'
P.C. = 2001+20.14
P.T. = 2002+05.49
NO SUPER

SURVEY CONTROL DETAILS

6/22/2020

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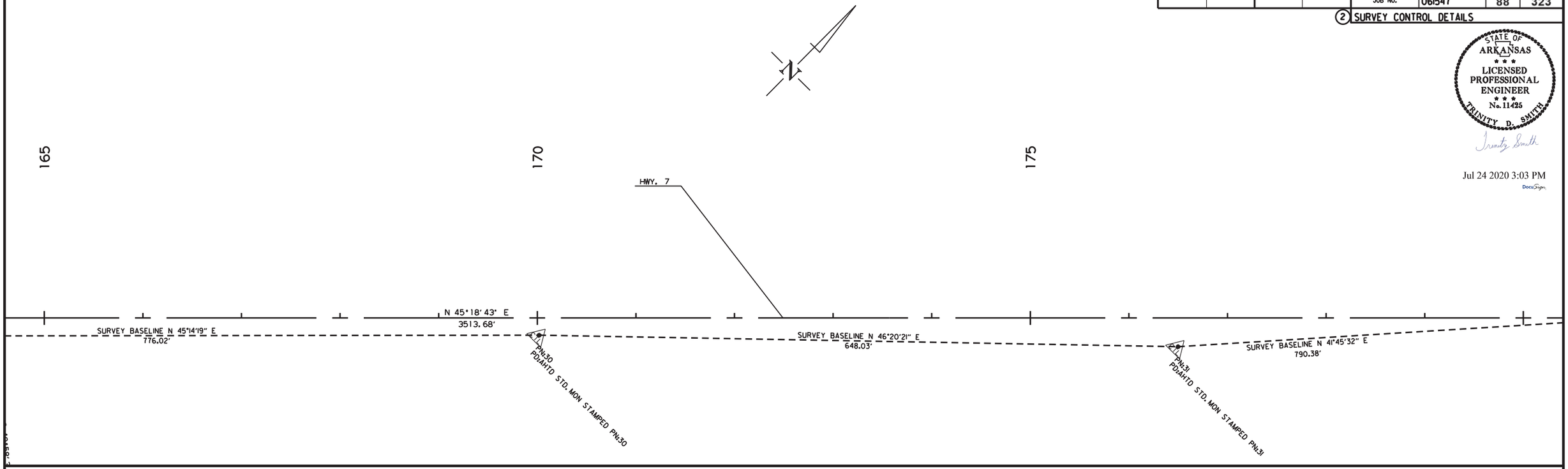
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				6	ARK.			
				JOB NO.		061547	88	323

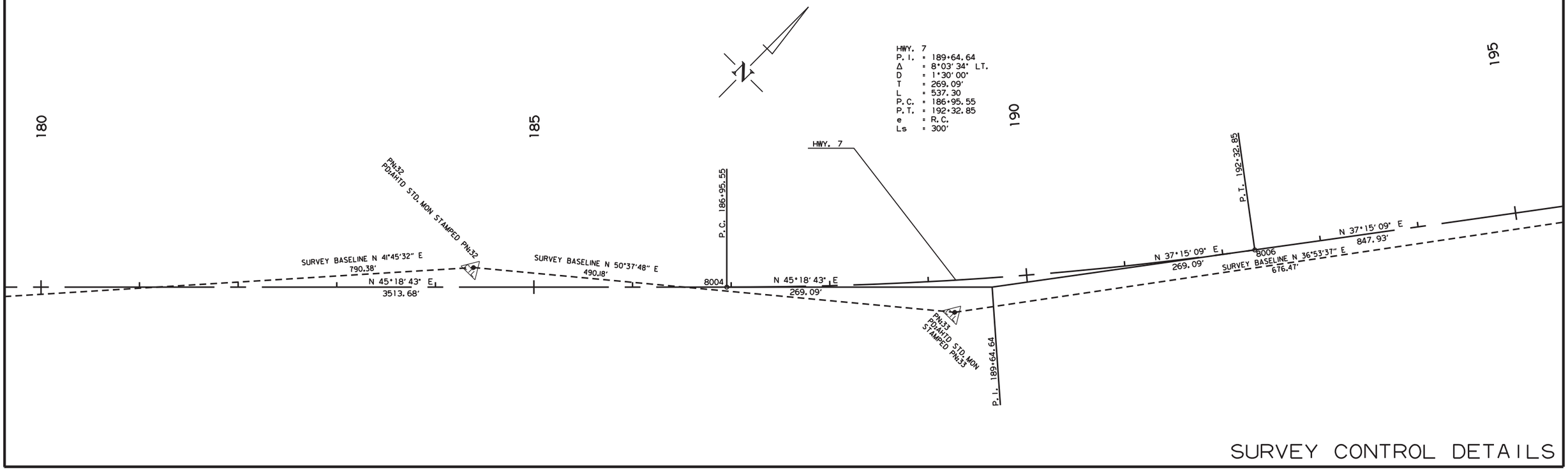
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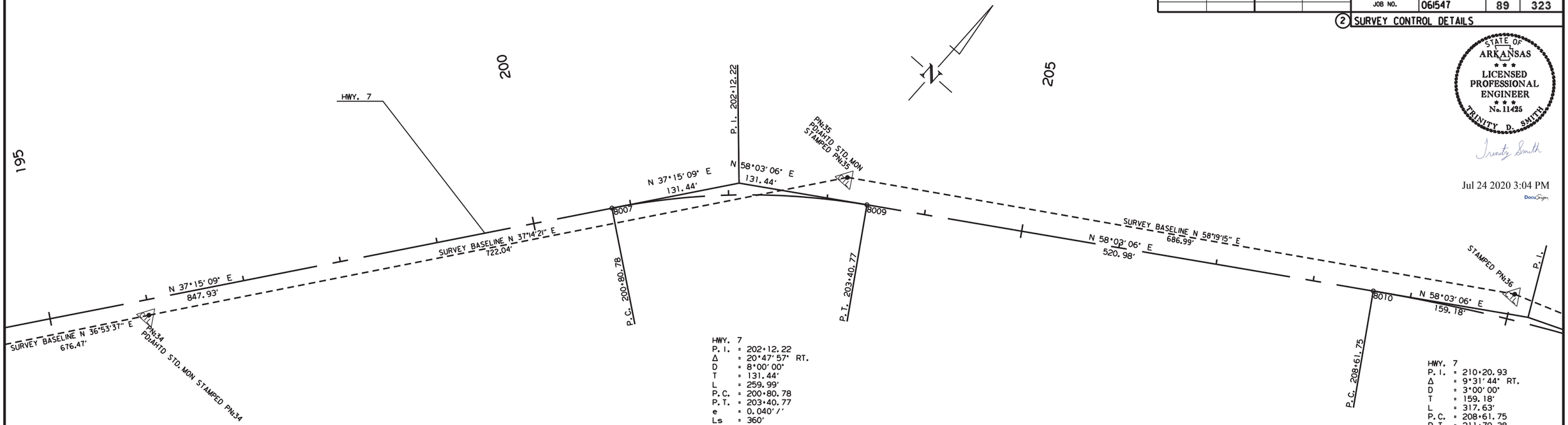
SURVEY CONTROL DETAILS

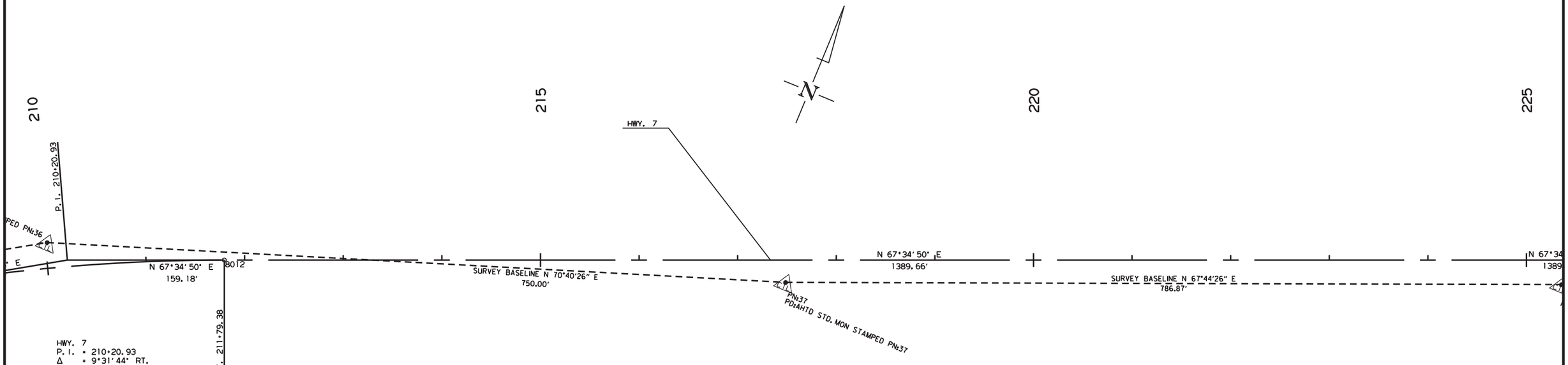
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				6	ARK.			
				JOB NO.		061547	89	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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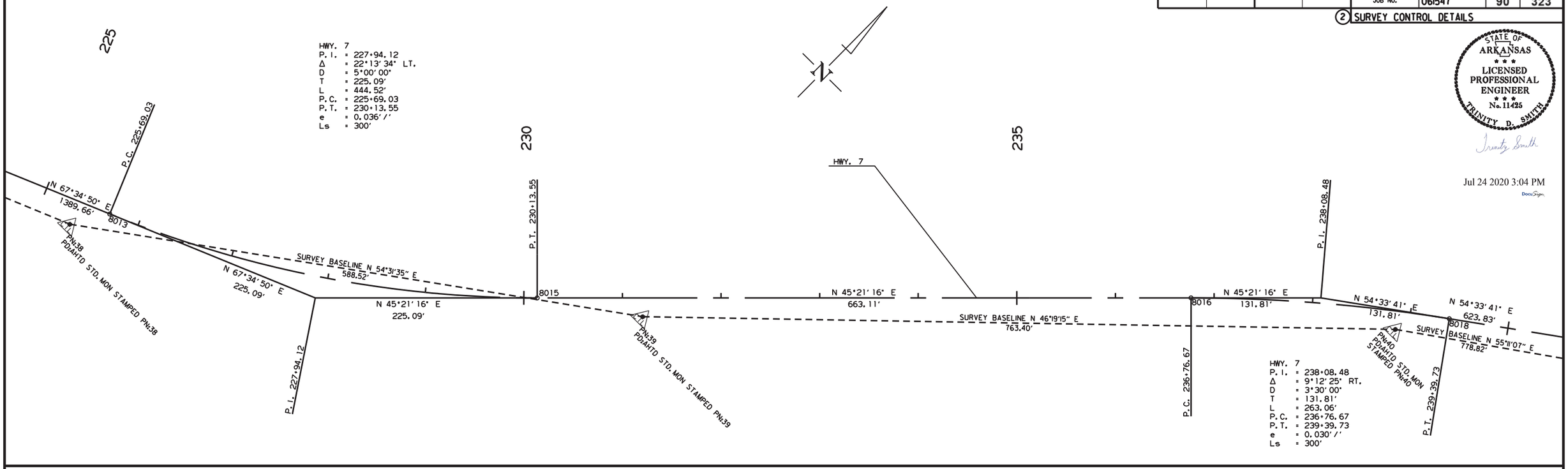
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				6	ARK.			
				JOB NO.		061547	90	323

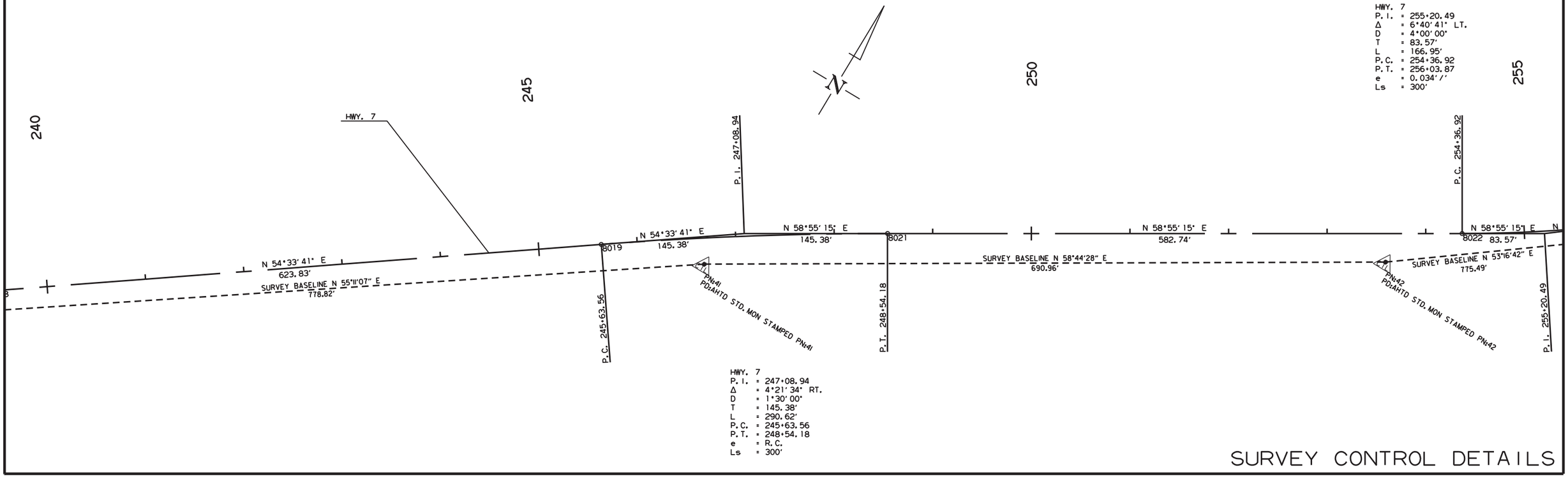
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	91	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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HWY. 7
P. I. = 255+20.49
Δ = 6°40'41" LT.
D = 4°00'00"
T = 83.57'
L = 166.95'
P. C. = 254+36.92
P. T. = 256+03.87
e = 0.034'/'
Ls = 300'

HWY. 7
P. I. = 263+63.59
Δ = 18°17'35" LT.
D = 6°00'00"
T = 153.75'
L = 304.89'
P. C. = 262+09.84
P. T. = 265+14.73
e = 0.038'/'
Ls = 360'

255 260 265

36.92

P. T. 256+03.87

HWY. 7

P. C. 262+09.84

P. T. 265+14.73

N 58°55'15" E
83.57'

N 52°14'34" E
83.57'

8024

SURVEY BASELINE N 53°16'42" E
175.49'

N 52°14'34" E
605.97'

P. I. 255+20.49

8025

SURVEY BASELINE N 40°18'56" E
640.65'

8027

N 52°14'34" E
153.75'

N 33°56'59" E
153.75'

P. I. 263+63.59

PN43
PDAHTD STD. MON
STAMPED PN43

N 33°56'59" E
471.23'

SURVEY BASELINE N 33°18'34" E
768.83'

8028

N 33°35'03" E
1779.84'

PN44
PDAHTD STD. MON STAMPED PN44

270 275 280 285

HWY. 7

P. I. 269+85.96
Δ = 0°21'56" LT.

8028

SURVEY BASELINE N 33°18'34" E
768.83'

N 33°35'03" E
1779.84'

SURVEY BASELINE N 31°04'55" E
741.85'

PN45
PDAHTD STD. MON STAMPED PN45

PN46
PDAHTD STD. MON STAMPED PN46

SURVEY BASELINE N 35°01'26" E
765.35'

6/22/2020

R061547.DGN

SURVEY CONTROL 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.		061547	92	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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Jul 24 2020 3:07 PM
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285 500 290 505 295

STA. 286+30.00 HWY. 7 =
STA. 500+00.00 DETOUR 2

SURVEY BASELINE N 35°01'26" E
765.35'

N 33°35'03" E
1779.84'

8087

P.C. 500+00.00

DETOUR 2
P.I. = 500+63.10
Δ = 12°34'11" RT.
D = 10°00'00"
T = 63.10'
L = 125.70'
P.C. = 500+00.00
P.R.C. = 501+25.70
NO SUPER

P.I. 500+63.10

N 33°35'03" E
63.10'

P.C. 287+65.80

N 46°09'14" E
63.10'

8089

P.R.C. 501+25.70

8029

N 46°09'14" E
85.91'

DETOUR 2

P.I. 502+11.61

P.I. 288+55.56

N 29°05'53" E
85.91'

HWY. 7
P.I. = 288+55.56
Δ = 4°29'10" LT.
D = 2°30'00"
T = 89.76'
L = 179.44'
P.C. = 287+65.80
P.T. = 289+45.24
e = 0.026'/'
Ls = 300'

DETOUR 2
P.I. = 502+11.61
Δ = 17°03'21" LT.
D = 10°00'00"
T = 85.91'
L = 170.56'
P.R.C. = 501+25.70
P.T. = 502+96.26
NO SUPER

P.T. 502+96.26

N 33°35'03" E
89.77'

N 29°05'53" E
89.77'

8031

P.T. 289+45.24

P.C. 503+19.63

8091

N 29°05'53" E
23.38'

8092

N 29°05'53" E
67.09'

PN47
PDHRTD STD.MON
STAMPED PN47

8094

N 15°44'26" E
67.09'

P.I. 503+86.73

DETOUR 2
P.I. = 503+86.73
Δ = 13°21'27" LT.
D = 10°00'00"
T = 67.09'
L = 133.58'
P.C. = 503+19.63
P.R.C. = 504+53.21
NO SUPER

P.R.C. 504+53.21

N 15°44'26" E
67.09'

P.I. 505+20.30

N 29°05'53" E
67.09'

8096

P.T. 505+86.78

DETOUR 2
P.I. = 505+20.30
Δ = 13°21'27" RT.
D = 10°00'00"
T = 67.09'
L = 133.58'
P.R.C. = 504+53.21
P.T. = 505+86.78
NO SUPER

STA. 292+10.00 HWY. 7 =
STA. 505+86.78 DETOUR 2

N 29°05'53" E
419.41'

P.C. 293+64.64

8032

N 29°05'53" E
138.30'

P.I. 295+02.94

HWY. 7
P.I. = 295+02.94
Δ = 12°23'53" LT.
D = 4°30'00"
T = 138.30'
L = 275.52'
P.C. = 293+64.64
P.T. = 296+40.16
e = 0.034'/'
Ls = 300'

P.T. 296+40.16

N 16°42'00" E
138.30'

8034

SURVEY BASELINE N 24°52'04" E
744.40'

N 16°42'00" E
855.84'

SURVEY BASELINE N 13°11'07" E
728.55'

PN48
PDHRTD STD.MON STAMPED PN48

HWY. 7

305 310 300 315

P.I. 307+02.87

PN49
PDHRTD STD.MON
STAMPED PN49

N 16°42'00" E
206.87'

N 48°55'22" E
206.87'

SURVEY BASELINE N 13°11'07" E
728.55'

N 16°42'00" E
855.84'

8035

P.C. 304+96.00

SURVEY BASELINE N 43°01'19" E
654.61'

8037

P.T. 308+98.78

N 48°55'22" E
683.20'

PN50
PDHRTD STD.MON STAMPED PN50

SURVEY BASELINE N 51°04'52" E
625.20'

HWY. 7
P.I. = 307+02.87
Δ = 32°13'22" RT.
D = 8°00'00"
T = 206.87'
L = 402.78'
P.C. = 304+96.00
P.T. = 308+98.78
e = 0.040'/'
Ls = 360'

P.C. 315+81.98

6/22/2020

R061547.DGN

SURVEY CONTROL 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.		061547	93	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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Jul 24 2020 3:07 PM
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315

320

330

610

HWY. 7
P.I. = 316+72.88
Δ = 9°04' 15" RT.
D = 5°00' 00"
T = 90.90'
L = 181.42'
P.C. = 315+81.98
P.T. = 317+63.40
e = 0.036'/'
Ls = 300'

HWY. 7
P.I. = 323+50.10
Δ = 38°39' 08" LT.
R = 400'
T = 140.28'
L = 269.84'
P.C. = 322+09.82
P.T. = 324+79.66
NO SUPER

STA. 321+98.26 HWY. 7 =
STA. 800+00.00 DETOUR 3

C.L. HWY. 7 STA. 326+06.76 =
C.L. ROUNDABOUT STA. 4+36.33
Δ = 90°00' 00"

HWY. 7
P.I. = 702+30.34
Δ = 9°54' 05" LT.
R = 300'
T = 25.98'
L = 51.84'
P.C. = 702+04.36
P.T. = 702+56.20
NO SUPER

C.L. HWY. 7 STA. 701+00.00 =
C.L. ROUNDABOUT STA. 0+00.00 =
C.L. ROUNDABOUT STA. 6+28.32
Δ = 90°00' 00"

HWY. 5
P.I. = 329+86.95
Δ = 50°50' 26" RT.
R = 200'
T = 95.05'
L = 177.46'
P.C. = 328+91.90
P.R.C. = 330+69.36
NO SUPER

ROUNDABOUT
P.I. = N.A.
Δ = 360°00' 00" RT.
D = 57°17' 45"
T = N.A.
L = 628.32'
P.C. = 0+00.00
P.T. = 6+28.32

HWY. 7
HWY. 5
HWY. 70
ROUNDABOUT
DETOUR 3

SURVEY CONTROL DETAILS

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

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JOB NO.		061547	94	323

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 3:08 PM
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DETOUR 3
P.I. = 802+66.81
Δ = 74°38'16" LT.
R = 350'
T = 266.81'
L = 455.94'
P.C. = 800+00.00
P.R.C. = 804+55.94
NO SUPER

DETOUR 3
P.I. = 805+48.50
Δ = 82°47'43" RT.
R = 105'
T = 92.56'
L = 151.73'
P.R.C. = 804+55.94
P.T. = 806+07.67
NO SUPER

HWY. 5
P.I. = 329+86.95
Δ = 50°50'26" RT.
R = 200'
T = 95.05'
L = 177.46'
P.C. = 328+91.90
P.R.C. = 330+69.36
NO SUPER

HWY. 5
P.I. = 332+28.78
Δ = 43°27'28" LT.
R = 400'
T = 159.42'
L = 303.40'
P.R.C. = 330+69.36
P.T. = 333+72.76
NO SUPER

HWY. 70
P.I. = 607+69.93
Δ = 53°07'51" LT.
D = 9°00'00"
T = 318.32'
L = 590.34'
P.C. = 604+51.62
P.T. = 610+41.96
NO SUPER

STA. 329+85.48 HWY. 5 =
STA. 808+63.11 DETOUR 3

C.L. HWY. 70 STA. 611+33.46 =
C.L. ROUNDABOUT STA. 2+96.71
Δ = 90°00'00"

C.L. HWY. 5 STA. 328+06.76 =
C.L. ROUNDABOUT STA. 1+57.08
Δ = 90°00'00"

SURVEY BASELINE N 38°02'45" E
443.06'

SURVEY BASELINE N 49°57'18" E
679.53'

ROUNDABOUT

PN52 PDI.AHTD STD. MON STAMPED PN52

PN61 PDI.AHTD STD. MON STAMPED PN61

PN63 PDI.AHTD STD. MON STAMPED PN63

HWY. 7

HWY. 70
JOB R60140

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

6/22/2020

R061547.DGN

SURVEY CONTROL DETAILS

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				JOB NO.		061547	95	323

(2) PLAN AND PROFILE SHEETS

STA. 130+00 TO STA. 148+00
SPECIAL FLOOD HAZARD AREA

OBLITERATE EXISTING PAVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STA. 140+57 IN PLACE
23' PIPE CULVERT
LT. SIDE DRAIN
RETAIN AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 140+86 CONSTRUCT
DROP INLET ON LT.
AND 18" X 36' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 140+86 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS IV) = 36 LIN. FT.

STA. 141+76 IN PLACE
28' PIPE CULVERT
LT. SIDE DRAIN
RETAIN AND CONSTRUCT
APPROACH ON LT. = 10 CU. YD.

STA. 144+50 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 244' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 142+03
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 244 LIN. FT.
18" SLPCCS PIPE = 244 LIN. FT.

STA. 144+81 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

STA. 142+03 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 16' PIPE INLET WITH F.E.S.
AND 18" X 114' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 140+86
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 130 LIN. FT.
18" SLPCCS PIPE = 114 LIN. FT.
18" F.E.S. = 1 EACH

270' TAPER

P.O.B. 139+00.00

N 42°21'36" E

PROP R/W

100' TRANSITION

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

SPECIAL FLOOD HAZARD AREA

STA. 140+86 CONSTRUCT
DROP INLET ON RT.
AND 24" X 18' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 18 LIN. FT.
24" SLPCCS PIPE = 18 LIN. FT.
24" F.E.S. = 1 EACH
Q50 = 7 CFS; D.A. = 1 ACRES

STA. 141+00 IN PLACE
14" X 39' R.C. PIPE CULVERT
WITH HDWL LT.
REMOVE HEADWALL, PLUG, AND ABANDON

STA. 144+50 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

6/22/2020

R061547.DGN

HWY. 7

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.		061547	96	323

(2) PLAN AND PROFILE SHEETS

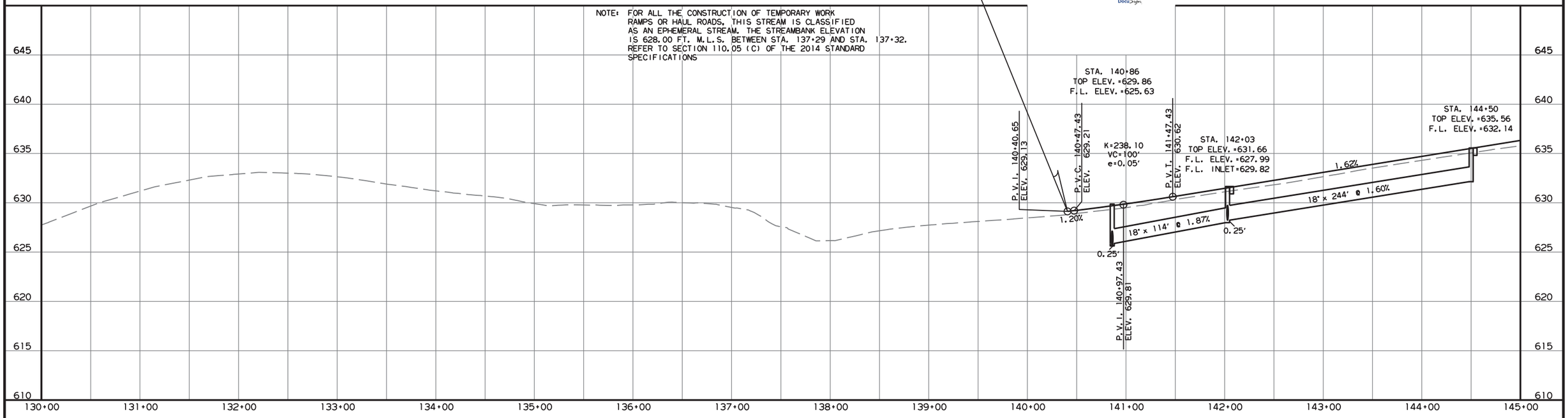
STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH

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STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

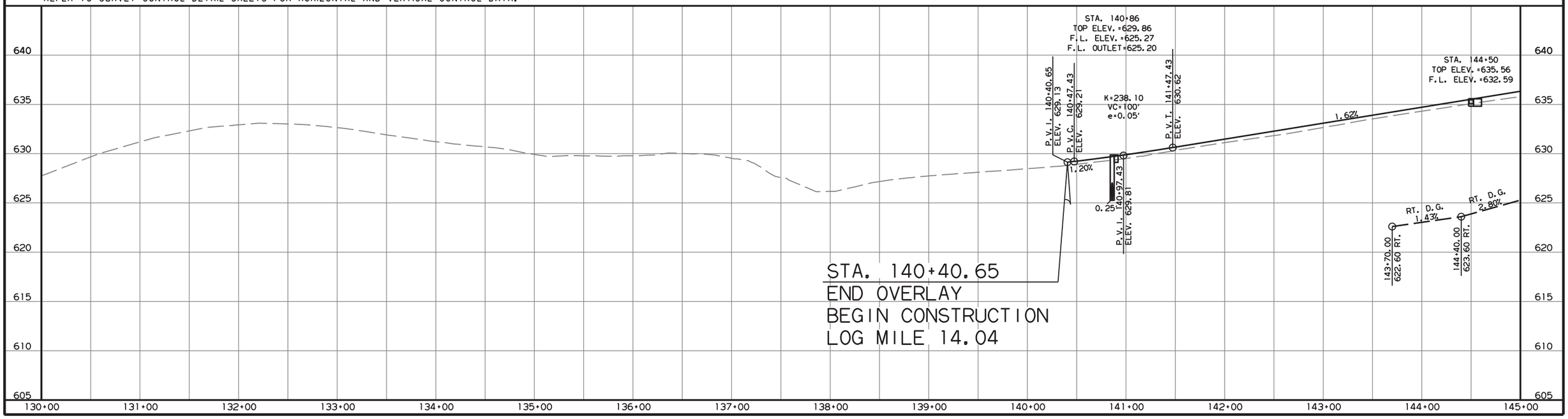
LEFT SIDE OF HWY. 7

NOTE: FOR ALL THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN EPHEMERAL STREAM. THE STREAMBANK ELEVATION IS 628.00 FT. M.L.S. BETWEEN STA. 137+29 AND STA. 137+32. REFER TO SECTION 110.05 (C) OF THE 2014 STANDARD SPECIFICATIONS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



STA. 140+40.65
END OVERLAY
BEGIN CONSTRUCTION
LOG MILE 14.04

6/22/2020

R061547.DGN

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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				JOB NO.		061547	97	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
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No. 11425
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STA. 130+00 TO STA. 148+00
SPECIAL FLOOD HAZARD AREA

STA. 145+29 CONSTRUCT
TURNOUT ON LT. = 15 CU. YD.

STA. 146+04 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
WITH 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 145+76 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

STA. 146+00.00 TO STA. 146+71.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 49.86 SQ. YD.

STA. 146+56 IN PLACE
15' X 6' X 78' R.C. BOX CULVERT
REMOVE AND CONSTRUCT
QUAD. 9' X 6' X 126' R.C. BOX
ON 45° LT. FWD. SKEW
WITH 3:1 WINGS LT. AND RT.
Q50 = 1830 CFS; D.A. = 1.23 SQ. MI.
SPAN = 55'-3"

STA. 147+52.00 TO STA. 148+20.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 47.75 SQ. YD.

STA. 148+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 28' PIPE OUTLET WITH F.E.S.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 28 LIN. FT.
18" F.E.S. = 1 EACH

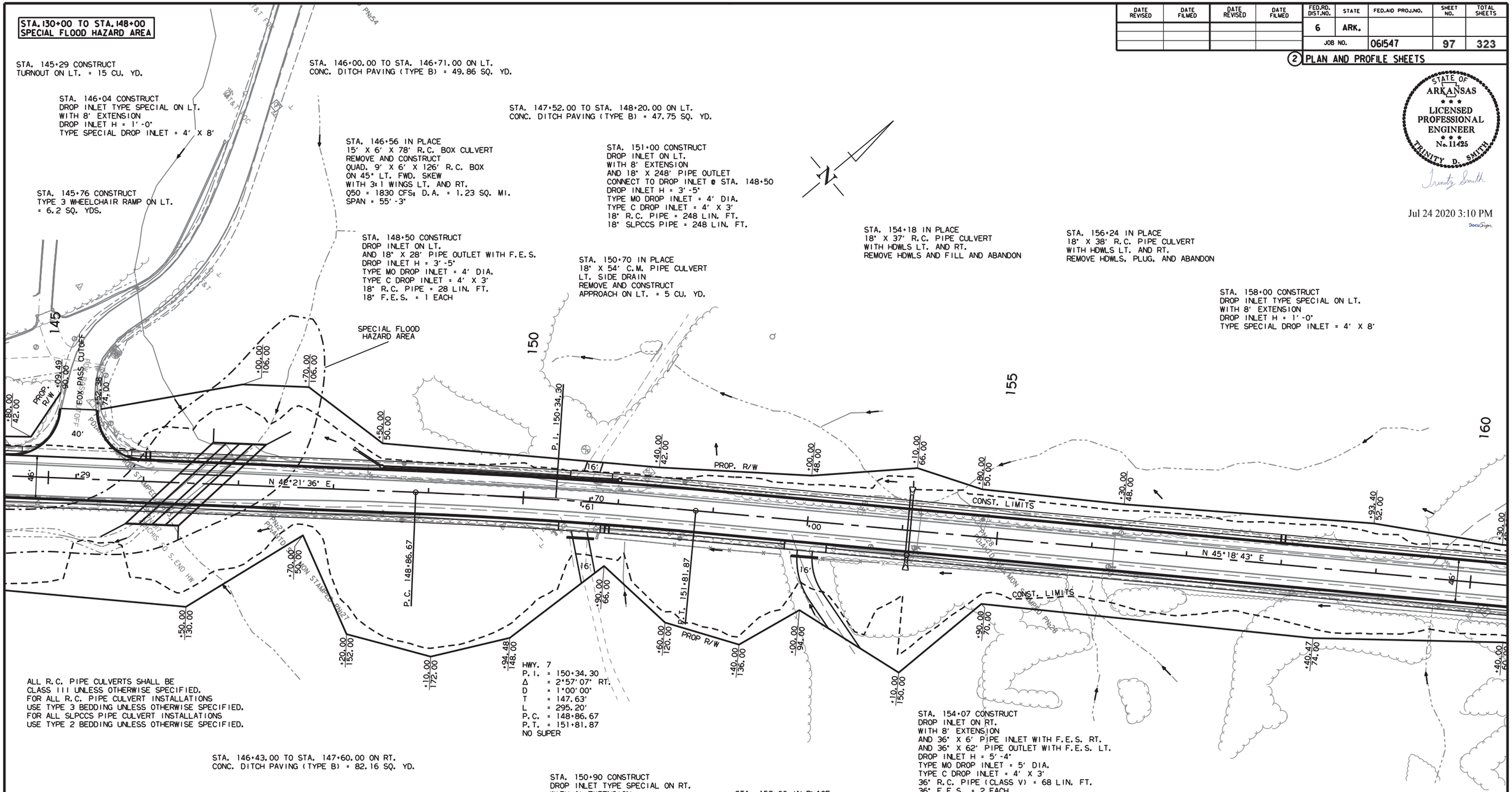
STA. 151+00 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 248' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 148+50
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 248 LIN. FT.
18" SLPCCS PIPE = 248 LIN. FT.

STA. 150+70 IN PLACE
18" X 54' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 154+18 IN PLACE
18" X 37' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS AND FILL AND ABANDON

STA. 156+24 IN PLACE
18" X 38' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS, PLUG, AND ABANDON

STA. 158+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
WITH 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'



ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

HWY. 7
P.I. = 150+34.30
Δ = 2°57'07" RT.
D = 1°00'00"
T = 147.63'
L = 295.20'
P.C. = 148+86.67
P.T. = 151+81.87
NO SUPER

STA. 146+43.00 TO STA. 147+60.00 ON RT.
CONC. DITCH PAVING (TYPE B) = 82.16 SQ. YD.

STA. 150+90 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 150+61 IN PLACE
18" X 66' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH ON RT. = 20 CU. YD. COMP. EMB.
= 5 CU. YD. UNCL. EXC.

STA. 153+00 IN PLACE
18" X 30' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH ON RT. = 20 CU. YD. COMP. EMB.
= 20 CU. YD. UNCL. EXC.

STA. 154+07 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 36" X 6' PIPE INLET WITH F.E.S. RT.
AND 36" X 62' PIPE OUTLET WITH F.E.S. LT.
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
36" R.C. PIPE (CLASS V) = 68 LIN. FT.
36" F.E.S. = 2 EACH
Q50 = 46 CFS; D.A. = 27 ACRES

STA. 154+07.00 TO STA. 155+00.00 ON RT.
CONC. DITCH PAVING (TYPE B) = 65.31 SQ. YD.

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
150+88	172+84	RT.	2261

6/22/2020

R061547.DGN

HWY. 7

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.		061547	98	323

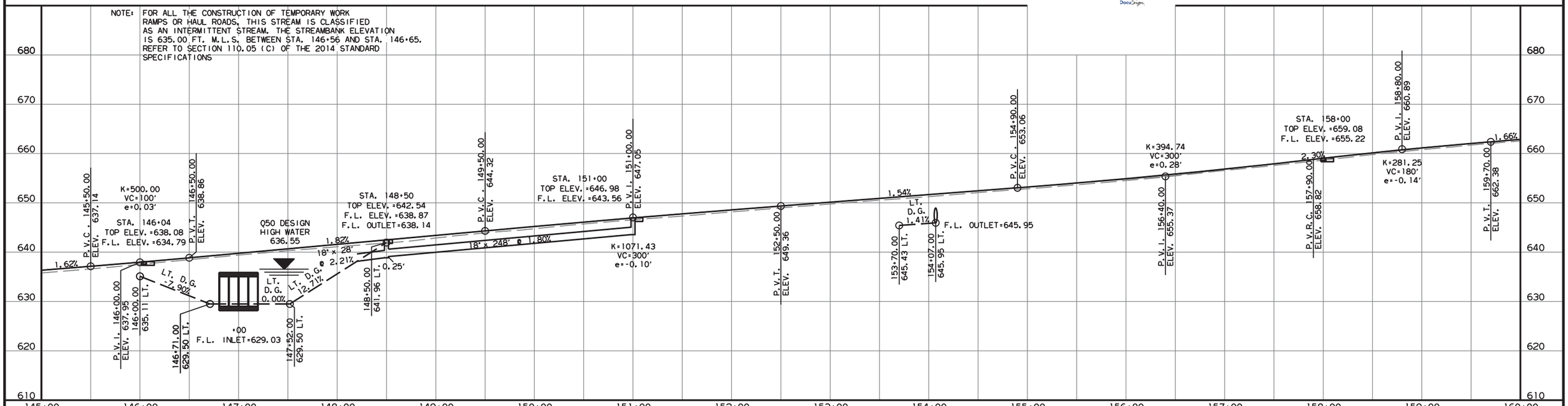
(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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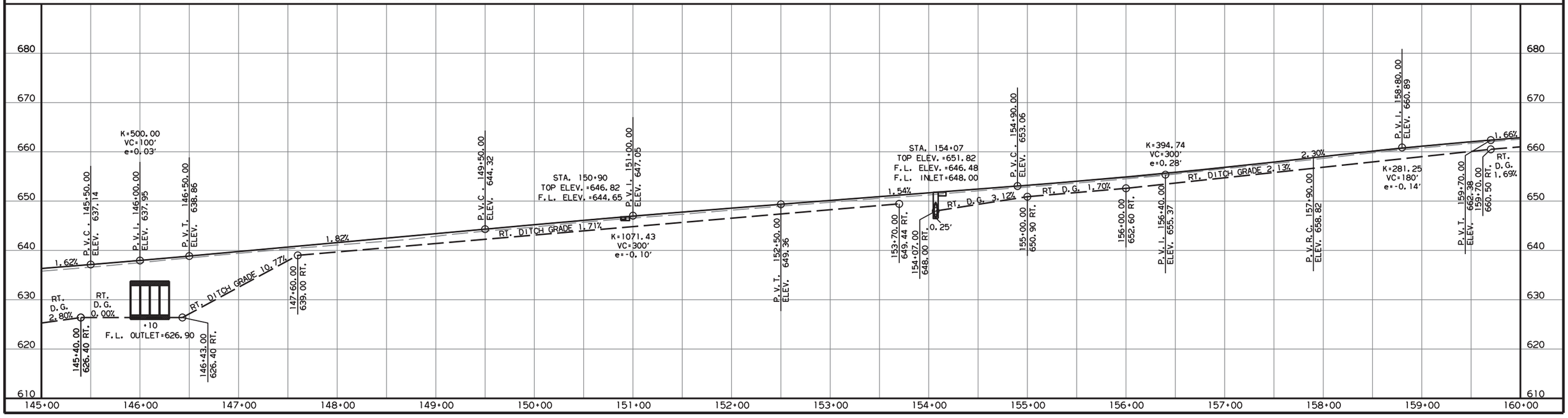
LEFT SIDE OF HWY. 7

NOTE: FOR ALL THE CONSTRUCTION OF TEMPORARY WORK RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAMBANK ELEVATION IS 635.00 FT. M.L.S. BETWEEN STA. 146+56 AND STA. 146+65. REFER TO SECTION 110.05 (C) OF THE 2014 STANDARD SPECIFICATIONS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

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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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				JOB NO.		061547	99	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
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No. 11425
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STA. 165+67 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 166+01 IN PLACE
18" X 42' R.C. PIPE CULVERT
WITH HDWL LT.
REMOVE

STA. 166+00 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 24" X 60' PIPE INLET WITH F.E.S. RT.
AND 24" X 8' PIPE OUTLET WITH F.E.S. LT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS IV) = 60 LIN. FT.
24" R.C. PIPE = 8 LIN. FT.
24" F.E.S. = 2 EACH
Q50 = 7 CFS; D.A. = 5 ACRES

STA. 162+64 IN PLACE
18" X 38' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS, PLUG, AND ABANDON

STA. 169+45 IN PLACE
DBL. 24" X 40' C.P. PIPE CULVERT
LT. SIDE DRAIN
RETAIN AND CONSTRUCT
APPROACH ON LT. = 15 CU. YD.

STA. 172+00 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 51" X 31" X 62' ARCH PIPE INLET WITH F.E.S. LT.
AND 51" X 31" X 12' ARCH PIPE OUTLET WITH F.E.S. RT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 5' X 4'
51" X 31" R.C. ARCH PIPE (CLASS V) = 62 LIN. FT.
51" X 31" R.C. ARCH PIPE = 12 LIN. FT.
51" X 31" ARCH F.E.S. = 2 EACH

STA. 169+76 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 171+89 IN PLACE
24" X 37' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE

STA. 174+00 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 196' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 172+00
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 196 LIN. FT.
30" SLPCCS PIPE = 196 LIN. FT.

STA. 172+04.00 TO STA. 172+50.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 32.30 SQ. YD.

160 165 170 175

STA. 162+40.00 HWY. 7 =
STA. 2000+00.00 DRIVEWAY 162+40
Δ = 90°00'00"

+30.00 42.00 | +40.00 50.00 | +40.00 38.00 | +45.00 41.42 | +50.00 56.00 | +80.00 42.00 | +05.19 56.00 | +60.00 48.00 | +00.00 52.00 | +23.00 50.03 | +28.00 64.00 | +62.00 64.00 | +70.00 46.00 | +92.94 86.00 | +43.79 42.00 | +60.00 42.00 | +60.00 46.00

PROP. R/W
CONST. LIMITS
24'
46'
N 45°18'43" E
167
13
45
61
20'
16'

P.C. 2000+35.89
P.I. 2000+82.40
P.I. 2001+20.14
P.C. 2001+28.63
P.I. 2001+70.32
P.T. 2002+05.49
P.O.E. 2002+23.00
N 17°58'29" E
49.58'30" E

+40.00 60.00 | +20.00 70.59 | +80.00 74.12 | +00.00 54.00 | +60.00 54.00 | +80.00 80.00 | +30.00 120.00 | +80.00 190.00 | +12.00 202.00 | +17.00 192.00 | +50.00 188.00 | +00.00 90.00 | +90.00 64.00 | +27.62 62.00 | +40.00 50.00 | +90.00 80.00 | +60.00 104.00 | +00.00 86.00 | +50.00 84.00 | +20.00 68.00 | +70.00 132.00

POND
PROP R/W
CONST. LIMITS
EXISTING 30" RCP
EXISTING 24" RCP
EXISTING 24" CMP
EXISTING 30" CMP
EXISTING 18

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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				JOB NO.		061547	100	323

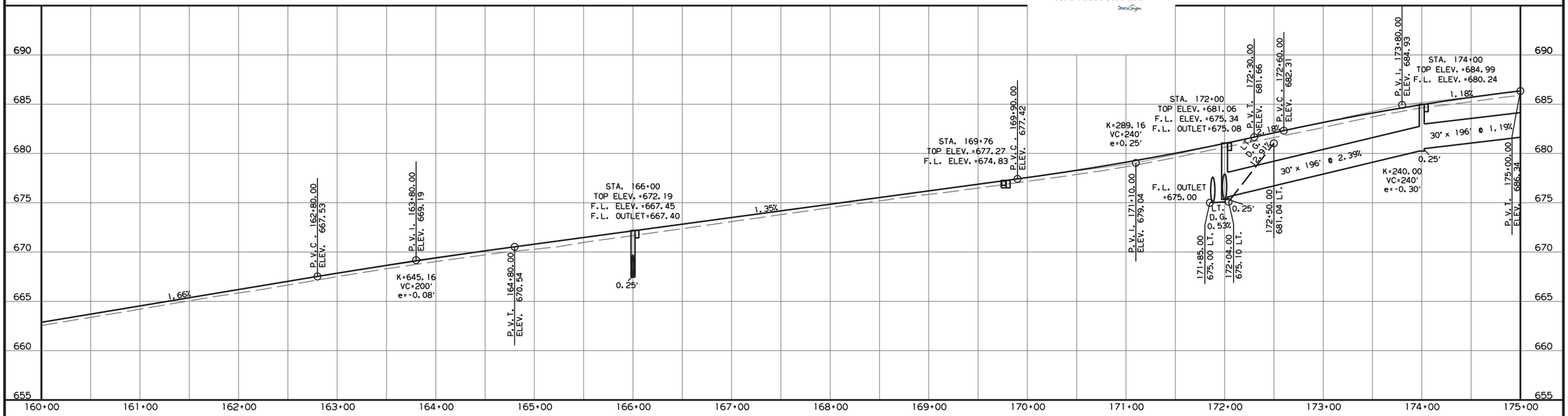
(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

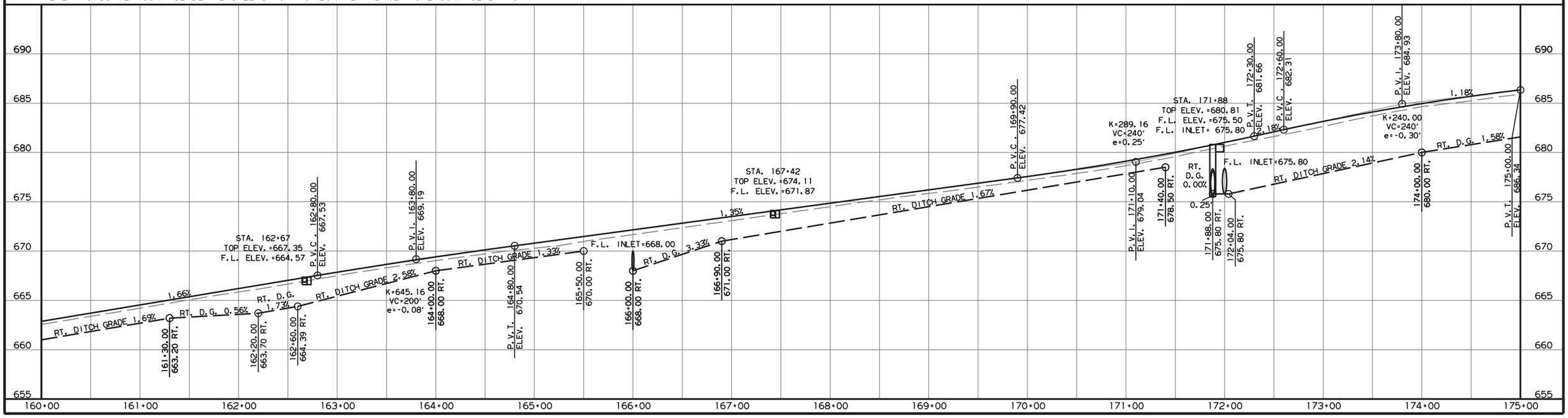
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

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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) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STA. 175+15 IN PLACE
JUNCTION BOX ON LT.
24" X 34' R.C. PIPE INLET WITH HDWL
30" X 302' R.C. PIPE OUTLET
REMOVE JUNCTION BOX AND PIPE OUTLET
REMOVE HDWL, PLUG, AND ABANDON PIPE INLET

STA. 175+54 IN PLACE
JUNCTION BOX ON LT.
24" X 37' R.C. PIPE OUTLET
REMOVE

STA. 176+00 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 196' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 174+00
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 196 LIN. FT.
30" SLPCCS PIPE = 196 LIN. FT.

STA. 176+15 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 175+70 IN PLACE
18" X 29' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 176+89 IN PLACE
24" X 100' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
42" X 80' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT TURNOUT = 85 CU. YD. COMP. EMB.
= 5 CU. YD. UNCL. EXC.

STA. 177+70 IN PLACE
JUNCTION BOX ON LT.
18" X 316' R.C. PIPE INLET
24" X 213' R.C. PIPE OUTLET
REMOVE

STA. 177+74 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 178+08 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 8' PIPE INLET WITH F.E.S. LT.
AND 30" X 204' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 176+00
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 212 LIN. FT.
30" SLPCCS PIPE = 204 LIN. FT.
30" F.E.S. = 1 EACH

STA. 178+08.00 TO STA. 178+50.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 29.49 SQ. YD.

STA. 177+56 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 178+30.00 TO STA. 180+00.00 ON RT.
CONC. DITCH PAVING (TYPE B) = 119.38 SQ. YD.

STA. 176+50 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.2 SQ. YDS.

STA. 177+29 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.2 SQ. YDS.

STA. 180+95 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 4' PIPE INLET WITH F.E.S. LT.
AND 24" X 284' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 178+08
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 4 LIN. FT.
24" R.C. PIPE = 284 LIN. FT.
24" SLPCCS PIPE = 210 LIN. FT.
18" F.E.S. = 1 EACH

STA. 180+40 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 36' PIPE OUTLET WITH F.E.S.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'18"
18" R.C. PIPE = 36 LIN. FT.
18" SLPCCS PIPE = 36 LIN. FT.
18" F.E.S. = 1 EACH

STA. 181+88 IN PLACE
15" X 28' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 182+15 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 6' PIPE INLET WITH F.E.S. LT.
AND 18" X 116' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 180+95
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 122 LIN. FT.
18" SLPCCS PIPE = 116 LIN. FT.
18" F.E.S. = 1 EACH

STA. 182+15.00 TO STA. 182+50.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 24.58 SQ. YD.

STA. 182+50 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 4' PIPE INLET WITH F.E.S. RT.
AND 18" X 206' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 180+40
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3
18" R.C. PIPE = 210 LIN. FT.
18" SLPCCS PIPE = 206 LIN. FT.
18" F.E.S. = 1 EACH

STA. 182+50.00 TO STA. 183+00.00 ON RT.
CONC. DITCH PAVING (TYPE B) = 35.11 SQ. YD.

STA. 183+55 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 183+82 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 164' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 182+15
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 164 LIN. FT.
18" SLPCCS PIPE = 164 LIN. FT.

STA. 184+50 IN PLACE
18" X 187' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 184+90 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 236' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 182+50
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 236 LIN. FT.
18" SLPCCS PIPE = 236 LIN. FT.

STA. 184+97 CONSTRUCT
APPROACH ON LT. = 5 CU. YD. UNCL. EXC.

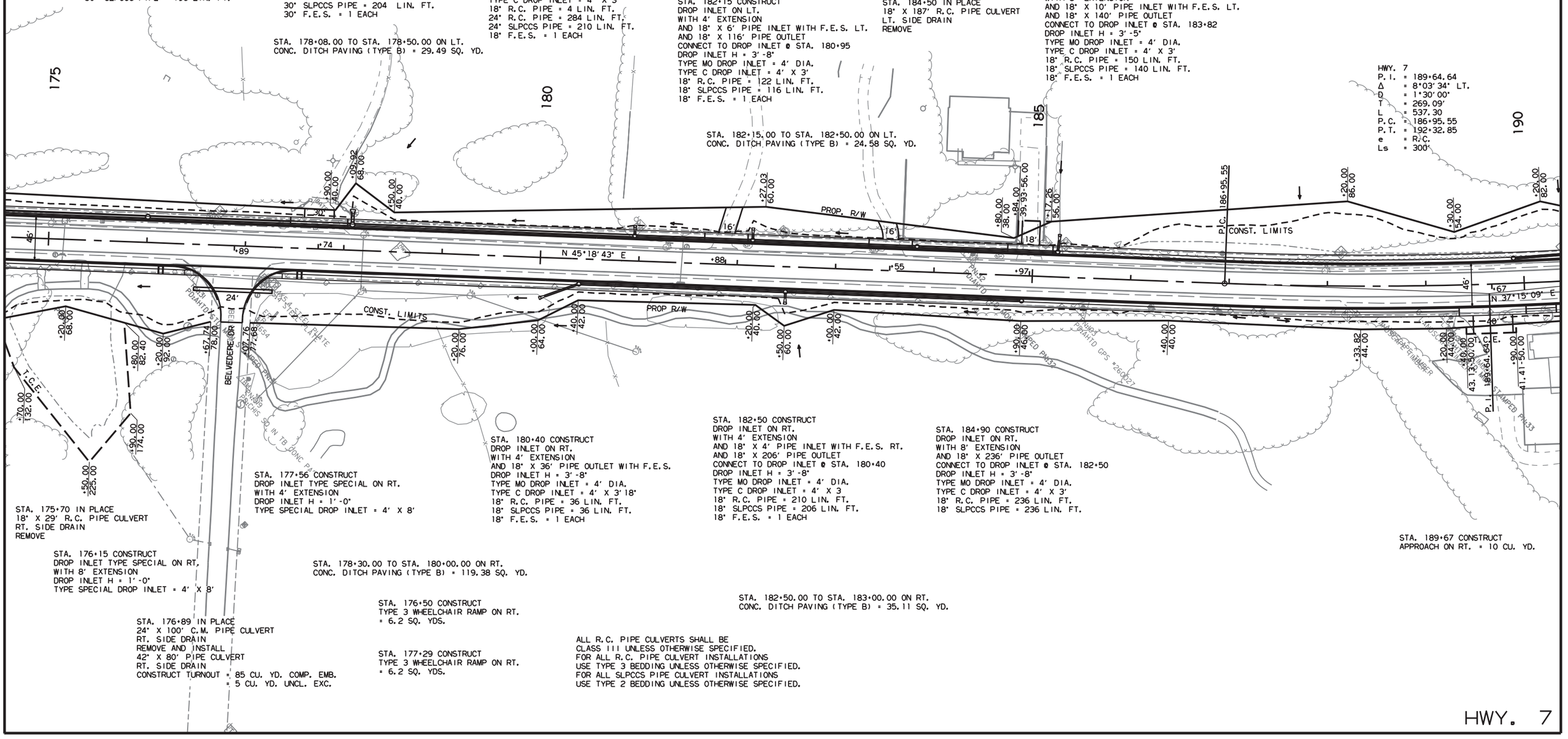
STA. 185+25 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 10' PIPE INLET WITH F.E.S. LT.
AND 18" X 140' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 183+82
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 150 LIN. FT.
18" SLPCCS PIPE = 140 LIN. FT.
18" F.E.S. = 1 EACH

STA. 189+67 CONSTRUCT
APPROACH ON RT. = 10 CU. YD.

STA. 189+90 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 294' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 192+90
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 294 LIN. FT.
18" SLPCCS PIPE = 294 LIN. FT.

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

HWY. 7
P.I. = 189+64.64
Δ = 8°03' 34" LT.
D = 1°30' 00"
T = 269.09'
L = 537.30
P.C. = 186+95.55
P.T. = 192+32.85
e = R.C.
Ls = 300'



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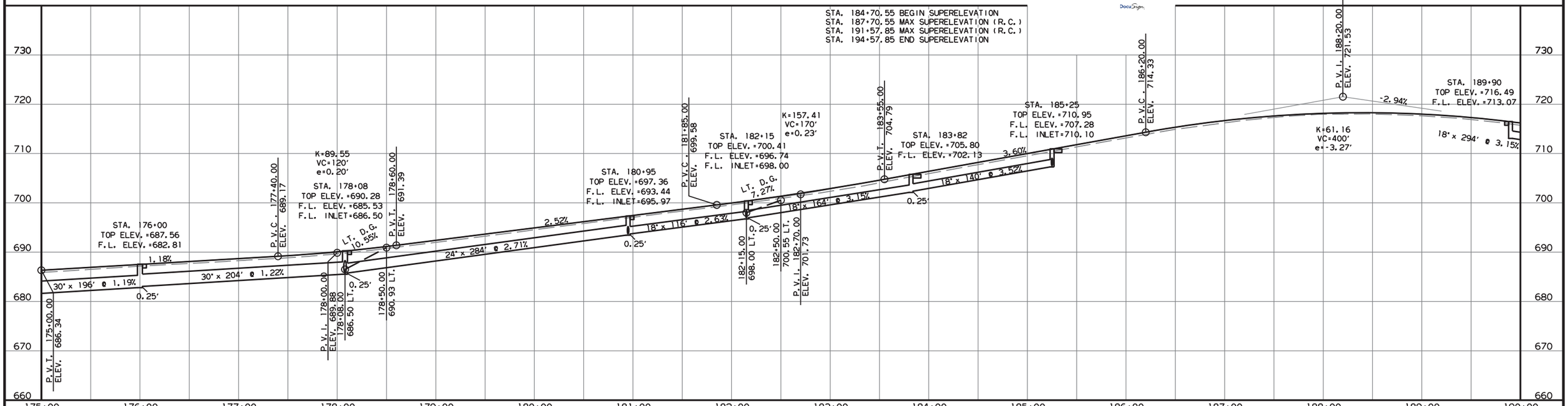
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				6	ARK.			
				JOB NO.		061547	102	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

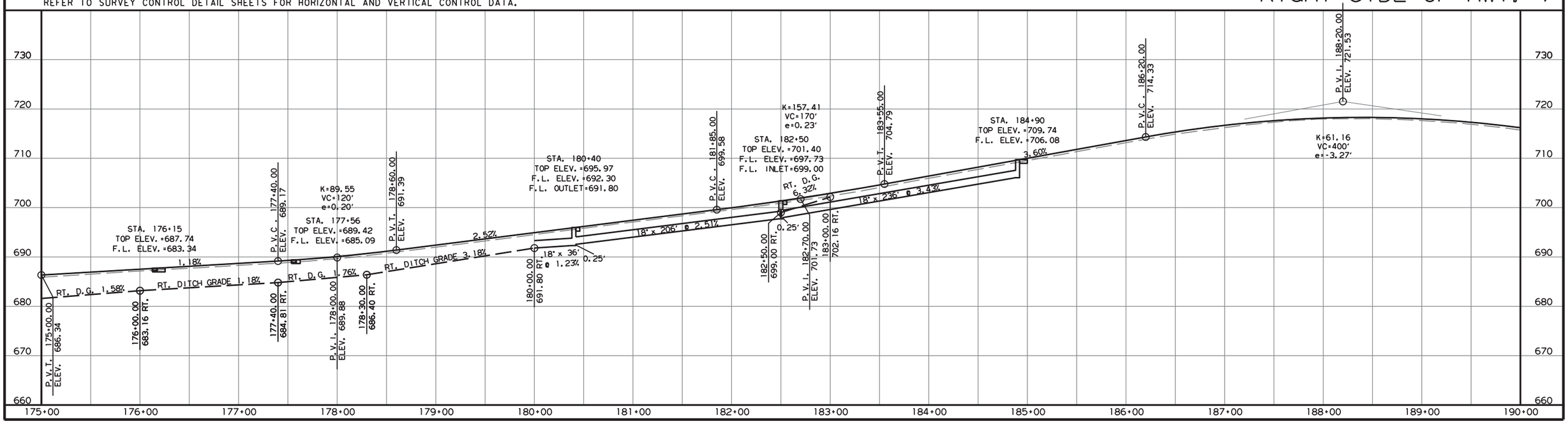
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

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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.		061547	103	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STA. 198+90 CONSTRUCT
DROP INLET ON LT.
AND 18" X 100' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 197+86
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 100 LIN. FT.
18" SLPCCS PIPE = 100 LIN. FT.

STA. 199+99 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 200+83 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 197+86 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'

STA. 192+90 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 296' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 195+90
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 296 LIN. FT.
18" SLPCCS PIPE = 296 LIN. FT.

STA. 195+90 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 192' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 197+86
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 192 LIN. FT.
18" SLPCCS PIPE = 192 LIN. FT.

STA. 197+86 IN PLACE
30" X 36' R.C. PIPE CULVERT
WITH HDWL LT.
REMOVE HDWL AND EXTEND
6' LT. AND 8' RT. WITH CONCRETE COLLARS
TO A COMPLETED LENGTH OF 48'
CONNECT TO DROP INLETS @ STA. 197+86 LT. & RT.
30" R.C. PIPE (CLASS IV) = 22 LIN. FT.

STA. 200+55 CONSTRUCT
TURNOUT ON LT. = 5 CU. YD.

STA. 203+71 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.6 SQ. YDS.

STA. 204+19 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.6 SQ. YDS.

STA. 203+95 CONSTRUCT
TURNOUT ON LT. = 20 CU. YD.

HWY. 7
P.I. = 189+64.64
Δ = 8°03'34" LT.
D = 1°30'00"
T = 269.09'
L = 537.30
P.C. = 186+95.55
P.T. = 192+32.85
e = R.C.
Ls = 300'

190 195 200 205

+20.00 82.00 | +80.00 66.00 | +70.00 120.00 | +76.04 124.00 | P.T. 192+32.85 | +30.00 96.00 | +40.00 42.00 | +10.00 86.00 | +60.00 82.00 | +30.00 40.00 | PROP. R/W | +00.00 46.00 | +06.74 64.00 | OAK CREEK DR | +73.86 46.15 | +30.00 48.00 | P.I. 202+12.22 | +90.00 56.00 | CLARENCE CI | CONST. LIMITS

N 37°15'09" E

+65 | +24 | +91 | +28 | +55 | +93 | +95 | N 58°03'06" E

+90.00 41.41-50.00 | +12.30 40.00 | +40.00 60.00 | +00.00 64.00 | +35.00 64.00 | +40.00 53.09 | +64.91 50.03 | +00.00 44.00 | +80.00 64.00 | +30.00 56.00 | +50.00 60.00 | +10.00 46.00 | +50.00 40.00 | P.C. 200+80.78 | +22.00 40.00-20.00 | P.T. 203+40.77 | +80.00 70.00 | +00.00 42.00 | +50.00 36.39

+75.00 53.28-66.00 | +15.00 52.92-66.00 | +89.39 52.28 | 102.68 70.00

40' | 20' | 22' | 40' | 20' | 40' | 46'

LANDSCAPE TIMBER | PK35 | PK37 | PK34 | PK33 | PK36 | 3" CAPPED STD. MON STAMPED PK34 | 3" CAPPED PK36 | 3" CAPPED PK35

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 193+91 IN PLACE
18" X 31' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 190+65 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 192+95 CONSTRUCT
JUNCTION BOX ON RT.
AND 30" X 12' PIPE INLET WITH F.E.S.
AND 30" X 62' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 193+61
JUNCTION BOX H = 5'-6"
TYPE E JUNCTION BOX = 4' X 4'
30" R.C. PIPE = 74 LIN FT.
30" SLPCCS PIPE = 62 LIN FT.
30" F.E.S. = 1 EACH

STA. 194+90 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 30" X 292' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 197+86
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 2 LIN. FT.
30" R.C. PIPE = 292 LIN. FT.
30" SLPCCS PIPE = 292 LIN. FT.
18" F.E.S. = 1 EACH

STA. 197+86 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 30" X 210' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 200+00
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 4 LIN. FT.
30" R.C. PIPE = 210 LIN. FT.
30" SLPCCS PIPE = 210 LIN. FT.
18" F.E.S. = 1 EACH

STA. 200+00 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 30" X 172' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 201+80
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE = 172 LIN. FT.
30" SLPCCS PIPE = 172 LIN. FT.

HWY. 7
P.I. = 202+12.22
Δ = 20°47'57" RT.
D = 8°00'00"
T = 131.44'
L = 259.99'
P.C. = 200+80.78
P.T. = 203+40.77
e = 0.040'/'
Ls = 360'

STA. 203+70 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 6' PIPE INLET WITH F.E.S.
AND 30" X 290' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 206+86
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 6 LIN. FT.
30" R.C. PIPE = 290 LIN. FT.
30" SLPCCS PIPE = 290 LIN. FT.
18" F.E.S. = 1 EACH

POND | POND

STA. 201+80 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 30" X 180' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 203+70
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE = 180 LIN. FT.
30" SLPCCS PIPE = 180 LIN. FT.

STA. 203+40 IN PLACE
18" X 33' R.C. PIPE CULVERT
WITH F.E.S. RT.
REMOVE F.E.S. AND CUT PIPE 27' RT.

STA. 202+93 IN PLACE
30" X 104' R.C. PIPE CULVERT
WITH F.E.S. LT. AND RT.
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

REMOVAL AND DISPOSAL OF GATES

STA.	STA.	SIDE	EACH
193+79	194+03	RT.	1

STA. 193+61 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 30" X 124' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 194+90
DROP INLET H = 3'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 4 LIN. FT.
30" R.C. PIPE = 124 LIN. FT.
30" SLPCCS PIPE = 124 LIN. FT.
18" F.E.S. = 1 EACH

STA. 193+24 IN PLACE
18" X 47' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 20 CU. YD.

STA. 195+28 IN PLACE
30" X 96' R.C. PIPE CULVERT
WITH F.E.S. LT. AND RT.
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 10 CU. YD. UNCL. EXC.

STA. 197+70.00 TO STA. 197+86.00 ON RT.
CONC. DITCH PAVING (TYPE B) = 11.24 SQ. YD.

6/22/2020

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HWY. 7

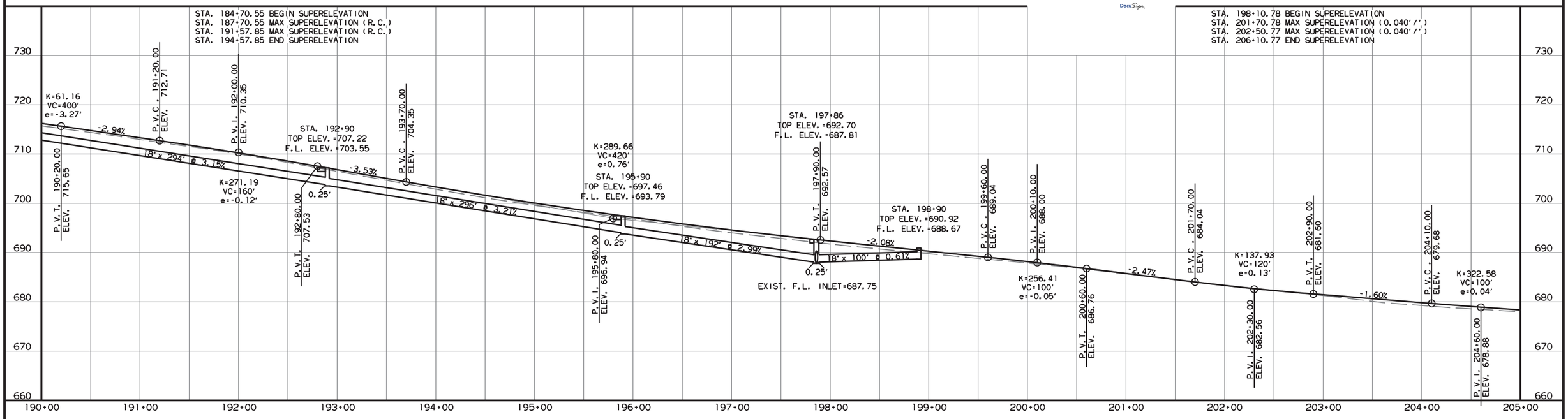
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				6	ARK.			
				JOB NO.		061547	104	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

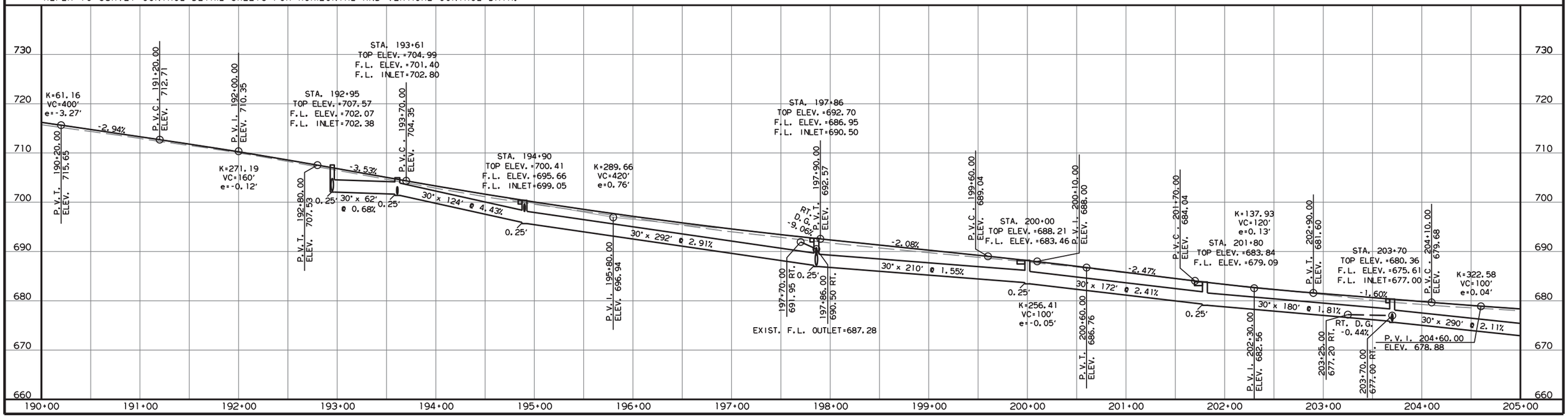
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

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STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	105	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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STA. 207+28 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
IN TOP OF BOX CULVERT
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
210+76	212+40	LT.	168
213+26	215+39	LT.	202

STA. 215+16 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 215+64 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 217+74 IN PLACE
15' X 60' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON LT. = 5 CU. YD.

STA. 215+40 IN PLACE
PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON LT. = 30 CU. YD.

STA. 216+17 CONSTRUCT
DROP INLET ON LT.
IN TOP OF BOX CULVERT
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'

STA. 219+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 207+09 IN PLACE
QUAD. 7' X 4' X 99' R.C. BOX CULVERT
ON 45° LT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
RETAIN
Q50 = 640 CFS; D.A. = 240 ACRES

STA. 213+12 IN PLACE
QUAD. 9' X 5' X 109' R.C. BOX CULVERT
ON 45° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
RETAIN
Q50 = 980 CFS; D.A. = 365 ACRES

STA. 214+48 CONSTRUCT
DROP INLET ON LT.
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 18" X 162' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 216+31
DROP INLET H = 2'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 166 LIN. FT.
18" SLPCCS PIPE = 162 LIN. FT.
18" F.E.S. = 1 EACH

STA. 214+75 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 216+31 IN PLACE
QUAD. 9' X 5' X 74' R.C. BOX CULVERT
WITH 3:1 WINGS LT. & RT.
RETAIN
Q50 = 960 CFS; D.A. = 340 ACRES

STA. 206+00 INSTALL
30" X 42" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 105 CU. YD.

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
210+78	212+40	LT.	4' C.L.	168
213+26	215+17	LT.	4' C.L.	162
215+17	215+28	LT.	D	45

STA. 217+28 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 217+51 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 217+98 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

HWY. 7
P.I. = 210+20.93
Δ = 9°31'44" RT.
D = 3°00'00"
T = 159.18'
L = 317.63'
P.C. = 208+61.75
P.T. = 211+79.38
e = 0.028'/'
Ls = 300'

STA. 208+26 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 12' PIPE INLET WITH F.E.S.
AND 18" X 120' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 206+86
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 132 LIN. FT.
18" SLPCCS PIPE = 120 LIN. FT.
18" F.E.S. = 1 EACH

STA. 211+08 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 30" X 202' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 213+36
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 2 LIN. FT.
30" R.C. PIPE = 202 LIN. FT.
18" SLPCCS PIPE = 202 LIN. FT.
18" F.E.S. = 1 EACH

STA. 213+31 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
IN TOP OF BOX CULVERT
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'

STA. 215+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 216+80 CONSTRUCT
DROP INLET ON RT.
AND 24" X 44' PIPE OUTLET WITH F.E.S.
DROP INLET H = 9'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 44 LIN. FT.
24" SLPCCS PIPE = 44 LIN. FT.
24" F.E.S. = 1 EACH

STA. 218+85 CONSTRUCT
APPROACH ON RT. = 50 CU. YD.

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 206+90 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
IN TOP OF BOX CULVERT
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'

STA. 209+25 CONSTRUCT
DROP INLET ON RT.
AND 30" X 4' PIPE INLET WITH F.E.S.
AND 30" X 176' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 211+08
DROP INLET H = 3'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
R.C. PIPE = 180 LIN. FT.
30" SLPCCS PIPE = 176 LIN. FT.
30" F.E.S. = 1 EACH

STA. 211+43 IN PLACE
DBL. 24" X 40' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 208+49 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 209+02 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 208+75 IN PLACE
DBL. 24" X 44' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON RT. = 5 CU. YD.

SPECIAL FLOOD HAZARD AREA

STA. 218+51 CONSTRUCT
DROP INLET ON RT.
AND 24" X 168' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 216+80
DROP INLET H = 8'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 168 LIN. FT.
24" SLPCCS PIPE = 168 LIN. FT.

STA. 219+80 CONSTRUCT
DROP INLET ON RT.
AND 24" X 126' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 218+51
DROP INLET H = 7'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 126 LIN. FT.
24" SLPCCS PIPE = 126 LIN. FT.

HWY. 7

6/22/2020

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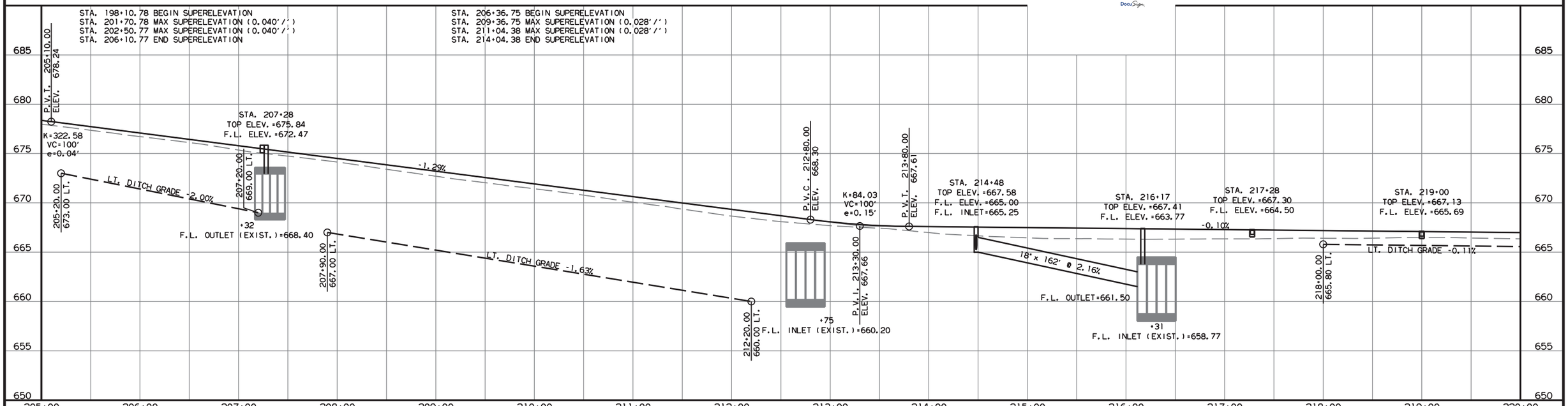
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6	ARK.			
JOB NO.		061547	106	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

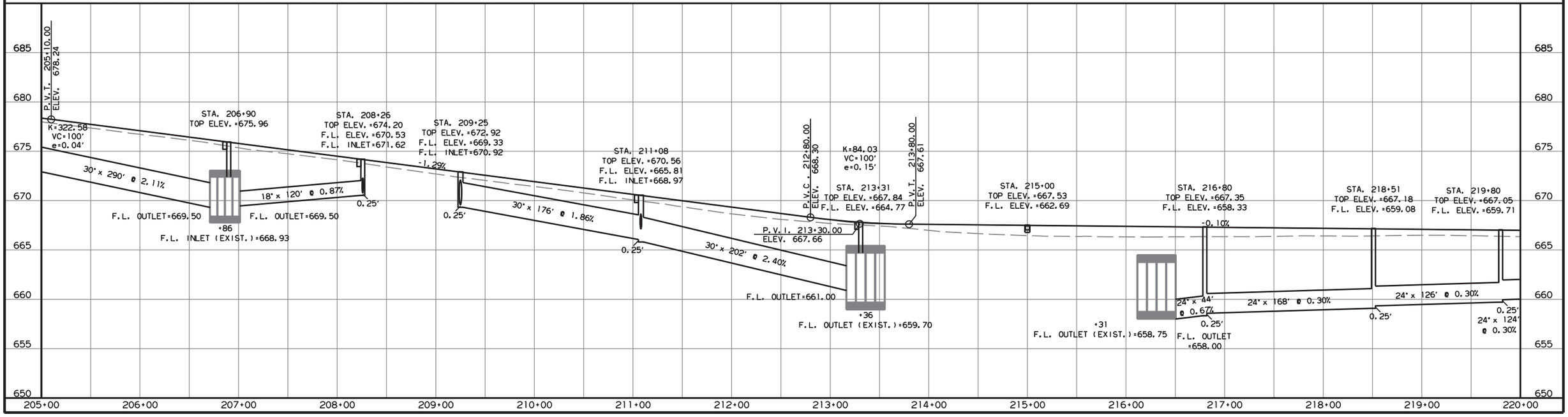
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	107	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

STA. 221+09 IN PLACE
18" X 49' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON LT. = 5 CU. YD.

STA. 220+63 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 18" X 142' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 222+08
DROP INLET H = 2'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 144 LIN. FT.
18" SLPCCS PIPE = 142 LIN. FT.
18" F.E.S. = 1 EACH

STA. 221+75 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 220+86 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 221+33 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 222+08 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
DROP INLET H = 5'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 2 LIN. FT.
18" SLPCCS PIPE = 2 LIN. FT.
18" F.E.S. = 1 EACH

STA. 222+07 IN PLACE
24" X 37' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS AND EXTEND
6' LT. AND 6' RT. WITH CONCRETE COLLARS
TO A COMPLETED LENGTH OF 49'
CONNECT TO DROP INLETS @ STA. 222+08 LT.
AND @ STA. 222+05 RT.
24" R.C. PIPE (CLASS IV) = 20 LIN. FT.
Q50 = 8 CFS; D.A. = 3 ACRES

STA. 222+77 IN PLACE
12" X 20' PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD. UNCL. EXC.

STA. 223+53 CONSTRUCT
DROP INLET ON LT.
AND 18" X 142' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 222+08
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 142 LIN. FT.
18" SLPCCS PIPE = 142 LIN. FT.

STA. 223+80 CONSTRUCT
APPROACH ON LT. = 45 CU. YD. UNCL. EXC.

STA. 224+60 IN PLACE
10" X 55' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 224+80 CONSTRUCT
DROP INLET ON LT.
AND 24" X 6' PIPE INLET WITH F.E.S. LT.
AND 24" X 66' PIPE OUTLET WITH F.E.S. RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 6 LIN. FT.
24" R.C. PIPE (CLASS V) = 66 LIN. FT.
24" F.E.S. = 1 EACH
Q50 = 9 CFS; D.A. = 7 ACRES

STA. 225+65 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 226+55 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 6'

STA. 227+45 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 226+95 IN PLACE
12" X 50' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 25 CU. YD. COMP. EMB.
= 5 CU. YD. UNCL. EXC.

STA. 228+35 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 228+88 IN PLACE
12" X 30' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 15 CU. YD.

STA. 229+24 CONSTRUCT
DROP INLET ON LT.
AND 24" X 6' PIPE INLET WITH F.E.S. LT.
AND 24" X 78' PIPE OUTLET WITH F.E.S. RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 6 LIN. FT.
24" R.C. PIPE (CLASS V) = 78 LIN. FT.
24" F.E.S. = 2 EACH
Q50 = 12 CFS; D.A. = 9 ACRES

STA. 230+10 CONSTRUCT
DROP INLET ON LT.
AND 18" X 80' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 229+24
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 80 LIN. FT.
18" SLPCCS PIPE = 80 LIN. FT.

STA. 231+80 CONSTRUCT
DROP INLET ON LT.
AND 18" X 174' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 233+57
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 174 LIN. FT.
18" SLPCCS PIPE = 174 LIN. FT.

STA. 233+70 IN PLACE
18" X 25' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 233+57 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 100' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 234+60
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 100 LIN. FT.
18" SLPCCS PIPE = 100 LIN. FT.

STA. 233+74 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 234+24 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 234+60.00 TO STA. 235+40.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 56.18 SQ. YD.

STA. 234+13 IN PLACE
15" X 28' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON LT. = 75 CU. YD. UNCL. EXC.

STA. 234+60 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 76' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 235+40
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 76 LIN. FT.
18" SLPCCS PIPE = 76 LIN. FT.

STA. 234+09 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 232' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 236+45
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 232 LIN. FT.
18" SLPCCS PIPE = 232 LIN. FT.

HWY. 7
P.I. = 227+94.12
Δ = 22°13'34" LT.
D = 5°00'00"
T = 225.09'
L = 444.52'
P.C. = 225+69.03
P.T. = 230+13.55
e = 0.036'/'
Ls = 300'

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
222+10	223+29	RT.	148
226+39	227+88	RT.	193
228+70	229+48	RT.	109

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
226+40	227+88	RT.	4' C.L. D	156
228+70	229+48	RT.		86

STA. 221+10.00
BEGIN RETAINING WALL
AND HAND RAIL

STA. 223+08.00
END RETAINING WALL
AND HAND RAIL

STA. 223+57 CONSTRUCT
TURNOUT ON RT. = 30 CU. YD.

STA. 221+08 CONSTRUCT
DROP INLET ON RT.
AND 24" X 124' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 219+80
DROP INLET H = 6'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 124 LIN. FT.
24" SLPCCS PIPE = 124 LIN. FT.

STA. 223+11 CONSTRUCT
DROP INLET ON RT.
AND 18" X 28' PIPE OUTLET WITH F.E.S.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 28 LIN. FT.
18" SLPCCS PIPE = 28 LIN. FT.
18" F.E.S. = 1 EACH

STA. 224+94 IN PLACE
18" X 35' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS, PLUG, AND ABANDON

STA. 220+20 IN PLACE
18" X 47' C.P. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 55 CU. YD.

STA. 222+05 CONSTRUCT
DROP INLET ON RT.
AND 24" X 94' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 221+08
DROP INLET H = 6'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 94 LIN. FT.
24" SLPCCS PIPE = 94 LIN. FT.

STA. 225+27 CONSTRUCT
TURNOUT ON RT. = 110 CU. YD.

STA. 226+03 CONSTRUCT
APPROACH ON RT. = 50 CU. YD.

STA. 223+33 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 223+81 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 224+88 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 225+38 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 228+05 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 228+59 CONSTRUCT
TURNOUT ON RT. = 100 CU. YD.

STA. 229+19 IN PLACE
18" X 82' R.C. PIPE CULVERT
WITH HDWL LT.
REMOVE HDWL, PLUG, AND ABANDON

STA. 230+67 CONSTRUCT
APPROACH ON RT. = 10 CU. YD.

STA. 231+10 CONSTRUCT
APPROACH ON RT. = 155 CU. YD.

SPECIAL FLOOD HAZARD AREA

STA. 228+37 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 228+81 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

BIG SAM LN
GRIMMETT LOOP
BELVEDERE OAKS CIR
DELONA LN
PROP. R/W
CONST. LIMITS
T.C.E.
N 67°34'50" E
N 45°21'16" E
T.C.E. MON STAMPED PN:38
T.C.E. MON STAMPED PN:39
RAILROAD R/W
T&T

6/22/2020

R061547.DGN

HWY. 7

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.		061547	108	323

(2) PLAN AND PROFILE SHEETS

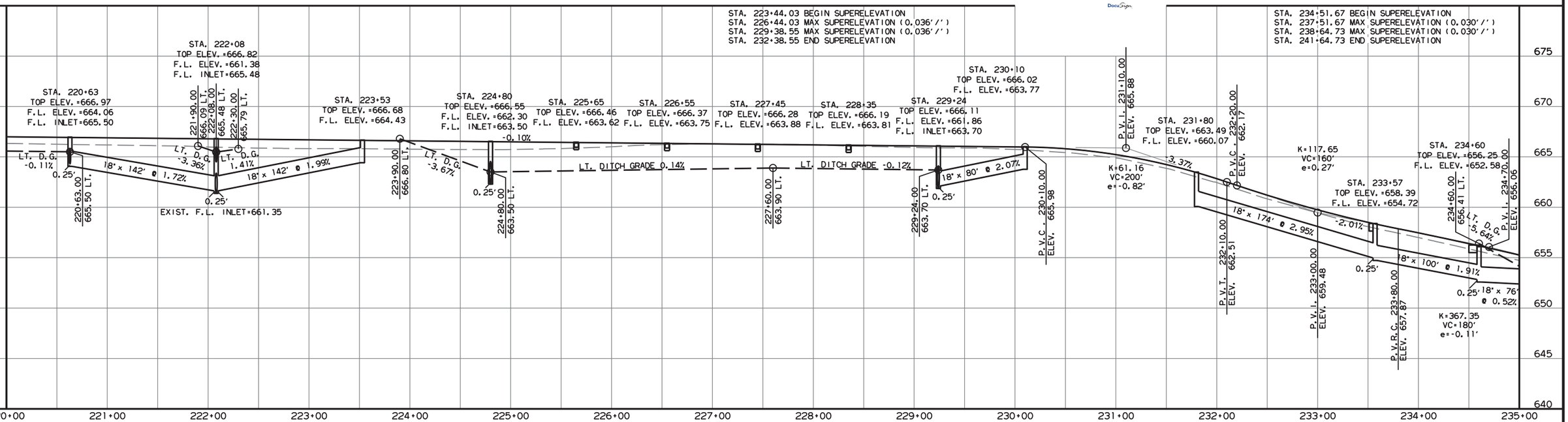
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEFT SIDE OF HWY. 7

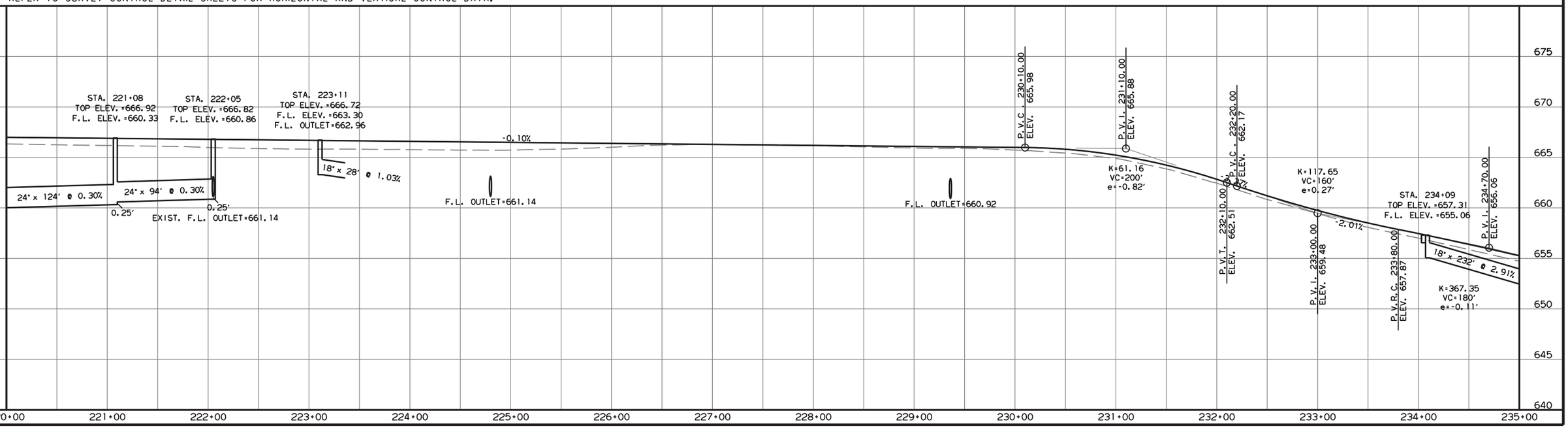
STA. 223+44.03 BEGIN SUPERELEVATION
STA. 226+44.03 MAX SUPERELEVATION (0.036'/')
STA. 229+38.55 MAX SUPERELEVATION (0.036'/')
STA. 232+38.55 END SUPERELEVATION

STA. 234+51.67 BEGIN SUPERELEVATION
STA. 237+51.67 MAX SUPERELEVATION (0.030'/')
STA. 238+64.73 MAX SUPERELEVATION (0.030'/')
STA. 241+64.73 END SUPERELEVATION



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

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STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

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.		061547	109	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
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STA. 237+70.00 TO STA. 239+49.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 125.70 SQ. YD.

STA. 239+70.00 TO STA. 240+00.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 21.07 SQ. YD.

STA. 244+80.00 TO STA. 245+24.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 30.90 SQ. YD.

STA. 235+40 CONSTRUCT
DROP INLET ON LT.
AND 24" X 6' PIPE OUTLET WITH F.E.S.
DROP INLET H = 2'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 6 LIN. FT.
24" SLPCCS PIPE = 6 LIN. FT.
24" F.E.S. = 1 EACH

STA. 238+17 IN PLACE
18" X 33' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 50' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 80 CU. YD.

STA. 240+69 CONSTRUCT
DROP INLET ON LT.
AND 18" X 104' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 142+03
DROP INLET H = 3'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 104 LIN. FT.
18" SLPCCS PIPE = 104 LIN. FT.

STA. 242+48 CONSTRUCT
APPROACH ON LT. = 135 CU. YD. UNCL. EXC.

STA. 247+00.00 TO STA. 247+90.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 63.20 SQ. YD.

STA. 236+30 IN PLACE
18" X 180' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 15 CU. YD. COMP. EMB.
= 15 CU. YD. UNCL. EXC.

STA. 239+58 IN PLACE
7' X 4' X 45' R.C. BOX CULVERT
WITH 3:1 WINGS LT. & RT.
RETAIN AND EXTEND 21' LT. AND 22' RT.
WITH 3:1 WINGS LT. & RT.
TO A COMPLETED LENGTH OF 88'
Q50 = 267 CFS; D.A. = 70 ACRES

STA. 241+70 CONSTRUCT
DROP INLET ON LT.
AND 22" X 14" X 2' ARCH PIPE INLET WITH F.E.S.
AND 18" X 98' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 240+69
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
22" X 14" R.C. ARCH PIPE = 2 LIN. FT.
18" R.C. PIPE = 98 LIN. FT.
18" SLPCCS PIPE = 98 LIN. FT.
22" X 14" ARCH F.E.S. = 1 EACH

STA. 244+60 IN PLACE
18" X 40' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 248+20 IN PLACE
18" X 34' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

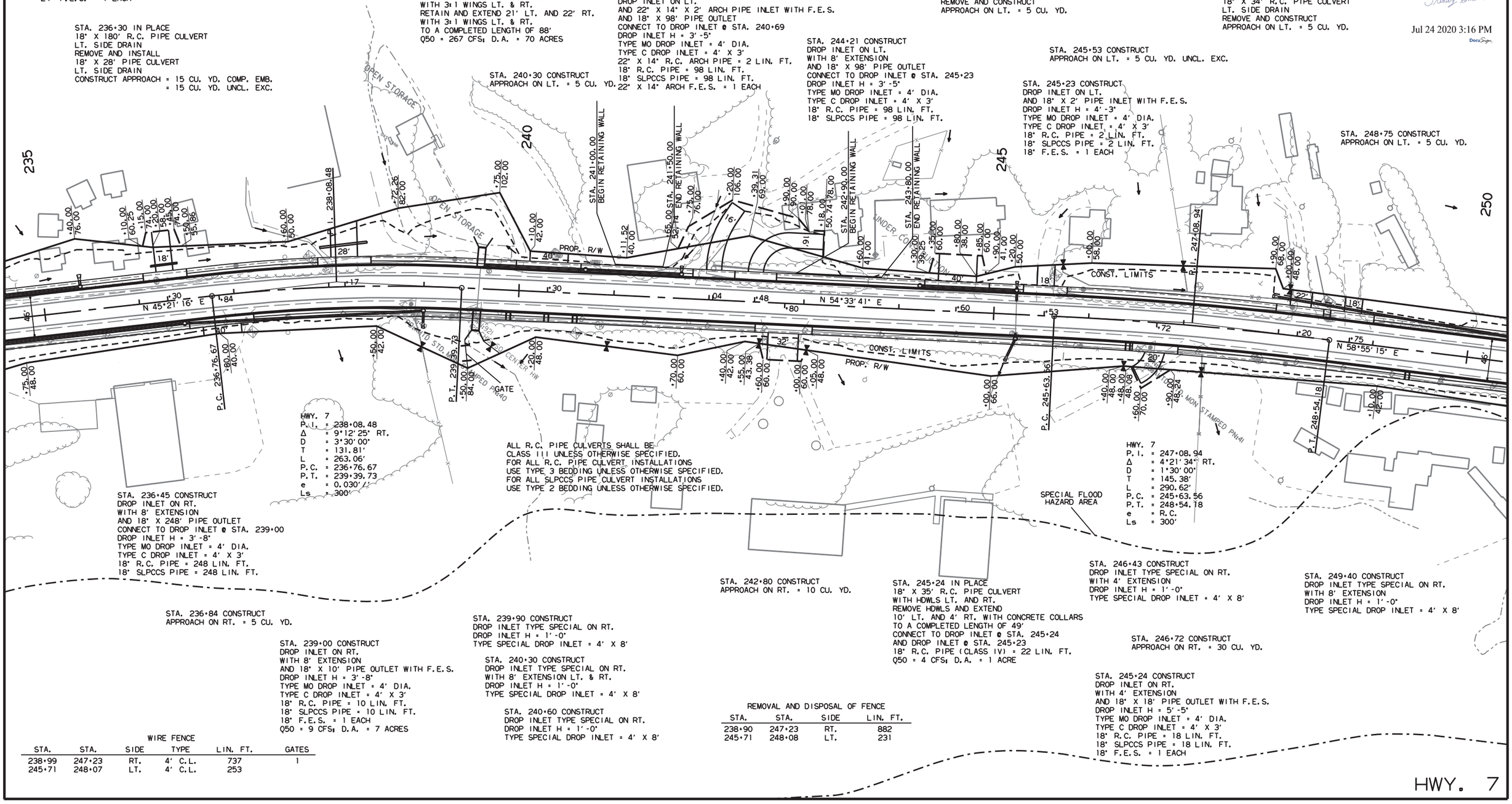
STA. 240+30 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 244+21 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 98' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 245+23
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 98 LIN. FT.
18" SLPCCS PIPE = 98 LIN. FT.

STA. 245+53 CONSTRUCT
APPROACH ON LT. = 5 CU. YD. UNCL. EXC.

STA. 245+23 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 2 LIN. FT.
18" SLPCCS PIPE = 2 LIN. FT.
18" F.E.S. = 1 EACH

STA. 248+75 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.



HWY. 7
P.I. = 238+08.48
Δ = 9°12'25" RT.
D = 3°30'00"
T = 131.81'
L = 263.06'
P.C. = 236+76.67
P.T. = 239+39.73
e = 0.030'/'
Ls = 300'

HWY. 7
P.I. = 247+08.94
Δ = 4°21'34" RT.
D = 1°30'00"
T = 145.38'
L = 290.62'
P.C. = 245+63.56
P.T. = 248+54.18
e = R.C.
Ls = 300'

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

SPECIAL FLOOD HAZARD AREA

STA. 236+45 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 248' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 239+00
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 248 LIN. FT.
18" SLPCCS PIPE = 248 LIN. FT.

STA. 242+80 CONSTRUCT
APPROACH ON RT. = 10 CU. YD.

STA. 245+24 IN PLACE
18" X 35' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS AND EXTEND
10' LT. AND 4' RT. WITH CONCRETE COLLARS
TO A COMPLETED LENGTH OF 49'
CONNECT TO DROP INLET @ STA. 245+24
AND DROP INLET @ STA. 245+23
18" R.C. PIPE (CLASS IV) = 22 LIN. FT.
Q50 = 4 CFS; D.A. = 1 ACRE

STA. 246+43 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 249+40 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 236+84 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 239+00 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 10' PIPE OUTLET WITH F.E.S.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 10 LIN. FT.
18" SLPCCS PIPE = 10 LIN. FT.
18" F.E.S. = 1 EACH
Q50 = 9 CFS; D.A. = 7 ACRES

STA. 239+90 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 240+30 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 8' EXTENSION LT. & RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 240+60 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 246+72 CONSTRUCT
APPROACH ON RT. = 30 CU. YD.

STA. 245+24 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 18' PIPE OUTLET WITH F.E.S.
DROP INLET H = 5'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 18 LIN. FT.
18" SLPCCS PIPE = 18 LIN. FT.
18" F.E.S. = 1 EACH

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.	GATES
238+99	247+23	RT.	4' C.L.	737	1
245+71	248+07	LT.	4' C.L.	253	

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
238+90	247+23	RT.	882
245+71	248+08	LT.	231

6/22/2020

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HWY. 7

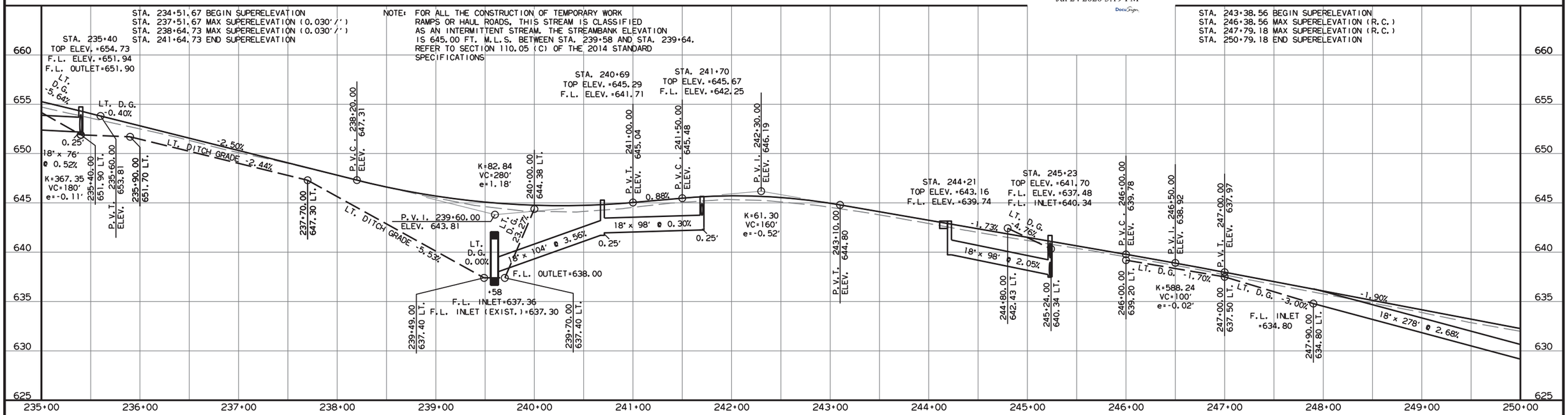
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				6	ARK.			
				JOB NO.		061547	110	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

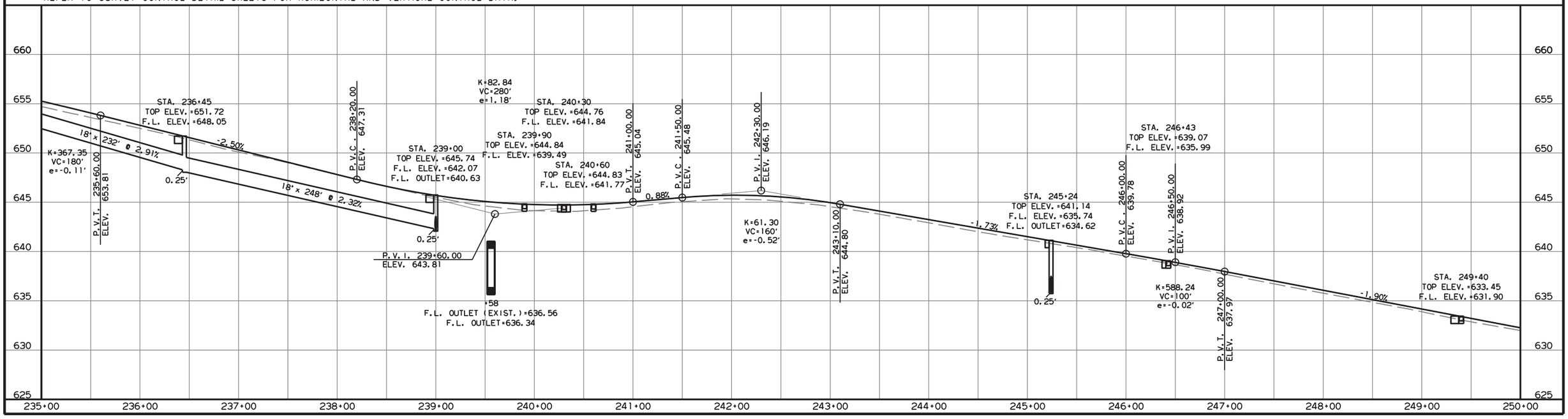
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

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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.		061547	111	323

(2) PLAN AND PROFILE SHEETS

STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STA. 250+97 IN PLACE
40' PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 253+13 IN PLACE
18" X 24' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 254+75 CONSTRUCT
YARD DRAIN ON LT.
AND 12" X 14' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 254+90
YARD DRAIN H = 2'-1"
YARD DRAIN = 1'-6" DIA.
12" YARD DRAIN = 14 LIN. FT.

STA. 258+15 INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 25 CU. YD.

STA. 258+86 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 210' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 261+00
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 210 LIN. FT.
18" SLPCCS PIPE = 210 LIN. FT.

STA. 262+79 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION LT. & RT.
AND 22" X 14" X 2' ARCH PIPE INLET WITH F.E.S.
AND 36" X 68' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 262+66 RT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE OUTLET (CLASS IV) = 68 LIN. FT.
22" X 14" R.C. ARCH PIPE = 2 LIN. FT.
22" X 14" ARCH F.E.S. = 1 EACH

HWY. 7
P.I. = 263+63.59
Δ = 18°17'35" LT.
D = 6°00'00"
T = 153.75'
L = 304.89'
P.C. = 262+09.84
P.T. = 265+14.73
e = 0.038'/'
Ls = 360'

STA. 250+69 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 272' PIPE INLET WITH F.E.S.
AND 24" X 212' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 252+86
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 272 LIN. FT.
24" R.C. PIPE = 212 LIN. FT.
24" SLPCCS PIPE = 212 LIN. FT.
18" F.E.S. = 1 EACH

STA. 252+86 CONSTRUCT
DROP INLET ON LT.
AND 42" X 2' PIPE INLET WITH F.E.S.
AND 48" X 88' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 253+80
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 5' X 5'
42" R.C. PIPE = 2 LIN. FT.
48" R.C. PIPE = 88 LIN. FT.
48" SLPCCS PIPE = 88 LIN. FT.
42" F.E.S. = 1

STA. 254+90 CONSTRUCT
DROP INLET ON LT.
AND 60" X 70' PIPE OUTLET WITH F.E.S.
DROP INLET H = 7'-6"
TYPE C DROP INLET = 7' X 5'
60" R.C. PIPE (CLASS V) = 70 LIN. FT.
Q50 = 105 CFS; D.A. = 70 ACRES
60" F.E.S. = 1

STA. 256+60 IN PLACE
18" X 27' R.C. PIPE CULVERT
LT. SIDE DRAIN
RETAIN

STA. 259+13 CONSTRUCT
APPROACH ON LT. = 15 CU. YD. UNCL. EXC.

STA. 257+84 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 6' PIPE INLET WITH F.E.S.
AND 30" X 130' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 256+50
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 136 LIN. FT.
30" SLPCCS PIPE = 130 LIN. FT.
30" F.E.S. = 1 EACH

STA. 253+80 CONSTRUCT
DROP INLET ON LT.
AND 48" X 104' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 254+90
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
48" R.C. PIPE = 104 LIN. FT.
48" SLPCCS PIPE = 104 LIN. FT.

STA. 256+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 36" X 152' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 254+90
DROP INLET H = 6'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 2 LIN. FT.
36" R.C. PIPE = 152 LIN. FT.
36" SLPCCS PIPE = 152 LIN. FT.
18" F.E.S. = 1

HWY. 7
P.I. = 255+20.49
Δ = 6°40'41" LT.
D = 4°00'00"
T = 83.57'
L = 166.95'
P.C. = 254+36.92
P.T. = 256+03.87
e = 0.034'/'
Ls = 300'

STA. 254+86.89
BEGIN RETAINING WALL

STA. 256+00.00
END RETAINING WALL

STA. 262+46 CONSTRUCT
DROP INLET ON LT.
AND 18" X 28' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+79
DROP INLET H = 2'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 28 LIN. FT.
18" SLPCCS PIPE = 28 LIN. FT.

STA. 263+67 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 54' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 263+07
DROP INLET H = 5'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE = 54 LIN. FT.
30" SLPCCS PIPE = 54 LIN. FT.

STA. 261+00 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 142' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+46
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 142 LIN. FT.
18" SLPCCS PIPE = 142 LIN. FT.

STA. 263+07 CONSTRUCT
DROP INLET ON LT.
AND 30" X 22' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+79
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE = 22 LIN. FT.
30" SLPCCS PIPE = 22 LIN. FT.

STA. 263+39 IN PLACE
18" X 22' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 55 CU. YD. UNCL. EXC.

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
258+04	258+72	RT.	4' C.L.	68

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
256+92	258+72	RT.	106

STA. 252+14 CONSTRUCT
APPROACH ON RT. = 50 CU. YD.

STA. 251+84 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 58' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 252+45
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 58 LIN. FT.
18" SLPCCS PIPE = 58 LIN. FT.

STA. 254+34 CONSTRUCT
TURNOUT ON RT. = 35 CU. YD.

STA. 252+45 CONSTRUCT
DROP INLET ON RT.
AND 18" X 8' PIPE OUTLET WITH F.E.S.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 8 LIN. FT.
18" SLPCCS PIPE = 8 LIN. FT.
18" F.E.S. = 1 EACH

STA. 254+78 IN PLACE
4' X 5' X 37' R.C. BOX CULVERT
REMOVE HDWLS. AND WINGS
PLUG AND ABANDON

STA. 253+62 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.1 SQ. YDS.

STA. 254+72 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 257+20 CONSTRUCT
APPROACH ON RT. = 35 CU. YD.

STA. 257+87 IN PLACE
18" X 33' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 85 CU. YD.

STA. 258+84 CONSTRUCT
APPROACH ON RT. = 30 CU. YD.

STA. 259+00.00 TO STA. 259+25.00 ON RT.
CONC. DITCH PAVING (TYPE B) = 17.56 SQ. YD.

STA. 259+15 CONSTRUCT
DROP INLET ON RT.
AND 18" X 10' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 10 LIN. FT.
18" SLPCCS PIPE = 10 LIN. FT.
18" F.E.S. = 1 EACH
CHANNEL CHANGE = 10 CU. YD. UNCL. EXC.

STA. 258+57 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 54' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 259+15
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 54 LIN. FT.
18" SLPCCS PIPE = 54 LIN. FT.

STA. 260+78 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 260+26 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 108' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 259+15
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 108 LIN. FT.
18" SLPCCS PIPE = 108 LIN. FT.

STA. 262+19 CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 262+66 IN PLACE
JUNCTION BOX ON RT.
24" X 40' R.C. PIPE INLET
REMOVE
24" X 300' P.V.C. PIPE OUTLET
FILL AND ABANDON

STA. 262+66 CONSTRUCT
JUNCTION BOX ON RT.
WITH 24" PIPE OUTLET
CONNECT EXIST. PIPE ON RT.
JUNCTION BOX H = 6'-5"
TYPE E JUNCTION BOX = 5' X 2'

STA. 263+50 CONSTRUCT
APPROACH ON RT. = 25 CU. YD.

SPECIAL FLOOD HAZARD AREA

HWY. 7

6/22/2020

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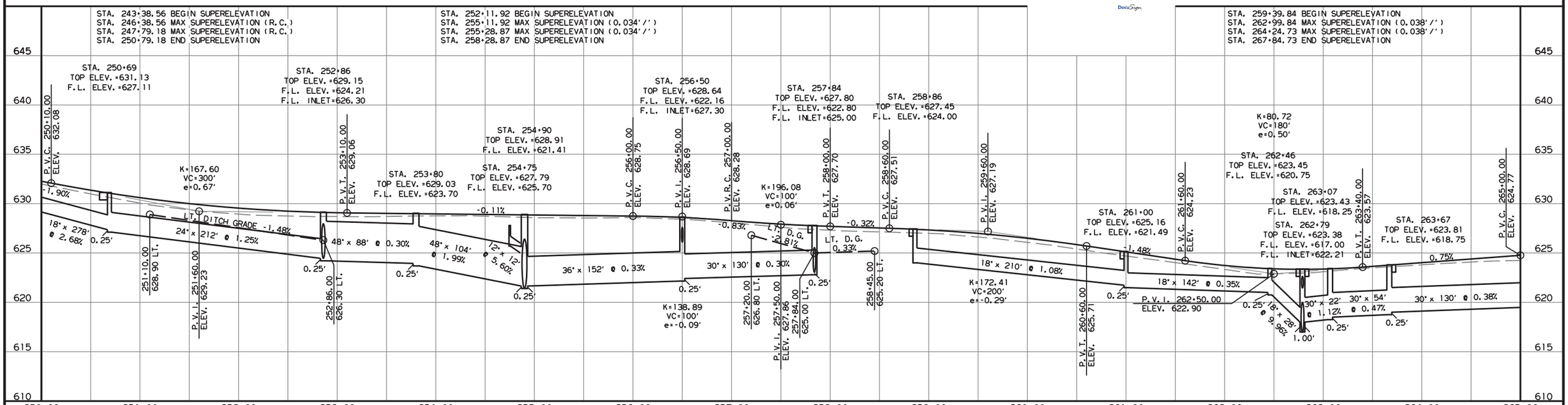
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				6	ARK.			
				JOB NO.		061547	112	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

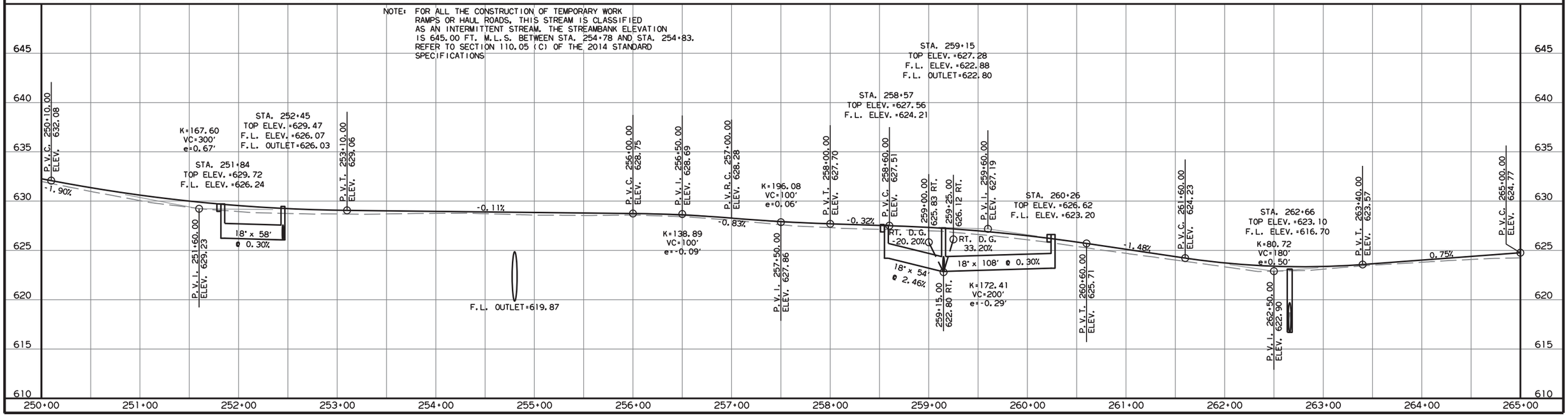
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LEFT SIDE OF HWY. 7



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RIGHT SIDE OF HWY. 7



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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.		061547	113	323

(2) PLAN AND PROFILE SHEETS

STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

STA. 265+06 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 30" X 130' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 263+67
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 2 LIN. FT.
30" R.C. PIPE = 130 LIN. FT.
30" SLPCCS PIPE = 130 LIN. FT.
18" F.E.S. = 1 EACH

STA. 266+19 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 24" X 24' PIPE INLET WITH F.E.S.
AND 24" X 108' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 265+06
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 132 LIN. FT.
24" SLPCCS PIPE = 108 LIN. FT.
24" F.E.S. = 1 EACH

STA. 268+00 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 242' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+45
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 242 LIN. FT.
18" SLPCCS PIPE = 242 LIN. FT.

STA. 271+35 IN PLACE
12" X 31' S.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 85 CU. YD. UNCL. EXC.

STA. 270+45 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 60' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 271+08
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 60 LIN. FT.
18" SLPCCS PIPE = 60 LIN. FT.

HWY. 7
P.I. = 263+63.59
Δ = 18°17'35" LT.
D = 6°00'00"
T = 153.75'
L = 304.89'
P.C. = 262+09.84
P.T. = 265+14.73
e = 0.038'/'
Ls = 360'

STA. 266+53 CONSTRUCT
APPROACH ON LT. = 25 CU. YD. UNCL. EXC.

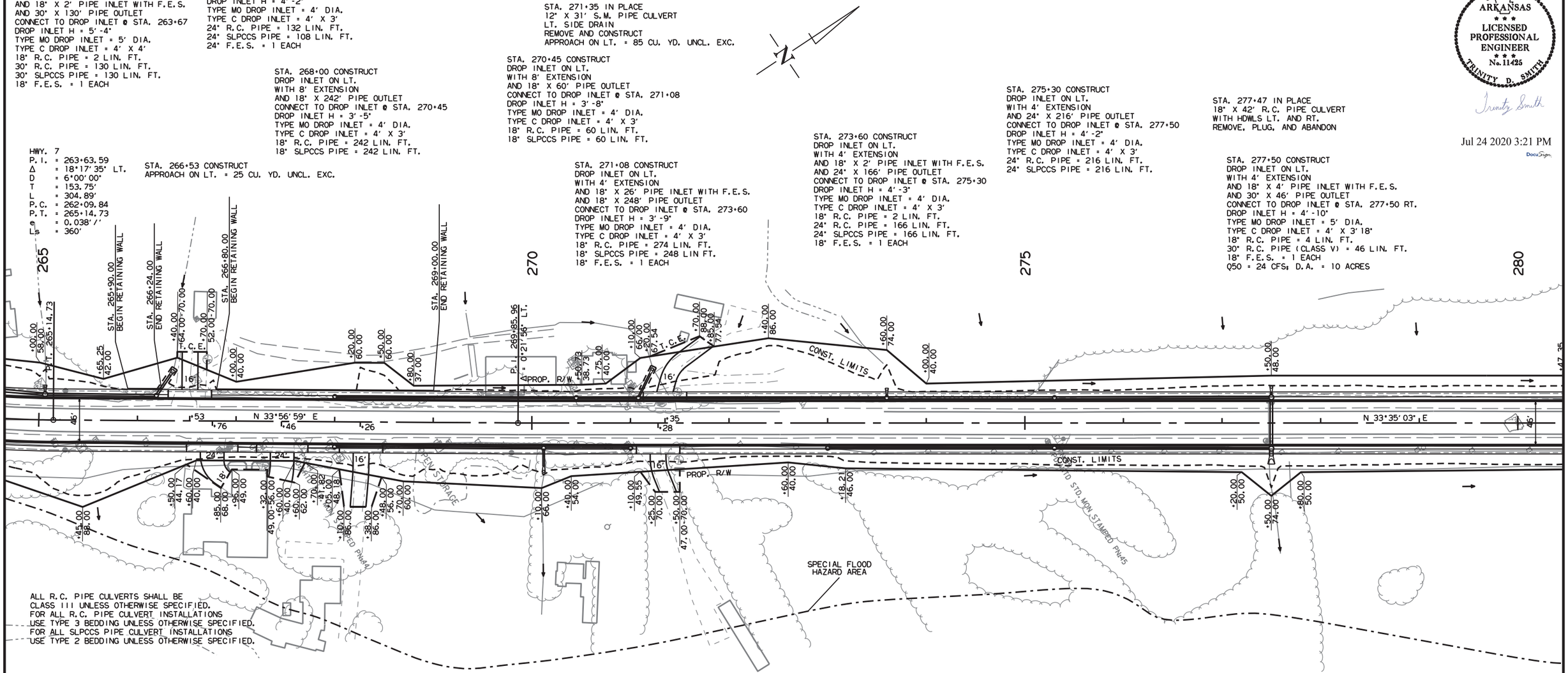
STA. 271+08 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 26' PIPE INLET WITH F.E.S.
AND 18" X 248' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 273+60
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 274 LIN. FT.
18" SLPCCS PIPE = 248 LIN FT.
18" F.E.S. = 1 EACH

STA. 273+60 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 24" X 166' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 275+30
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 2 LIN. FT.
24" R.C. PIPE = 166 LIN. FT.
24" SLPCCS PIPE = 166 LIN. FT.
18" F.E.S. = 1 EACH

STA. 275+30 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 24" X 216' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+50
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 216 LIN. FT.
24" SLPCCS PIPE = 216 LIN. FT.

STA. 277+47 IN PLACE
18" X 42' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE, PLUG, AND ABANDON

STA. 277+50 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 30" X 46' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+50 RT.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'18"
18" R.C. PIPE = 4 LIN. FT.
30" R.C. PIPE (CLASS V) = 46 LIN. FT.
18" F.E.S. = 1 EACH
Q50 = 24 CFS; D.A. = 10 ACRES



STA. 266+76 CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 268+00 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 208' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+12
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 208 LIN. FT.
18" SLPCCS PIPE = 208 LIN. FT.

STA. 267+46 CONSTRUCT
APPROACH ON RT. = 20 CU. YD.

STA. 268+26 CONSTRUCT
APPROACH ON RT. = 60 CU. YD.

STA. 270+12 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 16' PIPE OUTLET WITH F.E.S.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 16 LIN. FT.
18" SLPCCS PIPE = 16 LIN. FT.
18" F.E.S. = 1 EACH

STA. 271+00 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 84' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+12
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 84 LIN. FT.
18" SLPCCS PIPE = 84 LIN. FT.

STA. 271+28 CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 273+00 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 226' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 275+30
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 226 LIN. FT.
18" SLPCCS PIPE = 226 LIN. FT.

STA. 275+30 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 216' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+50
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 216 LIN. FT.
18" SLPCCS PIPE = 216 LIN. FT.

STA. 277+50 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 42" X 6' PIPE OUTLET WITH F.E.S.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5' X 3'
42" R.C. PIPE = 6 LIN. FT.
42" SLPCCS PIPE = 6 LIN. FT.
42" F.E.S. = 1 EACH

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

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HWY. 7

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				6	ARK.			
				JOB NO.		061547	114	323

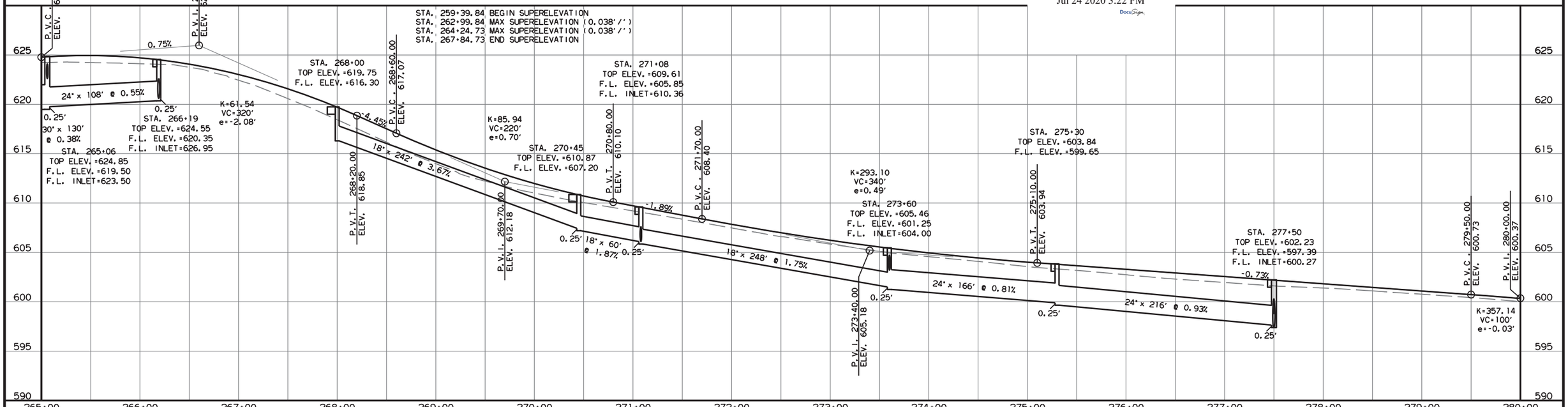
(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
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No. 11425
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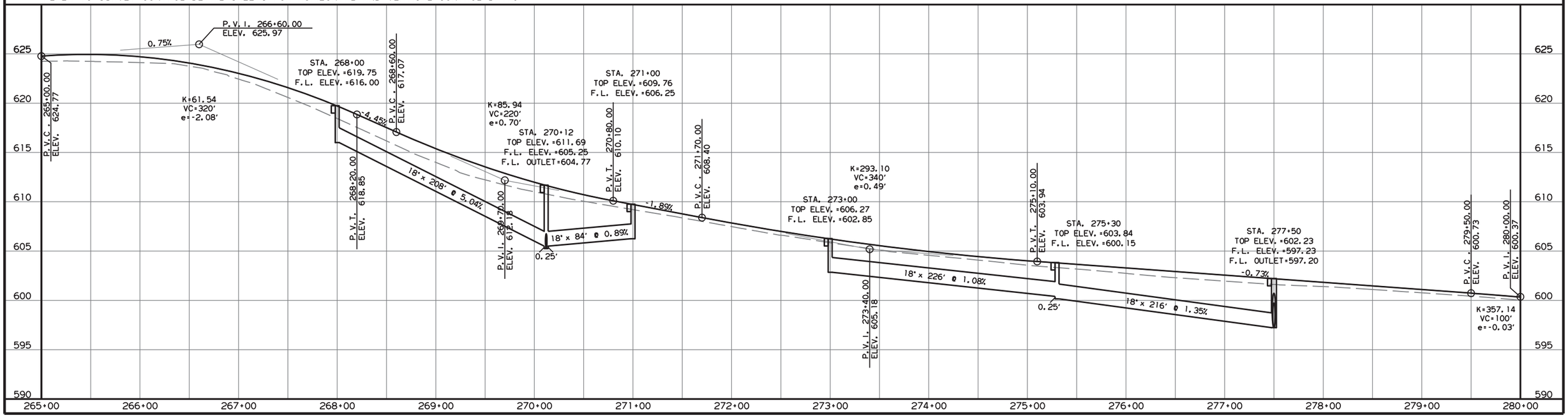
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LEFT SIDE OF HWY. 7



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RIGHT SIDE OF HWY. 7



6/22/2020

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STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	115	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
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STA. 283+46 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 284+12 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 281+45 CONSTRUCT
DROP INLET ON LT.
AND 24" X 172' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 283+20
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 172 LIN. FT.
24" SLPCCS PIPE = 172 LIN. FT.

STA. 283+79 CONSTRUCT
TURNOUT ON LT. = 25 CU. YD. UNCL. EXC.

STA. 283+20 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 24" X 296' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 286+20
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 2 LIN. FT.
24" R.C. PIPE = 296 LIN. FT.
24" SLPCCS PIPE = 296 LIN. FT.
24" F.E.S. = 1 EACH

STA. 280+50 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 24" X 4' PIPE INLET WITH F.E.S.
AND 24" X 92' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 281+45
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 96 LIN. FT.
24" SLPCCS PIPE = 92 LIN. FT.
24" F.E.S. = 1 EACH

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
280+75	283+00	LT.	D	225
284+67	286+01	LT.	D	134

STA. 288+50.00 TO STA. 288+80.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 21.07 SQ. YD.

STA. 289+31.00 TO STA. 289+70.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 27.39 SQ. YD.

STA. 287+60 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 84' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 288+50
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE = 84 LIN. FT.
30" SLPCCS PIPE = 84 LIN. FT.

STA. 288+98 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION LT. & RT.
AND 18" X 44' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 288+50
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 44 LIN. FT.
18" SLPCCS PIPE = 44 LIN. FT.

STA. 290+26.00 TO STA. 293+65.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 122.42 SQ. YD.

STA. 289+60 CONSTRUCT
DROP INLET ON LT.
AND 18" X 16' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 16 LIN. FT.
18" F.E.S. = 1 EACH

STA. 292+70 CONSTRUCT
DROP INLET ON LT.
AND 18" X 226' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 290+40
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 226 LIN. FT.
18" SLPCCS PIPE = 226 LIN. FT.

STA. 293+65 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 18" X 92' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 292+70
DROP INLET H = 2'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 94 LIN. FT.
18" SLPCCS PIPE = 92 LIN. FT.
18" F.E.S. = 1 EACH

STA. 286+20 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 24" X 136' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 287+60
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 136 LIN. FT.
24" SLPCCS PIPE = 136 LIN. FT.

STA. 288+50 CONSTRUCT
DROP INLET ON LT.
AND 30" X 8' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 8 LIN. FT.
30" SLPCCS PIPE = 8 LIN. FT.
30" F.E.S. = 1 EACH

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
280+75	283+00	LT.	225
284+67	286+01	LT.	144
288+26	288+81	LT.	57
290+23	293+64	LT.	369

HWY. 7
P.I. = 288+55.56
Δ = 4°29'10" LT.
D = 2°30'00"
T = 89.76'
L = 179.44'
P.C. = 287+65.80
P.T. = 289+45.24
e = 0.026'/'
Ls = 300'

STA. 290+00 IN PLACE
15" X 29' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 52' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 30 CU. YD.

STA. 290+40 CONSTRUCT
DROP INLET ON LT.
AND 18" X 76' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 289+60
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 76 LIN. FT.
18" SLPCCS PIPE = 76 LIN. FT.

STA. 293+96 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 294+40 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 74' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 295+20
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 74 LIN. FT.
18" SLPCCS PIPE = 74 LIN. FT.

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 280+50 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 92' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 281+45
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 92 LIN. FT.
18" SLPCCS PIPE = 92 LIN. FT.

STA. 281+82 CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 281+45 CONSTRUCT
DROP INLET ON RT.
AND 18" X 128' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+77
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 128 LIN. FT.
18" SLPCCS PIPE = 128 LIN. FT.

STA. 283+14 CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 282+77 CONSTRUCT
DROP INLET ON RT.
AND 18" X 148' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 284+28
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 148 LIN. FT.
18" SLPCCS PIPE = 148 LIN. FT.

STA. 284+28 CONSTRUCT
DROP INLET ON RT.
AND 18" X 188' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 286+20
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 188 LIN. FT.
18" SLPCCS PIPE = 188 LIN. FT.

STA. 284+67 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 285+59 CONSTRUCT
APPROACH ON RT. = 10 CU. YD.

STA. 286+60 CONSTRUCT
APPROACH ON RT. = 20 CU. YD.

STA. 286+20 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 298' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 289+36
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 298 LIN. FT.
18" SLPCCS PIPE = 298 LIN. FT.

STA. 289+23 IN PLACE
15' X 9' X 44' R.C. BOX CULVERT
REMOVE AND CONSTRUCT
DBL. 12' X 7' X 89' R.C. BOX
ON 15° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 1330 CFS, D.A. = 0.91 SQ. MI.
SPAN = 26'-9"

STA. 291+93 CONSTRUCT
DROP INLET ON RT.
AND 18" X 250' PIPE OUTLET
CONNECT TO BOX CULVERT @ STA. 289+36
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 250 LIN. FT.
18" SLPCCS PIPE = 250 LIN. FT.

STA. 291+64 CONSTRUCT
APPROACH ON RT. = 65 CU. YD.

STA. 294+27 CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

HWY. 7
P.I. = 295+02.94
Δ = 12°23'53" LT.
D = 4°30'00"
T = 138.30'
L = 275.52'
P.C. = 293+64.64
P.T. = 296+40.16
e = 0.034'/'
Ls = 300'

6/22/2020

R061547.DGN

HWY. 7

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	116	323

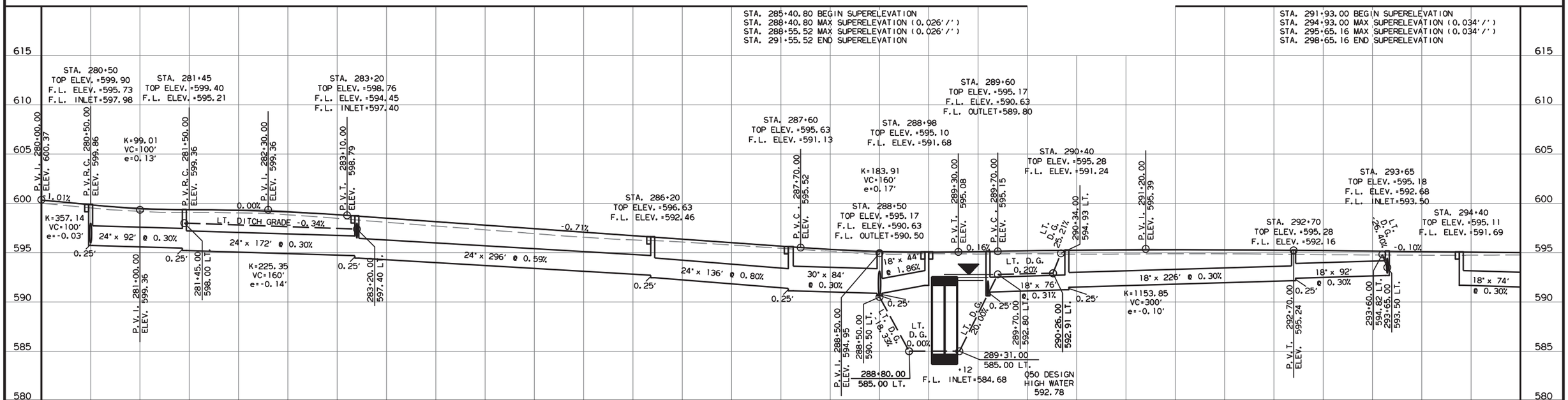
(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 11 2020 12:47 PM

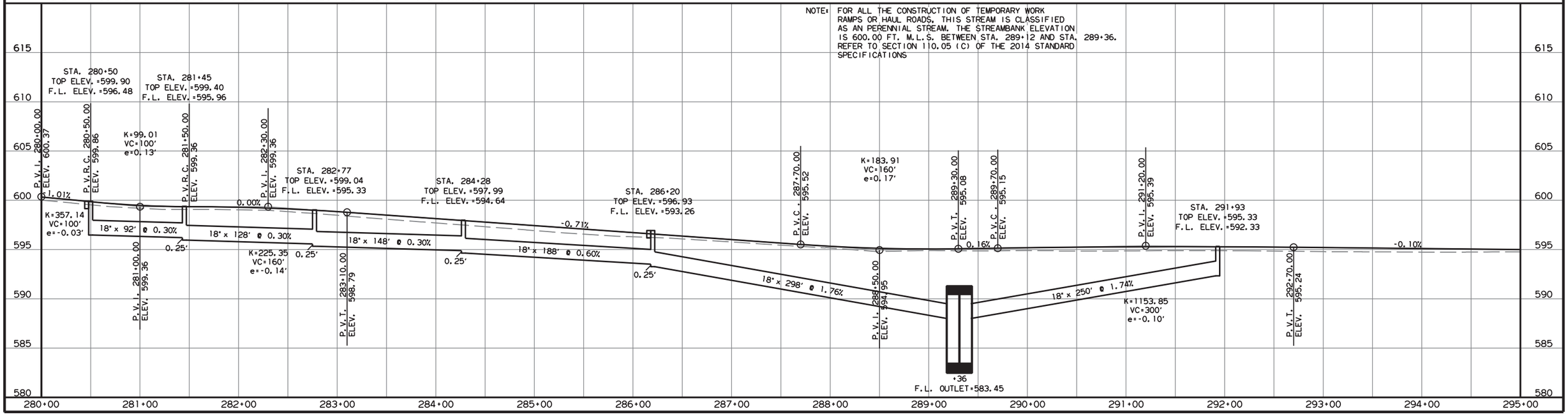
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

R061547.DGN

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.		061547	117	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Jul 24 2020 3:25 PM

STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

STA. 296+75 IN PLACE
15" X 187' P.V.C. PIPE CULVERT
LT. SIDE DRAIN WITH HDWL
REMOVE HDWL AND CUT PIPE 3' LT.

STA. 296+75 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 24" X 122' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 298+00
DROP INLET H = 4'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 2 LIN. FT.
24" R.C. PIPE = 122 LIN. FT.
24" SLPCCS PIPE = 122 LIN. FT.
18" F.E.S. = 1 EACH

STA. 296+03 IN PLACE
24" X 76' R.C. PIPE CULVERT
LT. SIDE DRAIN WITH F.E.S.
REMOVE F.E.S. AND RETAIN PIPE CULVERT

STA. 296+03 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 29" X 18" X 2' ARCH PIPE INLET WITH F.E.S.
AND 24" X 68' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 296+75
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 68 LIN. FT.
29" X 18" R.C. ARCH PIPE = 74 LIN. FT.
29" X 18" ARCH F.E.S. = 1 EACH

STA. 295+20 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 78' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 296+03
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 78 LIN. FT.
18" SLPCCS PIPE = 78 LIN. FT.

HWY. 7
P.I. = 295+02.94
Δ = 12°23'53" LT.
D = 4°30'00"
T = 138.30'
L = 275.52'
P.C. = 293+64.64
P.T. = 296+40.16
e = 0.034'/'
Ls = 300'

STA. 295+70.00
END RETAINING WALL

STA. 299+10 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 30" X 106' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 300+20
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE = 106 LIN. FT.
30" SLPCCS PIPE = 106 LIN. FT.

STA. 298+49 IN PLACE
DBL. 27" X 19" X 76' ARCH R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON LT. = 5 CU. YD. UNCL. EXC.

STA. 298+00 IN PLACE
15" P.V.C. PIPE CULVERT
LT. SIDE DRAIN WITH HDWL
REMOVE HDWL AND CUT PIPE 7' LT.

STA. 298+00 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 30" X 106' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 299+10
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 2 LIN. FT.
30" R.C. PIPE = 106 LIN. FT.
30" SLPCCS PIPE = 106 LIN. FT.
18" F.E.S. = 1 EACH

STA. 298+15 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 298+83 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 302+68 IN PLACE
10' X 3' X 74' R.C. BOX CULVERT
REMOVE HDWLS,
FILL, PLUG, AND ABANDON

STA. 302+55 IN PLACE
DBL. 36" R.C. PIPE CULVERT
LT. SIDE DRAIN WITH HEADWALL
REMOVE HEADWALL AND EXTEND 15' RT.
INTO DROP INLET @ STA. 302+55
36" R.C. PIPE = 38 LIN. FT.

STA. 302+55 CONSTRUCT
DROP INLET ON LT.
AND 18" X 6' PIPE INLET WITH F.E.S.
AND 60" X 48' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 303+11
DROP INLET H = 6'-0"
TYPE C DROP INLET = 11' X 7'
18" R.C. PIPE = 6 LIN. FT.
60" R.C. PIPE = 48 LIN. FT.
60" SLPCCS PIPE = 48 LIN. FT.
18" F.E.S. = 1 EACH

STA. 300+20 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 22" X 14" X 2' ARCH PIPE INLET WITH F.E.S.
AND 30" X 228' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 302+55
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 228 LIN. FT.
22" X 14" R.C. ARCH PIPE = 2 LIN. FT.
22" X 14" ARCH F.E.S. = 1 EACH

STA. 302+98 CONSTRUCT
JUNCTION BOX ON LT.
AND 60" X 20' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 303+11
DROP INLET H = 7'-6"
TYPE E JUNCTION BOX = 8' X 4'
60" R.C. PIPE = 20 LIN. FT.
60" SLPCCS PIPE = 20 LIN. FT.

STA. 303+77 CONSTRUCT
TYPE 2 WHEELCHAIR RAMP ON LT.
= 12.2 SQ. YDS.

STA. 303+86 CONSTRUCT
DROP INLET ON LT.
AND 18" X 40' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 303+49
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 40 LIN. FT.
18" SLPCCS PIPE = 40 LIN. FT.

STA. 303+49 CONSTRUCT
JUNCTION BOX ON LT.
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 18" X 32' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 303+11
DROP INLET H = 5'-6"
TYPE E JUNCTION BOX = 3' X 3'
18" R.C. PIPE = 36 LIN. FT.
18" SLPCCS PIPE = 32 LIN. FT.
18" F.E.S. = 1 EACH

STA. 303+11 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 72" X 48' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 313+11 RT.
DROP INLET H = 9'-1"
TYPE C DROP INLET = 8' X 7'
72" R.C. PIPE (CLASS V) = 48 LIN. FT.
72" SLPCCS PIPE = 48 LIN. FT.

STA. 302+98 IN PLACE
5' X 4' R.C. BOX CULVERT
LT. SIDE DRAIN
STUB INTO JUNCTION BOX @ STA. 302+98

STA. 305+68 IN PLACE
18" X 49' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 304+88 IN PLACE
18" X 43' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 306+90 IN PLACE
18" X 26' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 304+31 IN PLACE
DROP INLET ON LT.
18" X 53' C.M. PIPE INLET
18" X 31' R.C. PIPE OUTLET
REMOVE

STA. 306+36 IN PLACE
18" X 41' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 308+63 IN PLACE
18" X 19' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 304+12 CONSTRUCT
TURNOUT ON LT. = 25 CU. YD.

STA. 304+25 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.7 SQ. YDS.

STA. 309+26 IN PLACE
15" X 20' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

HWY. 7
P.I. = 307+02.87
Δ = 32°13'22" RT.
D = 8°00'00"
T = 206.87'
L = 402.78'
P.C. = 304+96.00
P.T. = 308+98.78
e = 0.040'/'
Ls = 360'

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 303+77 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.3 SQ. YDS.

STA. 306+85 IN PLACE
DBL. 24" X 26' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 309+88 IN PLACE
DBL. 24" X 40' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 309+40 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 126' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 310+70
DROP INLET H = 8'-6"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 126 LIN. FT.
72" SLPCCS PIPE = 126 LIN. FT.

STA. 308+21 IN PLACE
DBL. 24" X 46' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 307+83 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 148' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+40
DROP INLET H = 8'-6"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 148 LIN. FT.
72" SLPCCS PIPE = 148 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
296+48	298+64	RT.	228

SPECIAL FLOOD HAZARD AREA

STA. 306+57 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 118' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 307+83
DROP INLET H = 8'-6"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 117 LIN. FT.
72" SLPCCS PIPE = 117 LIN. FT.

STA. 305+62 IN PLACE
36" X 63' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 20 CU. YD.

STA. 305+23 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 126' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 306+57
DROP INLET H = 8'-6"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 126 LIN. FT.
72" SLPCCS PIPE = 126 LIN. FT.

STA. 303+42 IN PLACE
57" X 29" X 27" ARCH PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 35 CU. YD.

STA. 303+11 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 72" X 206' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 305+23
DROP INLET H = 9'-1"
TYPE C DROP INLET = 8' X 8'
72" R.C. PIPE = 206 LIN. FT.
72" SLPCCS PIPE = 206 LIN. FT.

STA. 302+10 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 96' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 303+11
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 96 LIN. FT.
18" SLPCCS PIPE = 96 LIN. FT.

STA. 300+43 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 164' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 302+10
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 164 LIN. FT.
18" SLPCCS PIPE = 164 LIN. FT.

STA. 299+73 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 302+61 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 300+72 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 302+81 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 301+73 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 298+52 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 299+23 CONSTRUCT
APPROACH ON RT. = 25 CU. YD.

STA. 296+28 CONSTRUCT
APPROACH ON RT. = 50 CU. YD.

STA. 295+25 CONSTRUCT
APPROACH ON RT. = 35 CU. YD.

STA. 295+03.54
END RETAINING WALL
AND HAND RAIL

STA. 295+46.46
BEGIN RETAINING WALL
AND HAND RAIL

STA. 296+06.54
END RETAINING WALL
AND HAND RAIL

STA. 296+60.00
BEGIN RETAINING WALL
AND HAND RAIL

STA. 298+20.00
END RETAINING WALL
AND HAND RAIL

STD. MON STAMPED PIN#49

P.I. 307+02.87

CAMPUS DR.

FASSON DR.

PROP. R/W

CONST. LIMITS

SEPTIC

6/22/2020

R061547.DGN

HWY. 7

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.		061547	118	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEFT SIDE OF HWY. 7

STA. 291+93.00 BEGIN SUPERELEVATION
STA. 294+93.00 MAX SUPERELEVATION (0.034'/')
STA. 295+65.16 MAX SUPERELEVATION (0.034'/')
STA. 298+65.16 END SUPERELEVATION

STA. 296+03
TOP ELEV. =594.94
F.L. ELEV. =590.73
F.L. INLET=593.73

STA. 296+75
TOP ELEV. =594.87
F.L. ELEV. =590.28
F.L. INLET=593.18

P.V.C. 297+60.00
ELEV. 594.75

P.V.I. 298+40.00
ELEV. 594.67

STA. 298+00
TOP ELEV. =594.70
F.L. ELEV. =589.67
F.L. INLET=592.21

STA. 299+10
TOP ELEV. =594.07
F.L. ELEV. =589.10

STA. 300+20
TOP ELEV. =593.07
F.L. ELEV. =588.54
F.L. INLET=592.33

P.V.C. 301+30.00
ELEV. 592.03

STA. 302+98
TOP ELEV. =590.10
F.L. ELEV. =582.60

P.V.I. 302+90.00
ELEV. 590.57

STA. 303+11
TOP ELEV. =589.57
F.L. ELEV. =580.47

STA. 303+86
TOP ELEV. =586.82
F.L. ELEV. =584.57

STA. 302+55
TOP ELEV. =590.47
F.L. ELEV. =584.47
F.L. INLET=584.79

STA. 303+49
TOP ELEV. =588.91
F.L. ELEV. =584.45
F.L. INLET=586.69

P.V.R.C. 304+50.00
ELEV. 585.20

STA. 295+20
TOP ELEV. =595.03
F.L. ELEV. =591.22

-0.10%
18" x 78' @ 0.30%
24" x 68' @ 0.30%
24" x 122' @ 0.30%
30" x 106' @ 0.30%
30" x 106' @ 0.30%
30" x 228' @ 1.68%
0.25'
K=197.53
VC=160'
e=-0.16'
P.V.T. 299+20.00
ELEV. 593.94
-0.91%
60" x 48' @ 8.03%
18" x 32' @ 11.48%
18" x 40' @ 0.30%
K=130.89
VC=320'
e=-0.98'
-3.35%
K=150.43
VC=100'
e=0.08'
P.V.I. 305+00.00
ELEV. 583.53
P.V.T. 305+50.00
ELEV. 582.18
-2.69%
P.V.C. 306+90.00
ELEV. 578.41
K=120.00
VC=300'
e=0.94'
-0.19%
P.V.I. 308+40.00
ELEV. 574.38
P.V.T. 309+90.00
ELEV. 574.09

STA. 302+26.00 BEGIN SUPERELEVATION
STA. 305+86.00 MAX SUPERELEVATION (0.040'/')
STA. 308+08.78 MAX SUPERELEVATION (0.040'/')
STA. 311+68.78 END SUPERELEVATION

600 595 590 585 580 575 570 565

295+00 296+00 297+00 298+00 299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7

P.V.C. 297+60.00
ELEV. 594.75

P.V.I. 298+40.00
ELEV. 594.67

-0.10%

K=197.53
VC=160'
e=-0.16'

P.V.T. 299+20.00
ELEV. 593.94

STA. 300+43
TOP ELEV. =592.86
F.L. ELEV. =589.44

-0.91%

18" x 164' @ 1.09%

P.V.C. 301+30.00
ELEV. 592.03

STA. 302+10
TOP ELEV. =591.09
F.L. ELEV. =587.42

18" x 96' @ 7.47%

K=130.89
VC=320'
e=-0.98'

P.V.I. 302+90.00
ELEV. 590.57

STA. 303+11
TOP ELEV. =589.17
F.L. ELEV. =580.08

-3.35%

P.V.R.C. 304+50.00
ELEV. 585.20

STA. 305+23
TOP ELEV. =582.97
F.L. ELEV. =574.46

72" x 206' @ 2.61%

K=150.43
VC=100'
e=0.08'

P.V.I. 305+00.00
ELEV. 583.53

P.V.T. 305+50.00
ELEV. 582.18

-2.69%

STA. 306+57
TOP ELEV. =579.34
F.L. ELEV. =570.83

P.V.C. 306+90.00
ELEV. 578.41

72" x 126' @ 2.69%

STA. 307+83
TOP ELEV. =576.31
F.L. ELEV. =567.80

72" x 118' @ 2.36%

K=120.00
VC=300'
e=0.94'

-0.19%

P.V.I. 308+40.00
ELEV. 574.38

72" x 148' @ 1.16%

STA. 309+40
TOP ELEV. =574.33
F.L. ELEV. =565.83

72" x 126' @ 0.30%

P.V.T. 309+90.00
ELEV. 574.09

0.25'

600 595 590 585 580 575 570 565

295+00 296+00 297+00 298+00 299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00

6/22/2020

R061547.DGN

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.		061547	119	323

(2) PLAN AND PROFILE SHEETS

STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

STA. 315+00.00 TO STA. 315+70.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 49.16 SQ. YD.

STA. 318+30.00 TO STA. 318+80.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 35.11 SQ. YD.

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
310+31	313+50	LT.	369
315+30	316+50	LT.	177
322+50	322+80	RT.	116

STA. 314+29 IN PLACE
18" X 36' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 317+67 IN PLACE
20" X 35' S.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 62' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT TURNOUT = 40 CU. YD.

OBLITERATE EXISTING PAVEMENT

STA. 317+14 IN PLACE
18" X 30' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 45 CU. YD.

STA. 319+38 IN PLACE
18" X 58' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 322+75 CONSTRUCT
DROP INLET ON LT.
AND 60" X 20' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 323+02
DROP INLET H = 7'-8"
TYPE C DROP INLET = 4' X 7'
60" R.C. PIPE = 20 LIN. FT.
60" SLPCCS PIPE = 20 LIN. FT.

STA. 312+86 IN PLACE
18" X 22' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 313+71 IN PLACE
18" X 39' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 315+33 CONSTRUCT
JUNCTION BOX ON LT.
AND 54" X 12' PIPE INLET WITH F.E.S.
AND 60" X 298' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 318+30
JUNCTION BOX H = 9'-4"
TYPE E JUNCTION BOX = 6' X 6'
54" R.C. PIPE = 12 LIN. FT.
60" R.C. PIPE = 298 LIN. FT.
60" SLPCCS PIPE = 298 LIN. FT.
54" F.E.S. = 1 EACH

STA. 318+30 CONSTRUCT
JUNCTION BOX ON LT.
AND 30" X 8' PIPE INLET WITH F.E.S.
AND 60" X 216' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 320+50
JUNCTION BOX H = 8'-10"
TYPE E JUNCTION BOX = 4' X 6'
30" R.C. PIPE = 8 LIN. FT.
60" R.C. PIPE = 216 LIN. FT.
60" SLPCCS PIPE = 216 LIN. FT.
30" F.E.S. = 1 EACH

STA. 320+50 CONSTRUCT
DROP INLET ON LT.
AND 60" X 216' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 322+75
DROP INLET H = 7'-10"
TYPE C DROP INLET = 4' X 7'
60" R.C. PIPE = 216 LIN. FT.
60" SLPCCS PIPE = 216 LIN. FT.

STA. 323+30 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 312+59 CONSTRUCT
DROP INLET ON LT.
AND 36" X 4' PIPE INLET WITH F.E.S.
AND 36" X 74' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 313+38
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE = 78 LIN. FT.
36" SLPCCS PIPE = 74 LIN. FT.
36" F.E.S. = 1 EACH

STA. 313+38 CONSTRUCT
DROP INLET ON LT.
AND 36" X 190' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 315+33
DROP INLET H = 6'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE = 190 LIN. FT.
36" SLPCCS PIPE = 190 LIN. FT.

STA. 314+67 IN PLACE
18" X 20' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 315+82 CONSTRUCT
APPROACH ON LT. = 10 CU. YD.

STA. 317+56 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 318+07 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 324+94 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YDS.

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.	GATES
310+31	313+50	LT.	5' C.L.	312	1
315+29	316+50	LT.	5' C.L.	118	1

HWY. 7
P.I. = 323+50.10
Δ = 38°39'08" LT.
R = 400'
T = 140.28'
L = 269.84'
P.C. = 322+09.82
P.T. = 324+79.66
NO SUPER

STA. 322+60.00 TO STA. 323+20.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 42.13 SQ. YD.

STA. 323+60.00 TO STA. 324+10.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 35.11 SQ. YD.

HWY. 7
P.I. = 316+72.88
Δ = 9°04'15" RT.
D = 5°00'00"
T = 90.90'
L = 181.42'
P.C. = 315+81.98
P.T. = 317+63.40
e = 0.036'/'
Ls = 300'

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
322+50	332+45	RT.	C	1042
322+50	704+45	LT.	C	697

STA. 310+70 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 186' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 312+59
DROP INLET H = 8'-9"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 186 LIN. FT.
72" SLPCCS PIPE = 186 LIN. FT.

STA. 312+59 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 238' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 315+00
DROP INLET H = 9'-3"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 238 LIN. FT.
72" SLPCCS PIPE = 238 LIN. FT.

STA. 315+00 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 72" X 194' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 317+00
DROP INLET H = 9'-8"
TYPE C DROP INLET = 4' X 8'
72" R.C. PIPE = 194 LIN. FT.
72" SLPCCS PIPE = 194 LIN. FT.

STA. 320+50 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 78" X 256' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 322+75
DROP INLET H = 9'-5"
TYPE C DROP INLET = 4' X 8'
78" R.C. PIPE = 256 LIN. FT.
78" SLPCCS PIPE = 256 LIN. FT.

STA. 322+18 IN PLACE
36" X 110' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 20 CU. YD.

STA. 323+02 CONSTRUCT
DROP INLET ON RT.
AND 84" X 6' PIPE OUTLET WITH F.E.S.
DROP INLET H = 9'-6"
TYPE C DROP INLET = 9' X 8'
84" R.C. PIPE = 6 LIN. FT.
84" SLPCCS PIPE = 6 LIN. FT.
84" F.E.S. = 1 EACH

STA. 324+94 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.2 SQ. YDS.

STA. 311+32 IN PLACE
DBL. 24" X 32' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 312+89 IN PLACE
DBL. 24" X 26' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 315+28 IN PLACE
7' X 2' X 41' R.C. BOX CULVERT
REMOVE HDWL. LT. & RT.
FILL AND ABANDON

STA. 318+18 IN PLACE
42" X 35' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 30 CU. YD.

STA. 318+67 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 78" X 180' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 320+50
DROP INLET H = 9'-6"
TYPE C DROP INLET = 4' X 8'
78" R.C. PIPE = 180 LIN. FT.
78" SLPCCS PIPE = 180 LIN. FT.

STA. 323+26 IN PLACE
TRI. 48" X 72" X 57' C.M. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE AND CONSTRUCT
DBL. 72" X 100' PIPE CULVERT
WITH FES LT. & RT.
Q50 = 588 CFS; D.A. = 230 ACRES
72" R.C. PIPE (CLASS IV) = 200 LIN. FT.
72" F.E.S. = 4 EACH

STA. 317+00 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 10' PIPE INLET WITH F.E.S.
AND 78" X 162' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 318+67
DROP INLET H = 9'-7"
TYPE C DROP INLET = 4' X 8'
18" R.C. PIPE = 10 LIN. FT.
78" R.C. PIPE = 162 LIN. FT.
78" SLPCCS PIPE = 162 LIN. FT.
18" F.E.S. = 1 EACH

STA. 319+02 IN PLACE
42" X 43' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 25 CU. YD.

STA. 322+75 CONSTRUCT
DROP INLET ON RT.
AND 78" X 22' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 323+02
DROP INLET H = 9'-3"
TYPE C DROP INLET = 4' X 8'
78" R.C. PIPE = 22 LIN. FT.
78" SLPCCS PIPE = 22 LIN. FT.

STA. 323+30 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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6/22/2020

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HWY. 7

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.		061547	120	323

(2) PLAN AND PROFILE SHEETS

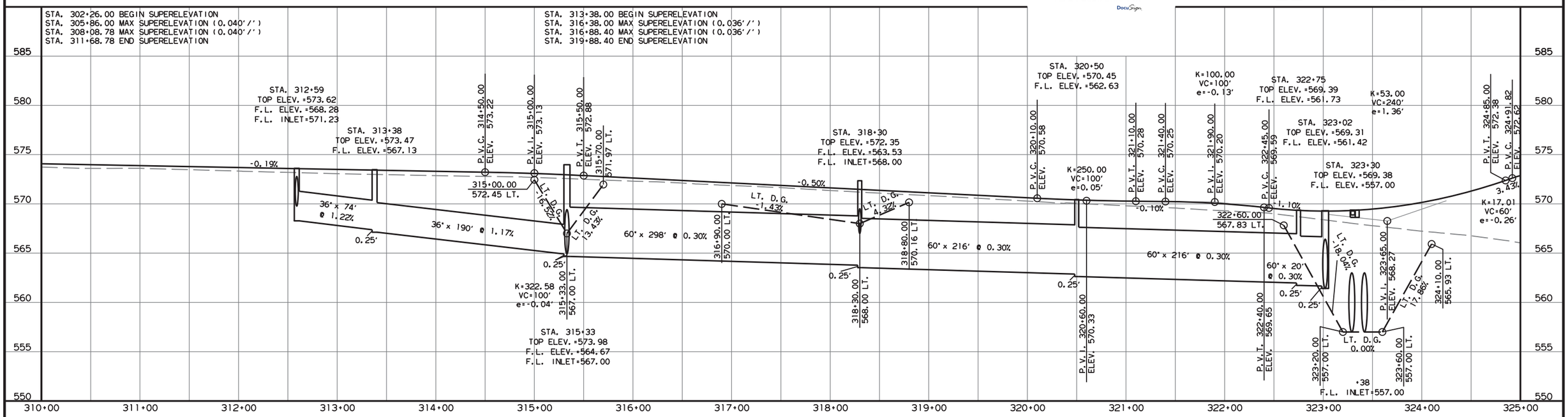
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

Jul 24 2020 3:30 PM

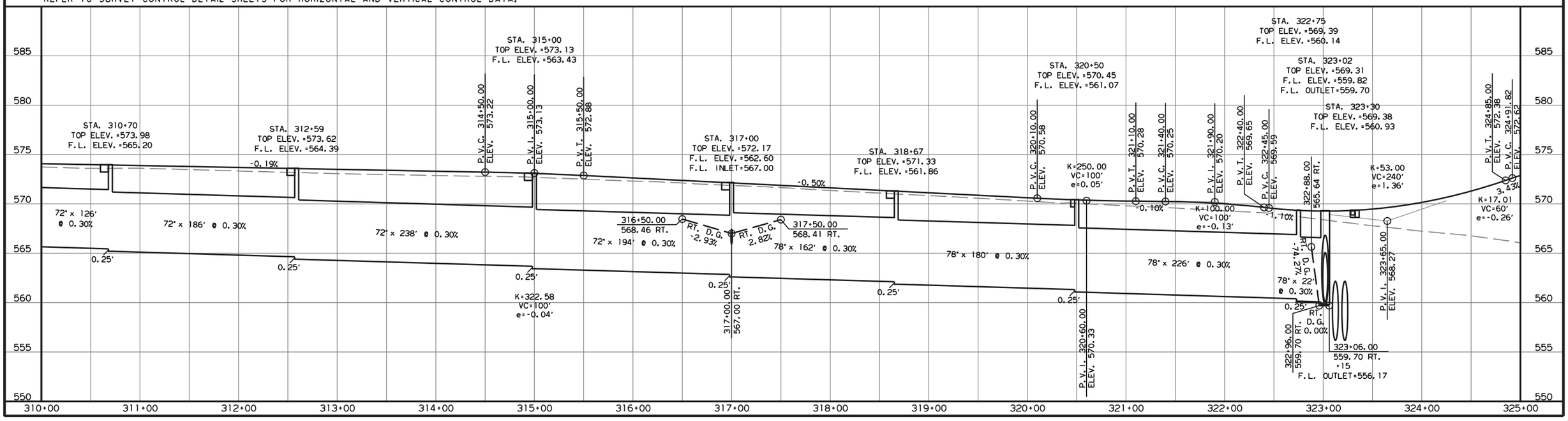
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LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



6/22/2020

R061547.DGN

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.		061547	121	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STA. 213+00 TO STA. 334+00
SPECIAL FLOOD HAZARD AREA

OBLITERATE EXISTING PAVEMENT

STA. 329+10.00 TO STA. 330+50.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 98.31 SQ. YD.

STA. 331+85.00 TO STA. 332+50.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 45.64 SQ. YD.

STA. 325+75 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.1 SQ. YDS.

STA. 325+91 CONSTRUCT
JUNCTION BOX ON LT.
AND 18" X 38' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 325+91 LT.
JUNCTION BOX H = 4'-0"
TYPE E JUNCTION BOX = 3' X 3'
18' R.C. PIPE (CLASS V) = 38 LIN. FT.
18' SLPCCS PIPE = 38 LIN. FT.

STA. 328+22 CONSTRUCT
DROP INLET ON LT.
AND 24" X 84' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 2+36 LT.
DROP INLET H = 5'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V) = 84 LIN. FT.
24" SLPCCS PIPE = 84 LIN. FT.

STA. 331+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
WITH 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 333+10.00 TO STA. 333+50.00 ON LT.
CONC. DITCH PAVING (TYPE B) = 28.09 SQ. YD.

STA. 332+15 CONSTRUCT
DROP INLET ON LT.
AND 42" X 8' PIPE INLET WITH F.E.S.
AND 42" X 40' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 332+15 RT.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5' X 3'
42" R.C. PIPE = 48 LIN. FT.
42" F.E.S. = 1 EACH
Q50 = 46 CFS; D.A. = 33 ACRES

STA. 325+91 CONSTRUCT
DROP INLET ON LT.
AND 18" X 76' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 3+70 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18' R.C. PIPE (CLASS V) = 76 LIN. FT.
18' SLPCCS PIPE = 76 LIN. FT.

STA. 328+36 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YDS.

STA. 332+69 IN PLACE
18" X 38' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT ON LT. = 5 CU. YD.

STA. 332+08 IN PLACE
18" X 32' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 333+00 IN PLACE
15" X 37' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 56' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 10 CU. YD.

STA. 333+30 CONSTRUCT
DROP INLET ON LT.
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 18" X 106' PIPE INLET WITH F.E.S.
AND 30" X 38' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 333+30 RT.
DROP INLET H = 6'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 108 LIN. FT.
30" R.C. PIPE (CLASS IV) = 38 LIN. FT.
18" F.E.S. = 2 EACH
Q50 = 16 CFS; D.A. = 6 ACRES

STA. 332+41 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.5 SQ. YDS.

STA. 332+98 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.5 SQ. YDS.

WIRE FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
704+45	332+45	LT.	C	861

C.L. HWY. 5 STA. 328+06.76 =
C.L. ROUNDABOUT STA. 1+57.08
Δ = 90°00'00"

HWY. 5
P.I. = 332+28.78
Δ = 43°27'28" LT.
R = 400'
T = 159.42'
L = 303.40'
P.R.C. = 330+69.36
P.T. = 333+72.76
NO SUPER

C.L. HWY. 7 STA. 326+06.76 =
C.L. ROUNDABOUT STA. 4+36.33
Δ = 90°00'00"

HWY. 7
P.I. = 322+50.10
Δ = 38°39'08" LT.
R = 400'
T = 140.28'
L = 269.84'
P.C. = 322+09.82
P.T. = 324+79.66
NO SUPER

HWY. 5
P.I. = 329+86.95
Δ = 50°50'26" RT.
R = 200'
T = 95.05'
L = 177.46'
P.C. = 328+91.90
P.R.C. = 330+69.36
NO SUPER

STA. 328+36 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.1 SQ. YDS.

STA. 331+00 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 18" X 118' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 332+15
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 118 LIN. FT.
18" SLPCCS PIPE = 118 LIN. FT.

STA. 328+03 IN PLACE
DROP INLET ON RT.
18" X 128' R.C. PIPE INLET
24" X 61' R.C. PIPE OUTLET
REMOVE

STA. 332+15 CONSTRUCT
DROP INLET ON RT.
AND 42" X 68' PIPE OUTLET WITH F.E.S.
DROP INLET H = 6'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5' X 5'
42" R.C. PIPE = 68 LIN. FT.
42" SLPCCS PIPE = 68 LIN. FT.
42" F.E.S. = 1 EACH

STA. 333+30 CONSTRUCT
DROP INLET ON RT.
AND 30" X 40' PIPE OUTLET WITH F.E.S.
DROP INLET H = 7'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 40 LIN. FT.
30" SLPCCS PIPE = 40 LIN. FT.
30" F.E.S. = 1 EACH

STA. 333+02 IN PLACE
4' X 4' X 42' R.C. BOX CULVERT
REMOVE HDWLS. LT. & RT.
FILL AND ABANDON

STA. 325+75 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.2 SQ. YDS.

STA. 326+07 IN PLACE
DROP INLET ON RT.
15' X 4.5' X 40' R.C. BOX CULVERT OUTLET
REMOVE

STA. 333+74 CONSTRUCT
APPROACH ON RT. = 45 CU. YD.

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 126+26.69
BEGIN JOB 061439
LOG MILE 0.11

STA. 334+00.00
END CONSTRUCTION
END JOB 061547

HWY. 7

6/22/2020

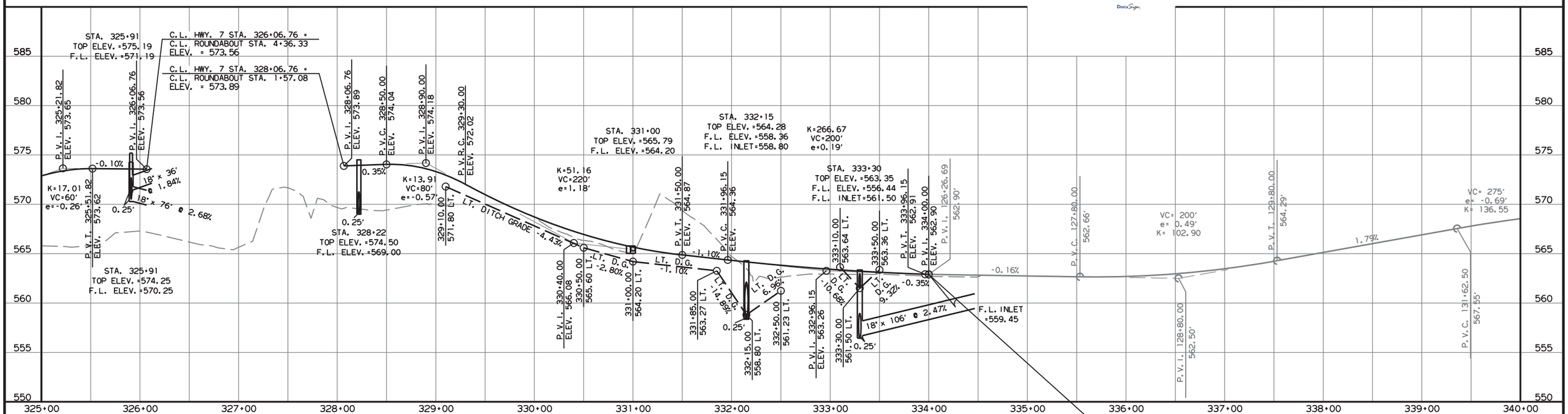
R061547.DGN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Trinity Smith
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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.		061547	122	323

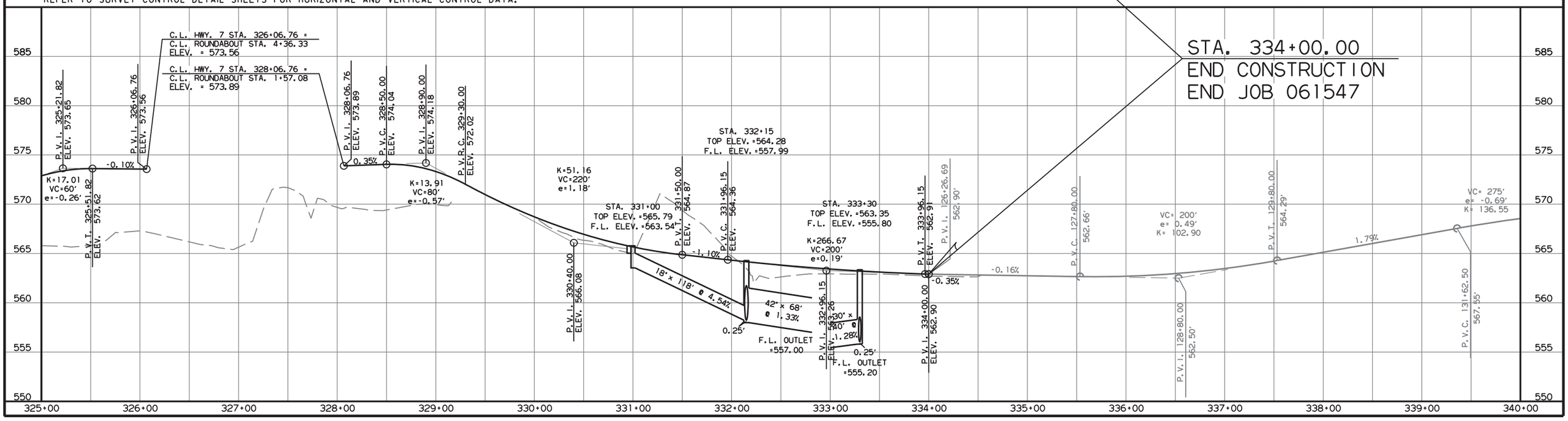
(2) PLAN AND PROFILE SHEETS

LEFT SIDE OF HWY. 7



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 7



STA. 334+00.00
END CONSTRUCTION
END JOB 061547

6/22/2020

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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.		061547	123	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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HWY. 70
P.I. = 607+69.93
Δ = 53°07'51" LT.
D = 9°00'00"
T = 318.32'
L = 590.34'
P.C. = 604+51.62
P.T. = 610+41.96

OBLITERATE EXISTING PAVEMENT

SPECIAL FLOOD HAZARD AREA

PROP. R/W & C/A
JOB R60140

P.O.B. 604+00.00

P.C. 604+51.62

STA. 611+25 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 34' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 34 LIN. FT.
18" SLPCCS PIPE = 34 LIN. FT.
18" F.E.S. = 1 EACH

C.L. HWY. 70 STA. 611+33.46 =
C.L. ROUNDABOUT STA. 2+96.71
Δ = 90°00'00"

STA. 611+04 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.1 SQ. YDS.

50' BUFFER

STA. 610+95.00
BEGIN HWY. 70

N 7°31'39" W

N 60°39'31" W

P.I. 607+69.93

STA. 611+04 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.2 SQ. YDS.

STA. 611+33.46
END HWY. 70

STA. 611+25 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 24" X 30' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 30 LIN. FT.
24" SLPCCS PIPE = 30 LIN. FT.
24" F.E.S. = 1 EACH

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS
USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

PROP. R/W
JOB R60140

50' BUFFER

STA. 701+31 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 4.2 SQ. YDS.

STA. 702+80 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 701+43 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 168' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 325+91
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 168 LIN. FT.
18" SLPCCS PIPE = 168 LIN. FT.

HWY. 7
P.I. = 702+30.34
Δ = 9°54'05" LT.
R = 300'
T = 25.98'
L = 51.84'
P.C. = 702+04.36
P.T. = 702+56.20
NO SUPER

C.L. HWY. 7 STA. 701+00.00 =
C.L. ROUNDABOUT STA. 0+00.00 =
C.L. ROUNDABOUT STA. 6+28.32
Δ = 90°00'00"

STA. 703+09.36
END HWY. 7

100' TRANSITION

STA. 701+84 IN PLACE
24" X 33' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 701+00.00
BEGIN HWY. 7

STA. 703+00 CONSTRUCT
JUNCTION BOX ON RT.
AND 24" X 50' PIPE INLET WITH F.E.S.
AND 24" X 158' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 701+43 RT.
JUNCTION BOX H = 5'-6"
TYPE E JUNCTION BOX = 2' X 3'
24" R.C. PIPE = 208 LIN. FT.
24" SLPCCS PIPE = 158 LIN. FT.
24" F.E.S. = 1 EACH

STA. 701+43 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 24" X 164' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 328+22
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V) = 164 LIN. FT.
24" SLPCCS PIPE = 164 LIN. FT.

STA. 702+80 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 701+31 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 4.1 SQ. YDS.

HWY. 70 / HWY. 7

6/22/2020

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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.		061547	124	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

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LEFT SIDE OF HWY. 70

STA. 610+95.00
BEGIN HWY. 70

STA. 611+33.46
END HWY. 70

C.L. HWY. 70 STA. 611+33.46 =
C.L. ROUNDABOUT STA. 2+96.71
ELEV. = 570.63

P.V.I. 610+95.00
ELEV. 569.86

P.V.I. 611+33.46
ELEV. 570.63

2.00%

18" x 40'
@ 2.71%

18" x 34'
@ 6.44%

0.25'

STA. 611+25
TOP ELEV. =570.68
F.L. ELEV. =566.68
F.L. OUTLET=564.17

LEFT SIDE OF HWY. 7

STA. 701+00.00
BEGIN HWY. 7

STA. 703+09.36
END HWY. 7

C.L. HWY. 7 STA. 701+00.00 =
C.L. ROUNDABOUT STA. 0+00.00 =
C.L. ROUNDABOUT STA. 6+28.32
ELEV. = 578.64

K=26.67
VC=40'
e=0.08'

P.V.C. 701+00.00
ELEV. 578.64

4.00%

P.V.T. 701+40.00
ELEV. 580.54

P.V.C. 701+51.75
ELEV. 581.19

5.50%

P.V.I. 702+01.75
ELEV. 583.94

P.V.T. 702+51.75
ELEV. 585.69

3.50%

P.V.I. 703+45.00
ELEV. 588.95

K=50.00
VC=100'
e=-0.25'

18" x 168' @ 3.55%

P.V.I. 701+20.00
ELEV. 579.44

STA. 701+43
TOP ELEV. =580.83
F.L. ELEV. =577.42

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 70

STA. 610+95.00
BEGIN HWY. 70

STA. 611+33.46
END HWY. 70

C.L. HWY. 70 STA. 611+33.46 =
C.L. ROUNDABOUT STA. 2+96.71
ELEV. = 570.63

P.V.I. 610+95.00
ELEV. 569.86

P.V.I. 611+33.46
ELEV. 570.63

2.00%

24" x 32'
@ 0.30%

18" x 64'
@ 0.86%

24" x 30'
@ 7.12%

0.25'

STA. 611+25
TOP ELEV. =570.79
F.L. ELEV. =566.71
F.L. OUTLET=564.14

RIGHT SIDE OF HWY. 7

STA. 701+00.00
BEGIN HWY. 7

STA. 703+09.36
END HWY. 7

C.L. HWY. 7 STA. 701+00.00 =
C.L. ROUNDABOUT STA. 0+00.00 =
C.L. ROUNDABOUT STA. 6+28.32
ELEV. = 578.64

K=26.67
VC=40'
e=0.08'

P.V.C. 701+00.00
ELEV. 578.64

4.00%

P.V.T. 701+40.00
ELEV. 580.54

P.V.C. 701+51.75
ELEV. 581.19

5.50%

P.V.I. 702+01.75
ELEV. 583.94

P.V.T. 702+51.75
ELEV. 585.69

3.50%

P.V.I. 703+45.00
ELEV. 588.95

24" x 50' @ 8.42%

24" x 158' @ 3.28%

K=50.00
VC=100'
e=-0.25'

0.25'

P.V.I. 701+20.00
ELEV. 579.44

24" x 164' @ 4.61%

STA. 701+43
TOP ELEV. =580.93
F.L. ELEV. =576.78

0.25'

STA. 703+00
TOP ELEV. =587.68
F.L. ELEV. =582.18
F.L. INLET=586.60

585 580 575 570 565 560 555 550

600 595 590 585 580 575 570 565

605+00 606+00 607+00 608+00 609+00 610+00 611+00 612+00 613+00

700+00 701+00 702+00 703+00 704+00 705+00

6/22/2020

R061547.DGN

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.		061547	125	323

(2) PLAN AND PROFILE SHEETS

OBLITERATE EXISTING PAVEMENT

STA. 3+70 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 40' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 611+25 LT.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 40 LIN. FT.
18" SLPCCS PIPE = 40 LIN. FT.

STA. 2+97 CONSTRUCT
DROP INLET ON LT.
AND 18" X 38' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 611+25 LT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V) = 38 LIN. FT.
18" SLPCCS PIPE = 38 LIN. FT.

ROUNDABOUT
P.I. = N.A.
Δ = 360°00'00" RT.
D = 57°17'45"
T = N.A.
L = 628.32'
P.C. = 0+00.00
P.T. = 6+28.32

STA. 2+36 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 24" X 32' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 611+25 RT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 32 LIN. FT.
18" SLPCCS PIPE = 32 LIN. FT.

STA. 3+12 CONSTRUCT
DROP INLET ON RT.
AND 18" X 64' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 611+25 RT.
DROP INLET H = 2'-6"
TYPE E DROP INLET = 3' X 2'
18" R.C. PIPE (CLASS V) = 64 LIN. FT.
18" SLPCCS PIPE = 64 LIN. FT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
FOR ALL SLPCCS PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

PROP. R/W & C/A
JOB R60140

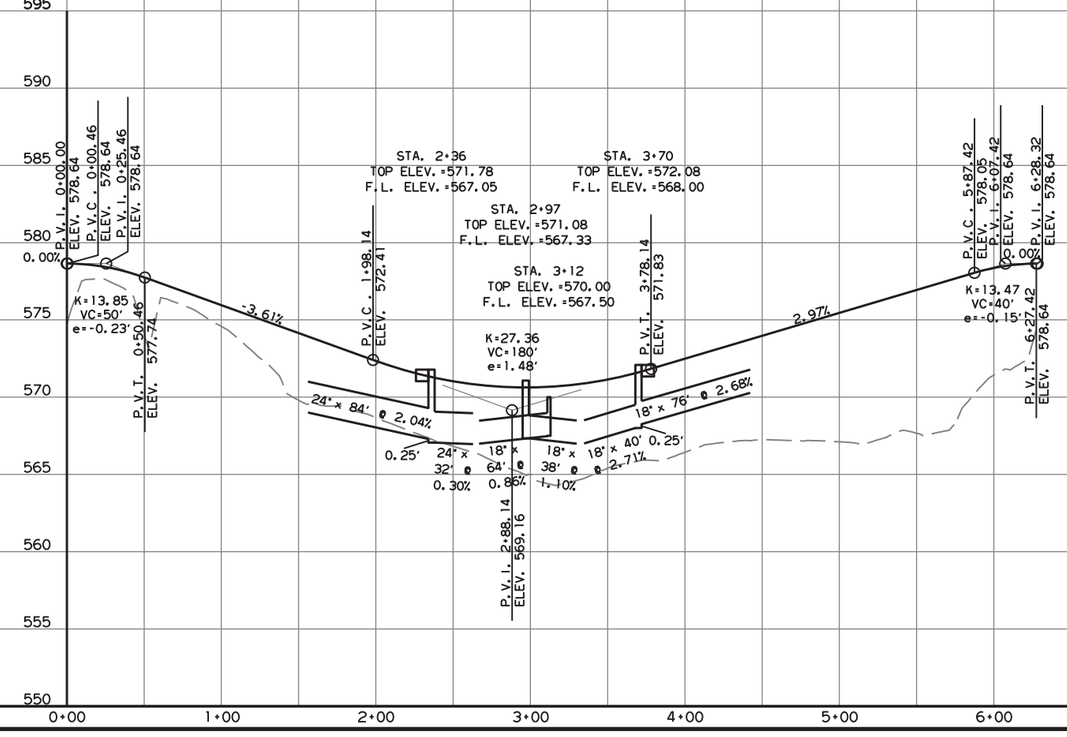
100' TRANSITION

T.C.E. 24'

PROPOSED

ROUNDABOUT

STA. 0+00.00 MAX SUPERELEVATION (0.030'/')
STA. 2+96.71 END/BEGIN SUPERELEVATION (N.C.)
STA. 6+28.32 MAX SUPERELEVATION (0.030'/')



6/22/2020

R061547.DGN

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.		061547	126	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STA. 400+00.00
BEGIN DETOUR 1

STA. 143+00.00 HWY. 7 =
STA. 400+00.00 DETOUR 1

DETOUR 1
P.I. = 400+93.01
Δ = 9°16'51" LT.
D = 5°00'00"
T = 93.01'
L = 185.61'
P.C. = 400+00.00
P.R.C. = 401+85.61
NO SUPER

STA. 402+31 CONSTRUCT
TURNOUT ON LT. = 15 CU. YD.

STA. 403+88 INSTALL
DBL. 72" X 52" TEMP. PIPE CULVERT
ON 45° LT. FWD. SKEW

SPECIAL FLOOD
HAZARD AREA

DETOUR 1
P.I. = 406+78.13
Δ = 8°02'48" LT.
D = 5°00'00"
T = 80.60'
L = 160.93'
P.R.C. = 405+97.53
P.T. = 407+58.46
NO SUPER

STA. 407+58.46
END DETOUR 1

STA. 150+55.00 HWY. 7 =
STA. 407+58.46 DETOUR 1

TEMP. CONST. LIMITS

PROP R/W

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

DETOUR 1
P.I. = 402+78.63
Δ = 9°16'51" RT.
D = 5°00'00"
T = 93.02'
L = 185.62'
P.R.C. = 401+85.61
P.T. = 403+71.23
NO SUPER

DETOUR 1
P.I. = 405+00.46
Δ = 9°43'48" RT.
D = 5°00'00"
T = 97.53'
L = 194.60'
P.C. = 404+02.93
P.R.C. = 405+97.53
NO SUPER

DETOUR 1

STA. 400+00.00
BEGIN DETOUR 1

STA. 407+58.46
END DETOUR 1

P.V.I. 402+58.60
ELEV. 636.33

P.V.I. 405+23.34
ELEV. 640.86

1.71%
F.L. INLET=629.73
F.L. OUTLET=629.03

402+70.00
635.22 LT.

LT. DITCH GRADE -3.80%

LT. DITCH GRADE 10.84%

405+30.00
639.66 LT.

LT.
D.G.
0.00%

404+10.00
629.90 LT.

404+40.00
629.90 LT.

655 650 645 640 635 630 625 620 615 610

400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00 408+00

6/22/2020

R061547.DGN

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.		061547	127	323

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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DETOUR 2

DETOUR 2
P.I. = 502+11.61
Δ = 17°03'21" LT.
D = 10°00'00"
T = 85.91'
L = 170.56'
P.R.C. = 501+25.70
P.T. = 502+96.26
NO SUPER

DETOUR 2
P.I. = 503+86.73
Δ = 13°21'27" LT.
D = 10°00'00"
T = 67.09'
L = 133.58'
P.C. = 503+19.63
P.R.C. = 504+53.21
NO SUPER

STA. 286+30.00 HWY. 7 =
STA. 500+00.00 DETOUR 2

STA. 292+10.00 HWY. 7 =
STA. 505+86.78 DETOUR 2

DETOUR 2
P.I. = 500+63.10
Δ = 12°34'11" RT.
D = 10°00'00"
T = 63.10'
L = 125.70'
P.C. = 500+00.00
P.R.C. = 501+25.70
NO SUPER

DETOUR 2
P.I. = 505+20.30
Δ = 13°21'27" RT.
D = 10°00'00"
T = 67.09'
L = 133.58'
P.R.C. = 504+53.21
P.T. = 505+86.78
NO SUPER

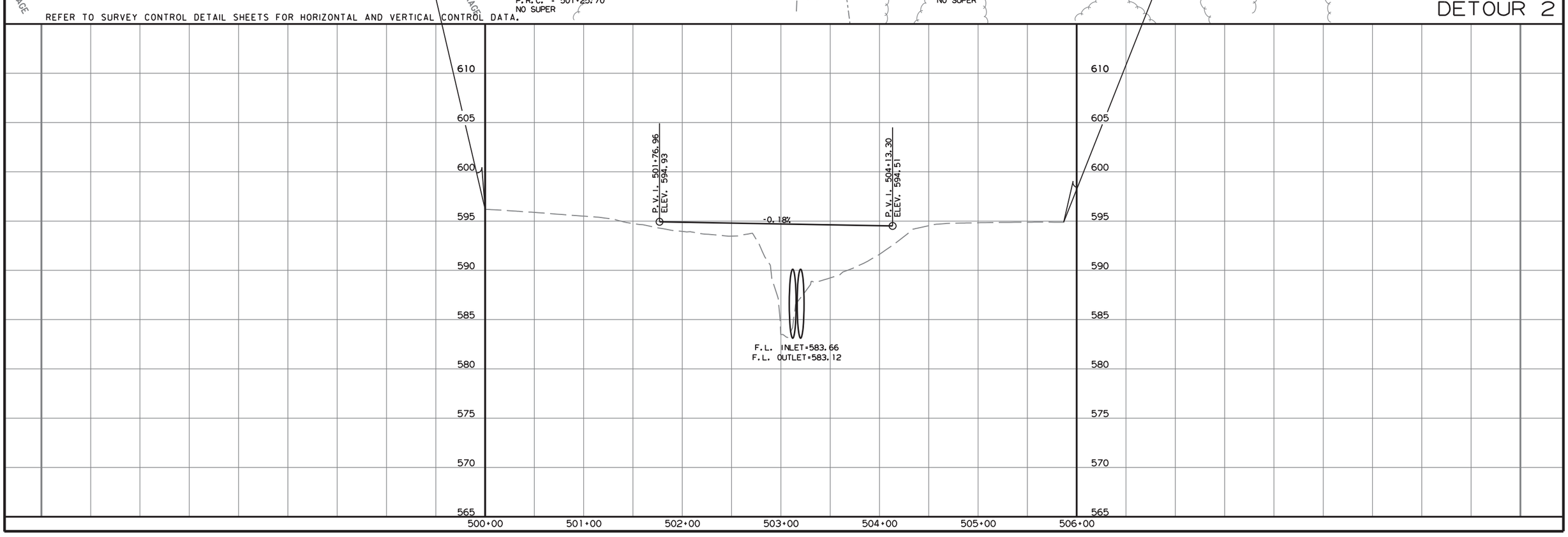
STA. 500+00.00
BEGIN DETOUR 2

STA. 505+86.78
END DETOUR 2

STA. 503+08 INSTALL
DBL. 84" X 48" TEMP. PIPE CULVERT
ON 15° RT. FWD. SKEW

SPECIAL FLOOD HAZARD AREA

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



6/22/2020

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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) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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DETOUR 3
P.I. = 802+66.81
Δ = 74°38'16" LT.
R = 350'
T = 266.81'
L = 455.94'
P.C. = 800+00.00
P.R.C. = 804+55.94
NO SUPER

DETOUR 3
P.I. = 805+48.50
Δ = 82°47'43" RT.
R = 105'
T = 92.56'
L = 151.73'
P.R.C. = 804+55.94
P.T. = 806+07.67
NO SUPER

STA. 321+98.26 HWY. 7 = STA. 800+00.00 DETOUR 3

STA. 329+85.48 HWY. 5 = STA. 808+63.11 DETOUR 3

STA. 800+00.00
BEGIN DETOUR 3

STA. 808+63.11
END DETOUR 3

DETOUR 3

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

P.V.I. 800+00.00 ELEV. 569.85
P.V.C. 800+60.00 ELEV. 569.22
K=50.00 VC=180' e=0.81'
P.V.I. 801+90.00 ELEV. 568.27
P.V.T. 802+40.00 ELEV. 570.57
P.V.C. 805+35.00 ELEV. 578.09
P.V.I. 805+60.00 ELEV. 578.73
K=9.49 VC=50' e=-0.33'
P.V.I. 805+85.00 ELEV. 578.05
P.V.C. 807+00.00 ELEV. 574.92
P.V.I. 807+80.00 ELEV. 572.74
K=100.37 VC=160' e=-0.32'
P.V.I. 808+63.11 ELEV. 569.16
P.V.T. 808+60.00 ELEV. 569.29
-1.05%
2.55%
-2.72%
-4.31%

595 590 585 580 575 570 565 560 555 550

800+00 801+00 802+00 803+00 804+00 805+00 806+00 807+00 808+00 809+00

6/22/2020

R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

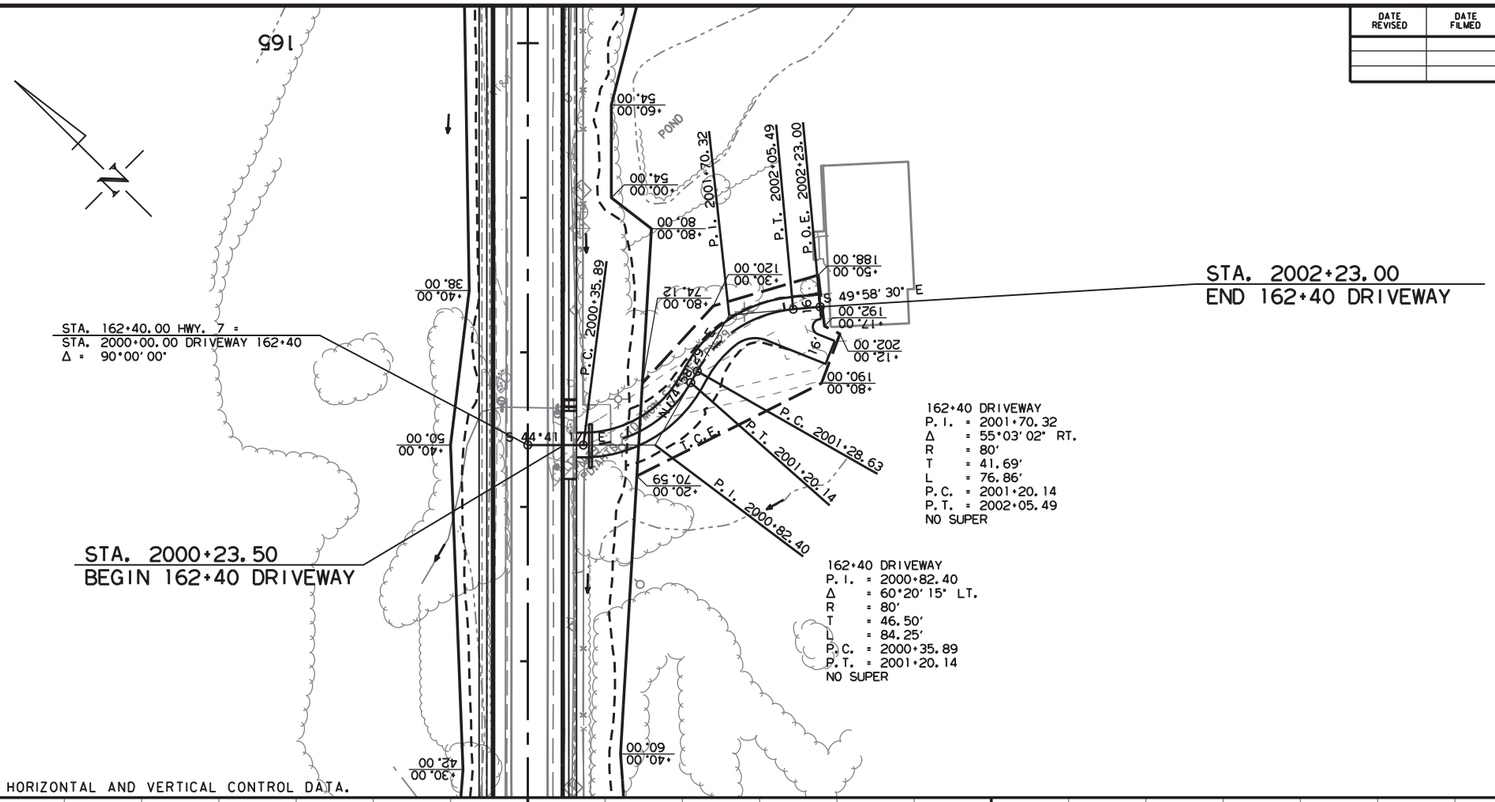
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	129	323

(2) PLAN AND PROFILE SHEETS

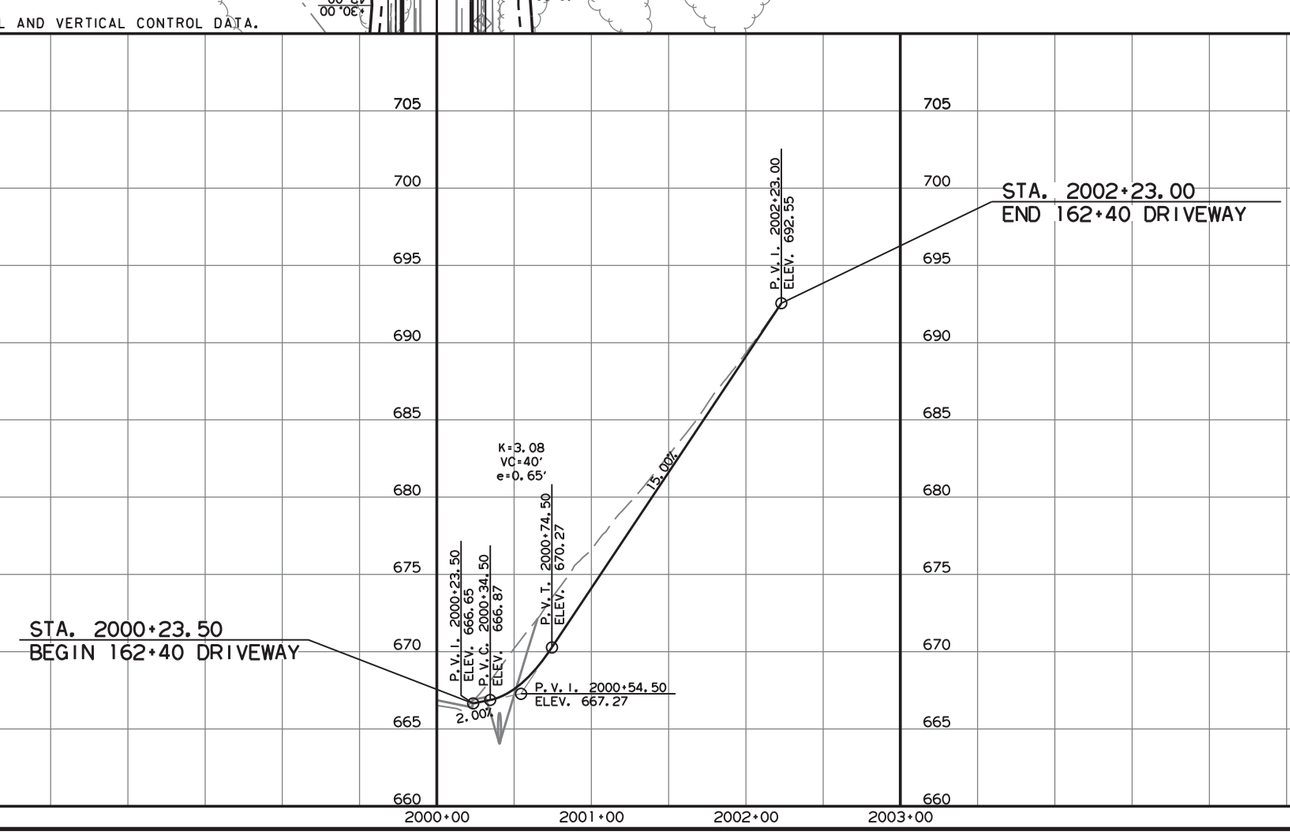
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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162+40 DRIVEWAY



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



6/22/2020

R061547.DGN

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				JOB NO.		061547	130	323

(2) TRAFFIC SIGNAL QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Trinity Smith

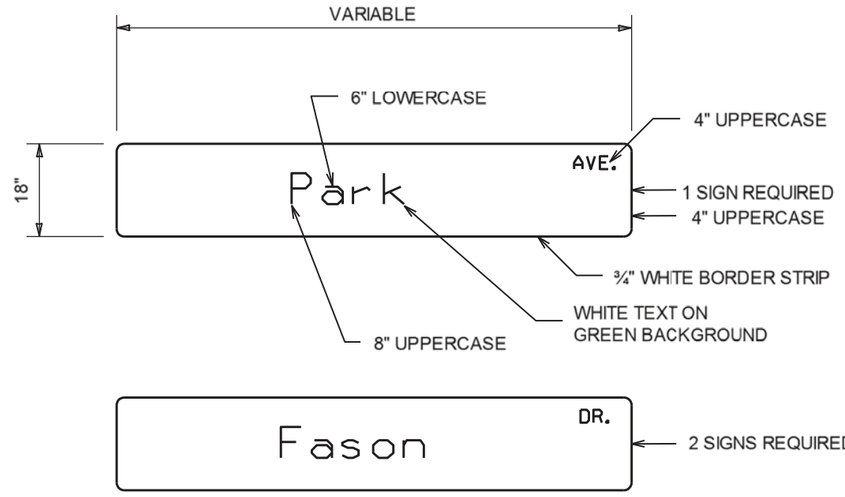
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TRAFFIC SIGNAL QUANTITIES

	ITEM NUMBER	ITEM	QUANTITY	UNIT
	SP & 701	ACTUATED CONTROLLER TS2-TYPE 2 (8 PHASES)	1	EACH
	SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	7	EACH
	SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	2	EACH
	SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	4	EACH
	708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1585	LIN. FT.
	708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	116	LIN. FT.
	708	TRAFFIC SIGNAL CABLE (12C/14 A.W.G.)	35	LIN. FT.
	708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	222	LIN. FT.
	SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	431	LIN. FT.
	SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	160	LIN. FT.
	SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	45	LIN. FT.
	SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	446	LIN. FT.
	709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
	710	NON-METALLIC CONDUIT (2")	40	LIN. FT.
	710	NON-METALLIC CONDUIT (3")	302	LIN. FT.
	711	CONCRETE PULL BOX (TYPE 1 HD)	1	EACH
	711	CONCRETE PULL BOX (TYPE 2 HD)	3	EACH
	SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (0')	1	EACH
	SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
	SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38'-32')	1	EACH
	SP	LED LUMINAIRE ASSEMBLY	3	EACH
	SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
	SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
	SP	18" STREET NAME SIGN	3	EACH
*	SP & 733	VIDEO DETECTOR (CLR)	6	EACH
	733	VIDEO CABLE	753	LIN. FT.
	733	VIDEO MONITOR (CLR)	1	EACH
*	SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
	SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH

* ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR SHALL BE SUPPLIED (REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

OVERHEAD STREET NAME MARKER STANDARD MAST ARM MOUNTED



NOTES:

1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.
2. ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL BE ALSO ALODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY/ COUNTY.
3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM ON THE NEARSIDE LEFT POLE. SEE STANDARD DRAWING SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.
4. THE SERIES C 2000 STANDARD ALPHABET SHALL BE USED FOR ALL LETTERS.

DATE: 06-22-20 FILE NAME: t061547.dgn

LOCATION: HWY. 7/FASON DR.
CITY: N/A
COUNTY: GARLAND
DISTRICT: 06 SCALE: N/A DRAWN BY: GWE

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.		061547	131	323

(2) TRAFFIC SIGNAL NOTES

TRAFFIC SIGNAL NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (CURRENT EDITION) NATIONAL ELECTRICAL CODE, NFPA 101 (CURRENT EDITION) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.

2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (E.G.C.) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND E.G.C. TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TC-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.

3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT 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 A.W.G. USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S/ COUNTY'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, ARE NEEDED WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCJIT (2c/#12 A.W.G. 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 THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, STANDARD DRAWINGS AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

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 STANDARD DRAWINGS MAY BE USED.

9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.

10. PAVEMENT MARKING SHOWN FOR REFERENCE ONLY. SEE PERMANENT PAVEMENT MARKING DETAILS.

11. 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 STANDARD DRAWING). PAYMENT WILL BE INCLUDED IN SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

12. ALL CONCRETE PULL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE THREE (3") INCH DIAMETER UNLESS SPECIFIED ON PLANS.

13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.

14. LED LUMINAIRE ASSEMBLIES SHALL HAVE A BUG RATING OF U0.

15. 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.

16. 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, THIRTY-EIGHT (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 TWENTY-ONE (21') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL SIX (6') FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.

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17. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS SIX (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.

18. 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.

19. 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 POLE COVER IS MISSNG. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

20. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.

21. ONE VIDEO PROGRAMMNG MODULE SHALL BE PROVDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.

22. TRAFFIC SIGNAL CONTRACTOR SHALL NOTIFY THE 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.

23. 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.

24. DOOR PANEL TEST PUSH BUTTONS SHALL ACTUATE INDICATED PHASES. DETECTOR ASSIGNMENTS AND/OR SIDE PANEL JUMPERS MAY REQUIRE MODFICATION.

25. ALL SYSTEM DETECTOR RACKS AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED BY THE MAIN CONTROLLER CABINET POWER SURGE PROTECTION.

26. IN PULL BOXES, POLE BASES, JUNCTION BOXES AND CONTROLLER CABINETS, THE DIRECTION OF EACH CABLE RUN SHALL BE INDICATED BY ATTACHING A PERMANENT TAG OF RIGID PLASTIC OR NON-FERROUS METAL TO THE CONDUIT. TAGS SHALL BE EMBOSSED, STAMPED OR ENGRAVED WITH LETTERS 1/4" OR GREATER IN HEIGHT AND SECURED TO THE CONDUIT WITH NYLON OR PLASTIC TIES. IN INSTANCES WHERE THE CONDUIT OR CONDUIT ENTRANCES ARE NOT VISIBLE OR ACCESSIBLE, A DIRECTION TAG SHALL BE ATTACHED TO EACH CABLE.

27. ALL NON-METALLIC CONDUIT RUNS SHALL HAVE BELL RING FITTINGS INSTALLED ON THE TERMINATING ENDS OF THE CONDUIT. THIS INCLUDES PULL BOXES, POLE BASES, AND TRAFFIC SIGNAL CABINETS.

28. ALL CONCRETE PULL BOXES SHALL BE SET ON A GRAVEL OR CRUSHED STONE BEDDING AS SPECIFIED IN SECTION 711, CONCRETE PULL BOX, OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

DATE: 06-25-20 FILE NAME: t061547.dgn

LOCATION: HWY. 7S - HWY. 5
CITY: N/A
COUNTY: GARLAND
DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

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.		061547	132	323

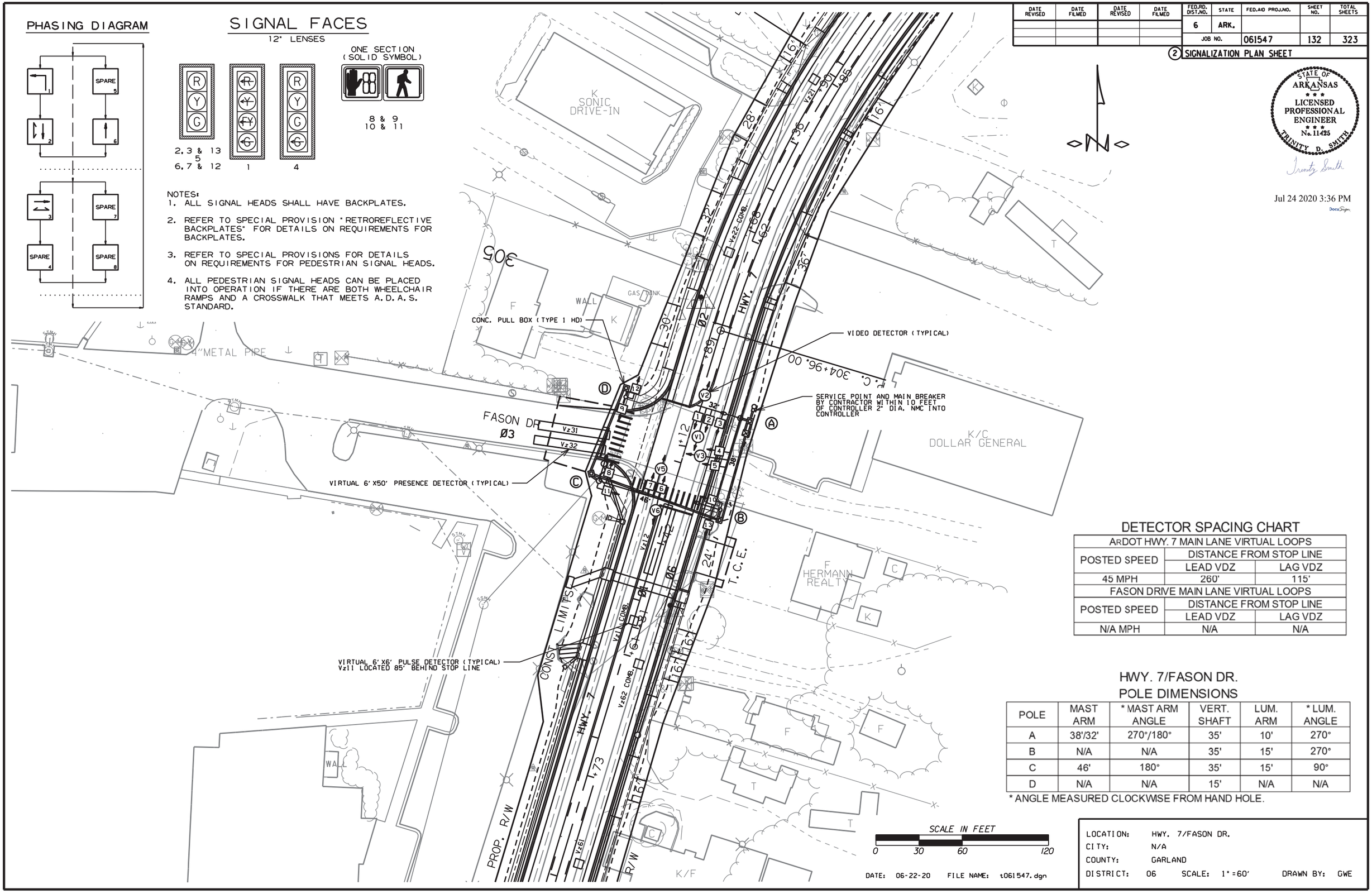
(2) SIGNALIZATION PLAN SHEET

PHASING DIAGRAM

SIGNAL FACES

12" LENSES

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEETS A.D.A.S. STANDARD.



DETECTOR SPACING CHART

ARDOT HWY. 7 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
45 MPH	260'	115'
FASON DRIVE MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
N/A MPH	N/A	N/A

HWY. 7/FASON DR. POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	38'/32'	270°/180°	35'	10'	270°
B	N/A	N/A	35'	15'	270°
C	46'	180°	35'	15'	90°
D	N/A	N/A	15'	N/A	N/A

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

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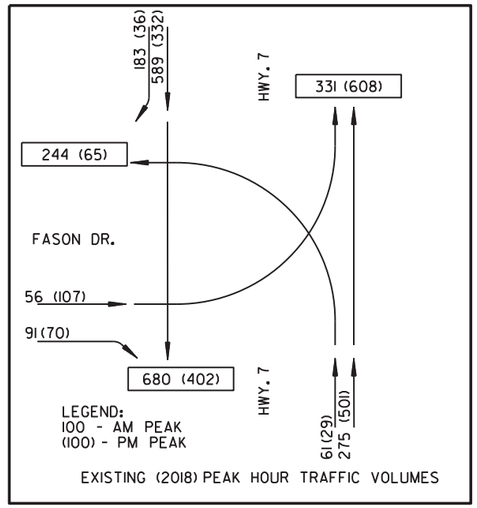
LOCATION: HWY. 7/FASON DR.
CITY: N/A
COUNTY: GARLAND
DISTRICT: 06 SCALE: 1"=60' DRAWN BY: GWE

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TRAFFIC FLOW DIAGRAM



EXISTING (2018) PEAK HOUR TRAFFIC VOLUMES

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(2) SIGNALIZATION PLAN SHEET

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CONC. PULL BOX (TYPE 1 HD)

VIDEO DETECTOR (TYPICAL)

SERVICE POINT AND MAIN BREAKER BY CONTRACTOR WITHIN 10 FEET OF CONTROLLER 2" DIA. NMC INTO CONTROLLER

VIRTUAL 6'X50' PRESENCE DETECTOR (TYPICAL)

VIRTUAL 6'X6' PULSE DETECTOR (TYPICAL)
Vz11 LOCATED 85' BEHIND STOP LINE

FASON DR.
HWY. 7
CONST. LIMITS
T.C.E.
P.C. 304+96.00
DOLL
HERMANN REALTY
GAS TANK

DESIGN PARAMETERS

POSTED SPEED LIMIT:
N/A MPH WEST APPROACH
45' MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

HWY. 7/FASON DR.
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 7 - STA. 304+41.50	31' RT.	1015216.59, 2007894.75
B	HWY. 7 - STA. 303+76.50	36' RT.	1015202.70, 2007831.06
C	HWY. 7 - STA. 303+71.49	51' LT.	1015118.36, 2007851.13
D	HWY. 7 - STA. 304+32.81	50' LT.	1015137.01, 2007909.56

SCALE IN FEET
0 20 40 80

DATE: 06-22-20 FILE NAME: t061547.dgn

LOCATION: HWY. 7/FASON DR.
CITY: N/A
COUNTY: GARLAND
DISTRICT: 06 SCALE: 1"=40' DRAWN BY: GWE

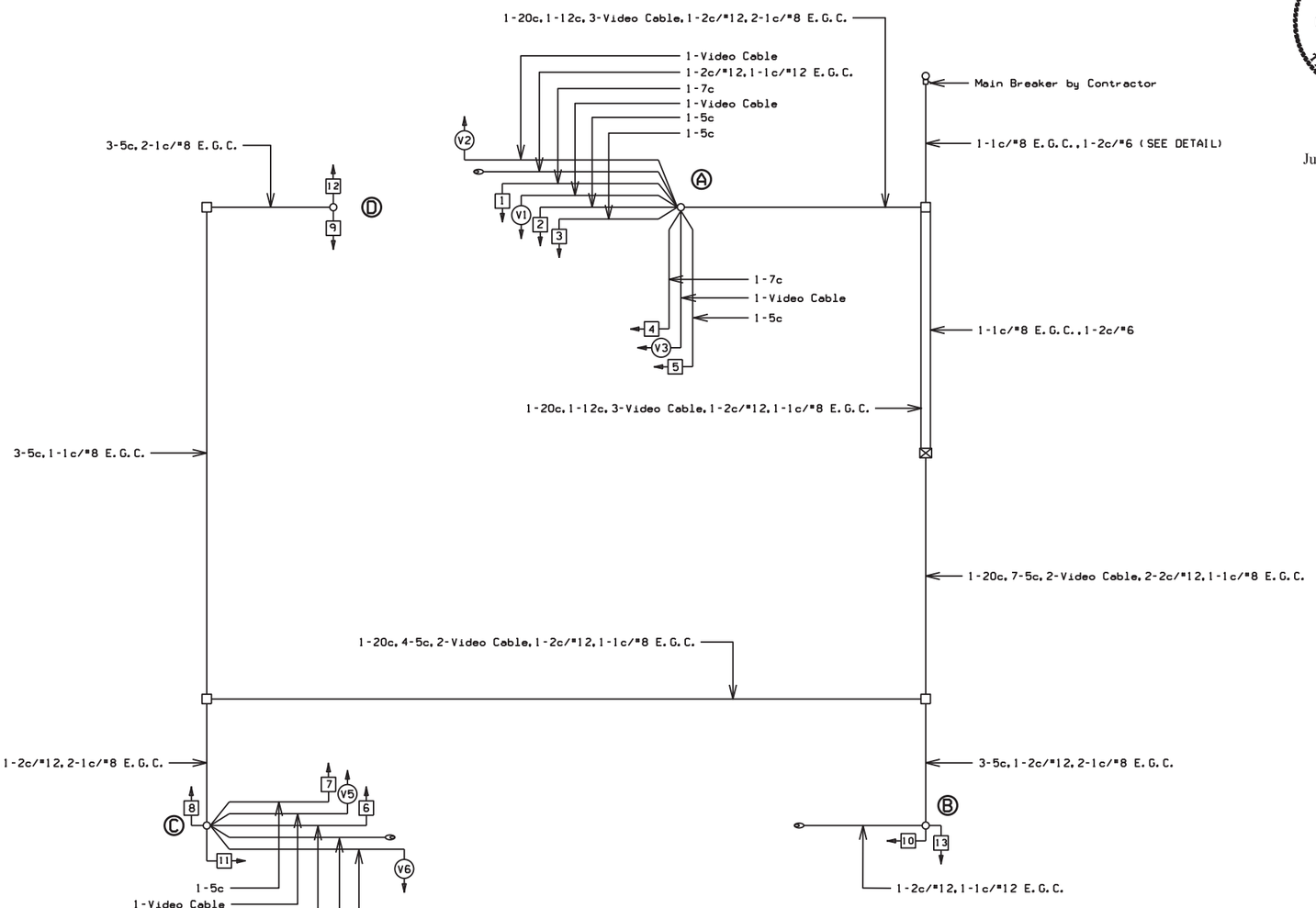
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(2) SIGNALIZATION PLAN SHEET



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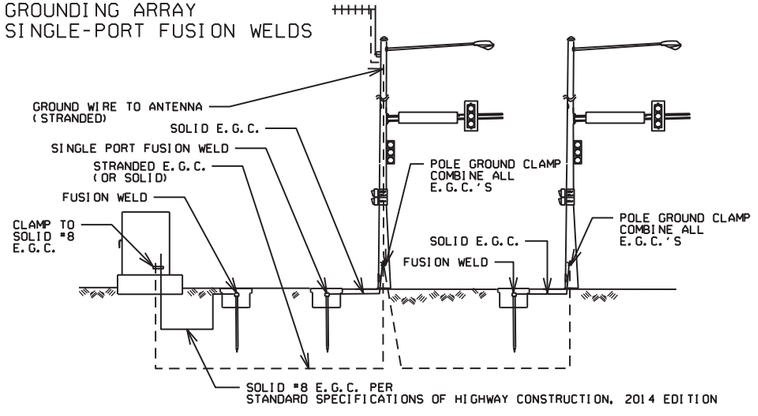


WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTONS.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

GROUNDING ARRAY
SINGLE-PORT FUSION WELDS



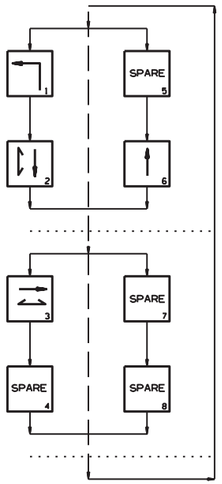
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LOCATION:	HWY. 7/FASON DR.				
CITY:	N/A				
COUNTY:	GARLAND				
DISTRICT:	06	SCALE:	N/A	DRAWN BY:	GWE

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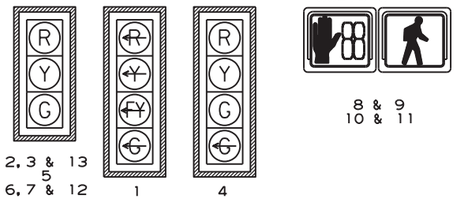
(2) SIGNALIZATION PLAN SHEET

PHASING DIAGRAM



SIGNAL FACES

12" LENSES



NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
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DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 061547											
HWY. 7/FASON DR. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM		
DET. ID #	LOCATION DIRECTION	TPYE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #	DETECTOR NUMBERS		
Vz11	NB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	37"
Vz12	NB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	37"
Vz21	SB ADVANCE	LOCAL			5	V2	2			CAMERA V2	74"
Vz22	SB NEAR	COMB.			6	V10	2	2		CAMERA V5	37"
Vz31	EB LEFT TURN	LOCAL			9	V11	3			CAMERA V3	37"
Vz32	EB RIGHT TURN	LOCAL			10	V3	3			CAMERA V3	37"
Vz61	NB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74"
Vz62	NB NEAR	COMB.			4	V14	6	6		CAMERA V1	37"
PB2 A&B	FASON DR. W. LEG	PED.				P2	2				
PB3 A&B	HWY. 7 S. LEG	PED.				P3	3				
					SPARE 7,8,11,12,13,14,15 & 16						

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

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HWY. 7/FASON DR. 1+6	CLR.	2+6	CLR.	3	CLR.		FLASH SEQ.
1	~~G~~	•	~~FY~~	•••	~~R~~	~~R~~		~~R~~
2&3	G	••	G	••	R	R		R
4	R	R	R	R	G/~~G~~	Y		R
5	R	R	R	R	G	Y		R
6&7	R	R	G	••	R	R		R
8&9	DW	DW	W	FDW	DW	DW		BLK
10&11	DW	DW	DW	DW	W	FDW		BLK

• 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

DATE: 06-22-20 FILE NAME: t061547.dgn

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CITY: N/A
COUNTY: GARLAND
DISTRICT: 06 SCALE: N/A DRAWN BY: GWE

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(2) ILLUMINATION NOTES AND QUANTITIES

GENERAL NOTES:

1. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAYBE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.

2. PERFORM ALL ELECTRICAL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF NATIONAL ELECTRICAL CODE (NFPA 70), LIFE SAFETY CODE (NFPA 101), STATE AND LOCAL ELECTRICAL CODE. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

3. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY A PUSHING OR BORING METHOD OR AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.

4. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTOR. THE TEST VOLTAGE SHALL BE LIMITED TO 600 VOLTS. ANY CONDUCTOR NOT MEETING THE MIMINUM ACCEPTABLE VALUE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE USING NEW CONDUCTOR. THE RESULTS SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS-IN-CONDUIT.

5. PULL BOX LIDS SHALL CLOSE FLUSH WITHOUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL NOT ENGAGE IN EXCAVATION OR DEMOLITION ACTIVITIES WITHOUT HAVING FIRST NOTIFIED THE ARKANSAS ONE CALL CENTER IN ACCORDANCE WITH A.C.A. § 14-271 UNDERGROUND FACILITIES DAMAGE PREVENTION ACT. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE CALL CENTER.

7. UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME UTILITES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES INVOLVED AND VERIFY THE LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL IT IS NO LONGER NECESSARY.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF REPAIR OR REPLACEMENT OF EXISTING UTILITES DAMAGED DURING THE CONSTRUCTION.

9. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.

10. ALL ELECTRICAL COMPONENTS SHALL BE UL LISTED.

11. ALL LUMINAIRE ASSEMBLIES SHALL HAVE BUG RATING OF U0.

12. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF LEDGER SIZE (11" X 17") AS-BUILT PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.

13. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPE SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.

14. ALL CONCRETE PULL BOXES SHALL BE TYPE 2 HD UNLESS OTHERWISE INDICATED ON THE PLANS.

15. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET.

16. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-28-101 ET SEQ. AND §20-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:
    (1) ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.
    (2) THE RATIO OF LICENSED-ELECTRICIAN-TO-APPRENTICE-ELECTRICIANS.
    (3) PRINTED SEARCH RESULT OF LICENSED ELECTRICIANS FROM ARKANSAS DEPARTMENT OF LABOR ELECTRICIAN LICENSEE DIRECTORY (https://www.ark.org/labor/electrician/search.php)
    ALL LICENSES SHALL BE VALID AND CURRENT.

SUMMARY OF QUANTITITES

ITEM NO.	ITEM	QUANTITIES TOTAL	UNIT
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/8 A.W.G., E.G.C.)	2018	LIN. FT
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/12 A.W.G., E.G.C.)	770	LIN. FT
710	NON-METALLIC CONDUIT (2")	1949	LIN. FT
SP & 711	CONCRETE PULL BOX (TYPE 2 HD)	18	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	LED ROADWAY ILLUMINATION POLE (14,000 LUMENS, COBRA HEAD, SHOE BASE, 30')	14	EACH

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
DocuSign

LOCATION: HWY. 7 AND HWY 5
CITY: N/A
COUNTY: GARLAND COUNTY
DISTRICT: 6 SCALE: N/A DRAWN BY: PC

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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.		061547	137	323

(2) ILLUMINATION TABLES

LUMINAIRE SCHEDULE

POLE NO.	EASTING	NORTHING	STA.	OFFSET (FT)	CENTER LINE	MOUNTING HEIGHT (FT)	VOLTAGE (V)	LUM. ARM (FT)	DELIVERED LUMENS	ORIENTATION ANGLE (PLAN NORTH = 0°, CW ROTATION)
SERVICE POINT	1016774.97	2009315.93	325+54.50	134.76	HWY. 7	30	240	12	14,000	N/A
P1A	1016799.03	2009399.83	326+41.64	129.68		30	240	12	14,000	15
P2A	1016739.73	2009394.18	326+16.67	75.6		30	240	12	14,000	340
P3A	1016683.16	2009353.71	325+59.75	35.62		30	240	12	14,000	295
P4A	1016601.52	2009176.4	323+72.76	32.67		30	240	12	14,000	300
P5A	1016585.31	2009282.32	324+58.23	32.54		30	240	12	14,000	115
P6A	1016585.07	2009472.48	326+39.32	96.27		30	240	12	14,000	75
P7A	1016561.32	2009570.36	701+47.82	35.65	HWY. 7 NORTH	30	240	12	14,000	40
P8A	1016429.87	2009666.15	703+16.60	30.50		30	240	12	14,000	30
P1B	1016813.73	2009525.96	327+96.79	75.53	HWY. 7	30	240	12	14,000	260
P2B	1016822.07	2009601.48	328+60.48	34.11		30	240	12	14,000	300
P3B	1016966.02	2009749.76	330+65.01	29.18		30	240	12	14,000	180
P4B	1016860.6	2009721.12	329+68.62	28.55		30	240	12	14,000	150
P5B	1016692.62	2009621.72	700+78.83	87.31	HWY. 7 NORTH	30	240	12	14,000	180
P6B	1016545.1	2009673.46	702+23.53	34.48		30	240	12	14,000	215

ELECTRICAL SERVICE DATA

CIRCUIT ID	LOCATION	SERVICE VOLTAGE	SERVICE CONDUIT SIZE	SERVICE CONDCUTORS	MAIN CIRCUIT BREAKER	BRANCH CIRCUIT BREAKER	BRANCH CIRCUIT (AMPS)	KVA LOAD
A	N 2009315.93 E 1016774.97	240V, SINGLE PHASE	2" NMC	2C/8 A.W.G., E.G.C.	2P/100A	2P/10A	2.50	0.60
B		240V, SINGLE PHASE	2" NMC	2C/8 A.W.G., E.G.C.		2P/10A	1.90	0.46

CIRCUIT A, Voltage Drop, 2C/8AWG, EGC

SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	CURRENT	Z/1000ft	LENGTH	VD	%VD
SP to P1A	240	1	1	8	0.53	0.78	86.65	0.07	0.03
P1A-P2A	240	1	1	8	1.06	0.78	60.22	0.10	0.04
P2A-P3A	240	1	1	8	1.59	0.78	71.33	0.18	0.07
P3A-P4A	240	1	1	8	2.12	0.78	193.06	0.64	0.27
P4A-PB	240	1	1	8	2.65	0.78	70.15	0.29	0.12
PB-P5A	240	1	1	8	3.18	0.78	69.38	0.34	0.14
P5A-P6A	240	1	1	8	3.71	0.78	194.93	1.13	0.47
P6A-P7A	240	1	1	8	4.24	0.78	101.56	0.67	0.28
P7A-P8A	240	1	1	8	4.77	0.78	161.94	1.21	0.50
								TOTAL	1.93

CIRCUIT B, Voltage Drop, 2C/8AWG, EGC

SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	CURRENT	Z/1000ft	LENGTH	VD	%VD
SP-P1A	240	1	1	8	0.53	0.78	86.65	0.07	0.03
P1A-P1B	240	1	1	8	1.06	0.78	147.55	0.24	0.10
P1B-P2B	240	1	1	8	1.59	0.78	76.68	0.19	0.08
P2B-PB	240	1	1	8	2.12	0.78	135.79	0.45	0.19
PB-P4B	240	1	1	8	2.65	0.78	31.27	0.13	0.05
P4B-P3B	240	1	1	8	3.18	0.78	108.16	0.54	0.22
PB-P5B	240	1	1	8	3.71	0.78	166.88	0.97	0.40
P5B-P6B	240	1	1	8	4.24	0.78	158.79	1.05	0.44
								TOTAL	1.52

CONDUIT FILL

CONDUIT SIZE	CONDUCTORS		CONDCUIT FILL	MAX FILL
2"	2C/#8, E.G.C.		4.69%	40%
2"		2C/#12, E.G.C.	2.24%	40%

ILLUMINATION STATISTICS

DESCRIPTION	AVG. (FC)	MAX. (FC)	MIN. (FC)	AVG/MIN
ROUNDABOUT	1.5	2.8	0.8	1.9:1
HWY. 5 (NE ROADWAY)	1.6	2.8	0.9	1.8:1
HWY. 7 (NW ROADWAY)	1.8	3.0	0.8	2.3:1
HWY. 7 (SW ROADWAY)	1.5	2.8	0.7	2.1:1
HWY. 7 BYPASS	1.5	2.8	0.6	2.5:1
CROSSWALK, HWY. 5 NORTHBOUND	1.0	1.1	0.9	1.1:1
CROSSWALK, HWY. 5 SOUTHBOUND	1.3	1.5	1.1	1.2:1
CROSSWALK, HWY. 7 NORTHBOUND 1	1.2	1.4	1	1.2:1
CROSSWALK, HWY. 7 SOUTHBOUND 1	0.9	1.2	0.7	1.3:1
CROSSWALK, HWY. 7 NORTHBOUND 2	1.1	1.3	0.9	1.2:1
CROSSWALK, HWY. 7 SOUTHBOUND 2	1.5	1.7	1.3	1.2:1
CROSSWALK, HWY. 7 BYPASS NORTHBOUND	0.8	1.1	0.6	1.3:1
CROSSWALK, HWY. 7 BYPASS SOUTHBOUND	1.1	1.2	0.9	1.2:1

NOTES:
1. CALCULATIONS WERE BASED ON 0.8 LIGHT LOSS FACTOR.
2. ILLUMINATION VALUES SHOWN FOR ROUNDABOUT AND HIGHWAYS 5 AND 7 ARE HORIZONTAL ILLUMINANCE.
3. ILLUMINATION VALUES SHOWN FOR CROSSWALKS ARE VERTICAL ILLUMINANCE.

ILLUMINATION DESIGN CRITERIA

DESCRIPTION	AVG. (FC)	AVG/MIN
ROUNDABOUT	1.2	4.0:1
ROADWAY	1	4.0:1

NOTE: DESIGN BASIS ARE AASHTO ROADWAY LIGHTING DESIGN GUIDE, 7TH ED., FOR ROADWAYS, AND IES RP-8-18 FOR ROUNDABOUT.

STATE OF ARKANSAS
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No. 7527
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DocuSigned

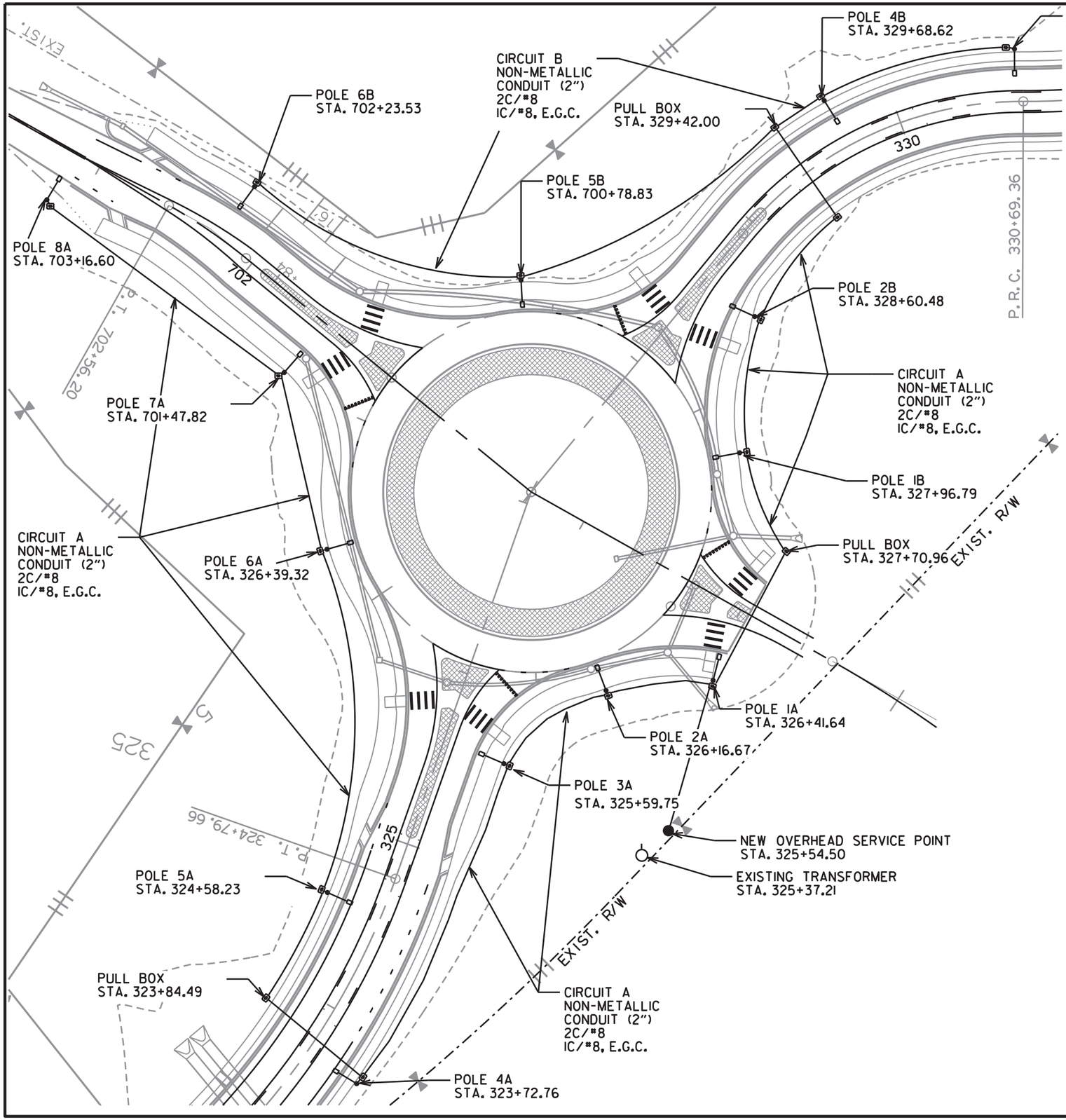
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CITY: N/A
COUNTY: GARLAND COUNTY
DISTRICT: 6 SCALE: N/A DRAWN BY: PC

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(2) ILLUMINATION LAYOUT



ILLUMINATION NOTES

1. FOR LUMINAIRE ORIENTATION AND PLACEMENT, SEE LUMINAIRE SCHEDULE.
2. INSTALL CONCRETE PULL BOX (TYPE 2 HD) WITHIN 5 FEET OF THE POLE FOUNDATION. FOR MORE INFORMATION, SEE STANDARD DRAWING SD-6 AND SPECIAL PROVISION CONCRETE PULL BOX.
3. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2")."
4. INSTALL 2#12 XHHW-2, 1#12 E.G.C. FROM PULL BOX TO LUMINAIRES.
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. USE MINIMUM 1/4" PULL ROPE OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS.
7. ALL SPLICES SHALL BE WATERTIGHT, AND UL-LISTED FOR CONTINOUS USE IN SUBMERSIBLE INSTALLATIONS.
8. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETEST THE SYSTEM. OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
9. UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" OF COVER.

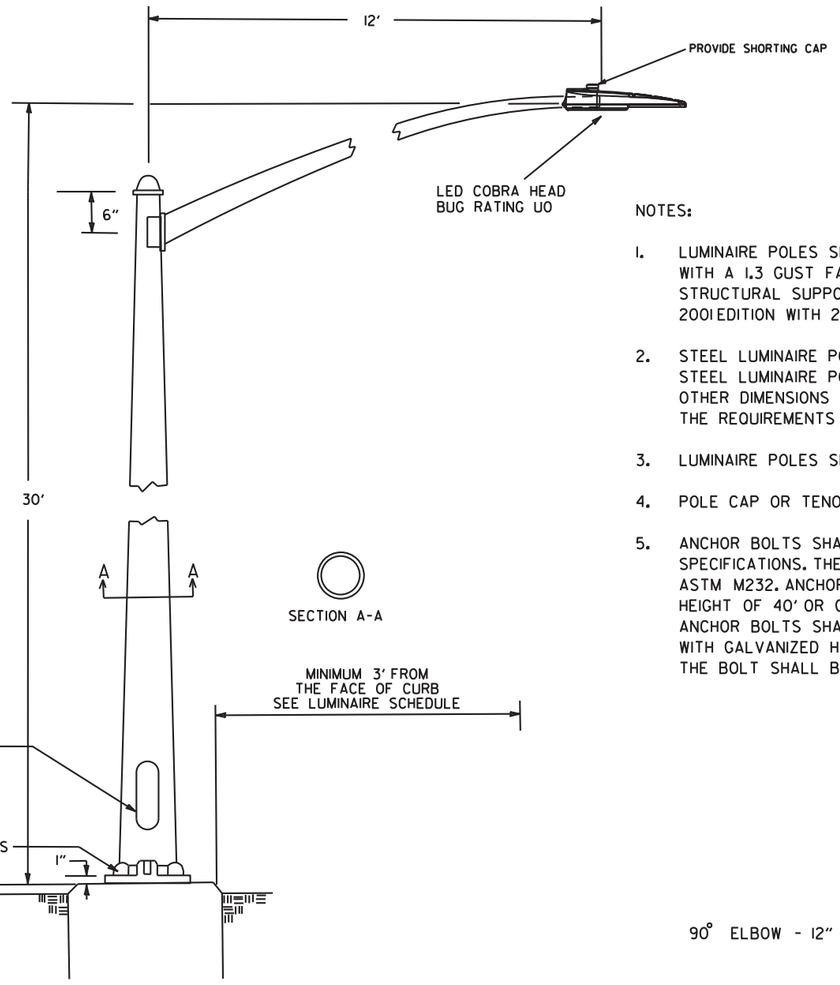
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
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LOCATION:	HWY. 7 AND HWY 5			
CITY:	N/A			
COUNTY:	GARLAND COUNTY			
DISTRICT:	6	SCALE: N/A	DRAWN BY:	PC

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(2) ILLUMINATION DETAILS



COBRA HEAD LUMINAIRE WITH SHOE BASE

NOTES:

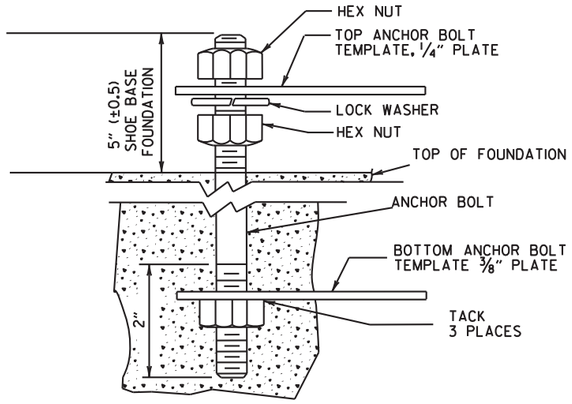
1. LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 90 MPH WIND ZONE WITH A 1.3 GUST FACTOR ON THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS, 2001 EDITION WITH 2003 AND 2006 INTERIMS.

2. STEEL LUMINAIRE POLES SHALL BE A MINIMUM OF 11 GAUGE. STEEL LUMINAIRE POLES SHALL BE HOT-DIPPED GALVANIZED. OTHER DIMENSIONS PER MANUFACTURER'S RECOMMENDATION AS NECESSARY TO MEET THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.

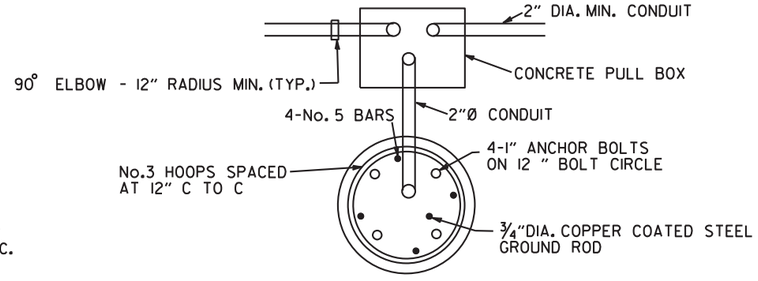
3. LUMINAIRE POLES SHALL BE FABRICATED FROM ASTM A572 GRADE 50 OR 65 STEEL.

4. POLE CAP OR TENON CAP SHALL BE PROVIDED.

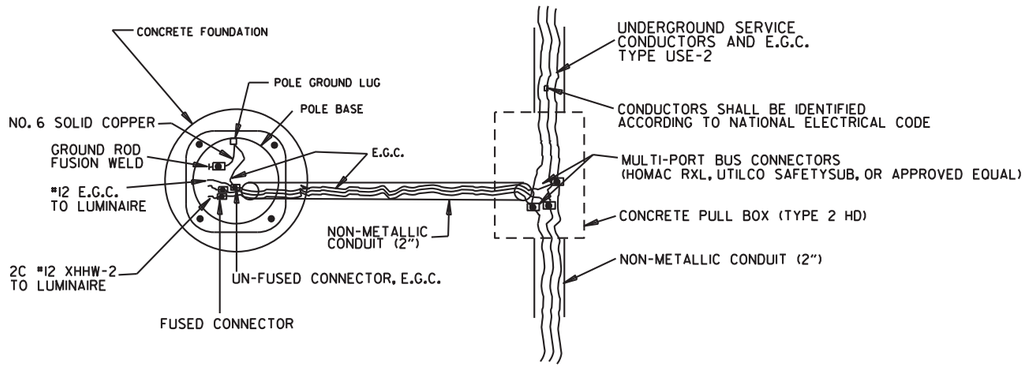
5. ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS. THE TOP 8" OF ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM M232. ANCHOR BOLTS IN FOUNDATIONS SHALL BE 1.25" X 30" FOR MOUNTING HEIGHT OF 40' OR GREATER, 1" X 30" FOR MOUNTING HEIGHT LESS THAN 40'. ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5" AND FURNISHED WITH GALVANIZED HEX NUTS, LOCK WASHERS, AND TEMPLATE. THE LOWER END OF THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE.



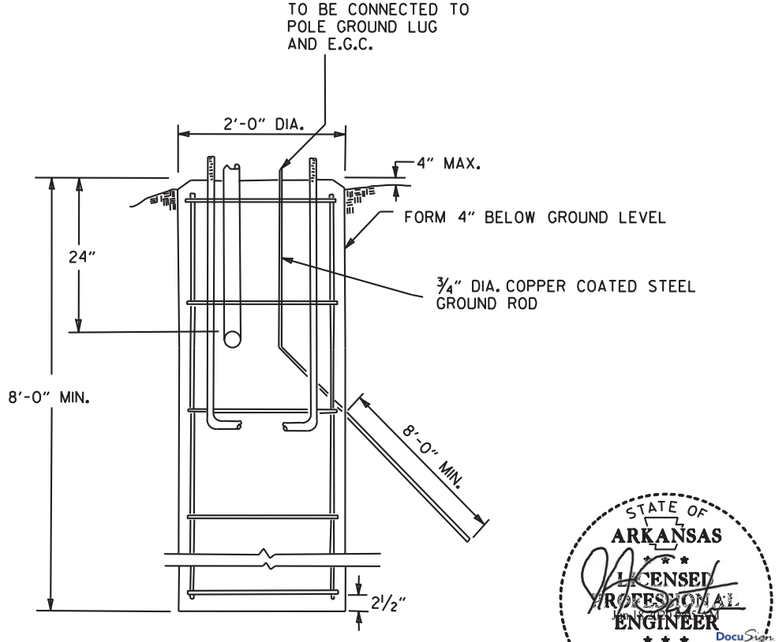
ANCHOR BOLT DETAIL



PLAN



POLE FOUNDATION/PULL BOX
WIRING DETAIL



ROADWAY LUMINAIRE
POLE FOUNDATION

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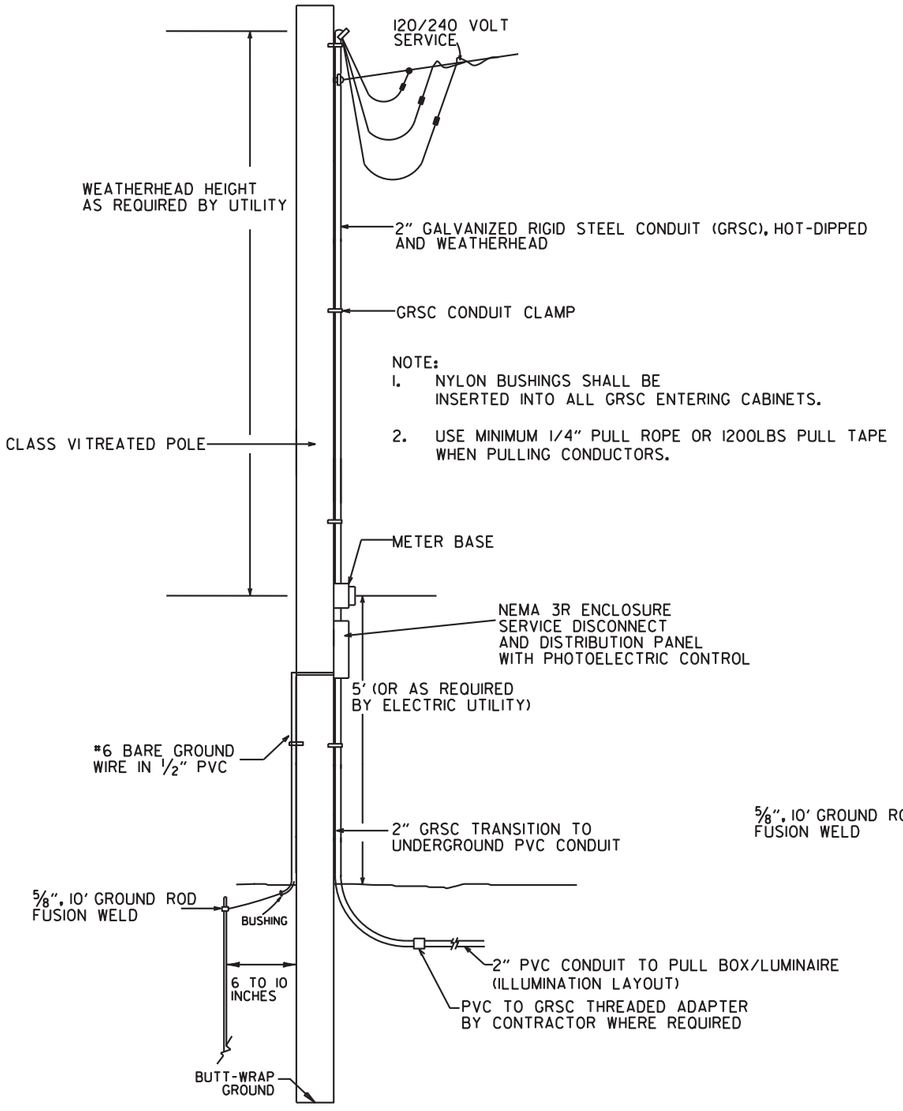
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HWY. 7S/HWY. 5
ILLUMINATION DETAILS

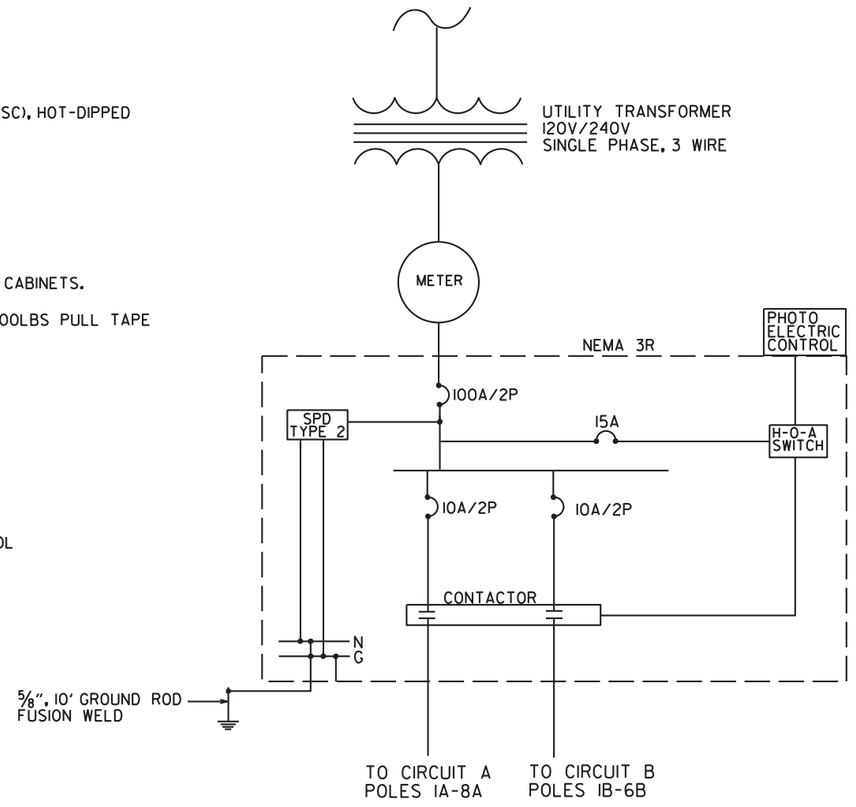
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				6	ARK.			
				JOB NO.		061547	140	323

(2) ILLUMINATION DETAILS

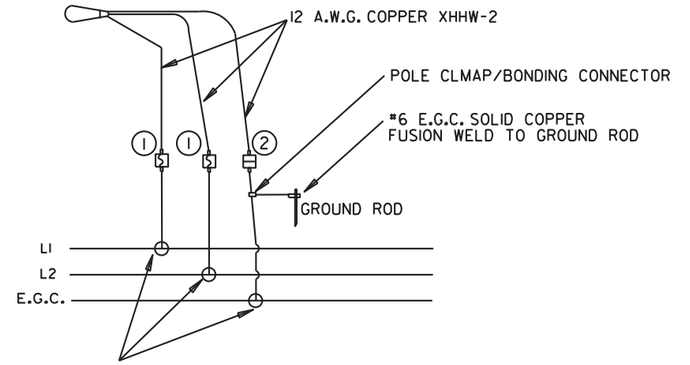


LUMINAIRE SERVICE POINT ASSEMBLY

120V/240 VAC LUMINAIRE SERVICE POINT ASSEMBLY FOR ROADWAY LIGHTING



ONE-LINE DIAGRAM



MULTI-PORT CONNECTOR
HOMAC RXL, POLARIS EDGE, UTILCO SAFETYSUB, OR EQUIVALENT

TYPICAL WIRING FOR LUMINAIRES
THREE-WIRE CIRCUIT-CENTER GROUNDED
LUMINIARES SERVED AT 240 VAC.

(120/240 VOLT SERVICE)

LUMINAIRE WIRING SCHEMATICS

KEYED NOTES:

1. FUSED CONNECTOR - SHALL BE WATERTIGHT, UL-LISTED, AND DESIGNED AS BREAKAWAY (HOMAC FLOOD-SEAL, EATON BUSSMANN OR EQUAL). USE A FUSED CONNECTOR FOR THE LINE WIRE ON ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.
2. UN-FUSED CONNECTOR - SHALL BE WATERTIGHT AND SHALL BE DESIGNED AS BREAKAWAY (HOMAC FLOOD-SEAL, EATON BUSSMANN, OR EQUAL).

STATE OF ARKANSAS
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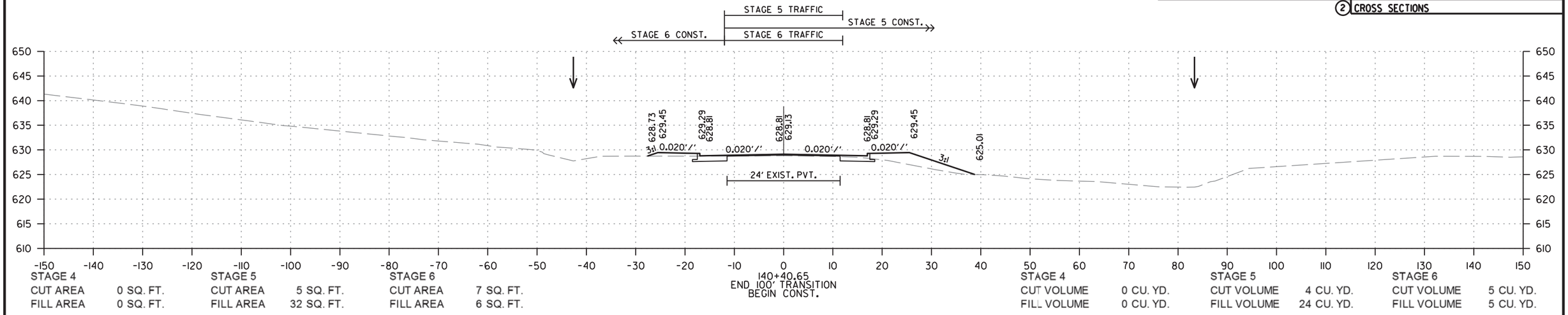
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HWY. 7S/HWY. 5
ILLUMINATION DETAILS

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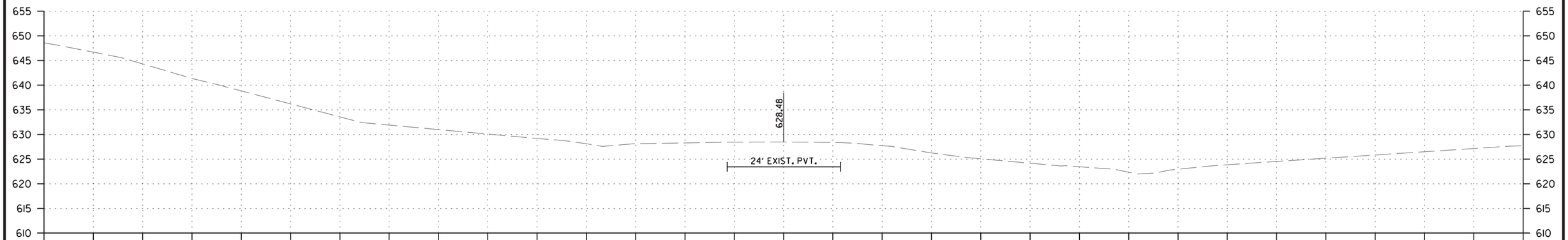
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	32 SQ. FT.	FILL AREA	6 SQ. FT.

140+40.65
END 100' TRANSITION
BEGIN CONST.

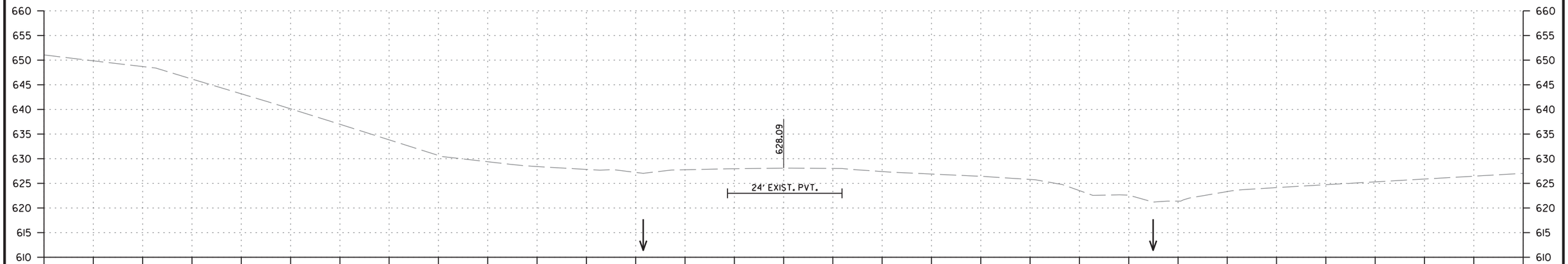
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	24 CU. YD.	FILL VOLUME	5 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.

140+00.00

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.

139+40.65
END OVERLAY
BEGIN 100' TRANSITION

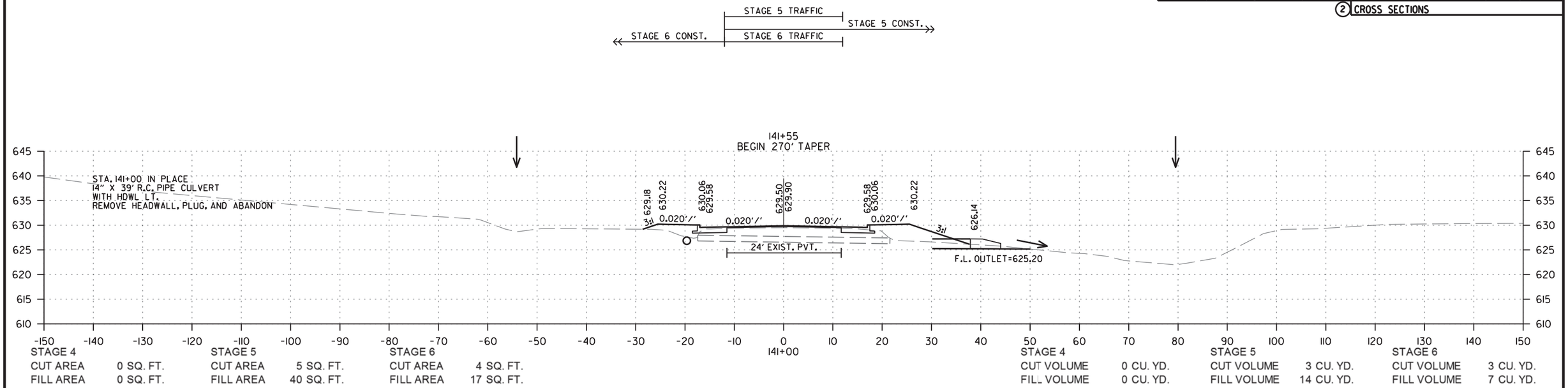
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 139+40.65 TO STA. 140+40.65

eh40219 6/22/2020
R061547.DGN

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.		061547	142	323

(2) CROSS SECTIONS

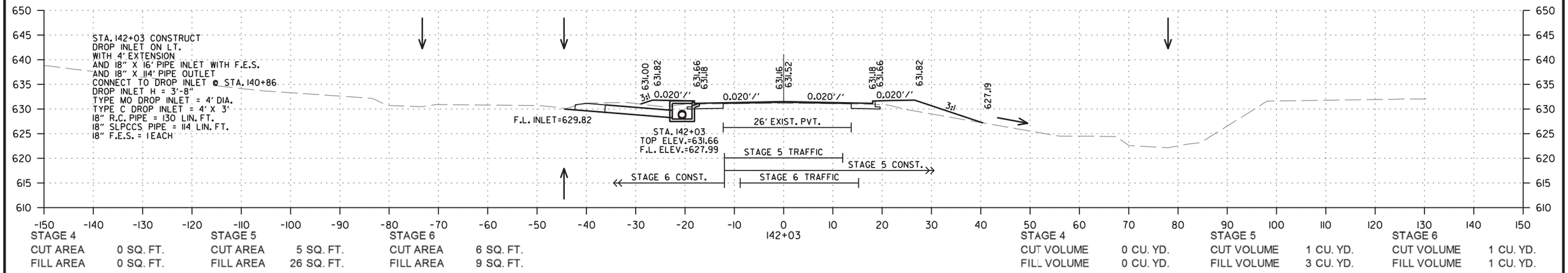


HWY. 7
STA. 140+57 TO STA. 141+00

6/22/2020
ah40219
R061547.DGN

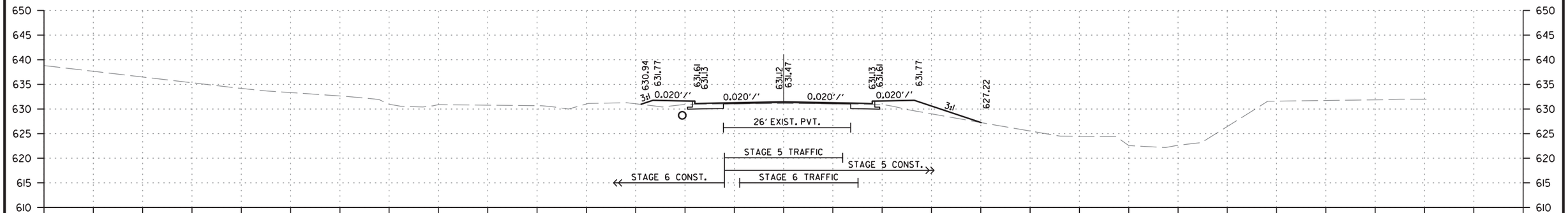
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	143	323

(2) CROSS SECTIONS



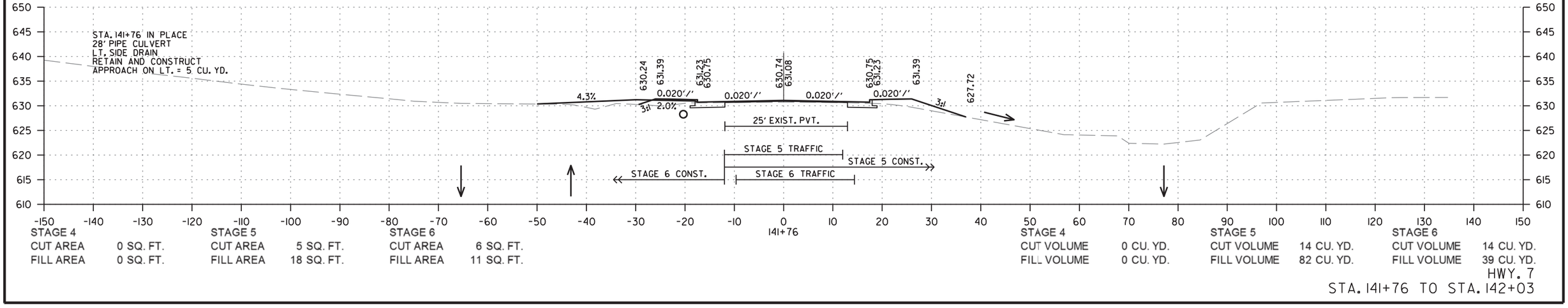
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	9 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	1 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	3 CU. YD.	FILL VOLUME	1 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	10 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	9 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	18 SQ. FT.	FILL AREA	11 SQ. FT.

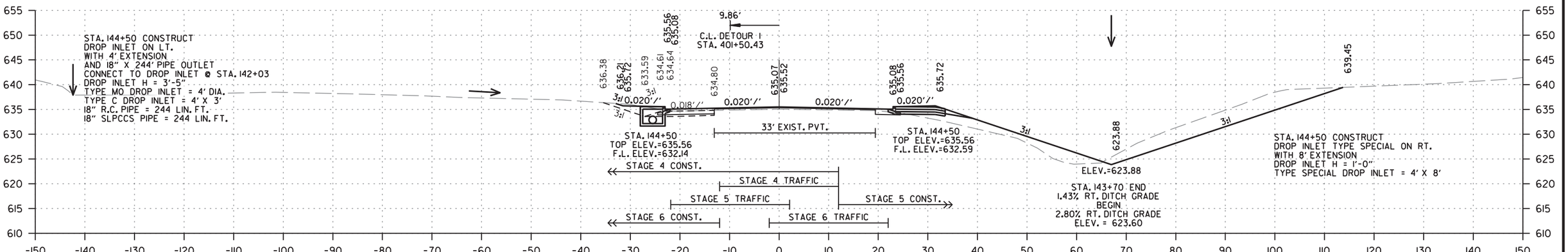
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	14 CU. YD.	CUT VOLUME	14 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	82 CU. YD.	FILL VOLUME	39 CU. YD.

HWY. 7
STA. 141+76 TO STA. 142+03

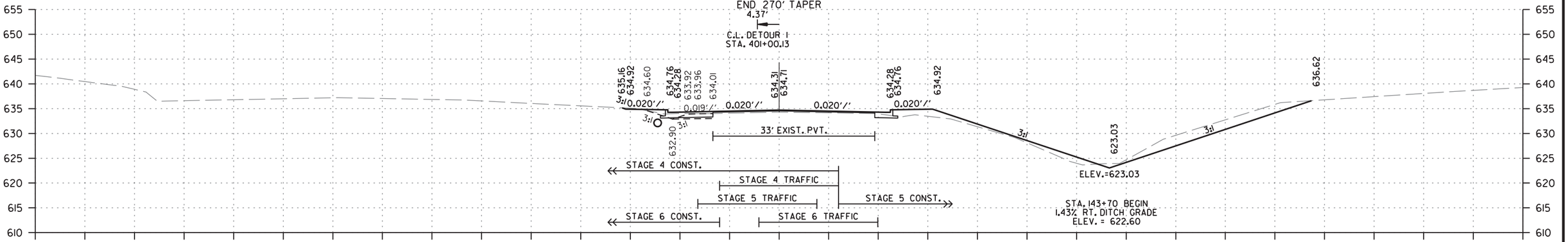
eh40219 6/22/2020
R061547.DGN

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.		061547	144	323

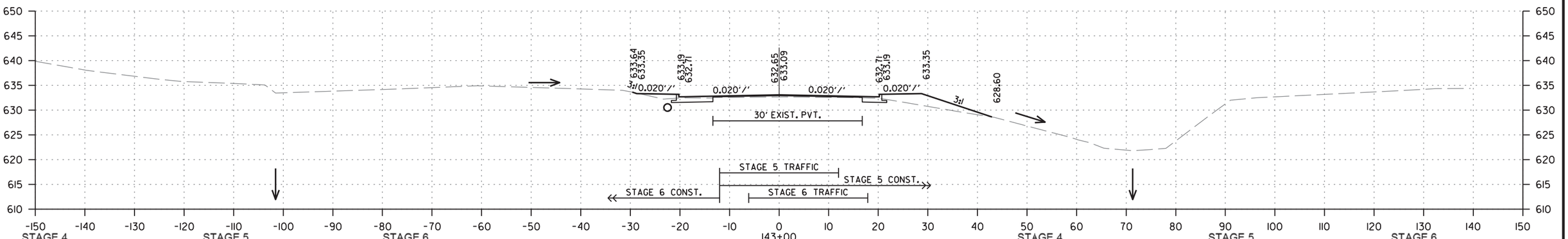
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	26 SQ. FT.	CUT AREA	132 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	34 CU. YD.	CUT VOLUME	184 CU. YD.	CUT VOLUME	12 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	78 SQ. FT.	FILL AREA	12 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	104 CU. YD.	FILL VOLUME	14 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	11 SQ. FT.	CUT AREA	67 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	20 CU. YD.	CUT VOLUME	131 CU. YD.	CUT VOLUME	22 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	34 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	119 CU. YD.	FILL VOLUME	15 CU. YD.



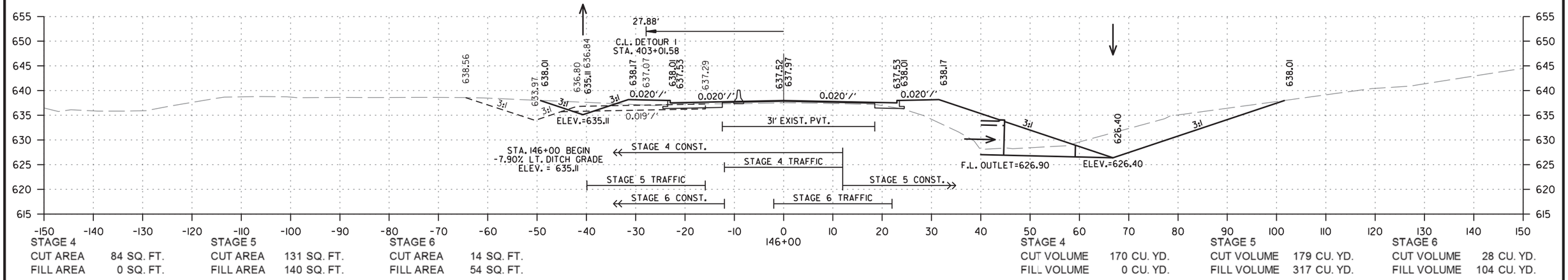
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	16 CU. YD.	CUT VOLUME	23 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	30 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	101 CU. YD.	FILL VOLUME	25 CU. YD.

HWY. 7
STA. 143+00 TO STA. 144+50

ah40219 6/22/2020
R061547.DGN

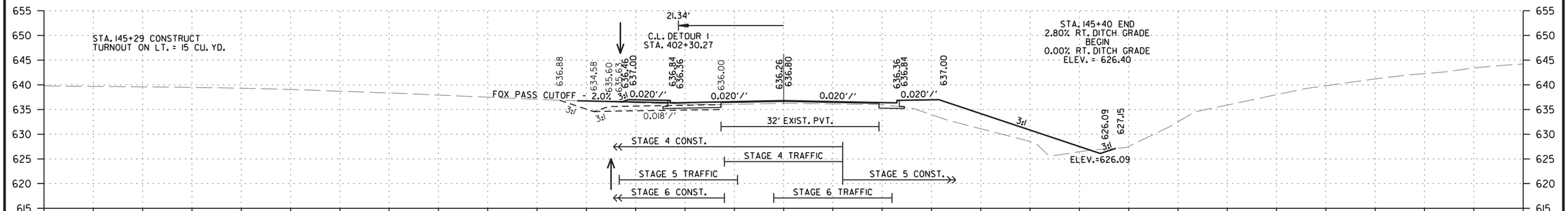
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	145	323

(2) CROSS SECTIONS



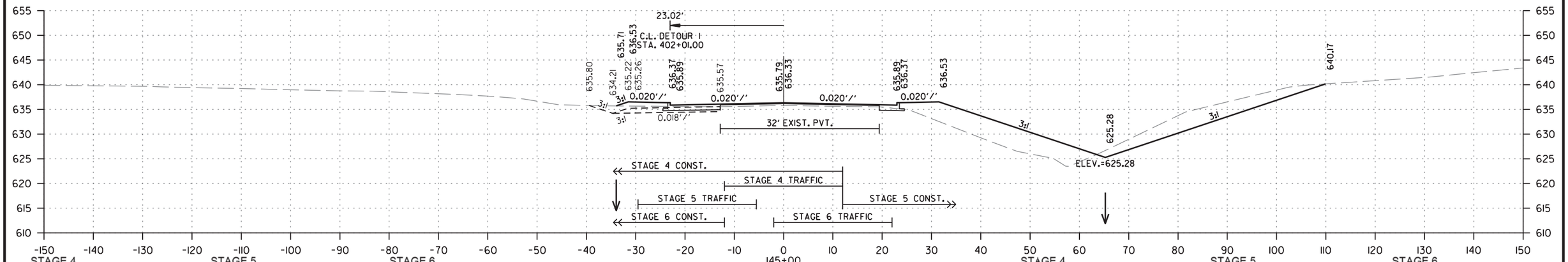
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	84 SQ. FT.	CUT AREA	131 SQ. FT.	CUT AREA	14 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	140 SQ. FT.	FILL AREA	54 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	170 CU. YD.	CUT VOLUME	179 CU. YD.	CUT VOLUME	28 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	317 CU. YD.	FILL VOLUME	104 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	45 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	101 SQ. FT.	FILL AREA	25 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	41 CU. YD.	CUT VOLUME	63 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	132 CU. YD.	FILL VOLUME	23 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	31 SQ. FT.	CUT AREA	112 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	145 SQ. FT.	FILL AREA	17 SQ. FT.

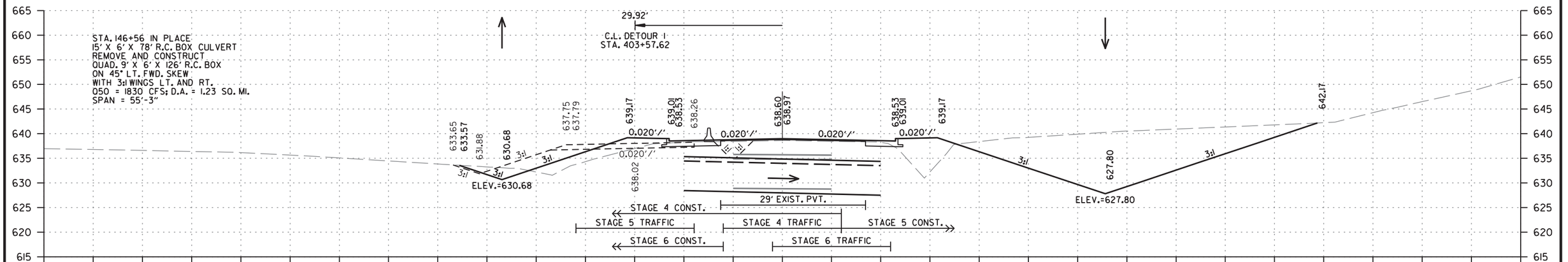
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	53 CU. YD.	CUT VOLUME	226 CU. YD.	CUT VOLUME	14 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	206 CU. YD.	FILL VOLUME	27 CU. YD.

HWY. 7
STA. 145+00 TO STA. 146+00

ah40219 6/22/2020
R061547.DGN

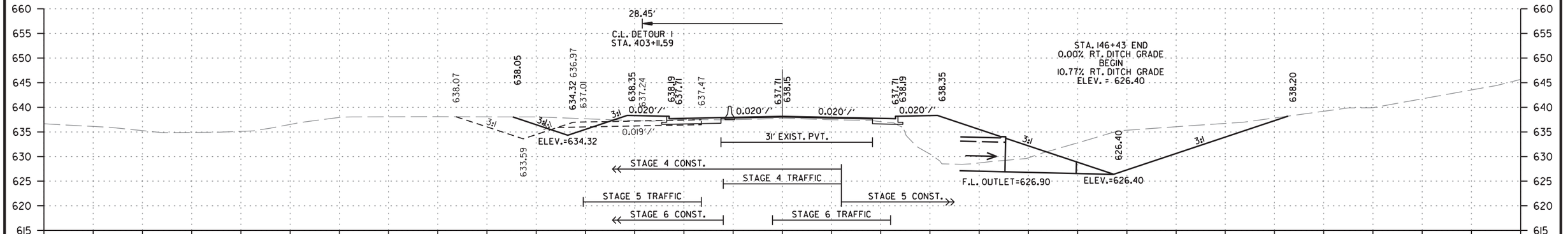
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	146	323

(2) CROSS SECTIONS



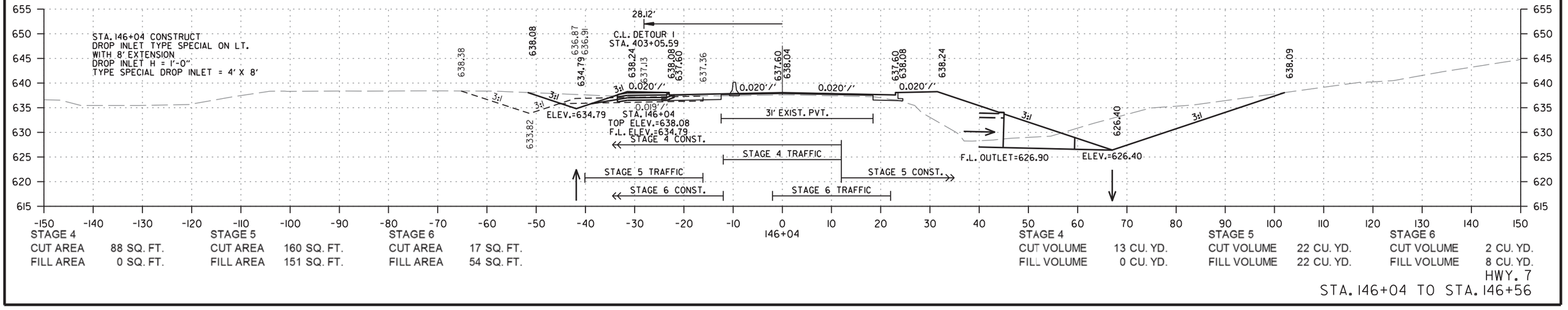
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	16 SQ. FT.	CUT AREA	467 SQ. FT.	CUT AREA	58 SQ. FT.
FILL AREA	63 SQ. FT.	FILL AREA	54 SQ. FT.	FILL AREA	12 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	91 CU. YD.	CUT VOLUME	574 CU. YD.	CUT VOLUME	67 CU. YD.
FILL VOLUME	54 CU. YD.	FILL VOLUME	189 CU. YD.	FILL VOLUME	53 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	91 SQ. FT.	CUT AREA	207 SQ. FT.	CUT AREA	21 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	168 SQ. FT.	FILL AREA	50 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	20 CU. YD.	CUT VOLUME	41 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	35 CU. YD.	FILL VOLUME	12 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	88 SQ. FT.	CUT AREA	160 SQ. FT.	CUT AREA	17 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	151 SQ. FT.	FILL AREA	54 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	13 CU. YD.	CUT VOLUME	22 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	8 CU. YD.

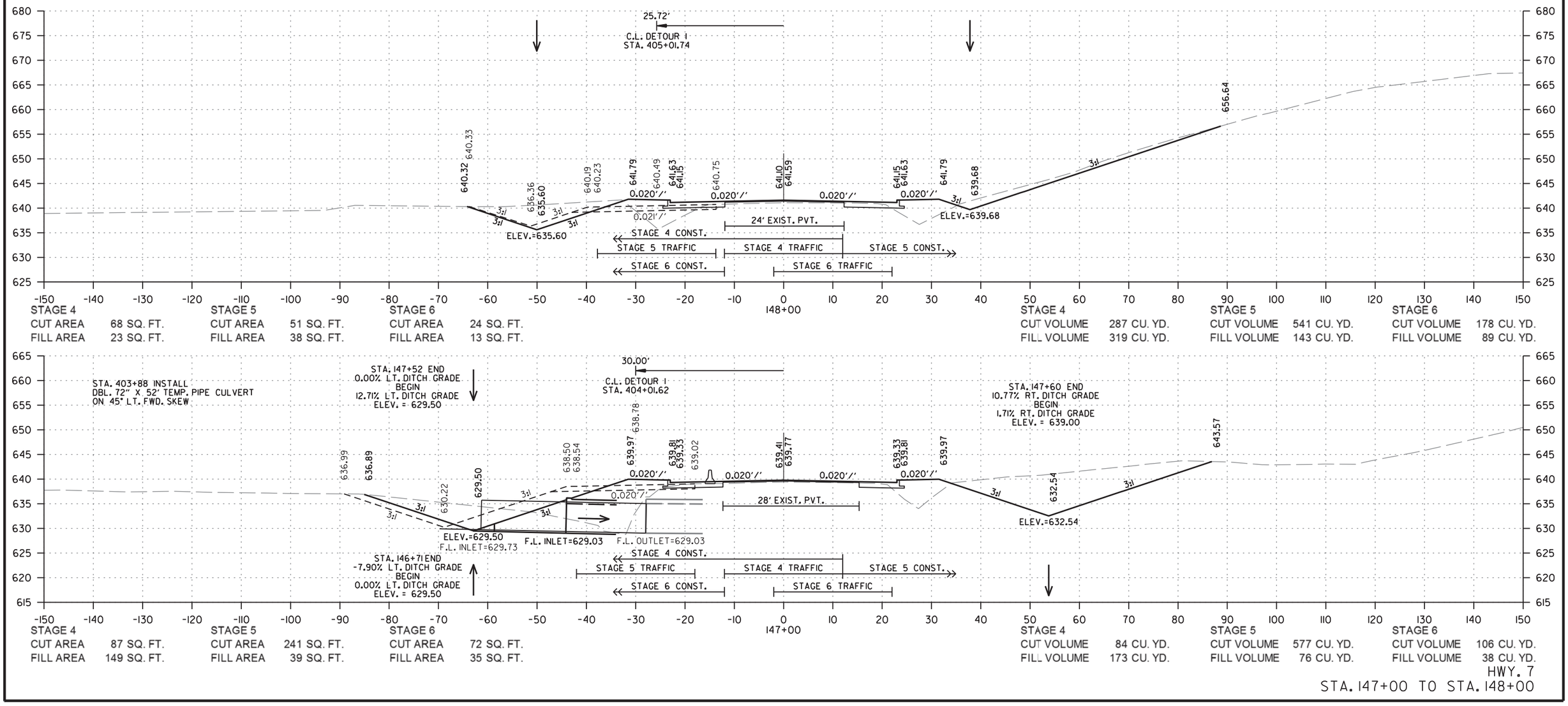
HWY. 7
STA. 146+04 TO STA. 146+56

eh40219 6/22/2020
R061547.DGN

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.		061547	147	323

(2) CROSS SECTIONS

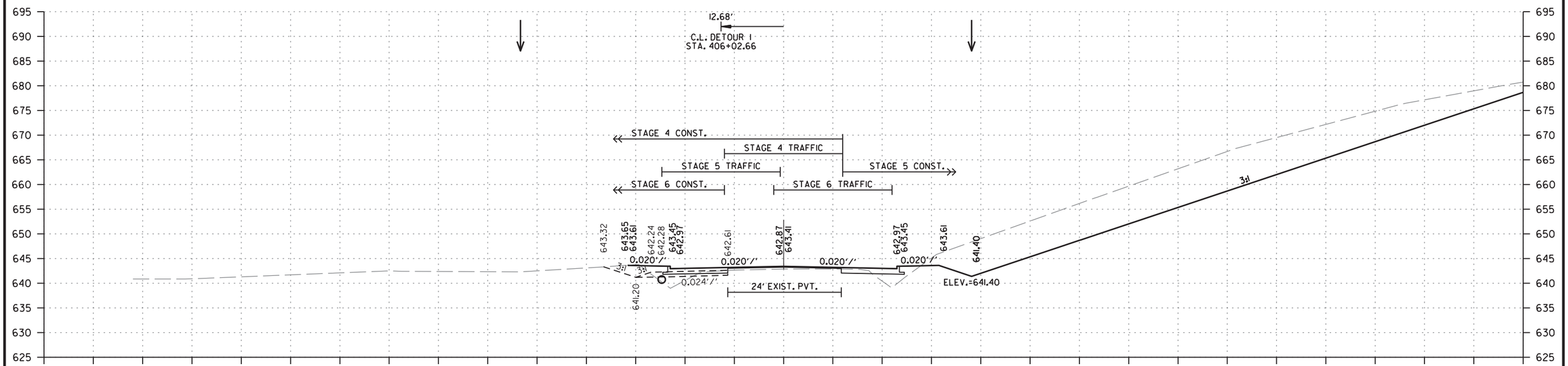


HWY. 7
STA. 147+00 TO STA. 148+00

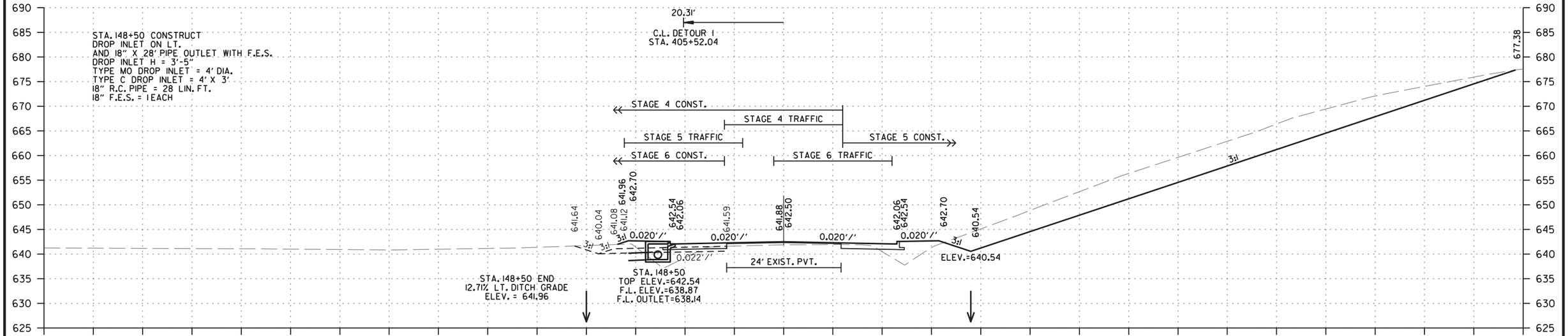
ah40219 6/22/2020
R061547.DGN

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.		061547	148	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	18 SQ. FT.	CUT AREA	790 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	38 CU. YD.	CUT VOLUME	1169 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	9 SQ. FT.	FILL AREA	15 SQ. FT.	FILL AREA	18 SQ. FT.	FILL VOLUME	25 CU. YD.	FILL VOLUME	40 CU. YD.	FILL VOLUME	38 CU. YD.



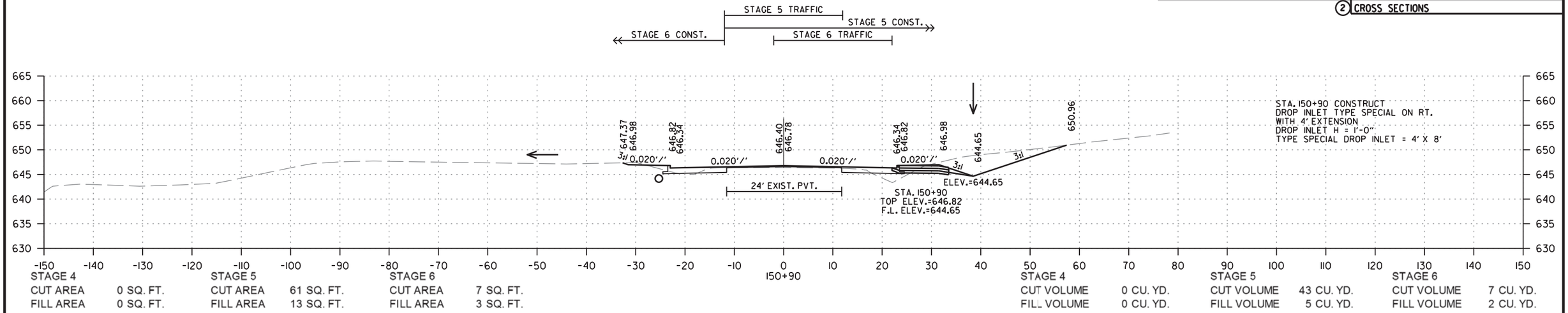
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	23 SQ. FT.	CUT AREA	472 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	84 CU. YD.	CUT VOLUME	484 CU. YD.	CUT VOLUME	27 CU. YD.
FILL AREA	18 SQ. FT.	FILL AREA	28 SQ. FT.	FILL AREA	23 SQ. FT.	FILL VOLUME	38 CU. YD.	FILL VOLUME	61 CU. YD.	FILL VOLUME	33 CU. YD.

HWY. 7
STA. 148+50 TO STA. 149+00

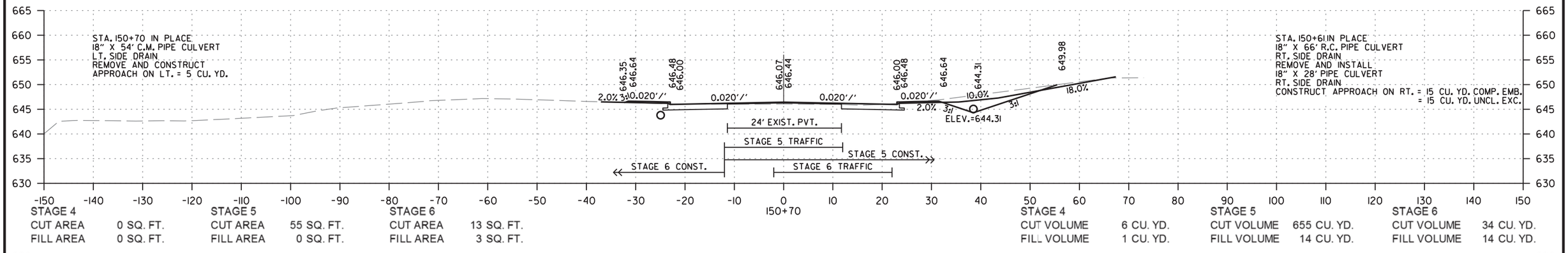
ah40219 6/22/2020
R061547.DGN

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.		061547	149	323

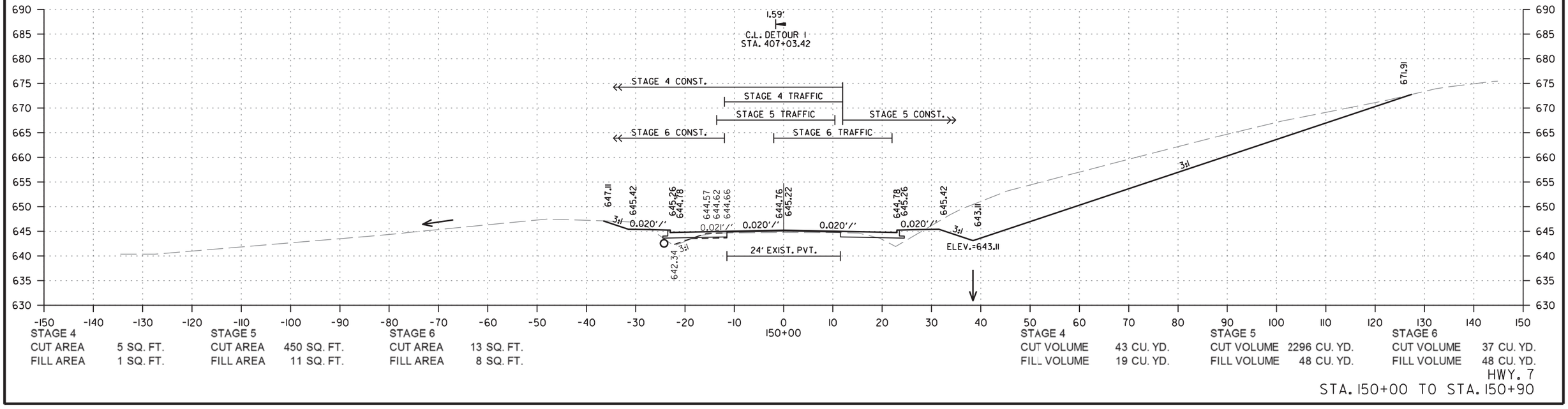
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	61 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	43 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	2 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	55 SQ. FT.	CUT AREA	13 SQ. FT.	CUT VOLUME	6 CU. YD.	CUT VOLUME	655 CU. YD.	CUT VOLUME	34 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	1 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	14 CU. YD.



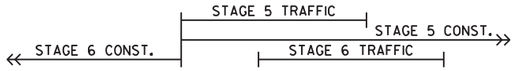
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	5 SQ. FT.	CUT AREA	450 SQ. FT.	CUT AREA	13 SQ. FT.	CUT VOLUME	43 CU. YD.	CUT VOLUME	2296 CU. YD.	CUT VOLUME	37 CU. YD.
FILL AREA	1 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	19 CU. YD.	FILL VOLUME	48 CU. YD.	FILL VOLUME	48 CU. YD.

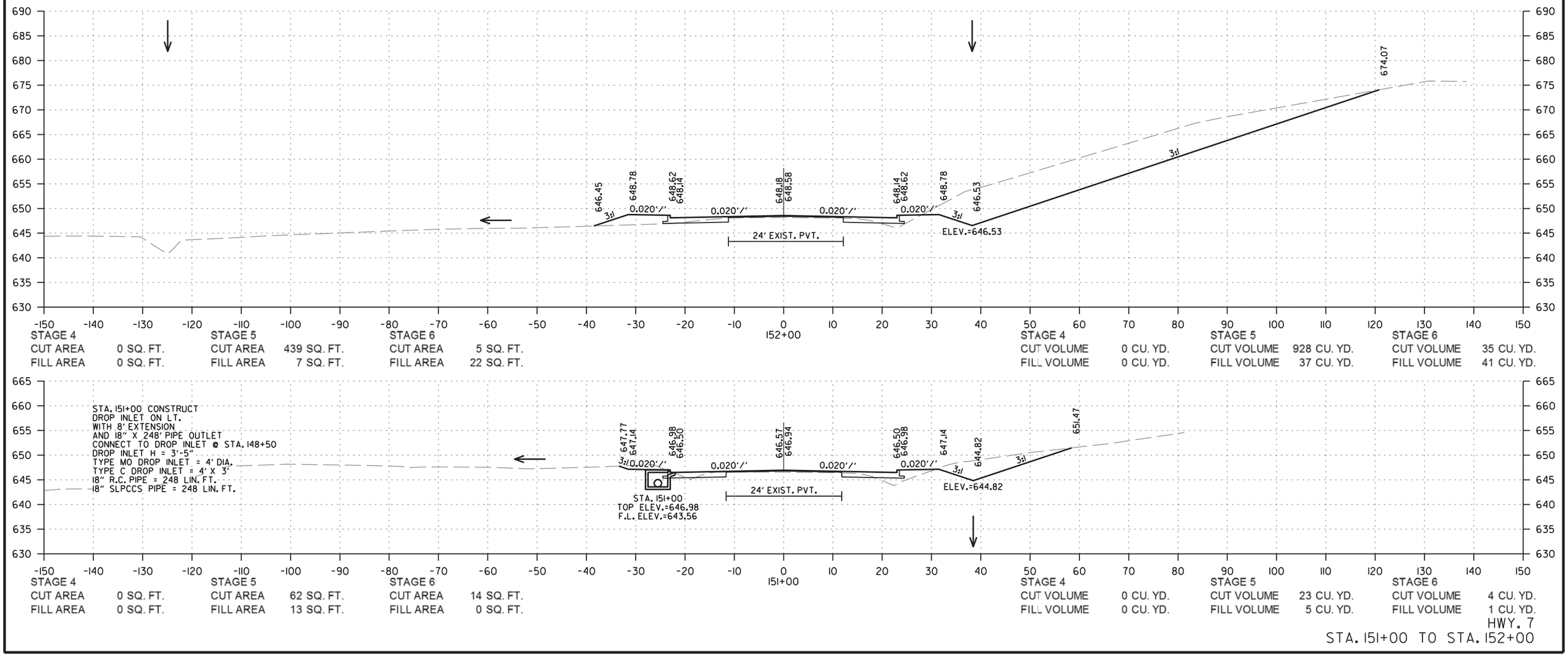
HWY. 7
STA. 150+00 TO STA. 150+90

ah40219 6/22/2020
R061547.DGN

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.		061547	150	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	439 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	22 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	928 CU. YD.	CUT VOLUME	35 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	37 CU. YD.	FILL VOLUME	41 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	62 SQ. FT.	CUT AREA	14 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	0 SQ. FT.

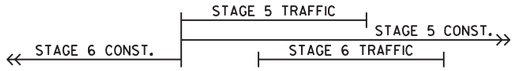
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	23 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	1 CU. YD.

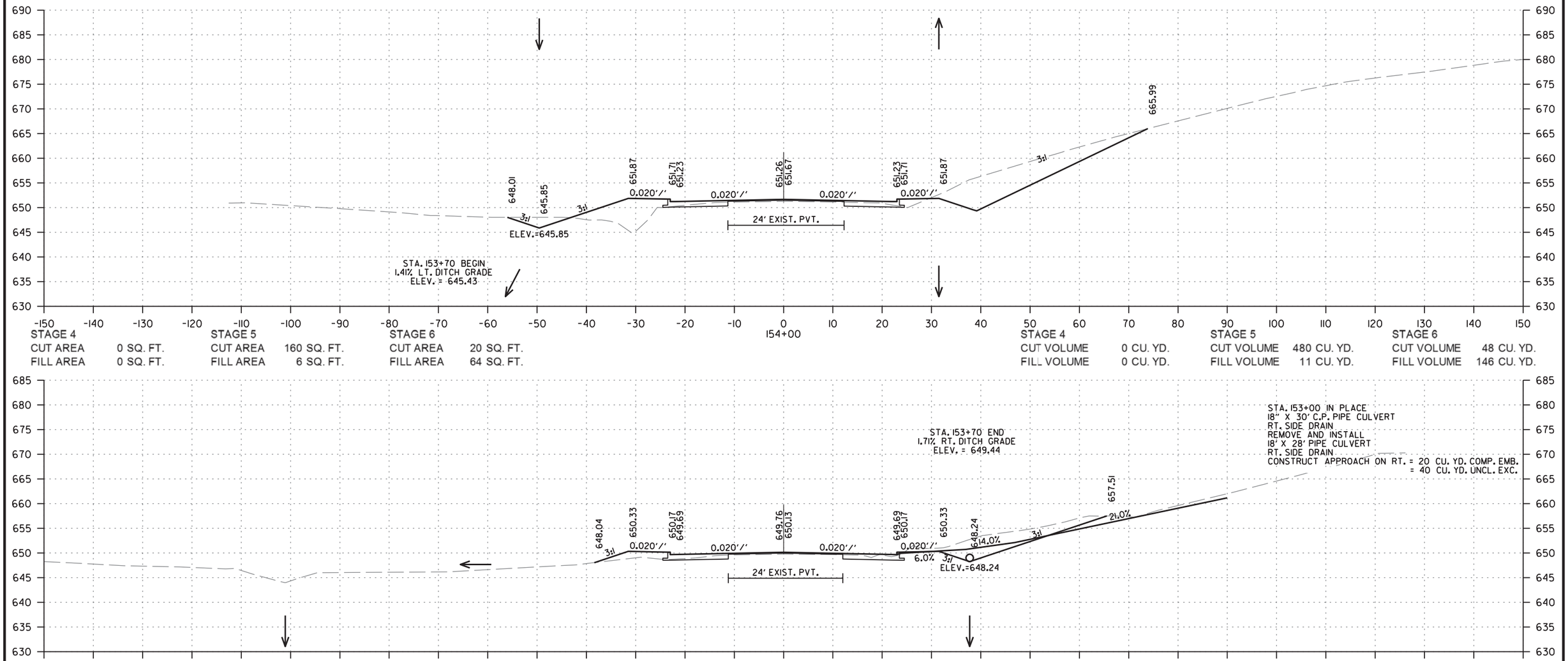
HWY. 7
STA. 151+00 TO STA. 152+00

eh40219 6/22/2020
R061547.DGN

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.		061547	151	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	160 SQ. FT.	CUT AREA	20 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	64 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	480 CU. YD.	CUT VOLUME	48 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	11 CU. YD.	FILL VOLUME	146 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	99 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	15 SQ. FT.

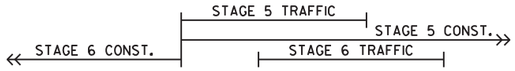
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	996 CU. YD.	CUT VOLUME	20 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	69 CU. YD.

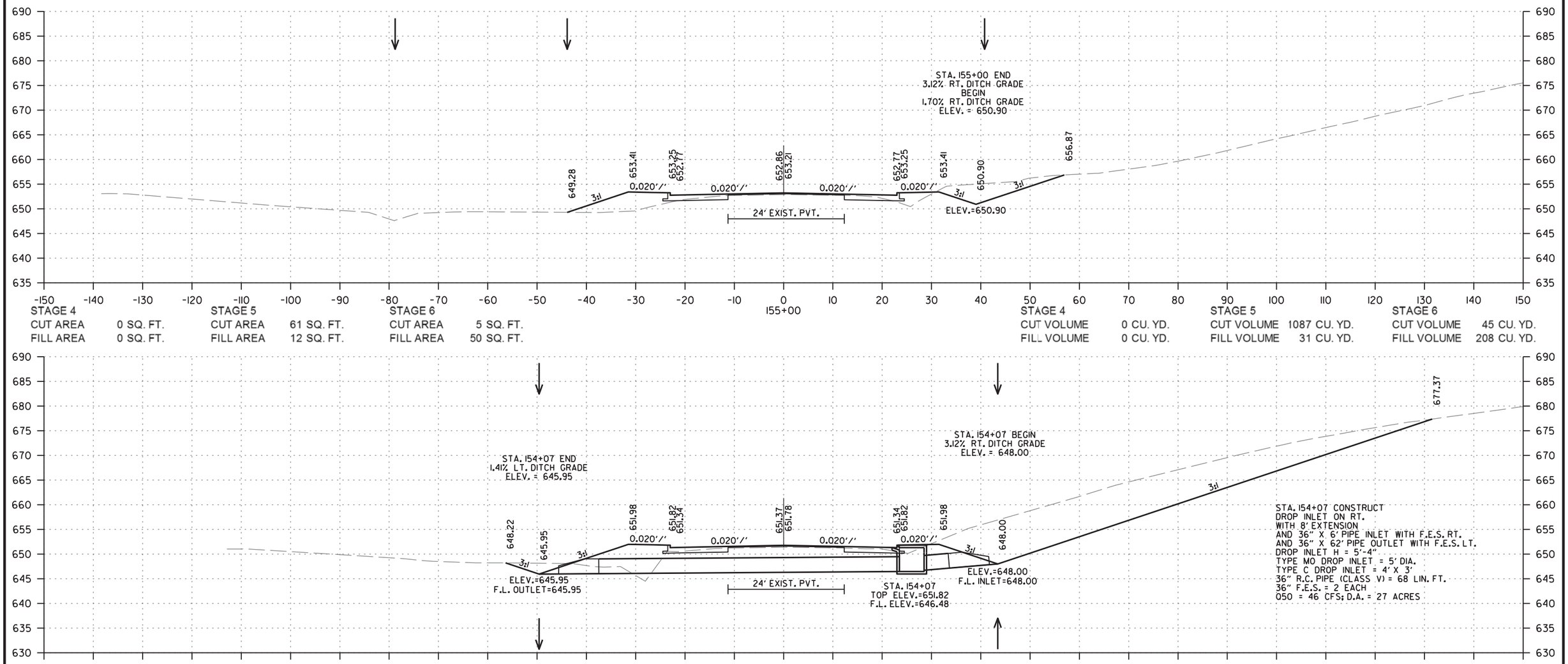
HWY. 7
STA. 153+00 TO STA. 154+00

eh40219 6/22/2020
R061547.DGN

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.		061547	152	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	61 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	12 SQ. FT.	FILL AREA	50 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1087 CU. YD.	CUT VOLUME	45 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	31 CU. YD.	FILL VOLUME	208 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	570 SQ. FT.	CUT AREA	21 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	71 SQ. FT.

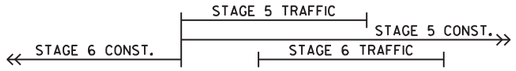
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	95 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	2 CU. YD.	FILL VOLUME	18 CU. YD.

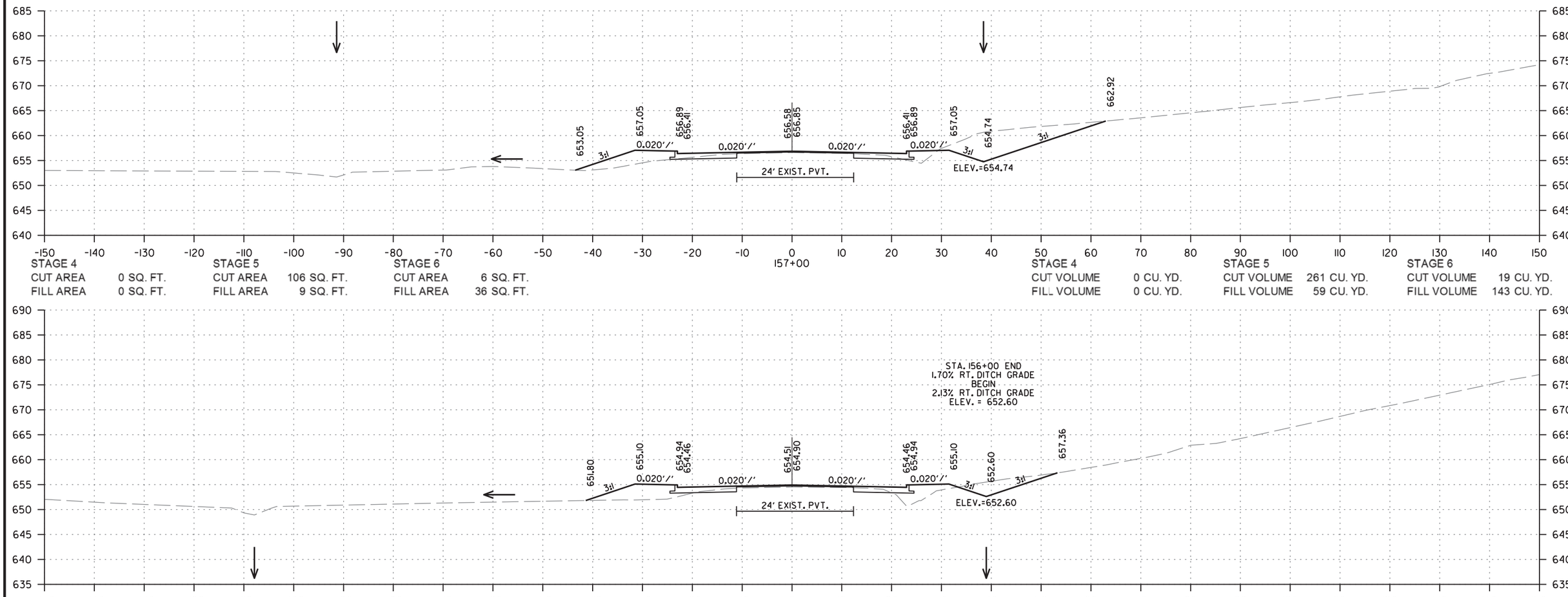
HWY. 7
STA. 154+07 TO STA. 155+00

eh40219 6/22/2020
R061547.DGN

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.		061547	153	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	106 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	261 CU. YD.	CUT VOLUME	19 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	36 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	59 CU. YD.	FILL VOLUME	143 CU. YD.

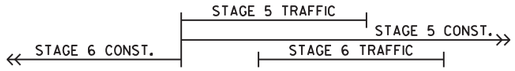
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	35 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	178 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	41 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	65 CU. YD.	FILL VOLUME	169 CU. YD.

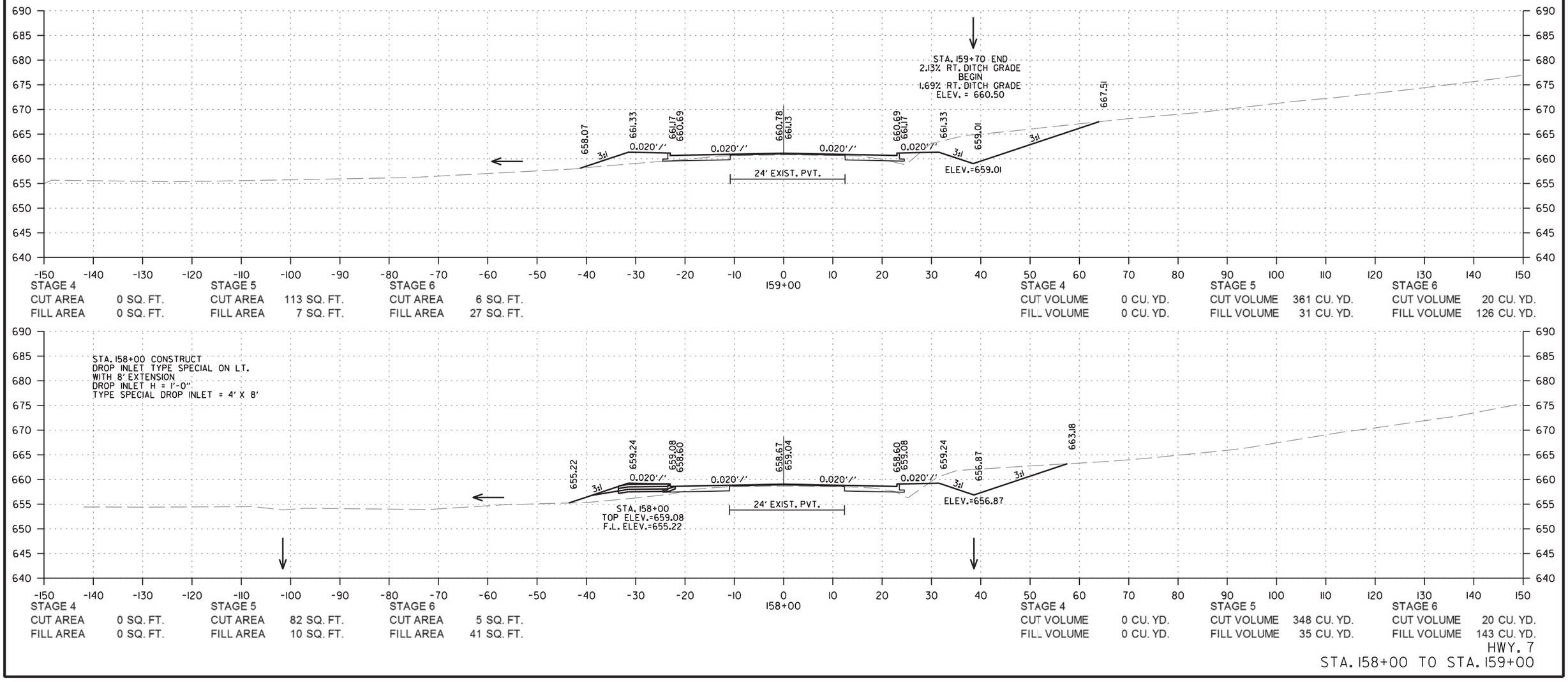
HWY. 7
STA. 156+00 TO STA. 157+00

eh40219 6/22/2020
R061547.DGN

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.		061547	154	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	113 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	27 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	361 CU. YD.	CUT VOLUME	20 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	31 CU. YD.	FILL VOLUME	126 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	82 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	10 SQ. FT.	FILL AREA	41 SQ. FT.

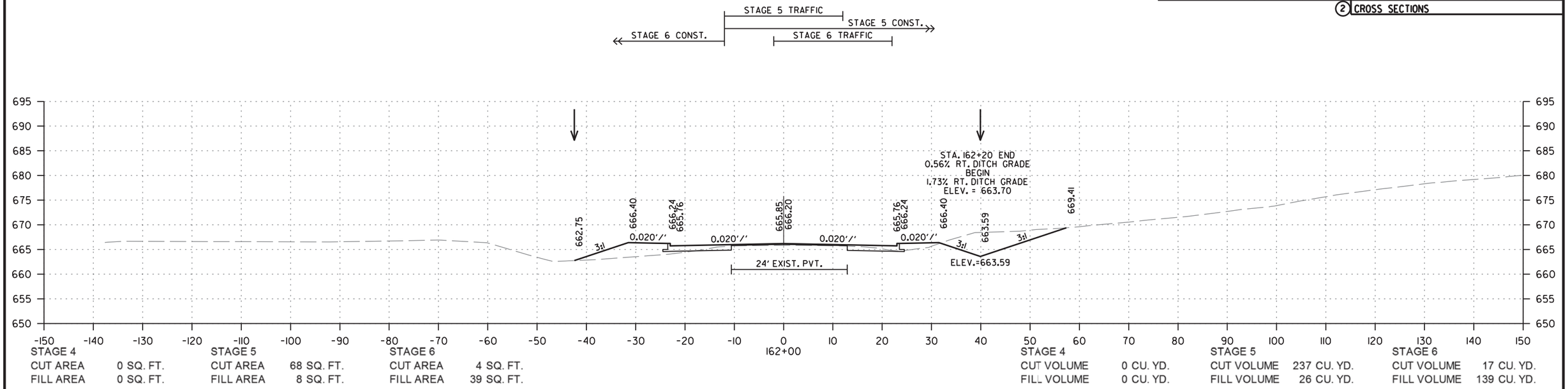
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	348 CU. YD.	CUT VOLUME	20 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	35 CU. YD.	FILL VOLUME	143 CU. YD.

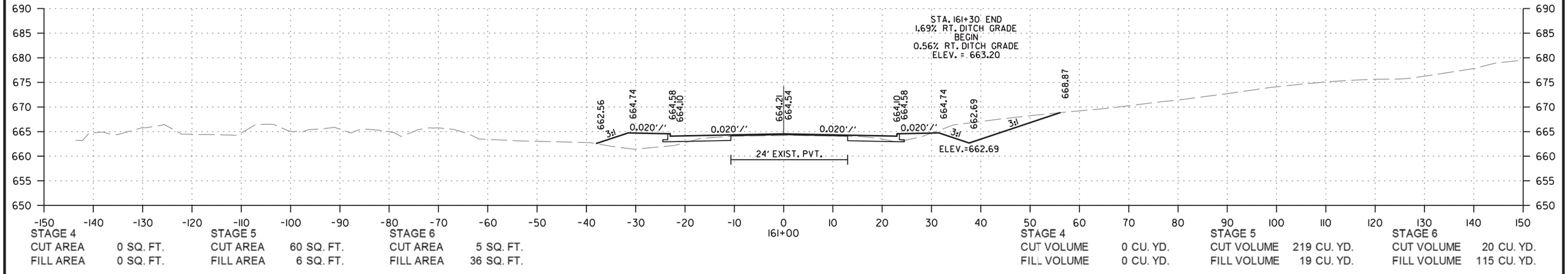
HWY. 7
STA. 158+00 TO STA. 159+00

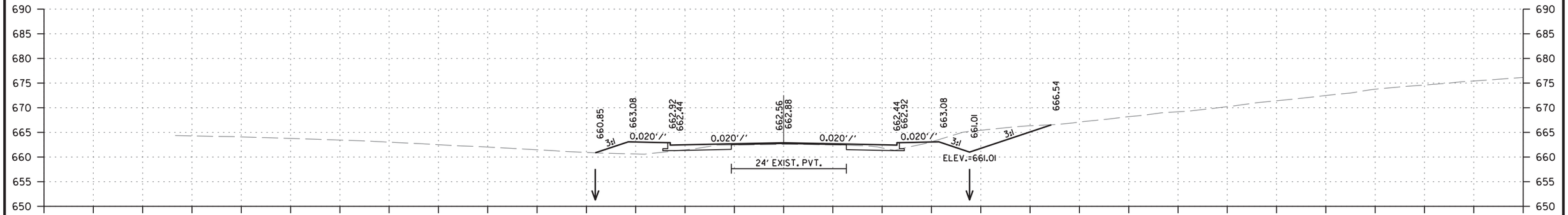
eh40219 6/22/2020
R061547.DGN

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.		061547	155	323

(2) CROSS SECTIONS





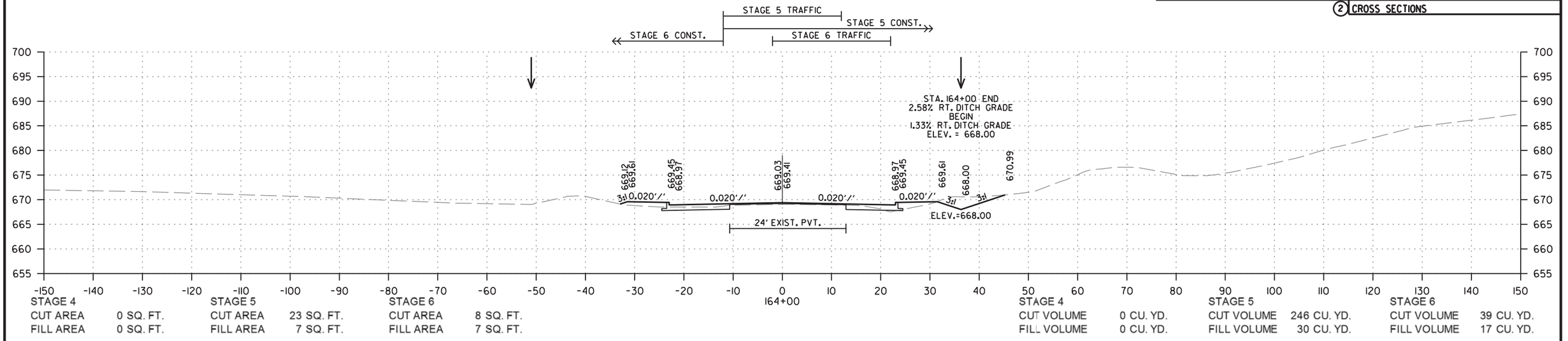


HWY. 7
STA. 160+00 TO STA. 162+00

6/22/2020
ah40219
R061547.DGN

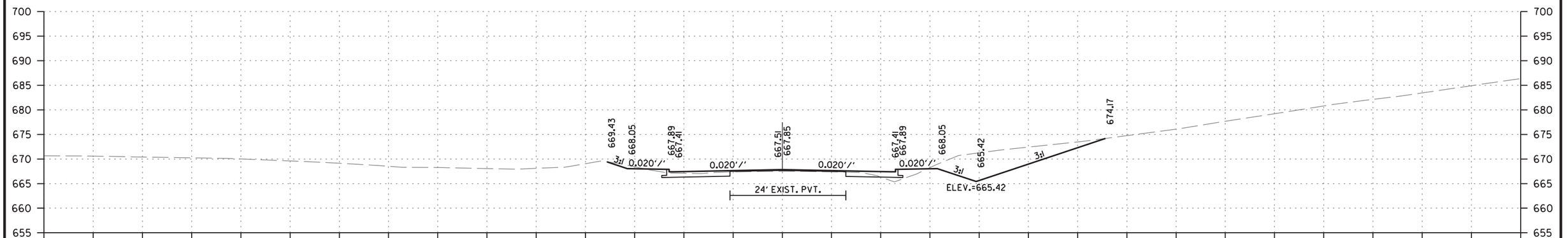
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	156	323

(2) CROSS SECTIONS



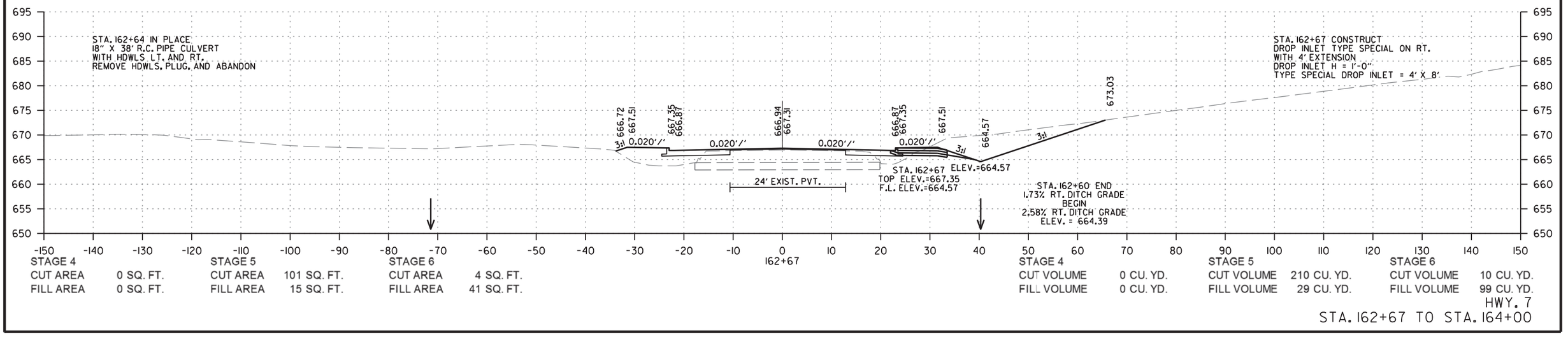
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	23 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	7 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	246 CU. YD.	CUT VOLUME	39 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	30 CU. YD.	FILL VOLUME	17 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	110 SQ. FT.	CUT AREA	13 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	2 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	129 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	15 CU. YD.	FILL VOLUME	26 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	101 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	15 SQ. FT.	FILL AREA	41 SQ. FT.

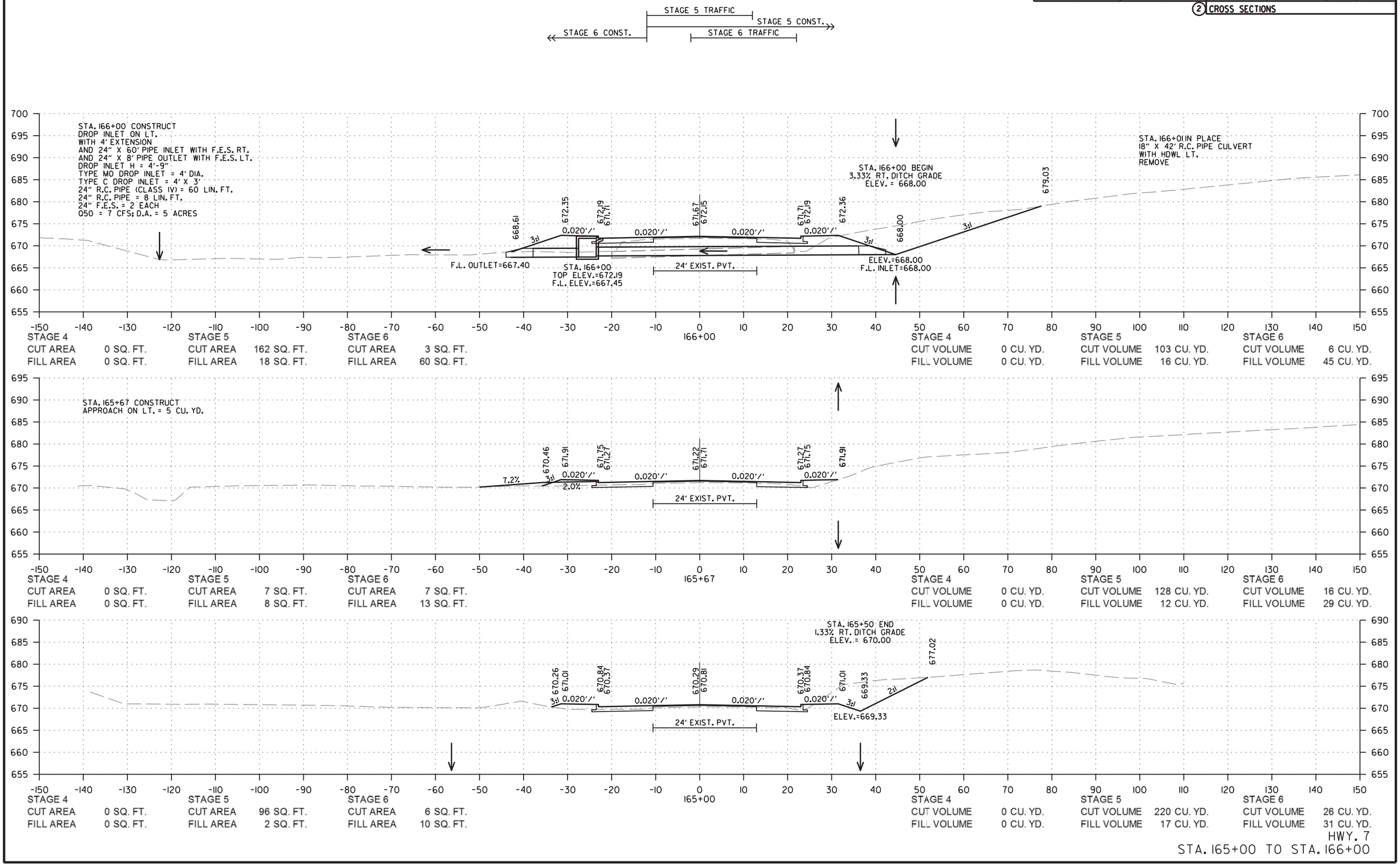
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	210 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	29 CU. YD.	FILL VOLUME	99 CU. YD.

HWY. 7
STA. 162+67 TO STA. 164+00

6/22/2020
eh40219
R061547.DGN

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.		061547	157	323

(2) CROSS SECTIONS

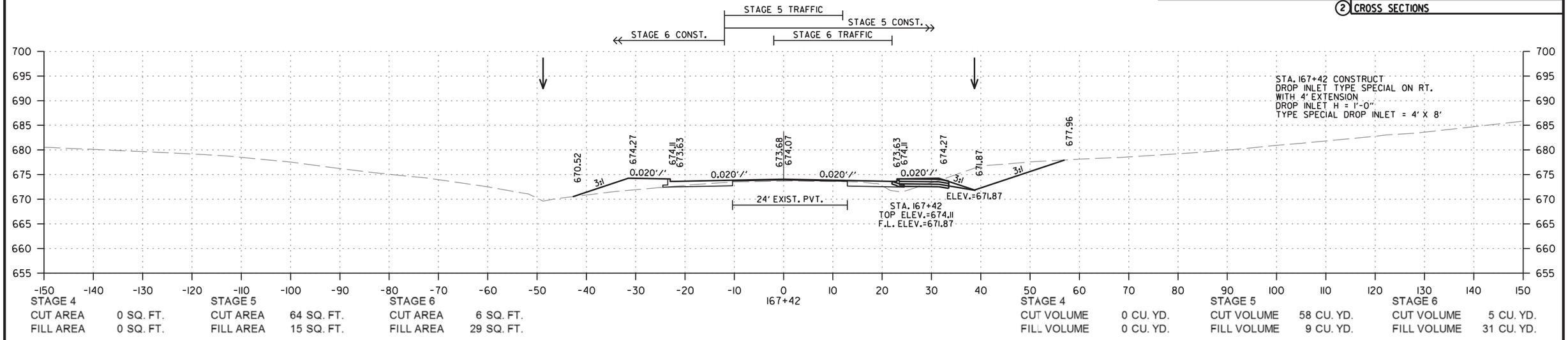


HWY. 7
STA. 165+00 TO STA. 166+00

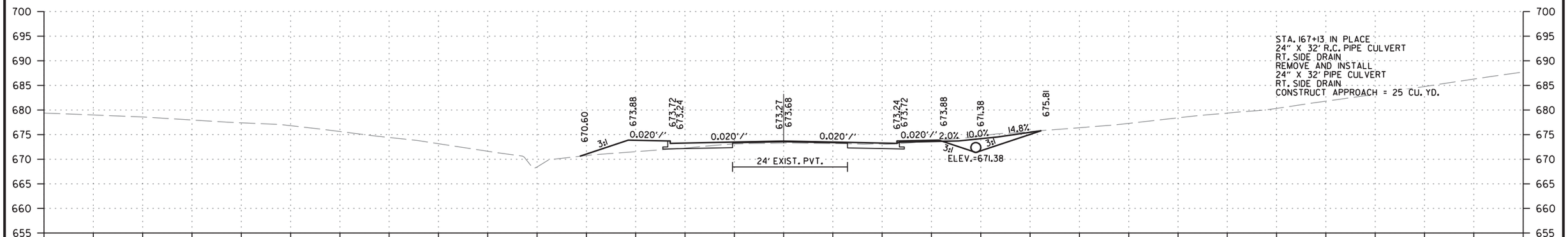
6/22/2020
ah40219
R061547.DGN

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.		061547	158	323

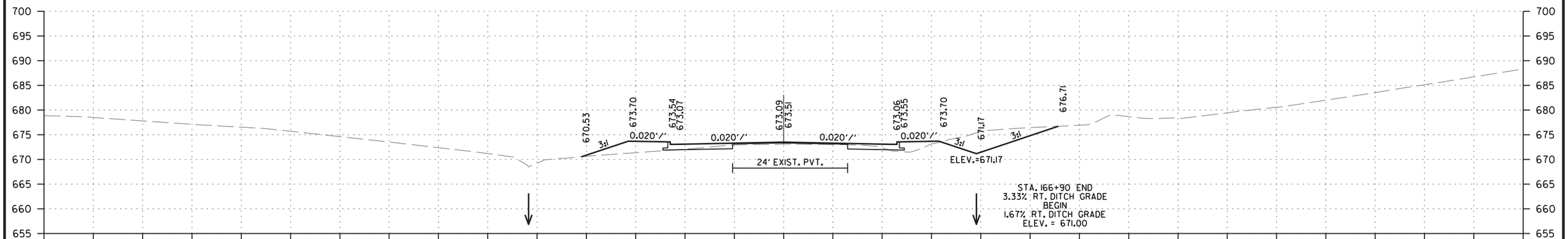
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	64 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	58 CU. YD.	CUT VOLUME	5 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	15 SQ. FT.	FILL AREA	29 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	9 CU. YD.	FILL VOLUME	31 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	44 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	25 CU. YD.	CUT VOLUME	2 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	2 SQ. FT.	FILL AREA	28 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	3 CU. YD.	FILL VOLUME	13 CU. YD.



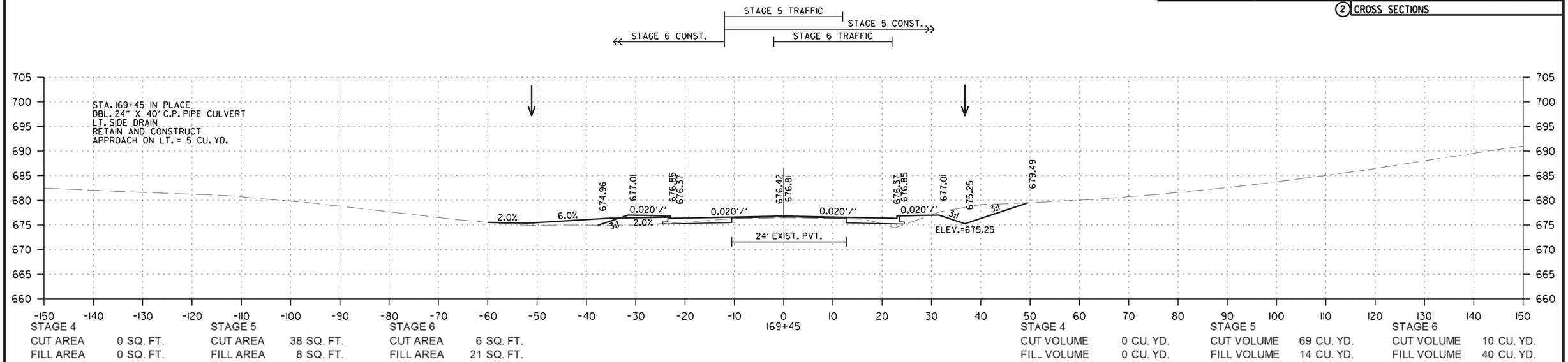
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	59 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	409 CU. YD.	CUT VOLUME	13 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	28 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	54 CU. YD.	FILL VOLUME	163 CU. YD.

HWY. 7
STA. 167+00 TO STA. 167+42

ah40219 6/22/2020
R061547.DGN

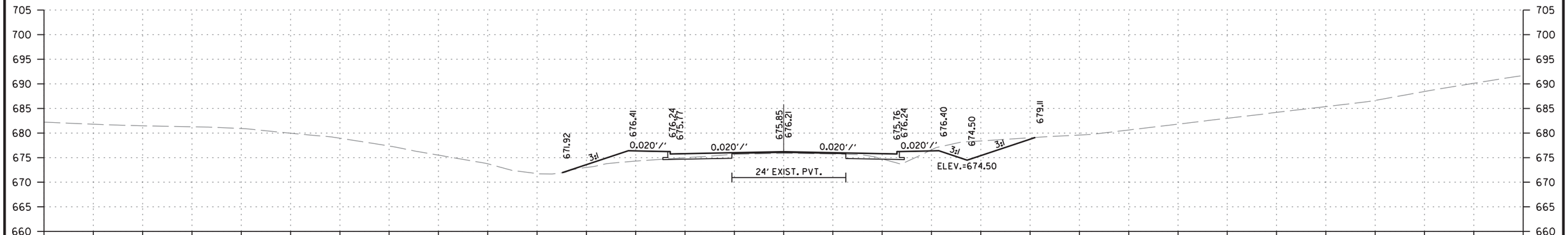
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	159	323

(2) CROSS SECTIONS



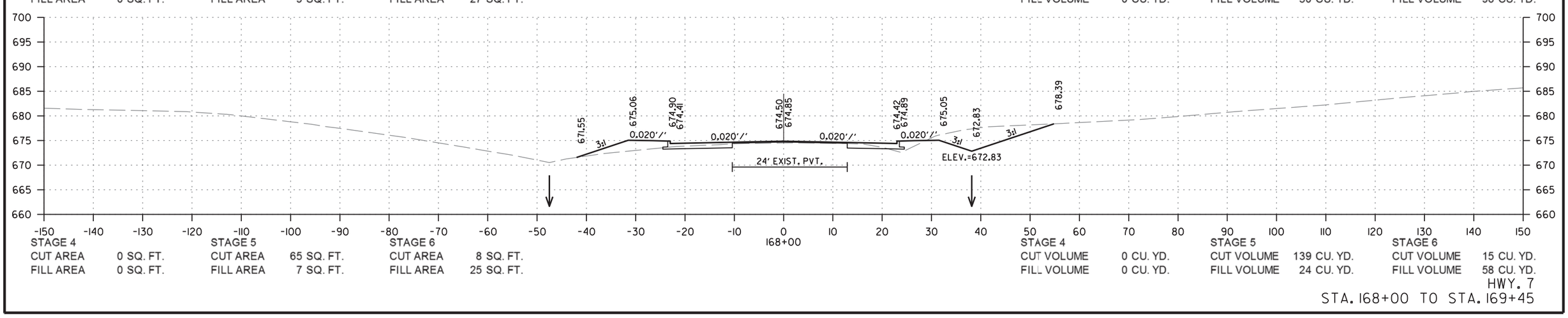
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	38 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	8 SQ. FT.	FILL AREA	21 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	69 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	40 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	45 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	27 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	204 CU. YD.	CUT VOLUME	26 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	30 CU. YD.	FILL VOLUME	96 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	65 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	25 SQ. FT.

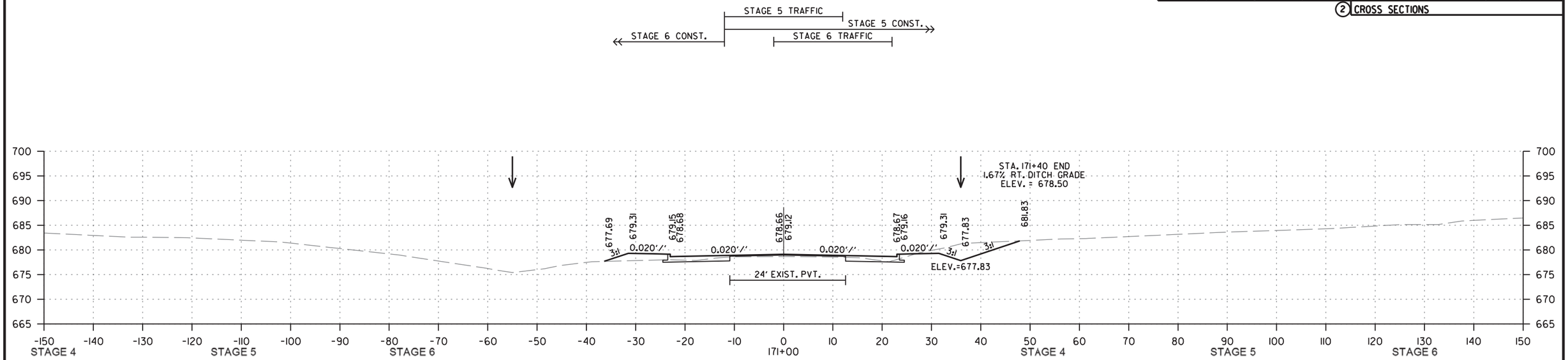
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	139 CU. YD.	CUT VOLUME	15 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	24 CU. YD.	FILL VOLUME	58 CU. YD.

HWY. 7
STA. 168+00 TO STA. 169+45

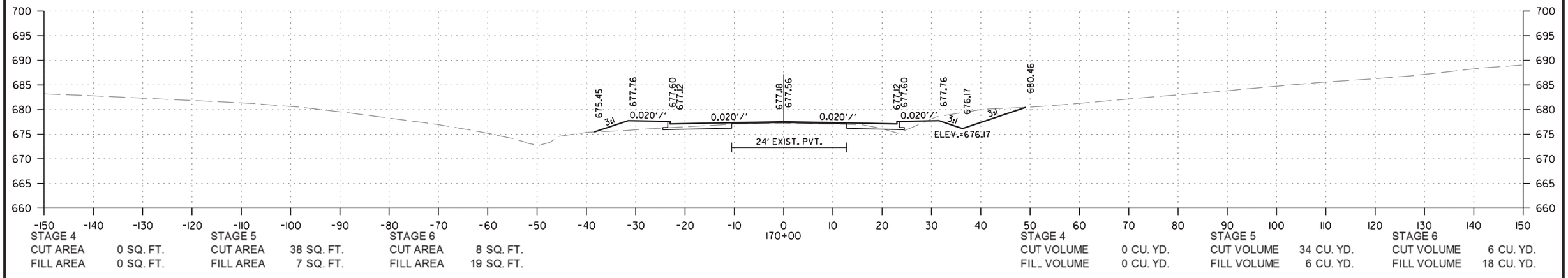
eh40219 6/22/2020
R061547.DGN

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.		061547	160	323

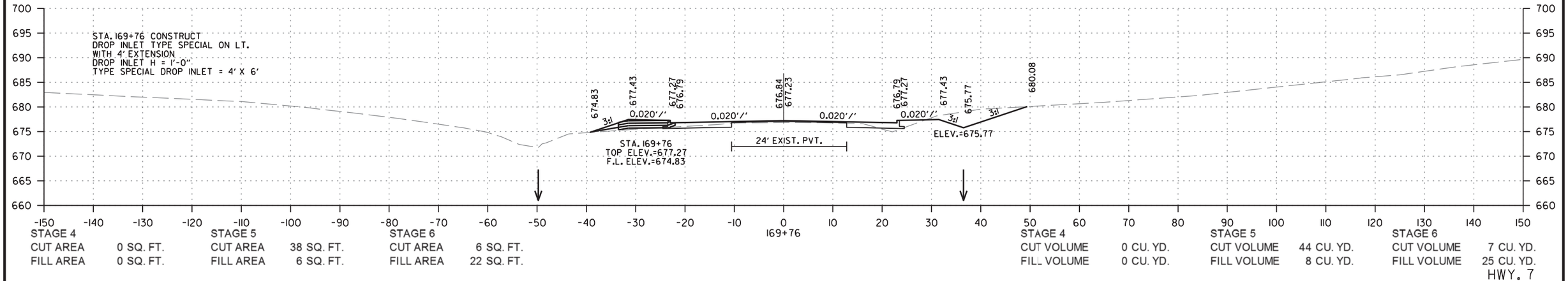
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	38 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	141 CU. YD.	CUT VOLUME	26 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	2 SQ. FT.	FILL AREA	14 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	61 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	38 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	34 CU. YD.	CUT VOLUME	6 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	19 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	6 CU. YD.	FILL VOLUME	18 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	38 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	44 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	22 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	8 CU. YD.	FILL VOLUME	25 CU. YD.

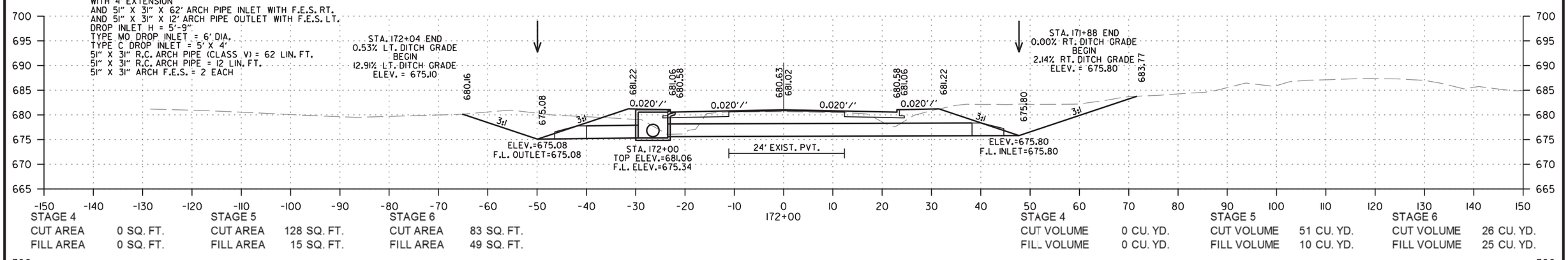
HWY. 7
STA. 169+76 TO STA. 171+00

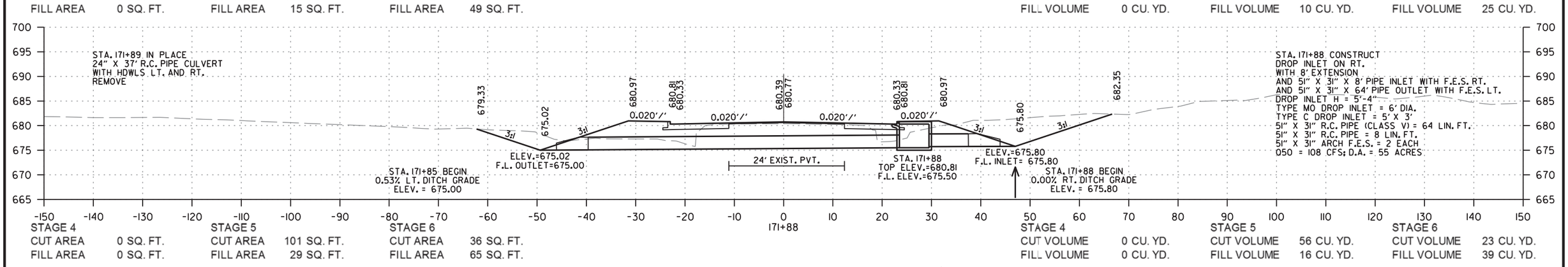
eh40219 6/22/2020
R061547.DGN

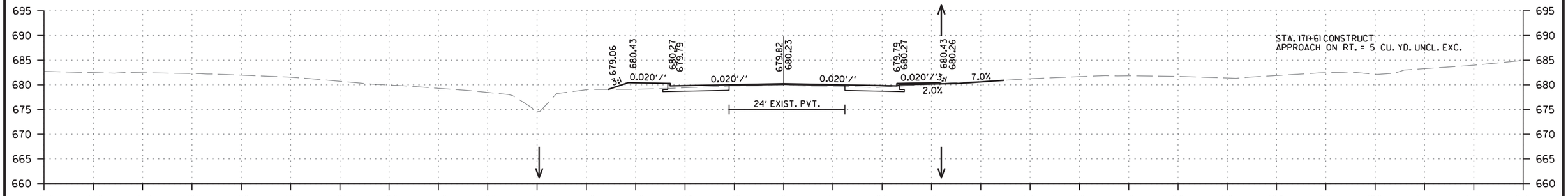
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	161	323

(2) CROSS SECTIONS

STAGE 6 CONST. ← STAGE 5 TRAFFIC → STAGE 5 CONST.
STAGE 6 TRAFFIC







HWY. 7
STA. 171+61 TO STA. 172+00

ah40219 6/22/2020
R061547.DGN

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.		061547	162	323

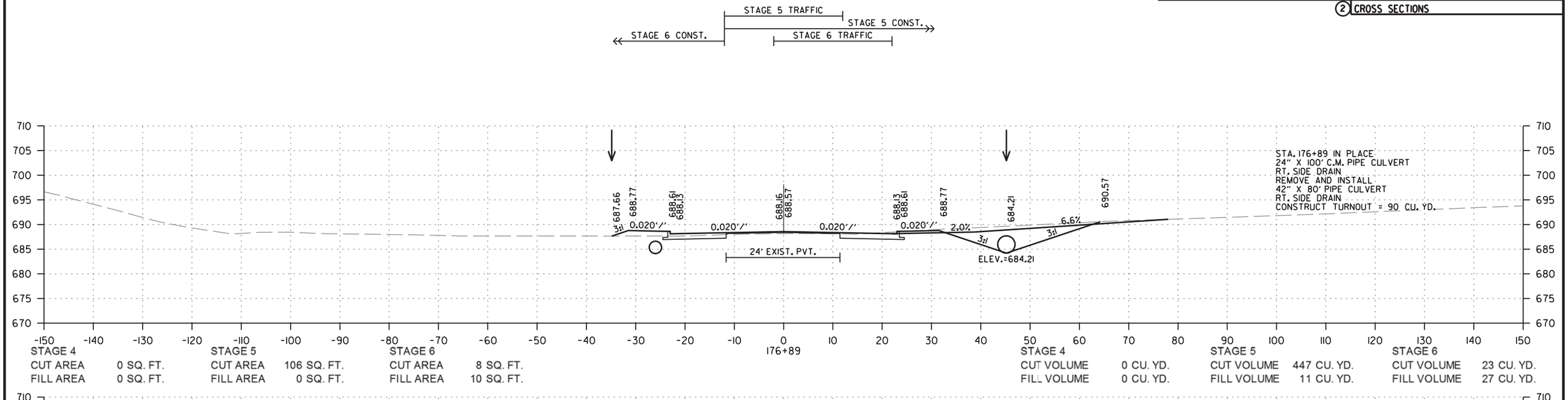
(2) CROSS SECTIONS

HWY. 7
STA. 173+00 TO STA. 175+00

ah40219 6/22/2020
R061547.DGN

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.		061547	163	323

(2) CROSS SECTIONS

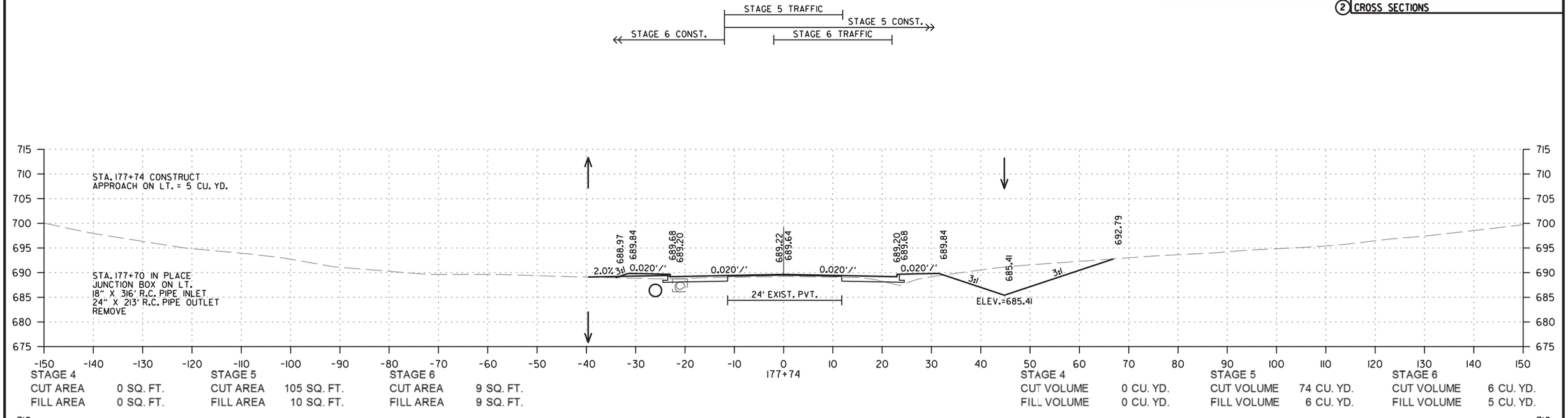


HWY. 7
STA. 176+00 TO STA. 176+89

6/22/2020
ah40219
R061547.DGN

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.		061547	164	323

(2) CROSS SECTIONS

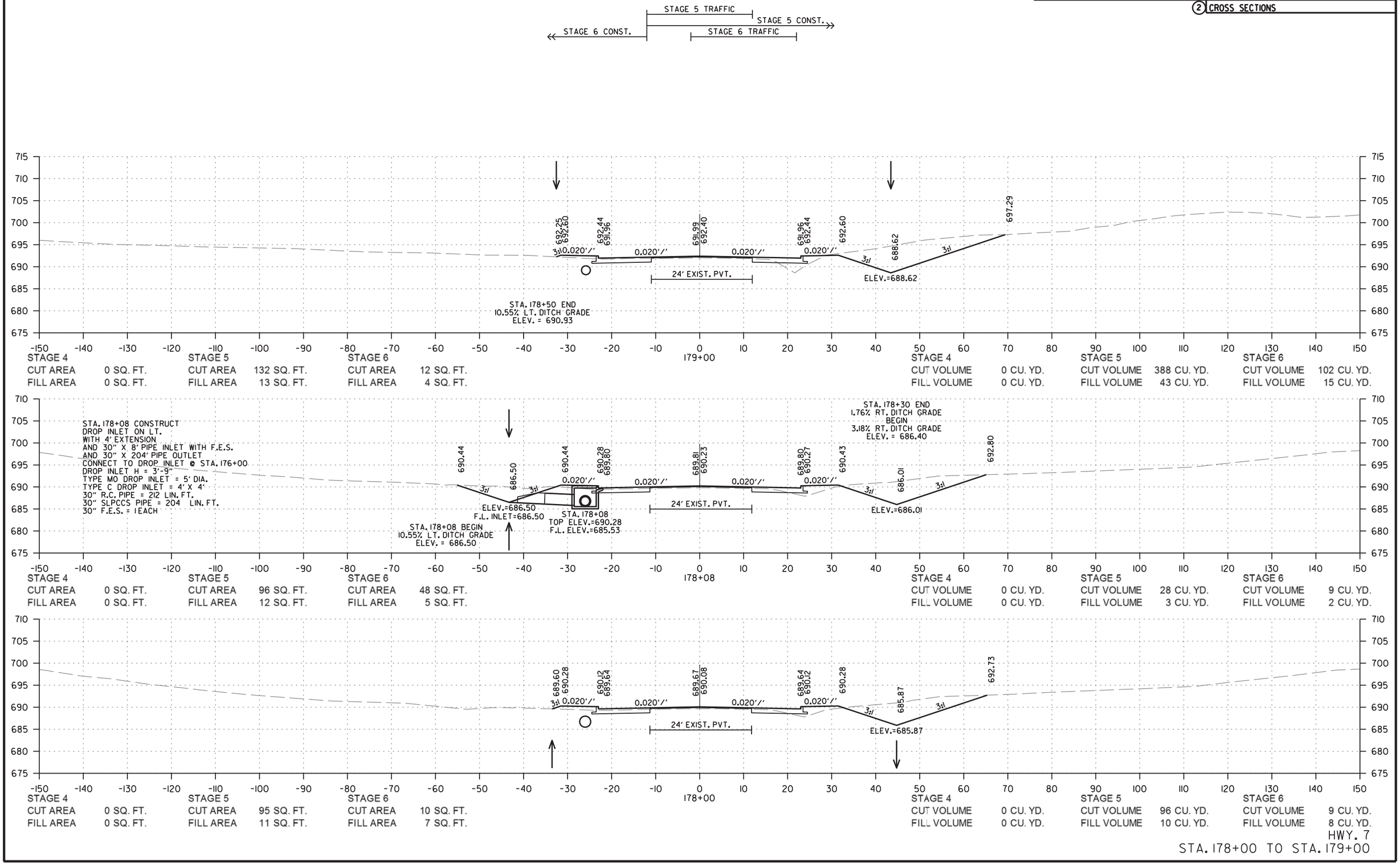


HWY. 7
STA. 177+00 TO STA. 177+74

ah40219 6/22/2020
R061547.DGN

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.		061547	165	323

(2) CROSS SECTIONS

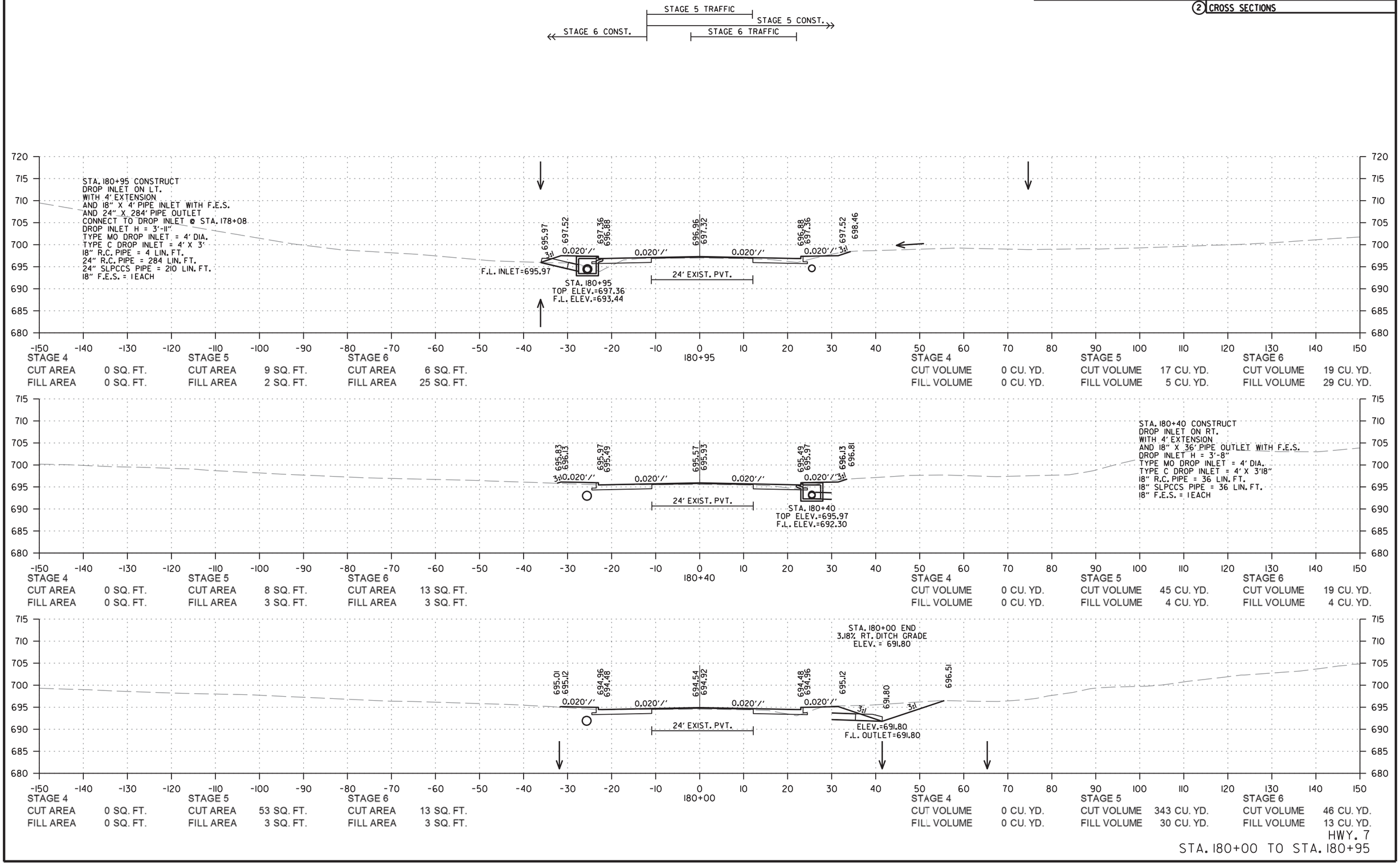


HWY. 7
STA. 178+00 TO STA. 179+00

ah40219 6/22/2020
R061547.DGN

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.		061547	166	323

(2) CROSS SECTIONS

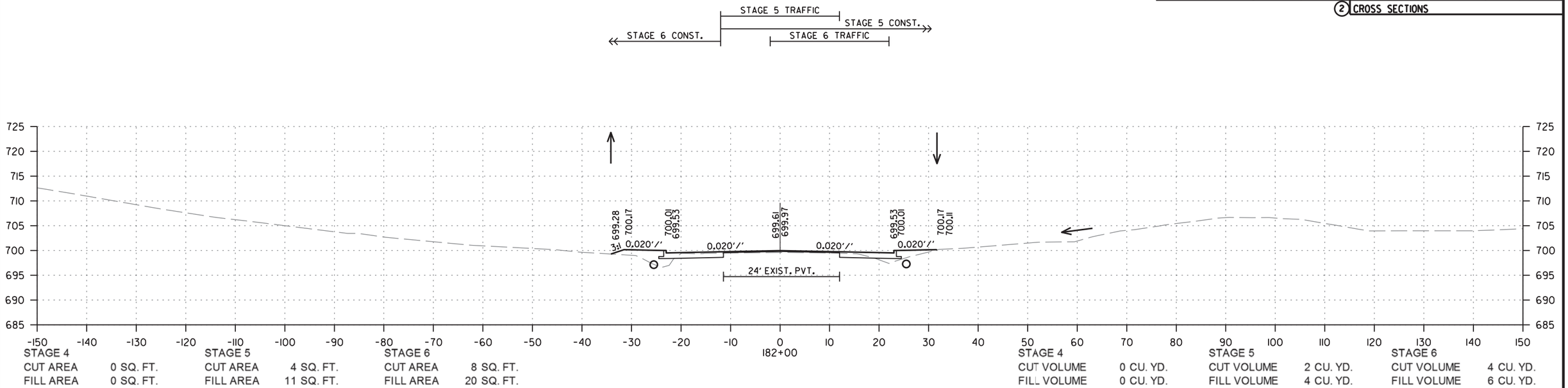


HWY. 7
STA. 180+00 TO STA. 180+95

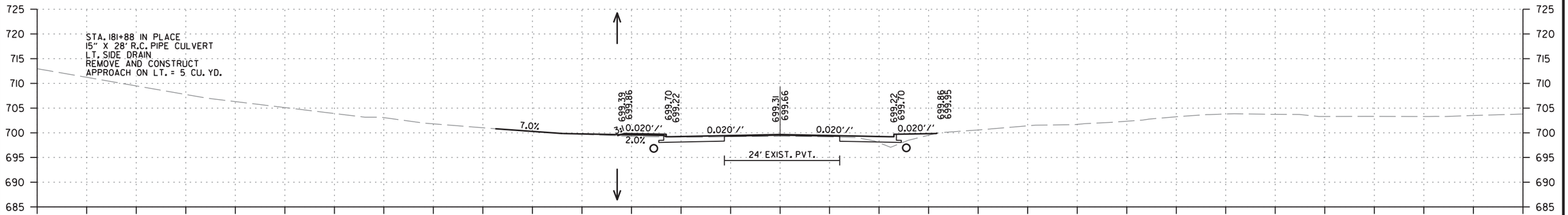
ah40219 6/22/2020
R061547.DGN

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.		061547	167	323

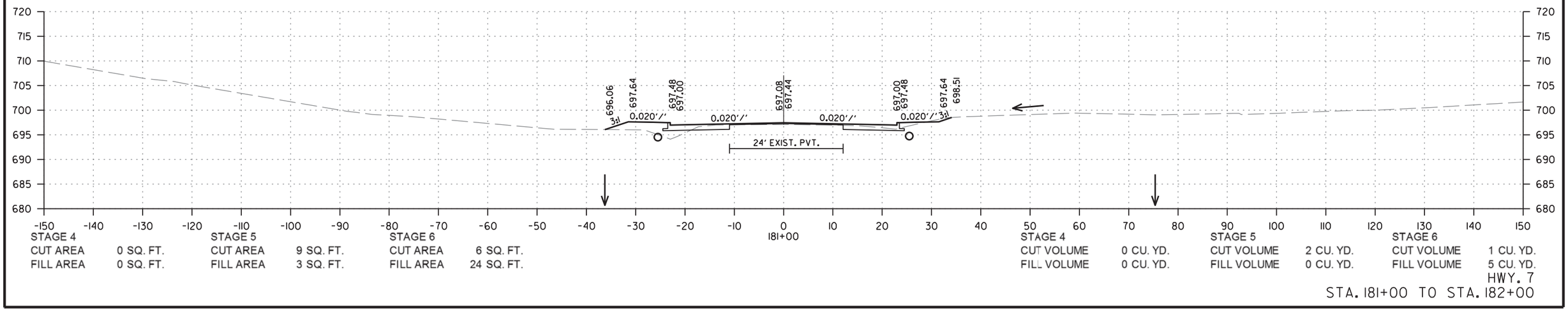
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	20 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	4 CU. YD.	FILL VOLUME	6 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	23 CU. YD.	CUT VOLUME	29 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	47 CU. YD.



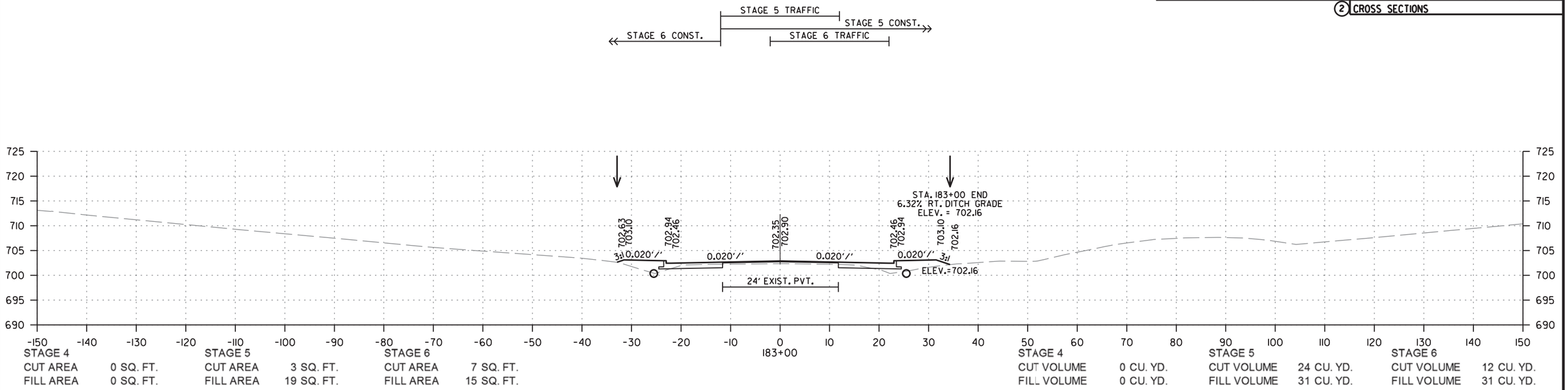
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	3 SQ. FT.	FILL AREA	24 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.

HWY. 7
STA. 181+00 TO STA. 182+00

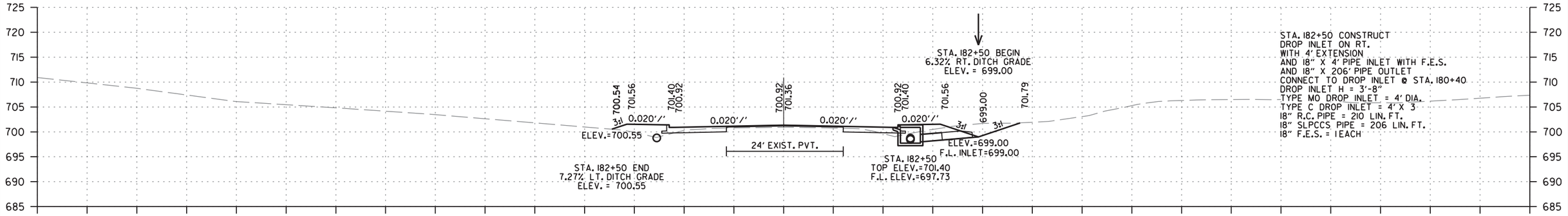
eh40219 6/22/2020
R061547.DGN

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.		061547	168	323

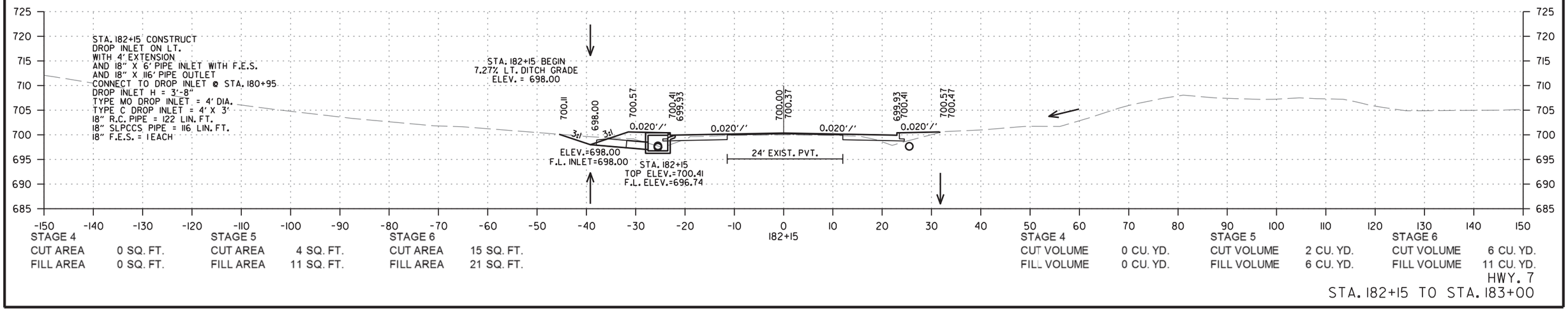
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	24 CU. YD.	CUT VOLUME	12 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	19 SQ. FT.	FILL AREA	15 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	31 CU. YD.	FILL VOLUME	31 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	23 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	18 CU. YD.	CUT VOLUME	14 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	18 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	16 CU. YD.	FILL VOLUME	25 CU. YD.



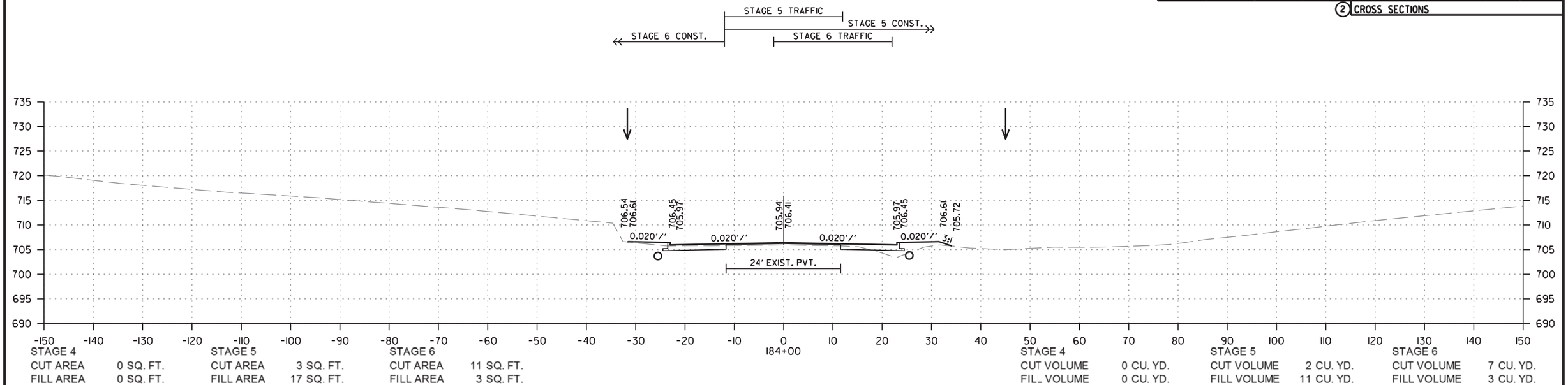
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	15 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	6 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	21 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	6 CU. YD.	FILL VOLUME	11 CU. YD.

HWY. 7
STA. 182+15 TO STA. 183+00

ah40219 6/22/2020
R061547.DGN

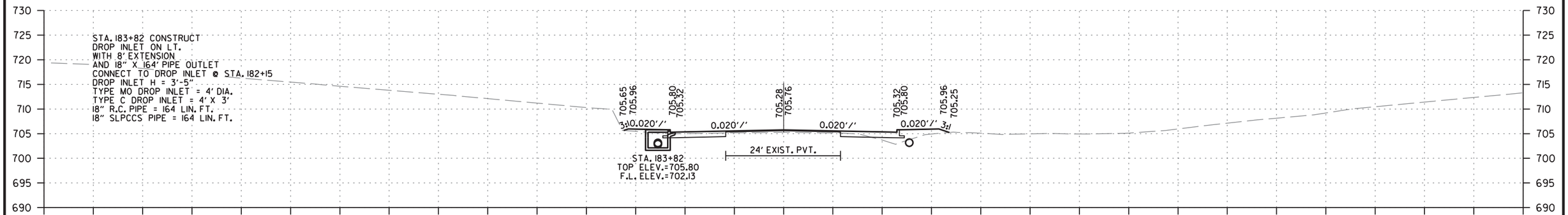
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	169	323

(2) CROSS SECTIONS



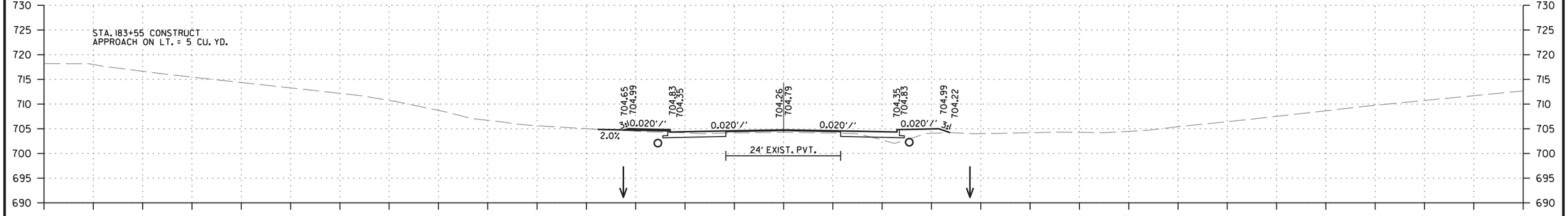
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	17 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	11 CU. YD.	FILL VOLUME	3 CU. YD.

184+00



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	17 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	5 CU. YD.

183+82



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	4 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	36 CU. YD.	FILL VOLUME	19 CU. YD.

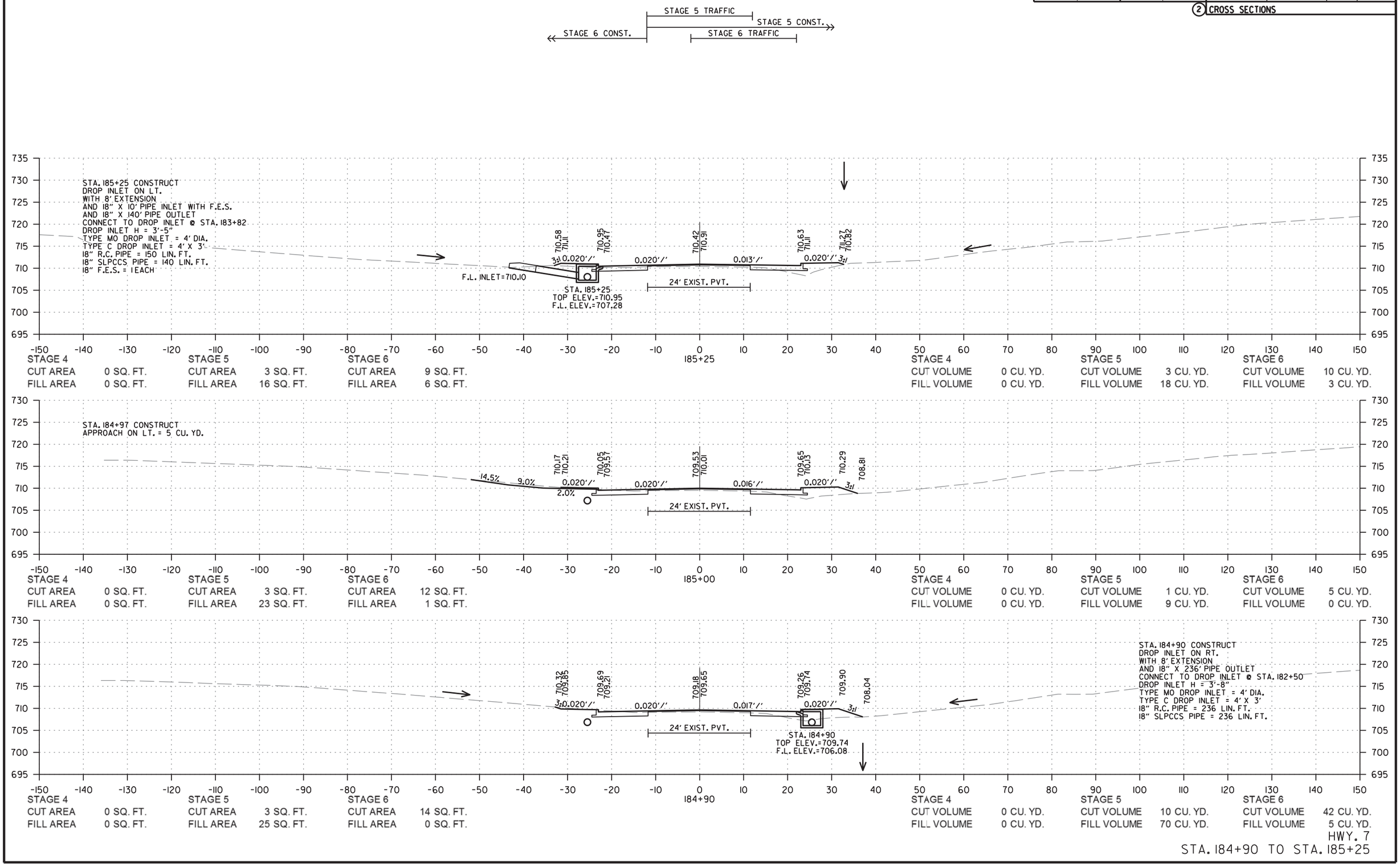
183+55

HWY. 7
STA. 183+55 TO STA. 184+00

eh40219 6/22/2020
R061547.DGN

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.		061547	170	323

(2) CROSS SECTIONS

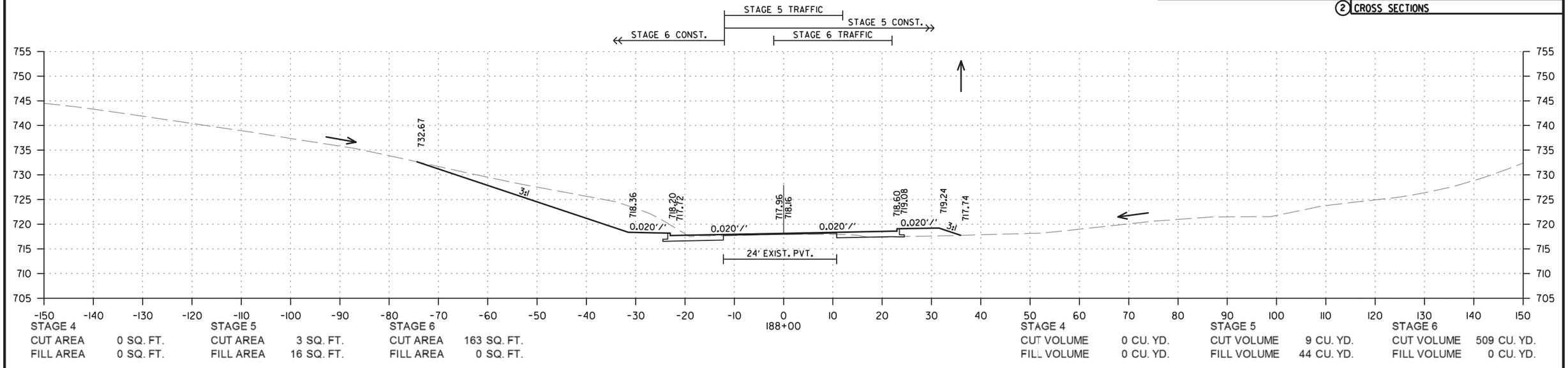


HWY. 7
STA. 184+90 TO STA. 185+25

ah40219 6/22/2020
R061547.DGN

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.		061547	171	323

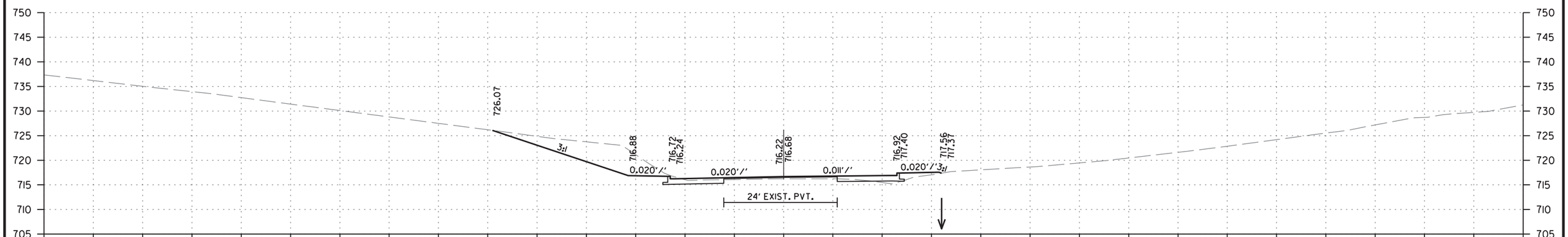
(2) CROSS SECTIONS



STAGE 4 CUT AREA 0 SQ. FT. FILL AREA 0 SQ. FT.
STAGE 5 CUT AREA 3 SQ. FT. FILL AREA 16 SQ. FT.
STAGE 6 CUT AREA 163 SQ. FT. FILL AREA 0 SQ. FT.

188+00

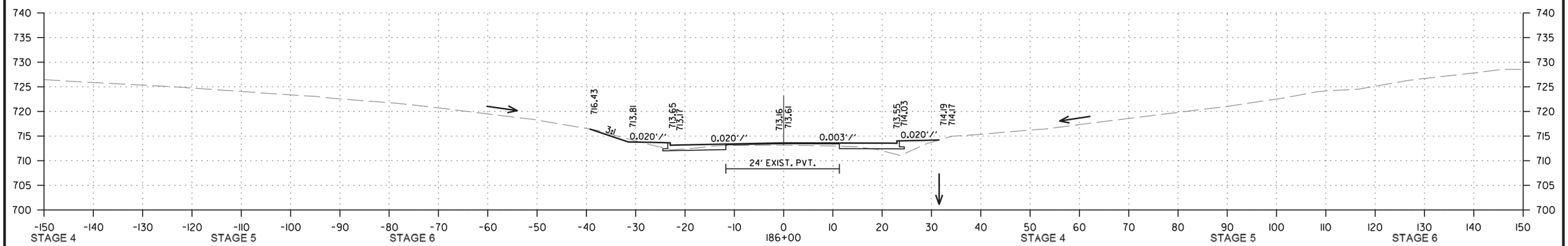
STAGE 4 CUT VOLUME 0 CU. YD. FILL VOLUME 0 CU. YD.
STAGE 5 CUT VOLUME 9 CU. YD. FILL VOLUME 44 CU. YD.
STAGE 6 CUT VOLUME 509 CU. YD. FILL VOLUME 0 CU. YD.



STAGE 4 CUT AREA 0 SQ. FT. FILL AREA 0 SQ. FT.
STAGE 5 CUT AREA 2 SQ. FT. FILL AREA 8 SQ. FT.
STAGE 6 CUT AREA 112 SQ. FT. FILL AREA 0 SQ. FT.

187+00

STAGE 4 CUT VOLUME 0 CU. YD. FILL VOLUME 0 CU. YD.
STAGE 5 CUT VOLUME 7 CU. YD. FILL VOLUME 41 CU. YD.
STAGE 6 CUT VOLUME 226 CU. YD. FILL VOLUME 7 CU. YD.



STAGE 4 CUT AREA 0 SQ. FT. FILL AREA 0 SQ. FT.
STAGE 5 CUT AREA 2 SQ. FT. FILL AREA 14 SQ. FT.
STAGE 6 CUT AREA 10 SQ. FT. FILL AREA 4 SQ. FT.

186+00

STAGE 4 CUT VOLUME 0 CU. YD. FILL VOLUME 0 CU. YD.
STAGE 5 CUT VOLUME 7 CU. YD. FILL VOLUME 42 CU. YD.
STAGE 6 CUT VOLUME 26 CU. YD. FILL VOLUME 14 CU. YD.

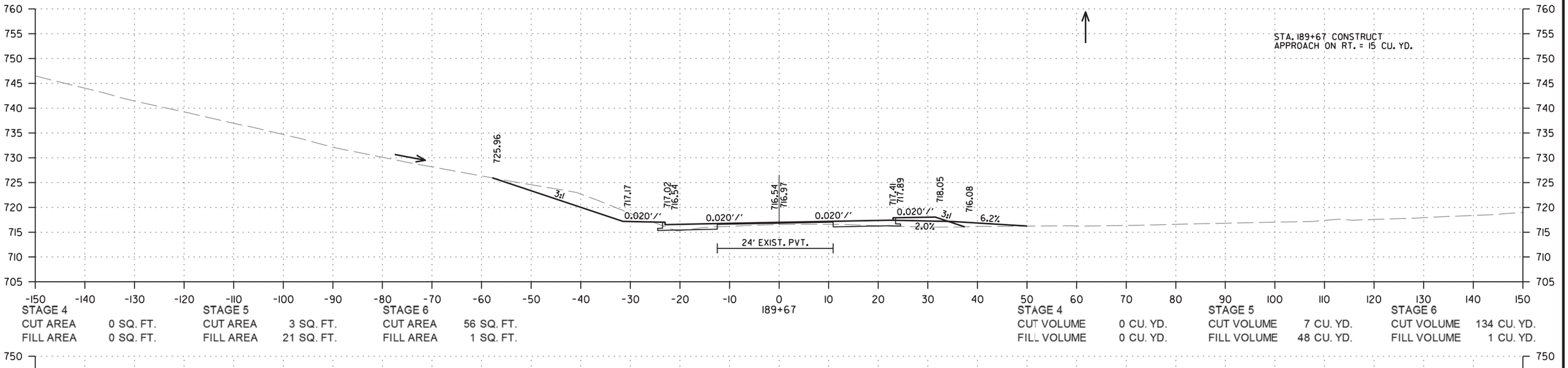
HWY. 7
STA. 186+00 TO STA. 188+00

ah40219 6/22/2020
R061547.DGN

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.		061547	172	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	56 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	1 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	134 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	48 CU. YD.	FILL VOLUME	1 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	52 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	18 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	398 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	63 CU. YD.	FILL VOLUME	0 CU. YD.

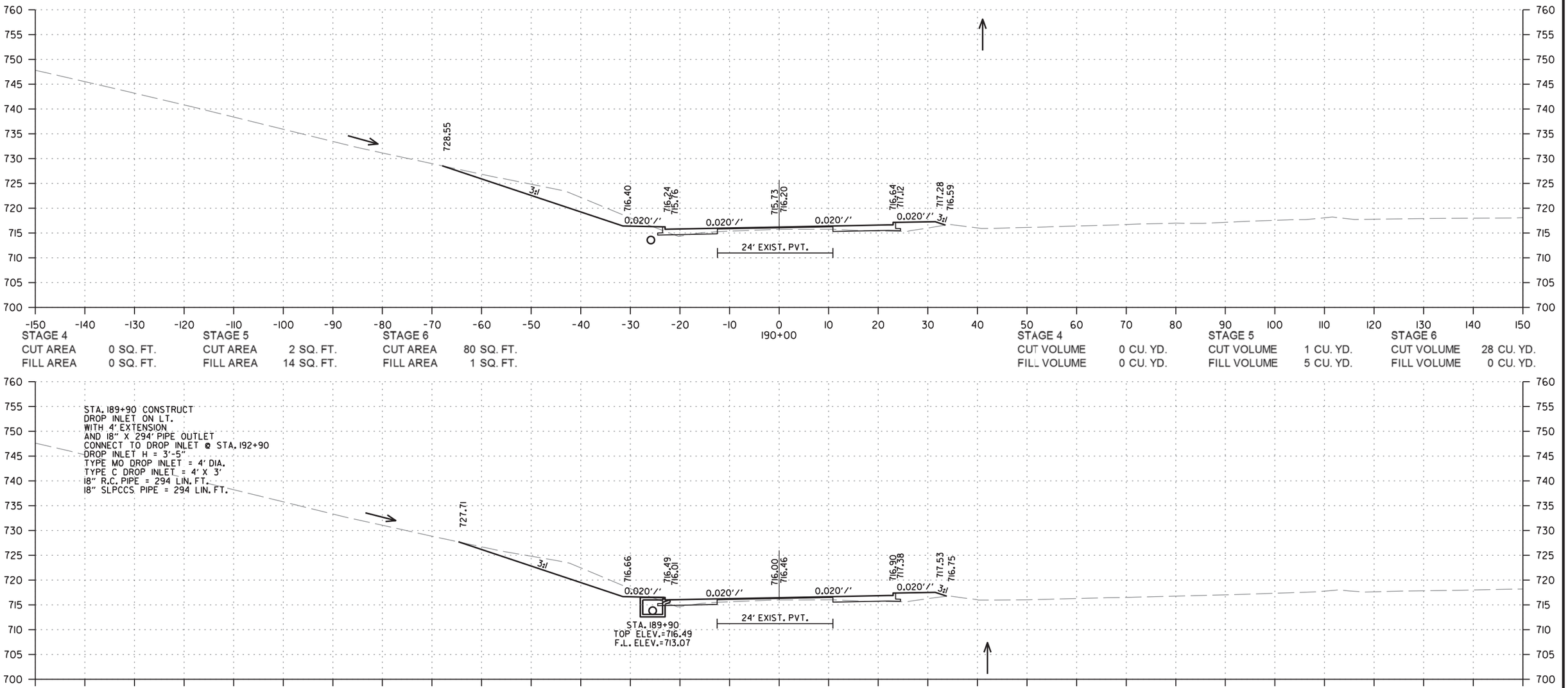
HWY. 7
STA. 189+00 TO STA. 189+67

eh40219 6/22/2020
R061547.DGN

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.		061547	173	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	80 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	1 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	28 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	72 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	1 SQ. FT.

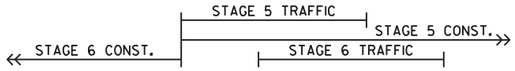
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	55 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	1 CU. YD.

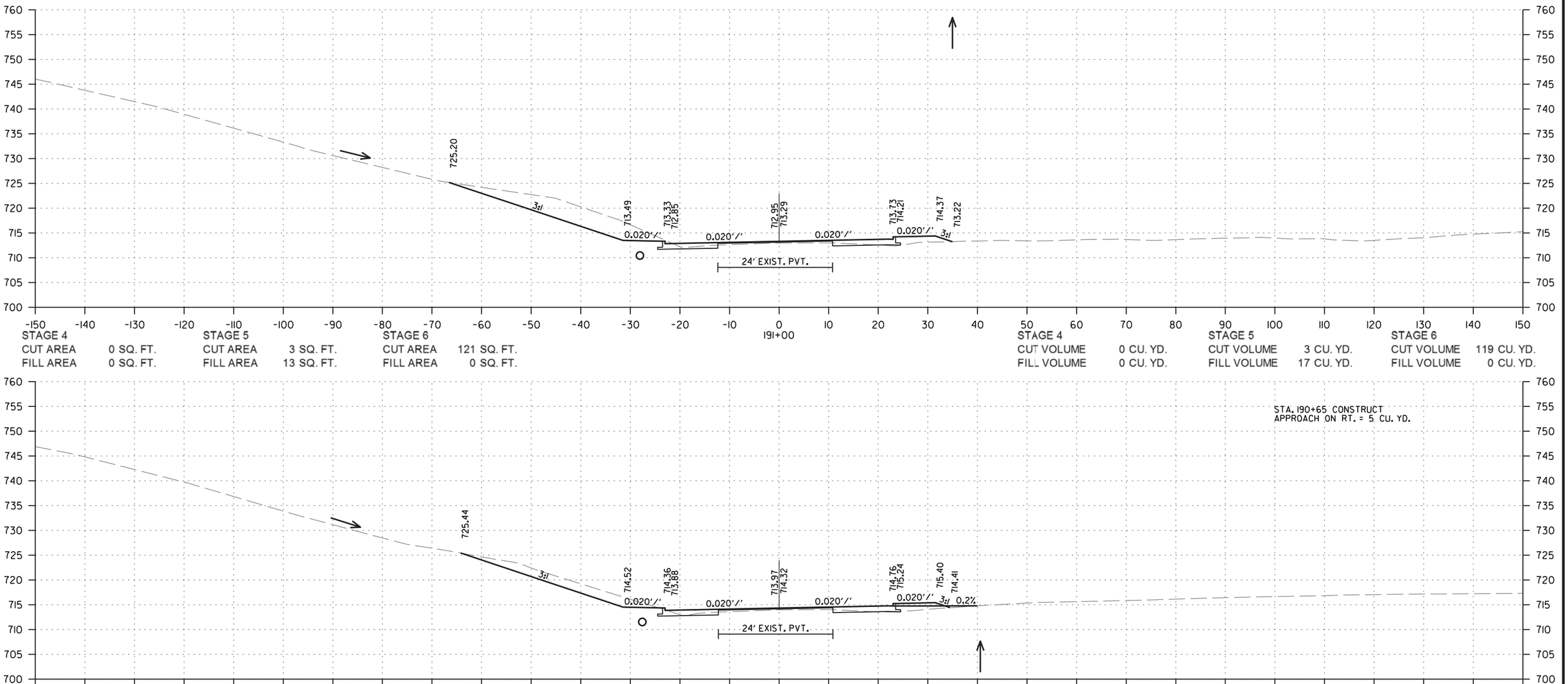
HWY. 7
STA. 189+90 TO STA. 190+00

eh40219 6/22/2020
R061547.DGN

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.		061547	174	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	121 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	119 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	63 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	0 SQ. FT.

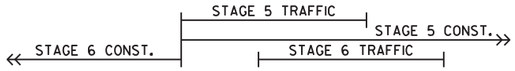
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	172 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	33 CU. YD.	FILL VOLUME	1 CU. YD.

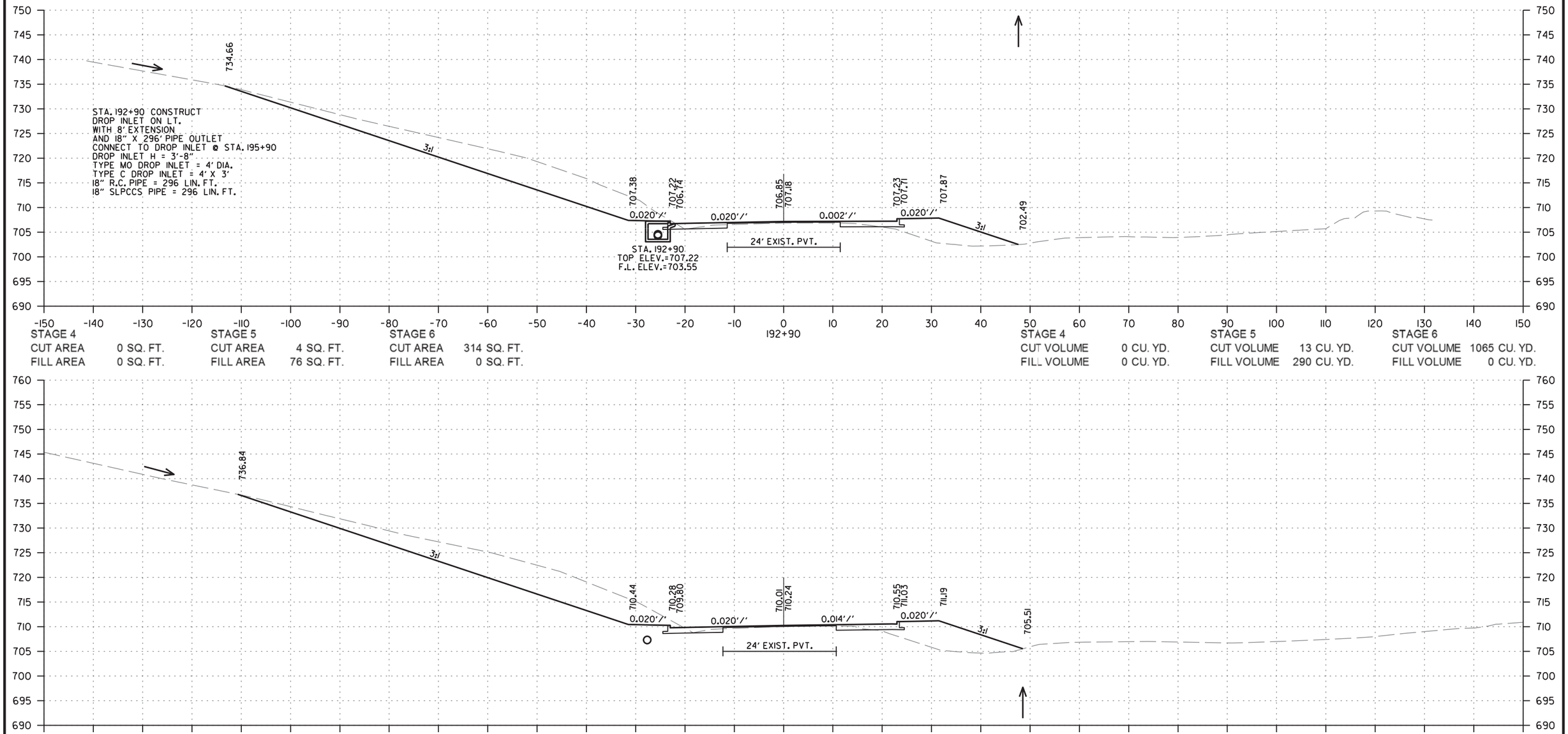
HWY. 7
STA. 190+65 TO STA. 191+00

ah40219 6/22/2020
R061547.DGN

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.		061547	175	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	314 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	1065 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	76 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	290 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	325 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	826 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	98 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	206 CU. YD.	FILL VOLUME	0 CU. YD.

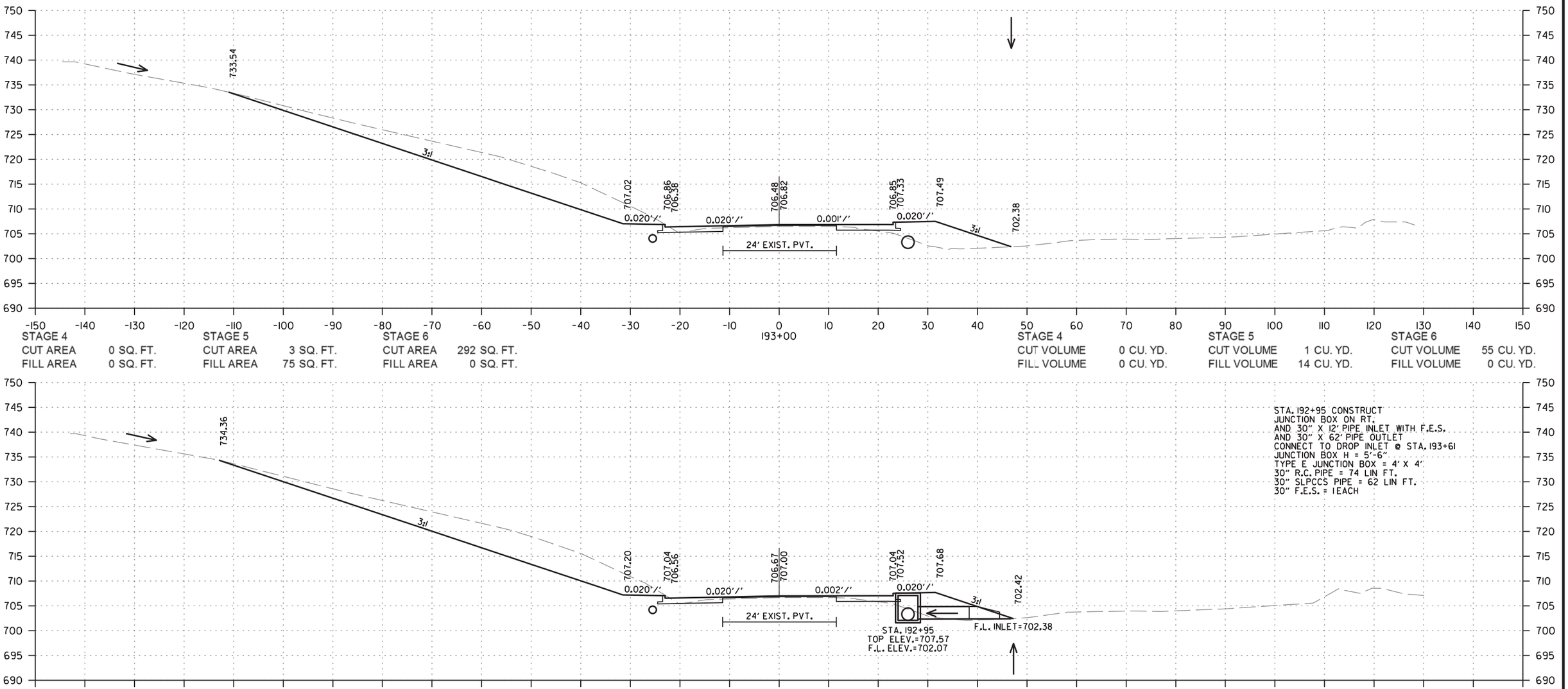
HWY. 7
STA. 192+00 TO STA. 192+90

eh40219 6/22/2020
R061547.DGN

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.		061547	176	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STA. 192+95 CONSTRUCT
JUNCTION BOX ON RT.
AND 30" X 12' PIPE INLET WITH F.E.S.
AND 30" X 62' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 193+61
JUNCTION BOX H = 5'-6"
TYPE E JUNCTION BOX = 4' X 4'
30" R.C. PIPE = 74 LIN FT.
30" SLPCCS PIPE = 62 LIN FT.
30" F.E.S. = 1 EACH

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	292 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	55 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	75 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	303 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	57 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	75 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	0 CU. YD.

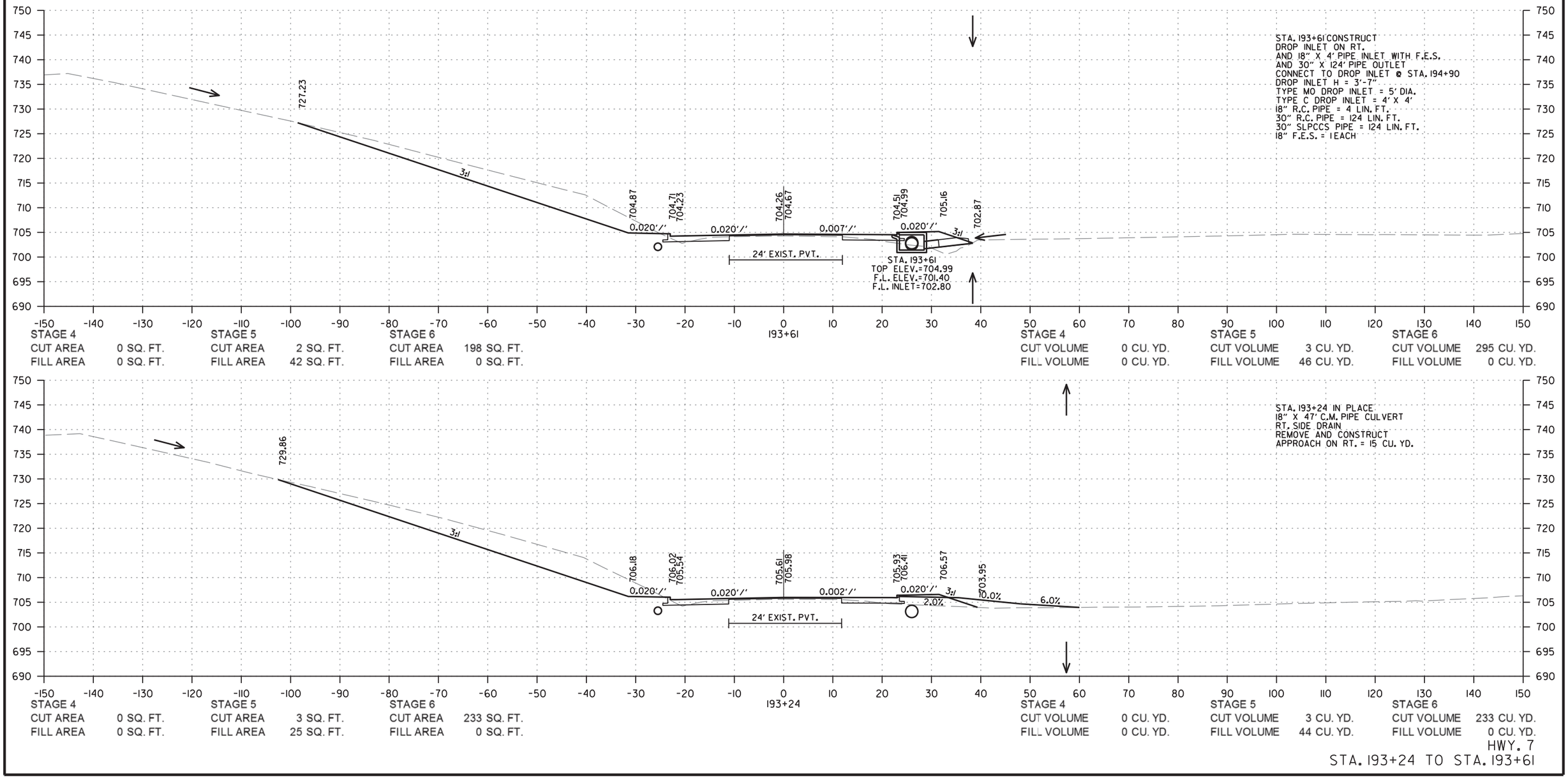
HWY. 7
STA. 192+95 TO STA. 193+00

eh40219 6/22/2020
R061547.DGN

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.		061547	177	323

(2) CROSS SECTIONS

STAGE 6 CONST. ← | STAGE 5 TRAFFIC | STAGE 5 CONST. → | STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	198 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	42 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	295 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	46 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	233 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	0 SQ. FT.

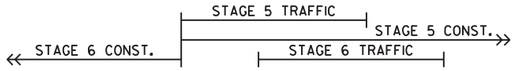
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	233 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	44 CU. YD.	FILL VOLUME	0 CU. YD.

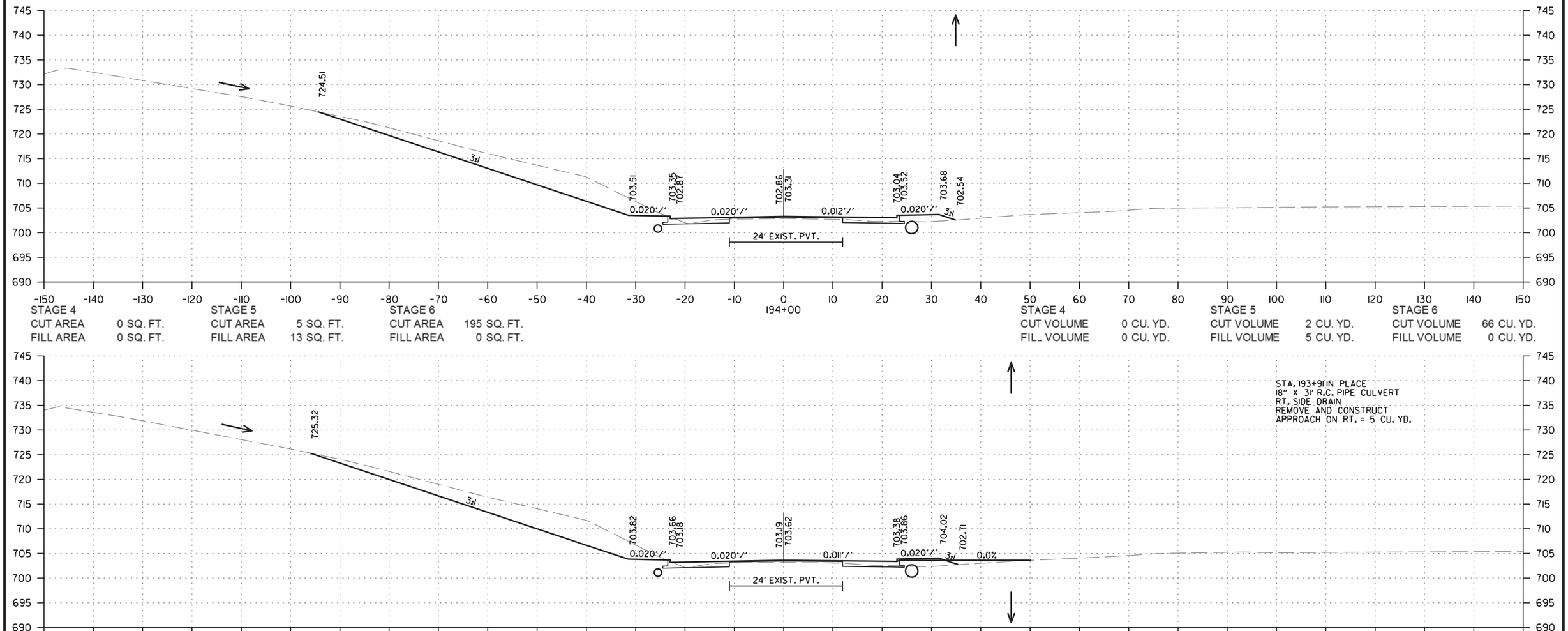
HWY. 7
STA. 193+24 TO STA. 193+61

ah40219 6/22/2020
R061547.DGN

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.		061547	178	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	195 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	66 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	201 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	15 SQ. FT.	FILL AREA	0 SQ. FT.

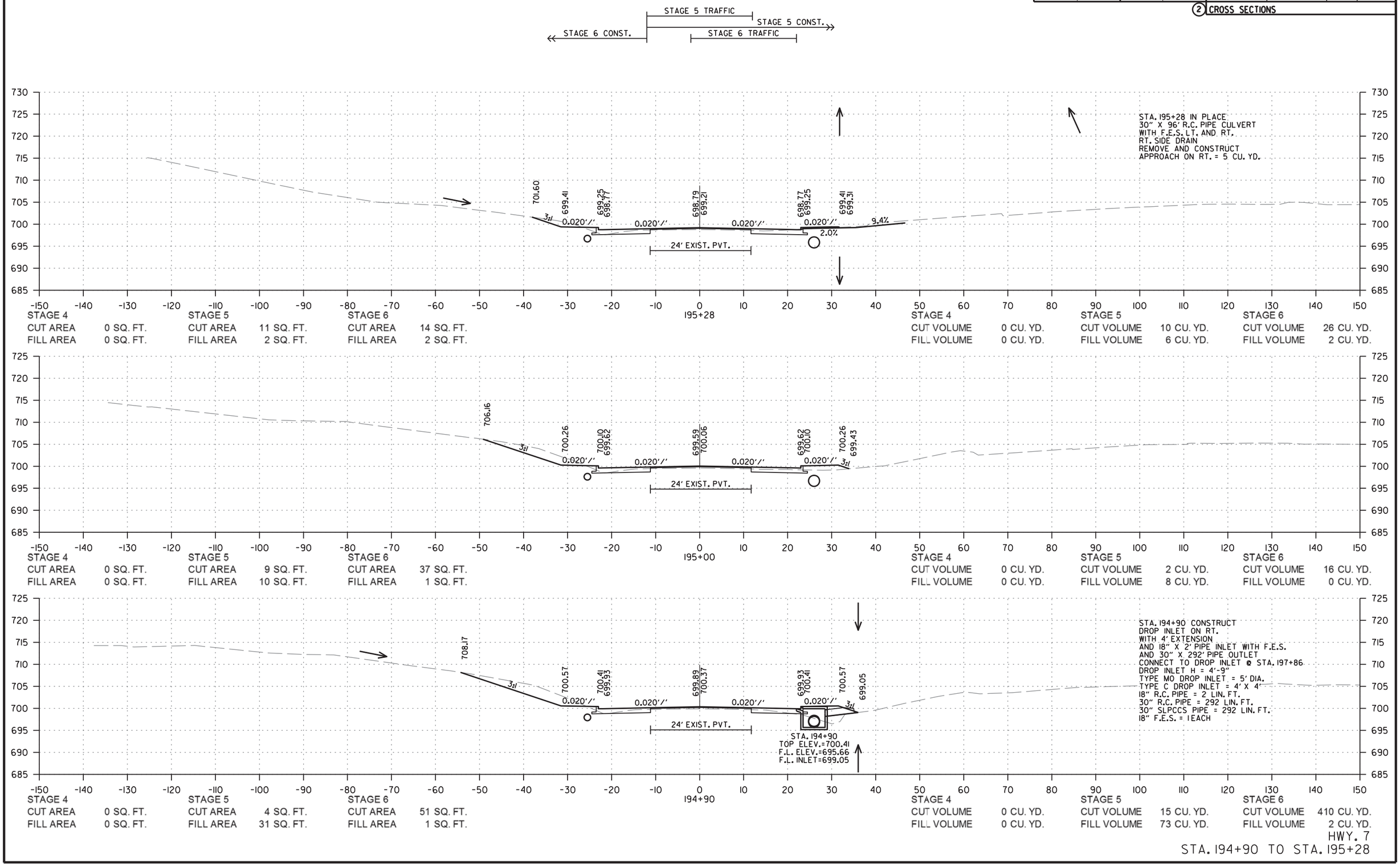
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	222 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	32 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 193+91 TO STA. 194+00

eh40219 6/22/2020
R061547.DGN

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.		061547	179	323

(2) CROSS SECTIONS

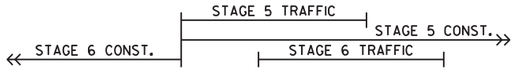


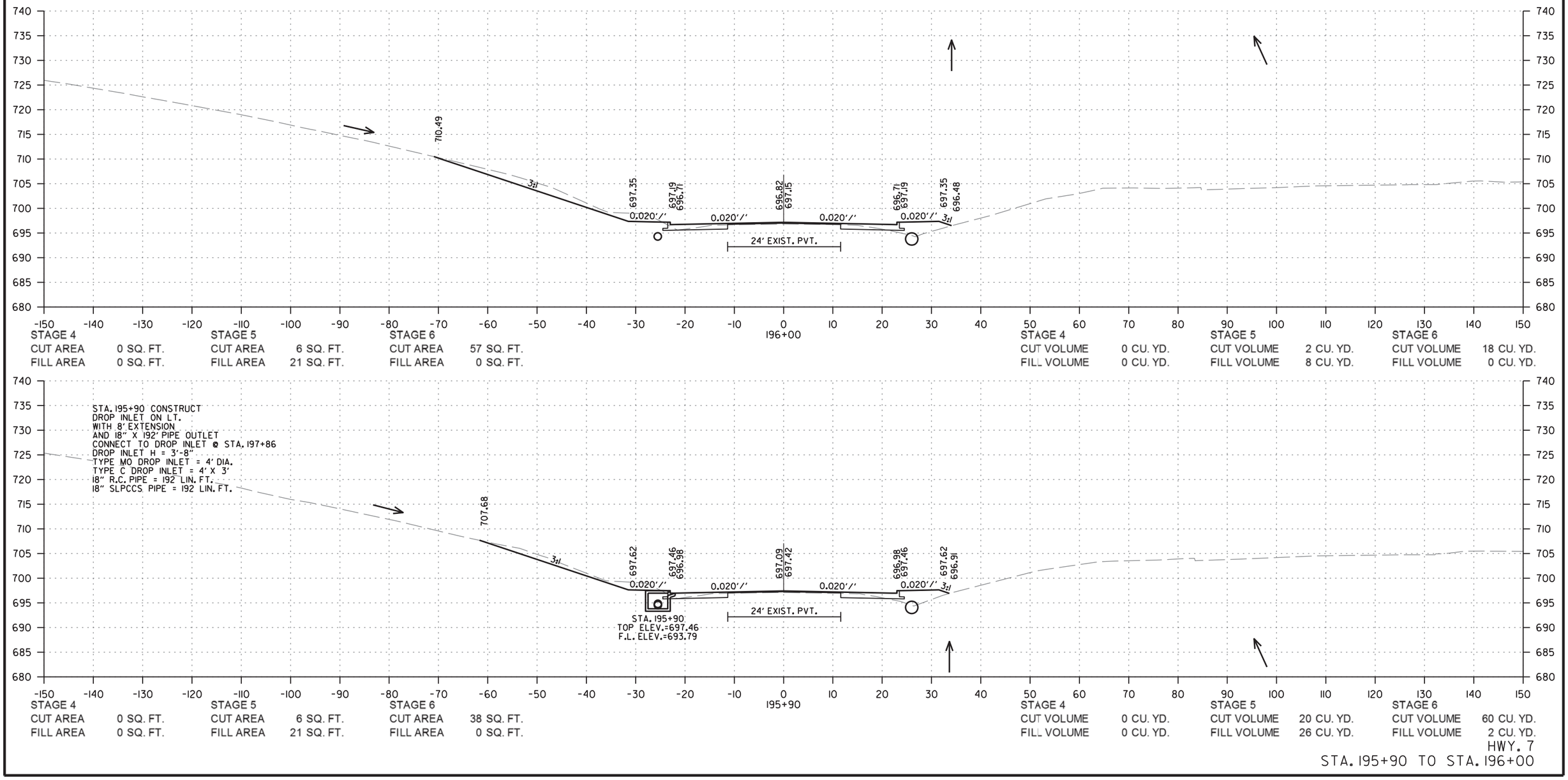
HWY. 7
STA. 194+90 TO STA. 195+28

eh40219 6/22/2020
R061547.DGN

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.		061547	180	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	57 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	18 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	8 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	38 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	20 CU. YD.	CUT VOLUME	60 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	26 CU. YD.	FILL VOLUME	2 CU. YD.

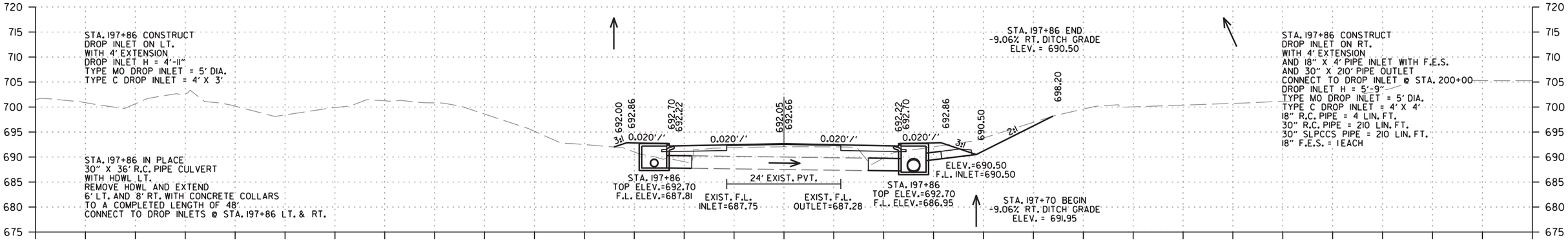
HWY. 7
STA. 195+90 TO STA. 196+00

eh40219 6/22/2020
R061547.DGN

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.		061547	181	323

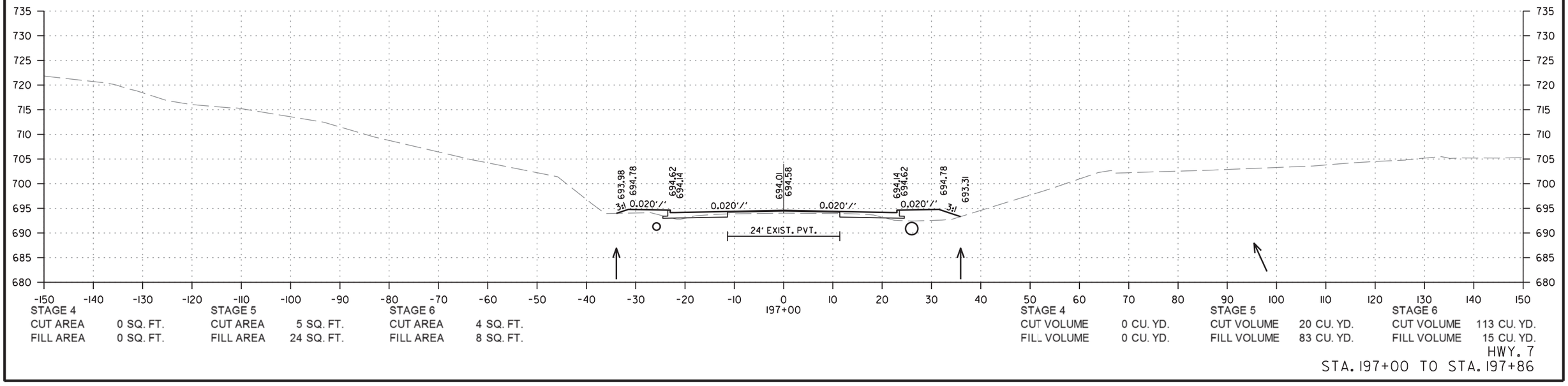
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	32 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	19 SQ. FT.	FILL AREA	30 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	59 CU. YD.	CUT VOLUME	11 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	68 CU. YD.	FILL VOLUME	61 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	24 SQ. FT.	FILL AREA	8 SQ. FT.

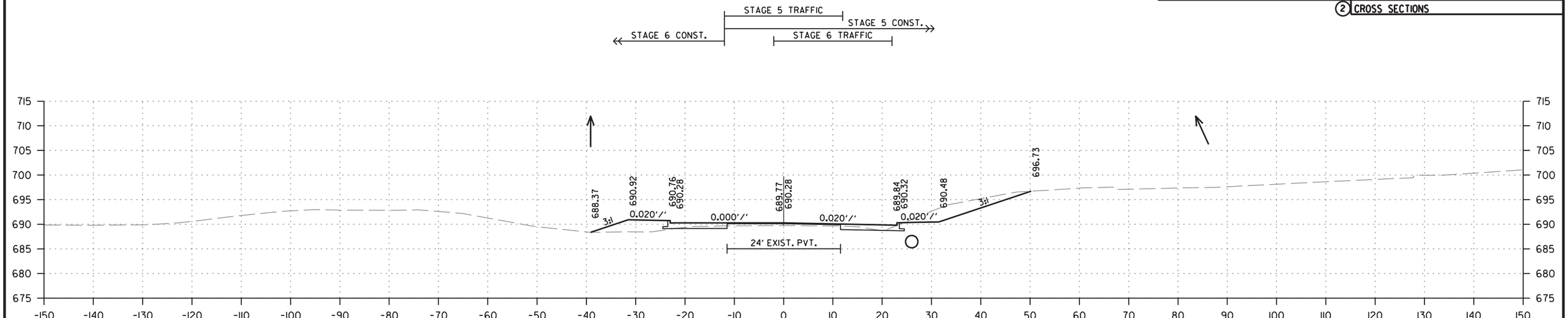
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	20 CU. YD.	CUT VOLUME	113 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	83 CU. YD.	FILL VOLUME	15 CU. YD.

HWY. 7
STA. 197+00 TO STA. 197+86

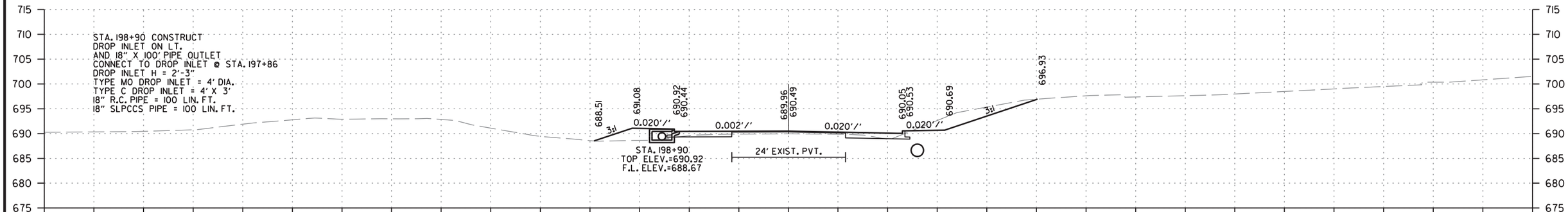
ah40219 6/22/2020
R061547.DGN

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.		061547	182	323

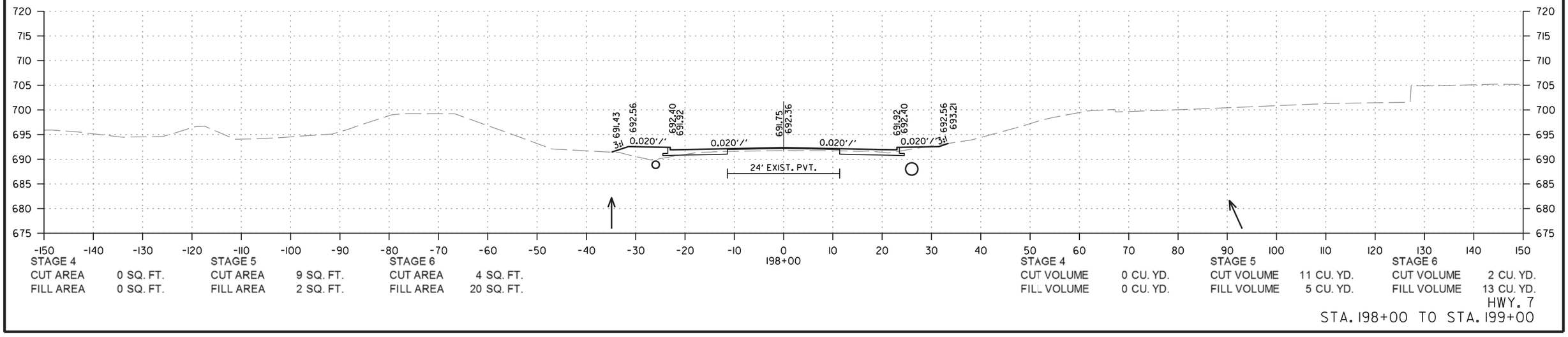
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	48 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	45 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	90 CU. YD.	CUT VOLUME	13 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	28 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	3 CU. YD.	FILL VOLUME	80 CU. YD.



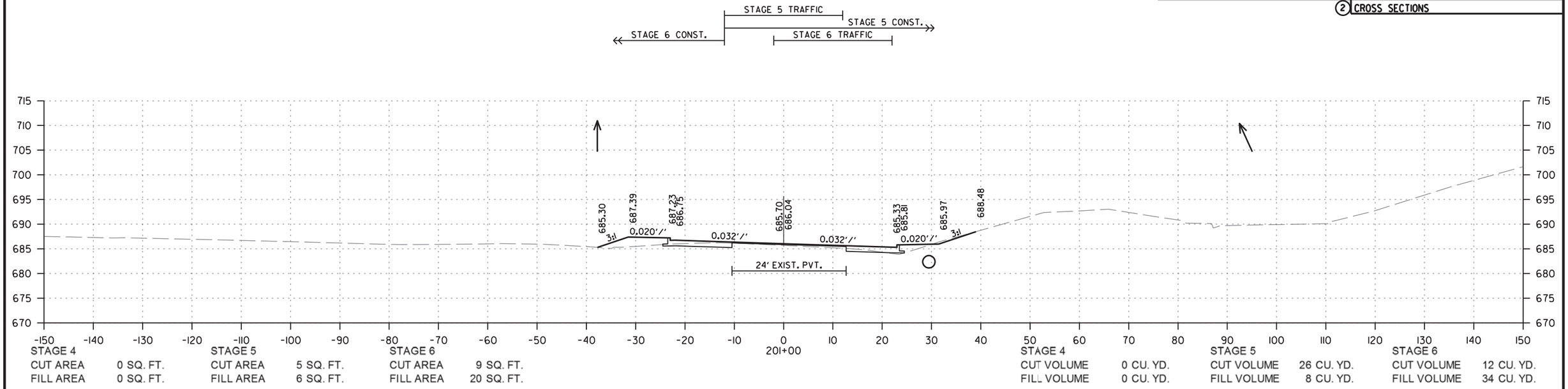
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	2 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	2 SQ. FT.	FILL AREA	20 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	13 CU. YD.

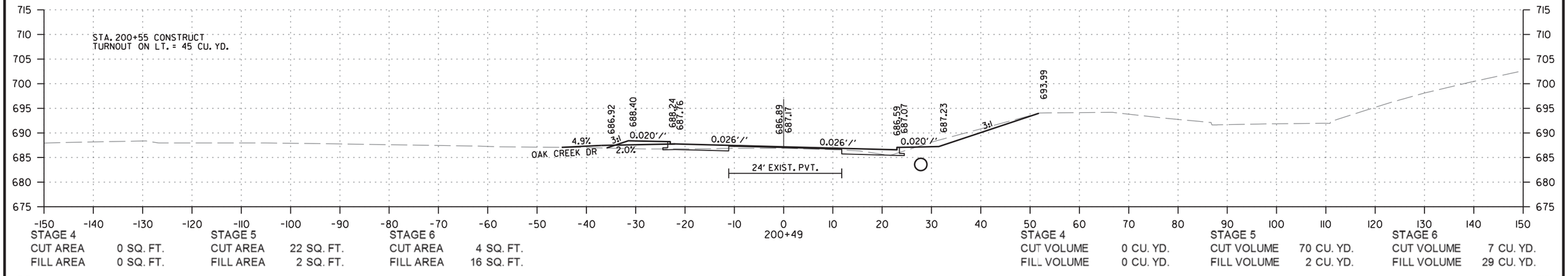
HWY. 7
STA. 198+00 TO STA. 199+00

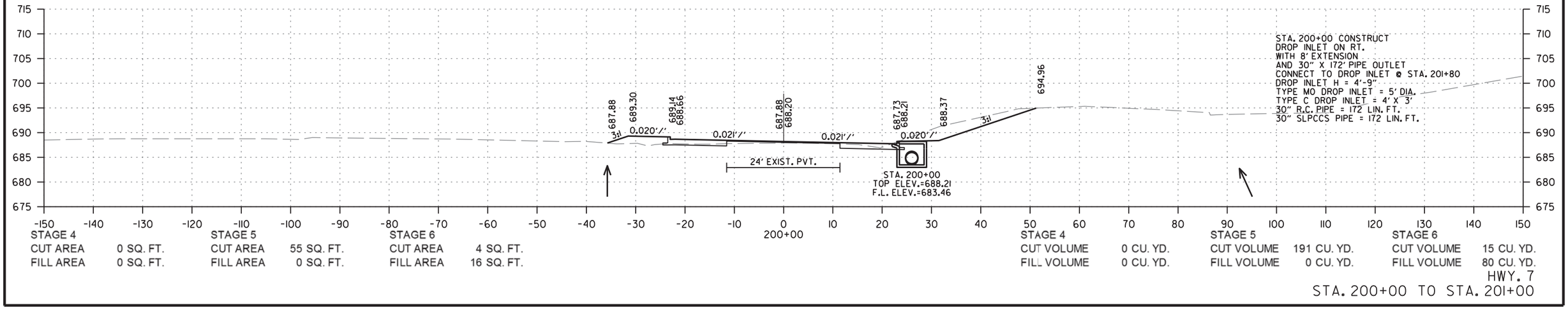
eh40219 6/22/2020
R061547.DGN

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.		061547	183	323

(2) CROSS SECTIONS





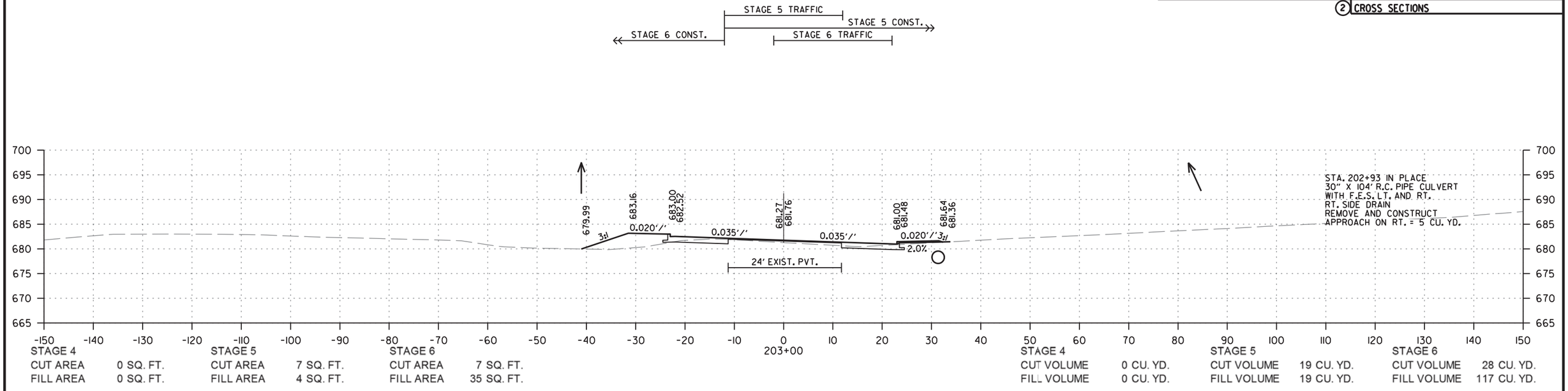


HWY. 7
STA. 200+00 TO STA. 201+00

oh40219 6/22/2020
R061547.DGN

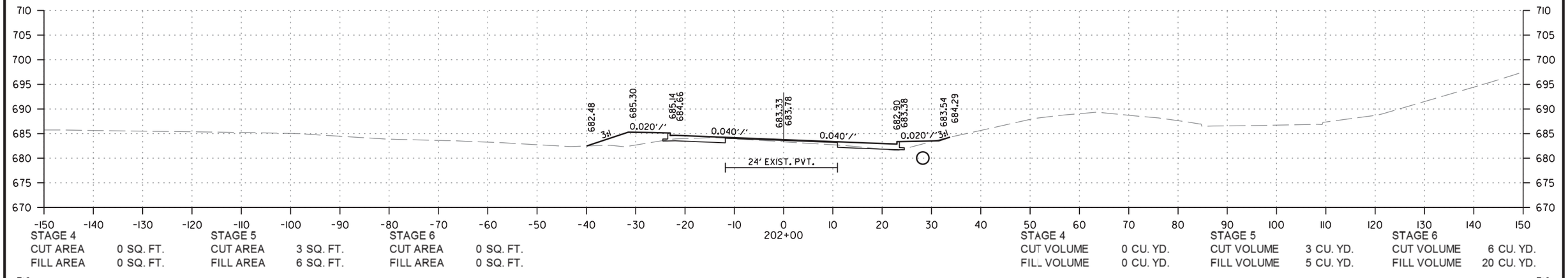
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	184	323

(2) CROSS SECTIONS



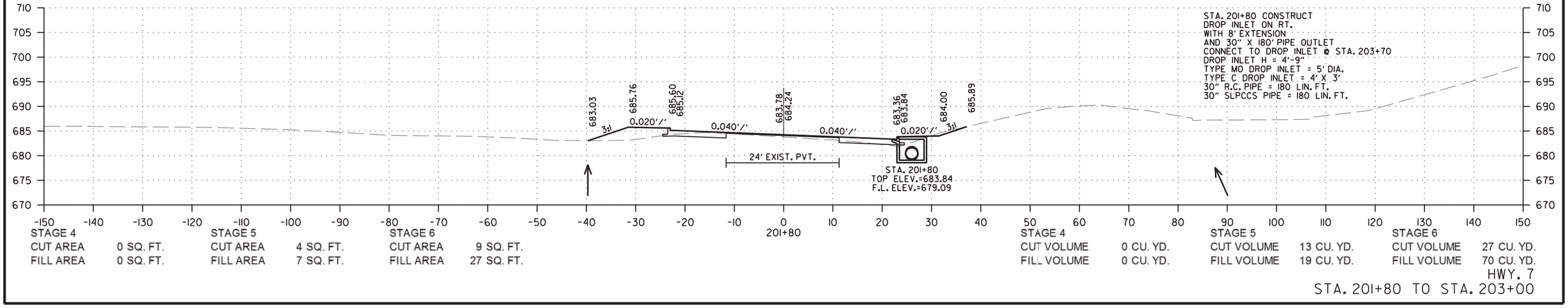
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	35 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	19 CU. YD.	CUT VOLUME	28 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	117 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	20 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	27 SQ. FT.

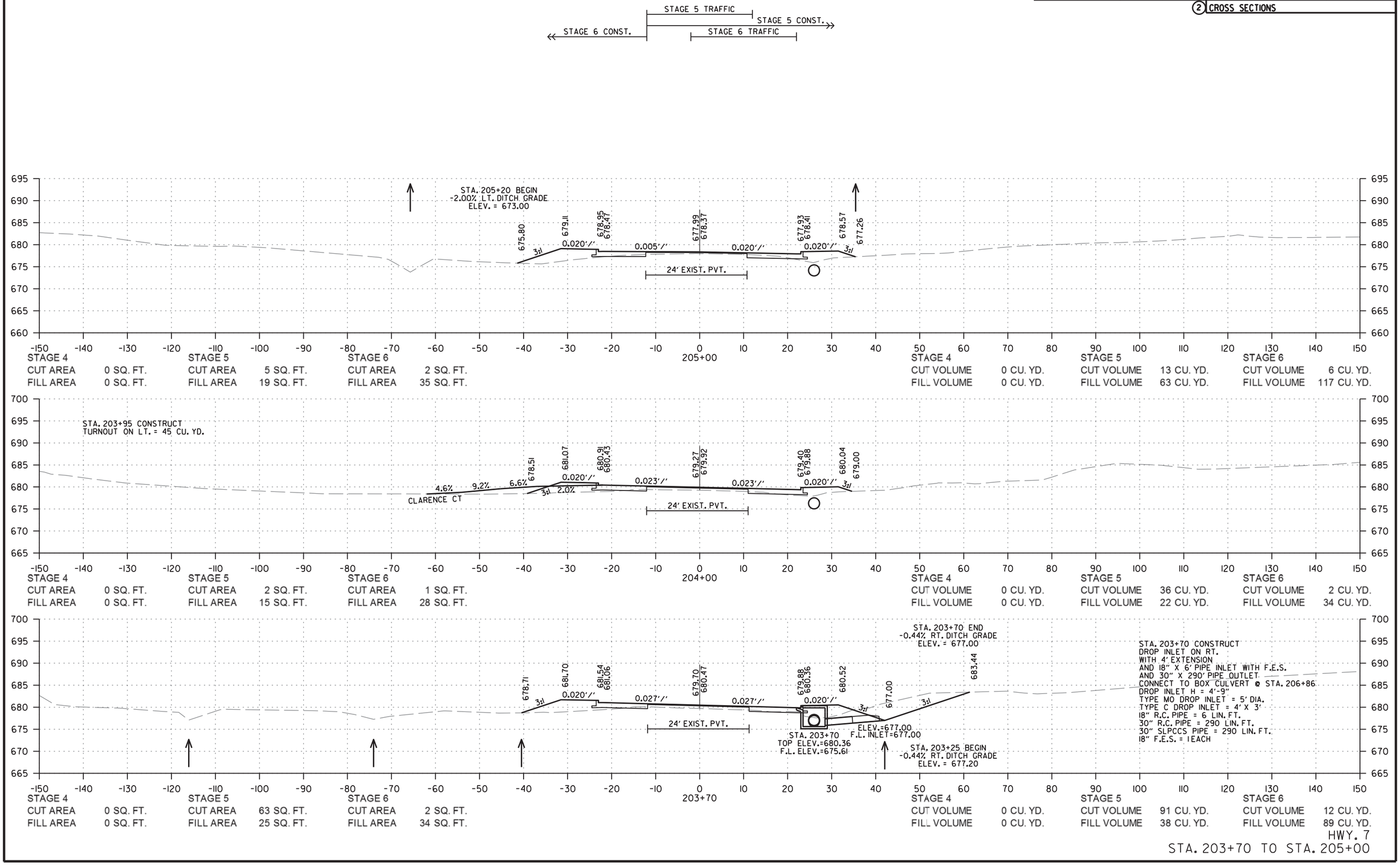
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	27 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	70 CU. YD.

HWY. 7
STA. 201+80 TO STA. 203+00

eh40219 6/22/2020
R061547.DGN

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.		061547	185	323

(2) CROSS SECTIONS



HWY. 7
STA. 203+70 TO STA. 205+00

ah40219 6/22/2020
R061547.DGN

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.		061547	186	323

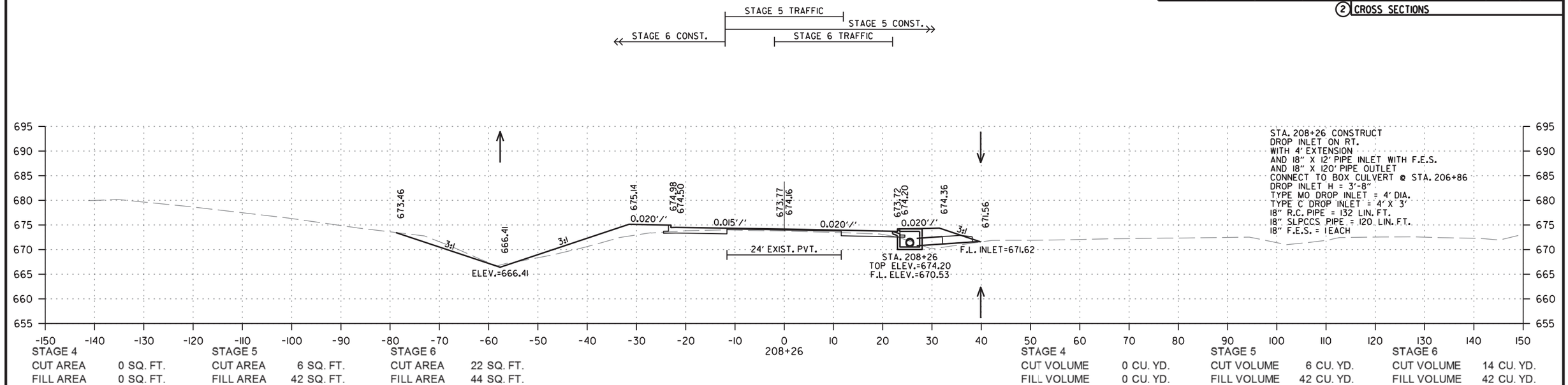
(2) CROSS SECTIONS

HWY. 7
STA. 206+00 TO STA. 207+00

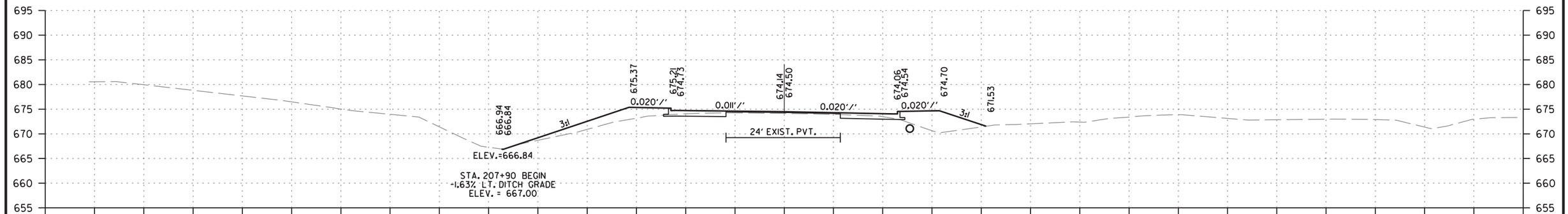
6/22/2020
ah40219
R061547.DGN

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.		061547	187	323

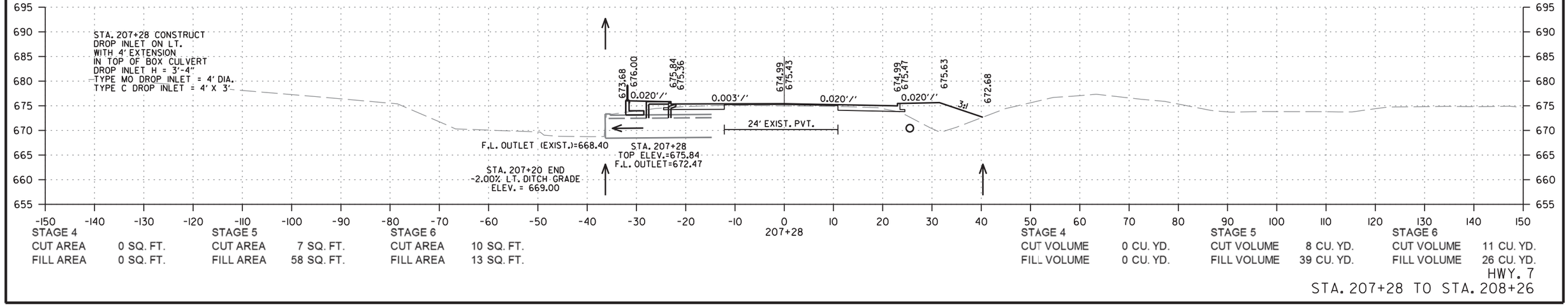
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	22 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	14 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	42 SQ. FT.	FILL AREA	44 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	42 CU. YD.	FILL VOLUME	42 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	19 CU. YD.	CUT VOLUME	23 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	46 SQ. FT.	FILL AREA	44 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	139 CU. YD.	FILL VOLUME	76 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	58 SQ. FT.	FILL AREA	13 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	39 CU. YD.	FILL VOLUME	26 CU. YD.

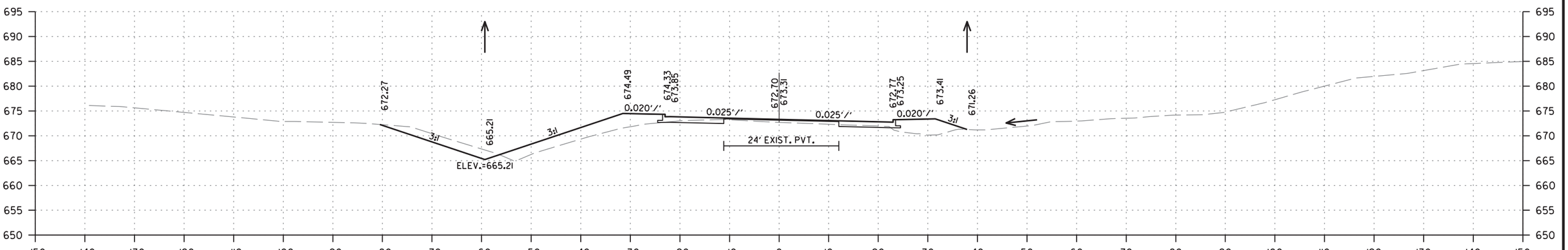
HWY. 7
STA. 207+28 TO STA. 208+26

eh40219 6/22/2020
R061547.DGN

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.		061547	188	323

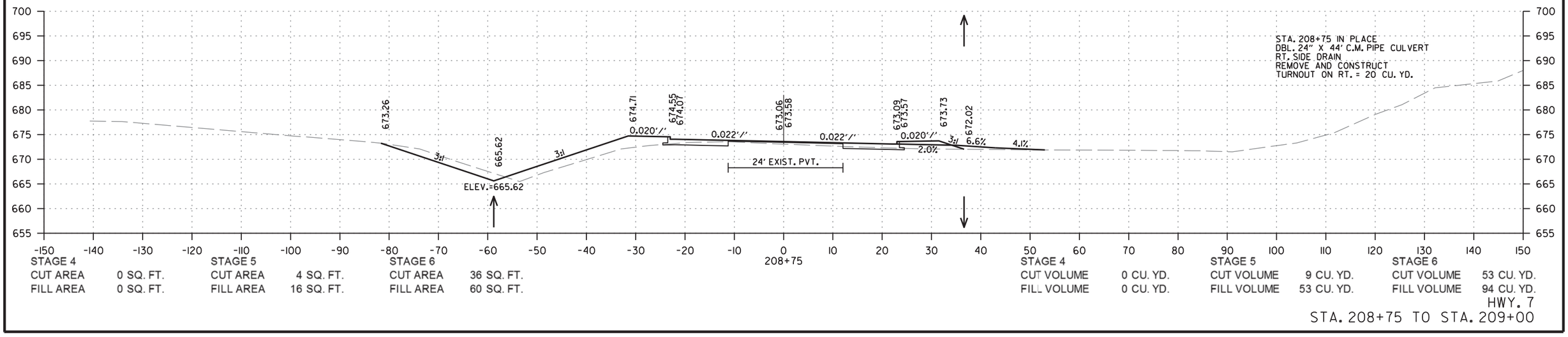
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	40 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	32 SQ. FT.	FILL AREA	72 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	35 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	61 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	36 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	60 SQ. FT.

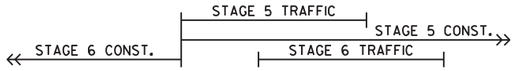
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	53 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	53 CU. YD.	FILL VOLUME	94 CU. YD.

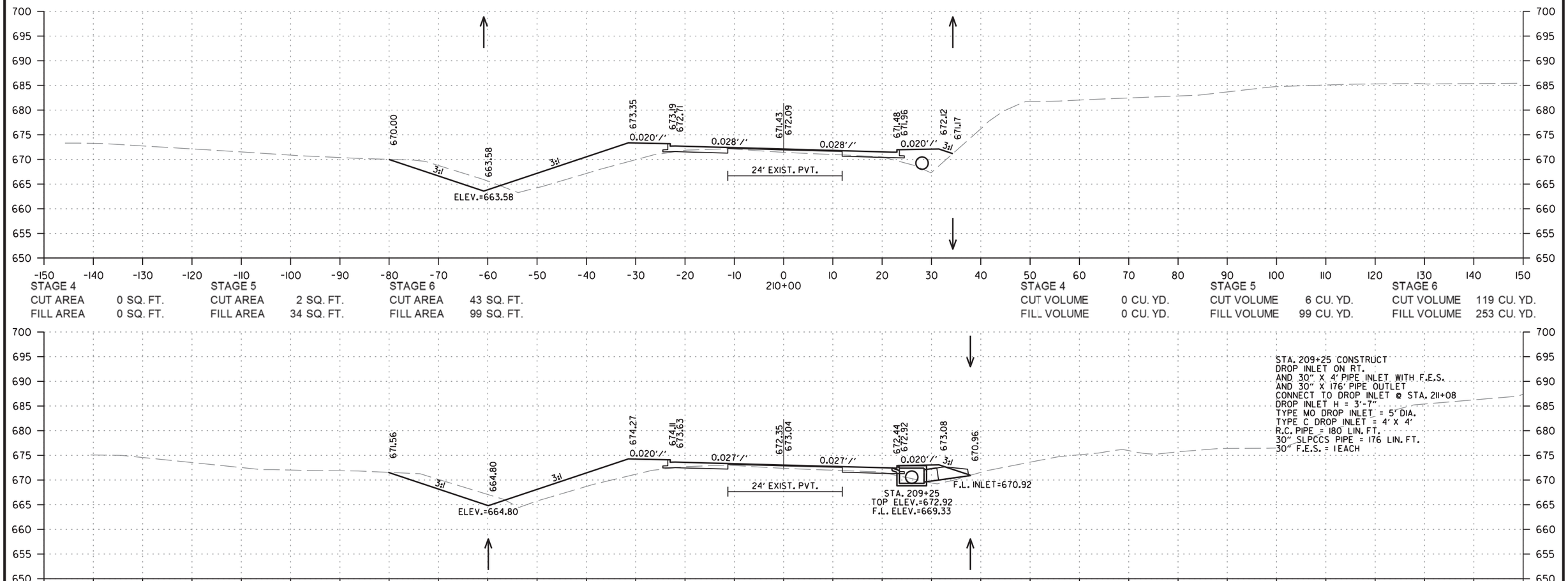
HWY. 7
STA. 208+75 TO STA. 209+00

ah40219 6/22/2020
R061547.DGN

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.		061547	189	323

(2) CROSS SECTIONS





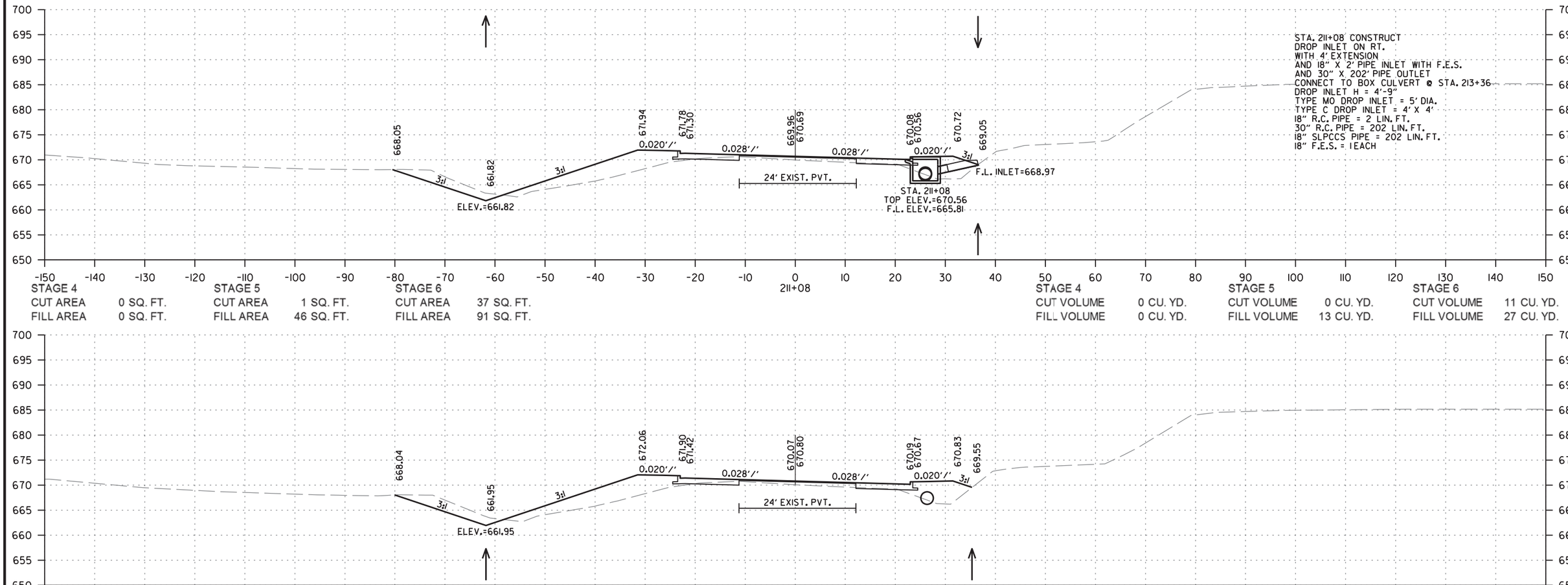
HWY. 7
STA. 209+25 TO STA. 210+00

ah40219 6/22/2020
R061547.DGN

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.		061547	190	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	37 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	46 SQ. FT.	FILL AREA	91 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	27 CU. YD.

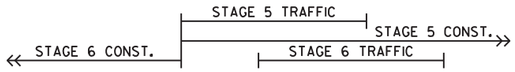
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	39 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	152 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	41 SQ. FT.	FILL AREA	94 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	139 CU. YD.	FILL VOLUME	357 CU. YD.

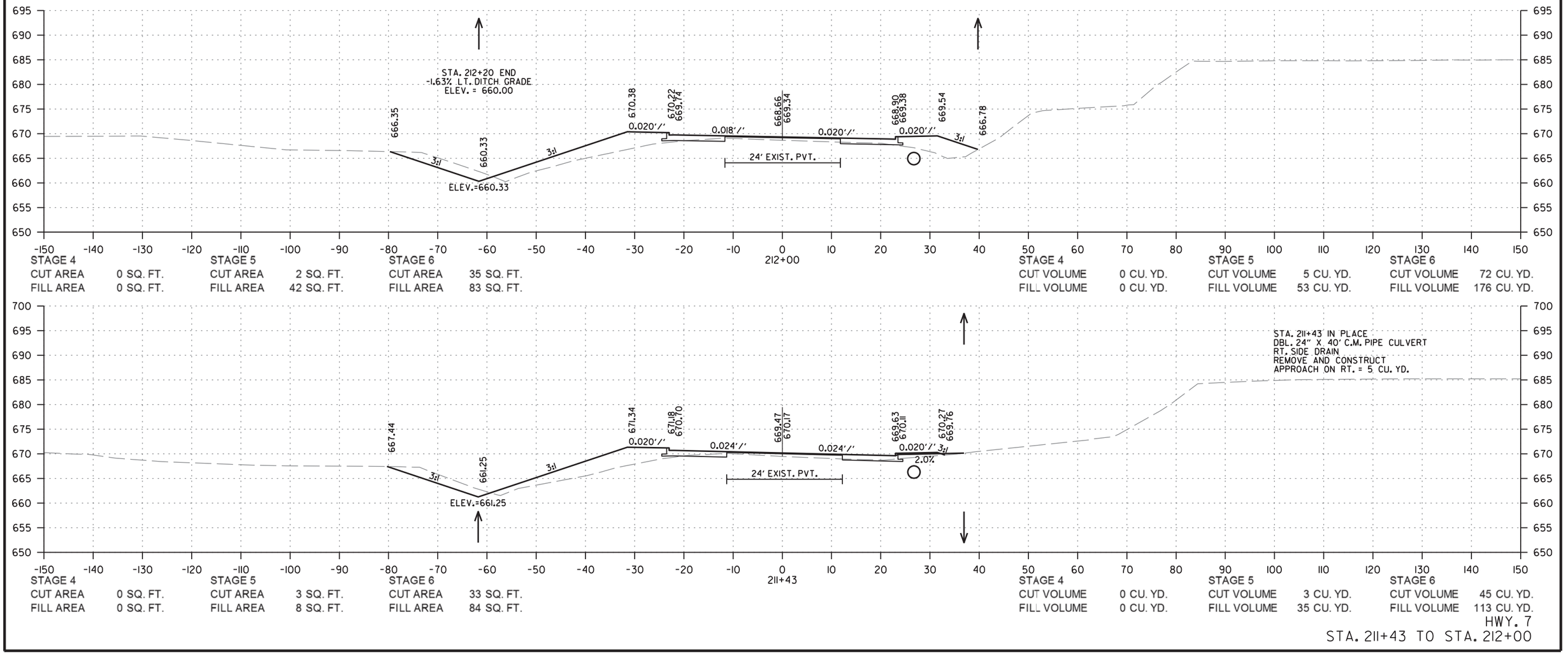
HWY. 7
STA. 211+00 TO STA. 211+08

ah40219 6/22/2020
R061547.DGN

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.		061547	191	323

(2) CROSS SECTIONS





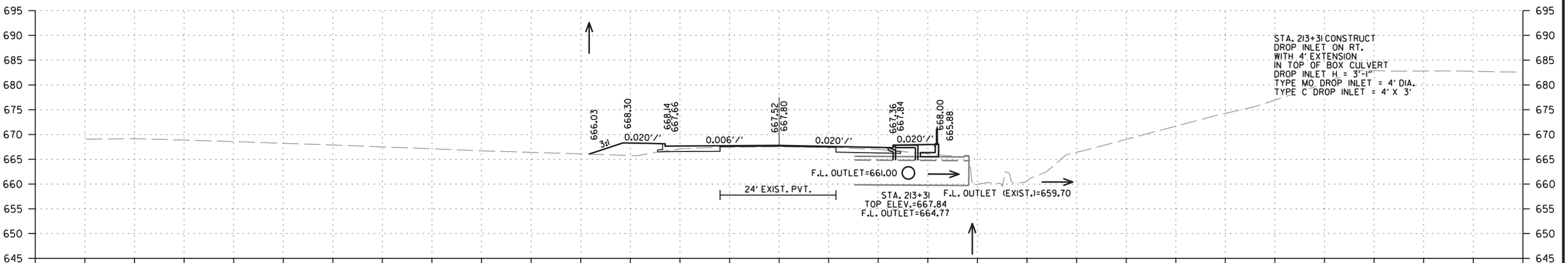
HWY. 7
STA. 211+43 TO STA. 212+00

ah40219 6/22/2020
R061547.DGN

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.		061547	192	323

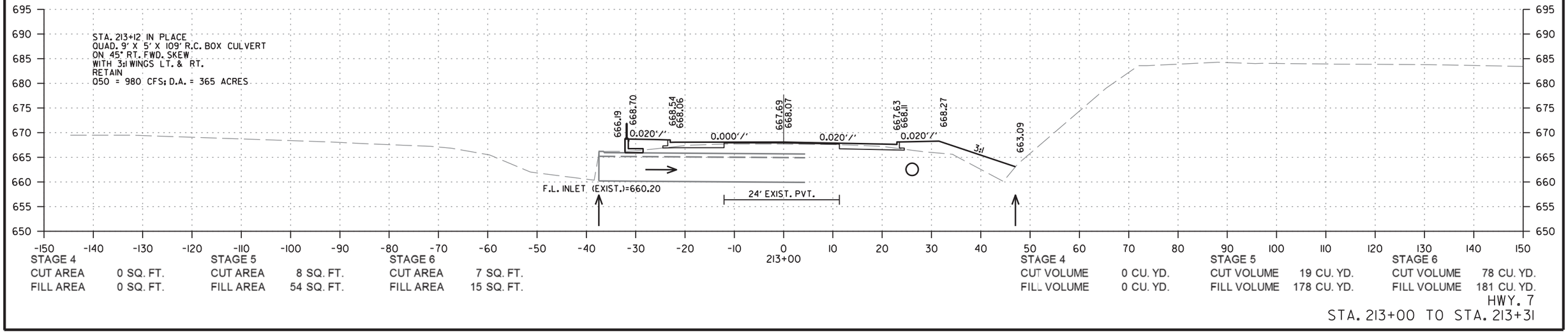
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	11 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	12 SQ. FT.	FILL AREA	26 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	38 CU. YD.	FILL VOLUME	24 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	54 SQ. FT.	FILL AREA	15 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	19 CU. YD.	CUT VOLUME	78 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	178 CU. YD.	FILL VOLUME	181 CU. YD.

HWY. 7
STA. 213+00 TO STA. 213+31

eh40219 6/22/2020
R061547.DGN

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.		061547	193	323

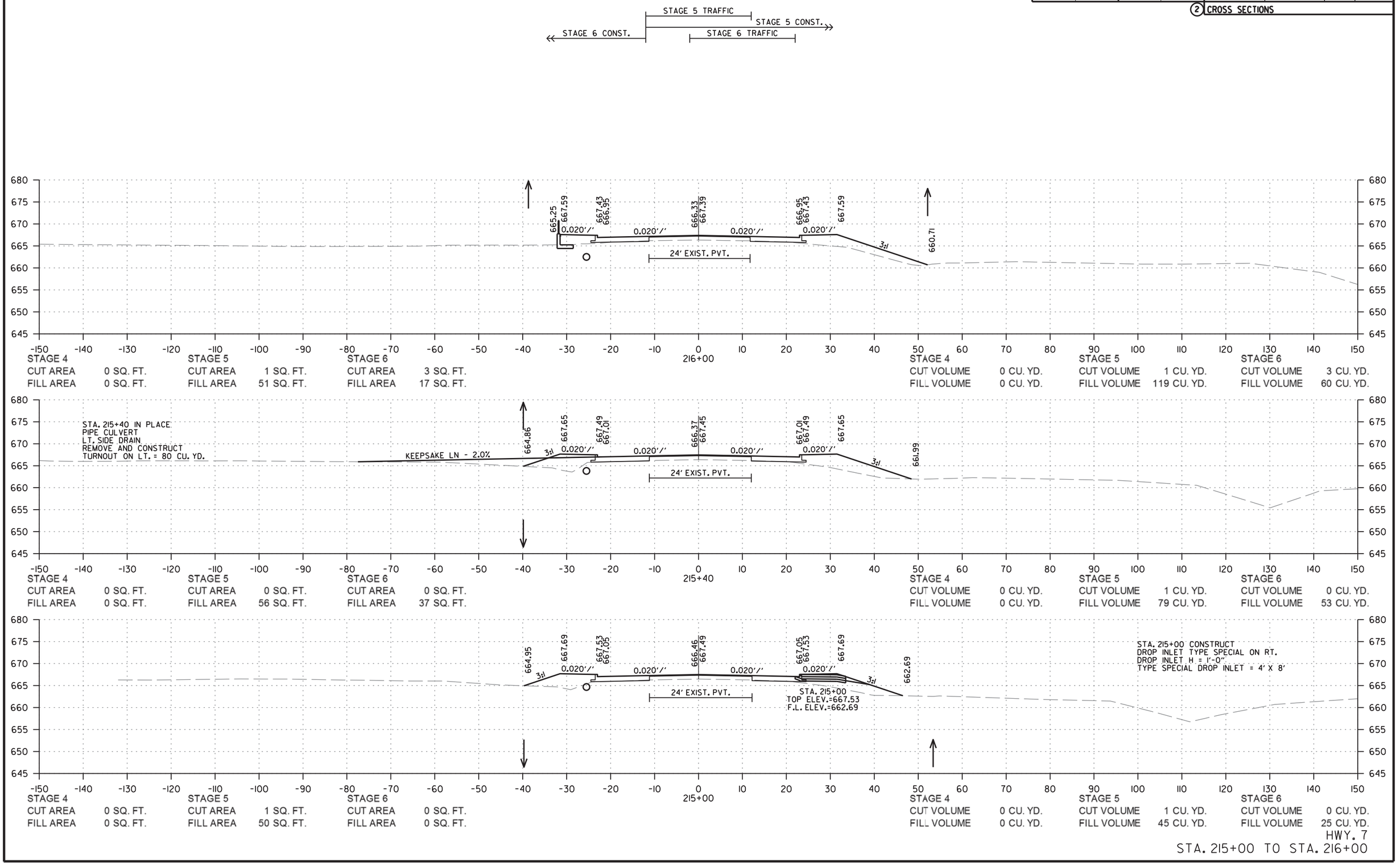
(2) CROSS SECTIONS

HWY. 7
STA. 214+00 TO STA. 214+75

eh40219 6/22/2020
R061547.DGN

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.		061547	194	323

(2) CROSS SECTIONS



216+00

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	51 SQ. FT.	FILL AREA	17 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	119 CU. YD.	FILL VOLUME	60 CU. YD.

215+40

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	56 SQ. FT.	FILL AREA	37 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	79 CU. YD.	FILL VOLUME	53 CU. YD.

215+00

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	50 SQ. FT.	FILL AREA	0 SQ. FT.

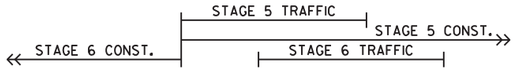
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	45 CU. YD.	FILL VOLUME	25 CU. YD.

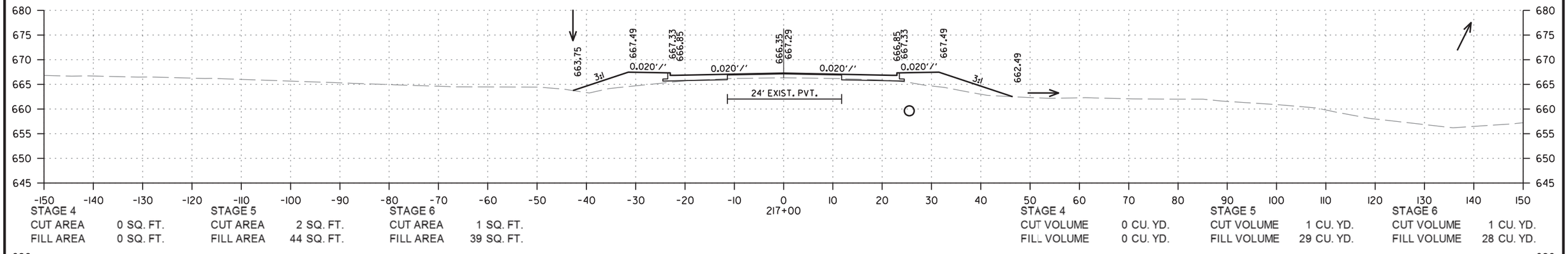
HWY. 7
STA. 215+00 TO STA. 216+00

6/22/2020
ah40219
R061547.DGN

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.		061547	195	323

(2) CROSS SECTIONS

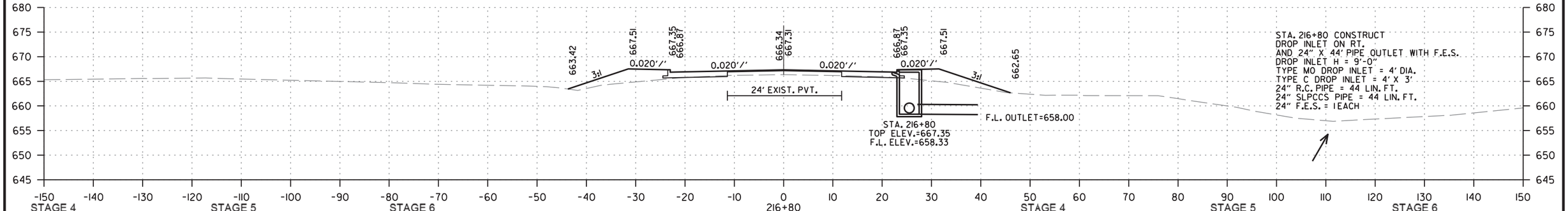




STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	1 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	44 SQ. FT.	FILL AREA	39 SQ. FT.

217+00

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	1 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	29 CU. YD.	FILL VOLUME	28 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	1 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	35 SQ. FT.	FILL AREA	37 SQ. FT.

216+80

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	60 CU. YD.	FILL VOLUME	62 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	2 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	16 SQ. FT.

216+17

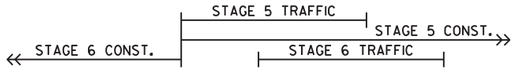
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	21 CU. YD.	FILL VOLUME	10 CU. YD.

HWY. 7
STA. 216+17 TO STA. 217+00

ah40219 6/22/2020
R061547.DGN

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.		061547	196	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	68 SQ. FT.	FILL AREA	13 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	65 CU. YD.	FILL VOLUME	13 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	66 SQ. FT.	FILL AREA	15 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	101 CU. YD.	FILL VOLUME	45 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	1 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	52 SQ. FT.	FILL AREA	38 SQ. FT.

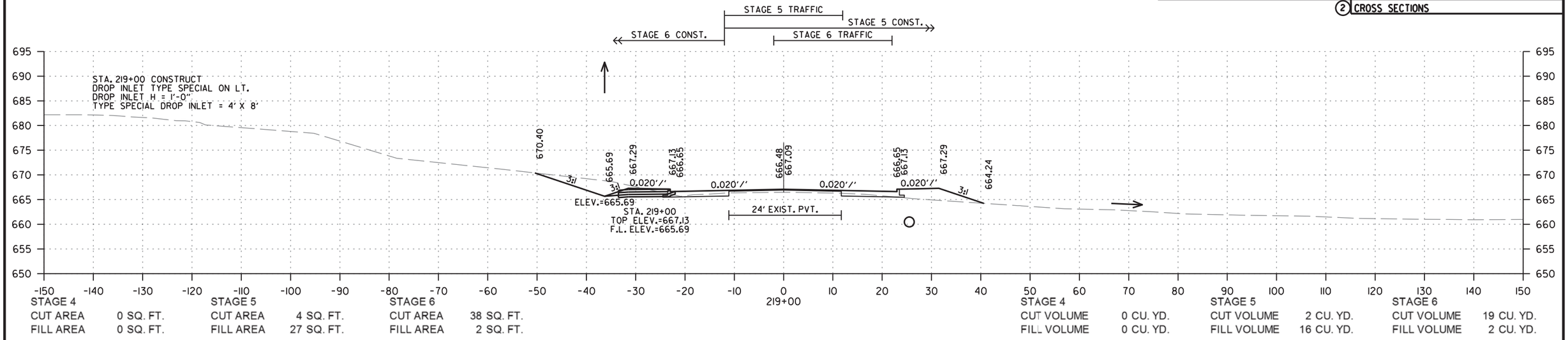
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	1 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	50 CU. YD.	FILL VOLUME	40 CU. YD.

HWY. 7
STA. 217+28 TO STA. 218+00

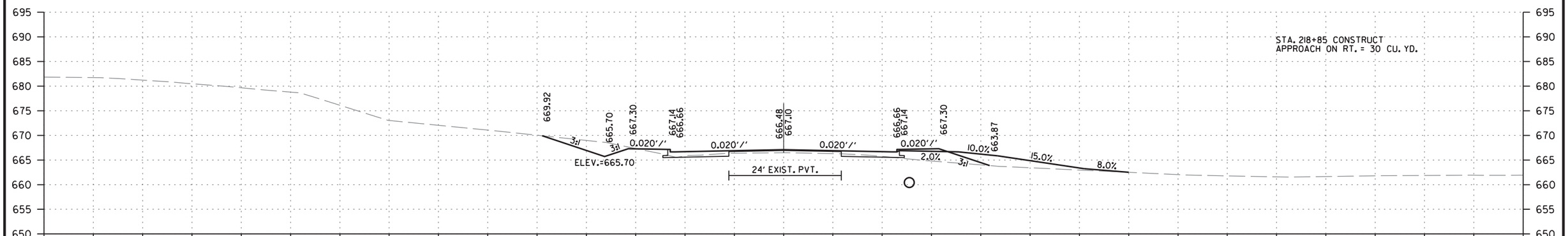
eh40219 6/22/2020
R061547.DGN

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.		061547	197	323

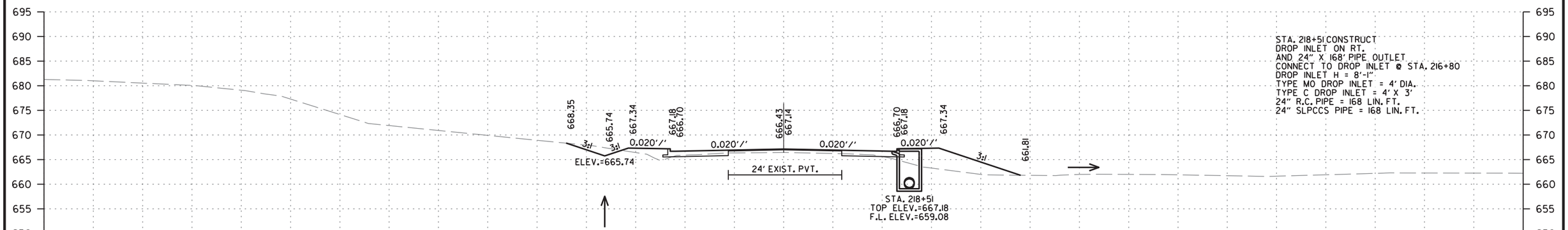
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	38 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	19 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	2 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	16 CU. YD.	FILL VOLUME	2 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	30 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	28 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	31 SQ. FT.	FILL AREA	4 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	62 CU. YD.	FILL VOLUME	10 CU. YD.



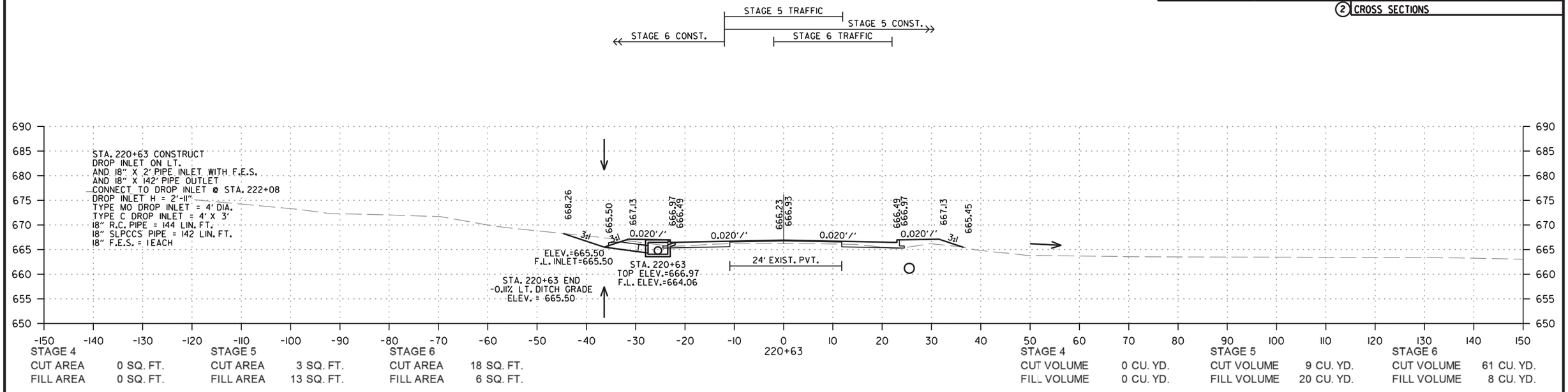
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	14 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	18 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	68 SQ. FT.	FILL AREA	12 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	128 CU. YD.	FILL VOLUME	24 CU. YD.

HWY. 7
STA. 218+51 TO STA. 219+00

6/22/2020
eh40219
R061547.DGN

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.		061547	198	323

(2) CROSS SECTIONS

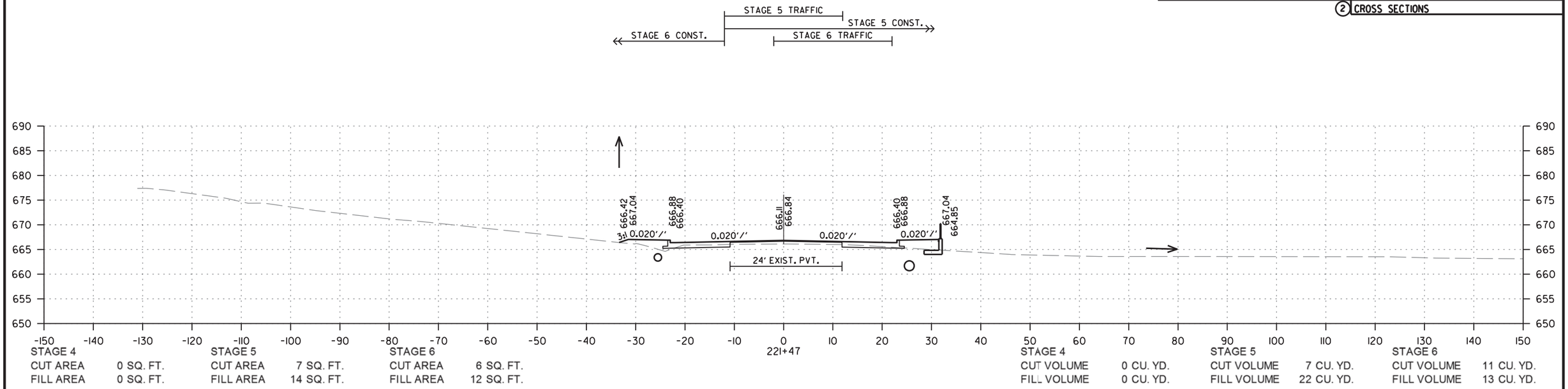


HWY. 7
STA. 219+80 TO STA. 220+63

ah40219 6/22/2020
R061547.DGN

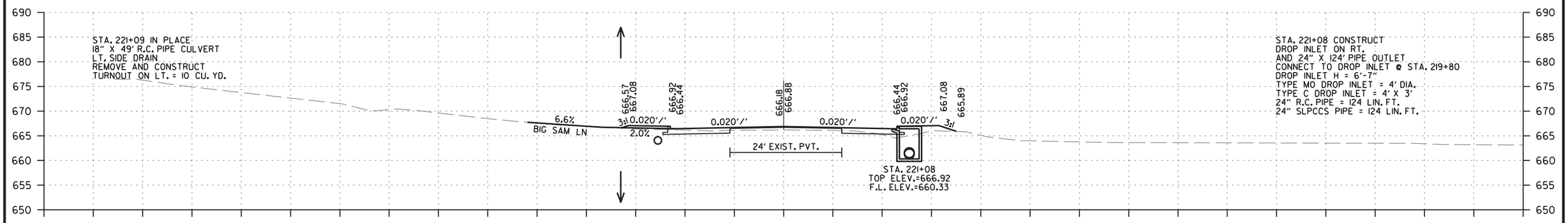
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	199	323

(2) CROSS SECTIONS



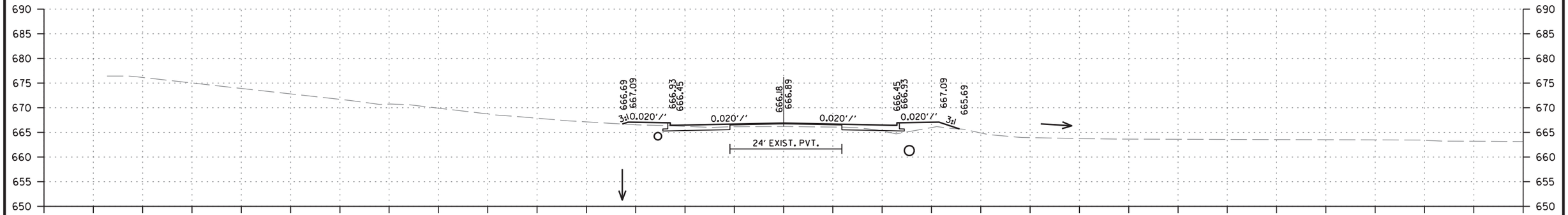
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	12 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	11 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	13 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	6 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	2 CU. YD.



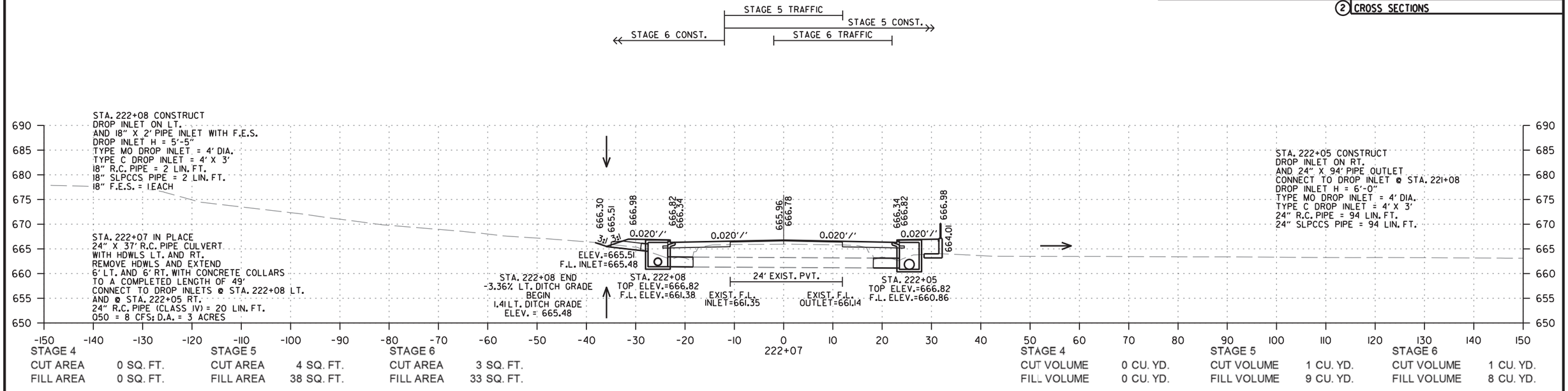
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	15 SQ. FT.	FILL AREA	5 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	19 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	8 CU. YD.

HWY. 7
STA. 221+00 TO STA. 221+47

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	200	323

(2) CROSS SECTIONS

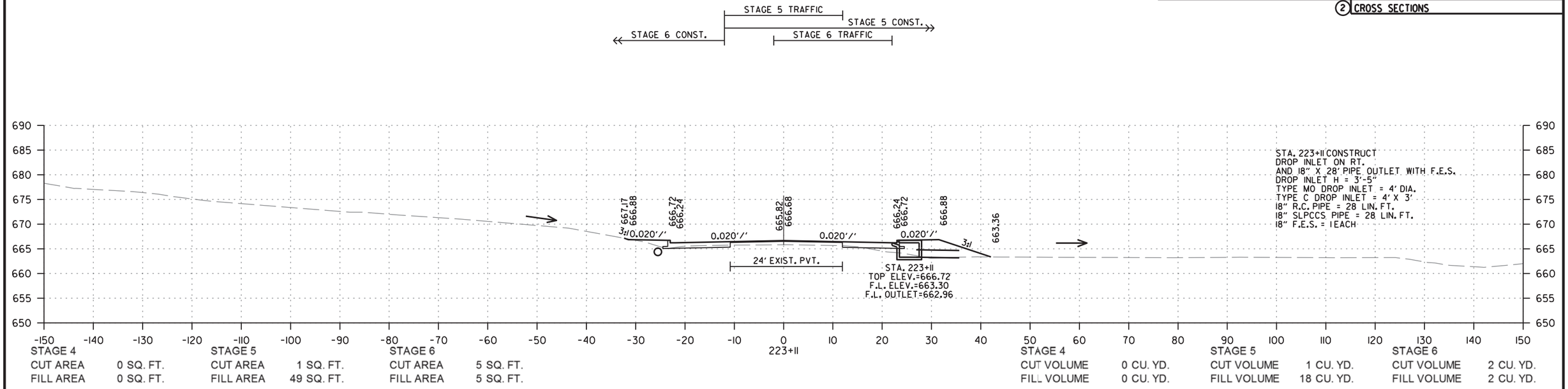


HWY. 7
STA. 221+75 TO STA. 222+07

eh40219 8/4/2020
R061547.DGN

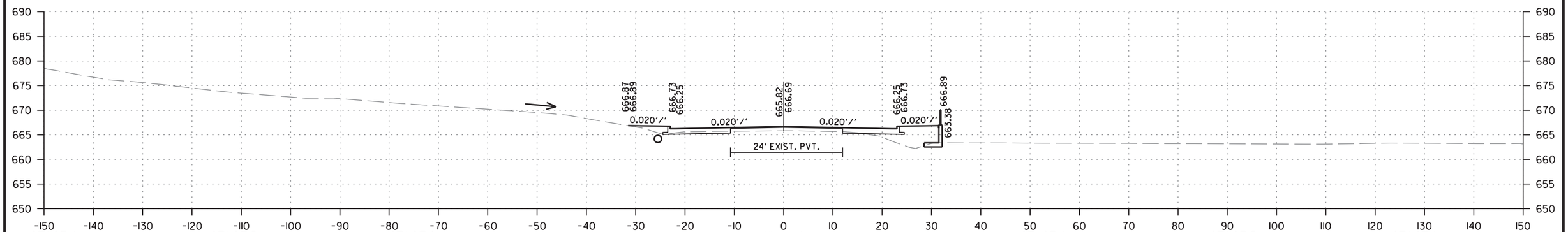
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	201	323

(2) CROSS SECTIONS



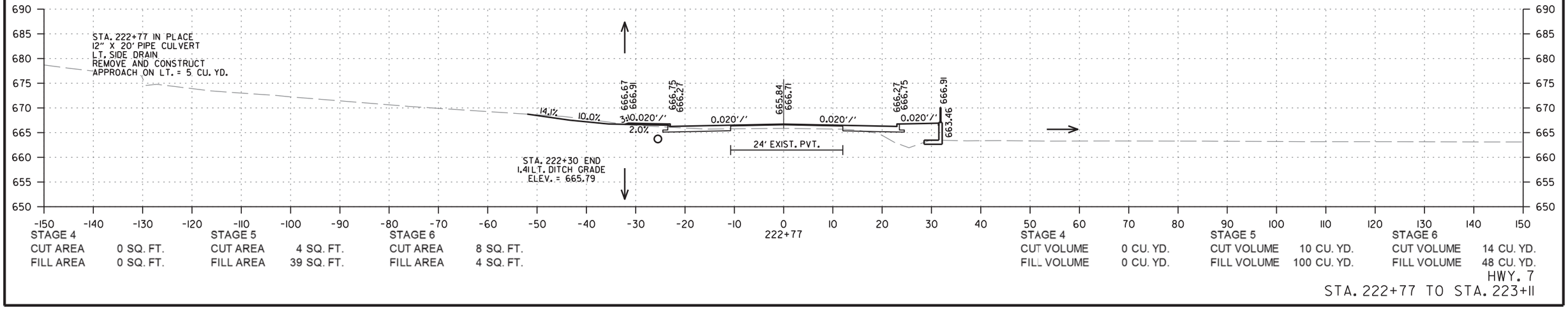
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	49 SQ. FT.	FILL AREA	5 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	18 CU. YD.	FILL VOLUME	2 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	37 SQ. FT.	FILL AREA	6 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	32 CU. YD.	FILL VOLUME	4 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	39 SQ. FT.	FILL AREA	4 SQ. FT.

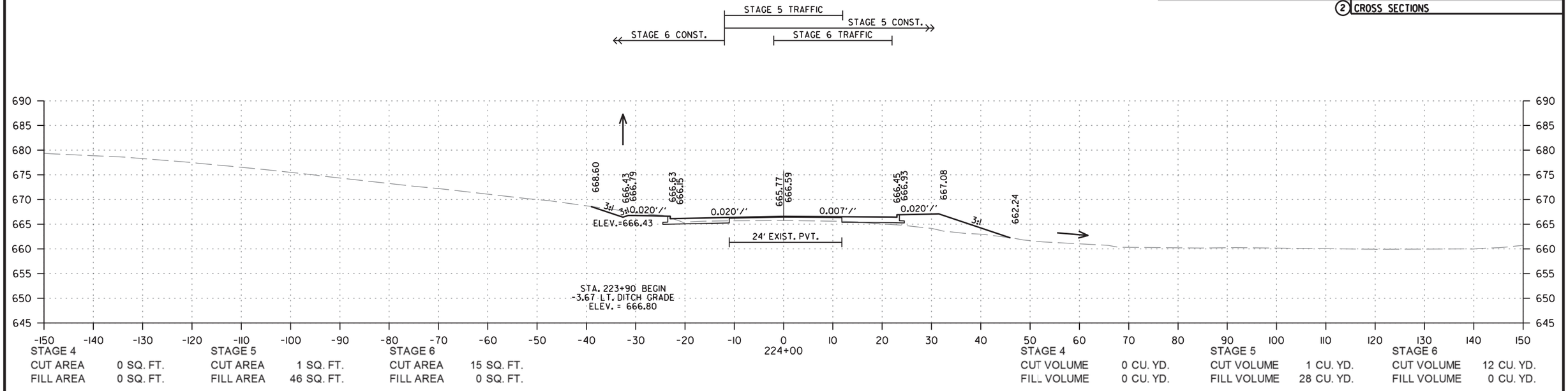
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	14 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	100 CU. YD.	FILL VOLUME	48 CU. YD.

HWY. 7
STA. 222+77 TO STA. 223+11

oh40219 6/22/2020
R061547.DGN

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.		061547	202	323

(2) CROSS SECTIONS

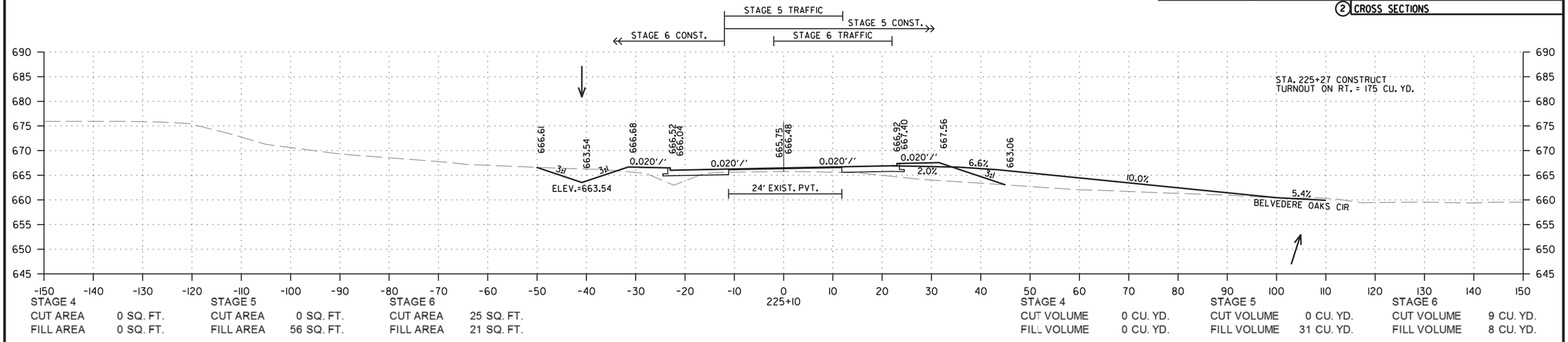


HWY. 7
STA. 223+53 TO STA. 224+00

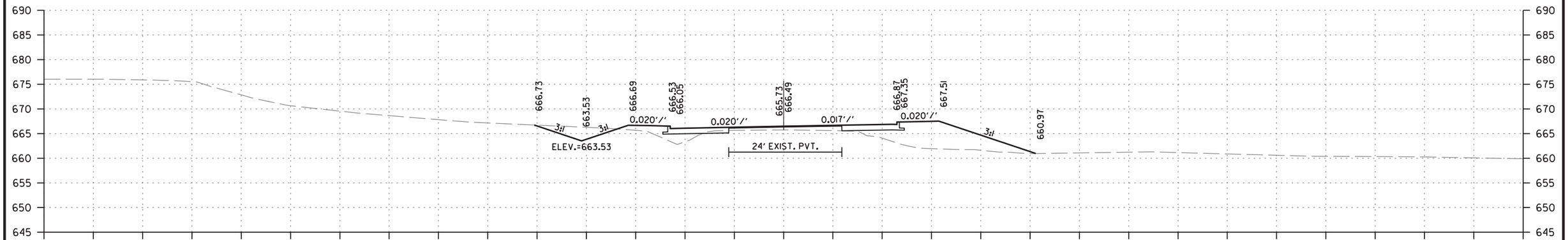
eh40219 6/22/2020
R061547.DGN

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.		061547	203	323

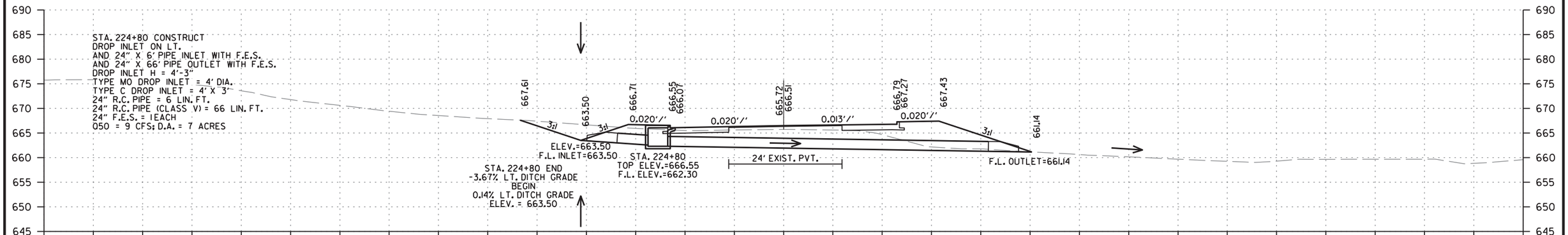
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	25 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	56 SQ. FT.	FILL AREA	21 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	31 CU. YD.	FILL VOLUME	8 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	26 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	24 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	109 SQ. FT.	FILL AREA	22 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	75 CU. YD.	FILL VOLUME	11 CU. YD.



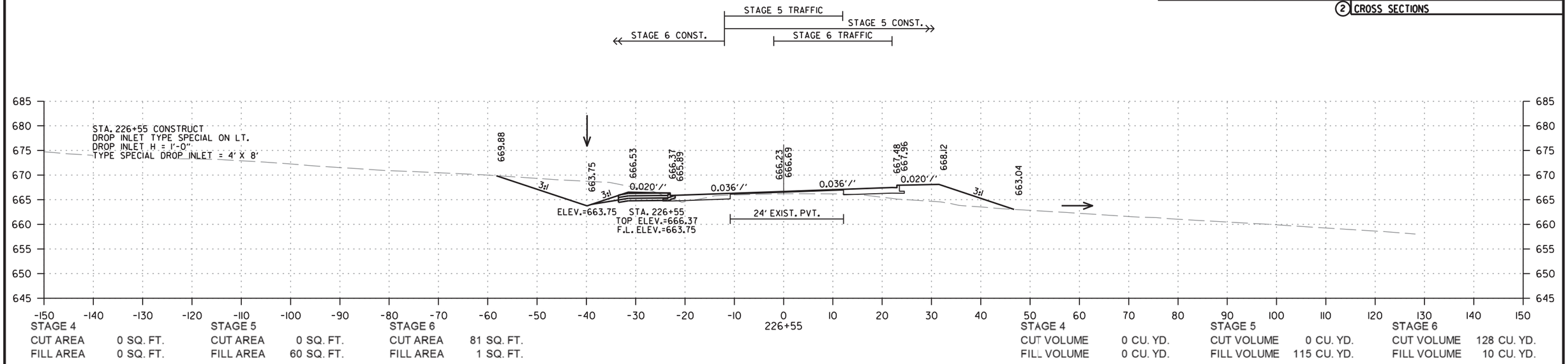
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	40 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	81 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	94 SQ. FT.	FILL AREA	7 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	207 CU. YD.	FILL VOLUME	10 CU. YD.

HWY. 7
STA. 224+80 TO STA. 225+10

ah40219 6/22/2020
R061547.DGN

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.		061547	204	323

(2) CROSS SECTIONS

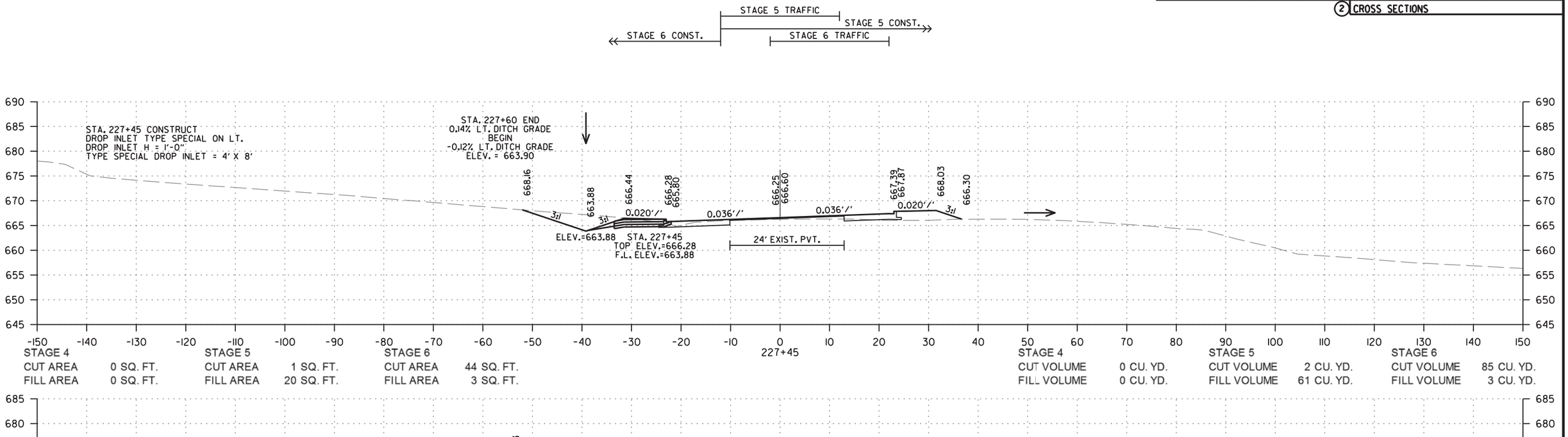


HWY. 7
STA. 225+65 TO STA. 226+55

eh40219 6/22/2020
R061547.DGN

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.		061547	205	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	44 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	85 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	20 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	61 CU. YD.	FILL VOLUME	3 CU. YD.

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	58 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	53 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	0 CU. YD.

STA. 226+95 IN PLACE
12" X 50' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 20 CU. YD. COMP. EMB.
= 5 CU. YD. UNCL. EXC.

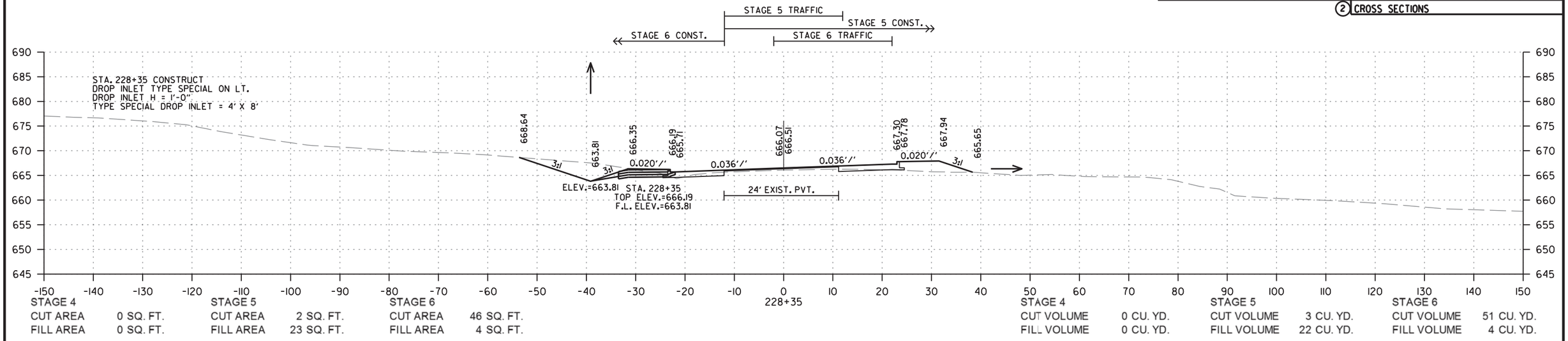
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	59 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	104 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	54 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	84 CU. YD.	FILL VOLUME	1 CU. YD.

HWY. 7
STA. 226+95 TO STA. 227+45

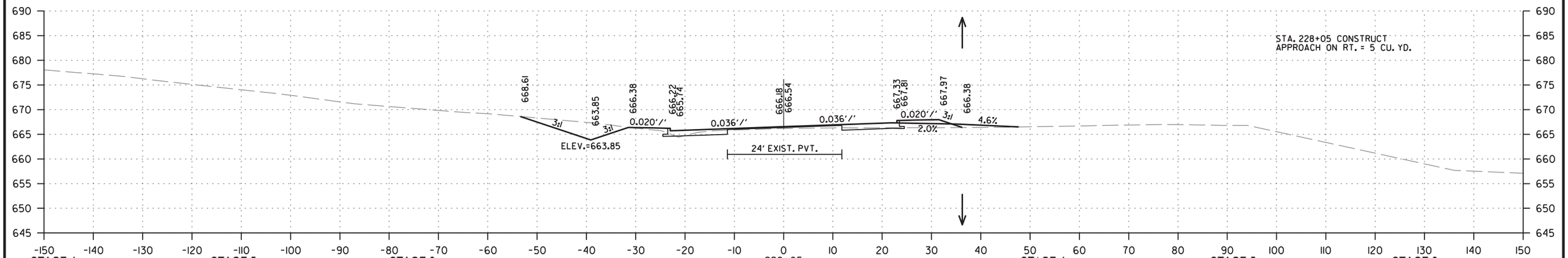
ah40219 6/22/2020
R061547.DGN

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.		061547	206	323

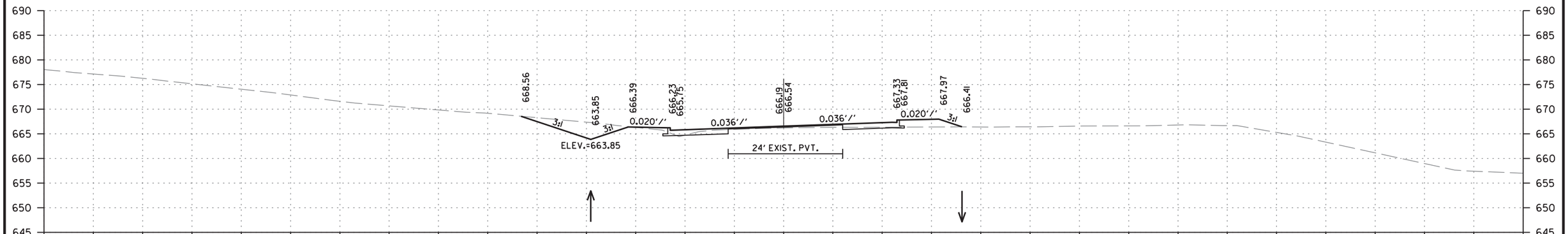
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	46 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	51 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	4 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	4 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	45 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	8 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	3 CU. YD.	FILL VOLUME	0 CU. YD.



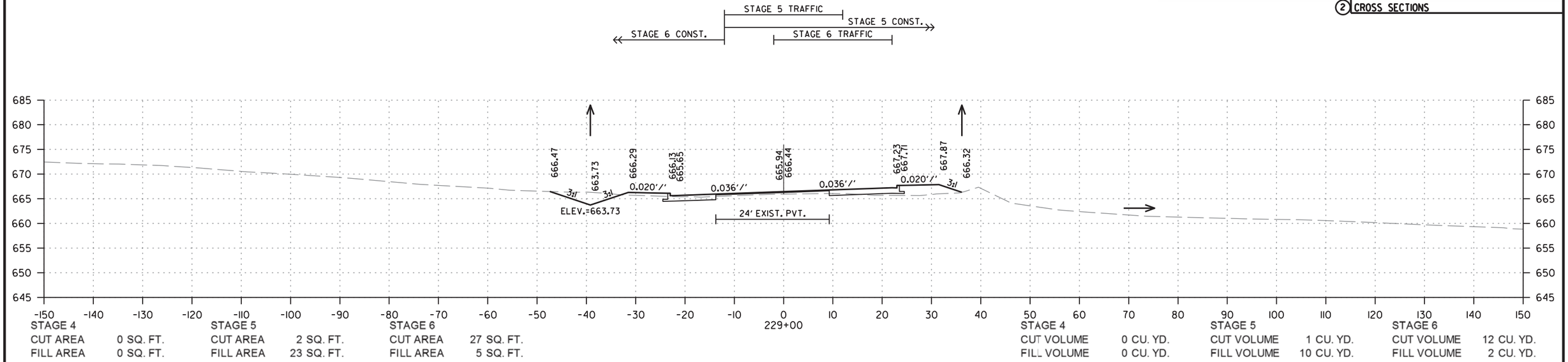
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	44 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	90 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	2 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	37 CU. YD.	FILL VOLUME	5 CU. YD.

HWY. 7
STA. 228+00 TO STA. 228+35

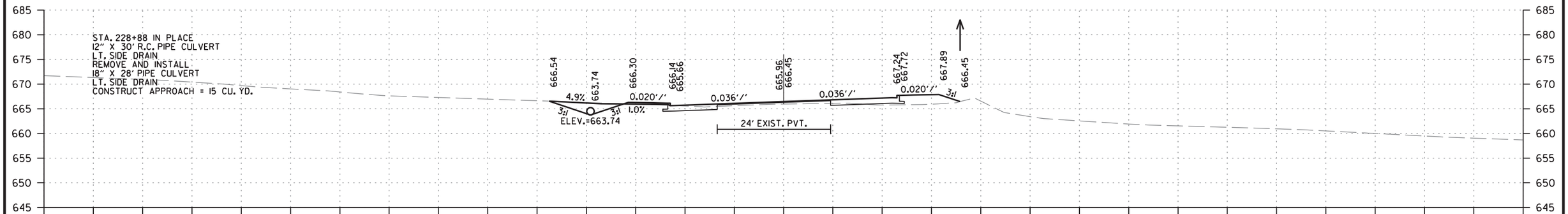
ah40219 6/22/2020
R061547.DGN

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.		061547	207	323

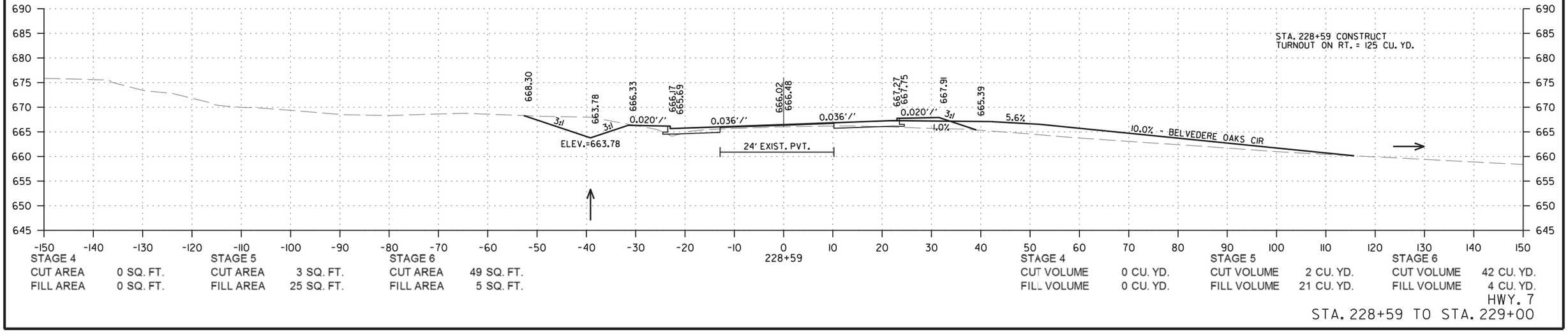
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	27 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	12 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	2 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	28 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	41 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	25 CU. YD.	FILL VOLUME	4 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	49 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	42 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	21 CU. YD.	FILL VOLUME	4 CU. YD.

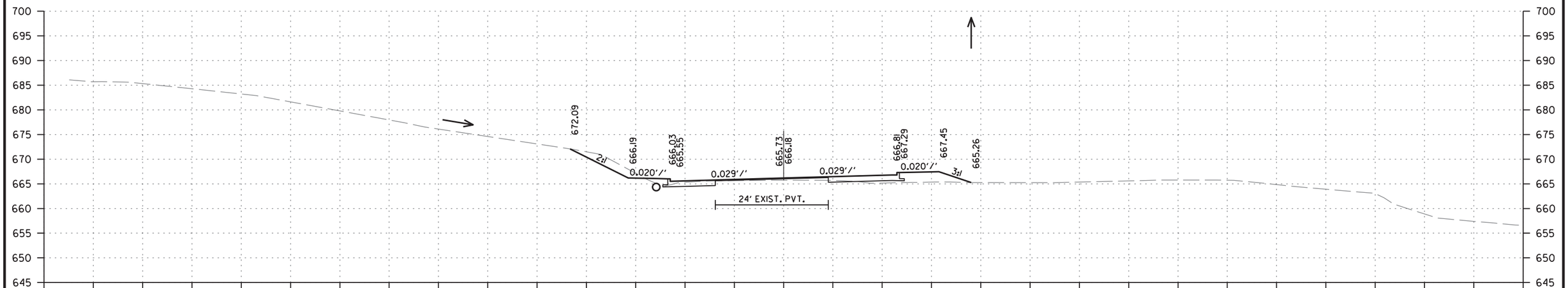
HWY. 7
STA. 228+59 TO STA. 229+00

ah40219 6/22/2020
R061547.DGN

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.		061547	208	323

(2) CROSS SECTIONS

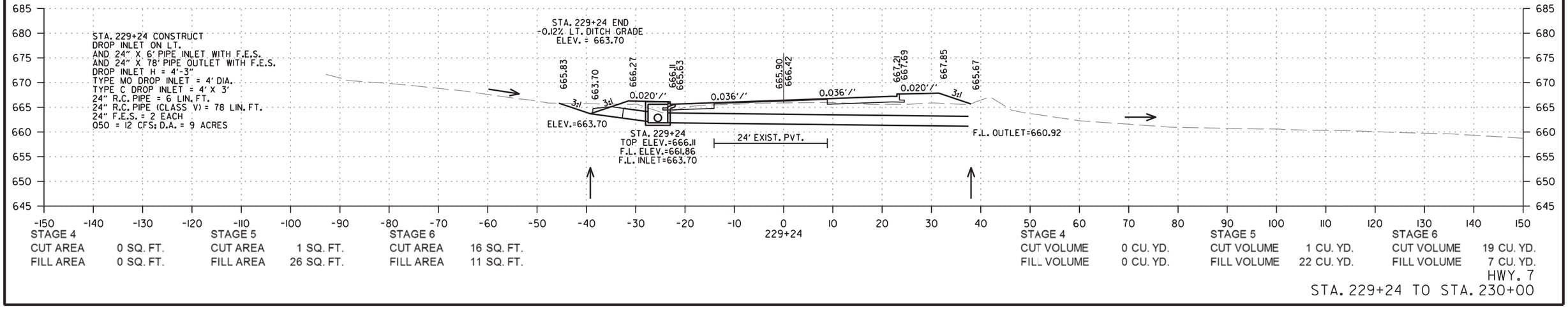
STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	28 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	62 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	4 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	73 CU. YD.	FILL VOLUME	21 CU. YD.

230+00

STA. 229+24 CONSTRUCT
DROP INLET ON LT.
AND 24" X 6' PIPE INLET WITH F.E.S.
AND 24" X 78' PIPE OUTLET WITH F.E.S.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE = 6 LIN. FT.
24" R.C. PIPE (CLASS V) = 78 LIN. FT.
24" F.E.S. = 2 EACH
050 = 12 CFS; D.A. = 9 ACRES



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	16 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	19 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	11 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	7 CU. YD.

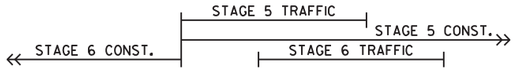
229+24

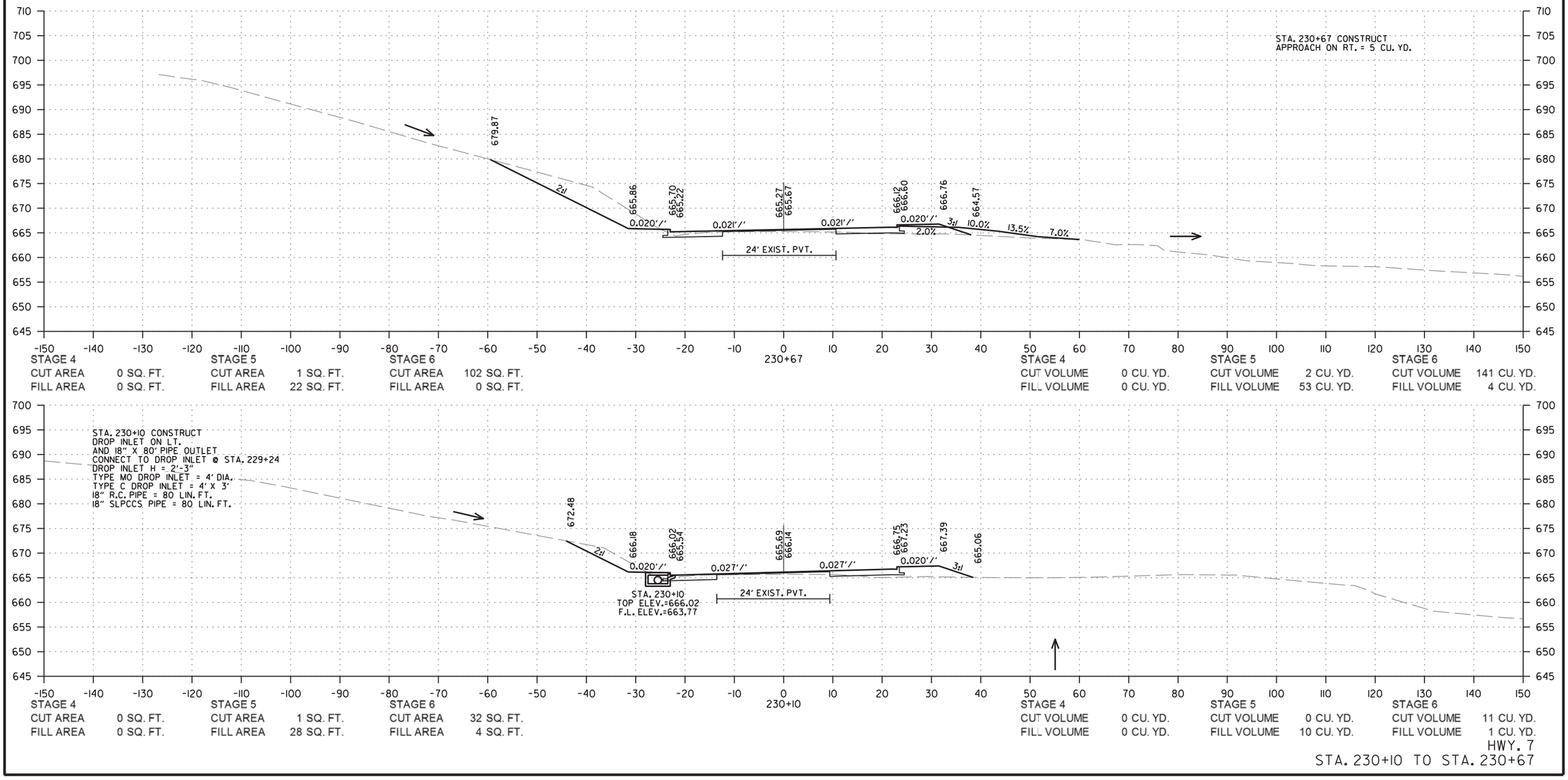
HWY. 7
STA. 229+24 TO STA. 230+00

ah40219 6/22/2020
R061547.DGN

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.		061547	209	323

(2) CROSS SECTIONS



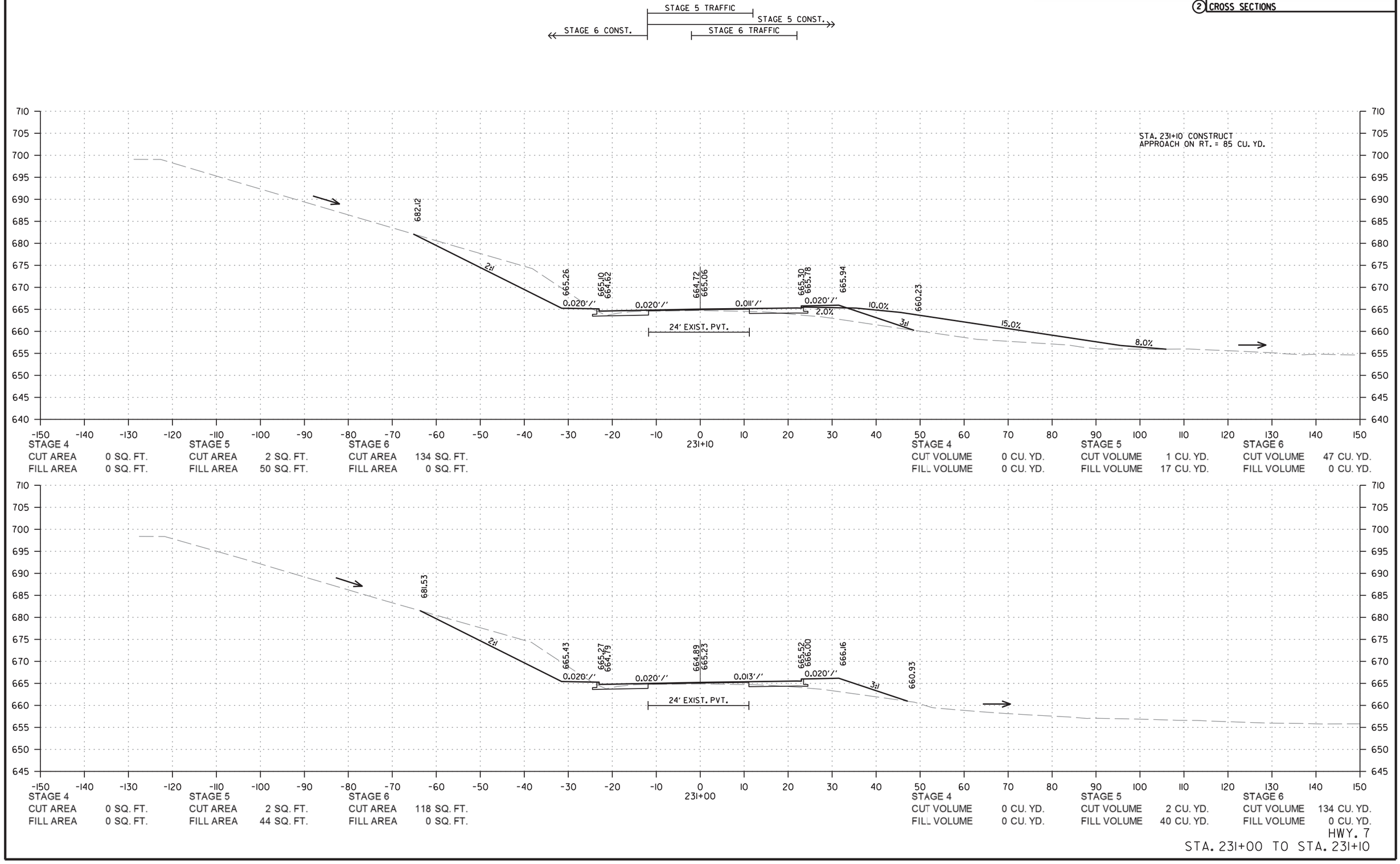


HWY. 7
STA. 230+10 TO STA. 230+67

eh40219 6/22/2020
R061547.DGN

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.		061547	210	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	134 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	50 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	47 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	118 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	44 SQ. FT.	FILL AREA	0 SQ. FT.

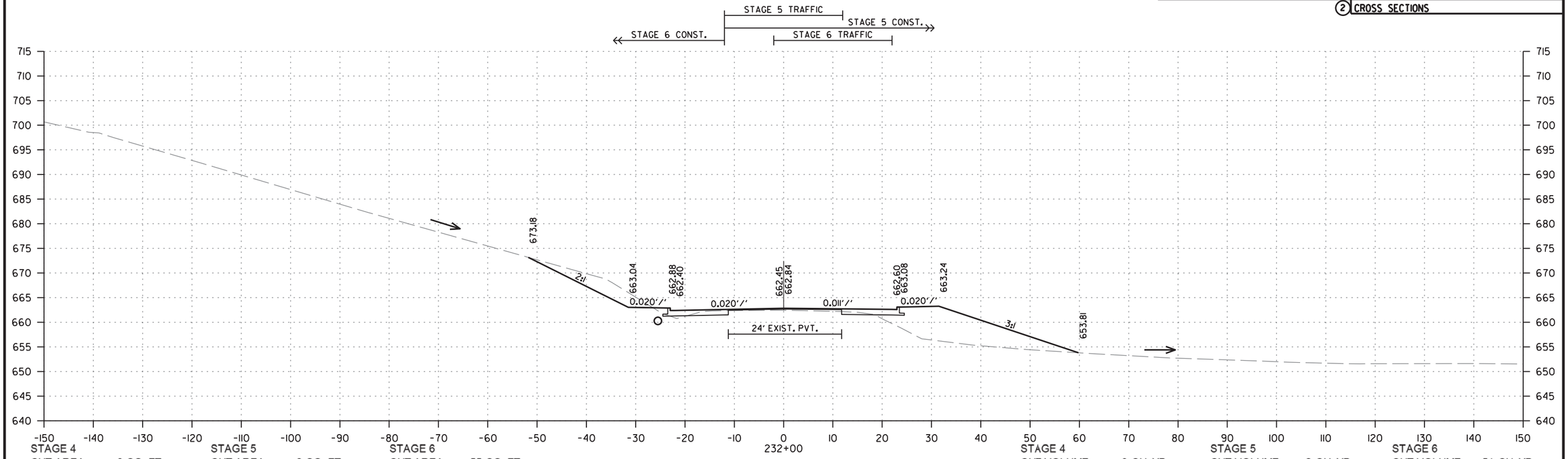
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	134 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	40 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 231+00 TO STA. 231+10

ah40219 6/22/2020
R061547.DGN

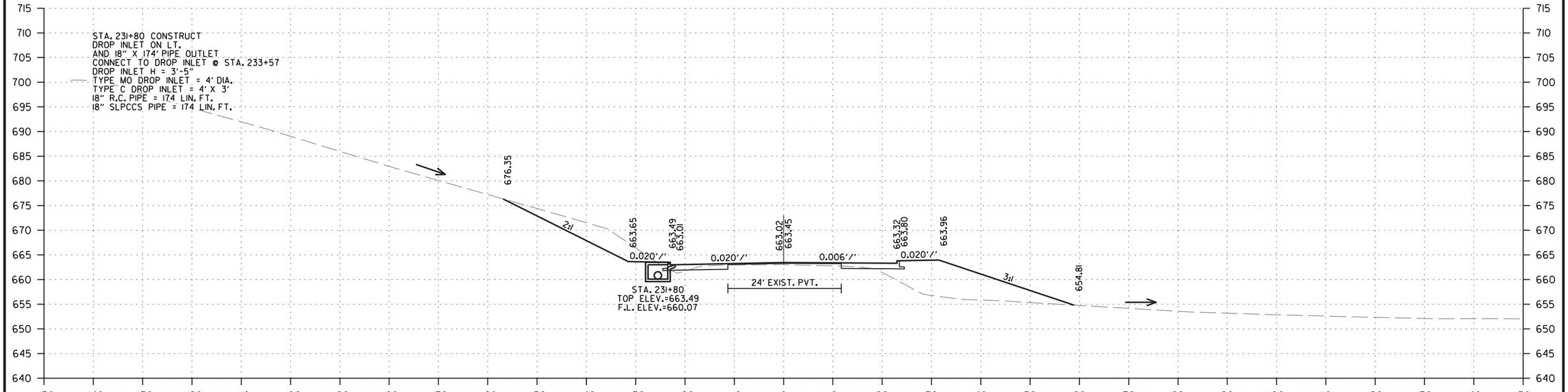
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	211	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	55 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	158 SQ. FT.	FILL AREA	3 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	51 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	117 CU. YD.	FILL VOLUME	2 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	82 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	159 SQ. FT.	FILL AREA	3 SQ. FT.

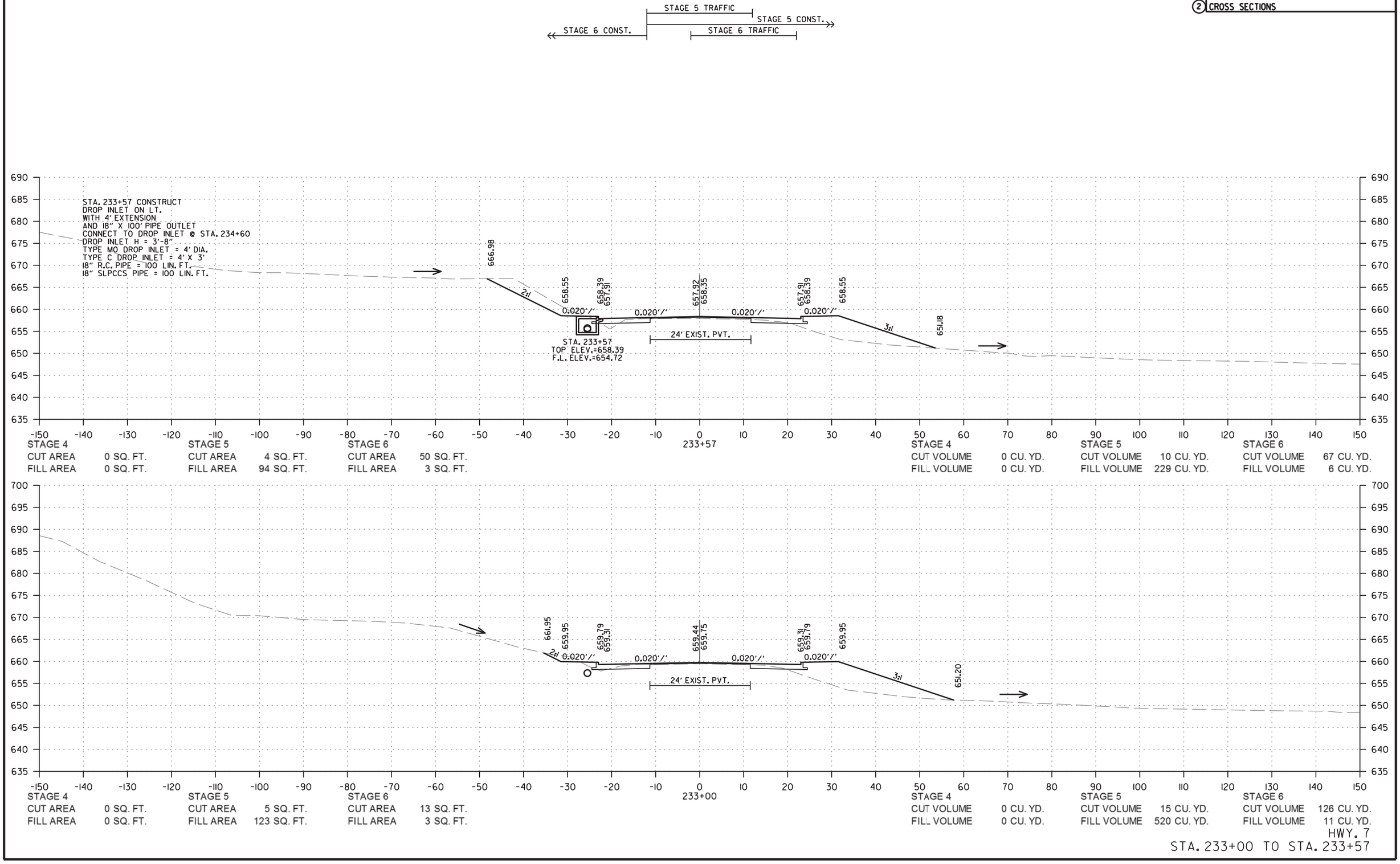
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	280 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	271 CU. YD.	FILL VOLUME	4 CU. YD.

HWY. 7
STA. 231+80 TO STA. 232+00

eh40219 6/22/2020
R061547.DGN

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.		061547	212	323

(2) CROSS SECTIONS



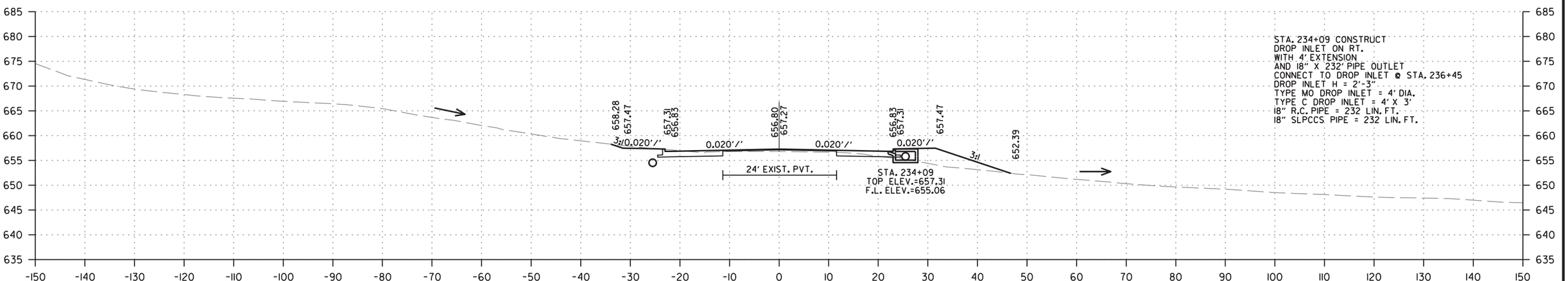
HWY. 7
STA. 233+00 TO STA. 233+57

ah40219 6/22/2020
R061547.DGN

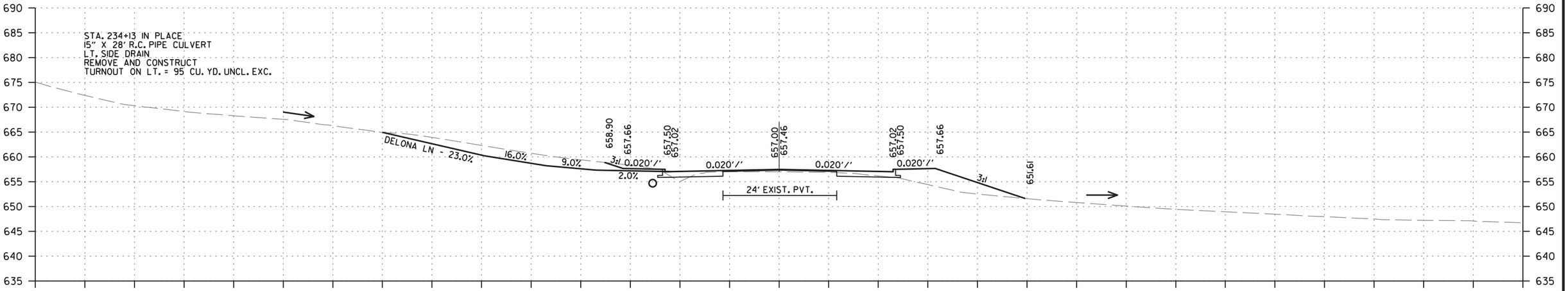
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	213	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	15 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	47 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	18 CU. YD.	FILL VOLUME	0 CU. YD.



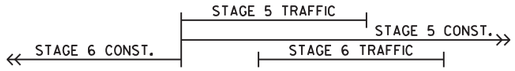
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	49 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	58 SQ. FT.	FILL AREA	2 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	121 CU. YD.	FILL VOLUME	4 CU. YD.

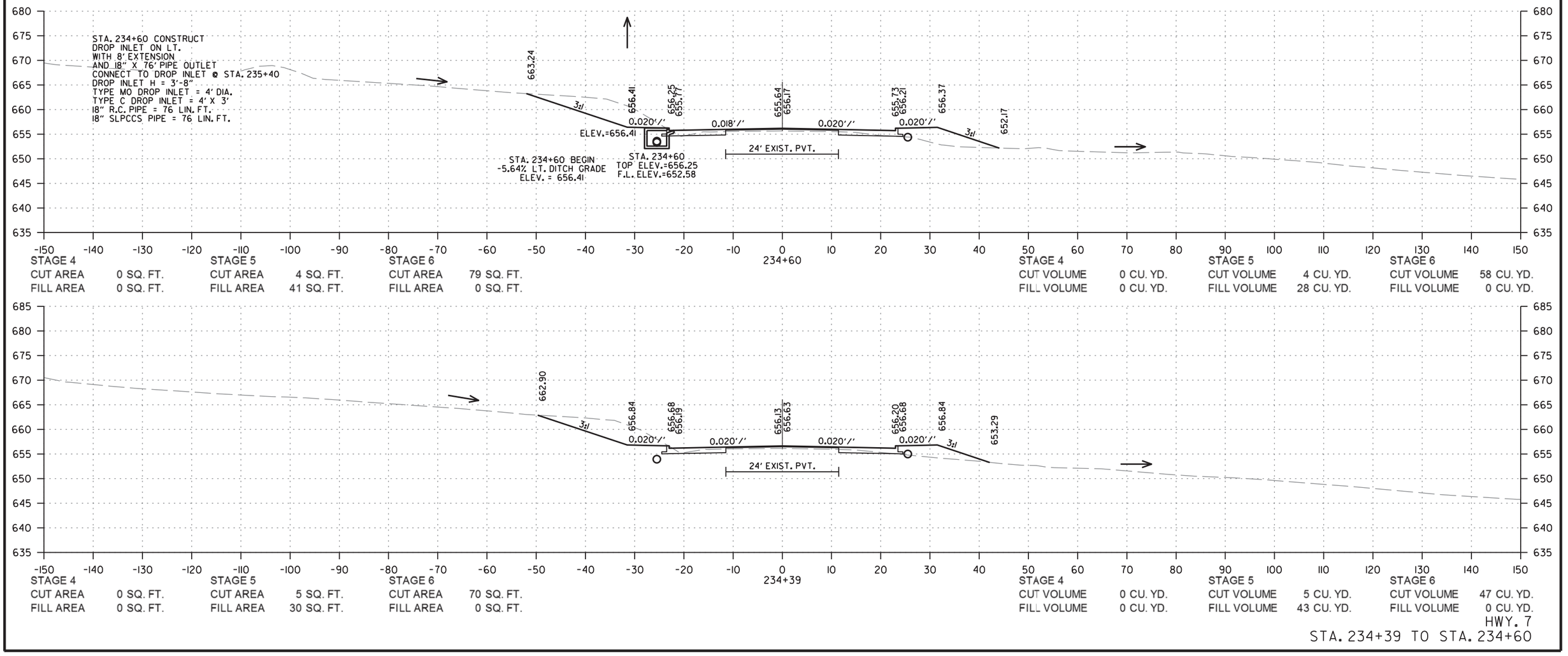
HWY. 7
STA. 234+00 TO STA. 234+09

eh40219 6/22/2020
R061547.DGN

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.		061547	214	323

(2) CROSS SECTIONS



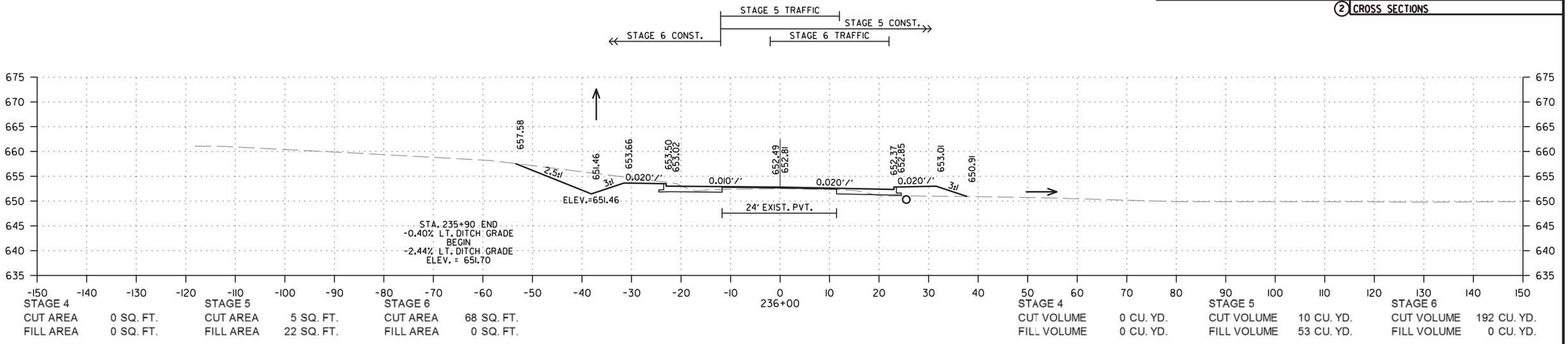


HWY. 7
STA. 234+39 TO STA. 234+60

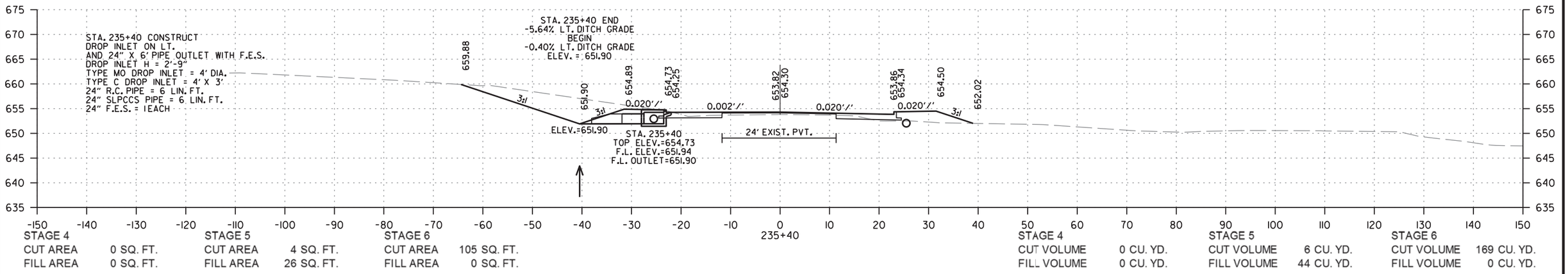
ah40219 6/22/2020
R061547.DGN

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.		061547	215	323

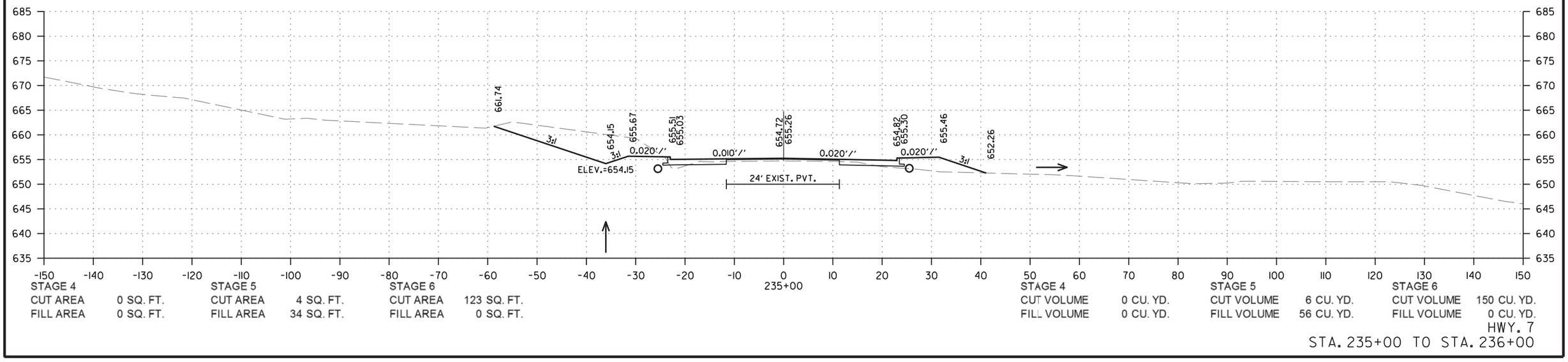
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	68 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	192 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	53 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	105 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	169 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	44 CU. YD.	FILL VOLUME	0 CU. YD.



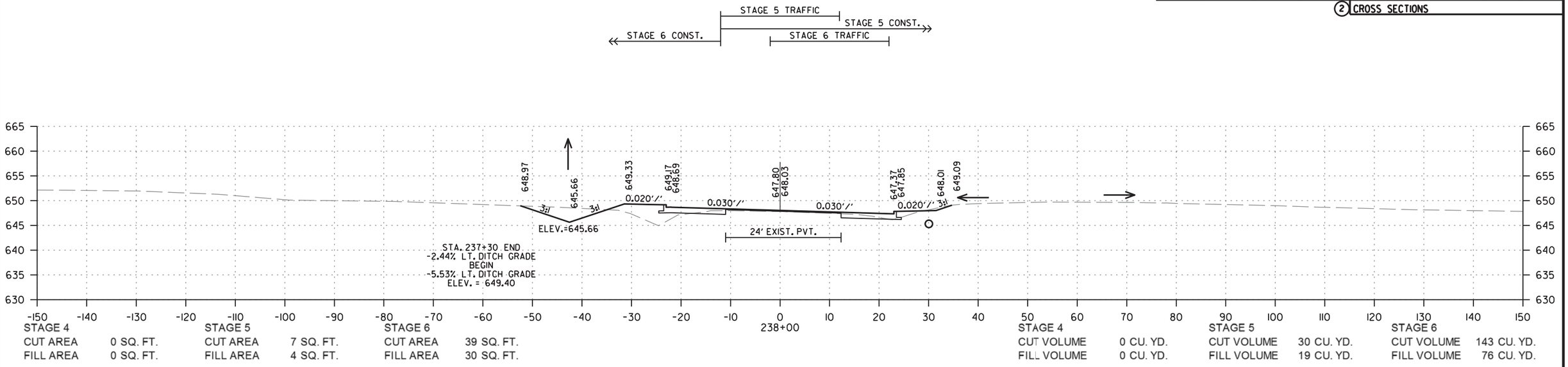
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	123 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	150 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	34 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	56 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 235+00 TO STA. 236+00

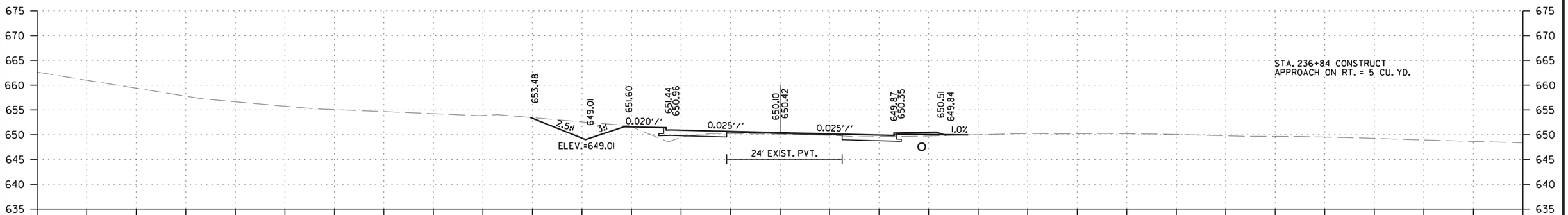
eh40219 6/22/2020
R061547.DGN

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.		061547	216	323

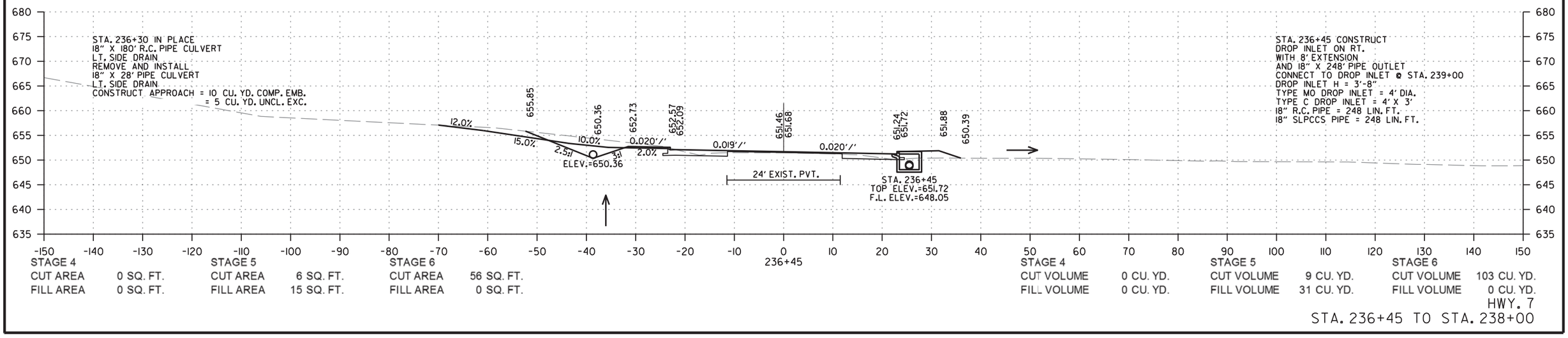
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	39 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	30 CU. YD.	CUT VOLUME	143 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	30 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	76 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	38 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	15 CU. YD.	CUT VOLUME	96 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	11 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	21 CU. YD.	FILL VOLUME	11 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	56 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	103 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	15 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	31 CU. YD.	FILL VOLUME	0 CU. YD.

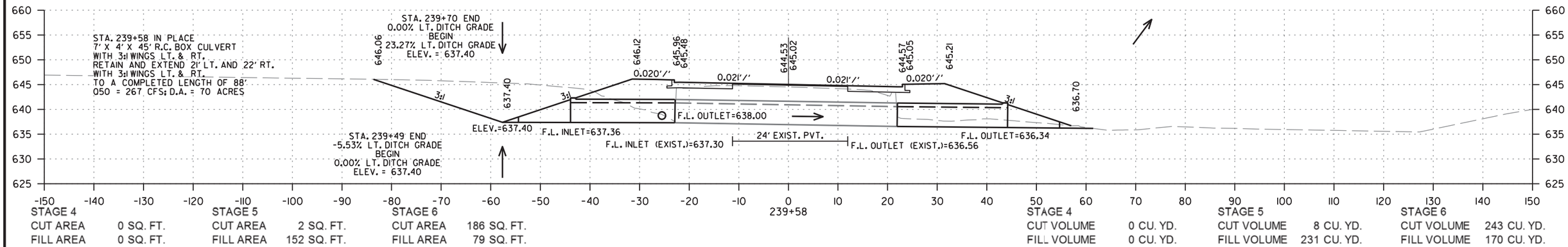
HWY. 7
STA. 236+45 TO STA. 238+00

6/22/2020
ah40219
R061547.DGN

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.		061547	217	323

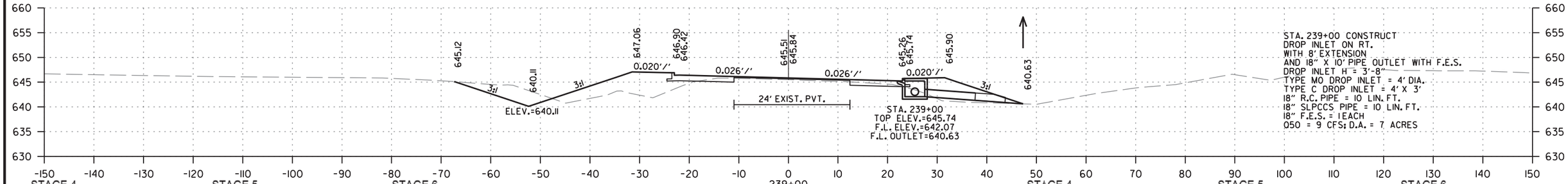
(2) CROSS SECTIONS

STAGE 6 CONST. ← STAGE 5 TRAFFIC → STAGE 5 CONST.
STAGE 6 TRAFFIC



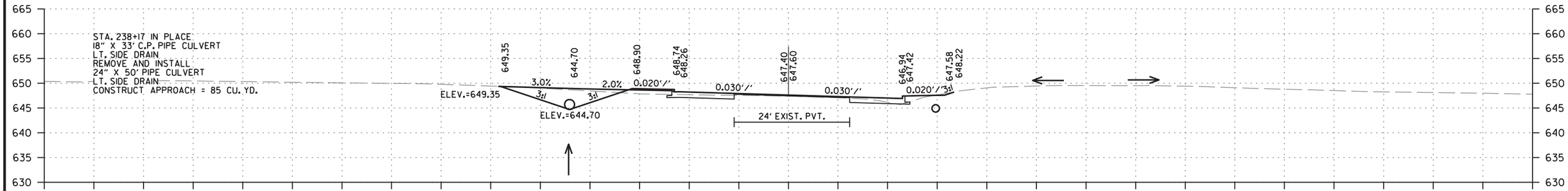
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	186 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	152 SQ. FT.	FILL AREA	79 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	243 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	231 CU. YD.	FILL VOLUME	170 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	40 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	63 SQ. FT.	FILL AREA	79 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	149 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	103 CU. YD.	FILL VOLUME	135 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	57 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	9 SQ. FT.

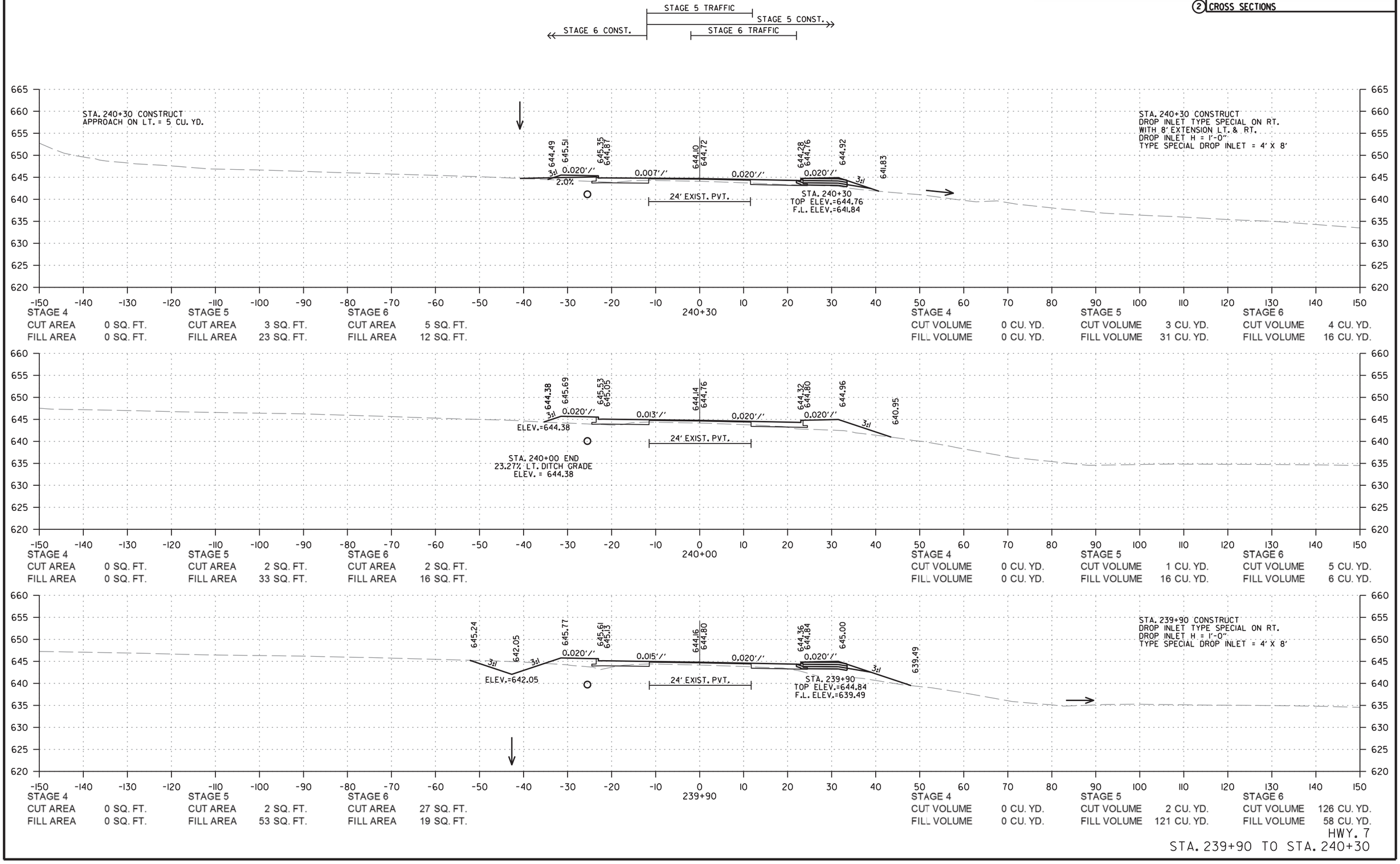
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	30 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	3 CU. YD.	FILL VOLUME	12 CU. YD.

HWY. 7
STA. 238+17 TO STA. 239+58

eh40219 6/22/2020
R061547.DGN

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.		061547	218	323

(2) CROSS SECTIONS

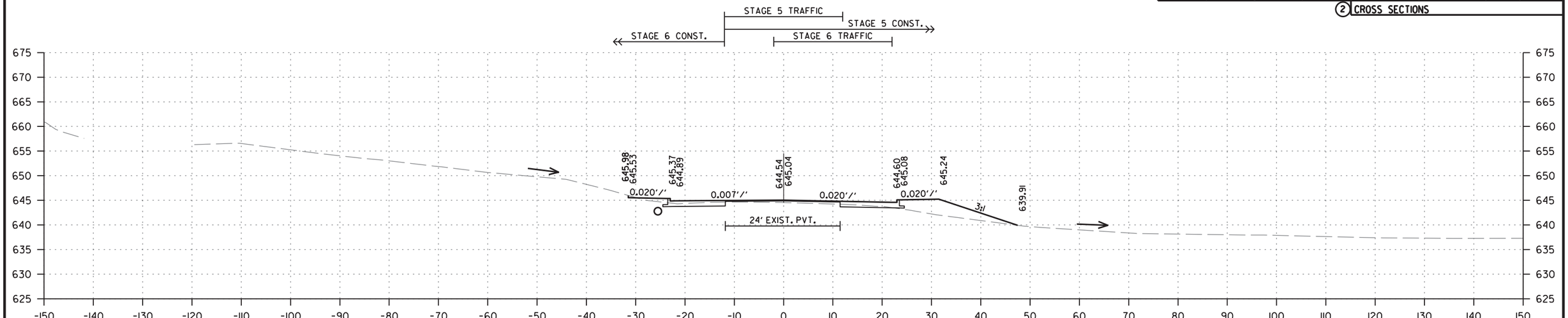


HWY. 7
STA. 239+90 TO STA. 240+30

ah40219 6/22/2020
R061547.DGN

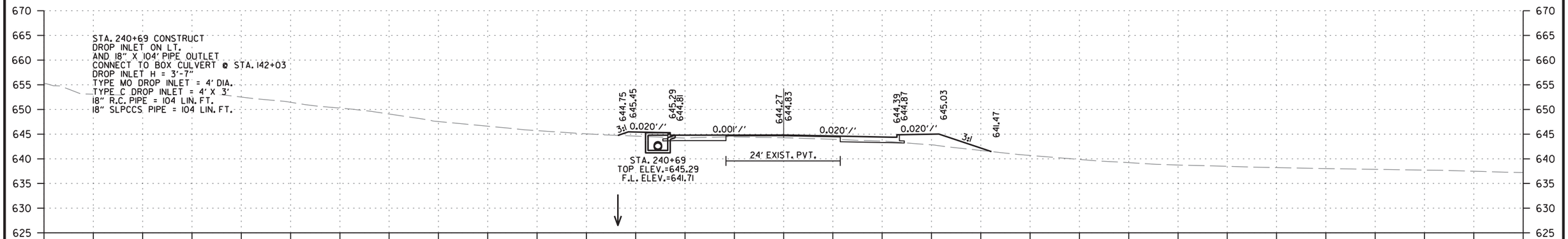
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	219	323

(2) CROSS SECTIONS



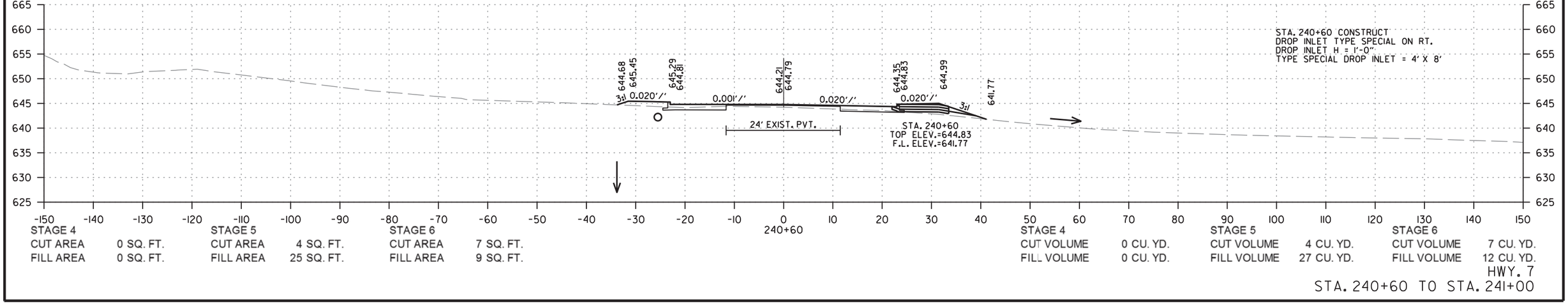
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	46 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	42 CU. YD.	FILL VOLUME	6 CU. YD.

241+00



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	28 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	9 CU. YD.	FILL VOLUME	3 CU. YD.

240+69



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	9 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	27 CU. YD.	FILL VOLUME	12 CU. YD.

240+60

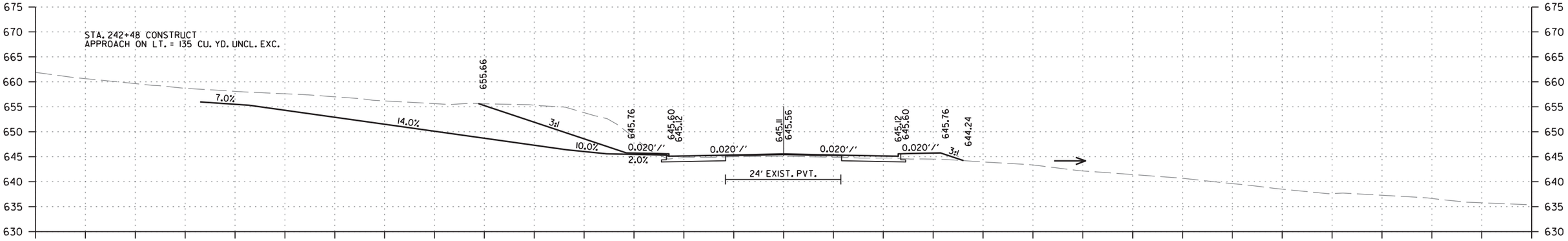
HWY. 7
STA. 240+60 TO STA. 241+00

eh40219 6/22/2020
R061547.DGN

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.		061547	220	323

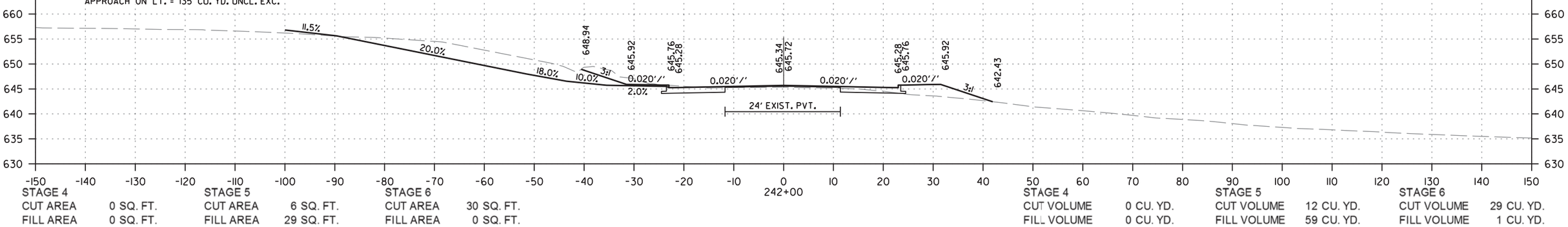
(2) CROSS SECTIONS

STAGE 6 CONST. ← STAGE 5 TRAFFIC → STAGE 5 CONST.
STAGE 6 TRAFFIC



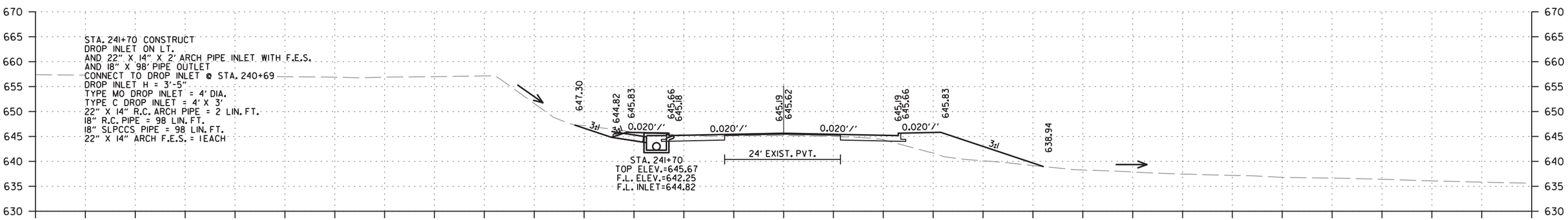
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	131 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	12 SQ. FT.	FILL AREA	1 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	143 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	36 CU. YD.	FILL VOLUME	1 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	30 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	29 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	29 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	59 CU. YD.	FILL VOLUME	1 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	15 SQ. FT.	CUT AREA	22 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	78 SQ. FT.	FILL AREA	1 SQ. FT.

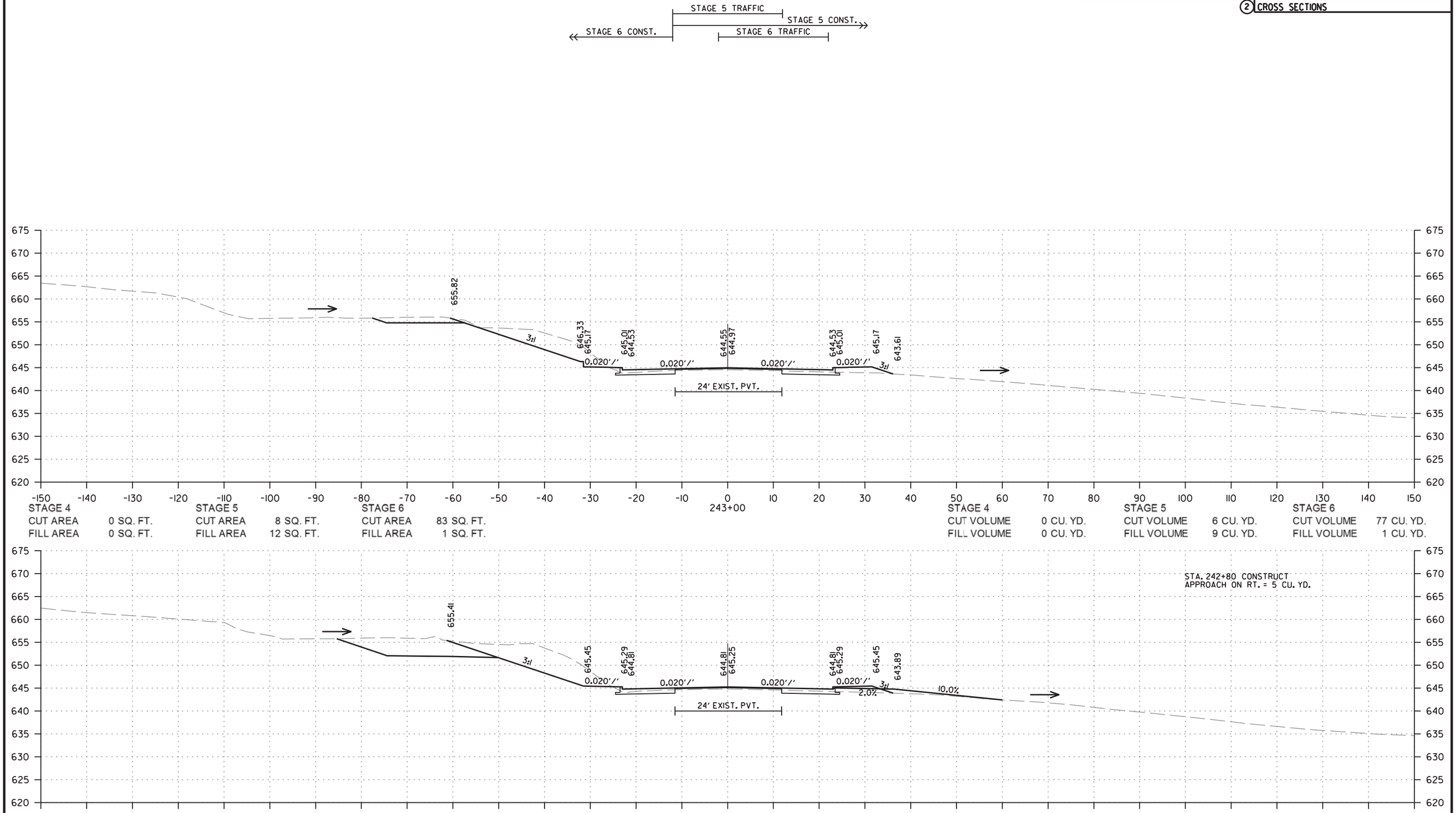
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	25 CU. YD.	CUT VOLUME	40 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	161 CU. YD.	FILL VOLUME	5 CU. YD.

HWY. 7
STA. 241+70 TO STA. 242+48

6/22/2020
eh40219
R061547.DGN

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.		061547	221	323

(2) CROSS SECTIONS



243+00

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	83 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	12 SQ. FT.	FILL AREA	1 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	77 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	9 CU. YD.	FILL VOLUME	1 CU. YD.

242+80

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	126 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	1 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	152 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	15 CU. YD.	FILL VOLUME	1 CU. YD.

HWY. 7
STA. 242+80 TO STA. 243+00

eh40219 6/22/2020
R061547.DGN

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.		061547	222	323

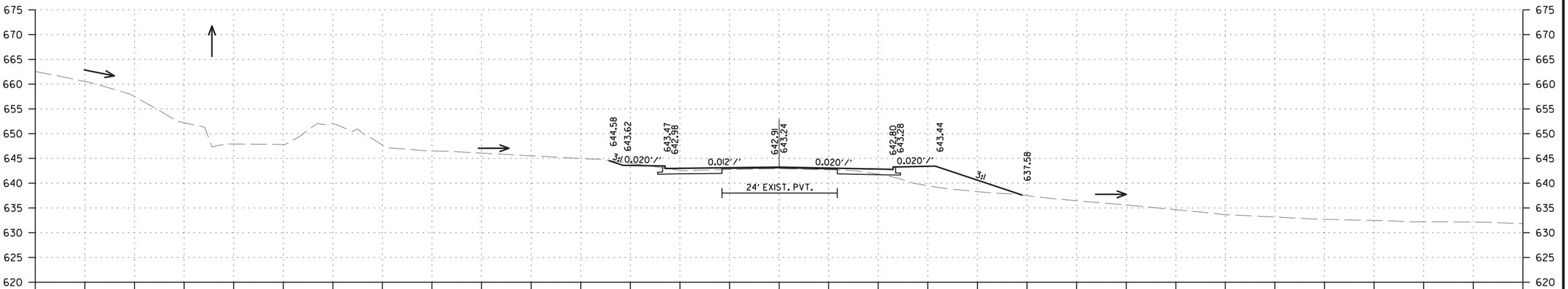
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	80 SQ. FT.	FILL AREA	4 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	56 CU. YD.	FILL VOLUME	2 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	12 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	65 SQ. FT.	FILL AREA	1 SQ. FT.

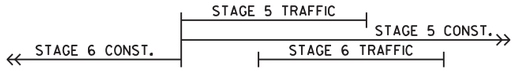
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	24 CU. YD.	CUT VOLUME	176 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	143 CU. YD.	FILL VOLUME	4 CU. YD.

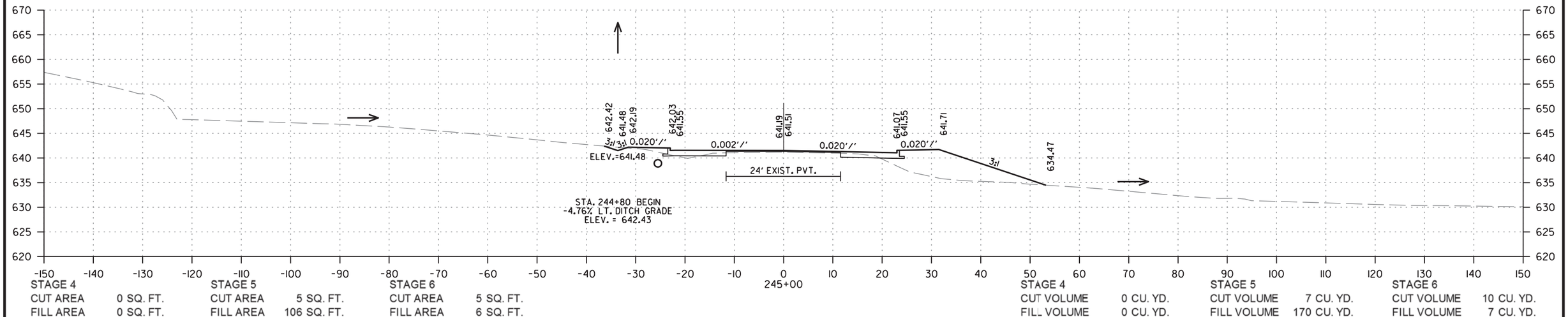
HWY. 7
STA. 244+00 TO STA. 244+21

eh40219 6/22/2020
R061547.DGN

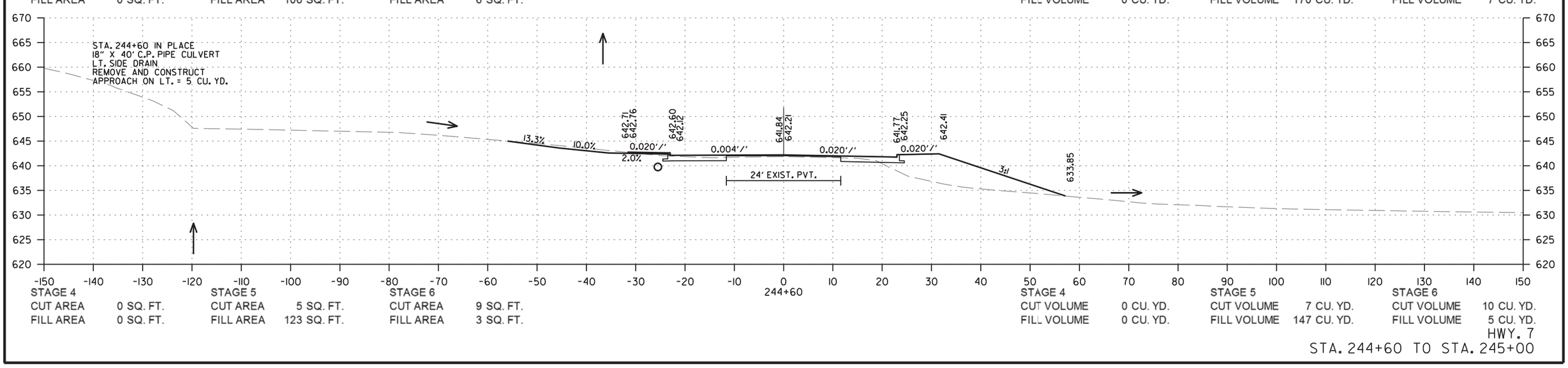
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	223	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	106 SQ. FT.	FILL AREA	6 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	170 CU. YD.	FILL VOLUME	7 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	123 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	147 CU. YD.	FILL VOLUME	5 CU. YD.

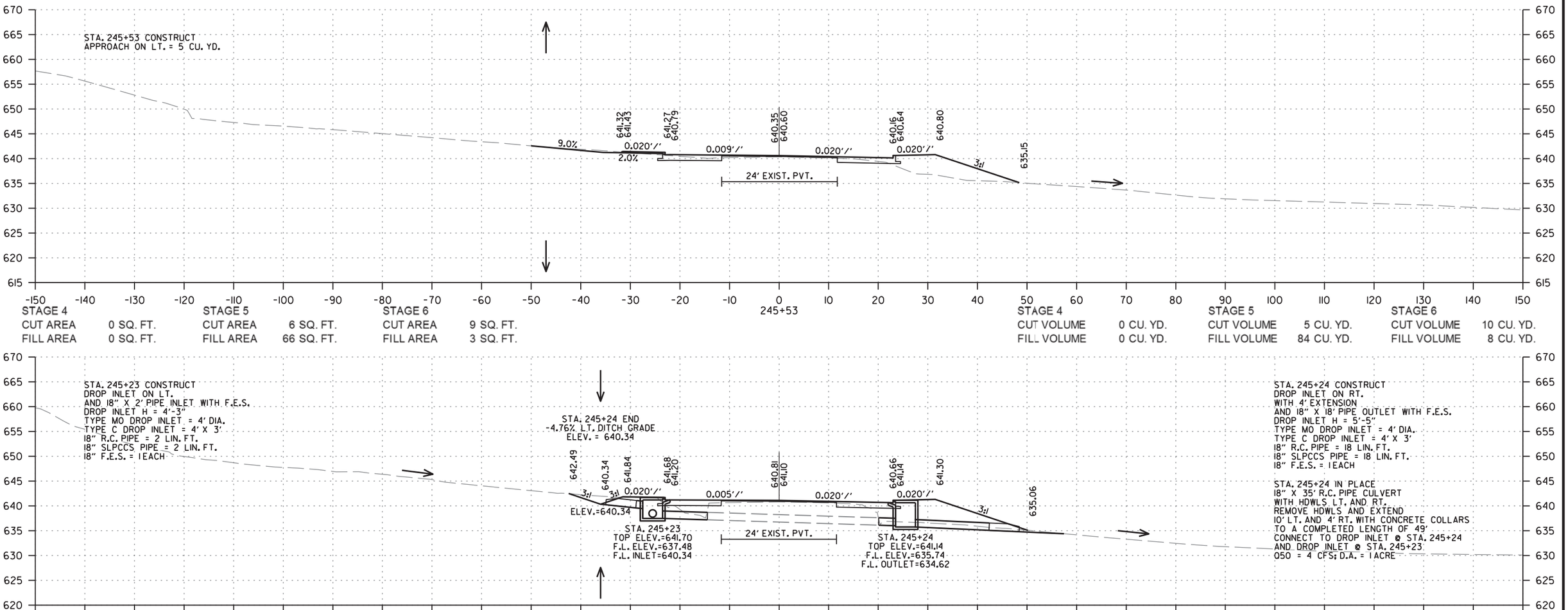
HWY. 7
STA. 244+60 TO STA. 245+00

ah40219 6/22/2020
R061547.DGN

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.		061547	224	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	66 SQ. FT.	FILL AREA	3 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	84 CU. YD.	FILL VOLUME	8 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	91 SQ. FT.	FILL AREA	11 SQ. FT.

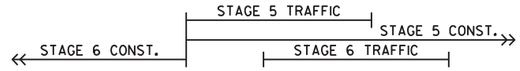
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	88 CU. YD.	FILL VOLUME	8 CU. YD.

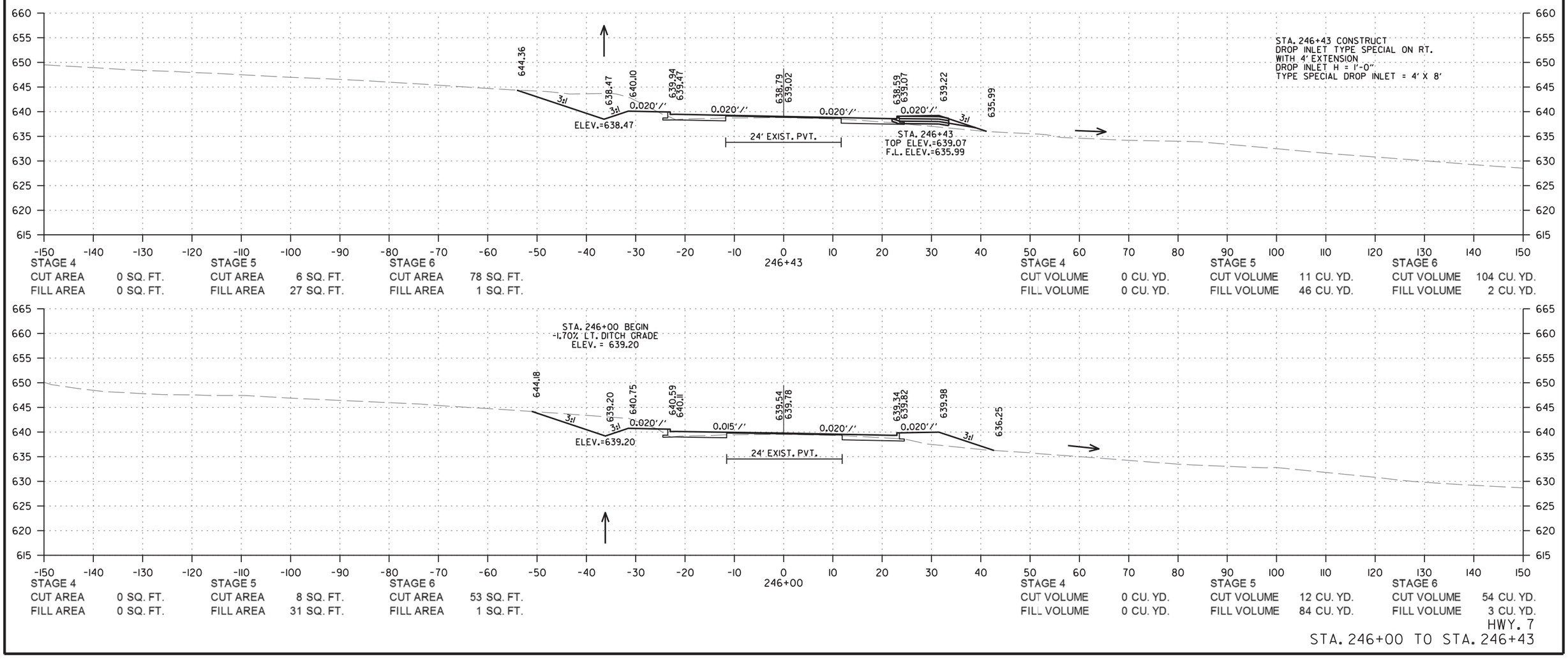
HWY. 7
STA. 245+24 TO STA. 245+53

eh40219 6/22/2020
R061547.DGN

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.		061547	225	323

(2) CROSS SECTIONS

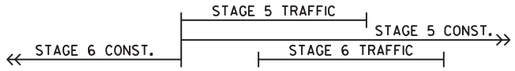


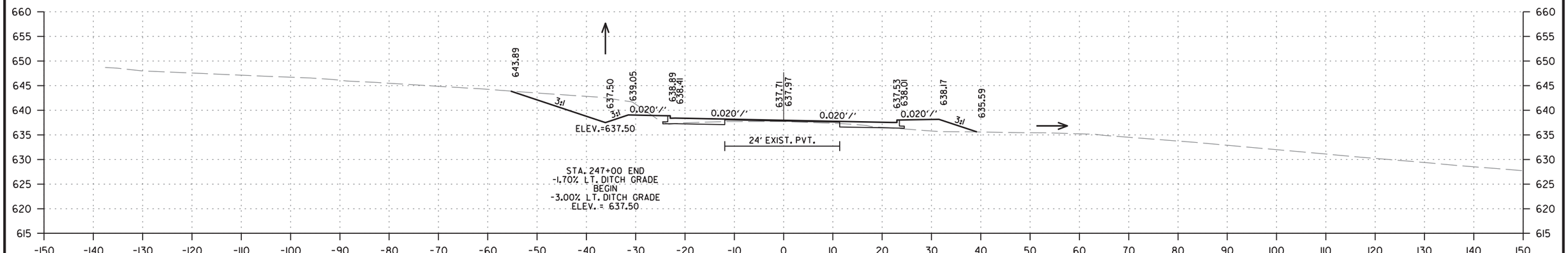


ah40219 6/22/2020
R061547.DGN

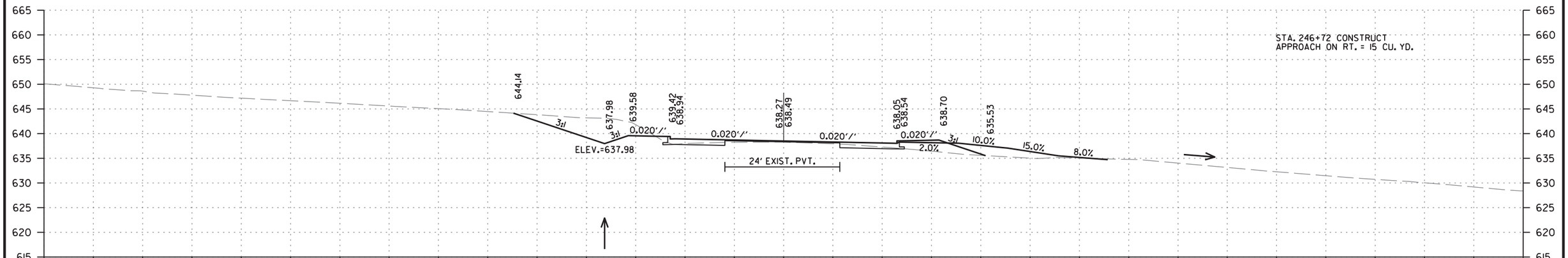
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	226	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	77 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	80 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	27 CU. YD.	FILL VOLUME	3 CU. YD.



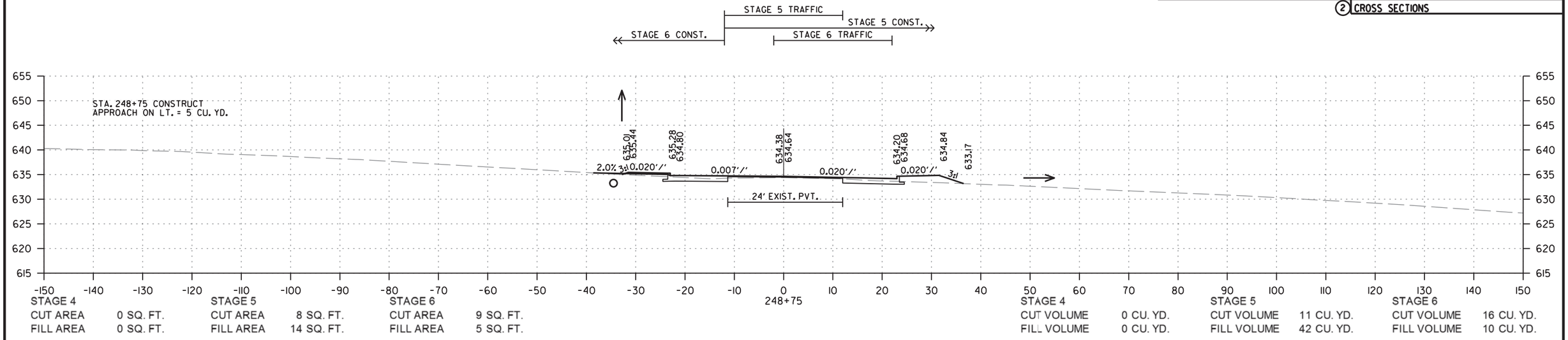
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	78 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	84 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	2 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	29 CU. YD.	FILL VOLUME	2 CU. YD.

HWY. 7
STA. 246+72 TO STA. 247+00

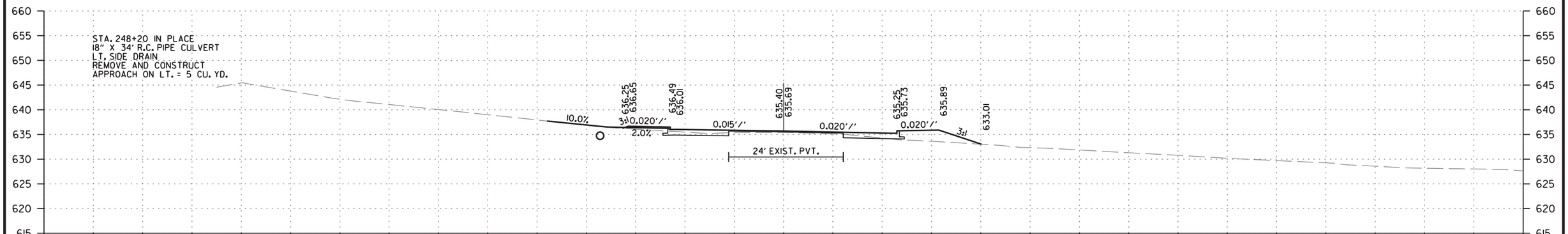
ah40219 6/22/2020
R061547.DGN

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.		061547	227	323

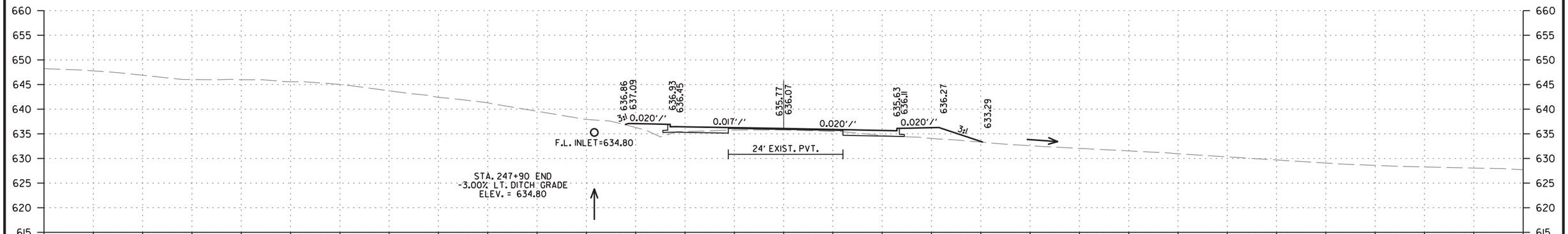
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	16 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	42 CU. YD.	FILL VOLUME	10 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	6 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	150 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	12 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	94 CU. YD.	FILL VOLUME	28 CU. YD.

HWY. 7
STA. 248+00 TO STA. 248+75

ah40219 6/22/2020
R061547.DGN

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.		061547	228	323

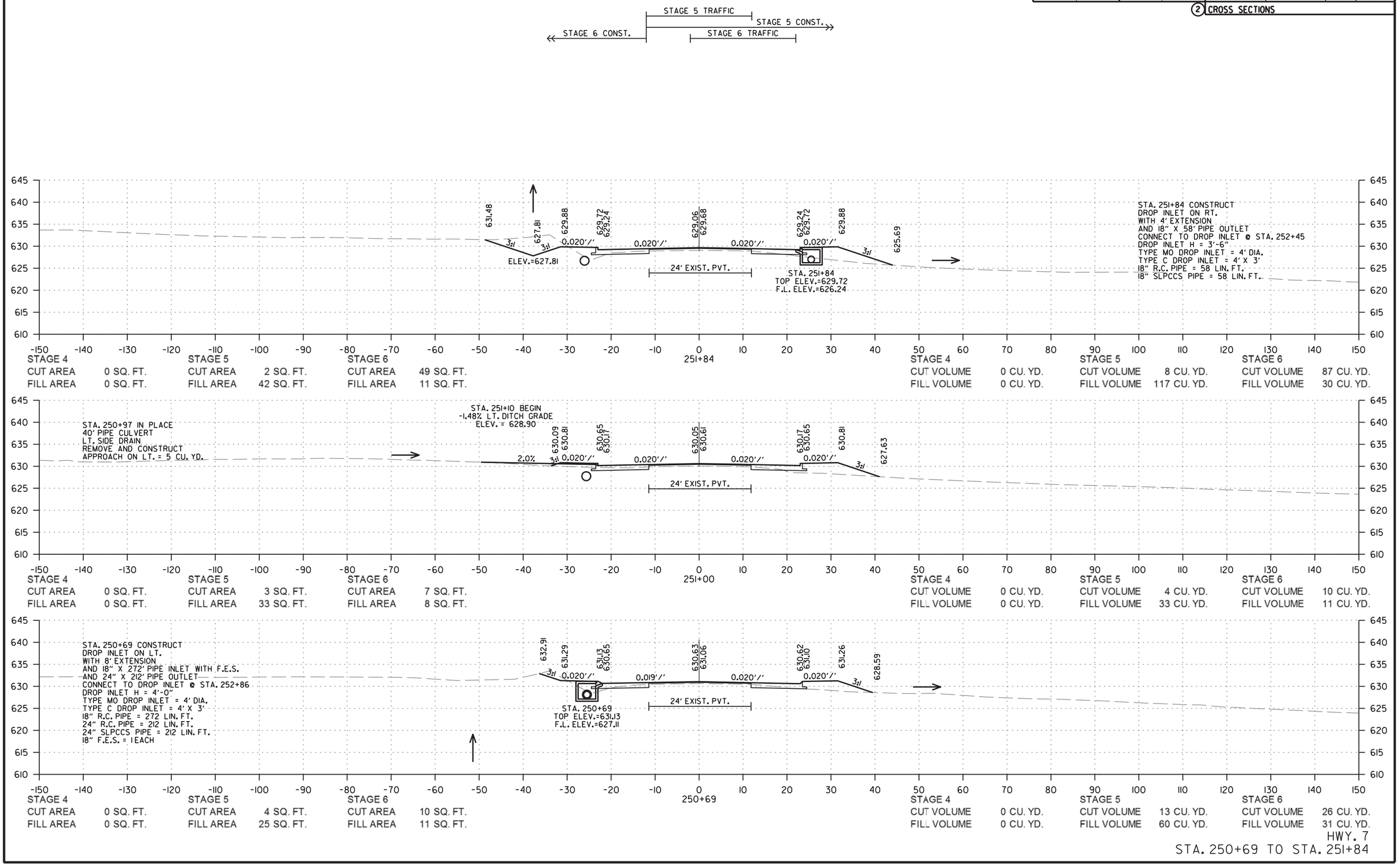
(2) CROSS SECTIONS

HWY. 7
STA. 249+00 TO STA. 250+00

ah40219 6/22/2020
R061547.DGN

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.		061547	229	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	49 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	42 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	87 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	117 CU. YD.	FILL VOLUME	30 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	33 SQ. FT.	FILL AREA	8 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	33 CU. YD.	FILL VOLUME	11 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	26 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	60 CU. YD.	FILL VOLUME	31 CU. YD.

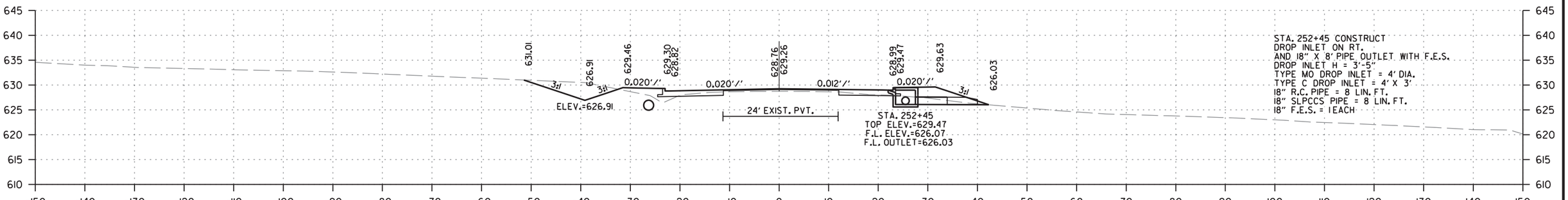
HWY. 7
STA. 250+69 TO STA. 251+84

eh40219 6/22/2020
R061547.DGN

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.		061547	230	323

(2) CROSS SECTIONS

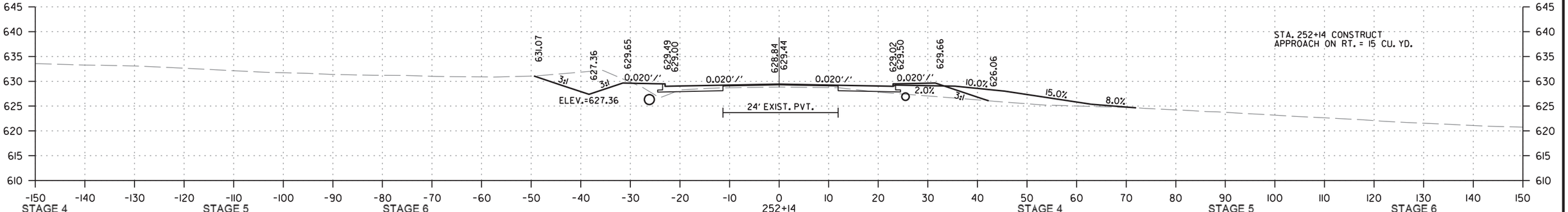
STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	39 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	29 SQ. FT.	FILL AREA	13 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	52 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	36 CU. YD.	FILL VOLUME	13 CU. YD.

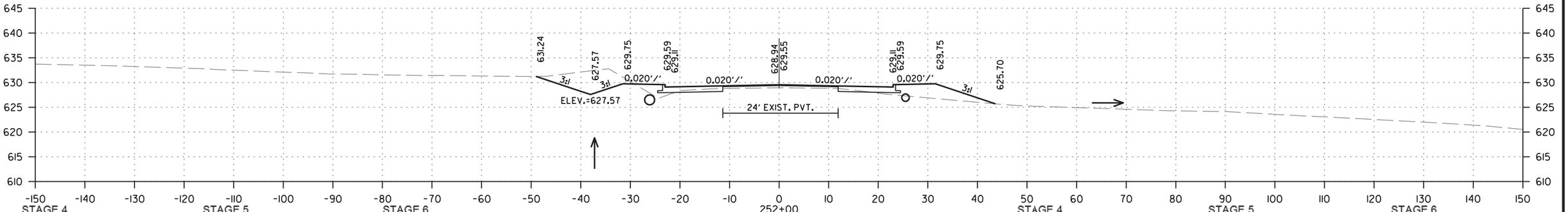
252+45



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	52 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	34 SQ. FT.	FILL AREA	9 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	28 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	5 CU. YD.

252+14



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	55 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	39 SQ. FT.	FILL AREA	10 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	31 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	24 CU. YD.	FILL VOLUME	6 CU. YD.

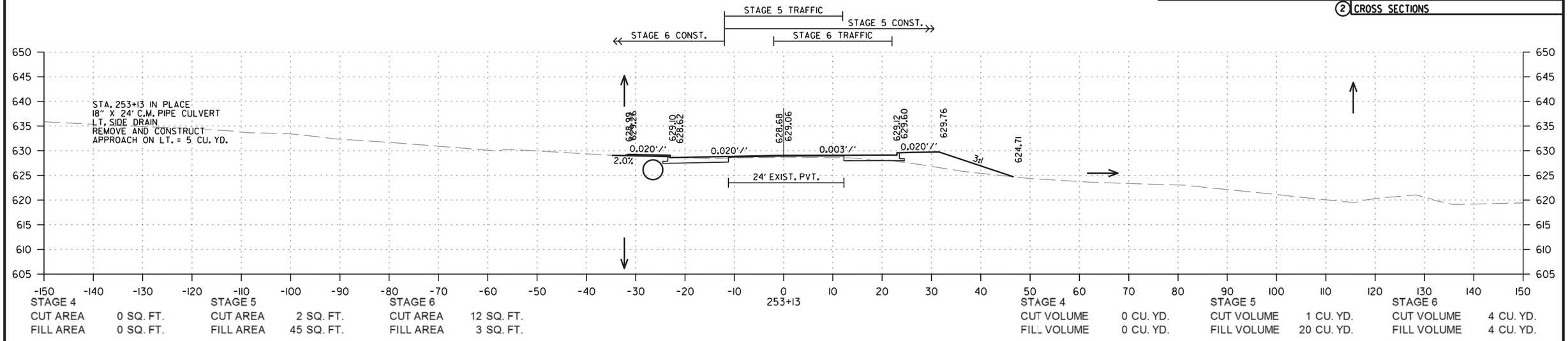
252+00

HWY. 7
STA. 252+00 TO STA. 252+45

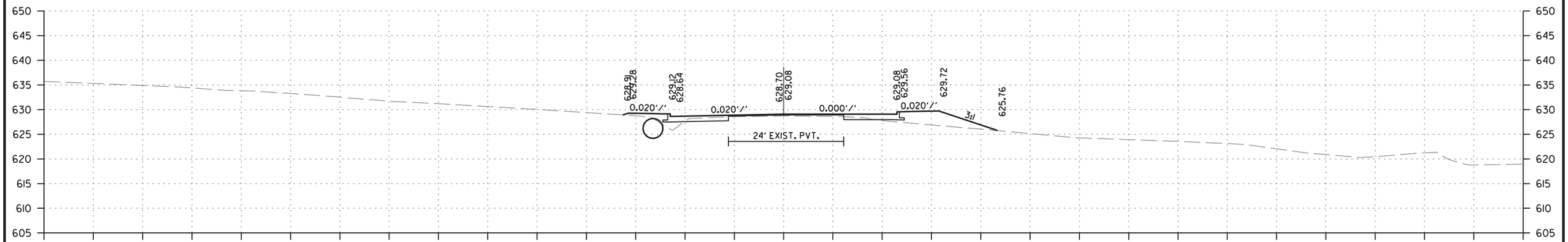
eh40219 6/22/2020
R061547.DGN

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.		061547	231	323

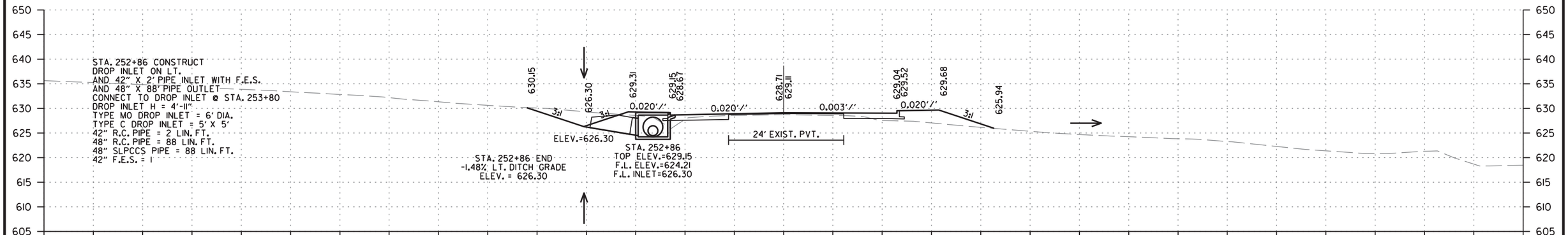
(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	45 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	4 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	39 SQ. FT.	FILL AREA	12 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	6 CU. YD.



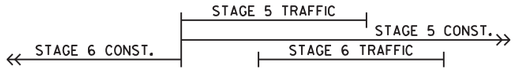
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	36 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	57 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	36 SQ. FT.	FILL AREA	13 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	49 CU. YD.	FILL VOLUME	20 CU. YD.

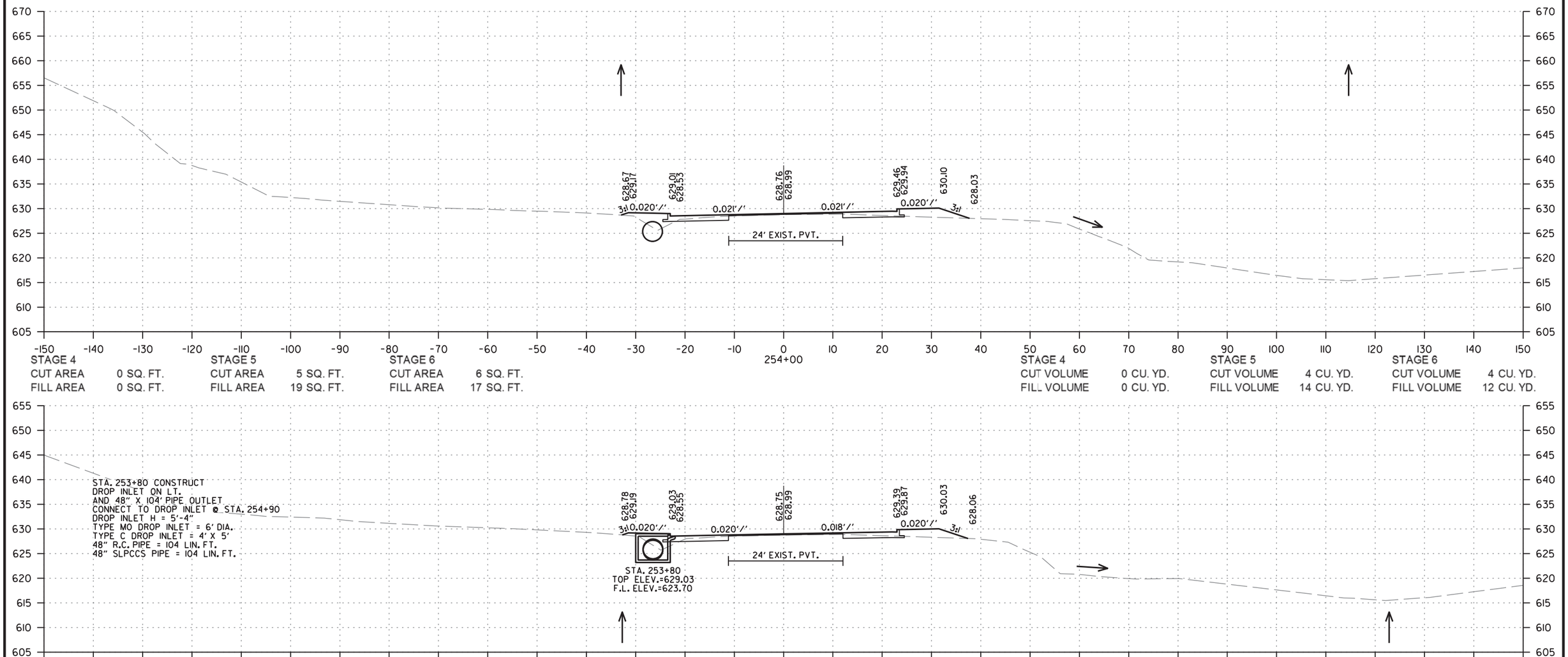
HWY. 7
STA. 252+86 TO STA. 253+13

ah40219 6/22/2020
R061547.DGN

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.		061547	232	323

(2) CROSS SECTIONS





STA. 253+80 CONSTRUCT
DROP INLET ON LT.
AND 48" X 104' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 254+90
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
48" R.C. PIPE = 104 LIN. FT.
48" SLPCCS PIPE = 104 LIN. FT.

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	19 SQ. FT.	FILL AREA	17 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	12 CU. YD.

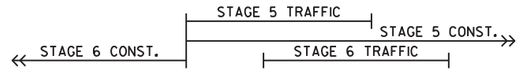
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	22 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	18 SQ. FT.	FILL AREA	16 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	78 CU. YD.	FILL VOLUME	24 CU. YD.

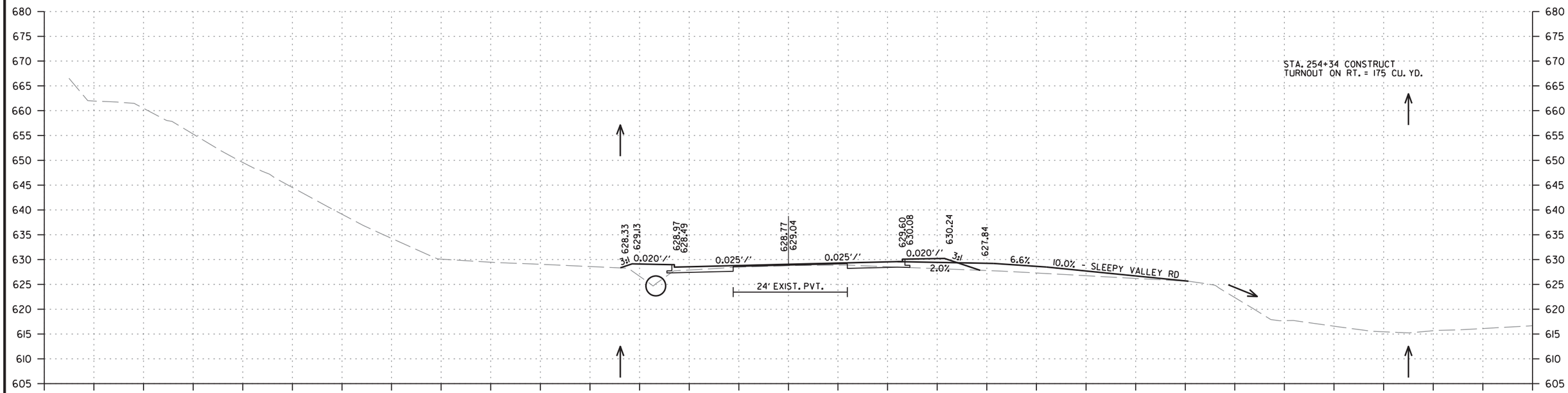
HWY. 7
STA. 253+80 TO STA. 254+00

eh40219 6/22/2020
R061547.DGN

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.		061547	233	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	24 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	26 CU. YD.	FILL VOLUME	26 CU. YD.

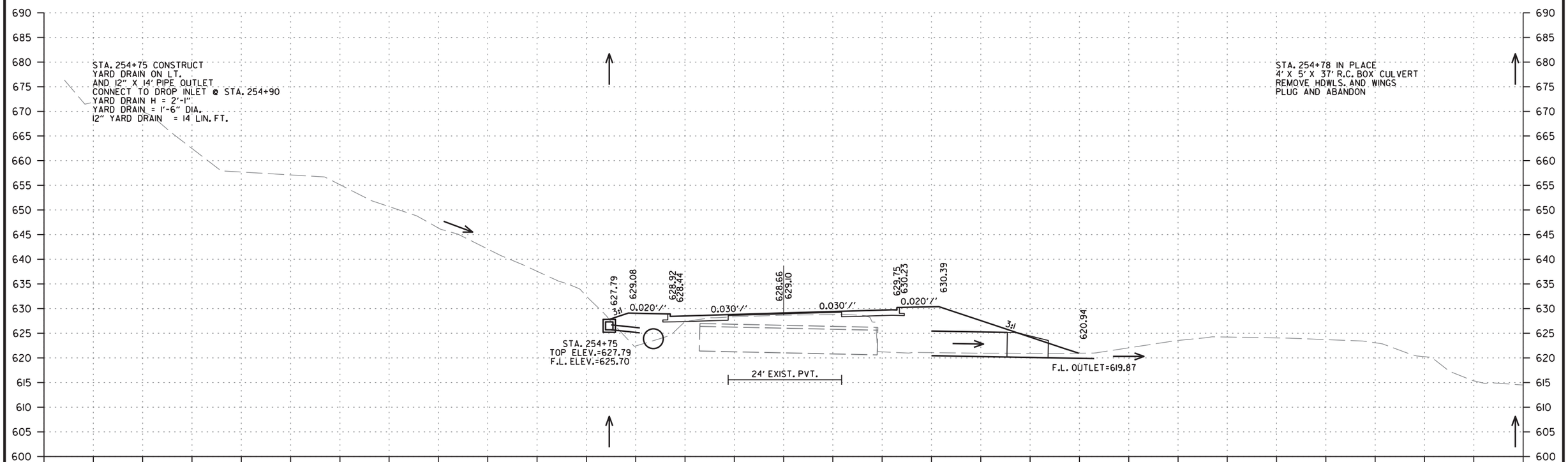
HWY. 7
STA. 254+34 TO STA. 254+34

eh40219 6/22/2020
R061547.DGN

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.		061547	234	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	243 SQ. FT.	FILL AREA	61 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	201 CU. YD.	FILL VOLUME	65 CU. YD.

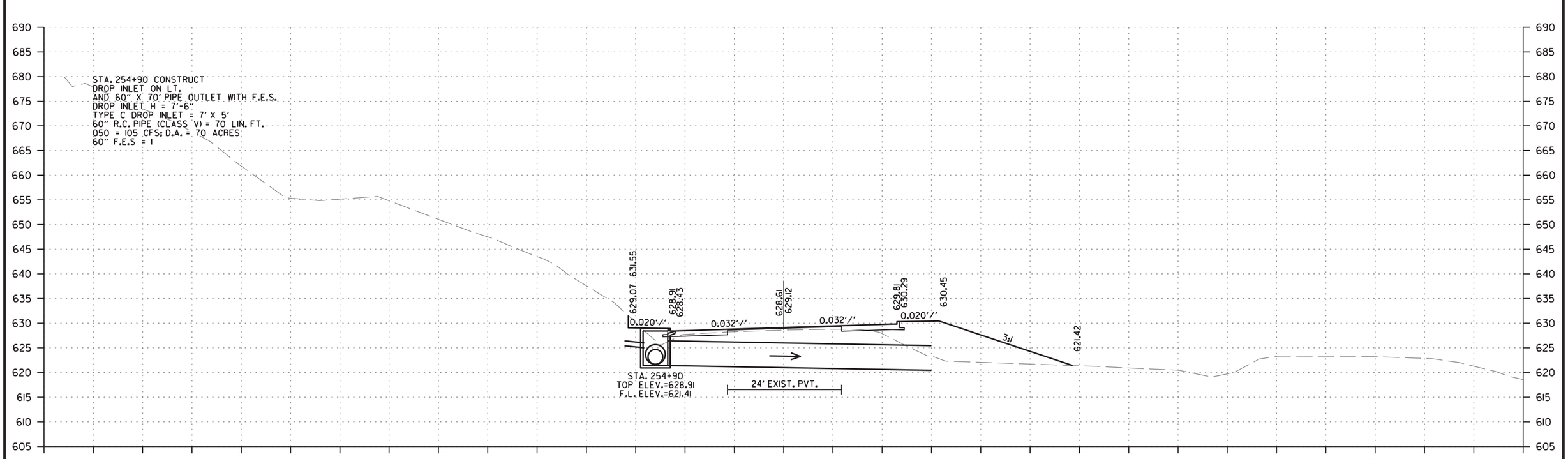
HWY. 7
STA. 254+75 TO STA. 254+75

ah40219 6/22/2020
R061547.DGN

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.		061547	235	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	165 SQ. FT.	FILL AREA	12 SQ. FT.

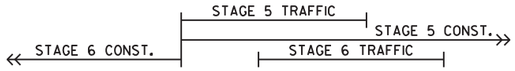
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	113 CU. YD.	FILL VOLUME	20 CU. YD.

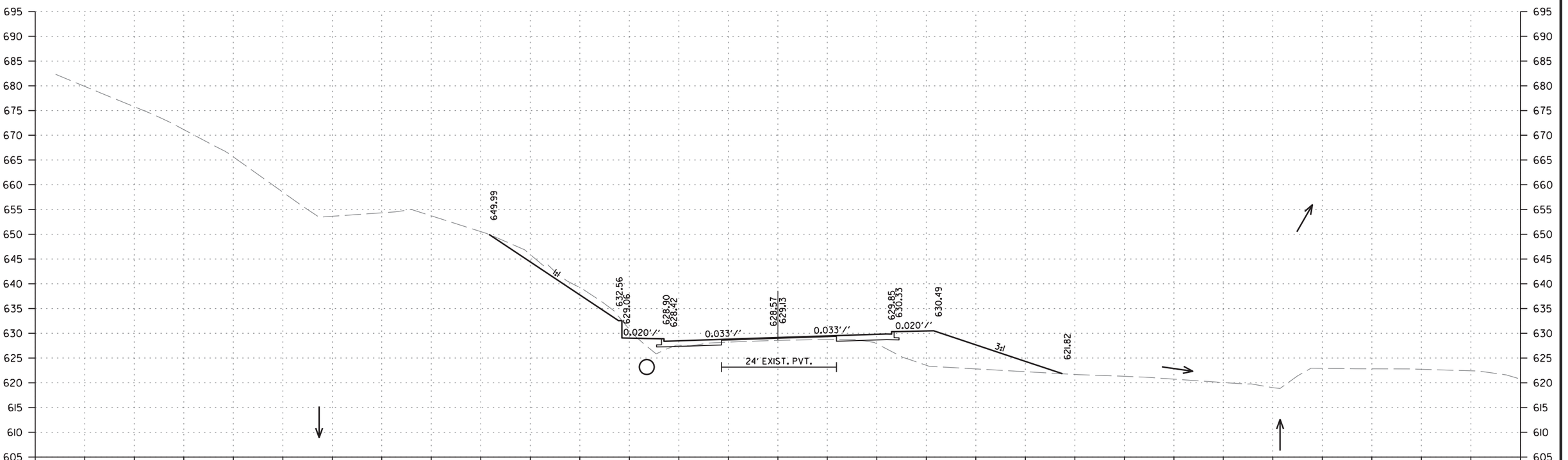
HWY. 7
STA. 254+90 TO STA. 254+90

eh40219 6/22/2020
R061547.DGN

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.		061547	236	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	41 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	148 SQ. FT.	FILL AREA	10 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	58 CU. YD.	FILL VOLUME	4 CU. YD.

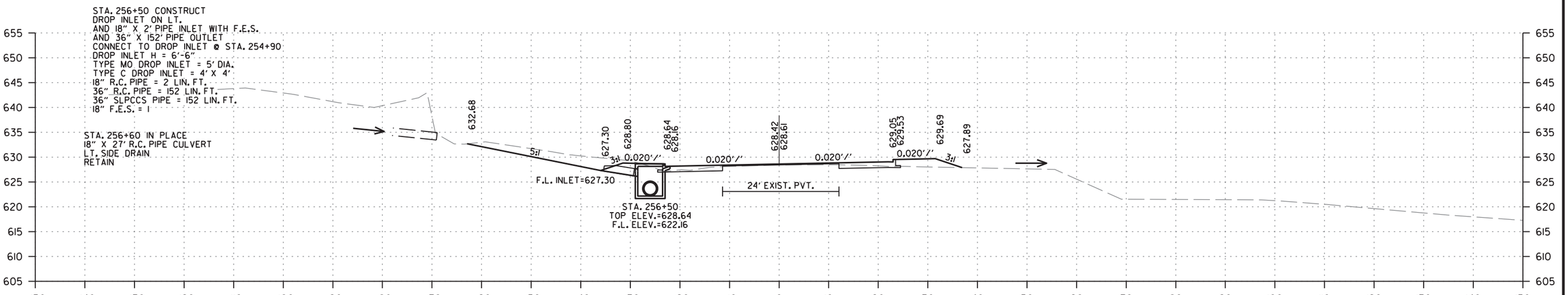
HWY. 7
STA. 255+00 TO STA. 255+00

6/22/2020
ah40219
R061547.DGN

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.		061547	237	323

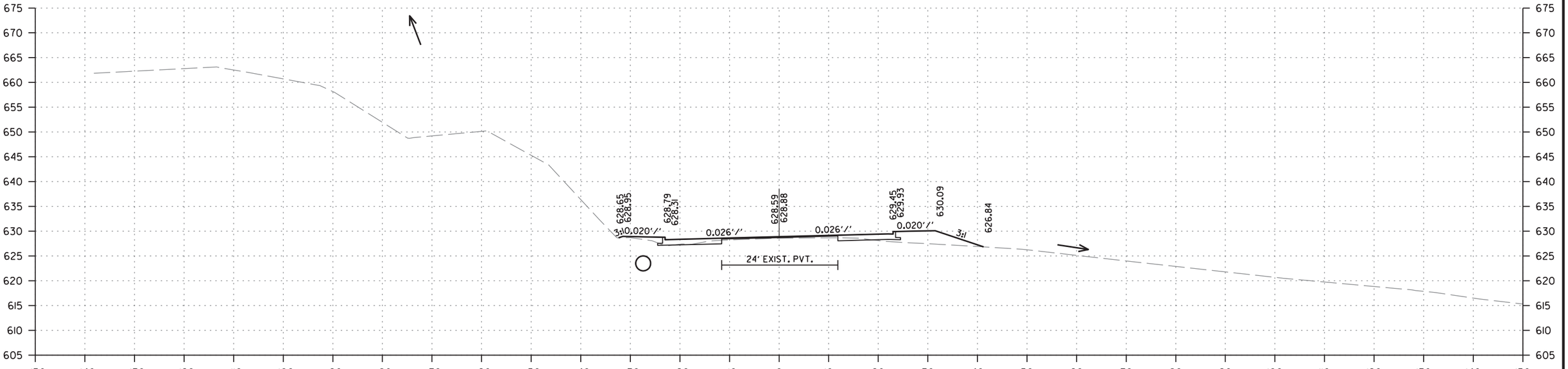
(2) CROSS SECTIONS

STAGE 6 CONST. ← STAGE 5 TRAFFIC → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	57 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	17 SQ. FT.	FILL AREA	3 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	56 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	46 CU. YD.	FILL VOLUME	7 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	33 SQ. FT.	FILL AREA	5 SQ. FT.

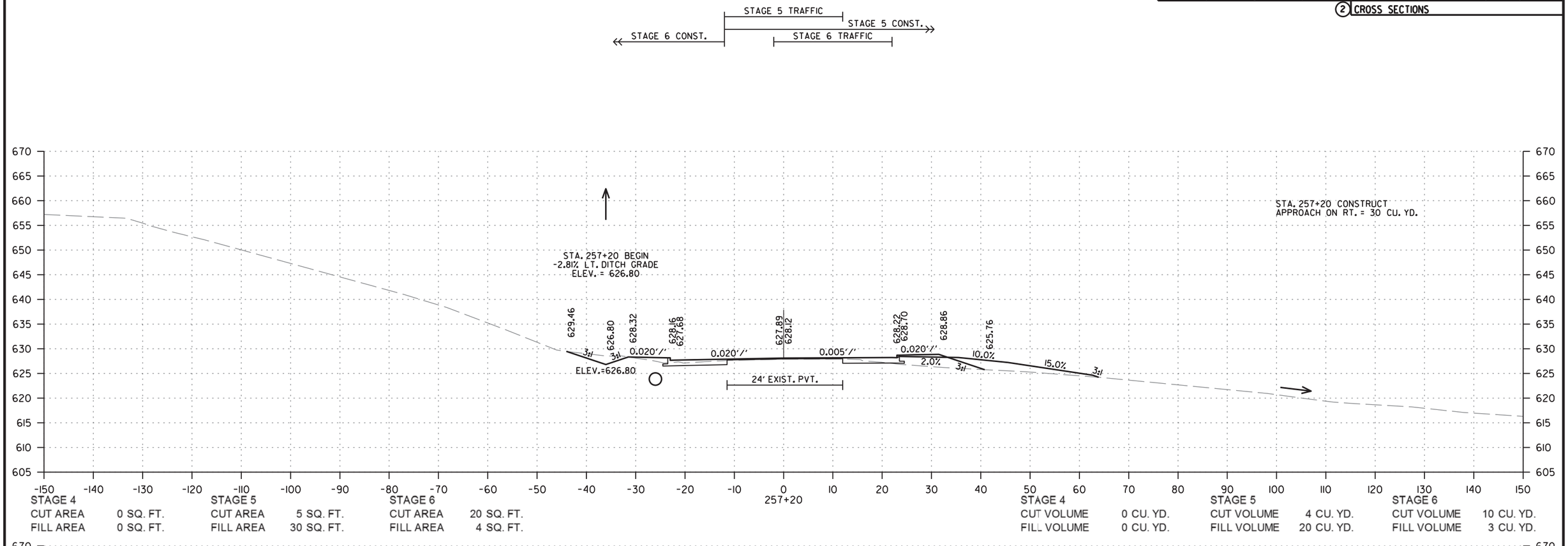
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	81 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	335 CU. YD.	FILL VOLUME	28 CU. YD.

HWY. 7
STA. 256+00 TO STA. 256+50

eh40219 6/22/2020
R061547.DGN

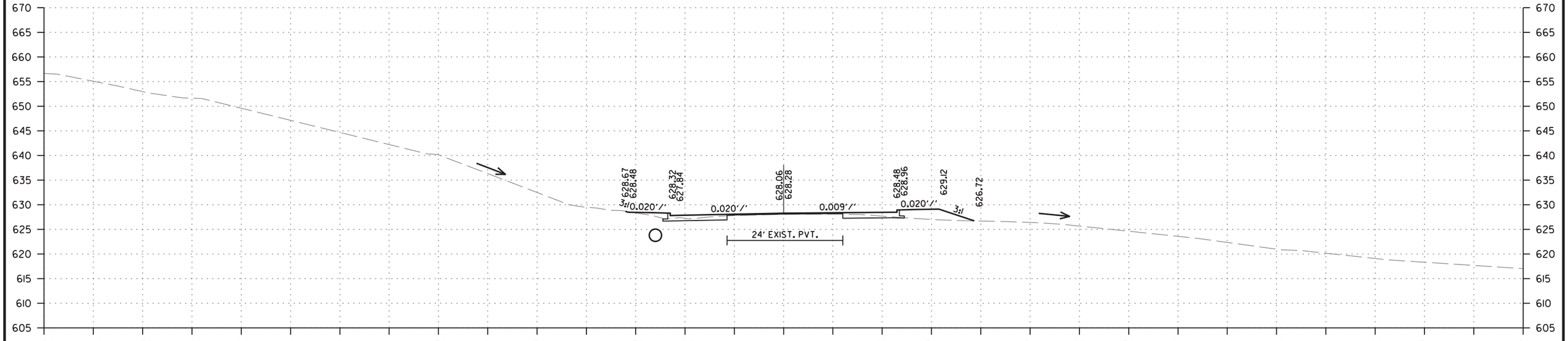
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	238	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	20 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	30 SQ. FT.	FILL AREA	4 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	3 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	4 SQ. FT.

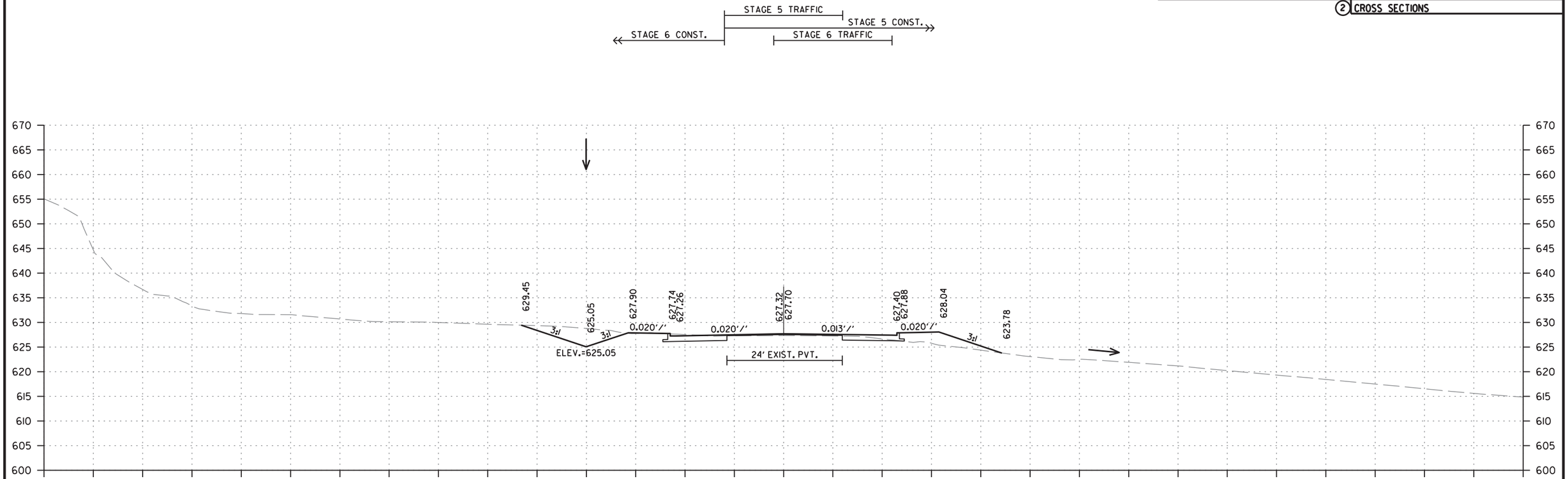
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	60 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	37 CU. YD.	FILL VOLUME	6 CU. YD.

HWY. 7
STA. 257+00 TO STA. 257+20

ah40219 6/22/2020
R061547.DGN

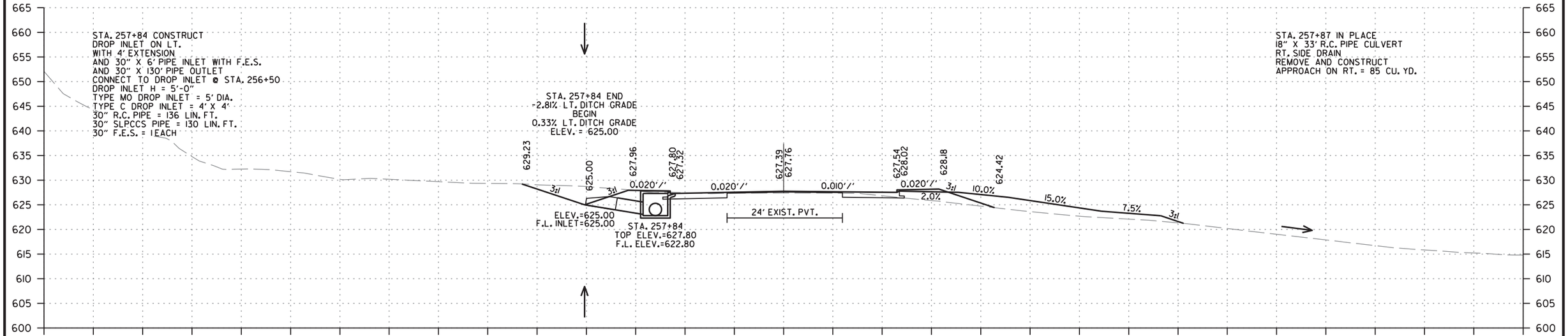
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	239	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	57 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	33 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	32 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	18 CU. YD.	FILL VOLUME	1 CU. YD.

258+00



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	54 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	14 CU. YD.	CUT VOLUME	88 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	30 SQ. FT.	FILL AREA	2 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	71 CU. YD.	FILL VOLUME	7 CU. YD.

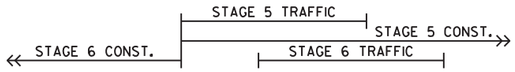
257+84

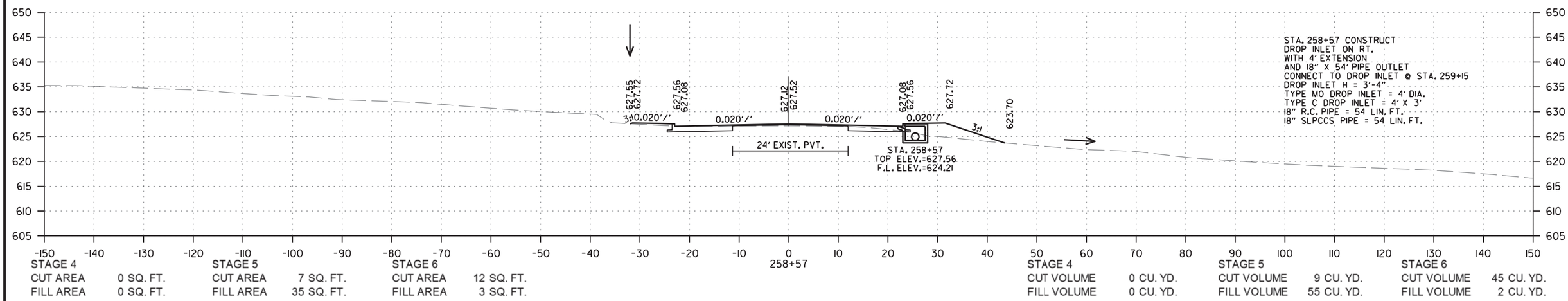
HWY. 7
STA. 257+84 TO STA. 258+00

ah40219 6/22/2020
R061547.DGN

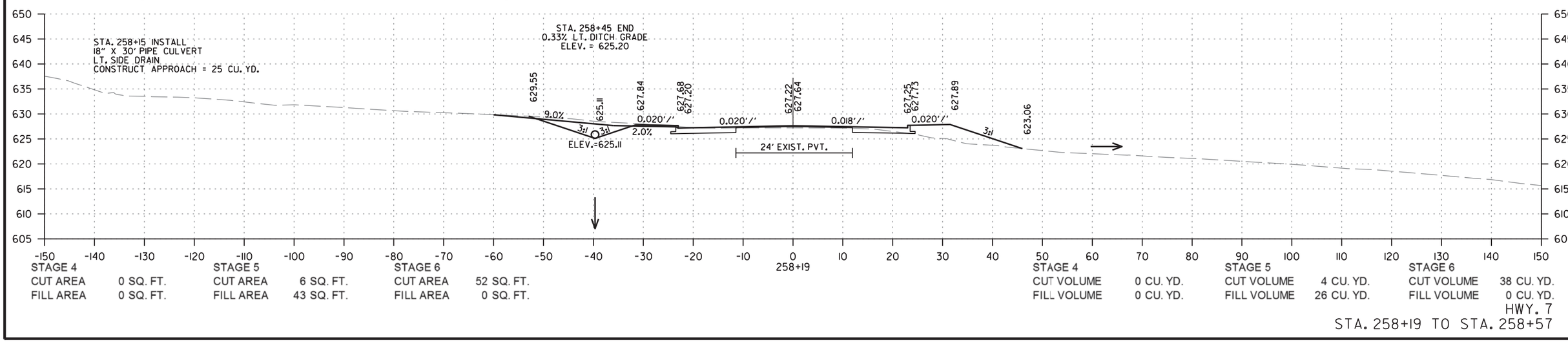
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	240	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	45 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	35 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	55 CU. YD.	FILL VOLUME	2 CU. YD.



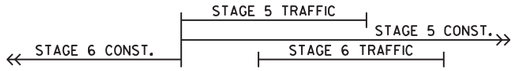
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	52 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	38 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	43 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	26 CU. YD.	FILL VOLUME	0 CU. YD.

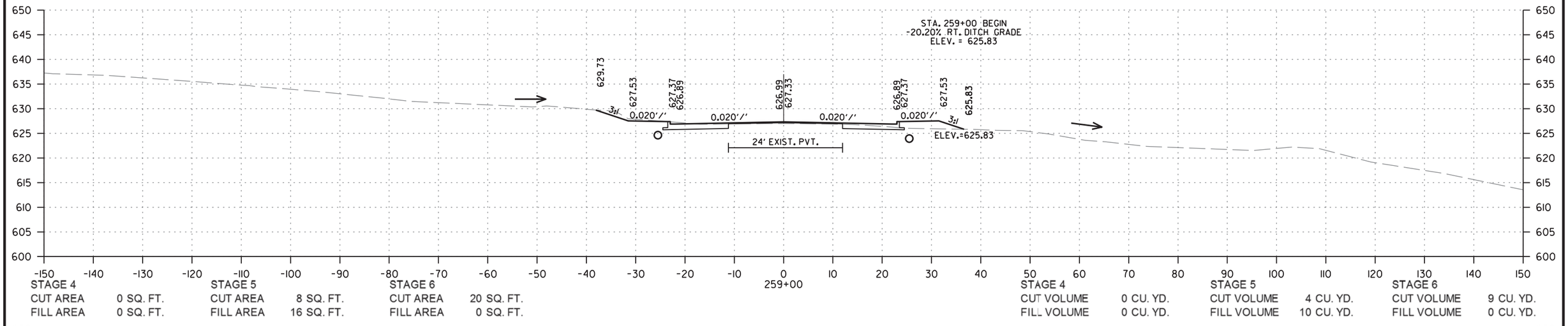
HWY. 7
STA. 258+19 TO STA. 258+57

ah40219 6/22/2020
R061547.DGN

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.		061547	241	323

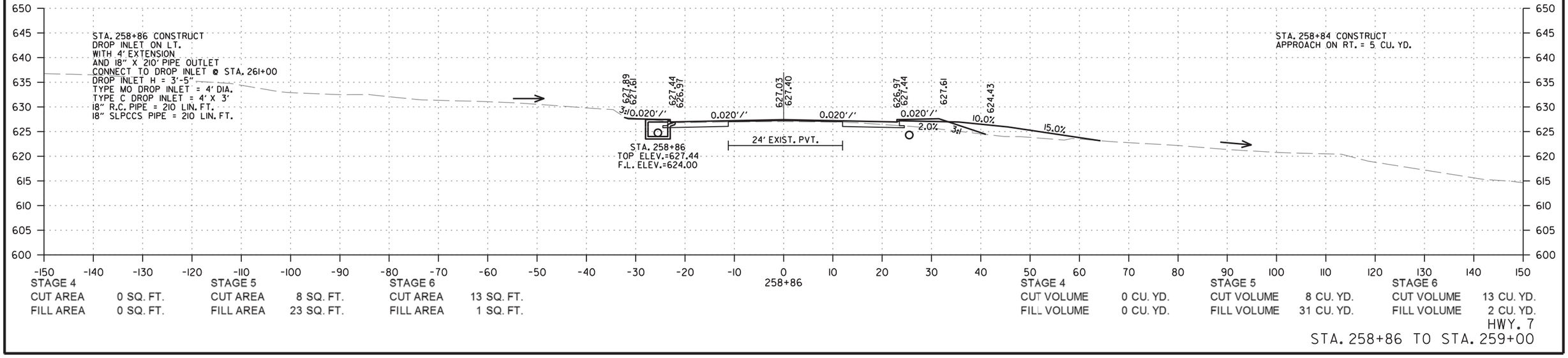
(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	20 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	13 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	1 SQ. FT.

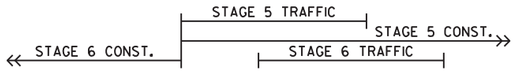
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	13 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	31 CU. YD.	FILL VOLUME	2 CU. YD.

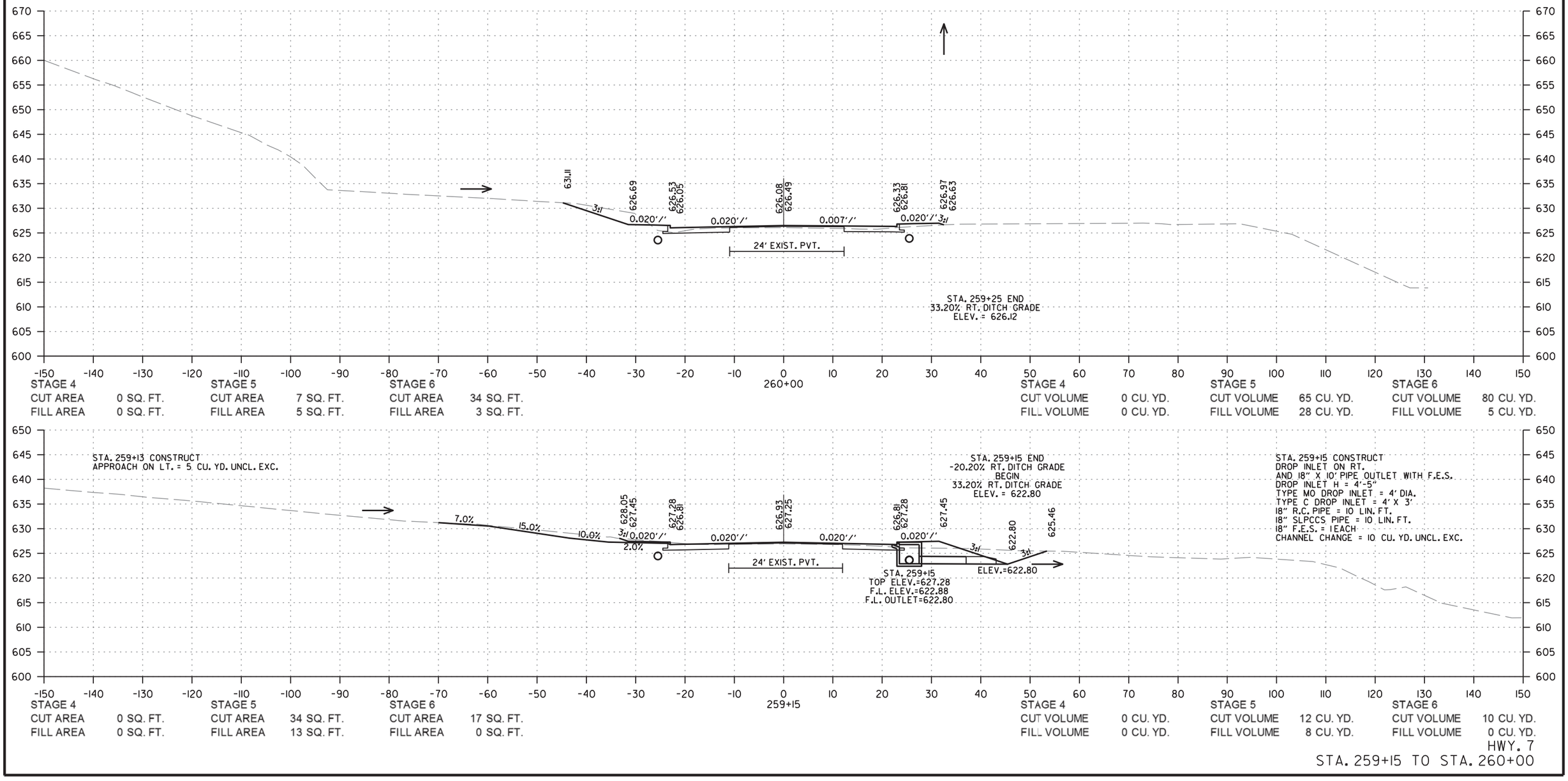
HWY. 7
STA. 258+86 TO STA. 259+00

eh40219 6/22/2020
R061547.DGN

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.		061547	242	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	34 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	65 CU. YD.	CUT VOLUME	80 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	5 SQ. FT.	FILL AREA	3 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	28 CU. YD.	FILL VOLUME	5 CU. YD.

260+00

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	34 SQ. FT.	CUT AREA	17 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	8 CU. YD.	FILL VOLUME	0 CU. YD.

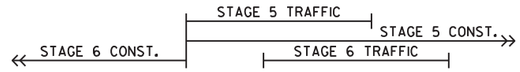
259+15

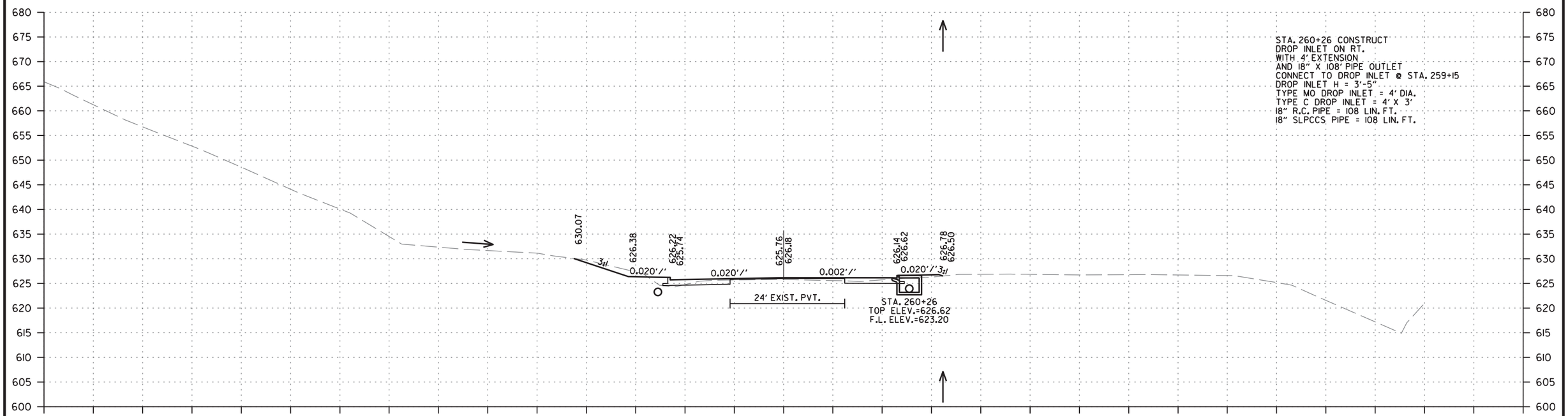
HWY. 7
STA. 259+15 TO STA. 260+00

6/22/2020
ah40219
R061547.DGN

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.		061547	243	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	18 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	5 SQ. FT.

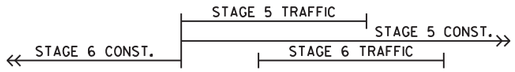
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	25 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	4 CU. YD.	FILL VOLUME	4 CU. YD.

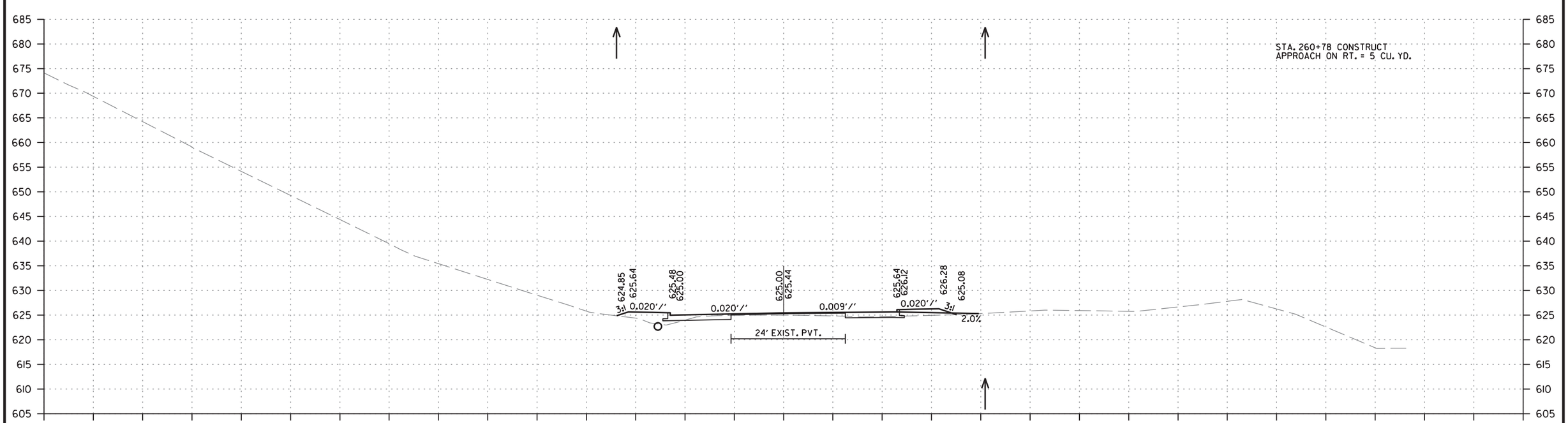
HWY. 7
STA. 260+26 TO STA. 260+26

eh40219 6/22/2020
R061547.DGN

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.		061547	244	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	17 SQ. FT.

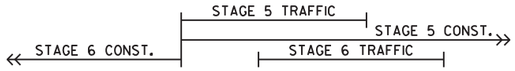
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	23 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	16 CU. YD.	FILL VOLUME	21 CU. YD.

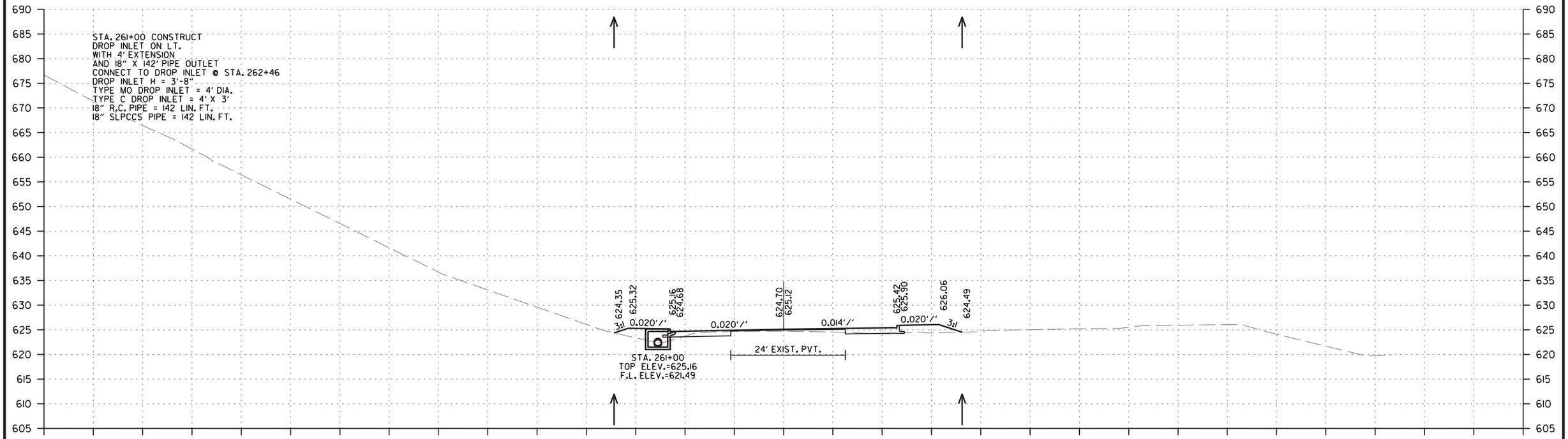
HWY. 7
STA. 260+78 TO STA. 260+78

eh40219 6/22/2020
R061547.DGN

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.		061547	245	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	22 SQ. FT.

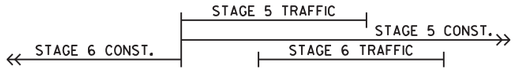
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	12 CU. YD.	FILL VOLUME	16 CU. YD.

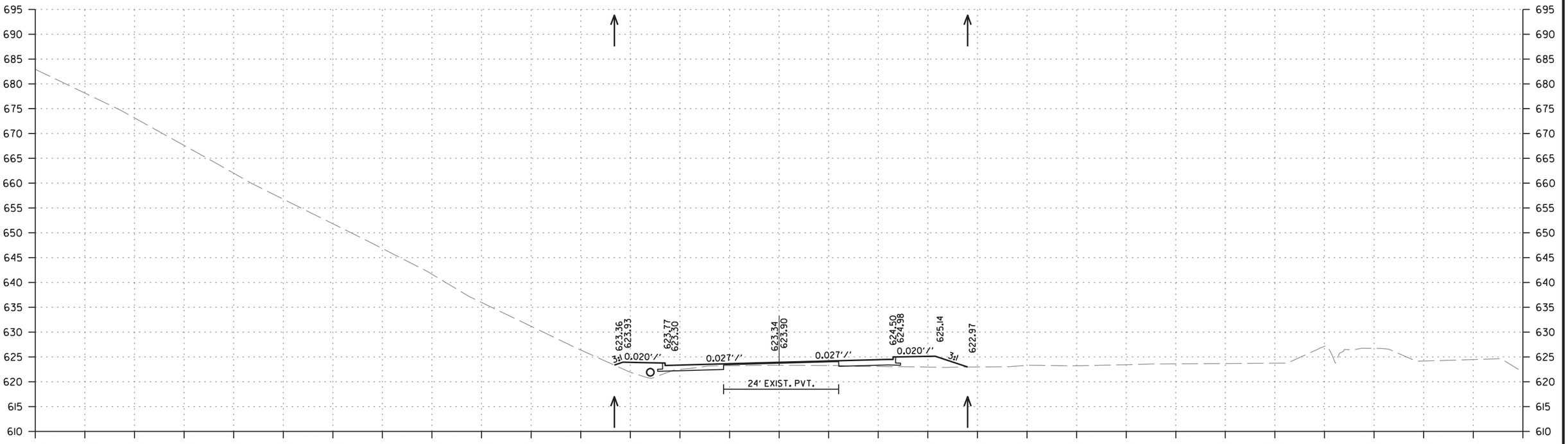
HWY. 7
STA. 261+00 TO STA. 261+00

ah40219 6/22/2020
R061547.DGN

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.		061547	246	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	21 SQ. FT.

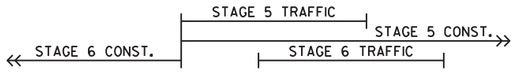
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	24 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	76 CU. YD.	FILL VOLUME	80 CU. YD.

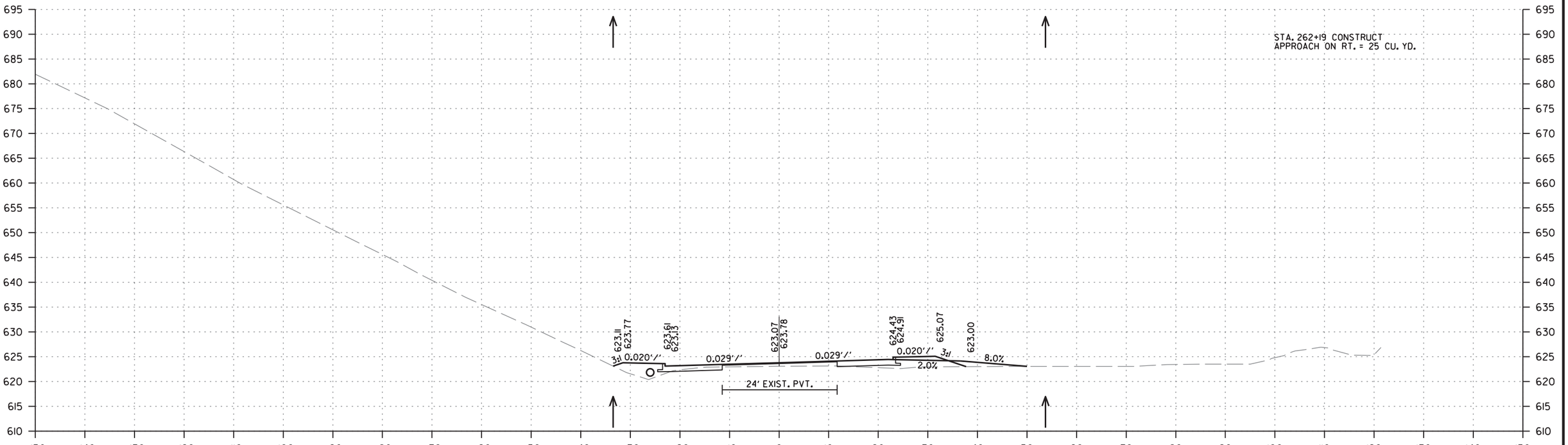
HWY. 7
STA. 262+00 TO STA. 262+00

6/22/2020
eh40219
R061547.DGN

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.		061547	247	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	22 SQ. FT.

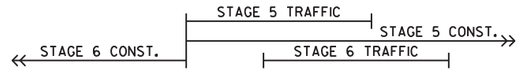
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	18 CU. YD.	FILL VOLUME	15 CU. YD.

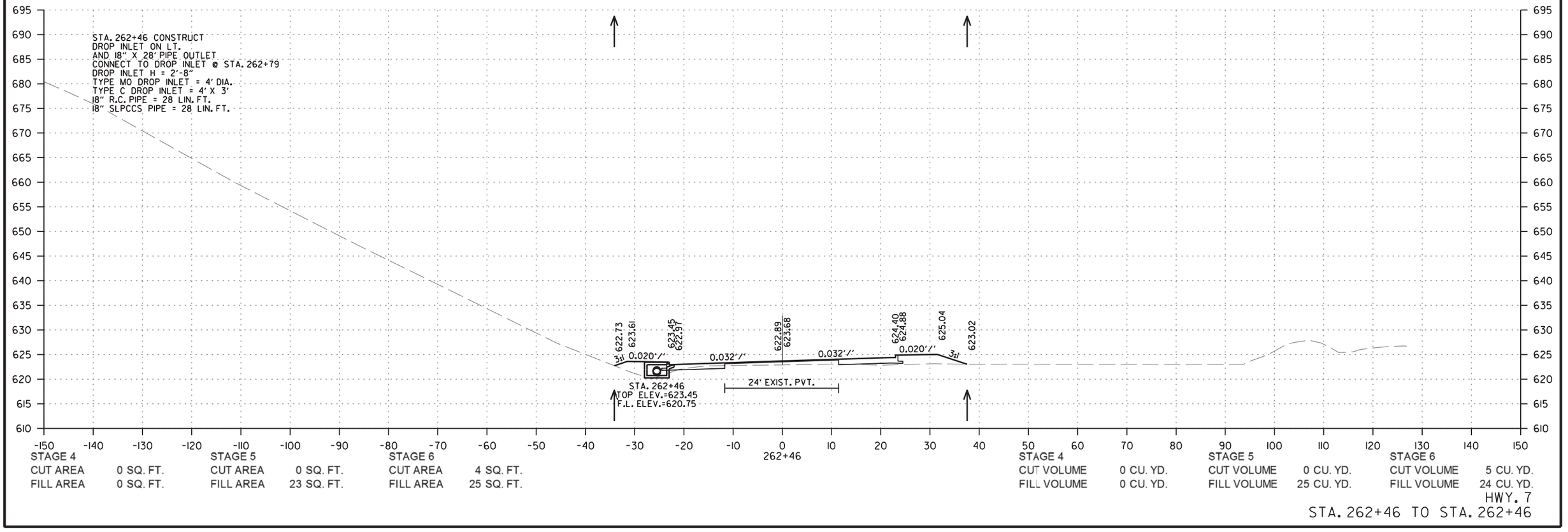
HWY. 7
STA. 262+19 TO STA. 262+19

eh40219 6/22/2020
R061547.DGN

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.		061547	248	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	25 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	25 CU. YD.	FILL VOLUME	24 CU. YD.

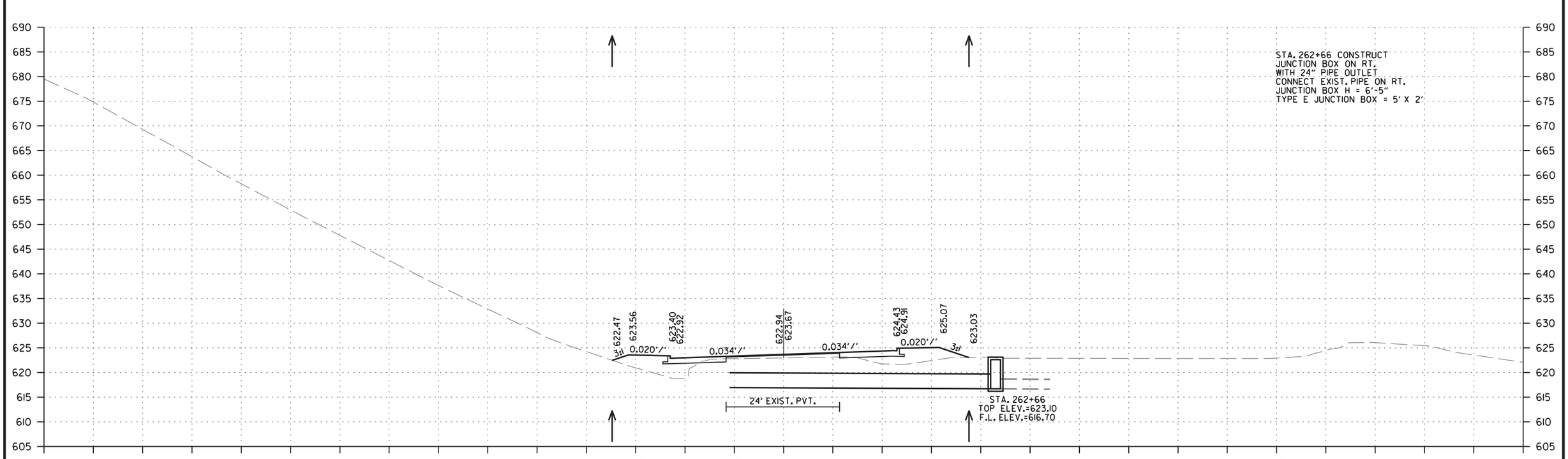
HWY. 7
STA. 262+46 TO STA. 262+46

6/22/2020
ah40219
R061547.DGN

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.		061547	249	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	40 SQ. FT.	FILL AREA	43 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	23 CU. YD.	FILL VOLUME	25 CU. YD.

HWY. 7
STA. 262+66 TO STA. 262+66

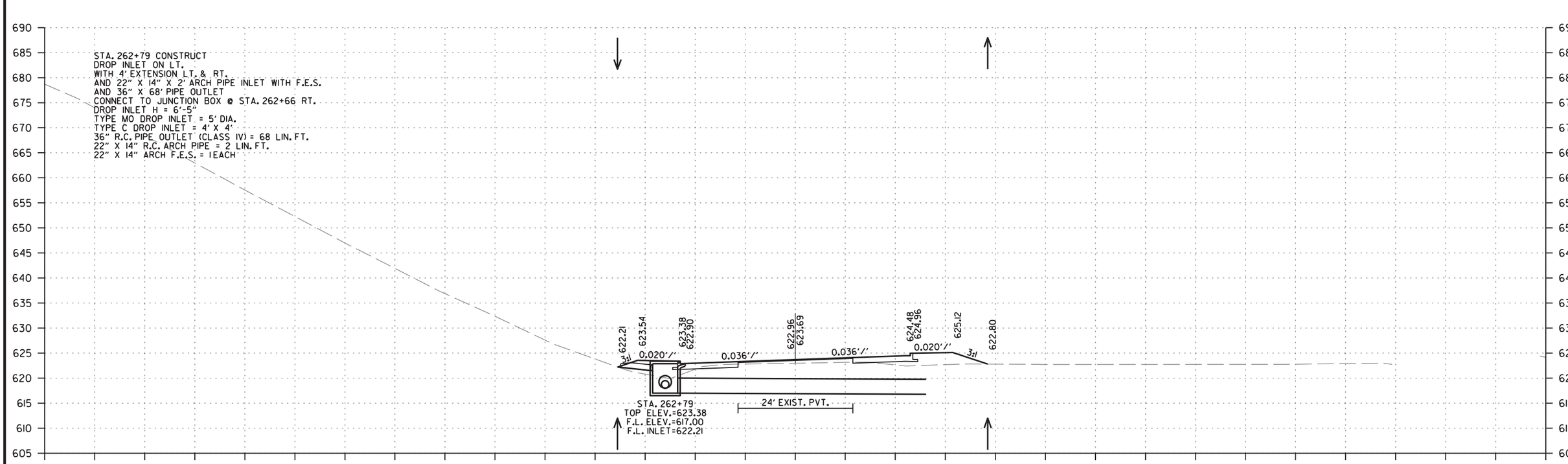
eh40219 6/22/2020
R061547.DGN

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.		061547	250	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC

STA. 262+79 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION LT. & RT.
AND 22" X 14" X 2' ARCH PIPE INLET WITH F.E.S.
AND 36" X 68' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 262+66 RT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE OUTLET (CLASS IV) = 68 LIN. FT.
22" X 14" R.C. ARCH PIPE = 2 LIN. FT.
22" X 14" ARCH F.E.S. = 1EACH



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	32 SQ. FT.	FILL AREA	31 SQ. FT.

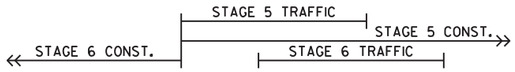
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	18 CU. YD.

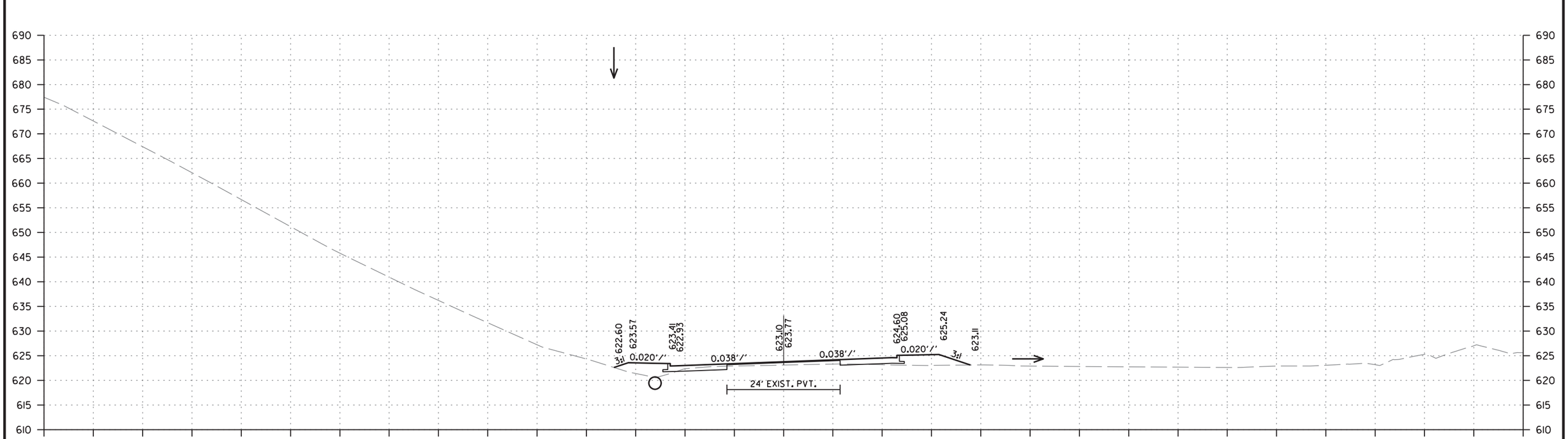
HWY. 7
STA. 262+79 TO STA. 262+79

6/22/2020
ah40219
R061547.DGN

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.		061547	251	323

(2) CROSS SECTIONS





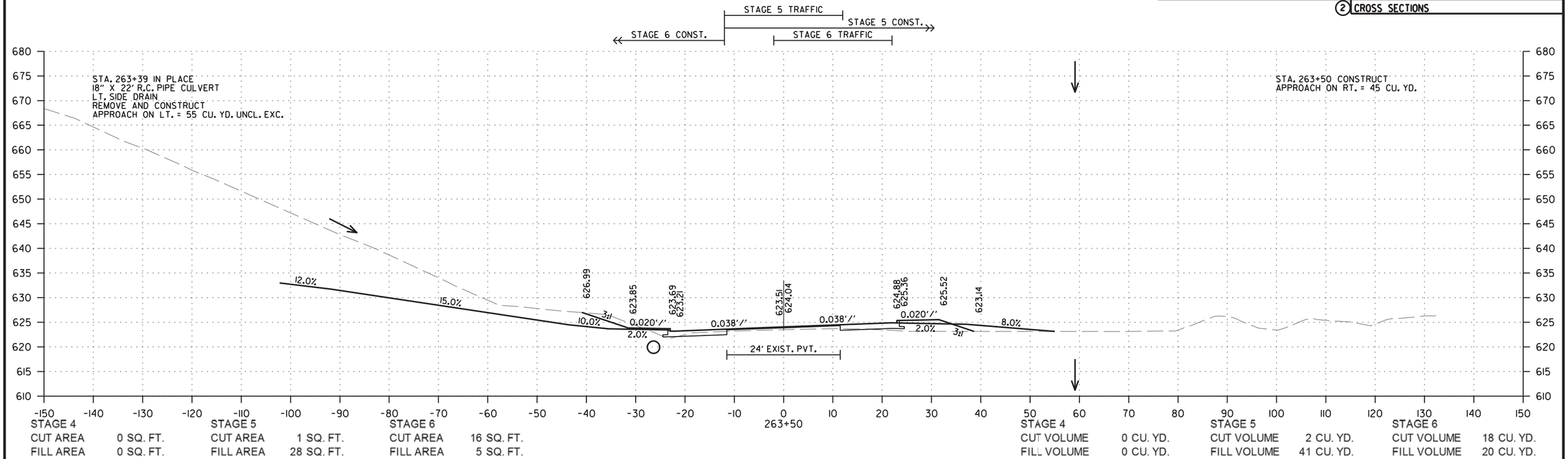
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	22 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	21 CU. YD.

HWY. 7
STA. 263+00 TO STA. 263+00

eh40219 6/22/2020
R061547.DGN

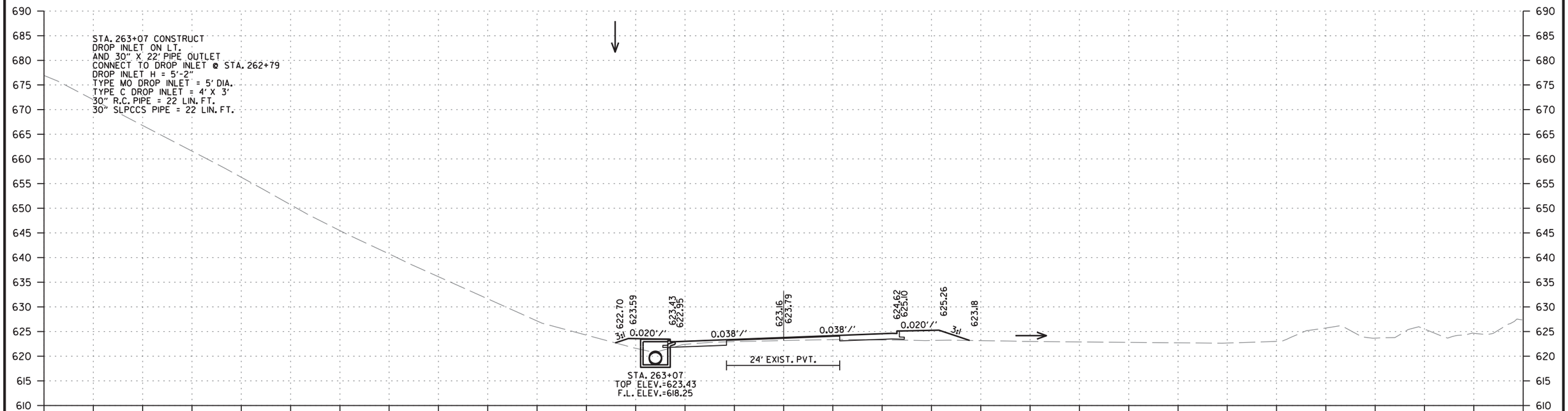
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	252	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	16 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	28 SQ. FT.	FILL AREA	5 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	18 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	41 CU. YD.	FILL VOLUME	20 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	20 SQ. FT.

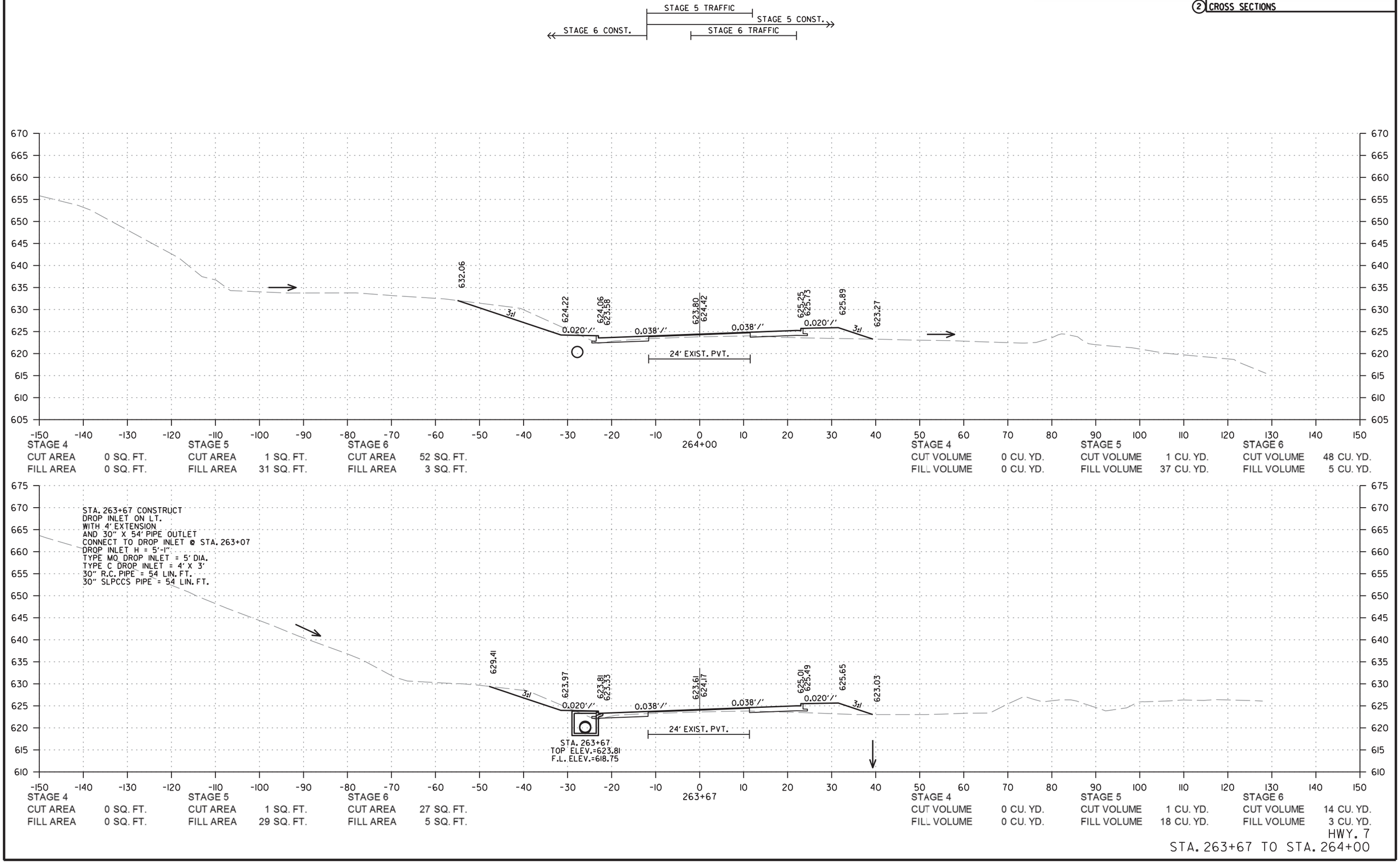
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	6 CU. YD.	FILL VOLUME	5 CU. YD.

HWY. 7
STA. 263+07 TO STA. 263+50

eh40219 6/22/2020
R061547.DGN

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.		061547	253	323

(2) CROSS SECTIONS



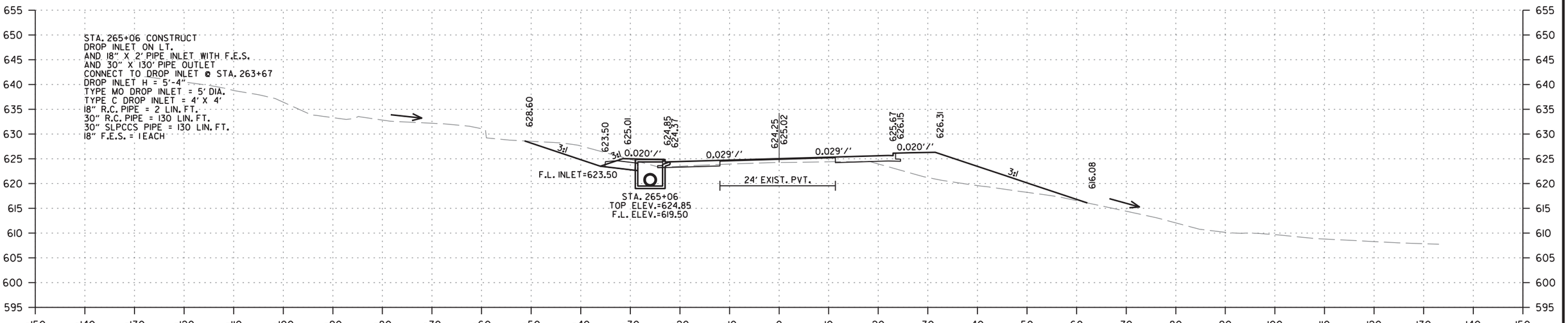
HWY. 7
STA. 263+67 TO STA. 264+00

ah40219 6/22/2020
R061547.DGN

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.		061547	254	323

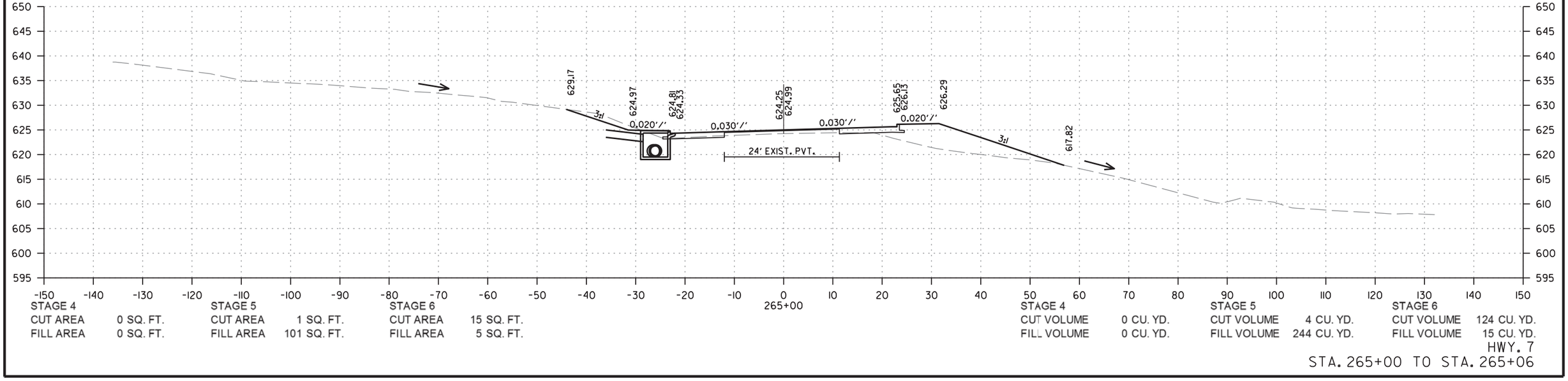
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	39 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	117 SQ. FT.	FILL AREA	6 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	24 CU. YD.	FILL VOLUME	1 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	15 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	101 SQ. FT.	FILL AREA	5 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	124 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	244 CU. YD.	FILL VOLUME	15 CU. YD.

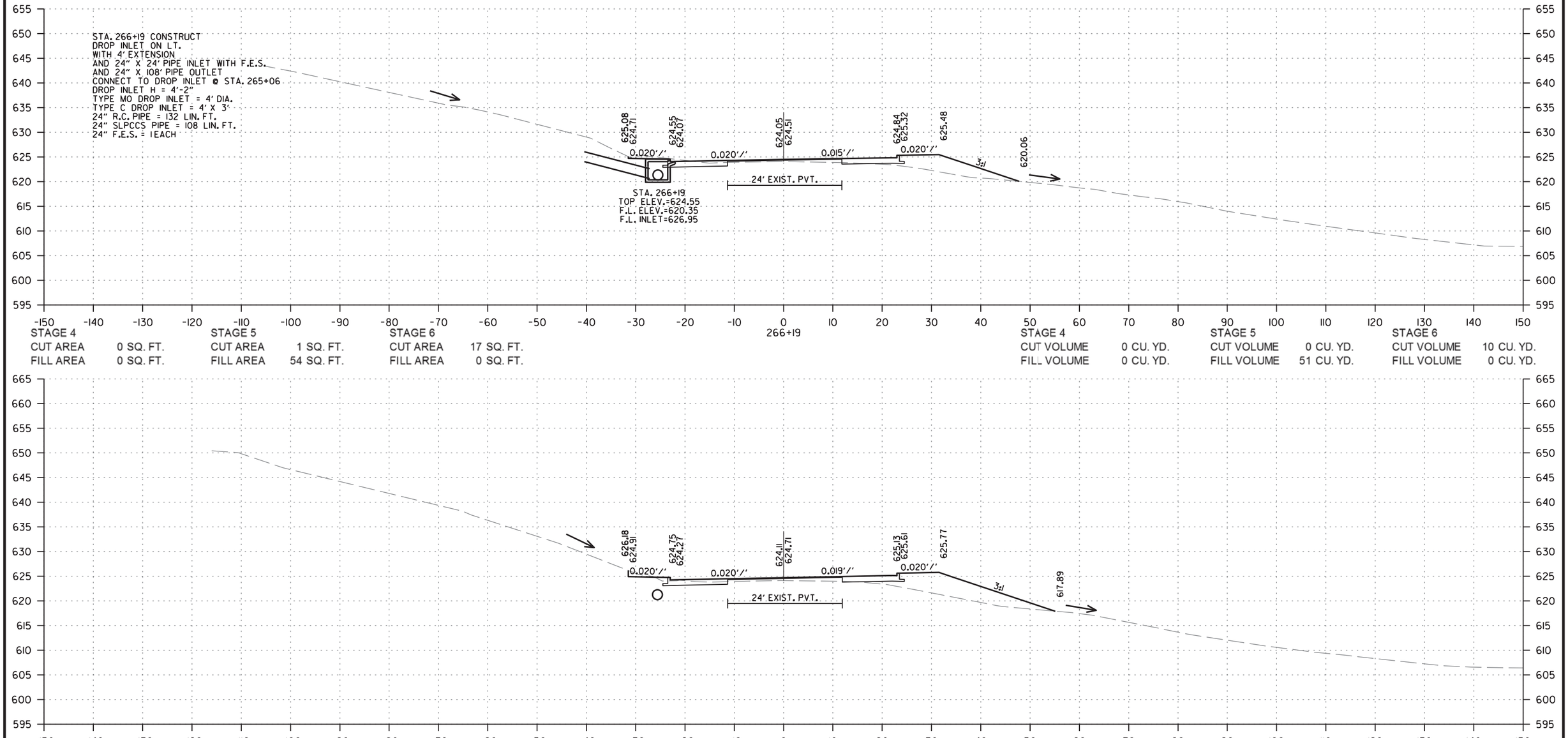
HWY. 7
STA. 265+00 TO STA. 265+06

eh40219 6/22/2020
R061547.DGN

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.		061547	255	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



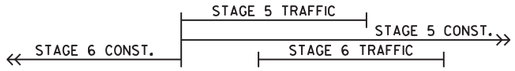
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	17 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	54 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	51 CU. YD.	FILL VOLUME	0 CU. YD.
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	89 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	92 SQ. FT.	FILL AREA	1 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	364 CU. YD.	FILL VOLUME	12 CU. YD.

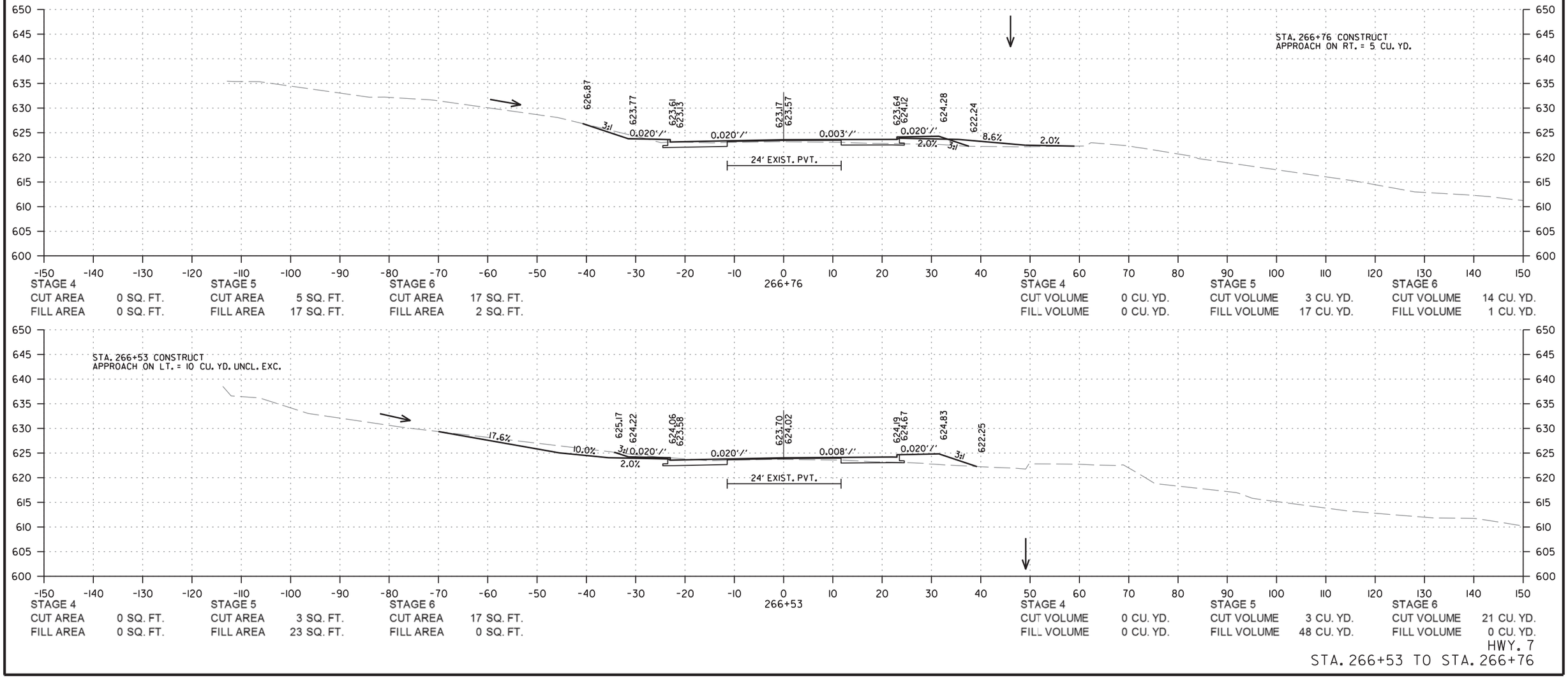
HWY. 7
STA. 266+00 TO STA. 266+19

eh40219 6/22/2020
R061547.DGN

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.		061547	256	323

(2) CROSS SECTIONS



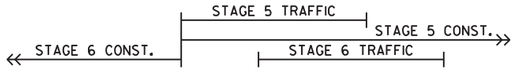


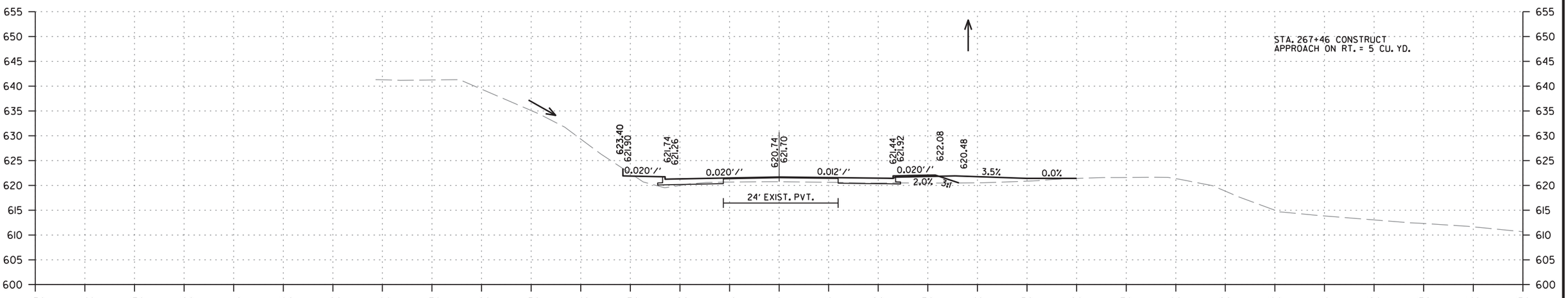
HWY. 7
STA. 266+53 TO STA. 266+76

ah40219 6/22/2020
R061547.DGN

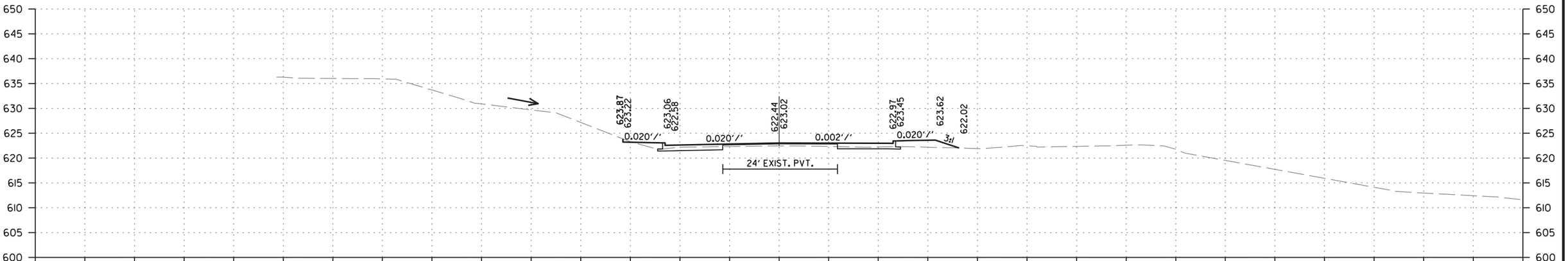
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	257	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	3 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	9 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	26 CU. YD.	FILL VOLUME	11 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	3 CU. YD.

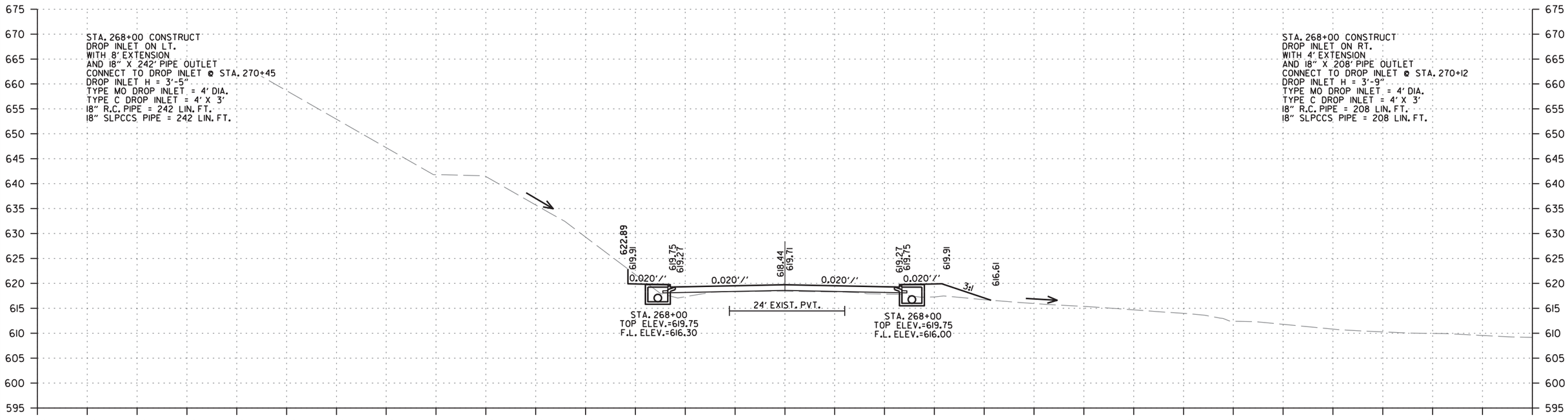
HWY. 7
STA. 267+00 TO STA. 267+46

ah40219 6/22/2020
R061547.DGN

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.		061547	258	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	34 SQ. FT.	FILL AREA	10 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	50 CU. YD.	FILL VOLUME	18 CU. YD.

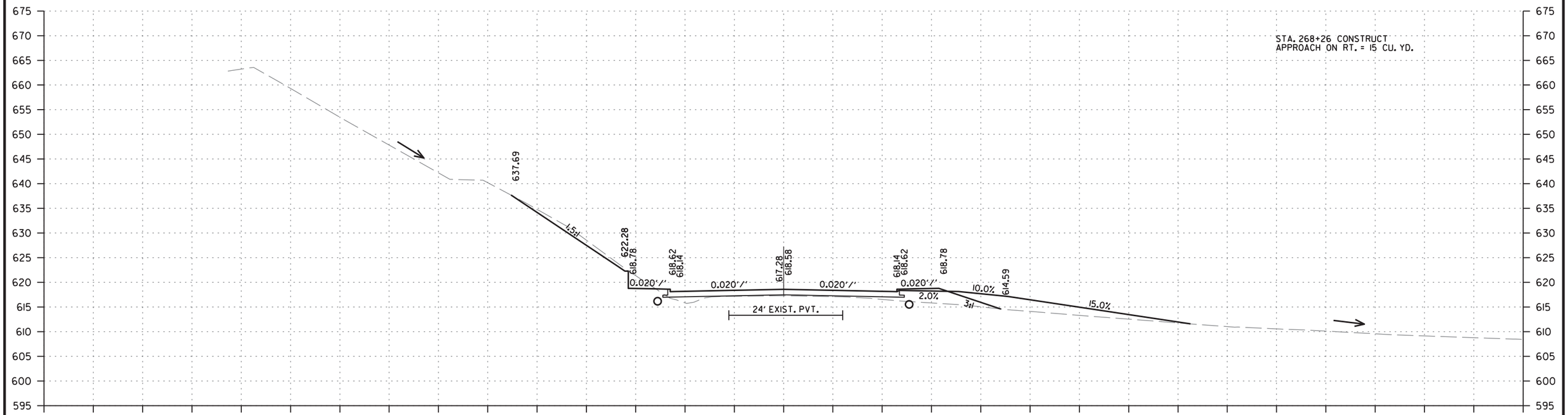
HWY. 7
STA. 268+00 TO STA. 268+00

eh40219 6/22/2020
R061547.DGN

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.		061547	259	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	29 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	45 SQ. FT.	FILL AREA	8 SQ. FT.

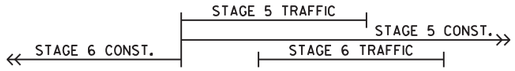
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	38 CU. YD.	FILL VOLUME	9 CU. YD.

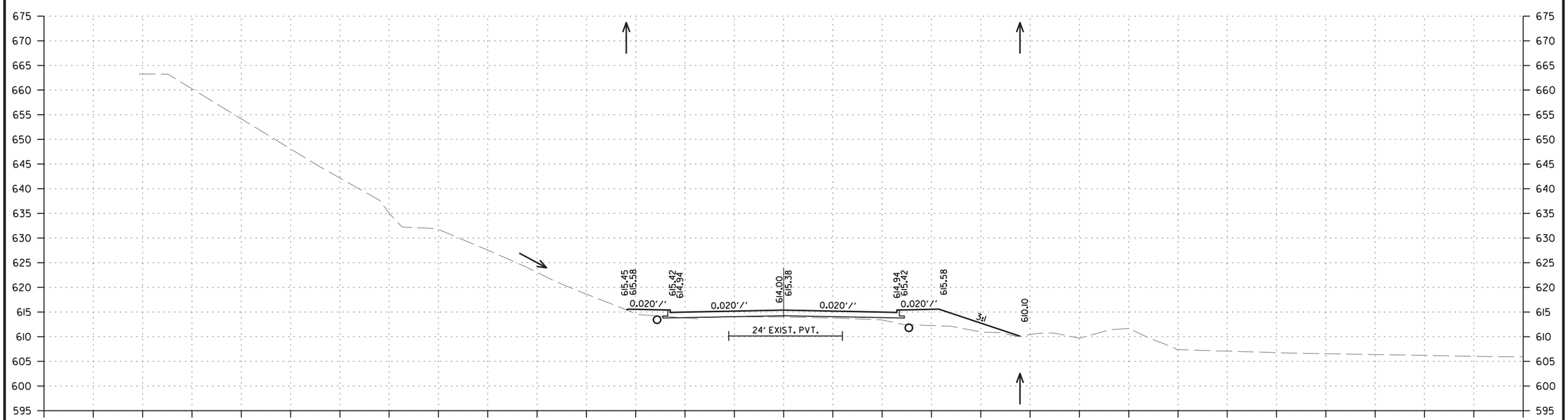
HWY. 7
STA. 268+26 TO STA. 268+26

eh40219 6/22/2020
R061547.DGN

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.		061547	260	323

(2) CROSS SECTIONS





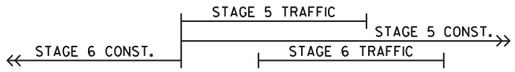
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	41 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	58 SQ. FT.	FILL AREA	9 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	141 CU. YD.	FILL VOLUME	23 CU. YD.

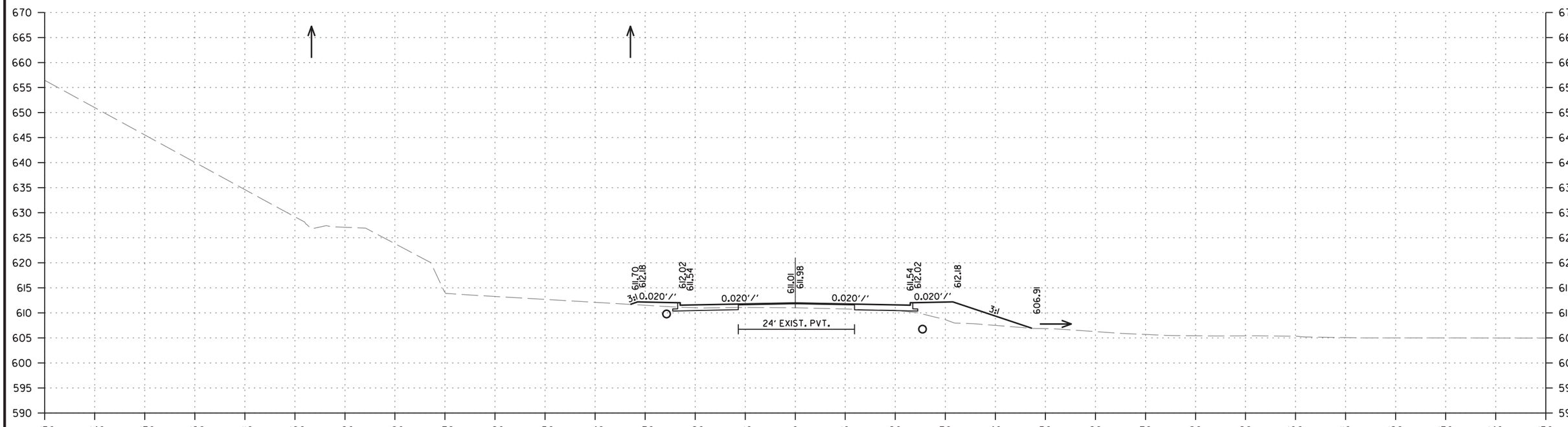
HWY. 7
STA. 269+00 TO STA. 269+00

eh40219 6/22/2020
R061547.DGN

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.		061547	261	323

(2) CROSS SECTIONS





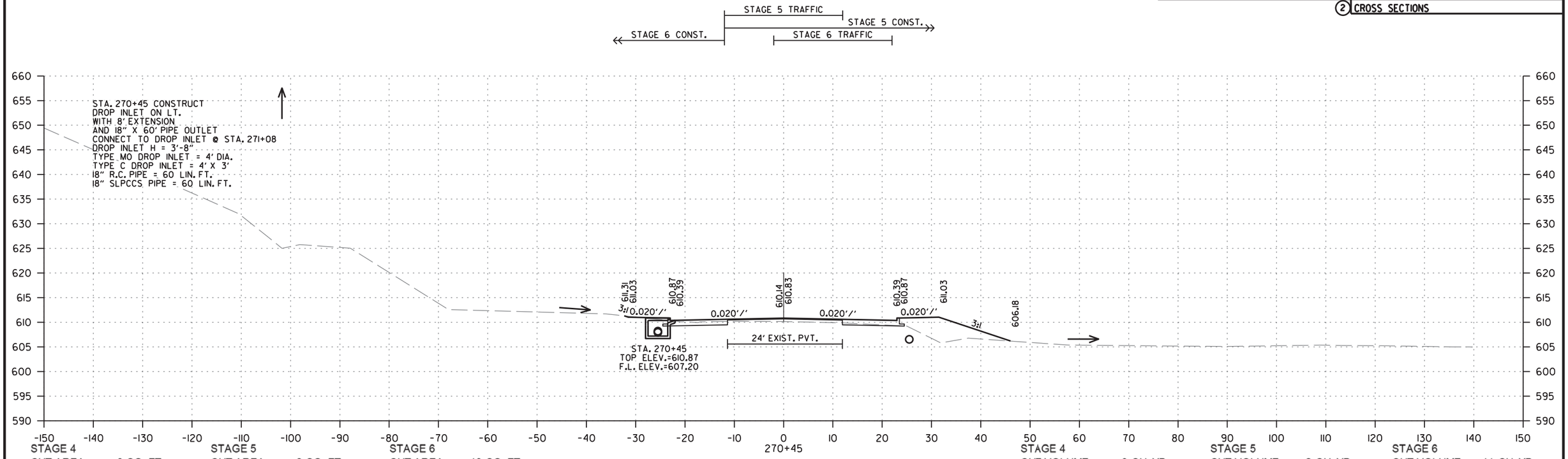
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	15 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	55 SQ. FT.	FILL AREA	6 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	209 CU. YD.	FILL VOLUME	28 CU. YD.

HWY. 7
STA. 270+00 TO STA. 270+00

eh40219 6/22/2020
R061547.DGN

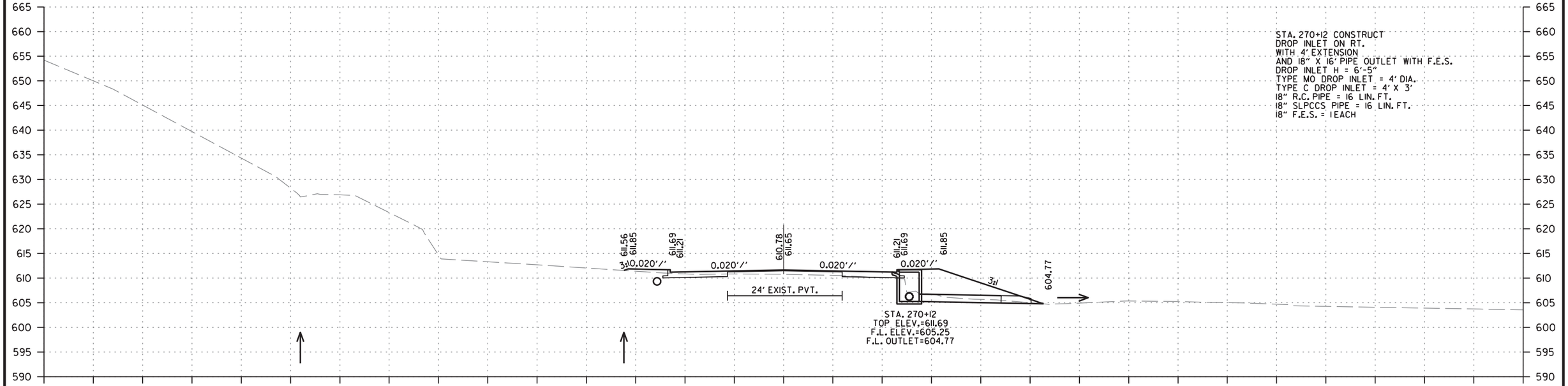
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	262	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	56 SQ. FT.	FILL AREA	1 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	11 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	92 CU. YD.	FILL VOLUME	3 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	94 SQ. FT.	FILL AREA	4 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	33 CU. YD.	FILL VOLUME	2 CU. YD.

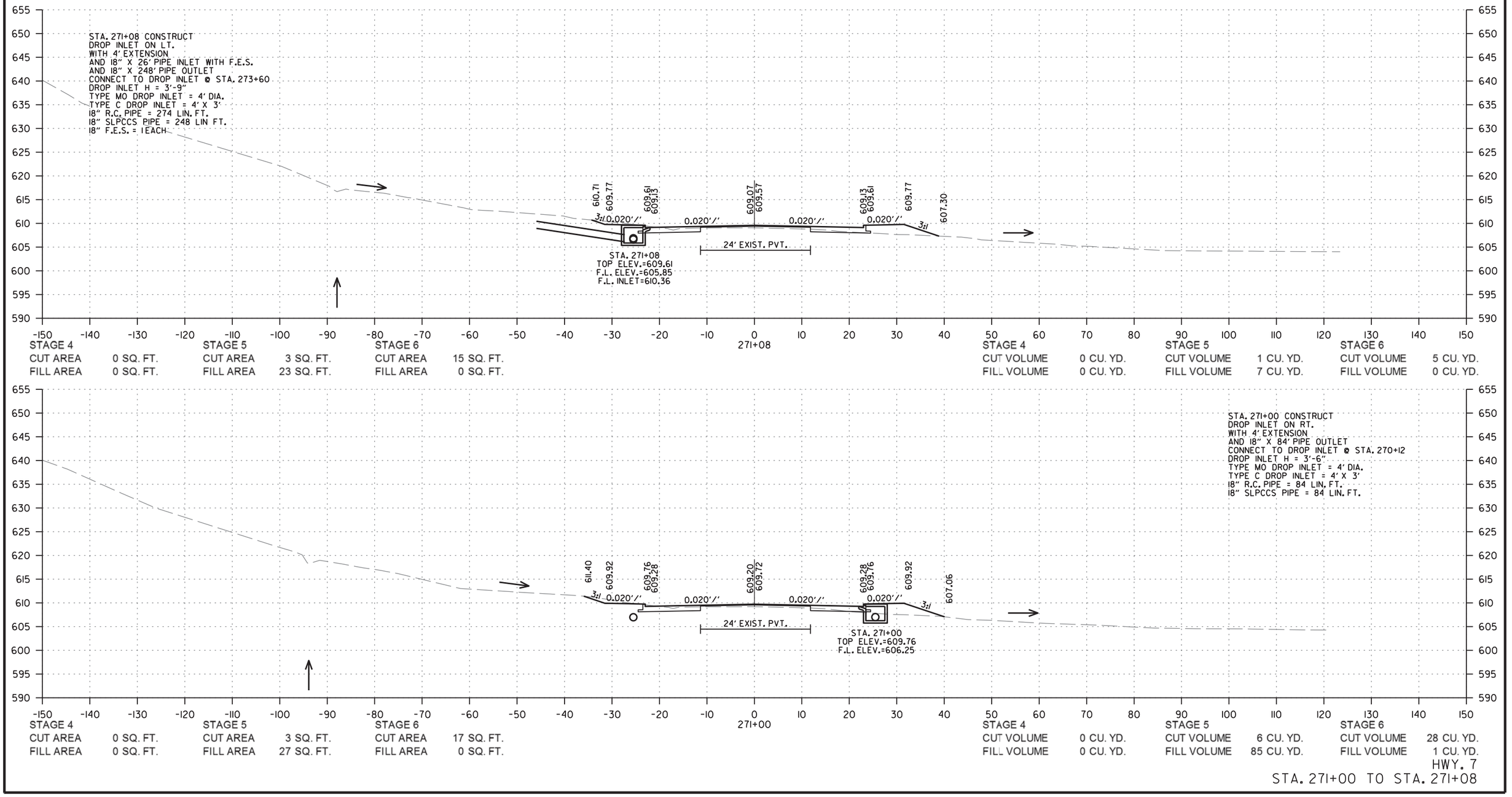
HWY. 7
STA. 270+12 TO STA. 270+45

eh40219 6/22/2020
R061547.DGN

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.		061547	263	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	15 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	5 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	7 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	17 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	28 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	85 CU. YD.	FILL VOLUME	1 CU. YD.

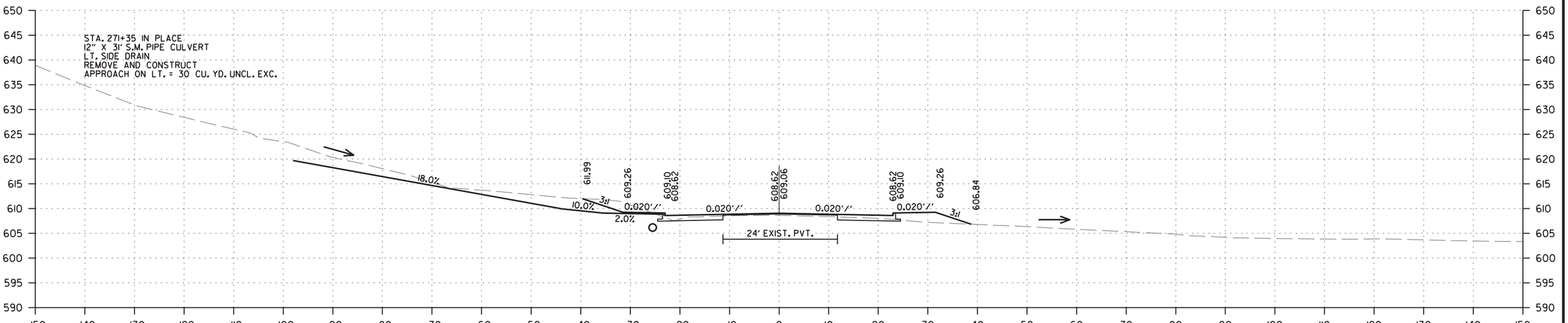
HWY. 7
STA. 271+00 TO STA. 271+08

eh40219 6/22/2020
R061547.DGN

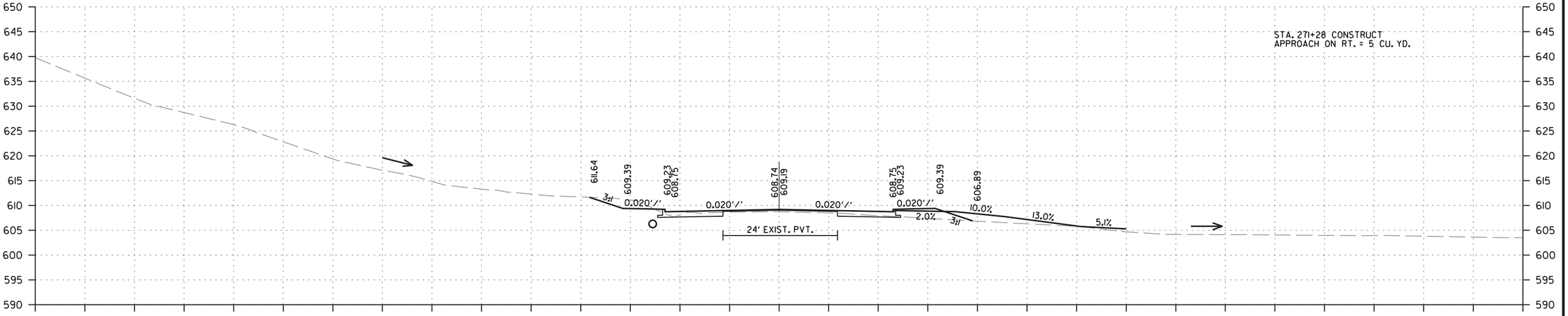
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	264	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 6 CONST. ← → STAGE 5 CONST.
STAGE 6 TRAFFIC



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	23 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	6 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	1 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	6 CU. YD.	FILL VOLUME	0 CU. YD.



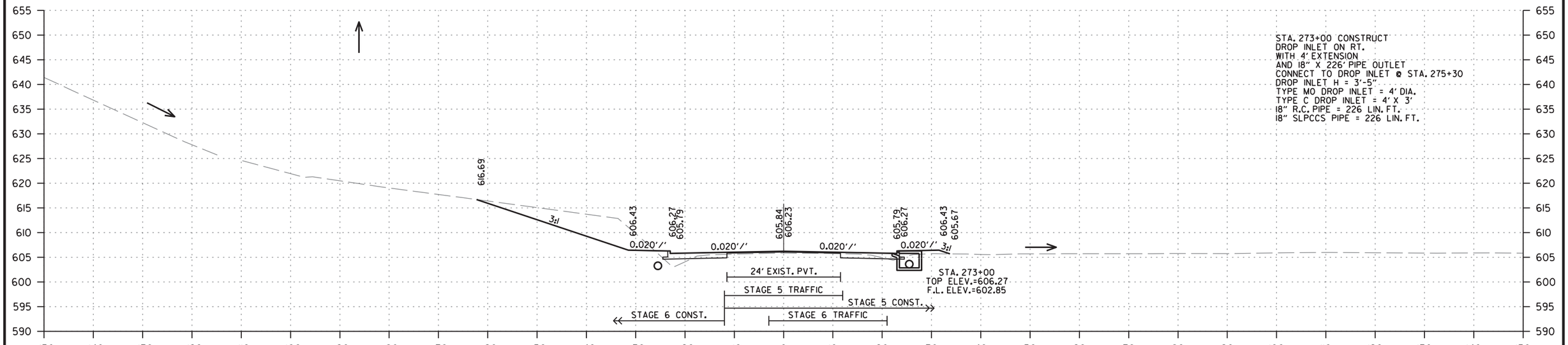
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	23 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	14 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	1 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 271+28 TO STA. 271+35

eh40219 6/22/2020
R061547.DGN

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.		061547	265	323

(2) CROSS SECTIONS



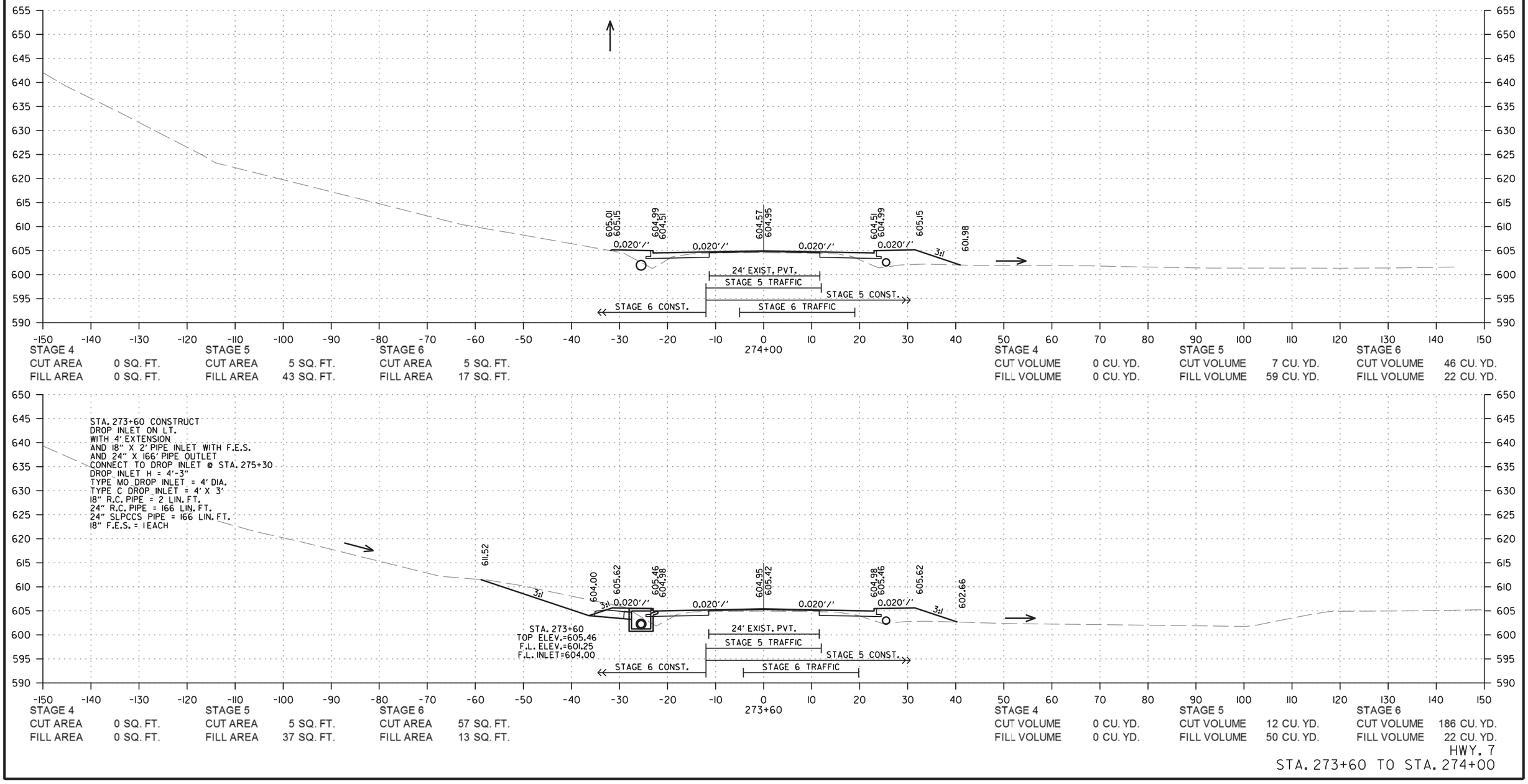
HWY. 7
STA. 272+00 TO STA. 273+00

6/22/2020
ah40219
R061547.DGN

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.		061547	266	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	46 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	43 SQ. FT.	FILL AREA	17 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	59 CU. YD.	FILL VOLUME	22 CU. YD.

274+00

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	57 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	186 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	37 SQ. FT.	FILL AREA	13 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	50 CU. YD.	FILL VOLUME	22 CU. YD.

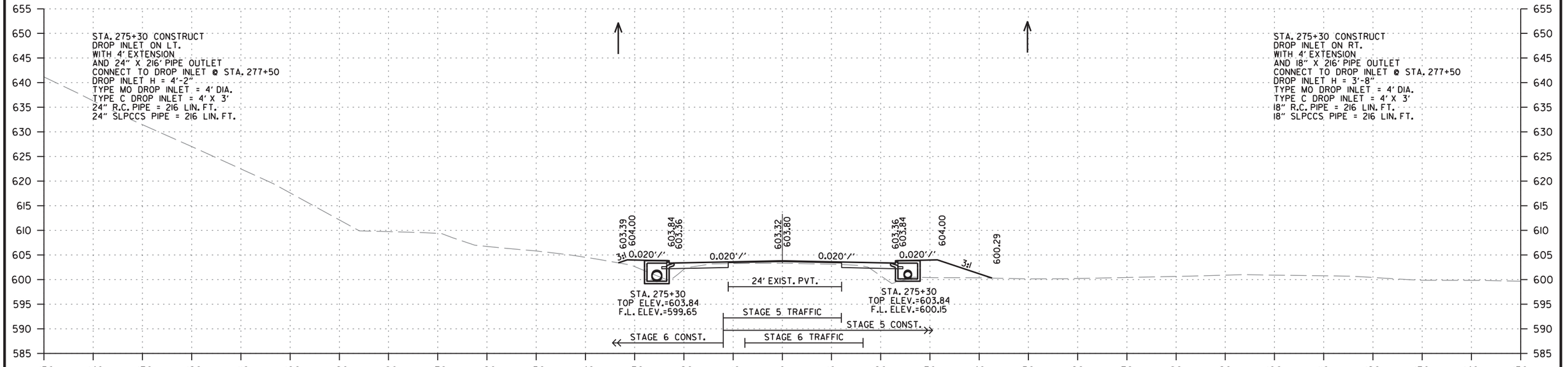
273+60

HWY. 7
STA. 273+60 TO STA. 274+00

6/22/2020
ah40219
R061547.DGN

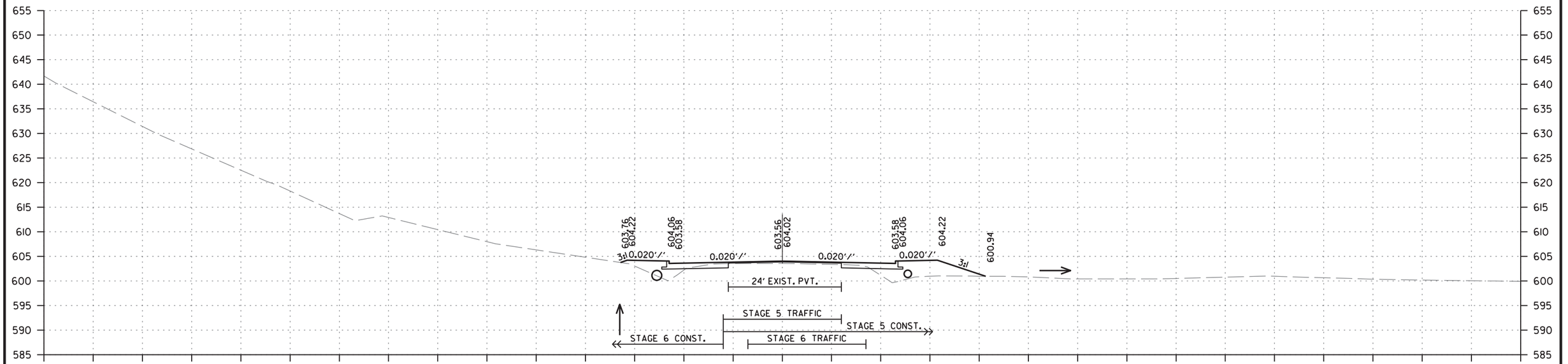
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	267	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	59 SQ. FT.	FILL AREA	24 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	62 CU. YD.	FILL VOLUME	26 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	52 SQ. FT.	FILL AREA	23 SQ. FT.

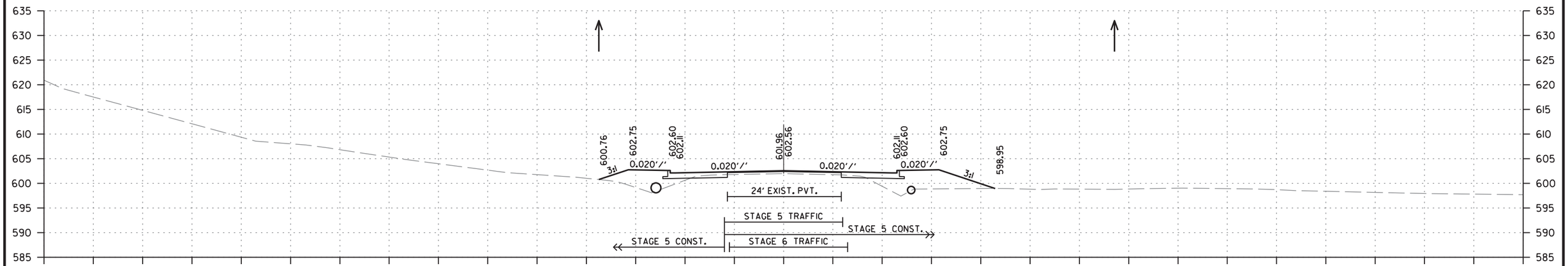
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	15 CU. YD.	CUT VOLUME	19 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	176 CU. YD.	FILL VOLUME	74 CU. YD.

HWY. 7
STA. 275+00 TO STA. 275+30

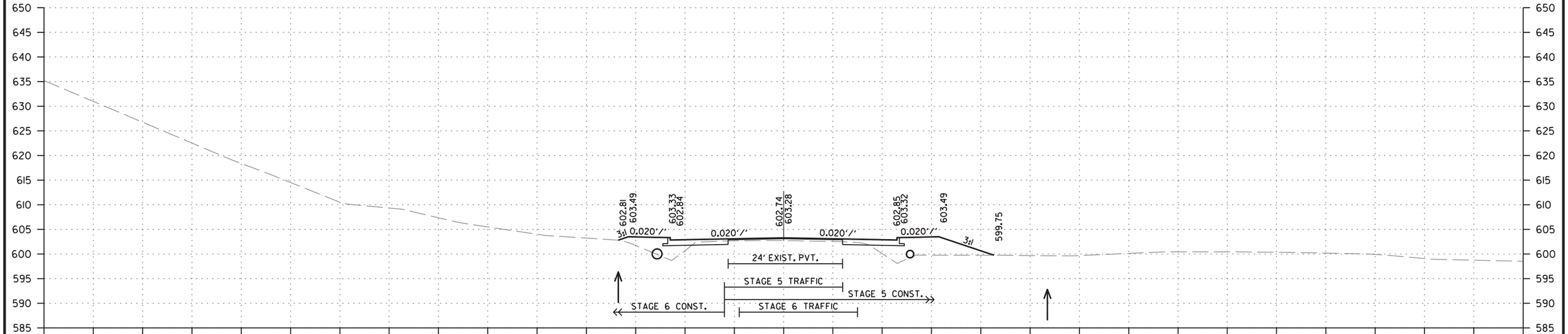
eh40219 6/22/2020
R061547.DGN

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.		061547	268	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	9 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	109 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	320 CU. YD.	FILL VOLUME	57 CU. YD.



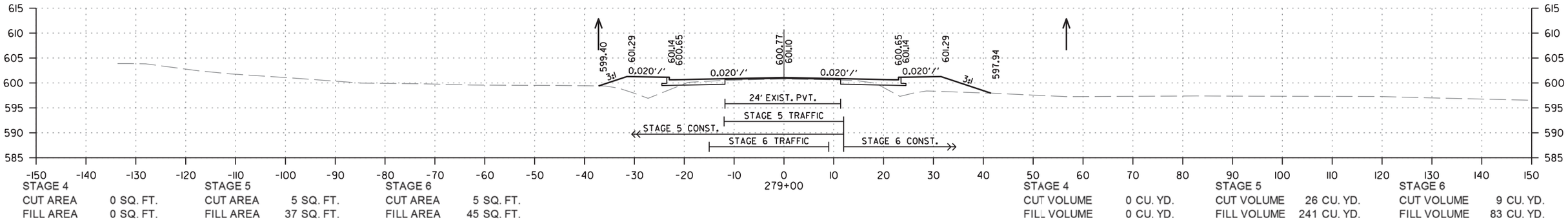
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	13 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	64 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	159 CU. YD.	FILL VOLUME	71 CU. YD.

HWY. 7
STA. 276+00 TO STA. 277+00

ah40219 6/22/2020
R061547.DGN

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.		061547	269	323

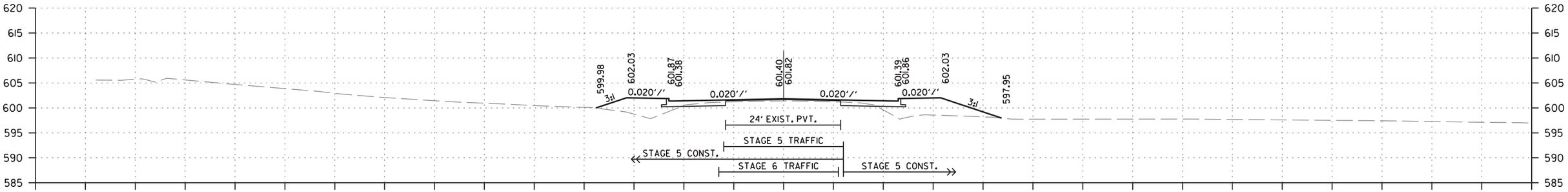
(2) CROSS SECTIONS



279+00

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	37 SQ. FT.	FILL AREA	45 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	26 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	241 CU. YD.	FILL VOLUME	83 CU. YD.



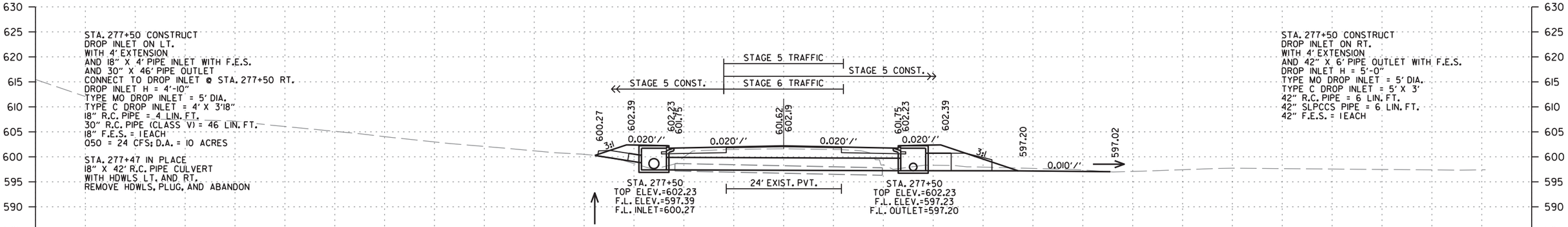
278+00

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	93 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	20 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	201 CU. YD.	FILL VOLUME	0 CU. YD.

STA. 277+50 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 30" X 46' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+50 RT.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 3'18"
18" R.C. PIPE = 4 LIN. FT.
30" R.C. PIPE (CLASS V) = 46 LIN. FT.
18" F.E.S. = 1EACH
Q50 = 24 CFS; D.A. = 10 ACRES

STA. 277+47 IN PLACE
18" X 42' R.C. PIPE CULVERT
WITH HDWLS LT. AND RT.
REMOVE HDWLS, PLUG, AND ABANDON



277+50

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	13 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	124 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	216 CU. YD.	FILL VOLUME	0 CU. YD.

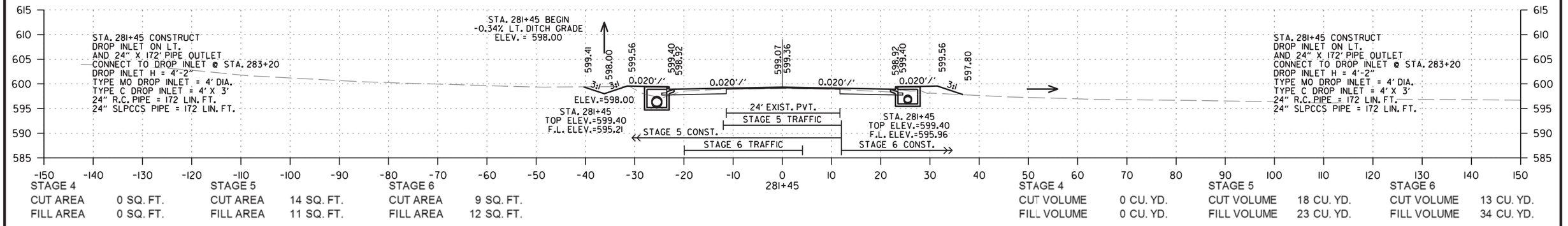
STA. 277+50 CONSTRUCT
DROP INLET ON RT.
WITH 4' EXTENSION
AND 42" X 6' PIPE OUTLET WITH F.E.S.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 5' X 3'
42" R.C. PIPE = 6 LIN. FT.
42" SLPCCS PIPE = 6 LIN. FT.
42" F.E.S. = 1EACH

HWY. 7
STA. 277+50 TO STA. 279+00

6/22/2020
eh40219
R061547.DGN

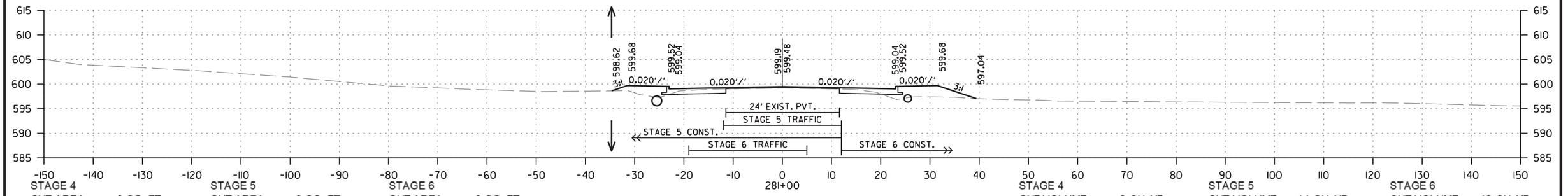
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	270	323

(2) CROSS SECTIONS



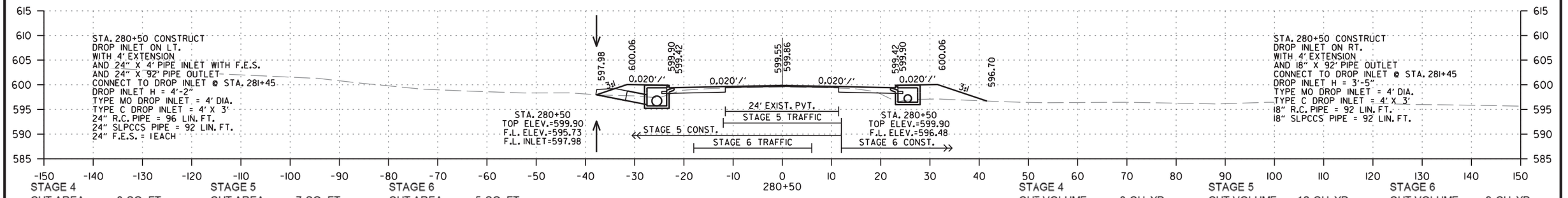
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	14 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	12 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	18 CU. YD.	CUT VOLUME	13 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	23 CU. YD.	FILL VOLUME	34 CU. YD.



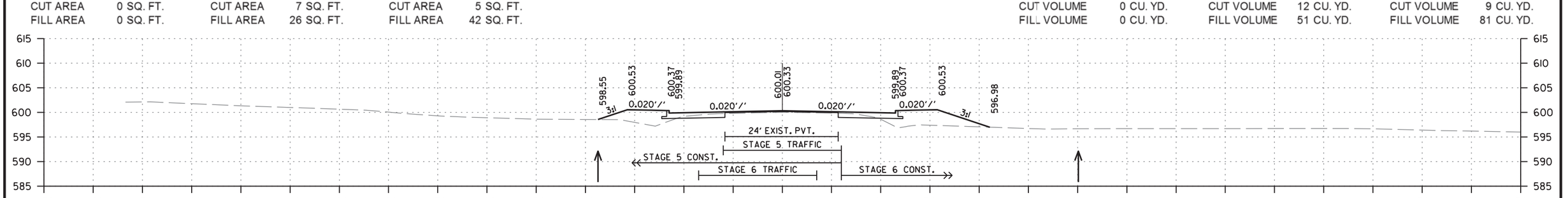
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	29 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	14 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	39 CU. YD.	FILL VOLUME	66 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	42 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	51 CU. YD.	FILL VOLUME	81 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	29 SQ. FT.	FILL AREA	46 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	56 CU. YD.	CUT VOLUME	19 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	452 CU. YD.	FILL VOLUME	170 CU. YD.

HWY. 7
STA. 280+00 TO STA. 281+45

eh40219 6/22/2020
R061547.DGN

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.		061547	271	323

(2) CROSS SECTIONS

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	21 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	8 SQ. FT.

282+77

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	56 CU. YD.	CUT VOLUME	26 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	29 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	18 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	12 SQ. FT.

282+00

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	9 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	18 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	14 SQ. FT.

281+82

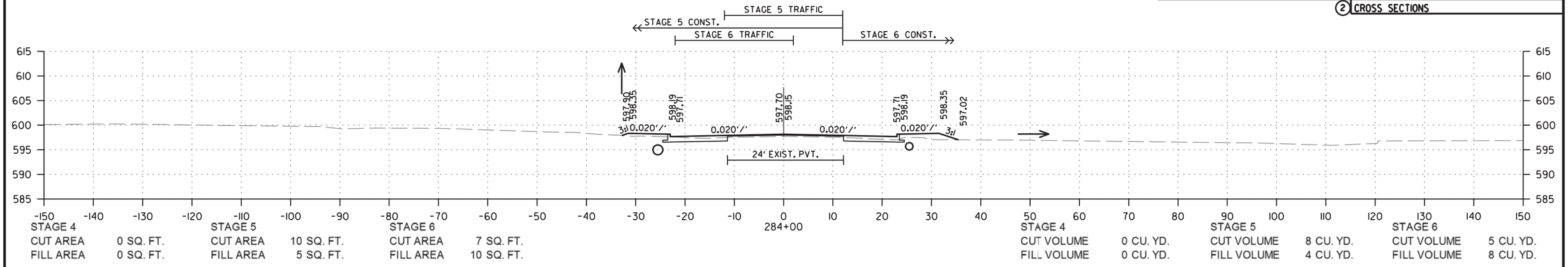
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	39 CU. YD.	CUT VOLUME	21 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	38 CU. YD.	FILL VOLUME	65 CU. YD.

HWY. 7
STA. 281+82 TO STA. 282+77

eh40219 6/22/2020
R061547.DGN

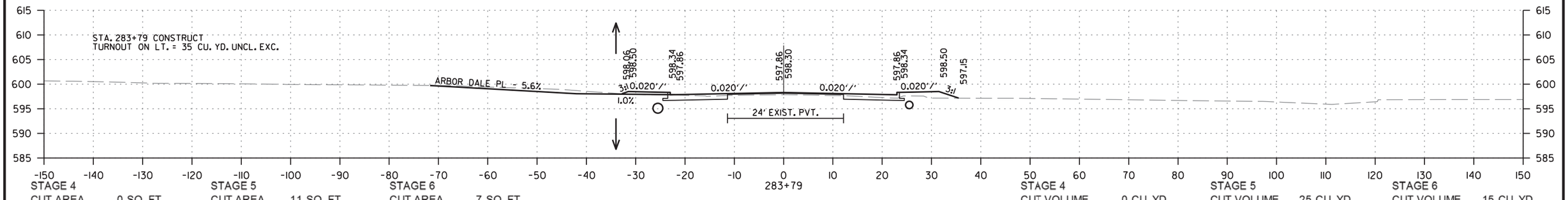
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	272	323

(2) CROSS SECTIONS



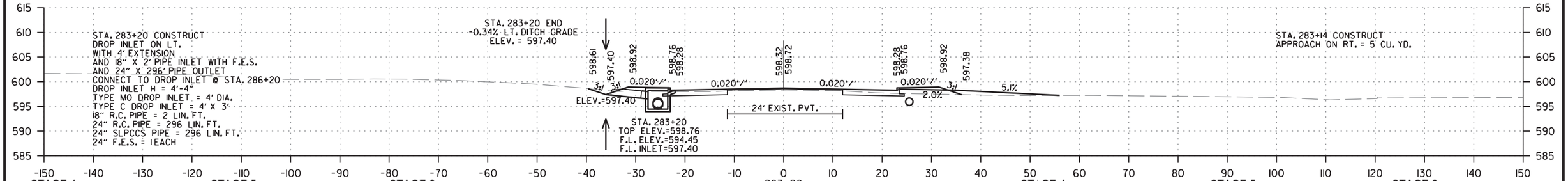
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	5 SQ. FT.	FILL AREA	10 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	4 CU. YD.	FILL VOLUME	8 CU. YD.



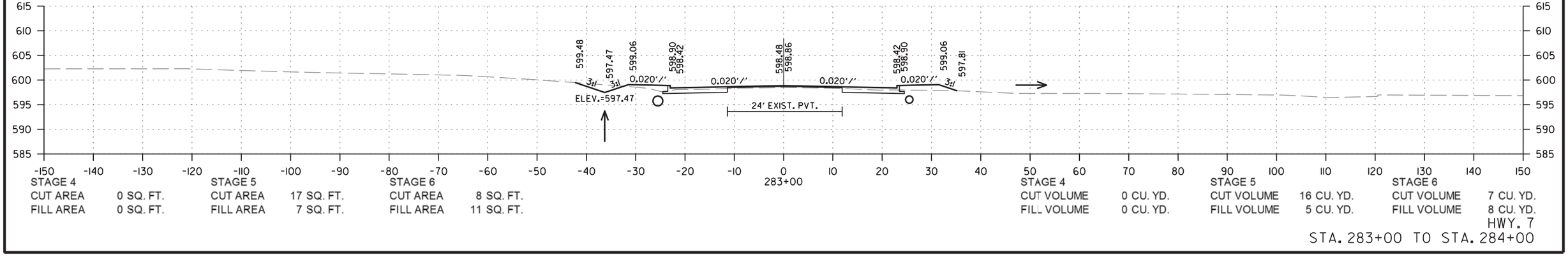
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	11 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	5 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	25 CU. YD.	CUT VOLUME	15 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	27 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	12 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	14 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	9 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	17 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	16 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	8 CU. YD.

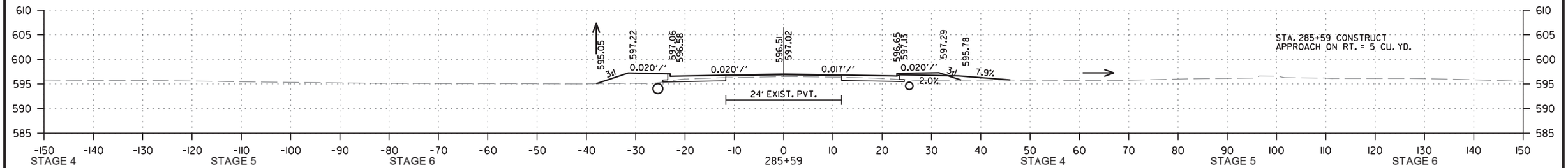
HWY. 7
STA. 283+00 TO STA. 284+00

eh40219 6/22/2020
R061547.DGN

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.		061547	273	323

(2) CROSS SECTIONS

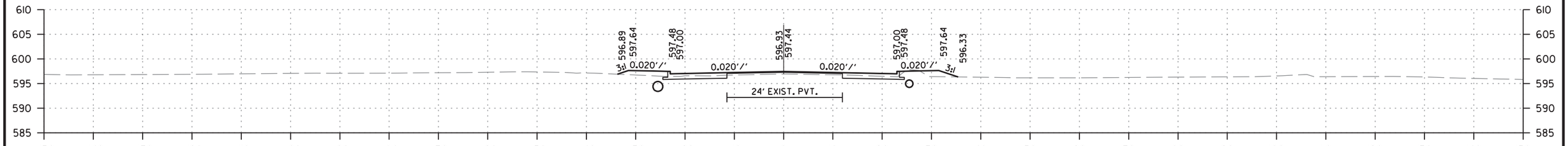
STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	15 SQ. FT.

285+59

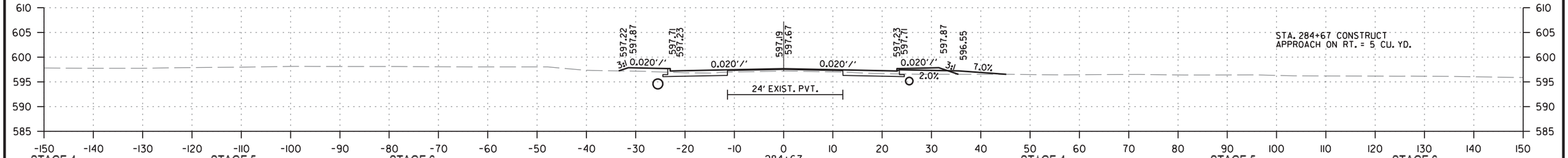
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	14 CU. YD.	CUT VOLUME	15 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	34 CU. YD.	FILL VOLUME	23 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	6 SQ. FT.

285+00

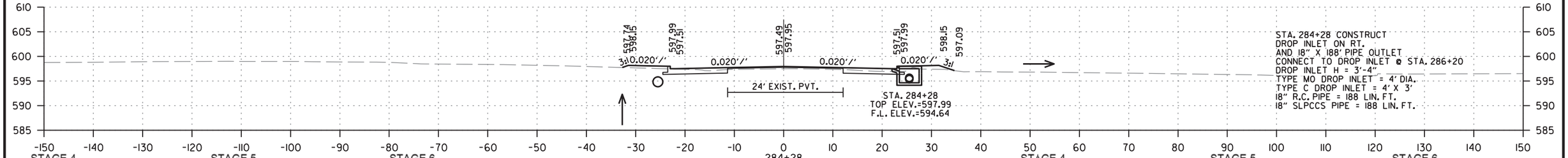
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	9 CU. YD.	FILL VOLUME	11 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	12 SQ. FT.

284+67

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	7 CU. YD.	FILL VOLUME	14 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	7 SQ. FT.

284+28

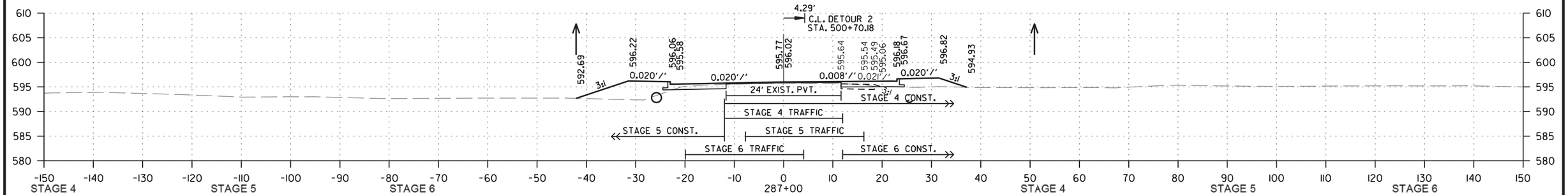
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	9 CU. YD.

HWY. 7
STA. 284+28 TO STA. 285+59

6/22/2020
ah40219
R061547.DGN

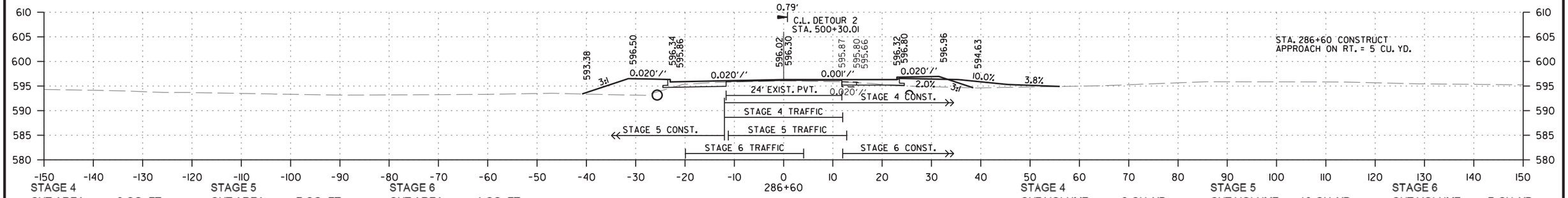
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	274	323

(2) CROSS SECTIONS



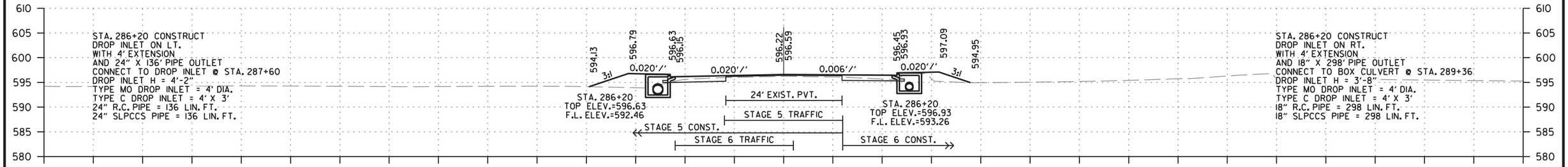
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	6 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	46 SQ. FT.	FILL AREA	19 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	7 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	63 CU. YD.	FILL VOLUME	31 CU. YD.



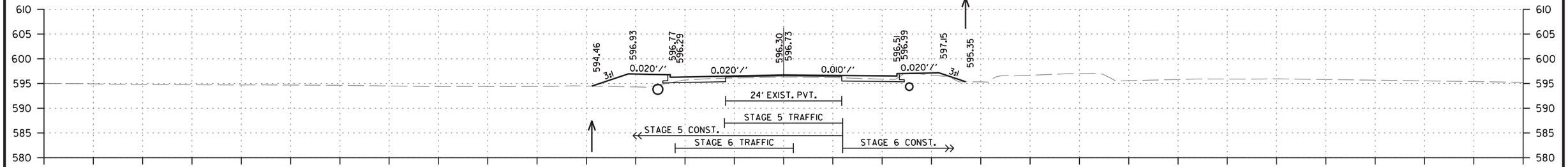
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	3 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	39 SQ. FT.	FILL AREA	23 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	2 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	52 CU. YD.	FILL VOLUME	25 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	31 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	5 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	28 SQ. FT.	FILL AREA	3 SQ. FT.

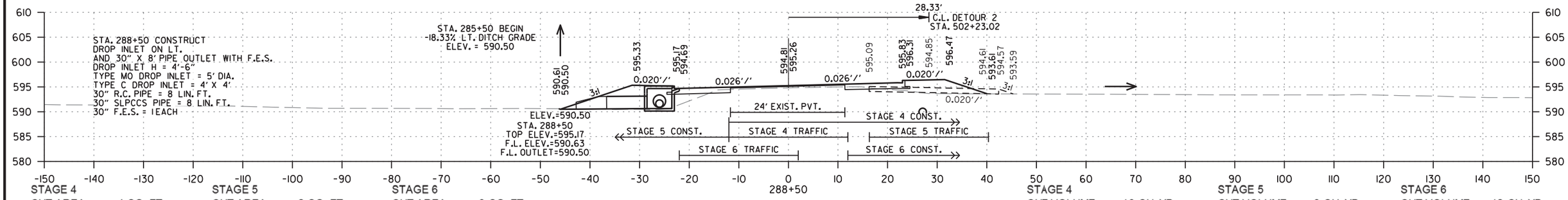
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	11 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	38 CU. YD.	FILL VOLUME	14 CU. YD.

HWY. 7
STA. 286+00 TO STA. 287+00

eh40219 6/22/2020
R061547.DGN

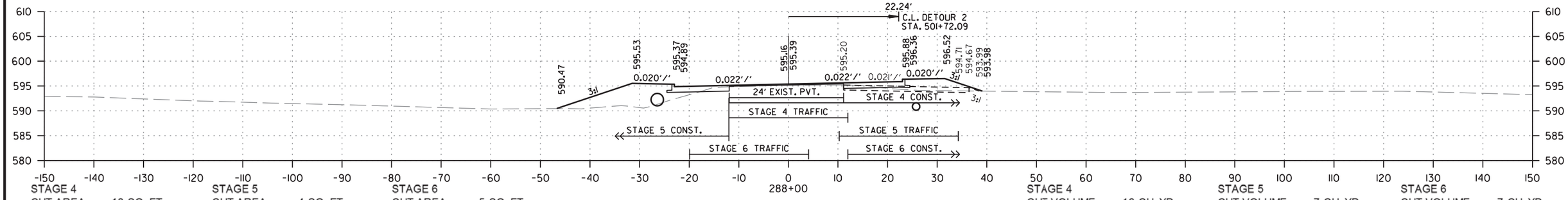
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	275	323

(2) CROSS SECTIONS



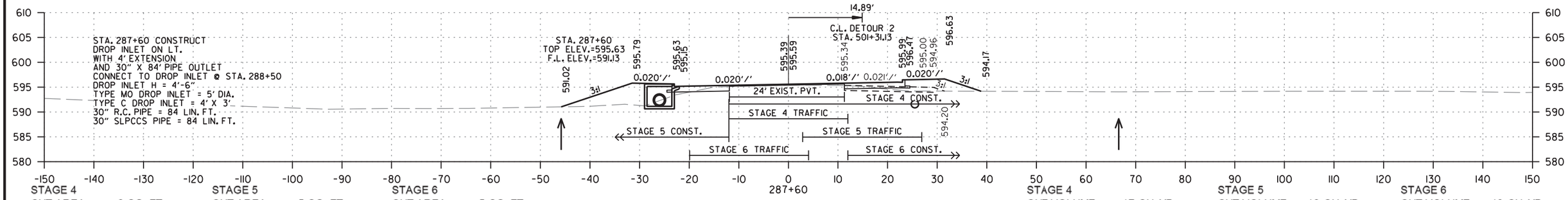
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	4 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	3 SQ. FT.	FILL AREA	82 SQ. FT.	FILL AREA	17 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	16 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	12 CU. YD.
FILL VOLUME	4 CU. YD.	FILL VOLUME	144 CU. YD.	FILL VOLUME	32 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	13 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	1 SQ. FT.	FILL AREA	73 SQ. FT.	FILL AREA	18 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	16 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	1 CU. YD.	FILL VOLUME	100 CU. YD.	FILL VOLUME	30 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	9 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	1 SQ. FT.	FILL AREA	62 SQ. FT.	FILL AREA	22 SQ. FT.

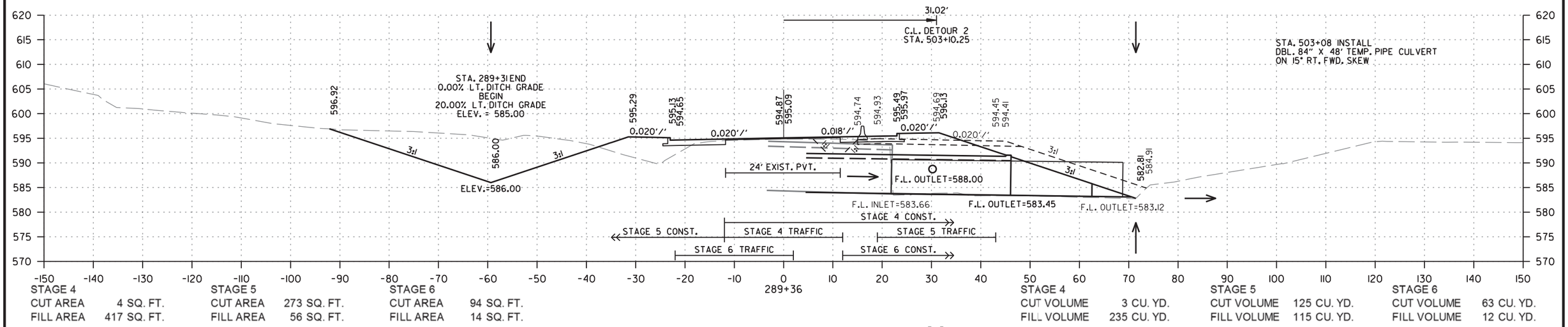
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	17 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	10 CU. YD.
FILL VOLUME	1 CU. YD.	FILL VOLUME	120 CU. YD.	FILL VOLUME	46 CU. YD.

HWY. 7
STA. 287+60 TO STA. 288+50

eh40219 6/22/2020
R061547.DGN

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.		061547	276	323

(2) CROSS SECTIONS



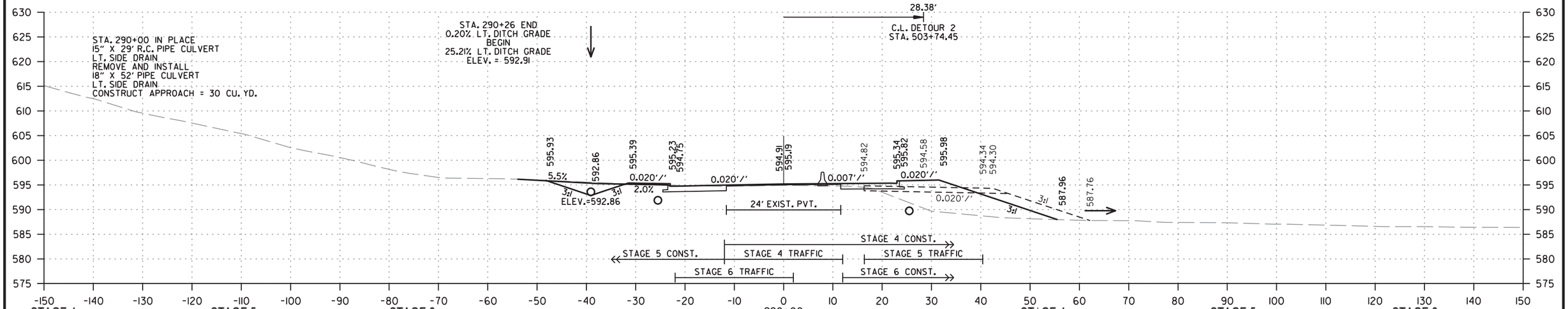
HWY. 7
STA. 289+00 TO STA. 289+36

ah40219 6/22/2020
R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
09-10-20			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		061547	277	323

(2) CROSS SECTIONS

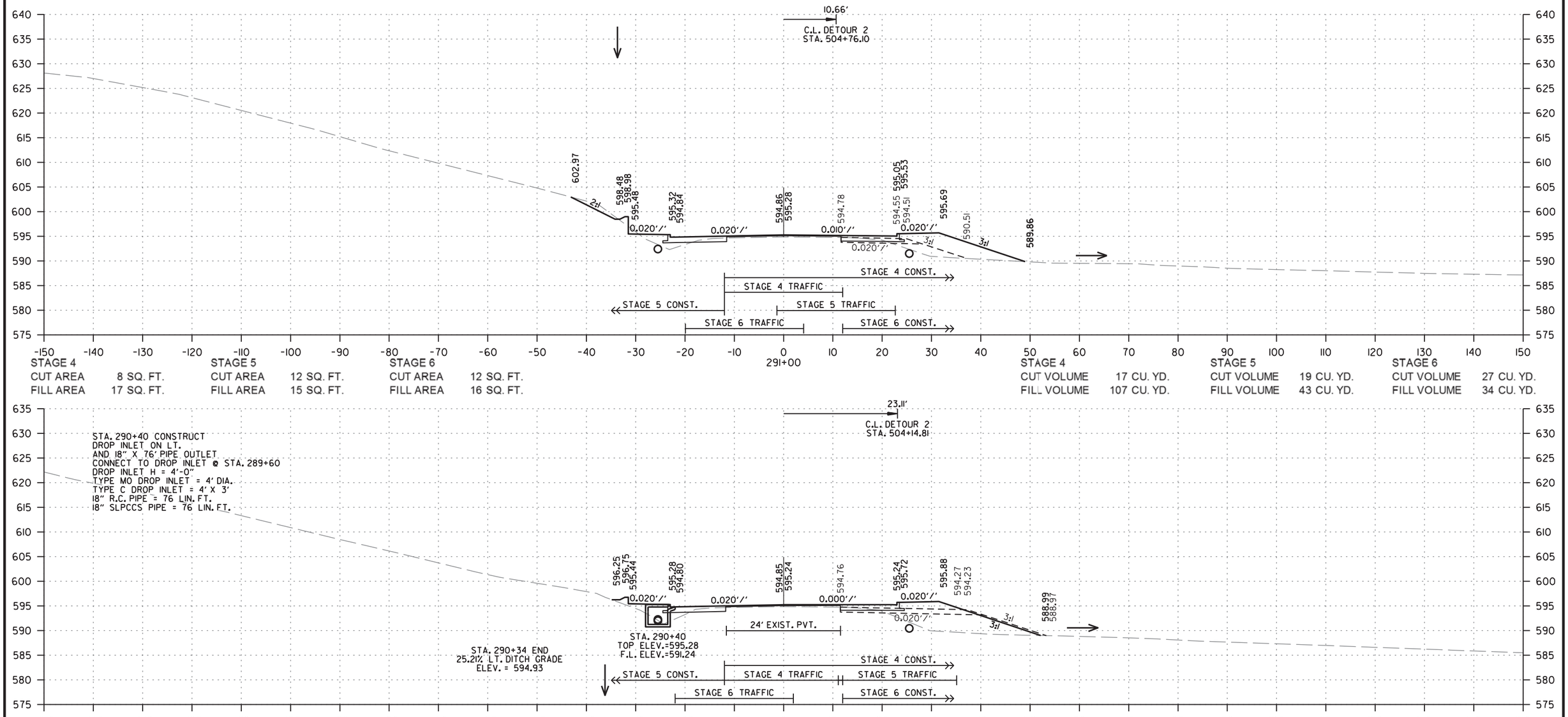


HWY. 7
STA. 289+60 TO STA. 290+00

ah40219 8/4/2020
R061547.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
09-10-20				6	ARK.			
				JOB NO.		061547	278	323

(2) CROSS SECTIONS

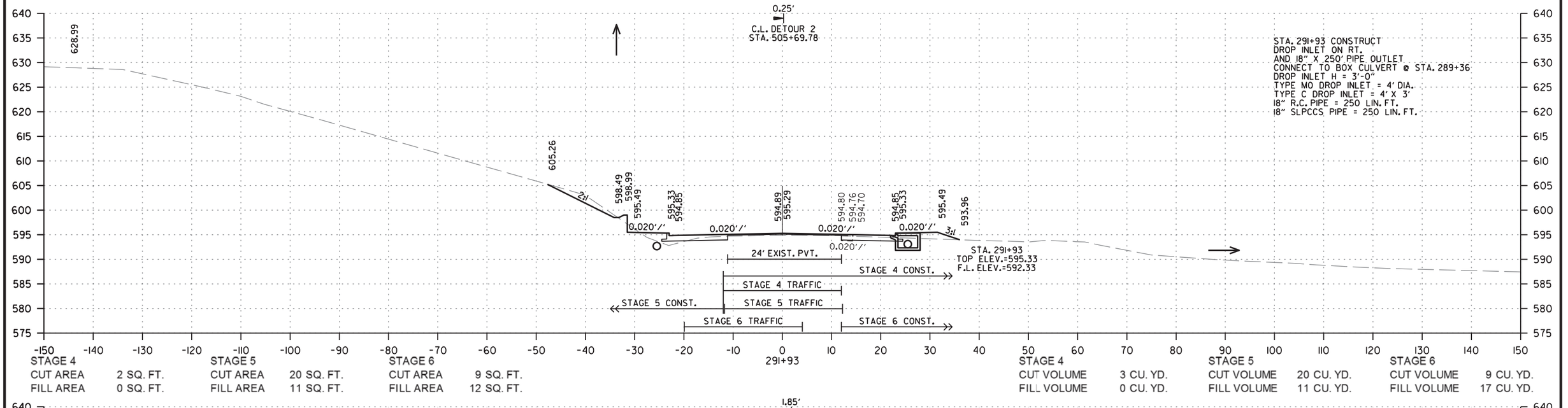


HWY. 7
STA. 290+40 TO STA. 291+00

eh40219 8/4/2020
R061547.DGN

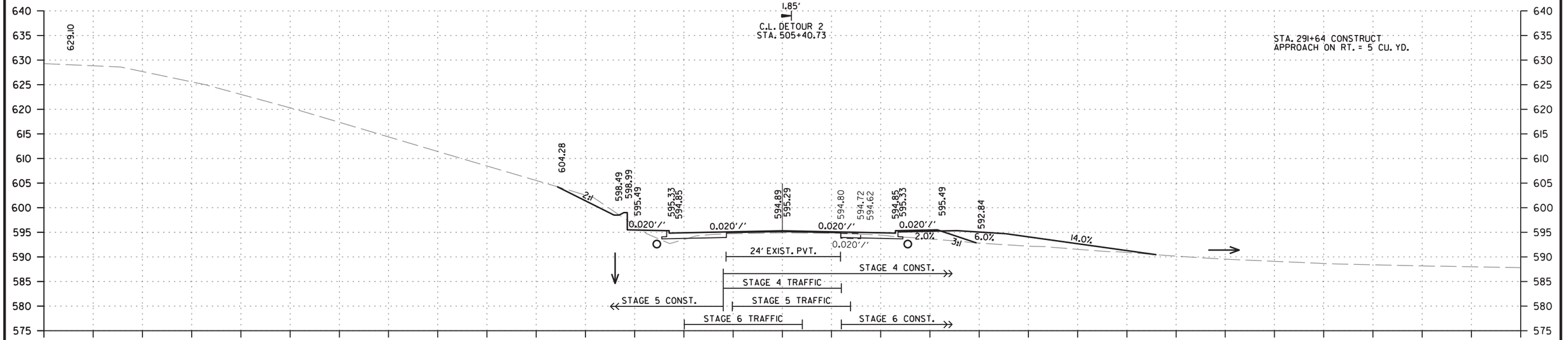
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	279	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	2 SQ. FT.	CUT AREA	20 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	12 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	3 CU. YD.	CUT VOLUME	20 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	11 CU. YD.	FILL VOLUME	17 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	4 SQ. FT.	CUT AREA	18 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	10 SQ. FT.	FILL AREA	20 SQ. FT.

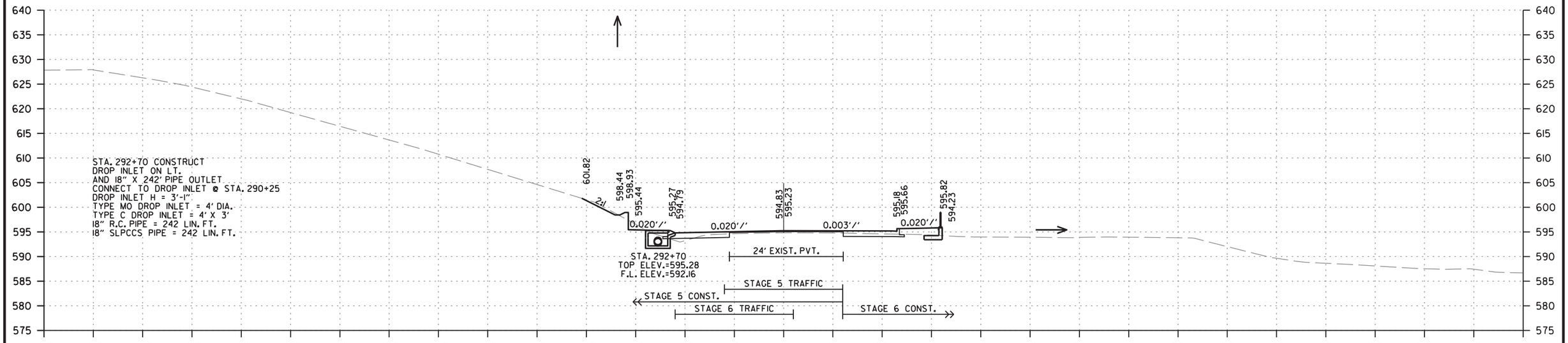
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	14 CU. YD.	CUT VOLUME	36 CU. YD.	CUT VOLUME	24 CU. YD.
FILL VOLUME	20 CU. YD.	FILL VOLUME	30 CU. YD.	FILL VOLUME	43 CU. YD.

HWY. 7
STA. 291+64 TO STA. 291+93

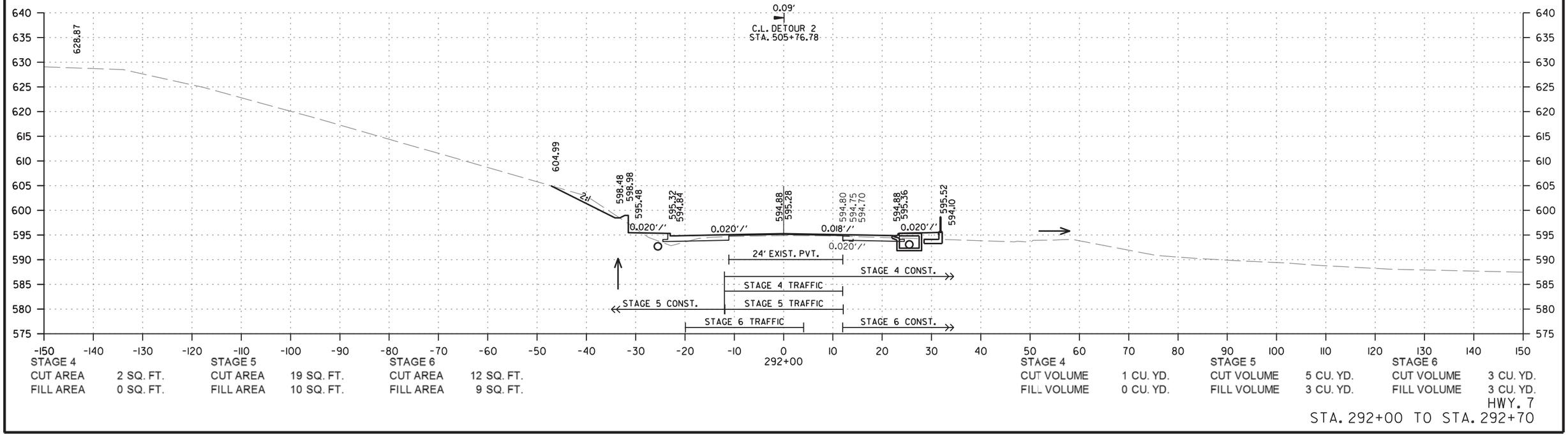
ah40219 6/22/2020
R061547.DGN

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.		061547	280	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	3 CU. YD.	CUT VOLUME	38 CU. YD.	CUT VOLUME	29 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	5 SQ. FT.	FILL AREA	10 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	25 CU. YD.



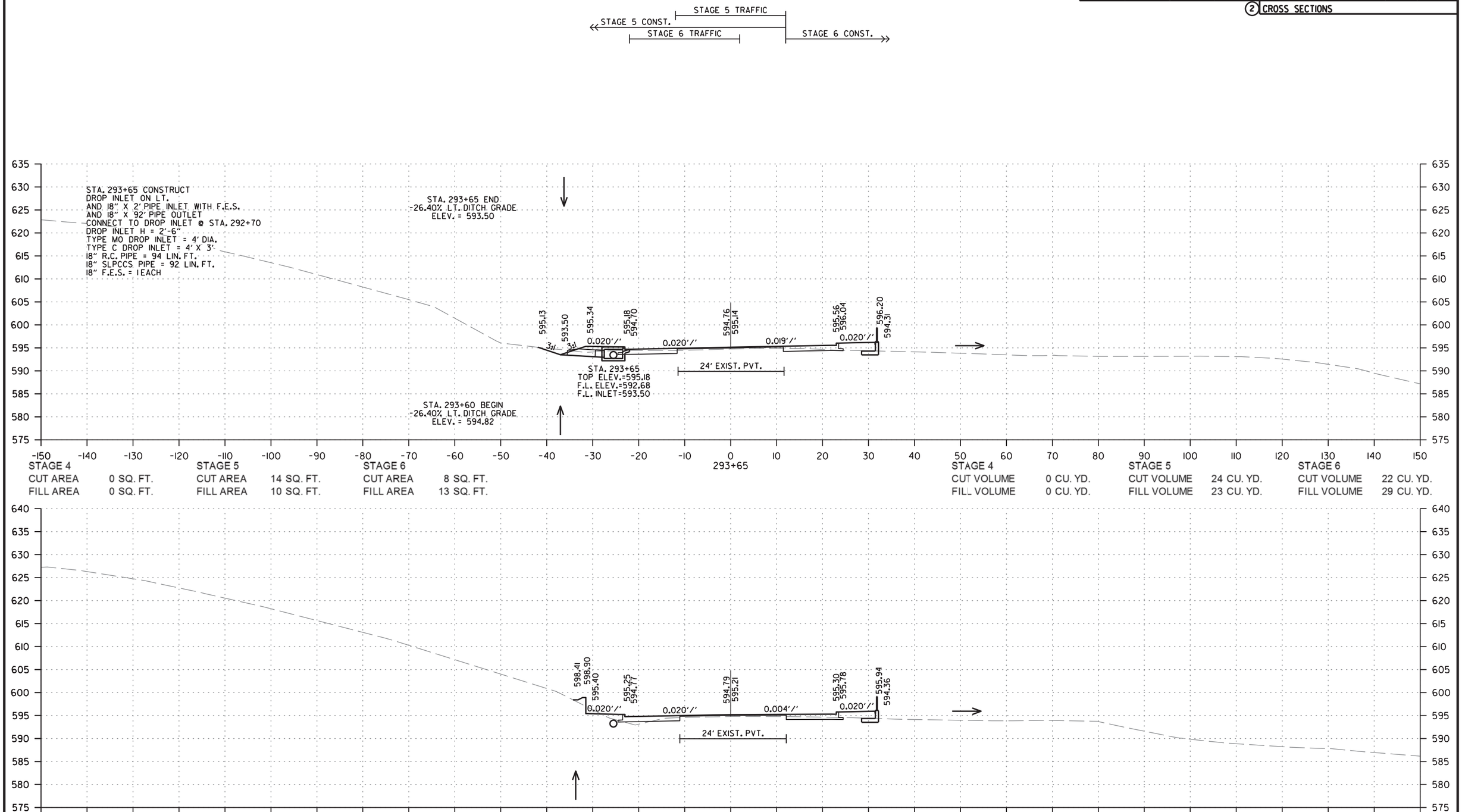
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	2 SQ. FT.	CUT AREA	19 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	1 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	10 SQ. FT.	FILL AREA	9 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	3 CU. YD.	FILL VOLUME	3 CU. YD.

HWY. 7
STA. 292+00 TO STA. 292+70

ah40219 6/22/2020
R061547.DGN

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.		061547	281	323

(2) CROSS SECTIONS



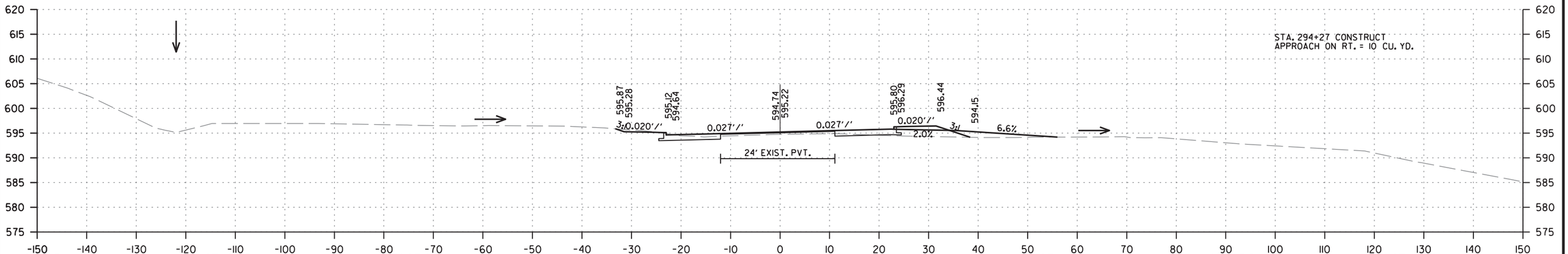
HWY. 7
STA. 293+00 TO STA. 293+65

ah40219 6/22/2020
R061547.DGN

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.		061547	282	323

(2) CROSS SECTIONS

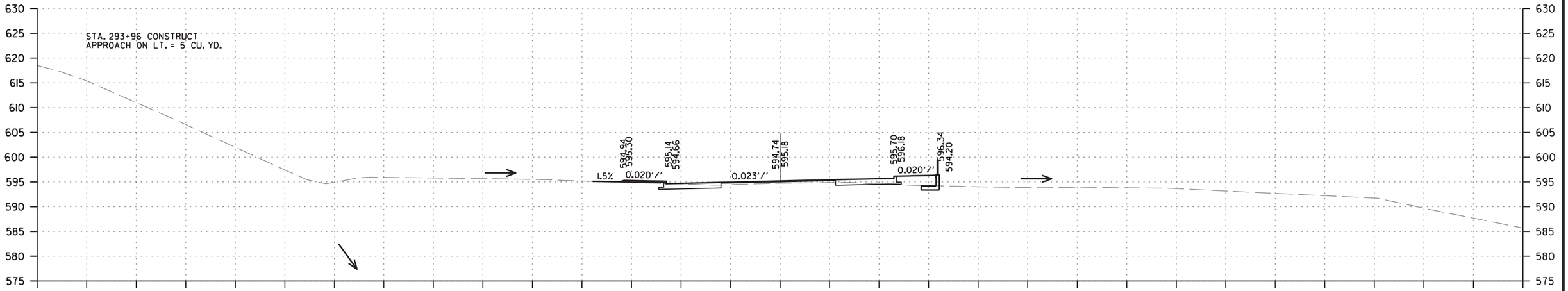
STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.



STA. 294+27 CONSTRUCT
APPROACH ON RT. = 10 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	12 SQ. FT.	CUT AREA	2 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	24 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	2 CU. YD.	FILL VOLUME	20 CU. YD.



STA. 293+96 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	11 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	4 SQ. FT.	FILL AREA	15 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	16 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	9 CU. YD.	FILL VOLUME	18 CU. YD.

HWY. 7
STA. 294+00 TO STA. 294+27

ah40219 6/22/2020
R061547.DGN

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.		061547	283	323

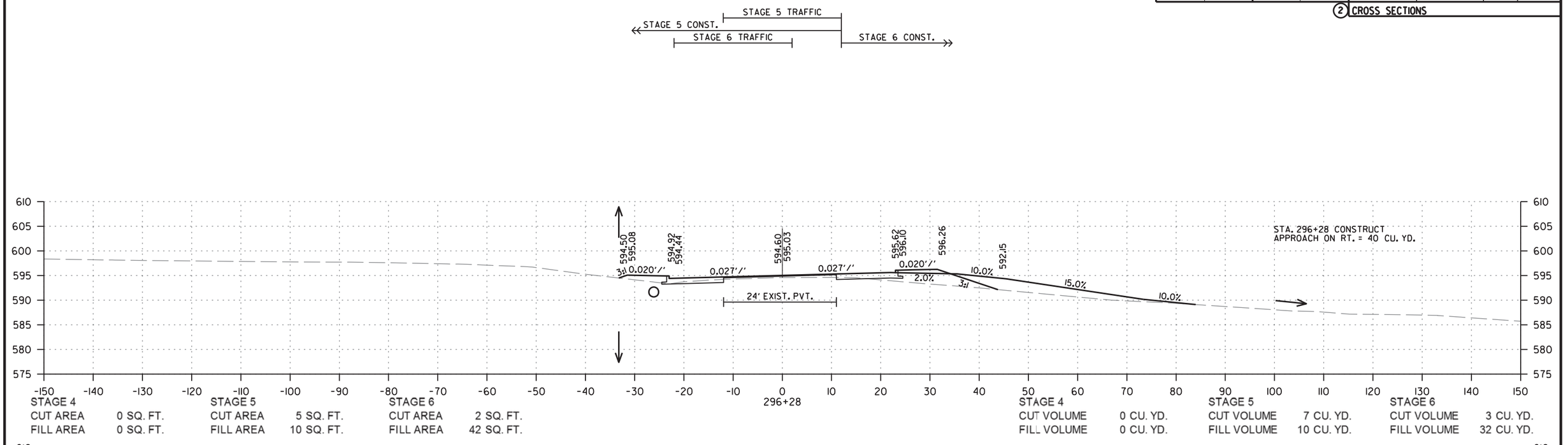
(2) CROSS SECTIONS

HWY. 7
STA. 294+40 TO STA. 295+20

6/22/2020
ah40219
R061547.DGN

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.		061547	284	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	2 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	10 SQ. FT.	FILL AREA	42 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	32 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	28 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	1 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	1 CU. YD.	FILL VOLUME	3 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	8 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	28 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	41 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	110 CU. YD.

HWY. 7
STA. 296+00 TO STA. 296+28

ah40219 6/22/2020
R061547.DGN

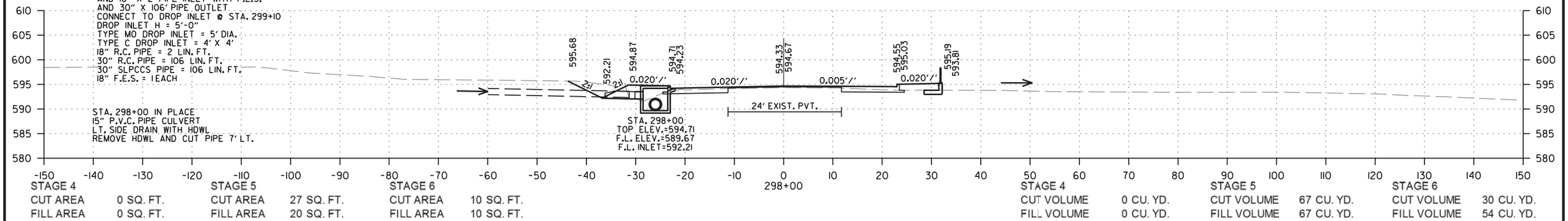
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	285	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.

STA. 298+00 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 30" X 106' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 299+10
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
18" R.C. PIPE = 2 LIN. FT.
30" R.C. PIPE = 106 LIN. FT.
30" SLPCCS PIPE = 106 LIN. FT.
18" F.E.S. = 1 EACH

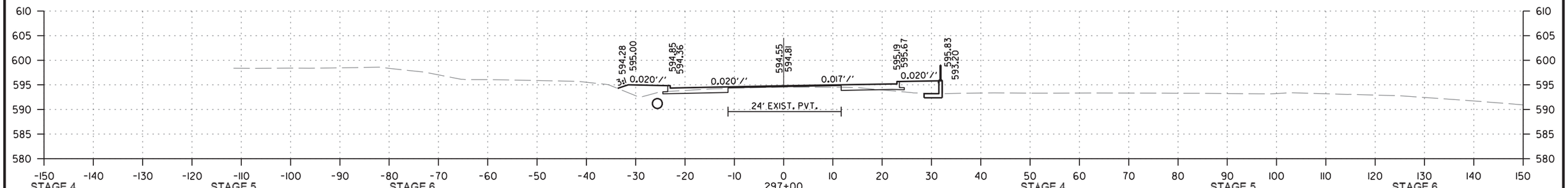
STA. 298+00 IN PLACE
15" P.V.C. PIPE CULVERT
LT. SIDE DRAIN WITH HDWL
REMOVE HDWL AND CUT PIPE 7' LT.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	27 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	20 SQ. FT.	FILL AREA	10 SQ. FT.

298+00

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	67 CU. YD.	CUT VOLUME	30 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	67 CU. YD.	FILL VOLUME	54 CU. YD.



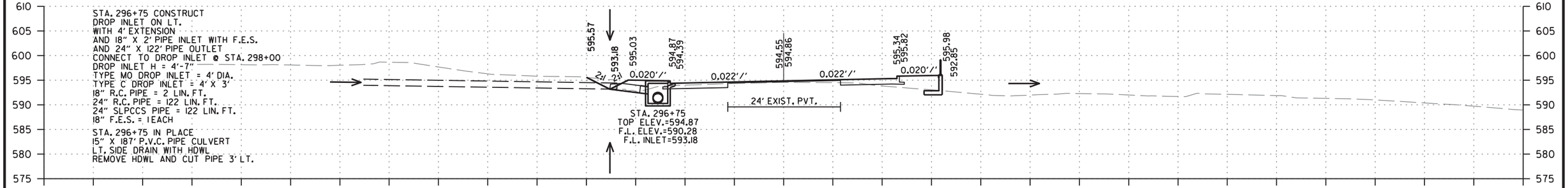
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	19 SQ. FT.

297+00

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	15 CU. YD.	FILL VOLUME	19 CU. YD.

STA. 296+75 CONSTRUCT
DROP INLET ON LT.
WITH 4' EXTENSION
AND 18" X 2' PIPE INLET WITH F.E.S.
AND 24" X 122' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 298+00
DROP INLET H = 4'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 2 LIN. FT.
24" R.C. PIPE = 122 LIN. FT.
24" SLPCCS PIPE = 122 LIN. FT.
18" F.E.S. = 1 EACH

STA. 296+75 IN PLACE
15" X 187' P.V.C. PIPE CULVERT
LT. SIDE DRAIN WITH HDWL
REMOVE HDWL AND CUT PIPE 3' LT.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	15 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	17 SQ. FT.	FILL AREA	23 SQ. FT.

296+75

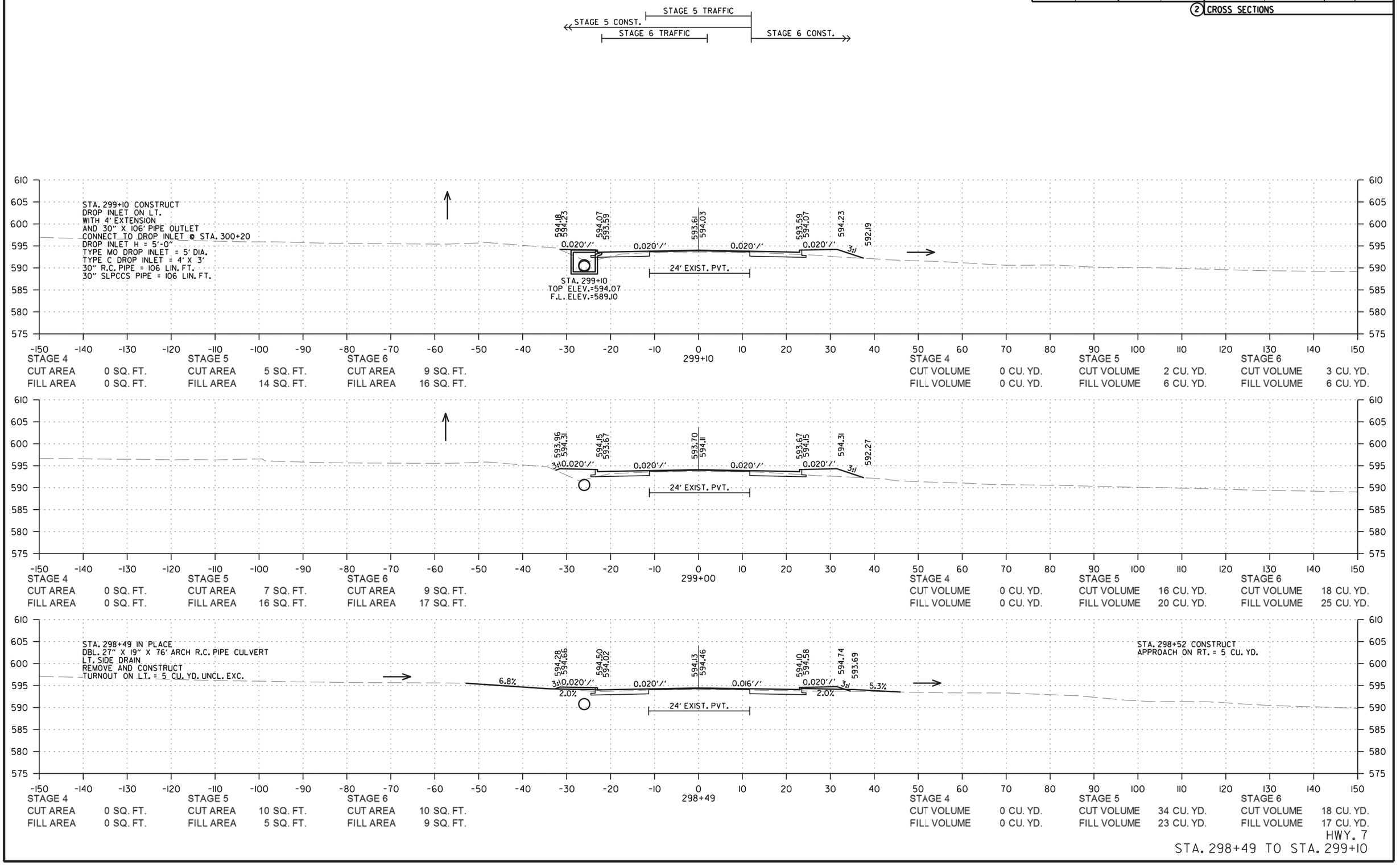
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	24 CU. YD.	FILL VOLUME	57 CU. YD.

HWY. 7
STA. 296+75 TO STA. 298+00

eh40219 6/22/2020
R061547.DGN

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.		061547	286	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	16 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	6 CU. YD.	FILL VOLUME	6 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	17 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	16 CU. YD.	CUT VOLUME	18 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	25 CU. YD.

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	5 SQ. FT.	FILL AREA	9 SQ. FT.

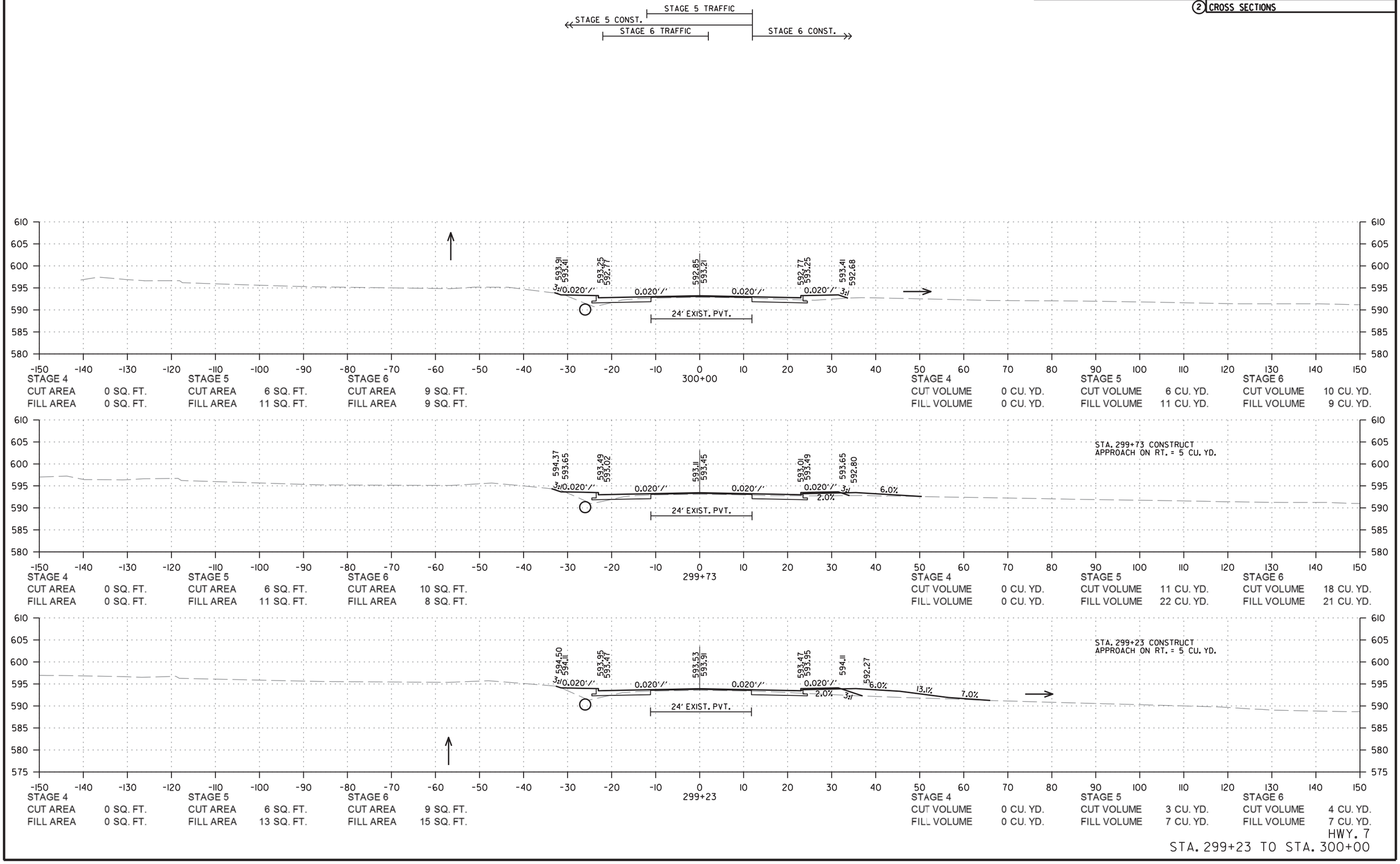
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	34 CU. YD.	CUT VOLUME	18 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	23 CU. YD.	FILL VOLUME	17 CU. YD.

HWY. 7
STA. 298+49 TO STA. 299+10

eh40219 6/22/2020
R061547.DGN

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.		061547	287	323

(2) CROSS SECTIONS

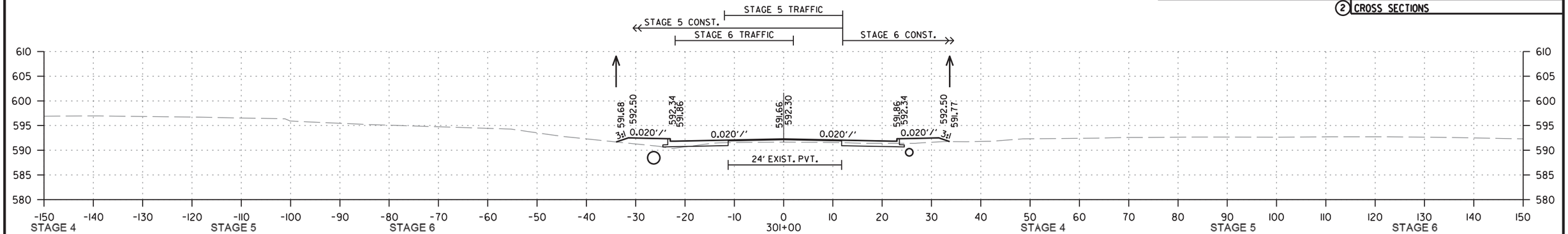


HWY. 7
STA. 299+23 TO STA. 300+00

eh40219 6/22/2020
R061547.DGN

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.		061547	288	323

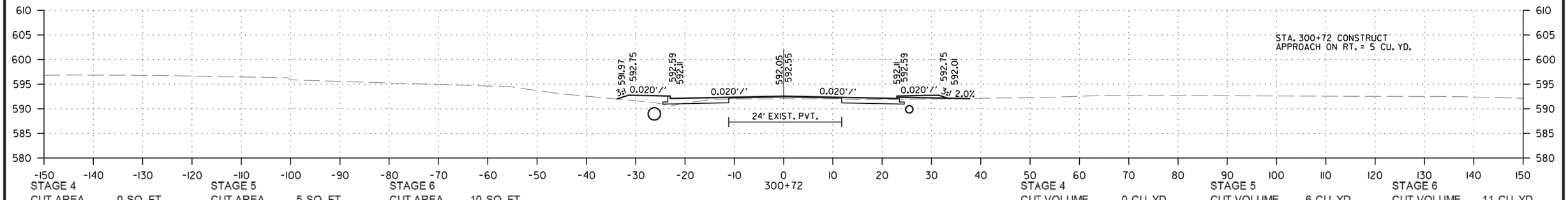
(2) CROSS SECTIONS



301+00

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	8 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	8 CU. YD.

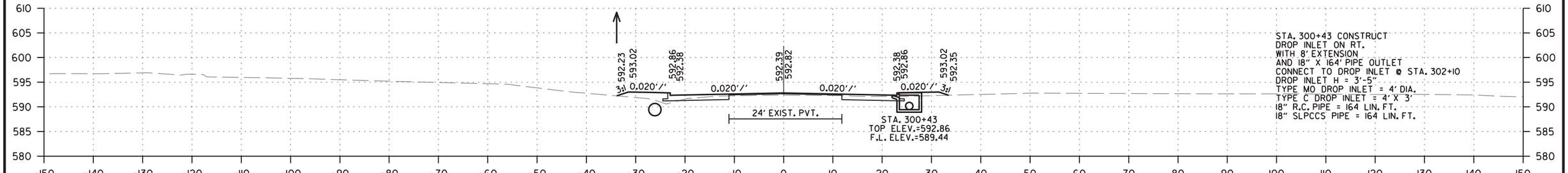


STA. 300+72 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

300+72

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	12 SQ. FT.	FILL AREA	7 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	11 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	8 CU. YD.

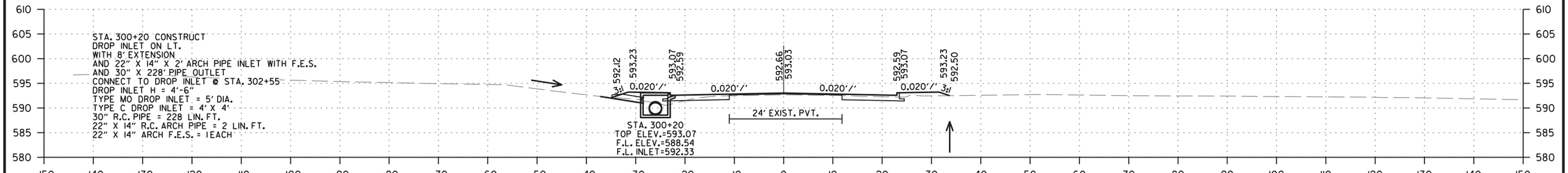


STA. 300+43 CONSTRUCT
DROP INLET ON RT.
WITH 8' EXTENSION
AND 18" X 164' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 302+10
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 164 LIN. FT.
18" SLPCCS PIPE = 164 LIN. FT.

300+43

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	13 SQ. FT.	FILL AREA	7 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	13 CU. YD.	FILL VOLUME	6 CU. YD.



STA. 300+20 CONSTRUCT
DROP INLET ON LT.
WITH 8' EXTENSION
AND 22" X 14" X 2' ARCH PIPE INLET WITH F.E.S.
AND 30" X 228' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 302+55
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE = 228 LIN. FT.
22" X 14" R.C. ARCH PIPE = 2 LIN. FT.
22" X 14" ARCH F.E.S. = 1EACH

300+20

STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	18 SQ. FT.	FILL AREA	7 SQ. FT.

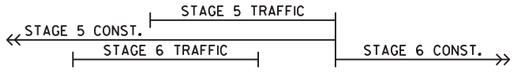
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	11 CU. YD.	FILL VOLUME	6 CU. YD.

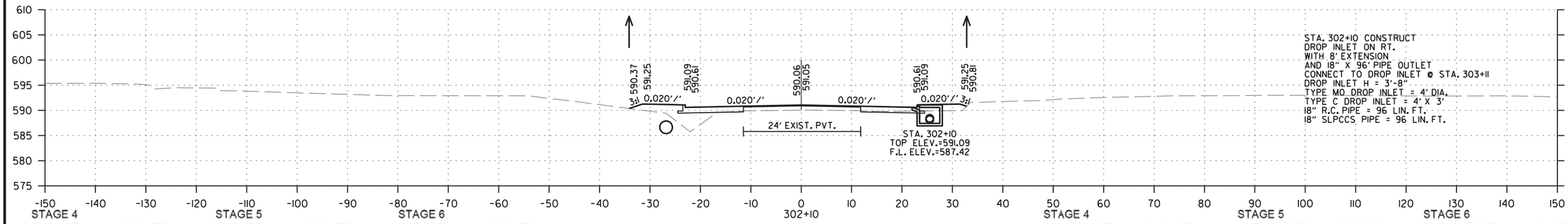
HWY. 7
STA. 300+20 TO STA. 301+00

eh40219 6/22/2020
R061547.DGN

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.		061547	289	323

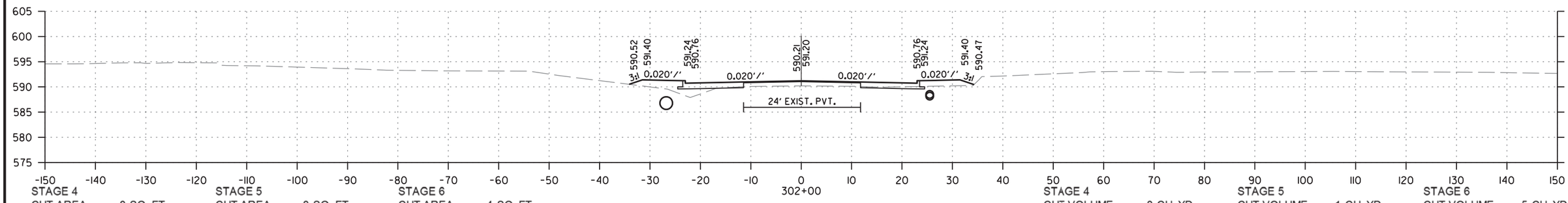
(2) CROSS SECTIONS





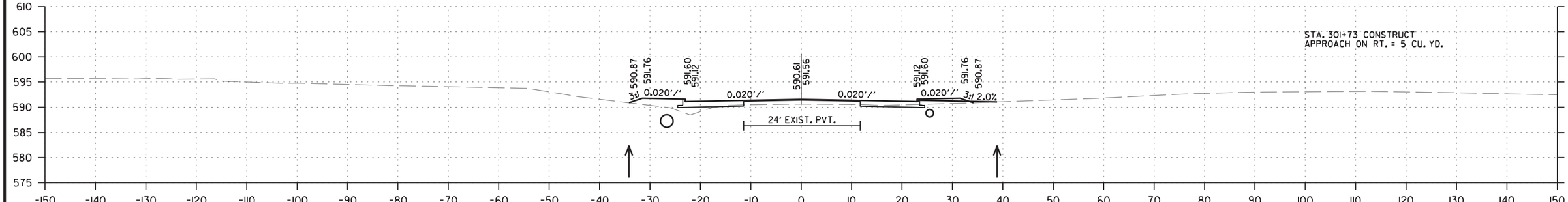
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	33 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	4 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	11 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	22 CU. YD.	FILL VOLUME	10 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	9 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	18 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	46 CU. YD.	FILL VOLUME	23 CU. YD.

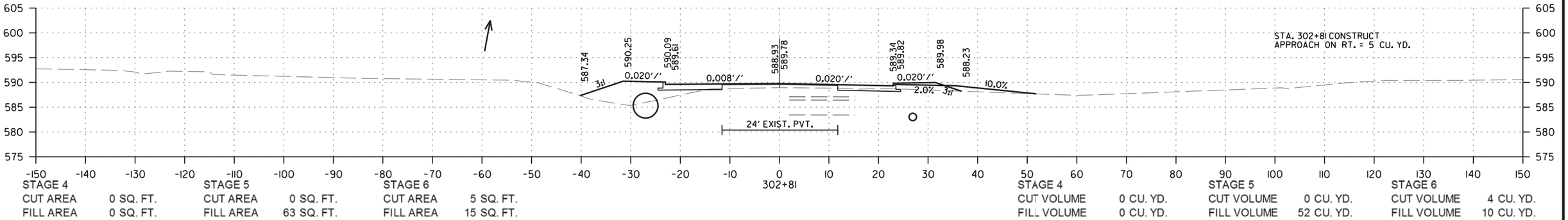
HWY. 7
STA. 301+73 TO STA. 302+10

eh40219 6/22/2020
R061547.DGN

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.		061547	290	323

(2) CROSS SECTIONS

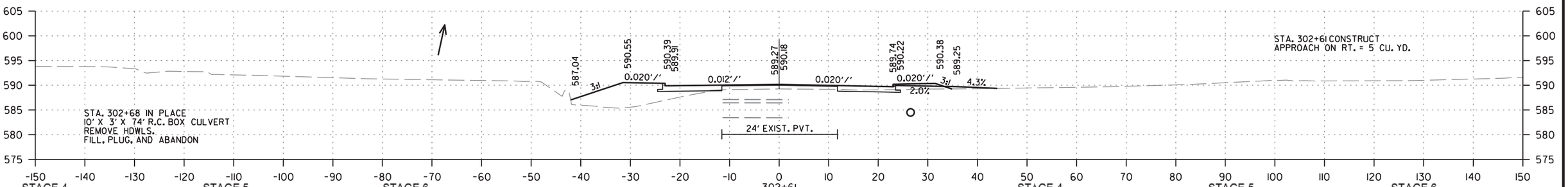
STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	63 SQ. FT.	FILL AREA	15 SQ. FT.

302+81

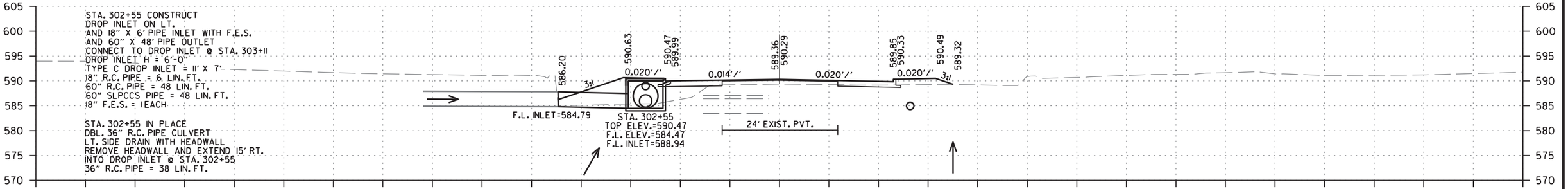
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	52 CU. YD.	FILL VOLUME	10 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	77 SQ. FT.	FILL AREA	11 SQ. FT.

302+61

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	3 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	104 SQ. FT.	FILL AREA	12 SQ. FT.

302+55

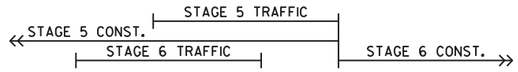
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	114 CU. YD.	FILL VOLUME	19 CU. YD.

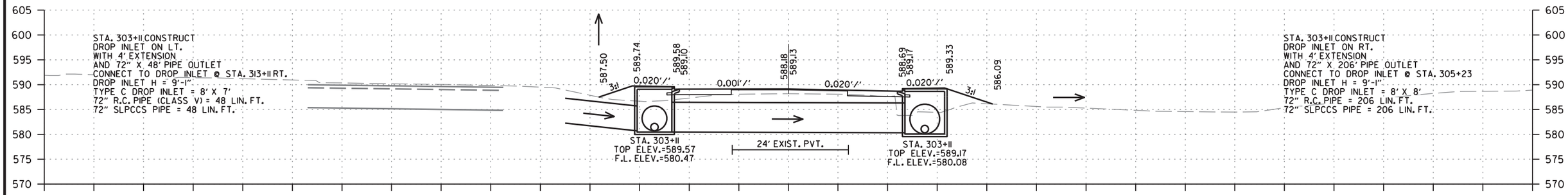
HWY. 7
STA. 302+55 TO STA. 302+81

eh40219 6/22/2020
R061547.DGN

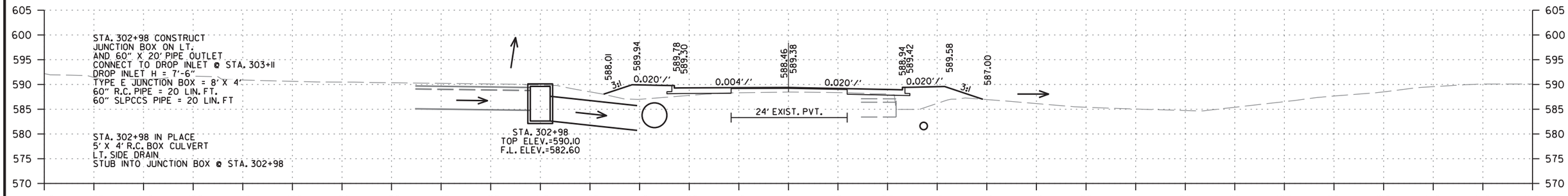
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	291	323

(2) CROSS SECTIONS





STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	39 SQ. FT.	FILL AREA	64 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	15 CU. YD.	FILL VOLUME	22 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	33 SQ. FT.	FILL AREA	46 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	34 CU. YD.	FILL VOLUME	21 CU. YD.

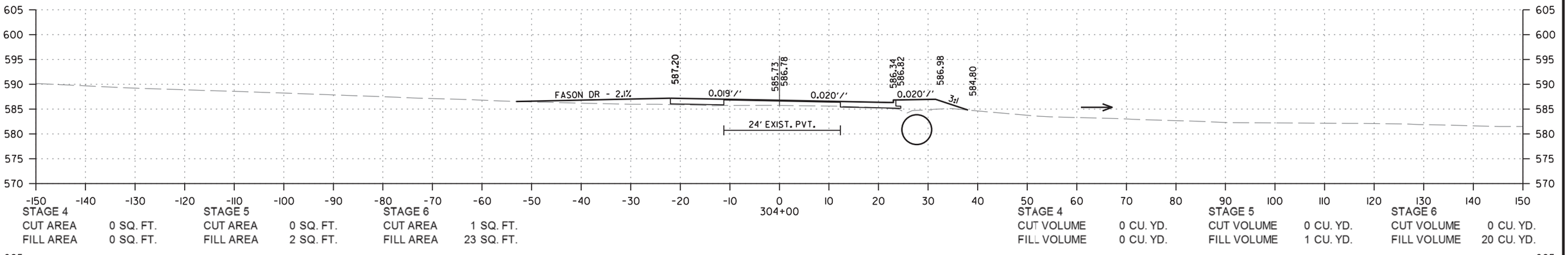
HWY. 7
STA. 303+00 TO STA. 303+11

6/22/2020
ah40219
R061547.DGN

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.		061547	292	323

(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.

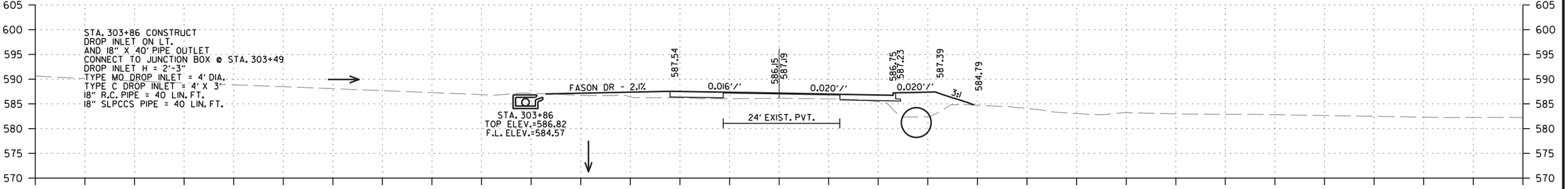


STAGE 4 CUT AREA 0 SQ. FT. FILL AREA 0 SQ. FT.
STAGE 5 CUT AREA 0 SQ. FT. FILL AREA 2 SQ. FT.
STAGE 6 CUT AREA 1 SQ. FT. FILL AREA 23 SQ. FT.

304+00

STAGE 4 CUT VOLUME 0 CU. YD. FILL VOLUME 0 CU. YD.
STAGE 5 CUT VOLUME 0 CU. YD. FILL VOLUME 1 CU. YD.
STAGE 6 CUT VOLUME 0 CU. YD. FILL VOLUME 20 CU. YD.

STA. 303+86 CONSTRUCT
DROP INLET ON LT.
AND 18" X 40' PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 303+49
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE = 40 LIN. FT.
18" SLPCCS PIPE = 40 LIN. FT.



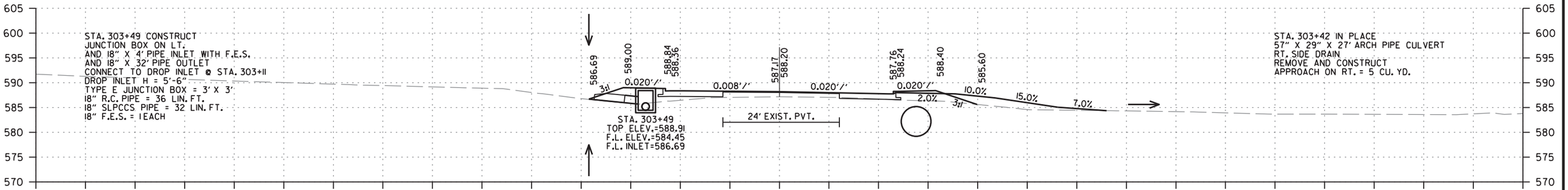
STA. 303+86
TOP ELEV.=586.82
F.L. ELEV.=584.57

STAGE 4 CUT AREA 0 SQ. FT. FILL AREA 0 SQ. FT.
STAGE 5 CUT AREA 0 SQ. FT. FILL AREA 2 SQ. FT.
STAGE 6 CUT AREA 0 SQ. FT. FILL AREA 54 SQ. FT.

303+86

STAGE 4 CUT VOLUME 0 CU. YD. FILL VOLUME 0 CU. YD.
STAGE 5 CUT VOLUME 0 CU. YD. FILL VOLUME 29 CU. YD.
STAGE 6 CUT VOLUME 1 CU. YD. FILL VOLUME 53 CU. YD.

STA. 303+49 CONSTRUCT
JUNCTION BOX ON LT.
AND 18" X 4' PIPE INLET WITH F.E.S.
AND 18" X 32' PIPE OUTLET
CONNECT TO DROP INLET @ STA. 303+11
DROP INLET H = 5'-6"
TYPE E JUNCTION BOX = 3' X 3'
18" R.C. PIPE = 36 LIN. FT.
18" SLPCCS PIPE = 32 LIN. FT.
18" F.E.S. = 1EACH



STA. 303+49
TOP ELEV.=588.91
F.L. ELEV.=584.45
F.L. INLET=586.69

STA. 303+42 IN PLACE
57" X 29" X 27' ARCH PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STAGE 4 CUT AREA 0 SQ. FT. FILL AREA 0 SQ. FT.
STAGE 5 CUT AREA 0 SQ. FT. FILL AREA 41 SQ. FT.
STAGE 6 CUT AREA 1 SQ. FT. FILL AREA 23 SQ. FT.

303+49

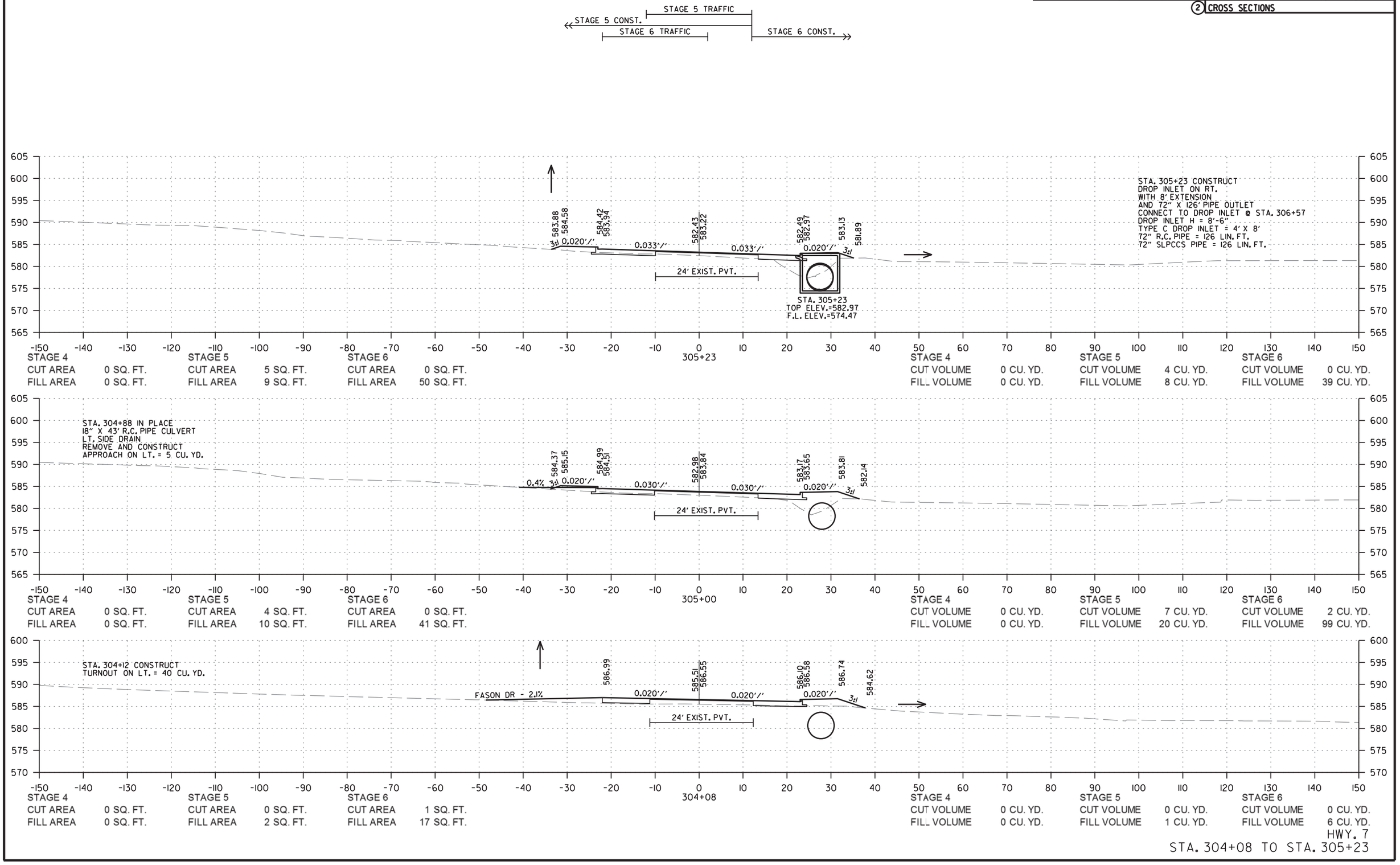
STAGE 4 CUT VOLUME 0 CU. YD. FILL VOLUME 0 CU. YD.
STAGE 5 CUT VOLUME 0 CU. YD. FILL VOLUME 56 CU. YD.
STAGE 6 CUT VOLUME 1 CU. YD. FILL VOLUME 61 CU. YD.

HWY. 7
STA. 303+49 TO STA. 304+00

eh40219 6/22/2020
R061547.DGN

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.		061547	293	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	50 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	8 CU. YD.	FILL VOLUME	39 CU. YD.

305+23

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	2 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	10 SQ. FT.	FILL AREA	41 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	99 CU. YD.

305+00

STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	2 SQ. FT.	FILL AREA	17 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	1 CU. YD.	FILL VOLUME	6 CU. YD.

304+08

HWY. 7
STA. 304+08 TO STA. 305+23

eh40219 6/22/2020
R061547.DGN

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.		061547	294	323

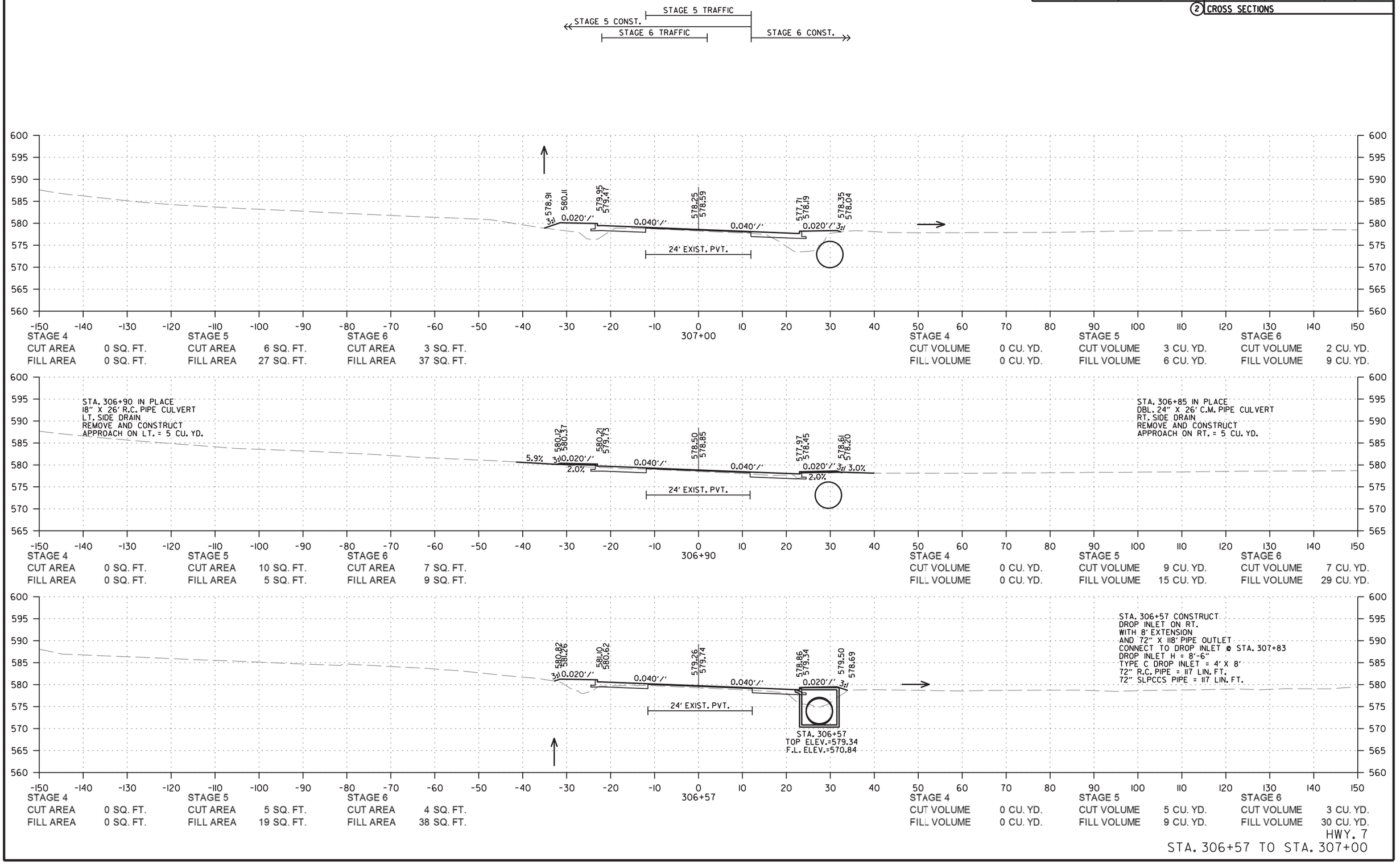
(2) CROSS SECTIONS

HWY. 7
STA. 305+68 TO STA. 306+36

eh40219 6/22/2020
R061547.DGN

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.		061547	295	323

(2) CROSS SECTIONS



STAGE 4		STAGE 5		STAGE 6		307+00	STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	3 SQ. FT.		CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	2 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	37 SQ. FT.		FILL VOLUME	0 CU. YD.	FILL VOLUME	6 CU. YD.	FILL VOLUME	9 CU. YD.

STAGE 4		STAGE 5		STAGE 6		306+90	STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	7 SQ. FT.		CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	5 SQ. FT.	FILL AREA	9 SQ. FT.		FILL VOLUME	0 CU. YD.	FILL VOLUME	15 CU. YD.	FILL VOLUME	29 CU. YD.

STAGE 4		STAGE 5		STAGE 6		306+57	STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	4 SQ. FT.		CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	19 SQ. FT.	FILL AREA	38 SQ. FT.		FILL VOLUME	0 CU. YD.	FILL VOLUME	9 CU. YD.	FILL VOLUME	30 CU. YD.

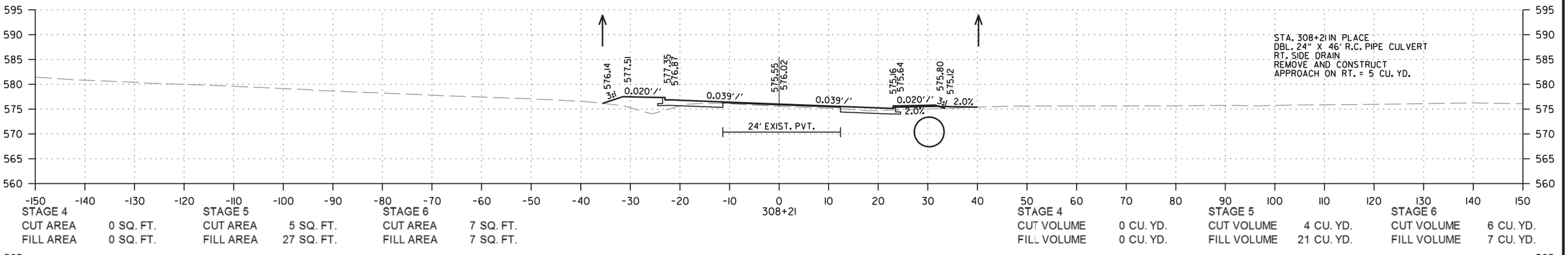
HWY. 7
STA. 306+57 TO STA. 307+00

ah40219 6/22/2020
R061547.DGN

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.		061547	296	323

(2) CROSS SECTIONS

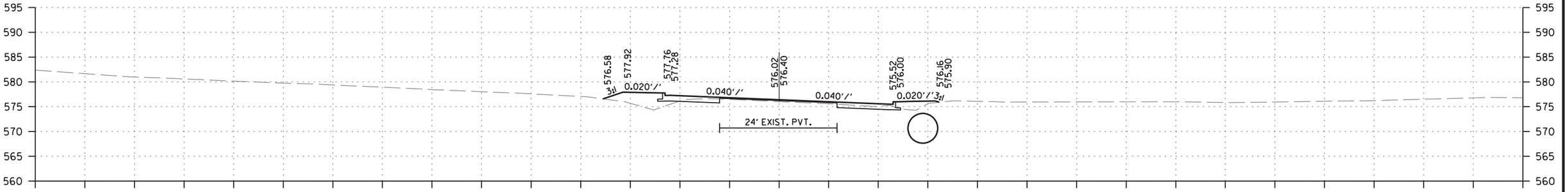
STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	7 SQ. FT.

308+21

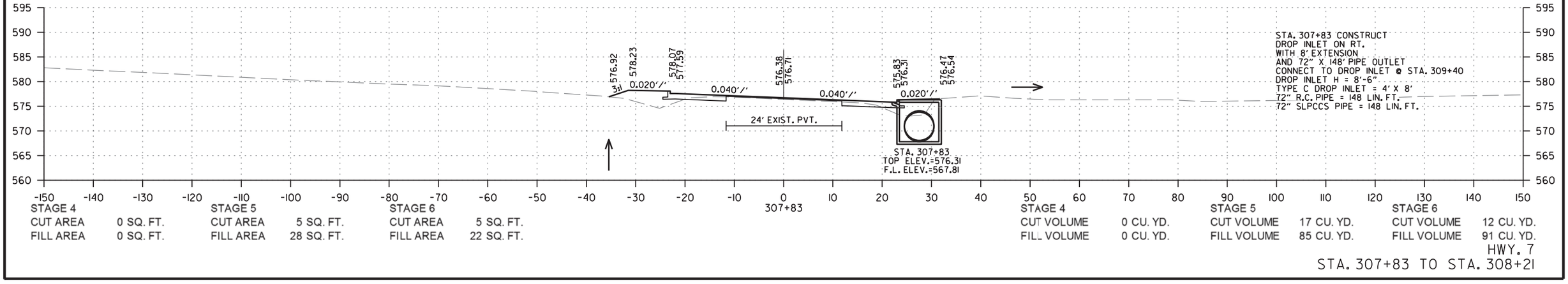
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	21 CU. YD.	FILL VOLUME	7 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	10 SQ. FT.

308+00

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	10 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	28 SQ. FT.	FILL AREA	22 SQ. FT.

307+83

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	12 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	85 CU. YD.	FILL VOLUME	91 CU. YD.

HWY. 7
STA. 307+83 TO STA. 308+21

eh40219 6/22/2020
R061547.DGN

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.		061547	297	323

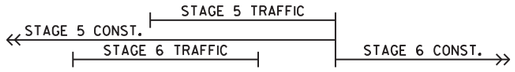
(2) CROSS SECTIONS

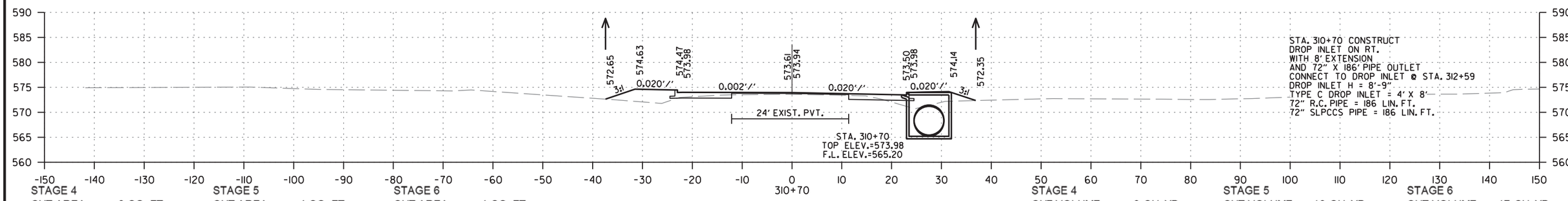
HWY. 7
STA. 308+63 TO STA. 309+26

eh40219 6/22/2020
R061547.DGN

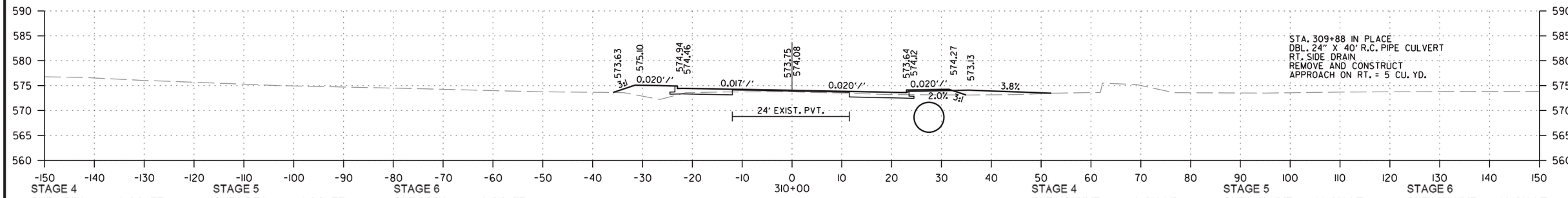
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	298	323

(2) CROSS SECTIONS

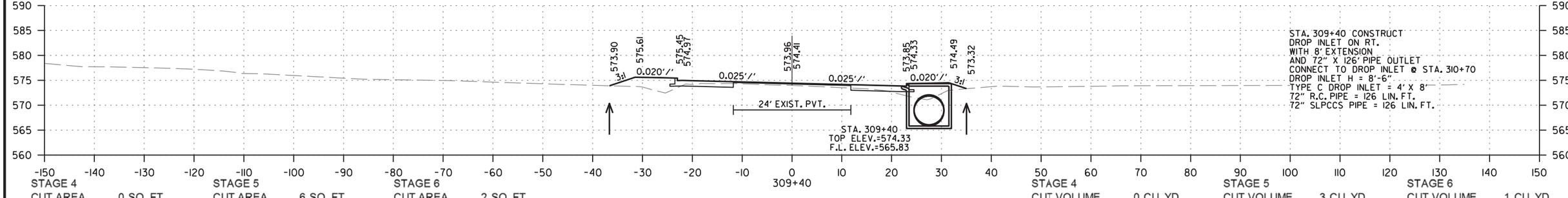




STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	4 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	27 SQ. FT.	FILL AREA	29 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	64 CU. YD.	FILL VOLUME	51 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	12 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	10 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	51 CU. YD.	FILL VOLUME	40 CU. YD.



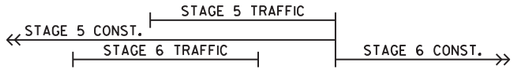
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	2 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	24 SQ. FT.	FILL AREA	26 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	13 CU. YD.

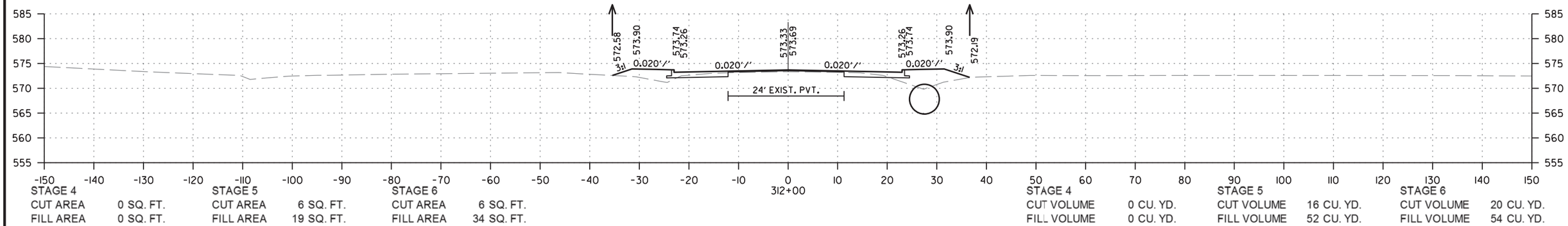
HWY. 7
STA. 309+40 TO STA. 310+70

eh40219 6/22/2020
R061547.DGN

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.		061547	299	323

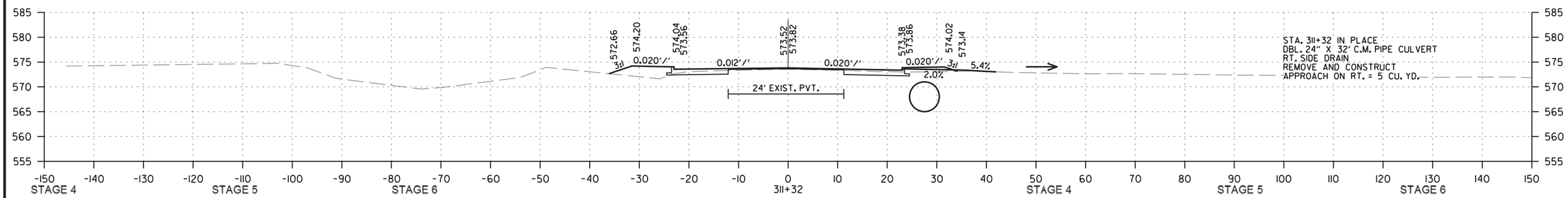
(2) CROSS SECTIONS





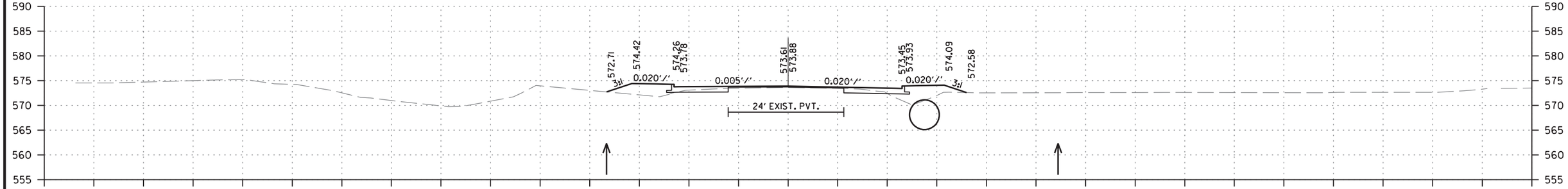
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	19 SQ. FT.	FILL AREA	34 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	16 CU. YD.	CUT VOLUME	20 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	52 CU. YD.	FILL VOLUME	54 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	22 SQ. FT.	FILL AREA	9 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	27 CU. YD.	FILL VOLUME	22 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	24 SQ. FT.	FILL AREA	28 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	28 CU. YD.	FILL VOLUME	32 CU. YD.

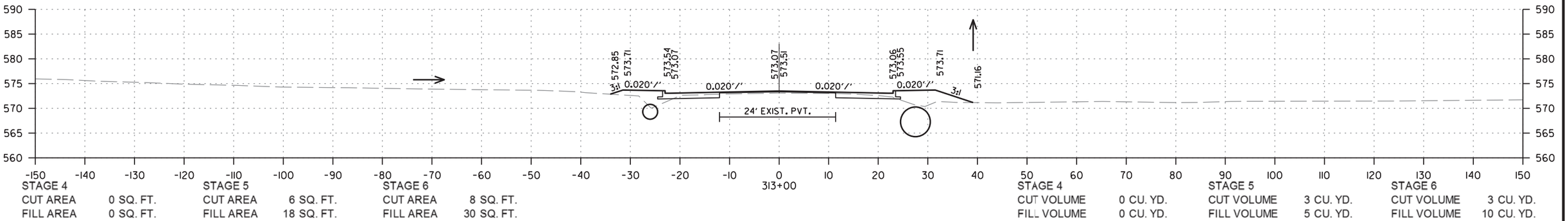
HWY. 7
STA. 311+00 TO STA. 312+00

eh40219 6/22/2020
R061547.DGN

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.		061547	300	323

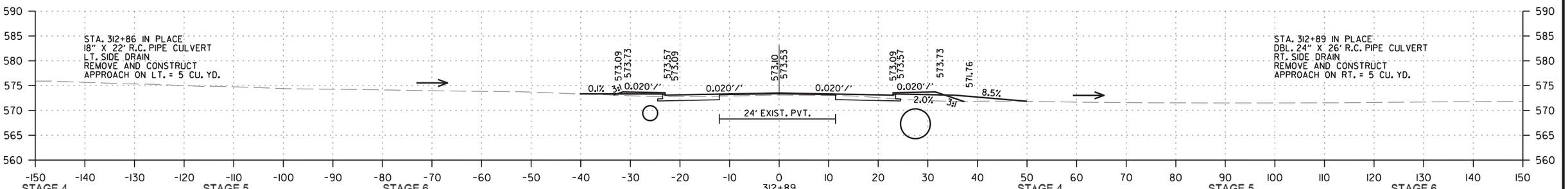
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.



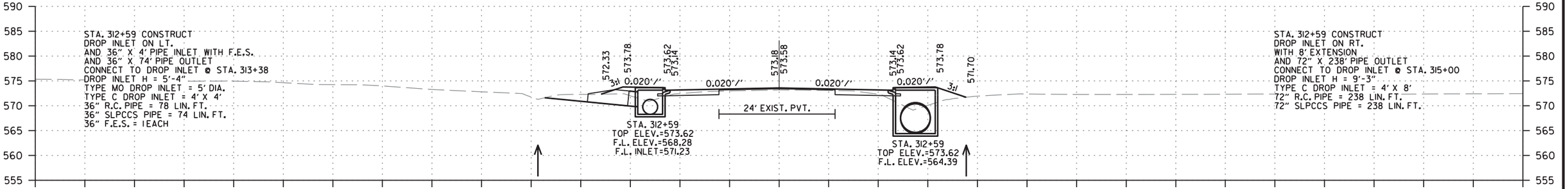
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	8 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	18 SQ. FT.	FILL AREA	30 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	5 CU. YD.	FILL VOLUME	10 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	7 SQ. FT.	FILL AREA	18 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	15 CU. YD.	FILL VOLUME	33 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	20 SQ. FT.	FILL AREA	41 SQ. FT.

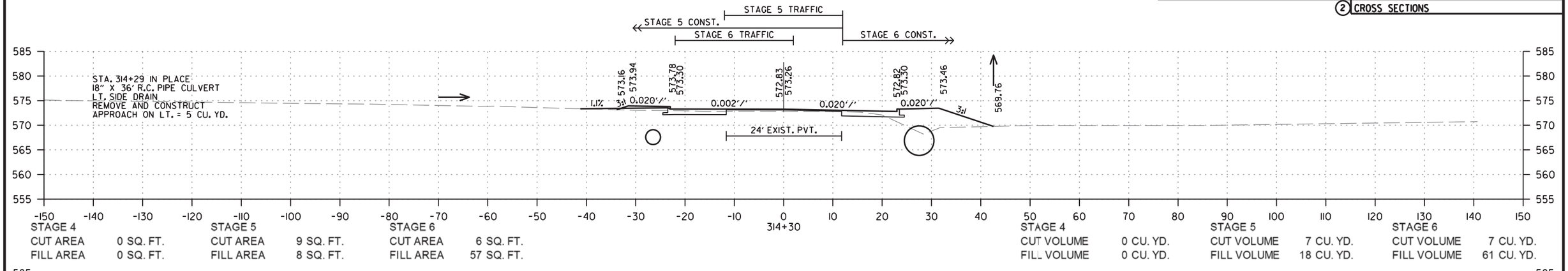
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	13 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	43 CU. YD.	FILL VOLUME	82 CU. YD.

HWY. 7
STA. 312+59 TO STA. 313+00

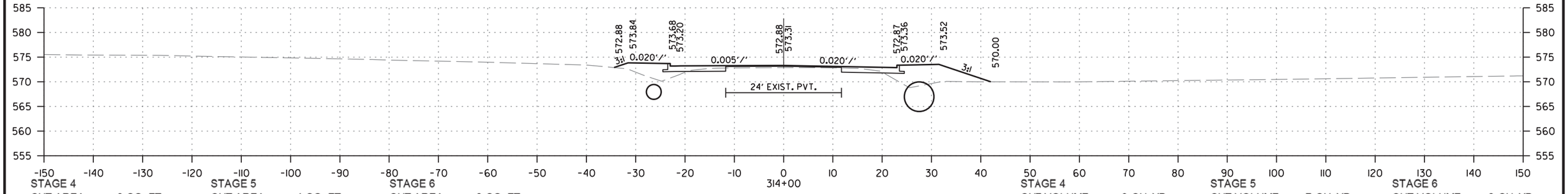
eh40219 6/22/2020
R061547.DGN

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.		061547	301	323

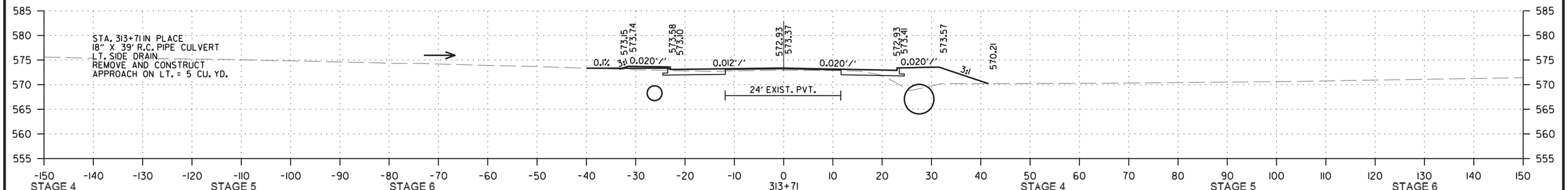
(2) CROSS SECTIONS



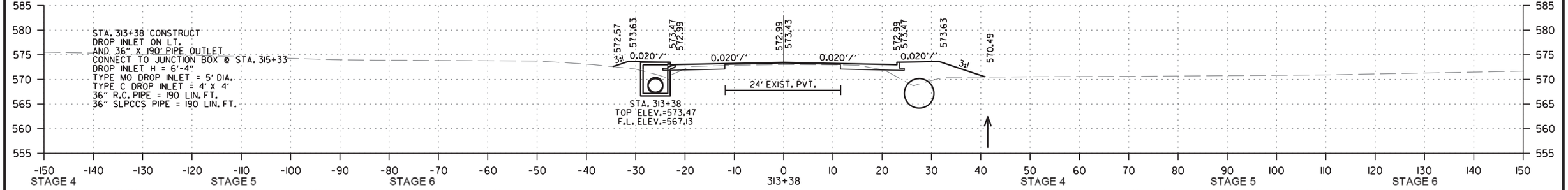
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	8 SQ. FT.	FILL AREA	57 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	18 CU. YD.	FILL VOLUME	61 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	6 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	53 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	56 CU. YD.



STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	6 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	6 SQ. FT.	FILL AREA	52 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	17 CU. YD.	FILL VOLUME	62 CU. YD.



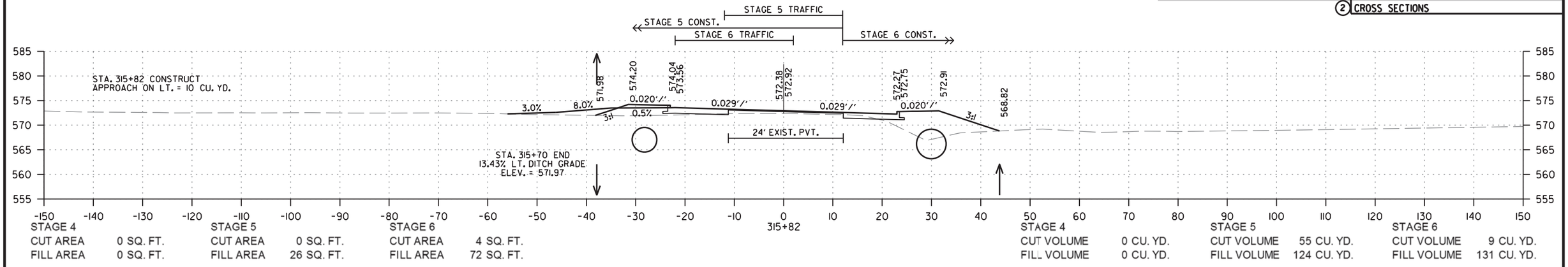
STAGE 4		STAGE 5		STAGE 6		STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	5 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	9 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	50 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	27 CU. YD.	FILL VOLUME	56 CU. YD.

HWY. 7
STA. 313+38 TO STA. 314+30

eh40219 6/22/2020
R061547.DGN

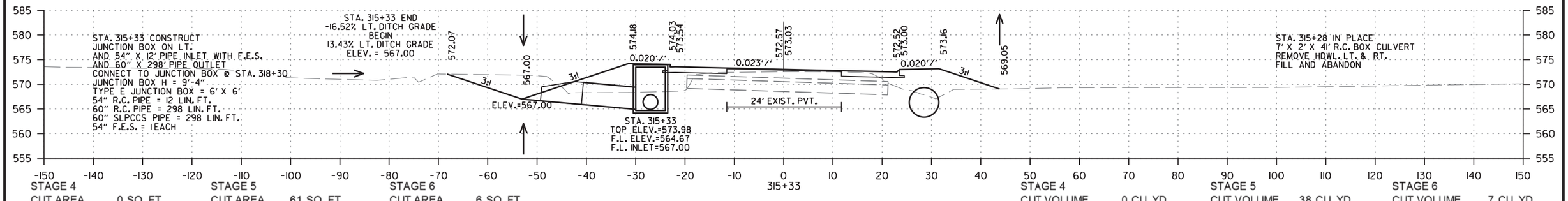
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	302	323

(2) CROSS SECTIONS



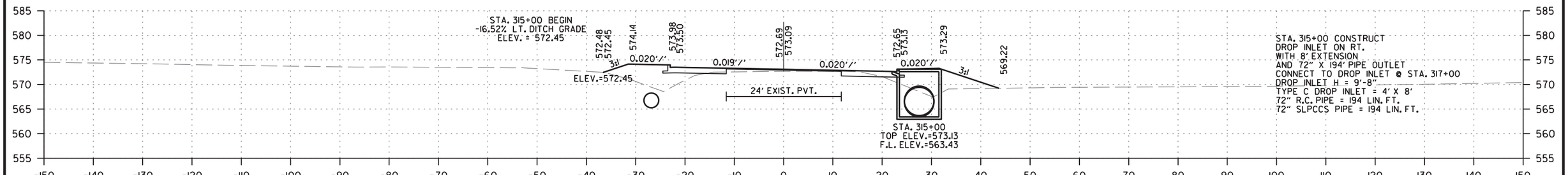
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	72 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	55 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	124 CU. YD.	FILL VOLUME	131 CU. YD.



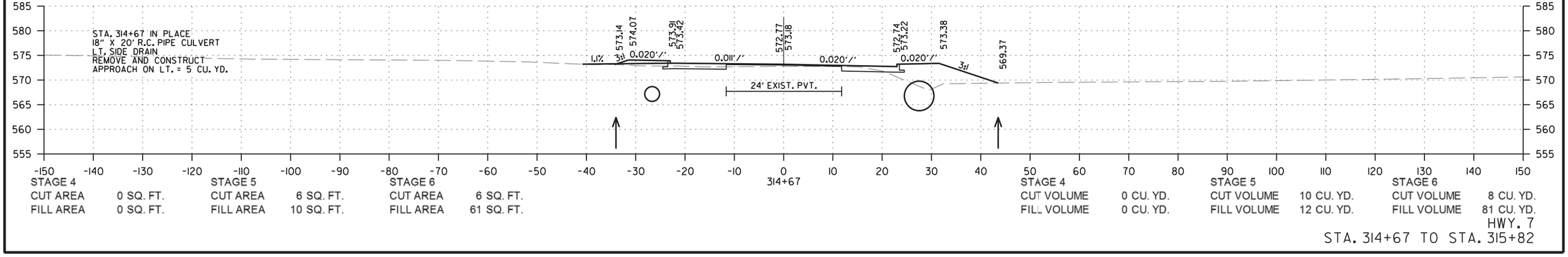
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	61 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	111 SQ. FT.	FILL AREA	72 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	38 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	100 CU. YD.	FILL VOLUME	84 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	52 SQ. FT.	FILL AREA	65 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	4 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	38 CU. YD.	FILL VOLUME	77 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	10 SQ. FT.	FILL AREA	61 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	10 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	12 CU. YD.	FILL VOLUME	81 CU. YD.

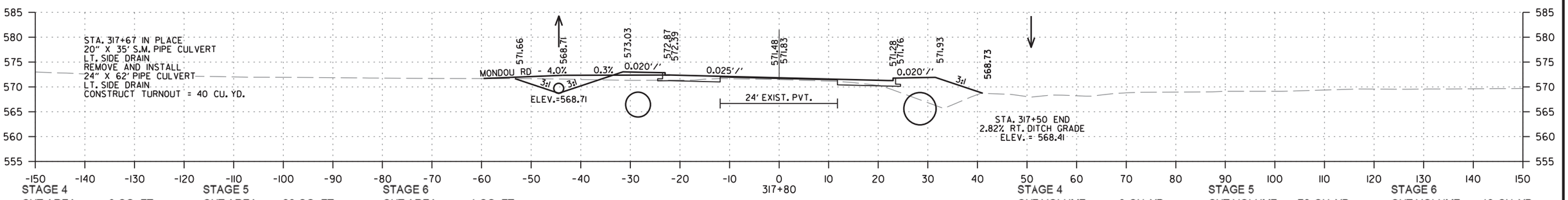
HWY. 7
STA. 314+67 TO STA. 315+82

eh40219 6/22/2020
R061547.DGN

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.		061547	303	323

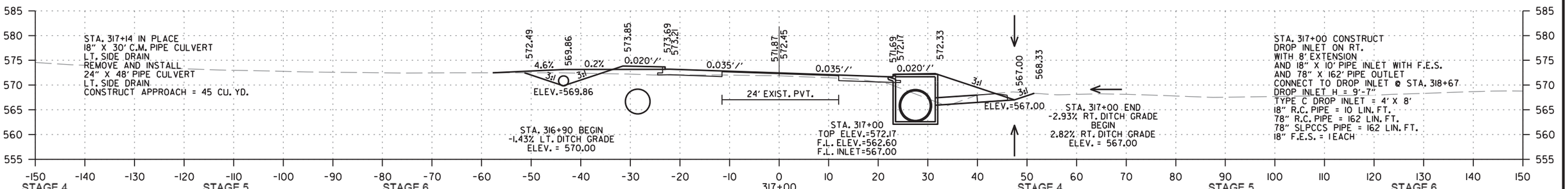
(2) CROSS SECTIONS

STAGE 5 TRAFFIC
STAGE 5 CONST.
STAGE 6 TRAFFIC
STAGE 6 CONST.



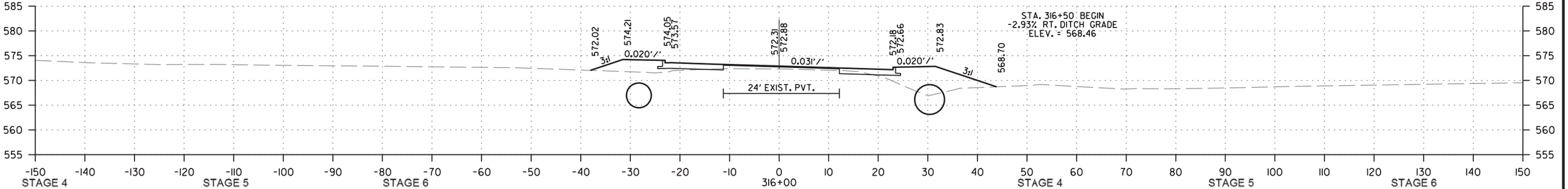
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	28 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	17 SQ. FT.	FILL AREA	65 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	73 CU. YD.	CUT VOLUME	19 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	49 CU. YD.	FILL VOLUME	201 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	21 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	16 SQ. FT.	FILL AREA	71 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	39 CU. YD.	CUT VOLUME	22 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	85 CU. YD.	FILL VOLUME	265 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	30 SQ. FT.	FILL AREA	72 SQ. FT.

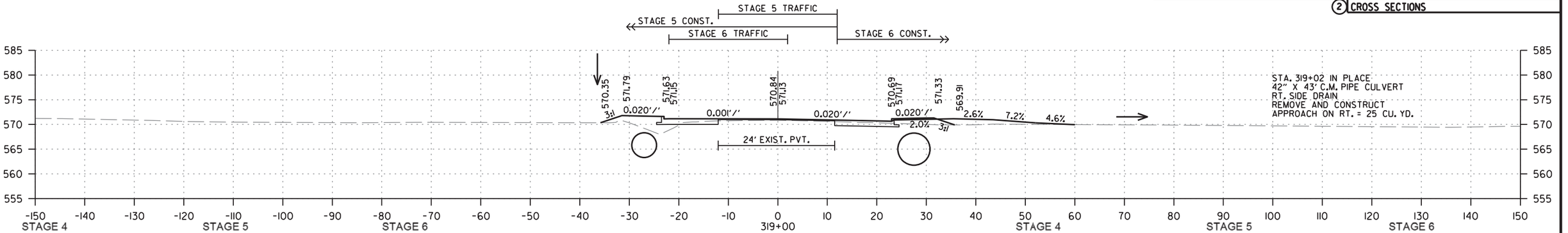
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	19 CU. YD.	FILL VOLUME	48 CU. YD.

HWY. 7
STA. 316+00 TO STA. 317+80

eh40219 6/22/2020
R061547.DGN

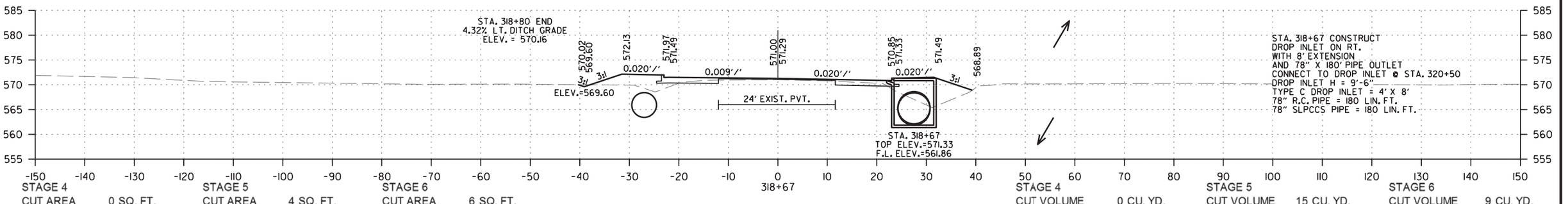
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	304	323

(2) CROSS SECTIONS



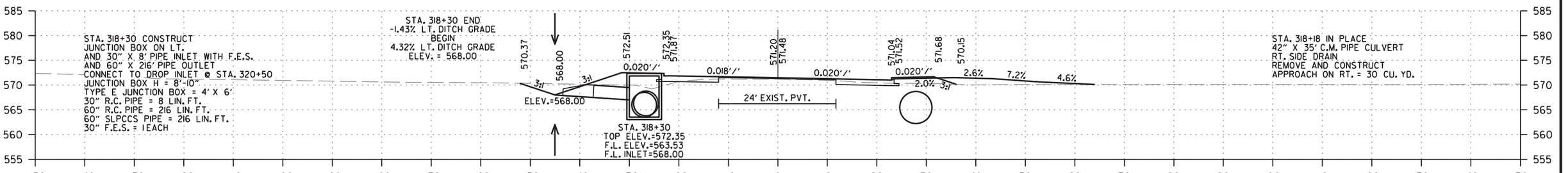
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	25 SQ. FT.	FILL AREA	12 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	34 CU. YD.	FILL VOLUME	43 CU. YD.



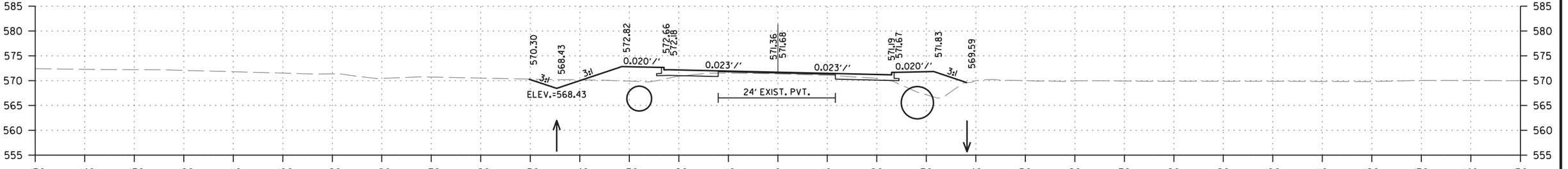
STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	31 SQ. FT.	FILL AREA	59 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	15 CU. YD.	CUT VOLUME	9 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	43 CU. YD.	FILL VOLUME	49 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	18 SQ. FT.	CUT AREA	7 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	32 SQ. FT.	FILL AREA	13 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	7 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	38 CU. YD.	FILL VOLUME	34 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	12 SQ. FT.	CUT AREA	5 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	36 SQ. FT.	FILL AREA	48 SQ. FT.

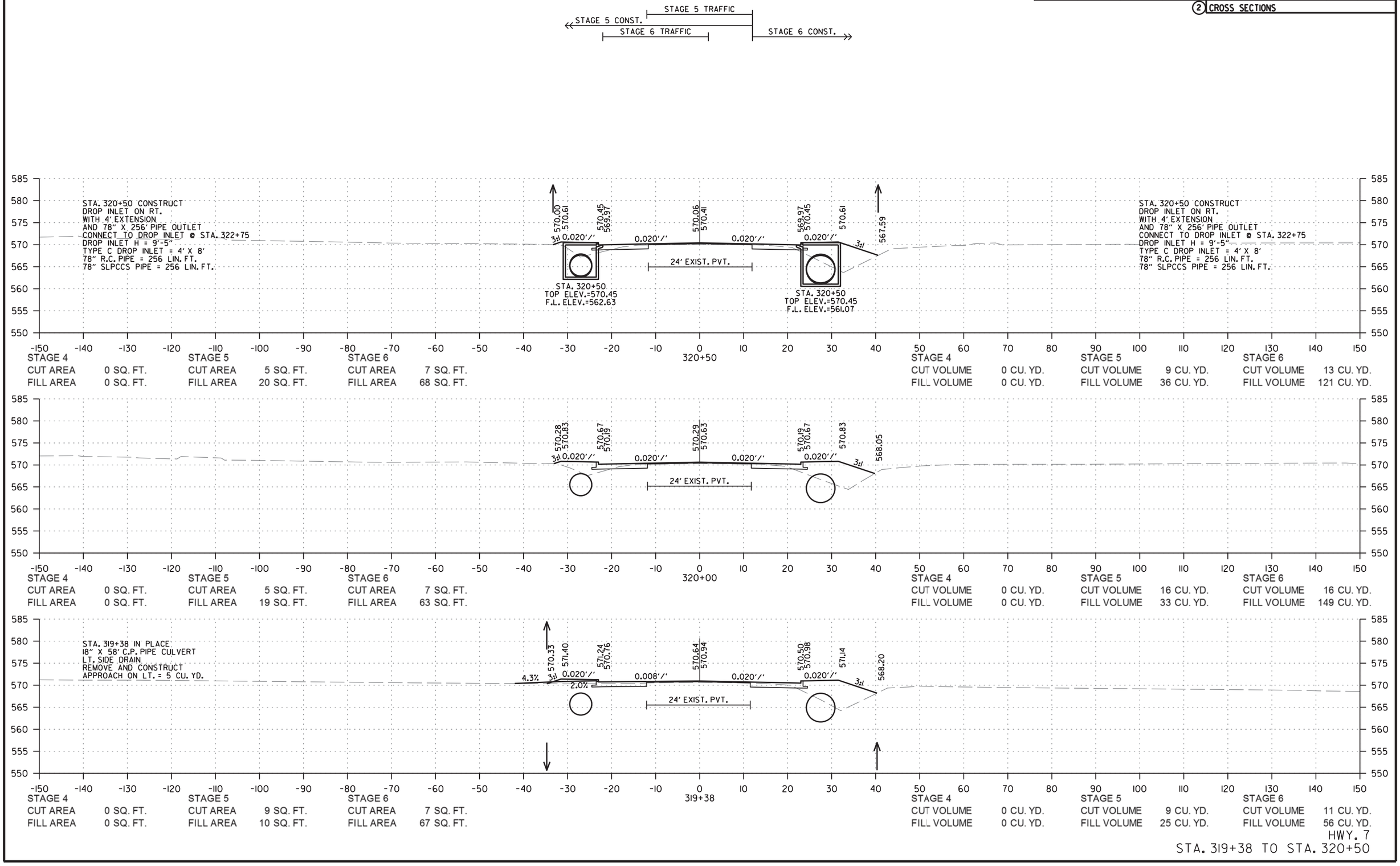
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	15 CU. YD.	CUT VOLUME	3 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	20 CU. YD.	FILL VOLUME	42 CU. YD.

HWY. 7
STA. 318+00 TO STA. 319+00

eh40219 6/22/2020
R061547.DGN

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.		061547	305	323

(2) CROSS SECTIONS

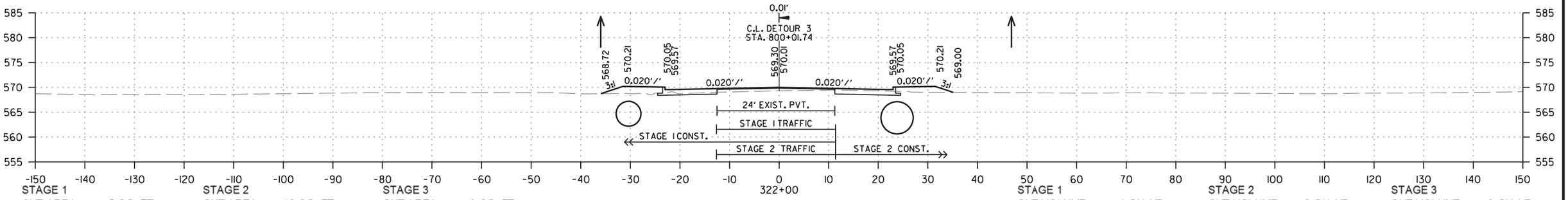


HWY. 7
STA. 319+38 TO STA. 320+50

ah40219 6/22/2020
R061547.DGN

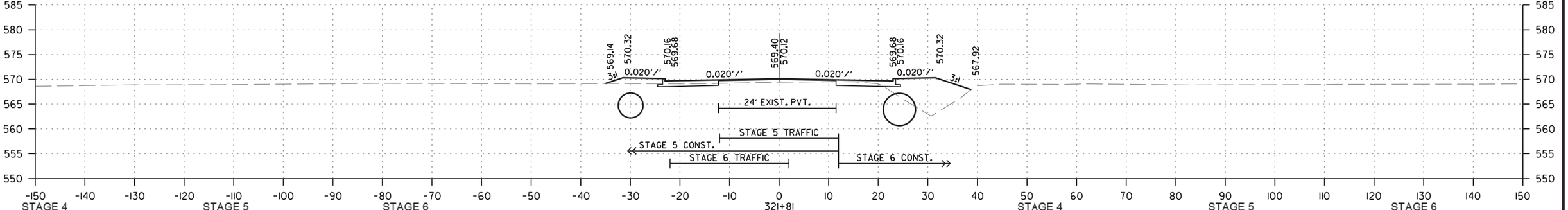
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	306	323

(2) CROSS SECTIONS



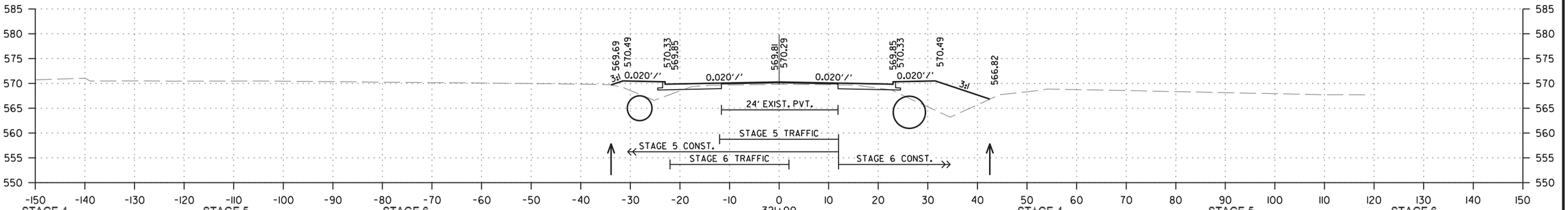
STAGE 1		STAGE 2		STAGE 3	
CUT AREA	5 SQ. FT.	CUT AREA	10 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	14 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	4 CU. YD.	CUT VOLUME	6 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	9 CU. YD.	FILL VOLUME	30 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	74 SQ. FT.

STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.	CUT VOLUME	18 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	56 CU. YD.	FILL VOLUME	224 CU. YD.



STAGE 4		STAGE 5		STAGE 6	
CUT AREA	0 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	6 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	75 SQ. FT.

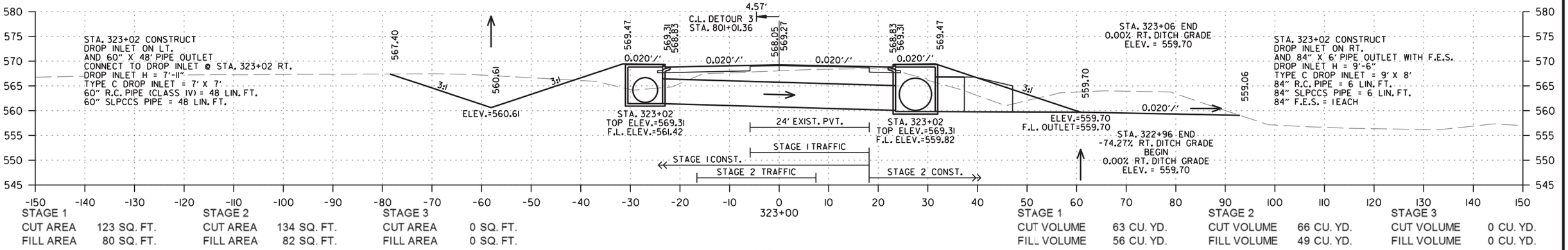
STAGE 4		STAGE 5		STAGE 6	
CUT VOLUME	0 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	12 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	43 CU. YD.	FILL VOLUME	132 CU. YD.

HWY. 7
STA. 321+00 TO STA. 322+00

ah40219 6/22/2020
R061547.DGN

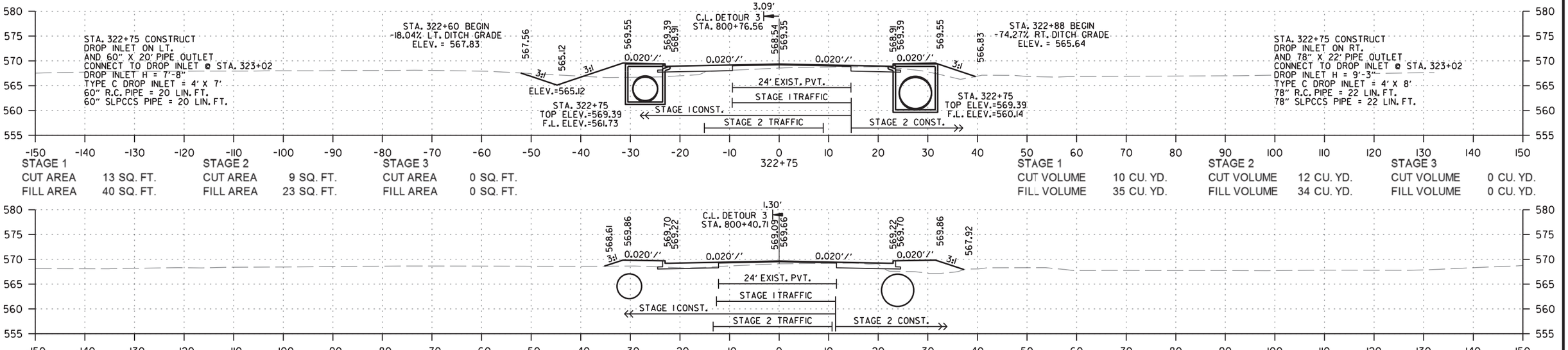
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	307	323

(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	123 SQ. FT.	CUT AREA	134 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	80 SQ. FT.	FILL AREA	82 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	63 CU. YD.	CUT VOLUME	66 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	56 CU. YD.	FILL VOLUME	49 CU. YD.	FILL VOLUME	0 CU. YD.

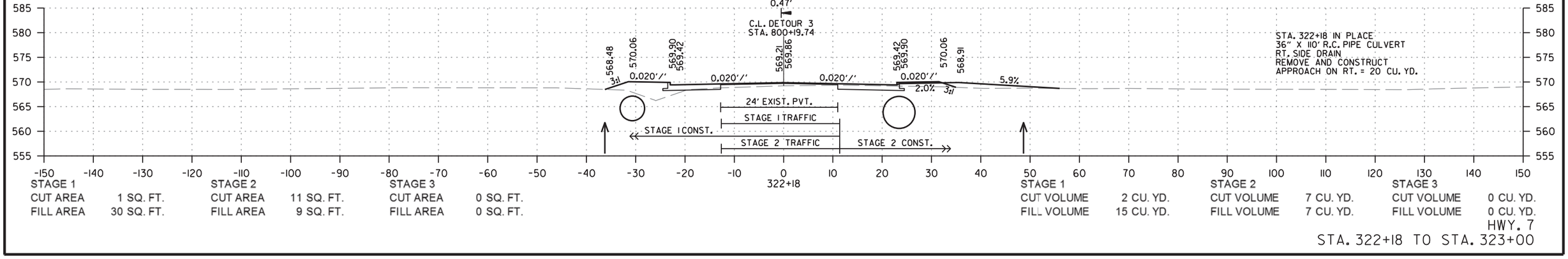


STAGE 1		STAGE 2		STAGE 3	
CUT AREA	13 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	40 SQ. FT.	FILL AREA	23 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	10 CU. YD.	CUT VOLUME	12 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	35 CU. YD.	FILL VOLUME	34 CU. YD.	FILL VOLUME	0 CU. YD.

STAGE 1		STAGE 2		STAGE 3	
CUT AREA	2 SQ. FT.	CUT AREA	9 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	12 SQ. FT.	FILL AREA	28 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	1 CU. YD.	CUT VOLUME	8 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	16 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	1 SQ. FT.	CUT AREA	11 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	30 SQ. FT.	FILL AREA	9 SQ. FT.	FILL AREA	0 SQ. FT.

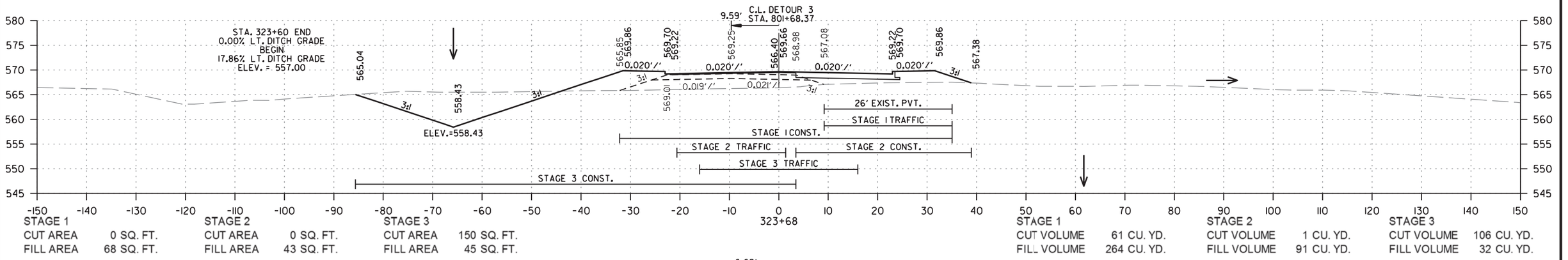
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	2 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	15 CU. YD.	FILL VOLUME	7 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 322+18 TO STA. 323+00

eh40219 6/22/2020
R061547.DGN

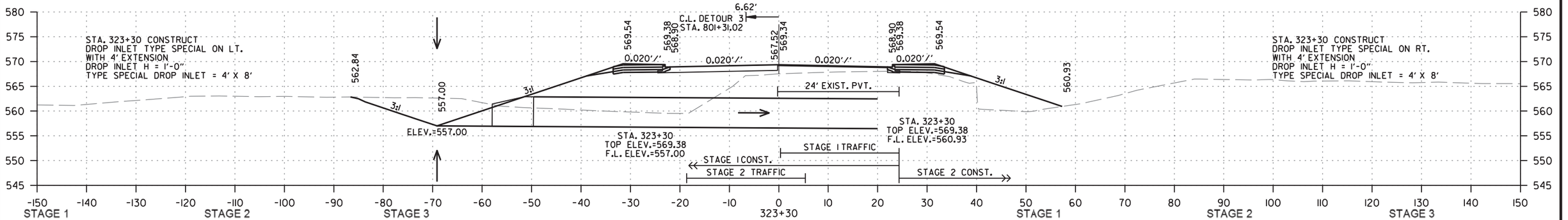
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	308	323

(2) CROSS SECTIONS



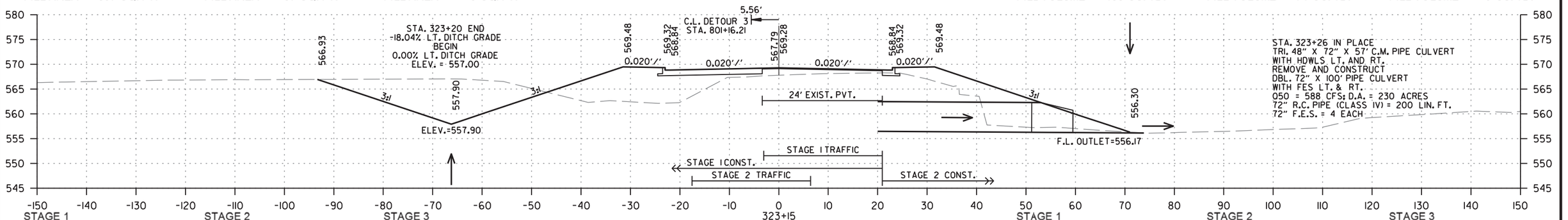
STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	150 SQ. FT.
FILL AREA	68 SQ. FT.	FILL AREA	43 SQ. FT.	FILL AREA	45 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	61 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	106 CU. YD.
FILL VOLUME	264 CU. YD.	FILL VOLUME	91 CU. YD.	FILL VOLUME	32 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	86 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	307 SQ. FT.	FILL AREA	87 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	86 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	133 CU. YD.	FILL VOLUME	71 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	222 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	170 SQ. FT.	FILL AREA	167 SQ. FT.	FILL AREA	0 SQ. FT.

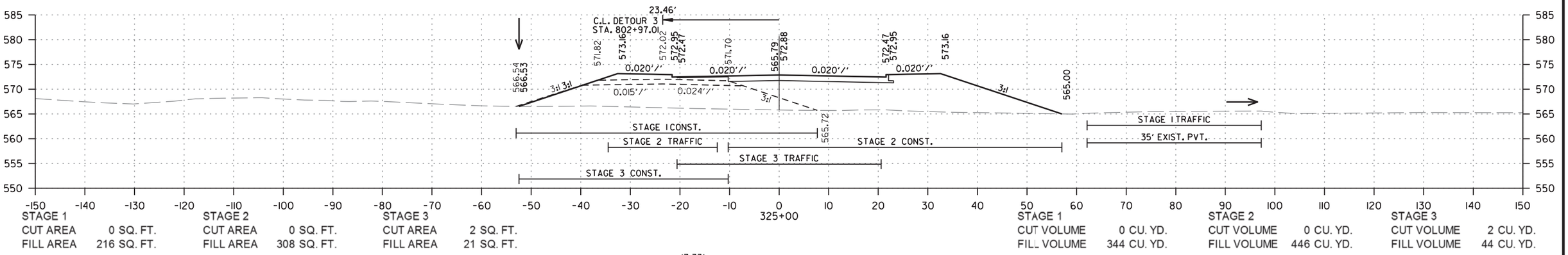
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	96 CU. YD.	CUT VOLUME	38 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	69 CU. YD.	FILL VOLUME	69 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 323+15 TO STA. 323+68

ah40219 6/22/2020
R061547.DGN

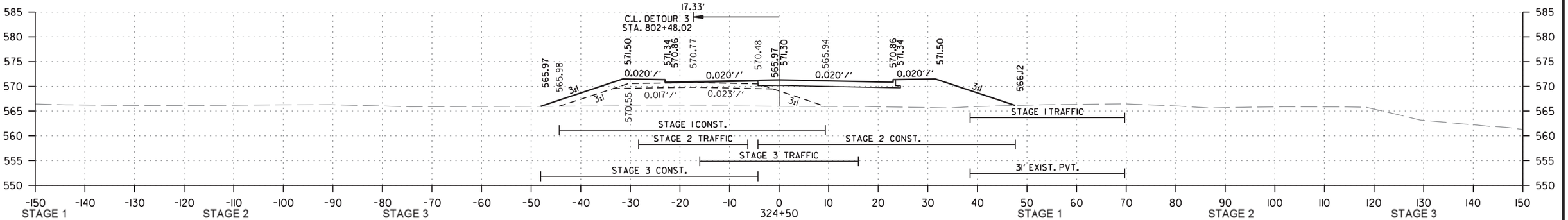
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	309	323

(2) CROSS SECTIONS



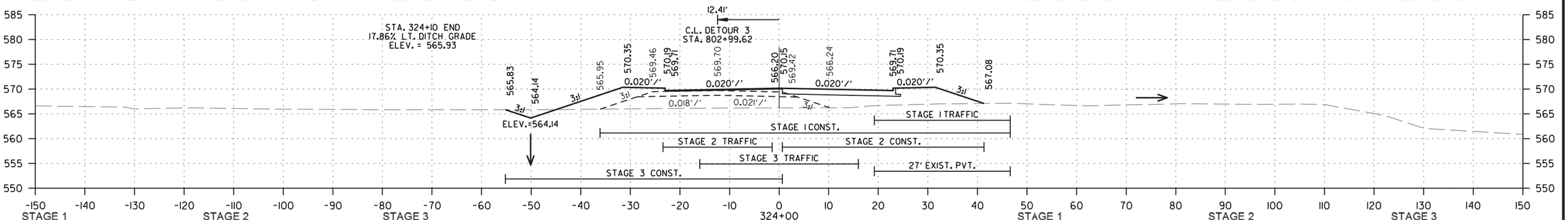
STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	2 SQ. FT.
FILL AREA	216 SQ. FT.	FILL AREA	308 SQ. FT.	FILL AREA	21 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	344 CU. YD.	FILL VOLUME	446 CU. YD.	FILL VOLUME	44 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	155 SQ. FT.	FILL AREA	174 SQ. FT.	FILL AREA	26 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	231 CU. YD.	FILL VOLUME	238 CU. YD.	FILL VOLUME	60 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	9 SQ. FT.
FILL AREA	95 SQ. FT.	FILL AREA	83 SQ. FT.	FILL AREA	39 SQ. FT.

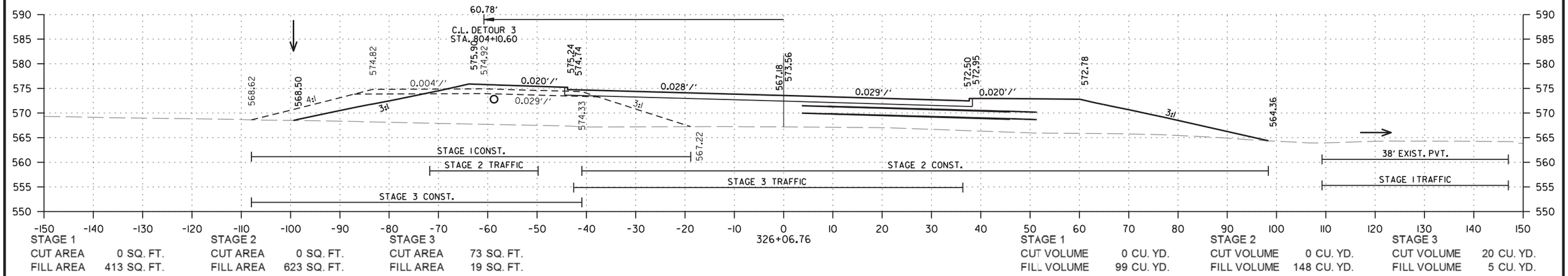
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	94 CU. YD.
FILL VOLUME	97 CU. YD.	FILL VOLUME	75 CU. YD.	FILL VOLUME	50 CU. YD.

HWY. 7
STA. 324+00 TO STA. 325+00

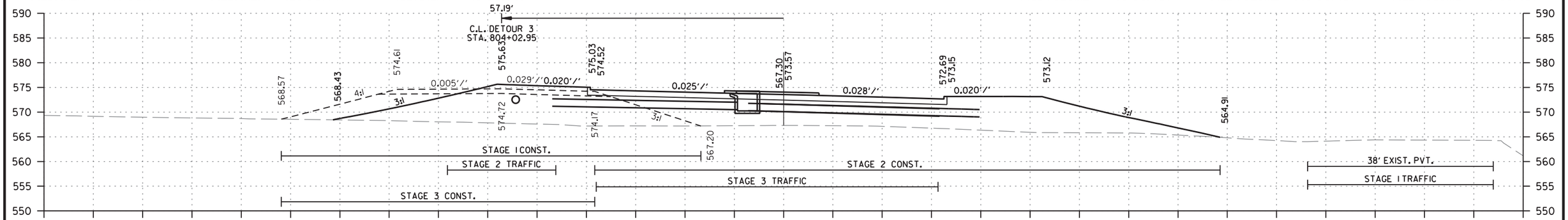
ah40219 6/22/2020
R061547.DGN

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.		061547	310	323

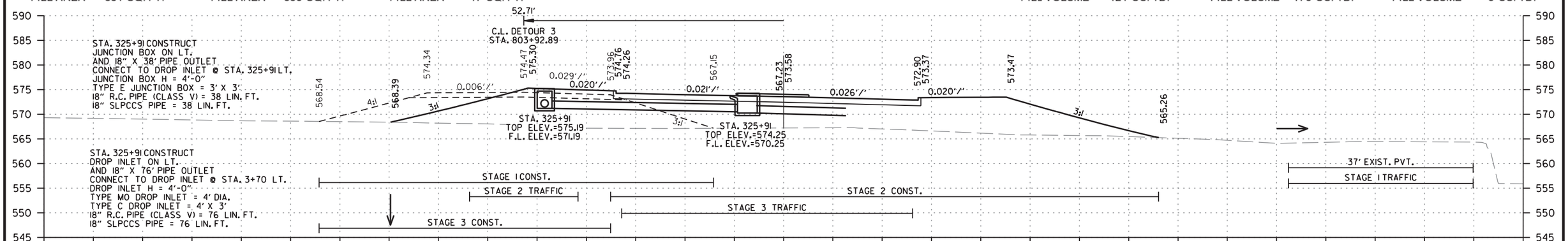
(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	73 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	20 CU. YD.
FILL AREA	413 SQ. FT.	FILL AREA	623 SQ. FT.	FILL AREA	19 SQ. FT.	FILL VOLUME	99 CU. YD.	FILL VOLUME	148 CU. YD.	FILL VOLUME	5 CU. YD.



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	87 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	31 CU. YD.
FILL AREA	381 SQ. FT.	FILL AREA	559 SQ. FT.	FILL AREA	17 SQ. FT.	FILL VOLUME	121 CU. YD.	FILL VOLUME	176 CU. YD.	FILL VOLUME	6 CU. YD.



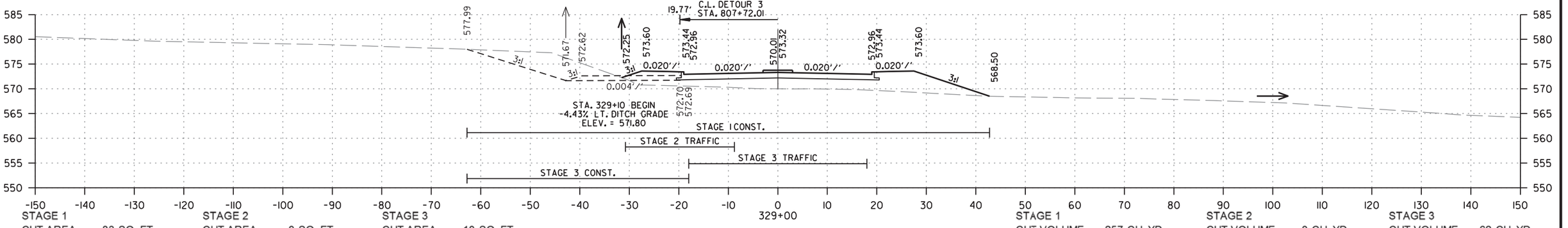
STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	96 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	165 CU. YD.
FILL AREA	344 SQ. FT.	FILL AREA	499 SQ. FT.	FILL AREA	16 SQ. FT.	FILL VOLUME	944 CU. YD.	FILL VOLUME	1360 CU. YD.	FILL VOLUME	62 CU. YD.

HWY. 7
STA. 325+91 TO STA. 326+06.76

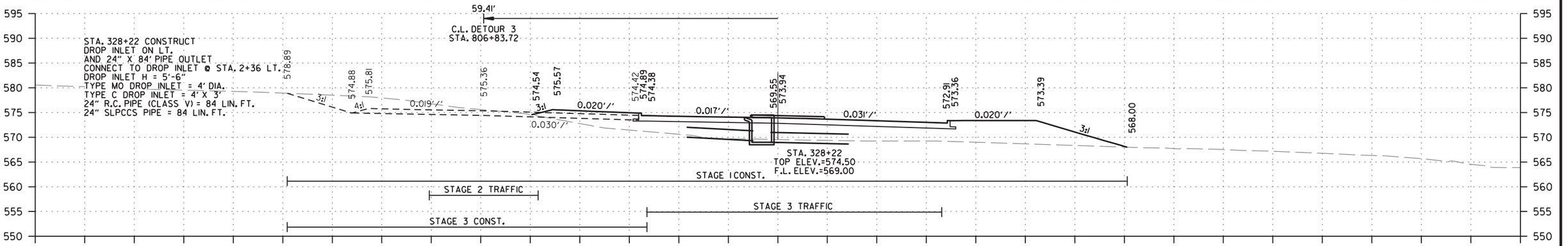
6/22/2020
ah40219
R061547.DGN

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.		061547	311	323

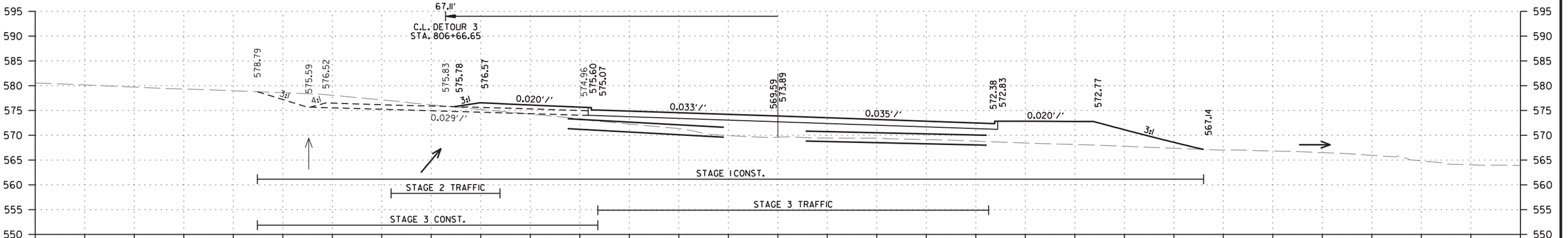
(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	83 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	257 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	62 CU. YD.
FILL AREA	149 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	90 SQ. FT.	FILL VOLUME	692 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	282 CU. YD.



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	95 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	33 SQ. FT.	CUT VOLUME	48 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	330 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	105 SQ. FT.	FILL VOLUME	192 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	55 CU. YD.



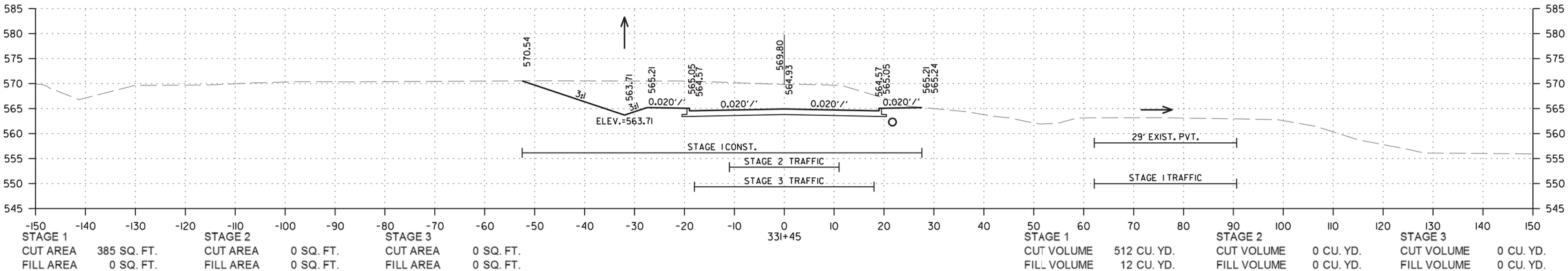
STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	75 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	26 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	351 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	89 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 5
STA. 328+06.76 TO STA. 329+00

ah40219 6/22/2020
R061547.DGN

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.		061547	312	323

(2) CROSS SECTIONS



STAGE 1
CUT AREA 385 SQ. FT.
FILL AREA 0 SQ. FT.

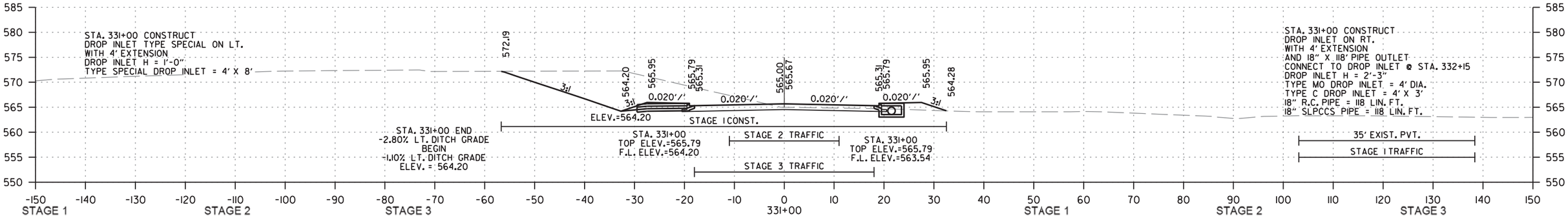
STAGE 2
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

STAGE 3
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

STAGE 1
CUT VOLUME 512 CU. YD.
FILL VOLUME 12 CU. YD.

STAGE 2
CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STAGE 3
CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.



STAGE 1
CUT AREA 229 SQ. FT.
FILL AREA 14 SQ. FT.

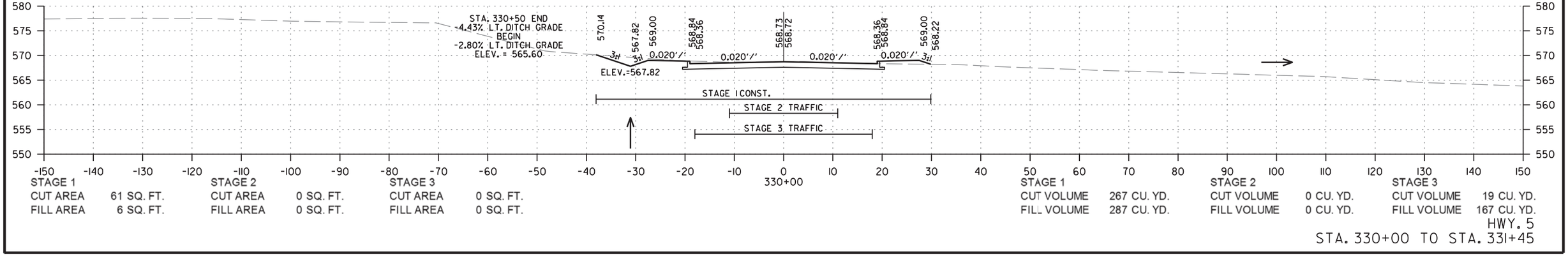
STAGE 2
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

STAGE 3
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

STAGE 1
CUT VOLUME 537 CU. YD.
FILL VOLUME 37 CU. YD.

STAGE 2
CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STAGE 3
CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.



STAGE 1
CUT AREA 61 SQ. FT.
FILL AREA 6 SQ. FT.

STAGE 2
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

STAGE 3
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

STAGE 1
CUT VOLUME 267 CU. YD.
FILL VOLUME 287 CU. YD.

STAGE 2
CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

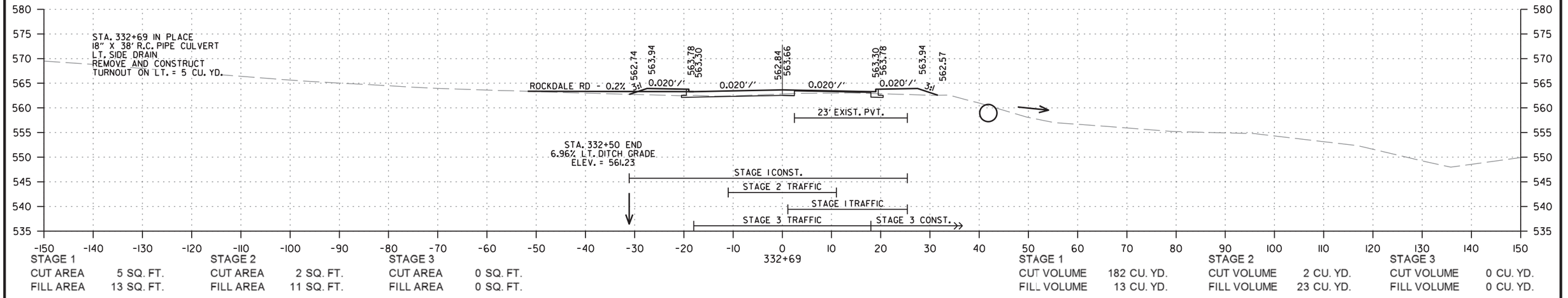
STAGE 3
CUT VOLUME 19 CU. YD.
FILL VOLUME 167 CU. YD.

HWY. 5
STA. 330+00 TO STA. 331+45

eh40219 6/22/2020
R061547.DGN

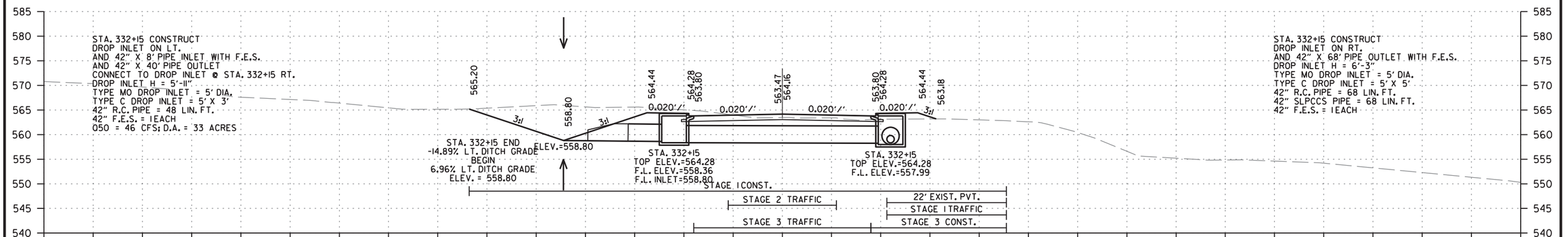
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	313	323

(2) CROSS SECTIONS



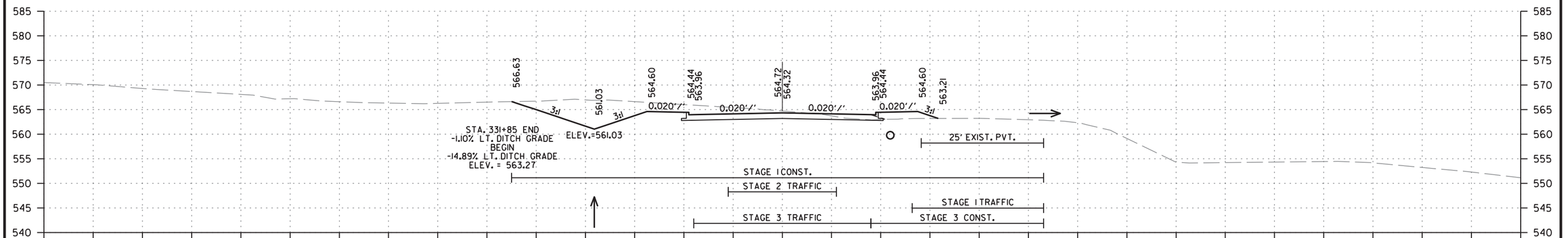
STAGE 1		STAGE 2		STAGE 3	
CUT AREA	5 SQ. FT.	CUT AREA	2 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	13 SQ. FT.	FILL AREA	11 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	182 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	13 CU. YD.	FILL VOLUME	23 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	177 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	12 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	96 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	7 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	168 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	14 SQ. FT.	FILL AREA	0 SQ. FT.

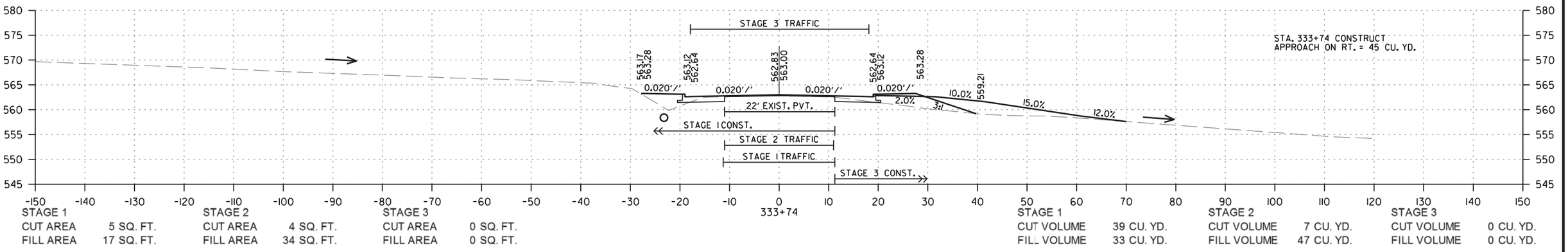
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	563 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	14 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 5
STA. 332+00 TO STA. 332+69

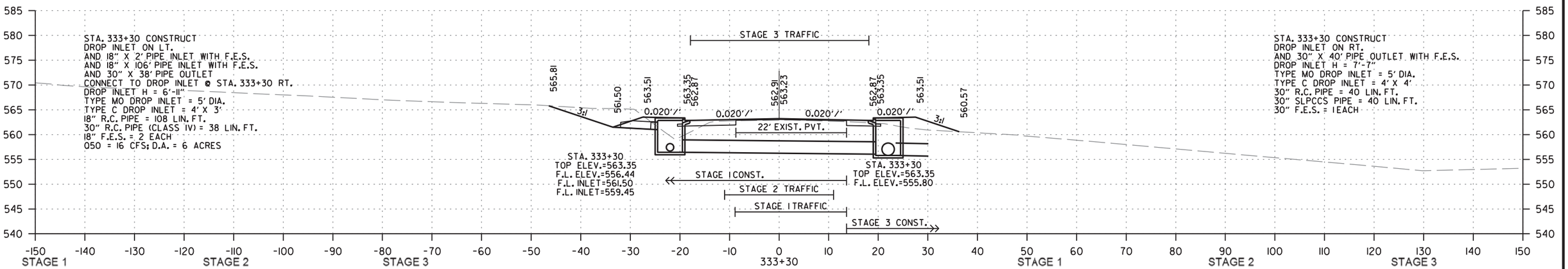
ah40219 6/22/2020
R061547.DGN

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.		061547	314	323

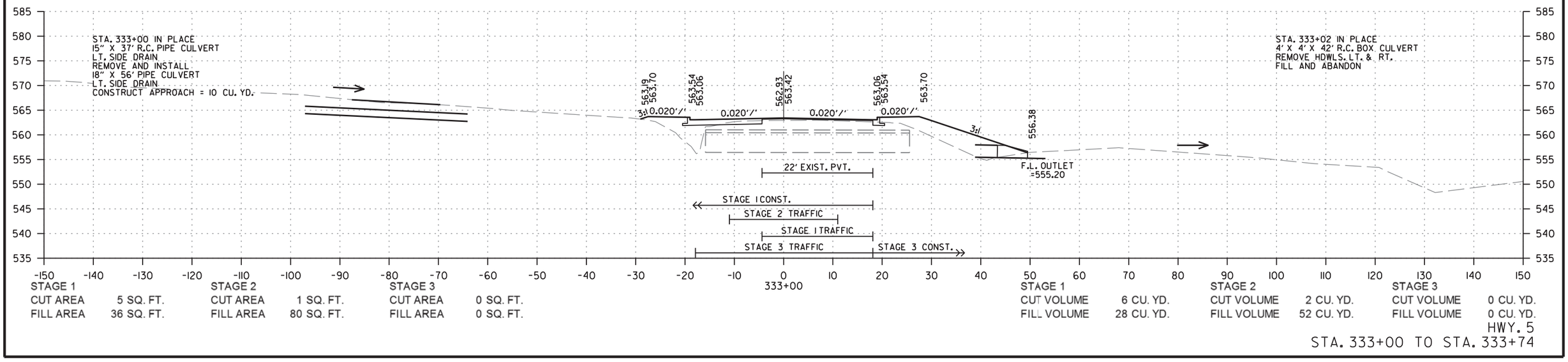
(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	5 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	39 CU. YD.	CUT VOLUME	7 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	17 SQ. FT.	FILL AREA	34 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	33 CU. YD.	FILL VOLUME	47 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	43 SQ. FT.	CUT AREA	4 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	27 CU. YD.	CUT VOLUME	3 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	23 SQ. FT.	FILL AREA	24 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	33 CU. YD.	FILL VOLUME	58 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	5 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	6 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	36 SQ. FT.	FILL AREA	80 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	28 CU. YD.	FILL VOLUME	52 CU. YD.	FILL VOLUME	0 CU. YD.

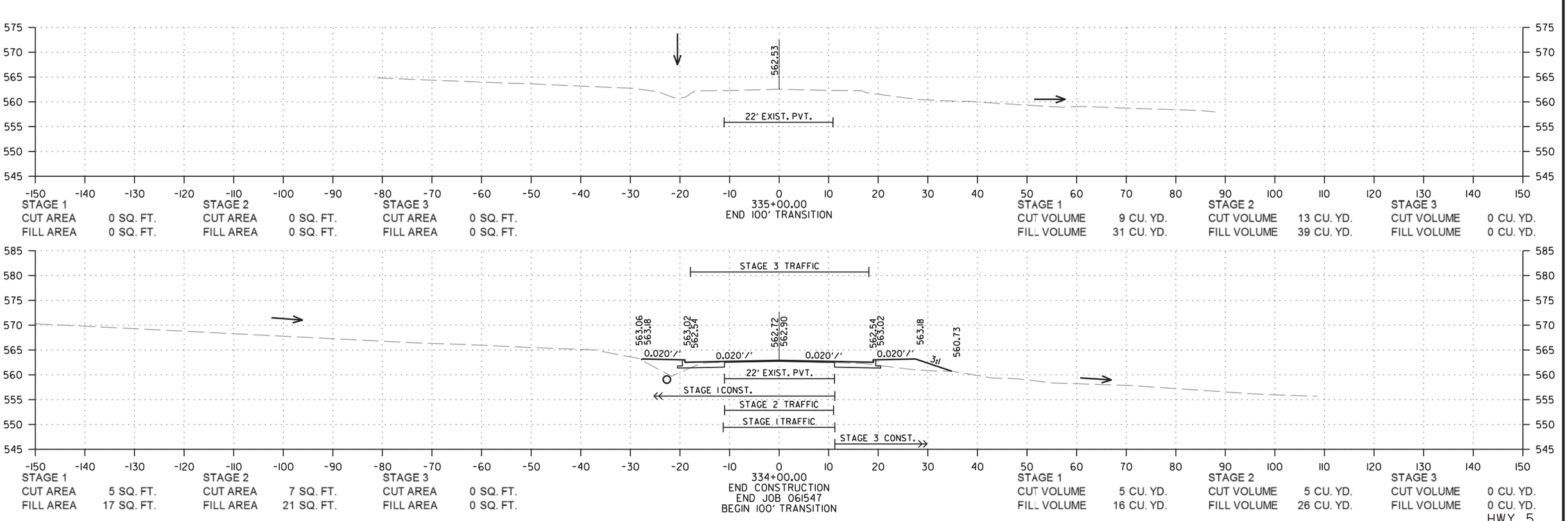
HWY. 5
STA. 333+00 TO STA. 333+74

6/22/2020
ah40219
R061547.DGN

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.		061547	315	323

(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	9 CU. YD.	CUT VOLUME	13 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	31 CU. YD.	FILL VOLUME	39 CU. YD.	FILL VOLUME	0 CU. YD.

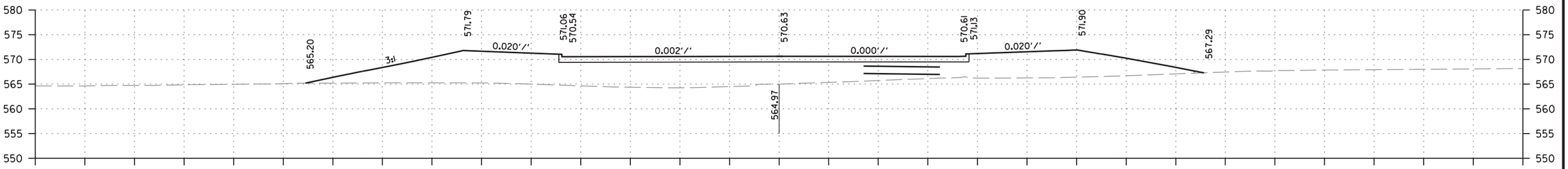
STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	5 SQ. FT.	CUT AREA	7 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	5 CU. YD.	CUT VOLUME	5 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	17 SQ. FT.	FILL AREA	21 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	16 CU. YD.	FILL VOLUME	26 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 5
STA. 334+00 TO STA. 335+00

eh40219 6/22/2020
R061547.DGN

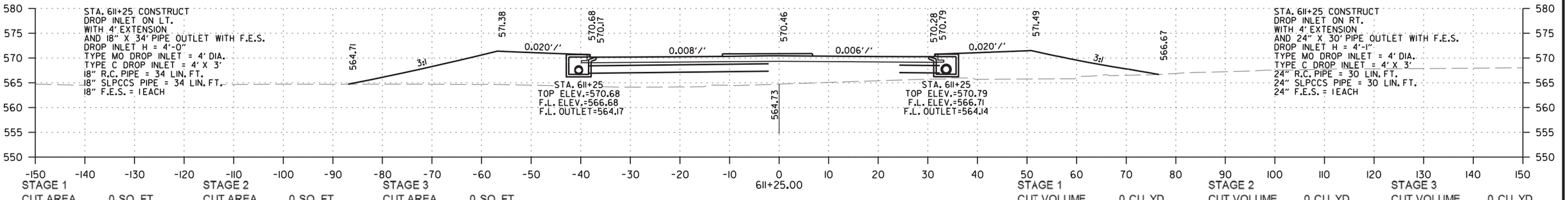
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	316	323

(2) CROSS SECTIONS



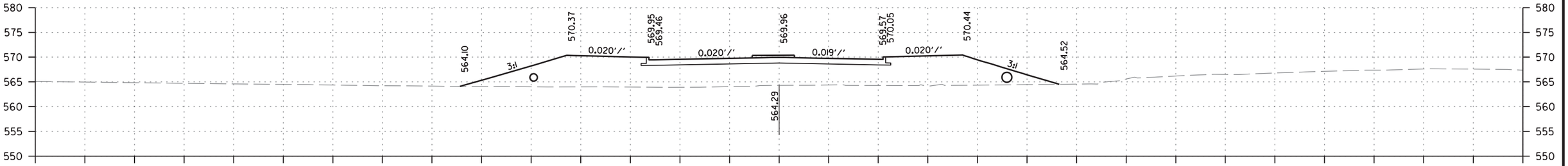
611+33.46
END HWY. 70

STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	777 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	232 CU. YD.	FILL VOLUME	0 CU. YD.



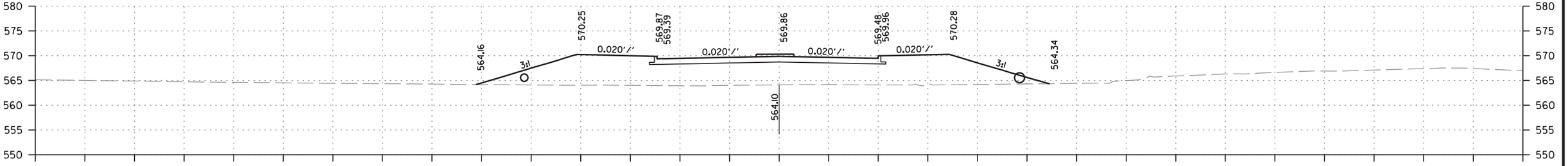
611+25.00

STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	701 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	570 CU. YD.	FILL VOLUME	0 CU. YD.



611+00.00

STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	531 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	96 CU. YD.	FILL VOLUME	0 CU. YD.



610+95.00
BEGIN HWY. 70

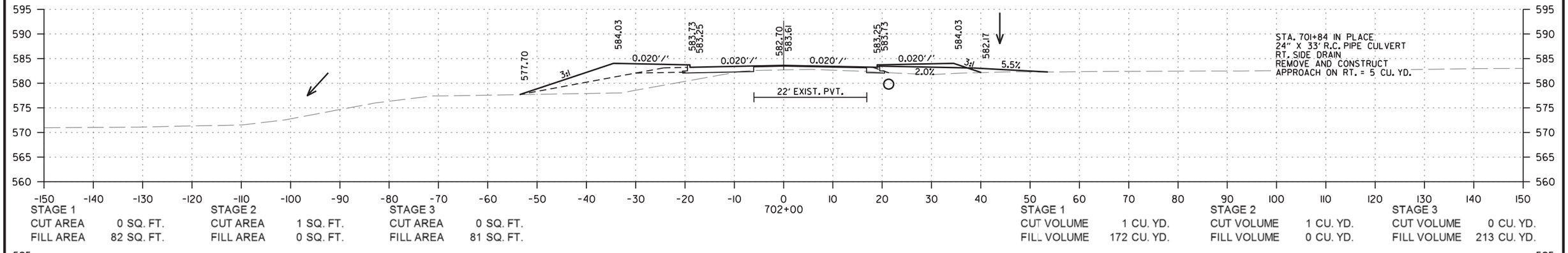
STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	505 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 70
STA. 610+95.00 TO STA. 611+33.46

eh40219 6/22/2020
R061547.DGN

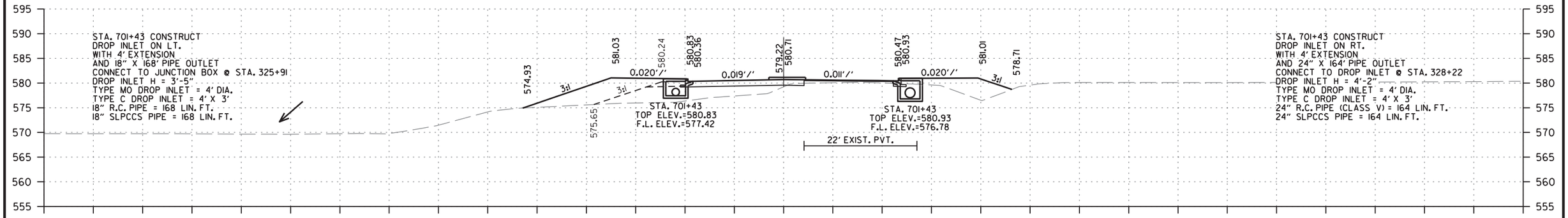
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	317	323

(2) CROSS SECTIONS



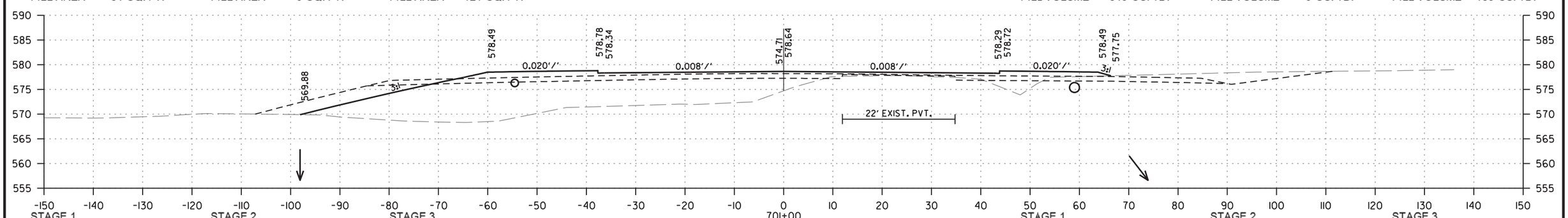
STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	1 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	82 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	81 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	1 CU. YD.	CUT VOLUME	1 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	172 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	213 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	1 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	81 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	121 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	65 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	76 CU. YD.
FILL VOLUME	549 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	186 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	80 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	95 SQ. FT.
FILL AREA	609 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	112 SQ. FT.

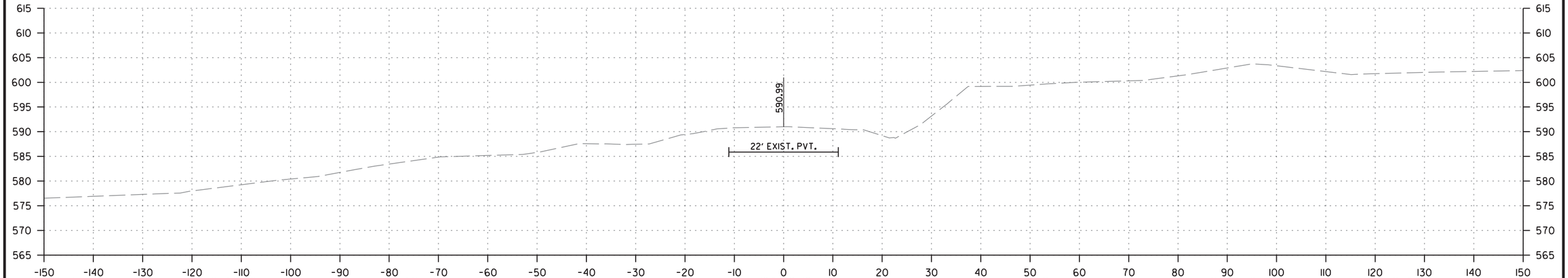
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

HWY. 7
STA. 701+00 TO STA. 702+00

ah40219 6/22/2020
R061547.DGN

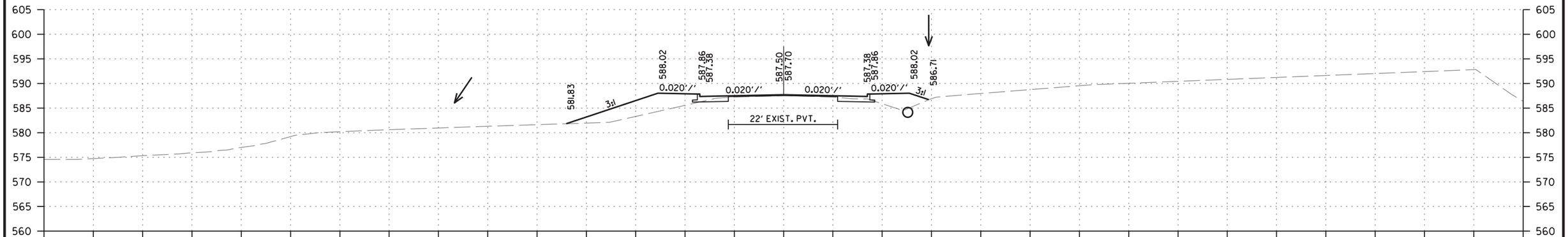
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	318	323

(2) CROSS SECTIONS



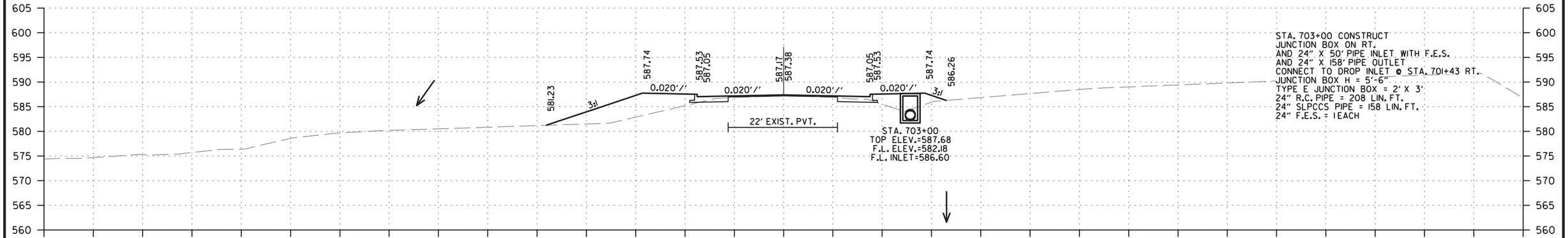
704+09.36
END 100' TRANSITION

STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	6 CU. YD.	CUT VOLUME	9 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	119 CU. YD.	FILL VOLUME	48 CU. YD.	FILL VOLUME	0 CU. YD.



703+09.36
END HWY. 7
BEGIN 100' TRANSITION

STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	3 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	1 CU. YD.	CUT VOLUME	2 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	64 SQ. FT.	FILL AREA	26 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	26 CU. YD.	FILL VOLUME	10 CU. YD.	FILL VOLUME	0 CU. YD.



703+00

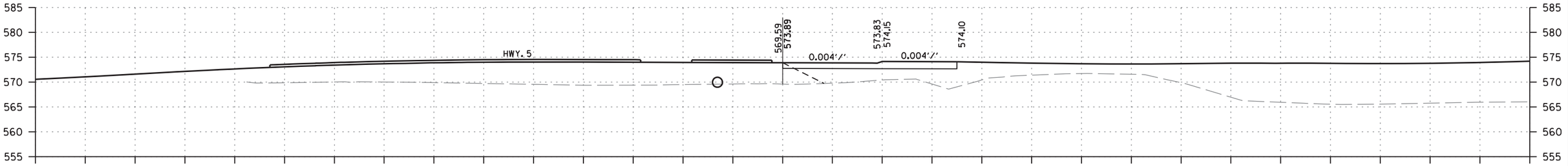
STAGE 1		STAGE 2		STAGE 3		STAGE 1		STAGE 2		STAGE 3	
CUT AREA	3 SQ. FT.	CUT AREA	5 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	6 CU. YD.	CUT VOLUME	11 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	87 SQ. FT.	FILL AREA	33 SQ. FT.	FILL AREA	0 SQ. FT.	FILL VOLUME	313 CU. YD.	FILL VOLUME	61 CU. YD.	FILL VOLUME	150 CU. YD.

HWY. 7
STA. 703+00 TO STA. 704+09.36

ah40219 6/22/2020
R061547.DGN

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.		061547	319	323

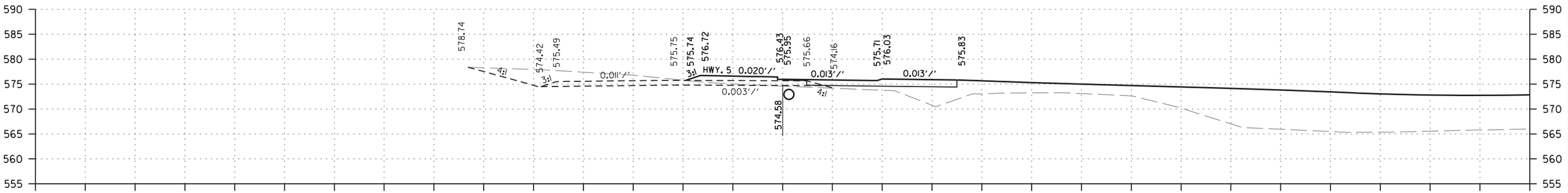
(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	329 SQ. FT.	FILL AREA	0 SQ. FT.

1+57.08

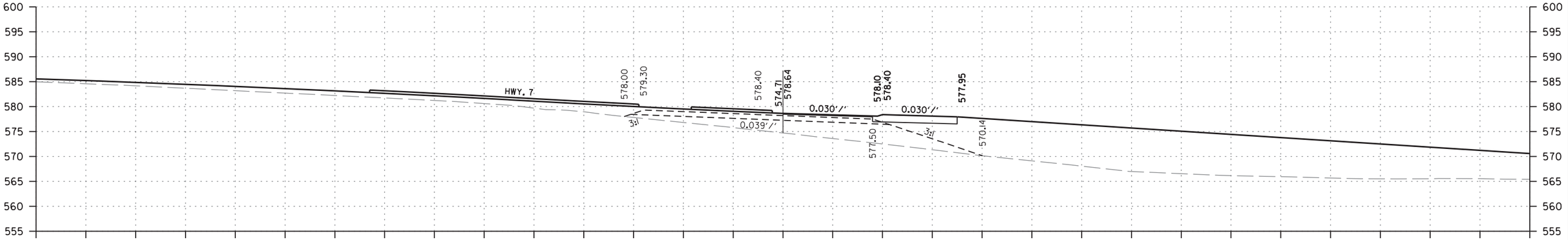
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	105 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	29 CU. YD.
FILL VOLUME	3 CU. YD.	FILL VOLUME	650 CU. YD.	FILL VOLUME	114 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	99 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	27 SQ. FT.
FILL AREA	3 SQ. FT.	FILL AREA	286 SQ. FT.	FILL AREA	108 SQ. FT.

I+00.00

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	183 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	50 CU. YD.
FILL VOLUME	294 CU. YD.	FILL VOLUME	1574 CU. YD.	FILL VOLUME	200 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	156 SQ. FT.	FILL AREA	564 SQ. FT.	FILL AREA	0 SQ. FT.

0+00.00

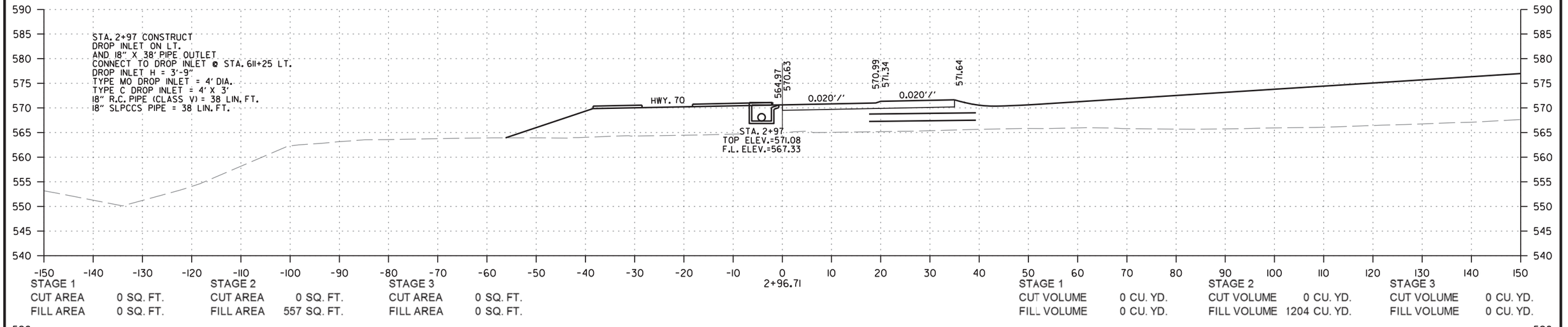
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

ROUNDABOUT
STA. 0+00.00 TO STA. 1+57.08

ah40219 6/22/2020
R061547.DGN

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.		061547	320	323

(2) CROSS SECTIONS

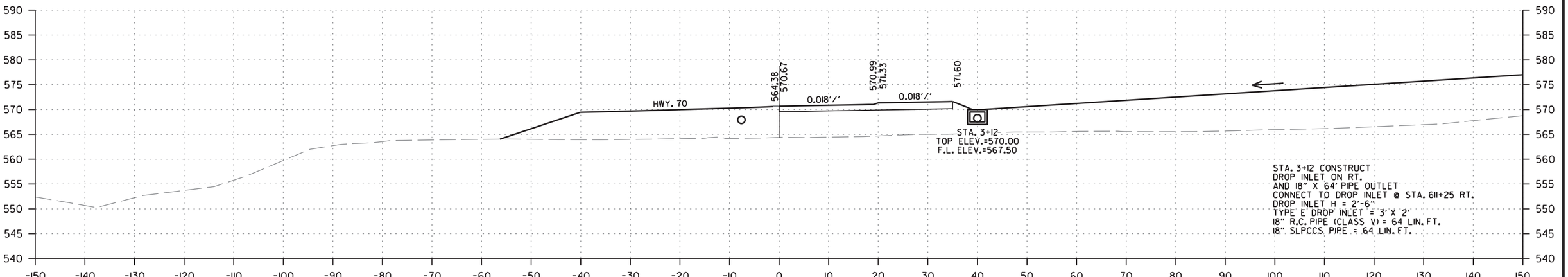


ROUNDABOUT
STA. 2+00.00 TO STA. 2+96.71

ah40219 6/22/2020
R061547.DGN

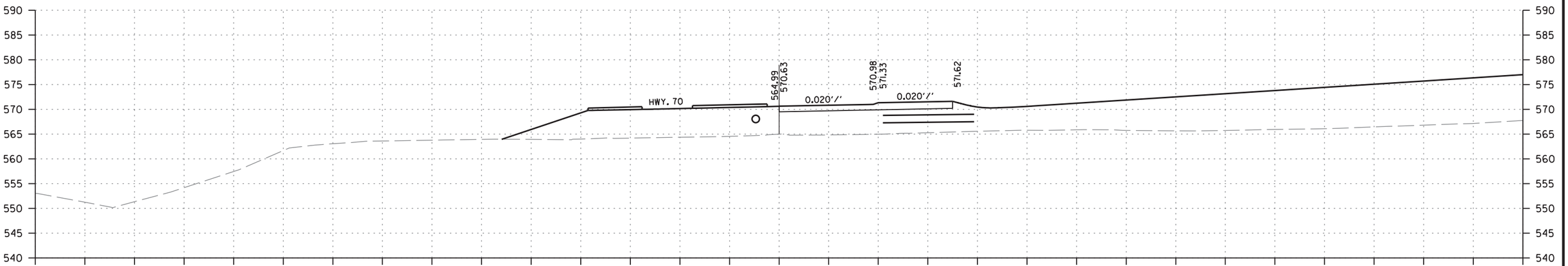
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	321	323

(2) CROSS SECTIONS



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	587 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	256 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	0 SQ. FT.	FILL AREA	565 SQ. FT.	FILL AREA	0 SQ. FT.

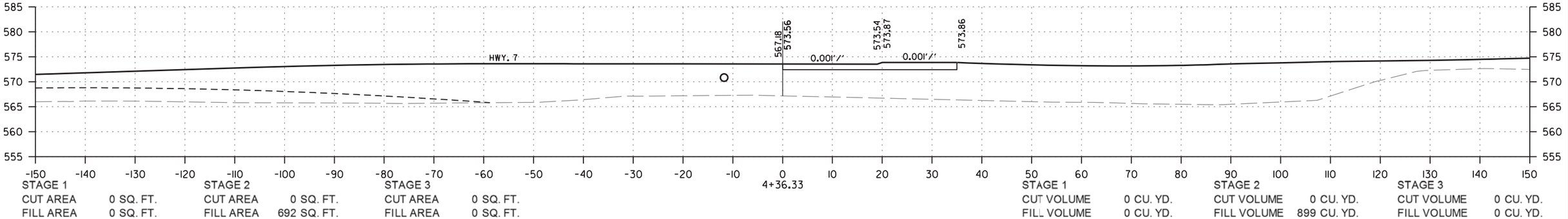
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	0 CU. YD.	FILL VOLUME	68 CU. YD.	FILL VOLUME	0 CU. YD.

ROUNDABOUT
STA. 3+00 TO STA. 3+12

ah40219 6/22/2020
R061547.DGN

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.		061547	322	323

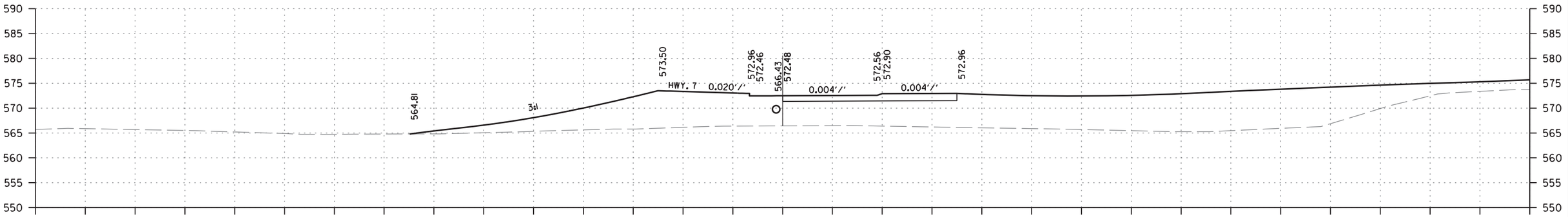
(2) CROSS SECTIONS



STAGE 1 — CUT AREA 0 SQ. FT. — FILL AREA 0 SQ. FT.
STAGE 2 — CUT AREA 0 SQ. FT. — FILL AREA 692 SQ. FT.
STAGE 3 — CUT AREA 0 SQ. FT. — FILL AREA 0 SQ. FT.

4+36.33

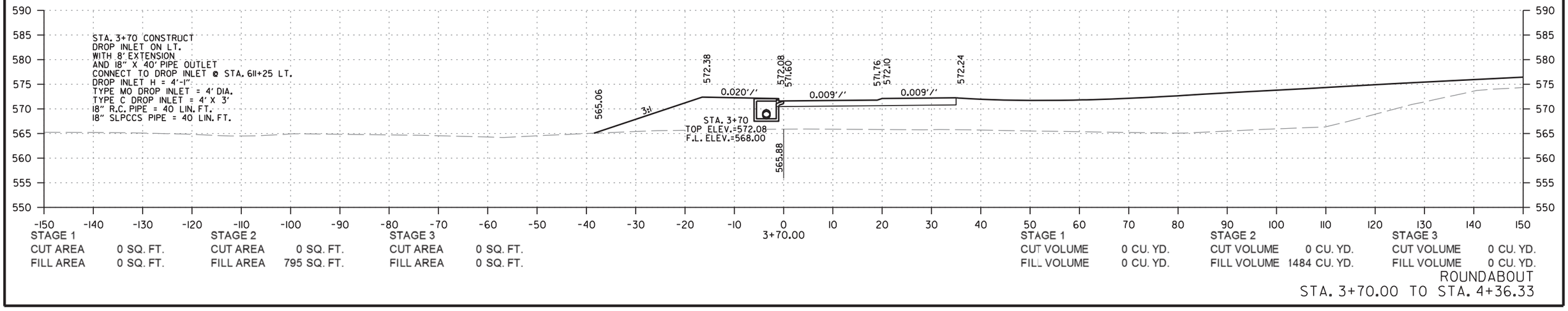
STAGE 1 — CUT VOLUME 0 CU. YD. — FILL VOLUME 0 CU. YD.
STAGE 2 — CUT VOLUME 0 CU. YD. — FILL VOLUME 899 CU. YD.
STAGE 3 — CUT VOLUME 0 CU. YD. — FILL VOLUME 0 CU. YD.



STAGE 1 — CUT AREA 0 SQ. FT. — FILL AREA 0 SQ. FT.
STAGE 2 — CUT AREA 0 SQ. FT. — FILL AREA 644 SQ. FT.
STAGE 3 — CUT AREA 0 SQ. FT. — FILL AREA 0 SQ. FT.

4+00.00

STAGE 1 — CUT VOLUME 0 CU. YD. — FILL VOLUME 0 CU. YD.
STAGE 2 — CUT VOLUME 0 CU. YD. — FILL VOLUME 799 CU. YD.
STAGE 3 — CUT VOLUME 0 CU. YD. — FILL VOLUME 0 CU. YD.



STAGE 1 — CUT AREA 0 SQ. FT. — FILL AREA 0 SQ. FT.
STAGE 2 — CUT AREA 0 SQ. FT. — FILL AREA 795 SQ. FT.
STAGE 3 — CUT AREA 0 SQ. FT. — FILL AREA 0 SQ. FT.

3+70.00

STAGE 1 — CUT VOLUME 0 CU. YD. — FILL VOLUME 0 CU. YD.
STAGE 2 — CUT VOLUME 0 CU. YD. — FILL VOLUME 1484 CU. YD.
STAGE 3 — CUT VOLUME 0 CU. YD. — FILL VOLUME 0 CU. YD.

ROUNDABOUT
STA. 3+70.00 TO STA. 4+36.33

ah40219 6/22/2020
R061547.DGN

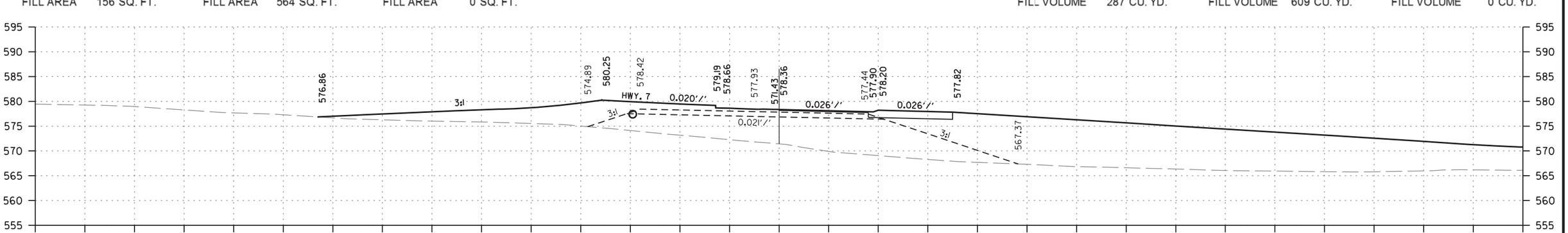
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		061547	323	323

(2) CROSS SECTIONS

6+28.32

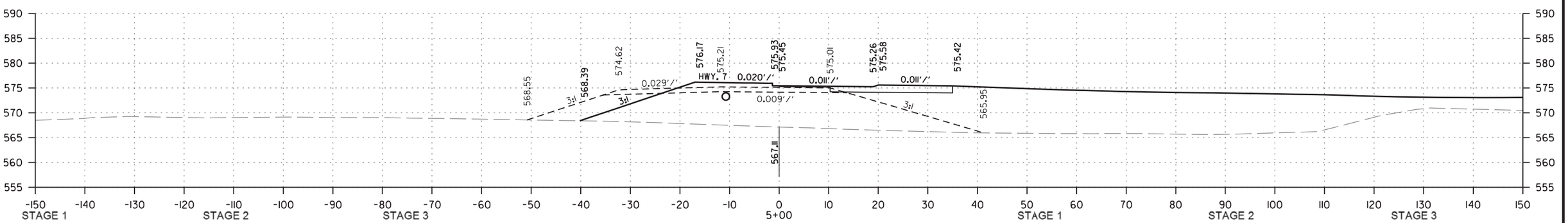
STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	156 SQ. FT.	FILL AREA	564 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL VOLUME	287 CU. YD.	FILL VOLUME	609 CU. YD.	FILL VOLUME	0 CU. YD.



STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.
FILL AREA	392 SQ. FT.	FILL AREA	598 SQ. FT.	FILL AREA	0 SQ. FT.

STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	128 CU. YD.
FILL VOLUME	1583 CU. YD.	FILL VOLUME	2263 CU. YD.	FILL VOLUME	0 CU. YD.

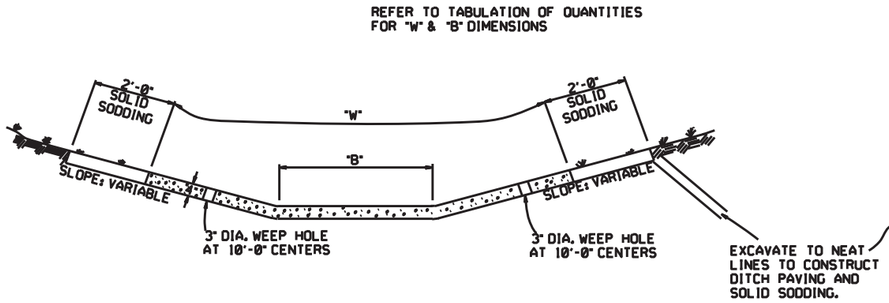


STAGE 1		STAGE 2		STAGE 3	
CUT AREA	0 SQ. FT.	CUT AREA	0 SQ. FT.	CUT AREA	69 SQ. FT.
FILL AREA	463 SQ. FT.	FILL AREA	624 SQ. FT.	FILL AREA	0 SQ. FT.

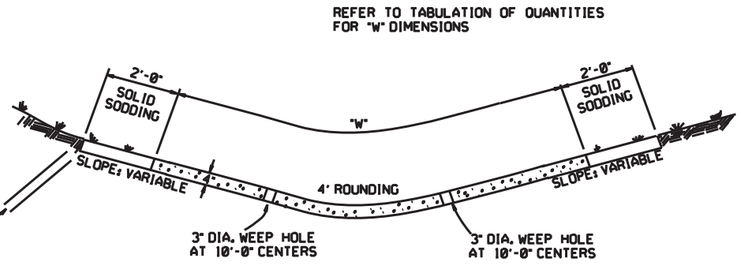
STAGE 1		STAGE 2		STAGE 3	
CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.	CUT VOLUME	81 CU. YD.
FILL VOLUME	546 CU. YD.	FILL VOLUME	1552 CU. YD.	FILL VOLUME	0 CU. YD.

ROUNDABOUT
STA. 5+00 TO STA. 6+00

ah40219 6/22/2020
R061547.DGN

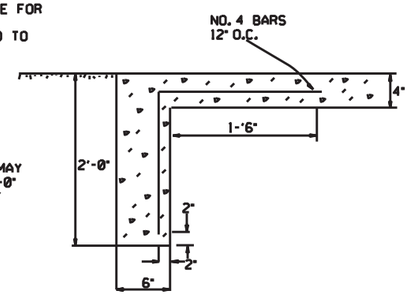


TYPE A



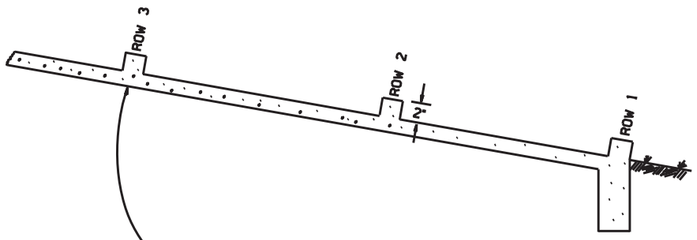
TYPE B

THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR "CONCRETE DITCH PAVING."



TOE WALL DETAIL FOR CONCRETE DITCH PAVING

TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION



ENERGY DISSIPATORS
(NO SCALE)

ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

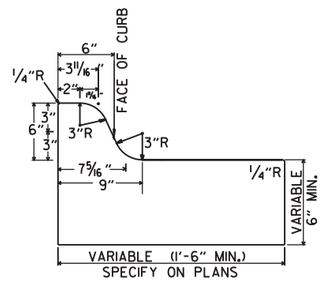
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45° INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
12-8-16	CORRECTED ENERGY DISSIPATOR DRAWING AND NOTE	
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

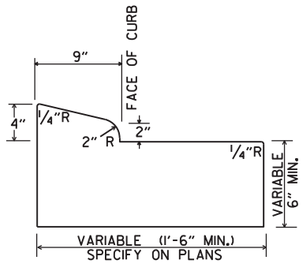
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

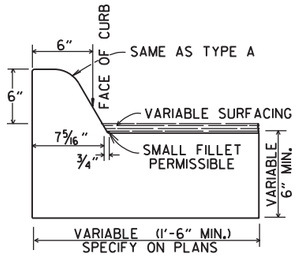
STANDARD DRAWING CDP-1



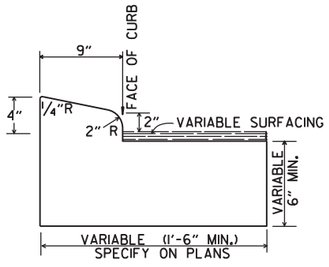
TYPE A



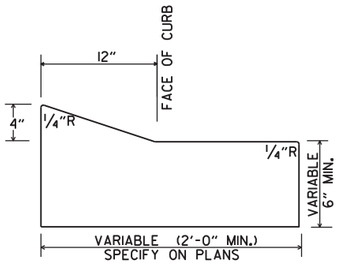
TYPE B-1



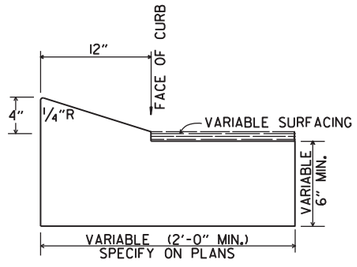
TYPE C



TYPE B-2

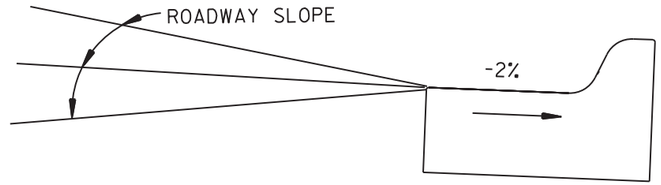


TYPE E-1



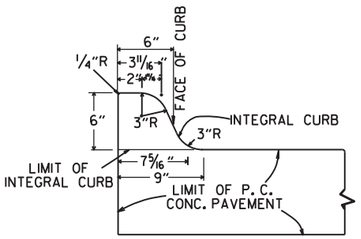
TYPE E-2

CONCRETE COMBINATION CURB AND GUTTER

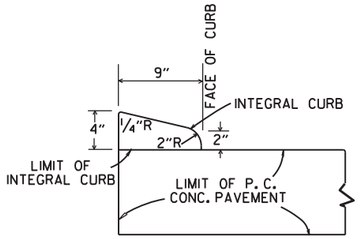


DETAIL OF GUTTER SLOPE

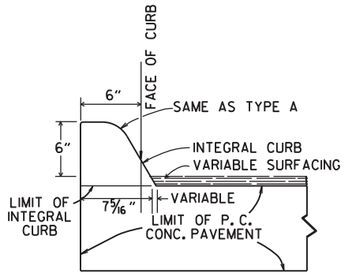
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

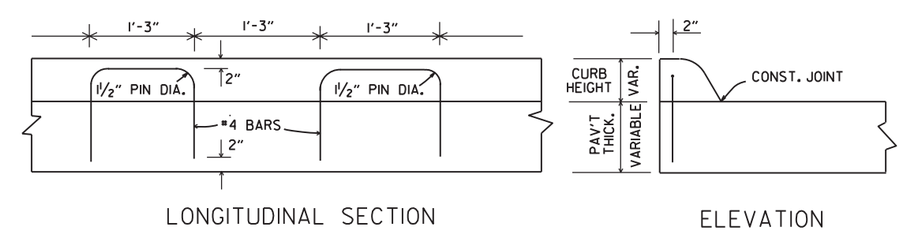


TYPE B



TYPE C

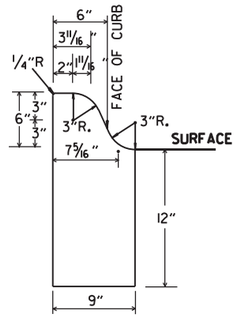
INTEGRAL CURB



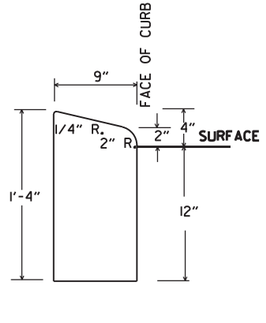
LONGITUDINAL SECTION

ELEVATION

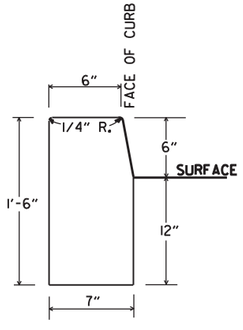
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



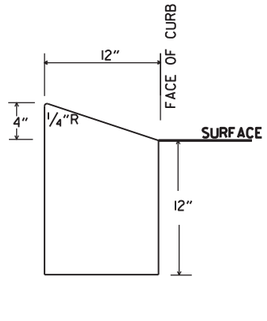
TYPE A



TYPE B

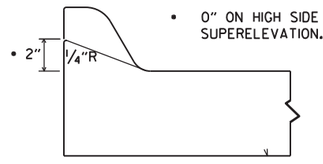


TYPE D



TYPE E

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.

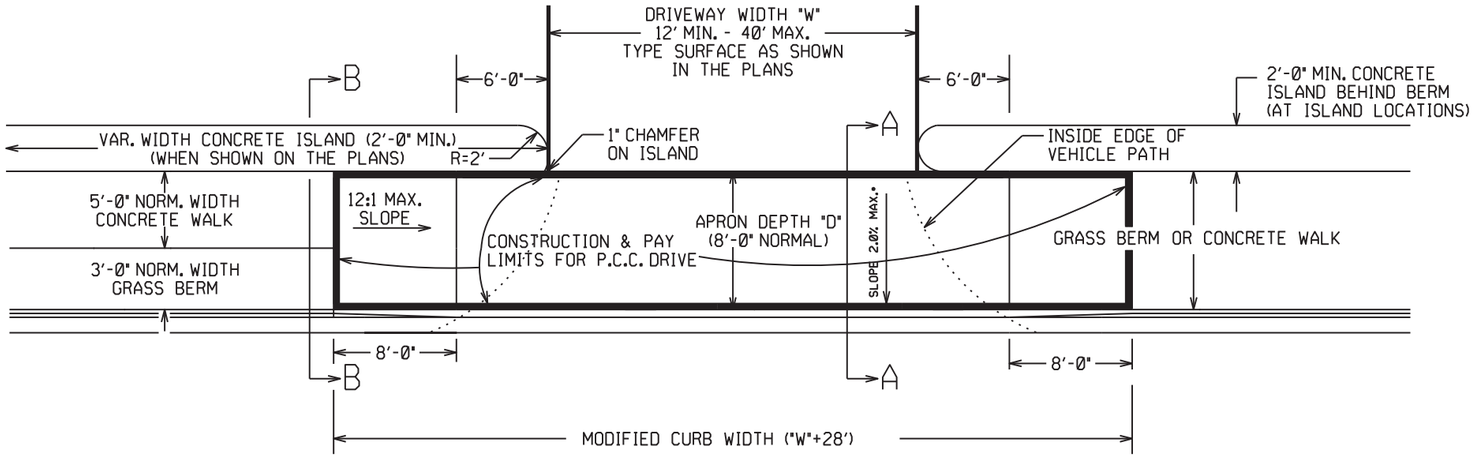
DETAILS OF MODIFIED CURB

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	VARIBLE DEPTH TYPE A & B I	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

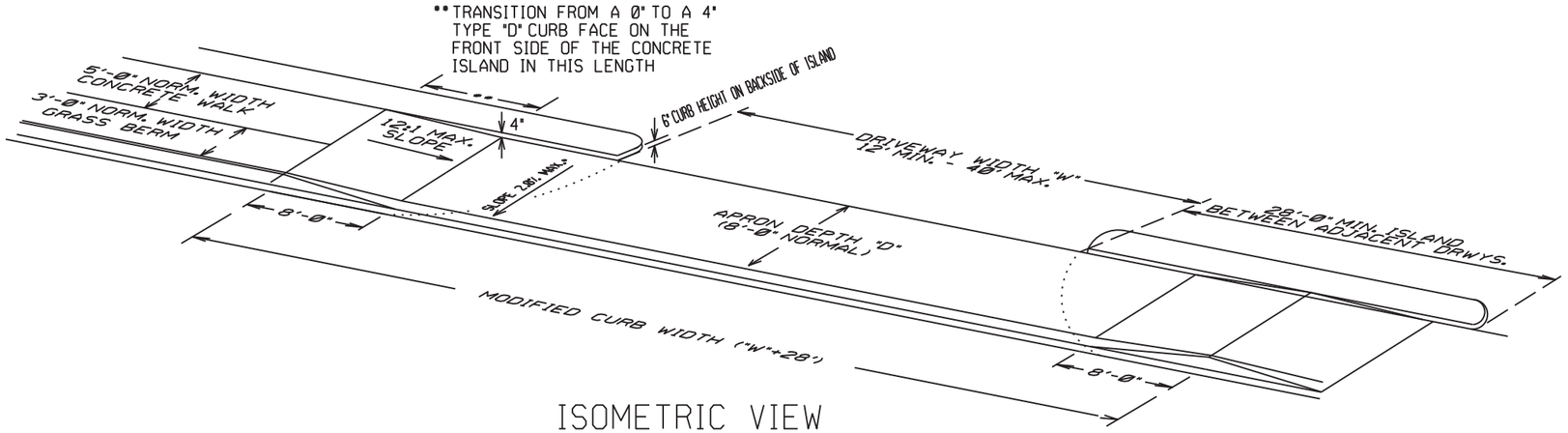
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

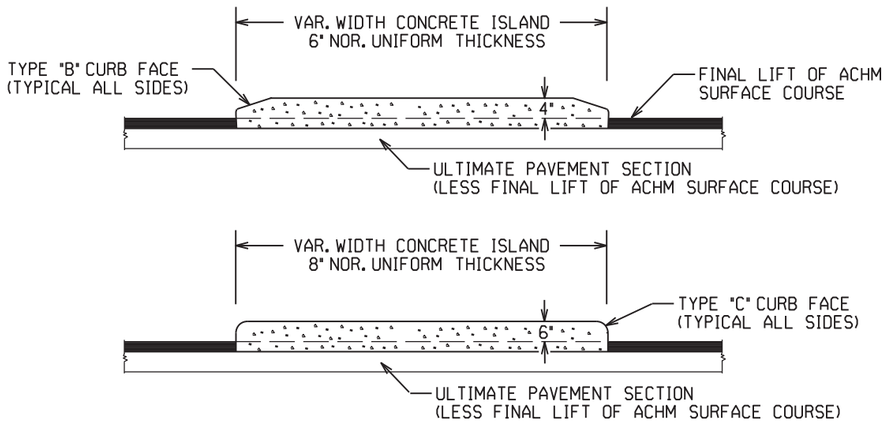
STANDARD DRAWING CG-1



PLAN VIEW

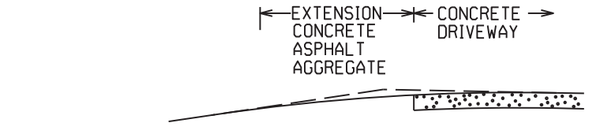


ISOMETRIC VIEW



CURBED ISLANDS FOR CHANNELIZATION

REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".



EXTENSION TYPICAL SECTIONS

1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY

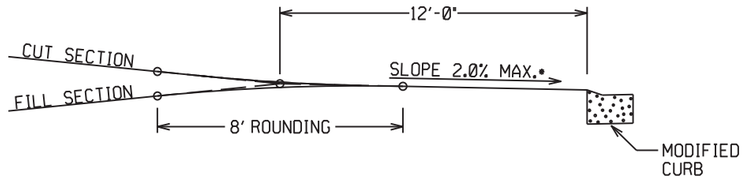
2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")

3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE

4: AGGREGATE - 6" AGGREGATE BASE COURSE

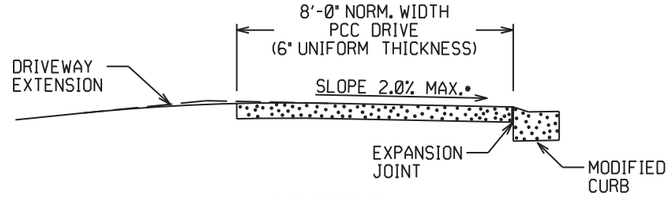
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

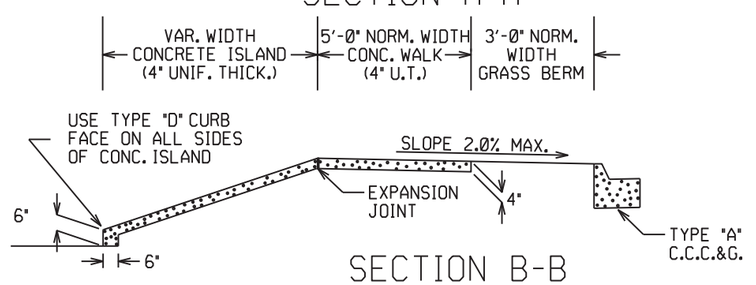


DRIVEWAY VERTICAL ALIGNMENT DETAILS

- NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



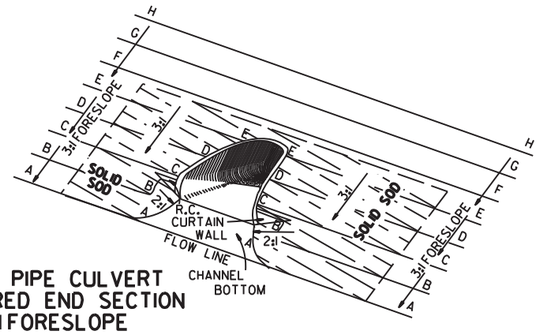
SECTION B-B
CURBED ISLAND BEHIND WALK

DATE REV	DATE FILMED	DESCRIPTION
11-07-19		REVISED WALK DETAILS
2-27-14		REVISED PLAN & ISOMETRIC VIEW
11-29-07		ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05		REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02		ADDED ISLAND DETAILS & NOTES
3-30-00		REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98		REVISED NOTES
11-18-98		REDRAWN AND REISSUED

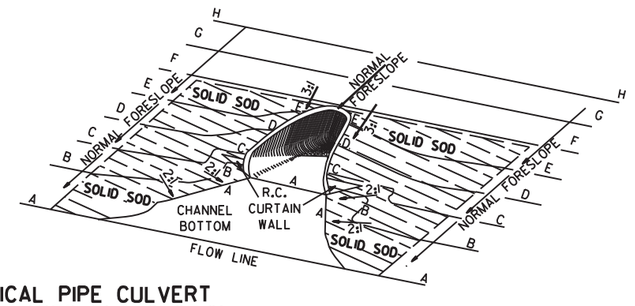
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & ISLANDS

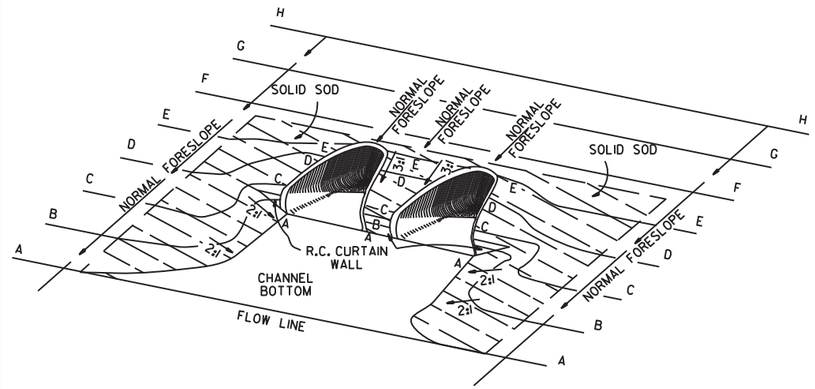
STANDARD DRAWING DR-1



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT
WITH FLARED END SECTIONS
& FLATTENED ADJACENT SLOPES

R.C. CURTAIN WALL
DIMENSIONS & QUANTITIES

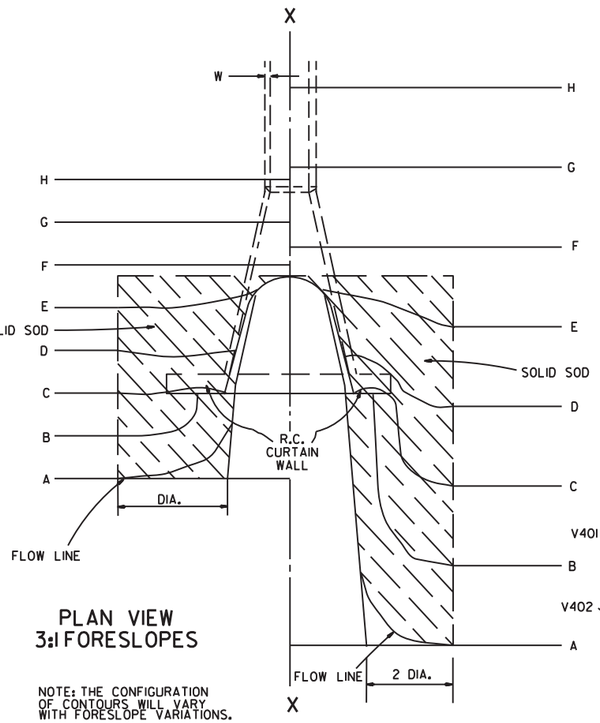
PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C.		DOUBLE R.C.P.C.	
					CONC.	REINF. STEEL	CONC.	REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1½"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9½"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.

REINFORCING STEEL SCHEDULE

PIPE DIA.	SINGLE R.C. PIPE CULVERT								DOUBLE R.C. PIPE CULVERT											
	H401		H402		V401		V402		H401		H402		H403		V401		V402	
	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8½"	12	8"	18
30"	10'-8"	2	2'-4½"	4	1'-11½"	10	8"	12	17'-8"	2	2'-4½"	4	8"	2	1'-11½"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9½"	8	2'-9½"	16	8"	15	23'-8"	2	3'-9½"	8	8"	4	2'-9½"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8½"	12	3'-5½"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5½"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

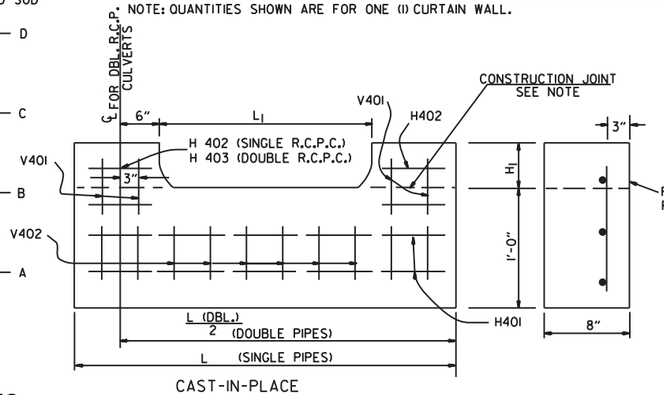
ALL REINFORCING STEEL #4 BARS @ 6" O.C.



PLAN VIEW
3:1 FORESLOPES

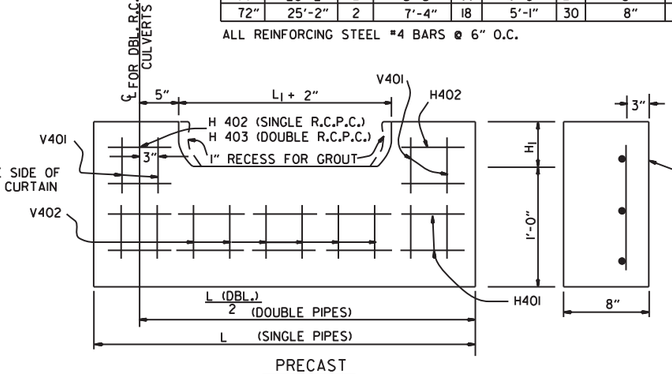
NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES



CAST-IN-PLACE

NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



PRECAST

NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

R.C. CURTAIN WALL DETAILS

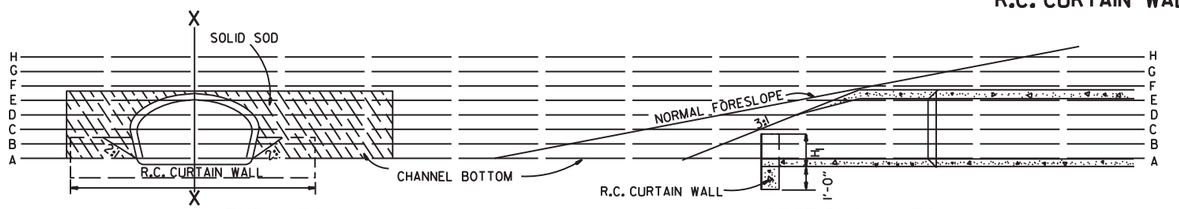
SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C.			DOUBLE R.C.P.C.		
	3:1	4:1	6:1	3:1	4:1	6:1
	SQ. YDS.			SQ. YDS.		
18"	5	7	12	6	8	13
24"	8	12	19	9	13	20
30"	13	18	29	14	19	30
36"	17	26	41	18	28	43
42"	23	35	55	25	37	57
48"	29	46	68	31	48	70
54"	35	57	85	37	59	87
60"	45	62	104	48	65	107
72"	64	92	156	67	95	159

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

GENERAL NOTES

1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
4. WELDED WIRE MESH 3 x 3 W10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

SECTIONAL VIEW "X-X"

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	
10-12-95	CORRECTED SPELLING	
11- 3-94	ADDED GENERAL NOTE NO. 4	
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-80	ADDED PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

STANDARD DRAWING FES-1

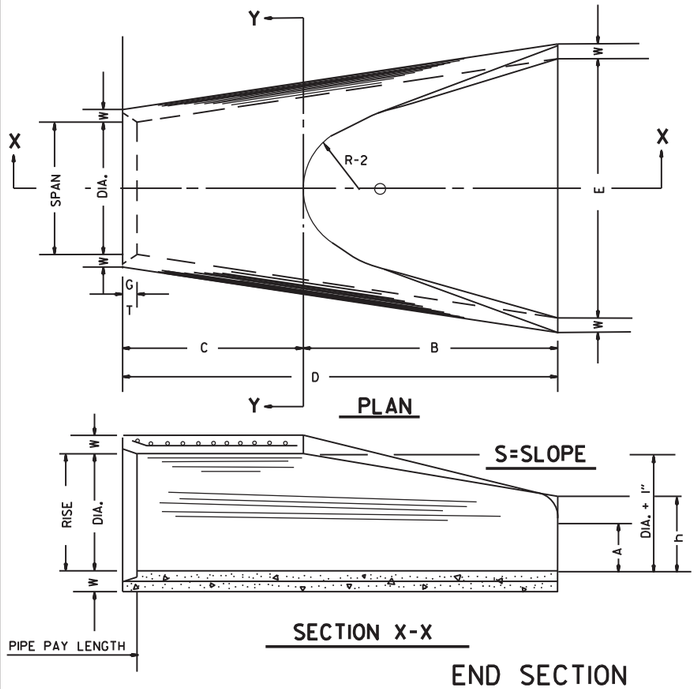
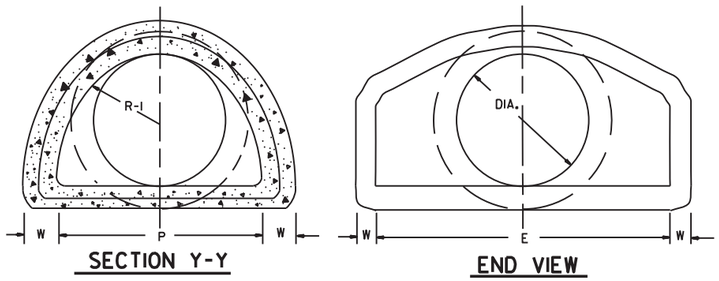


TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + I"	P	R-1	R-2	G-T	WT.	h
18"	2½"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15½"	12"	2"	1000	1'-0½"
24"	3"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	3:1	25"	33⅜"	16⅛"	14"	2½"	1600	1'-1½"
30"	3½"	1'-0"	4'-6"	1'-7¾"	6'-1¾"	5'-0"	3:1	31"	37"	18½"	15"	3¼"	1940	1'-4⅝"
36"	4"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	6'-0"	3:1	37"	47⅛"	24⅝"	20"	3½"	4100	1'-8"
42"	4½"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53⅛"	27½"	22"	3½"	5380	2'-2½"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56½"	28½"	22"	3½"	6550	2'-6"
54"	5½"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65½"	33⅛"	24"	4"	8750	2'-10½"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72½"	36⅛"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77⅛"	38⅝"	24"	5"	13250	4'-6"



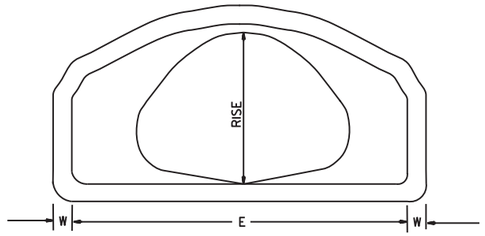
NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

END SECTION
FOR REINFORCED CONCRETE PIPE CULVERTS

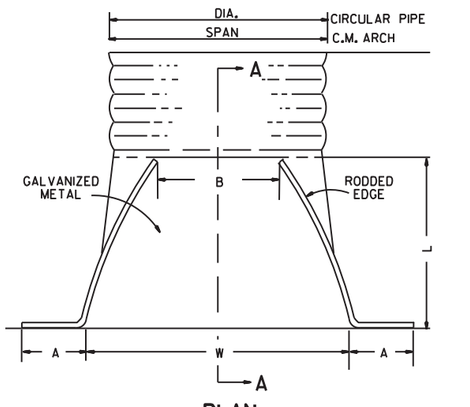
ARCH PIPE

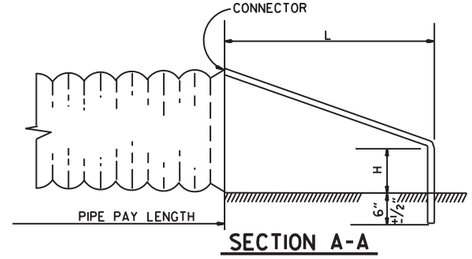
EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2½"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36⅛"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47⅛"	20"	3"	2½:1
36	43¾	44	26⅝	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54⅜"	22"	3½"	2½:1
42	51⅛	51	31⅜	31	4½"	11½"	4'-7"	1-10¼"	6'-5¼"	7'-2"	59½"	23"	3¾"	2½:1
48	58½	59	36	36	5"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	7'-10"	70⅝"	24"	4¼"	2½:1
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72⅛"	24"	4¾"	2¼:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77⅛"	24"	5"	2¼:1

• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.

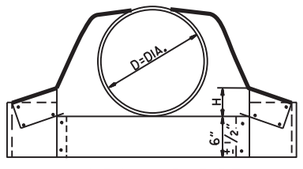


END VIEW
CONCRETE ARCH PIPE

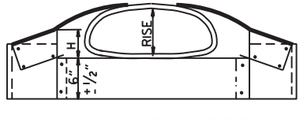




NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.



CIRCULAR PIPE



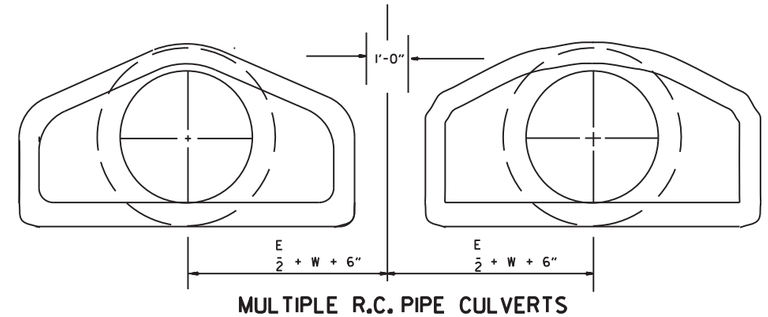
C.M. ARCH PIPE

CIRCULAR PIPE

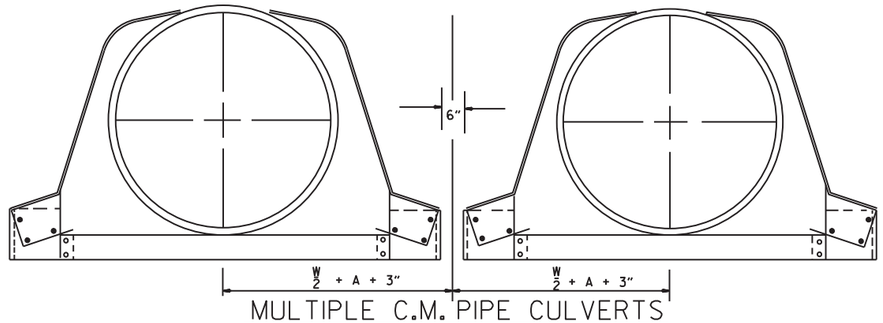
D. DIA.	GAUGE	A I" ±	B. MAX.	H I" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1¾:1
66	12	18	36	12	87	120	1½:1
72	12	18	39	12	87	126	1 1/3:1

C.M. ARCH PIPE

EQUIV. DIA.	SPAN	RISE	A I" ±	B MAX.	H I" ±	L 1½" ±	W 2" ±	S	GAUGE
	INCHES								
15"	17	13	7	9	6	19	30	2½:1	16
18"	21	15	7	10	6	23	36	2½:1	16
21"	24	18	8	12	6	28	42	2½:1	16
24"	28	20	9	14	6	32	48	2½:1	16
30"	35	24	10	16	6	39	60	2½:1	14
36"	42	29	12	18	8	46	75	2½:1	14
42"	49	33	13	21	9	53	85	2½:1	12
48"	57	38	18	26	12	63	90	2½:1	12
54"	64	43	18	30	12	70	102	2¼:1	12
60"	71	47	18	33	12	77	114	2¼:1	12



MULTIPLE R.C. PIPE CULVERTS



MULTIPLE C.M. PIPE CULVERTS

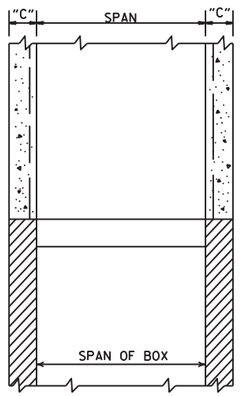
END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73
10-2-72	REVISED AND REDRAWN	760-10-2-72

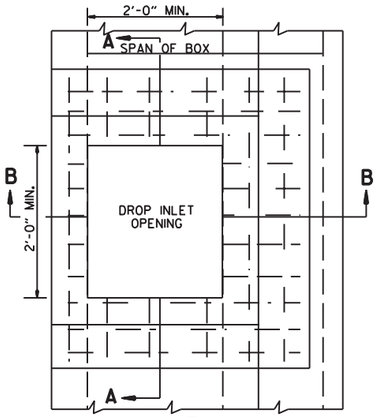
ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

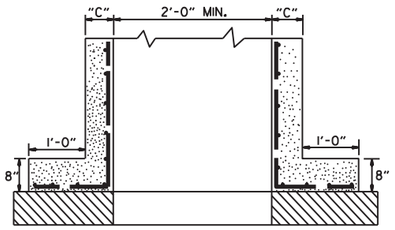
STANDARD DRAWING FES-2



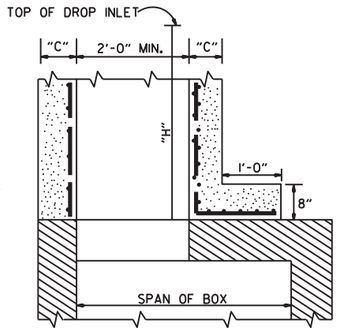
SECTION B-B



PLAN

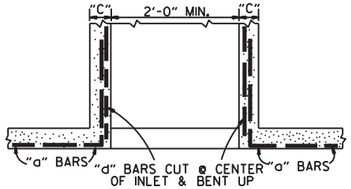


SECTION A-A

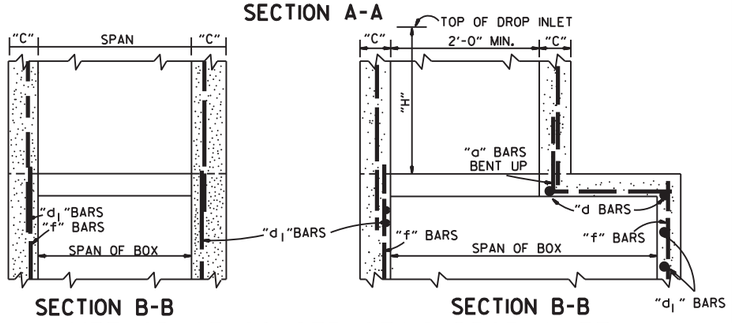


SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



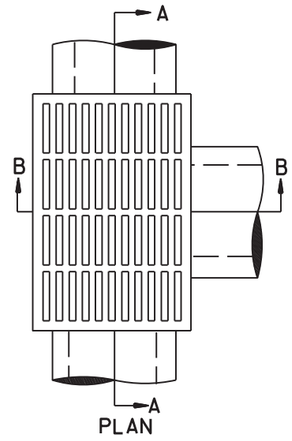
SECTION A-A



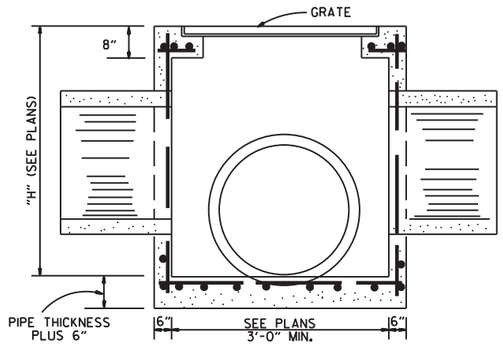
SECTION B-B SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

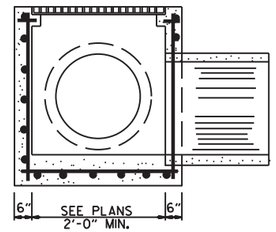


PLAN



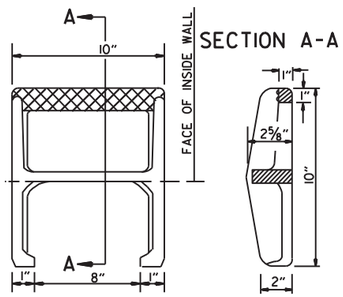
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)

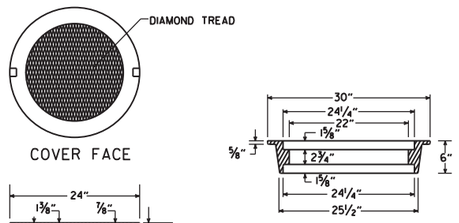


APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

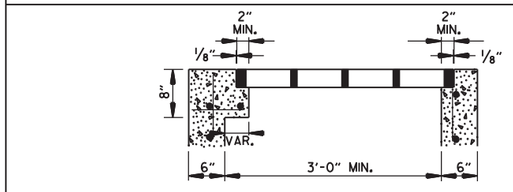
DETAIL OF STEP FOR DROP INLET



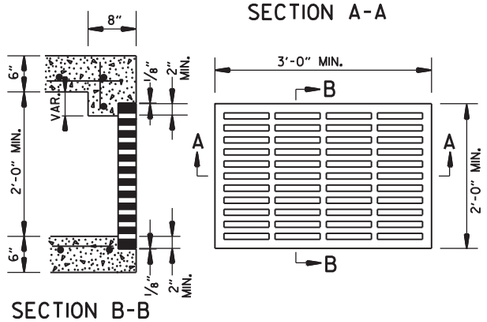
COVER SECTION RING SECTION

APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



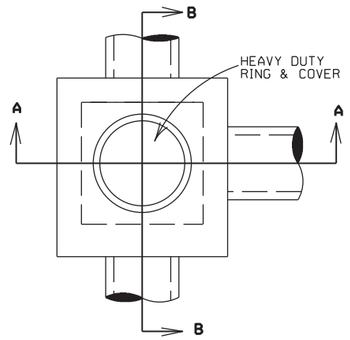
SECTION A-A



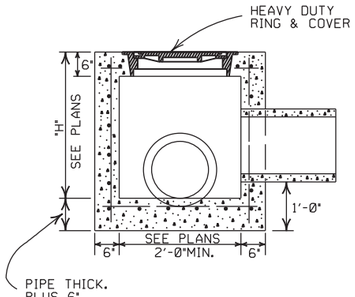
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

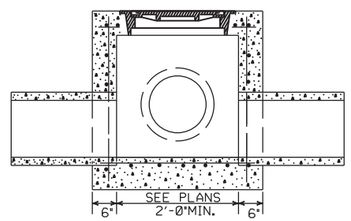


PLAN



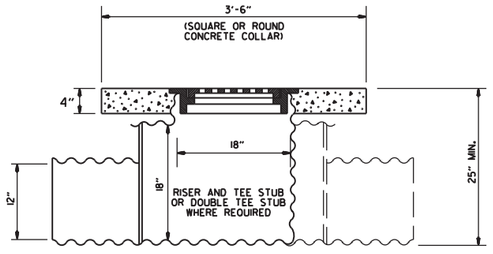
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

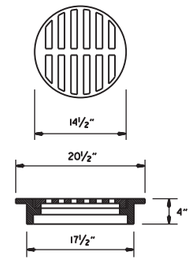


SECTION B-B

JUNCTION BOX (TYPE E)



NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS " 12" SIDE DRAIN ".



USE NEENAH R-5901-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

DETAIL OF YARD DRAIN

GENERAL NOTES:

1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL. DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

STANDARD DRAWING FPC-9

4'-0" LENGTH DROP INLET

PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0" CLASS A CONC.	HEIGHT 5'-0" REINF. STEEL	PLUS OR MINUS PER LIN. FT. OF HEIGHT CLASS A CONC.	PLUS OR MINUS PER LIN. FT. OF HEIGHT REINF. STEEL
		CU. YDS.	POUNDS	CU. YDS.	POUNDS
18"	2'-6"	1.77	156	0.28	22
24"	2'-6"	1.79	156	0.28	22
30"	3'-2"	2.39	205	0.30	26
36"	3'-8"	2.63	236	0.32	28
42"	4'-4"	2.95	250	0.34	30
48"	4'-10"	3.21	265	0.36	32

NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

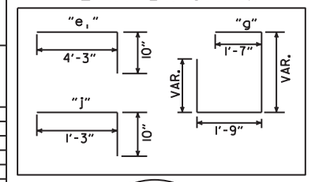
DROP INLET EXTENSION

4'-0" CLASS A CONC.	4'-0" REINF. STEEL	8'-0" CLASS A CONC.	8'-0" REINF. STEEL
CU. YDS.	POUNDS	CU. YDS.	POUNDS
0.58	38	0.87	72
DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
0.04	3		

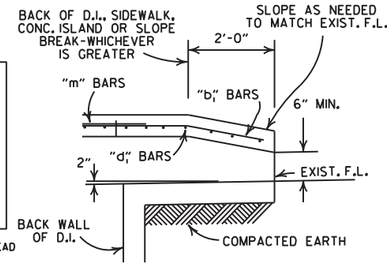
DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

INSIDE DIA. PIPE	CLASS A CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8

BAR DIAGRAM

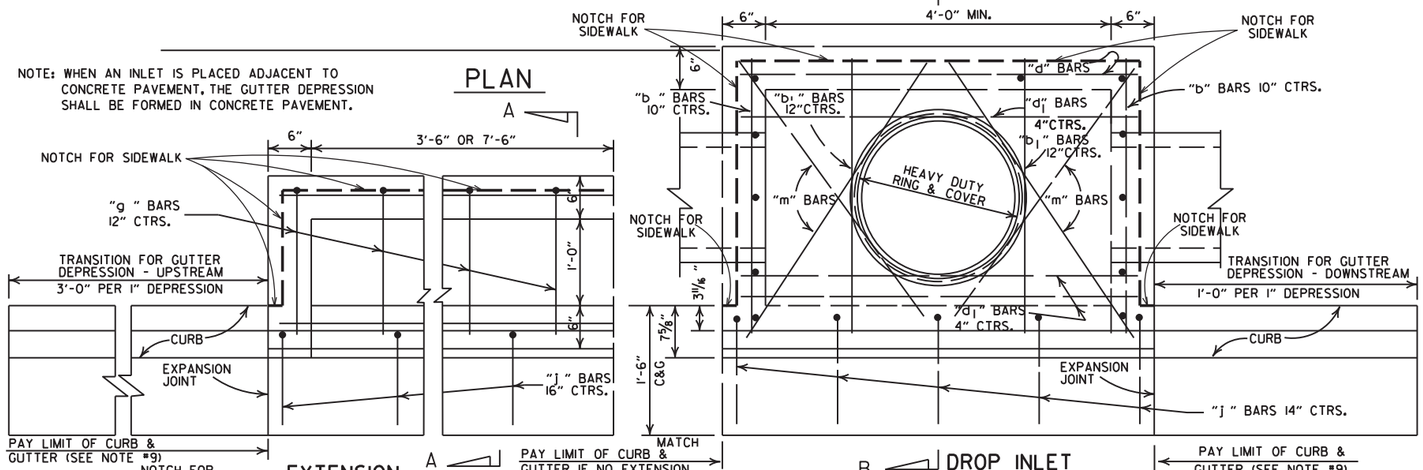


BACK OPENING

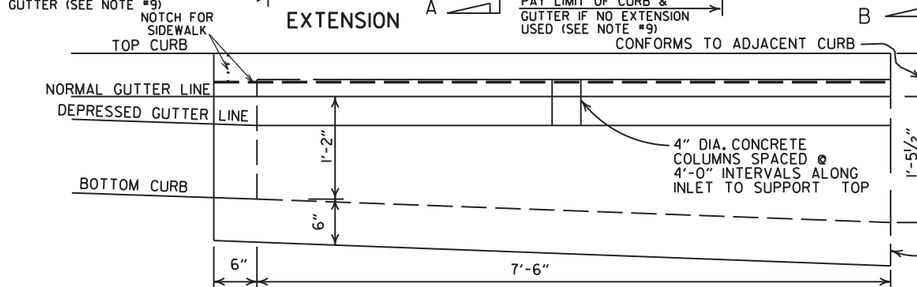


WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).

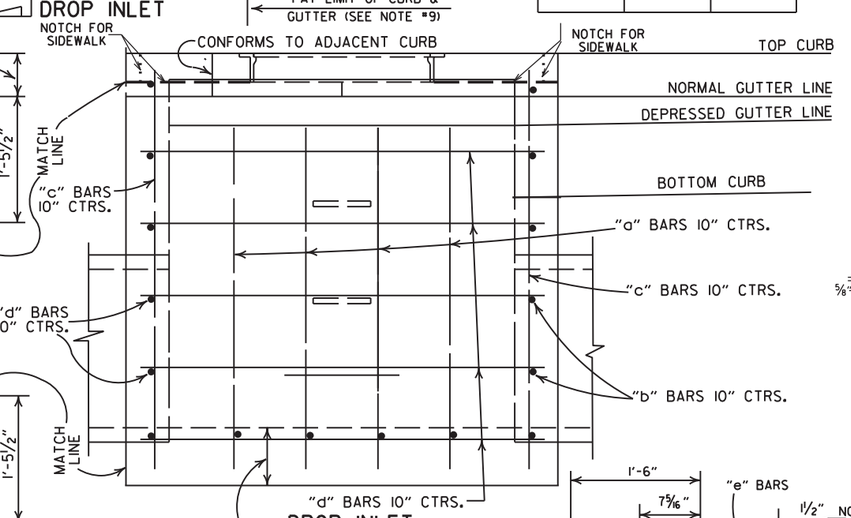
PLAN



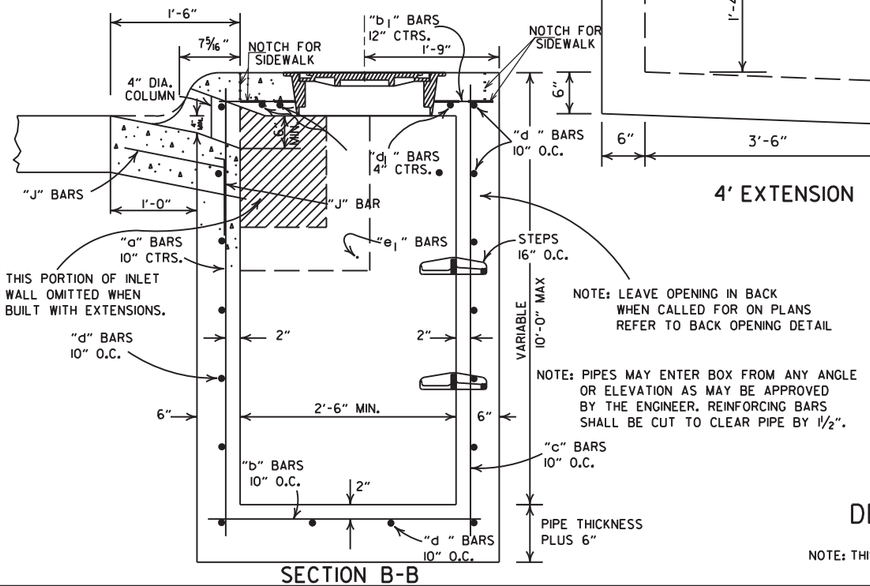
EXTENSION

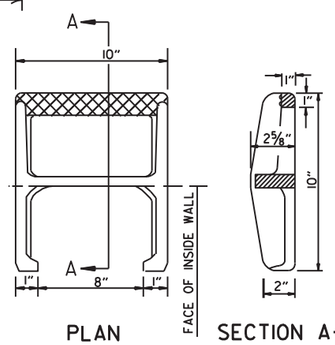


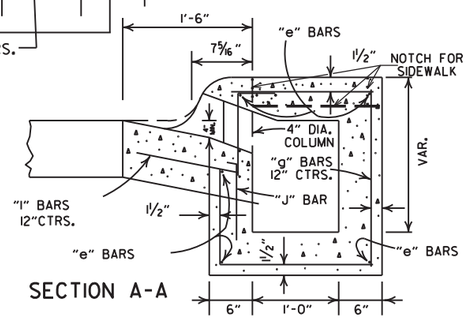
DROP INLET

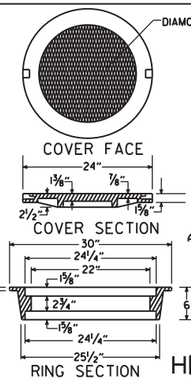


ELEVATION









APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

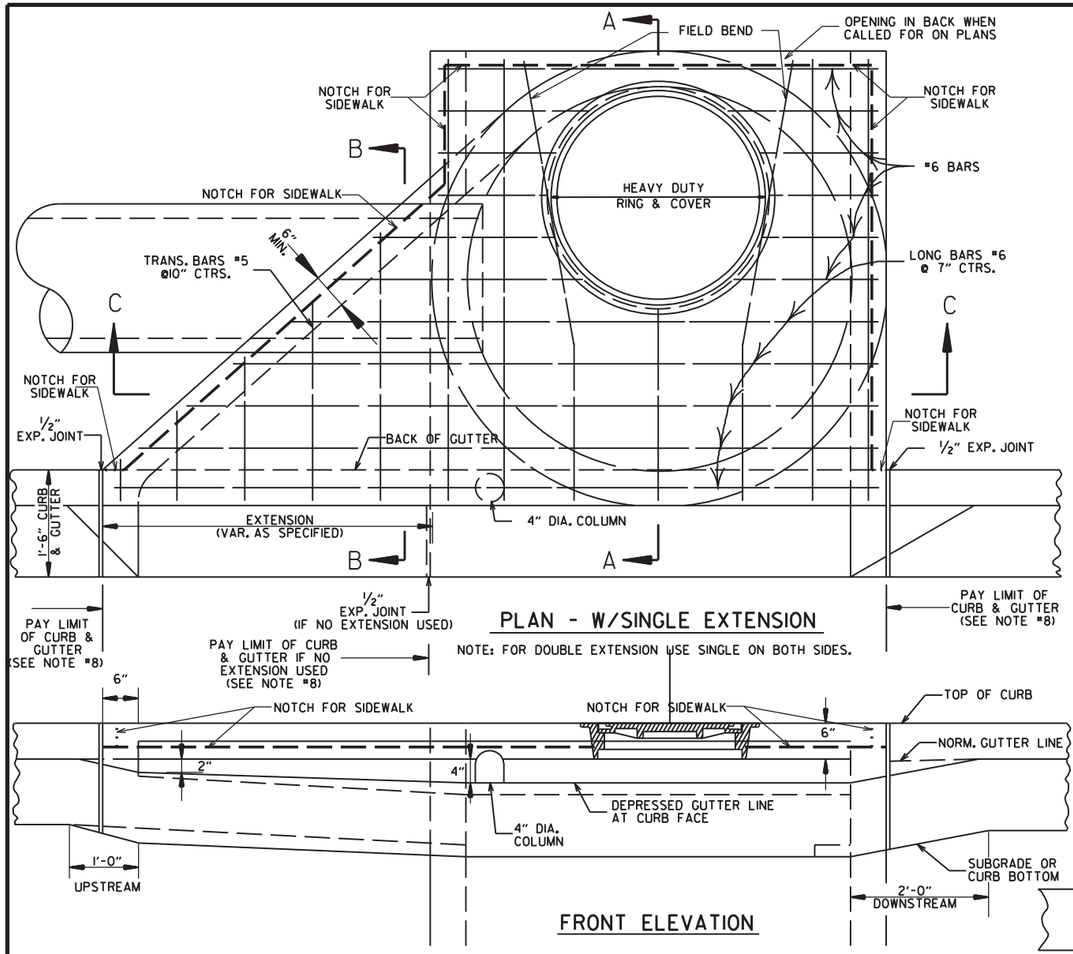
GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
3. ALL REINF. BARS SHALL BE #4 AND HAVE 1 1/2" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
6. WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (FPC-9D).
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
9. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
10. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
11. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

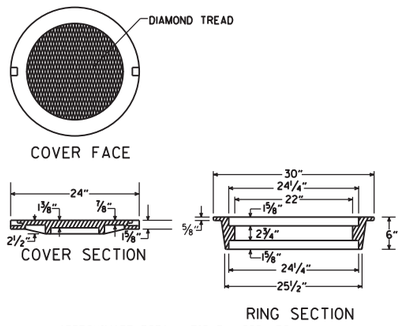
DATE REV.	REVISION	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13; REVISED SECTION B-B	
1-12-00	CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99	ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98	REPLACED RING & COVER W/HEAVY DUTY RING & COVER ADDED NOTES 9,10,&11	
10-18-96	CORRECTED SPELLING	
4-26-96	ADDED NOTE 8 & REVISED (4')(8') EXTENSION TITLES	10-18-96
4-1-93	REVISED BACK OPENING & NOTE	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS (TYPE C)

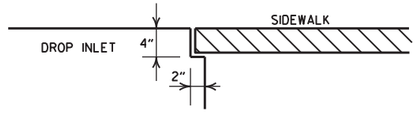
STANDARD DRAWING FPC-9E



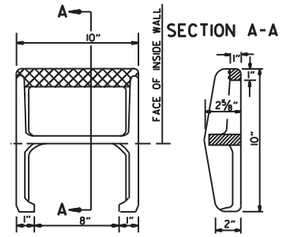


HEAVY DUTY RING & COVER

1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.



DETAIL OF NOTCH FOR SIDEWALKS



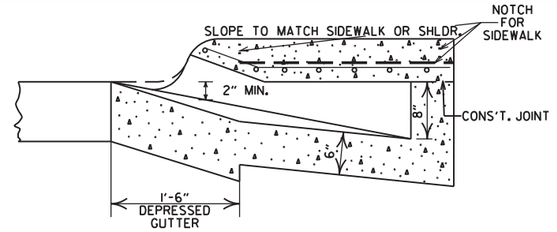
SECTION A-A

APPROX. WEIGHT = 11 LBS. (CAST IRON)

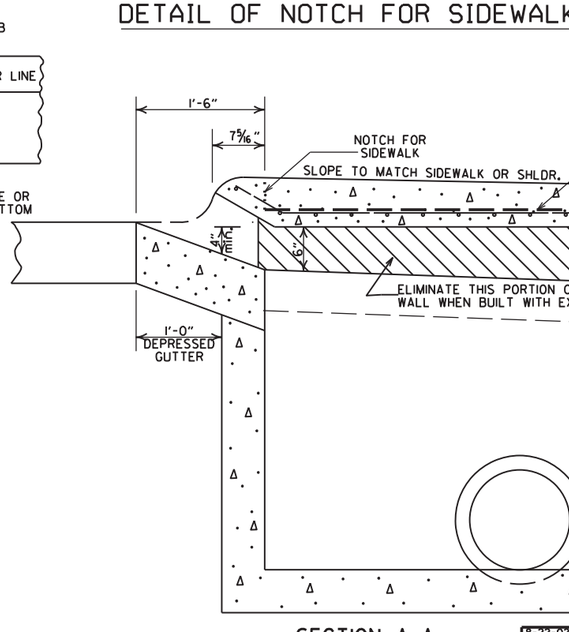
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

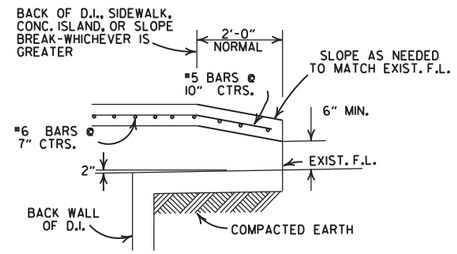
DETAIL OF STEP FOR DROP INLET



SECTION B-B



SECTION A-A



BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1 1/2" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

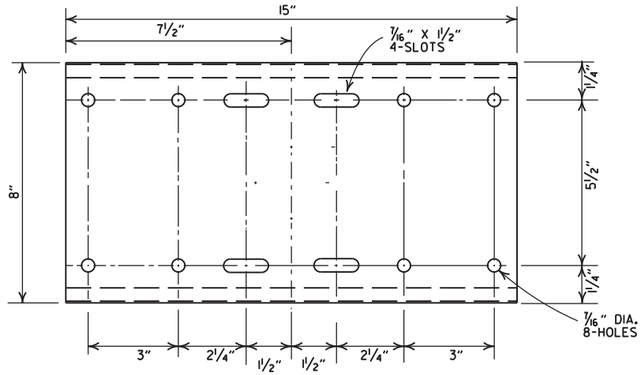
DIA. OF D.I.	DIA. OF OUTLET PIPE	MINIMUM WALL THICKNESS	
		CAST IN PLACE	PRECAST
4' I.D.	12" THRU 27"	6"	5"
5' I.D.	30" THRU 42"	8"	6"
6' I.D.	48" THRU 54"	8"	7"

DATE	REVISIONS	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REM. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE 1/2 ADJ. OPENING DIMENSION	
10-12-95	CORRECTED #6 BAR SPACING	
7-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
4-27-95	TYPE C TO MO (OPEN BACK DETAIL)	
11-3-94	REVISED GENERAL NOTES	11-3-94
4-1-93	REV. BACK OPEN. DETAIL & NOTE	4-1-93
8-15-91	REVISED NOTES 11,12 & ADDED BK.OPEN DETAIL	8-15-91
11-30-89	ADDED NOTE NO. 12	11-30-89
5-23-89	ADDED NOTE & MINIMUM WALL THICKNESS	513-5-23-89
7-15-88	ADDED EXTEND NOTE TO SECTION A-A	629-7-15-88
1-14-87	MODIFIED WALL THICKNESS	783-1-14-87
6-12-87	ISSUED	4-6-12-87

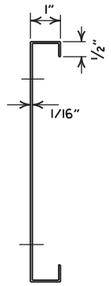
ARKANSAS STATE HIGHWAY COMMISSION

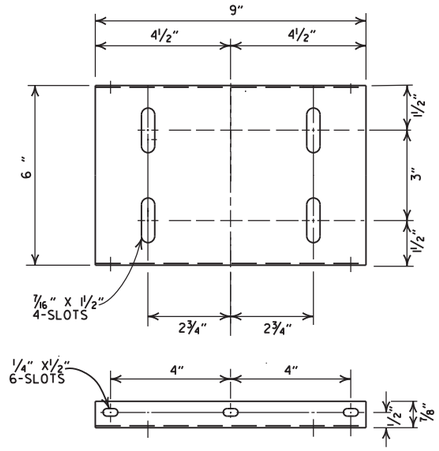
DETAILS OF DROP INLET (TYPE MO)

STANDARD DRAWING FPC-9M

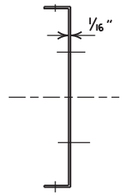


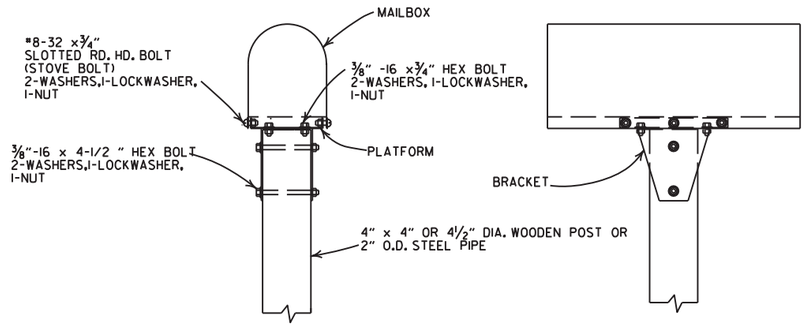
SHELF



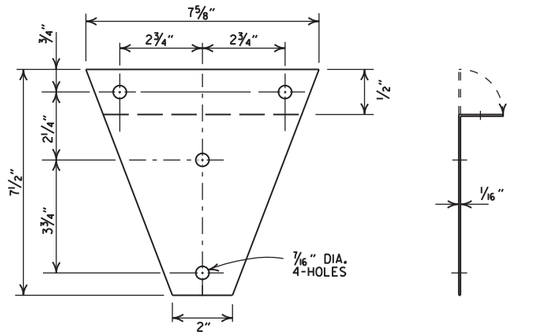


PLATFORM

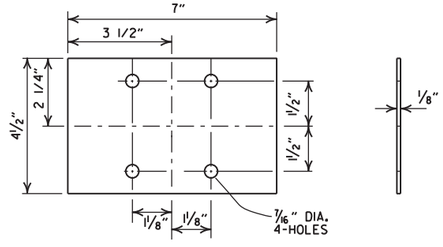




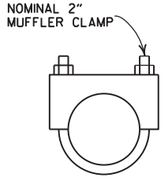
SINGLE INSTALLATION



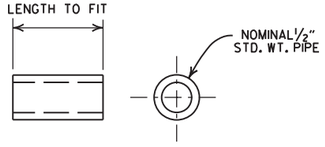
BRACKET



ANTI-TWIST PLATE



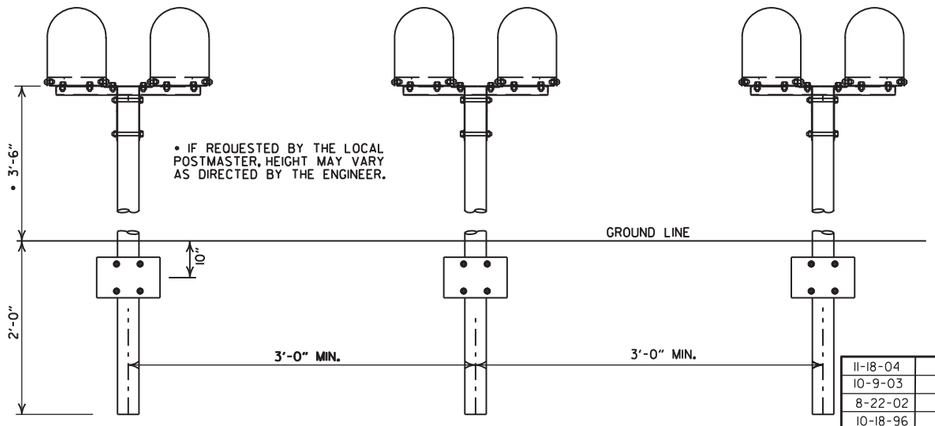
CLAMP



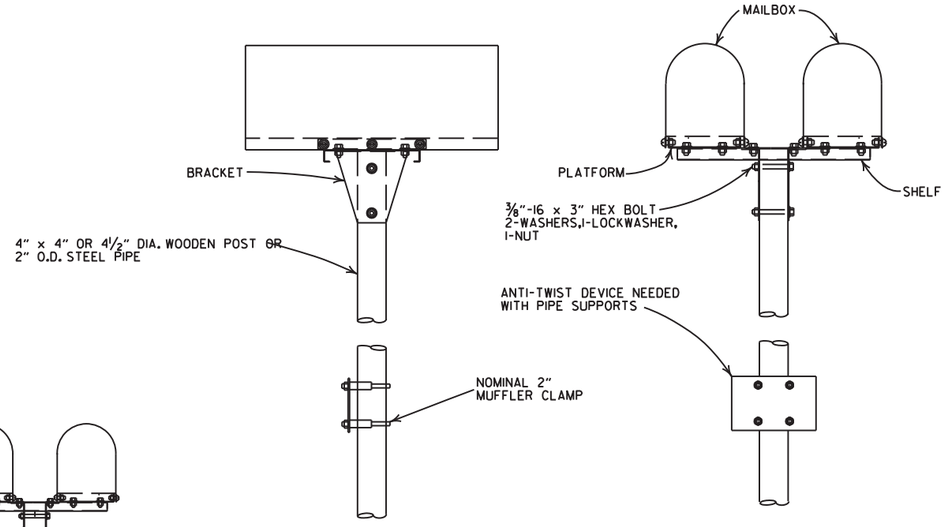
SPACER

GENERAL NOTES

1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
2. ANTI-TWIST PLATES SHALL BE USED ONLY ON METAL POSTS.
3. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL, HOWEVER TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF ¾" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 X ¾" FLATHEAD WOOD SCREWS USED TO ATTACH THE MAILBOX TO THE PLATFORM.
4. THE MAILBOX SHELF AND PLATFORM THAT IS SHOWN IS FOR STANDARD SIZE MAILBOXES. THE SHELF AND PLATFORM SIZE SHALL BE MODIFIED TO FIT MAILBOXES OF A DIFFERENT SIZE.
5. METAL PIPE FOR MAILBOX SUPPORT SHALL BE 2" OUTSIDE DIAMETER STEEL WITH A WALL THICKNESS OF 0.145" AND A WEIGHT OF 2.72 LBS PER FT. OUTSIDE DIAMETER AND WEIGHT SHALL HAVE A TOLERANCE OF +/- 5% ACCORDING TO AASHTO M 181.
6. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED, PROVIDED THEY ARE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.



SPACING FOR MULTIPLE POST INSTALLATION



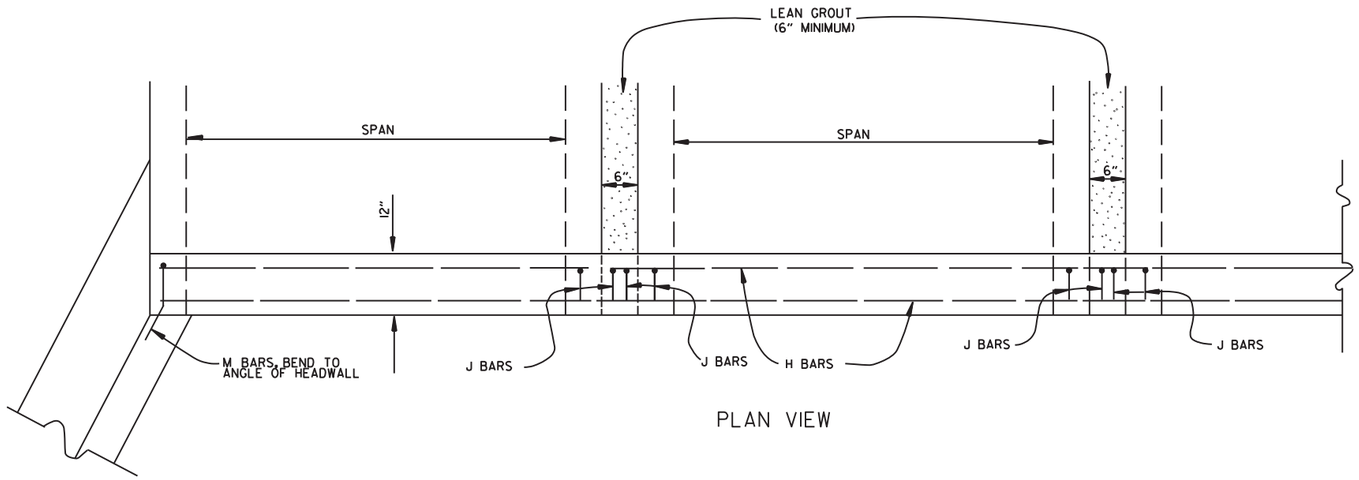
DOUBLE INSTALLATION

DATE	FILMED	REVISION
11-18-04		REVISED NOTES
10-9-03		REVISED NOTE 6
8-22-02		REVISED NOTE 6
10-18-96		CORRECTED AASHTO
10-1-92		CORRECTED SPELLING
9-26-91		NEW PHONE NUMBER
8-15-91		ADDED NOTE
11-30-89		ADJUSTED HEIGHT & ADDED NOTE
2-16-89		DELETED SLOTS FROM SHELF & PLTF
11-17-88	10-1-92	ADJUSTED DIMENSIONS OF STEEL POSTS
7-15-88	20-7-15-88	ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

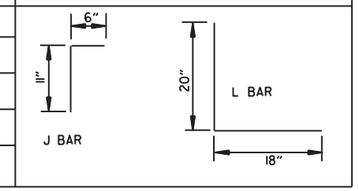
STANDARD DRAWING MB-1



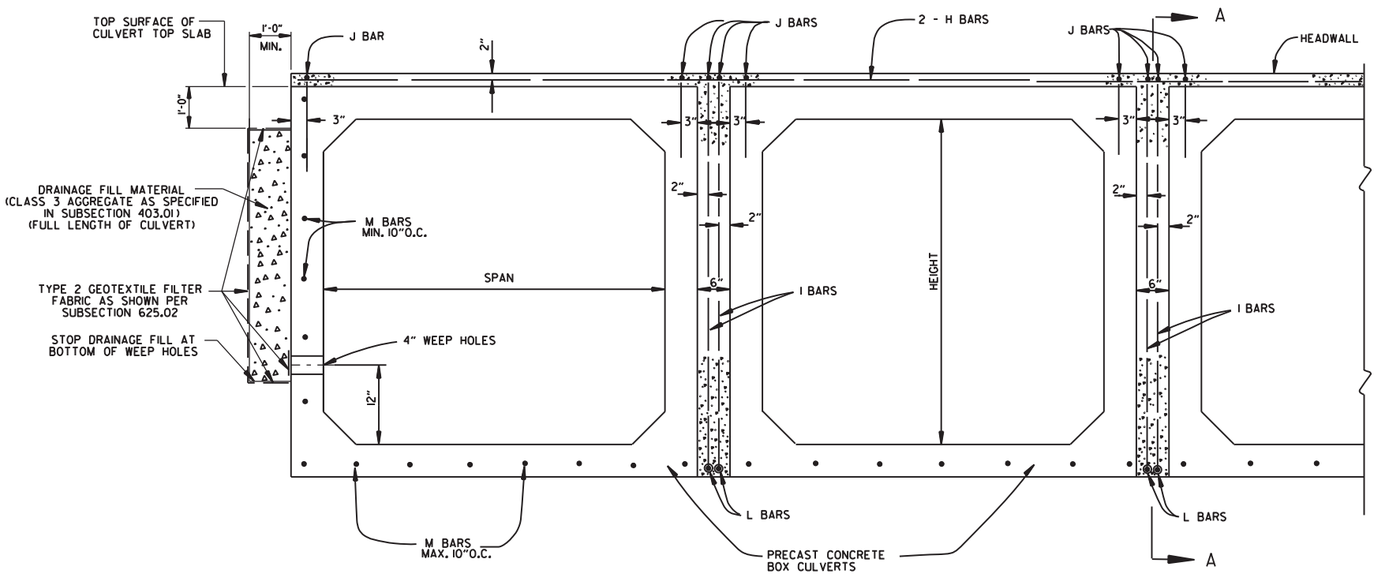
PLAN VIEW

BAR LIST

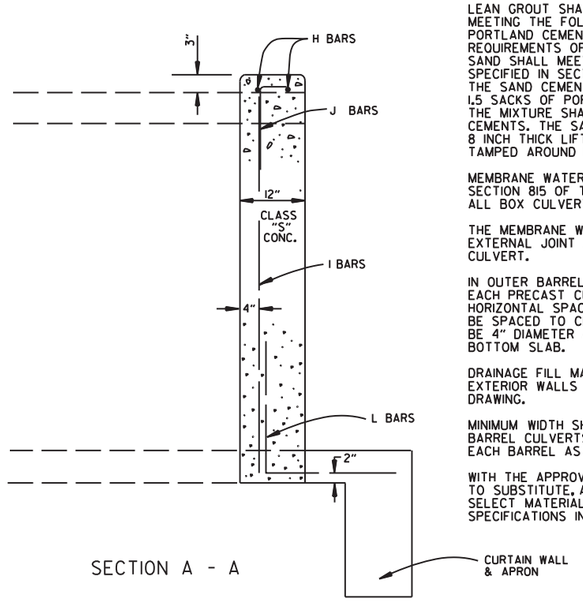
BAR	NO.	SIZE	LENGTH	BAR BENDING DIAGRAM
H	2	#4	•	
I	•	#4	•	
J	•	#4	1'-5"	
L	•	#4	3'-2"	
M	•	#4	1'-8"	



• NOTE: LENGTH AND NUMBER OF BARS VARIES WITH SIZE OF CULVERT



END VIEW



SECTION A - A

GENERAL NOTES

WINGS, CURTAIN WALLS AND APRONS SHALL BE TIED TO THE PRECAST CULVERT SECTION BY CASTING BARS IN CULVERT END SECTIONS AS SHOWN OR BY DOWELING AND GROUTING. J BARS AND M BARS SHALL BE EMBEDDED A MINIMUM OF 10" IN PRECAST BOX.

WINGS, FOOTINGS, APRONS AND CURTAIN WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE WING DRAWING. STEEL AND CONCRETE QUANTITIES WILL BE ADJUSTED TO FIT THE IN-PLACE WIDTH & HEIGHT OF THE PRECAST CONCRETE BOX CULVERTS.

ALL EXPOSED CORNERS TO HAVE ¾" CHAMFERS.

WINGWALLS AND FOOTINGS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER.

ALL CONCRETE, REINFORCING STEEL, LEAN GROUT, MEMBRANE WATERPROOFING, DRAINAGE FILL MATERIAL, GEOTEXTILE FILTER FABRIC, LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR INSTALLING PRECAST BOX CULVERTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR THE ITEMS AS SPECIFIED IN SECTION 607 OF THE STANDARD SPECIFICATIONS.

LEAN GROUT SHALL CONSIST OF A SAND CEMENT MIXTURE MEETING THE FOLLOWING REQUIREMENTS:
PORTLAND CEMENT SHALL BE TYPE I AND SHALL MEET THE REQUIREMENTS OF AASHTO M 85.
SAND SHALL MEET THE REQUIREMENTS OF FINE AGGREGATE AS SPECIFIED IN SECTION 802.02 OF THE STANDARD SPECIFICATIONS.
THE SAND CEMENT MIXTURE SHALL CONSIST OF NOT LESS THAN 1.5 SACKS OF PORTLAND CEMENT PER TON OF MATERIAL MIXTURE.
THE MIXTURE SHALL CONTAIN SUFFICIENT WATER TO HYDRATE THE CEMENTS. THE SAND CEMENT MIXTURE SHALL BE PLACED IN MAXIMUM 8 INCH THICK LIFTS, LOOSE MEASURE, AND THOROUGHLY RODDED AND TAMPED AROUND BOX TO THOROUGHLY FILL ALL VOIDS.

MEMBRANE WATERPROOFING CONFORMING TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS SHALL BE APPLIED TO ALL BOX CULVERT JOINTS.

THE MEMBRANE WATERPROOFING WILL BE REQUIRED ON THE TOP EXTERNAL JOINT AND SHALL EXTEND 1 FOOT DOWN THE SIDES OF THE CULVERT.

IN OUTER BARRELS, ONE WEEP HOLE IS REQUIRED IN EXTERIOR WALLS OF EACH PRECAST CULVERT SECTION. WEEP HOLES SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" IN THE ASSEMBLED CULVERT AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE BOTTOM SLAB.

DRAINAGE FILL MATERIAL WITH GEOTEXTILE FABRIC IS REQUIRED AT THE EXTERIOR WALLS OF THE ASSEMBLED CULVERT, SEE DETAILS ON THIS DRAWING.

MINIMUM WIDTH SHALL BE 12" (6" ON EACH SIDE OF JOINT). ON MULTIPLE BARREL CULVERTS, MEMBRANE WATERPROOFING SHALL BE APPLIED TO EACH BARREL AS DESCRIBED ABOVE.

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, FLOWABLE SELECT MATERIAL CONFORMING TO SECTION 206 OF THE STANDARD SPECIFICATIONS IN LIEU OF LEAN GROUT.

DATE	REVISION	DATE FILMED
1-28-15	REVISED GEOTEXTILE FABRIC PLACEMENT	
12-15-11	ADDED NOTE & DTLS FOR WEEP HOLE AND DRAINAGE FILL	
10-15-09	ADDED GENERAL NOTE	
11-10-05	REVISED SPACING OF "M" BARS	
4-10-03	REVISED GENERAL NOTES	
10-18-96	CORRECTED AASHTO REF.	
10-1-92	ADDED NOTE FOR MEMBRANE WATERPROOFING	
8-15-91	ADDED NOTE FOR LEAN GROUT	
11- 8-90	REVISED FOR 1991 SPECS	
11-30-89	ISSUED; JABE	

ARKANSAS STATE HIGHWAY COMMISSION

PRECAST CONCRETE BOX CULVERTS

STANDARD DRAWING PBC-1

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDOT NOMINAL	AASHTO M 206	ARDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43⅜	44	26⅝	27
42	51⅛	51	31⅝	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87⅛	87
120	154	154	96⅞	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

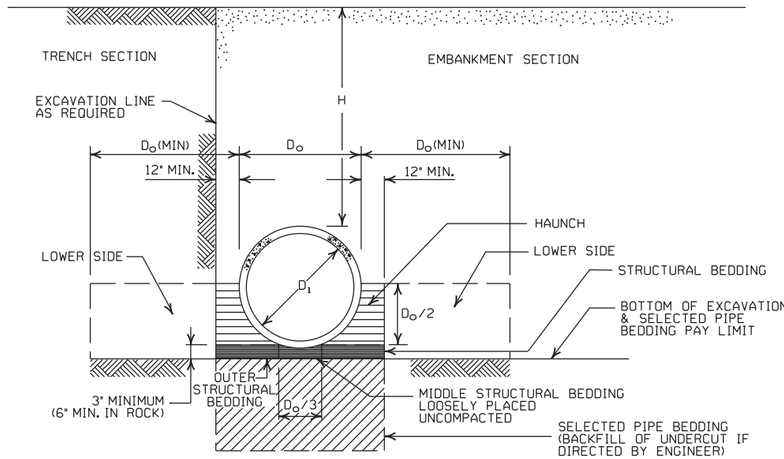
- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
D_o = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
		2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

CORRUGATED METAL PIPE ARCHES

EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINUMUM CORNER RADIUS (INCHES)	STEEL			ALUMINUM		
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)
				INSTALLATION	INSTALLATION		INSTALLATION	INSTALLATION
				TYPE 1	TYPE 1		TYPE 1	TYPE 1
			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM		
15	17x13	3	0.064	2	15	0.060	2	15
18	21x15	3	0.064	2	15	0.060	2	15
21	24x18	3	0.064	2.25	15	0.060	2.25	15
24	28x20	3	0.064	2.5	15	0.075	2.5	15
30	35x24	3	0.079	3	12	0.075	3	12
36	42x29	3½	0.079	3	12	0.105	3	12
42	49x33	4	0.079	3	12	0.105	3	12
48	57x38	5	0.109	3	13	0.135	3	13
54	64x43	6	0.109	3	14	0.135	3	14
60	71x47	7	0.138	3	15	0.164	3	15
66	77x52	8	0.168	3	15			
72	83x57	9	0.168	3	15			
			② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM					
				INSTALLATION	INSTALLATION			
				TYPE 2	TYPE 1	TYPE 2	TYPE 1	
36	40x31	5	0.079	3	2	12	15	
42	46x36	6	0.079	3	2	13	15	
48	53x41	7	0.079	3	2	13	15	
54	60x46	8	0.079	3	2	13	15	
60	66x51	9	0.079	3	2	13	15	
66	73x55	12	0.079	3	2	15	15	
72	81x59	14	0.079	3	2	15	15	
78	87x63	14	0.079	3	2	15	15	
84	95x67	16	0.109	3	2	15	15	
90	103x71	16	0.109	3	2	15	15	
96	112x75	18	0.109	3	2	15	15	
102	117x79	18	0.109	3	2	15	15	
108	128x83	18	0.138	3	2	15	15	

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

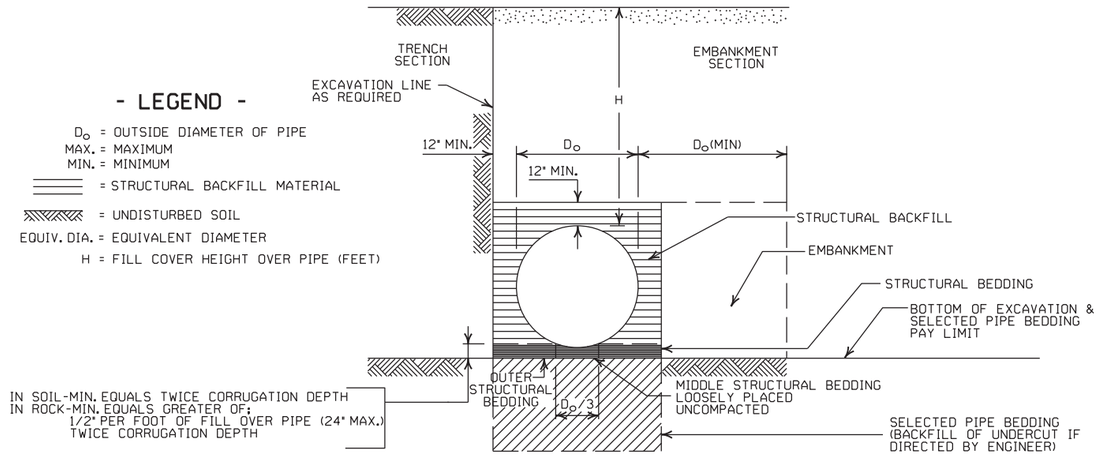
NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

③ SM-3 WILL NOT BE ALLOWED.

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL			
ZINC COATED	UNCOATED	ALUMINUM	
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALALTION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2⅔" X ½" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" X 1" OR 5" X 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
9. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 2/3"x ½" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

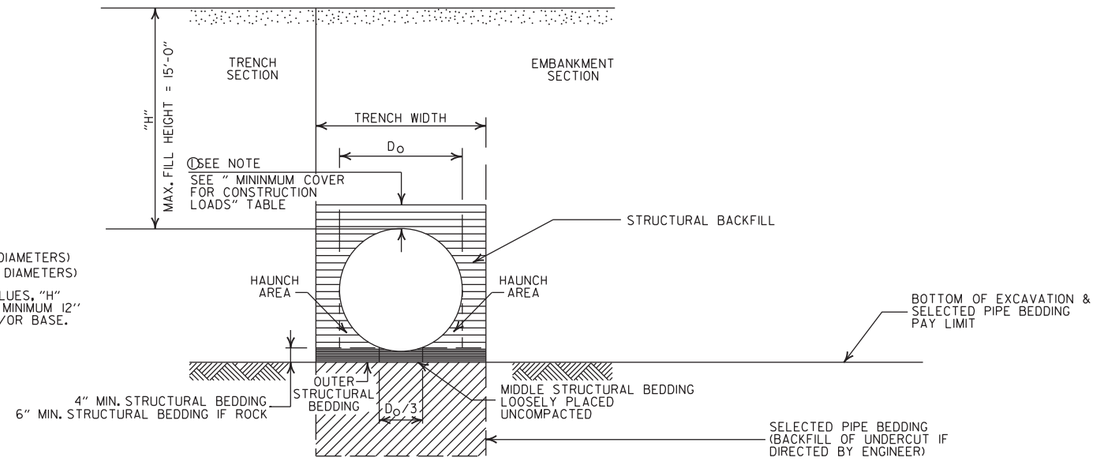
①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)

MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)

STANDARD DRAWING PCP-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PVC PIPE.

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"

MULTIPLE INSTALLATION OF PVC PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"

MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL

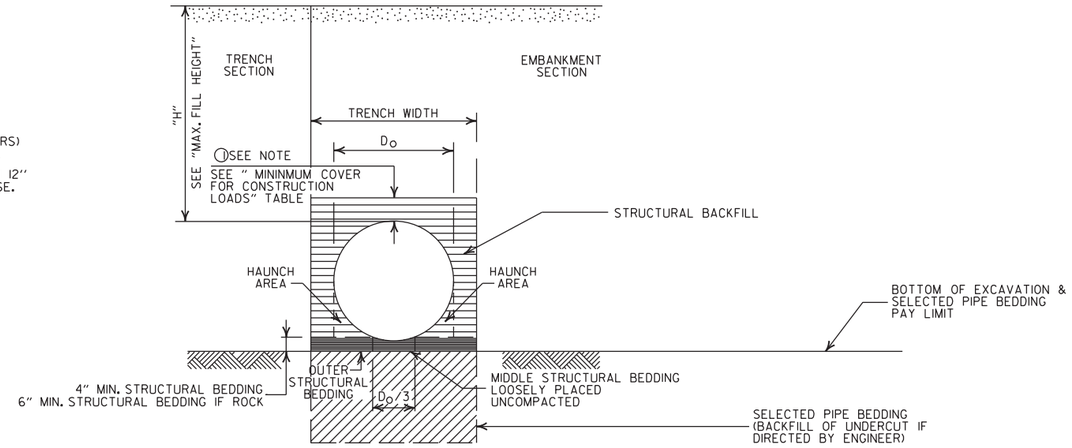
PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

① NOTE:
12" MIN. (18" - 36" DIAMETERS)
MINIMUM COVER VALUE, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
18" THRU 36"	2'-0"	2'-6"	3'-0"	3'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO ASTM F949, CELL CLASS 12454. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. PVC PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR PVC PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_O = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REV GENERAL NOTES & MINIMUM COVER NOTE; DELETED SM3 MATERIAL	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (PVC F949)

STANDARD DRAWING PCP-2

INSTALLATION TYPE	**MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	*SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4) OR TYPE 1 INSTALLATION MATERIAL

*SM3 WILL NOT BE ALLOWED.

** STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF POLYPROPYLENE PIPE.

MULTIPLE INSTALLATION OF POLYPROPYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"
60"	5'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"
60"	10'-0"	15'-0"

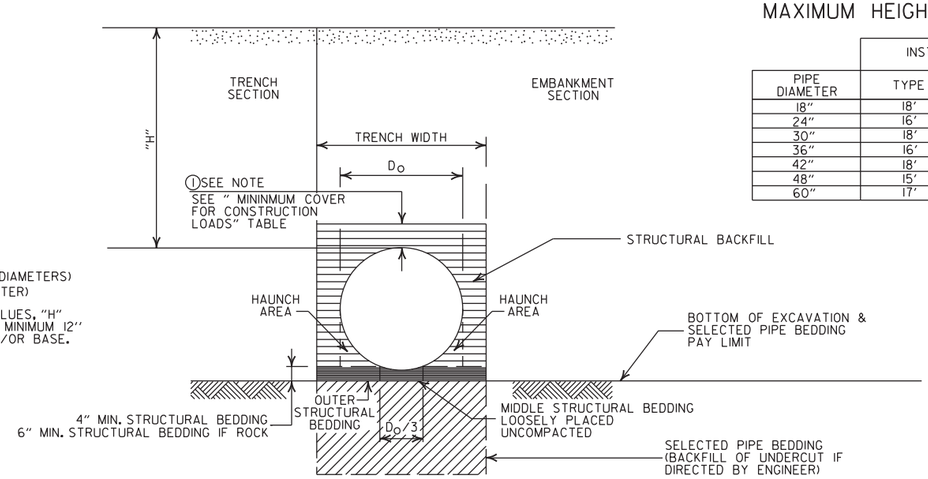
MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-150.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.

①NOTE:
12" MIN. (18" - 42" DIAMETERS)
24" MIN. (60" DIAMETER)

MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.



MAXIMUM HEIGHT OF FILL "H"

PIPE DIAMETER	INSTALLATION TYPE	
	TYPE 1	TYPE 2
18"	18'	14'
24"	16'	12'
30"	18'	14'
36"	16'	12'
42"	18'	13'
48"	15'	11'
60"	17'	12'

EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M330, TYPE S, INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION (2012) WITH 2013 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. POLYPROPYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR POLYPROPYLENE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN SECTION 26.4.2.4 AND 30.4.2 OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS 3RD EDITION (2010) WITH 2012 INTERIMS. JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

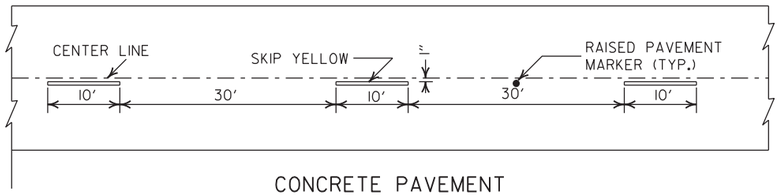
DATE	REVISION	DATE FILMED
02-27-20	REVISED	
11-07-19	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

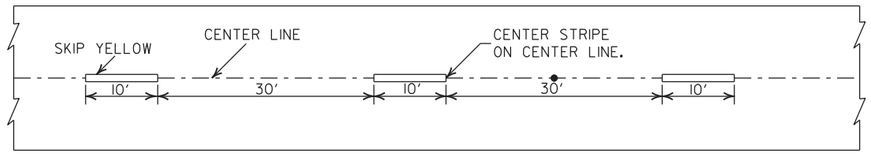
PLASTIC PIPE CULVERT (POLYPROPYLENE)

STANDARD DRAWING PCP-3

NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.

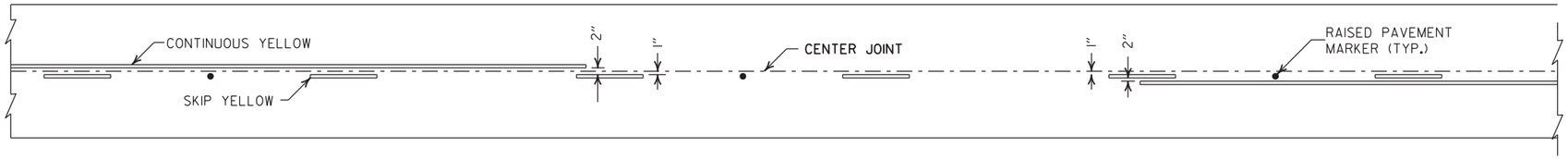


CONCRETE PAVEMENT

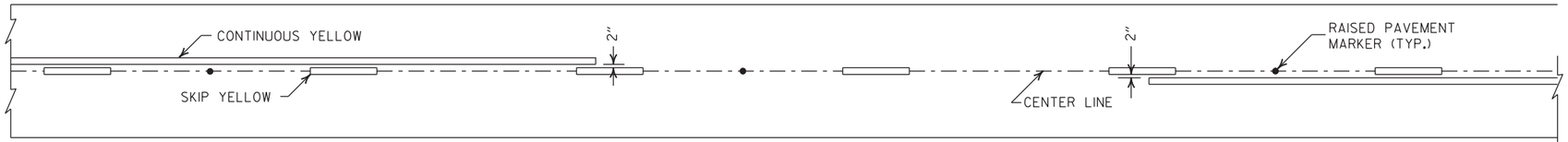


ASPHALT PAVEMENT

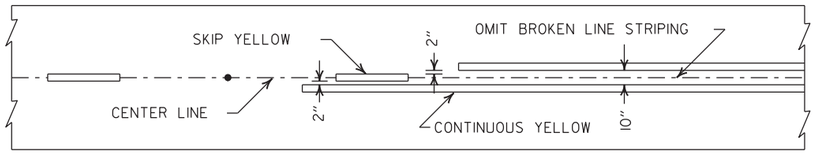
BROKEN LINE STRIPING



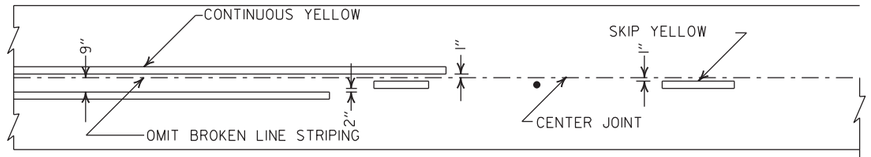
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

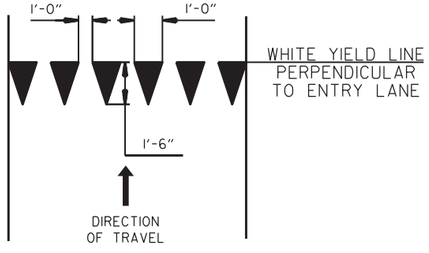


ASPHALT PAVEMENT

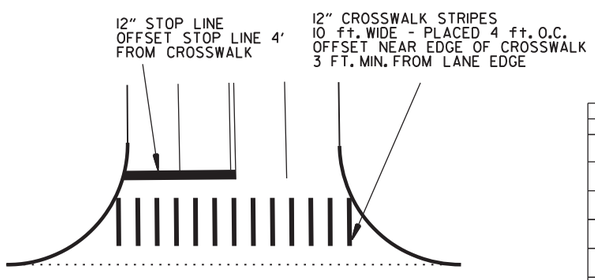


CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

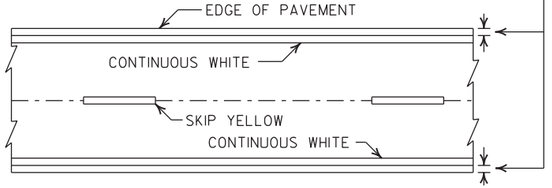


YIELD LINE DETAIL



CROSSWALK AND STOP LINE DETAILS

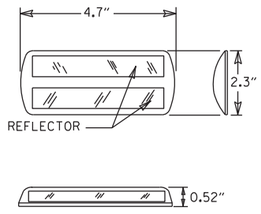
2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT



PAVEMENT EDGE LINE MARKING

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

TYPE II
RED/CLEAR OR
YELLOW/YELLOW



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 ARDOT QUALIFIED PRODUCTS LIST.

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

DATE	REVISION	FILMED
2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
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

ARKANSAS STATE HIGHWAY COMMISSION

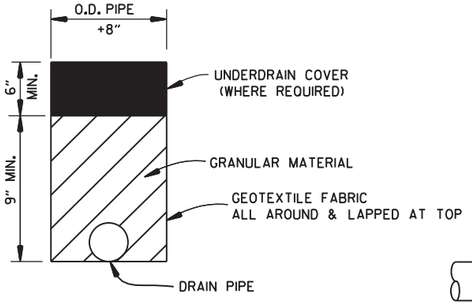
PAVEMENT MARKING DETAILS

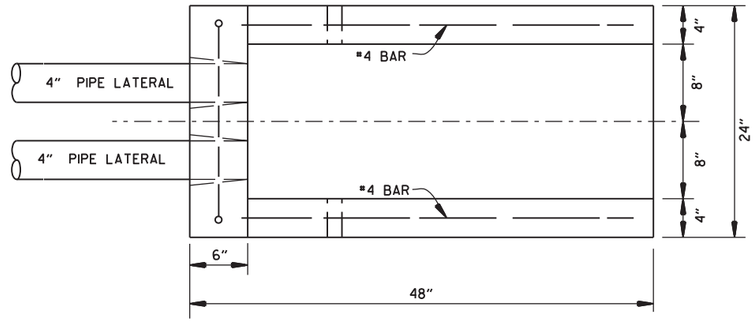
STANDARD DRAWING PM-1

NOTE:

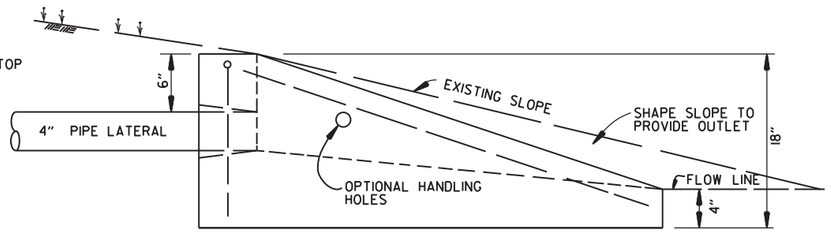
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.

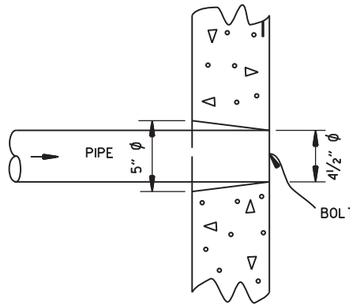




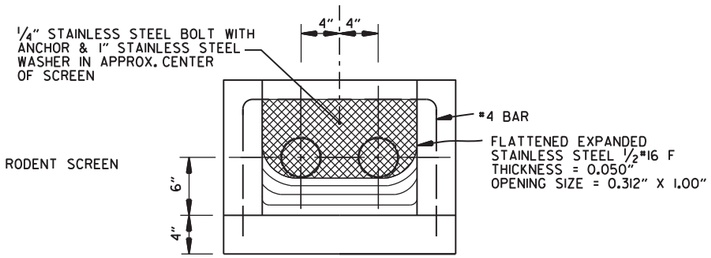
PLAN VIEW



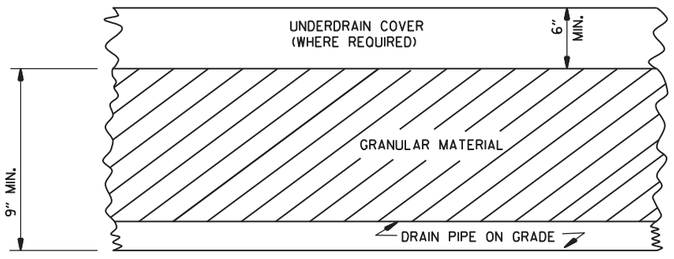
SIDE VIEW



DETAIL OF HOLE FOR 4" PIPE

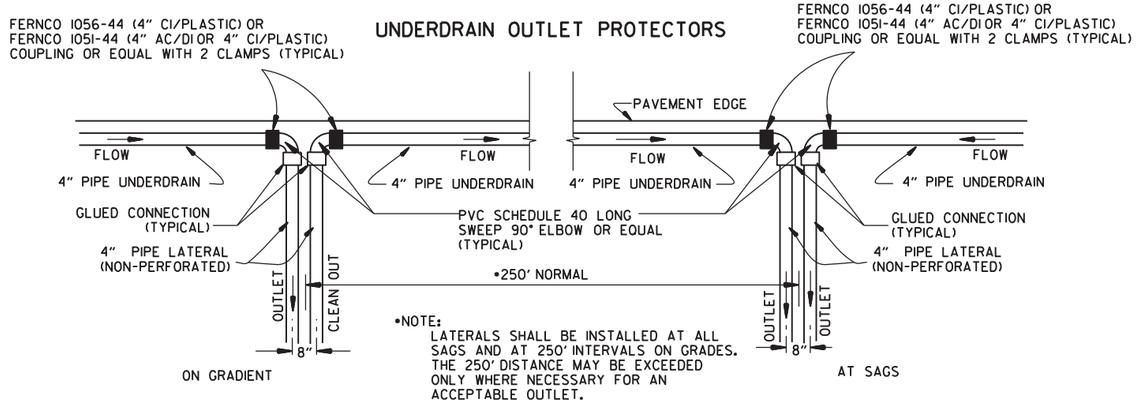


FRONT VIEW
(DETAIL OF RODENT SCREEN)



DETAILS OF PIPE UNDERDRAIN

UNDERDRAIN OUTLET PROTECTORS



DETAIL OF PIPE UNDERDRAIN LATERALS WHEN PLACED ALONG PAVEMENT EDGE

NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE 1. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

3. EXISTING 4" PIPE UNDERDRAINS MAY BE CONNECTED TO PROPOSED DROP INLETS OR EXTENDED WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."

4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

5. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."

6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. EXISTING UNDERDRAIN OUTLET PROTECTORS SHALL BE REMOVED UNDER THE ITEM "REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS."

7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1. INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2. INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE.

DATE	REVISION	DATE FILMED
12-8-16	ADDED NOTES FOR PIPE UNDERDRAINS, REVISED RODENT SCREEN DETAIL AND NOTES, REMOVED NOTE 1 FOR GRANULAR MATERIAL, ADDED NOTE FOR GEOTEXTILE FABRIC	
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE; 5½" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11- 3-94	REVISED FOR DUAL LATERALS	11- 3-94
10- 1-92	SUBSTITUTED GEOTEXTILE	10- 1-92
8-15-91	ADDED POLYEDTHYLENE PIPE	8-15-91
11- 8-90	DELETED ALTERNATE NOTE	11- 8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

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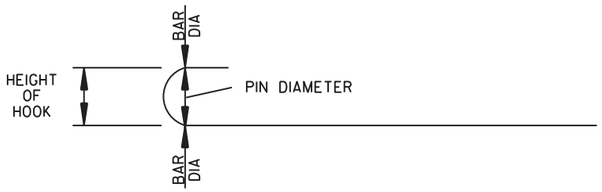
DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

STEEL FABRICATION: REINFORCING STEEL FABRICATION SHALL CONFORM TO THE DIMENSIONS LISTED IN THE TABLE BELOW:

BAR SIZE	PIN DIAMETER	HOOK EXTENSION "K"
3	2¼"	4"
4	3 "	4½"
5	3¾"	5"
6	4½"	6"
7	5¼"	7"
8	6"	8"

IF THE OVERALL HEIGHT OF THE HOOK (SEE DIAGRAM BELOW) FOR A "b", "b1", "b2" or "b3" BENT BAR IS GREATER THAN THE CORRESPONDING TOP OR BOTTOM SLAB THICKNESS, LESS 2¾ INCHES, EACH BENT BAR SHALL BE REPLACED WITH ONE HOOKED BAR AND ONE STRAIGHT BAR, USING LENGTHS AS SHOWN IN THE TABLE BELOW. THE TWO BARS SHALL BE THE SAME DIAMETER AS, AND PLACED AT THE SAME SPACING AS, THE "b", "b1", "b2" OR "b3" BENT BARS THEY REPLACE.



NOTE: DIMENSIONS OF BARS ARE MEASURED OUT TO OUT OF BARS.

OVERALL HEIGHT OF HOOKED BAR DIAGRAM

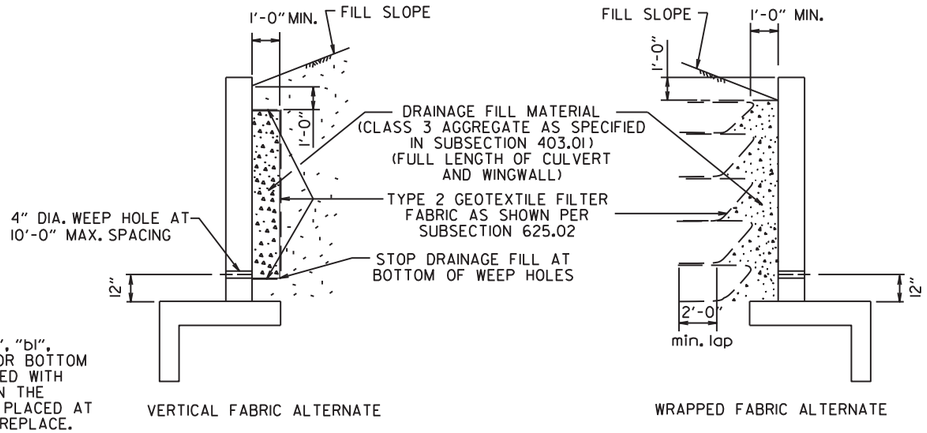
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

FOR SKEWED CULVERTS, THE REPLACEMENT STRAIGHT BAR MAY HAVE TO BE CUT IN FIELD TO FIT.

REPLACEMENT BAR LENGTHS TABLE

BAR SIZE: "b", "b1", "b2" OR "b3"	LENGTH OF HOOKED BAR	LENGTH OF STRAIGHT BAR
#4	L + 1' - 0"	SEE "c" BAR LENGTH
#5	L + 1' - 2"	SEE "c" BAR LENGTH
#6	L + 1' - 4"	SEE "c" BAR LENGTH
#7	L + 1' - 8"	SEE "c" BAR LENGTH
#8	L + 1' - 10"	SEE "c" BAR LENGTH
#9	L + 2' - 6"	SEE "c" BAR LENGTH

L = "OW" - 3 INCHES



WINGWALL & CULVERT DRAINAGE DETAIL

REINFORCED CONCRETE BOX CULVERT GENERAL NOTES

CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

REINFORCING STEEL SHALL BE AASHTO M 31 OR M 53, GRADE 60.

CONSTRUCTION AND MATERIALS FOR WINGWALL & CULVERT DRAINAGE, INCLUDING WEEP HOLES AND GRANULAR MATERIAL, SHALL BE SUBSIDIARY TO THE BID ITEM, "CLASS S CONCRETE".

MEMBRANE WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS.

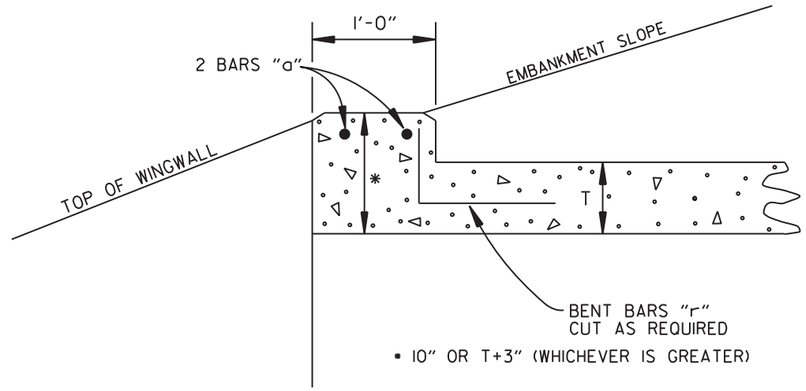
MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

REINFORCING STEEL TOLERANCES: THE TOLERANCES FOR REINFORCING STEEL SHALL MEET THOSE LISTED IN "MANUAL OF STANDARD PRACTICE" PUBLISHED BY CONCRETE REINFORCING STEEL INSTITUTE (CRSI) EXCEPT THAT THE TOLERANCE FOR TRUSS BARS SUCH AS FIGURE 3 ON PAGE 7-4 OF THE CRSI MANUAL SHALL BE MINUS ZERO TO PLUS ½ INCH.

WEEP HOLES IN BOX CULVERT WALLS SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE BOTTOM SLAB.

WEEP HOLES IN WINGWALLS SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THERE SHALL BE A MINIMUM OF TWO (2) WEEP HOLES IN EACH WINGWALL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE WINGWALL FOOTING.

THE REQUIREMENTS SHOWN ON THIS DRAWING SHALL SUPERCEDE THE CORRESPONDING REQUIREMENTS ON ALL REINFORCED CONCRETE BOX CULVERT STANDARD DRAWINGS.



NOTE: FOR ALL SKEWED R.C. BOX CULVERTS THE LENGTH "K" OF THE MODIFIED HEADWALL SHALL BE EQUAL TO THE ROADWAY LENGTH "RL". THE ENDS OF THE HEADWALL SHALL BE CONSTRUCTED PARALLEL TO THE SKEW ANGLE OF THE BOX CULVERT.

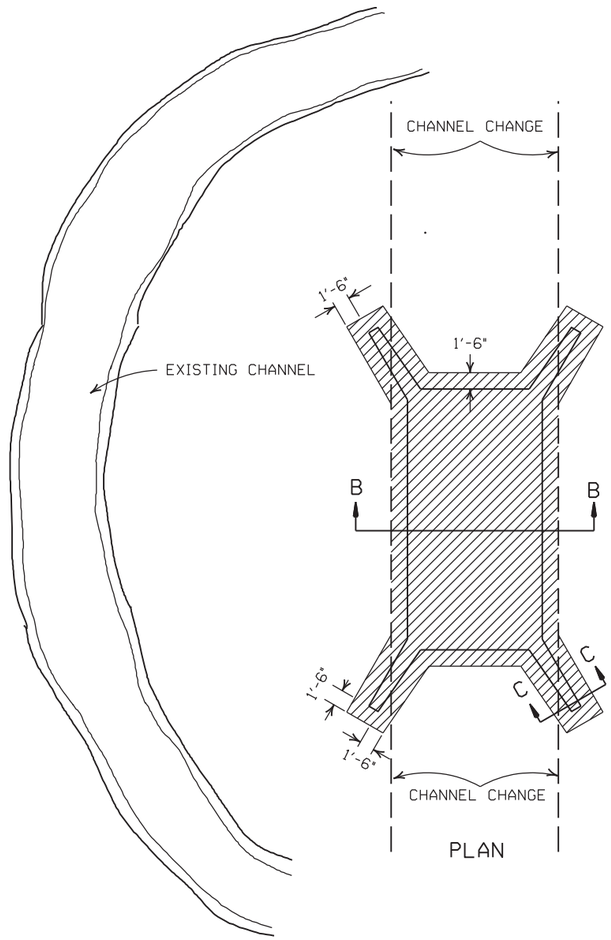
R.C. BOX CULVERT HEADWALL MODIFICATIONS

DATE	REVISION	DATE FILMED
7/26/12	REV. DRAINAGE FILL MATERIAL & DETAIL	
12/15/11	REQUIRE WEEP HOLES IN BOX CULVERT WALLS	
5-25-06	REV. GEN. NOTES AND DETAILS FOR WEEP HOLES; BAR DIAGRAM	
11-16-01	ADDED WINGWALL DRAINAGE DETAIL/EDITED GEN. NOTES	
10-18-96	REV. ASTM REF. TO AASHTO & ADDED BAR DIAGRAM	
10-12-95	MOVED SOLID SODDING DETAIL TO RCB-2	
6-2-94	ADDED SOLID SODDING PLAN DETAIL	
8-5-93	REVISED PIN DIAMETER TO SPECS.	
8-15-91	DRAWN AND ISSUED	

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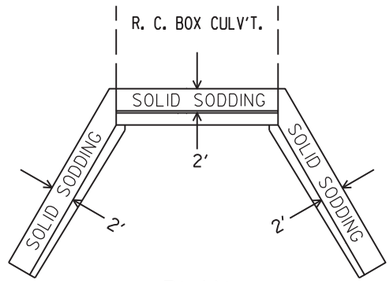
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1



PLAN

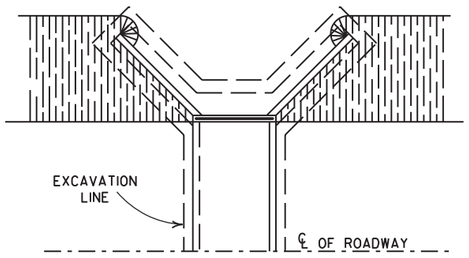
SOLID SODDING



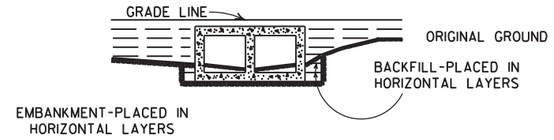
PLAN

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

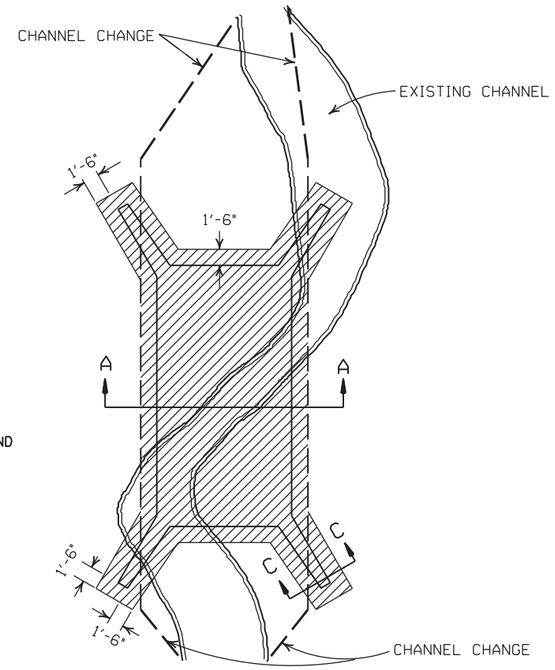


PLAN

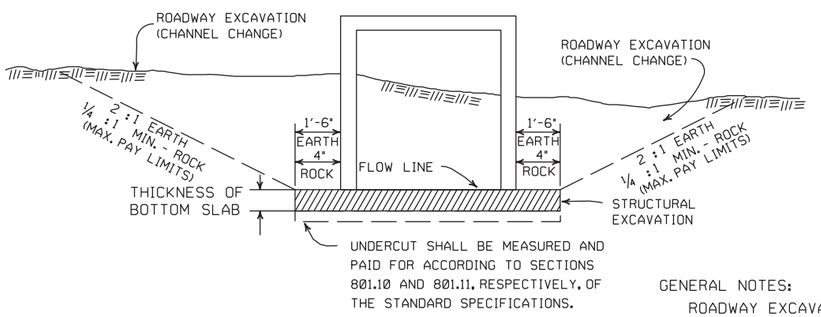


LONGITUDINAL SECTION

BACKFILL DETAILS FOR BOX CULVERT

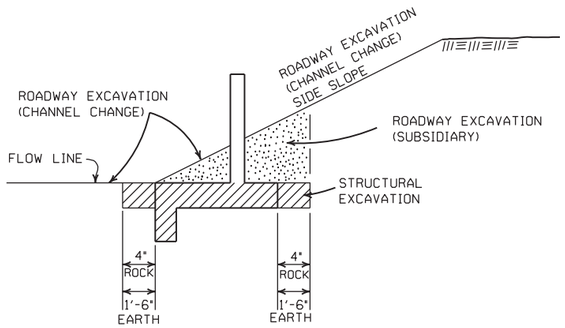


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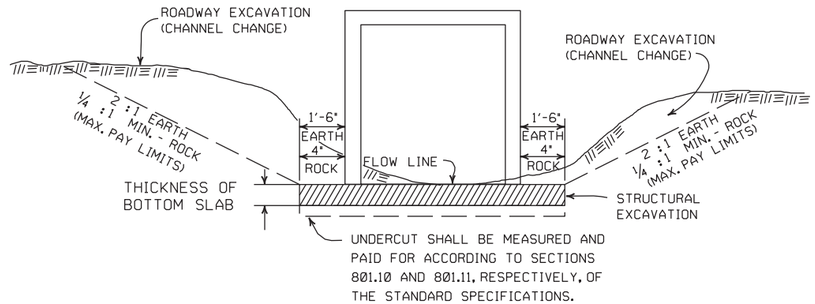


SECTION B-B

DETAILS FOR NEW CHANNELS



SECTION C-C



SECTION A-A

DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:

ROADWAY EXCAVATION (CHANNEL CHANGE) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGE) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.

EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS BELOW THE CHANNEL FLOW LINE.

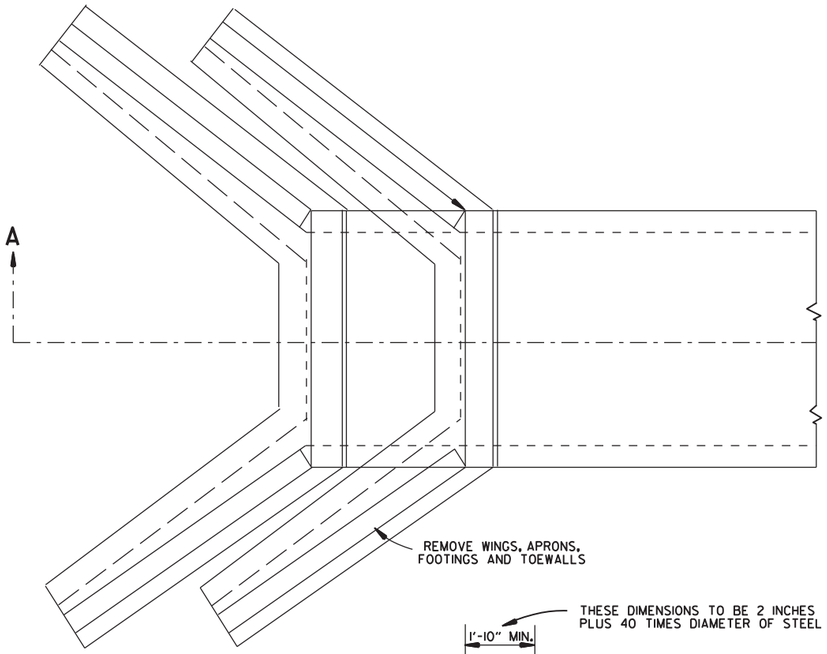
ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

DATE	REVISION	FILMED
11-20-03	REVISED SECTION A-A NOTE	
8-22-02	REVISED SECTION B-B NOTE	
10-12-95	COMBINED 1891B AND 1888A	
1-4-83	REVISED GENERAL NOTES	674-1-4-83
	AND ADDED MAXIMUM PAY	
	LIMIT NOTES.	
2-2-76	EXCAV. PAY LIMITS	917-2-2-76
10-2-72	REVISED AND REDRAWN	564-10-16-72

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EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS

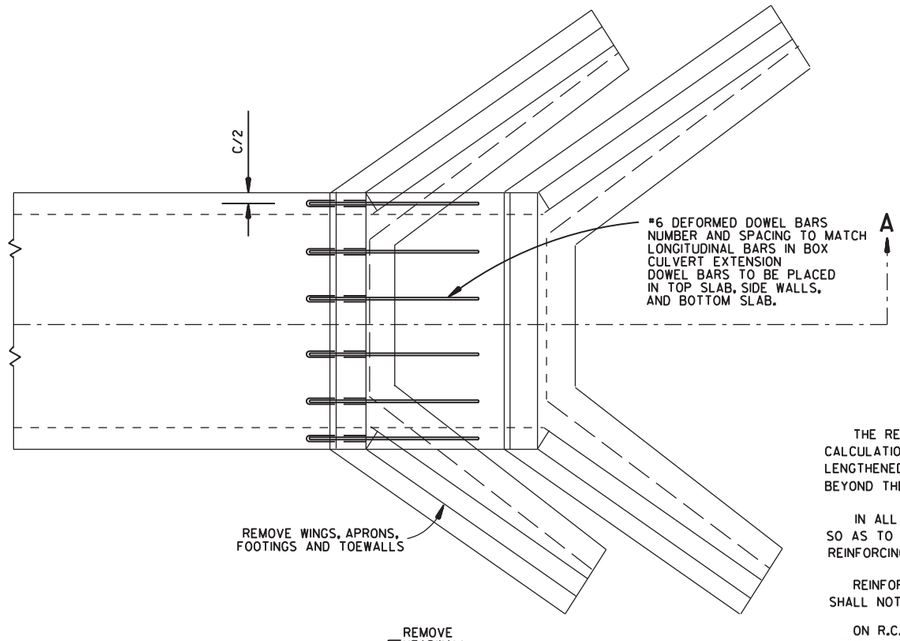
STANDARD DRAWING RCB-2



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 1



TOP VIEW
R.C. BOX CULVERT

SECTION A-A

METHOD 2

GENERAL NOTES

	USE FOR METHOD
THE RESIDENT ENGINEER WILL MAKE INDIVIDUAL CALCULATIONS OF QUANTITIES FOR EACH STRUCTURE LENGTHENED, MAKING NO ALLOWANCE FOR OVERBREAKAGE BEYOND THE LINES INDICATED.	1
IN ALL INSTANCES CONCRETE SHALL BE REMOVED SO AS TO PERMIT FULL 40 DIAMETER SPLICE OF REINFORCING STEEL.	1
REINFORCING STEEL REMOVED FROM EXISTING STRUCTURE SHALL NOT BE REUSED IN CONSTRUCTING EXTENSION.	1&2
ON R.C. BOX CULVERTS THAT HAVE AN EXISTING CONCRETE APRON; THE CONCRETE APRON SHALL BE REMOVED WITH THE WINGS. THE COST OF REMOVING ALL OLD CONCRETE WILL BE INCLUDED IN THE PRICE BID PER CUBIC YARD FOR NEW CONCRETE OF THE CLASS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.	1&2
MATERIALS FOR SECURING DOWEL BARS SHALL MEET THE REQUIREMENTS OF SECTION 507.02 OF THE STANDARD SPECIFICATIONS.	2
DOWEL BARS SHALL BE INSTALLED AS FOLLOWS: THE DRILLING PROCEDURE SHALL BE APPROVED BY THE ENGINEER, THE FILLING SYSTEM SHALL BE APPROVED BY THE ENGINEER, AND SHALL BE AN INJECTION-TYPE SYSTEM WHICH WILL INSURE THAT SUFFICIENT MATERIAL IS INJECTED SO IT COMPLETELY SURROUNDS THE BARS AND FILLS THE HOLES.	2
THE CONTRACTOR SHALL HAVE THE OPTION OF USING EITHER METHOD 1 OR METHOD 2. REGARDLESS OF WHICH METHOD IS USED, PAY QUANTITIES WILL BE CALCULATED BASED ON METHOD 1.	1&2

NOTE:
NO PART OF THIS STANDARD IS TO BE USED FOR ANY DETAILS RELATIVE TO NEW CONSTRUCTION.

SEE STANDARD DRAWING LISTED IN TABULATION OF STRUCTURES FOR ALL NEW CONSTRUCTION DETAILS.

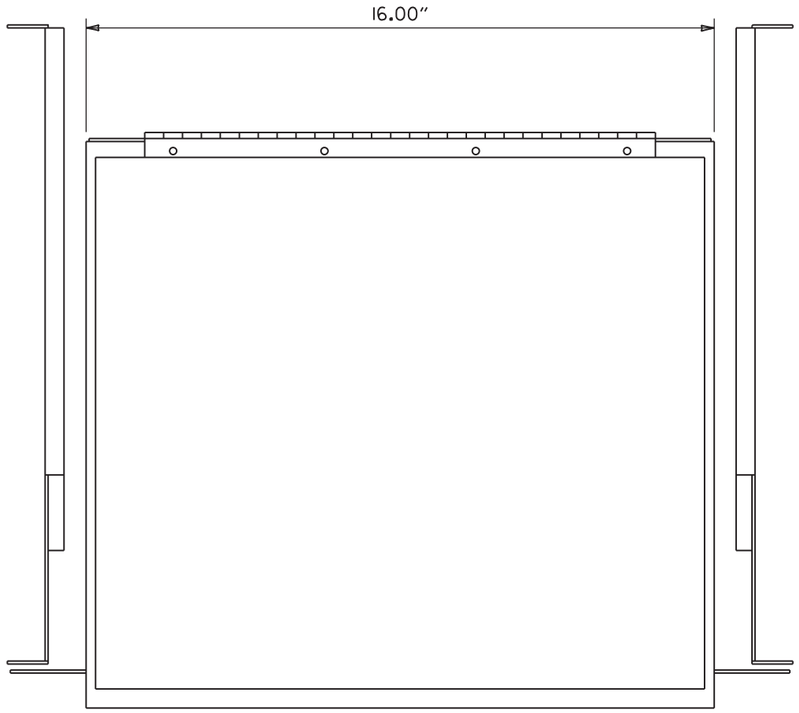
DATE	REVISION	DATE FILM
10-12-95	CHANGED DRAWING # FROM 144-A	
4-1-93	ADDED GENERAL NOTE	
10-1-92	ADDED ALT. METHOD OF EXTENSION	
11-30-89	REDRAWN	
1-4-83	ELIMINATED CONCRETE CLASS	
12-20-56	RETRACED	

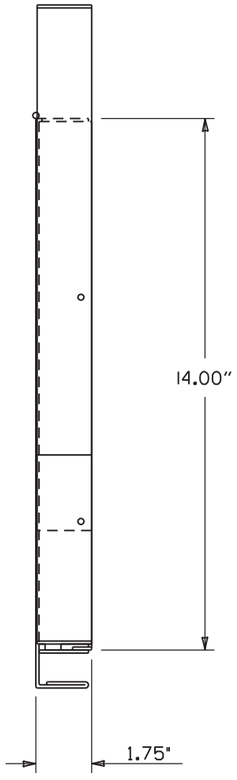
ARKANSAS STATE HIGHWAY COMMISSION

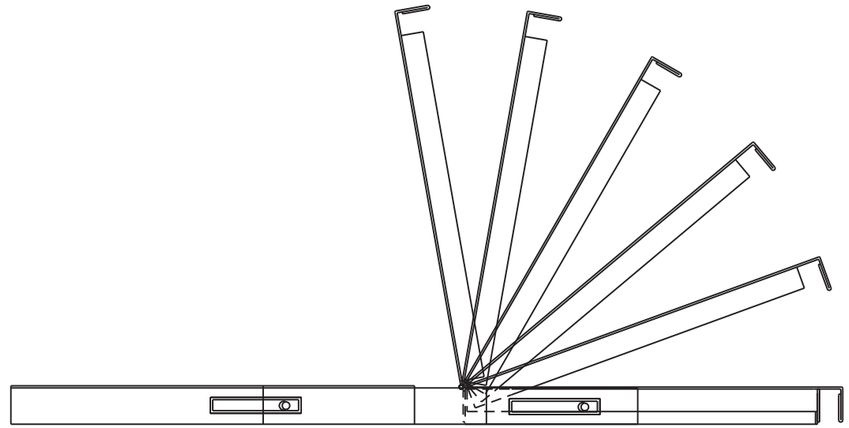
METHOD OF EXTENDING EXISTING R.C. BOX CULVERTS

STANDARD DRAWING RCB-3

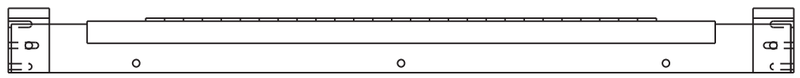
DRAWER PLAN VIEW



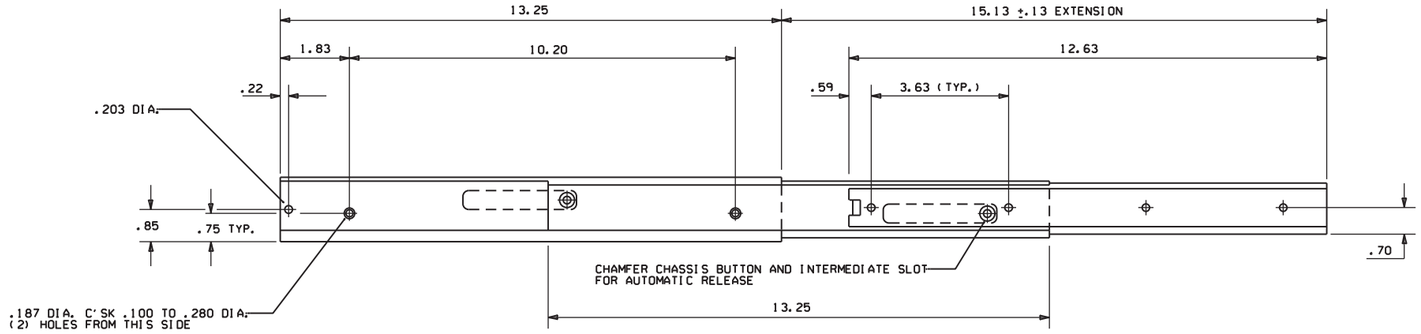




NOTES:
1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.
2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.
3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



FRONT VIEW



RIGHT SIDE ASSEMBLY

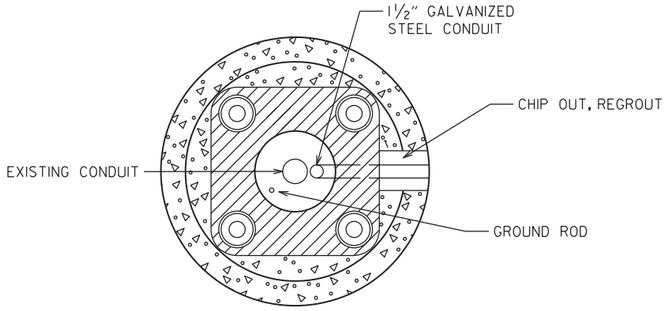
DATE	REVISION	DATE FILM
9-12-13	ISSUED AS STANDARD DRAWING	
6-15-05	ISSUED	

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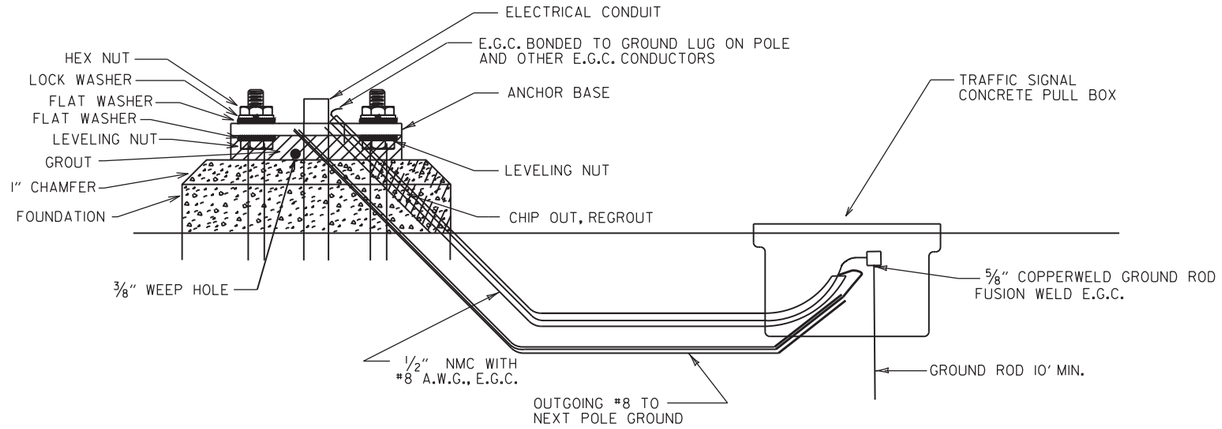
CONTROLLER CABINET UTILITY DRAWER

STANDARD DRAWING SD-5

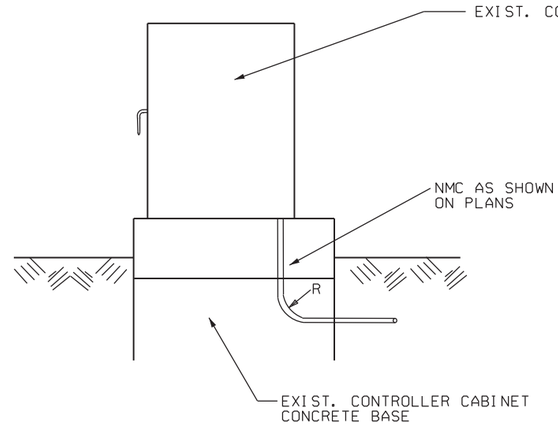
CONDUIT ENTRY TO EXISTING POLE BASE



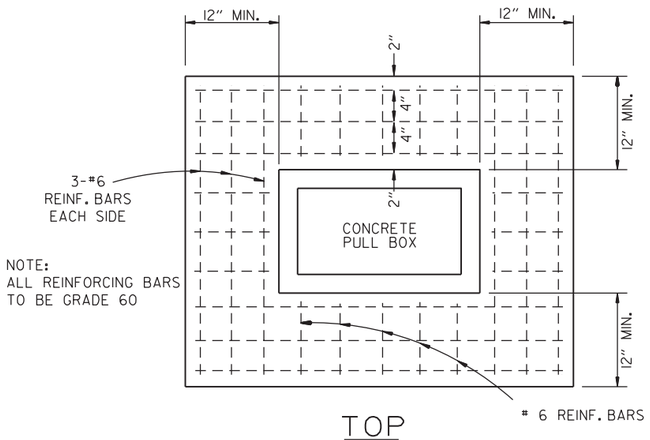
ANCHOR BASE



CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

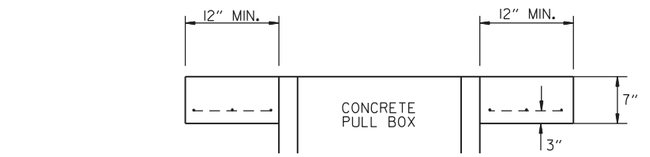


NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



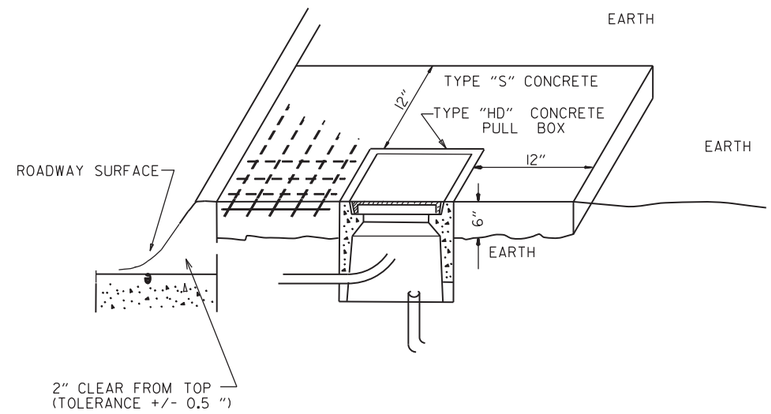
TOP

NOTE:
ALL REINFORCING BARS TO BE GRADE 60



ELEVATION

TYPE "HD" CONCRETE PULL BOX DETAIL



NOTE:
ALL TYPE 1AND TYPE 2 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 7" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD CONCRETE PULL BOX. THE CONCRETE 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 CONCRETE PULL BOX IS REQUIRED IN CONCRETE.

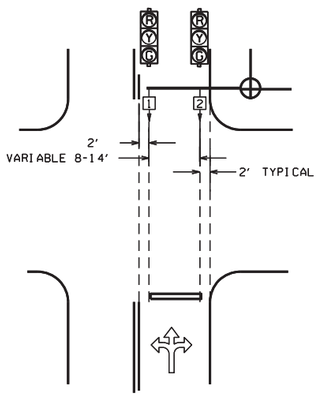
DATE	REVISION	FILMED
11-16-17	REVISED NOTES	
09-02-15	REVISED PULL BOX DEPTH	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	ADDED & REVISED CONDUIT ENTRY	
06-23-04	REVISED CLEARANCE AT CURB ENTRY	
01-04-02	ADDED REINFORCING TO BOX APRON	
07-02-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	

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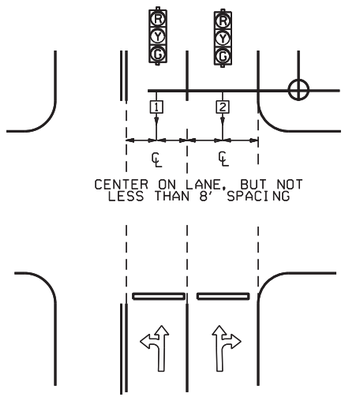
HEAVY DUTY PULL BOX

STANDARD DRAWING SD-6

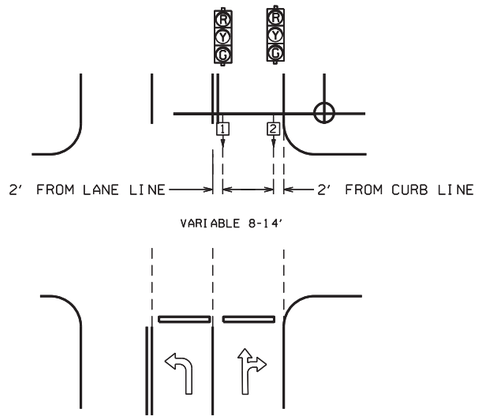
(A)



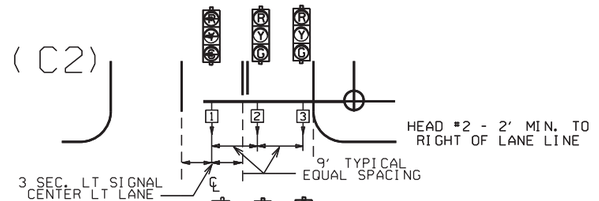
(B)



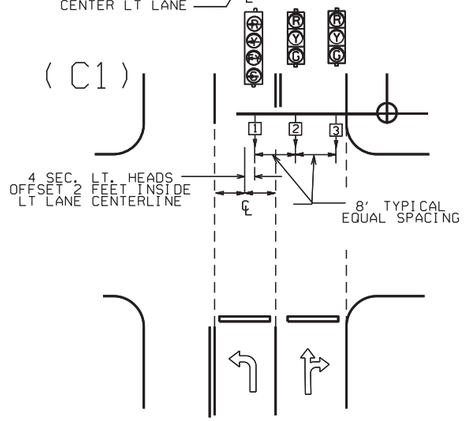
(C)



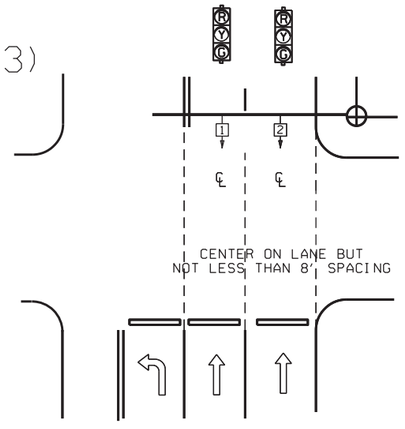
(C2)



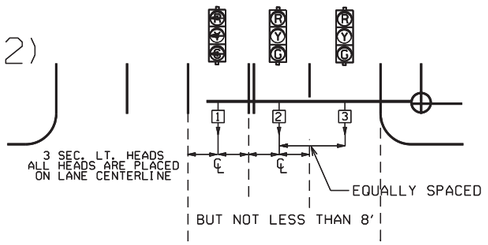
(C1)



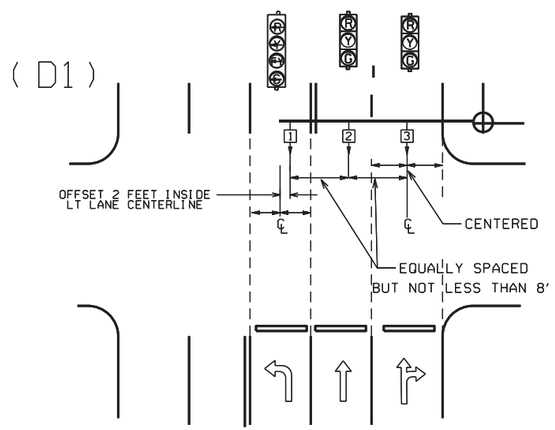
(C3)



(D2)

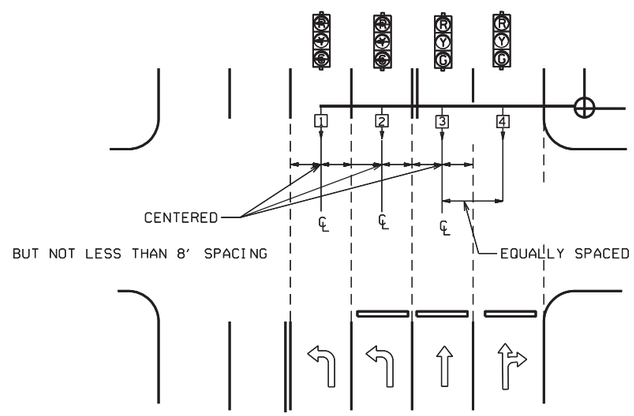


(D1)



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.

(E)



℄ = CENTER OF LANE FROM APPROACH SIDE

GENERAL NOTES:

1. 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.

2. THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

3. 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.

4. SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.

5. 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.

6. MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-5 OF 2009 MUTCD.

DATE	REVISION	DATE FILM
12-8-16	REVISED NOTE 6	
9-12-13	ISSUED AS STANDARD DRAWING	
3-11-10	2009 MUTCD	
12-9-99	ISSUED	

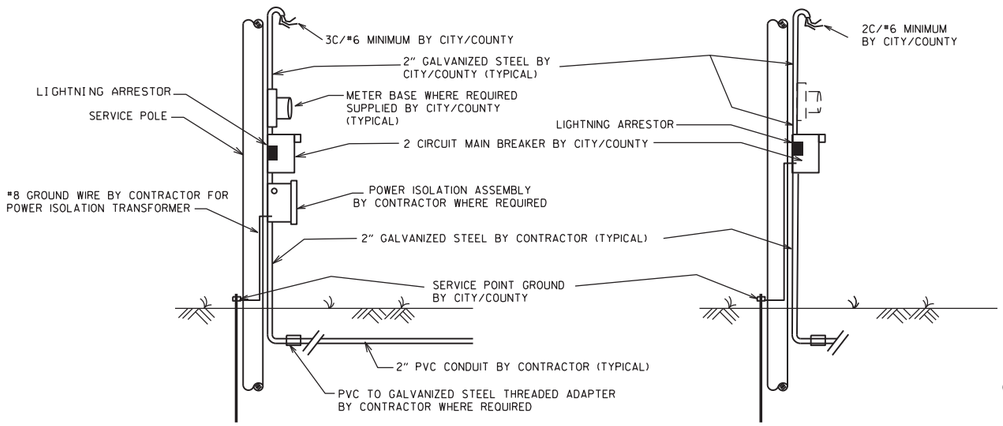
ARKANSAS STATE HIGHWAY COMMISSION

SIGNAL HEAD PLACEMENT

STANDARD DRAWING SD-8

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/COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

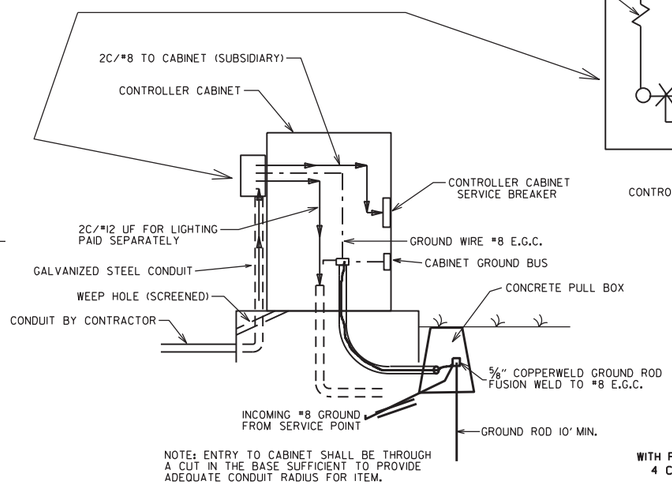
ALL SITUATIONS:
ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION STREET LIGHTING CIRCUIT (2C/#12 A.W.G. 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.

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.

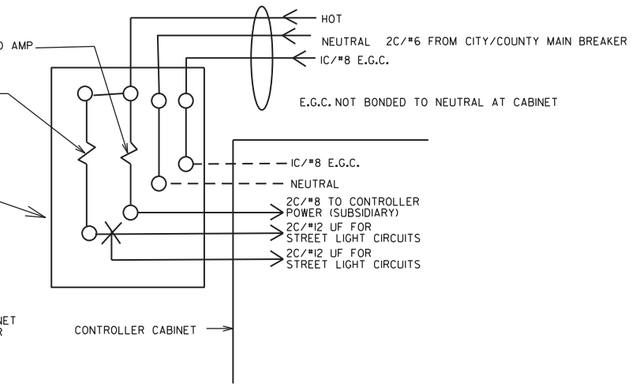
MAIN BREAKER NEAR CONTROLLER CABINET:
ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.

GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 701. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



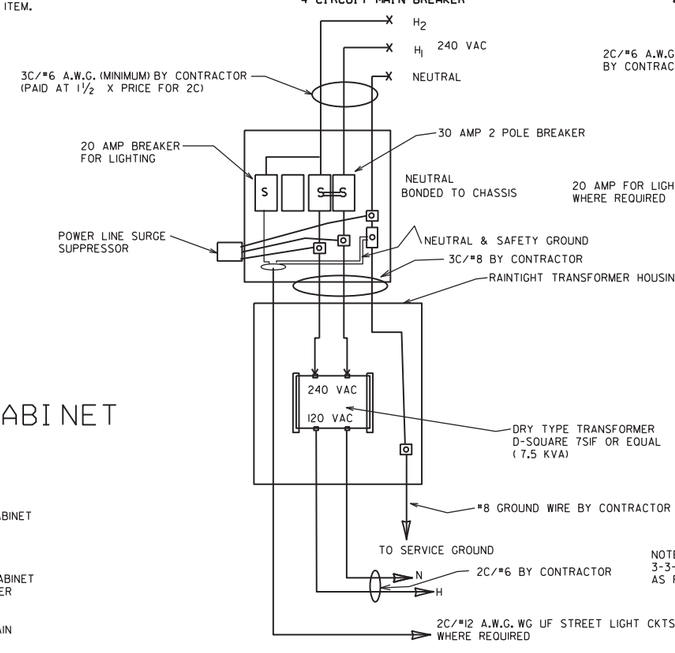
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



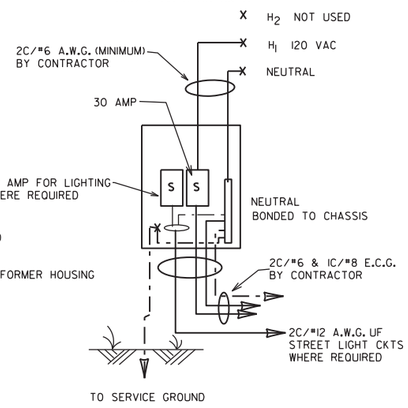
MAIN BREAKER WIRING (TYPICAL)

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.

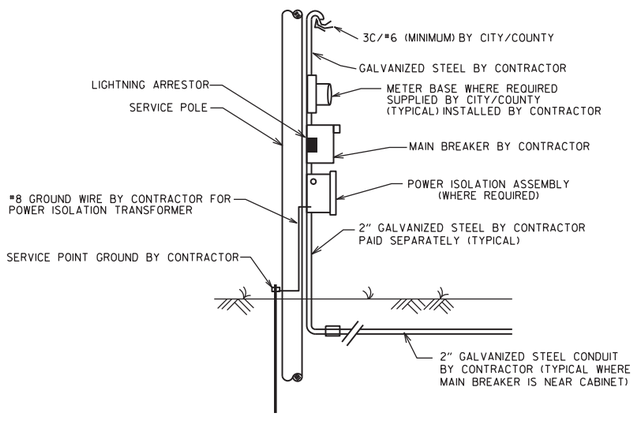
WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER



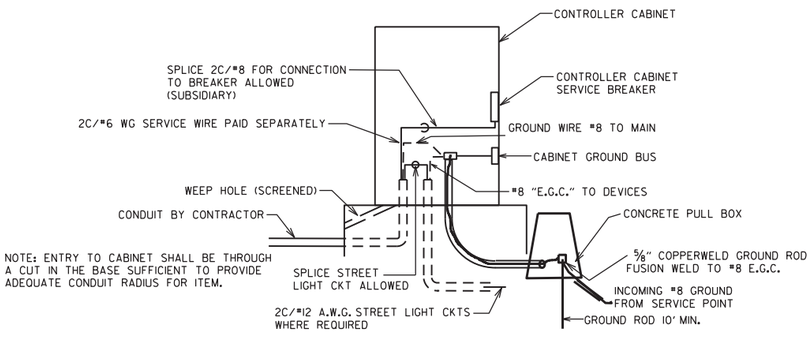
WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER



NOTE: ELECTRICAL GROUND CONDUCTOR (E.C.G.) ADDED 3-3-2003, CONSISTING OF A IC/#8 A.W.G. CU GREEN WIRE AS PER NATIONAL ELECT. CODES.



MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED



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

DATE	REVISION	FILMED
11-07-19	REVISED	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
04-18-13	ADDED LIGHTNING ARRESTOR	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
03-03-03	ADDED EGC NOTE	
09-26-01	REVISED	
12-27-99	REVISED	
07-28-99	REVISED	
02-05-99	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT

STANDARD DRAWING SD-9

NOTES:
PEDESTRIAN AND TRAFFIC SIGNAL HEAD SIGNS:
EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)" SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)" TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209. ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES:
1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4') FEET BEHIND CURB OR SHOULDER.

2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.

3. MINIMUM STRUCTURAL REQUIREMENTS:
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY II FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH MAST ARMS LESS THAN 60' AND ON ROUTES WHERE THE SPEED LIMITS OF 45 MPH AND LESS WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE THE SPEED LIMIT IS 45 MPH AND LESS AND MAST ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS:
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN ½" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, TWELVE (12") INCH AND HAVE FIVE (5") INCH BACK PLATES:

SIGNAL HEADS AT THE END OF MAST ARM - ONE 4 SEC., 85 LB., 14.5 SQ. FT., ONE SIGN MOUNTED 3 FEET FROM SIGNAL HEAD (2'-0" X 2'-6"; 20 LB.) REMAINING SIGNAL HEADS SPACED AT 8 FT. (3 SEC., 56 LB., 8.3 SQ. FT.):
DESIGN TO ACCOMMODATE:
2 SIGNAL HEADS FOR MAST ARMS 10 FT. TO 16 FT.
3 SIGNAL HEADS FOR MAST ARMS 18 FT. TO 24 FT.
4 SIGNAL HEADS FOR MAST ARMS OVER 26 FT.

STREET NAME SIGN - 72" X 18", 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAT 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT.
ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) - VARIABLE ARM LENGTH (MAX. WT. 75 LB., 3.3 SQ. FT.)
PEDESTRIAN SIGNALS - TWO 1 SEC., 12 INCH MOUNTED 8 FT. FROM BASE OF POLE. POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

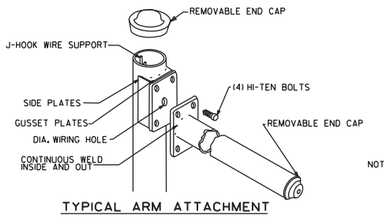
4. POLE/MAST ARM CAP - POLE AND MAST ARM CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE - HAND HOLES SHALL BE 4 IN. X 6 IN. FOR STANDARD, AND 3 IN. X 5 IN. FOR PED POLES. MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACCUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDED A HAND HOLE WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).

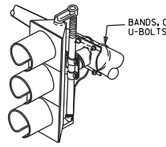
6. POLE/MAST ARM TAPER SLOPE - AVERAGE TAPER OF SIGNAL MAST ARMS AND POLE SHAFT SHALL BE 0.125 TO 0.15 INCHES PER FOOT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE MAST ARM SHALL MAINTAIN A POSITIVE SLOPE AFTER IT IS PLACED UNDER LOAD.

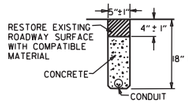
7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.



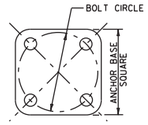
TYPICAL ARM ATTACHMENT



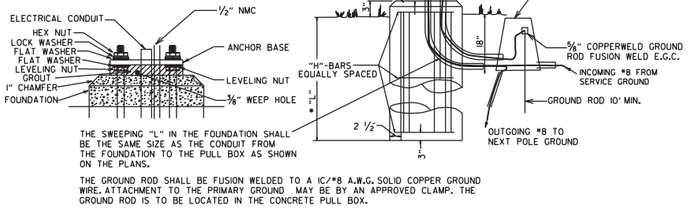
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.



TRENCHING DETAIL
(FOR SAW CUT TRENCH IN ROADWAY)



ANCHOR BASE



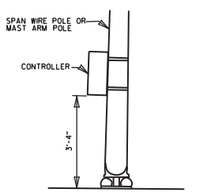
THE SWEEPING "L" IN THE FOUNDATION SHALL BE THE SAME SIZE AS THE CONDUIT FROM THE FOUNDATION TO THE PULL BOX AS SHOWN ON THE PLANS.

THE GROUND ROD SHALL BE FUSION WELDED TO A 1C/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE GROUND ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

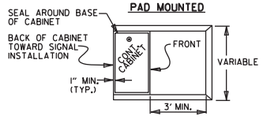
TYPICAL FOUNDATION DETAILS

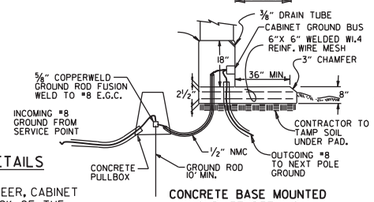
POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

ARM LENGTH	FOUNDATION DIAMETER	DEPTH "L"*	STEEL		
			VERTICAL	HORIZONTAL	O.C.
PED	30"	7'-0"	12-#7 (6'-6")	10-#4	8.44"
2' TO 12'	30"	10'-6"	12-#7 (10'-0")	15-#4	8.42"
OVER 12' TO 20'	30"	11'-6"	12-#7 (11'-0")	16-#4	8.66"
OVER 20' TO 35'	36"	12'-6"	13-#8 (12'-0")	17-#4	8.88"
OVER 35' TO 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8.56"
OVER 50' TO 72'	42"	14'-6"	18-#8 (14'-0")	20-#4	8.74"
TWINS TO 20'	30"	16'-0"	12-#6 (15'-6")	22-#4	8.76"
TWINS OVER 20' TO 44'	36"	16'-0"	13-#8 (15'-6")	22-#4	8.76"
TWINS OVER 44' TO 50'	42"	16'-0"	18-#8 (15'-6")	22-#4	8.76"
TWINS OVER 50' TO 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64"



SPAN WIRE SUPPORT POLE AND MAST ARM POLE MOUNTED





CONCRETE BASE MOUNTED CABINET DETAILS

CONTROLLER CABINET MOUNTING DETAILS

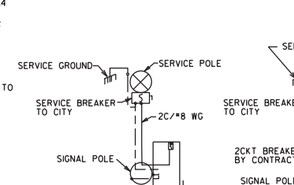
NOTE:
UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' X ⅝" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND ½" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID SEPERATELY.

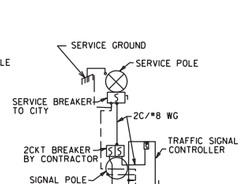
9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A ¼" WEEP HOLE. ALL CONCRETE SHALL BE CLASS "S" OR GREATER.

10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS "S" OR GREATER.

11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PEDESTRIAN PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM 707 PEDESTRIAN SIGNAL HEAD.



NO LUMINAIRE



WITH LUMINAIRE

SERVICE DISCONNECT
NOTE: ELECTRICAL GROUND CONDUCTOR IS BONDED TO ALL METAL ENCLOSURES

* WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND #4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS.

** IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANIFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60" X 16" X 0.125" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LENGTH OF THE MAST ARM FROM THE END OF THE MAST ARM WITH THE LONG AXIS OF THE PANEL COLLINEAR WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH THE HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OF SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

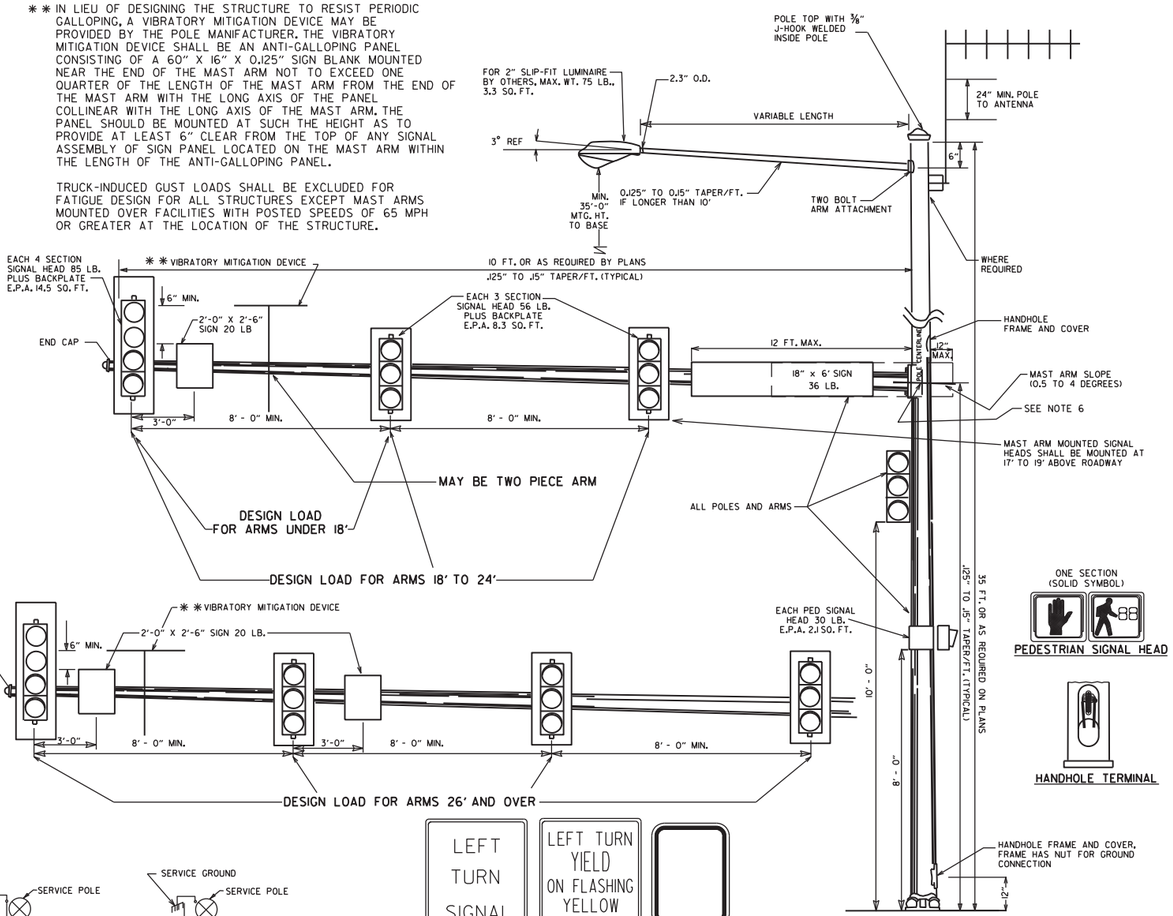
TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.

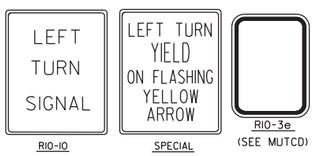
SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

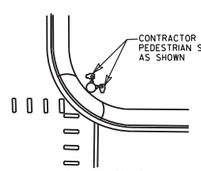
THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME THE INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATION IN FLASH SEQUENCE.

SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3. MINIMUM STRUCTURAL REQUIREMENTS.





R10-10 SPECIAL



PEDESTRIAN SIGNAL HEADS

DATE	REVISION	FILMED
11-16-17	REVISED NOTES, ADDED PEDESTRIAN SIGNAL HEAD DETAIL, ADDED HANDHOLE TERMINAL DETAIL, ADDED TRENCHING DETAIL	
02-27-14	REVISED NOTES.	
09-12-13	ISSUED AS STANDARD DRAWING	
12-08-16	REVISED NOTES	
02-27-14	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
07-21-11	REVISED VMD, SIGNAL HEADS	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
04-25-08	ADDED VIBRATORY MITIGATION DEVICE & NOTES	
04-18-08	REVISED AASHTO NOTES	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
10-12-04	REVISED CABINET ORIENTATION	
06-23-04	REVISED	
05-11-04	REV. NOTE 3/AASHTO REQUIREMENTS	
06-11-01	REV. NOTES & POLE MAST ARM SLOPE	
04-11-01	REVISED POLE TAPERS	
04-25-00	REV. NOTES & SIGNAL HEAD PLACEMENT	
11-22-99	REVISED FOUNDATION DETAILS	
11-17-98	REVISED DETAILS AND NOTES	
11-21-95	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

STEEL POLE WITH MAST ARM

STANDARD DRAWING SD-11

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC (4% MAXIMUM)

DEGREE OF CURVE	30 MPH e	30 MPH Ls (FT) MINIMUM	30 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'			
1° 15'			
1° 30'			
1° 45'			
2° 00'			
2° 15'	RC	72	100
2° 30'			
2° 45'			
3° 00'			
3° 15'	0.022	75	
3° 30'			
3° 45'	0.024	79	
4° 00'			
4° 15'			
4° 30'			
4° 45'	0.026	83	
5° 00'			
5° 30'			
6° 00'	0.028	86	125
6° 30'			
7° 00'	0.030	90	
7° 30'			
8° 00'			
8° 30'	0.032	93	
9° 00'			
9° 30'			
10° 00'	0.034	97	
10° 30'			
11° 00'			
11° 30'			
12° 00'	0.036	100	
12° 30'			
13° 00'			
13° 30'			
14° 00'	0.038	104	
14° 30'			
15° 00'			
15° 30'			
16° 00'			
16° 30'	0.040	108	150

D MAX = 22° 45'

DEGREE OF CURVE	35 MPH e	35 MPH Ls (FT) MINIMUM	35 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'			
1° 15'			
1° 30'			
1° 45'	RC	78	100
2° 00'			
2° 15'			
2° 30'	0.022	82	
2° 45'	0.024	86	
3° 00'			
3° 15'			
3° 30'	0.026	90	
3° 45'			
4° 00'			
4° 15'	0.028	94	125
4° 30'			
4° 45'			
5° 00'	0.030	98	
5° 30'			
6° 00'	0.032	101	
6° 30'			
7° 00'	0.034	105	
7° 30'			
8° 00'			
8° 30'	0.036	109	
9° 00'			150
9° 30'	0.038	113	
10° 00'			
10° 30'			
11° 00'			
11° 30'	0.040	117	

D MAX = 15° 15'

DEGREE OF CURVE	40 MPH e	40 MPH Ls (FT) MINIMUM	40 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'			
1° 15'	RC	84	100
1° 30'			
1° 45'			
2° 00'	0.022	88	
2° 15'	0.024	92	
2° 30'	0.026	97	
2° 45'			
3° 00'	0.028	101	125
3° 15'			
3° 30'	0.030	105	
3° 45'			
4° 00'	0.032	109	
4° 15'			
4° 30'	0.034	113	
4° 45'			
5° 00'	0.036	118	150
5° 30'			
6° 00'	0.038	122	
6° 30'			
7° 00'	0.040	126	
7° 30'			
8° 00'			

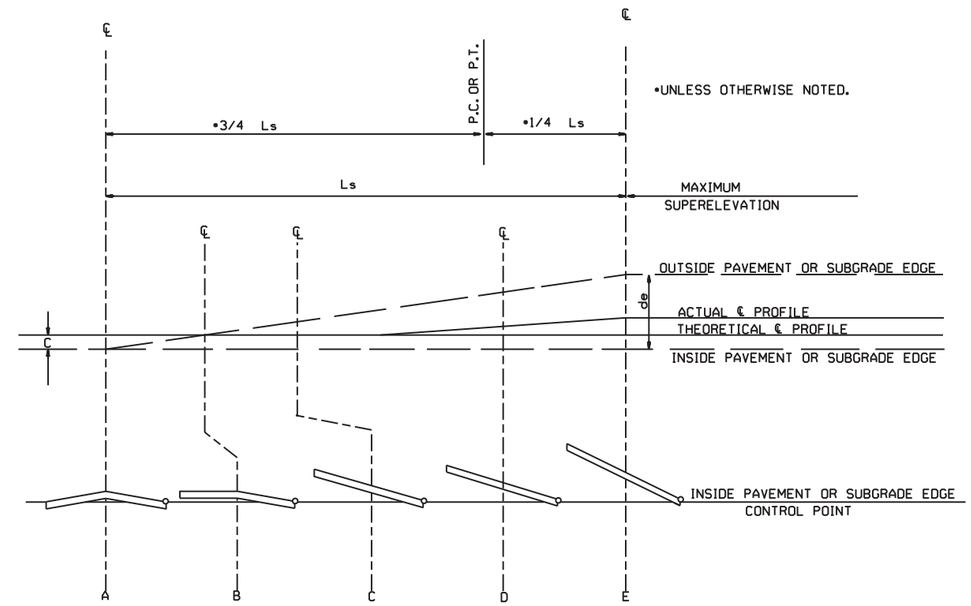
D MAX = 10° 30'

DEGREE OF CURVE	45 MPH e	45 MPH Ls (FT) MINIMUM	45 MPH Ls (FT) DESIRABLE
0° 15'	NC		
0° 30'			
0° 45'			
1° 00'	RC	90	125
1° 15'			
1° 30'	0.022	95	
1° 45'	0.024	99	
2° 00'	0.026	104	
2° 15'			
2° 30'	0.028	108	
2° 45'	0.030	113	
3° 00'			
3° 15'	0.032	117	
3° 30'			
3° 45'	0.034	122	150
4° 00'			
4° 15'	0.036	126	
4° 30'			
4° 45'	0.038	131	
5° 00'			
5° 30'	0.040	135	
6° 00'			

D MAX = 8° 00'

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.)



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

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

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

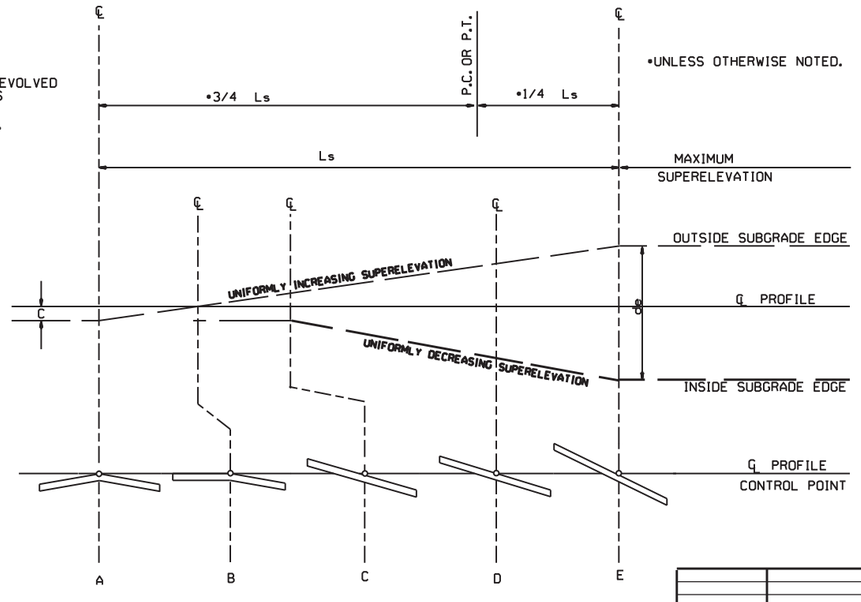
GENERAL NOTES

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.



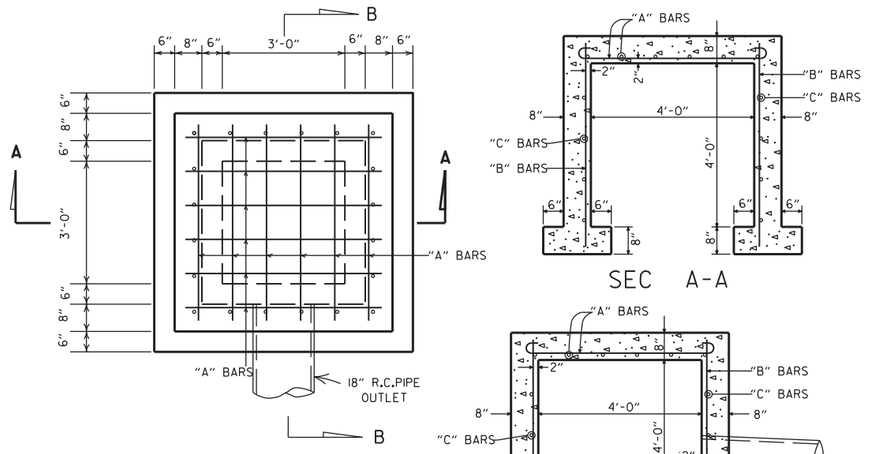
STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

11-07-19	ISSUED	
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC (4% MAXIMUM)

STANDARD DRAWING SE-3

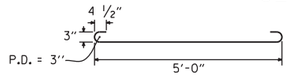


NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE

BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 ½"
"C"	16	5'-0"	12"

ALL STEEL TO BE #4 BARS



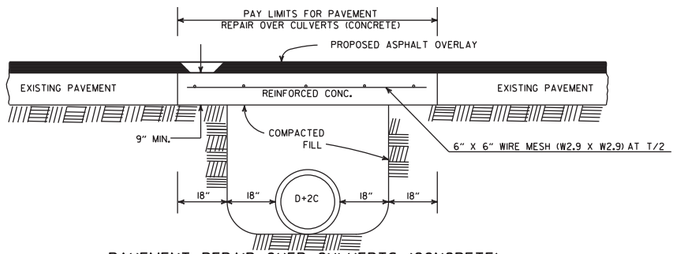
QUANTITIES

CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

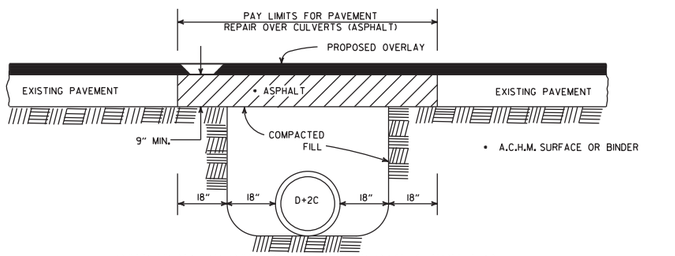
GENERAL NOTE:

THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITTIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

REINFORCED CONCRETE SPRING BOX



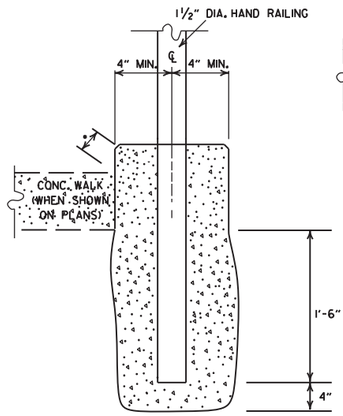
PAVEMENT REPAIR OVER CULVERTS (CONCRETE)



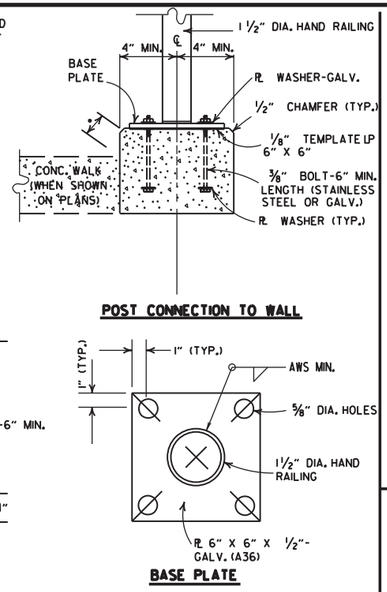
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS

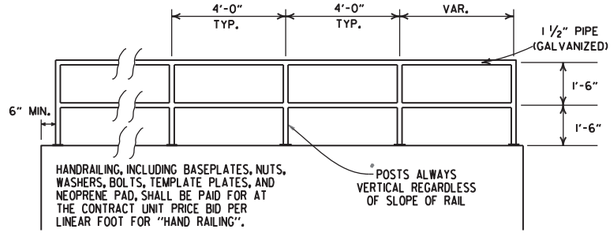
• A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



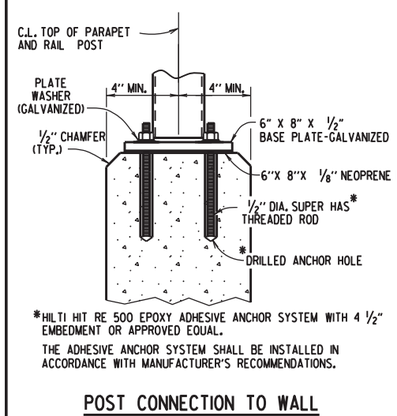
DETAIL OF HAND RAILING SET IN CONCRETE



POST CONNECTION DETAILS



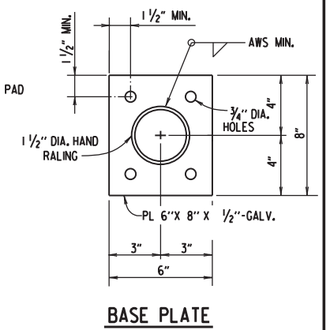
HAND RAILING SHALL CONFORM TO SECTION 633.



*HILTI HIT RE 500 EPOXY ADHESIVE ANCHOR SYSTEM WITH 4 ½" EMBEDMENT OR APPROVED EQUAL.

THE ADHESIVE ANCHOR SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

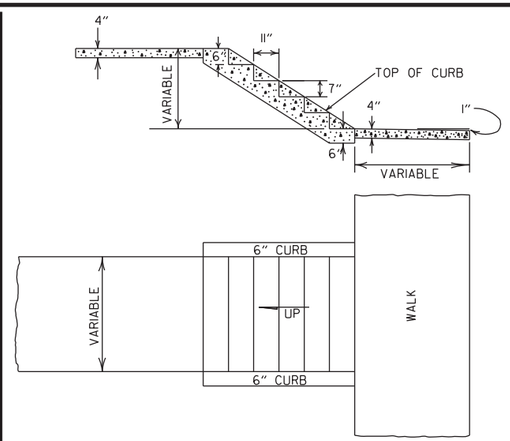
POST CONNECTION TO WALL



BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM (EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



GENERAL NOTES

1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

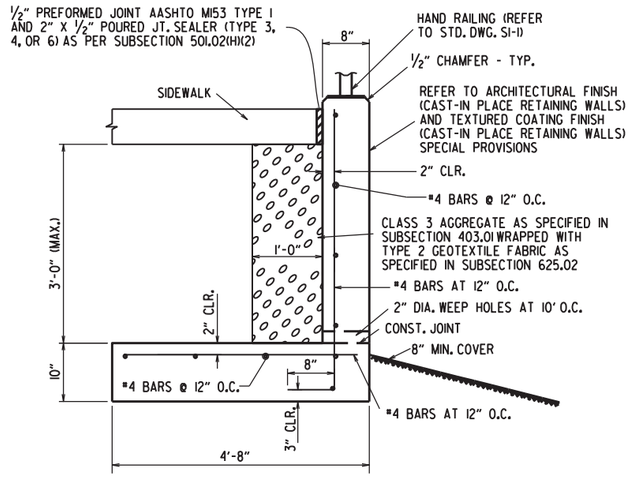
DETAILS OF CONCRETE STEPS & WALKS

DATE	REVISION	DATE FILMED
10-25-18	REVISED DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS	
9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-96	ADD WEEP HOLE;REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR ADDED HDWL. MODS, DEL. PIPE UNDERDRAINS	649-7-15-88
11-1-84	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
1-4-83	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET& PAVEMENT REPAIR	674-4-20-79
2-2-76	12"MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

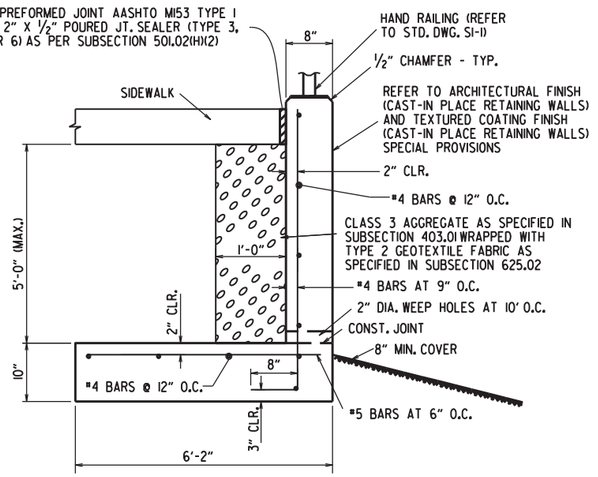
DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI-1



CONCRETE WALK (TYPE SPECIAL) DETAIL MAX HEIGHT 3'-0"

N.T.S.



CONCRETE WALK (TYPE SPECIAL) DETAIL MAX HEIGHT 5'-0"

N.T.S.

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION (2012).

LIVE LOAD: LIVE LOAD SURCHARGE IS NOT INCLUDED IN THE DESIGN OF THESE WALLS. VEHICULAR LIVE LOAD SHALL NOT BE ALLOWED WITHIN A DISTANCE EQUAL TO ONE-HALF THE HEIGHT OF THE WALL.

CONCRETE: CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED ½". ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 3,500 PSI. A CLASS 2 SURFACE FINISH SHALL BE USED ON ALL SURFACES OF THE CONCRETE UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS) AND TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS) SPECIAL PROVISIONS.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 60.

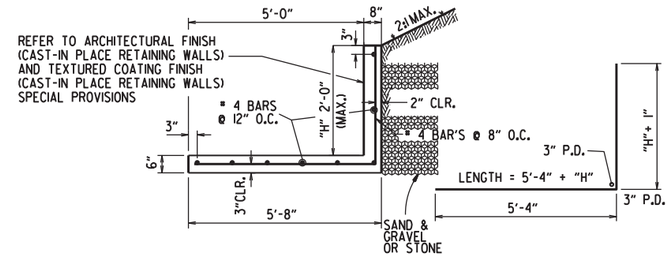
FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 801.04. BACKFILL FOR RETAINING WALLS SHALL BE IN ACCORDANCE WITH SUBSECTION 801.08.

WATERPROOF MEMBRANE (TYPE C), WATERSTOPS, PREFORMED JOINTS, WEEP HOLES & GEOTEXTILE FABRIC SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO CLASS S CONCRETE.

JOINTS IN THE WALL SHALL MATCH TYPE AND SPACING OF THE JOINTS IN THE WALK.

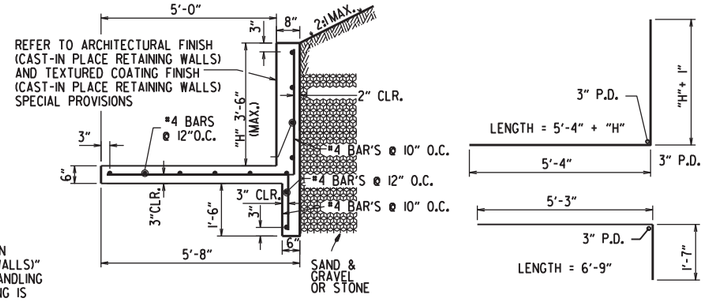
DRAINAGE FILL MATERIAL (CLASS 3) AND SELECT BACKFILL SHALL BE MEASURED AND PAID FOR AS COMPACTED EMBANKMENT.

THESE DETAILS ARE NOT INTENDED FOR USE ALONG STREAMS OR DITCHES WITHOUT CONSIDERATION FOR SCOUR.



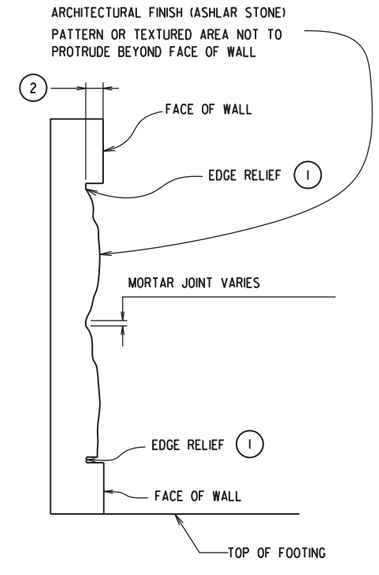
CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 2'-0"

N.T.S.



CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 3'-6"

N.T.S.

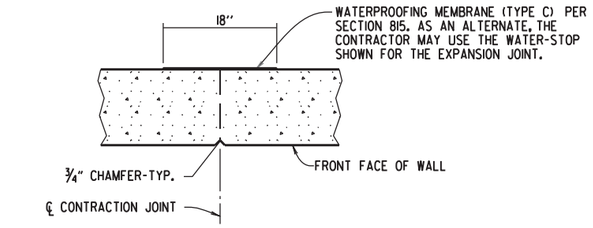


ARCHITECTURAL FINISH DETAILS

N.T.S.

(1) PROVIDE EDGE RELIEF AROUND PERIMETER OF TEXTURE. EDGE RELIEF DIMENSIONS SHALL MATCH MANUFACTURERS EDGE DISTANCE.

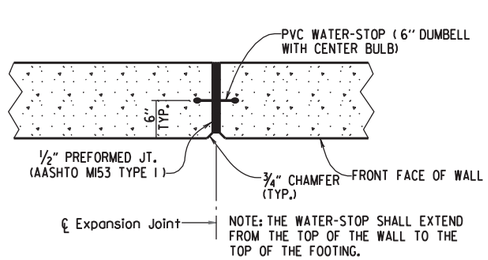
(2) DEPTH OF ASHLAR STONE PATTERN APPROX. 1⅝". SEE SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)".



TYPICAL CONTRACTION JOINT DETAIL

N.T.S.

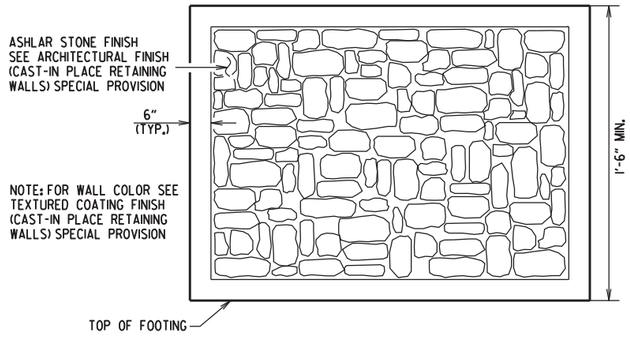
NOTE: 20'-0" MAX. SPACING BETWEEN CONTRACTION JOINTS. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONTRACTION JOINTS.



TYPICAL EXPANSION JOINT DETAIL

N.T.S.

NOTE: 60'-0" MAX. SPACING BETWEEN EXPANSION JOINTS. HORIZONTAL REINFORCING SHALL STOP 2" FROM ℄ EXPANSION JOINT.



ASHLAR STONE FINISH DETAIL

NOTES:

WALL PATTERN SHALL BE APPLIED TO THE EXPOSED SURFACES OF WALL IN ACCORDANCE WITH SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)" AND AS SHOWN IN THE PLANS. CARE SHALL BE TAKEN WITH FORM LINER HANDLING AND INSTALLATION TO ENSURE AESTHETIC QUALITY OF THE WALL TEXTURING IS MAINTAINED. WHERE FORM LINER PANELS REQUIRE MODIFICATION TO CONFORM TO THE LOCATION, DIMENSIONS AND LINES SHOWN IN THE PLANS, THE CONTRACTOR SHALL PROVIDE EDGE RELIEF MATCHING THAT OF THE UNALTERED FORM LINER. PAYMENT FOR WALL TEXTURING SHALL BE IN ACCORDANCE WITH SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)".

NO ADJUSTMENTS WILL BE MADE IN CONCRETE VOLUME DUE TO THE USE OF "ARCHITECTURAL FINISH". CLASS "S" CONCRETE SHALL BE MEASURED IN ACCORDANCE WITH SUBSECTION 802.24(A). CARE SHALL BE TAKEN IN PLACING CONCRETE TO AVOID SEGREGATION AND TO ELIMINATE FLOW LINES.

CLASS 3 TEXTURED COATING FINISH SHALL BE APPLIED TO WALL SURFACES AS SPECIFIED IN SP "TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS)" AND IN ACCORDANCE WITH SUBSECTION 802.19(B)(3).

DATE	REVISION	DATE FILMED
5-14-20	DRAWING ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE WALK (TYPE SPECIAL)

STANDARD DRAWING SI - 3

R1-1



STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

W3-5



STD. 36"X36"
EXPWY. 48"X48"
FWY. 48"X48"

W3-5a



STD. 36"X36"
EXPWY. 48"X48"
FWY. 48"X48"

R4-1



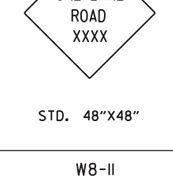
STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2



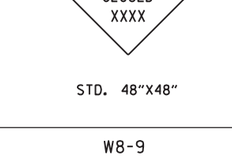
STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R5-1



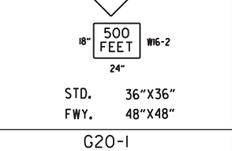
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2



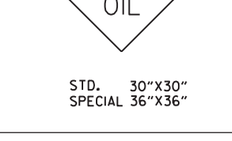
48"X30"

RII-3A



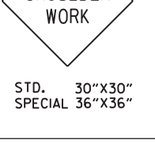
60"X30"

RII-4



60"X30"

W21-5a



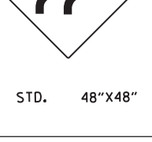
STD. 36"X36"
FWY. 48"X48"

WI-1



STD. 36"X36"
FWY. 48"X48"

WI-2



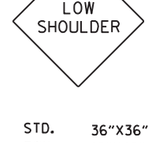
STD. 36"X36"
FWY. 48"X48"

WI-3



STD. 48"X48"

WI-4



STD. 48"X48"

WI-6



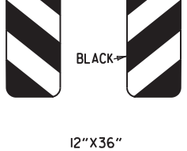
STD. 48"X24"
SPECIAL 60"X30"

WI-8



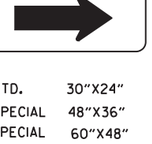
STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



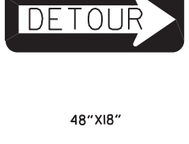
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2



STD. 36"X36"
FWY. 48"X48"

W5-1



STD. 36"X36"
SPECIAL 48"X48"

W6-3



EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7



EXPWY. 36"X36"
FWY. 48"X48"

W9-2



STD. 36"X36"
FWY. 48"X48"

WI3-1



STD. 24"X24"

W20-1



STD. 48"X48"

W20-2



STD. 48"X48"

W20-3



STD. 48"X48"

W20-4



STD. 48"X48"

W20-5



STD. 48"X48"

W20-7a



STD. 36"X36"
FWY. 48"X48"

W21-2



STD. 30"X30"
SPECIAL 36"X36"

W21-5



STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

WI-4b



STD. 48"X48"

R56-1



STD. 18"X18"

W8-11

STD. 36"X36"
FWY. 48"X48"

W8-9

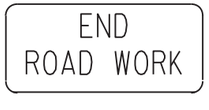
STD. 36"X36"
FWY. 48"X48"

G20-1



60"X24"

G20-2



48"X24"

OM-3L OM-3R

12"X36"

M4-9



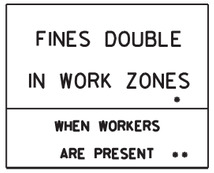
STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10



48"X18"

R55-1



36"X60"

• USE 6" C LETTERS
•• USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE AHEAD

GENERAL NOTES:

1. 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.
2. 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.
3. 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.
- 4. 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.
- 5. 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.
6. 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.
7. 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.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. 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.
10. 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.

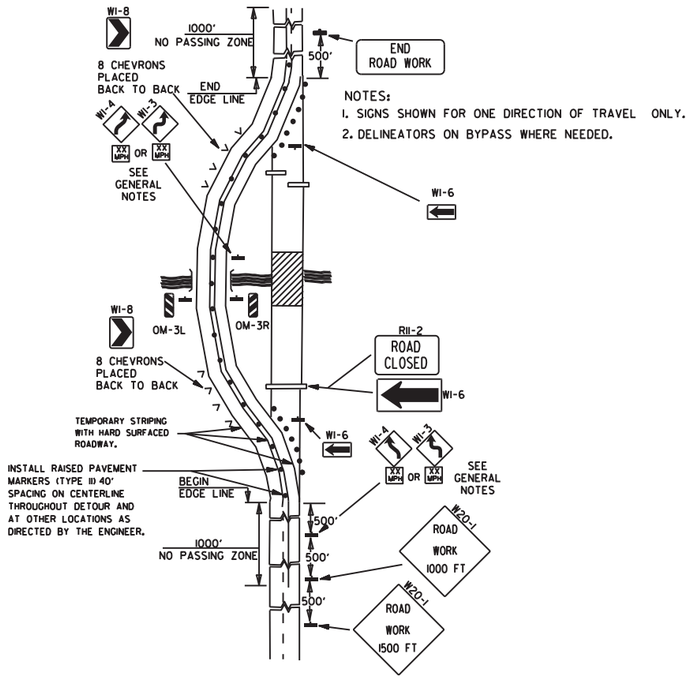
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
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	

ARKANSAS STATE HIGHWAY COMMISSION

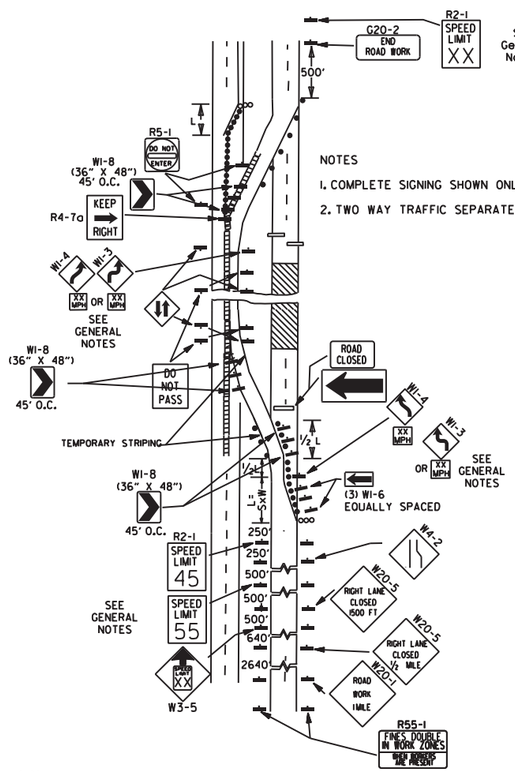
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



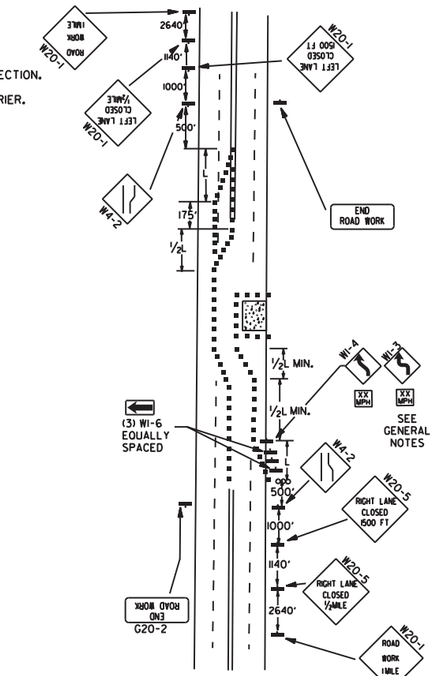
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.

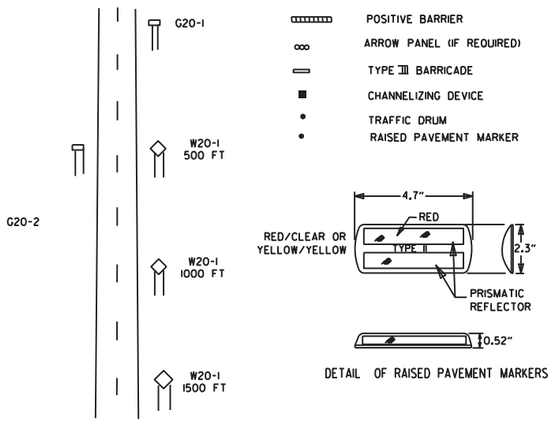


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

(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.



DETAIL OF RAISED PAVEMENT MARKERS

TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

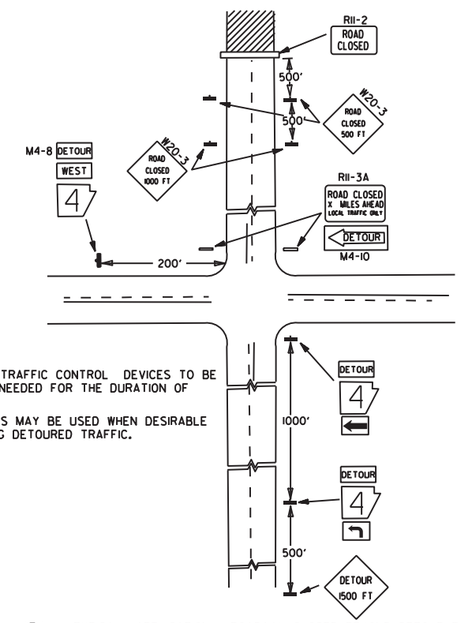
L=SXW FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS^2}{60}$ 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.

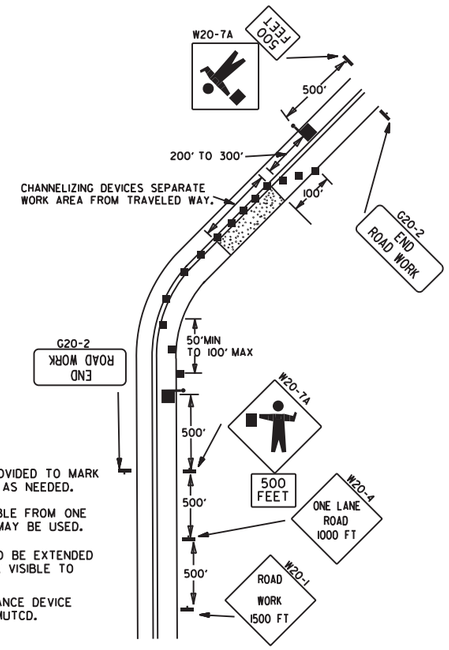
GENERAL NOTES:

1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. 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 W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-145MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. 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 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. 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.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. 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.
8. 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 ARDOT QUALIFIED PRODUCTS LIST.
9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



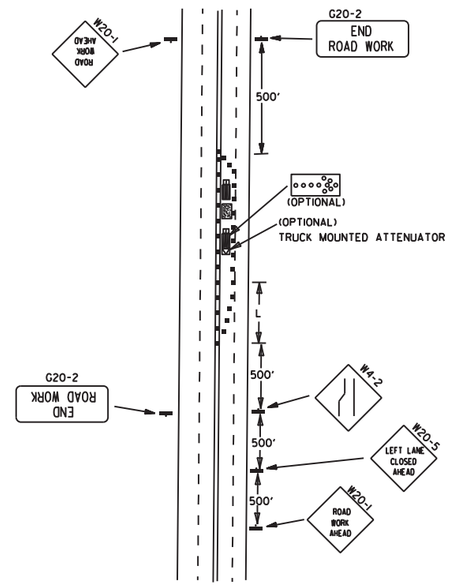
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



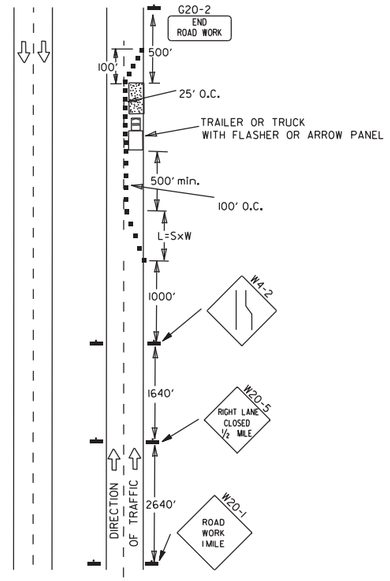
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

11-07-19	REVISED NOTE 1, ADDED NOTE 9	
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
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 (o) 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	
DATE	REVISION	FILMED

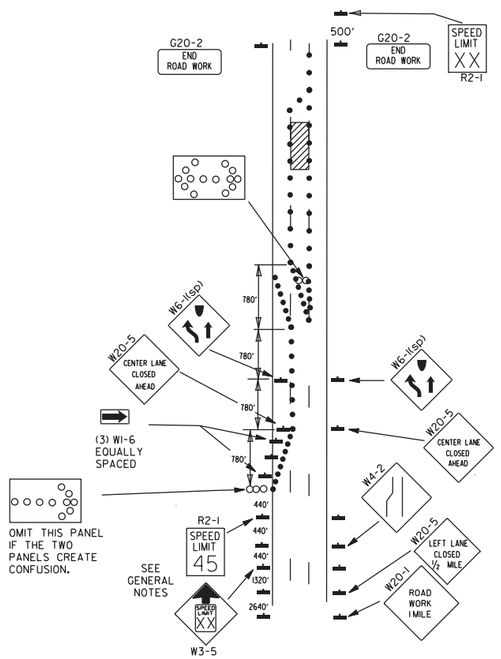
ARKANSAS STATE HIGHWAY COMMISSION

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.

KEY:

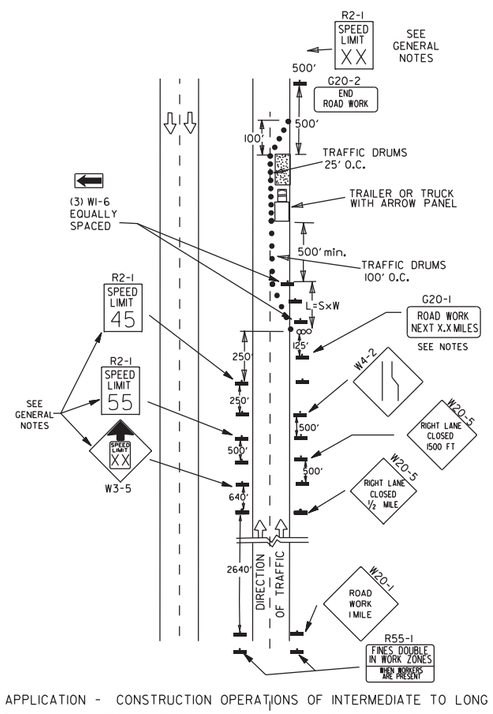
ooo ARROW PANEL (IF REQUIRED)

■ CHANNELIZING DEVICE

● TRAFFIC DRUM

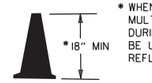
GENERAL NOTES:

1. A SPEED LIMIT REDUCTION MAY BE IMPLEMENTED ONLY WHEN DESIGNATED IN THE PLAN OR WHEN RECOMMENDED BY THE ROADWAY DESIGN DIVISION.
2. 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 W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. 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.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. 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.
8. FLAGGERS SHALL USE STOP/SLOW PADDLES FOR CONTROLLING TRAFFIC THROUGH WORK ZONES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. ALL PLASTIC DRUMS AND CONES SHALL MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
10. 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.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



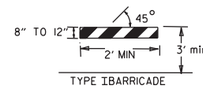
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES



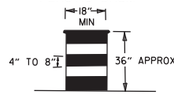
* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS. 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

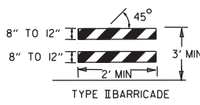
CONES



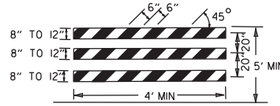
TYPE I BARRICADE

PLASTIC DRUM



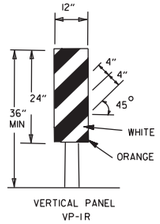


TYPE II BARRICADE



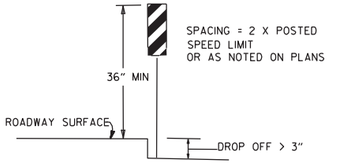
TYPE III BARRICADE

NOTE:
FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.

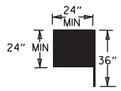


VERTICAL PANEL
VP-1R

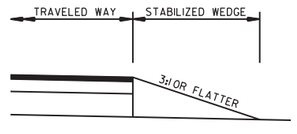
VERTICAL PANEL PLACEMENT



FLAG

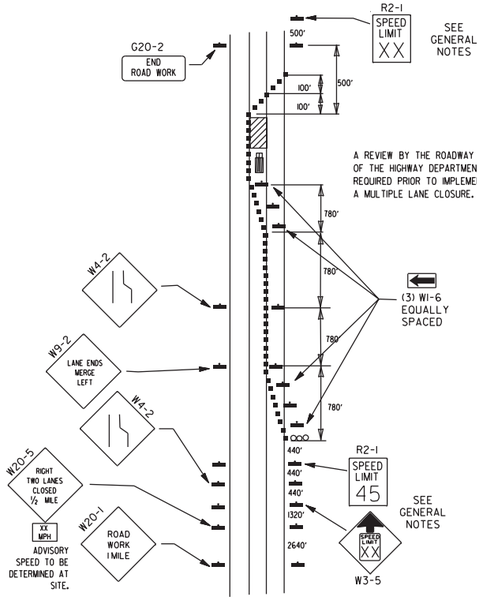


FLAG SHALL BE OF GOOD GRADE RED MATERIAL



STABILIZED WEDGE

NOTE:
MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.



A REVIEW BY THE ROADWAY DESIGN DIVISION OF THE HIGHWAY DEPARTMENT WILL BE REQUIRED PRIOR TO IMPLEMENTING A MULTIPLE LANE CLOSURE.

(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

TRAFFIC CONTROL DEVICES

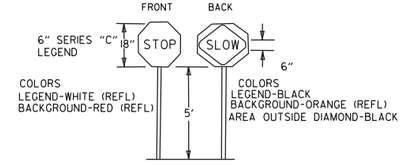
NON-INTERSTATE			
VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 2"	CENTERLINE	W8-11 AND LANE STRIPING	W8-11 AND LANE STRIPING
> 2"	CENTERLINE	STANDARD LANE CLOSURE	STANDARD LANE CLOSURE
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND VERTICAL PANELS	W8-9, EDGE LINE STRIPING, AND VERTICAL PANELS
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND VERTICAL PANELS	W8-17, EDGE LINE STRIPING, AND VERTICAL PANELS
> 6" ≤ 18"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(1)	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(2)
> 18" ≤ 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(1)	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS(3)
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER(4) & EDGE LINES	PRECAST CONCRETE BARRIER(4) & EDGE LINES

INTERSTATE		
VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL
≤ 2"	CENTERLINE	W8-11 AND LANE STRIPING
≤ 2"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS(2)
> 2" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(2)
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

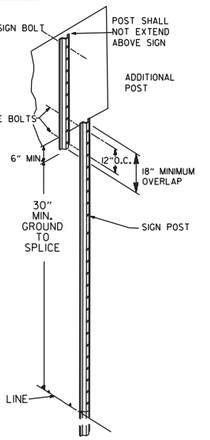
INTERSTATE AND NON-INTERSTATE		
FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

GENERAL NOTES:
1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED.
3. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
4. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
5. W21-5, W21-5a, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER.

STOP SLOW PADDLE



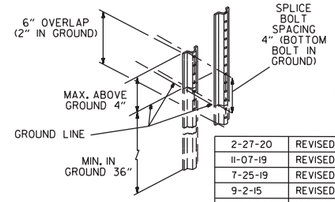
DETAIL OF SPLICES



NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-21)

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
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS	
11-07-19	REVISED NOTE 9, ADDED NOTE 11	
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS	
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
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	

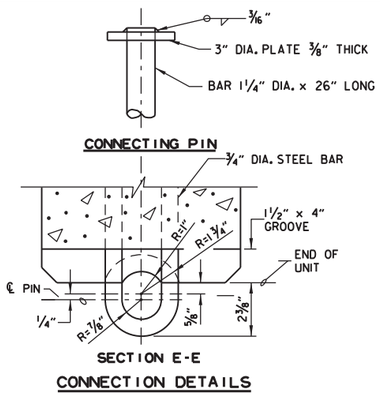
ARKANSAS STATE HIGHWAY COMMISSION

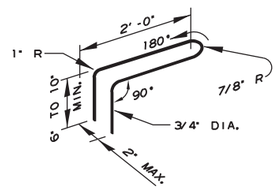
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

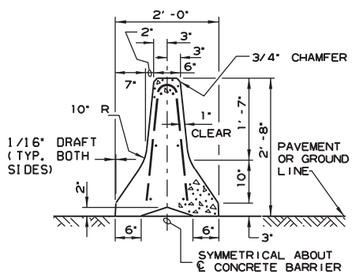
STANDARD DRAWING TC-3

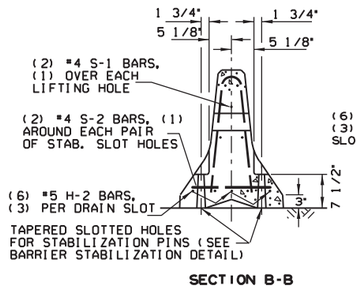
REINFORCING BAR TABLE PER BARRIER UNIT

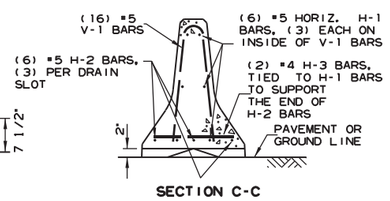
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2. TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9", 2 3/16" R, 12°, 9 1/2", 2'-1 3/8", 4 3/8"

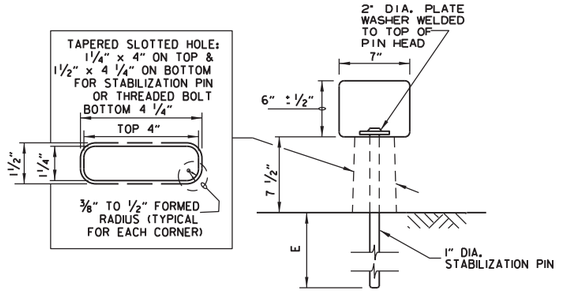


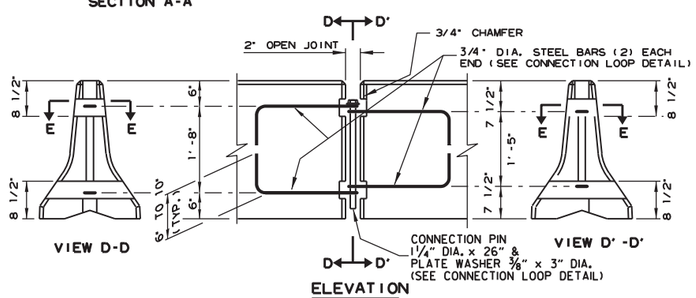


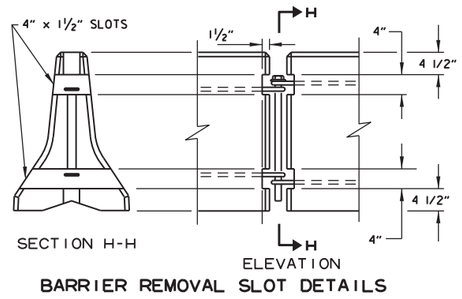


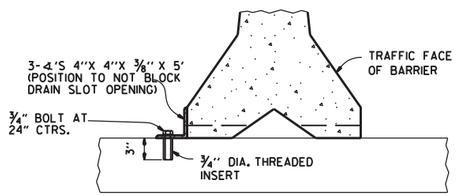




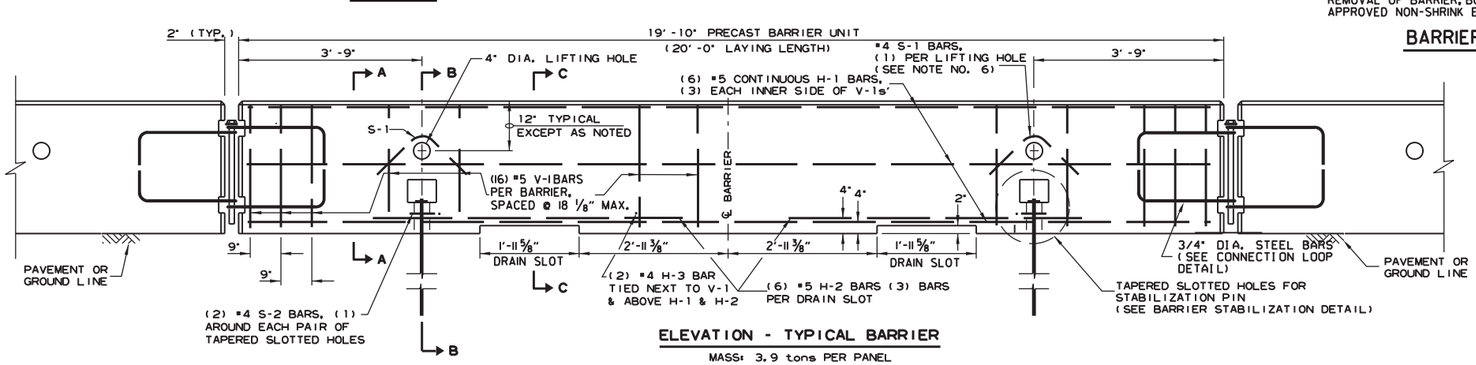








NOTE: " THREADED INSERTS SHALL BE CAST IN PLACE FOR ALL NEW BRIDGE DECKS AND DRILLED AND GROUTED FOR EXISTING BRIDGE DECKS. INSERTS SHALL HAVE A MINIMUM ULTIMATE LOAD CAPACITY OF 8000 LBS. IN TENSION. AFTER REMOVAL OF BARRIER, BOLTS, AND ANGLES, THE INSERTS SHALL BE FILLED WITH APPROVED NON-SHRINK EPOXY.



MASS: 3.9 tons PER PANEL

GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH THE PRECAST CONCRETE BARRIER UNITS AND SHALL BE RESPONSIBLE FOR THE MANUFACTURE, SHIPMENT, STORAGE, PLACEMENT AND REMOVAL. AT THE COMPLETION OF THE PROJECT, THE PRECAST UNITS WILL REMAIN THE PROPERTY OF THE CONTRACTOR.

2. MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   CONCRETE: 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
   REINFORCING STEEL: AASHTO M 31 OR M 53, GRADE 60
   STRUCTURAL STEEL: AASHTO-M270 GRADE 36 SHALL BE USED FOR THE CONNECTION PIN, CONNECTION LOOPS, AND STABILIZATION PINS. A ONE PIECE PIN WITH A 3" ROUNDED TOP MAY BE USED IN PLACE OF THE DETAILED CONNECTION PIN.
   DELINEATORS: DELINEATORS SHALL BE MOUNTED AT 10' SPACING ON TOP OF PRECAST BARRIER.

   IN APPLICATIONS WHERE BARRIER WALL IS WITHIN 6 FEET OF A TRAFFIC LANE, ADDITIONAL DELINEATORS SHALL BE PLACED ON THE BARRIER AT 10' SPACING APPROXIMATELY ONE (1) FOOT FROM THE TOP OF THE BARRIER. DELINEATORS SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CONSTRUCTION CONCRETE BARRIER MARKERS.
   DELINEATOR COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
   PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN. FT. FOR "FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER". THE CONTRACTOR SHALL CERTIFY TO THE ENGINEER THAT THE MATERIAL AND THE DESIGN USED IN THE PRECAST BARRIER UNITS MEETS THE REQUIREMENTS AS SHOWN ON THIS STANDARD DRAWING.

3. OTHER PRECAST CONCRETE BARRIERS THAT HAVE BEEN CRASH TESTED AND APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION TO MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) WILL BE ACCEPTED IN LIEU OF THE BARRIER SHOWN. DRAIN SLOTS SHALL BE PROVIDED AS NEEDED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH A CERTIFICATION OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) COMPLIANCE FOR ANY OTHER TYPES OF PRECAST BARRIER TO BE USED. THE CERTIFICATION SHALL STATE THAT THE PRECAST CONCRETE BARRIER MEETS THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). MIXING OF SHAPES WILL NOT BE ALLOWED IN A CONTINUOUS LINE OF UNITS.

4. DOWEL HOLES IN PAVEMENT OR BRIDGE SLABS THAT ARE TO REMAIN IN PLACE SHALL BE FILLED. HOLES IN CONCRETE PAVEMENT AND BRIDGE SLABS SHALL BE FILLED WITH AN APPROVED NON-SHRINK EPOXY GROUT. HOLES IN ASPHALT PAVEMENT SHALL BE FILLED WITH AN APPROVED ASPHALT JOINT FILLER. PAYMENT FOR DRILLING AND FILLING HOLES TO BE INCLUDED IN THE PRICE FOR VARIOUS BARRIER ITEMS.

5. ATTACH UNITS TO ROADWAY SURFACE WITH STABILIZATION PINS AND TO DECK SLABS USING BOLTS WHEN REQUIRED.

6. A 4" WHITE PVC SLEEVE MAY BE USED TO FORM THE LIFTING HOLE AND IF USED THE SLEEVE IS TO BE LEFT IN PLACE.

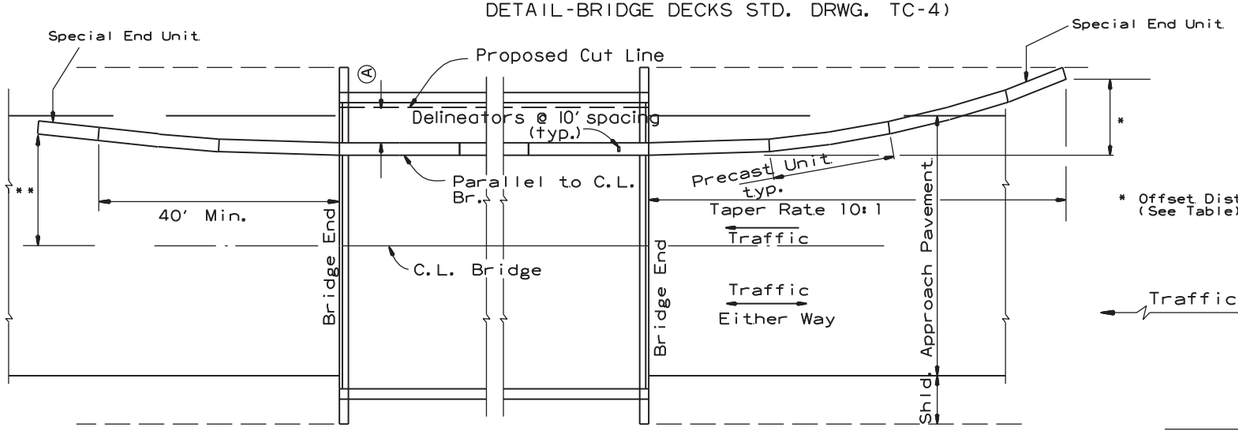
DATE	REVISION	FILMED
11-07-19	REVISED NOTE 3	
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-4

Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)

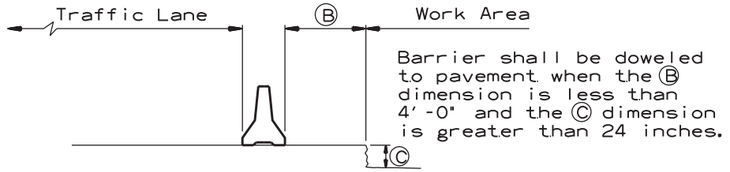


BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

** Offset Distance for Two Way Traffic Only

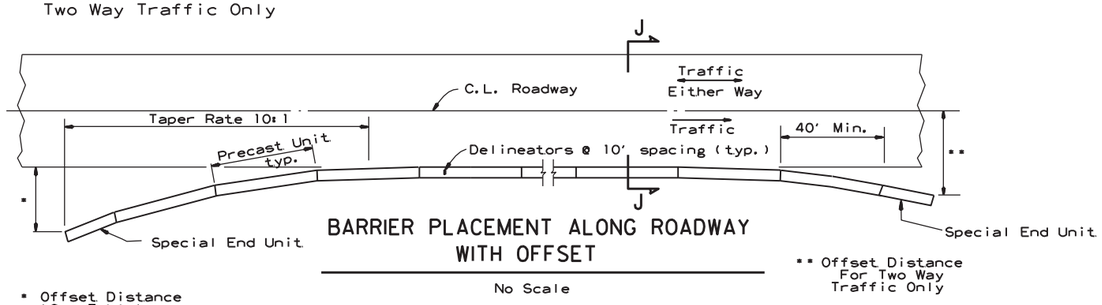
* Offset Distance (See Table)



Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

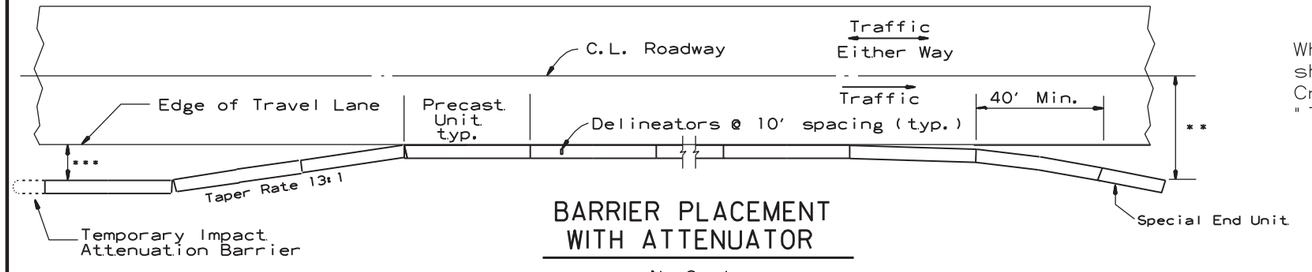
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see "Barrier Placement With Attenuator" Detail shown below.

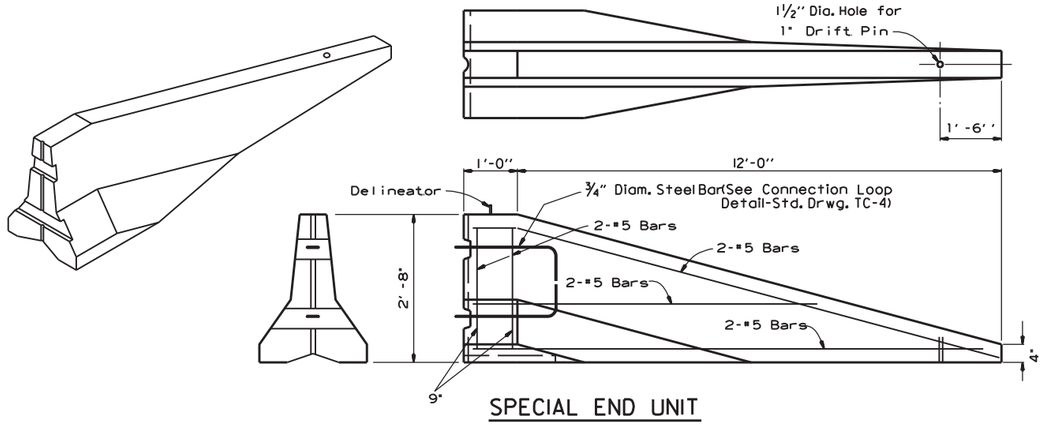


BARRIER PLACEMENT WITH ATTENUATOR

No Scale

*** Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator

** Offset Distance For Two Way Traffic Only



SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with a Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
11-07-19	REVISED NOTE	
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

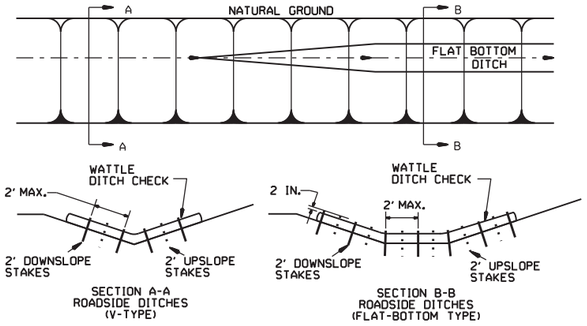
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

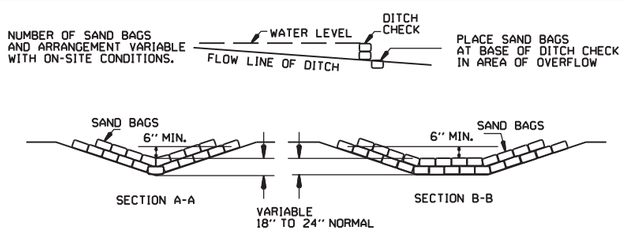
STANDARD DRAWING TC-5

GENERAL NOTES

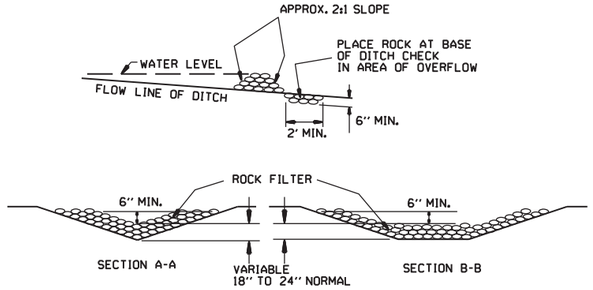
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

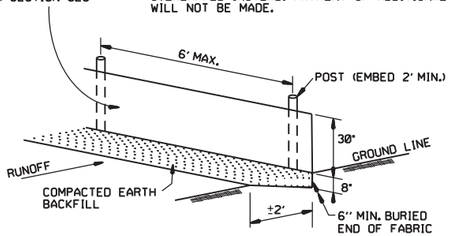


ROCK DITCH CHECK (E-6)

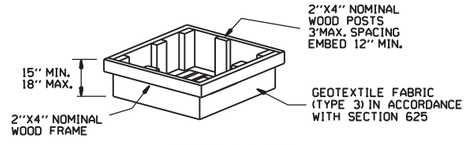
GENERAL NOTES

GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

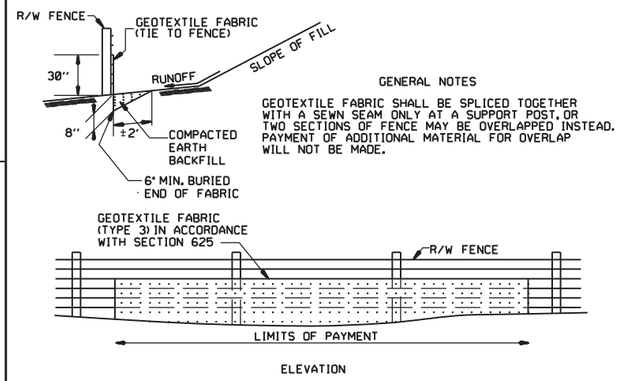
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



SILT FENCE (E-11)



DROP INLET SILT FENCE (E-7)



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.

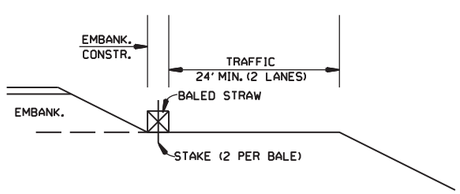
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

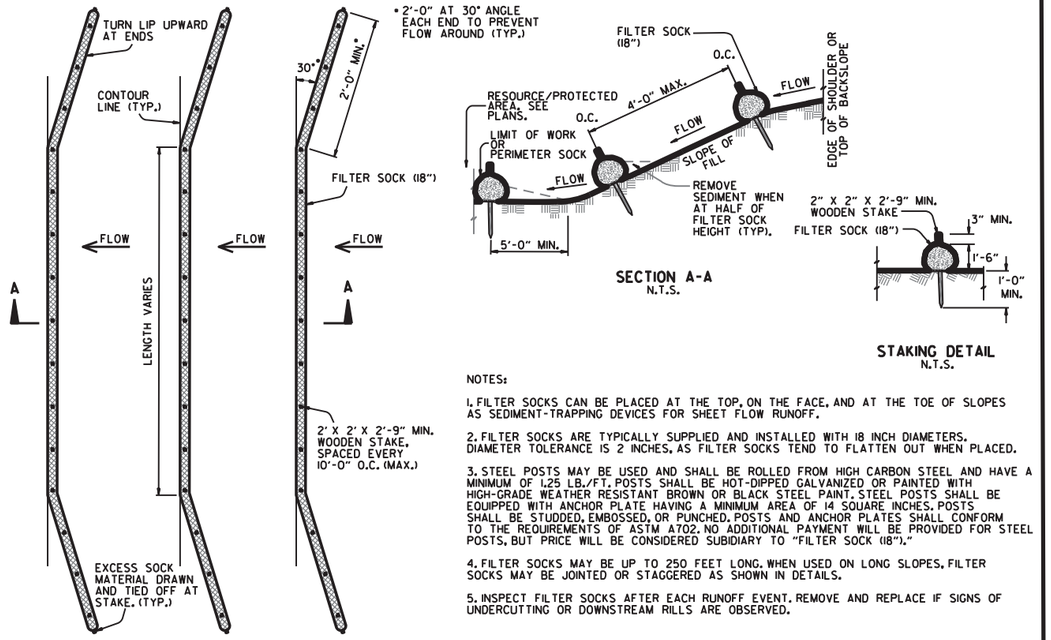
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

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)



NOTES:

1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.

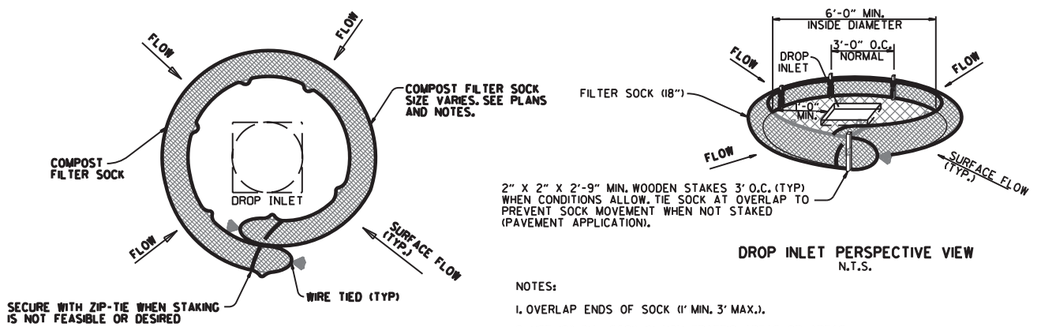
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBIDIARY TO "FILTER SOCK (18")."

4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.

5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

FILTER SOCK ALONG SLOPE (E-3)



NOTES:

1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).

2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

DATE	REVISION	FILMED
11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1

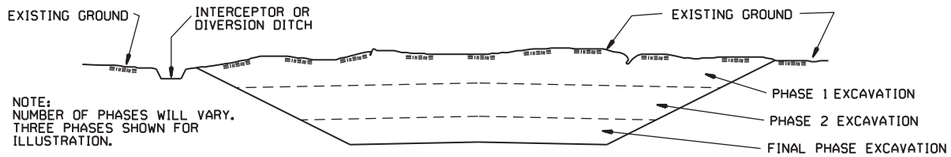
CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)

2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



GENERAL NOTE

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

CONSTRUCTION SEQUENCE

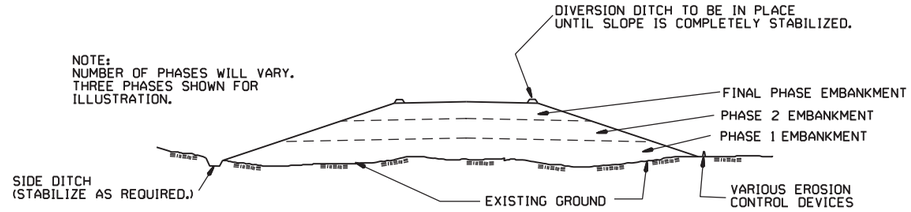
1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.

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



GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, 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.

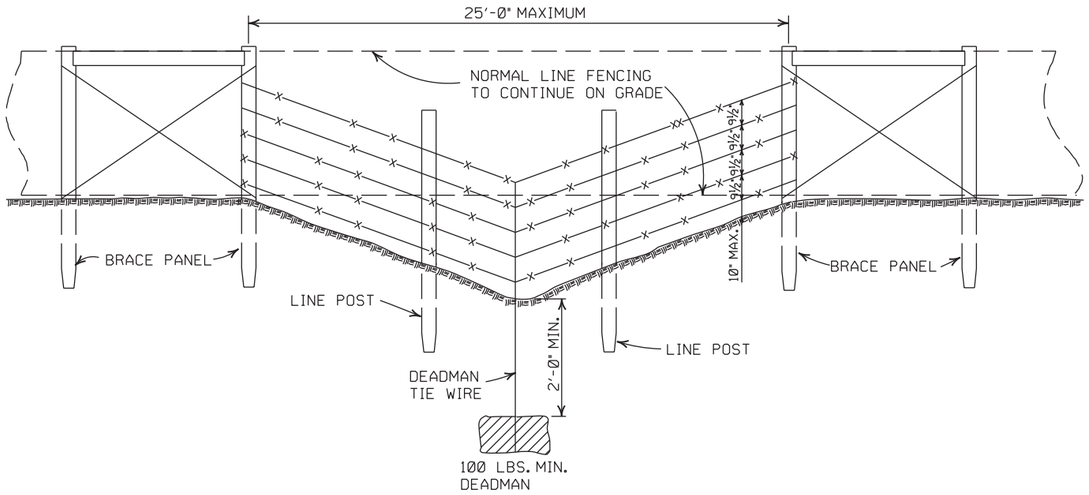
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

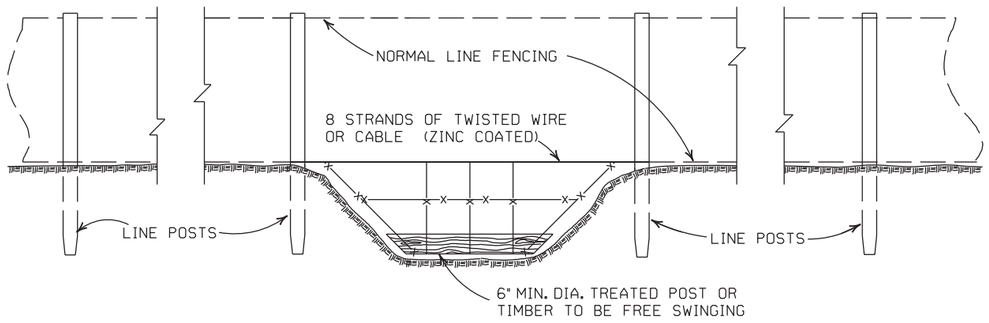
DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

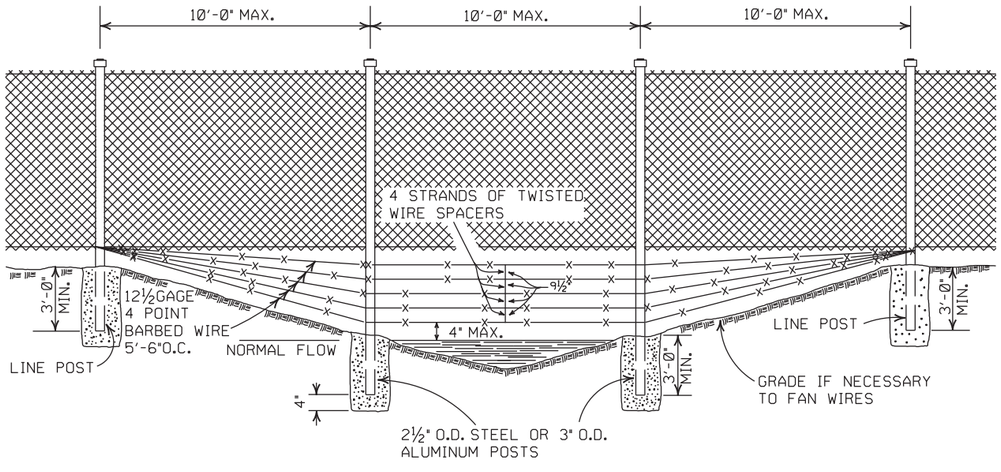
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3







GENERAL NOTES:

THESE INSTALLATIONS TO BE USED WHERE NORMAL FENCING INSTALLATION WOULD CAUSE THE COLLECTING OF DRIFT IN THE CHANNEL OR THE DEPRESSION WILL NOT PERMIT NORMAL INSTALLATION. INSTALLATIONS WILL BE MADE ONLY WHERE DIRECTED BY THE ENGINEER.

WHEN A FENCE LINE APPROACHES A DITCH, GULLY OR DEPRESSION, THE LAST POST ON LEVEL GROUND SHALL BE PLACED CLOSE ENOUGH TO THE EDGE OF THE DROP OFF THAT THE FENCE MAY BE STRUNG TO THE POST IN THE DEPRESSION WITHOUT TOUCHING THE GROUND.

IN TERRAIN OF SUCH EXTREME IRREGULARITY THAT MINOR GRADING WILL NOT BE FEASIBLE, THE NORMAL FENCE SHALL CONTINUE ON GRADE AND THE GULLIES OR DEPRESSIONS TREATED BY AUXILIARY FENCES AS SHOWN.

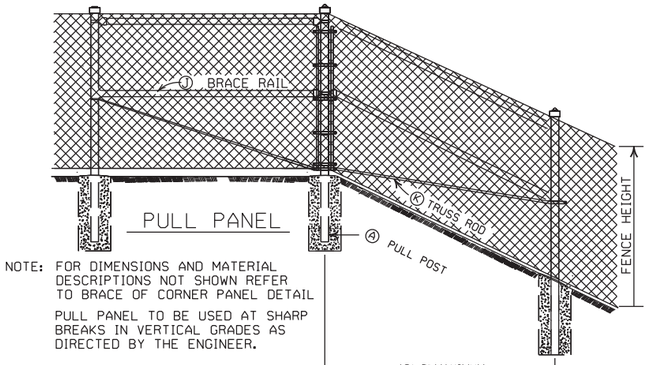
PAYMENT FOR THE TYPE INSTALLATION USED WILL NOT BE MADE DIRECTLY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR WIRE FENCE OR CHAIN LINK FENCE.

DATE	REVISION	FILMED
4-20-79	REVISED TOP RAIL & TENSION WIRE	696-4-20-79
10-2-72	REVISED AND REDRAWN	529-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE WATER GAPS

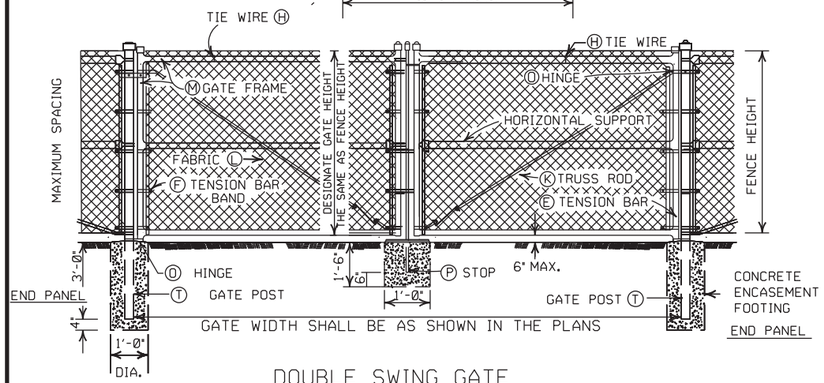
STANDARD DRAWING WF-2



PULL PANEL

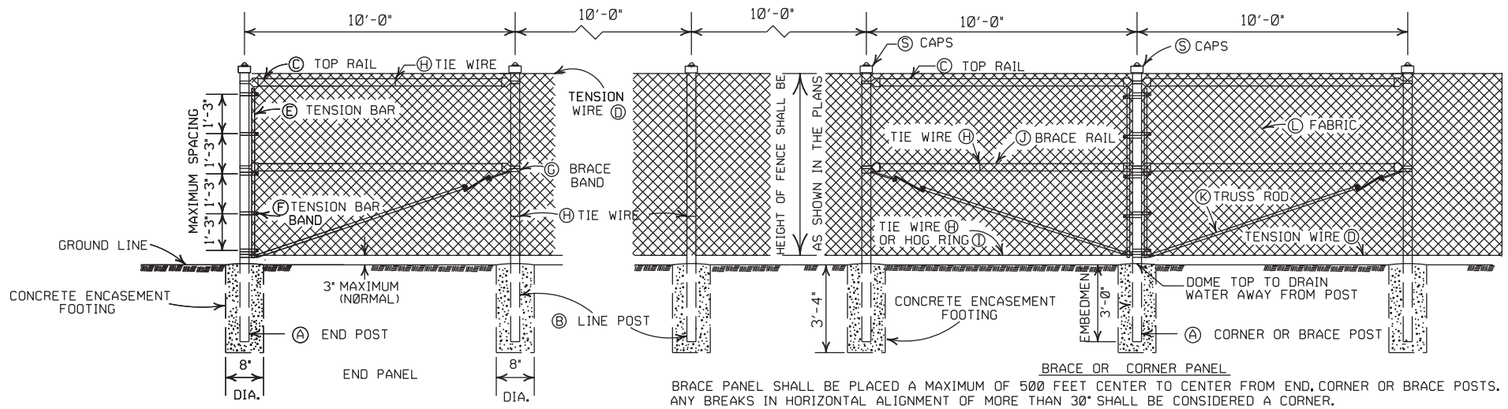
NOTE: FOR DIMENSIONS AND MATERIAL DESCRIPTIONS NOT SHOWN REFER TO BRACE OF CORNER PANEL DETAIL

PULL PANEL TO BE USED AT SHARP BREAKS IN VERTICAL GRADES AS DIRECTED BY THE ENGINEER.



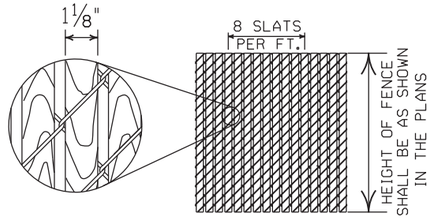
DOUBLE SWING GATE

POST SPACING DETAIL



BRACE OR CORNER PANEL

BRACE PANEL SHALL BE PLACED A MAXIMUM OF 500 FEET CENTER TO CENTER FROM END, CORNER OR BRACE POSTS. ANY BREAKS IN HORIZONTAL ALIGNMENT OF MORE THAN 30° SHALL BE CONSIDERED A CORNER.



1⅛" X ¼" REDWOOD SLATS(LENGTH TO MATCH HEIGHT OF FENCE)

DETAIL OF REDWOOD SLAT INSTALLATION

(WHERE APPLICABLE)

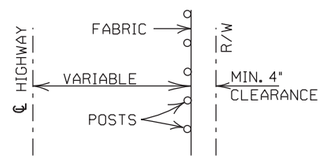
HEIGHT OF FENCE FABRIC	(A)	(B)		(C)			(D)		(E)		(F)			(G)	
	END, PULL, CORNER OR BRACE POST	LINE POSTS		TOP RAIL			TENSION WIRE		TENSION BAR		TENSION BAR BAND			BRACE BAND	
		SIZE	TIE SPACING	SIZE	TIE SPACING	MIN. LENGTH	SIZE	TIE SPACING	SIZE	LENGTH	SIZE	BOLT SIZE	SPACING	SIZE	BOLT SIZE
6' AND LESS	2½" O.D.	2" O.D.	1 TIE EVERY 1'-2" OF FABRIC HEIGHT	1⅝" O.D.	1 TIE EVERY 2'-0"	10'-0"	7 GAUGE COIL SPRING WIRE	1 TIE EVERY 1'-0"	MIN. OF ⅜" X ¾"	MIN. OF 2" LESS THAN FABRIC HEIGHT	MIN. OF ¾" X 0.074	⅝" X 1¼"	1 BAND AT TOP AND BOTTOM 15" MAX. INTERVAL BETWEEN BANDS	MIN. OF ¾" X 0.105	⅝" X 1¼"
OVER 6' TO 12' INCL.	3 " O.D.	2½" O.D.													

HEIGHT OF FENCE FABRIC	(H)	(I)	(J)		(K)	(L)			(M)		(N)		(O)	(T)	
	TIE WIRE	HOG RING	BRACE RAIL		TRUSS ROD	FABRIC			GATE FRAME		HORIZONTAL SUPPORT		HINGE TYPE	GATE POST	
			SIZE	TIE SPACING		SIZE	MESH	SELVAGE	SIZE	TIE SPACING	SIZE	TIE SPACING	180° SWING	GATE WIDTH 12' AND LESS	GATE WIDTH OVER 12' TO 24' INCL.
6' AND LESS	MIN. OF 12 GA. STEEL OR 9 GA. ALUM.	SAME GAUGE AS FABRIC	1⅝" O.D.	1 TIE EVERY 2'-0"	MIN. OF ⅝" ROUND WITH TIGHTNERS AND FITTINGS	9 GA.	2"	KNUCK -ING AND/OR TWIST -ING	2" O.D.	1 TIE EVERY 1'-0"	2" O.D.	1 TIE EVERY 1'-0"	OFFSET	3" O.D.	4" O.D.
OVER 6' TO 12' INCL.														4" O.D.	

NOTE: POST SIZES SHOWN ARE FOR STEEL. WHERE ALUMINUM IS PROVIDED, LINE POSTS SHALL HAVE AN OUT SIDE DIAMETER OF 2½" FOR FENCE HEIGHT OF 6' AND LESS, AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' TO 12'. END, PULL, CORNER OR BRACE POSTS SHALL HAVE AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' AND LESS; AN OUTSIDE DIAMETER OF 3½" FOR FENCE HEIGHTS OF 6' TO 12'. GATE POSTS WHERE GATE WIDTH IS 12' AND LESS SHALL HAVE AN OUTSIDE DIAMETER OF 3½" FOR FENCE HEIGHT OF 6' AND LESS. ALUMINUM TENSION WIRE SHALL BE 0.192" IN DIAMETER. MINIMUM THICKNESS OF MATERIAL FROM WHICH EXPANSION SLEEVES SHALL BE MADE WILL BE 0.078". POSTS AND RAILS MAY HAVE ANY CROSS-SECTIONAL SHAPE THAT WILL MEET THE SPECIFICATIONS.

OTHER DETAILS APPLY TO BOTH STEEL AND ALUMINUM FENCE.

ALL MISCELLANEOUS FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS AND PRODUCTION TOLERANCES AS SET FORTH IN THE SPECIFICATIONS. 9 GAUGE ALUMINUM WIRE SHALL BE ACCEPTABLE FOR TIEING FABRIC TO TUBULAR AND ROLL FORMED MEMBERS OF STEEL FENCE.



INSTALLATION MAY BE MODIFIED AS SHOWN IN THE PLANS

TYPICAL INSTALLATION DIAGRAM

POSTS AND RAILS

SIZE O.D.	GRADE 1 AND ALUMINUM ALLOY				GRADE 2		
	O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT. STEEL	LBS. PER LINEAR FT. ALUMINUM	O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT.
1⅝	1.660	0.140	2.27	0.786	1.660	0.111	1.84
2	1.900	0.145	2.72	0.940	1.900	0.120	2.28
2½	2.375	0.154	3.65	1.264	2.375	0.130	3.11
3	2.875	0.203	5.79	2.004	2.875	0.160	4.64
3½	3.500	0.216	7.58	2.621	3.500	0.160	5.71
4	4.000	0.226	9.11	3.151	4.000	0.160	6.56

TOLERANCES ON DIMENSIONS AND WEIGHTS ACCORDING TO AASHTO M 181

GENERAL NOTES:

(C) CHAIN LINK FENCE BEING PLACED ON PRIVATE PROPERTY SHALL INCLUDE A TOP RAIL. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER LIN. FT. OF CHAIN LINK FENCE.

(D) TENSION WIRE: SHALL BE SECURED TO ALL TERMINAL, PULL, BRACE OR CORNER POSTS WITH TENSION BAR BANDS.

(J) BRACE RAIL: BRACE RAILS SHALL BE PROVIDED AT ALL TERMINAL, PULL, BRACE OR CORNER POSTS HALFWAY BETWEEN THE TOP RAIL AND GROUND LEVEL WHEN TOPRAIL IS SPECIFIED AND TWELVE INCHES (12") DOWN FROM TOP OF FABRIC WHEN TOP TENSION WIRE IS SPECIFIED. BRACE RAIL SHALL EXTEND FROM SUCH POST TO THE FIRST ADJACENT LINE POST.

(L) FABRIC: SHALL CONFORM TO THE SPECIFICATIONS.

(M) GATE FRAMES: SHALL BE CONSTRUCTED OF TUBULAR MEMBERS ASSEMBLED BY USE OF HEAVY PRESSED STEEL, MALLEABLE FITTINGS OR BY WELDING. ALL GATES SHALL HAVE ONE HORIZONTAL SUPPORT EXTENDING THE WIDTH OF THE GATE AT THE MIDPOINTS OF VERTICAL FRAME MEMBERS. THE COMPLETE FRAME SHALL BE RIGID AND HAVE AMPLE STRENGTH TO BE FREE FROM SAG AND TWIST.

(O) HINGES: SHALL BE OF HEAVY PATTERN, OF ADEQUATE STRENGTH FOR GATE, AND WITH LARGE BEARING SURFACES FOR CLAMPING IN POSITION. THE HINGE SHALL BE OF THE PROPER TYPE TO ALLOW FOR THE DESIGNATED DEGREE OF SWING. THE HINGE SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. THE GATES SHALL BE CAPABLE OF BEING OPENED AND CLOSED EASILY BY ONE PERSON.

(P) LATCHES AND STOPS: SHALL BE PROVIDED FOR ALL GATES. GATES SHALL HAVE A DROP BAR LATCH. LATCHES SHALL BE ARRANGED FOR LOCKING. THE STOP FOR DROP BAR LATCHES SHALL BE SET IN CONCRETE AND ENGAGE THE PLUNGER OF THE BAR LATCH.

(S) CAPS: ALL POSTS, EXCEPT ROLL FORMED POSTS AND "T" POSTS SHALL BE CAPPED OVER THE EXTERIOR OF THE POST, AND SHALL CONFORM TO ASTM F626.

CONCRETE REQUIRED FOR THE EMBEDMENT OF ALL POSTS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR CHAIN LINK FENCE.

POSTS SHALL BE SPACED EQUIDISTANT ON A MAXIMUM OF 10' CENTERS.

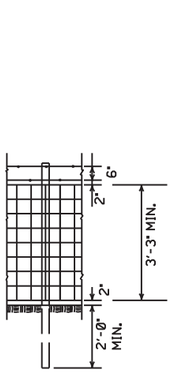
EXCAVATION FOR POSTS: IN OTHER THAN ROCK SHALL BE OF THE DIMENSIONS INDICATED. IF ROCK IS ENCOUNTERED BEFORE REACHING THE REQUIRED DEPTH, THE EXCAVATION SHALL BE CONTINUED TO THE DEPTH INDICATED OR 1'-6" INTO THE ROCK, WHICHEVER IS LESS, AND SHALL BE A MINIMUM OF 8 INCHES IN DIAMETER.

DATE	REVISION	FILMED
11-17-10	REVISED TRUSS ROD	
12-10-09	REVISED POSTS & RAILS TABLE	
5-21-09	ADDED TABLE & GEN. NOTE (C)	
8-22-02	REVISED NOTES, REMOVED TABLE, & REMOVED FENCE ALTERNATE	
4-3-97	REVISED BRACE RAIL NOTE	
10-18-96	REVISED AASHTO & ASTM REF.	
11-3-94	REVISED NOTE (L)	
10-1-92	DELETED ALTERNATE POST	10-1-92
8-15-91	DELETED ROLL FORMED POST DETAIL & ADDED NOTE	8-15-91 8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
11-17-88	REVISED O.D. SIZES	668-11-17-88
10-30-87	GENERAL REVISIONS	548-10-30-87
4-20-79	REVISED TOP RAIL & TENSION WIRE	695-4-20-79
10-2-72	REVISED AND REDRAWN	530-10-2-72

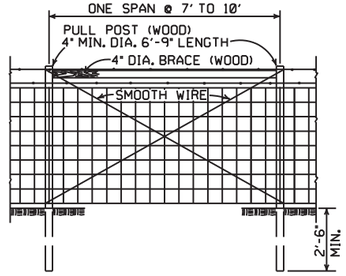
ARKANSAS STATE HIGHWAY COMMISSION

CHAIN LINK FENCE

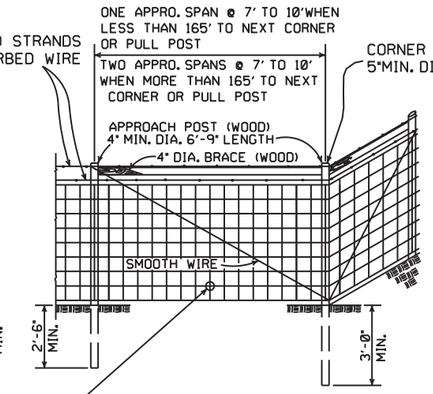
STANDARD DRAWING WF-3

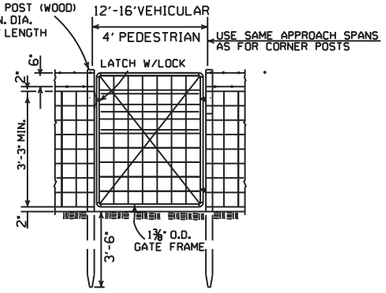


LINE POST
3" MIN. DIA. 6'-3" LENGTH
MAX. SPACING TO BE 10'-0"



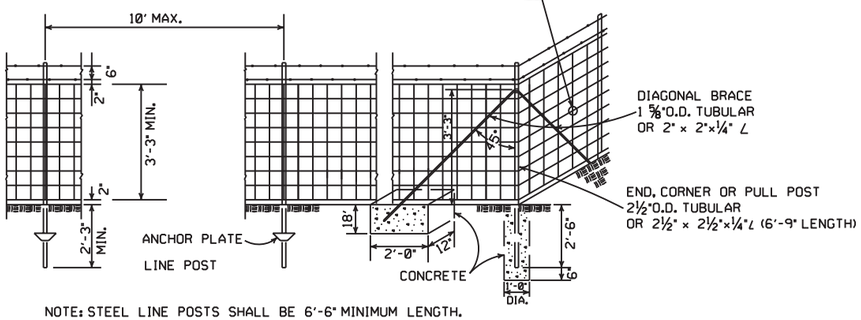
LINE BRACE ASSEMBLY
MAX. SPACING TO BE 330'

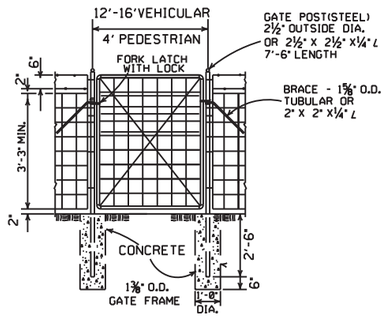


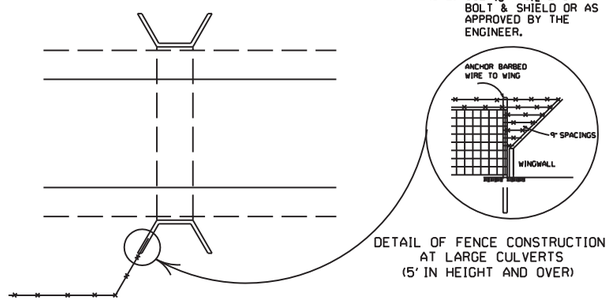


TYPE C FENCE (WOOD POSTS)

OTHER APPROVED TIES
WILL BE PERMITTED





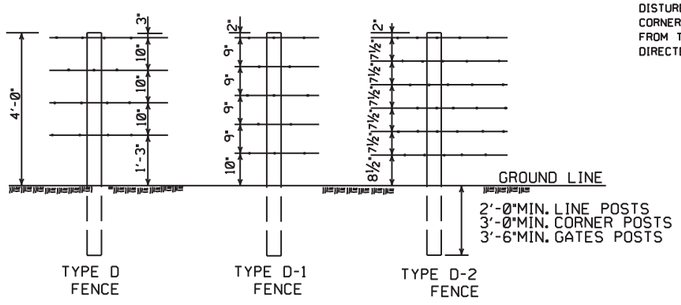


DETAIL OF FENCE CONSTRUCTION
AT LARGE CULVERTS
(5' IN HEIGHT AND OVER)

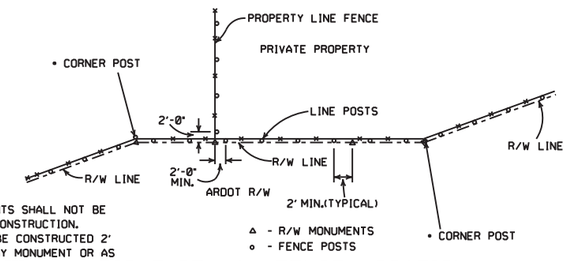
NOTE: STEEL LINE POSTS SHALL BE 6'-6" MINIMUM LENGTH.

TYPE C FENCE (STEEL POSTS)

4 STRANDS BARBED WIRE (D)
5 STRANDS BARBED WIRE (D-1)
6 STRANDS BARBED WIRE (D-2)

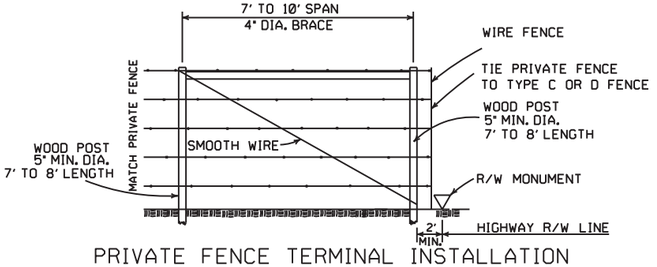


NOTE: SPACING AND SIZE (EXCEPT LENGTH) OF POSTS, APPROACH SPANS, PULL POST ASSEMBLIES, AND CORNER BRACING FOR TYPE D FENCE SHALL CONFORM TO TYPE C FENCE. USE GALVANIZED STAPLES ON WOOD POSTS AND APPROVED FASTENERS ON STEEL POSTS.



• NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

RIGHT-OF-WAY FENCE LOCATION



PRIVATE FENCE TERMINAL INSTALLATION

WHERE EXISTING FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN IN TYPE C FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

GENERAL NOTES:

STEEL LINE POSTS SHALL BE PAINTED OR GALVANIZED.
TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK). APPROVED ALTERNATES ARE ACCEPTABLE.
AN ACCEPTABLE TOLERANCE IN LENGTH OF TUBULAR OR WOODEN POSTS SHALL BE - 1" TO +2".
TUBULAR POSTS MUST BE PAINTED OR GALVANIZED.

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF TIMBER LINE POSTS OF 7 FOOT LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

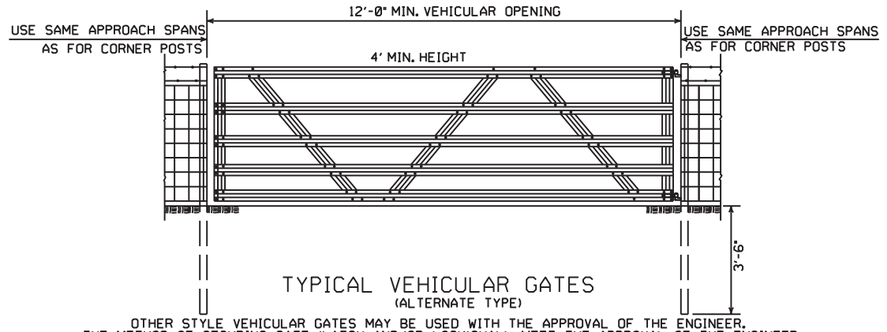
DRIVEWAY GATES, EITHER SINGLE 12' TO 16' OR DOUBLE 6' TO 8' OPENING OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE, FOR USE OF MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS, THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF THE BANK TO THE BRIDGE STRUCTURE A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFICIENT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD" AS DESCRIBED AS FOLLOWS:
THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRES A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.



TYPICAL VEHICULAR GATES
(ALTERNATE TYPE)

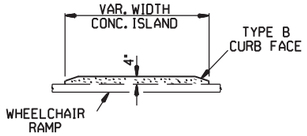
OTHER STYLE VEHICULAR GATES MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
THE METHOD OF SECURING GATE (LATCH AND/OR LOCK) SHALL MEET THE APPROVAL OF THE ENGINEER.

DATE	REVISION	FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	REVISED BARB WIRE AND ADDED CORNER POST NOTES	6-2-94
8-5-93	REVISED R/W INSTALLATION FENCE	8-5-93
10-1-92	ADDED STAPLE NOTE	10-1-92
8-15-91	ADDED TYPE D-2 FENCE	8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
7-15-88	ADDED SPLICE NOTE	700-7-15-88
10-30-87	GENERAL REVISIONS	549-10-30-87
11-1-84	MAX. POST SPACING MIN. WIRE GAUGE	507-11-1-84
1-4-83	MIN. DIA. LINE POST	648-1-4-83
3-2-81	TOLERANCE FOR POST LENGTH	722-3-2-81
12-1-72	ADDED D-1 & FENCE INSTALLATION	564-12-1-72
10-2-72	REVISED AND REDRAWN	540-10-2-72

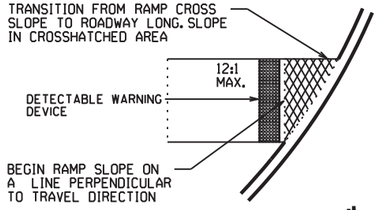
ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE
TYPE C AND D

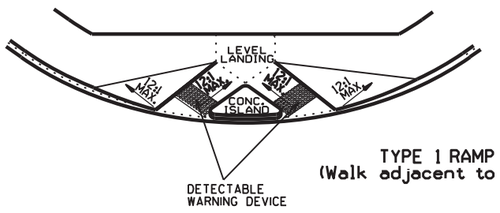
STANDARD DRAWING WF-4



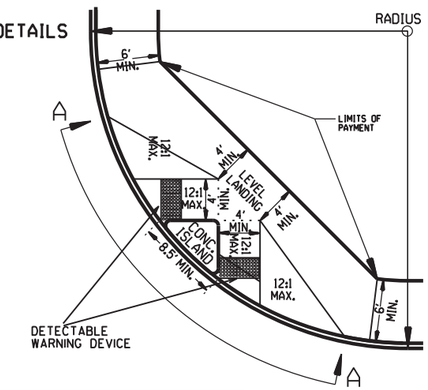
CONCRETE ISLAND DETAIL



SLOPE TRANSITION DETAILS



TYPE 1 RAMP
(Walk adjacent to curb)

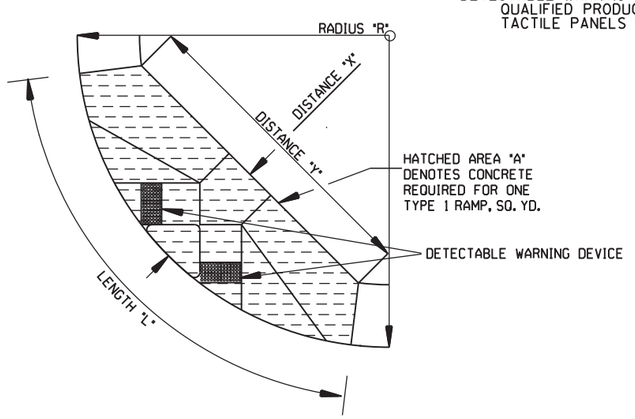




SECTION A-A

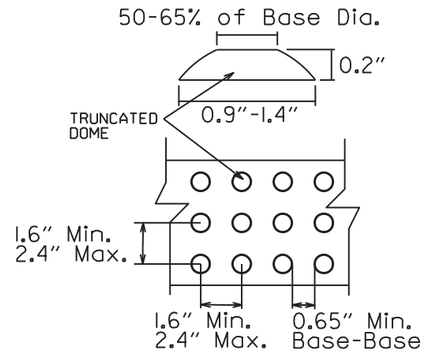
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS "R" FEET	DISTANCE "X" FEET	DISTANCE "Y" FEET	LENGTH "L" FEET	RAMP AREA "A" SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80



GENERAL NOTES FOR DETECTABLE WARNING DEVICES

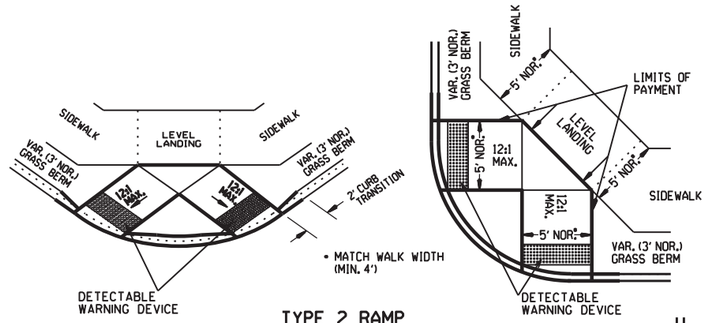
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
DETECTABLE WARNING DEVICE SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



DETECTABLE WARNING DEVICE DETAIL

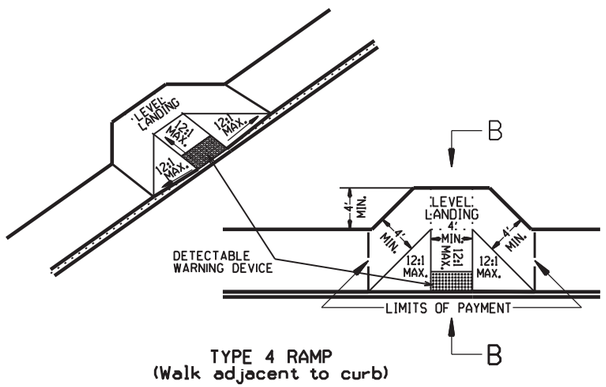
GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.
IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4".
THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.
RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

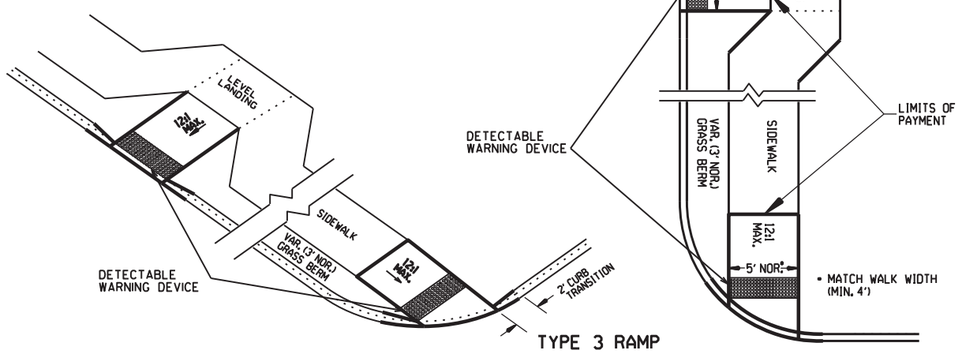


TYPE 2 RAMP

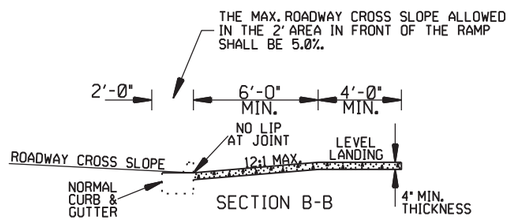
NOTE:
THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGTITUDINAL GRADE.



TYPE 4 RAMP
(Walk adjacent to curb)



TYPE 3 RAMP



SECTION B-B

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD.SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM8#TO12#MAX.SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM	------
6-02-76	ISSUED-P.M.D.	299-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS

STANDARD DRAWING WR-1