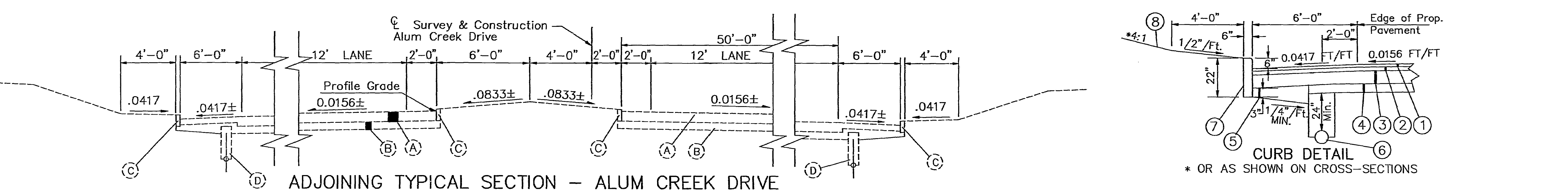
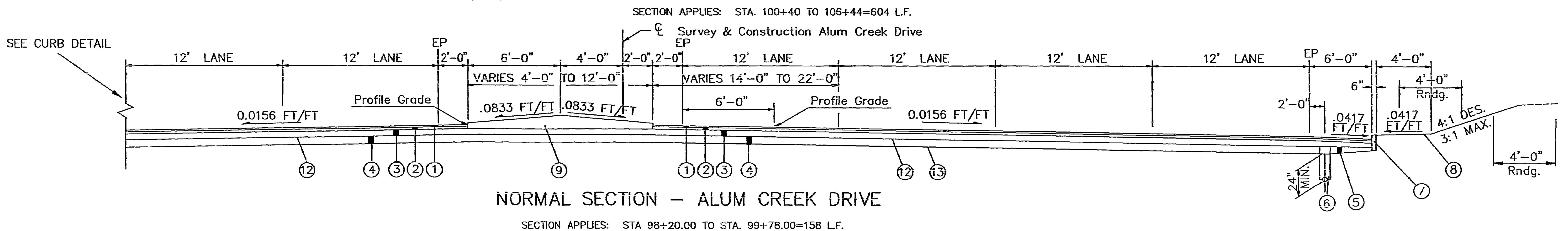
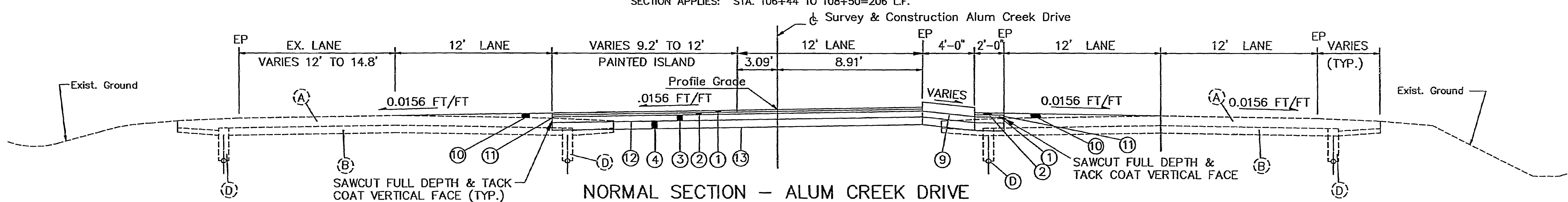
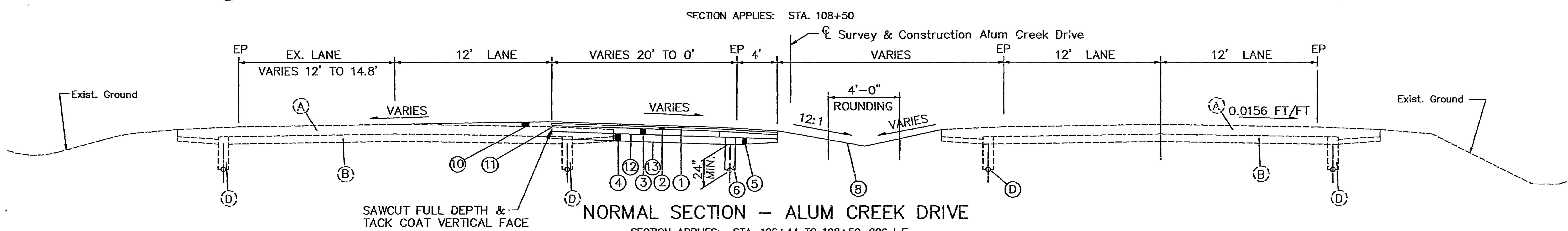
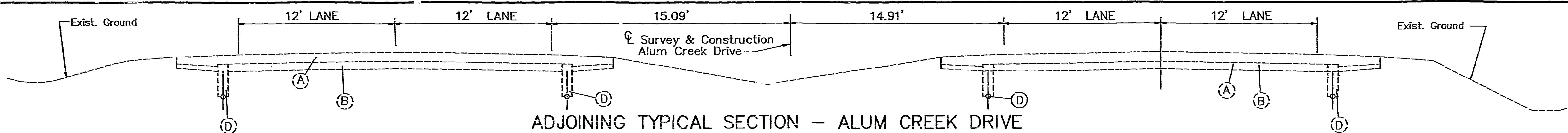


VILLAGE OF GROVEPORT  
HAMILTON TOWNSHIP  
MADISON TOWNSHIP

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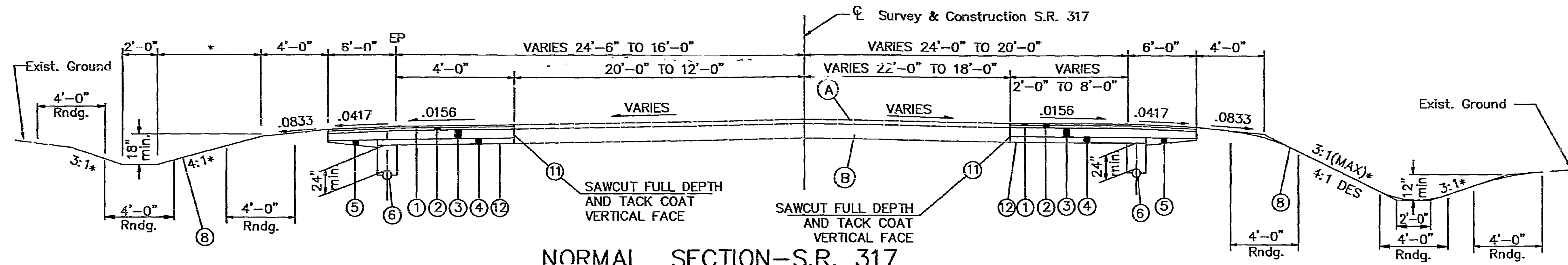




- LEGEND**
- |  |  |                                   |   |
|--|--|-----------------------------------|---|
| ① ITEM 404 - 1 1/4" ASPHALT CONCRETE, AC-20  | ④ ITEM 304 - 6" AGGREGATE BASE                 | ⑦ ITEM 609 - CURB, TYPE 6         | ⑩ ITEM 404 - VARIABLE DEPTH ASPHALT CONCRETE, AC-20 |
| ② ITEM 402 - 1 3/4" ASPHALT CONCRETE, AC-20  | ⑤ ITEM 304 - VARIABLE THICKNESS AGGREGATE BASE | ⑧ ITEM 659 - SEEDING AND MULCHING | ⑪ ITEM 407 - TACK COAT @ 0.10 GAL./S.Y.             |
| ③ ITEM 301 - 10" BITUMINOUS AGGREGATE BASE, AC-20<br>(Placed in initial Lift of 4" followed by 2 Lifts of 3" Each) | ⑥ ITEM 605 - 4" UNCLASSIFIED PIPE UNDERDRAIN   | ⑨ ITEM 612 - CONCRETE MEDIAN      | ⑫ ITEM 408 - PRIME COAT @ 0.10 GAL./S.Y.            |
|  |  |                                   | ⑬ ITEM 203 - SUBGRADE COMPACTION                    |
- (A) 13" ± ASPHALT CONCRETE  
(B) 14" ± AGGREGATE BASE  
(C) EXISTING TYPE 6 CURB  
(D) EXISTING 6" UNDERDRAIN

TYPICAL SECTIONS - ALUM CREEK DRIVE

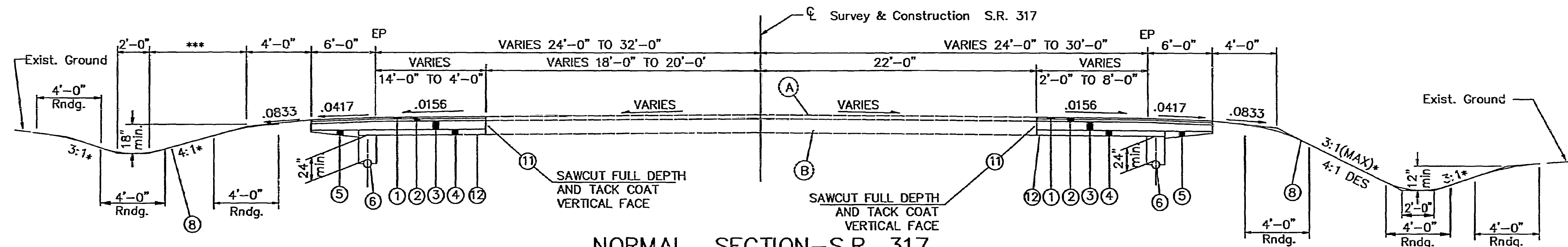
FRA - 317 - 3.62



NORMAL SECTION-S.R. 317

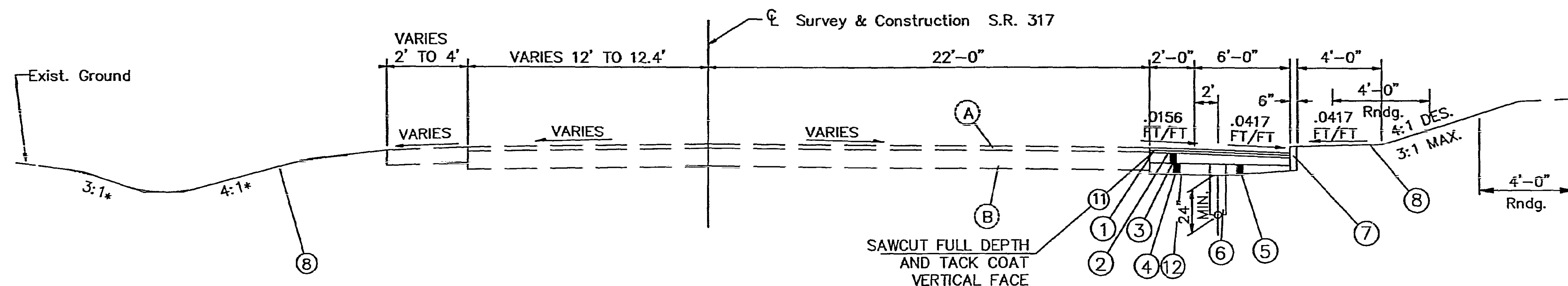
SECTION APPLIES: STA. 196+75.00 TO 198+50.00 = 175.00 L.F.

- \* OR AS SHOWN ON THE CROSS SECTIONS
- \*\* SEE PAVEMENT DETAILS FOR ALL WIDTHS
- \*\*\* SEE CROSS SECTIONS



NORMAL SECTION-S.R. 317

SECTION APPLIES: STA. 193+68.00 TO 196+75.00 = 307.00 L.F.

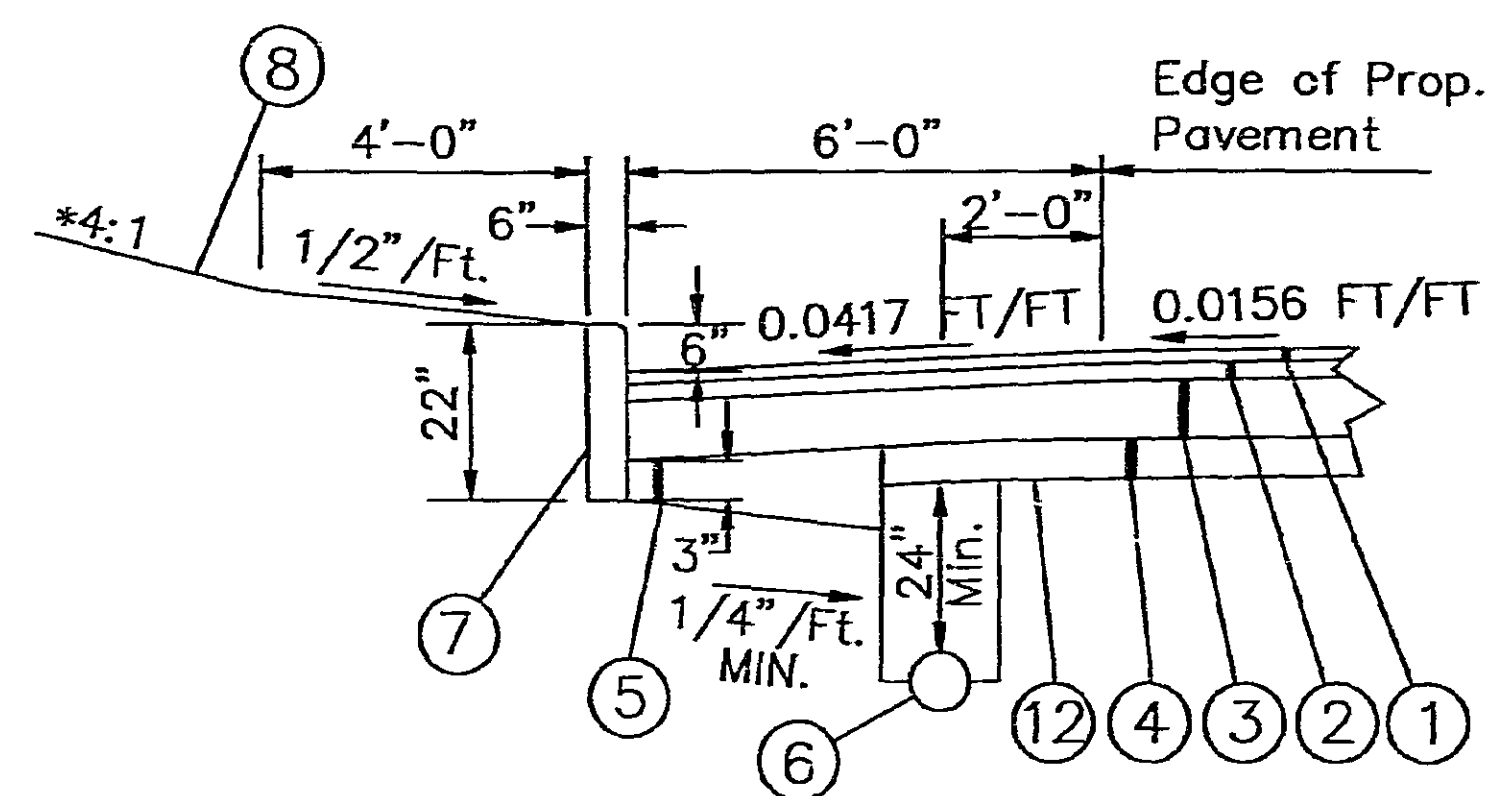


NORMAL SECTION-S.R. 317

SECTION APPLIES: STA. 191+35.73 TO 193+68.00=232.27 L.F.

LEGEND

- (A) 8" ± ASPHALT CONCRETE
- (B) 12" ± AGGREGATE BASE
- (C) EXISTING TYPE 6 CURB
- (D) EXISTING UNDERDRAIN



CURB DETAIL

\* OR AS SHOWN ON CROSS-SECTIONS

- (1) ITEM 404 - 1 1/4" ASPHALT CONCRETE, AC-20
- (2) ITEM 402 - 1 3/4" ASPHALT CONCRETE, AC-20
- (3) ITEM 301 - 10" BITUMINOUS AGGREGATE, AC-20  
(Placed in initial Lift of 4" followed by 2 Lifts of 3" Each)
- (4) ITEM 304 - 6" AGGREGATE BASE
- (5) ITEM 304 - AGGREGATE BASE (THICKNESS VARIES)
- (6) ITEM 605 - 4" PIPE UNDERDRAIN
- (7) ITEM 609 - CURB, TYPE 6
- (8) ITEM 659 - SEEDING AND MULCHING
- (9) ITEM 612 - CONCRETE MEDIAN
- (11) ITEM 407 - TACK COAT @0.10 GAL/S.Y.
- (12) ITEM 202 - SUBGRADE COMPACTION



# GENERAL NOTES

FIELD OFFICE---THE CONTRACTOR SHALL PROVIDE A TYPE A FIELD OFFICE HAVING A MINIMUM OF 300 SQ. FT. OF FLOOR SPACE. KEROSENE HEATERS SHALL NOT BE USED AS A HEAT SOURCE. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 619 FIELD OFFICE, TYPE A.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS---THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

UNDERGROUND UTILITIES--- THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE.

UTILITY OWNERSHIP---THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT.

TELEPHONE:  
AMERITECH CO., INC  
150 EAST GAY ST. RM. 6C  
COLUMBUS, OHIO 43215  
TELEPHONE (614) 223-8535

POWER:  
SOUTH CENTRAL POWER CO.  
P.O. BOX 250  
LANCASTER, OHIO 43130  
TELEPHONE (614) 653-4422

GAS:  
COLUMBIA GAS OF OHIO, INC.  
939 W. GOODALE BLVD.  
COLUMBUS, OHIO 43212  
TELEPHONE (614) 460-2079

SANITARY SEWERS:  
FRANKLIN COUNTY SANITARY ENGINEER  
1717 ALUM CREEK DRIVE  
COLUMBUS, OHIO 43207  
TELEPHONE (614) 462-3940

WATER LINES:  
CITY OF COLUMBUS UTILITIES COMPLEX  
DIVISION OF WATER  
910 DUBLIN ROAD  
COLUMBUS, OHIO 43215  
TELEPHONE (614) 645-7677

CABLE TV:  
COAXIAL COMMUNICATIONS  
3770 EAST LIVINGSTON AVE.  
COLUMBUS, OHIO 43227  
TELEPHONE (614) 236-1201

CONTINGENCY QUANTITIES---THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER:", UNLESS AUTHORIZED BY THE ENGINEER.

ELEVATION DATUM---ALL ELEVATIONS ARE BASED ON NAVD 88 DATUM.

ITEM 203 PROOF ROLLING---PORTIONS OF THIS ROADWAY MAY BE CONSTRUCTED ON POORLY DRAINED SOILS. ALL PREPARED SUBGRADES SHALL BE PROOF ROLLED WITH A TANDEM TRUCK LOADED WITH A MAXIMUM LEGAL LOAD WHILE IN THE PRESENCE OF THE ENGINEER WHO WILL DETERMINE THE NUMBER OF PASSES REQUIRED. AN ESTIMATED QUANTITY OF 10 HOURS HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR ITEM 203, PROOF ROLLING.

MAINTAINING AND REPLACEMENT OF MAILBOXES---IN ADDITION TO THE REQUIREMENTS OF SECTION 107.12 OF THE SPECIFICATIONS THE CONTRACTOR SHALL REPLACE THE EXISTING MAILBOXES WITH MATERIALS SUPPLIED BY THE FRANKLIN COUNTY ENGINEER. THEY SHALL BE REPLACED WITH A PLASTIC BOX MOUNTED ON A 2 INCH O. D. X 4 FOOT LONG THIN WALL GALVANIZED STEEL POST. THE BASE POST SUPPORT SYSTEM IS A FLUSH TO THE GROUND SOCKET AS MANUFACTURED BY FORESIGHT INDUSTRIES, INC.

THE CONTRACTOR SHALL ERECT THE MAILBOXES IN ACCORDANCE WITH POSTAL REGULATIONS. THE CONTRACTOR SHALL OBTAIN THE NECESSARY MATERIALS AT 970 DUBLIN ROAD, AT WHICH TIME DETAILS AND INSTALLATION REQUIREMENTS SHALL BE FURNISHED. PAYMENT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 203, EMBANKMENT, AS PER PLAN.

## OVERNIGHT TRENCH CLOSING

THE PAVEMENT WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 1.5 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

SEEDING---QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, TO THE WORK LIMITS IN AREAS COVERED BY EASEMENTS (TEMPORARY R/W, SEWER, SLOPE OR CHANNEL EASEMENTS) OR TO THE RIGHT OF WAY LINE IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS. ANY AREAS OUTSIDE THE ABOVE LIMITS THAT ARE DISTURBED OR DESTROYED BY THE CONTRACTOR SHALL BE RESTORED AND RESEEDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO FRANKLIN COUNTY.

WATERING PERMANENT SEEDED AREAS---THE FOLLOWING ESTIMATED QUANTITY IS INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

659	WATER	5M GAL
-----	-------	--------

ITEM 659 SEEDING AND MULCHING---THE INTENT OF THIS NOTE IS TO PROVIDE SEED A PROPER HABITAT TO GERMINATE AND ENCOURAGE VIGOROUS GROWTH. THEREFORE, THE REQUIREMENTS OF SECTION 659.09 OF THE SPECIFICATIONS ARE EXTENDED AS FOLLOWS.

THE CONTRACTOR SHALL PROVIDE A SEED BED FREE OF STONES AND OTHER DELETERIOUS MATERIALS. EIGHTY FIVE PERCENT OF THE SEED BED SHALL CONSIST OF GROWTH SUPPORTING MATERIAL. IF THERE ARE ANY QUESTIONS ON THE AMOUNT OF STONES OR OTHER DELETERIOUS MATERIAL THAT MAY BE CONTAINED IN THE SEED BED, THE ENGINEER MAY ORDER THAT ONE OR MORE TWO SQUARE FOOT BY FIVE INCH DEEP TEST SECTIONS BE EXCAVATED. THIS EXCAVATED MATERIAL SHALL BE PASSED THROUGH A NUMBER 10 SIEVE. IF IT IS FOUND THAT FIFTEEN PERCENT OF THE VOLUME, BY WEIGHT, OF THE TEST SECTION CONSISTS OF STONES OF OTHER DELETERIOUS MATERIALS THE SEED BED SHALL BE REJECTED.

IF THE EQUIPMENT USED TO PREPARE THE SEED BED IS NOT CAPABLE OF REMOVING THE STONES OR DELETERIOUS MATERIALS, THE CONTRACTOR SHALL HAND RAKE THE SEED BED. IF THIS DOES NOT REMOVE ADEQUATE DELETERIOUS MATERIAL FROM THE SEED BED, THE CONTRACTOR SHALL BE REQUIRED TO SUPPLEMENT THE SEED BED WITH SUITABLE MATERIAL TO PROVIDE THE PROPER SEED BED.

ALL AREAS TO BE SEEDED SHALL BE CONSIDERED URBAN IN CHARACTER AND SHALL BE SEEDED AS PER THE URBAN SEED MIX OF SECTION 659.09 OF THE SPECIFICATIONS. HAY SHALL NOT BE USED AS A MULCH ON THIS PROJECT.

DESIGN AGENCY  
BELING CONSULTANTS  
1150 DUBLIN RD.  
COLUMBUS, OHIO 43240  
(614) 486-6844

REVIEWED	DATE	CHECKED

GENERAL NOTES

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# GENERAL NOTES

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL--THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207	STRAW OR HAY BALES	50	EACH
207	TEMPORARY SEEDING OR MULCHING	460	S.Y.
601	ROCK CHANNEL PROTECTION	30	C.Y.
659	REPAIR SEEDING AND MULCHING	115	S.Y.
659	COMMERCIAL FERTILIZER	1	TON
659	WATER	1	M.GAL.

EROSION CONTROL--ITEMS 601, 660 AND 667 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS, AND TURF OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE 660 OR 667. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THESE ITEMS SHALL MEET THE REQUIREMENTS OF 108.04.

DUST CONTROL--THE FOLLOWING QUANTITIES OF CALCIUM CHLORIDE AND WATER ARE PROVIDED FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

ITEM 616	CALCIUM CHLORIDE	1 TON
ITEM 616	WATER	5 M. GAL.

SOIL PROFILE--THE CONTRACTOR IS URGED TO REVIEW THE SOILS REPORT FOR THIS IMPROVEMENT. THIS REPORT IS AVAILABLE FOR REVIEW IN THE OFFICE OF FRANKLIN COUNTY ENGINEER AT 970 DUBLIN ROAD, COLUMBUS, OHIO.

UNSUITABLE SOIL--QUANTITIES FOR ITEM 203, EXCAVATION OF UNSUITABLE MATERIAL, ITEM 203 EMBANKMENT USING NO. 2 STONE, ITEM 203 EMBANKMENT USING NO. 57 STONE, ITEM 203 EMBANKMENT USING ITEM 304, ITEM SPECIAL GEOTEXTILE FABRIC AND ITEM SPECIAL GEOGRID HAVE BEEN INCLUDED FOR REMOVAL OF ANY UNSUITABLE SOIL ENCOUNTERED ON THIS PROJECT. THE ABOVE ITEMS, ESTABLISHED FOR THE REMOVAL AND REPLACEMENT OF UNSUITABLE SOIL, SHALL BE USED ONLY AS DIRECTED BY THE ENGINEER AND SHALL ORDERED ONLY WITH PERMISSION OF THE ENGINEER.

THE GEOTEXTILE FABRIC SHALL BE TERRATEX HD, MIRAFI 600X, EXXON GTF 300, OR AN APPROVED EQUAL HAVING A BURST STRENGTH OF AT LEAST 600 PSI.

THE GEOGRID SHALL BE TENSAR BX1200 BY THE TENSAR CORP. OR AN APPROVED EQUAL. THE GEOGRID SHALL BE USED IN ACCORDANCE WITH MANUFACTURERS SUGGESTED RECOMMENDATION OR AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

203	EXCAVATION OF UNSUITABLE MATERIAL	3059 CU. YD.
203	EMBANKMENT USING NO. 2 STONE	3059 CU. YD.
203	EMBANKMENT USING NO. 57 STONE	765 CU. YD.
203	EMBANKMENT USING ITEM 304	255 CU. YD.
SPECIAL	GEOTEXTILE FABRIC	4589 SQ. YD.
SPECIAL	GEOGRID	4589 SQ. YD.

UNTREATED SEPTIC CONNECTIONS--THIS PLAN MAKES NO PROVISION FOR CONNECTING, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT ANY UNTREATED SEPTIC DRAINAGE INTO THE HIGHWAY DRAINAGE SYSTEM. ANY PIPE CARRYING UNTREATED SEPTIC FLOW SHALL BE PLUGGED WITH CLASS C CONCRETE AT THE RIGHT-OF-WAY LINE. PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 203 EXCAVATION.

TREATED SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS--TREATED SANITARY FLOW MAY BE DISCHARGED INTO THE HIGHWAY DRAINAGE SYSTEM PROVIDED THE OWNER HAS SECURED THE APPROVAL OF THE FRANKLIN COUNTY HEALTH AUTHORITIES AND HAS ACQUIRED THE OFFICIAL PERMIT TO HAVE THE CONNECTION MADE.

IN EACH CASE, WHERE A PERMIT HAS BEEN ISSUED FOR A SANITARY CONNECTION TO BE MADE INTO THE HIGHWAY DRAINAGE CONDUIT, IT SHALL BE PROVIDED WITH AN INSPECTION WELL, IN ACCORDANCE WITH THE DETAIL SHOWN ON STANDARD DRAWING MC-8.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER, IN MAKING THE ABOVE DESCRIBED CONNECTIONS.

603	6" CONDUIT, TYPE C	50 LIN. FT.
604	INSPECTION WELL*	2 EACH

NECESSARY BENDS AND BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

THE CONTRACTOR SHALL NOT ORDER ANY OF THE ABOVE MATERIAL UNTIL AUTHORIZED BY THE ENGINEER.

- ◆ NO INSPECTION WELL IS REQUIRED IF EFFLUENT IS DISCHARGED INTO A CATCH BASIN OR MANHOLE.

DESIGN AGENCY  
BELING CONSULTANTS  
1160 DUBLIN RD.  
COLUMBUS, OHIO 43215  
(614) 486-8844

DATE  
REVIEWED  
CALCULATED  
CHECKED

GENERAL NOTES

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# MAINTENANCE OF TRAFFIC NOTES

BEFORE WORK IS STARTED ON THIS PROJECT THE CONTRACTOR SHALL SUBMIT A WRITTEN SCHEDULE OF OPERATIONS FOR APPROVAL TO THE ENGINEER. IN NO INSTANCE SHALL THE STIPULATIONS OF THESE NOTES WAIVE THE REQUIREMENTS OF EITHER THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OR THE CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

WHEN NO LONGER REQUIRED FOR TRAFFIC CONTROL, ALL EXISTING TRAFFIC CONTROL DEVICES LOCATED WITHIN THE PROJECT LIMITS, SHALL BE REMOVED AND STORED BY THE CONTRACTOR FOR PICKUP BY FRANKLIN COUNTY.

ANY INCIDENTAL CONSTRUCTION, CLEARING AND GRUBBING, MISCELLANEOUS REMOVALS, STORM SEWERS, STORM SEWER OUTLETS, FINAL GRADING, SEEDING AND MULCHING ETC., MAY BE CONSTRUCTED AT ANY TIME PROVIDED TRAFFIC FLOW IS NOT INTERRUPTED. EXCEPTIONS MAY BE GIVEN FOR TWO-WAY ONE-LANE TRAFFIC ZONES USED FOR SHORT PERIODS OF TIME. FOR EXAMPLE, REMOVING EXISTING PIPES OR CONSTRUCTING CULVERTS OR STORM SEWERS UNDER THE EXISTING PAVEMENT ETC.. TWO ADJACENT WORK ZONE LOCATIONS SHALL NOT BE CLOSED AT ANY ONE TIME.

IT IS THE INTENT OF THESE NOTES THAT THE MAJORITY OF WORK FOR THIS PROJECT BE CONSTRUCTED WHILE TRAFFIC IS MAINTAINED. THE CONTRACTOR SHALL PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC. ADEQUATE PERMANENT AND/OR TEMPORARY SIGNS AND LANE MARKINGS SHALL BE PROVIDED AS REQUIRED OR AS DIRECTED BY THE ENGINEER.

ACCESS FOR ADJACENT PROPERTIES SHALL BE PROVIDED AT ALL TIMES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THESE PROPERTIES AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 614. ACCESS SHALL BE MAINTAINED BY USE OF THE EXISTING PAVEMENT, ALL OR PORTIONS OF THE PROPOSED PAVEMENT AND/OR SHOULDERS AND TEMPORARY COMPACTED SURFACES. THE LOCATIONS, LIMITS AND DURATIONS OF THESE TEMPORARY SURFACES SHALL BE HELD TO AN ABSOLUTE MINIMUM, AND IN ALL INSTANCES BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

THROUGH TRAFFIC SHALL BE ROUTED AS SHOWN IN THIS PLAN WITH SIGNS PROVIDED, ERECTED AND MAINTAINED BY THE CONTRACTOR. TRAFFIC SHALL BE PROVIDED A MINIMUM TWO LANE TWO-WAY ROAD THROUGH THE CONSTRUCTION ZONE.

AN ESTIMATED QUANTITY OF 40 CU. YD ITEM 410 TRAFFIC COMPACTED SURFACE COURSE, AS PER PLAN, HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO PROVIDE INGRESS AND EGRESS TO THE ADJACENT PROPERTIES. THE MATERIAL USED FOR ITEM 410 TRAFFIC COMPACTED COURSE, AS PER PLAN, SHALL MEET THE GRADATION REQUIREMENTS OF ITEM 304 AGGREGATE BASE MATERIAL.

PAYMENT FOR ALL MATERIALS, LABOR AND ANY NECESSARY OPERATION FOR MAINTAINING TRAFFIC DURING THE LIFE OF THIS CONTRACT INCLUDING REMOVALS AND REPLACEMENT OF SIGNS, LIGHTS AND BARRICADES SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES BID FOR:

614	MAINTAINING TRAFFIC	LUMP SUM
616	CALCIUM CHLORIDE	1 TON
616	WATER	5 M. GAL.
410	TRAFFIC COMPACTED SURFACE, AS PER PLAN	40 CU.YD.

FACES OF CONSTRUCTION SIGNS, BARRICADES, VERTICAL PANELS AND DRUM BANDS SHALL BE REFLECTORIZED WITH TYPE "G" (HIGH INTENSITY) SHEETING. THIS SHEETING SHALL COMPLY WITH THE REQUIREMENTS OF 730.19 AND IN GOOD CONDITION IN CONFORMANCE WITH "QUALITY STANDARDS FOR WORK ZONE SAFETY CONTROL DEVICES" PUBLISHED BY ATSSA. ALL SHEETING WILL BE TESTED FOR REFLECTIVITY PER FEDERAL PRACTICE 85.

REQUIRE REFLECTANCE FOR TYPE III SHEETING  
(CANDELAS PER FOOTCANDLE PER SQUARE FOOT)

OBSERVATION ANGLE	ENTRANCE ANGLE	WHITE	RED	ORANGE	YELLOW	GREEN	BLUE
0.2	-4	250	45.0	100	170	45.0	20.0
0.2	30	95	13.3	26	64	11.4	7.6
0.5	-4	200	28.0	56	136	24.0	18.0
0.5	30	65	10.0	25	45	10.0	5.0

SOURCE: FEDERAL PRACTICE FP-85

ALL BARRICADES AT CLOSURES SHALL HAVE YELLOW TYPE "A" LOW INTENSITY FLASHING LIGHTS. ALL BARRELS SHALL HAVE YELLOW TYPE "B" FLASHING LIGHTS. ALL SIGNS NINE SQUARE FEET (36" x 36") AND OVER SHALL HAVE YELLOW TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS AND THREE FLAGS.

DRUMS WHEN NECESSARY SHALL BE PLACED AS FOLLOWS 25' C/C ON TANGENTS, 15' C/C ON TAPERS, AND 8' C/C IN RADII.

## EXISTING TRAFFIC SIGN MAINTENANCE

SPECIAL CARE SHALL BE TAKEN TO MAINTAIN EXISTING STREET NAME SIGNS AND STOP SIGNS. IF NECESSARY, THE CONTRACTOR SHALL RELOCATE THESE SIGNS OUT OF THE WAY OF CONSTRUCTION, BUT IN CONFORMANCE WITH ODOT.

## TRAFFIC MAINTENANCE SEQUENCING NOTES

### INITIAL SIGNING PHASE

PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR IS TO ENSURE THAT ALL TRAFFIC WARNING SIGNS SHALL BE ERECTED AND IN PLACE AT ALL APPROACHES TO THE PROJECT.

### STAGE ONE

REPLACE EXISTING TRAFFIC SIGNALS PER PROPOSED TRAFFIC SIGNAL PLAN. ALLOW FOR SHIFTING OF VEHICULAR SIGNAL HEADS TO BE ALIGNED OVER OPEN LANES DURING STAGES TWO AND THREE AS DIRECTED BY THE ENGINEER.

### STAGE TWO

AFTER ALL NECESSARY SIGNAGE AND TRAFFIC CONTROL, INCLUDING ALL NECESSARY BARRELS, ARE IN PLACE, THE CONTRACTOR IS TO CLOSE THE TWO RIGHT LANES OF NORTH BOUND ALUM CREEK DRIVE, SOUTH OF STATE ROUTE 317. ADDITIONALLY, THE CONTRACTOR IS TO CLOSE THE FAR RIGHT LANE OF SOUTH BOUND ALUM CREEK DRIVE, SOUTH OF STATE ROUTE 317. THE CONTRACTOR SHALL ALIGN VEHICULAR SIGNAL HEADS FOR OPEN LANES AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS. IT IS INTENDED THAT THE CONTRACTOR SHALL, DURING THIS CLOSURE PERIOD, CONSTRUCT THE FULL DEPTH PAVEMENT REPLACEMENT WITHIN THE CONFINES OF THE CLOSURE AREA. DURING STAGE TWO, THE CONTRACTOR IS ALSO TO PLACE THE PROPER TRAFFIC CONTROL TO ACCOMPLISH THE CONSTRUCTION OF THE NEW PAVEMENT EDGE AND SHOULDER ON THE NORTH EAST CORNER OF THE INTERSECTION.

### STAGE THREE

AFTER STAGE TWO IS COMPLETED AND RE-OPENED TO TRAFFIC, THE SIGNAGE NECESSARY FOR THIS PART OF THE PROJECT IS TO BE UNCOVERED OR ERECTED. ANY SIGNAGE THAT WAS SPECIFIC TO STAGE TWO IS TO BE COVERED OR REMOVED BY THE CONTRACTOR.

AFTER ALL THE NECESSARY SIGNAGE AND TRAFFIC CONTROL IS IN PLACE, THE CONTRACTOR IS TO CLOSE THE LEFT TWO LANES OF NORTH BOUND ALUM CREEK DRIVE AND THE LEFT LANE OF SOUTH BOUND ALUM CREEK DRIVE SOUTH OF STATE ROUTE 317. THE CONTRACTOR SHALL ALIGN VEHICULAR SIGNAL HEADS FOR OPEN LANES AS DIRECTED BY THE ENGINEERS. THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS. IT IS INTENDED THAT THE CONTRACTOR, DURING THIS CLOSURE PERIOD, CONSTRUCT THE REMAINDER OF FULL DEPTH PAVEMENT REPLACEMENT AND CONCRETE MEDIAN WITHIN THE CONFINES OF THE CLOSURE AREA. ADDITIONALLY, THE CONTRACTOR IS TO CLOSE THE LEFT LANE OF NORTH AND SOUTH BOUND ALUM CREEK DRIVE, NORTH OF STATE ROUTE 317. IT IS INTENDED THAT THE CONTRACTOR, DURING THIS CLOSURE PERIOD, CONSTRUCT THE NEW LANES, PAVEMENT OVERLAY AND CONCRETE MEDIAN WITHIN THE CONFINES OF THE CLOSURE AREA.

UPON COMPLETION OF STAGE THREE, THE CONTRACTOR SHALL ALIGN VEHICULAR SIGNAL HEADS IN THEIR FINAL POSITION AS SHOWN ON THE PROPOSED TRAFFIC SIGNAL PLAN AND REMOVE ANY CONFLICTING PAVEMENT MARKINGS.

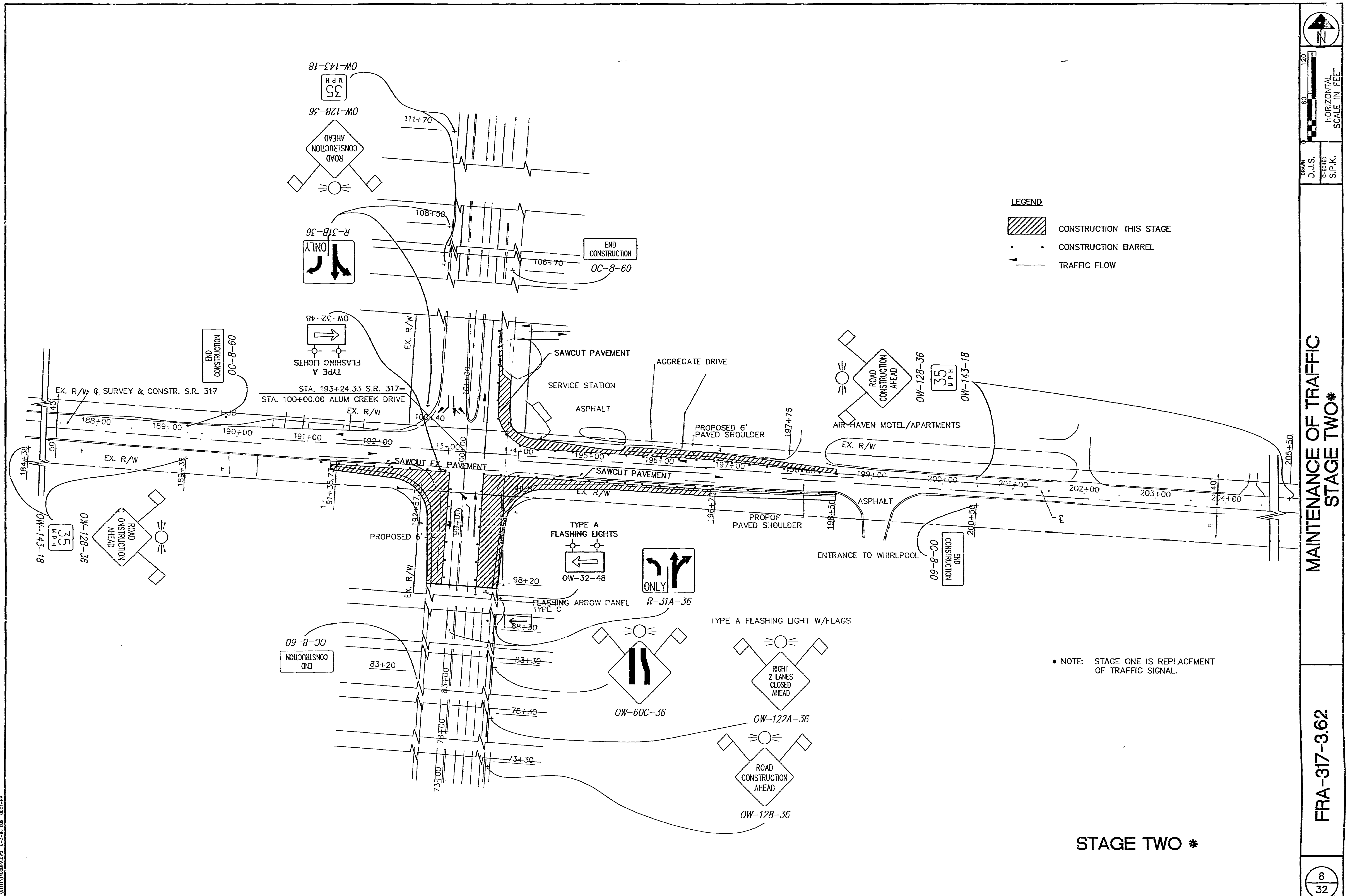
SOME ITEMS, I.E. FINAL SEEDING AND GRADING, ARE NOT INCLUDED IN THE SEQUENCE NOTES AS THEY HAVE ONLY MINOR EFFECT ON MAINTAINING TRAFFIC.

DRAWN  
D.J.S.  
CHECKED  
S.P.K.

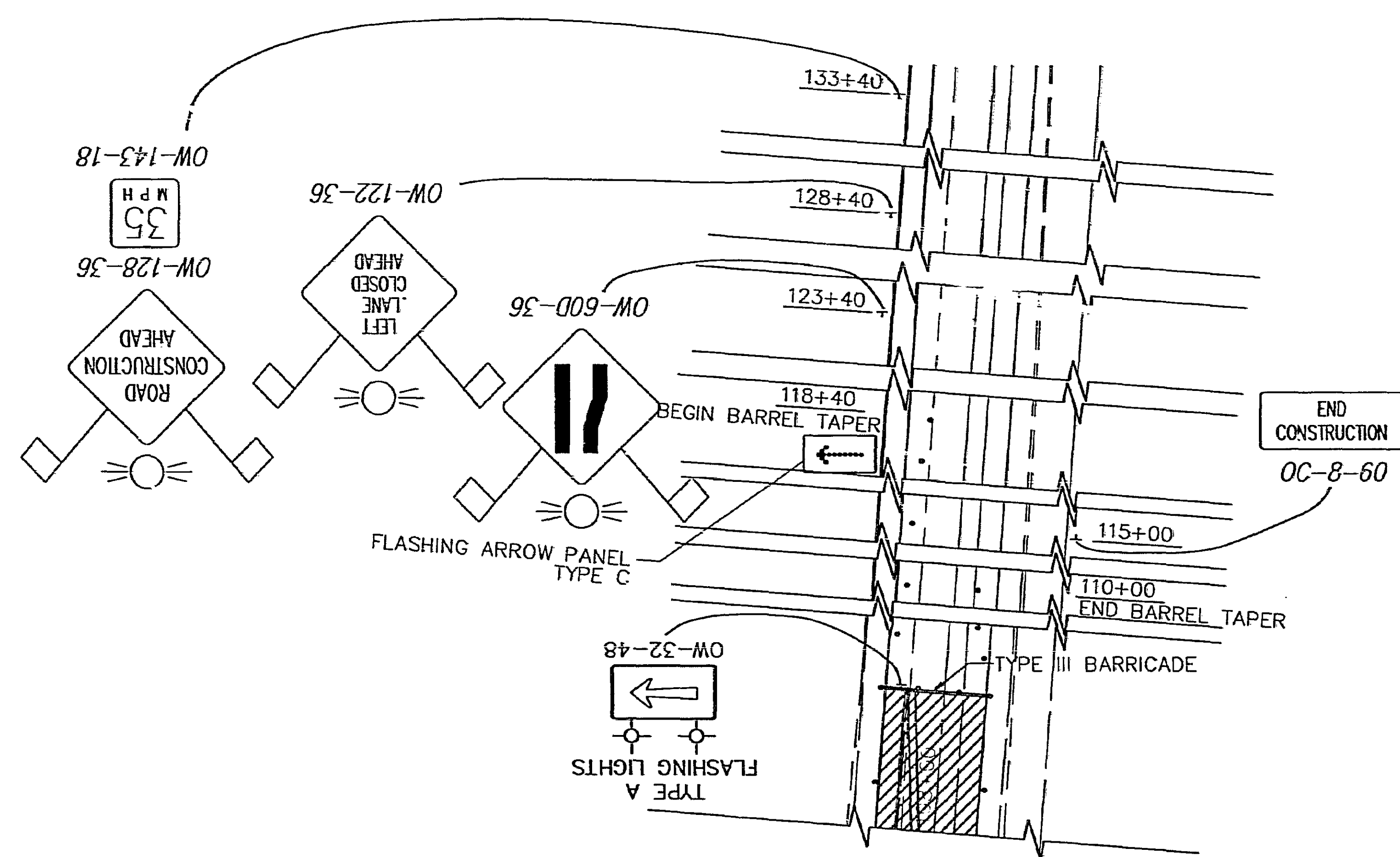
MAINTENANCE OF TRAFFIC NOTES

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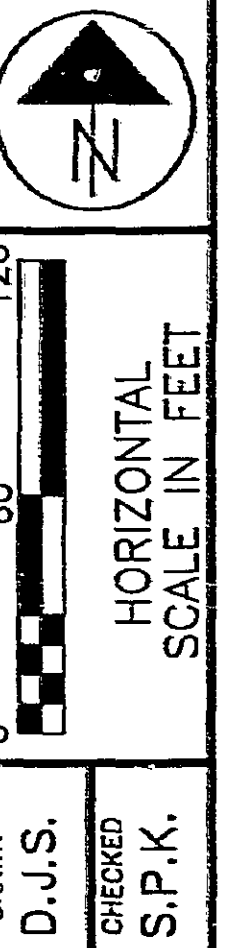






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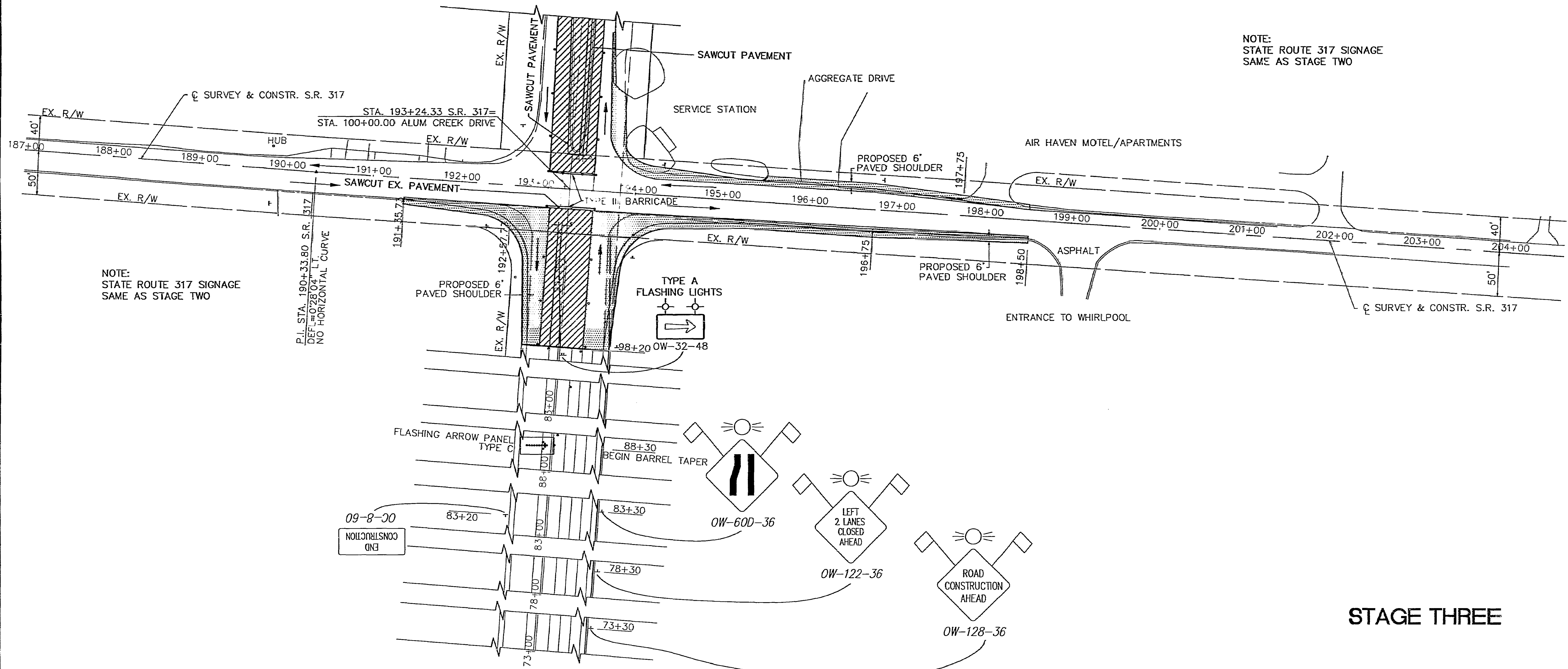
- CONSTRUCTION THIS STAGE
- CONSTRUCTION PREVIOUS STAGE
- CONSTRUCTION BARREL
- TRAFFIC FLOW



## MAINTENANCE OF TRAFFIC STAGE THREE

FRA-317-362

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## STAGE THREE

03/9/11/11/100250.DWG 5-31-08 DLS 0001-PN

# CALCULATIONS

(QUANTITIES CARRIED TO GENERAL SUMMARY)\*

## ITEM-252 FULL DEPTH PAVEMENT SAWING

STA 98+20	88 LF
STA 103+40 TO 103+41 = 301 LF	
2 * 301	602 LF
STA 100+40 TRANSVERSE	21 LF
STA 100+57 TO STA 101+82	125 LF
STA 106+44 TO STA 104+41	203 LF
STA 103+40 TO STA 108+50	520 LF
STA 191+35 TO STA 198+50	720 LF
STA 194+24 TO STA 198+50	430 LF
RADIUS CUT @ 194+24	
[2(3.14159)(60)]/4	95 LF
TOTAL	2804 LF

## FULL DEPTH PAVEMENT AREA

### ALUM CREEK DRIVE

STA 98+20 TO STA 99+50 = 130 LF  
(130)(88)(1/9)+(2.108)(20)(20)  
+(1.10)(20)(20)(1/9) =1413.69 SY

STA 100+40 TO STA 103+41 = 301 LF  
[(301)(21)(1/9)+(301)(14)(1/9)]  
-[(4)(271)(1/9)] 816.00 SY

STA 103+41 TO STA 106+00 = 259 LF  
(259)(35)(1/9)-(4)(259)(1/9) 892.11 SY

STA 106+00 TO 108+50 LT. = 250 LF  
(2)(250)(1/9)+(5)(250)(25)(1/9) 402.78 SY

STA 106+00 TO STA 106+44 RT. = 44 LF  
(4)(44)(1/9) 19.56 SY

### S.R. 317

STA 191+35 TO STA 192+00 = 65 LF  
(2)(65)(1/9)+(5)(65)(5)(1/9) 32.50 SY

STA 192+00 TO 194+24 = 224 LF  
(9.5 AVG.)(224)(1/9) 236.44 SY  
(19 AVG.)(134)(1/9) 282.88 SY  
[(.845)+(3.357)](20)(20)(1/9)] 53.42 SY

STA 194+24 TO 198+50 = 426 LF  
RIGHT  
(2)(426)(1/9)+(5)(106)(10)(1/9) 153.56 SY  
LEFT  
(4)(145)(1/9)+(3 AVG.)(175)(1/9)  
+(4)(10)(1/9)+(5)(100)(7)(1/9) 166.11 SY

N.E. CORNER OF INTERSECTION  
(2.69)(20)(1/9) =119.56 SY  
(2.69)(20)(20)(1/9) TOTAL 4588.61 SY

## ITEM 404 - ASPHALT CONCRETE (AC-20) (OVERLAY)

STA 100+40 TO 103+41 = 301 LF

TRANSITION AREA 100 LF AVG. DEPTH 6.4 IN. LT. 4 IN. RT.  
(.5)(18)(6.4/12)(.5)(1/27)(100) 8.89 CY  
(.5)(10)(4.0/12)(.5)(1/27)(100) 3.07 CY

FULL OVER LAY AVG. DEPTH 4.5 IN. LEFT 4 IN. RIGHT  
(.5)(201)(4.5/12)(1/27)(12) 16.75 CY  
(.5)(201)(4.5/12)(1/27)(12) 16.75 CY

STA 103+41 TO 108+50 AVG. DEPTH 4 INCH  
(.5)(409)(4.0/12)(1/27)(12) LT. 30.30 CY  
(.5)(203)(4.0/12)(1/27)(12) RT. 15.04 CY

TRANSITION OUT 100 LF AVG DEPTH RT & LT 4 IN.  
(.5)(10)(4.0/12)(.5)(1/27)(100)(20) 61.73 CY  
TOTAL 140.57 CY

SHEET #	EXCAVATION (CU.YD.)	EMBANKMENT (CU.YD.)	SEEDING (SQ.YD.)
18	1621	0	554
19	322	0	0
20	309	41	7
21	105	16	222
22	34	202	334
23	274	14	500
24	255	0	555
25	51	0	111
TOTALS	2971	273	2283

## ITEM 301 - 10" BITUMINOUS AGGREGATE

FULL DEPTH PAVEMENT (10/36)(4588.61)	1274.61 CY
SE & SW SIDES OF INTERSECTION (503)(6)(10/12)(1/27)	93.15 CY
STA 106+44 TO 108+50 = 206 LF (206)(4)(10/12)(1/27)	25.43 CY
TOTAL	1393.19 CY

## ITEM 304 - 6" AGGREGATE BASE

FULL DEPTH PAVEMENT (6/36)(4588.61)	764.77 CY
STA 106+44 TO 108+50 = 206 LF (206)(4)(4/12)(1/27)	10.17 CY
SUB TOTAL	774.94 CY

## ITEM 304 - AGGREGATE BASE

SE & SW SIDES OF INTERSECTION (503)(6)(4/12)(1/27)	37.26 CY
TOTAL	812.20 CY

## ITEM 402 - 1 3/4" ASPHALT CONCRETE (AC-20)

FULL DEPTH PAVEMENT (1.75/36)(4588.61)	223.06 CY
SE & SW SIDES OF INTERSECTION (503)(6)(1.75/12)(1/27)	16.30 CY
STA 106+44 TO 108+50 = 206 LF (206)(4)(1.75/12)(1/27)	4.45 CY
TOTAL	243.81 CY

## ITEM 404 - 1 1/4" ASPHALT CONCRETE (AC-20)

FULL DEPTH PAVEMENT (1.25/36)(4588.61)	159.33 CY
SE & SW SIDES OF INTERSECTION (503)(6)(1.25/12)(1/27)	11.64 CY
STA 106+44 TO 108+50 = 206 LF (206)(4)(1.25/12)(1/27)	3.18 CY
TOTAL	174.15 CY

## ITEM 605 - 4" UNCLASSIFIED PIPE UNDERDRAIN

SW & SE CORNER OF INTERSECTION 503+10+10+10+10	543 LF
STA 100+40 TO 108+50 = 810 LF 810+10+10	830 LF
STA 194+00 TO 196+75 = 275 LF (2)(275+10+10)	590 LF
TOTAL	1963 LF

## ITEM 609 - CURB TYPE 6

SE & SW CORNER OF INTERSECTION (95)+(101)+(2)(3.14159)(50)(.5)+ (87.27)+(62)	502.35 LF
TOTAL	502.35 LF

## ITEM 612 - CONCRETE MEDIAN

STA 100+40 TO 106+44 = 604 LF (4)(604)(1/9)+(5)(4)(44)(1/9)	278.22 SY
STA 98+20 TO 99+16 = 96 LF (4)(96)(1/9)+(5)(8)(96)(1/9)	85.33 SY
TOTAL	363.55 SY

## ITEM 407 - BITUMINOUS TACK COAT @0.10

GAL/SY (2804)(4/12)(1/9)(0.10)	10.39 GAL
TOTAL	10.39 GAL

## ITEM 203 - SUBGRADE COMPACTION

ALUM CREEK DRIVE	3544.14 SQ.YD.
S.R. 317	1044.47 SQ.YD.
TOTAL	4588.61 SQ.YD.

## ITEM 408 - BITUMINOUS PRIME COAT @ 0.40

GAL/SQ.YD. (4588.61)(.40)	1835.44
TOTAL	1835.44

# GENERAL SUMMARY

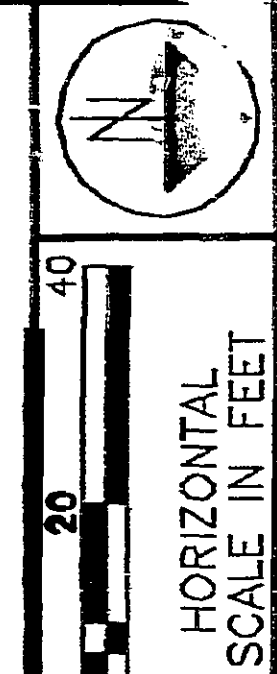
SHEET NUMBER				ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
5	6	7	10					
								ROADWAY
				201	11000	LUMP		CLEARING AND GRUBBING
	3059			203	13100	3059	CU.YD.	EXCAVATION OF UNSUITABLE MATERIAL
	3059			203	21222	3059	CU.YD.	EMBANKMENT USING NO. 2 STONE
	765			203	21057	765	CU.YD.	EMBANKMENT USING NO. 57 STONE
10				203	45000	10	HOUR	PROOF ROLLING
			4589	203	50000	4589	SQ.YD.	SUBGRADE COMPACTION
	255			203	21304	255	CU.YD.	EMBANKMENT USING ITEM 304
			2971	203	12000	2971	CU.YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
			273	203	20000	273	CU.YD.	EMBANKMENT
	4589			SPECIAL	69012010	4589	SQ.YD.	GEOTEXTILE FABRIC
								EROSION CONTROL
	460			207	10000	460	SQ.YD.	TEMPORARY SEEDING AND MULCHING
	50			207	70000	50	EACH	STRAW OR HAY BALES
	30			601	32200	30	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
	2283			659	10000	2283	SQ.YD.	SEEDING AND MULCHING
	115			659	14000	115	SQ.YD.	REPAIR SEEDING AND MULCHING
	1			659	20000	1	TON	COMMERCIAL FERTILIZER
5	1			659	35000	6	MGAL	WATER
								DRAINAGE
	50			603	01100	50	LIN.FT.	6" CONDUIT, TYPE C
	2			604	37000	2	EACH	INSPECTION WELL
			1963	605	05200	1963	LIN.FT.	4" UNCLASSIFIED PIPE UNDERDRAIN
								PAVEMENT
			2804	252	01500	2804	LIN.FT.	FULL DEPTH PAVEMENT SAWING
			1393	301	10002	1393	CU.YD.	BITUMINOUS AGGREGATE BASE, AC-20
			812	304	20000	812	CU.YD.	AGGREGATE BASE
			244	402	20000	244	CU.YD.	ASPHALT CONCRETE, AC-20
			315	404	20000	315	CU.YD.	ASPHALT CONCRETE, AC-20
			43	407	10000	43	GAL	TACK COAT
			1835	408	10000	1835	GAL	BITUMINOUS PRIME COAT
			502	609	26000	502	LIN.FT.	CURB, TYPE 6
			364	612	20000	364	SQ.YD.	9" CONCRETE MEDIAN
								MAINTENANCE OF TRAFFIC
		40		410	14001	40	CU.YD.	TRAFFIC COMPACTED SURFACE, AS PER PLAN
		5		616	10000	5	MGAL	WATER
		1		616	20000	1	TON	CALCIUM CHLORIDE
								FOR TRAFFIC CONTROL GENERAL SUMMARY, SEE SHEET 29
				614	11000	LUMP		MAINTAINING TRAFFIC
				619	15000	LUMP		FIELD OFFICE, TYPE A
				623	10000	LUMP		CONSTRUCTION LAYOUT STAKES
				624	10000	LUMP		MOBILIZATION

CALCULATIONS AND  
GENERAL SUMMARY SHEET

FRA-317-3.62

10  
32



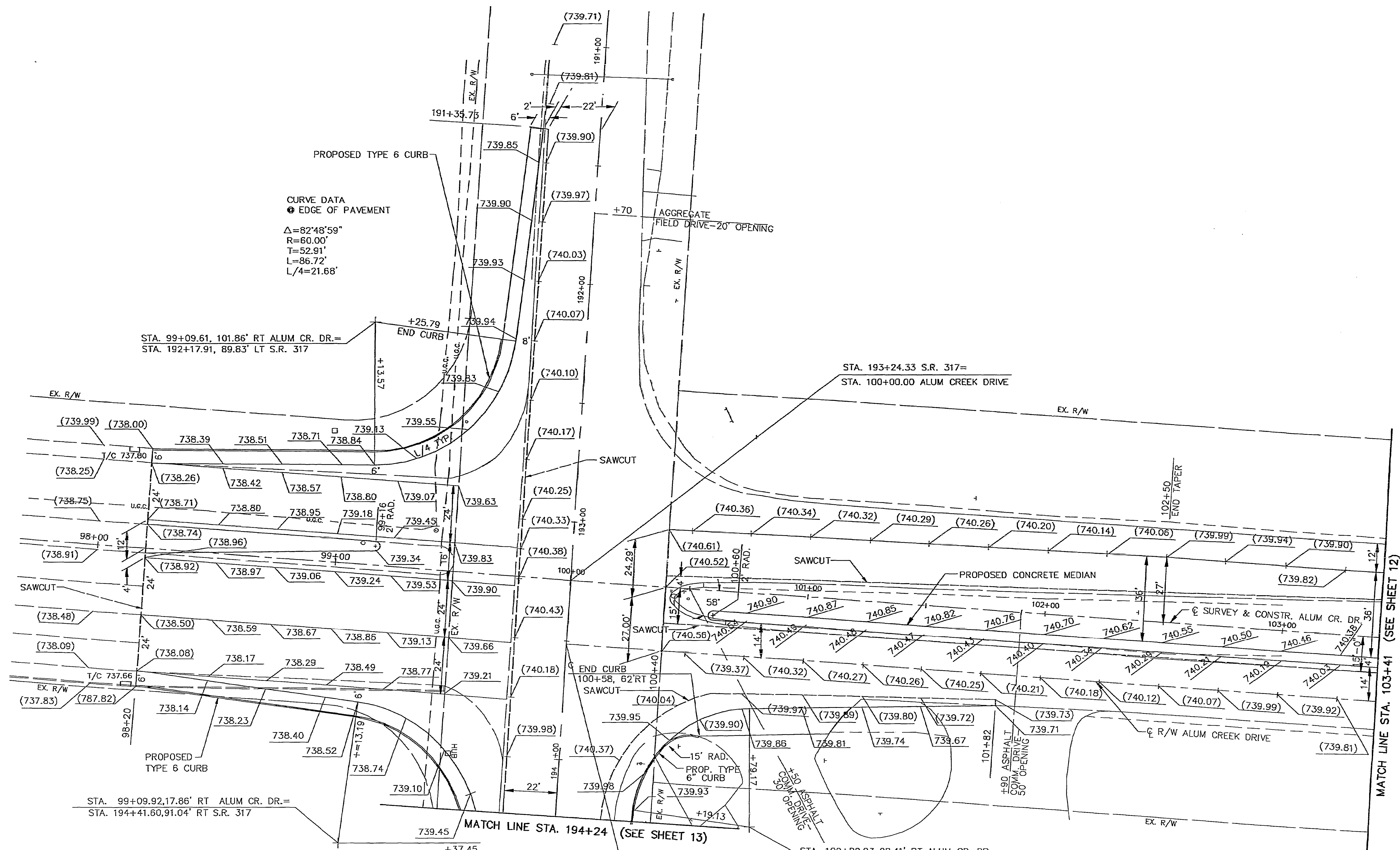


D.J.S.  
CHECKED  
S.P.K.

**PAVEMENT DETAILS**  
ALUM CR. DR. STA. 97+46 TO STA. 103+41  
S.R. 317 STA. 191+00 TO STA. 194+24

**FRA-317-3.62**

11  
32



CURVE DATA  
@ EDGE OF PAVEMENT  
 $\Delta=82^{\circ}48'59''$   
 $R=60.00'$   
 $T=52.91'$   
 $L=86.72'$   
 $L/4=21.68'$

STA. 99+09.61, 101.86' RT ALUM CR. DR.=  
STA. 192+17.91, 89.83' LT S.R. 317

STA. 193+24.33 S.R. 317=  
STA. 100+00.00 ALUM CREEK DRIVE

STA. 99+09.92, 17.86' RT ALUM CR. DR.=  
STA. 194+41.60, 91.04' RT S.R. 317

CURVE DATA  
@ EDGE OF PAVEMENT  
 $\Delta=81^{\circ}35'35''$   
 $R=60.00'$   
 $T=51.78'$   
 $L=85.44'$   
 $L/4=21.36'$

STA. 193+51.33 S.R. 317=  
@ R/W ALUM CREEK DRIVE (N)

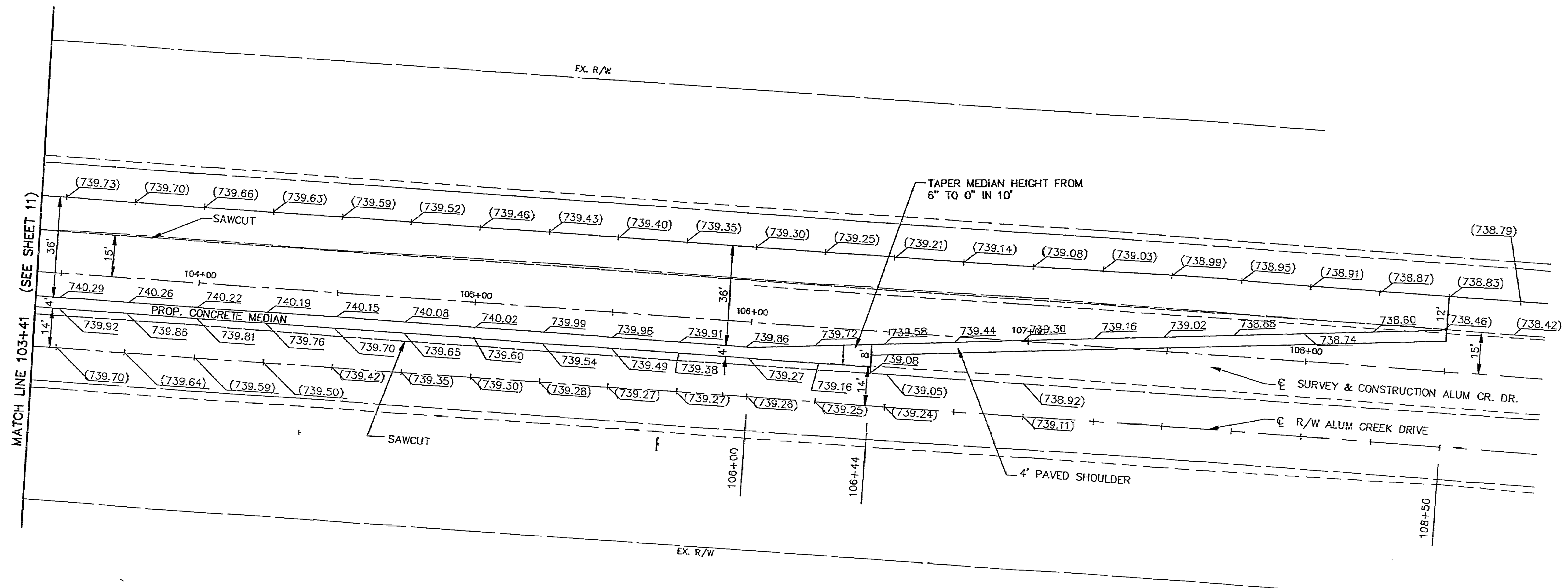
STA. 100+82.93 98.41' RT ALUM CR. DR.  
STA. 194+23.10, 82.01' LT. S.R. 317

CURVE DATA  
@ EDGE OF PAVEMENT  
 $\Delta=90^{\circ}00'00''$   
 $R=50.00'$   
 $T=50.00'$   
 $L=78.54'$   
 $L/4=19.64'$

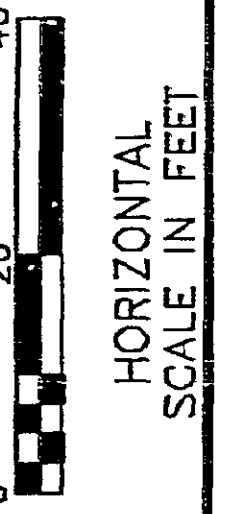
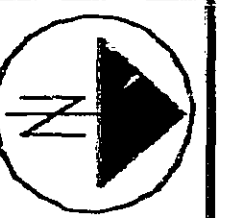
NOTE: ELEVATION IN PARENTHESIS  
DENOTE EXISTING ELEVATIONS

MATCH LINE STA. 103+41 (SEE SHEET 12)

MATCH LINE STA. 194+24 (SEE SHEET 13)



NOTE: ELEVATIONS IN PARENTHESIS  
DENOTE EXISTING ELEVATIONS



DESIGNED  
D.J.S.  
CHECKED  
S.P.K.

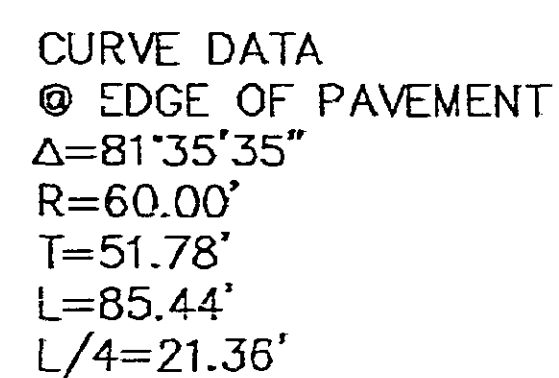
PAVEMENT DETAILS S.R. ALUM CREEK DRIVE  
STA. 103+41 TO STA. 108+50

FRA-317-3.62

12  
32

REVISED SPK 10/28/96

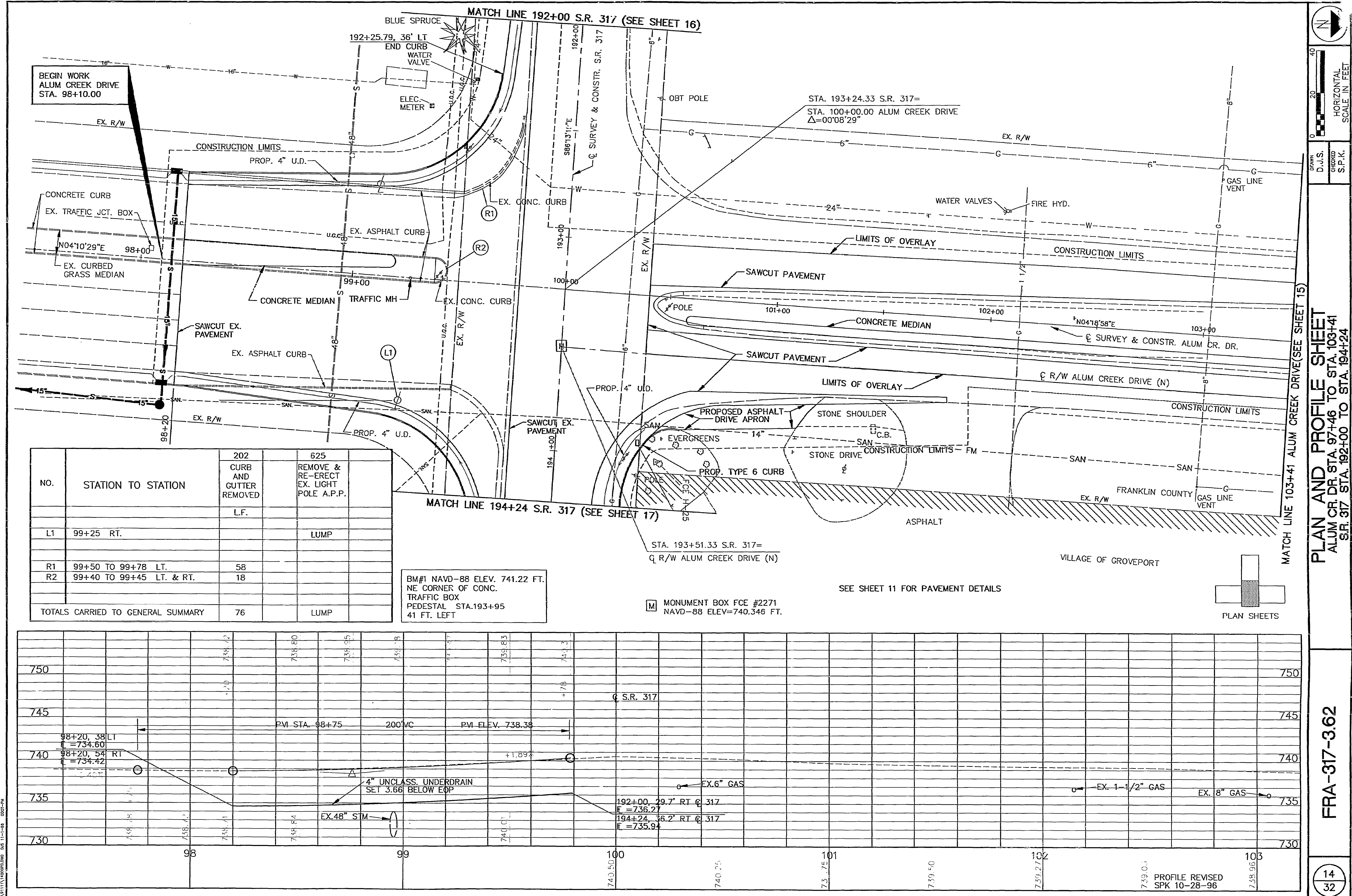




PAVEMENT DETAILS S.R. 317  
S.R. 317 STA. 194+24 TO STA. 200+00

FRA-317-3.62

$$\frac{13}{32}$$



BEGIN WORK  
ALUM CREEK DRIVE  
STA. 98+10.00

MATCH LINE 192+00 S.R. 317 (SEE SHEET 16)

STA. 193+24.33 S.R. 317=  
STA. 100+00.00 ALUM CREEK DRIVE  
Δ=00°08'29"

MATCH LINE 194+24 S.R. 317 (SEE SHEET 17)

MATCH LINE 103+41 ALUM CREEK DRIVE (SEE SHEET 15)

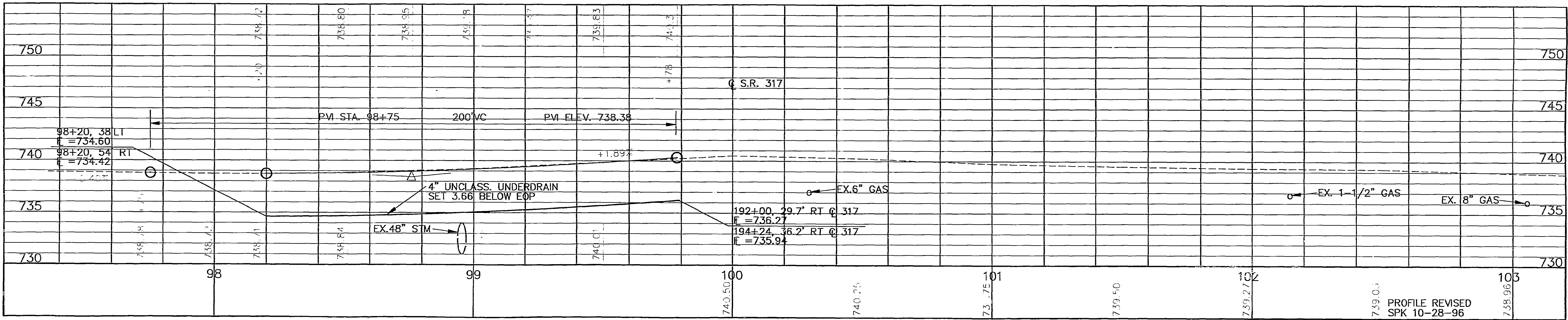
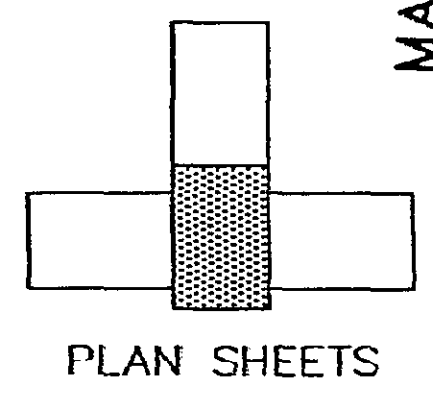
NO.	STATION TO STATION	202 CURB AND GUTTER REMOVED	625 REMOVE & RE-ERECT EX. LIGHT POLE A.P.P.
L1	99+25 RT.	L.F.	LUMP
R1	99+50 TO 99+78 LT.	58	
R2	99+40 TO 99+45 LT. & RT.	18	
TOTALS CARRIED TO GENERAL SUMMARY		76	LUMP

BM#1 NAVD-88 ELEV. 741.22 FT.  
NE CORNER OF CONC.  
TRAFFIC BOX  
PEDESTAL STA. 193+95  
41 FT. LEFT

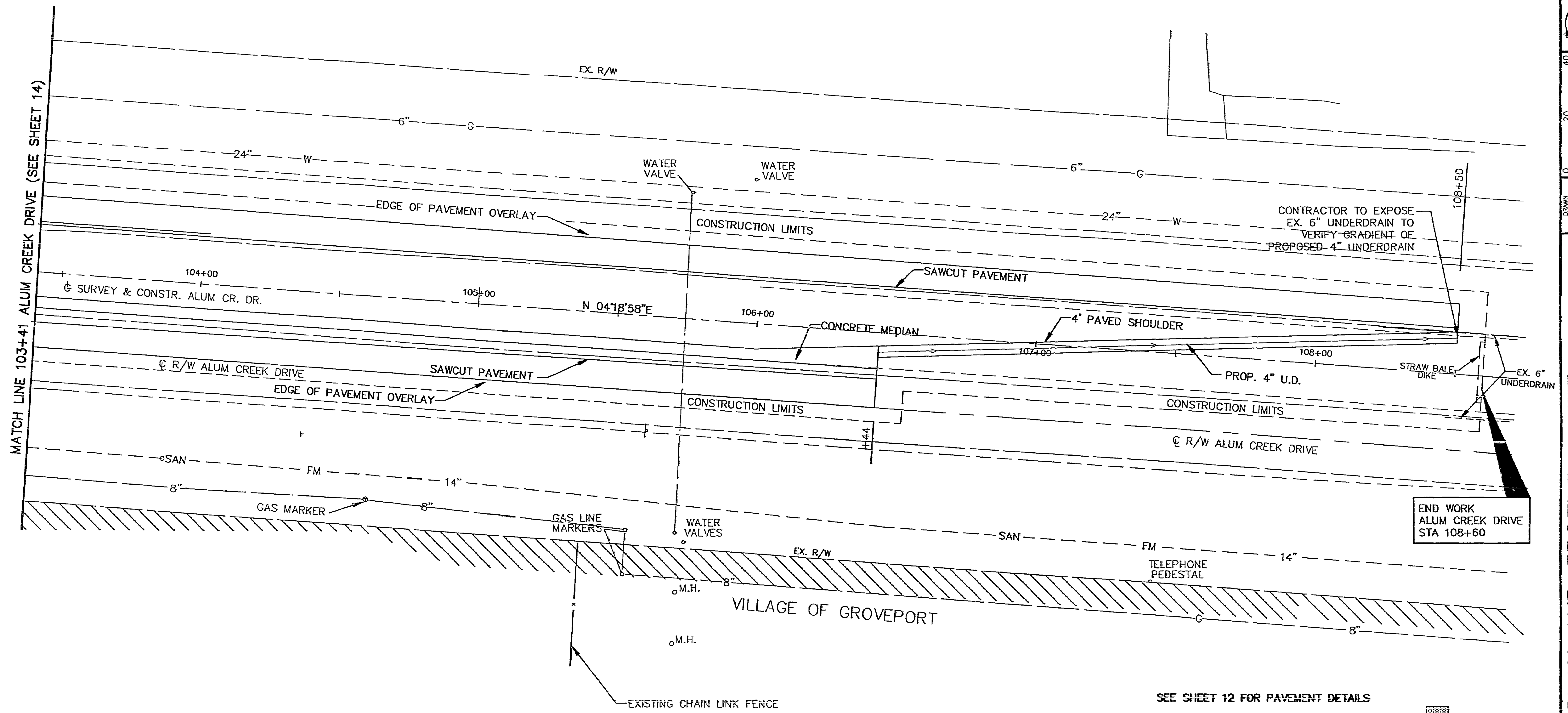
MONUMENT BOX FCE #2271  
NAVD-88 ELEV=740.346 FT.

SEE SHEET 11 FOR PAVEMENT DETAILS

VILLAGE OF GROVEPORT

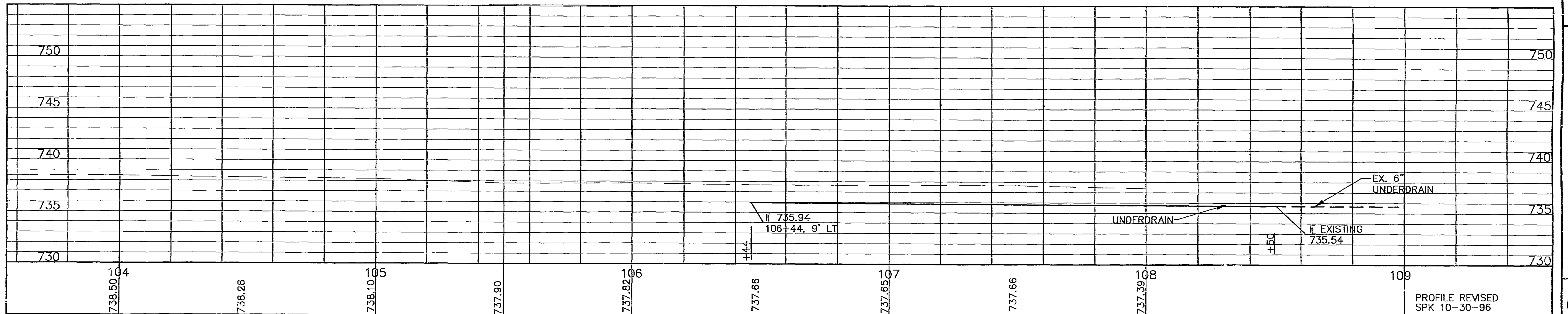
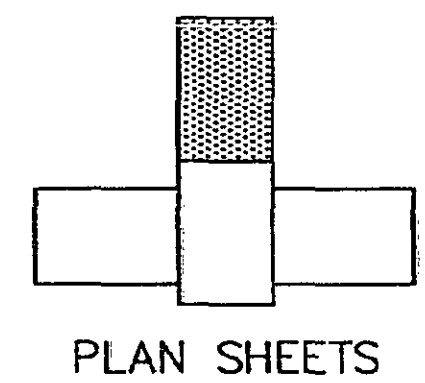




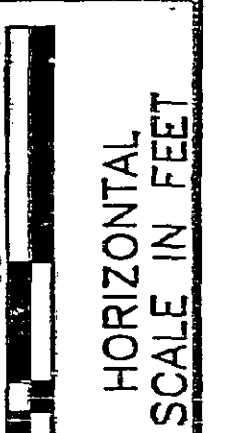
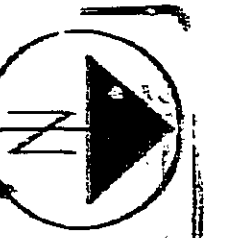


SEE SHEET 12 FOR PAVEMENT DETAILS

BM#2 NAVD-88 ELEV. 739.28 FT.  
 FAR EAST BOLT ON  
 FIRE HYDRANT W/ PUNCH  
 MARK  
 STA.109+98 76 FT. LT



PROFILE REVISED  
 SPK 10-30-96

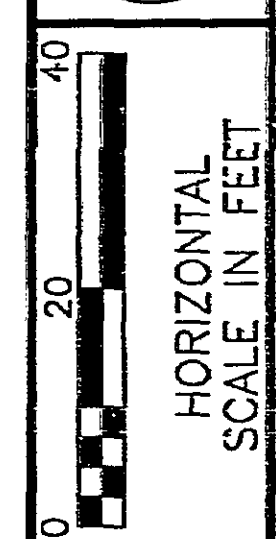


DRAWN  
 D.J.S.  
 CHECKED  
 S.P.K.

PLAN AND PROFILE SHEET  
 STA. 103+41 TO STA. 108+50 ALUM CREEK DRIVE

FRA-317-3.62

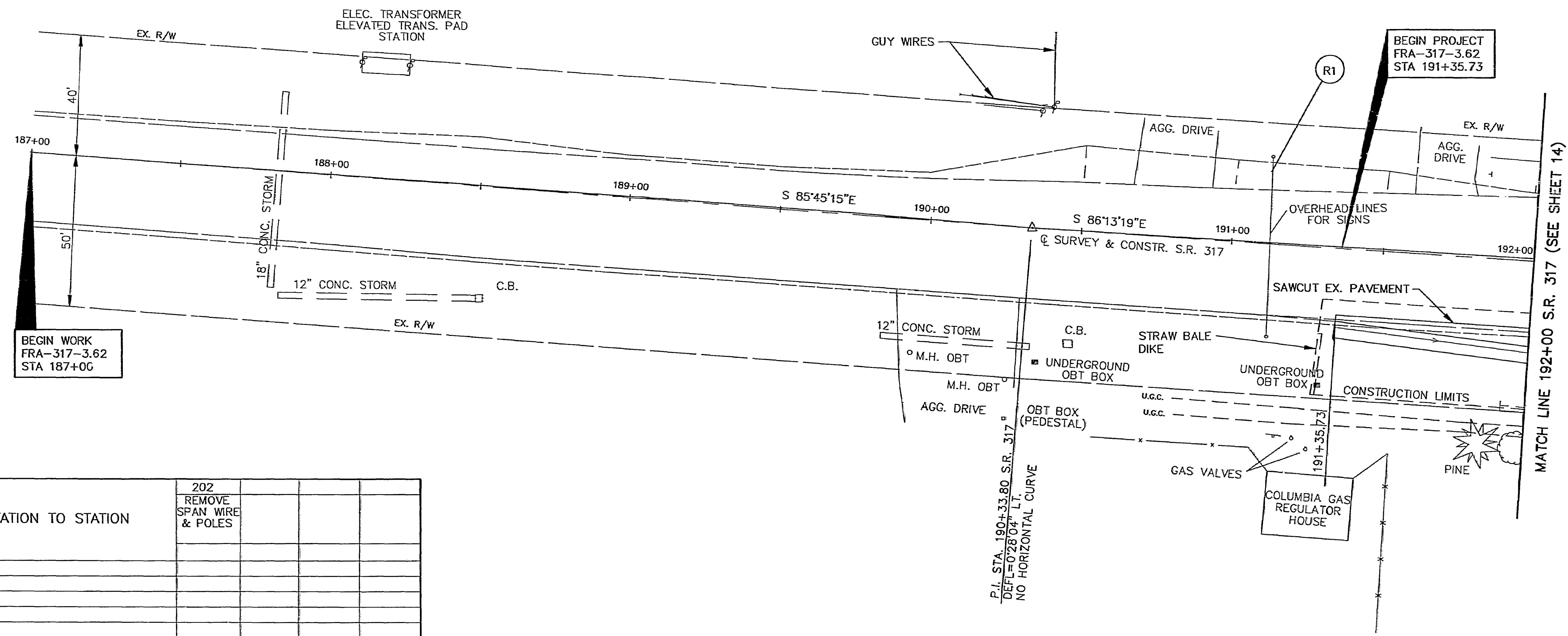
15  
 32



DRAWN BY  
D.J.S.  
CHECKED  
S.P.K.

PLAN AND PROFILE SHEET  
STA. 187+00 TO STA. 192+00 S.R. 317

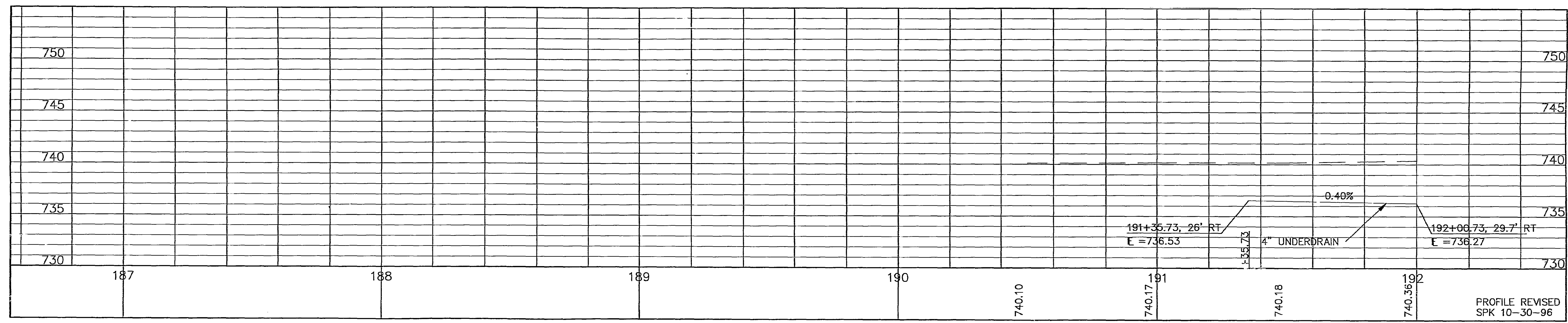
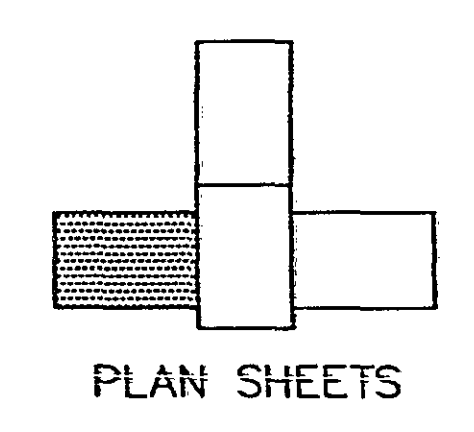
FRA-317-3.62



NO.	STATION TO STATION		202			
			REMOVE			
			SPAN WIRE			
			& POLES			
R1	191+12	L & R	LUMP			
TOTALS CARRIED TO GENERAL SUMMARY			LUMP			

BM#3 NAVD-88 ELEV 737.86 FT.  
CONC. STORM PIPE  
(18") 1 FOOT SOUTH  
OF SAID PIPE ON 317  
STA. 187+82 26 FT. LT

SEE SHEET 11 FOR PAVEMENT DETAILS



PROFILE REVISED  
SPK 10-30-96

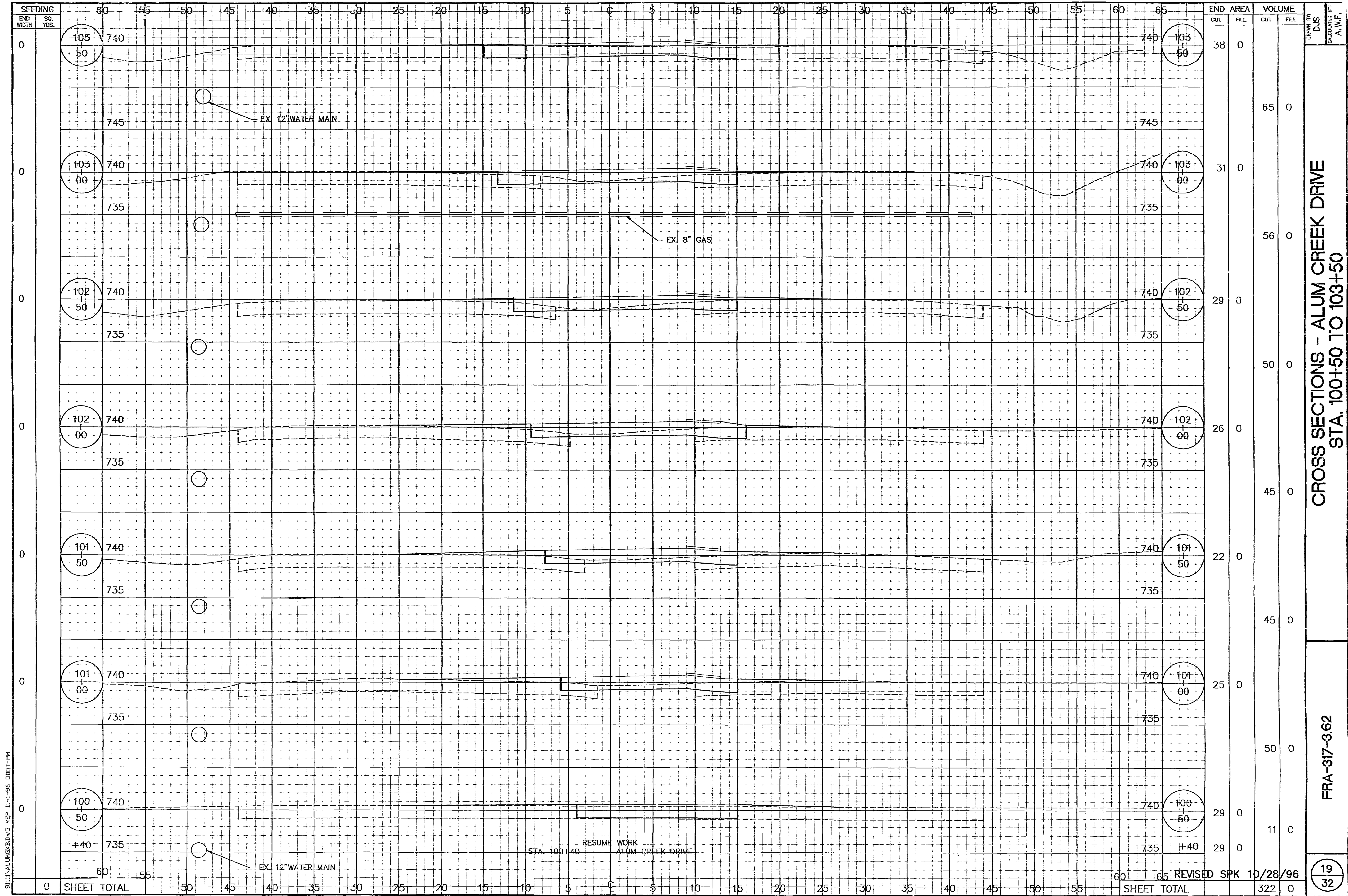










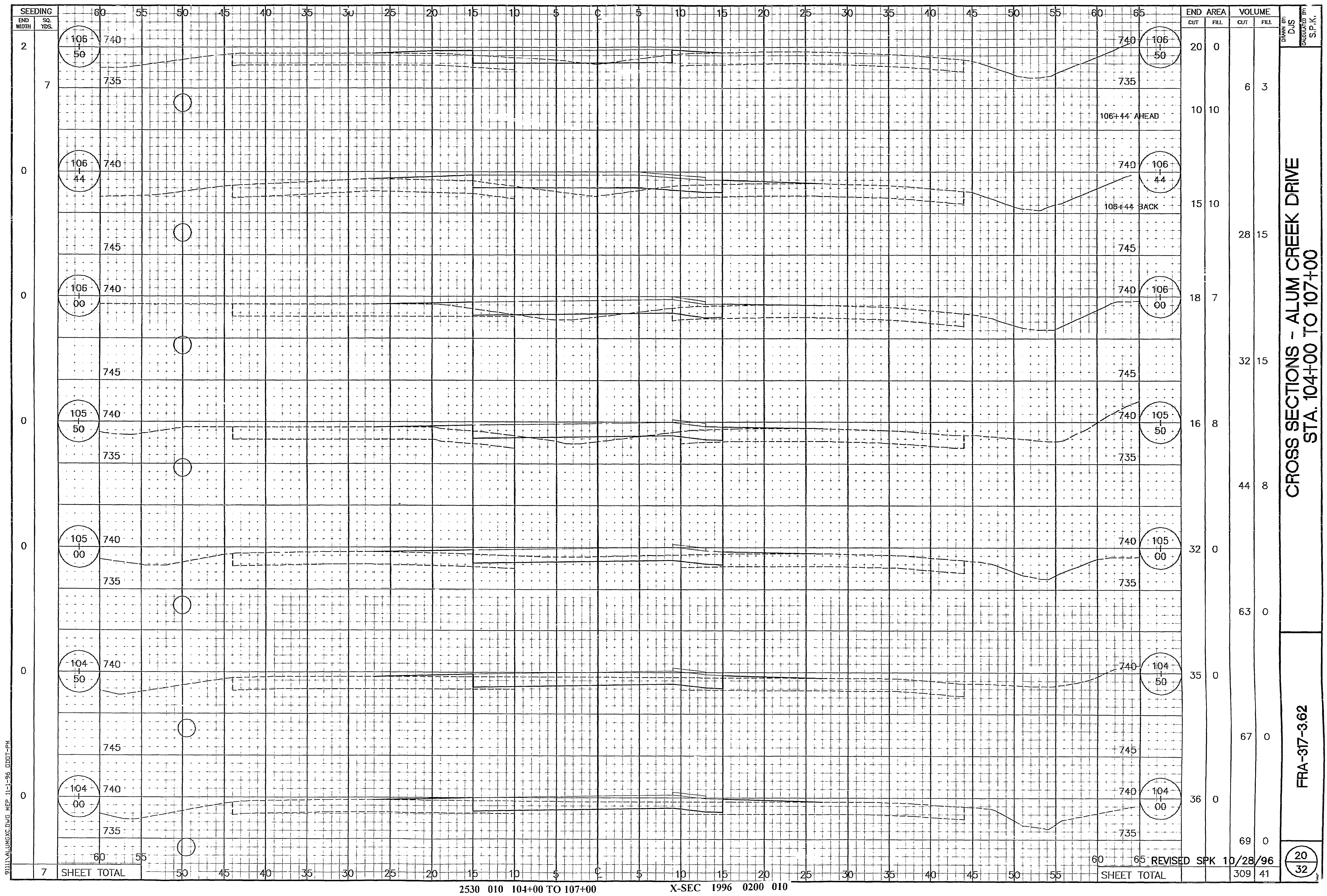


STILLING/ALUM CREEK DRIVE MAP 11-1-96 0007-PM

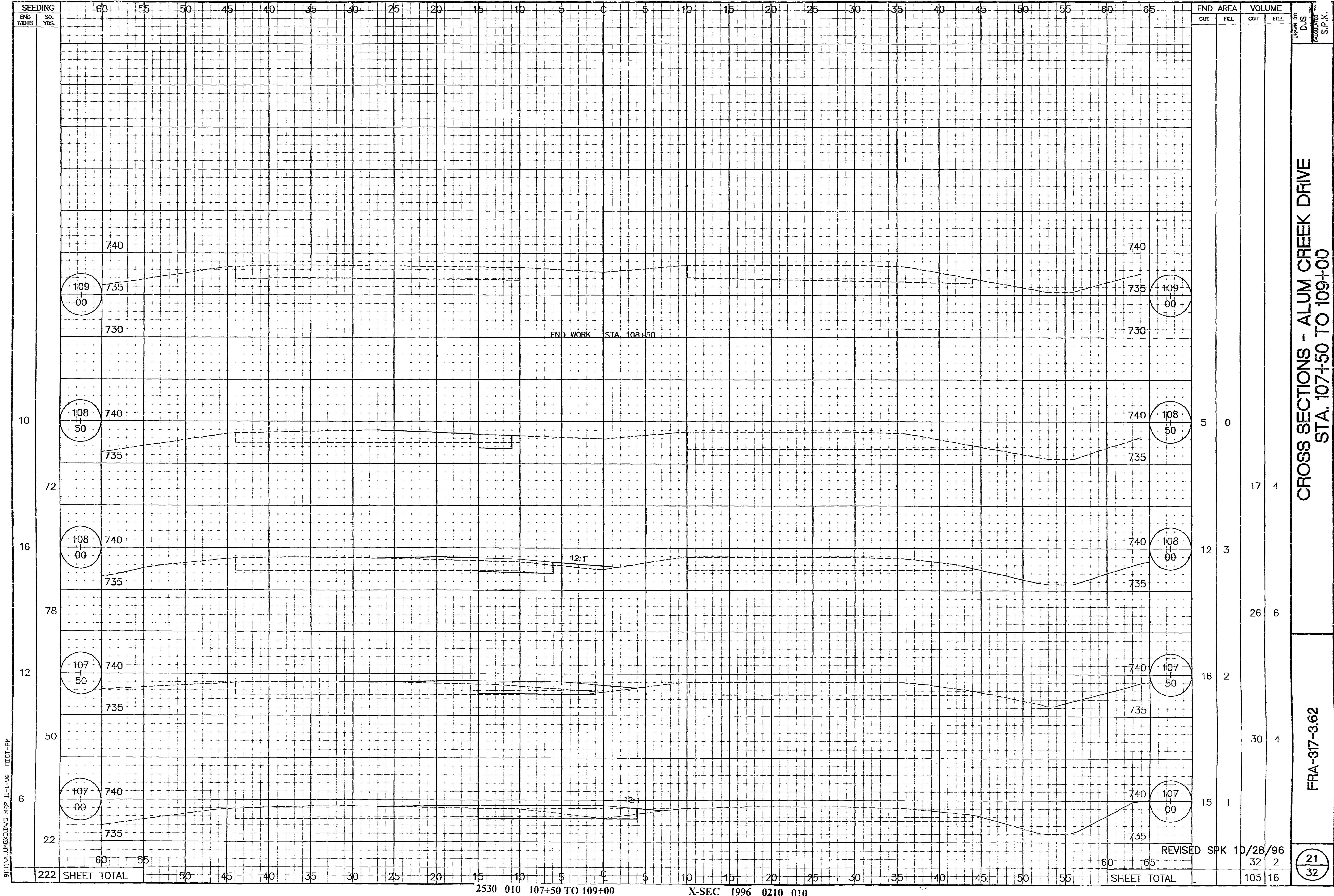
CROSS SECTIONS - ALUM CREEK DRIVE  
STA. 100+50 TO 103+50

FRA-317-3.62

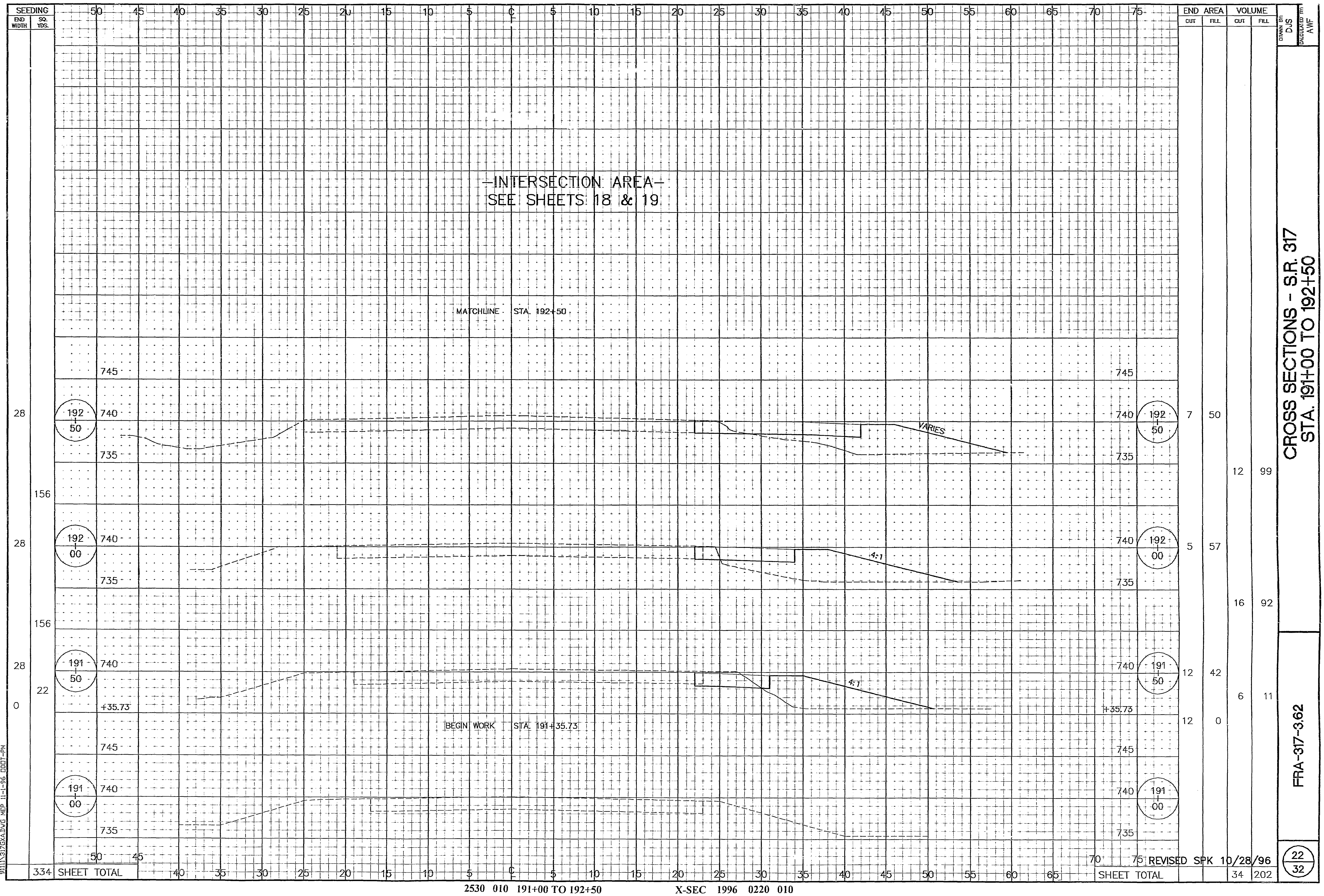




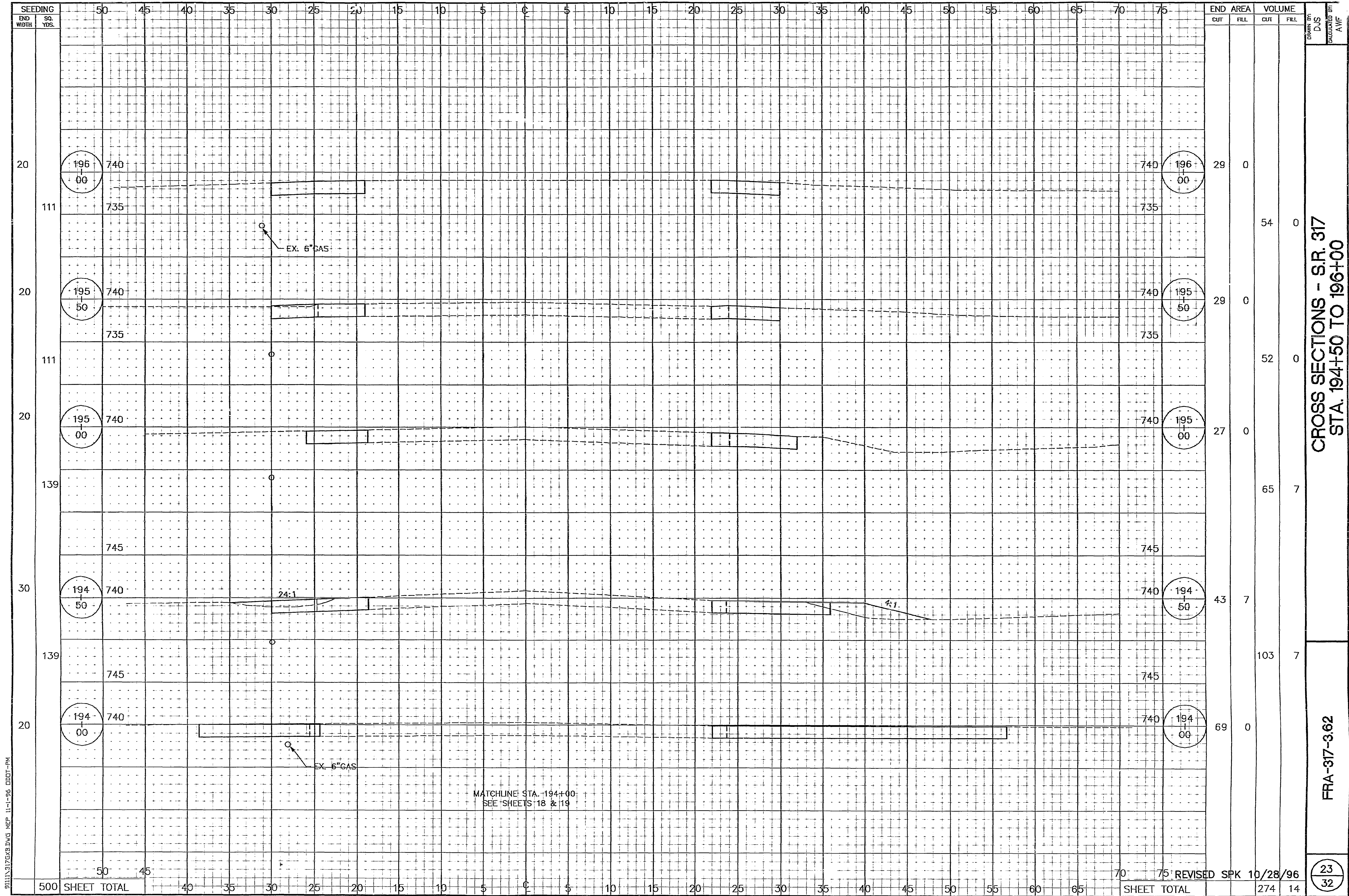






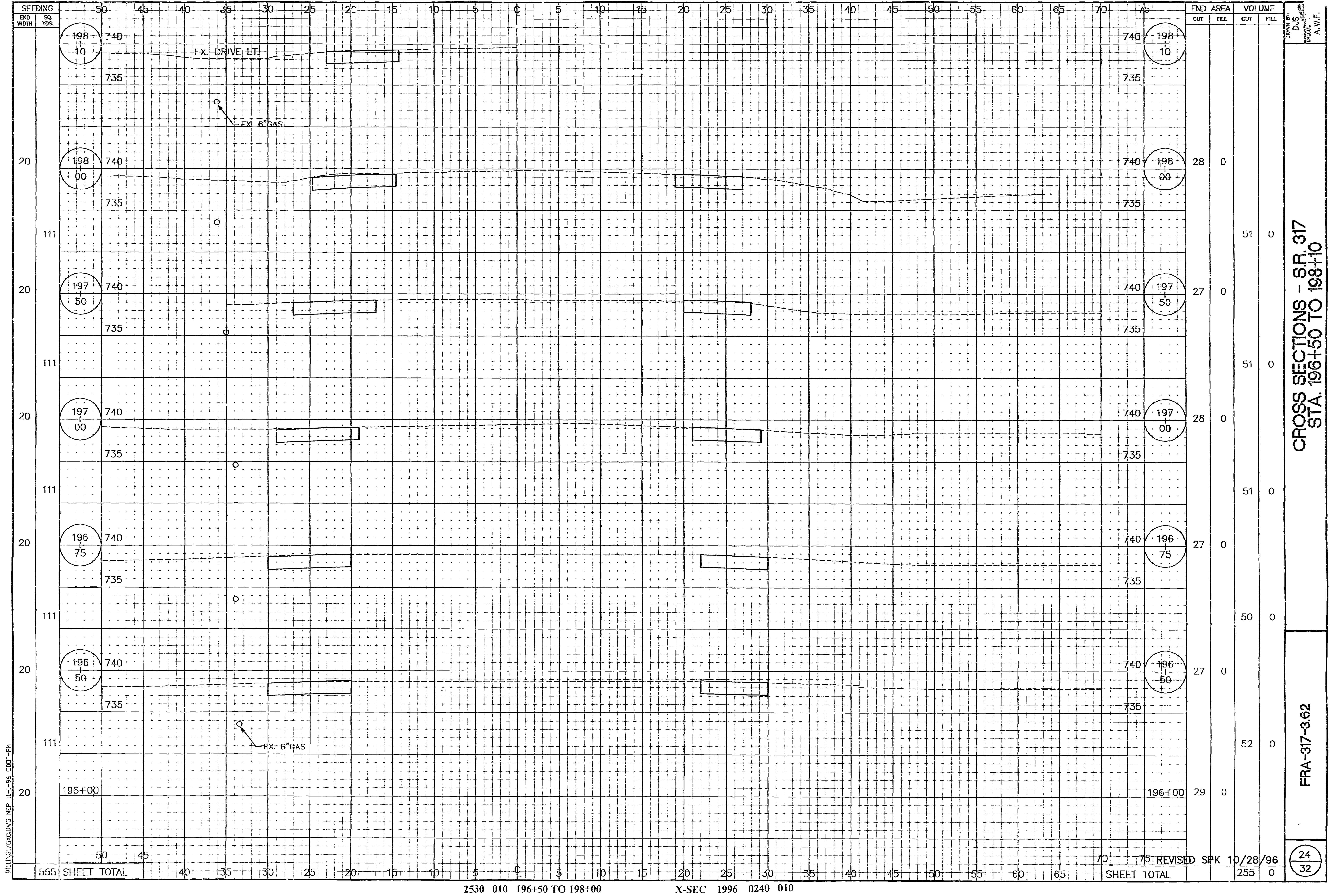




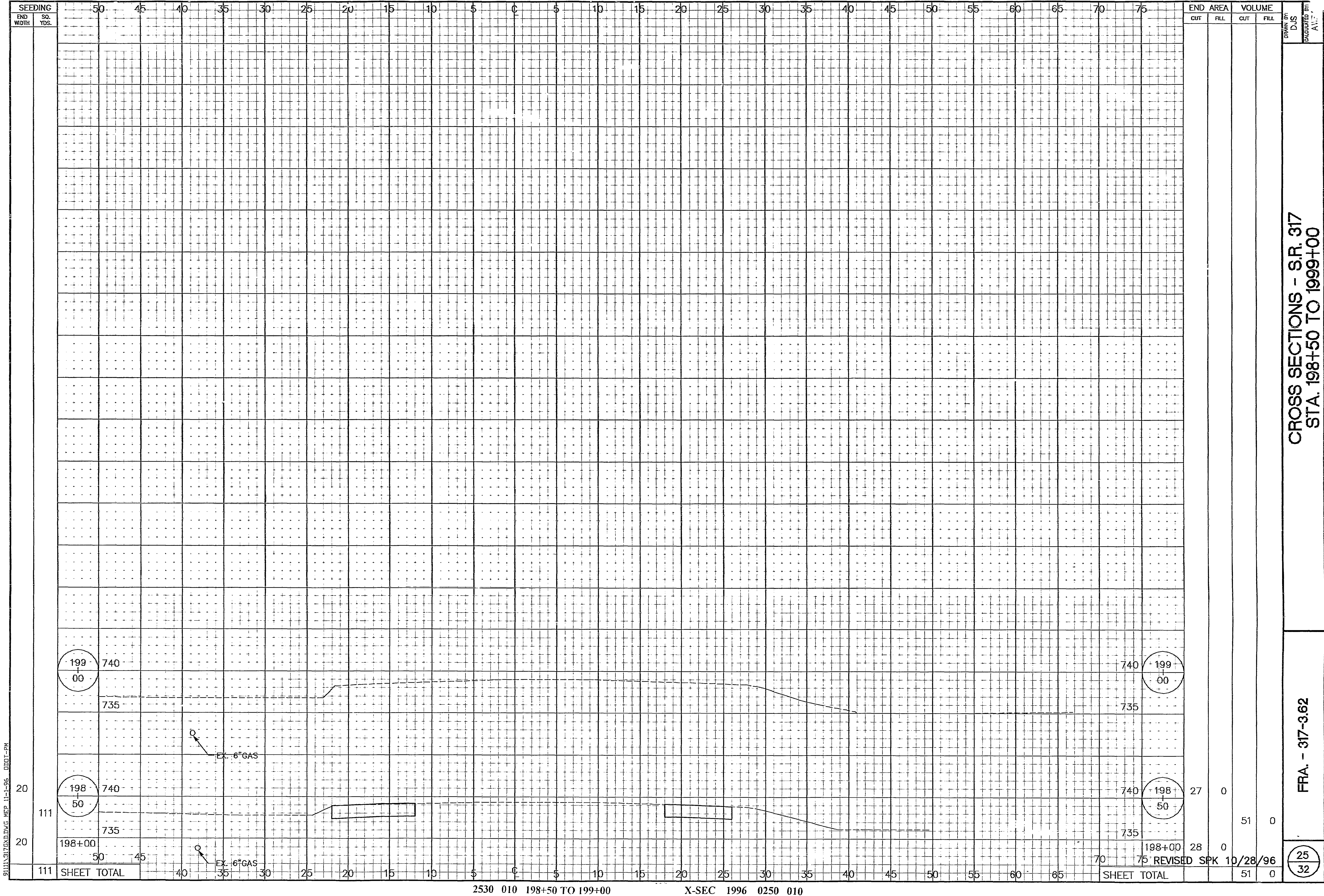


91111317633.DWG MEP 11-1-96 DDDT-PM





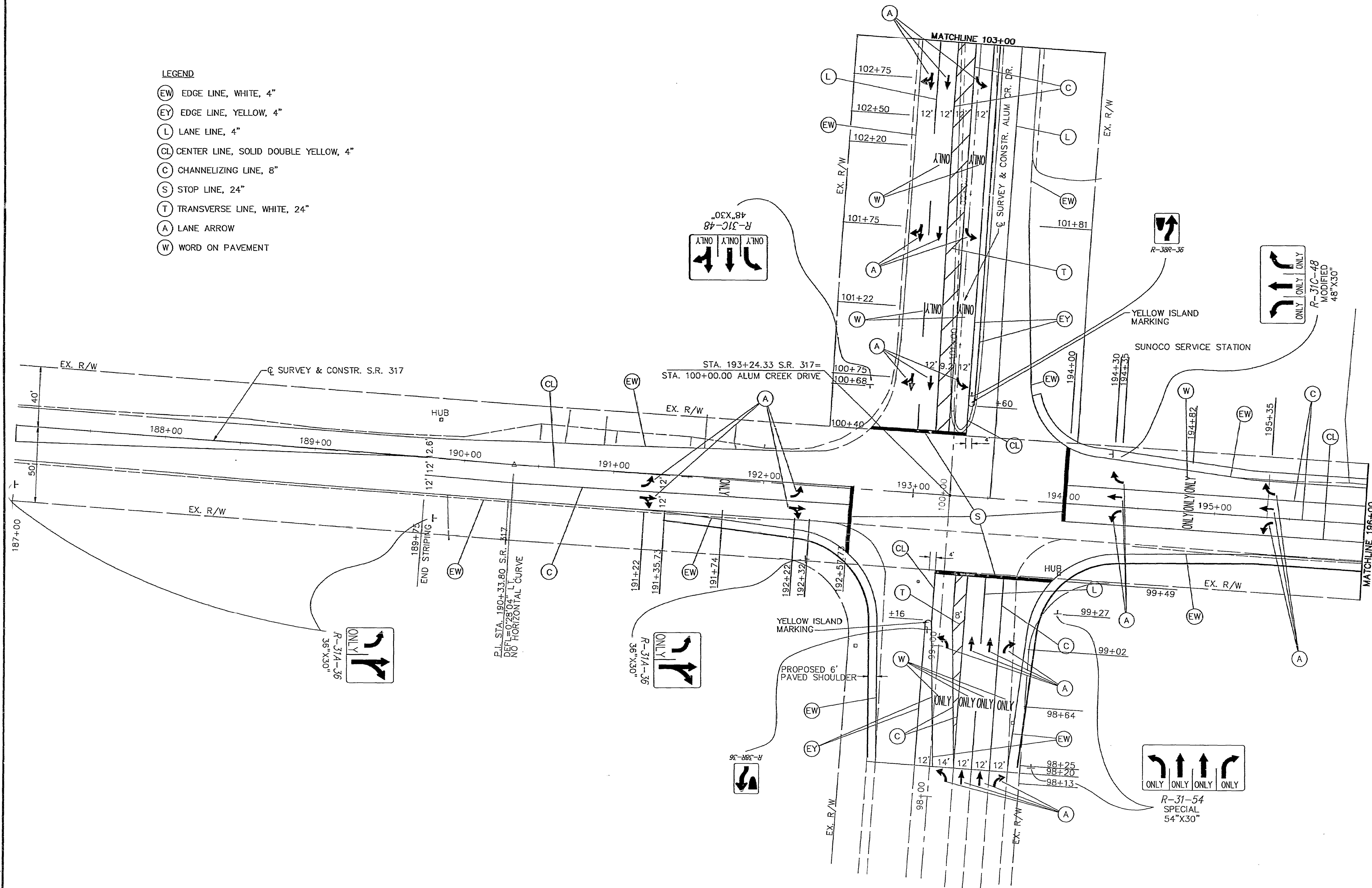






# LEGEND

- (EW) EDGE LINE, WHITE, 4"
- (EY) EDGE LINE, YELLOW, 4"
- (L) LANE LINE, 4"
- (CL) CENTER LINE, SOLID DOUBLE YELLOW, 4"
- (C) CHANNELIZING LINE, 8"
- (S) STOP LINE, 24"
- (T) TRANSVERSE LINE, WHITE, 24"
- (A) LANE ARROW
- (W) WORD ON PAVEMENT



**FRA-317-3.62**

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32

**PAVEMENT MARKING AND SIGNING PLAN**

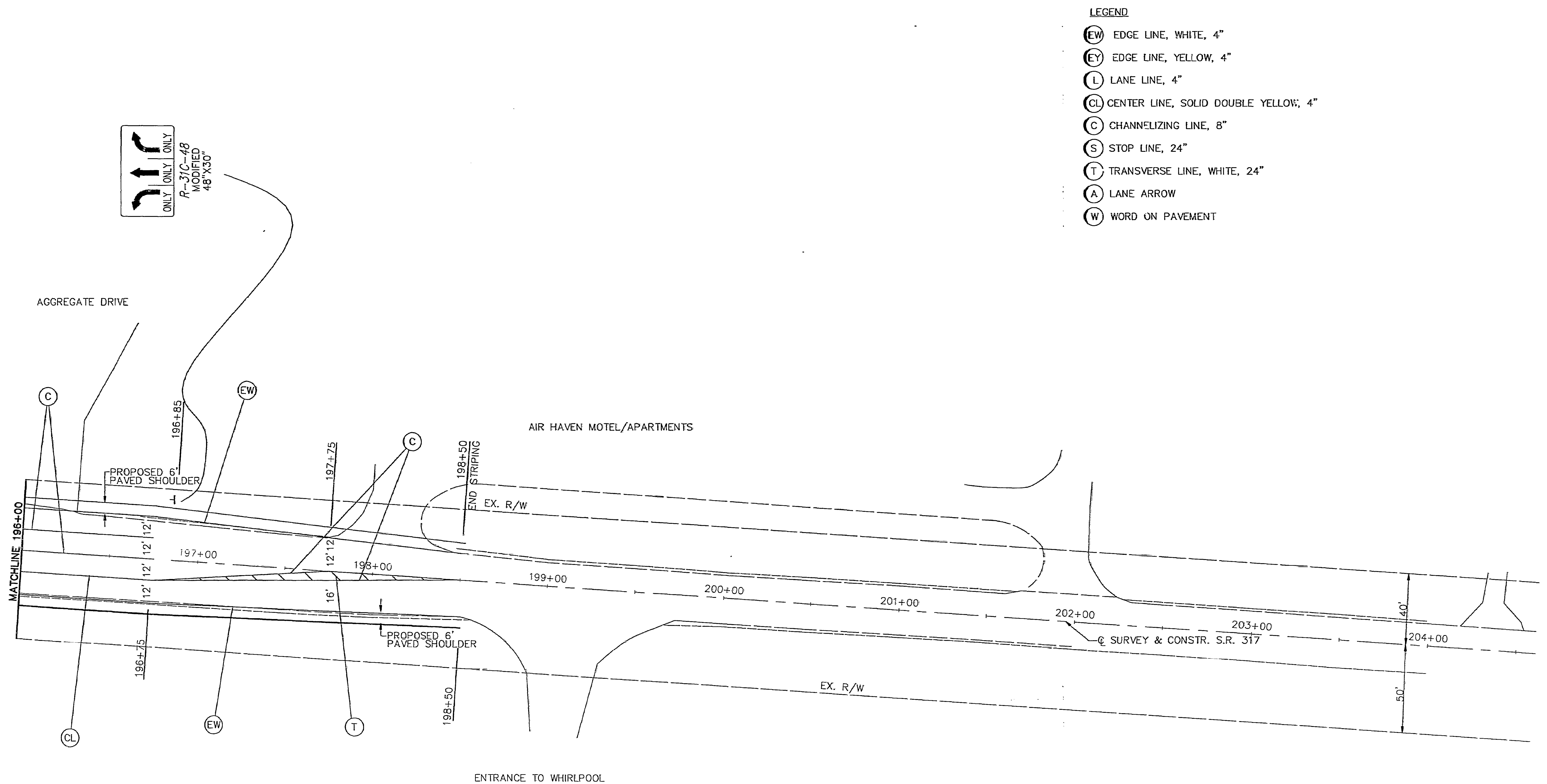
STA. 98+00 TO 103+00 ALUM CREEK  
STA. 187+00 TO 196+00 S.R. 317

0 30 60  
HORIZONTAL  
SCALE IN FEET

DRAWN  
M.E.P.  
CHECKED  
S.P.K.



\\0111\4009\2700 DSS E-31-96 0001-PN



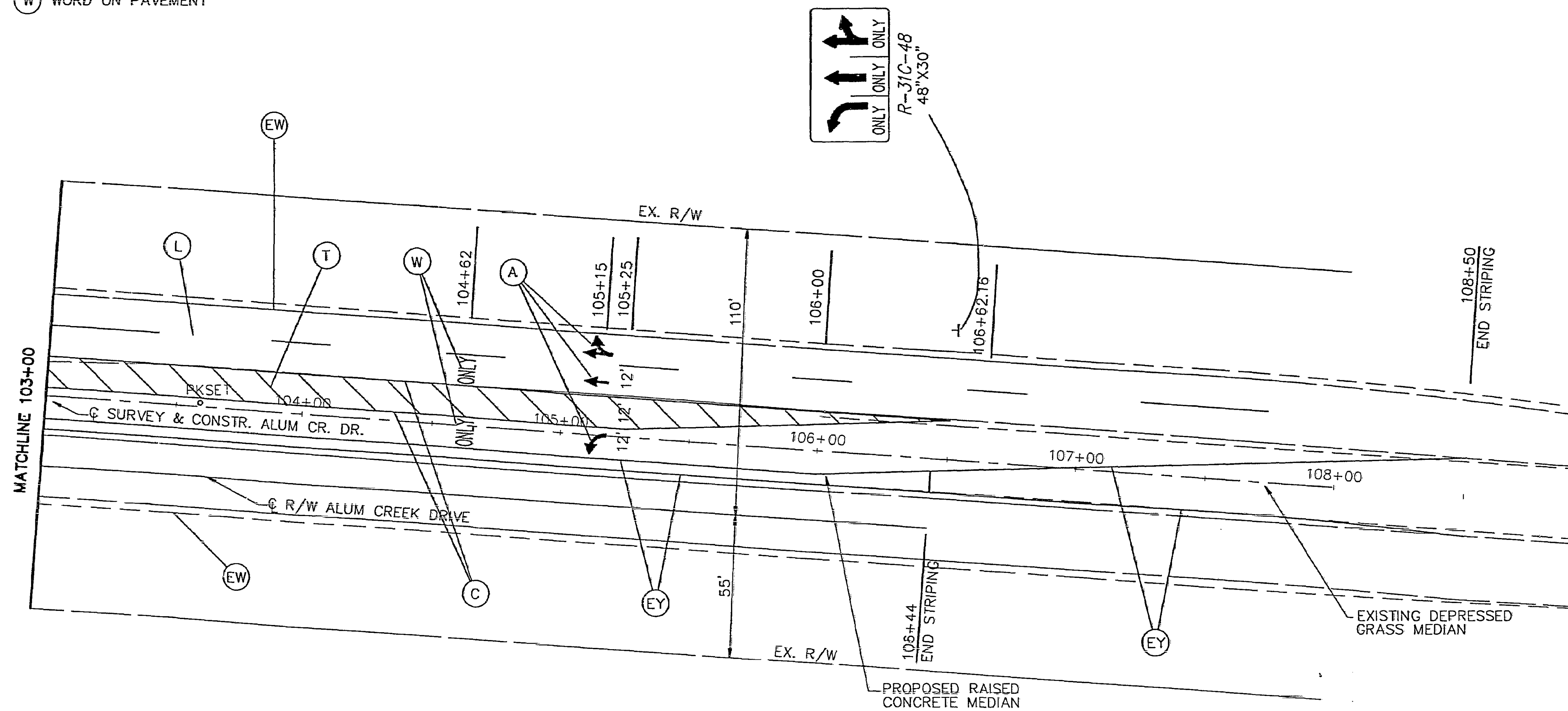
DRAWN M.E.P.	CHECKED S.P.K.	PAVEMENT MARKING AND SIGNAGE PLAN STA. 196+00 TO STA. 204+00 S.R. 317	FRA-317-3.62	27
				32

0 30 60  
HORIZONTAL  
SCALE IN FEET

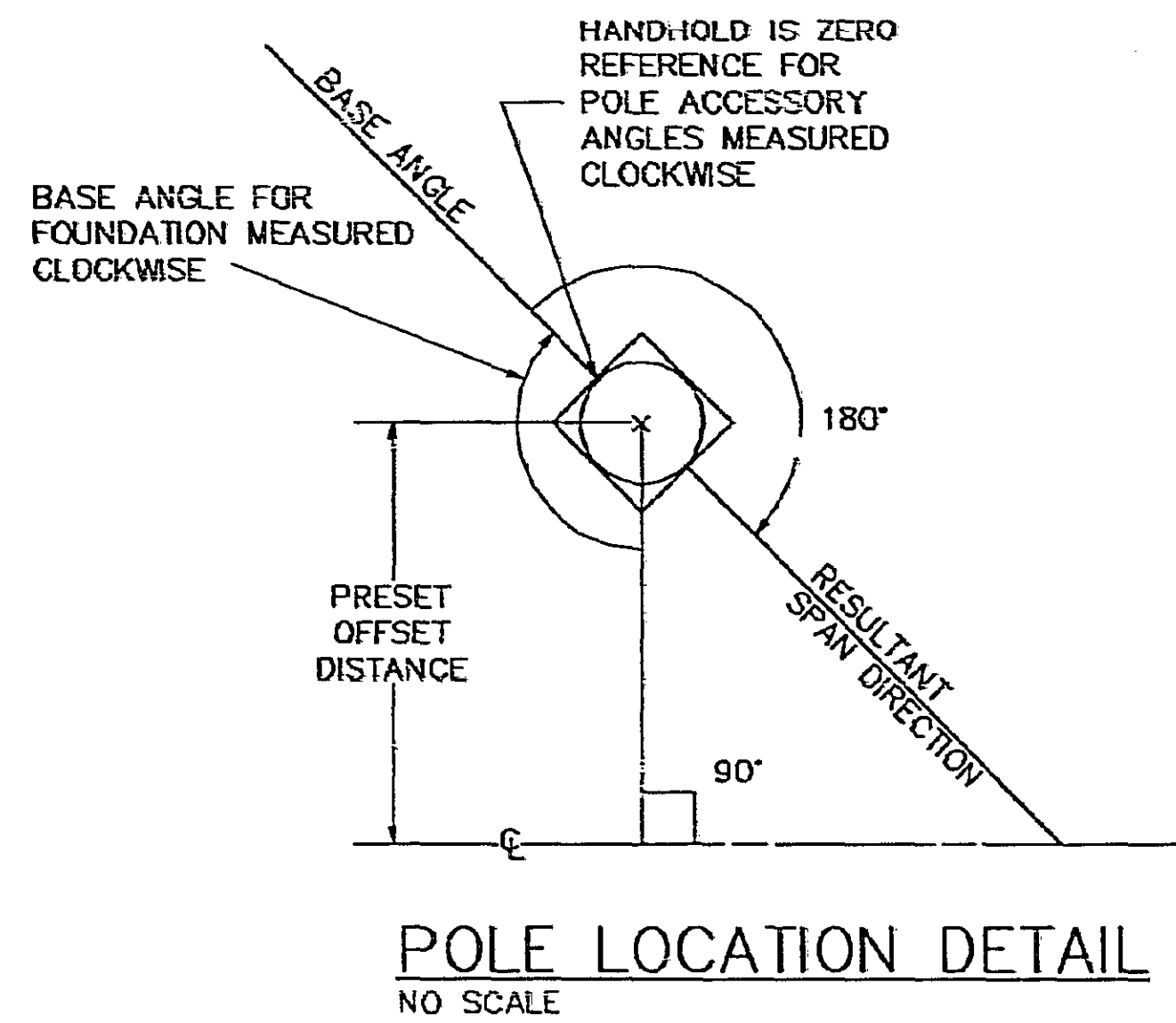
2530 010 PAVEMENT MARKING 1996 0270 010

LEGEND

- (EW) EDGE LINE, WHITE, 4"
- (EY) EDGE LINE, YELLOW, 4"
- (L) LANE LINE, 4"
- (CL) CENTER LINE, SOLID DOUBLE YELLOW, 4"
- (C) CHANNELIZING LINE, 8"
- (S) STOP LINE, 24"
- (T) TRANSVERSE LINE, WHITE, 24"
- (A) LANE ARROW
- (W) WORD ON PAVEMENT

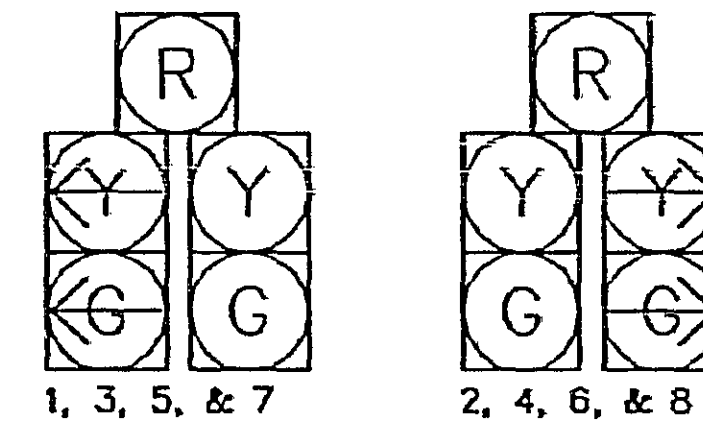






POLE	DESCRIPTION	STATION	OFFSET	BASE ANGLE FOR FOUNDATION	SPAN ANGLE(S)	BUND COUP SIZE	BLIND COUP ANGLE	BLIND COUP FROM TOP	TOP OF FOUNDATION ELEVATION	PED PUSH BTN ANGLE(S)	FUSH BTN SIGN ANGLE(S)
P1	81.10 DESIGN	192+56	58" LT	129°	180°	2"	180°	12"	740.45	180°	180°
P2	81.10 DESIGN	193+98	55" LT	229°	180°	4"	180°	12"	740.72	180°	180°
P3	81.10 DESIGN	194+10	70" RT	129°	180°	2"	180°	12"	741.07	180°	180°
P4	81.10 DESIGN	192+58	65" RT	230°	180°	2"	180°	12"	741.19	180°	180°

INITIAL SIGNAL TIMING								
PHASE	1	2	3	4	5	6	7	8
MINIMUM	10	20	10	15	10	20	10	15
EXTENSION	3.0	4.2	3.0	3.0	3.0	4.2	3.0	3.0
MAXIMUM	25	40	25	30	25	40	25	30
YELLOW	3.0	4.5	3.0	4.2	3.0	4.5	3.0	4.2
ALL RED	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
RECALL	N.L.	ON	N.L.	N.L.	N.L.	ON	N.L.	N.L.



SIGNAL HEADS

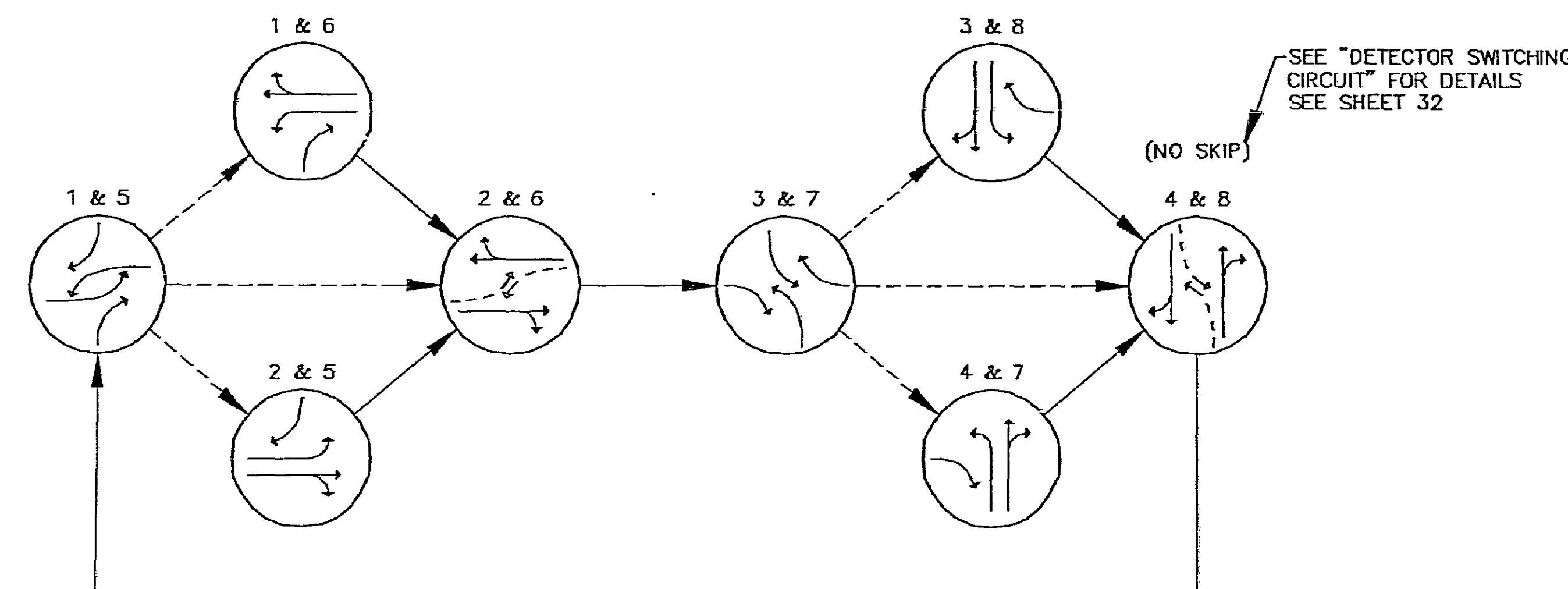
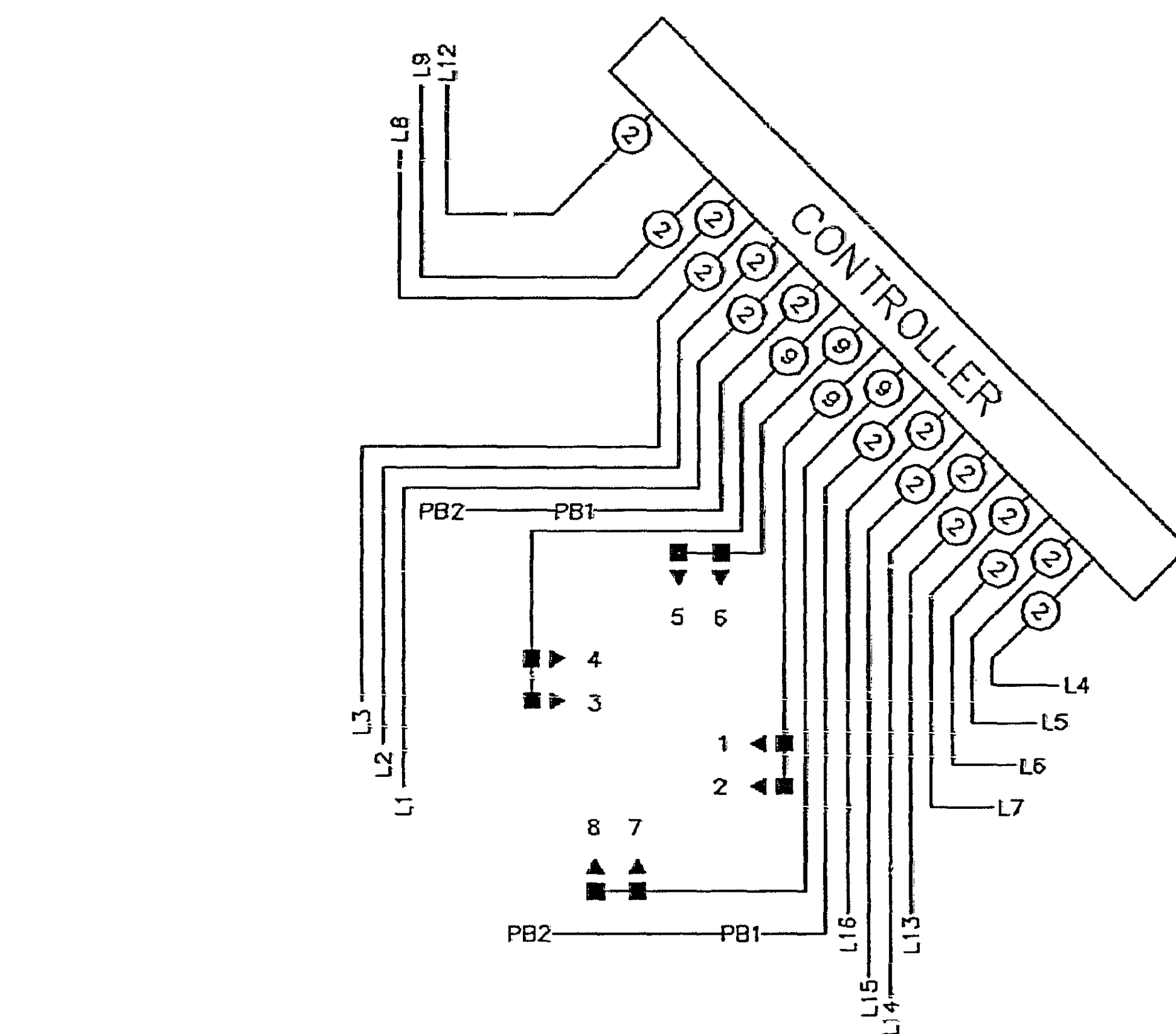
DETECTOR	SIZE	TURNS	PHASE	MODE
L1	6 x 6	3	2	PULSE
L2	6 x 6	3	2	PULSE
L3	6 x 30	2	5	RECALL
L4	6 x 30	2	6	PRESENCE
L5	6 x 6	3	6	PULSE
L6	6 x 6	3	6	PULSE
L7	6 x 30	2	1	RECALL
L8	10/18 x 30	2	8	PRESENCE
L9	6 x 30	2	8	PRESENCE
L10	6 x 30	2	3	PRESENCE
L11	6 x 30	2	4	PRESENCE
L12	6 x 30	2	4	PRESENCE
L13	6 x 30	2	4	PRESENCE
L14	6 x 30	2	7	PRESENCE
PB1			4	
PB2			8	

DETECTOR TABLE

PHASE	1 & 5	1 & 6	2 & 5	2 & 6
MOVEMENT	R/W C1 C2	R/W C1 C2	R/W C1 C2	R/W C1 C2
SIGNAL 1	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
2	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
3	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
4	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
5	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
6	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
7	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
8	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R

PHASE	3 & 7	3 & 8	7 & 4	4 & 8
MOVEMENT	R/W C1 C2	R/W C1 C2	R/W C1 C2	R/W C1 C2
SIGNAL 1	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
2	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
3	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
4	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
5	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
6	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
7	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R
8	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R	R R R R R R R R R R R R

SIGNAL DISPLAY SCHEDULE



SIGNAL PHASING

## TRAFFIC SIGNAL SUMMARY

ITEM CODE	TOTAL	UNIT	DESCRIPTION
SIGNAL REPLACEMENT			
625E18100	2	EACH	BRACKET ARM, 12"
625E23400	280	L.F.	NO. 10 AWG POLE AND BRACKET CABLE
625E25300	350	L.F.	CONDUIT, 1 1/2", 713.04
625E25400	915	L.F.	CONDUIT, 2", 713.04
625E26250	2	EACH	LUMINAIRE, CONVENTIONAL
625E29000	885	L.F.	TRENCH
625E30706	10	EACH	PULL BOX, 713.08, 24'
625E32000	5	EACH	GROUND ROD
632E00500	8	EACH	VEHICULAR SIGNAL HEAD, 5 SECTION, 12" LENS, 1 WAY
632E25000	8	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632E26000	4	EACH	PEDESTRIAN PUSH BUTTON
632E27108	4	EACH	LOOP DETECTOR UNIT, 4 CHANNEL, DELAY AND EXTENSION TYPE
632E27500	1640	L.F.	LOOP DETECTOR PAVEMENT CUTTING
632E30200	483	L.F.	MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES
632E40900	775	L.F.	SIGNAL CABLE, 9 CONDUCTOR, NO. 14 AWG
632E64900	2442	L.F.	LOOP DETECTOR WIRE, TYPE E
632E65200	5412	L.F.	LOOP DETECTOR LEAD-IN CABLE
632E67300	100	L.F.	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
632E69800	200	L.F.	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG
632E71000	4	EACH	CABLE SUPPORT ASSEMBLY
632E72000	10.4	C.Y.	CONCRETE FOR ANCHOR BASE FOUNDATION
632E82800	2	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 8
632E84800	2	EACH	COMBINATION STRAIN POLE, TYPE TC-81.10, DESIGN 8
632E90100	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
633E38000	1	EACH	CONTROLLER ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR
633E70500	6	SQ.FT.	CONTROLLER WORK PAD
603E00401	30	L.F.	CONDUIT, 4", TYPE E AS PER PLAN

## TRAFFIC CONTROL SUMMARY

ITEM CODE	TOTAL	UNIT	DESCRIPTION
630E03100	209	LN.FT.	GROUND MOUNTED SUPPORT, NO. 3 POST
630E80102	90.5	SQ. FT.	SIGN, FLAT SHEET, TYPE G
644E00100	.95	MILE	EDGE LINE
644E00200	.59	MILE	LANE LINE
644E00300	.12	MILE	CENTER LINE
644E00400	1830	LN.FT.	CHANNELIZING LINE
644E00500	225	LN.FT.	STOP LINE
644E00700	700	LN.FT.	TRANSVERSE LINE
644E01300	27	EACH	LANE ARROW
644E01410	14	EACH	WORD ON PAVEMENT, 96"
62100100	326	EACH	RAISED PAVEMENT MARKERS

## RAISED PAVEMENT MARKERS

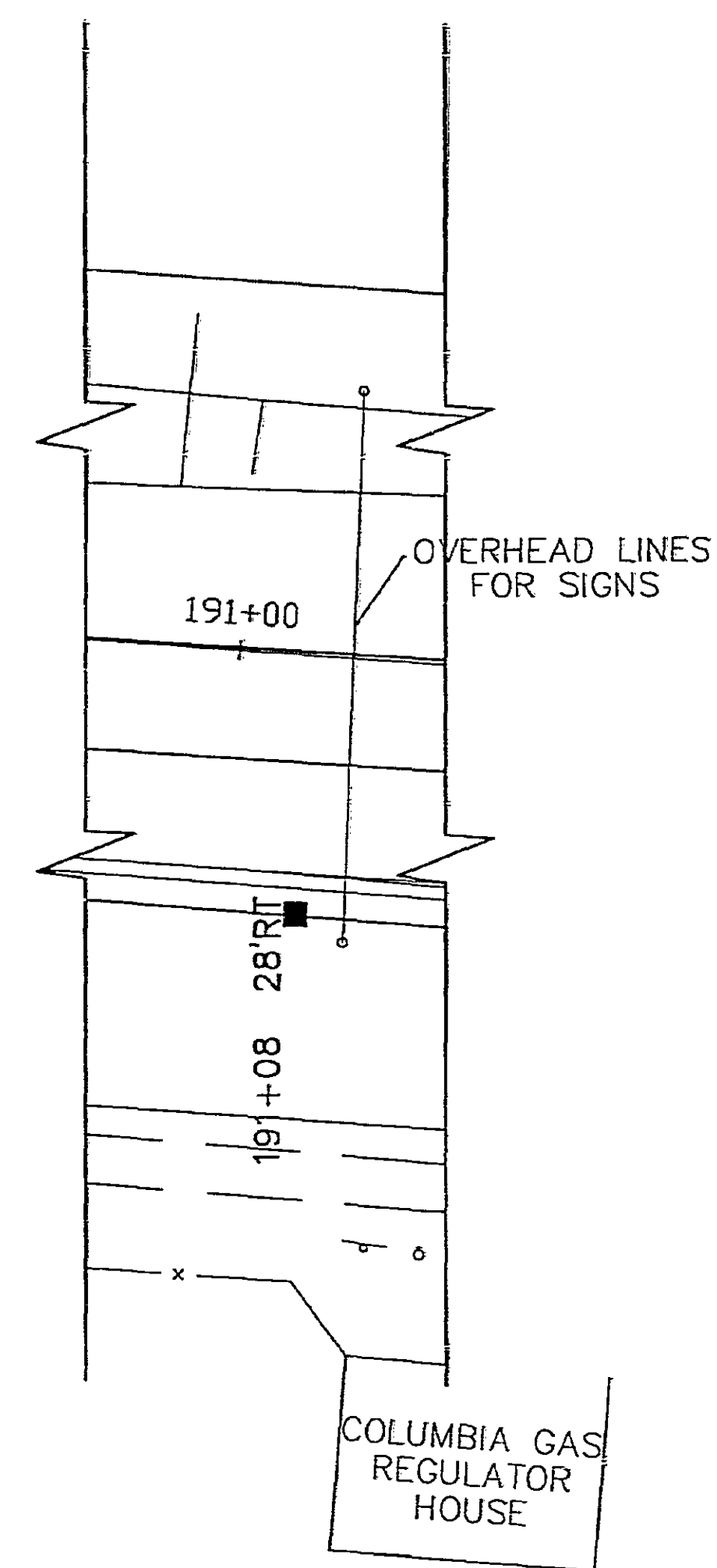
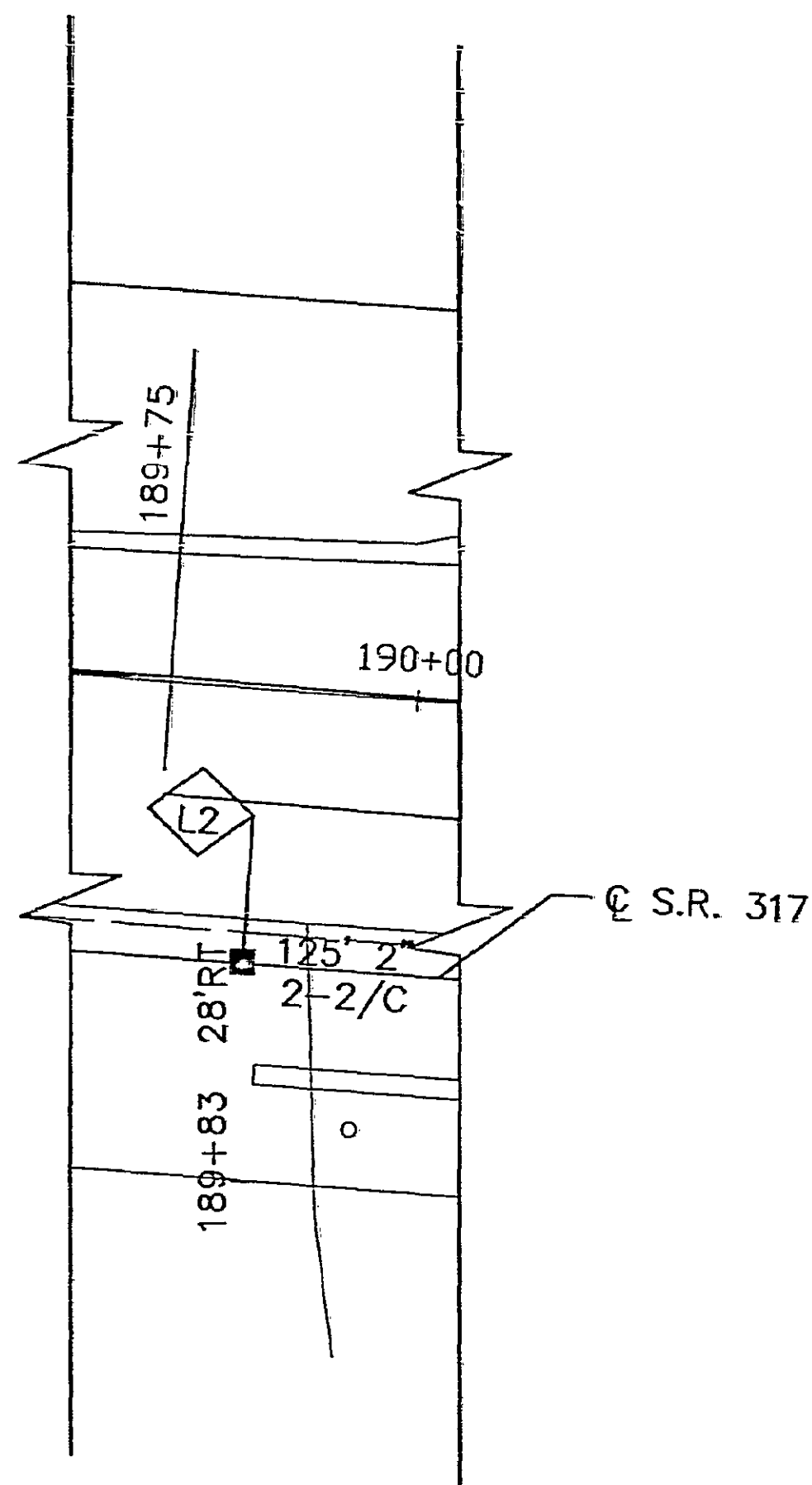
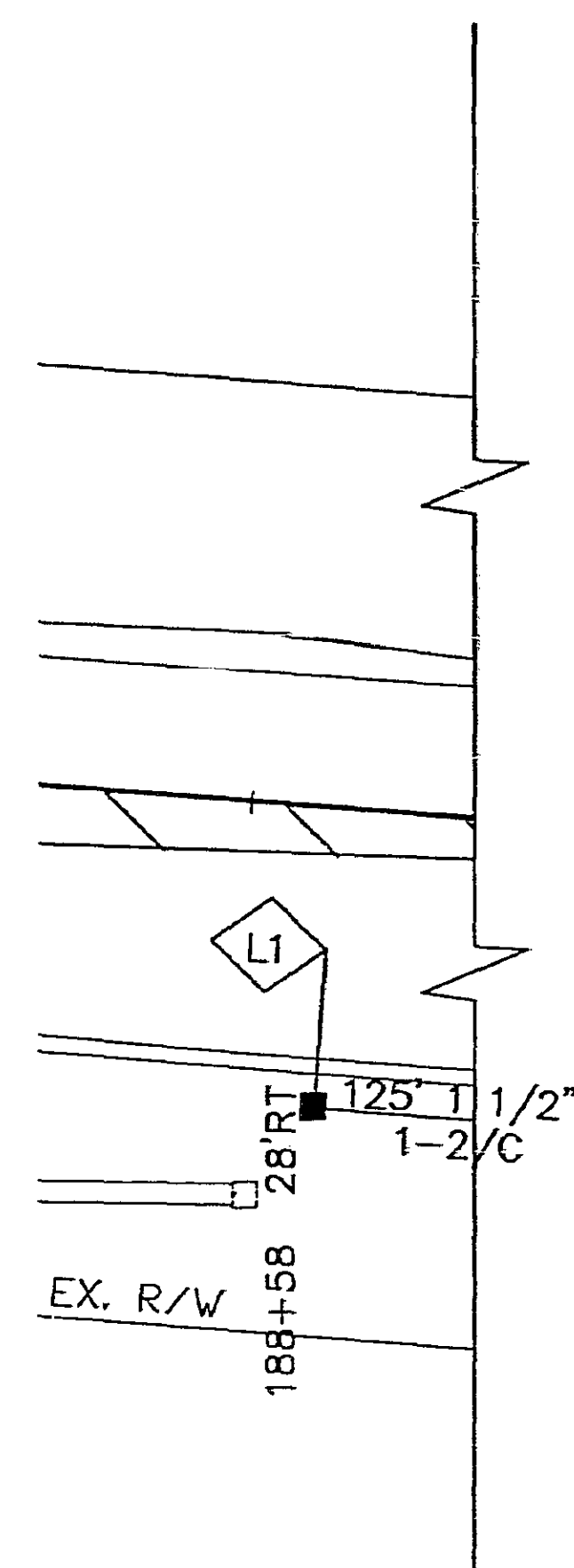
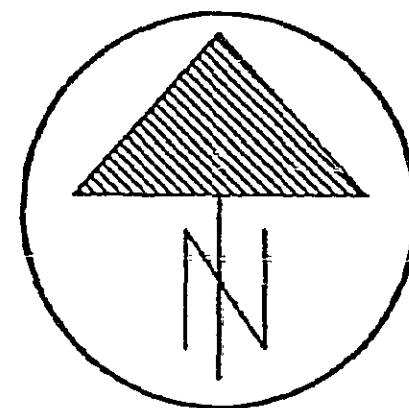
STATION	SPACING	W	Y/Y	W/R
FROM	TO			
191+36	192+58	20'	16	8
194+00	196+00	20'	48	12
196+00	198+50	80'	12	10
98+20	99+18	20'	26	10
		40'		4
100+70	108+50	20'	60	24
		40'	20	14
		70'		4
		80'	10	12
SUB-TOTALS			198	78
			12	50
			TOTAL = 326	

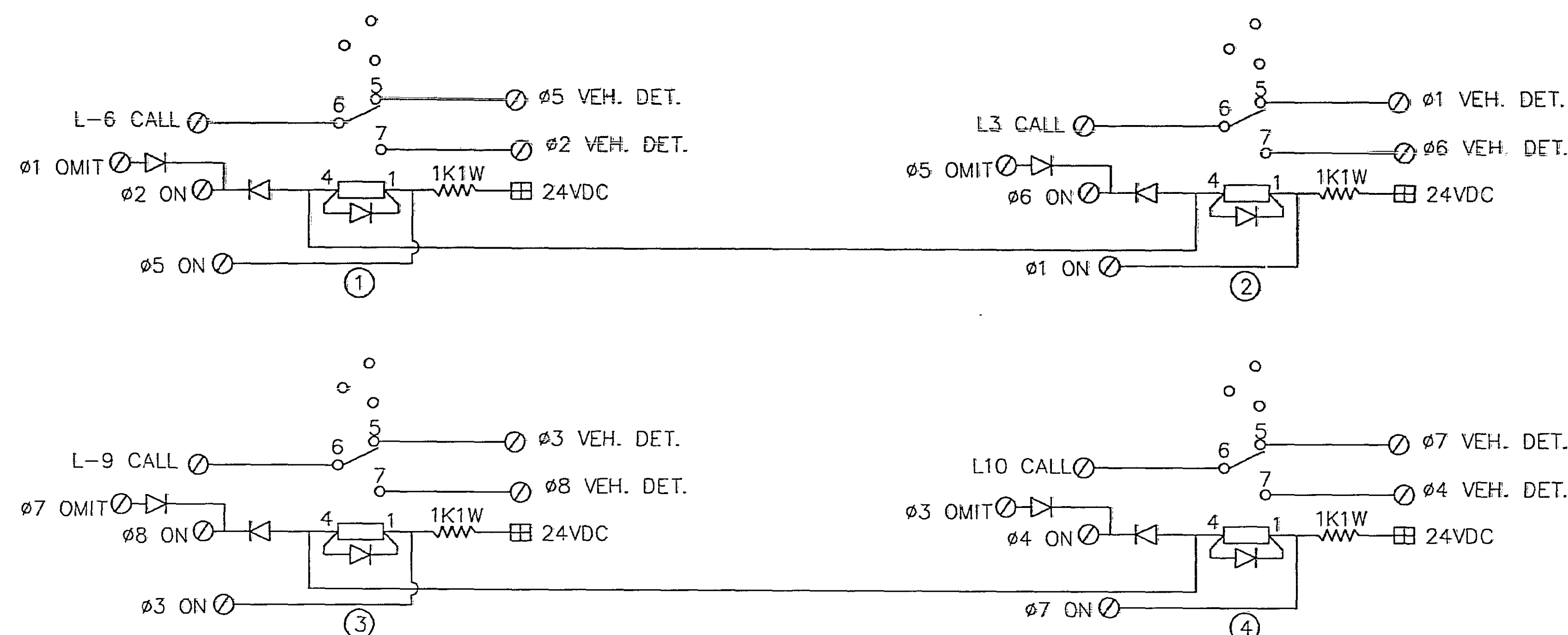
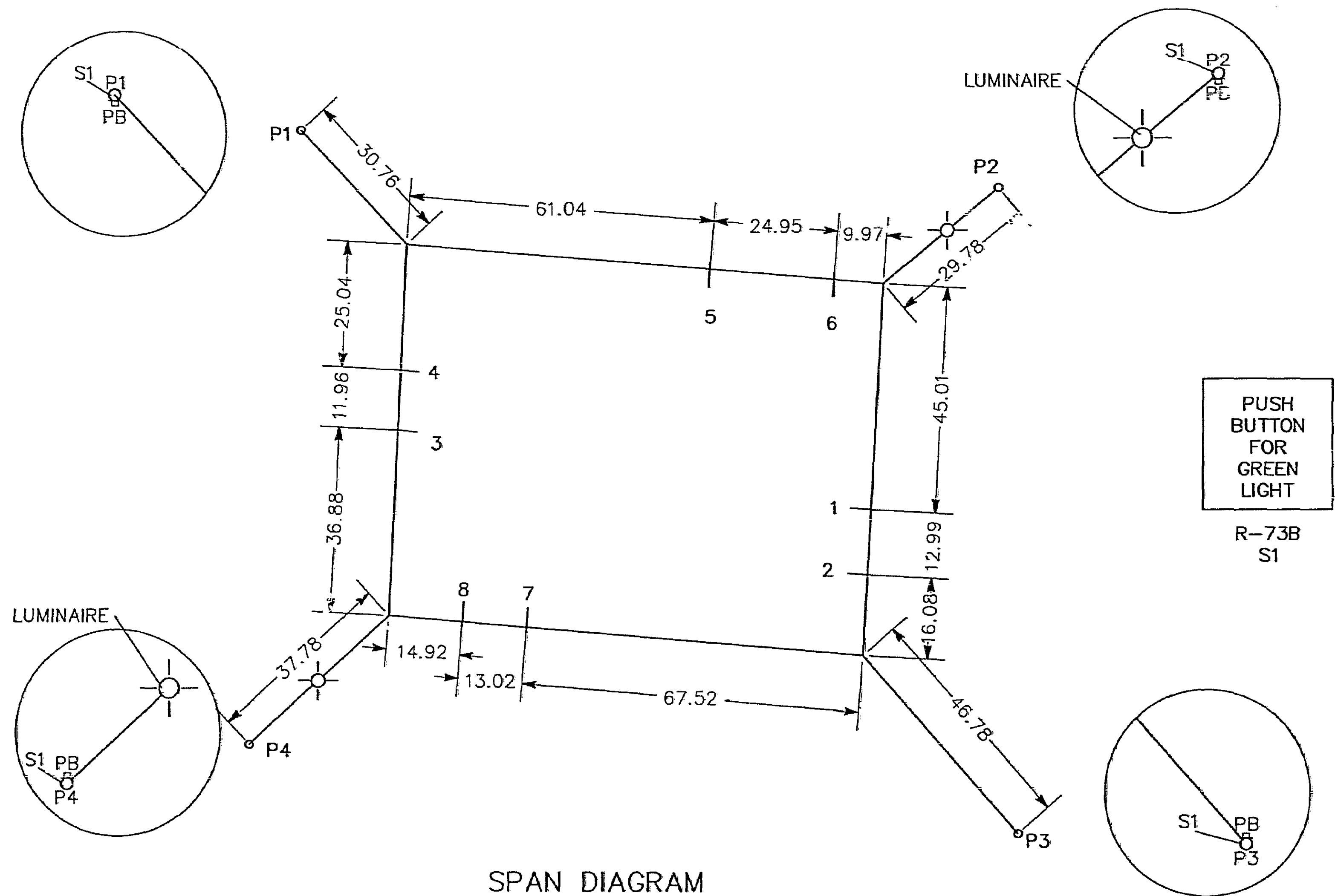
FOUNDATION  
ELEVATION  
REVISED SPK 10/28/96





\\s0111\h02043.dwg DS B-1-85 D001-PN





#### TYPICAL OPERATION: (ø5 CIRCUIT)

LOOP L-6 WOULD NORMALLY GO TO ø5 DET. IN. WHEN ø2 BECOMES GREEN, THE RELAY BECOMES ENERGIZED AND DET. L-6 IS TRANSFERRED TO ø2 DET. IN. WHEN ø2 TERMINATES, RELAY IS DE-ENERGIZED AND DET. L-6 IS AGAIN ROUTED TO ø5 DET. IN. IF BOTH ø2 AND ø5 IS "ON", THE RELAY POWER IS SHUNTED AROUND THE RELAY TO ø5 "ON" AND THEREFORE THE RELAY IS DE-ENERGIZED THUS ALLOWING L-6 TO BE ROUTED TO ø5. THE ø1 OMIT IS TIED INTO THE ø2 "ON" OUTPUT TO AVOID THE UNDESIRABLE SKIPPING FROM ø2 & ø6 TO ø5 & ø2 OR TO ø1 & ø6. RELAY ① AND ② ARE TIED TOGETHER AT THE NEG. SIDE OF THE COIL IN ORDER TO ALLOW A CALL TO BE PLACED FOR THE PERMISSIVE LEFT TURN MOVEMENT ON THE OPPOSITE APPROACH TO PRECLUDE THAT MOVEMENT WAITING UNTIL A COMPLETE CYCLE IS COMPLETE.

#### DETECTOR SWITCHING CIRCUIT

#### UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

TELEPHONE:  
AMERITECH CO. INC.  
150 EAST GAY STREET, ROOM 6C  
COLUMBUS, OHIO 43215  
(614) 223-8535

POWER:  
SOUTH CENTRAL POWER CO.  
P.O. BOX 250  
LANCASTER, OHIO 43130  
(614) 653-4422

GAS:  
COLUMBIA GAS OF OHIO, INC.  
939 W. GOODALE BLVD.  
COLUMBUS, OHIO 43212  
(614) 460-2079

SANITARY SEWERS:  
FRANKLIN COUNTY SANITARY ENGINEER  
1717 ALUM CREEK DRIVE  
COLUMBUS, OHIO 43207  
(614) 462-3940

WATER LINES:  
CITY OF COLUMBUS, UTILITY COMPLEX  
DIVISION OF WATER  
910 DUBLIN, ROAD  
COLUMBUS, OHIO 43215  
(614) 645-7677

CABLE T.V.:  
COAXIAL COMMUNICATIONS  
3770 EAST LIVINGSTON AVE.  
COLUMBUS, OHIO 43227  
(614) 236-1201

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

#### WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

#### ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE COMPLETED PAVEMENT.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELLING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME. AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THERE IS A RULE THAT ALL NEW OR RELOCATED ELECTRIC SERVICE ENCLOSURES ARE TO BE INSPECTED BY A LICENSED STATE INSPECTOR PRIOR TO CONNECTION TO A UTILITY DISTRIBUTION LINE. THIS RULE IS NOW BEING ENFORCED BY THE UTILITY COMPANIES AND THE OHIO DEPARTMENT OF INDUSTRIAL RELATIONS. THIS IS A NEW SITUATION FOR ODOT BECAUSE STATE INSPECTIONS ARE NOW BEING REQUIRED FOR TRAFFIC CONTROL DEVICES AND LIGHTING INSTALLATIONS. THE CONTRACTOR SHALL APPLY FOR THE INDUSTRIAL RELATIONS INSPECTION(S); PAY THE APPROPRIATE FEE(S) TO THE INDUSTRIAL RELATIONS DEPARTMENT AND ADVISE THE DISTRICT TRAFFIC ENGINEER OF THE TIME OF THE INSPECTION(S), SO THAT HE MAY HAVE A REPRESENTATIVE IN ATTENDANCE. IT IS NOTED THAT THE INDUSTRIAL RELATIONS INSPECTION IS NOT A SUBSTITUTE FOR ODOT'S FINAL INSPECTION, NOR DOES IT SUPERSEDE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.

THE COST OF THE INDUSTRIAL RELATIONS INSPECTIONS, ESTIMATED AT \$100.00 PER INSPECTION, SHALL BE CONSIDERED AS INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE FOLLOWING:

ITEM 614 MAINTAINING TRAFFIC

TRAFFIC CONTROL NOTES

FRA-317-3.62

32  
32



# MATERIAL SPECIFICATIONS FOR GENERATOR POWER PANEL EQUIPMENT

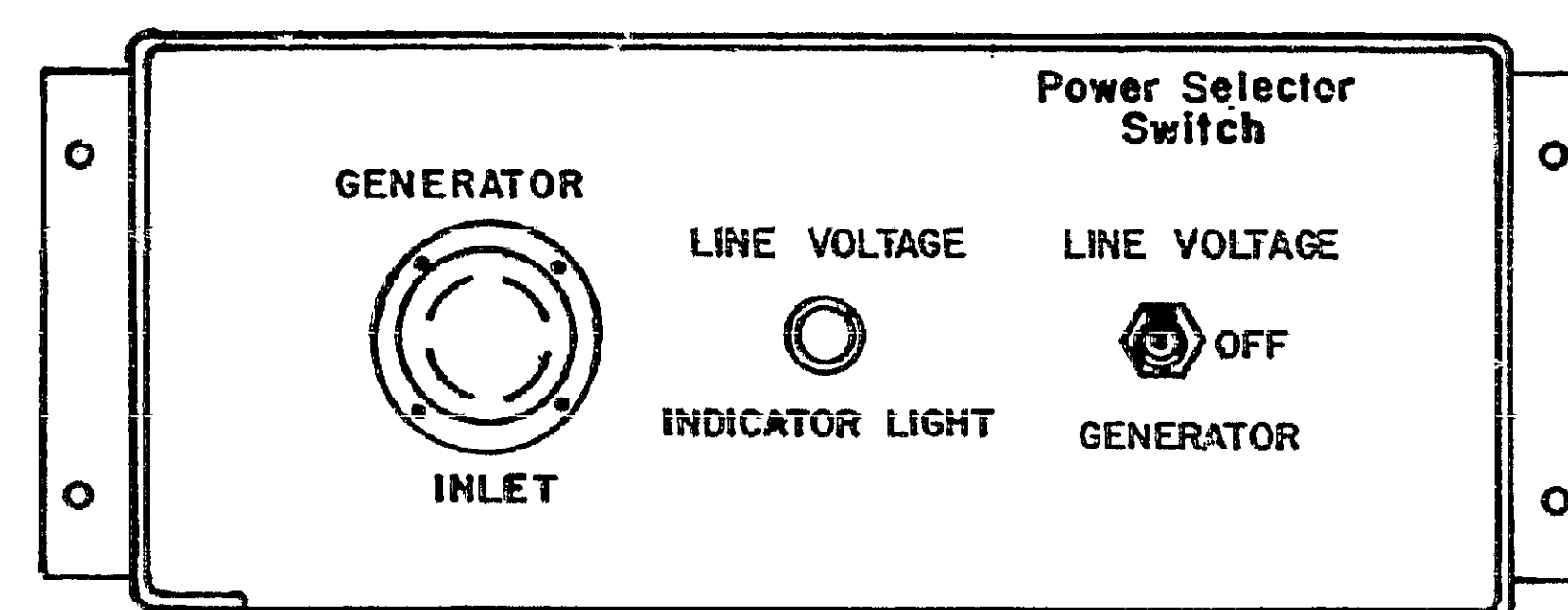
**GENERATOR POWER PANEL ENCLOSURE** — This item can be fabricated to meet the attached specifications, or it can be purchased through Gammatronix at 6279 Shier Rings Road, Dublin, Ohio 43017. Phone number 614-889-2511.

**GENERATOR INLET** — The inlet shall be 30 amp, 125/250V, locking, four (4) wire grounding and meet the NEMA configuration number LI4-30-P 30A 125/250 specification. The inlet shall be a Hubbell catalog # 2715

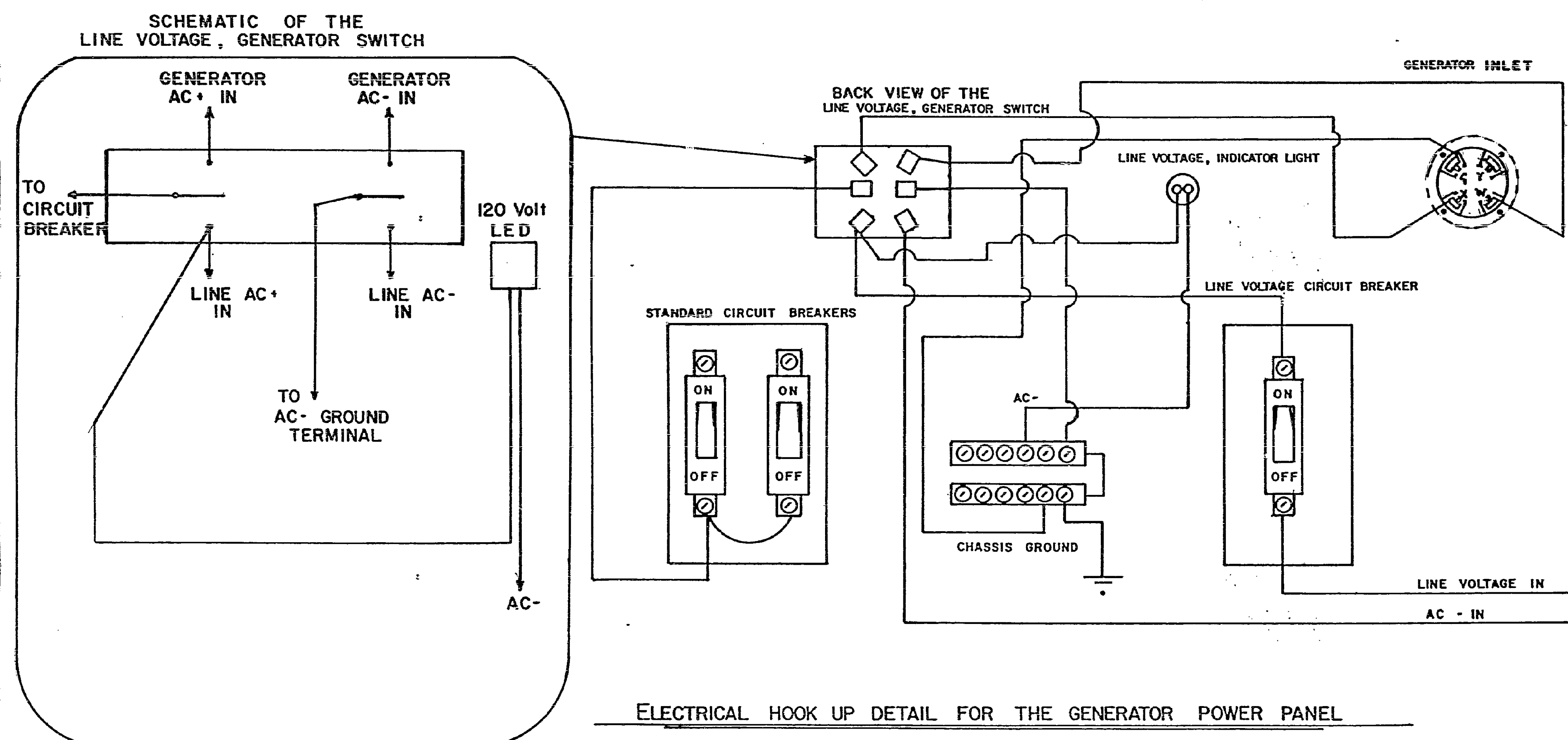
**LINE VOLTAGE GENERATOR SWITCH** — The switch shall be 30 amp, 125/250V AC, two (2) pole, three (3) position. (On, Off, On, Hubbell 1388.)

**LINE VOLTAGE INDICATOR LIGHT** — The indicator light shall be 125V AC light emitting diode with a red lens.

**LINE VOLTAGE CIRCUIT BREAKER** — The circuit breaker shall be single pole single throw and a minimum of 30 amps. The amperage shall be increased to accommodate greater loads, if necessary. The gauge of the power cable shall be of proper size per the N.E.C.



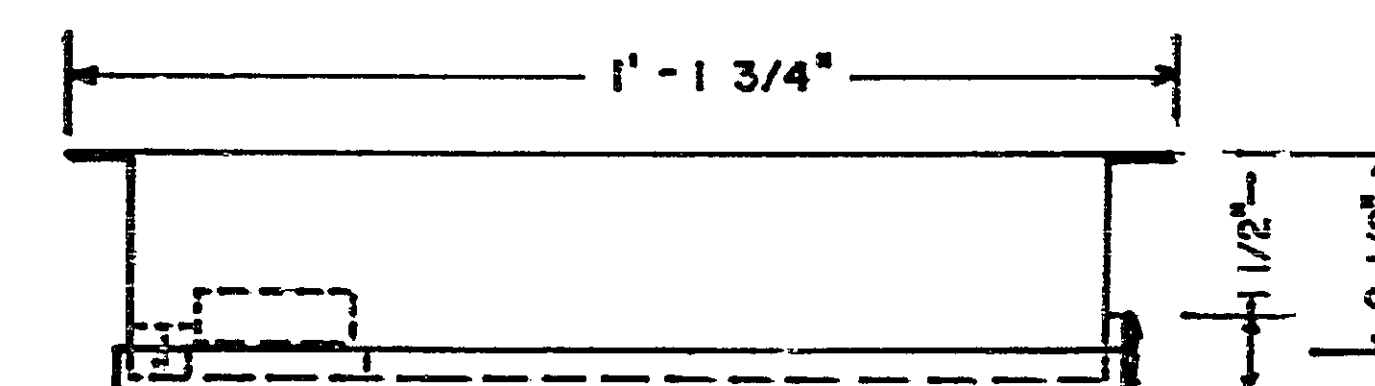
FRONT VIEW OF GENERATOR POWER PANEL



ELECTRICAL HOOK UP DETAIL FOR THE GENERATOR POWER PANEL

FHWA REGION	STATE	PROJECT	
5	OHIO		

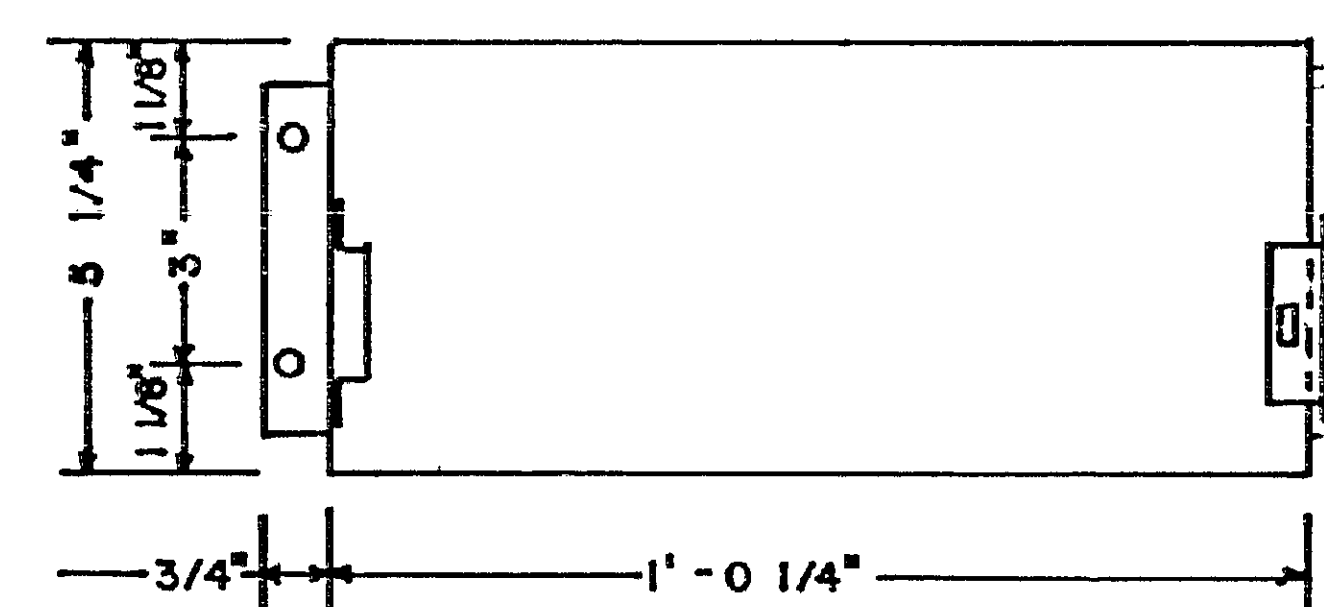
32A  
32



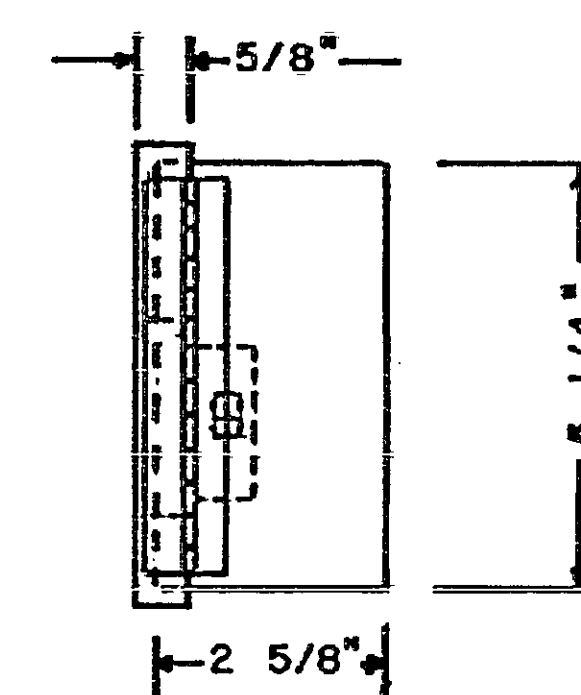
TOP VIEW



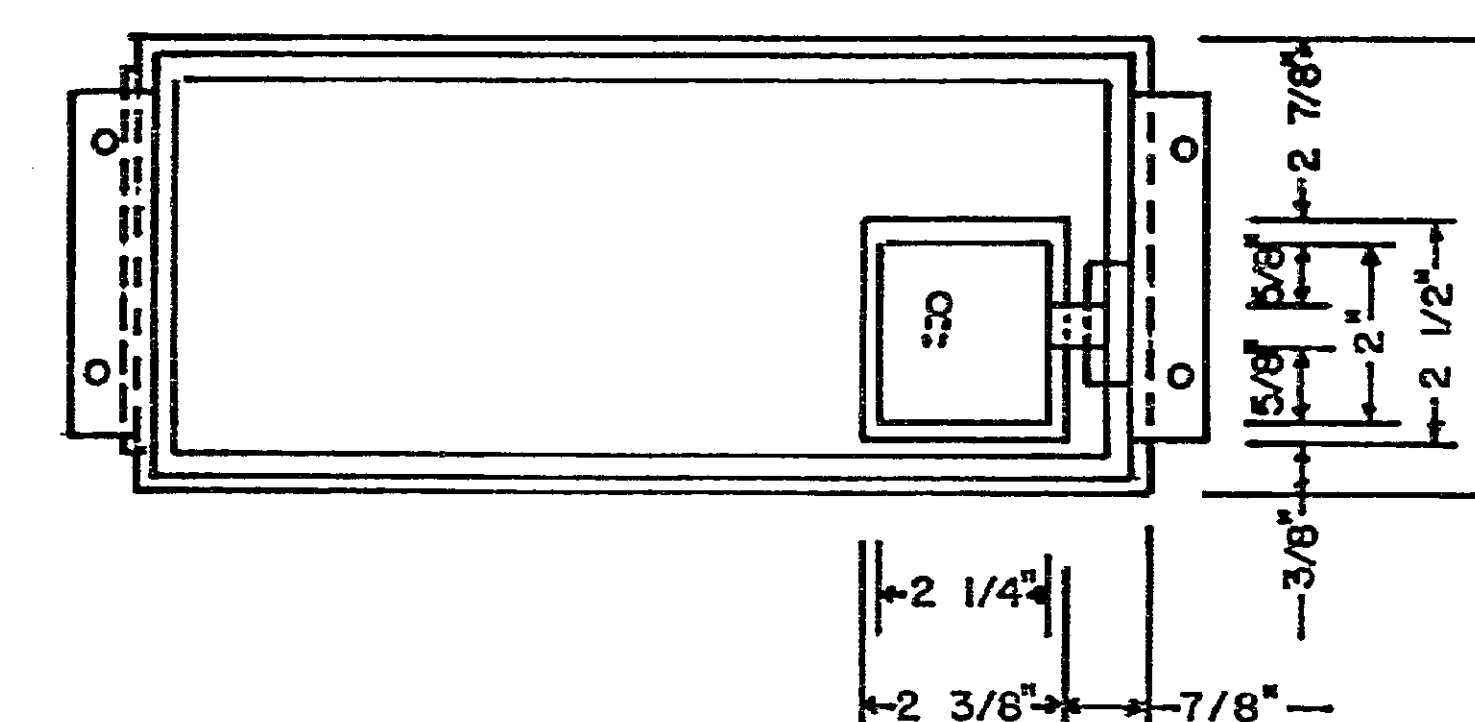
FRONT VIEW CLOSED DOOR



FRONT VIEW OPEN DOOR



RIGHT SIDE VIEW  
CLOSED DOOR



BACK VIEW CLOSED DOOR

## GENERATOR POWER PANEL ENCLOSURE

### NOTES

1. THE ENCLOSURE SHALL BE CONSTRUCTED OF 1/8" THICK ALUMINUM.
2. THE LOCK SHALL BE THE STANDARD POLICE DOOR TYPE, KEYED WITH THE STANDARD FLASHER DOOR SKELETON KEY.
3. THE DOOR SHALL BE SEALED WITH A FOAM RUBBER GASKET TO PREVENT MOISTURE FROM ENTERING THE ENCLOSURE.
4. THE ENCLOSURE SHALL BE MOUNTED ONTO THE OUTSIDE OF THE CONTROLLER CABINET WITH NON-ACCESSIBLE BOLTS AND SEALED WITH A HIGH QUALITY SILICON CAULK AT ALL SURFACES TOUCHING THE CABINET.
5. THE HINGE SHALL BE OF STAINLESS STEEL OR EQUIVALENT CORROSIVE-RESISTANT MATERIAL.

TRAFFIC CONTROL	DATE
GENERATOR POWER PANEL	1/94
	REV-6/94
	REV-10/94

## GENERAL INFORMATION

## INTRODUCTION

THIS REPORT CONSISTS OF THE SOIL INVESTIGATION OF THE INTERSECTION OF ALUM CREEK DRIVE AND S.R. 317. THE SECTION ALONG ALUM CREEK DRIVE IS APPROXIMATELY 0.2 MILES LONG AND EXTENDS FROM STATION 98+10 TO STATION 108+60. THE SECTION ALONG S.R. 317 IS APPROXIMATELY 0.14 MILES LONG AND EXTENDS FROM STATION 191+35 TO STATION 198+50. INCLUDED IN THIS REPORT IS A SOIL PROFILE OF BOTH SECTIONS.

## GEOLOGY OF THE SITE

THE PROJECT SITE IS LOCATED APPROXIMATELY 2.4 MILES TO THE EAST OF THE BIG WALNUT CREEK IN FRANKLIN COUNTY, OHIO. RELIEF ACROSS THE PROJECT SITE IS APPROXIMATELY FOUR FEET WITH A HIGH APPROXIMATE ELEVATION ALONG S.R. 317 OF 744.3 AT STATION 188+00 AND A LOW APPROXIMATE ELEVATION ALONG ALUM CREEK DRIVE OF 739.68 AT STATION 106+00.

THE PROJECT SITE LIES ON THE RELATIVELY SMOOTH MISSISSIPPI VALLEY PLAIN. THE AREA WAS ABRADED BY BOTH THE ILLINOIAN AND WISCONSIN ICE SHEETS LEAVING APPROXIMATELY 50 FEET IN THICKNESS OF DRIFT AND CONSISTS OF CROSBY-URBAN LAND COMPLEX WHICH IS PRIMARILY SILT LOAN AND CLAY. THE OHIO GEOLOGICAL SURVEY INDICATES THAT BEDROCK IN THE VICINITY OF THE SITE IS ANTICIPATED TO PRESENT AT AN APPROXIMATE ELEVATION OF 690 AND IS EXPECTED TO CONSIST OF DENSE SHALE AT ABOUT THE MIDDLE OF THE OHIO FORMATION WHICH IS DEVONIAN IN AGE.

## EXPLORATION

THE SUBSURFACE EXPLORATION PROGRAM FOR THIS PROJECT INCLUDED ADVANCING A TOTAL OF EIGHT ROADWAY DRIVE SAMPLE CORE BORINGS WITH A CME-75 TRUCK MOUNTED DRILLING RIG USING CONVENTIONAL 2.25 I.D. HOLLOW STEM AUGERS, PERFORMED DURING JULY, 1994.

## INVESTIGATIONAL FINDINGS

TEST BORINGS B-1, B-2, AND PAVEMENT CORE C-1 WERE ADVANCED ALONG THE SOUTHERN LEG. B-3, B-4, AND C-2 ALONG THE WESTERN LEG, B-5, B-6, AND C-3 ALONG THE NORTHERN LEG AND B-7, B-8, AND C-4 ALONG THE EASTERN LEG TO OBTAIN SUBSURFACE DATA FOR THE PAVEMENT DESIGN. MATERIALS ENCOUNTERED ON THE PROJECT SITE WERE PREDOMINANTLY COMPRISED OF SILT AND CLAY CLASSIFIED AS A-6A, CLAY CLASSIFIED AS A-7-6, AND ELASTIC CLAY CLASSIFIED AS A-7-5.

BEDROCK WAS NOT ENCOUNTERED AT ANY OF THE TEST LOCATIONS DURING THE DRILLING OPERATIONS. TEST BORINGS B-1 THROUGH B-8 WERE TERMINATED AT AN APPROXIMATE DEPTH OF TEN FEET BELOW THE EXISTING ROADWAY SURFACE.

THE RELATIVE CONSISTENCY OF THE COHESIVE SOILS WAS FOUND TO RANGE FROM "MEDIUM STIFF" TO "HARD," BUT WAS PREDOMINANTLY "STIFF" TO "VERY STIFF." THE LABORATORY ANALYSIS INDICATE THAT THE LIQUID LIMITS FOR THE SAMPLES TESTED RANGE FROM 32.4 TO 59.1 AND THE PLASTICITY INDICES RANGE FROM 13.4 TO 28.8. GENERALLY THE SAMPLES TESTED HAVE MEDIUM TO HIGH MOISTURE CONTENT. FOR SPECIFIC CONDITIONS AT VARIOUS DEPTHS, REFER TO THE INDIVIDUAL TEST BORING LOGS WHICH FORM A PART OF THESE PLANS.

## LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS - 10 SAMPLES TESTED

DESCRIPTION	T.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
GRAVEL AND/OR STONE FRAGMENTS	A-1-A (1)	A-1-A	---	---	---	---	---	---	---	---	---
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-B (1)	A-1-B	---	---	---	---	---	---	---	---	---
FINE SAND	A-3 (1)	A-3	---	---	---	---	---	---	---	---	---
COARSE AND FINE SAND	A-3A (1)	A-3A	---	---	---	---	---	---	---	---	---
GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT	A-2-4 (1)	A-2-4	---	---	---	---	---	---	---	---	---
GRAVEL AND/OR STONE FRAGMENTS WITH SAND, SILT, AND CLAY	A-2-6 (1)	A-2-6	---	---	---	---	---	---	---	---	---
SANDY SILT	A-4 (1)	A-4A	---	---	---	---	---	---	---	---	---
SILT	A-4 (1)	A-4B	---	---	---	---	---	---	---	---	---
ELASTIC SILT AND CLAY WITH OR WITHOUT ORGANIC MATERIAL	A-5 (1)	A-5	---	---	---	---	---	---	---	---	---
SILT AND CLAY	A-6 (8)	A-6A	9	9	12	34	36	32	13	16	7
SILTY CLAY	A-6 (1)	A-6B	---	---	---	---	---	---	---	---	---
ELASTIC CLAY	A-7-5 (20)	A-7-5	13	2	5	---	80	59	29	27	1
CLAY	A-7-6 (14)	A-7-6	1	2	4	---	93	44	23	19	2
TOP SOIL											
ROCK-SOIL MIXTURE											
PEAT OR ORGANIC MATERIAL											
LIMESTONE											
SANDSTONE											
SHALE											
AUGER BORING - PLAN VIEW											
DRIVE SAMPLE AND/OR CORE BORING - PLAN VIEW											
AUGER BORING PLOTTED TO VERTICAL SCALE ONLY											
DRIVE SAMPLE AND/OR CORE BORING PLOTTED TO VERTICAL SCALE ONLY											

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. e.g. 15

\* DENOTES COMBINED SILT AND CLAY CONTENT.

SYMBOLS SHOWN HEREIN CORRESPOND TO LOCATION AND DESIGN MANUAL, VOLUME I, ROADWAY DESIGN, DATED DECEMBER 1990 (REF. SECTION 701.2 - LEGEND AND CLASSIFICATION OF SOILS).

## SUMMARY OF SOIL TEST DATA

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC.

\* DENOTES COMBINED SILT AND CLAY CONTENT.

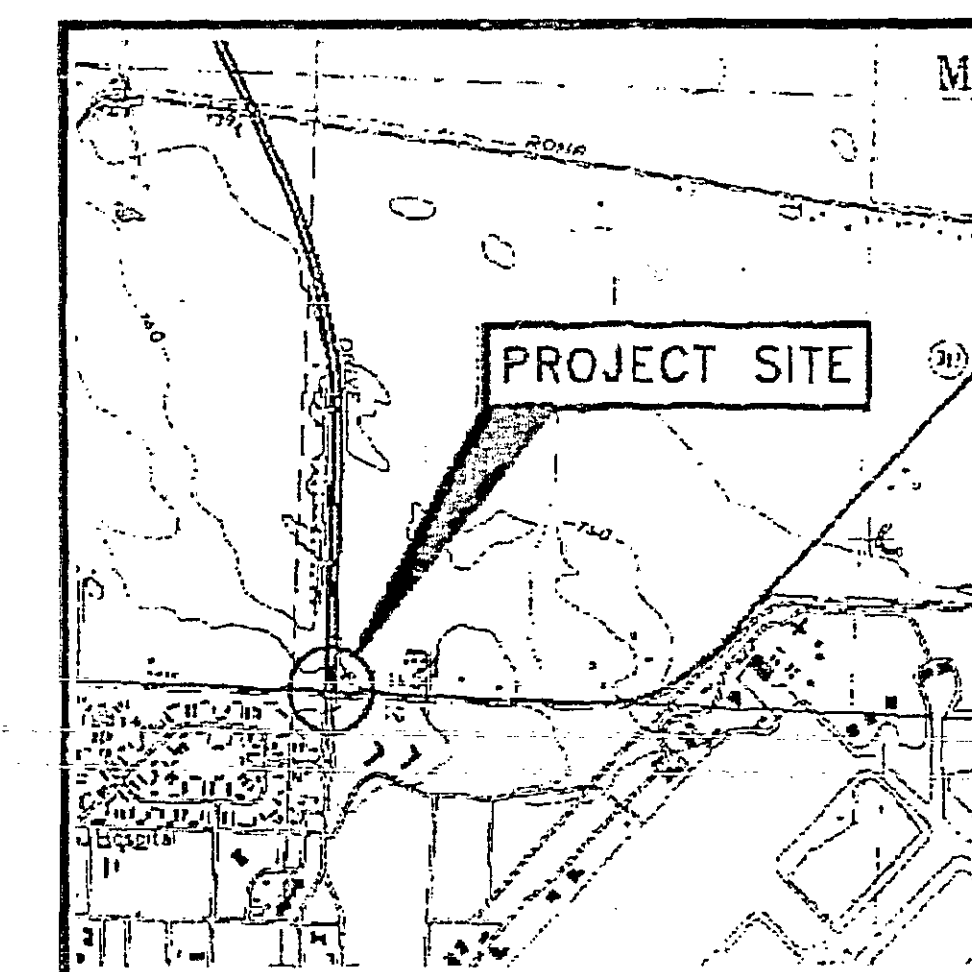
STATION & OFFSET	DEPTH	%	%	%	%	%	L.L.	P.I.	%	SHTL
FROM TO	AGG.	C.S.	F.S.	SILT	CLAY				W.C.	CLASS.
95 + 50 (B-1)	10 ft Rt.	0.0 - 0.7 0.7 - 1.5 1.5 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) BROWN SILT AND CLAY 9 12 12 28 39 BROWN SILT AND CLAY BROWN SILT AND CLAY						21 18 14	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
99 + 00 (B-2)	3 ft Rt.	0.0 - 0.7 0.7 - 1.3 1.3 - 1.5 1.5 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) BROWN SILT AND CLAY 8 10 16 BROWN SILT AND CLAY BROWN SILT AND CLAY BROWN SILT AND CLAY						66 * 32 13 15 13	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
191 + 95 (B-3)	14 ft Lt.	0.0 - 0.7 0.7 - 1.3 1.3 - 1.5 1.5 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) BROWN SILT AND CLAY 17 7 10 30 36 BROWN SILT AND CLAY BROWN SILT AND CLAY BROWN SILT AND CLAY						20 19 13	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
188 + 00 (B-4)	17 ft Rt.	0.0 - 0.6 0.6 - 1.4 1.4 - 1.5 1.5 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) BROWN CLAY BROWN CLAY 0 0 1 BROWN CLAY BROWN CLAY						99 * 41 20 28 14	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
101 + 00 (B-5)	36 ft Lt.	0.0 - 1.0 1.0 - 1.6 1.6 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) 12 12 17 BROWN SILT AND CLAY BROWN SILT AND CLAY BROWN SILT AND CLAY						59 * 14 13 12	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
106 + 00 (B-6)	30 ft Rt.	0.0 - 1.0 1.0 - 1.8 1.8 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) 2 3 6 12 12 16 BROWN SILT AND CLAY BROWN SILT AND CLAY						89 * 46 26 15 14	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
195 + 30 (B-7)	16 ft Rt.	0.0 - 0.7 0.7 - 1.5 1.5 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) 0 9 6 42 43 BROWN SILT AND CLAY BROWN SILT AND CLAY BROWN SILT AND CLAY							VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL
198 + 10 (B-8)	CL	0.0 - 0.7 0.7 - 1.5 1.5 - 3.5 3.5 - 5.5 5.5 - 8.0 8.0 - 10.0	ASPHALT ROADBASE (gravel) 13 2 5 4 4 8 46 38 BROWN SILT AND CLAY BROWN SILT AND CLAY						80 * 59 29 27 22 12	VISUAL VISUAL VISUAL VISUAL VISUAL VISUAL

SOIL PROFILE  
FRANKLIN COUNTY  
ALUM CREEK DRIVE AT S.R. 317

R & R INTERNATIONAL, INC.  
GEOTECHNICAL ENGINEERS GEOLOGISTS  
1234 CLEVELAND-MASSILLON ROAD P.O. BOX 4383 AKRON, OHIO 44321

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. R & R INTERNATIONAL, INC. ONLY GUARANTEES THAT DATA WHERE ACTUAL SAMPLES WERE SECURED AND TESTED. VARIATIONS WITHIN THE SAMPLING INTERVALS, AS WELL AS AMONG THE TEST LOCATIONS, MAY AND PROBABLY DO EXIST. INFORMATION PROVIDED HERE IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

ALL SOIL AND BEDROCK INFORMATION COLLECTED FOR THIS PROJECT, WHICH CAN BE CONVENIENTLY SHOWN ON THE SOIL PROFILE FOUNDATION INVESTIGATION SHEETS, HAS BEEN SO REPORTED. SOME ADDITIONAL SUBSURFACE INVESTIGATION, SOIL TESTS, AND BEDROCK BORINGS MAY BE AVAILABLE. CONTACT THE OHIO DEPARTMENT OF TRANSPORTATION TO CHECK IF ADDITIONAL INFORMATION IS AVAILABLE.



LOCATION MAP

Recon. - W.I.N. - 7/11/94

Drilling - Auger - J.R. - 7/14/94

Drafting - T.M. - 12/94

Reviewed -



