CUY-90-14.90

PID 77332/85531

APPENDIX EX-83

CUY-071-1640, CUY-90-0947 and CUY-490-0150

(Reference Document)

State of Ohio
Department of Transportation
Jolene M. Molitoris, Director

Innerbelt Bridge
Construction Contract Group 1 (CCG1)

Revision Date: 1984

2 - Addendum No. 2 - New Appendix

105

STATE OF OHIO PROJ 105-85
DEPARTMENT OF TRANSPORTATION

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

1/40

PLAN NO. BR-85-84

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII BEGIN	PROJECT TERMINII END	NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
1	CUY	I-71	16.40					CLEVELAND	
2	CUY	I-90	9.47 TO 22.00					CLEVELAND	BRATENAHL
3	CUY	I-480	1.50 TO 21.70					NORTH OLMSTED	
								INDEPENDENCE	
								GARFIELD HTS.	

APPROACH PAVEMENT REPAIR

The Standard 19 83 Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the plans and proposal shall govern these improvements.

I hereby approve these plans and declare that the making of these improvements will require the closing of the highways to traffic on Parts No. NONE and that detours will be provided by State forces. The closing to traffic of the highways will not be required on Parts No. 1, 2, & 3 and provisions for the maintenance and safety of traffic will be as indicated in the proposal.

Approved Date 3/14/84 — Walter A. Gallo
District Deputy Director of Transportation

JDR Approved Date 11-16-84 — Walter J. Gestings JDR
Engineer, Bureau of Bridges and Structural Design

JEB Approved Date 11-21-84 — James R. Longenecker
Chief Engineer, Operations

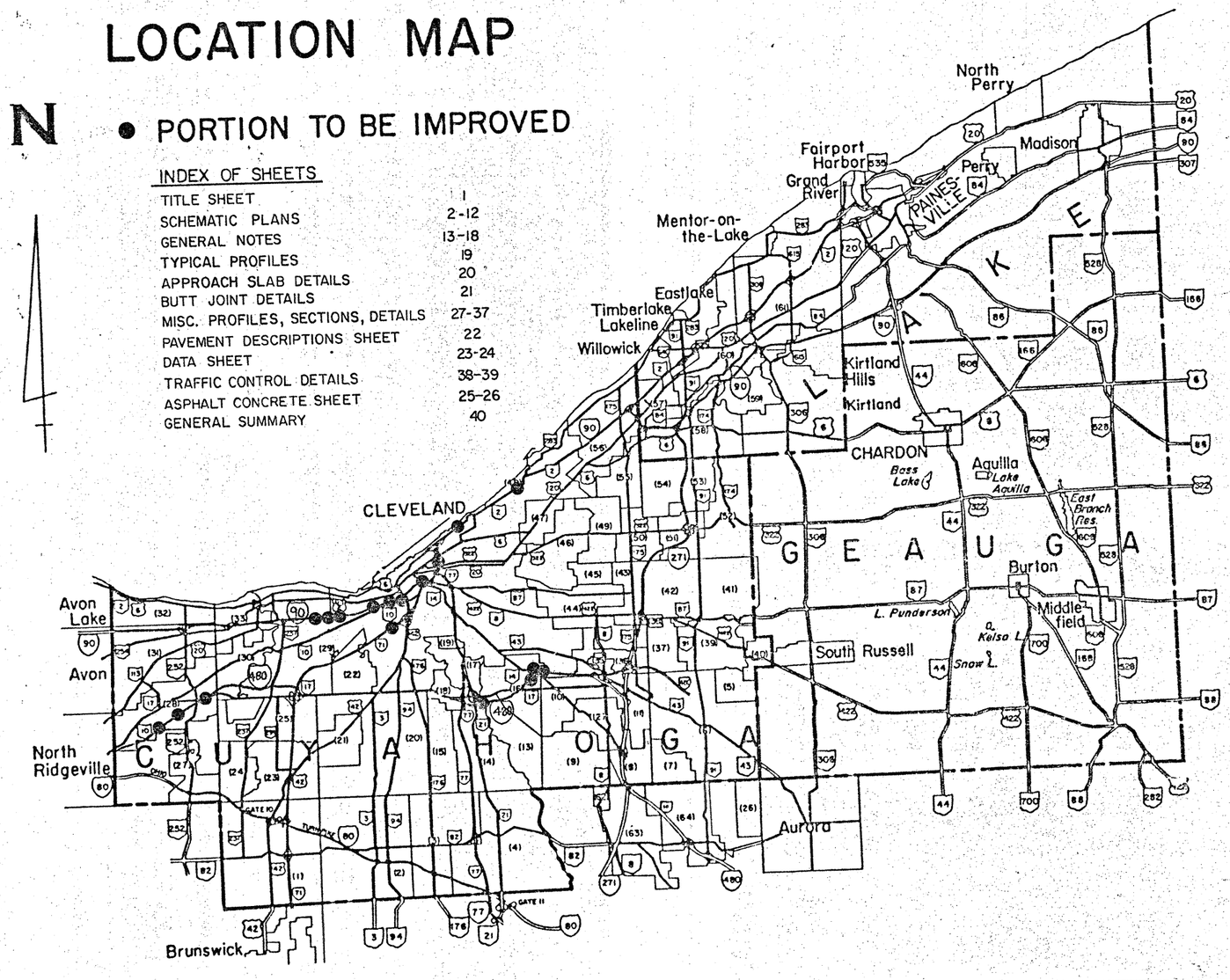
Approved Date 11-21-84 — Warren J. Smith
Director, Department of Transportation

LOCATION MAP

N

● PORTION TO BE IMPROVED

INDEX OF SHEETS



STRUCTURE NO. OR LOG PT.	FEATURE
CUY-71-1640	N & W R.R.
CUY-90-0947 L&R	W 140 ST.
CUY-90-0971 L&R	JOSLYN RD., CONRAIL, RTA
CUY-90-0991 L&R	BEREA RD.
CUY-90-1127 L&R	W. BLVD.
CUY-90-1146 L&R	W. 100 ST.
CUY-90-1152 L	W. 98 ST.
CUY-90-1490 R	STARKWEATHER AVE.
CUY-90-1506	KENILWORTH AVE.
CUY-90-1651	E. 14 ST.
CUY-90-19.72	W. OF E. 55 ST.
CUY-90-2200	E. 105 ST.
CUY-480-0150	STEARNS RD.
CUY-480-0286	FITCH RD.
CUY-480-4.86	GRACE RD
CUY-480-1839 L&R	CUYAHOGA RIVER
CUY-480-2163W	McCRACKEN RD
CUY-480-2165	McCRACKEN RD.
CUY-480-2170E	McCRACKEN RD.

2 WORKING DAYS
BEFORE YOU DIG
CALL TOLL FREE 800-362-2764
OHIO UTILITIES PROTECTION SERVICE

STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-5	7-16-81	803	5-27-83
TC-35.10	10-5-77		

8-42-1-85

M & R 695

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

2
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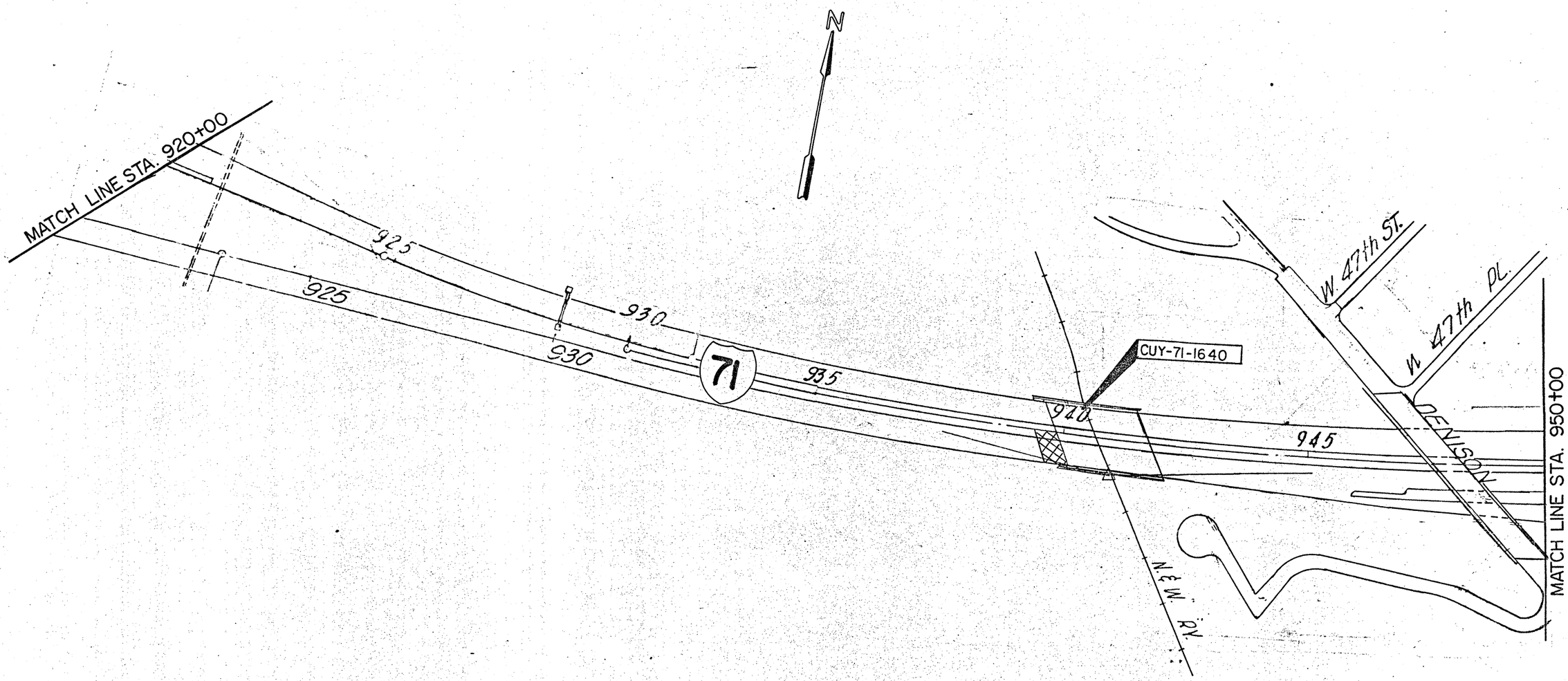
PLAN NO.
BR-85-84

SCHEMATIC PLAN



— WORK AREA, TYPICAL FOR ALL SCHEMATICS

M & R 695

SCHEMATIC PLAN

CUYAHOGA COUNTY
CUY- 71/90/480 - 16.40 /9.47/1.50

3
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PLAN NO.
BR-85-84

MATCH LINE STA. 665+00
W. 142 ST.
W. 140 ST.
90
670
RAMP 3
RAMP 4
680
CUY-90-0947 L&R
P.T. STA. 683+82.87
JOSLYN RD.
CUY-90-0971 L&R
R.T.A.
CONRAIL
690
MATCH LINE STA. 695+00
N
MATCH LINE STA. 695+00
BEREA RD.
S.C. STA. 699+86.65
700
C.S. STA. 705+20.04
CUY-90-0991 L&R
S.T. STA. 710+20.04
710
N
90
720
RAMP 5
730
RAMP 8
RAMP 7
W. 117th St.
MATCH LINE STA. 735+00

MATCH LINE STA. 735+00
RAMP 12
RAMP 11
RAMP 9
740
W. 110 ST.
750
90
W. 106 ST.
760
RAMP 14
RAMP 13
N
P.T. STA. 769+68.46
WEST BLVD.
770
CUY-90-1127 L&R
W. 100 ST.
T.S. STA. 775+57.89
S.C. STA. 779+57.89
780
CUY-90-1146 L&R
C.S. STA. 784+03.42
W. 98 ST.
S.T. STA. 788+03.42
790
RAMP 15
RAMP 16
CUY-90-1152 L
LORAIN AVE.
MATCH LINE STA. 800+00

M & R 695

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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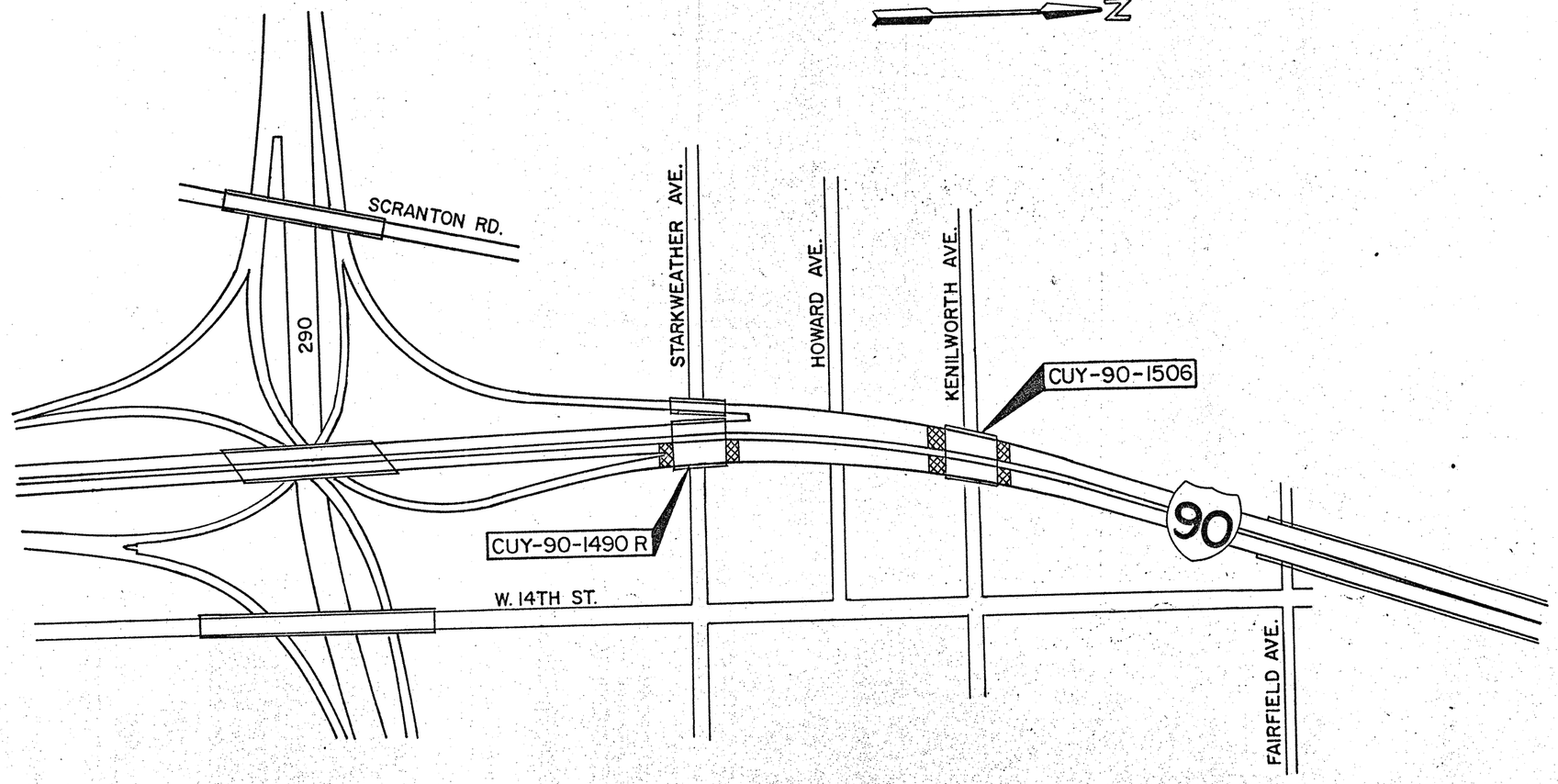
PLAN NO.
BR-85-84

SCHEMATIC PLAN



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SCHEMATIC PLAN

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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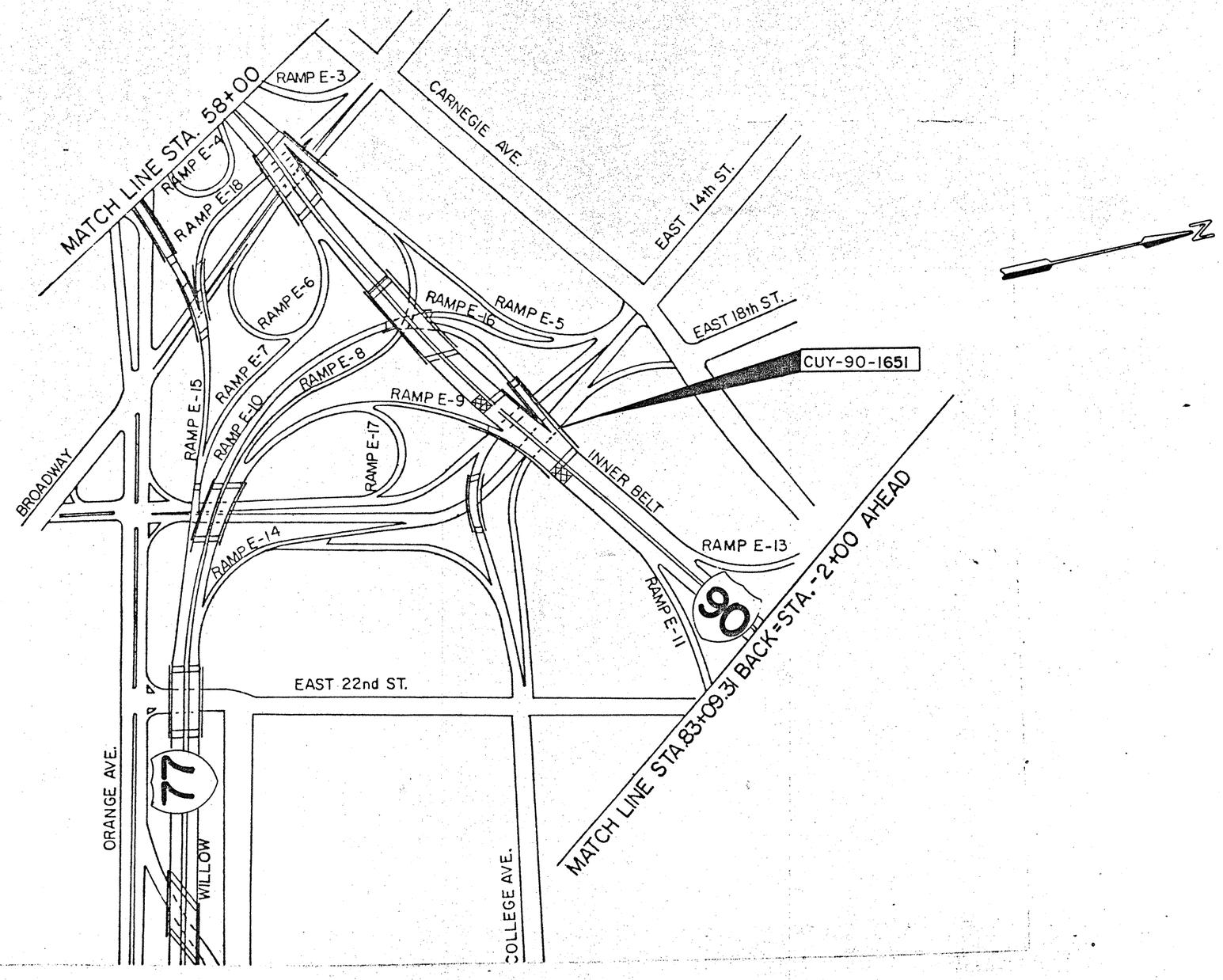

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SCHEMATIC PLAN

CUYAHOGA COUNTY
CUY-71/90/480 - 16.40/9.47/1.50

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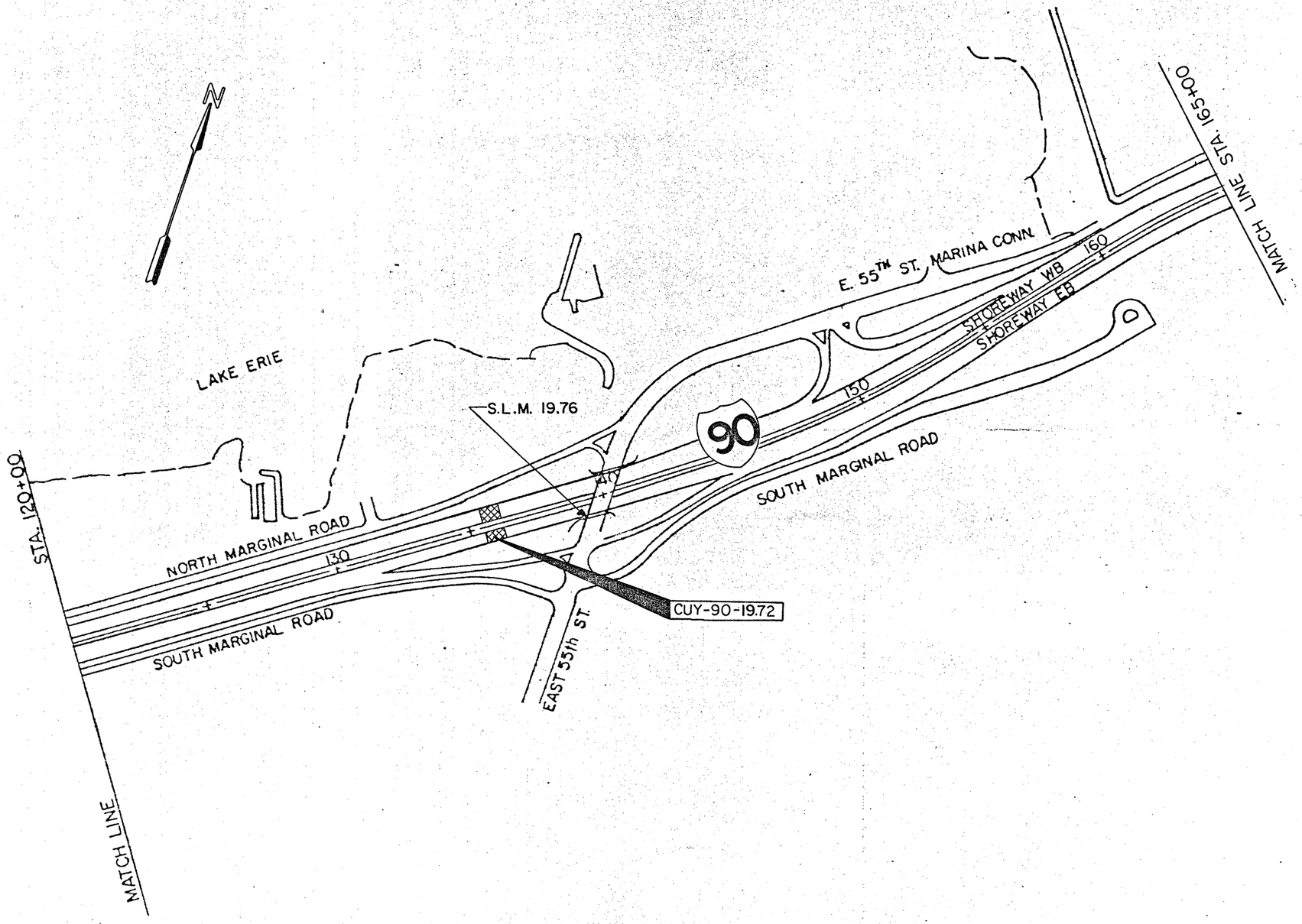

M & R 695

SCHEMATIC PLAN

CUYAHOGA COUNTY
CUY-71/90/480 — 16.40/9.47/1.50

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PLAN NO.
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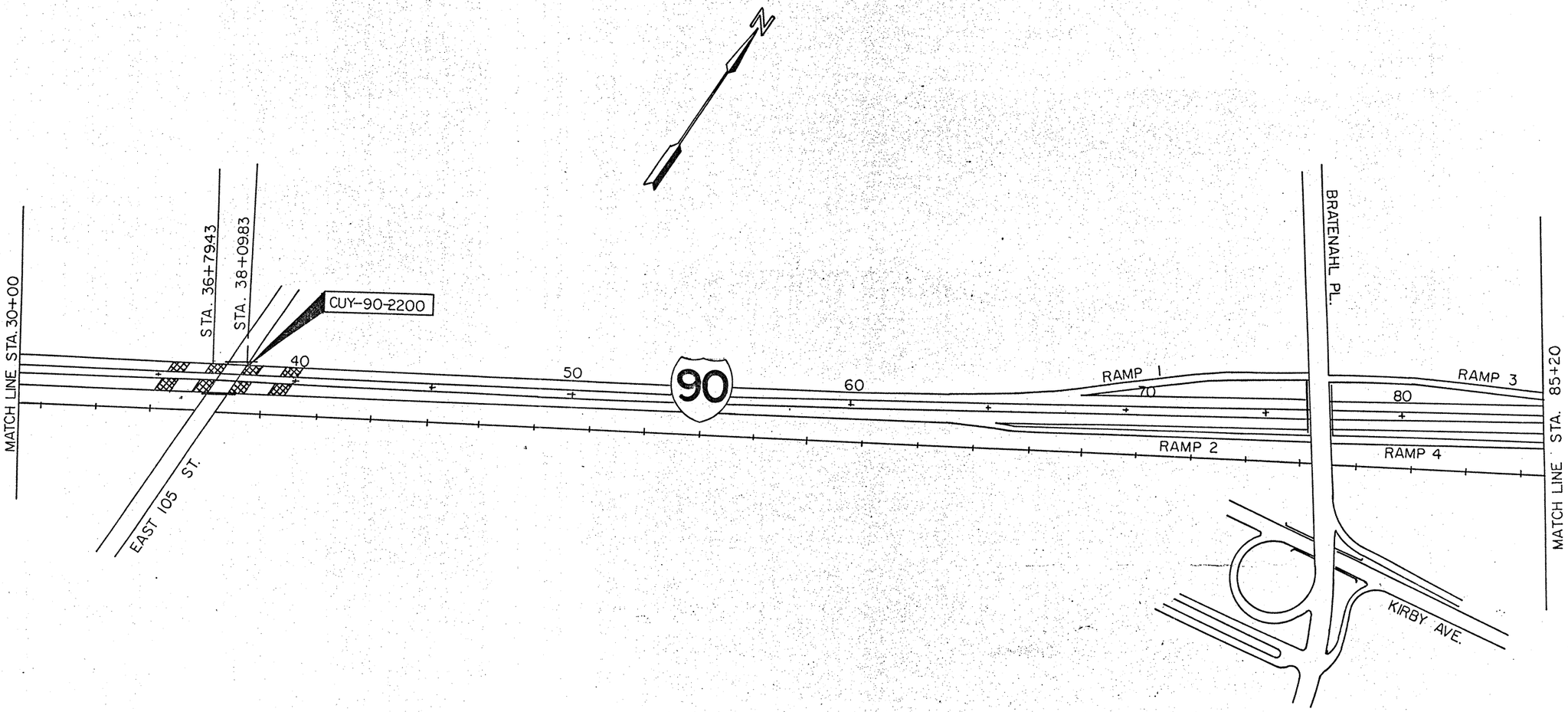

M & R 695

CUYAHOGA COUNTY
CUY- 71/90/480 - 16.40/9.47/1.50

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PLAN NO.
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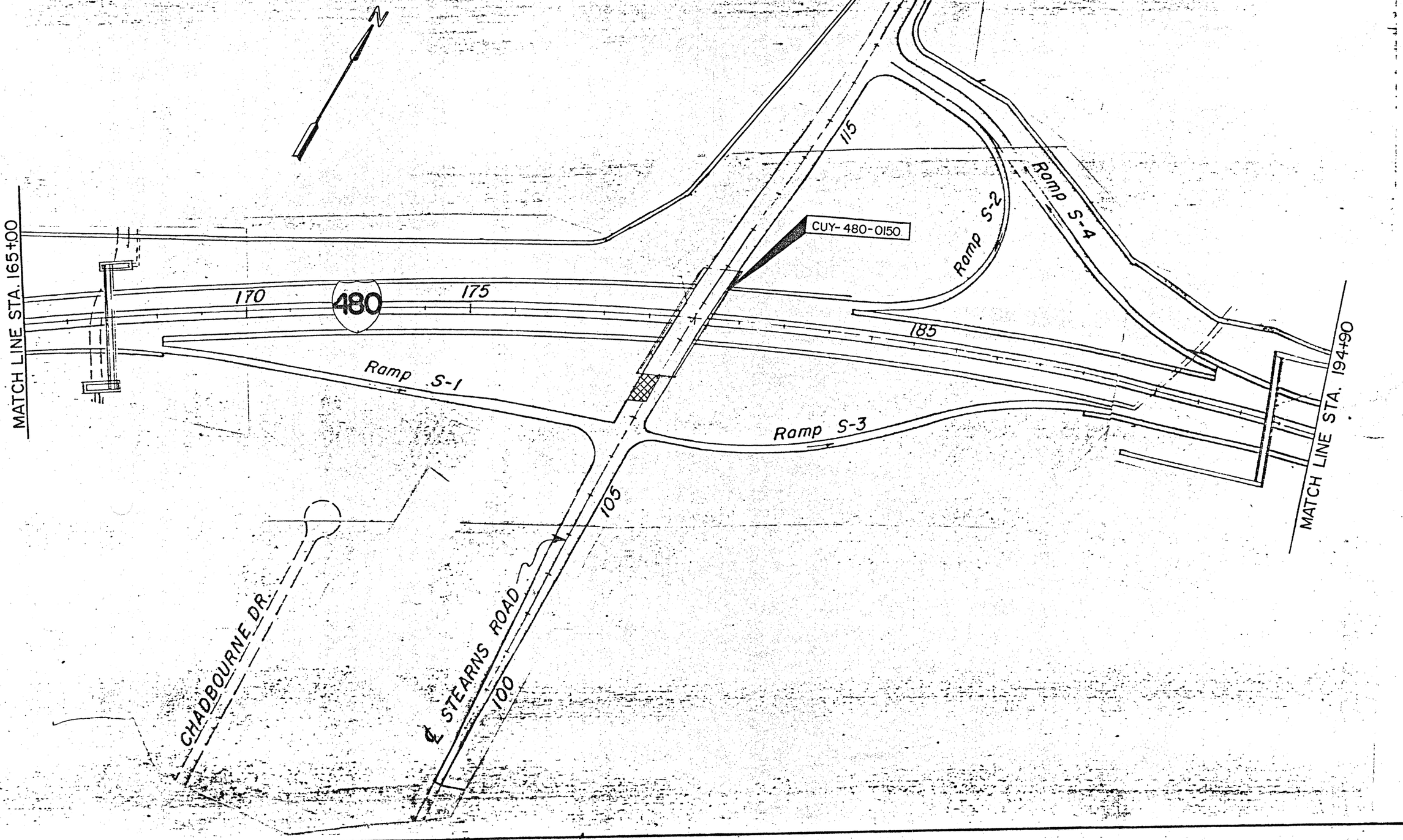

M & R 695

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47 /1.50

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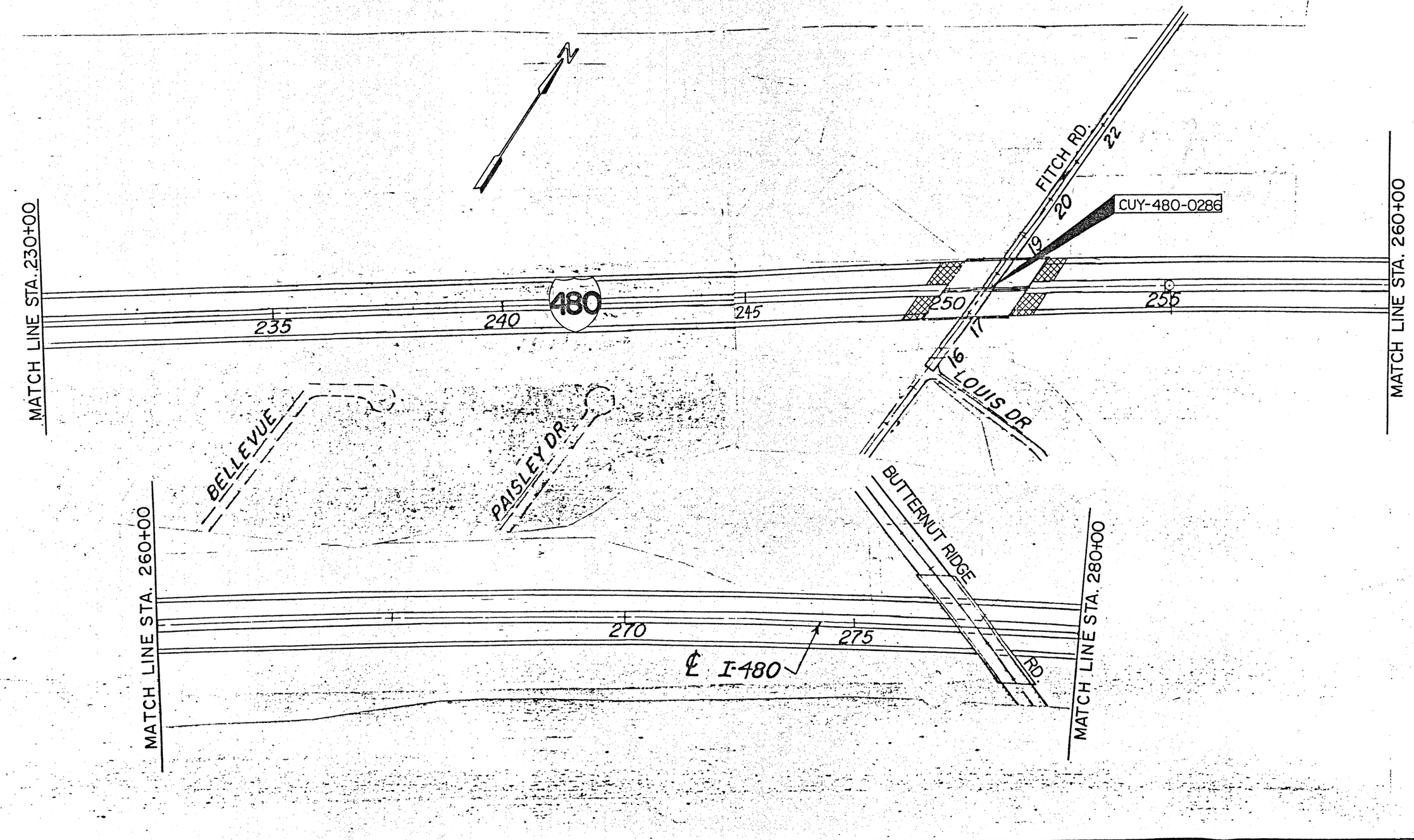

M & R 695

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CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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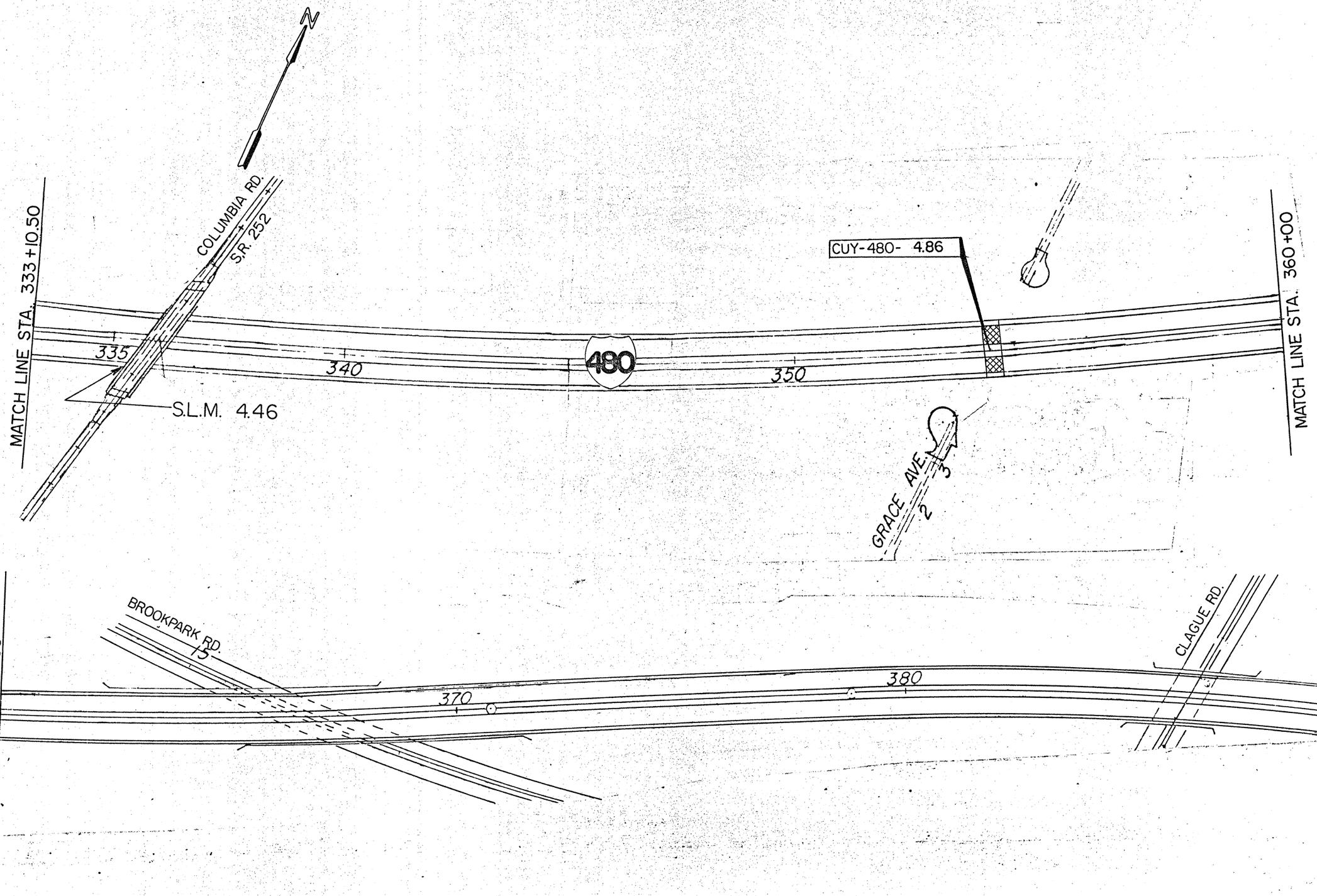

M & R 695

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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PLAN NO.
BR-85-84

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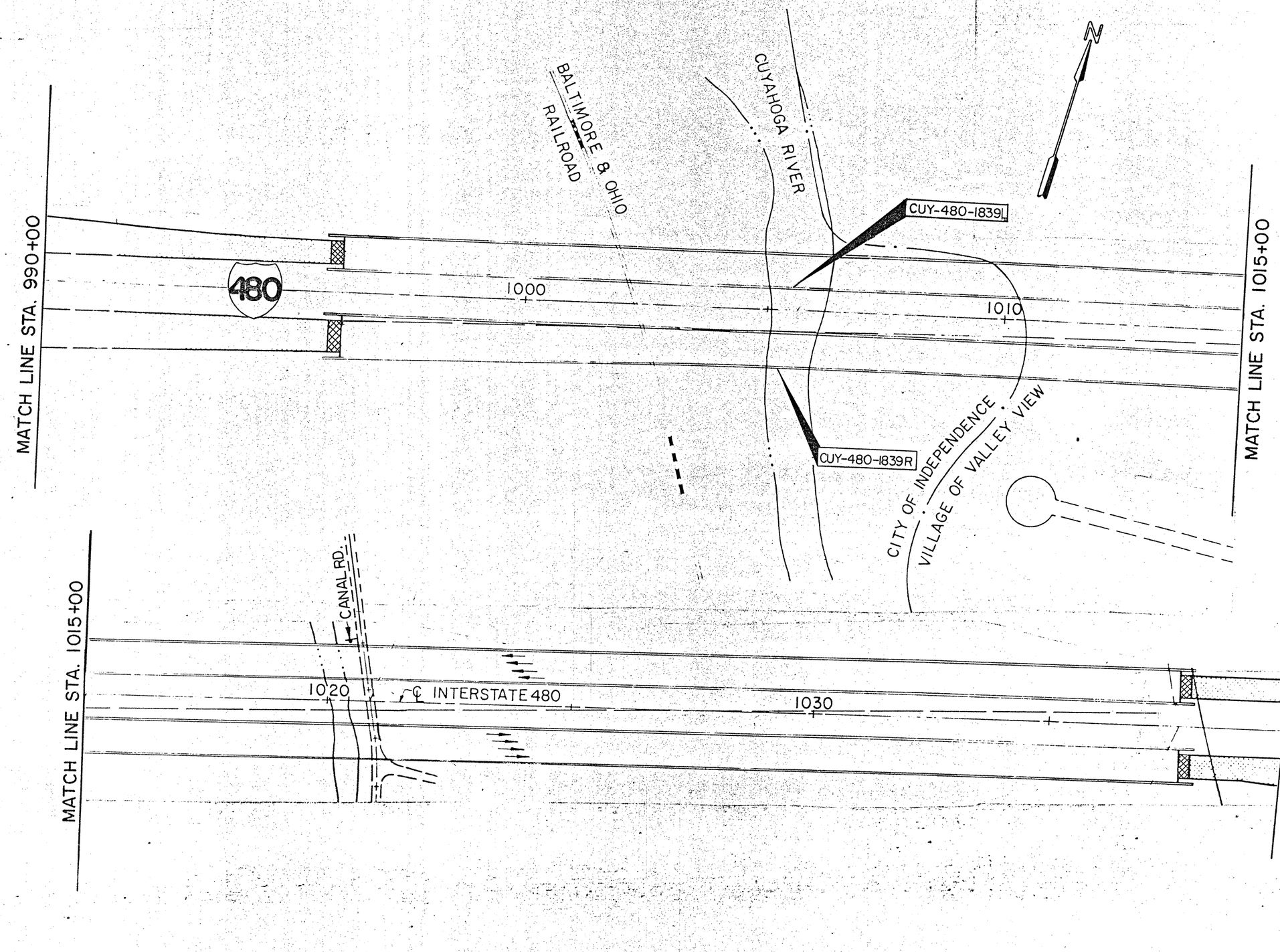

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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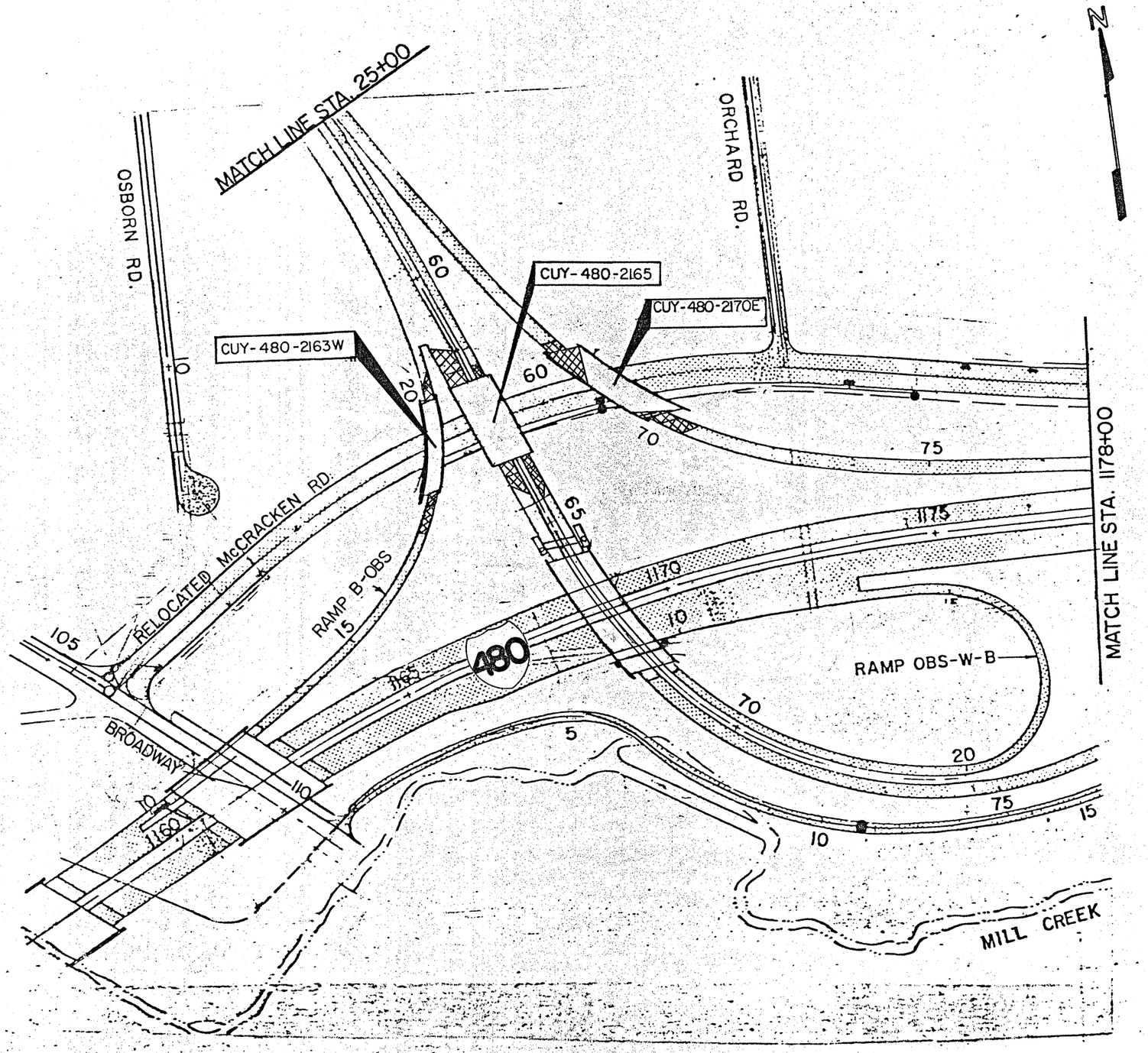
PLAN NO.
BR-85-84

SCHEMATIC PLAN



GENERAL NOTES

UTILITIES NOTIFICATION

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN IN THE PLANS.

THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY ARE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

THE CITY OF CLEVELAND, DIVISION OF ENGINEERING & CONSTRUCTION
601 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
664-2381

CITY OF CLEVELAND, DIVISION OF UTILITIES ENGINEERING
1201 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
664-3346

CITY OF CLEVELAND, DEPARTMENT OF PUBLIC SAFETY,
DEPARTMENT OF PUBLIC SERVICE
601 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
664-2200

THE CITY OF CLEVELAND WATER DEPARTMENT
1201 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
(216) 664-3346

CUYAHOGA COUNTY SANITARY ENGINEER
1219 ONTARIO
CLEVELAND, OHIO 44113
443-7600

CLEVELAND REGIONAL SEWER DISTRICT
CLEVELAND PLAZA
CLEVELAND, OHIO
781-6600

CLEVELAND PUBLIC POWER
1201 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
664-4600

GREATER CLEVELAND REGIONAL TRANSIT SYSTEM
615 SUPERIOR AVENUE NW
CLEVELAND, OHIO 44113
556-5100

CITY OF GARFIELD HEIGHTS
5555 TURNEY ROAD
GARFIELD HEIGHTS, OHIO 44125
475-1100

OHIO DEPARTMENT OF TRANSPORTATION
10100 BROADWAY
GARFIELD HEIGHTS, OHIO 44125
(216) 641-1926

CITY OF NORTH OLMSTED, ENGINEERING DEPARTMENT
5252 DOVER CENTER ROAD
NORTH OLMSTED, OHIO 44070
777-8000

CITY OF MAPLE HEIGHTS
5353 LEE ROAD
MAPLE HEIGHTS, OHIO 44137
662-6000

SUN PIPE LINE COMPANY
5161 YOUNG ROAD
HUDSON, OHIO 44236
655-2538

CITY OF INDEPENDENCE
6800 BRECKSVILLE ROAD
INDEPENDENCE, OHIO 44131
524-4131

VILLAGE OF VALLEYVIEW
6848 HATHAWAY ROAD
VALLEYVIEW, OHIO 44125
524-6511

GENERAL NOTES

THE CLEVELAND ELECTRIC ILLUMINATING CO.
55 PUBLIC SQUARE
CLEVELAND, OHIO 44101
(216) 623-1350

THE EAST OHIO GAS CO.
1201 EAST 55th STREET
CLEVELAND, OHIO 44103
(216) 351-2753

OHIO BELL TELEPHONE CO.
820 WEST SUPERIOR AVE.
CLEVELAND, OHIO 44113
(216) 822-6241

STANDARD OIL OF OHIO
P.O. BOX 188
VANDALIA, OHIO 45377
575-4141

LAUREL PIPE LINE COMPANY
P.O. BOX 426
CAMP HILL, PENNSYLVANIA 17011

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

RIGHT-OF-WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY.

EXISTING PAVEMENT

EXISTING PAVEMENT THICKNESSES AND AREAS HAVE BEEN TAKEN FROM THE RECORDS AND ARE BELIEVED TO REPRESENT THE EXISTING PAVEMENT, BUT THE STATE DOES NOT GUARENTEE THE ACCURACY OF THE SAME.

FOR FURTHER INFORMATION IN REGARD TO THE EXISTING PAVEMENTS, THE CONTRACTOR SHALL REFER TO THE PREVIOUS CONSTRUCTION PLANS. THESE PLANS MAY BE REVIEWED AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 12 OFFICE, 10100 BROADWAY AVENUE, GARFIELD HEIGHTS, OHIO.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE APPROACH SLABS, AND ROADWAY HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATION AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE APPROACH SLABS AND ROADWAY AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 102.05 AND 105.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE APPROACH SLABS AND ROADWAY BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON THE ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

PLANS OF EXISTING BRIDGES

CONSTRUCTION PLANS FOR THE EXISTING BRIDGES, APPROACH SLABS AND ROADWAY ARE ON FILE AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 12, 10100 BROADWAY AVENUE, GARFIELD HEIGHTS, OHIO, AND ARE AVAILABLE FOR VIEWING.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATION IS INTENDED.

GENERAL NOTES

PLAN NO.
BR-85-84

BUTT JOINTS

BUTT JOINTS SHALL BE MADE PARALLEL TO THE ENDS OF THE APPROACH SLAB EXCEPT IF THE SKEW ANGLE IS LESS THAN 5 DEGREES, THEN THE BUTT JOINT SHALL BE MADE AT A 12:1 ANGLE AS SHOWN ON SHEET 21.

HE COST OF REMOVAL FOR THE BUTT JOINT SHALL BE INCLUDED IN THE PERTINENT REMOVAL ITEM. THE COST OF ANY SAW CUT SHALL BE INCLUDED IN THE PERTINENT REMOVAL ITEM.

ASPHALT APPROACHES AT BRIDGES

THE CONTRACTOR SHALL ESTABLISH CONTROLS AT 10 FOOT INTERVALS, BOTH ACROSS THE APPROACH SLAB AND IN THE FEATHER AREA. VARIATIONS FROM THE GRADE LINE IN EXCESS OF 1/4 INCH SHALL BE UNACCEPTABLE AT WHICH TIME THE ASPHALT PROVIDED FOR THE APPROACH SLAB AND TRANSITION AREA SHALL BE REMOVED AND REPLACED TO THE ABOVE TOLERANCE AT NO ADDITIONAL COST TO THE STATE.

EXCEPTIONS TO APPROACH SLAB REPAIR

SEVERAL PORTIONS OF THIS REPAIR PROJECT ARE NOT ON APPROACH SLABS. THESE EXCEPTIONS EXHIBIT THE SAME ROUGHNESS AND POOR RIDEABILITY AS THE OUT OF GRADE APPROACH SLABS. THEY ARE AS FOLLOWS:

CUY-90-19.72	PAVEMENT CRUSHED
CUY-480-4.86	ROUGH PAVEMENT JOINT
CUY-480-2163W	BRIDGE LOWER THAN APPROACH PAVEMENT
CUY-480-2165	BRIDGE LOWER THAN APPROACH PAVEMENT
CUY-480-2170E	BRIDGE LOWER THAN APPROACH PAVEMENT

THE REPAIRS FOR THE ABOVE LOCATIONS ARE ADDRESSED SEPARATELY IN THE PLANS.

ITEMS 407 - TACK COAT AND COVER AGGREGATE

ITEM-407 TACK COAT AND ITEM-407 COVER AGGREGATE SHALL BE APPLIED TO ALL PAVEMENTS, APPROACH SLABS, AND SHOULDERS WHERE ITEM 403-ASPHALT CONCRETE OR ITEM 404-ASPHALT CONCRETE IS TO BE PLACED.

ITEM 202 - RAISED PAVEMENT MARKERS REMOVED FOR STORAGE

RAISED PAVEMENT MARKERS SHALL BE REMOVED IN A MANNER THAT PREVENTS DAMAGE TO THE CASTINGS. ALL DEPRESSIONS CAUSED BY REMOVAL OF THE MARKERS SHALL BE FILLED WITH 404 TO THE EXISTING ROAD SURFACE PRIOR TO RESURFACING. REMOVED MARKERS ARE TO BE STORED ON THE RIGHT-OF-WAY WITHIN THE PROJECT LIMITS BY THE CONTRACTOR AS DIRECTED. ALL COSTS TO BE INCLUDED IN THE CONTRACT BID FOR ITEM 202, RAISED PAVEMENT MARKERS REMOVED FOR STORAGE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM	DESCRIPTION	QUANTITY	UNIT
202	RAISED PAVEMENT MARKERS REMOVED FOR STORAGE	10	EACH

ITEM SPECIAL - PAVEMENT PLANING, BITUMINOUS WITHOUT HEATING

TRAFFIC SHALL NOT BE EXPOSED TO TRANSVERSE VERTICAL FACES.

THE TIME BETWEEN PLANING OPERATIONS AND OVERLAY OPERATIONS SHALL BE KEPT TO A MINIMUM, AND SHALL IN NO CASE EXCEED 36 HOURS.

ANY NECESSARY CLEANING, INCLUDING DEBRIS REMOVAL, SHALL BE INCLUDED IN THE COST OF PAVEMENT PLANING.

QUANTITIES FOR BERMS ADJACENT TO THE APPROACH SLAB HAVE BEEN INCLUDED IN THE APPROACH SLAB AREA. QUANTITIES FOR BERMS ADJACENT TO THE ROADWAY HAVE BEEN INCLUDED IN THE ROADWAY AREA.

PAYMENT SHALL BE PER SQUARE YARD OF ITEM SPECIAL-PAVEMENT PLANING, BITUMINOUS WITHOUT HEATING.

ITEM SPECIAL - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE

TRAFFIC SHALL NOT BE EXPOSED TO TRANSVERSE VERTICAL FACES.

THE TIME BETWEEN PLANING OPERATIONS AND OVERLAY OPERATIONS SHALL BE KEPT TO A MINIMUM, AND SHALL IN NO CASE EXCEED 36 HOURS.

ANY NECESSARY CLEANING ALONG THE CURB, INCLUDING DEBRIS REMOVAL, SHALL BE INCLUDED IN THE COST OF PAVEMENT PLANING.

QUANTITIES FOR BERMS ADJACENT TO THE APPROACH SLAB HAVE BEEN INCLUDED IN THE APPROACH SLAB AREA. QUANTITIES FOR BERMS ADJACENT TO THE ROADWAY HAVE BEEN INCLUDED IN THE ROADWAY AREA.

PAYMENT SHALL BE PER SQUARE YARD OF ITEM SPECIAL-PAVEMENT PLANING, PORTLAND CEMENT CONCRETE.

GENERAL NOTES

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50 (16/40)

PLAN NO.
BR-85-84

ITEM SPECIAL - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT

REPAIR AREAS SHALL BE AS DIRECTED BY THE ENGINEER.

A TYPICAL SECTION IS SHOWN ON SHEET 29.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM	DESCRIPTION	QUANTITY	UNIT
SPECIAL	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT	146	S.Y.

ITEM 614 - MAINTAINING TRAFFIC

GENERALLY THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AS TO MAKE THE PROPOSED APPROACH SLAB REPAIR AND SMOOTHING WITH A MINIMUM OF HAZARD, DELAY AND INCONVENIENCE TO THE MOTORIST USING THE HIGHWAY AFFECTED BY THE WORK DONE UNDER THIS CONTRACT. IN ADDITION TO THE CONSTRUCTION AND MATERIAL SPECIFICATION, THE FOLLOWING PROVISIONS ARE MANDATORY.

I. NOTIFICATION
SINCE FUNCTIONAL TRAFFIC IS A MAJOR CONCERN ON THIS PROJECT, IT IS ESSENTIAL THAT THE MOTORING PUBLIC BE ADEQUATELY FOREWARNED OF FUTURE LANE CLOSURES AND TRAFFIC CONSTRICTIONS. THE CONTRACTOR SHALL SUBMIT A SCHEDULE TO THE OHIO DEPARTMENT OF TRANSPORTATION INDICATING THE LOCATIONS AND DATES OF EACH LANE CLOSURE AT LEAST 3 DAYS PRIOR TO THE IMPLEMENTATION OF ANY SUCH CLOSURE.

II. NIGHTTIME (PERIOD FROM 9:30 PM TO 6:30 AM) WORK
NIGHTIME WORK SHALL NOT BE PERMITTED.

III. RESTRICTIONS

ALL THROUGH TRAFFIC LANES SHALL BE KEPT OPEN AT ALL TIMES EXCEPT AS NOTED HERE AND IN THE MAINTENANCE OF TRAFFIC PLANS. AT LEAST ONE THROUGH LANE SHALL BE MAINTAINED AT ALL TIMES.

DURING PROJECT WORK, 3-LANE TRAFFIC MAY BE RESTRICTED TO ONE THROUGH LANE AND 4-LANE TRAFFIC MAY BE RESTRICTED TO TWO THROUGH LANES ON THE EXISTING PAVEMENT ONLY DURING DAYLIGHT. TWO-LANE CLOSURES SHALL BE MINIMIZED.

TWO LANES OF TRAFFIC SHALL BE KEPT OPEN AT ALL TIMES ON CUY-90-1651, CUY-480-0286, AND CUY-480-4.86.

PROJECT WORK MAY IMPLEMENT THE ABOVE LANE RESTRICTIONS AT THE FOLLOWING TIMES ONLY:

WEEKDAYS
AFTER 9:00 AM UNTIL DUSK

CUY-90-0947R (EB)
CUY-90-0971R (EB)
CUY-90-0991R (EB)
CUY-90-1127R (EB)
CUY-90-1146R (EB)

DAWN TO 3:00 PM

CUY-90-0947L (WB)
CUY-90-0971L (WB)
CUY-90-0991L (WB)
CUY-90-1127L (WB)
CUY-90-1147L (WB)
CUY-90-1152L (WB)

FROM 9:00 AM TO 3:00 PM ONLY

CUY-71-1640
CUY-90-1490R
CUY-90-1506
CUY-90-1651
CUY-90-1972
CUY-90-2200
CUY-480-0286
CUY-480-4.86
CUY-480-1839 R&L
CUY-480-2163 W
CUY-480-2165
CUY-480-2170 E

SATURDAY AND SUNDAY
DAYLIGHT HOURS ON ALL BRIDGES

LANES MAY NOT BE RESTRICTED DURING INCREASED TRAFFIC VOLUME CAUSED BY A SPECIAL EVENT.

GENERAL NOTES

THE CONTRACTOR SHALL NOT ROUTE TRAFFIC ON BOTH SIDES OF A LANE CLOSURE.

WITHIN THE LENGTH OF THE CLOSURE, PROVISION SHALL BE MADE TO CONTROL THE TRAFFIC ENTERING AND EXITING ON RAMPS AS NECESSARY TO PREVENT WRONG MOVEMENTS AND TO KEEP VEHICLES OFF NEW PAVEMENT NOT READY FOR TRAFFIC.

IV. TRAFFIC CONTROL SYSTEMS

A. WHEN REQUIRED

WHENEVER ANY PART OF THE TRAVELED SURFACE IS BEING WORKED UPON OR IS OTHERWISE NOT SUITABLE FOR SAFE AND CONVENIENT USE BY VEHICLES, TRAFFIC CONTROL DEVICES, SUFFICIENT TO PROTECT SUCH AREAS TO ASSURE THE SAFE AND CONVENIENT PASSAGE OF VEHICULAR TRAFFIC, SHALL BE INSTALLED AND MAINTAINED. SUCH TRAFFIC CONTROL DEVICES AND THE MANNER IN WHICH THEY ARE USED SHALL BE CONSISTENT WITH THESE PLANS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, HEREINAFTER REFERRED TO AS THE "MANUAL". THE TRAFFIC CONTROL DEVICE SYSTEM SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL FOR EACH PARTICULAR SITUATION. WHENEVER THE ENGINEER DEEMS IT NECESSARY, EXPECIALLY WHERE A GRADE, CURVE, OR MERGE CONDITION EXISTS, HE MAY DIRECT THAT ADDITIONAL OR ALTERNATIVE DEVICES BE USED.

B. CONDITIONS

DURING ALL PARTS OF THIS PROJECT, SIGNING, CONES, ETC. SHALL BE LOCATED AS INDICATED IN THE PLANS. THE NUMBER OF LANES MAINTAINED SHALL BE AS INDICATED ON THE TRAFFIC CONTROL SHEETS AND NOTES.

C. ADVANCE WARNING SIGNS

ALL ADVANCE WARNING SIGNS FOR ANY CONDITION WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHENEVER THEY ARE NOT APPLICABLE.

D. FLASHING ARROW REQUIREMENT

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORISTS SHALL BE WARNED AND DIRECTED BY THE CONTRACTOR THROUGH THE USE OF ONE FLASHING ARROW FOR EACH LANE CLOSED IN ADDITION TO THOSE PROVISIONS SET FORTH IN THE "MANUAL" AND STD. DWG. TC-35.10.

GENERAL NOTES

E. LAW ENFORCEMENT OFFICER WITH PATROL CAR

THE CONTRACTOR SHALL PROVIDE AND PAY ALL COST FOR THE SERVICES OF LAW ENFORCEMENT OFFICERS AND PATROL CARS FOR THE EXCLUSIVE PURPOSE OF CONTROLLING TRAFFIC AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL DETERMINE THE NUMBER OF OFFICERS AND CARS REQUIRED FOR THIS PURPOSE. THE OFFICERS SHALL MOVE THEIR PATROL CARS AS NECESSARY TO MAXIMIZE THEIR EFFECT ON TRAFFIC. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS REGARDING SCHEDULING OF AND PAYMENT FOR THE LAW ENFORCEMENT OFFICERS AND PATROL CARS. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL-LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM	DESCRIPTION	QUANTITY	UNIT
SPEC	LAW ENFORCEMENT OFFICER WITH PATROL CAR	50	HRS.

G. FAILURE TO COMPLY

IF THERE IS ANY FAILURE TO COMPLY WITH PROVISIONS FOR TRAFFIC CONTROL SET OUT IN THESE PLANS AND NOTES, OR WITH THE PROVISIONS OF THE "MANUAL", THE HIGHWAY IN THE VICINITY OF THE WORK AREA SHALL NOT BE CONSIDERED IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC. ANY FAILURE TO KEEP THE HIGHWAY IN THE VICINITY OF THE WORK AREA IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF THIS CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS.

V. TRAFFIC CONTROL MATERIAL

A. SIGNS
SIGN DIMENSIONS AND SPECIFICATIONS, INCLUDING LETTER SIZES SHALL BE AS PROVIDED IN THE "MANUAL", OR IN SIGN DESIGN DRAWINGS PROVIDED BY THE DEPARTMENT OF TRANSPORTATION. THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THE PROJECT.

B. SIGN SUPPORTS
SIGN SUPPORTS SHALL BE OF SUFFICIENT SIZE AND HEIGHT AS TO SUPPORT THE SIGNS AT LEAST 1 FOOT ABOVE THE PAVEMENT. SUPPORTS SHALL ALSO BE ADEQUATE IN MASS AND STABILITY TO PREVENT THE SIGNS BEING BLOWN OVER BY WIND OR VEHICULAR GENERATED AIR TURBULENCE.

C. FLASHING ARROWS
THE ELECTRIC FLASHING ARROW SHALL BE OF TYPE A, AS SHOWN IN STANDARD CONSTRUCTION DRAWING TC-35.10. PAYMENT FOR THIS SHALL BE INCLUDED UNDER ITEM 614-MAINTAINING TRAFFIC.

D. CONES
CONES SHALL BE 36 INCHES IN HEIGHT. CONES SHALL BE LOCATED AS SHOWN ON THE TRAFFIC CONTROL PLANS. ALL COSTS FOR INSTALLING, MAINTAINING AND SUBSEQUENT REMOVAL OF SAID CONES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

M & R 695

TYPICAL PROFILES

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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PLAN NO.
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DEPRESSION LENGTH DL / STRAIGHT GRADE

APPROACH SLAB BACKWALL JOINT (TYP.)

1 1/4" DEPTH OR TO BOTTOM OF DEPRESSION WHICHEVER IS GREATER

ITEM SPECIAL - PAVEMENT PLANING, BITUMINOUS, W/O HEATING

ITEM-404 - ASPHALT CONCRETE 1 1/4" OR AS NECESSARY

STRAIGHT GRADE (TYP.)

BUTT JOINT

AA

ASPHALT

ASPHALT

PLANE ASPHALT ON BACKWALL REPLACE WITH 404

ITEM-404 - ASPHALT CONCRETE 1 1/4" OR AS NECESSARY

ITEM SPECIAL - PAVEMENT PLANING, BITUMINOUS, W/O HEATING

ITEM SPECIAL - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE

BUTT JOINT

AC

ASPHALT

CONCRETE

SAW CUT

THE FINAL GRADE OF THE ASPHALT OVERLAY ON THE APPROACH SLAB AND PAVEMENT SHALL BE SET BY TWO POINTS; THE END OF THE BRIDGE (BRIDGE-APPROACH SLAB INTERSECTION ①) AND THE END OF THE DEPRESSION POINT (AT THE BUTT JOINT ②).

① TYPICAL

② TYPICAL

ITEM SPECIAL - PAVEMENT PLANING PORTLAND CEMENT CONCRETE

ITEM 404 - ASPHALT CONCRETE 1 1/4" OR AS NECESSARY

BUTT JOINT

CC

CONCRETE

CONCRETE

SAW CUT

DO NOT DAMAGE BACKWALL

BRIDGE

L AVG.

F

APPROACH SLAB

APPROACH PAVEMENT

TYPICAL PROFILES

M & R 695

APPROACH SLAB DETAILS

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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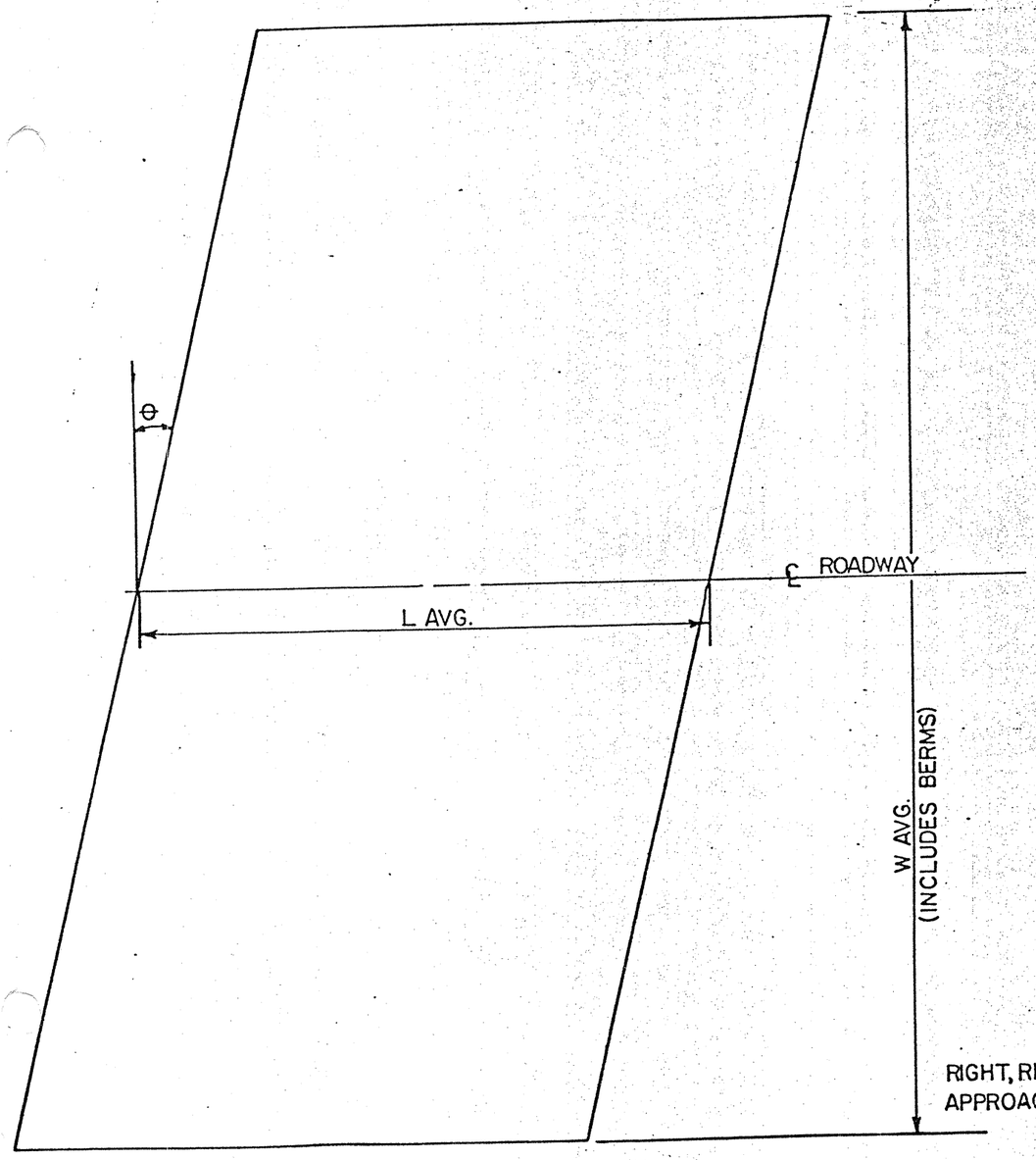
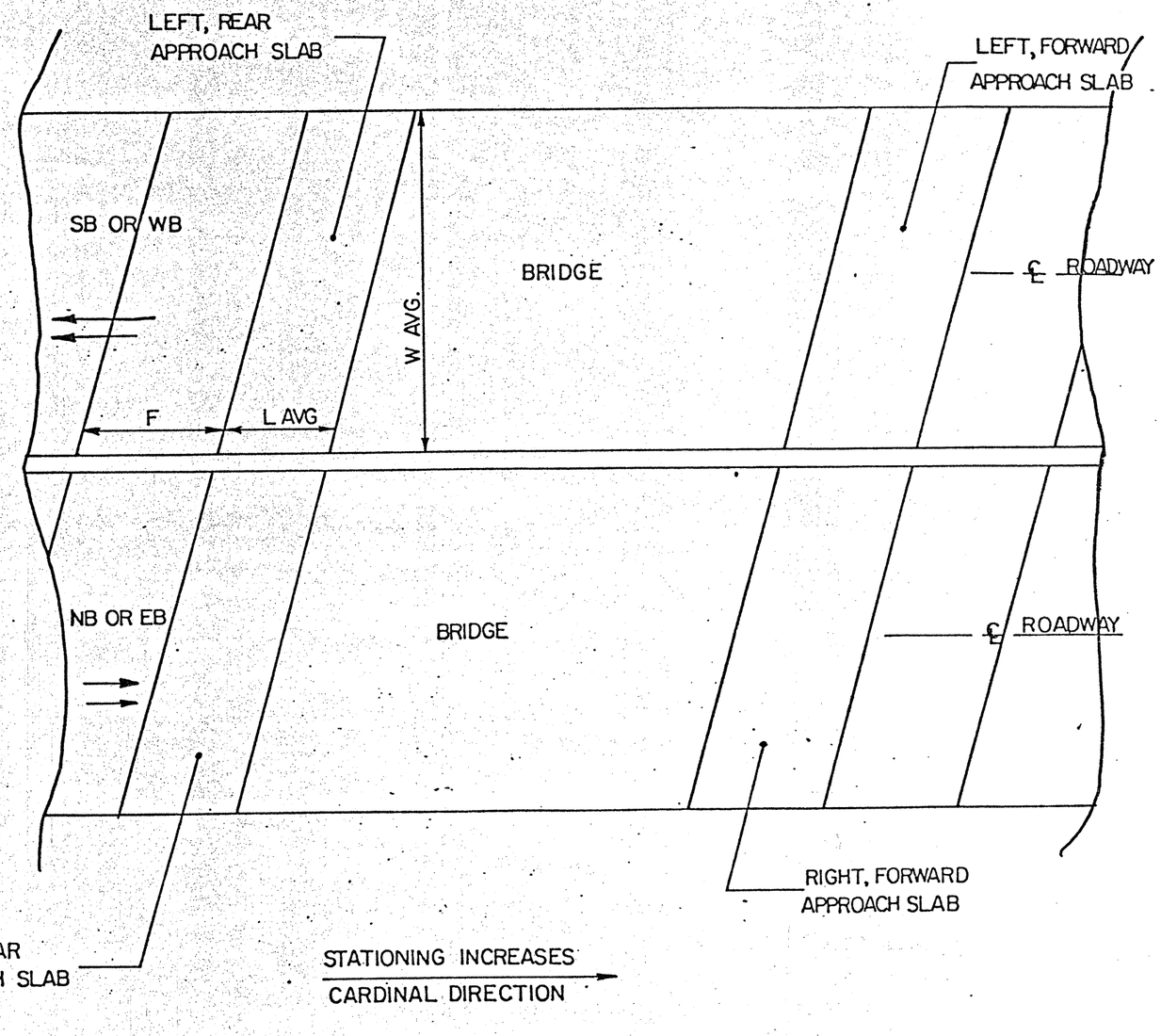
PLAN NO.
BR-85-84





APPROACH SLAB DETAILS

M & R 695

BUTT JOINT DETAILS

CUYAHOGA COUNTY
CUY-71/90/480-1640/9.47/1.50

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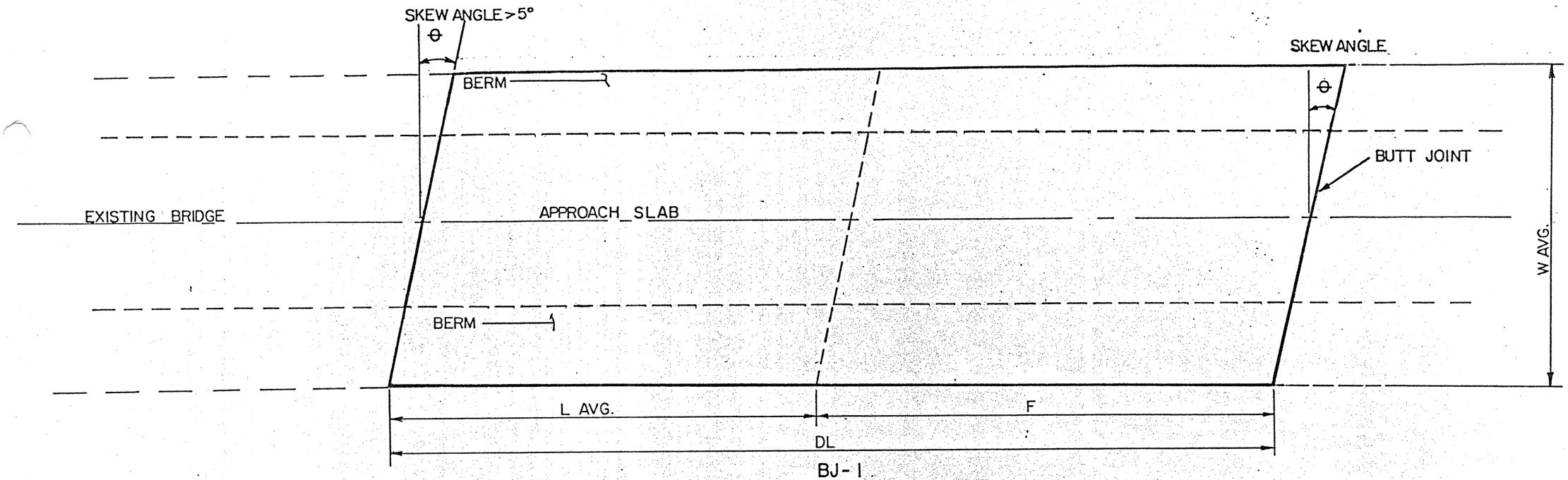
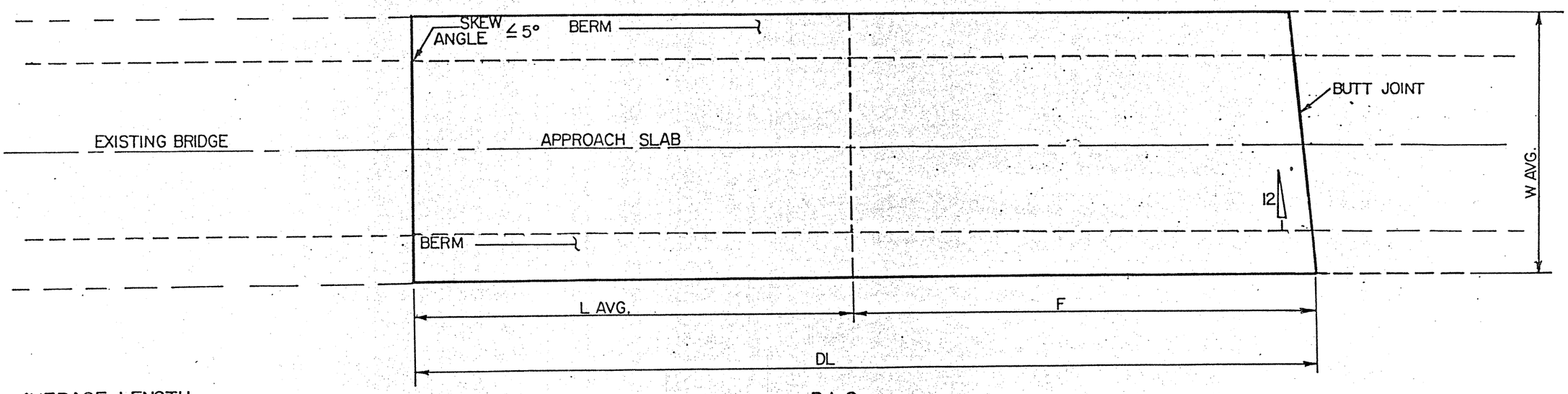
PLAN NO.
BR-85-84



BJ-1



BJ-2

L AVG. — AVERAGE LENGTH
W AVG — AVERAGE WIDTH
DL — DEPRESSION LENGTH
F — FEATHER

BUTT JOINT DETAILS

A & R 695

PAVEMENT DESCRIPTIONS

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

COMPUTED BY: DJM
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PLAN NO.
BR-85-84

STRUCTURE	FEATURE	LANES NB OR EB/SB OR WB	THICKNESS (INCHES)	DECK SURFACE	THICKNESS (INCHES)	APPROACH SLAB SURFACE	THICKNESS (INCHES)	APPROACH PAVEMENT SURFACE
CUY-71-1640	OVER N & W RR	3@ 12, 1@ 17±/4@ 12	1-3/4	DENSE CONCRETE	1-1/2	ASPHALT	3	ASPHALT
CUY-90-0947 L&R	OVER W. 140 ST.	4@ 12 /4@ 12	2-1/2	ASPHALT	1-1/2 RT. 2-1/2 LT.	ASPHALT	8	CONCRETE
CUY-90-0971 L&R	OVER JOSLYN RD., CONRAIL RR & RTA	4@ 12, 1±@12±/4@12, 1@12-	2 1/2	ASPHALT	15F, 19R	CONCRETE	10	CONCRETE
CUY-90-0991 L&R	OVER BEREA RD.	4@ 12 /4@ 12	2-1/2	ASPHALT	10	CONCRETE	10	CONCRETE
CUY-90-1127 L&R	OVER W. BLVD.	4@ 12 /4@ 12	1-1/2	ASPHALT	15	CONCRETE	10	CONCRETE
CUY-90-1146 L&R	OVER W. 100 ST.	4@ 12 /4@ 12	2-1/2	ASPHALT	15	CONCRETE	10	CONCRETE
CUY-90-1152L	OVER W. 98 ST.	4@ 12 /4@ 12	1-1/2	ASPHALT	15	CONCRETE	10	CONCRETE
CUY-90-1490R	OVER STARKWEATHER RD.	4@12, 1@12-/3@ 12	1-3/4	DENSE CONCRETE	1-1/2	ASPHALT	3	ASPHALT
CUY-90-1506	OVER KENILWORTH RD.	3@12, 1@11±/4@12, 1±@12-	1-3/4	DENSE CONCRETE	1-1/2	ASPHALT	3	ASPHALT
CUY-90-1651	OVER E. 14 ST.	3+@12 /3+@12	1-3/4	DENSE CONCRETE	1-1/2	ASPHALT	3	ASPHALT
CUY-90-1972	WEST OF E.55 ST. BRIDGE	2@12,2@14 /2@12,2@14		NO STRUCTURE INVOLVED			3	ASPHALT
CUY-90-2200	OVER E. 105 ST.	4@ 12 /4@ 12	1-3/4	ASPHALT	3	ASPHALT	3	ASPHALT
CUY-480-0150	STEARNS RD. OVER I-480	1@ 12, 1@ 14/ 2@ 14	8-1/2	CONCRETE	15	CONCRETE	9	CONCRETE
CUY-480-0286	OVER FITCH RD.	3@ 12 /3@ 12	3	ASPHALT	3	ASPHALT	3	ASPHALT
CUY-480-0486	OVER GRACE RD.	3@ 12 /3@ 12		NO STRUCTURE INVOLVED			3	ASPHALT
CUY-480-1839 L&R	OVER CUYAHOGA RIVER	4+@ 12 /4@ 12	2-1/2	ASPHALT	2-1/2	ASPHALT	10	CONCRETE
CUY-480-2163W	RAMP OVER McCRACKEN ROAD	/1@16	1-1/2	ASPHALT	2-1/2	ASPHALT	9	CONCRETE
CUY-480-2165	BROADWAY RAMP OVER McCRACKEN RD.	2@ 15± /1@ 16	2-1/2	ASPHALT	2-1/2	ASPHALT	10	CONCRETE
CUY-480-2170E	RAMP OVER McCRACKEN ROAD	2@12	2-1/2	ASPHALT	2-1/2	ASPHALT	10	CONCRETE

M & R 695

DATA

CUYAHOGA COUNTY
CUY-71/90/480-1640/947/150

COMPUTED BY: DJM
CHECKED BY: JAM

PLAN NO.
BR-85-84

BRIDGE Nº.	FEATURE	FOR-WARD OR REAR	NB/EB OR SB/WB	L AVG	W AVG	SL OR WL	F	DL	AREA (SY) ASPHALT	AREA (SY) CONCRETE	TOTAL AREA (SY)	BUTT JOINT	PROFILE
CUY-71-1640	OVER N & W RR	R	NB	25	68.5	0	25	50	381	0	381	BJ-1	AA
CUY-90-0947 R	OVER W. 140 ST.	F & R	EB	25	75.4	0	40	65	248	297	545	BJ-1	AC
CUY-90-0947 L	OVER W. 140 ST.	F & R	WB	25	70.8	0	40	65	240	272	512	BJ-1	AC
CUY-90-0971 R	OVER JOSLYN RD., CONRAIL RR & RTA	F	EB	30	82.5	0	31.3	61.3	102	460	562	BJ-2	CC
CUY-90-0971 R	"	R	EB	25	82.5	0	31.3	56.3	94	421	515	BJ-2	CC
CUY-90-0971 L	"	F	WB	30	76.9	0	31.3	61.3	102	422	524	BJ-2	CC
CUY-90-0971 L	"	R	WB	25	76.9	0	31.3	56.3	94	387	481	BJ-2	CC
CUY-90-0991 R & L	OVER BEREA RD.	F & R	EB&WB	30	69.5	0	40	70	117	424	541	BJ-1	CC
CUY-90-1127 R	OVER W. BLVD.	F & R	EB	25	70.8	0	40	65	144	367	511	BJ-1	CC
CUY-90-1127 L	OVER W. BLVD.	F & R	WB	25	69.5	0	40	65	144	358	502	BJ-1	CC
CUY-90-1146 R	OVER W. 100 ST.	F & R	EB	25	69.5	0	40	65	144	358	502	BJ-1	CC
CUY-90-1146 L	OVER W. 100 ST.	F & R	WB	25	70.8	0	40	65	144	367	511	BJ-1	CC
CUY-90-1152 L	OVER W. 98 ST.	F & R	WB	25	70.8	0	40	65	144	367	511	BJ-1	CC
CUY-90-1490 R	OVER STARKWEATHER RD.	F	EB	25	84	0	31.3	56.3	526	0	526	BJ-2	AA
CUY-90-1490 R	"	R	EB	25	88	0	31.3	56.3	551	0	551	BJ-2	AA
CUY-90-1506	OVER KENILWORTH	F	EB	25	64	0	31.3	56.3	400	0	400	BJ-1	AA
CUY-90-1506	"	R	EB	25	66	0	31.3	56.3	413	0	413	BJ-1	AA
CUY-90-1506	"	R	WB	25	66	0	31.3	56.3	413	0	413	BJ-1	AA
CUY-90-1506	"	F	WB	25	76	0	31.3	56.3	475	0	475	BJ-1	AA
CUY-90-1651	OVER E. 14 ST.	F	EB	25	61	0	31.3	56.3	382	0	382	BJ-2	AA
CUY-90-1651	"	R	EB	25	51	0	31.3	56.3	319	0	319	BJ-2	AA
CUY-90-1972	W. OF E. 55 ST.	-	E & W	-	65.5	10	-	10	73	0	73	-	-
CUY-90-2200	OVER E. 105 ST. (PRJ)	F & R	EB&WB	-	61.8	6	-	6	41	0	41	-	-
CUY-90-2200	OVER E. 105 ST. (STRUCTURE)	F & R	EB&WB	10	61.8	10	0	20	137	0	137	BJ-1	AA
CUY-480-0150	STEARNS RD. OVER I-480	R	SB	25	47	45	0	70	0	366	366	BJ-1	CC
CUY-480-0286	OVER FITCH RD.	F & R	E & W	25	59.5	0	31.3	56.3	131	241	372	BJ-1	CC
CUY-480- 4.86	AT GRACE RD.	-	E & W	-	57	10	0	0	22	42	64	-	-
CUY-480-1839 R	OVER CUYAHOGA RIVER	F	EB	25	68	0	31.3	56.3	259	167	426	BJ-2	AC
CUY-480-1839 R	"	R	EB	25	80	0	31.3	56.3	292	209	501	BJ-2	AC
CUY-480-1839 L	"	F & R	WB	25	68	0	31.3	56.3	259	167	426	BJ-2	AC

M & R 695

DATA

CUYAHOGA COUNTY
CUY-71/90/480-1640/947/150

COMPUTED BY: DJM
CHECKED BY: JAM

PLAN NO. BR-85-84

BRIDGE Nº.	FEATURE	NB/EB OR SB/WB	LEFT OR RIGHT	L AVG	W AVG	SL OR WL	F	DL	AREA (SY) ASPHALT	AREA (SY) CONCRETE	TOTAL AREA (SY)	BUTT JOINT	PROFILE
CUY-480-2163 W	RAMP OVER McCRACKEN RD.	F	WB	* 20	30	—	0	23.4 °	74	80	154	SEE SHT 34	AC
CUY-480-2163 W	RAMP OVER McCRACKEN RD.	R	WB	* 20	30	—	0	60 °	271	80	351	SEE SHT 34	AC
CUY-480-2165	RAMP OVER McCRACKEN RD.	F	EB	* 20	41.25	—	0	36.7 °	62	100	162	SEE SHT 35	CC
CUY-480-2165	"	R	EB	* 20	40	—	0	65.8 °	127	165	292	SEE SHT 35	CC
CUY-480-2165	"	F	WB	* 20	33	—	0	52.5 °	94	99	193	SEE SHT 36	CC
CUY-480-2165	"	R	WB	* 20	33	—	0	48.3 °	92	85	177	SEE SHT 36	CC
CUY-480-2170 E	"	F	EB	* 20	42	—	0	33.0 °	62	16	78	SEE SHT 37	AC
CUY-480-2170 E	RAMP OVER McCRACKEN RD.	R	EB	* 20	42	—	0	76.1 °	129	71	200	SEE SHT 37	AC

* FOR THESE STRUCTURES L AVG IS PURELY INFORMATIONAL, AND ONLY A PORTION OF L AVG. MAY BE USED TO COMPUTE THE AREAS ABOVE. SEE BUTT JOINT COLUMN FOR MORE INFORMATION.

° AVG. LENGTH OF WORK

M & R 690 REV. 9-1-74

ASPHALT CONCRETE

COMPUTED BY: DBM
CHECKED BY : JAM

PLAN NO. BR-85-84

25/40

PAVEMENT DATA

PART	ROUTE	FEATURE		LOG POINT		# OF AREAS	AREA FROM SHEET 23 SQ. YDS.	TOTAL AREA PER STRUCTURE SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT @ .10. gal./s.y. GALS.	407 COVER AGGR. @ .7. lbs./s.y. TONS	ASPHALT CONCRETE ITEM 404 THICK INCHES	ASPHALT CONCRETE ITEM 404 CU. YDS.	ASPHALT CONCRETE ITEM ..... THICK INCHES	ASPHALT CONCRETE ITEM ..... CU. YDS.	THICKNESS INCHES	SPECIAL PAVEMENT PLANING, BITUMINOUS W/O HEATING SQ. YDS.	SPECIAL PAVEMENT PLANING, PORTLAND CEMENT CONCRETE SQ. YDS.	SPECIAL PATCHING PLANED SURFACES (BITUMINOUS) SQ. YDS.	SPECIAL PATCHING PLANED SURFACES (CONCRETE) SQ. YDS.	SPECIAL FULL DEPTH PAVEMENT REMOVAL & FLEXIBLE REPLACEMENT SQ. YDS.
1	71	N & W RR		1640		1	381	381	38	1.0	2	21			2	381	0	38	0	0
	EXTRA FOR	LOW AREAS									VARIES	2								
	TOTAL,	PART 1					381	381	38	1.0	2	23			2	381	0	38	0	0
2	90	W. 140 ST.		0947 R		2	545	1,090	109	3.8	1-1/4	38			1-1/4	496	594	50	59	0
2	90	W. 140 St.		0947 L		2	512	1,024	102	3.6	1-1/4	36			1-1/4	480	544	48	54	0
2	90	JOSLYN, CONRAIL R.R.		0971 R		1	562	1,077	108	3.8	1-1/4	37			1-1/4	196	881	20	88	0
		RTA				1	515													
2	90	JOSLYN, CONRAIL R.R.		0971 L		1	524	1,005	101	3.5	1-1/4	35			1-1/4	196	809	20	81	0
		RTA				1	481													
2	90	BEREA RD.		0991 R		2	541	1,082	108	3.8	1-1/4	38			1-1/4	234	848	23	85	0
2	90	BEREA RD.		0991 L		2	541	1,082	108	3.8	1-1/4	38			1-1/4	234	848	23	85	0
2	90	W. BLVD.		1127 R		2	511	1,022	102	3.6	1-1/4	36			1-1/4	288	734	29	73	0
2	90	W. BLVD.		1127 L		2	502	1,004	100	3.5	1-1/4	35			1-1/4	288	716	29	72	0
2	90	W. 100 ST.		1146 R		2	502	1,004	100	3.5	1-1/4	35			1-1/4	288	716	29	72	0
2	90	W. 100 ST.		1146 L		2	511	1,022	102	3.6	1-1/4	36			1-1/4	288	734	29	73	0
2	90	W. 98 ST.		1152 L		2	511	1,022	102	3.6	1-1/4	36			1-1/4	288	734	29	73	0
2	90	STARKWEATHER RD.		1490 R		1	526	1,077	108	3.8	1-1/4	37			1-1/4	1,077	0	108	0	0
						1	551													
2	90	KENILWORTH RD.		1506		1	400	1,701	170	6.0	1-1/4	59			1-1/4	1,701	0	170	0	0
						1	413													
						1	413													
						1	475													
2	90	E. 14 ST.		1651		1	382	701	70	2.5	1-1/4	24			1-1/4	701	0	70	0	0
						1	319													
2	90	W. OF E. 55 ST.		19.72		2	73	146	0	0		0				0	0	0	0	146
2	90	E. 105 ST. (P.R.J.)		2200		4	41	164	16	0.6	3	14			3	164	0	16	0	0
2	90	E. 105 ST. (STRUCT.)		2200		4	137	548	55	1.9	1	15			1	548	0	55	0	0
	EXTRA FOR	LOW AREAS, MISC.						789	79	3.0	VARIES	55			1-1/4	374	408	37	41	0
	TOTAL,	PART 2						16,560	1,640	58		604				7,841	8,566	785	856	146

M & R 690 REV. 9-1-74

ASPHALT CONCRETE

COMPUTED BY: DJM
CHECKED BY : Jam

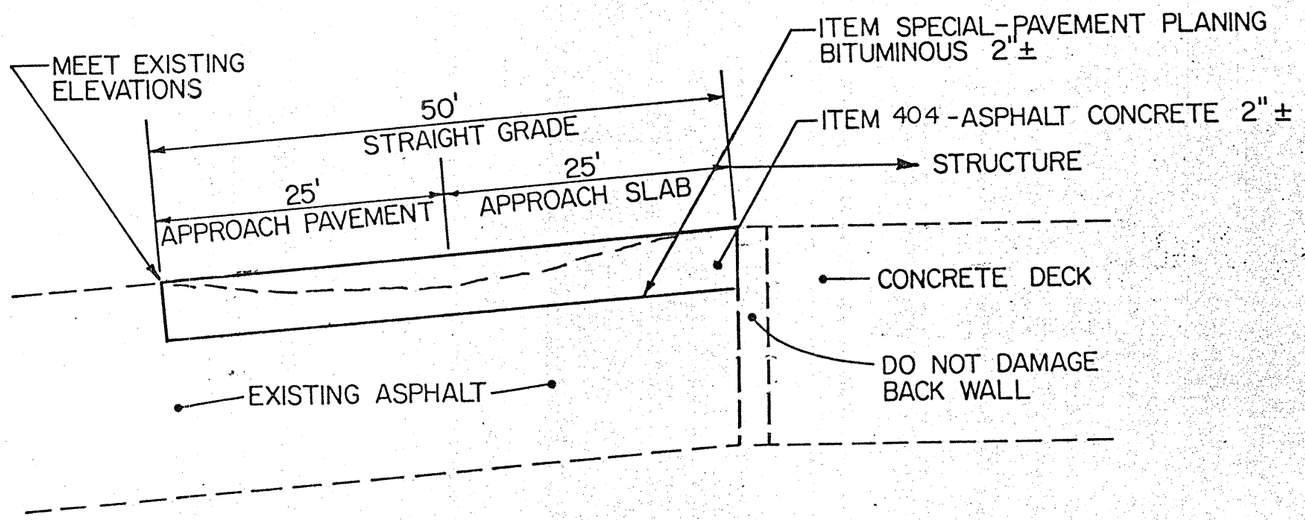
PLAN NO. BR-85-84

26/40

PAVEMENT DATA

PART	ROUTE	FEATURE		LOG POINT		# OF AREAS	AREA FROM SHEET 23&24 SQ. YDS.	TOTAL AREA PER STRUCTURE SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT @ .10 gal./s.y. GALS.	407 COVER AGGR. @ .7 lbs./s.y. TONS	ASPHALT CONCRETE ITEM 404 THICK INCHES	ASPHALT CONCRETE ITEM 404 CU. YDS.	ASPHALT CONCRETE ITEM ..... THICK INCHES	ASPHALT CONCRETE ITEM ..... CU. YDS.	THICK-NESS INCHES	SPECIAL PAVEMENT PLANING, BITUMINOUS W/O HEATING SQ. YDS.	SPECIAL PAVEMENT PLANING, PORTLAND CEMENT CONCRETE SQ. YDS.	SPECIAL PATCHING PLANED SURFACES (BITUMINOUS) SQ. YDS.	SPECIAL PATCHING PLANED SURFACES (CONCRETE) SQ. YDS.	202	516 VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS LIN. FT.
3	480	STEARNS RD.		0150		1	366	366	37	1.3	1-1/4	13			½ to 1¼	0	366	0	37		0
3	480	FITCH RD.		0286		4	372	1,488	149	5.2	1-1/4	52			1-1/4	524	964	52	96		0
3	480	GRACE RD.		4.86		1	64	64	6	0.2	1-1/4	2			1-1/4	22	42	2	4		0
3	480	CUYAHOGA RIVER		1839 R		1	426	927	93	3.2	1-1/4	32			1-1/4	551	376	55	38		0
						1	501														0
3	480	CUYAHOGA RIVER		1839 L		2	426	852	85	3.0	1-1/4	30			1-1/4	518	334	52	33		0
3	480	McCRACKEN RD.		2163 W		1	154	505	51	1.8	VARIES	21			0 TO 1	185	87	19	9		0
						1	351														
3	480	McCRACKEN RD.		2165		1	162	824	82	2.9	VARIES	38			0 TO 1	337	325	34	33		0
						1	292														
						1	193														
						1	177														
3	480	McCRACKEN RD.		2170 E		1	78	278	28	1.0	VARIES	13			0 TO 1	239	173	24	17		42
						1	200														
	EXTRA FOR	LOW AREAS, MISC.						586	59	2.1	VARIES	33			0 TO 1	236	308	24	31		0
	TOTAL, PART 3							5,890	590	21		234				2,612	2,975	262	298		42

PLAN NO.
BR-85-84



PROFILE I-71-1640 NB
REAR APPROACH

THE REAR APPROACH SLAB AND PAVEMENT, NORTHBOUND, TO STRUCTURE CUY-71-1640 ARE UNEVEN AND SETTLING.

THE CONTRACTOR SHALL PLANE 2"± OF ASPHALT OFF THE APPROACH SLAB AND PAVEMENT, FULL WIDTH OF PAVEMENT (INCLUDING SHOULDERS) AND PLACE 2" OF ASPHALT CONCRETE IN THE PLANED AREA.

ASPHALT CONCRETE SHALL BE PLACED TO MEET THE EXISTING ELEVATIONS OF THE ADJACENT STRUCTURE AND APPROACH PAVEMENT.

M & R 695

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

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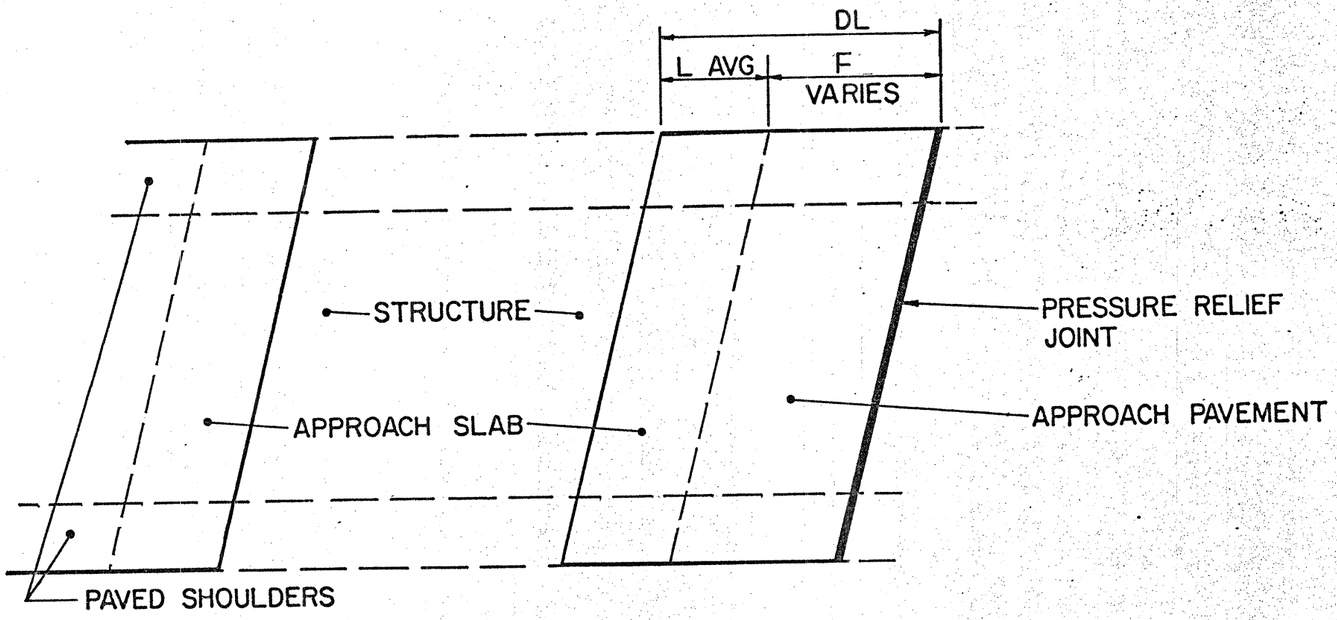
PLAN NO.
BR-85-84



PLAN FOR ADDITIONAL WORK AREA ON I-90

SEVERAL AREAS OF I-90 SHALL HAVE PAVEMENT PLANING AND 404-ASPHALT CONCRETE FROM THE STRUCTURE-APPROACH SLAB INTERSECTION TO FAR END OF THE PRESSURE RELIEF JOINT, AS SHOWN. LISTED BELOW ARE THE STRUCTURES INVOLVED. SEE SHEET 23 FOR DATA.

CUY-90-0947 L & R
CUY-90-0991 L & R
CUY-90-1127 L & R
CUY-90-1146 L & R
CUY-90-1152 L

I-90 ADDITIONAL WORK AREA

M & R 695

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

29
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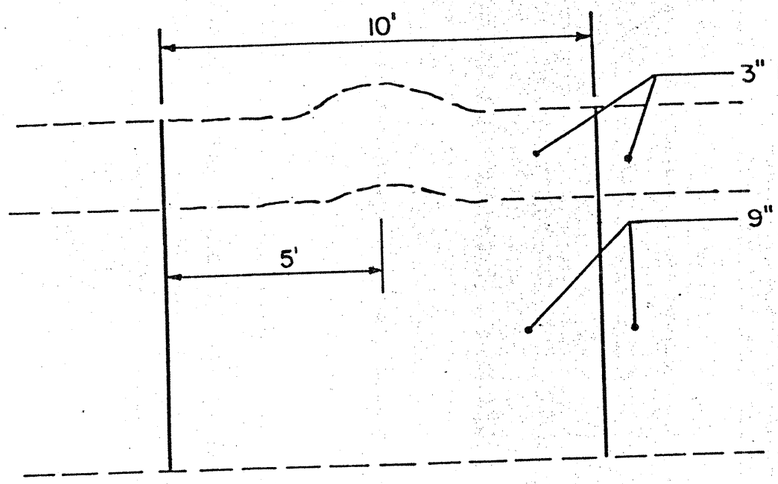
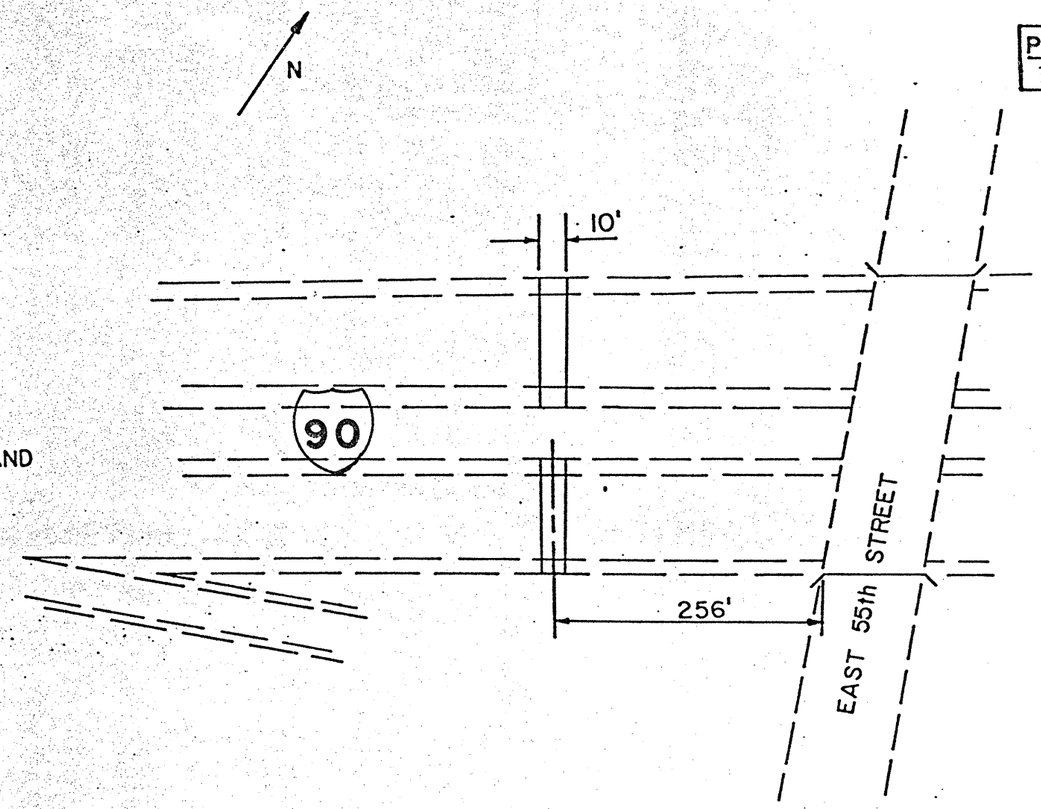
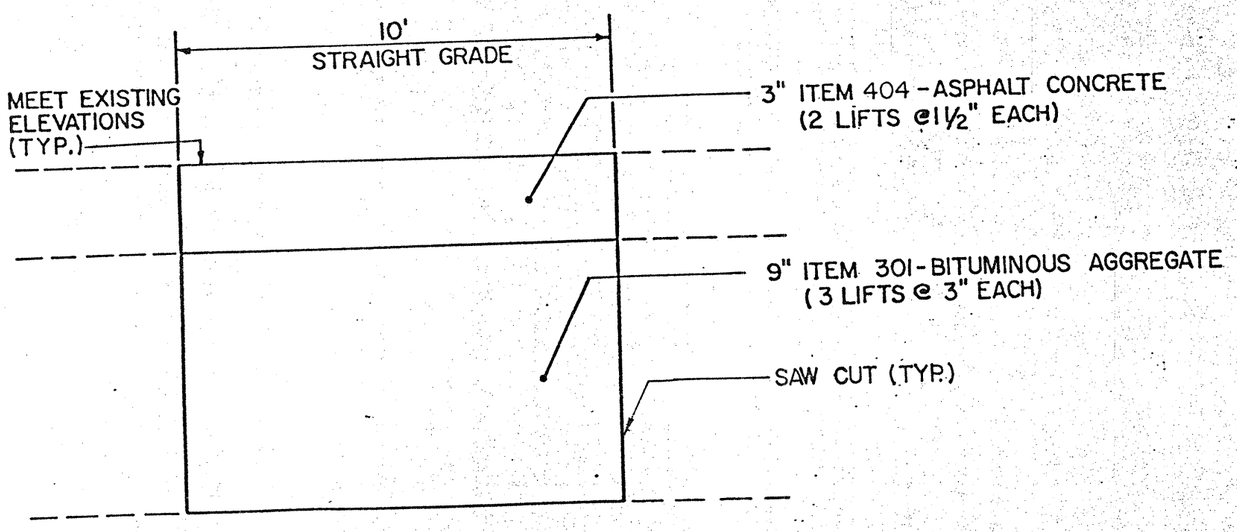
PLAN NO.
BR-85-84





PLAN VIEW



PROFILE

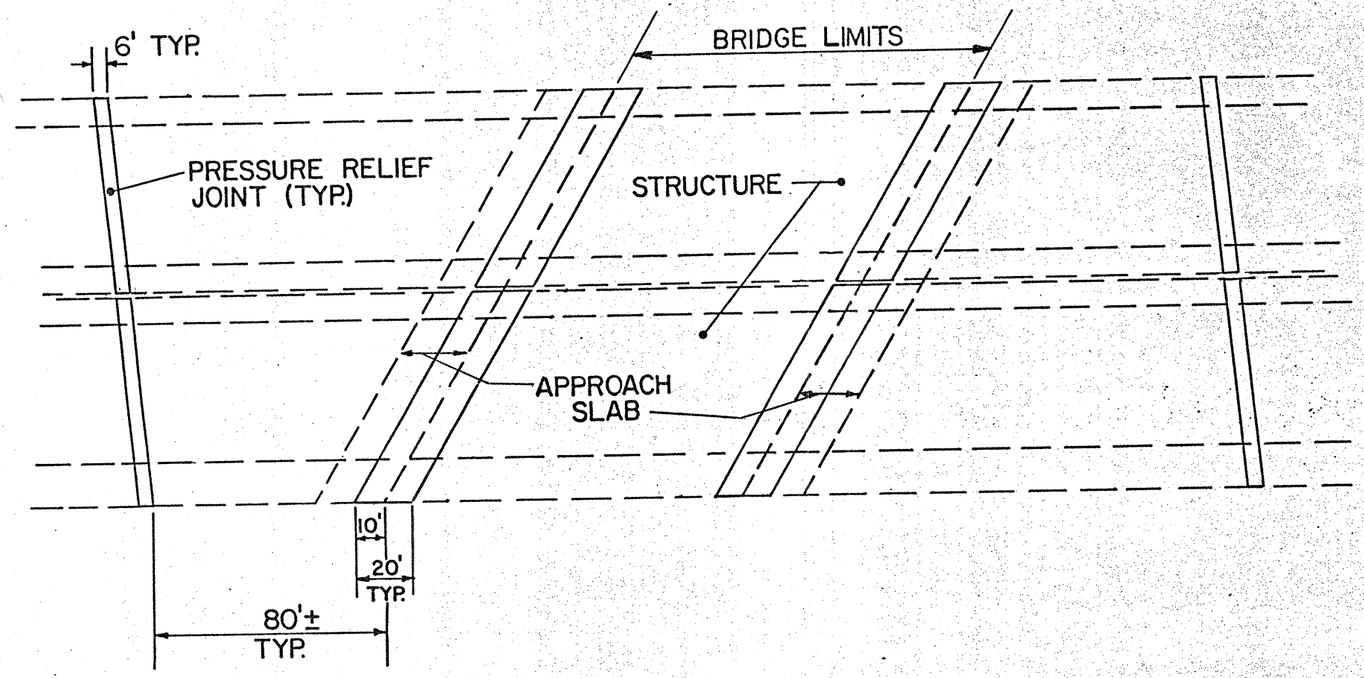
A BUCKLED PORTION OF PAVEMENT EXISTS APPROXIMATELY 256 FEET FROM THE WEST END OF THE EAST 55th STREET BRIDGE (CUY-90-1976).

TO CORRECT THIS PROBLEM, FULL DEPTH PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT SHALL BE USED AT THE ABOVE LOCATION, FULL WIDTH OF THE PAVEMENT (INCLUDING SHOULDERS) AND 10 FEET LONG, AS SHOWN. ASPHALT CONCRETE SHALL BE PLACED TO MEET THE ADJACENT PAVEMENTS AT THEIR EXISTING ELEVATIONS. SAW CUTS MADE AT THIS LOCATION SHALL BE PAID FOR UNDER ITEM SPECIAL - PAVEMENT SAWING

THE UNIT PRICE BID SHALL BE PER SQUARE YARD OF ITEM SPECIAL-FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AND SHALL APPLY TO THE ROADWAY AND SHOULDERS.

ITEM SPECIAL-FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT I-90, WEST OF EAST 55 ST. BRIDGE EB & WB (19.72)

CUY-90-19.72



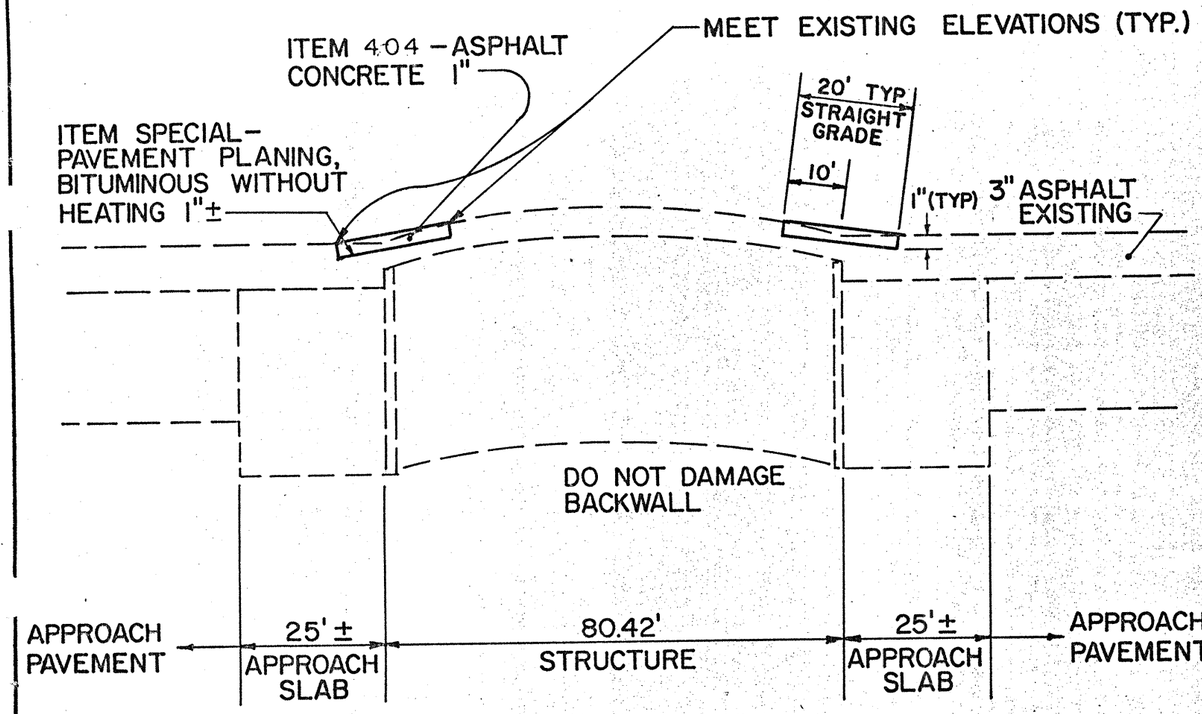
PLAN STRUCTURE CUY-90-2200

STRUCTURE CUY-90-2200 HAS A POOR TRANSITION FROM APPROACH SLAB TO STRUCTURE, AND BUCKLED, DETERIORATED PRESSURE RELIEF JOINTS IN THE APPROACH PAVEMENT.

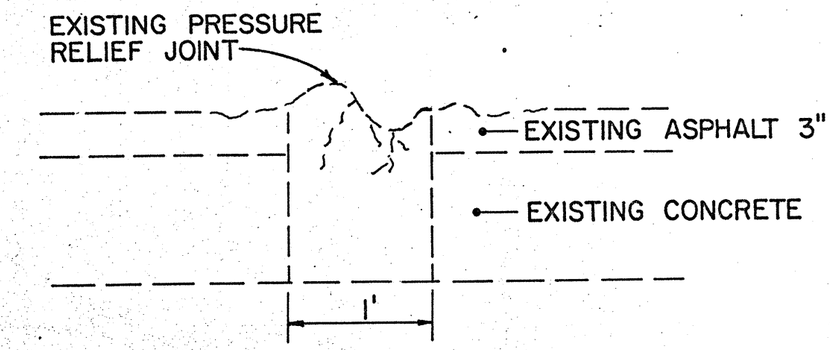
TO CORRECT THE TRANSITION FROM APPROACH TO STRUCTURE, THE CONTRACTOR SHALL PLANE 1"± OF ASPHALT, 20' LONG, ALONG THE APPROACH SLAB – STRUCTURE INTERSECTION, FULL WIDTH OF PAVEMENT. THEN ASPHALT CONCRETE SHALL BE PLACED 1"± IN THE PLANED AREA. ASPHALT CONCRETE SHALL BE PLACED TO MEET THE ADJACENT PAVEMENTS AT THEIR EXISTING ELEVATIONS, AS SHOWN.

TO CORRECT THE PRESSURE RELIEF JOINTS, THE CONTRACTOR SHALL PLANE 3" OF ASPHALT, 6' LONG, OVER THE PRESSURE RELIEF JOINT, FULL WIDTH OF PAVEMENT. ASPHALT CONCRETE SHALL BE PLACED 3"± IN THE PLANED AREA. ASPHALT CONCRETE SHALL BE PLACED TO MEET THE ADJACENT PAVEMENT AT THE EXISTING ELEVATION, AS SHOWN.

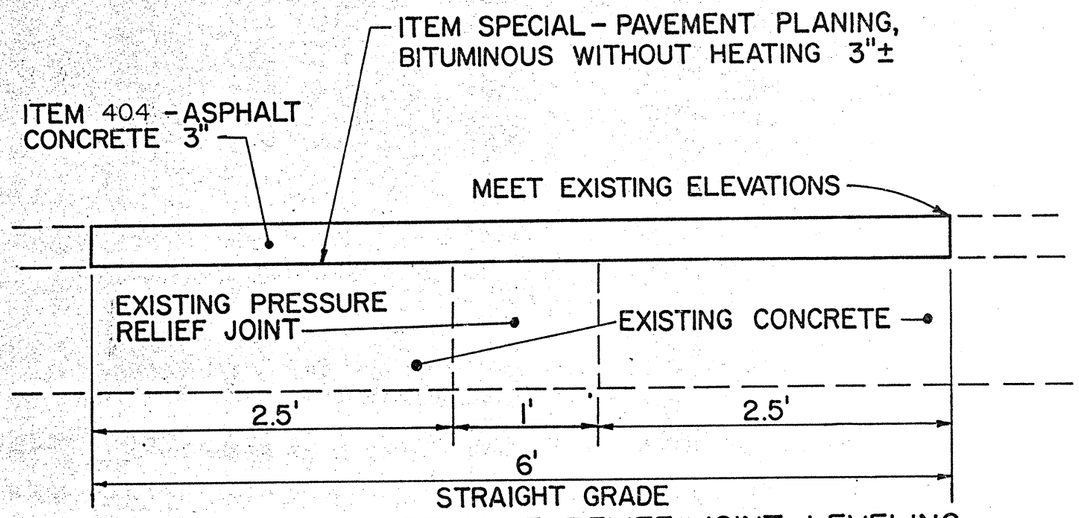
THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT THE DECK'S WATERPROOFING IS NOT DAMAGED. IF THE WATERPROOFING IS DAMAGED, THE CONTRACTOR SHALL WATERPROOF, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE STATE.



PROFILE - STRUCTURE CUY-90-2200

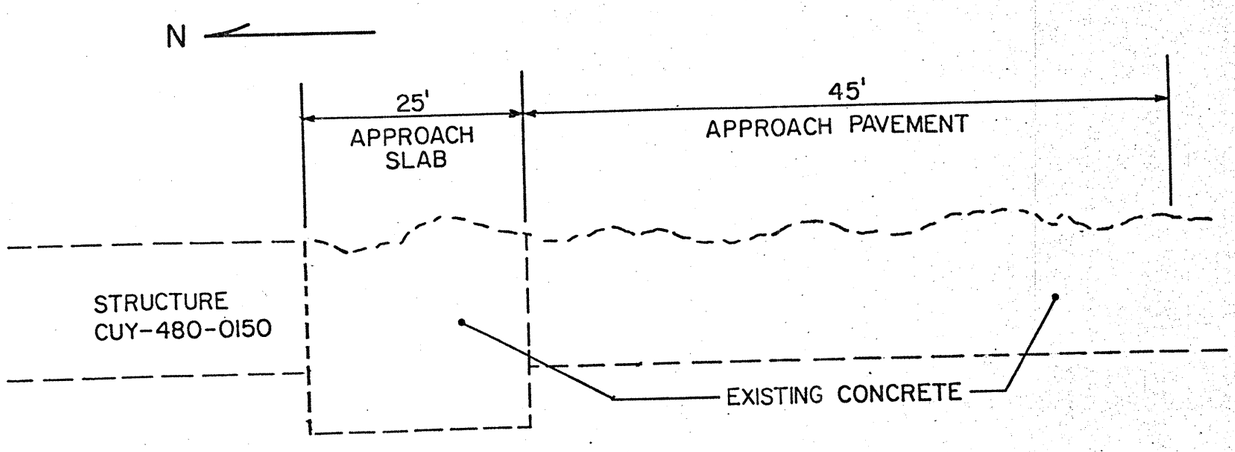


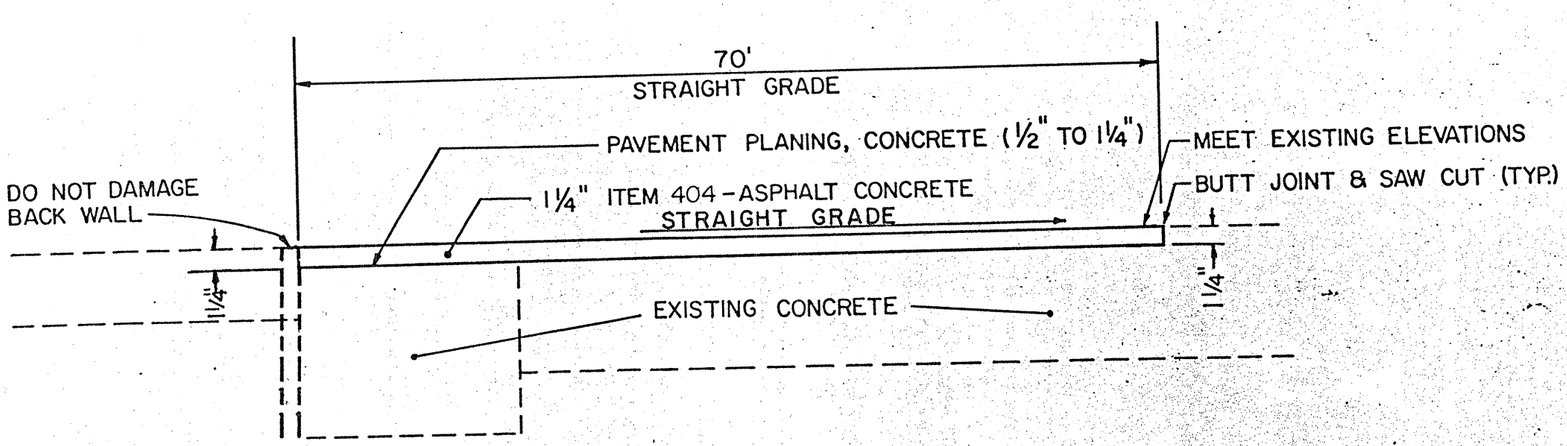
PROFILE, EXISTING PRESSURE RELIEF JOINT, STRUCTURE CUY-90-2200



PROFILE, PROPOSED PRESSURE RELIEF JOINT LEVELING STRUCTURE CUY-90-2200

PLAN NO.
BR-85-84





PROFILE - STEARNS ROAD BRIDGE (OVER I-480)
SOUTHBOUND REAR, APPROACH

AN UNEVEN AND DETERIORATED PORTION OF AN APPROACH SLAB AND PAVEMENT EXISTS ON SOUTHBOUND STEARNS ROAD OVER I-480, REAR (SOUTH) OF THE STRUCTURE CUY-480-0150.

CONCRETE SHALL BE PLANED 1/2" TO 1-1/4", AS DIRECTED BY THE ENGINEER, IN THE ABOVE AREA.

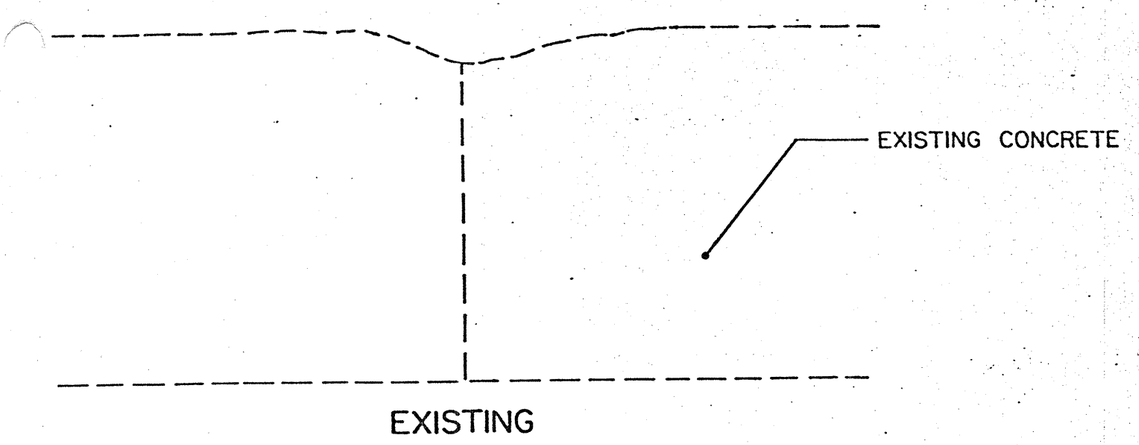
ASPHALT CONCRETE SHALL BE PLACED TO MEET THE EXISTING ELEVATIONS OF THE ADJACENT STRUCTURE AND APPROACH PAVEMENT.

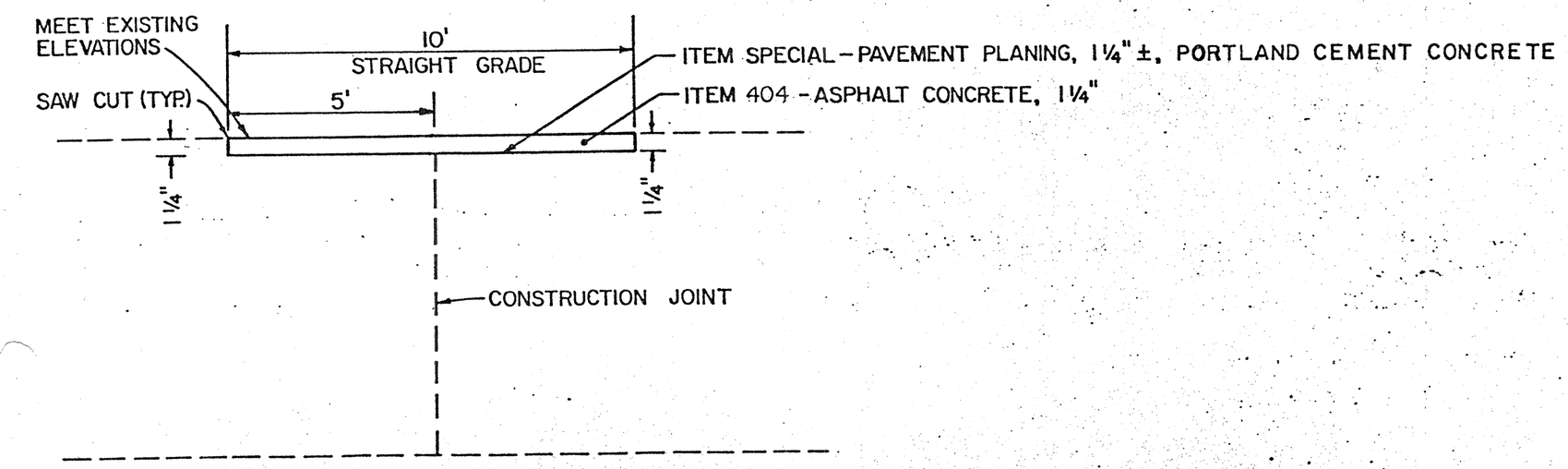
PLAN NO.
BR-85-84

AN UNEVEN CONCRETE CONSTRUCTION JOINT IS LOCATED ON I-480, LOG POINT 4.86 (AT GRACE ROAD).

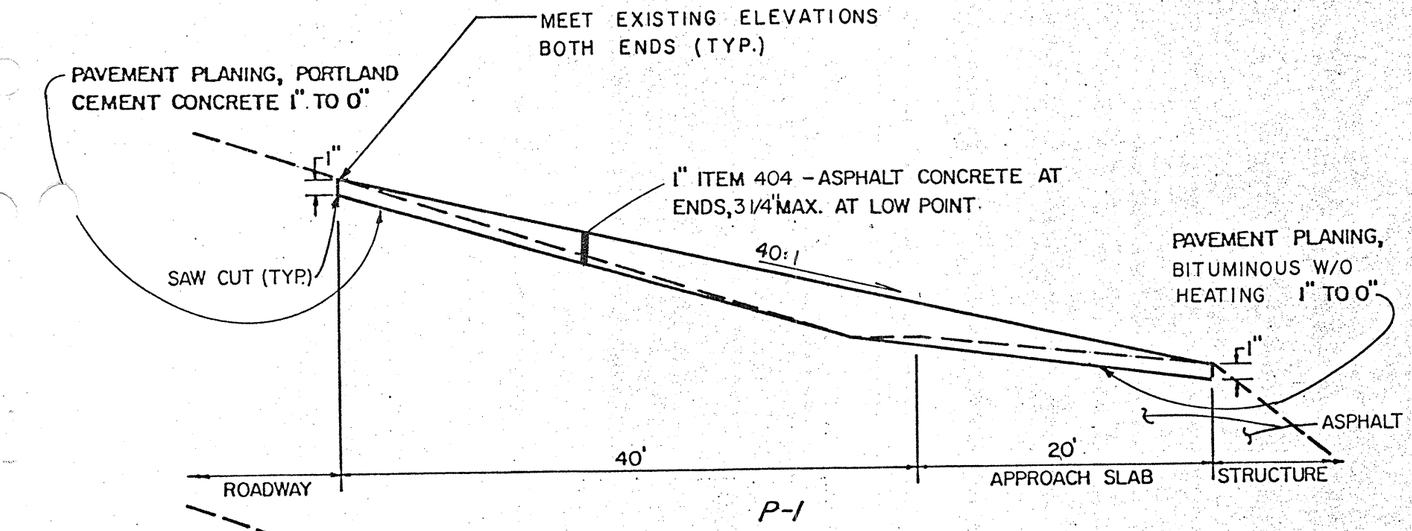
TO CORRECT THIS PROBLEM, THE CONTRACTOR SHALL PLANE 1-1/4", FULL WIDTH OF PAVEMENT (INCLUDING SHOULDERS), 10 FEET LONG, AS SHOWN.

THE NEW ASPHALT SHALL MEET THE ADJACENT CONCRETE PAVEMENTS AT THE BUTT JOINTS AT THEIR EXISTTING ELEVATIONS.

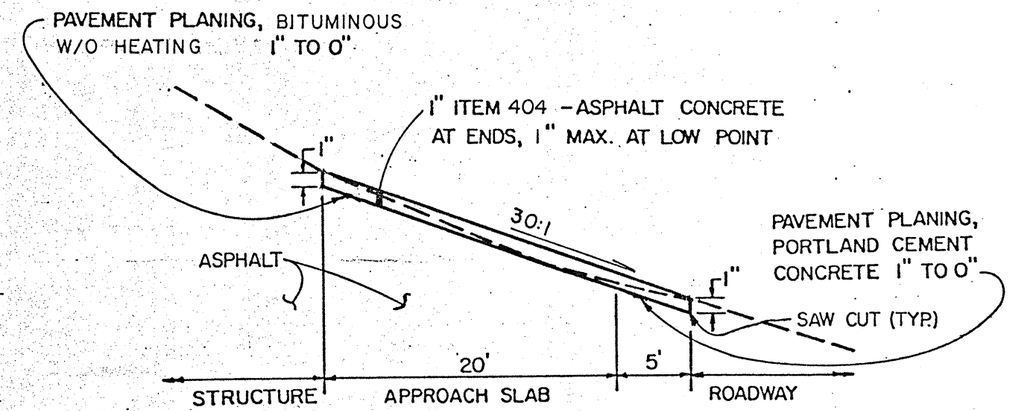




PROFILE AT GRACE ROAD (4.86) ON 480
PROPOSED

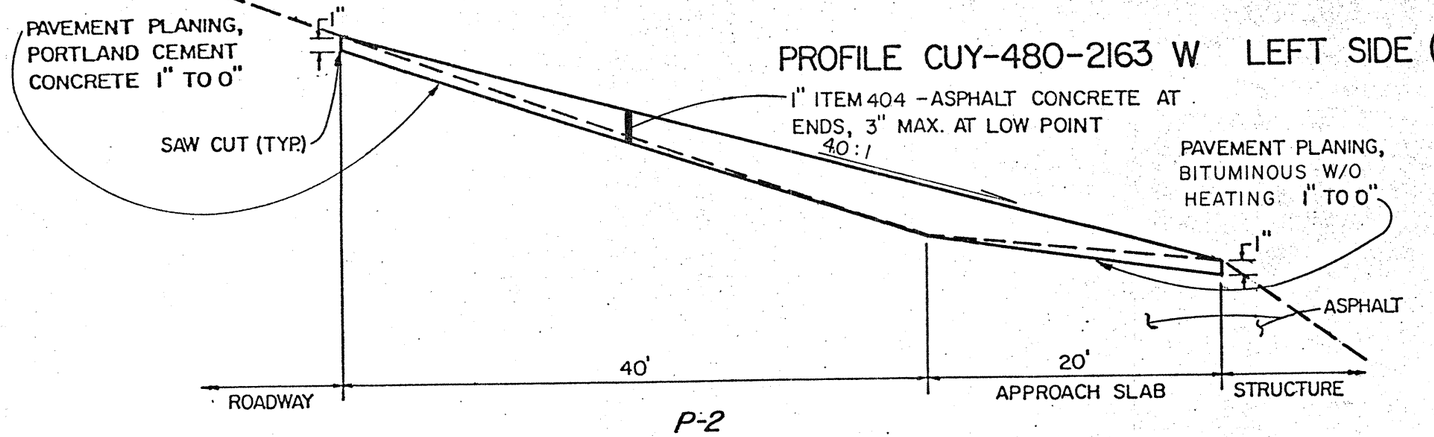


P-1

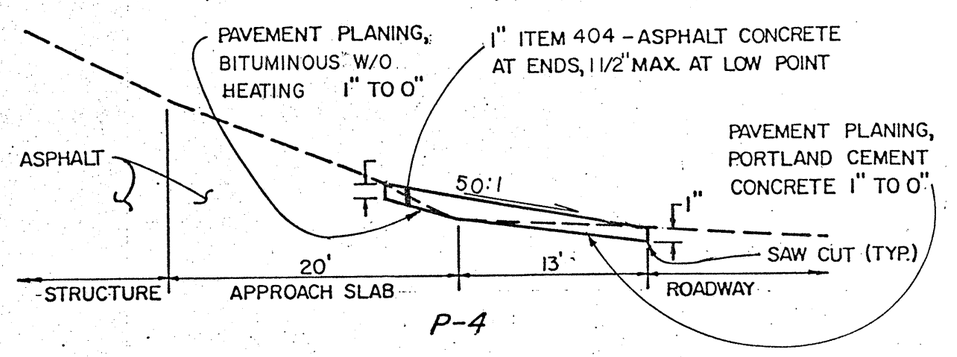


P-3

PROFILE CUY-480-2163 W LEFT SIDE (ALONG EDGE LINE)

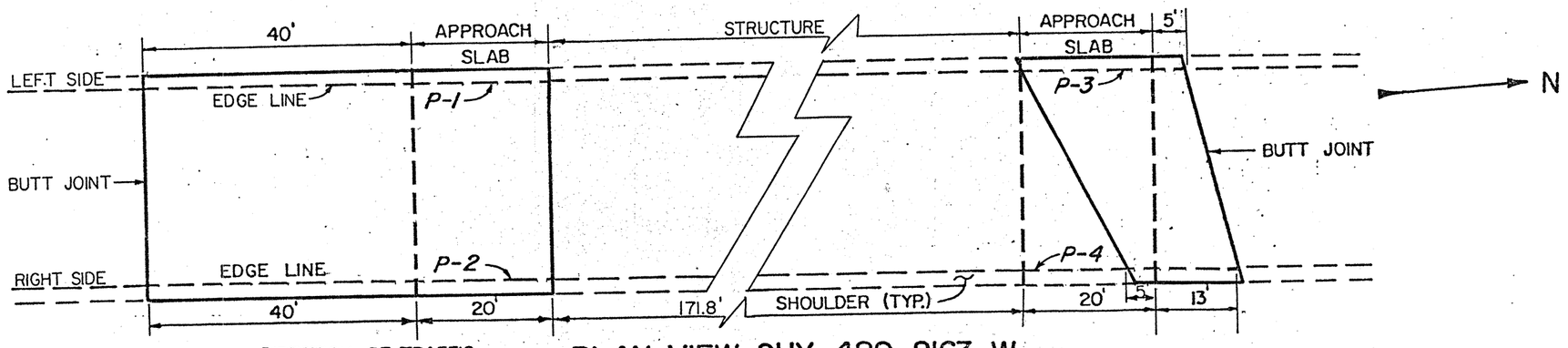


P-2



P-4

PROFILE CUY-480-2163 W RIGHT SIDE (ALONG EDGE LINE)



PLAN VIEW CUY-480-2163 W

CUY-480-2163 W

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

35
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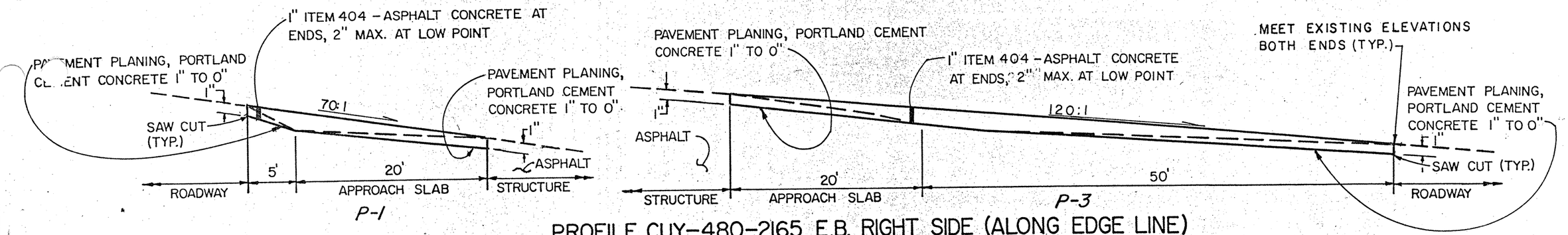
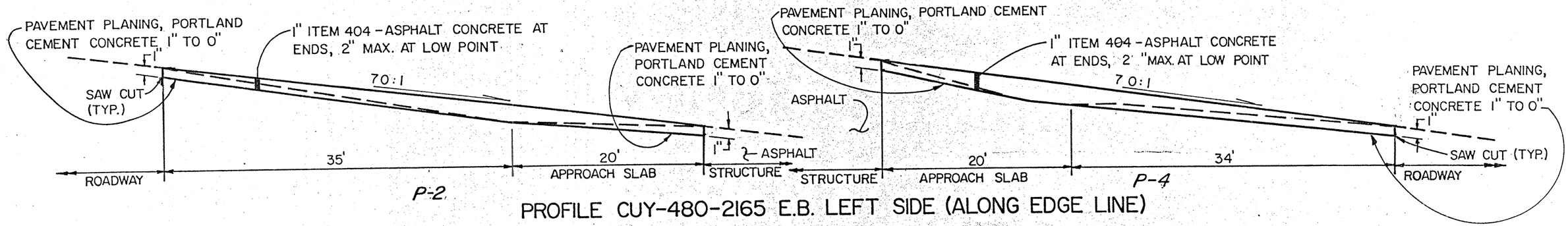
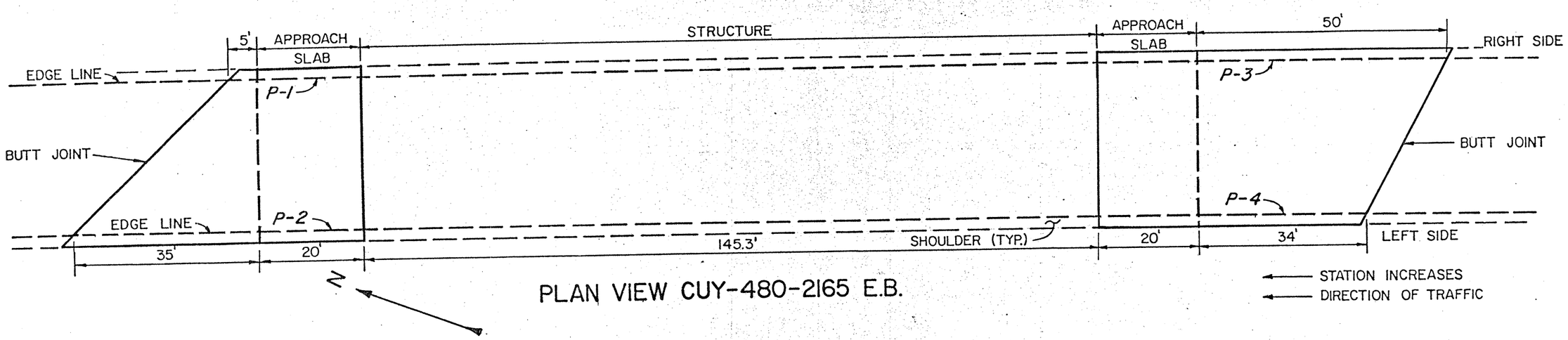
PLAN NO.
BR-85-84



PROFILE CUY-480-2165 E.B. RIGHT SIDE (ALONG EDGE LINE)



PROFILE CUY-480-2165 E.B. LEFT SIDE (ALONG EDGE LINE)



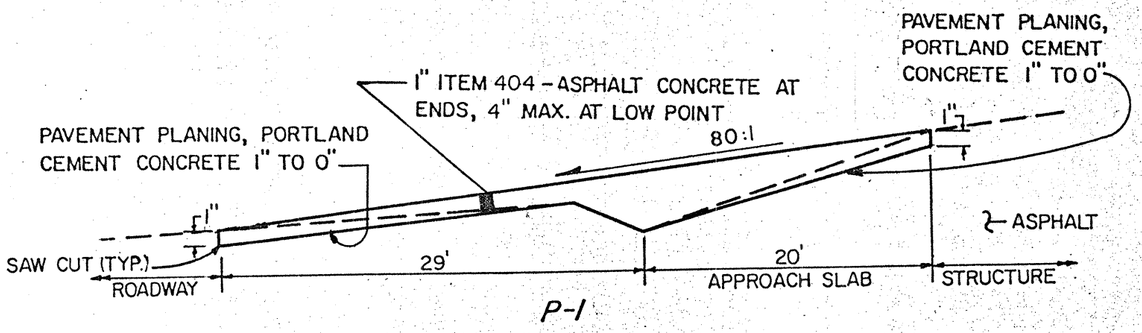
PLAN VIEW CUY-480-2165 E.B.

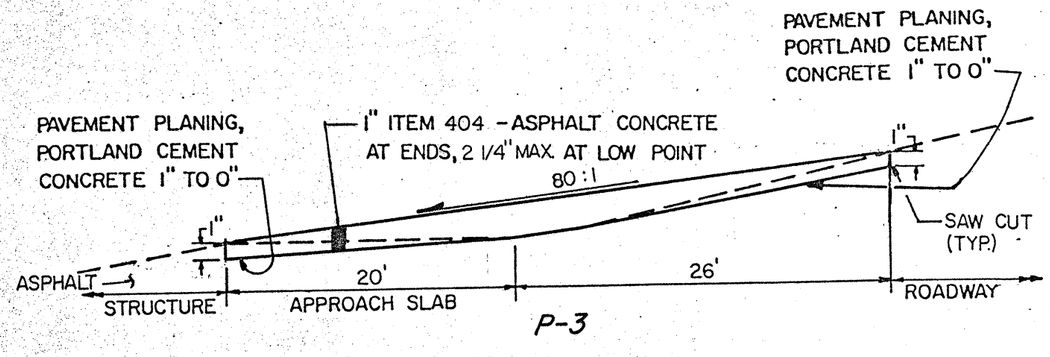
CUY-480-2165

M & R 695

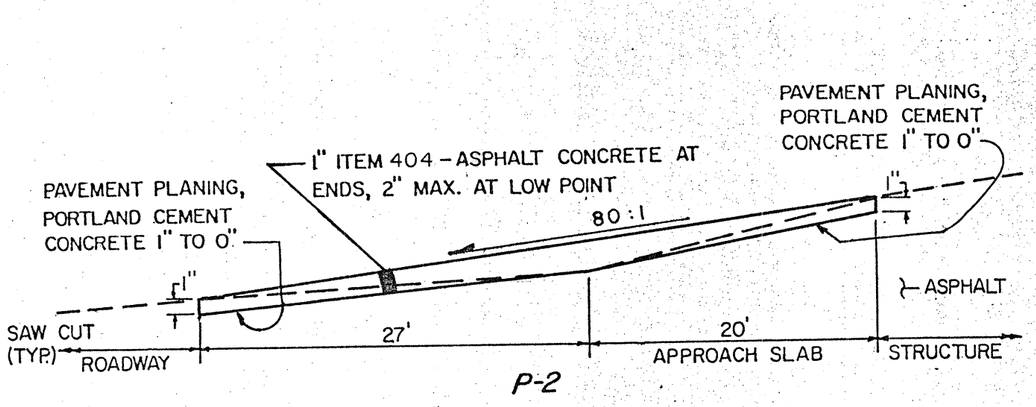
CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

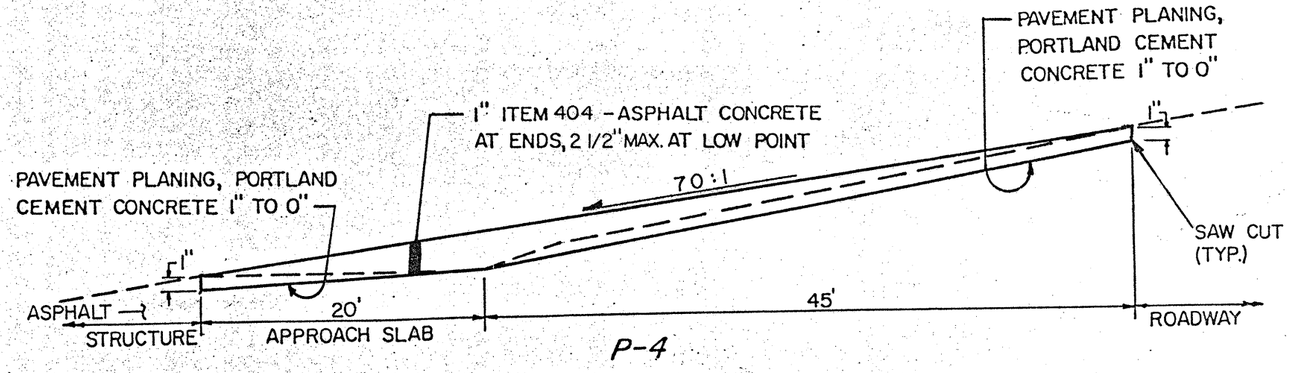
PLAN NO.
BR-85-84



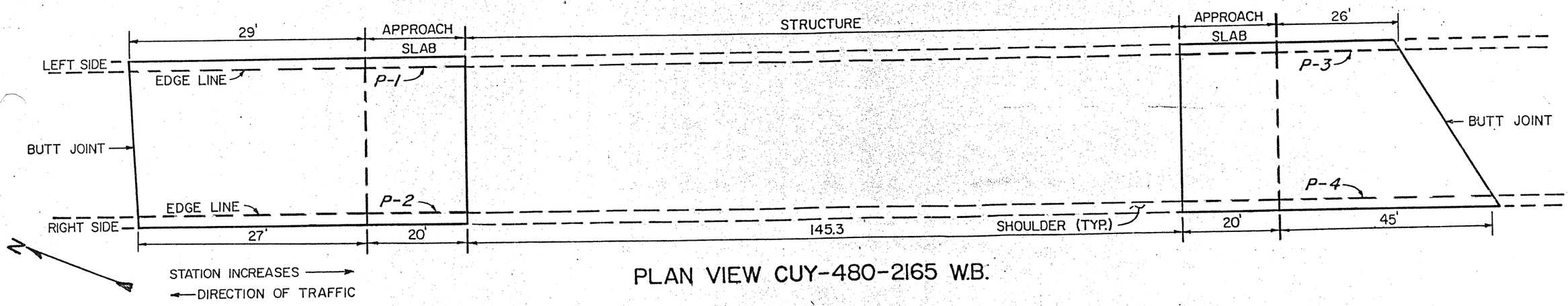


PROFILE CUY-480-2165 W.B. LEFT SIDE (ALONG EDGE LINE)





PROFILE CUY-480-2165 W.B. RIGHT SIDE (ALONG EDGE LINE)



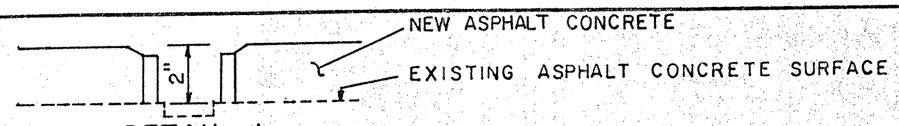
PLAN VIEW CUY-480-2165 W.B.

CUY-480-2165

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

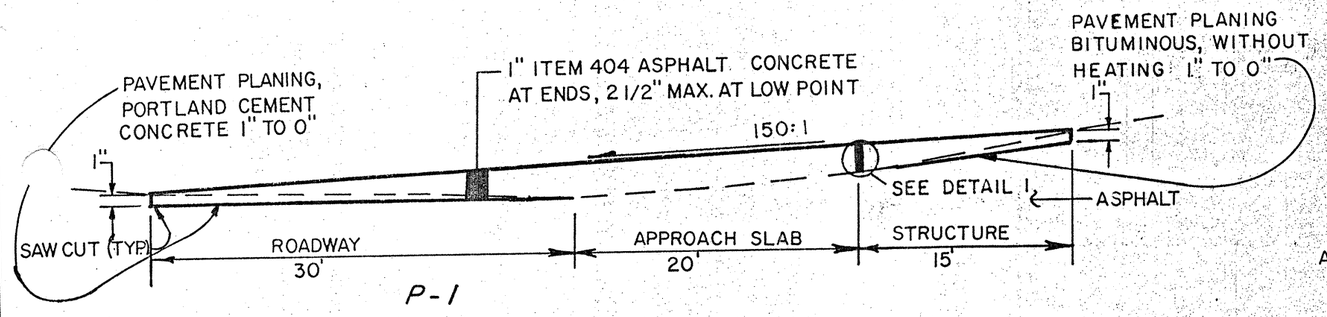
CUYAHOGA COUNTY
CUY - 71/90/480 - 16.40/9.47/1.50

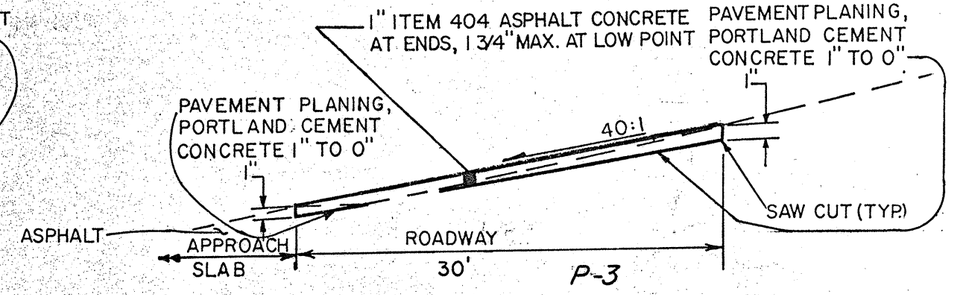
PLAN NO.
BR-85-84



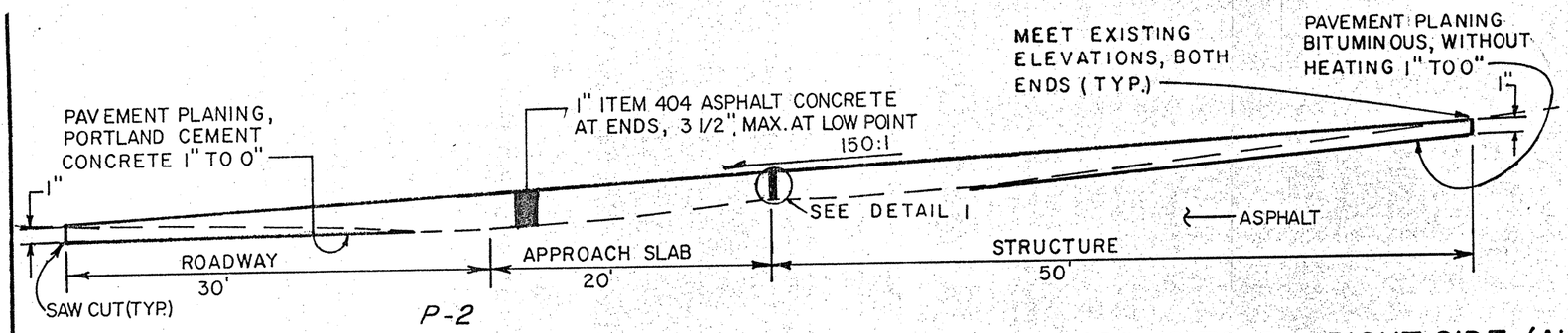
DETAIL I

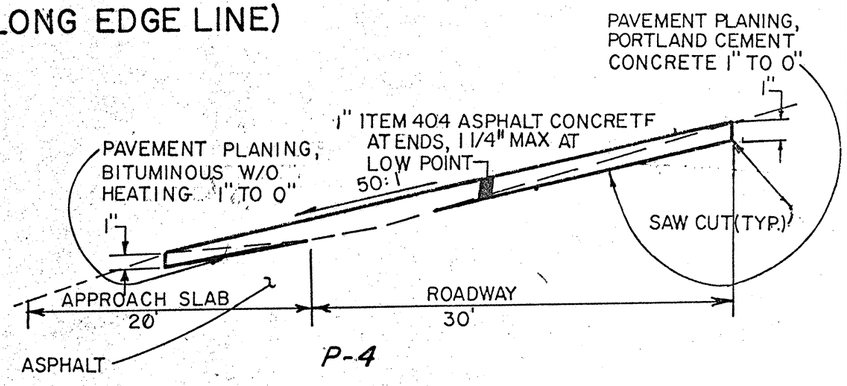
VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT



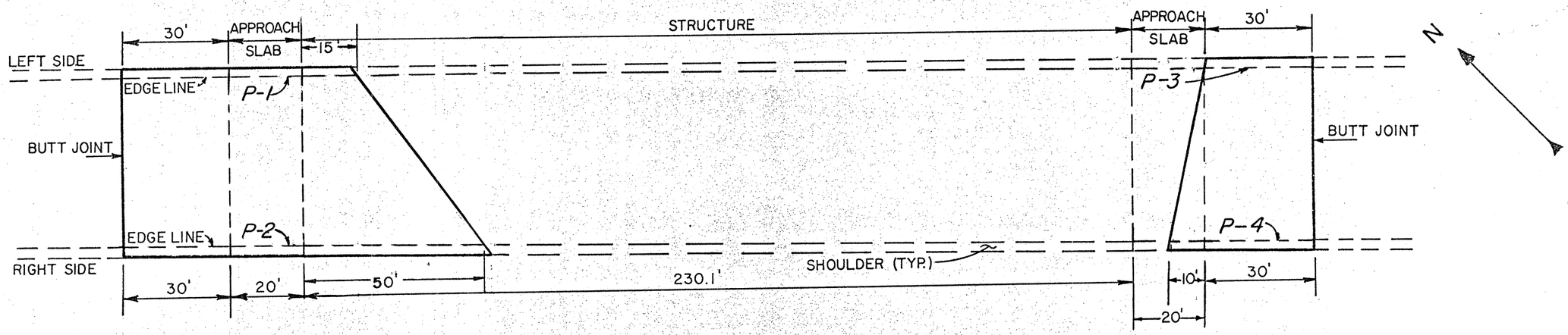


PROFILE CUY - 480 - 2170 E LEFT SIDE (ALONG EDGE LINE)





PROFILE CUY - 480 - 2170 E RIGHT SIDE (ALONG EDGE LINE)



PLAN VIEW CUY - 480 - 2170 E

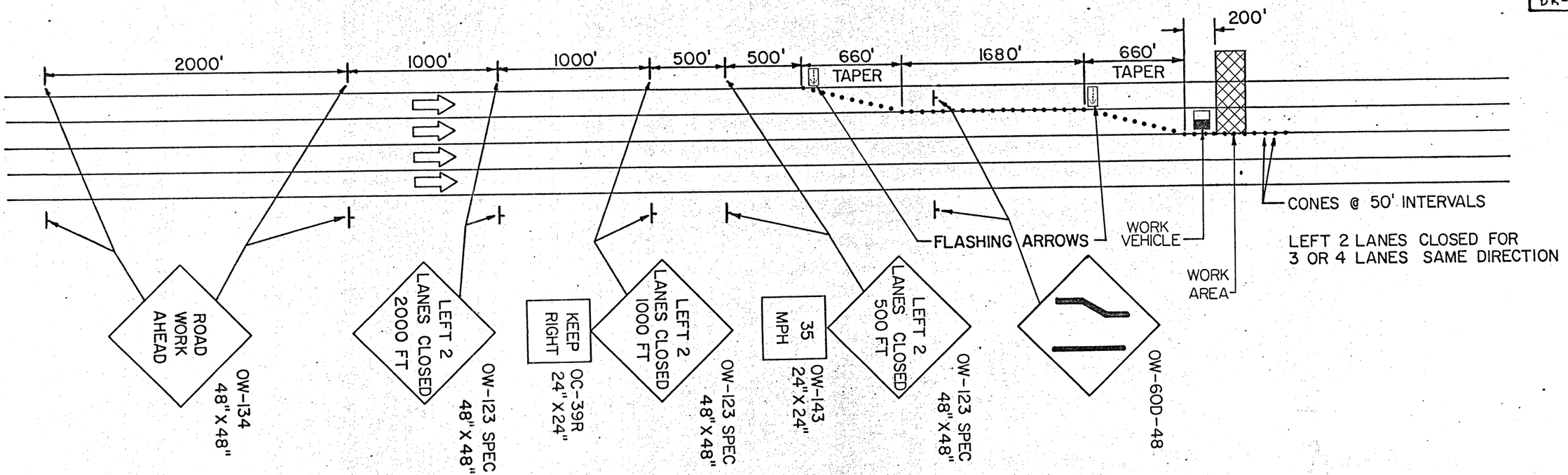
CUY-480-2170E

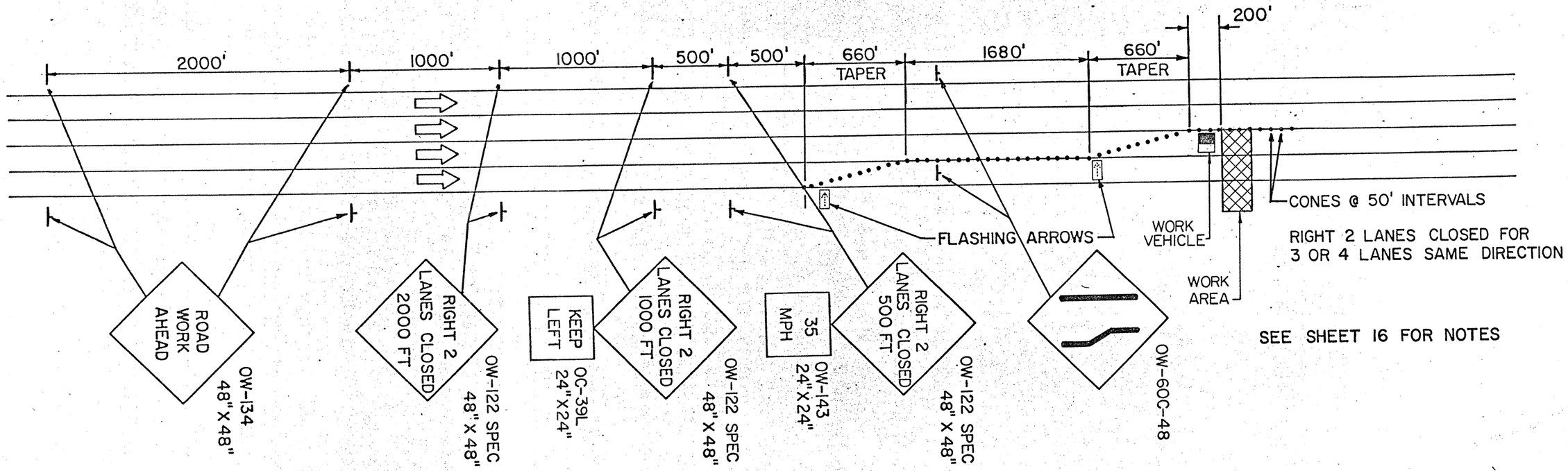
M & R 695

TRAFFIC CONTROL DETAILS

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

PLAN NO.
BR-85-84





SEE SHEET 16 FOR NOTES

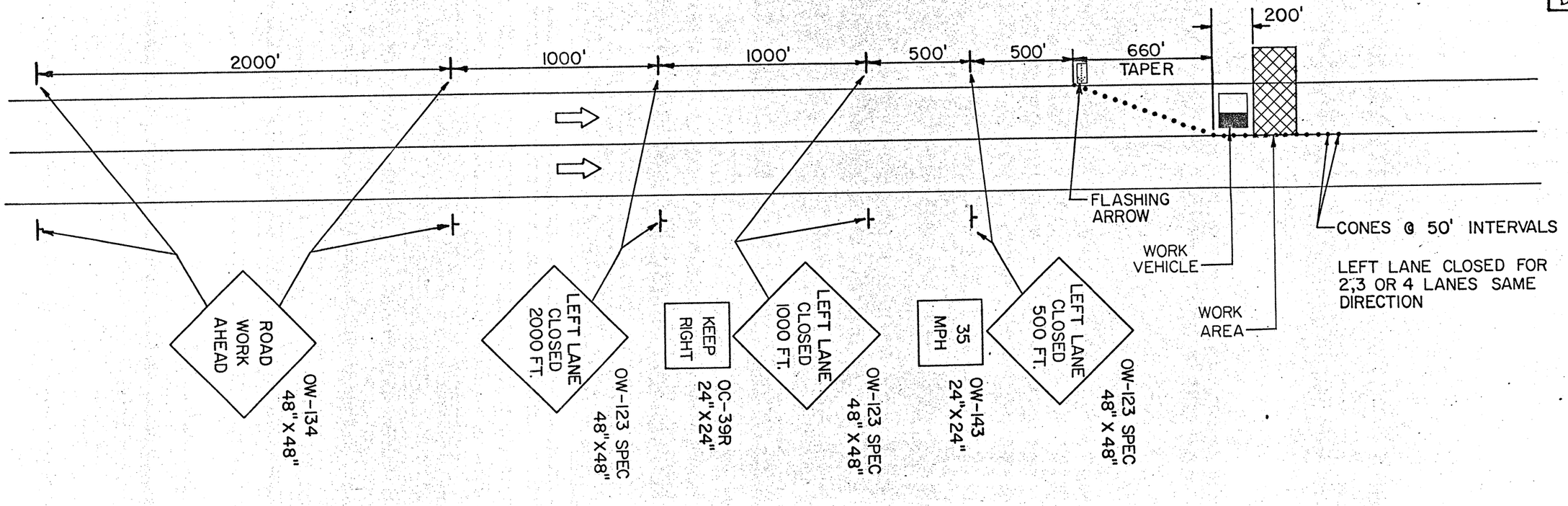
M & R 695

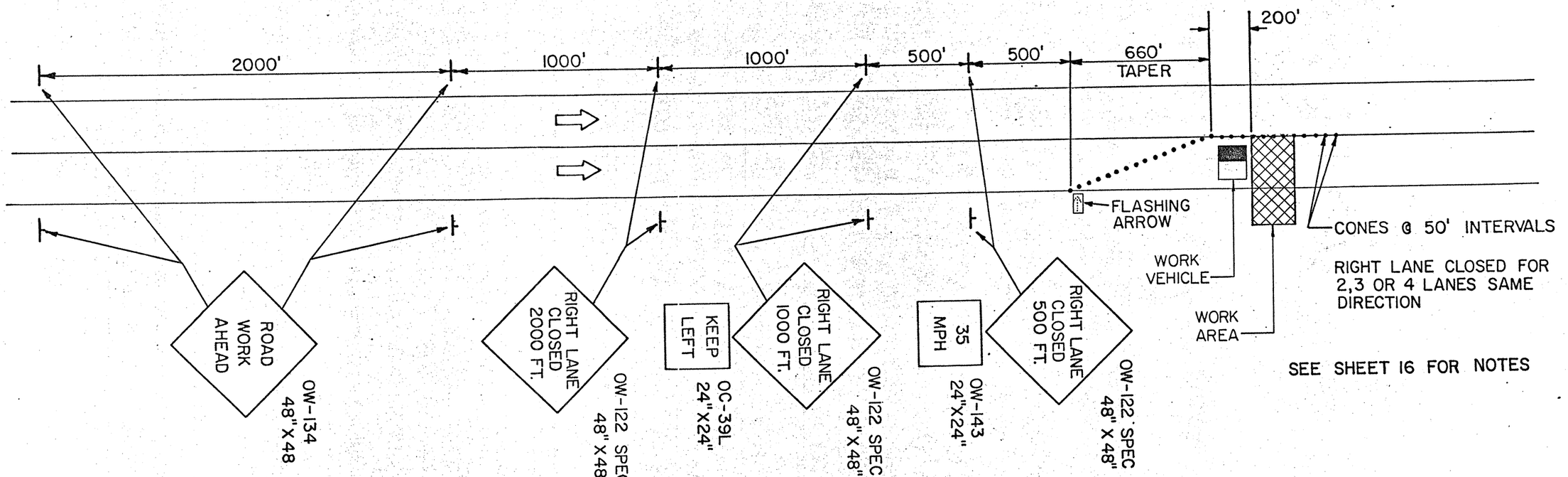
TRAFFIC CONTROL DETAILS

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

39
40

PLAN NO.
BR-85-84





SEE SHEET 16 FOR NOTES

CUYAHOGA COUNTY
CUY-71/90/480-16.40/9.47/1.50

PLAN NO. BR-85-84

40/40

COMPUTED BY: DGM
CHECKED BY : JAM

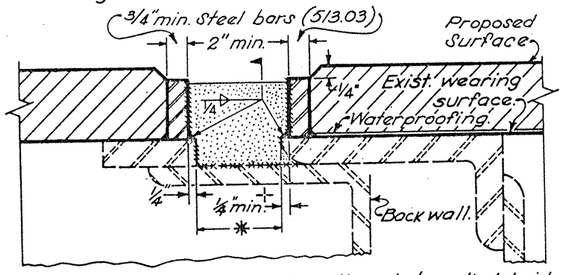
GENERAL SUMMARY

ITEM		PART 1	PART 2	PART 3		GENERAL (SHT. 18)				ITEM	GRAND TOTAL part(s) 1, 2, 3	UNIT	DESCRIPTION
202		0	5	5						202	10	EACH	RAISED PAVEMENT MARKERS REMOVED FOR STORAGE
404		23	604	234						404	861	CU.YDS.	ASPHALT CONCRETE, AC-20
407		38	1,640	590						407	2,268	GALS.	TACK COAT
407		1	58	21						407	80	TONS	COVER AGGREGATE
516		0	0	42						516	42	LIN.FT.	VERTICAL EXTENSION OF STRUCTURE EXPANSION JOINT
621		0.02	0.76	0.38						621	1.16	MILE	EDGE LINE
621		0.03	1.19	0.32						621	1.54	MILE	LANE LINE, 4"
SPECIAL		381	7,841	2,612						SPECIAL	10,834	SQ.YDS.	PAVEMENT PLANING, BITUMINOUS WITHOUT HEATING
SPECIAL		0	8,566	2,975						SPECIAL	11,542	SQ. YDS.	PAVMENT PLANING, PORTLAND CEMENT CONCRETE
SPECIAL		38	785	262						SPECIAL	1,085	SQ. YDS.	PATCHING PLANED SURFACES, BITUMINOUS
SPECIAL		0	856	298						SPECIAL	1,154	SQ. YDS.	PATCHING PLANED SURFACES, CONCRETE
SPECIAL		0	146	0						SPECIAL	146	SQ. YDS.	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT
SPECIAL		0	270	0						SPECIAL	270	LIN. FT.	PAVEMENT SAWING
SPECIAL						50				SPECIAL	50	HR.	LAW ENFORCEMENT OFFICER WITH PATROL CAR
614		LUMP	LUMP	LUMP						614	LUMP	L.S.	MAINTAINING TRAFFIC
624		LUMP	LUMP	LUMP						624	LUMP	L.S.	MOBILIZATION

RESURFACING

+ Increase as necessary to maintain 2" min. opening.

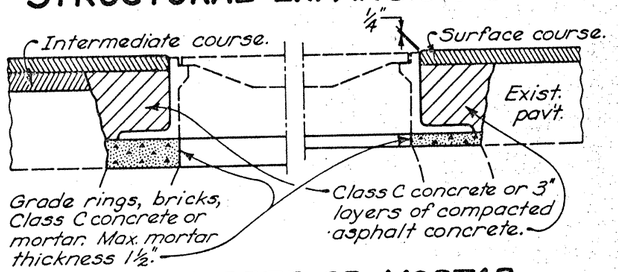
* Vertical extension of joints found to be closed to ½" or less may be non-performed as directed by the Engineer.



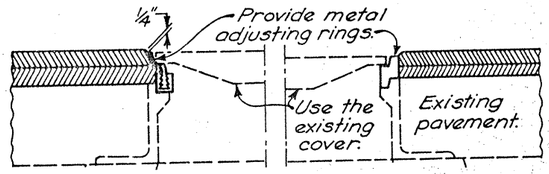
As a part of item 516, seal joint with a hot-applied bridge deck waterproofing material which also meets the requirements of 705.01. Sandblast vertical surfaces ( ) and wipe clean. Seal joint before rust forms. If rust forms, re-sandblast. Use bond breaker on the horizontal surface ( ).

MAINTENANCE OF TRAFFIC: Generally the bars shall be welded while the lane is closed for waterproofing or resurfacing. However, if traffic is routed over the bars before resurfacing, temporary ramps shall be constructed to the tops of the bars using 402 or 404 feathering at a max. slope of 6 ft/in. The ramps shall be removed prior to resurfacing. Payment for placing and removing the ramps shall be included in the lump sum bid for Item 614.

VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS

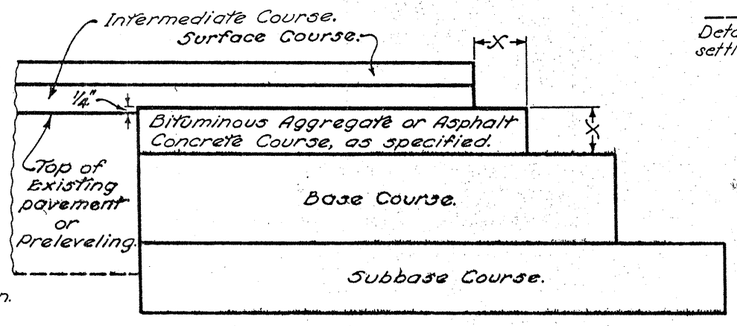


USING CONCRETE OR MORTAR



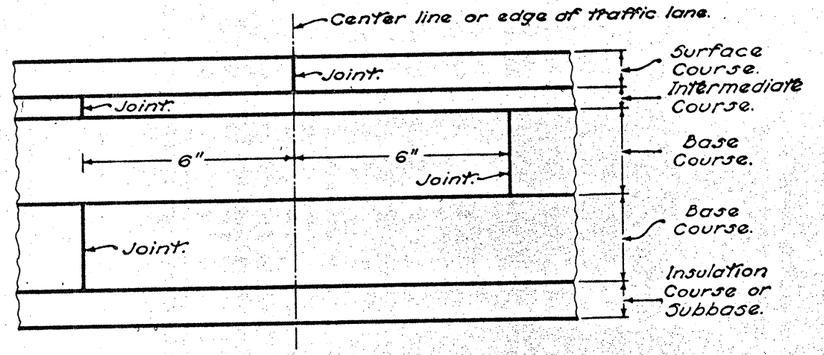
Metal adjusting rings shall fasten or tighten securely in the existing frame, or be welded permanently to the frame and be one piece or fabricated into one piece. Any installation unacceptable to the Engineer, including a poorly seated cover, shall be replaced by the Contractor at his expense.

USING METAL ADJUSTING RINGS
MANHOLES ADJUSTED TO GRADE

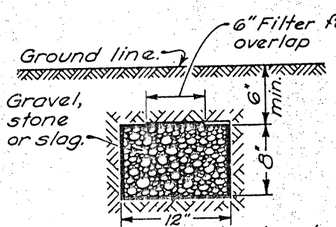


The Bituminous Aggregate in the upper part of the base widening shall finish approximately ¼" above the edge of the existing pavement where no preleveling is used. Where a preleveling (using intermediate course material) is specified, it shall be placed prior to excavation of the widening trench and the upper course of the base widening shall finish approximately ¼" above the preleveling.

COURSE DETAIL FOR WIDENING

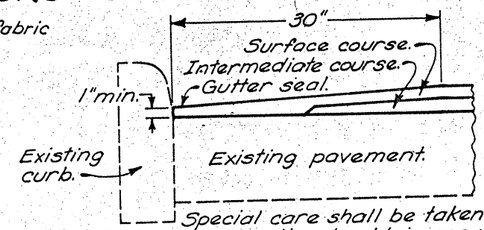


LAPPING LONGITUDINAL JOINTS



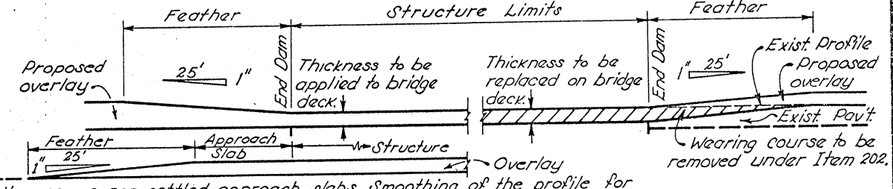
Aggregate drains to be placed where and as directed by Engineer. Provide filter fabric when specified as a separate pay item.

AGGREGATE DRAIN



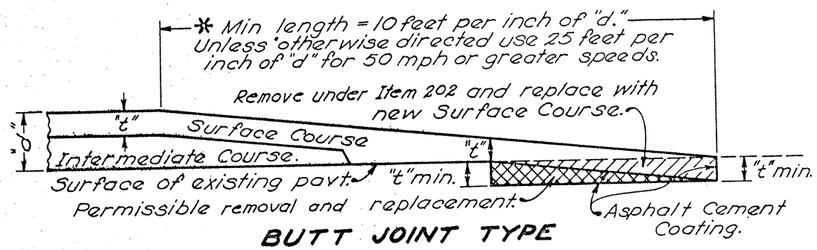
Special care shall be taken during construction to obtain maximum compaction of bituminous concrete in gutters.

GUTTER FINISH

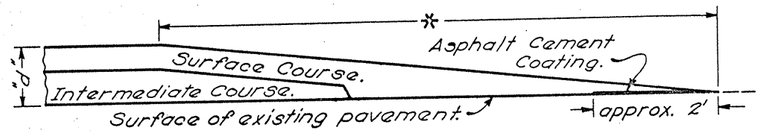


Details assume non-settled approach slabs. Smoothing of the profile for settlement is required per plan grades or as directed by the Engineer.

FEATHERING AT STRUCTURES



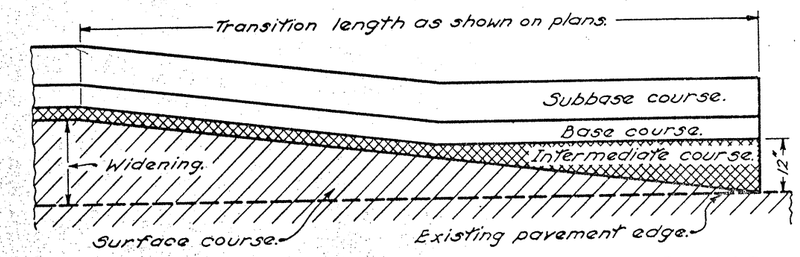
BUTT JOINT TYPE



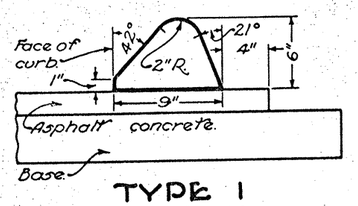
FEATHER EDGE TYPE

NOTE: Either butt or feather type may be used unless type is specified by the plan.

PLACING FEATHERED AREAS



MERGING EDGE OF PAVEMENT WIDENING WITH EDGE OF EXISTING PAVEMENT



TYPE I ASPHALT CONCRETE CURB

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF TRANSPORTATION

RESURFACING

STANDARD CONSTRUCTION DRAWING BP-5

APPROVED _____ ENGR., L.D.

DATE
6-1-65
1-1-71
6-1-72
8-11-75
4-16-79
7-16-81

FLASHING ARROW PANEL

THIS ITEM OF WORK SHALL CONSIST OF PROVIDING, OPERATING, MAINTAINING AND SUBSEQUENTLY REMOVING A FLASHING ARROW PANEL AS HEREIN DESCRIBED OR SHOWN ON THE PLANS.

THE FLASHING ARROW PANEL SHALL CONSIST OF THE FOLLOWING COMPONENTS:

A. FLASHER PANEL
B. LAMPS
C. CONTROLS
D. POWER SUPPLY
E. MOUNTING

COMPONENT SPECIFICATIONS

A. FLASHER PANEL

THE FLASHER PANEL SHALL BE OF EXTERIOR TYPE PLYWOOD OR CORROSION RESISTANT METAL CONSTRUCTION OF ADEQUATE DESIGN AND STRENGTH. THE PANEL FINISH SHALL BE FLAT BLACK.

FLASHER PANELS SHALL BE TWO SIZES. TYPE A PANELS SHALL BE A NOMINAL 48 INCHES HIGH BY 96 INCHES WIDE. TYPE B SHALL BE A NOMINAL 30 INCHES HIGH BY 54 INCHES WIDE.

B. LAMPS

LAMPS SHALL BE NUMBER 4412A (AMERICAN NATIONAL STANDARDS INSTITUTE, ANSI). THE LAMPS SHALL BE FITTED WITH CUTAWAY VISORS AT LEAST FIVE INCHES LONG. THE LAMPS SHALL BE SECURELY MOUNTED AND POSITIONED IN THE PANEL PERPENDICULAR TO THE PANEL FACE AND ORIENTED SO THAT THE LAMP LOCATING LUG (ON THE BACK OF THE LAMP) IS ON THE HORIZONTAL CENTER LINE THROUGH THE LENS. THE LUG WILL BE ON THE RIGHT SIDE OF THE LAMP AS VIEWED FROM THE FRONT.

THE LAMPS SHALL BE WIRED IN CIRCUITS THAT CAN BE SWITCHED TO DISPLAY ANY ONE OF THE FOLLOWING MESSAGE MODES: LEFT ARROW, RIGHT ARROW, LEFT AND RIGHT ARROW AND LIGHT BAR.

TYPE A PANELS SHALL CONTAIN 15 LAMPS AND TYPE B SHALL CONTAIN 13 LAMPS.

C. CONTROLS

EACH FLASHING ARROW PANEL SHALL CONTAIN A FLASHER CONTROL AND DIMMER CONTROL UNIT HOUSED IN A CABINET WHICH CAN BE LOCKED.

1. FLASHER CONTROL

THE FLASH RATE FOR THE SIGN PANEL SHALL BE AT A RATE OF 25 TO 35 FLASHES PER MINUTE. THE FLASHER SHALL NOT INTERFERE WITH RADIO BROADCAST OR RECEPTION.

THE FLASHING ARROW PANEL SHALL PROVIDE EITHER SYNCHRONOUS OR SEQUENTIAL FLASHING. SYNCHRONOUS FLASHING SHALL HAVE AN "ON TIME" OF 50%. SEQUENTIAL FLASHING SHALL BE AS FOLLOWS:

LEFT ARROW OR RIGHT ARROW DISPLAYS - LAMPS ALONG THE SHAFT, EXCEPT THE LAMP ADJACENT TO THE ARROW HEAD, AND ALL THE LAMPS IN THE ARROW HEAD SHALL BE LIGHTED AT UNIFORM INTERVALS DURING 1/4 OF THE FLASH CYCLE AND THEN ALL LAMPS SHALL REMAIN LIGHTED FOR 1/4 OF THE FLASH CYCLE.

A MINIMUM OF THREE INDICATOR LIGHTS SHALL BE PLACED ON THE BACK OF THE PANEL TO INDICATE WHICH MESSAGE MODE IS IN OPERATION.

2. DIMMER CONTROL

LAMP INTENSITY SHALL BE VARIABLE BY MEANS OF A PHOTOELECTRICALLY CONTROLLED CIRCUIT WHICH SHALL REDUCE LAMP OUTPUT DURING LOW AMBIENT LIGHT CONDITIONS. THE PHOTOELECTRIC CONTROL SHALL BE CALIBRATED TO ACTUATE A LAMP DIMMING CIRCUIT AT 2 to 5 AMBIENT FOOT CANDLES AND TO RESTORE THE LIGHTS TO NORMAL AT 5 TO 10 AMBIENT FOOT CANDLES. A TIME DELAY SHALL BE BUILT INTO THE CONTROL TO PREVENT FALSE OPERATION DUE TO LIGHT FLASHES. THE PHOTOELECTRIC CONTROL SHALL CONTAIN A SWITCH WHICH SHALL OVERRIDE THE PHOTOELECTRIC CONTROL. THE DIMMING CIRCUIT SHALL BE EXTERNALLY ADJUSTABLE SUCH THAT THE LIGHT OUTPUT MAY BE ADJUSTED WITHIN THE RANGE OF 40% TO 100% OF THE NORMAL LAMP OUTPUT.

D. POWER SUPPLY

THE FLASHING ARROW PANEL SHALL OPERATE FROM POWER SOURCES CAPABLE OF FURNISHING 12 VOLTS DC AT THE LAMPS.

MOTOR GENERATORS, IF USED, SHALL BE OF MODERN DESIGN TO PROVIDE LOW EMISSION OF POLLUTANTS AND SHALL BE PROPERLY MUFFLED. THE MOTOR GENERATOR SHALL BE ENCLOSED IN A MESH ENCLOSURE WHICH CAN BE LOCKED. THE FUEL TANK SHALL HAVE A CAP WHICH CAN BE LOCKED. THE TANK CAPACITY SHALL BE SUFFICIENT TO PROVIDE UNATTENDED OPERATION FOR A MINIMUM OF 24 HOURS BUT SHALL NOT EXCEED 48 HOURS SUPPLY.

MOTOR GENERATORS SUPPLYING POWER TO A FLASHING ARROW SIGN SHALL NOT BE USED TO SUPPLY POWER TO OTHER EQUIPMENT.

E. MOUNTING

THE FLASHING ARROW PANEL MAY BE TRAILER OR VEHICLE MOUNTED OR MOUNTED ON A RIGID SUPPORTING DEVICE SUITABLE FOR MAINTAINING IT IN THE DESIGNATED POSITION. EACH OF THE MOUNTING METHODS SHALL BE SUITABLY STABLE SUCH AS TO PREVENT MOVEMENT DUE TO HIGH WINDS OR PASSAGE OF LARGE VEHICLES.

WHEN A TRAILER IS USED, CONSTRUCTION SHALL BE SUCH AS TO TRANSPORT THE FLASHING ARROW PANEL AND APPURTANCES ADEQUATELY AND LEGALLY AS WELL AS SUPPORT THEM PROPERLY DURING OPERATION. THE TRAILER SHALL BE EQUIPPED WITH DEVICES WHICH SHALL PROVIDE LEVELING AND STABILITY DURING OPERATION.

MINIMUM ARROW PANEL MOUNTING HEIGHT SHALL BE 7 FEET ABOVE THE PAVEMENT SURFACE (MEASURED TO THE BOTTOM OF THE PANEL).

GENERAL REQUIREMENTS

THE FLASHING ARROW PANEL SHALL BE DESIGNED FOR OPERATION IN 100% HUMIDITY AND TEMPERATURES FROM -20 to +130 DEGREES FAHRENHEIT.

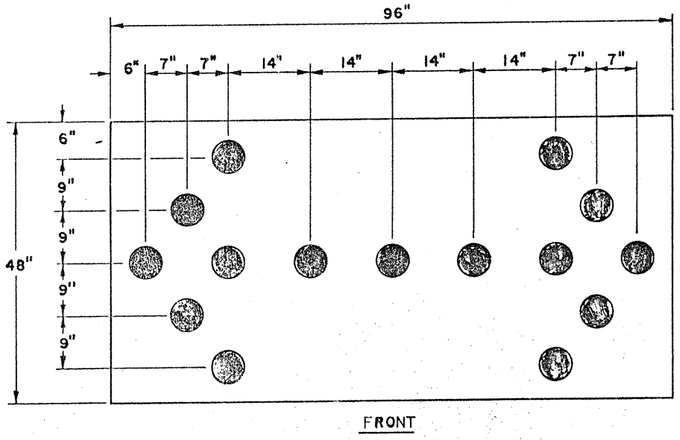
USE AND OPERATION

THE FLASHING ARROW PANEL SHALL BE LOCATED AS SHOWN IN THE MAINTENANCE OF TRAFFIC DRAWINGS OR AS DIRECTED BY THE ENGINEER AND OPERATED CONTINUOUSLY DURING TRAFFIC MAINTAINED PERIODS. THE CONTRACTOR SHALL SUPPLY ALL FUEL, LUBRICANTS AND PARTS NECESSARY TO OBTAIN CONTINUOUS OPERATION AND SHALL PROVIDE ALL SERVICE. THE CONTRACTOR SHALL ARRANGE WITH THE ENGINEER, AN ACCEPTABLE METHOD OF OBTAINING SERVICE FOR A MALFUNCTIONING PANEL WITHIN 30 MINUTES OF A REPORTED MALFUNCTION.

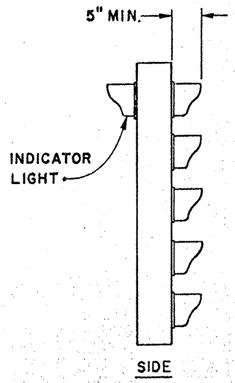
UNLESS OTHERWISE SPECIFIED, A FLASHING ARROW PANEL, TYPE A SHALL BE USED EXCEPT WHERE THE SPEED LIMIT OF THE APPROACH TO THE CONSTRUCTION AREA IS 35 MPH OR LESS, THEN A FLASHING ARROW PANEL, TYPE B MAY BE USED.

WHEN LEFT UNATTENDED, THE CONTROL CABINET, MOTOR GENERATOR ENCLOSURE AND FUEL TANK SHALL BE LOCKED.

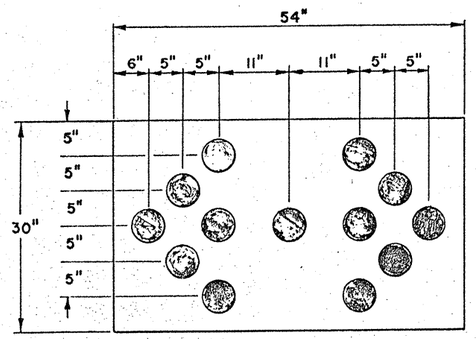
WHEN NOT IN USE, THE FLASHING ARROW PANEL SHALL BE STORED AT A LOCATION WHICH WILL NOT BE HAZARDOUS TO TRAFFIC OR PEDESTRIANS.



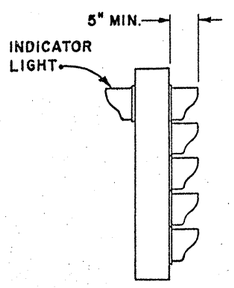
FRONT



SIDE



FRONT



SIDE

BUREAU OF DESIGN SERVICES
DIVISION OF HIGHWAYS
OHIO DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL	DATE 10/5/77
FLASHING ARROW PANEL	
STANDARD CONSTRUCTION DRAWING TC-35.10	

APPROVED: E. J. Kluchar Engineer of Design Services

Jan 24, 1985

Cuyahoga
Various Rts + Sec.
3 Parts 25 Structures
105

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

SUPPLEMENTAL SPECIFICATION 803

SUPPLEMENT TO SECTION 108.01, SUBLETTING OF CONTRACT, OF THE CMS

May 27, 1983

(a) The following terms as used in this section are defined as follows:

(1) "His own organization" shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

(b) The contractor shall perform with his own organization contract work amounting to not less than 50 percent of the total contract price. An assignment of contract work is considered synonymous with a subcontract to perform work.

(c) To assure that any subcontracted work is performed in accordance with the contract requirements, the contractor shall furnish:

(1) A competent superintendent or foreman who is employed by him, who has full authority to direct performance of the work in accordance with the contract requirements, and who is in charge of all construction operations (regardless of who performs the work), and

(2) Such other of his organizational capability and responsibility (supervision management, and engineering services) as the Director determines is necessary to assure the performance of the contract.

(d) To determine whether the contractor is in compliance with the requirement that he perform with his own organization contract work amounting to not less than 50 percent of the total contract price, the following criteria shall apply:

(1) The contract amount upon which the 50 percent requirement is computed shall include the cost of materials and manufactured products which are to be purchased or produced under the contract provisions.

(2) The percentage of subcontracted work shall be based on the contract, rather than subcontract unit prices. If only a part of a contract item is to be sublet, its proportional value shall be determined administratively on the same basis. This procedure should be followed even when the part not sublet consists only of procuring the materials. However, when a firm both sells

materials to a contractor and performs the work of incorporating the materials into the project, these two phases must be considered in combination and as constituting a single subcontract.

If an affiliate of the firm either sells the materials or performs the work, the Department may refuse approval. An affiliate is one who has some common ownership or other close relation to said firm.

(e) Contract work shall not be performed under a subcontract or other agreement unless such arrangement has been authorized by the Director in writing. A copy of any such subcontracts must be furnished to the Department.

PROJECT NO.:
LETTING DATE:
COMPL. DATE:

OHIO DEPARTMENT OF TRANSPORTATION
APPROXIMATE ESTIMATE
UNIT PRICE CONTRACT

PROJECT: STATE
TYPE: Bridge Repair
COUNTY: Cuyahoga
State Route

3 Parts (25 Structures)
For improving twenty five structures on various routes and sections in Cuyahoga (Cities of Cleveland, North Olmsted, Independence and Garfield Heights, and the Village of Bratenahl) County, Ohio, by planing asphalt and portland cement pavement approach slabs, correcting profile grade at the approaches using asphalt concrete, and other related work in accordance with plans and specifications.

Project Length: 0.00 ft. or 0.00 mile
Work Length: 172,814 ft. or 32.73 miles

REF NO.	ITEM NO.	QUANT	UNIT	DESCRIPTION
1	202	10	ea	raised pavement markers removed for storage
2	404	861	cu yd	asphalt concrete, AC-20
3	407	2268	gal	tack coat
4	407	80	ton	cover aggragate
5	516	42	lin ft	vertical extension of structure expansion joint
6	621	1.16	mile	edge line
7	621	1.54	mile	lane line, 4"
8	Special	10834	sq yd	pavement planing, bituminous without heating

9	Special	11542	sq yd	pavement planing, portland cement concrete
0	Special	1085	sq yd	patching planed surfaces, bituminous
11	Special	1154	sq yd	patching planed surfaces, concrete
12	Special	146	sq yd	full depth rigid pavement removal and flexible replacement
13	Special	270	lin ft	pavement sawing
14	Special	50	hr	law enforcement officer with patrol car
15	624	lump		Mobilization
16	103.05	lump		Premium for Contract Performance Bond and for Payment Bond
17	614	lump		Maintaining Traffic
18				TOTAL AMOUNT OF THE BID

ESTIMATED COST OF REPAIRS TO DETOUR

ESTIMATED COST OF RIGHT OF WAY

ESTIMATED COST OF ENGINEERING, SUPERINTENDENCE, AND CONTINGENCIES

ESTIMATED COST OF PRELIMINARY ENGINEERING

APPROXIMATE TOTAL COST AND EXPENSE

FEDERAL AID

STATE'S SHARE XX

COUNTY'S SHARE

MUNICIPALITY'S SHARE

OTHER FUNDS

SUBMITTED November 21 ,19 84

BY James E. Barnhart /RLE
Est. Engr.

BY Warren J. Smith 11-21-84
Director, ODOT date