MICROFILMED
AUG 10 1994

E-11

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CUY-480-19.23

CITY OF MAPLE HEIGHTS
CITY OF GARFIELD HEIGHTS
VILLAGE OF VALLEY VIEW
CITY OF INDEPENDENCE

CUYAHOGA COUNTY

IR-480-4(70)183

CUYAHOGA COUNTY CUY-480-19.23	OHIO
FHWA REGION 5	1/171
IR-480-4(70)183	FEDERAL PROJECT

ALL PROJECT DESIGNATIONS OF CUY-480-19.23 SHALL GOVERN OVER THE ENTIRE SET OF PLANS IN LIEU OF CUY-480-19.19.

DESIGN DESIGNATION

CURRENT ADT (1988)	= 108400
DESIGN YEAR ADT (2008)	= 156,310
D.H.V.	= 1,5631
D	= 55%
T	= 6%
V(POSTED)	= 55 MPH
V(DESIGN)	= 60 MPH
FUNCTIONAL CLASSIFICATION	INTERSTATE
DESIGN EXEPTIONS	NONE

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

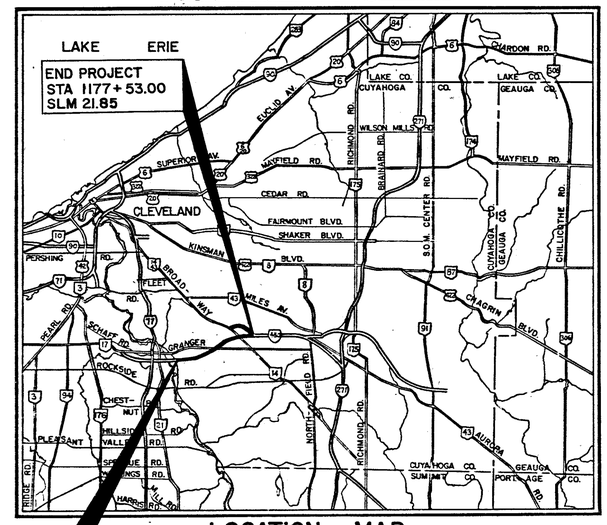
CONVENTIONAL SIGNS

County Line
Township Line
Section Line
Corporation Line or
Fence Line (existing) (proposed)
Center Line 352 353
Trees, Stumps, (to be removed)
Utility Poles: Telephone, Power, Light.

Limited Access (only) LA
Right of Way (only) RW
Limited Access & Right of Way LA & RW
Existing Right of Way
Property Line (in existing fence)
Railroad or
Guardrail (existing) (proposed)

INDEX OF SHEETS

TITLE SHEET 1
SCHEMATIC PLAN 2
TYPICAL SECTIONS 3-5
GENERAL NOTES 6-16
CALCULATIONS & SUBSUMMARIES 17-22
GENERAL SUMMARY 23-24
PLAN SHEETS 25-37
INTERSECTION DETAILS 38-43
MISCELLANEOUS DETAILS 44-53
CROSS SECTIONS 54-55
MAINTENANCE OF TRAFFIC PLANS 56-88
TRAFFIC CONTROL PLANS 89-148
LIGHTING PLANS 149-153
STRUCTURE PLANS 154-171



LOCATION MAP

SCALE IN MILES
0 1 2 5 10

Portion to be improved
State & Federal Routes
Other Roads

1989 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on these plans and estimates.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (I) OF THE REVISED CODE OF OHIO, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

Approved Martin A. Gallito
Date 10-11-89 District Deputy Director of Transportation

Approved B. D. Vanderman
Date 12-13-89 Engineer, Bureau of Bridges and Structural Design

Approved Theodore J. Stitt
Date 1/18/90 Chief Engineer, Planning and Design

Approved Bernard B. Hurst
Date 1/18/90 Director, Department of Transportation

LINE DATA

PROJECT LIMITS

STA 1039+02.75 TO STA 1177+53.00 = 13,850.25 LF = 2.623 MI.

ADDITIONS &/OR DEDUCTIONS

STA 1040+50.00 BK = STA 1040+25.85 AH = +24.15 LF
STA 1145+00.58 BK = STA 1145+22.32 AH = -21.74 LF

PROJECT LENGTH = 13,852.66 LF = 2.624 MI.

ADDITIONAL WORK

STA. 995+20 TO STA. 1039+02.75 = 4382.75 LF.
STA. 1177+53 TO STA. 1198+15 = 2062.00 LF.

TOTAL WORK LENGTH = 20297.41 LF = 3.844 MI.

SCALES

Plan 0' 25' 50' 100'
Profile: Horizontal, Vertical
Cross Section: Horizontal 0' 5' 10' 20', Vertical 0' 5' 10' 20'

SUPPLEMENTAL SPECIFICATIONS			
802	5-4-88	947	10-17-83
847	10-17-83	905	5-2-89
931	6-18-85		
850	5-31-88	952	12-14-88
812	8-8-88		
803	10-2-89		

UNDERGROUND UTILITIES

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

NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-2	1-11-85	GR-1	1-11-85	HL-10.11	5-1-87	TC-9.10	4-24-80	TC-41.40	6-18-79	TC-85.10	1-20-84
BP-3	12-6-76	GR-2B	2-5-82	HL-10.12	5-1-87	TC-12.30	1-20-84	TC-41.50	3-26-79	TC-85.20	1-20-84
BP-4	10-1-87	GR-3	1-21-85	HL-10.13	5-1-87	TC-16.20	1-20-84	TC-42.10	8-19-77	MT-95.30	10-10-88
BP-5	10-1-87	GR-4	2-5-82	HL-20.11	5-1-87	TC-17.10	1-20-84	TC-42.20	3-26-79	MT-99.10	11-14-86
BP-7	10-1-87	GR-4A	1-30-84	HL-30.11	5-1-87	TC-21.20	1-20-84	TC-51.10	1-20-84	MT-99.20	4-29-88
BP-12	10-1-87	GR-5	2-5-82	HL-30.21	5-1-87	TC-22.10	3-1-79	TC-52.20	4-3-79	SD-1-69	6-12-69
BP-13	5-8-87	MC-9A	1-11-85	HL-30.22	5-1-87	TC-22.20	3-1-79	TC-71.10	4-9-79		
BP-1	6-1-65	MC-4	7-26-76	HL-40.10	5-1-87	TC-31.21	3-6-79	TC-72.20	2-26-82		
CB-5	11-10-83	MC-5	6-12-75	HL-50.11	5-1-87	TC-32.10	3-8-79	TC-81.20	1-20-84	TC-18.24	4-25-79
F-1	11-10-83	MC-9	1-30-84	HL-60.11	5-1-87	TC-32.11	3-21-79	TC-82.10	8-29-84	TC-18.26	5-31-79
I-3C & D	4-1-80	MC-11	8-1-78	HL-60.12	5-1-87	TC-35.10	8-29-84	TC-83.10	1-20-84	TC-52.10	4-3-79
GR-3B	1-21-85	MH-1	12-18-84	HL-60.31	5-1-87	TC-41.10	8-29-84	TC-83.20	1-20-84	MC-6	1-30-81
GR-7	2-5-82	MH-3	12-18-84	HL-20.31	5-1-87	TC-41.20	3-26-79	TC-84.20	1-20-84	MH-2	6-12-75

Plan Prepared By:
DISTRICT 12
LOCATION & DESIGN

REVISED 3-26-90

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

Project: 05656
Date of Letting _____ 19__, Contract No. _____

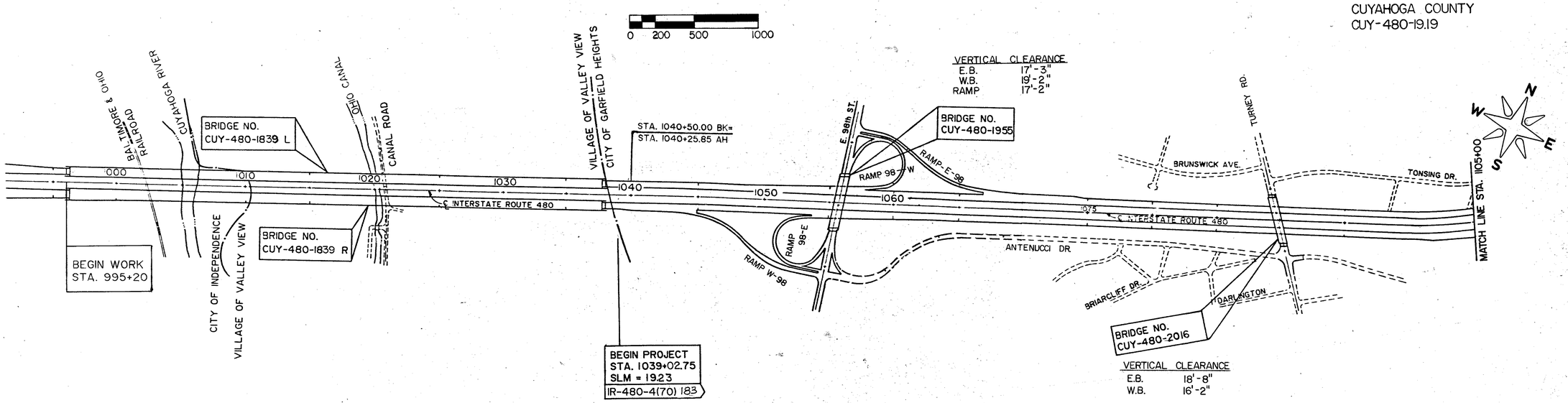
RUNNING 44.562 29.724
LL0300 Rev. 9-3-75

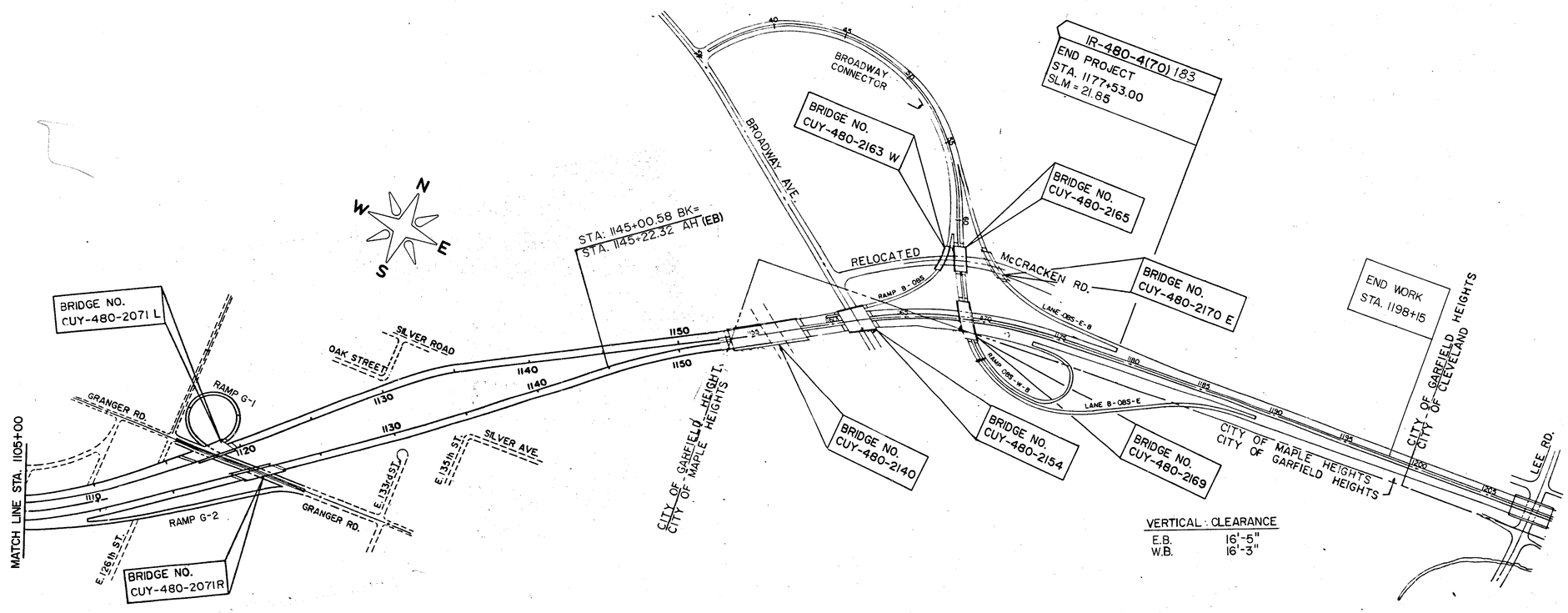
FHWA REGION	STATE	PROJECT	
5	OHIO		

2/171

CUYAHOGA COUNTY
CUY-480-19.19

SCHEMATIC PLAN

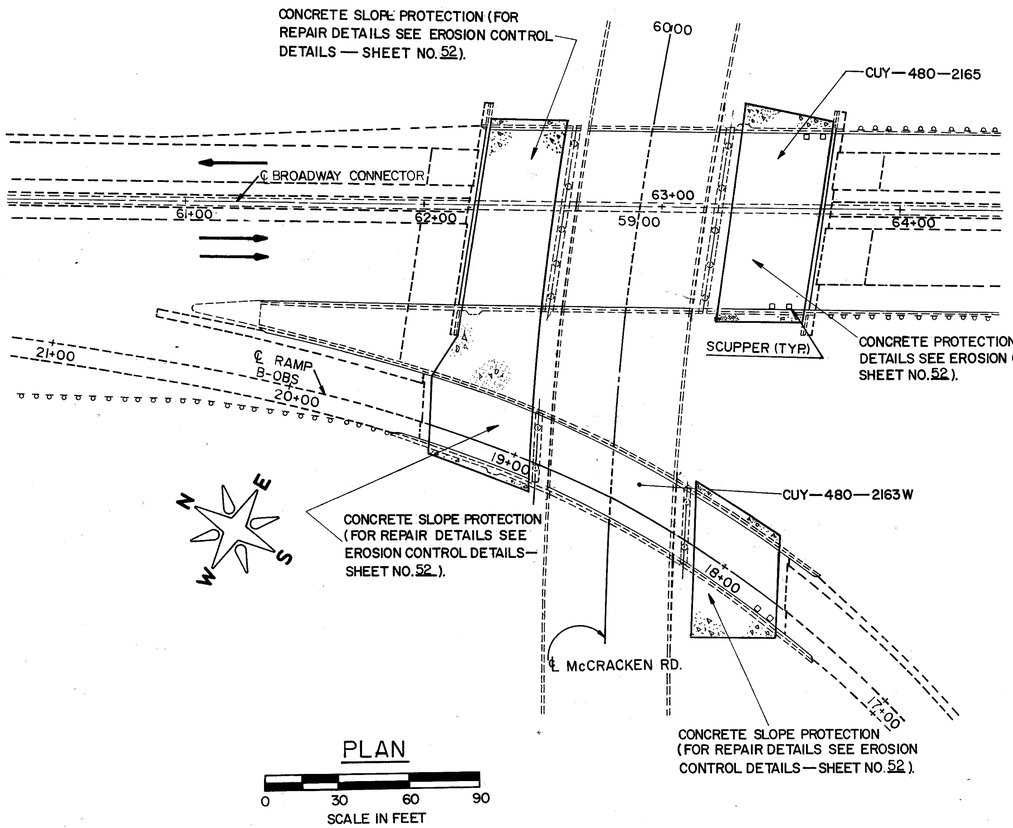




SCHEMATIC PLAN

PLAN AND BRIDGE TRANSVERSE SECTION

FOR LEGEND SEE SHEET 159.



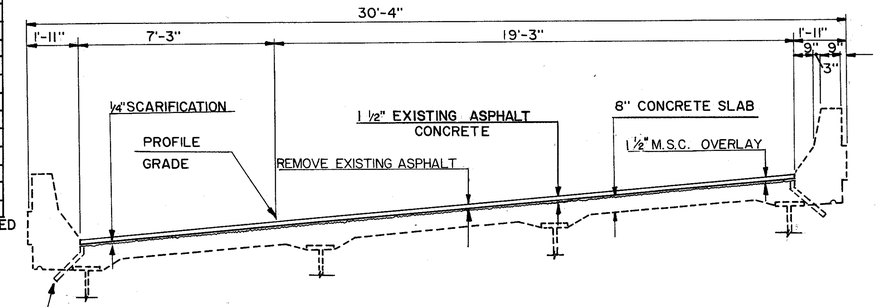
PLAN

0 30 60 90
SCALE IN FEET

CUY-480-2163 W			
LOCATION	SPECIAL	*519	*SPECIAL
	SOUNDING CONCRETE BRIDGE COMPONENTS	PATCHING CONCRETE STRUCTURES, AS PER PLAN	REPAIRING CONCRETE WITH SOLVENT-FREE EPOXY RESIN
	SQ. FT.	SQ. FT.	SQ. FT.
ABUTMENTS	864	2	3
PIERS & CAPS	1,260	3	4
PARAPETS	3,591	7	11
** ADDITIONAL		12	17
TOTAL	5,715	24	35

** ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

* ACTUAL UNSOUND AREA OR 1% OF THE SEALED AREA



TYPICAL TRANSVERSE SECTION
CUY-480-2163 W

* ACTUAL UNSOUND AREA OR 1% OF THE SEALED AREA

CUY-480-2165			
LOCATION	SPECIAL	*519	*SPECIAL
	SOUNDING CONCRETE BRIDGE COMPONENTS	PATCHING CONCRETE STRUCTURES, AS PER PLAN	REPAIRING CONCRETE WITH SOLVENT-FREE EPOXY RESIN
	SQ. FT.	SQ. FT.	SQ. FT.
ABUTMENTS	666	2	2
PIERS & CAPS	6,516	13	20
PARAPETS	5,580	11	17
** ADDITIONAL		26	38
TOTAL	12,762	52	77

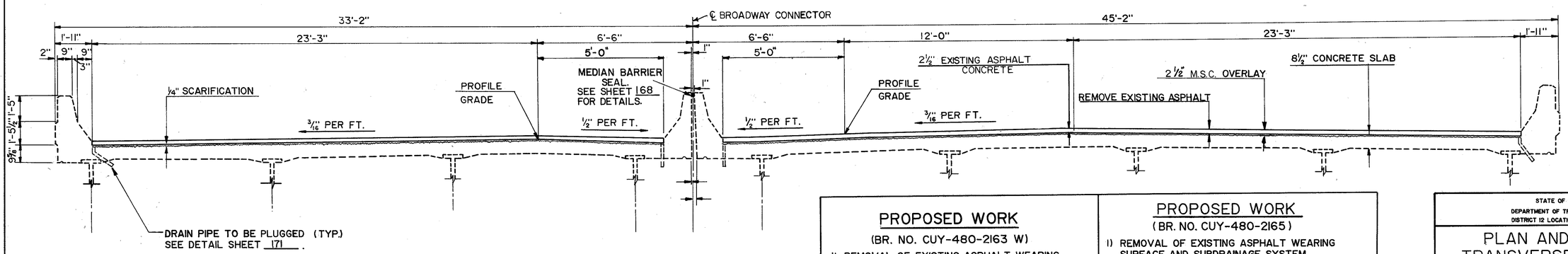
** ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

EXISTING STRUCTURE
(BR. NO. CUY-480-2163 W)

TYPE: CONTINUOUS 3-SPAN ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 48'-9 9/16", 69'-3 7/16", 48'-7 7/8"
ROADWAY: 26'-6" CURB TO CURB
LOADING: HS 20-44
WEARING SURFACE: 1 1/2" ASPHALT CONCRETE
ALIGNMENT: 13°-30'-00"
SKEW: 23°-50'-55"

EXISTING STRUCTURE
(BR. NO. CUY-480-2165)

TYPE: CONTINUOUS 3-SPAN ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 38'-9", 64'-3", 40'-3"
ROADWAY: 74'-6" CURB TO CURB WITH CONCRETE BARRIER
LOADING: HS 20-44
WEARING SURFACE: 2 1/2" ASPHALT CONCRETE
ALIGNMENT: TANGENT
SKEW: 07°-46'-02"



TYPICAL TRANSVERSE SECTION
CUY-480-2165

0 2 4 6 8
SCALE IN FEET

PROPOSED WORK
(BR. NO. CUY-480-2163 W)

1) REMOVAL OF EXISTING ASPHALT WEARING SURFACE AND SUBDRAINAGE SYSTEM
2) 1 1/2" M.S.C. OVERLAY TO GRADE
3) SLOPE PROTECTION REPAIR
4) SEAL CONCRETE SURFACES
5) SEAL EXPANSION JOINTS
6) PATCH CONCRETE SURFACES
7) DECK BOTTOM SOUNDING AND EPOXY INJECTING

PROPOSED WORK
(BR. NO. CUY-480-2165)

1) REMOVAL OF EXISTING ASPHALT WEARING SURFACE AND SUBDRAINAGE SYSTEM
2) 2 1/2" M. S. C. OVERLAY TO GRADE
3) SLOPE PROTECTION REPAIR
4) SEAL CONCRETE SURFACES
5) SEAL EXPANSION JOINTS
6) PATCH CONCRETE SURFACE
7) SEAL MEDIAN BARRIER JOINT
8) DECK BOTTOM SOUNDING AND EPOXY INJECTING

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT 12 LOCATION & DESIGN

PLAN AND BRIDGE TRANSVERSE SECTION
CUY-480-2163 W
CUY-480-2165
BROADWAY CONNECTOR RAMPS OVER McCRACKEN RD.
CUYAHOGA COUNTY OHIO

DESIGNED	TRACED	CHECKED	REVIEWED	REVISED
DATE	T.A.K. DATE	DATE	DATE	SHEET 12/18

90449