OUTAGAMIE

1123-7-71, 72

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

APPLETON - GREEN BAY

CTH E INTERCHANGE
USH 41
OUTAGAMIE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1123-7-71	DPI 0131(8)	1
1123-7-72	STP 03(107)	1

RECEIVED JAN 25 1995 OUTAGAMIE COUNTY HIGHWAY DEPT.

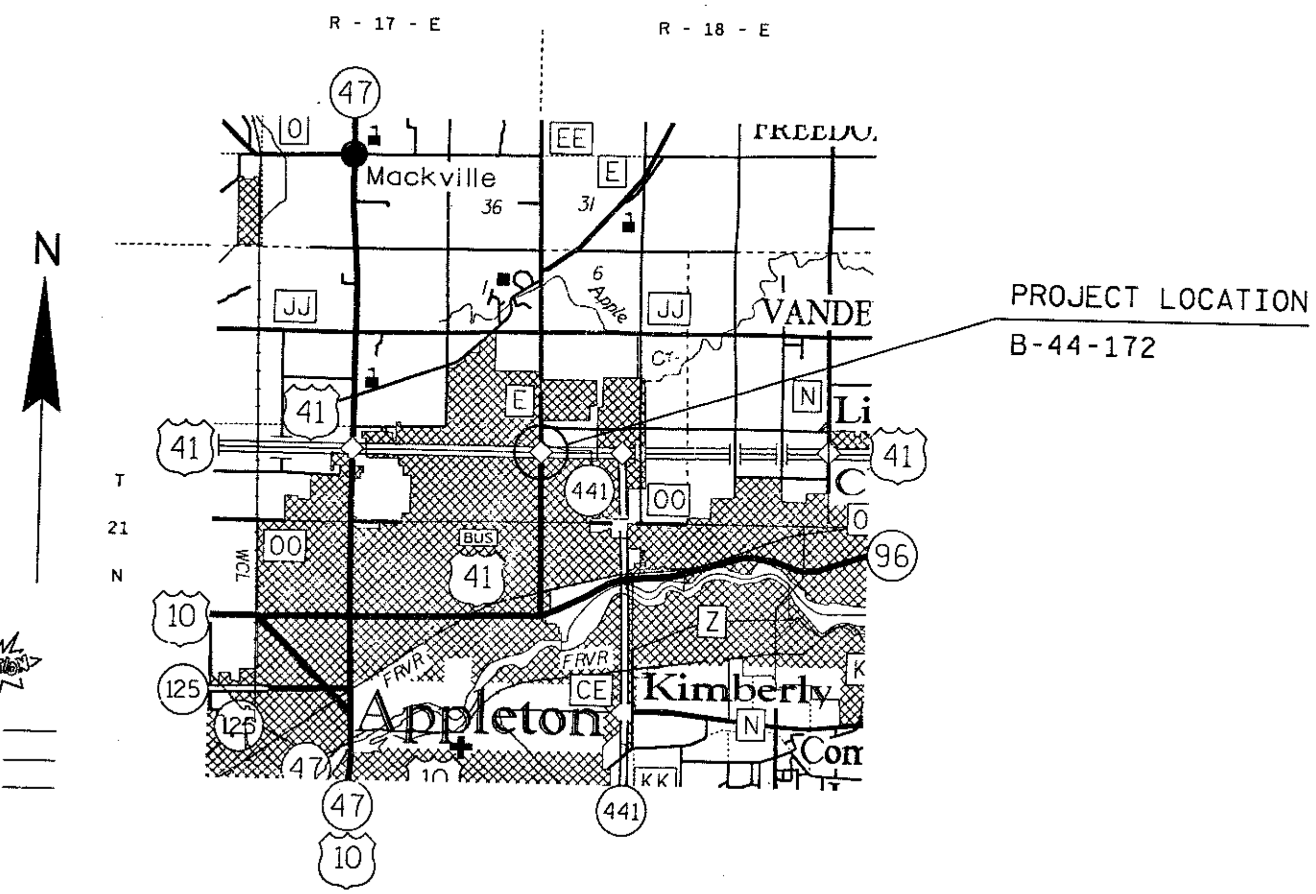
STATE PROJECT NUMBER
1123-7-71, 72

INDEX OF SHEETS

TOTAL SHEETS = 161

DESIGN DESIGNATION

			CTH E	USH 41
A.D.T.	1994	=	8,100	28,900
A.D.T.	2016	=	31,800	52,900
D.H.V.		=	1,900	3,000
D.		=	55-45	55-45
T.		=	N/A	11.6%
V.		=	50 MPH	70 MPH
ESALS		=	N/A	N/A



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.00 MI.

CONVENTIONAL SIGNS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED EASEMENT
EXISTING RIGHT OF WAY
NEW RIGHT OF WAY
REFERENCE LINE
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE
CULVERT IN PLACE
CULVERT REQUIRED
CULVERT REQUIRED (Profile)

COMBUSTIBLE FLUIDS (UNDER PRESSURE)
UNDERGROUND UTILITIES
GAS
ELECTRIC
TELEPHONE
SERVICE PEDESTAL
CABLE MARKER
POWER POLE
TELEPHONE POLE
RAILROADS
MARSH
WOODED AREA

ALL COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE.

(71) INTERCHANGE
(72) BIKE/PEDESTRIAN FACILITIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor M. D. VANDEHEI
Designer P. M. VRANEY, P. J. DUCHATEAU, I. XIONG
District Examiner T. R. KAUFMAN
District Supervisor R. L. SABOURIN
Proj. Dev. Engineer
C.O. Examiner R. CALKINS

APPROVED FOR DISTRICT OFFICE
DATE: 11/10/94 Richard Lohmann (Signature)

AUTHORIZED FOR CENTRAL OFFICE DESIGN
DATE: 12/15/94 (Signature)

E24

E24

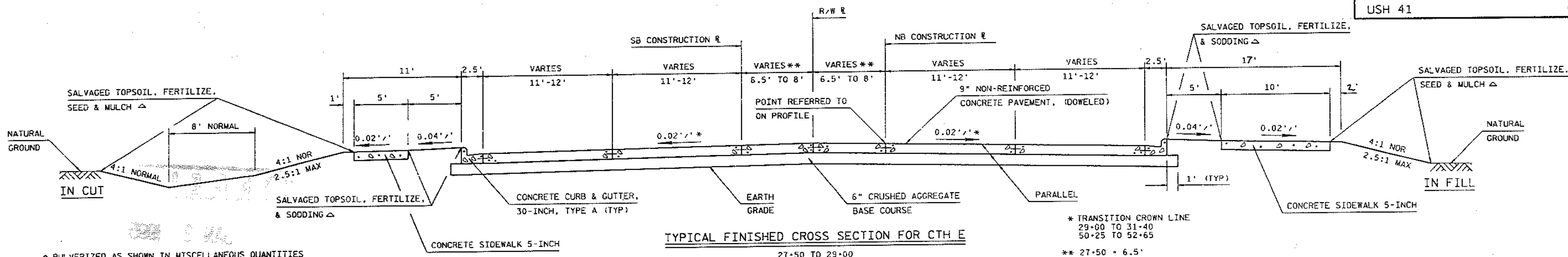
FILE NAME: D3_112307101.DGN

WISDOT/CADDS SHEET 10

STATE PROJECT NUMBER	SHEET NO.
1123-7-71,72	2.0

TYPICAL CROSS SECTIONS FOR

USH 41 OUTAGAMIE CO



TYPICAL FINISHED CROSS SECTION FOR CTH E

27+50 TO 29+00
52+65 TO 53+73

* TRANSITION CROWN LINE
29+00 TO 31+40
50+25 TO 52+65

** 27+50 - 6.5'
29+00 - 6.63'
52+65 - 8.00'
53+73 - 8.00'

△ PULVERIZED AS SHOWN IN MISCELLANEOUS QUANTITIES

UTILITIES

DIGGER'S HOTLINE 1-800-242-8511 (TOLL FREE)

AMERITECH
ATTN : JOHN STUMPF 414-735-3246
221 WEST WASHINGTON STREET
4th FLOOR, OSPE
APPLETON, WISCONSIN 54911
CABLE LOCATE : 1-800-242-8511 (TOLL FREE)

WISCONSIN ELECTRIC POWER COMPANY
JIM JACOBS 414-735-8445
P.O. BOX 1699
APPLETON, WISCONSIN 54913

WISCONSIN NATURAL GAS COMPANY
DAVE BROOKS 414-735-8357
800 SOUTH LYNNDALE
APPLETON, WISCONSIN 54912

CABLEVISION
RANDY HAUGESTUEN 414-738-3160
P.O. BOX 145
1001 KENNEDY AVENUE
KIMBERLY, WISCONSIN 54136-0145

CITY OF APPLETON
CINDI HESSE, CLERK 414-832-6425
200 N. APPLETON STREET
APPLETON, WISCONSIN 54911

APPLETON WATER DEPARTMENT
DON WYDEVEN 414-832-5940
125 N. WALNUT
APPLETON, WISCONSIN 54911

COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

FRANK CHARLESWORTH, JR. - OUTAGAMIE COUNTY
ZONING ADMINISTRATOR
410 SOUTH WALNUT STREET
APPLETON, WISCONSIN 54914
PHONE 414-832-5255

STANDARD DETAIL DRAWINGS

INLET COVERS	8A5-9a,b
INLET AND MANHOLE COVERS	8A5-9d
MANHOLES, TYPE 1	8B6-3
INLETS, TYPES 1, 2 AND 3	8C1-5
INLETS, TYPES 8, 9, 10 AND 11	8C5-2
CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES	8D1-11
CURB RAMPS	8D5-8
SILT FENCE	8E9-4
APRON ENDWALLS FOR CULVERT PIPE	8F1-10a
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN	8F6-3
STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SECTION	8F7-2
AT-GRADE SIDE ROAD INTERSECTIONS, TYPES "B", "C" AND "D"	9A1-9a
CONDUIT	9B2-5
PULL BOX	9B4-1
CONCRETE BASES	9C2-1
CAST BASES	9C3-1
CONCRETE CONTROL CABINET BASES	9C5-1
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3	9E1-1b
HARDWARE DETAILS FOR POLE MOUNTINGS	9E1-1e
NON-FREEWAY LIGHTING UNIT POLE WIRING	9E3-1
NAME PLATE-STRUCTURES	12A3-4
ASPHALTIC SHOULDER RUMBLE STRIPS	13A4-3
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES	13C1-9 ✳
DOWELED NON-REINFORCED CONCRETE PAVEMENT (TRANSVERSE JOINTS SPACED AT 20' AND NORMAL)	13C13-1 ✳
TEMPORARY PRECAST CONCRETE BARRIER	14B7-8a
PRECAST CONCRETE BARRIER END SECTION AND PORTABLE CRASH CUSHION	14B7-8b
CLASS "A" STEEL PLATE BEAM GUARD, INSTALLATION & ELEMENTS	14B15-1a
CLASS "A" STEEL PLATE BEAM GUARD, BULLNOSE INSTALLATION AT MEDIAN PIERS AND SIGN SUPPORTS	14B18-1d
CHAIN LINK FENCE	15B3-9a & 9b
BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES	15C2-2
PAVEMENT MARKING SYMBOLS	15C7-4a
PAVEMENT MARKING (MAINLINE)	15C8-6a
PAVEMENT MARKING (LEFT TURN LANE)	15C8-6c
PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)	15C8-6d
PAVEMENT MARKING (RAMP & GORES)	15C8-6e
RAISED PAVEMENT MARKERS (RAMPS & ARROWS)	15C10-3b
RAISED PAVEMENT MARKERS (CASTING & SAWCUT DETAILS)	15C10-3c
LANDMARK REFERENCE MONUMENTS AND COVERS	16A1-5

GENERAL NOTES

THE CONTROL SURVEY FOR THIS PROJECT WAS CONDUCTED UNDER AND MET SPECIFICATIONS FOR THIRD ORDER CONTROL SURVEYS.

ALL COORDINATES SHOWN ON THIS PLAN ARE GRID COORDINATES REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE.

THE X AND Y COORDINATES ARE BASED ON NORTH AMERICAN DATUM 1983 (1991) ADJUSTMENT.

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

ALL DISTANCES AND STATIONING SHOWN ON THIS PLAN ARE GROUND VALUES. GRID VALUES ARE OBTAINED BY MULTIPLYING GROUND VALUES BY 0.999940.

BEARINGS ON THIS PLAN ARE GRID BEARINGS TO THE NEAREST SECOND.

ALL ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D.).

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE EXISTING RIGHT-OF-WAY IS RESERVED FOR HIGHWAY PURPOSES BY EASEMENT. THE CONTRACTOR SHALL MAKE HIS OWN NEGOTIATIONS WITH THE PROPERTY OWNERS RELATIVE TO THE DISPOSAL OF TREES CUT ON THEIR PROPERTY IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE ITEM "REMOVING OLD CULVERTS" WILL PERTAIN ONLY TO THOSE CULVERTS ENUMERATED IN THE SUMMARY OF MISCELLANEOUS QUANTITIES. ALL OTHER CULVERTS TO BE REMOVED WILL BE INCIDENTAL TO CULVERT INSTALLATION OR UNCLASSIFIED EXCAVATION.

THE ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE EARTH GRADE ELEVATIONS AT LOCATIONS IDENTIFIED BY TYPICAL CROSS SECTIONS.

ALL SILT FENCE REQUIRED FOR THIS PROJECT SHALL MEET THE REQUIREMENTS OF SILT FENCE FOR SILTY SOILS.

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTION FROM BORROW EXCAVATION,UNCLASSIFIED EXCAVATION, CONCRETE PAVEMENT DISPOSAL. THE FACTORS USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME FOR MATERIALS REQUIRED IS 1.15 FOR BORROW EXCAVATION, 1.40 FOR UNCLASSIFIED EXCAVATION, AND 1.10 FOR PAVEMENT DISPOSAL.

EARTHWORK BALANCES AND HAULS AS SHOWN ON THE PLAN AND PROFILE SHEETS MAY BE REVISED WITH THE APPROVAL OF THE ENGINEER IF SUCH REVISIONS WILL FACILITATE THE CONTRACTOR'S PLAN OF OPERATION AND SATISFY THE REQUIREMENTS OF THE CONTRACT PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATIONS FOR CONDUITS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CURB AND GUTTER RADII ARE SHOWN TO THE FRONT FACE OF CURB.

THE QUANTITY OF SALVAGED TOPSOIL WAS COMPUTED FROM MEASUREMENTS BETWEEN THE FINISHED SUBGRADE POINTS AND THE SLOPE INTERCEPTS AS SHOWN ON THE CROSS SECTIONS PLUS 5 FEET PER STATION FOR ROUNDING.

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS BETWEEN THE SUBGRADE SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

DISTURBED AREAS THAT WERE PREVIOUSLY LAWNS SHALL BE SEEDED WITH SEED MIXTURE NO. 40.

NORTH BOUND PROFILE SHOWN. SOUTH BOUND PROFILE SAME.

HAND AUGER BORINGS WERE TAKEN TO VARIFY TOPSOIL DEPTHS FOLLOWING IS A SUMMARY OF FINDINGS:

SW QUADRANT	8" DEPTH
SE QUADRANT	8-9" DEPTH
NW QUADRANT	12-16" DEPTH
NE QUADRANT	18-24" DEPTH

EXCESS TOPSOIL MAY BE USED FOR EMBANKMENT CONSTRUCTION AT LOCTIONS OUTSIDE THE 1:1 SLOPE.

CTH E TRANSVERSE & LONGITUDINAL JOINTS SHALL BE SEALED AND THE RAMP JOINTS SHALL NOT BE SEALED.

✳ THESE S.D.D. ARE FOR THE RAMPS

D.N.R. AREA LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
KELLEY O'CONNOR 414-492-5819
P.O. BOX 10448
1125 NORTH MILITARY AVENUE
GREEN BAY, WISCONSIN 54307-0448

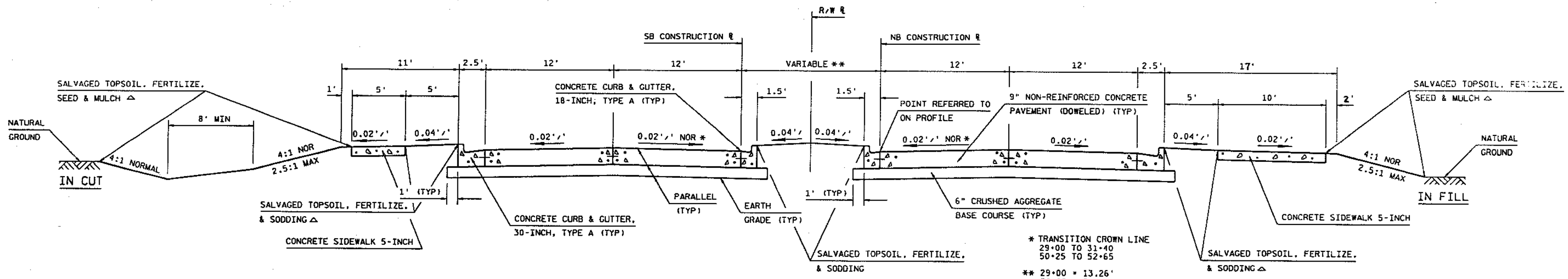
FILE NAME : D3 112307:201.DGN

22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

LEVELS ON :

STATE PROJECT NUMBER
1123-7-71

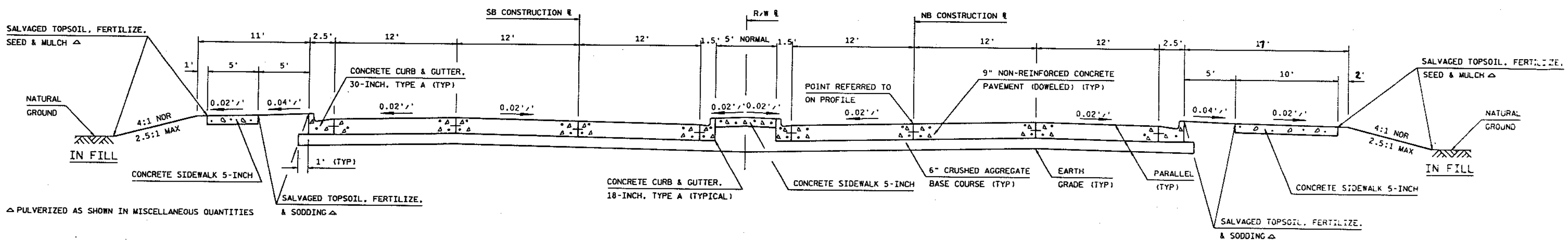
TYPICAL CROSS SECTIONS
FOR
USH 41 OUTAGAMIE CO



△ PULVERIZED AS SHOWN IN MISCELLANEOUS QUANTITIES

TYPICAL FINISHED CROSS SECTION FOR CTH E

29+00 TO 36+28
41+76 TO 52+65



△ PULVERIZED AS SHOWN IN MISCELLANEOUS QUANTITIES

TYPICAL FINISHED CROSS SECTION FOR CTH E

36+28 TO STRUCTURE
STRUCTURE TO 41+76

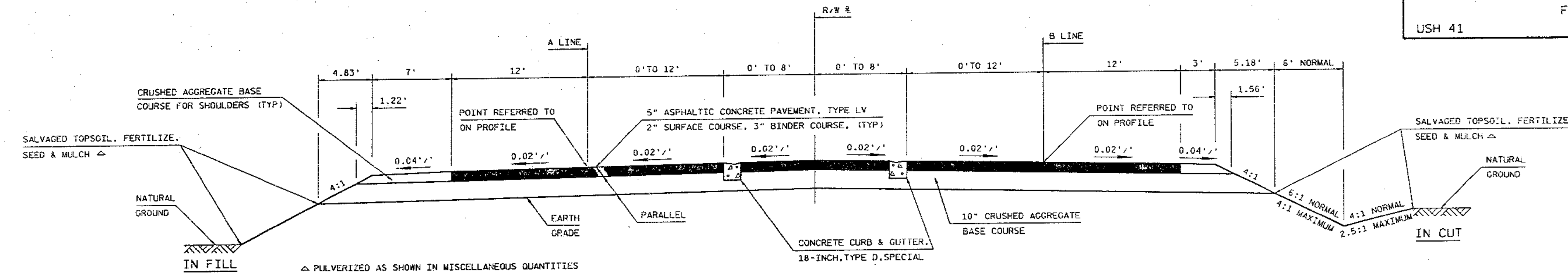
LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

FILE NAME : D3 112307:201.DGN

STATE PROJECT NUMBER 1123-7-71 | SHEET NO. 2.2

TYPICAL CROSS SECTIONS FOR

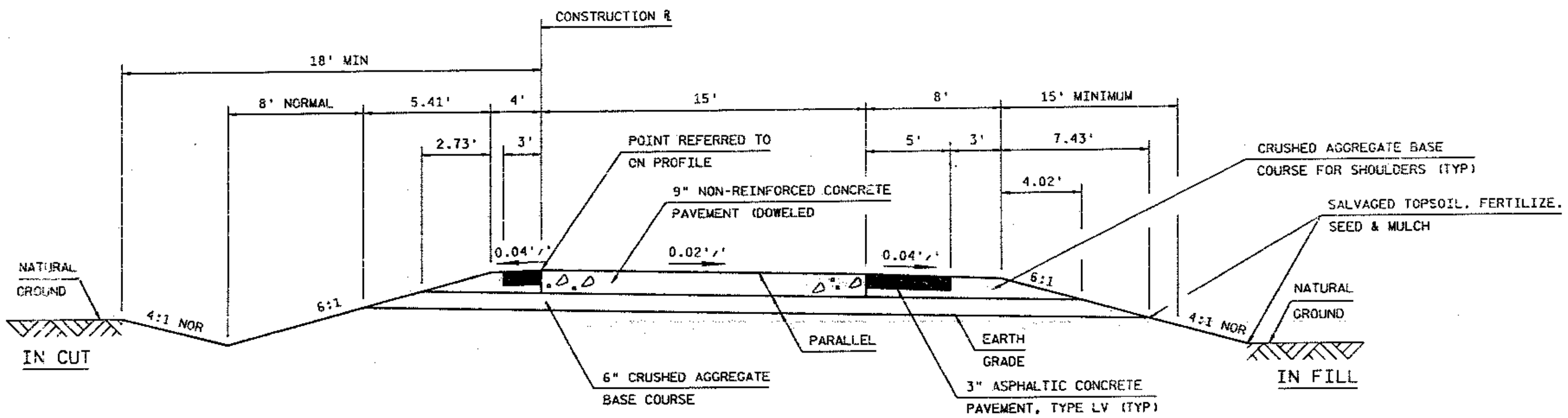
USH 41 OUTAGAMIE CO



△ PULVERIZED AS SHOWN IN MISCELLANEOUS QUANTITIES
* 53+73 TO 56+85

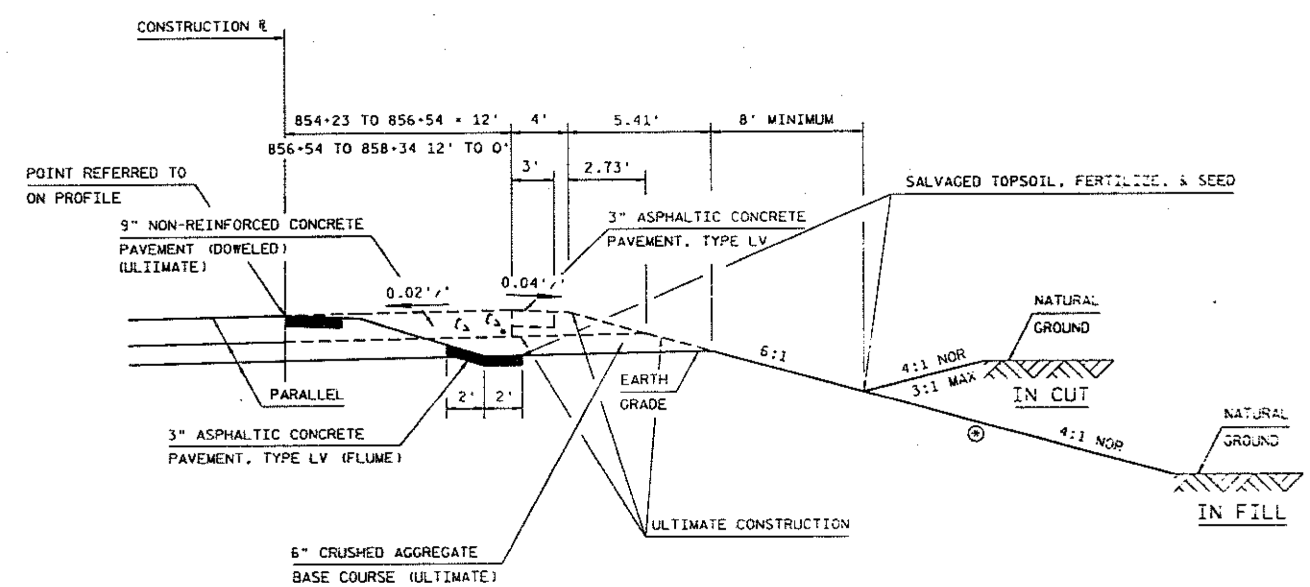
TYPICAL FINISHED CROSS SECTION FOR CTH E

53+73 TO 60+00



TYPICAL CROSS SECTION FOR RAMPS

845+50 TO 853+99 SW RAMP
854+15 TO 862+50 SE RAMP
846+50 TO 853+82 NW RAMP
854+23 TO 862+50 NE RAMP



TYPICAL CROSS SECTION FOR NE RAMP

SHOWING ULTIMATE TURN LANE
854+23 TO 858+34
VIEW LOOKING UP STATION

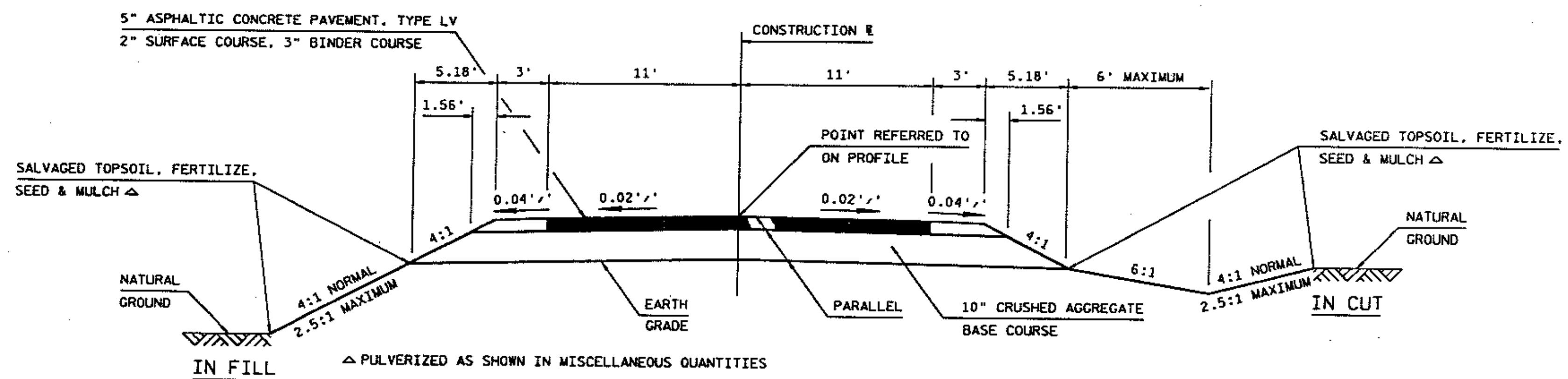
⊛ CLEARZONE WIDTH IN CUT & FILL SECTION SAME AS TYPICAL FINISHED CROSS SECTION FOR RAMPS

LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60.

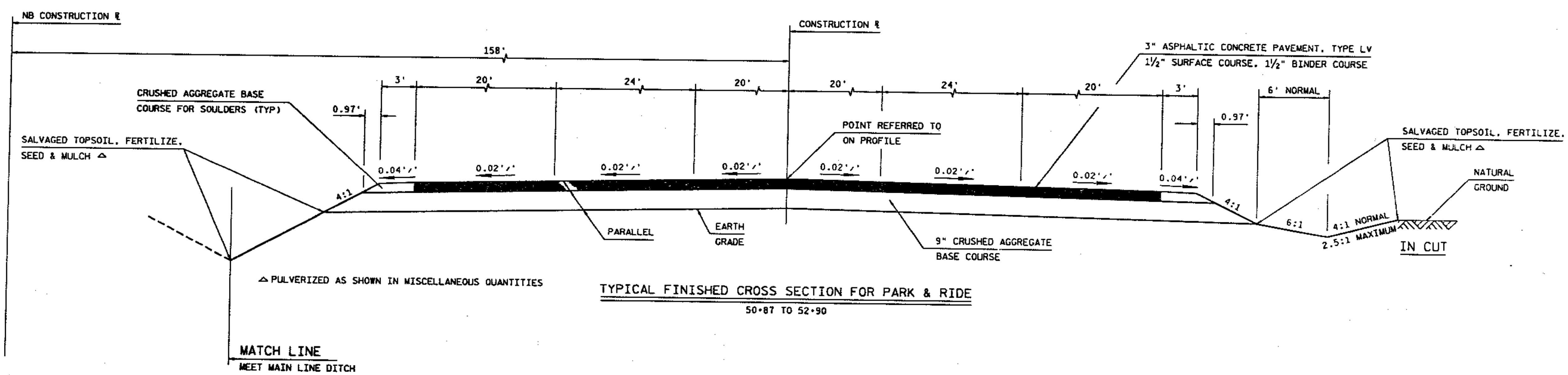
FILE NAME : D3 112307:2OLDGN

STATE PROJECT NUMBER 1123-7-71	SHEET 2.3

TYPICAL CROSS SECTIONS
FOR
USH 41 OUTAGAMIE CO



TYPICAL FINISHED CROSS SECTION FOR EVERGREEN ROAD
10+35 TO 11+48



TYPICAL FINISHED CROSS SECTION FOR PARK & RIDE
50+87 TO 52+90

22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

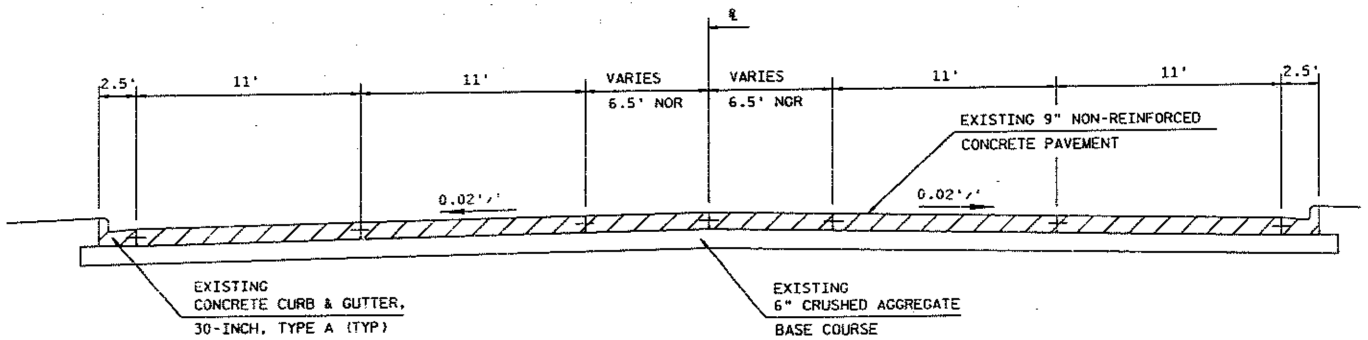
LEVELS ON =

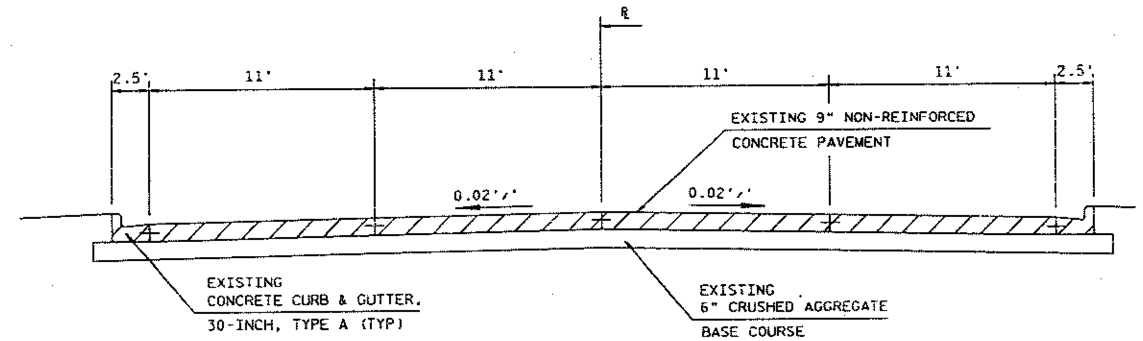
FILE NAME : D3 112307:201.DGN

STATE PROJECT NUMBER 1123-7-71 | 2.4

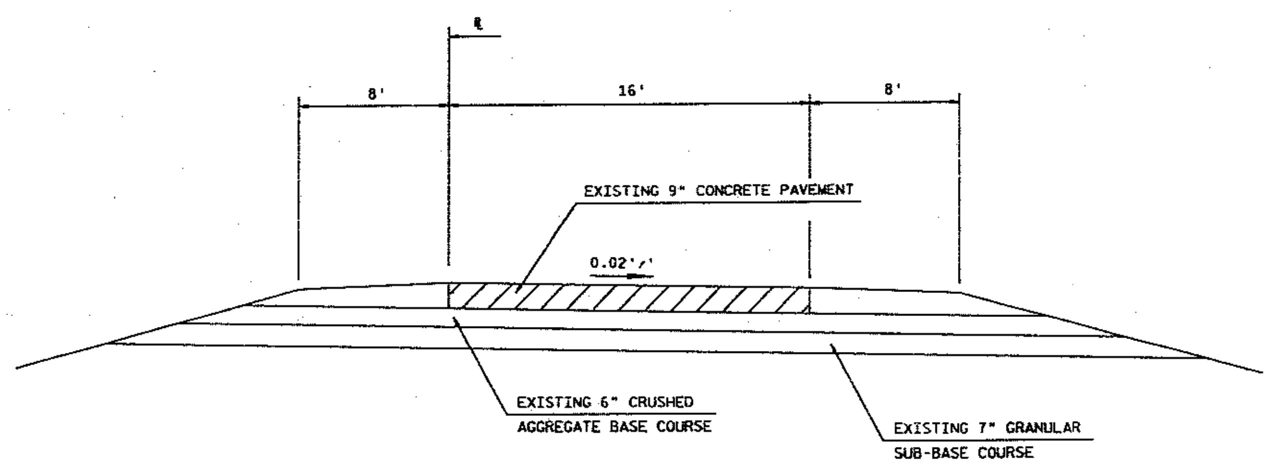
TYPICAL CROSS SECTIONS FOR

USH 41 OUTAGAMIE CO

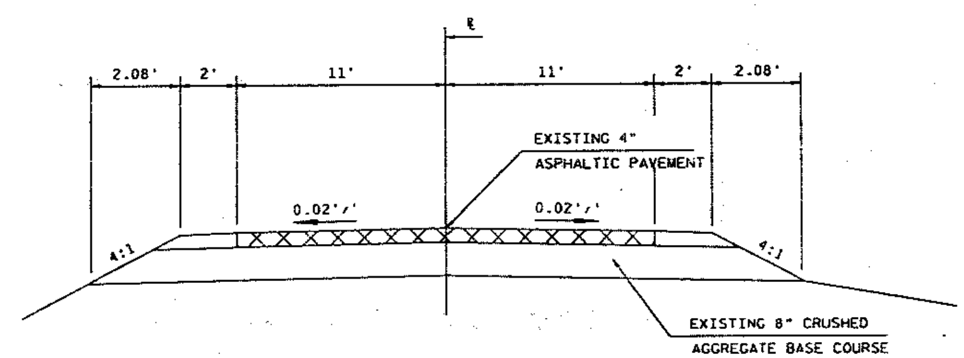




EXISTING TYPICAL CROSS SECTIONS FOR CTH E CAPITAL DRIVE TO USH 41

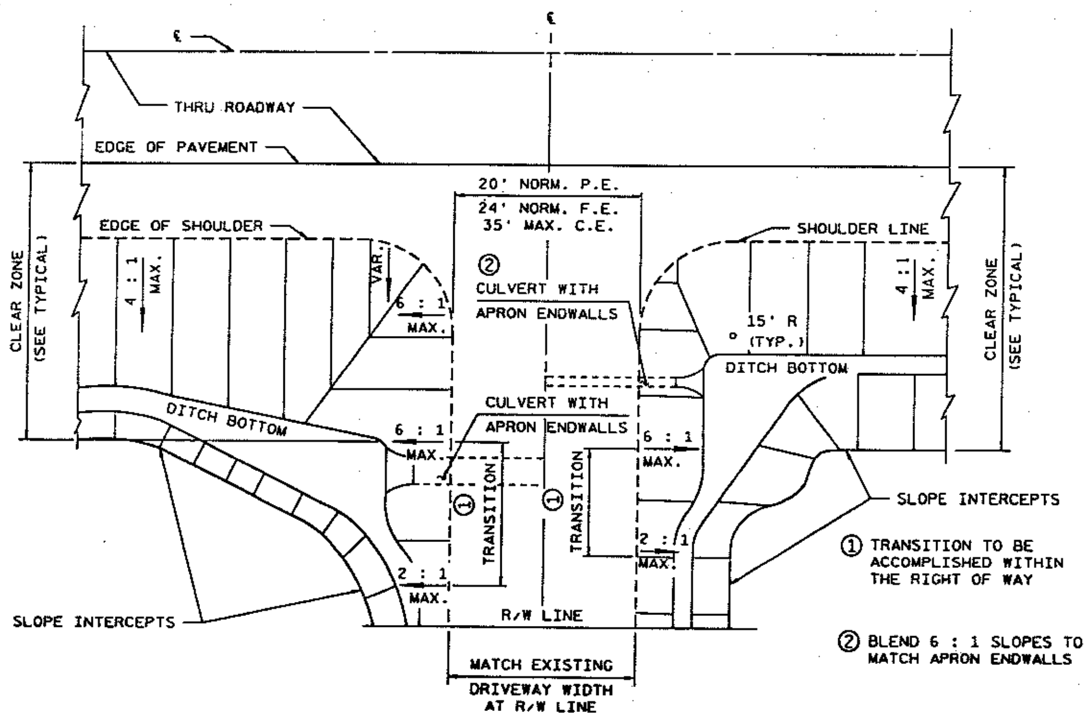


EXISTING TYPICAL CROSS SECTION FOR RAMPS AT CTH E



EXISTING TYPICAL CROSS SECTION FOR CTH E NORTH OF USH 41

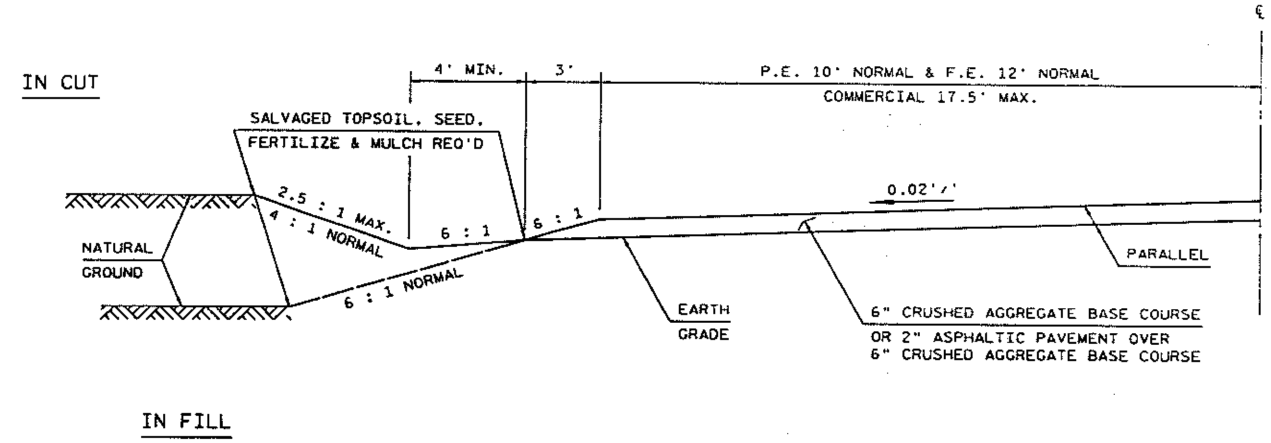
RURAL DRIVEWAY AND SIDEROAD DETAILS



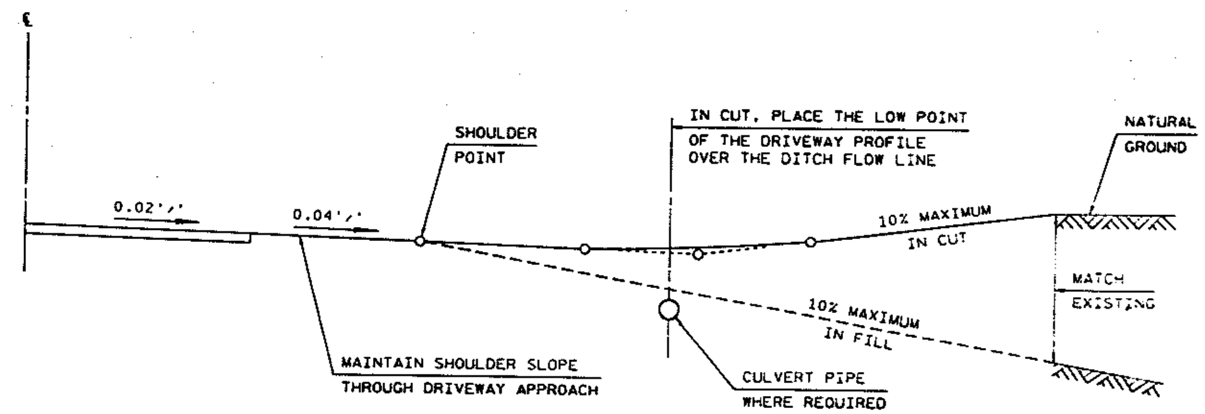
FOR CULVERTS OVER 24" DIAMETER

FOR CULVERTS 24" DIAMETER & LESS

PLAN VIEW



½ TYPICAL CROSS SECTION

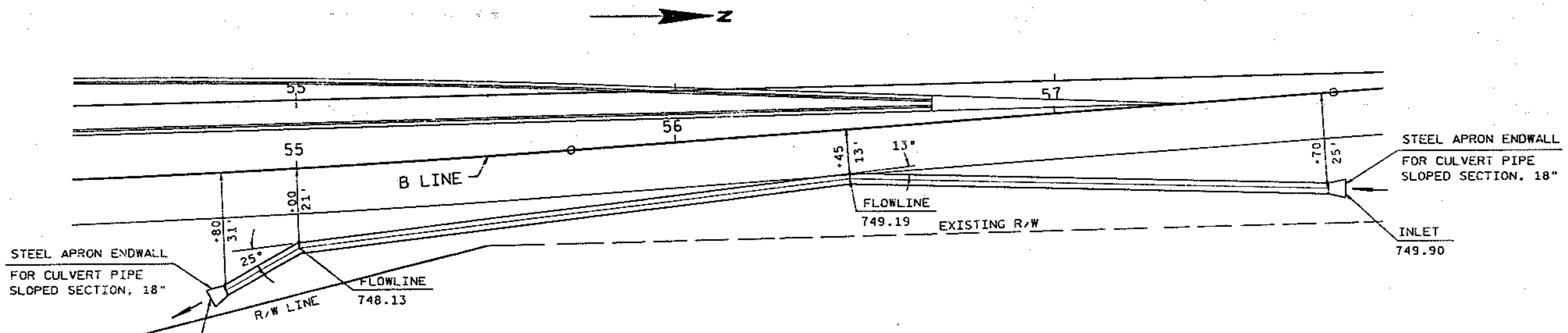


TYPICAL DRIVEWAY PROFILE

22,23,24,25,26,27,28,29,30,3132,33,3435,3637,38,39,40,41,42,43,44,45,46,47,48,49,50,5152,53,54,55,56,57,58,59.

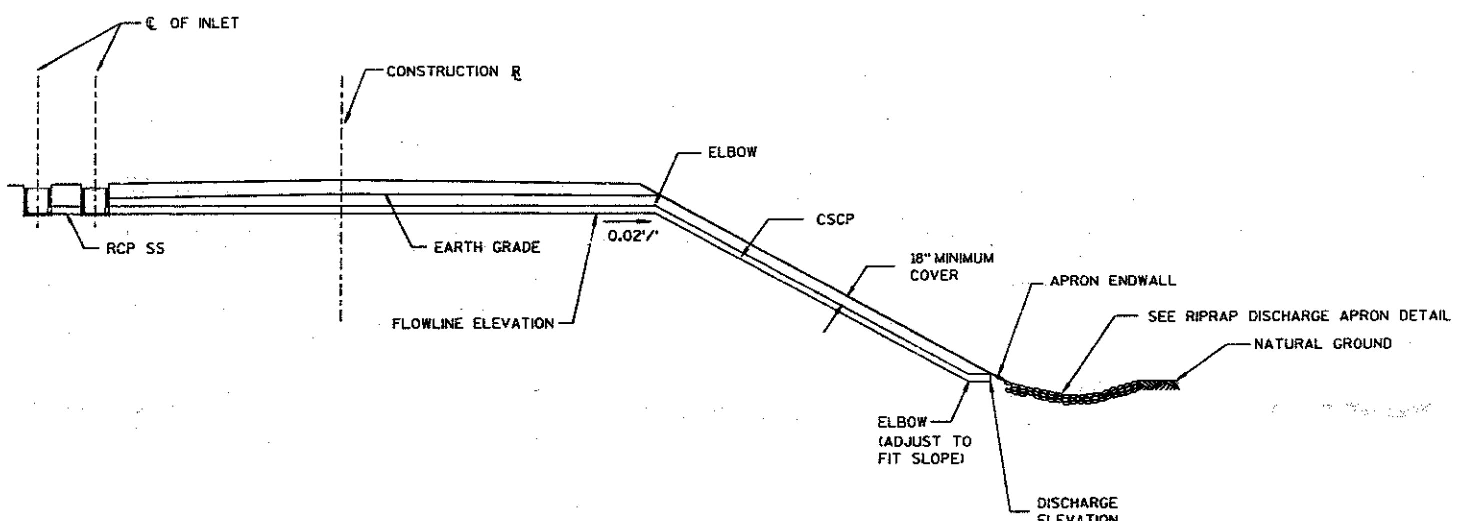
LEVELS ON =

FILE NAME : D3 DESIGN:RURDRIVE

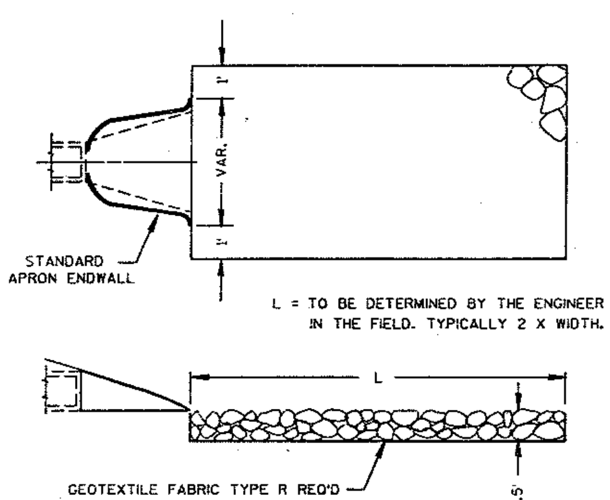


DETAIL FOR DRAINAGE OF RIGHT DITCH

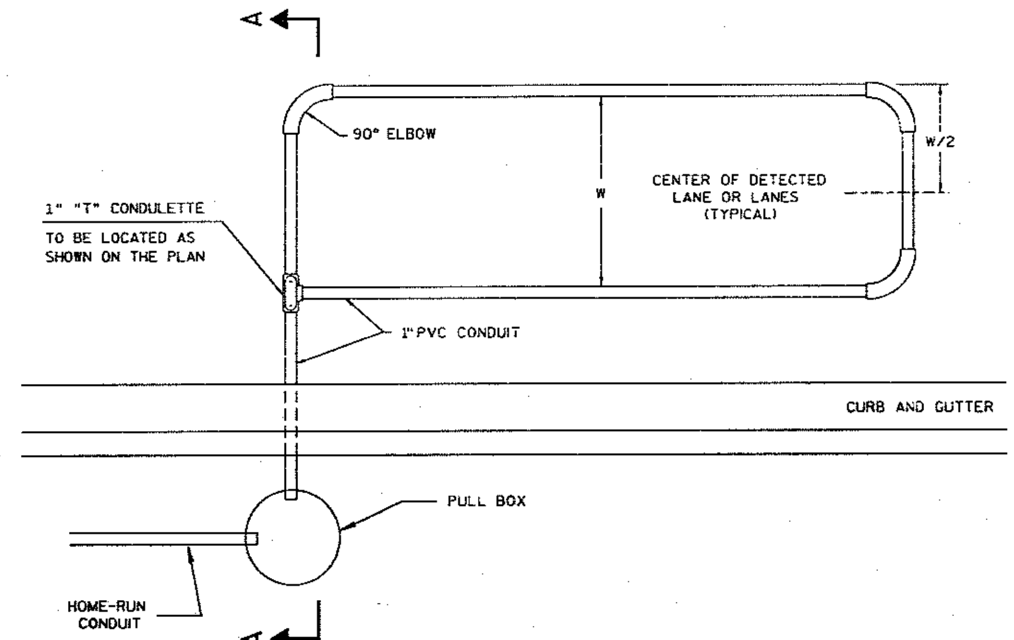
CTH E, 54+80 - 57+70



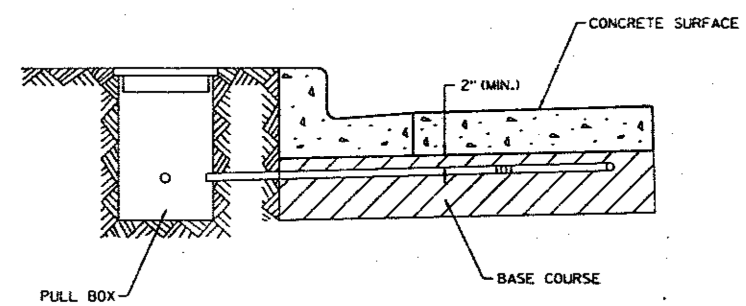
DETAIL FOR MEDIAN INLET DISCHARGE PIPE TO DITCH



RIPRAP DISCHARGE APRON



TYPICAL PLAN FOR DETECTOR LOOP
INSTALLED PRIOR TO PAVING CONCRETE



SECTION A-A

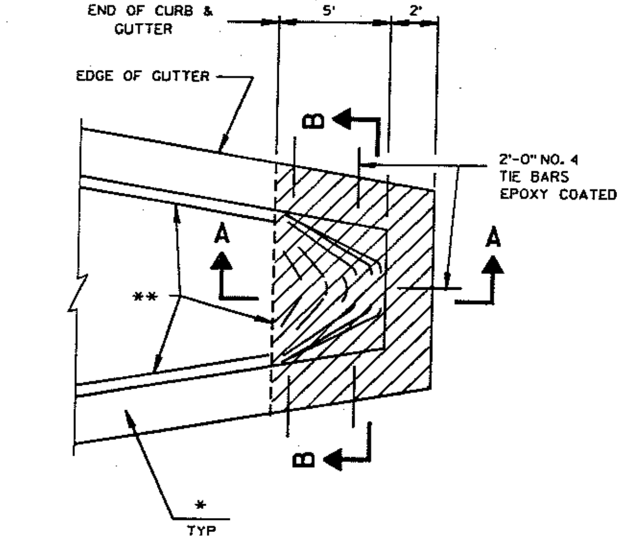
DETECTOR LOOP DETAILS, PLACED IN CR.AGG. BASE

LEVELS ON # 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

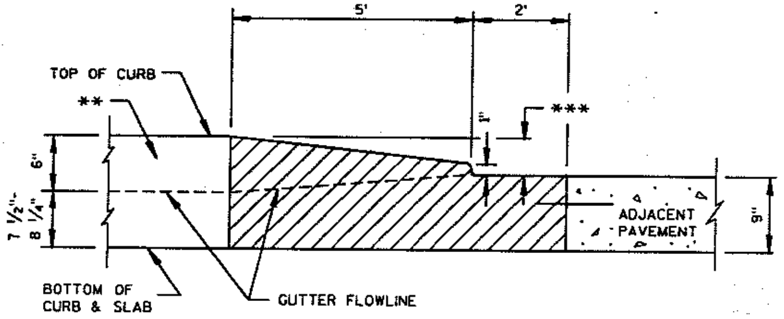
STATE PROJECT NUMBER	SHEET NO.
1123-7-71	27

CONSTRUCTION DETAILS FOR

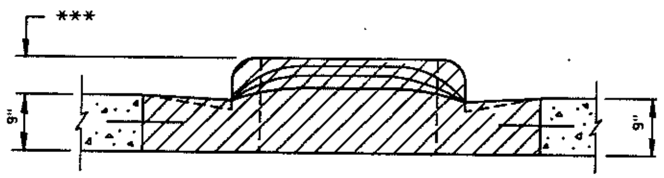
USH 41 OUTAGAMIE CO



DESIGN NOTE: CONCRETE ISLAND NOSE (TO BE PAID FOR AS CONCRETE PAVEMENT, 9-INCH)



SECTION A-A



SECTION B-B

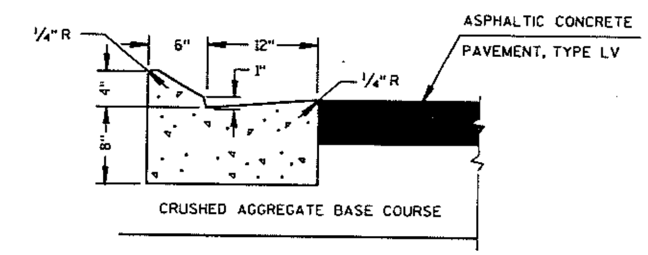
* CONCRETE CURB & GUTTER, 18-INCH, TYPE A MEDIAN
CONCRETE CURB & GUTTER, 30-INCH, TYPE A OUTSIDE AND ISLANDS

** SODDING OR CONCRETE SIDEWALK (BASED ON LOCATION)

*** CONCRETE CURB & GUTTER, 30-INCH, TYPE A = 4 1/2"
CONCRETE CURB & GUTTER, 18-INCH, TYPE A = 5 1/4"

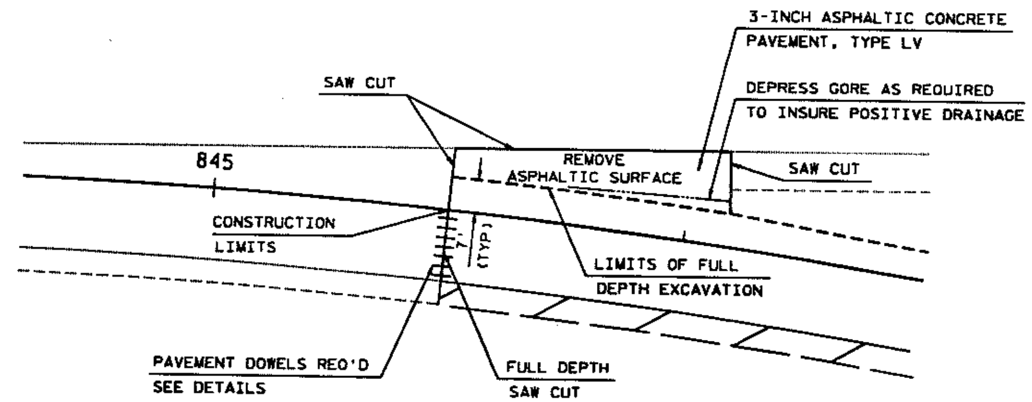
CONCRETE MEDIAN NOSE DETAIL

AT MEDIAN AND ISLANDS



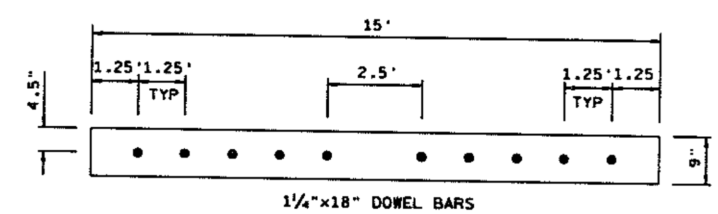
CONCRETE CURB & GUTTER, 18-INCH, TYPE D (SPECIAL)

TO BE PAID FOR AS CONCRETE CURB & GUTTER, 18-INCH, TYPE D
STA 53+73 TO STA 56+85



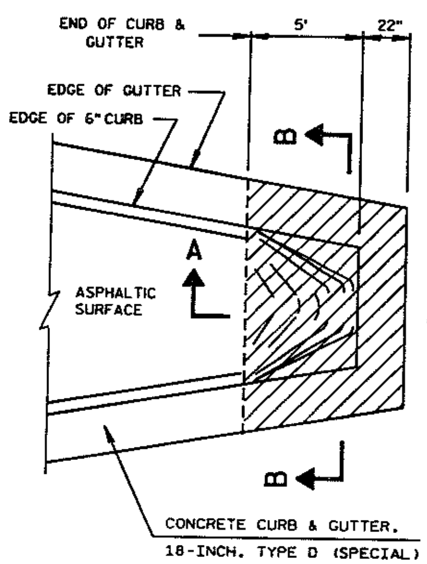
GORE CONSTRUCTION DETAILS

SW RAMP SHOWN. SE, NE, NW RAMPS SIMILAR

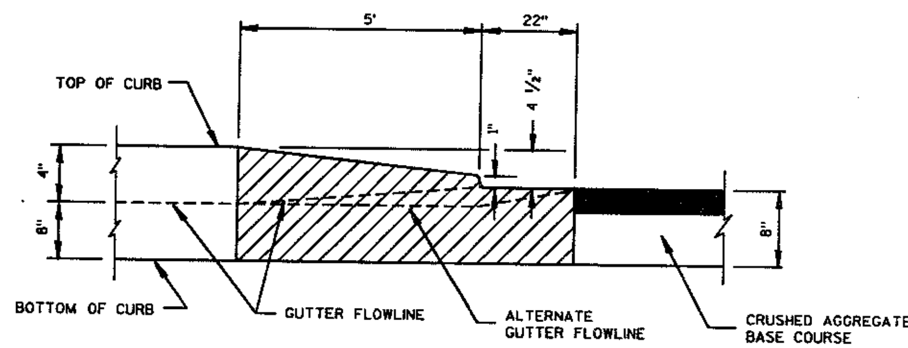


DOWEL BAR SPACING ABUTTING EXISTING PAVEMENT

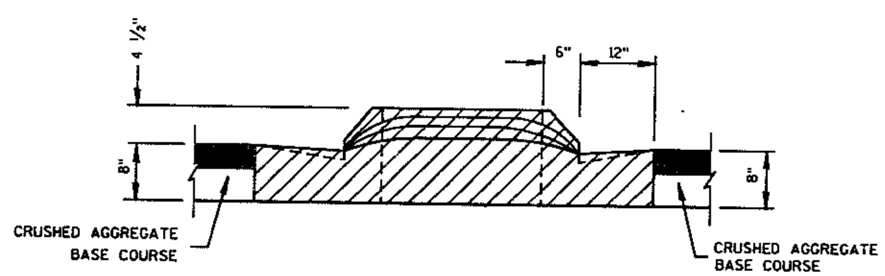
RAMPS



DESIGN NOTE: CONCRETE ISLAND NOSE (TO BE PAID FOR AS CONCRETE PAVEMENT, 9-INCH)



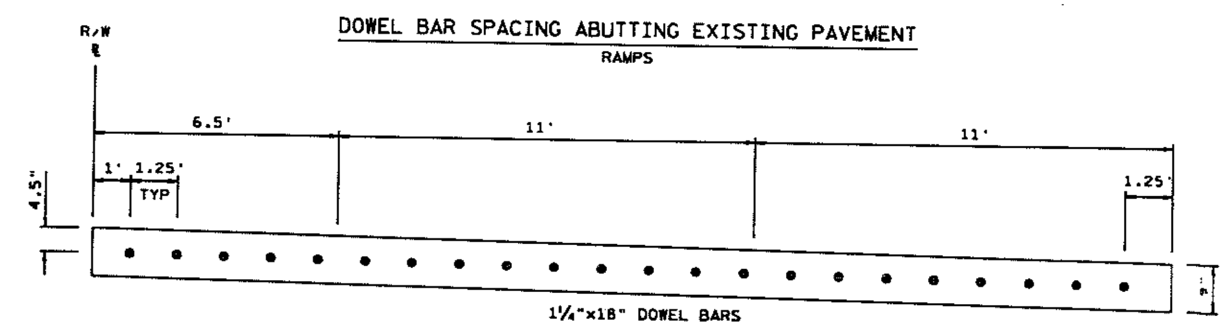
SECTION A-A



SECTION B-B

CONCRETE MEDIAN NOSE DETAIL

STA 56+85



DOWEL BAR SPACING ABUTTING EXISTING PAVEMENT

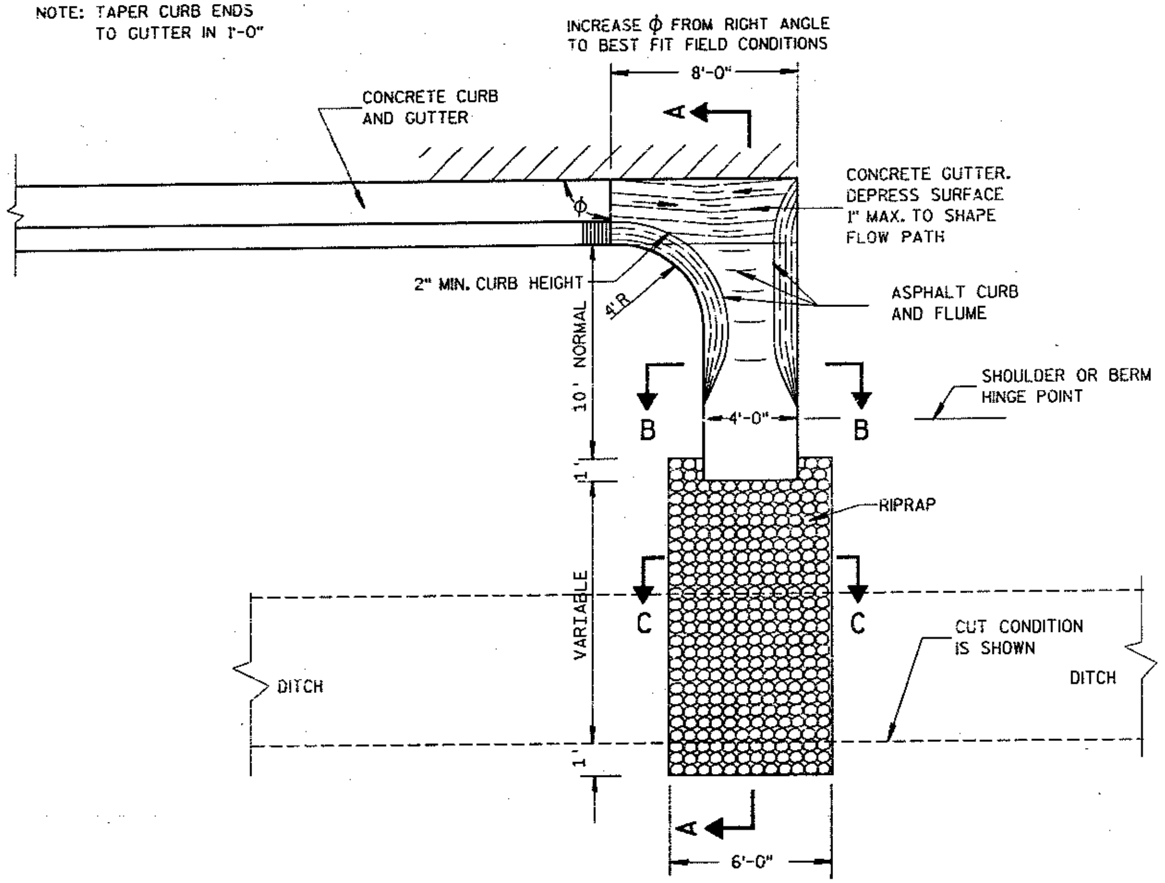
STA 27+50

22,23,24,25,26,27,28,29,30,3132,33,3435,36,3738,39,40,4142,43,44,45,46,47,48,49,50,5152,53,54,55,56,57,58,59,60,

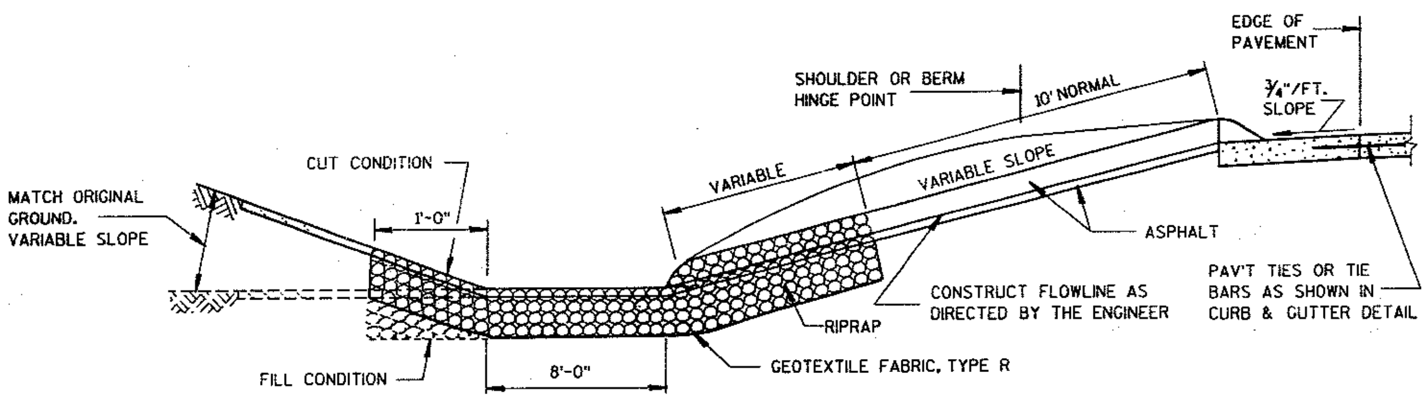
LEVELS ON =

FILE NAME : D3 112307:200.DGN

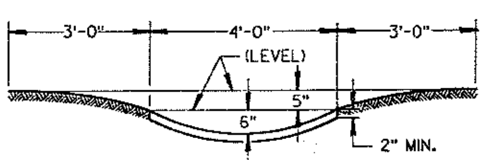
ASPHALTIC FLUME



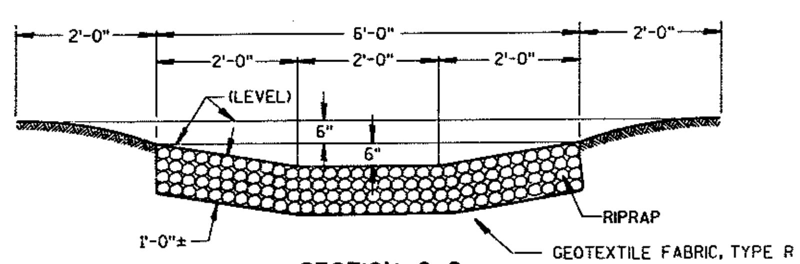
PLAN VIEW
FLUME AT CURB END



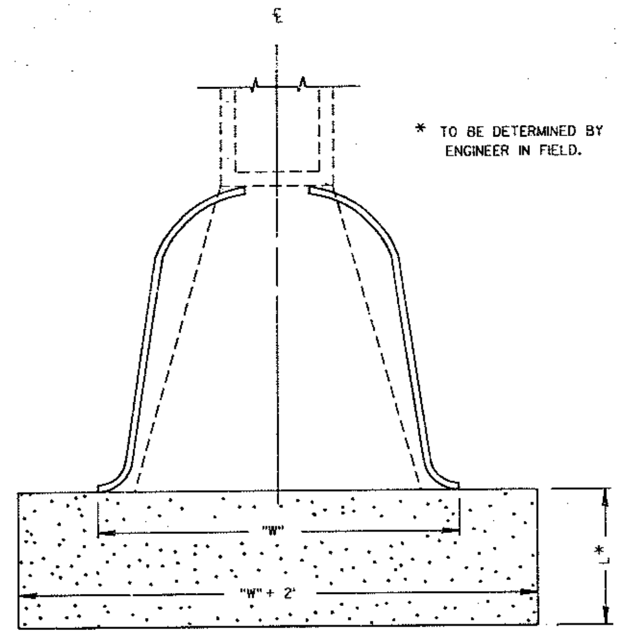
SECTION A-A



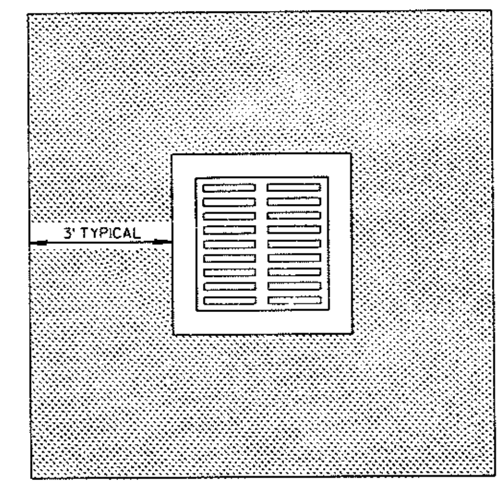
SECTION B-B



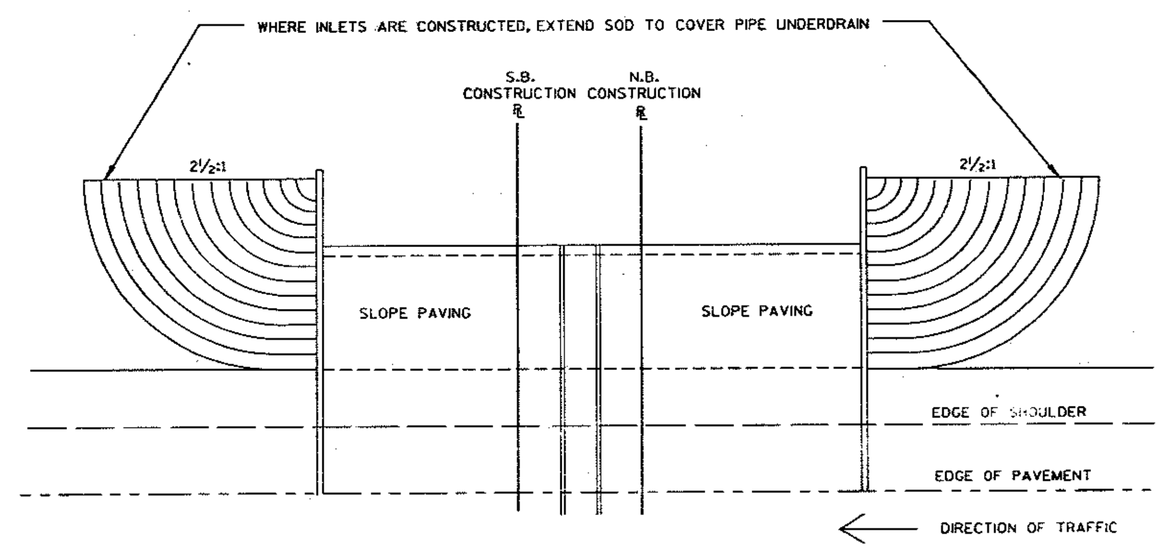
SECTION C-C



SOD AT PIPE END

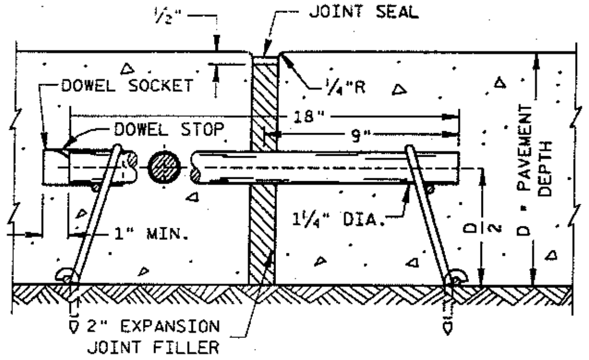


SOD AT MS INLET

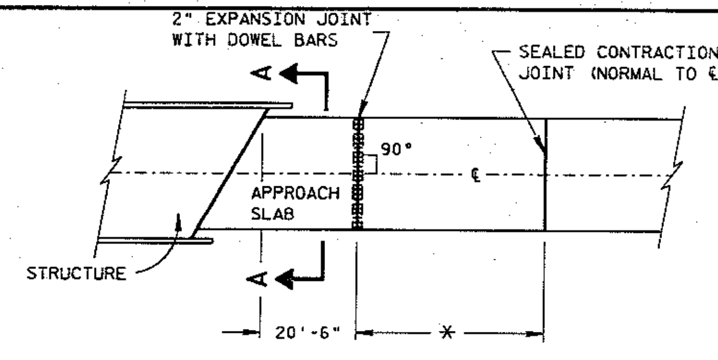


DETAIL OF SOD SLOPES AT STRUCTURES

STATE PROJECT NUMBER	
1123-7-71	2.9
CONSTRUCTION DETAILS	
USH 41	OUTAGAMIE CO

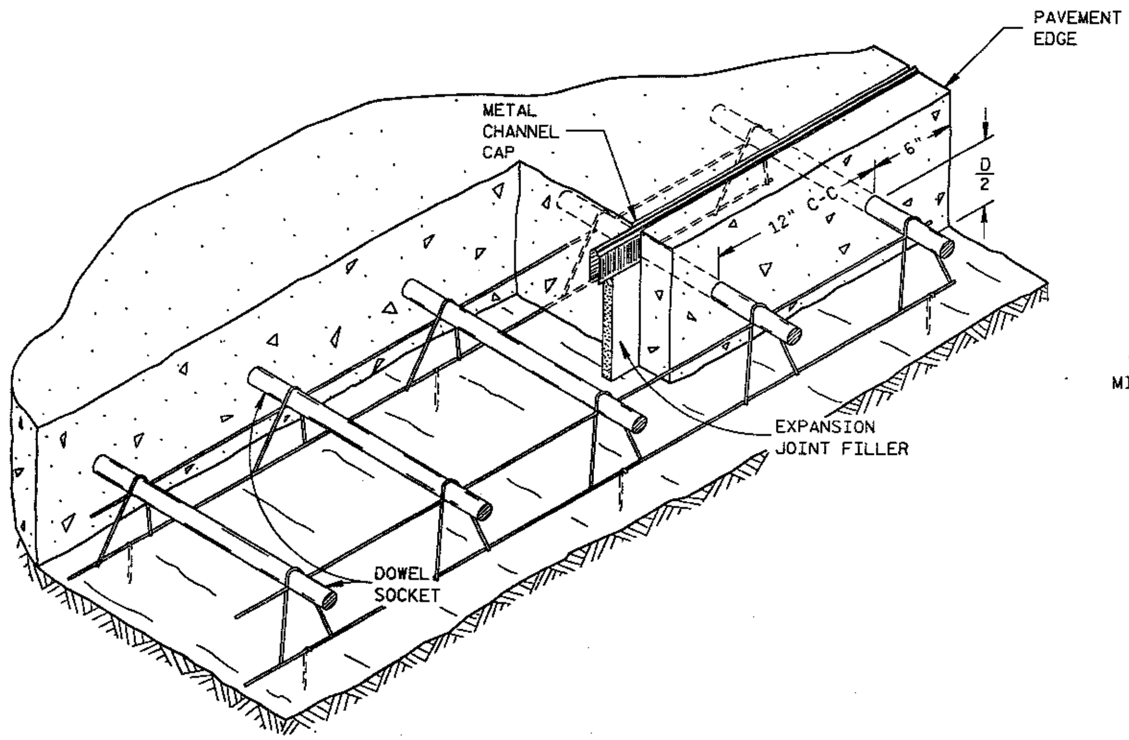


EXPANSION JOINT

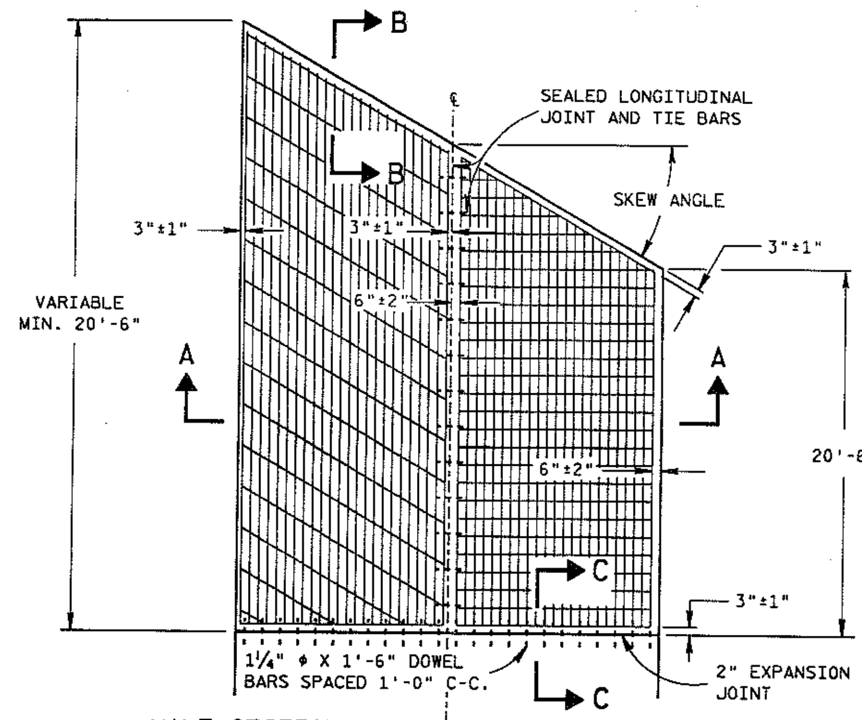


APPROACH SLAB AND ADJACENT PAVEMENT

* 12' MIN., 20' MAX. FOR NON-REINFORCED CONCRETE PAVEMENT.



INSTALLING DEVICE FOR DOWEL BARS AND EXPANSION JOINT ASSEMBLY



HALF SECTION BOTTOM REINFORCEMENT

HALF SECTION TOP REINFORCEMENT

APPROACH SLAB

NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS

DOWEL BARS ACROSS EXPANSION JOINTS SHALL BE CORROSION RESISTANT COATED CONFORMING TO THE REQUIREMENTS OF AASHTO DESIGNATION M 254.

THE COATING TYPE SHALL BE. TYPE B - THERMOSETTING EPOXY.

JOINT SEALING

EXPANSION JOINTS SHALL BE SEALED AS FOLLOWS:

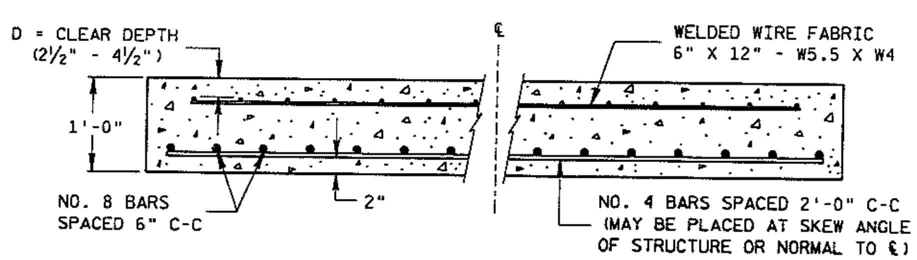
1. ON PAVEMENTS HAVING TRANSVERSE CONTRACTION JOINTS SEALED WITH A POURED TYPE SEALER. EXPANSION JOINTS SHALL BE SEALED WITH THE SAME TYPE SEALANT, ¼" BELOW PAVEMENT SURFACE.
2. ON PAVEMENTS WITH NO CONTRACTION JOINTS, UNSEALED CONTRACTION OR CONTRACTION JOINTS SEALED WITH COMPRESSION TYPE SEALS, EXPANSION JOINTS SHALL BE SEALED WITH A POURED TYPE SEALER AS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

WELDED WIRE FABRIC

SHEET WIDTHS OF 8 FEET ARE PERMITTED.

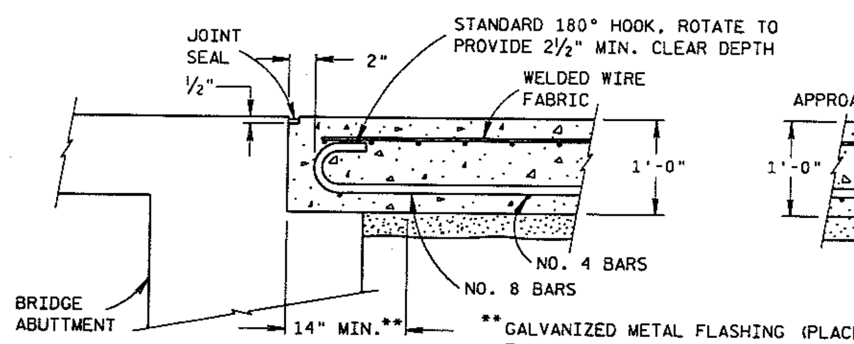
STEEL REINFORCEMENT

SPLICING OF NO. 8 BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. LAPS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.



SECTION A-A

REINFORCEMENT POSITIONING DETAIL

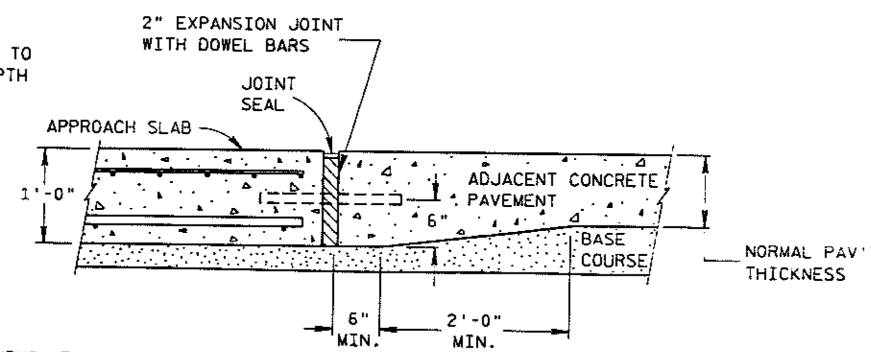


** GALVANIZED METAL FLASHING (PLACE FULL WIDTH OF PAVEMENT AND SECURE BY NAILING TO BASE).

SECTION B-B

BEND DETAIL

BOTTOM REINFORCEMENT



SECTION C-C

TRANSITION DETAIL

APPROACH SLAB TO ADJACENT PAVEMENT

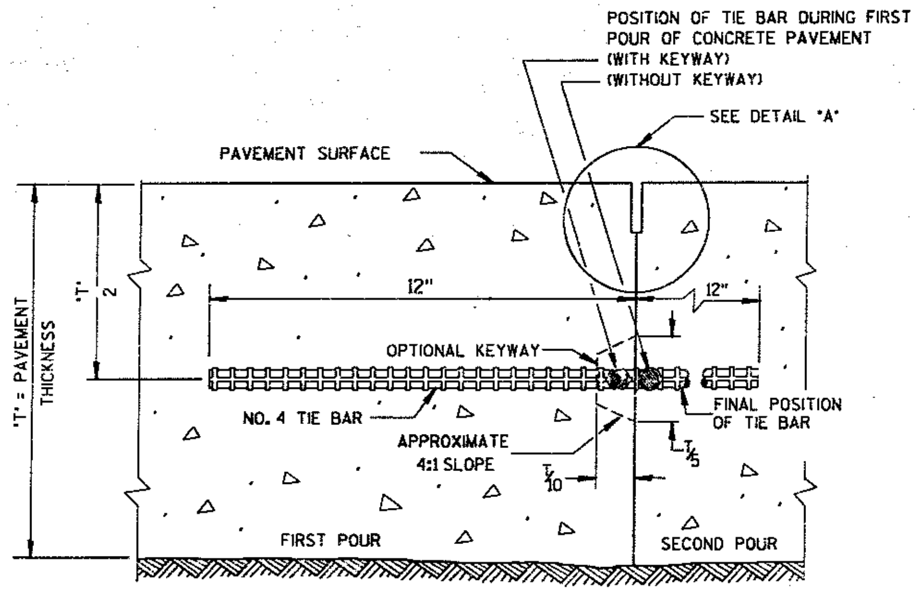
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:d3 design:d13b203

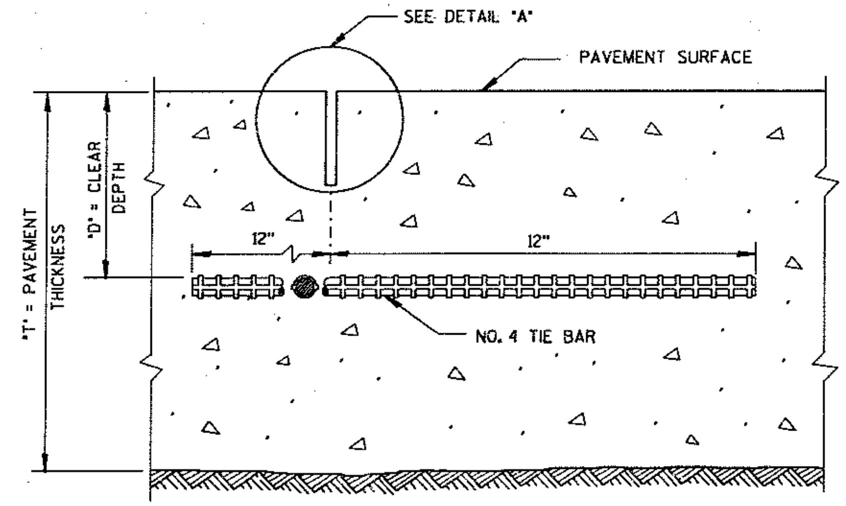
STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.10

CONSTRUCTION DETAILS
FOR
USH 41 OUTAGAMIE CO

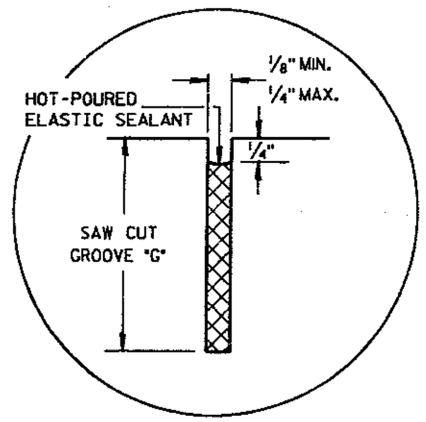
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES
(C.T.H. 'E' ONLY)



CONSTRUCTION JOINT



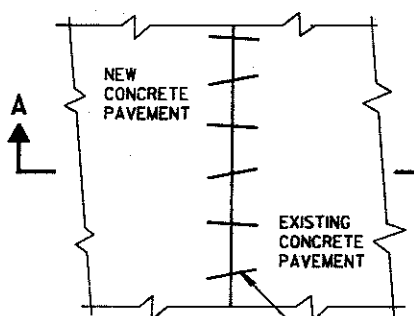
SAWED JOINT



DETAIL "A"

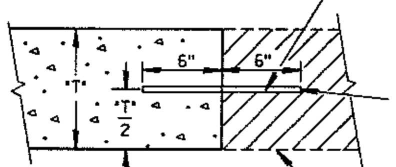
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TIE BARS AND PAVEMENT TIES SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



PLAN VIEW

NO. 6 TIE BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

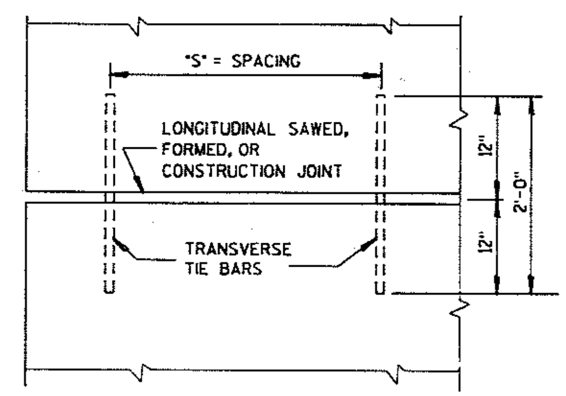


THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

EXIST. CONC. PAVEMENT

SECTION A-A
PAVEMENT TIES

PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S"
9"	4 1/4" ±1"	2 1/4"	30"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

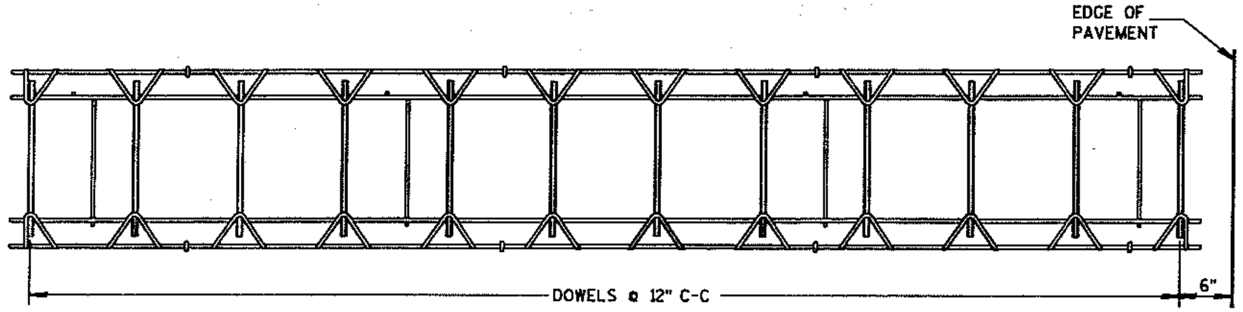
FILE NAME : D3 DESIGN:4994001.DGN

LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

STATE PROJECT NUMBER	
1123-7-71	2.11

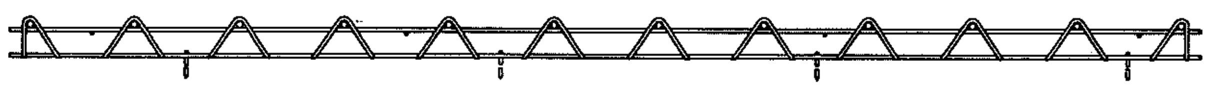
CONSTRUCTION DETAILS
FOR
USH 41 OUTAGAMIE CO

TRANSVERSE JOINTS IN NON-REINFORCED DOWELED CONCRETE PAVEMENT (20' NORMAL TRANSVERSE JOINTS) (C.T.H. 'E' ONLY)



12 DOWELS AT 12" C-C FOR 12' PAVED WIDTH
14 DOWELS AT 12" C-C FOR 14' PAVED WIDTH
15 DOWELS AT 12" C-C FOR 15' PAVED WIDTH

PLAN VIEW

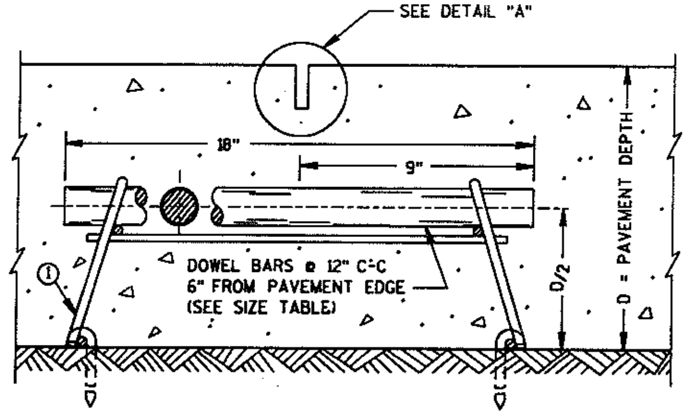


SIDE VIEW

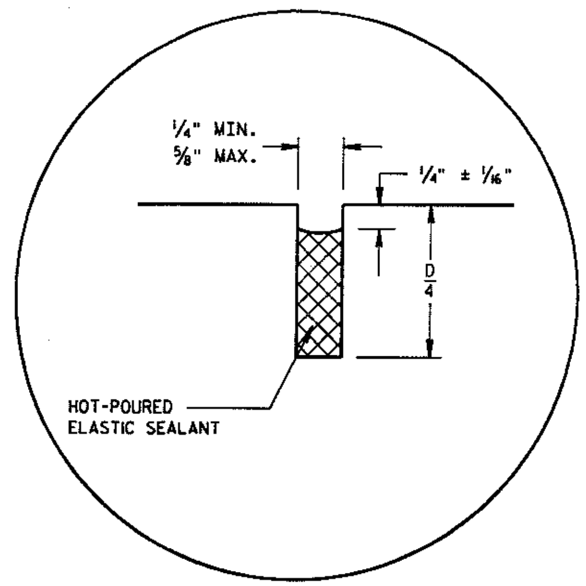
CONTRACTION JOINT DOWEL ASSEMBLY

DOWEL BAR SIZE TABLE

PAVEMENT DEPTH	DOWEL BAR DIAMETER
9" OR LESS	1¼"
MORE THAN 9"	1½"



DOWELED CONTRACTION JOINT



DETAIL "A"
HOT POURED
ELASTIC JOINT SEAL

NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

CONTRACTION JOINTS

CONTRACTION JOINTS SHALL BE SEALED AS SHOWN IN DETAIL "A".

DOWEL BARS SHALL BE PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

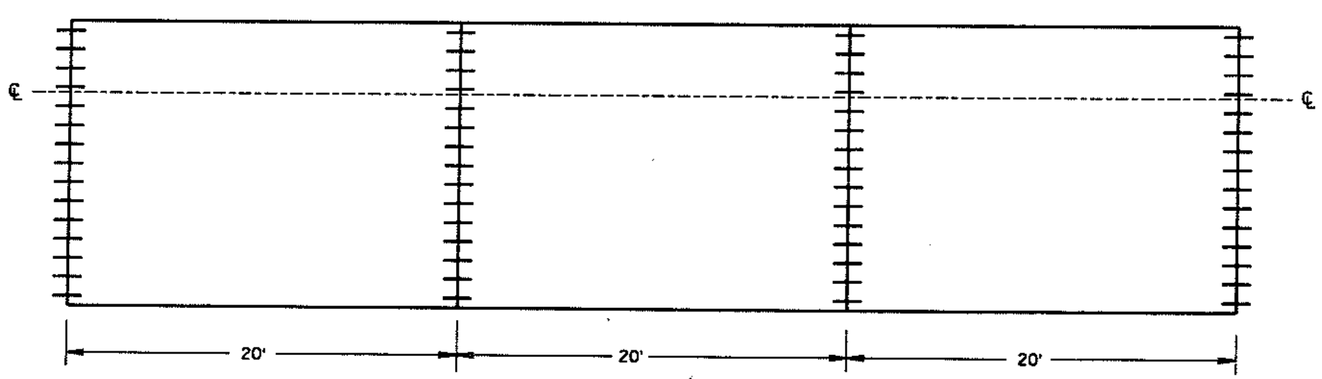
CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO THE CONTRACTION JOINTS OR AT A 90° TO THE CENTERLINE.

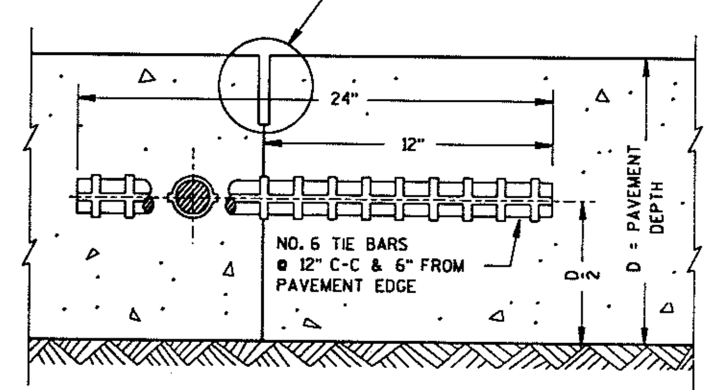
CONSTRUCTION JOINTS SHALL BE SEALED AS SHOWN IN DETAIL "A".

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

TIE BARS SHALL BE EPOXY COATED IN CONFRMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



CONTRACTION JOINT LOCATIONS



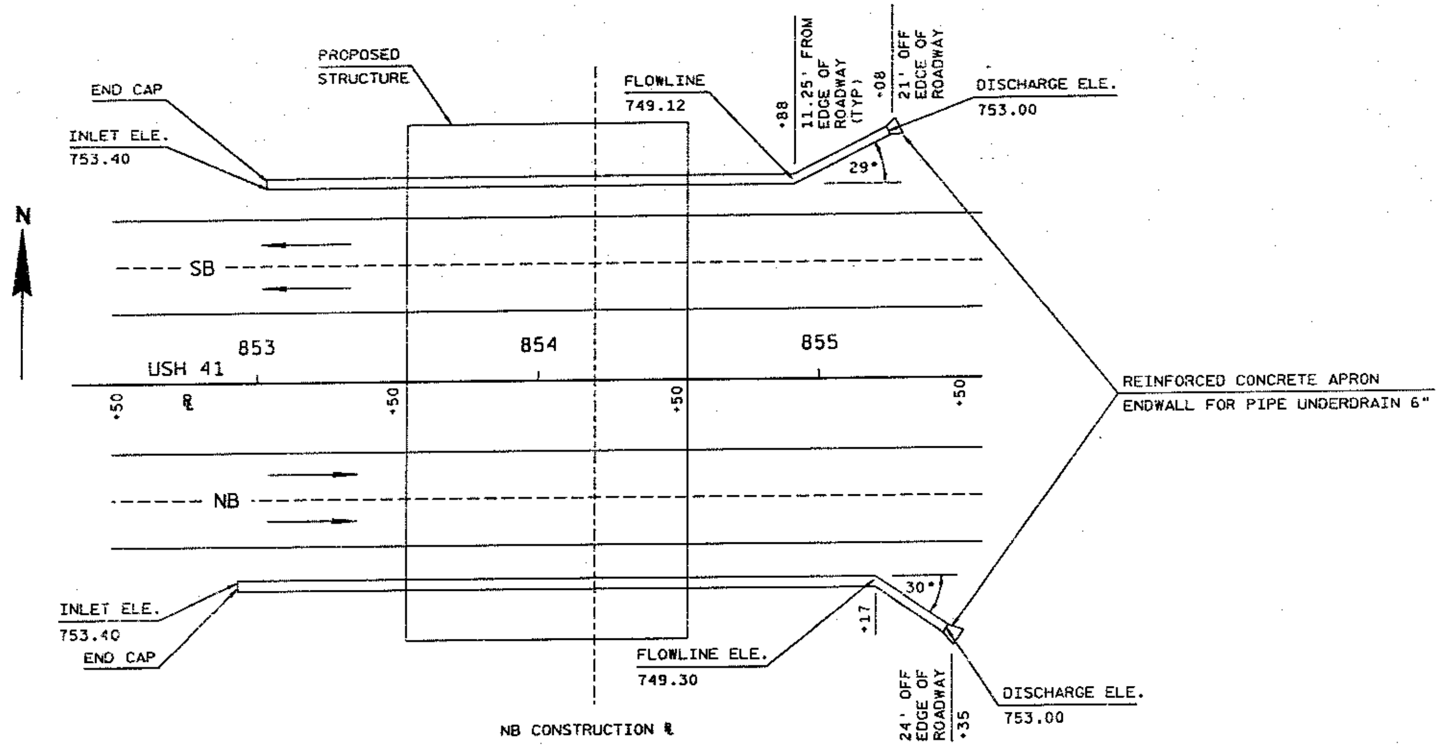
CONSTRUCTION JOINT

11-1-94 CJS

LEVELS ON =

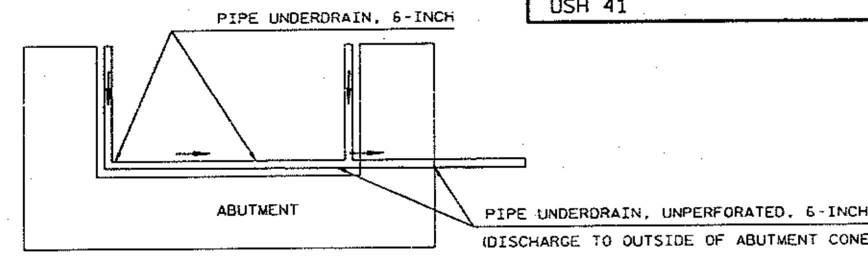
FILE NAME : D3 DESIGN:4994001.DGN

STATE PROJECT NUMBER	
1123-7-71	2.12
CONSTRUCTION DETAILS FOR	
USH 41	OUTAGAMIE CO

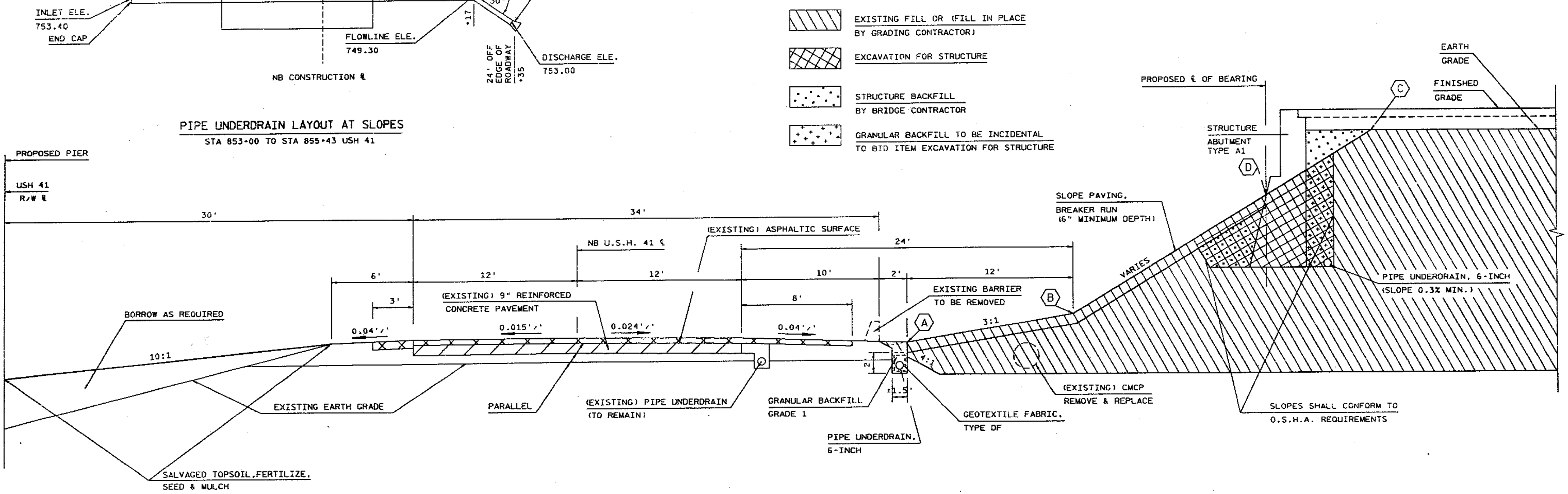


PIPE UNDERDRAIN LAYOUT AT SLOPES

STA 853+00 TO STA 855+43 USH 41



UNDERDRAIN LAYOUT FOR ABUTMENTS AT STRUCTURE B-44-172



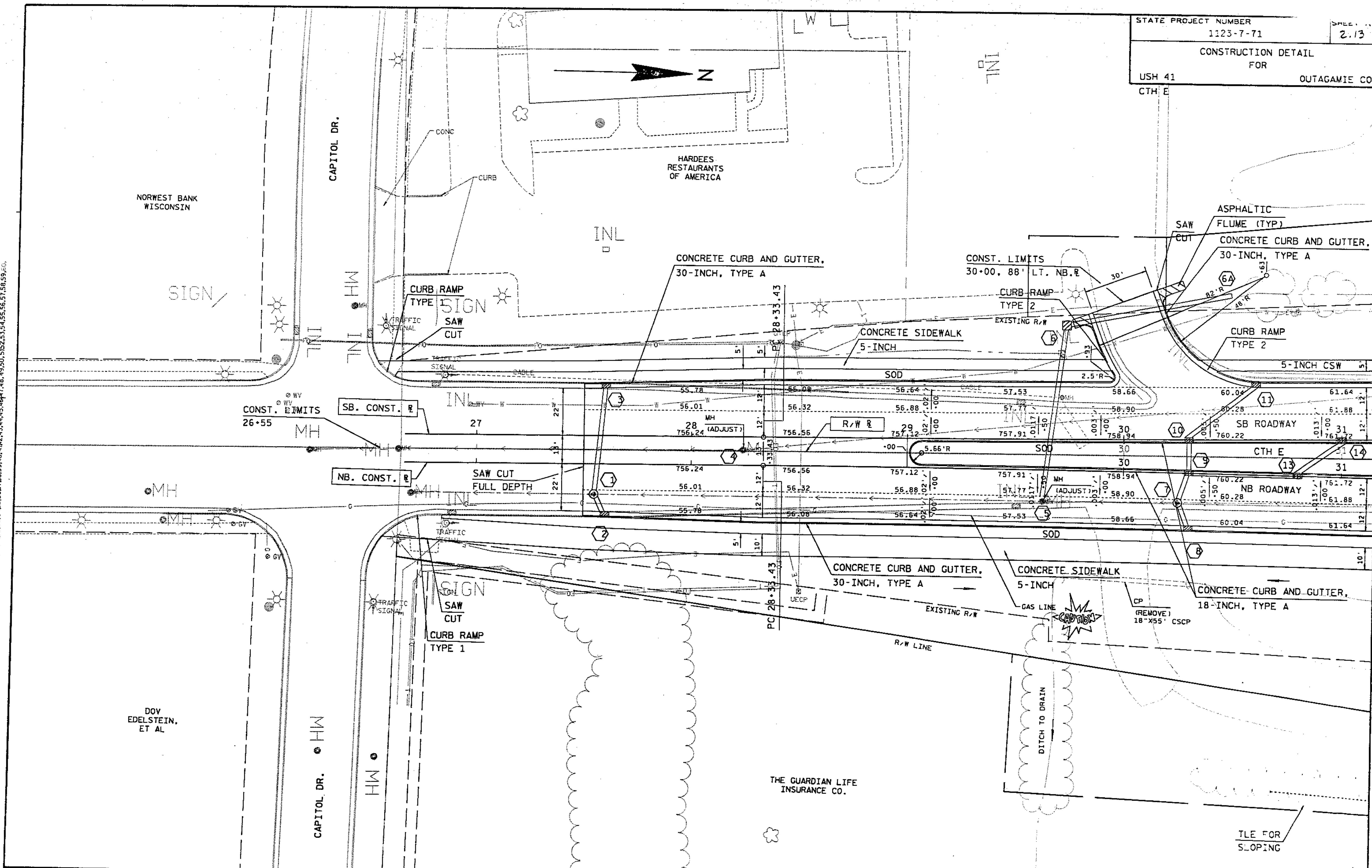
		D		A		B		C	
STRUCTURE	ABUTMENT	℄ BEARING STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
B-44-172	SOUTH	38+23.83	770.00	38+59	754.50	38+47	759.17	38+07	778.18
B-44-172	NORTH	40+22.17	768.30	39+91	754.61	40+03	759.28	40+40	776.26

LONGITUDINAL SECTION FOR NORTH & SOUTH ABUTMENTS AT CTH E OVER U.S.H. 41

N BOUND USH 41 SHOWN S BOUND USH 41 SIMILAR

LEVELS ON = 22,23,24,25,26,27,28,29,30,3132,33,34,35,36,3738,39,40,41,42,43,44,45,46,47,48,49,50,5152,53,54,55,56,57,58,59,60,

FILE NAME : D3 112307:200.DGN



FILE NAME : D3 112307:206.DGN

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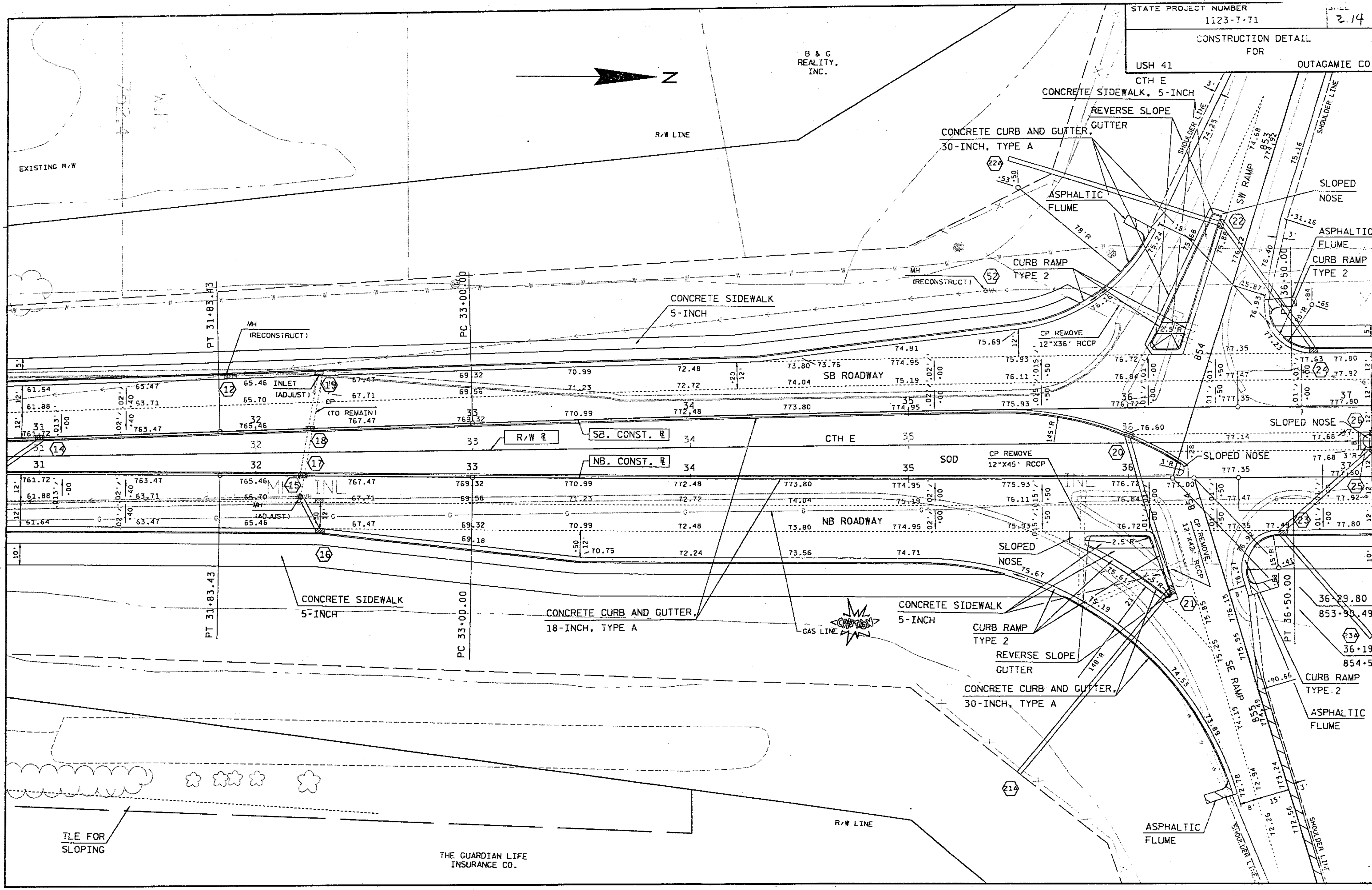
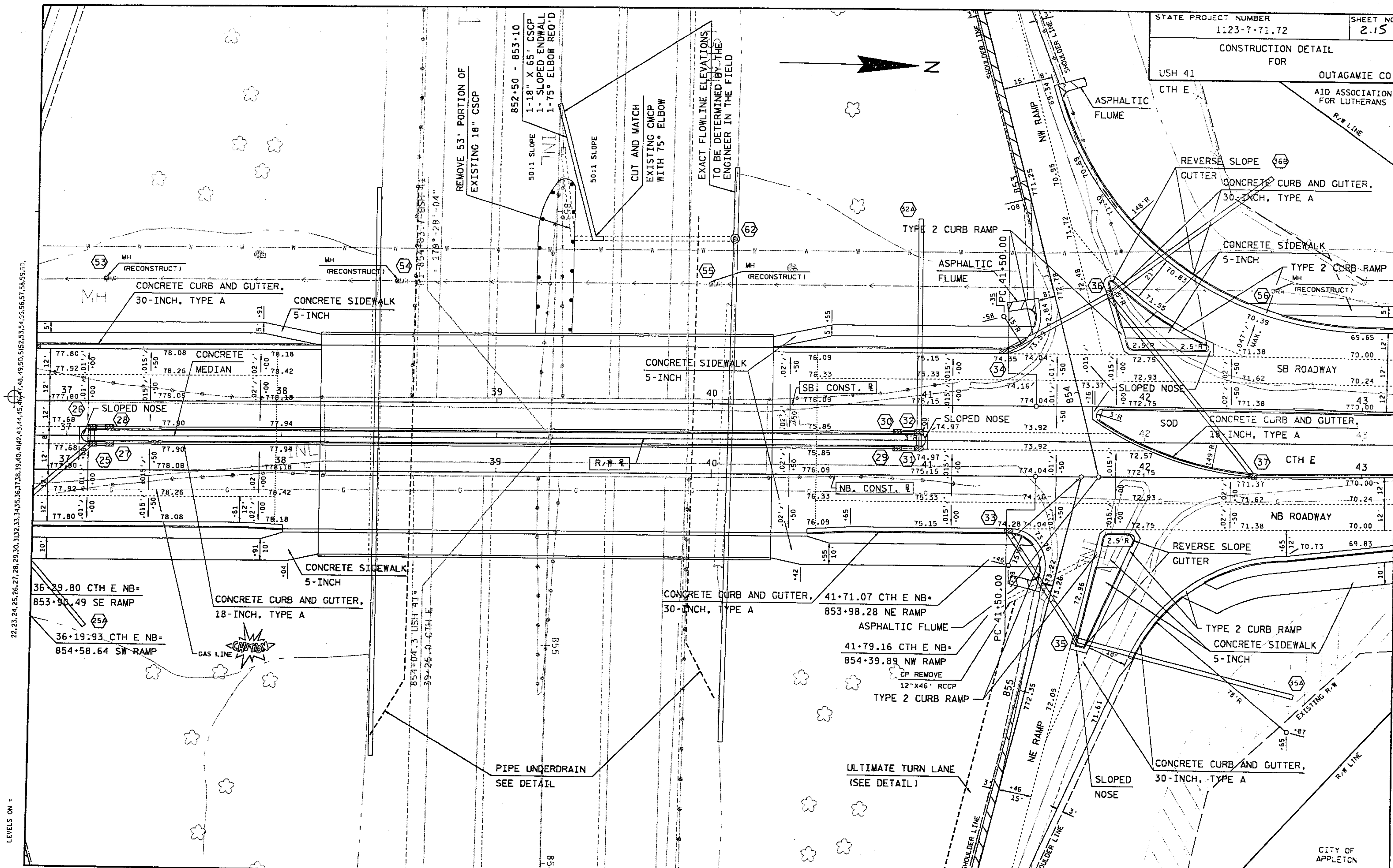
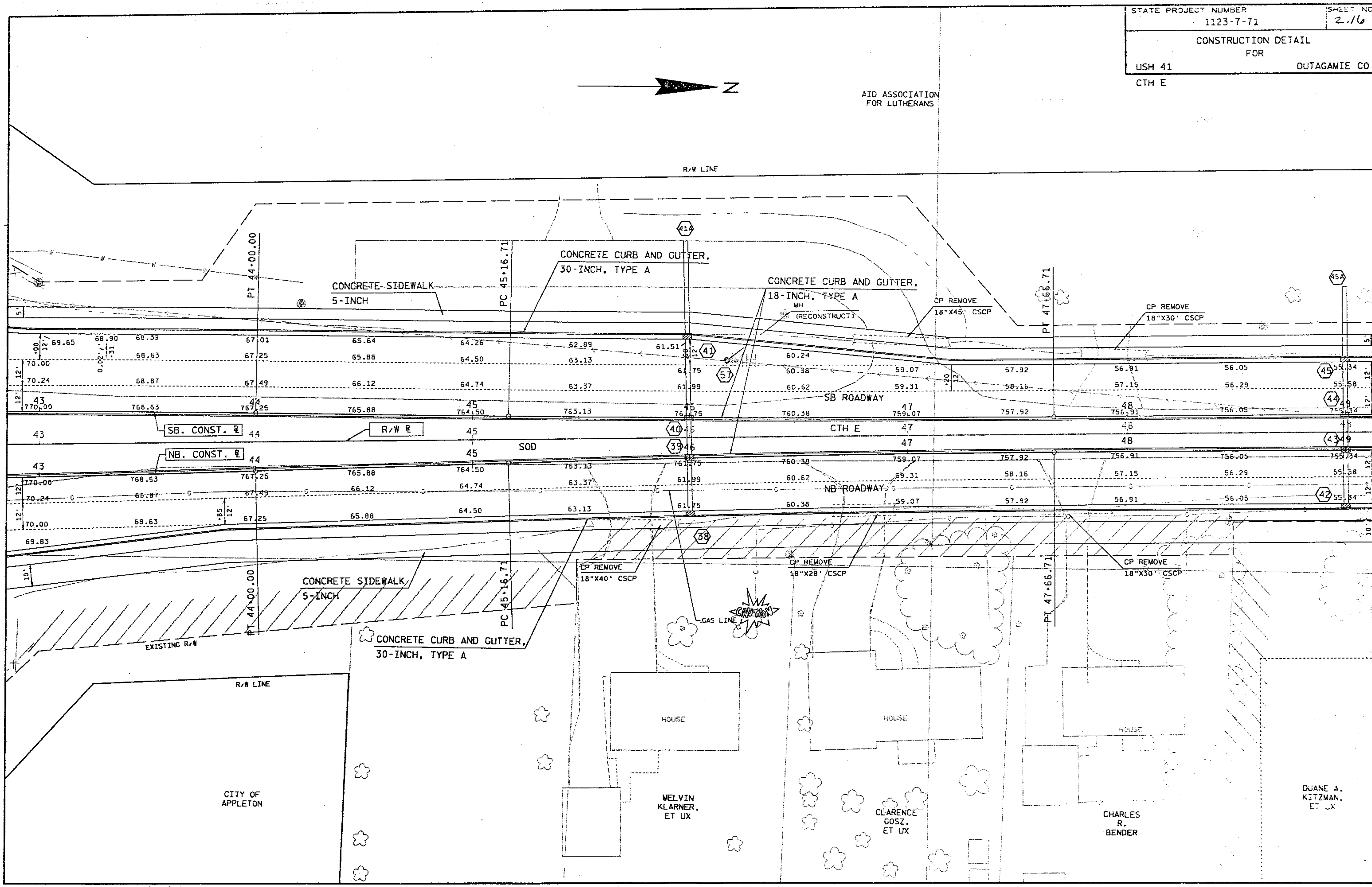


FILE NAME : D3 112307:207.DGN



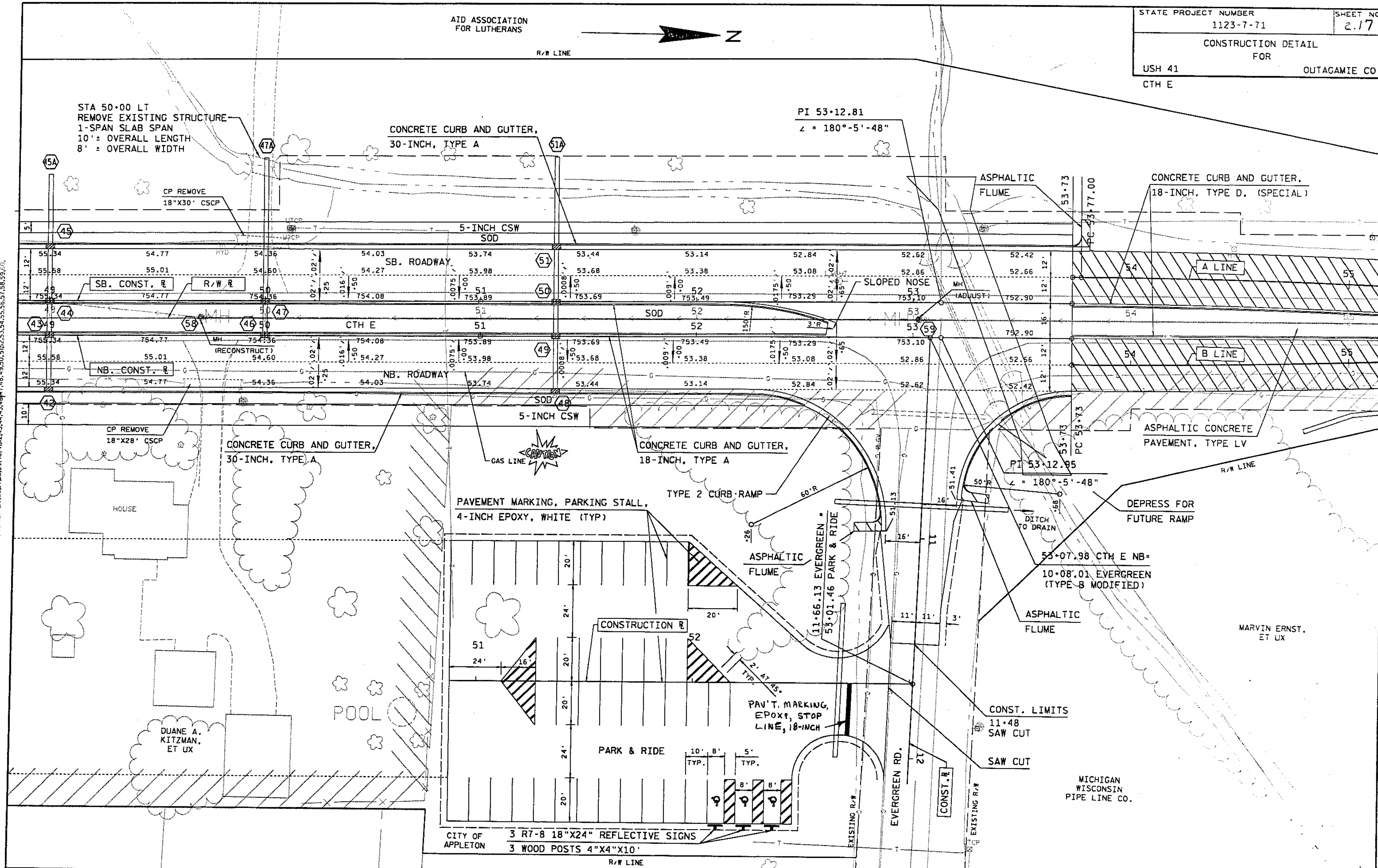
FILE NAME : D3 112307:208.DGN



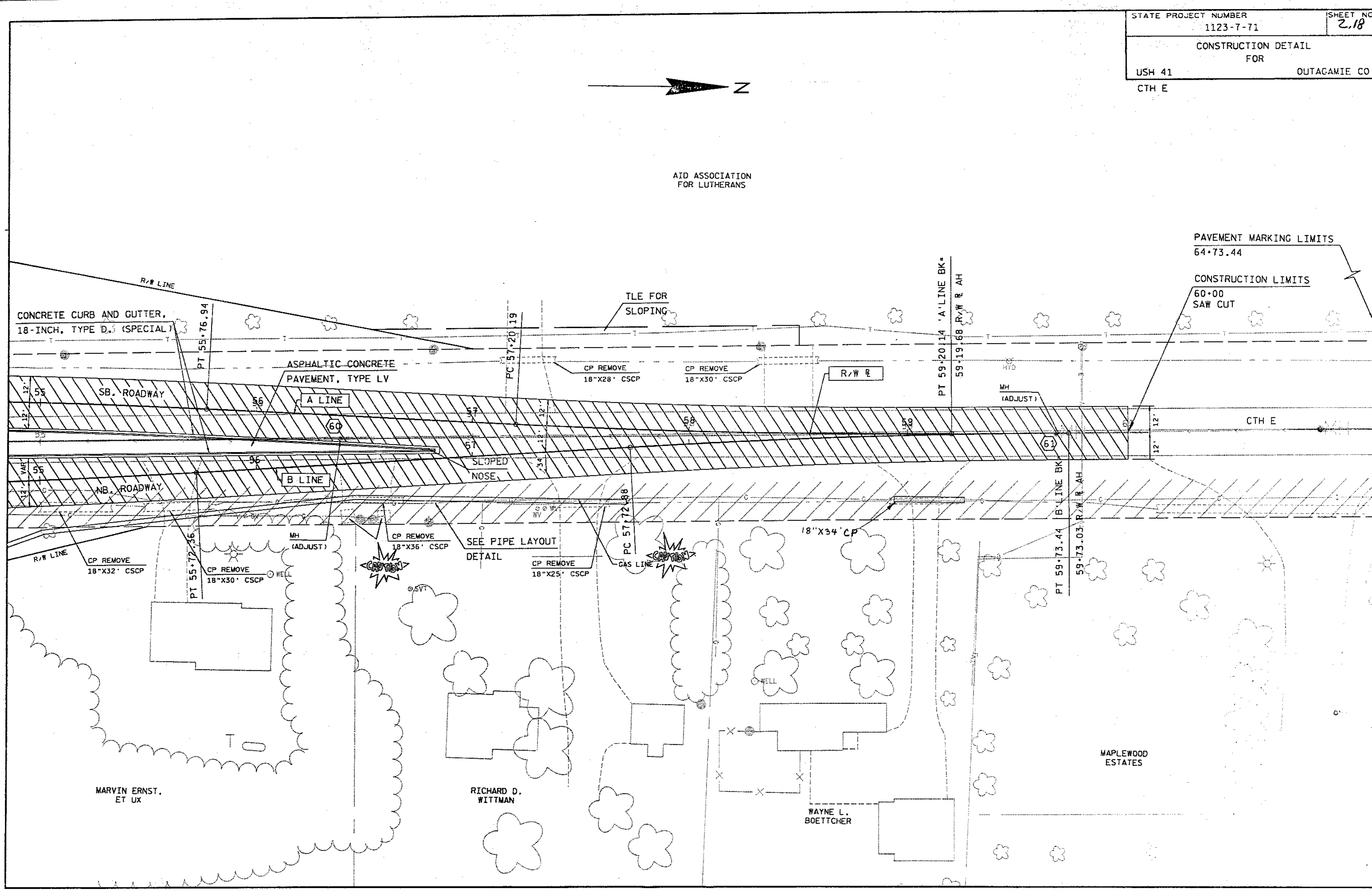
FILE NAME : D3 112307:209.DGN

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.17

CONSTRUCTION DETAIL
FOR
USH 41 OUTAGAMIE CO
CTH E



FILE NAME : D3 112307:210.DGN



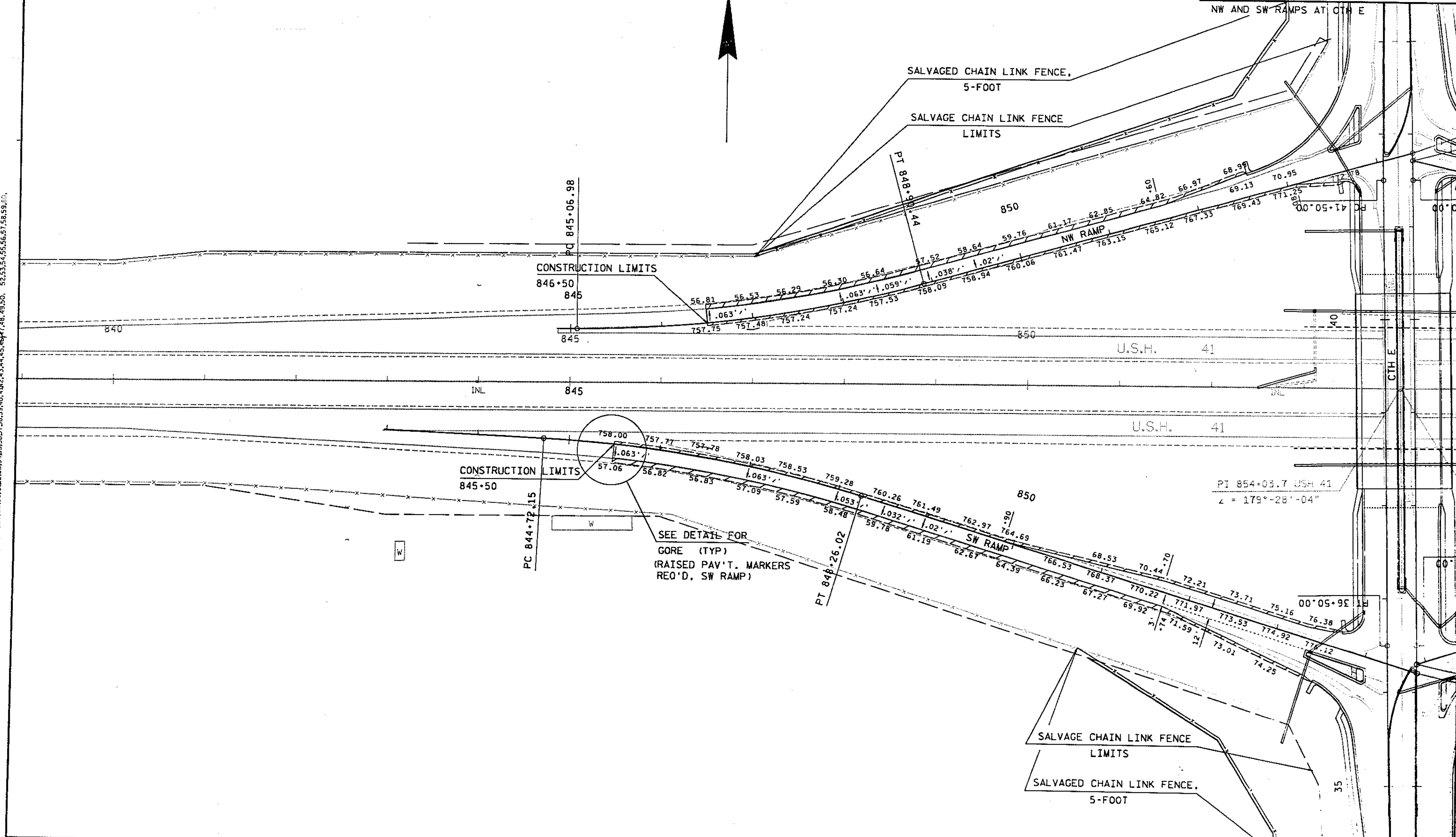
LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

FILE NAME : D3 112307:21LDGN

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.19

CONSTRUCTION DETAILS
FOR
USH 41 OUTAGAMIE CO
NW AND SW RAMPS AT CTH E

NOTE : ALL GRADES ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED.



PLOT SCALE: 50

11-1-94
12-8-94

LEVELS ON =

FILE NAME : d3 112307:213

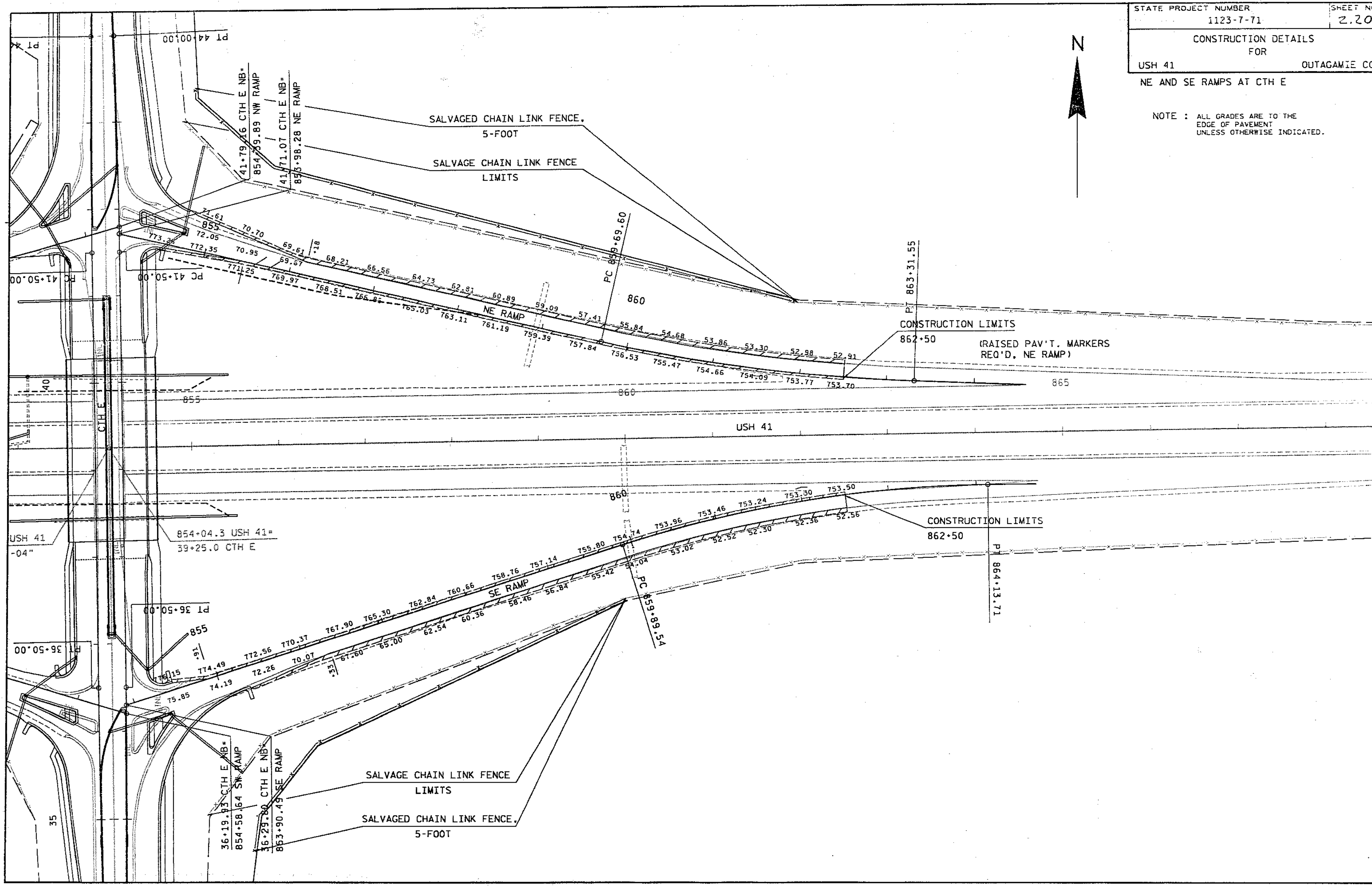
STATE PROJECT NUMBER 1123-7-71 | SHEET NO. 2.20

CONSTRUCTION DETAILS FOR

USH 41 OUTAGAMIE CO

NE AND SE RAMPS AT CTH E

NOTE : ALL GRADES ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED.

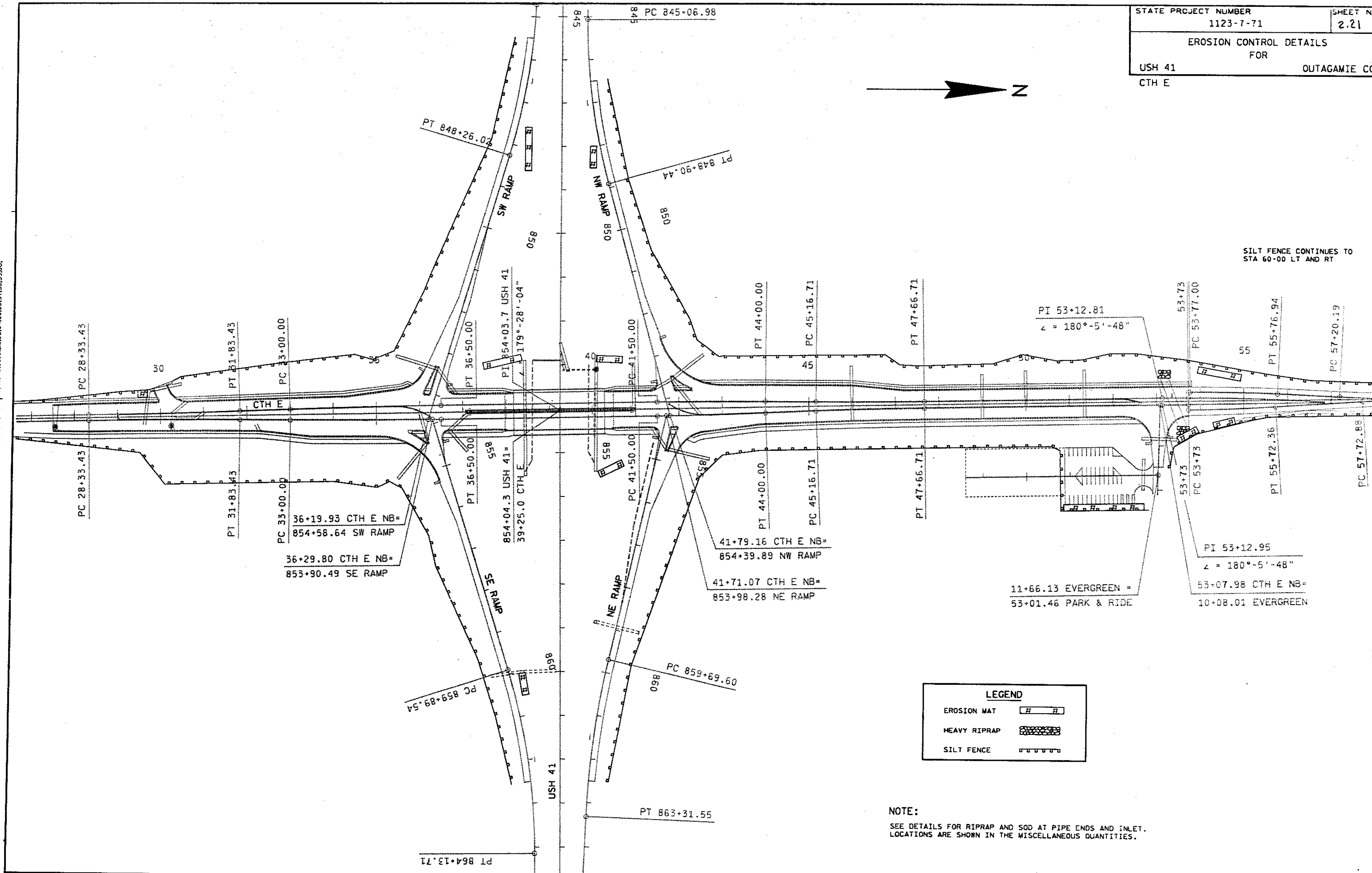


LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50, 52,53,54,55,56,57,58,59,60,

FILE NAME : d3 112307:214

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.21

EROSION CONTROL DETAILS
FOR
USH 41 OUTAGAMIE CO
CTH E

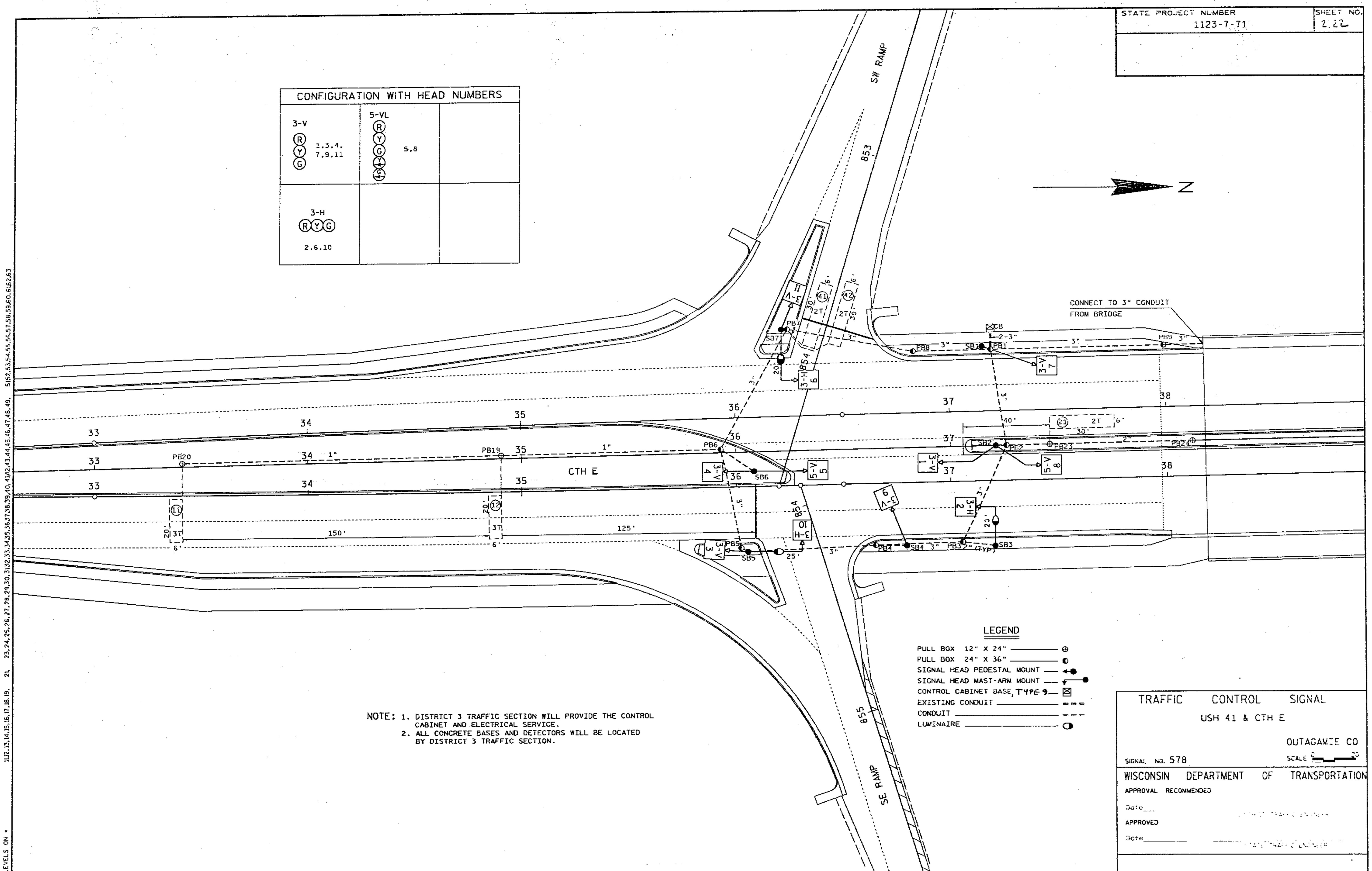


NOTE:

SEE DETAILS FOR RIPRAP AND SOD AT PIPE ENDS AND INLET.
LOCATIONS ARE SHOWN IN THE MISCELLANEOUS QUANTITIES.

FILE NAME : D3 112307:215.DGN

LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,



CONFIGURATION WITH HEAD NUMBERS

3-V	5-VL	
R Y G — 1,3,4, 7,9,11	R Y G — 5,8	
3-H RYG — 2,6,10		

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 36"
- SIGNAL HEAD PEDESTAL MOUNT
- SIGNAL HEAD MAST-ARM MOUNT
- CONTROL CABINET BASE, TYPE 9
- EXISTING CONDUIT
- CONDUIT
- LUMINAIRE

NOTE: 1. DISTRICT 3 TRAFFIC SECTION WILL PROVIDE THE CONTROL CABINET AND ELECTRICAL SERVICE.
2. ALL CONCRETE BASES AND DETECTORS WILL BE LOCATED BY DISTRICT 3 TRAFFIC SECTION.

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.22

TRAFFIC CONTROL SIGNAL

USH 41 & CTH E

OUTAGAMIE CO

SIGNAL NO. 578

SCALE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date

APPROVED

Date

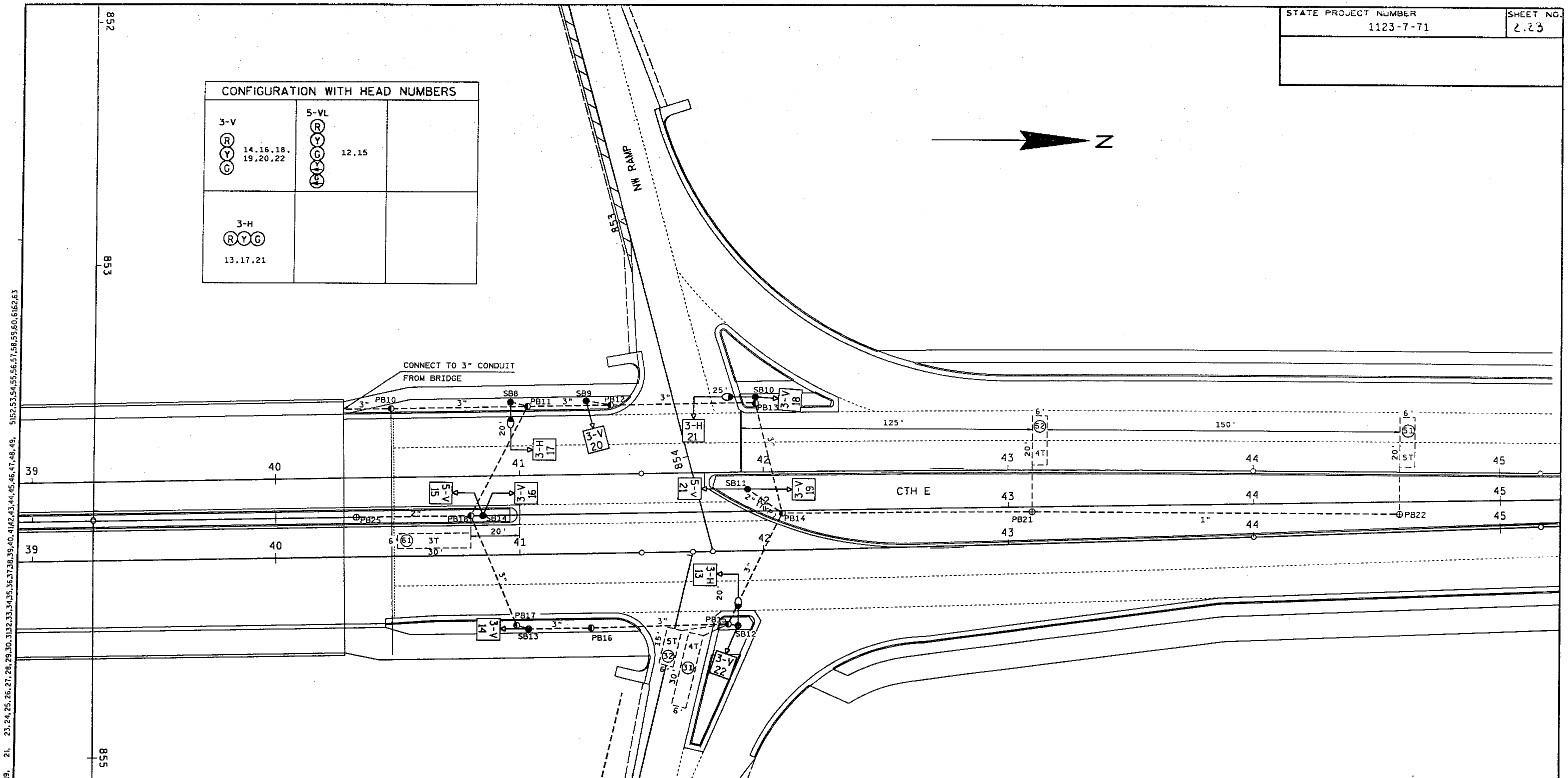
FILE NAME: D3 TRAFF:TFSIG835.DGN

WISDOT/CADDS SHEET 42

LEVELS ON = 1,2,13,14,15,16,17,18,19, 21, 23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49, 51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER 1123-7-71

SHEET NO. 2.23



NOTE: 1. DISTRICT 3 TRAFFIC SECTION WILL PROVIDE THE CONTROL CABINET AND ELECTRICAL SERVICE.
2. ALL CONCRETE BASES AND DETECTORS WILL BE LOCATED BY DISTRICT 3 TRAFFIC SECTION.

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 36"
- SIGNAL HEAD PEDESTAL MOUNT
- SIGNAL HEAD MAST-ARM MOUNT
- EXISTING CONDUIT
- CONDUIT
- LUMINAIRE

TRAFFIC CONTROL SIGNAL

USH 41 & CTH E

OUTAGAMIE CO

SIGNAL NO. 578

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

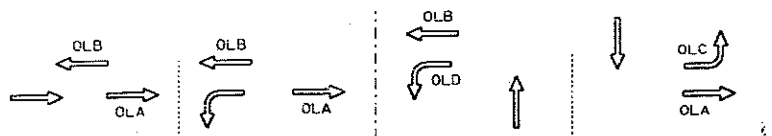
Date

APPROVED

Date

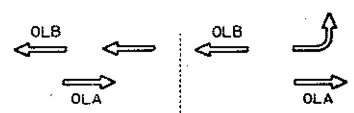
FILE NAME: D3 TRAFF\TFSIG83S.DGN

SEQUENCE OF OPERATION



RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **		Ø2 R/W	Ø2 CLEAR TO **		Ø3 R/W	Ø3 CLEAR TO **		Ø4 R/W	Ø4 CLEAR TO **		FLASH
Ø1	1.2.3.4	G	Y	R	R	R	R	R	R	R	R	R	R	Y
Ø2	5.8	-	-	-	~~G~~	~~Y~~	-	-	-	-	-	-	-	-
Ø3	20.21.22	R	R	R	R	R	R	G	Y	R	R	R	R	R
Ø4	9.10.11	R	R	R	R	R	R	R	R	R	G	Y	R	R
Ø5	16.17.18.19	R	R	R	R	R	R	R	R	R	R	R	R	Y
Ø6	12.15	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø7														
Ø8														
OL"A"	12.13.14.15	G	Y	R	G	Y	R	R	R	R	G	Y	R	Y
OL"B"	5.6.7.8	G	Y	R	G	Y	R	G	R	Y	R	R	R	Y
OL"C"	12.15	-	-	-	-	-	-	-	-	-	~~G~~	~~Y~~	-	-
OL"D"	5.8	-	-	-	~~G~~	~~Y~~	-	~~G~~	~~Y~~	-	-	-	-	



NOT USED

NOT USED

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **		Ø6 R/W	Ø6 CLEAR TO **		Ø7 R/W	Ø7 CLEAR TO **		Ø8 R/W	Ø8 CLEAR TO **	
Ø1	1.2.3.4	R	R	R	R	R	R						
Ø2	5.8	-	-	-	-	-	-						
Ø3	20.21.22	R	R	R	R	R	R						
Ø4	9.10.11	R	R	R	R	R	R						
Ø5	16.17.18.19	G	Y	R	R	R	R						
Ø6	12.15	-	-	-	~~G~~	~~Y~~	-						
Ø7													
Ø8													
OL"A"	12.13.14.15	G	Y	R	G	Y	R						
OL"B"	5.6.7.8	G	Y	R	G	Y	R						
OL"C"	12.15	-	-	-	~~G~~	~~Y~~	-						
OL"D"	5.8	-	-	-	-	-	-						

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

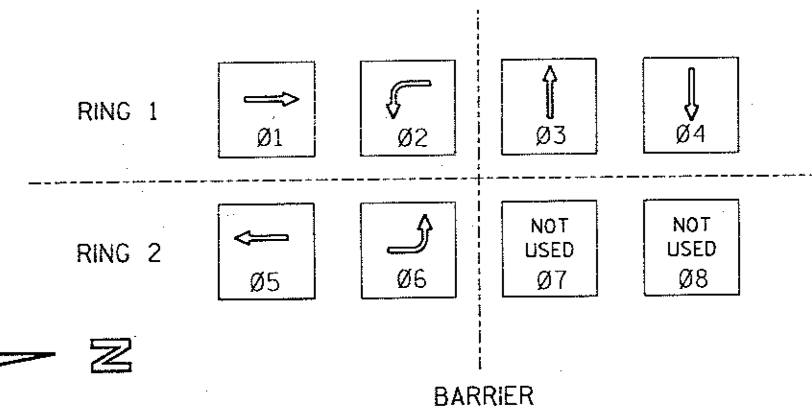
* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

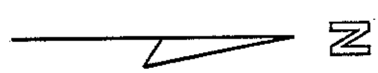
CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	ϕ5, ϕ6	ϕ2, ϕ3, ϕ4
Ø2	ϕ5, ϕ6	ϕ1, ϕ3, ϕ4
Ø3	NONE	ϕ1, ϕ2, ϕ4, ϕ5, ϕ6
Ø4	NONE	ϕ1, ϕ2, ϕ3, ϕ5, ϕ6
Ø5	ϕ1, ϕ2	ϕ3, ϕ4, ϕ6
Ø6	ϕ1, ϕ2	ϕ3, ϕ4, ϕ5
Ø7		
Ø8		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			ϕ1	ϕ1			X	6X20	3
12	2	X			ϕ1	ϕ1				6X20	3
21	3	X			ϕ2	ϕ2		X		6X30	2
31	4	X			ϕ3	ϕ3				6X30	5
32	4	X			ϕ3	ϕ3				6X15	4
41	5	X			ϕ4	ϕ4				6X30	2
42	5	X			ϕ4	ϕ4				6X30	2
51	6	X			ϕ5	ϕ5			X	6X20	5
52	7	X			ϕ5	ϕ5				6X20	4
61	8	X			ϕ6	ϕ6		X		6X30	3





TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	
IN TRAFFIC CONTROL CABINET	X
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE FOR HAND CONTROL OPERATION.

STATE PROJECT NUMBER | SHEET NO.
1123-7-71 | 2.34

SEQUENCE OF OPERATION

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			MIN
2			
3			
4			
5			MIN
6			
7			
8			

OVERLAPS

O.L. "A" = ϕ1, ϕ2, ϕ4, ϕ5, ϕ6
O.L. "B" = ϕ1, ϕ2, ϕ3, ϕ5, ϕ6
O.L. "C" = ϕ4, ϕ6
O.L. "D" = ϕ2, ϕ3

USH 41 & CTH E

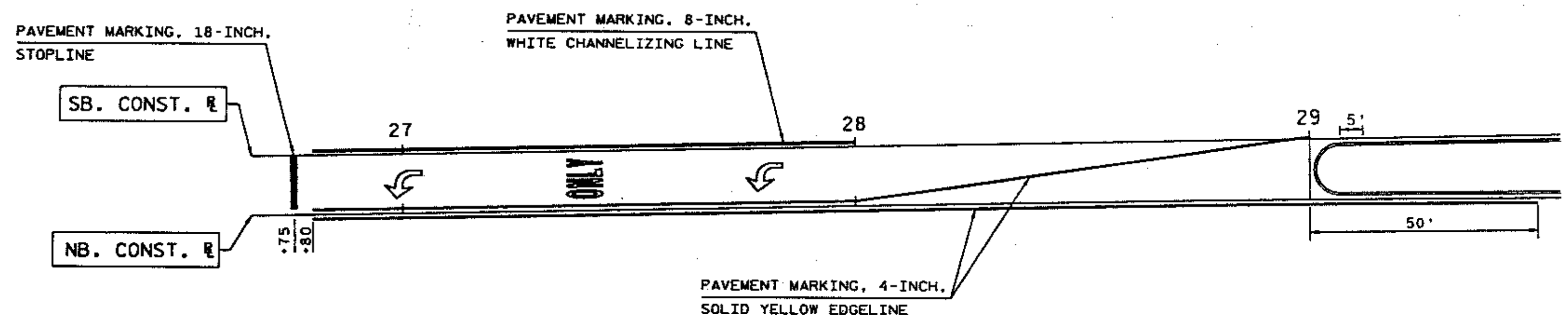
OUTAGAMIE CO

SIGNAL NO. 578

DATE SHEET NO.

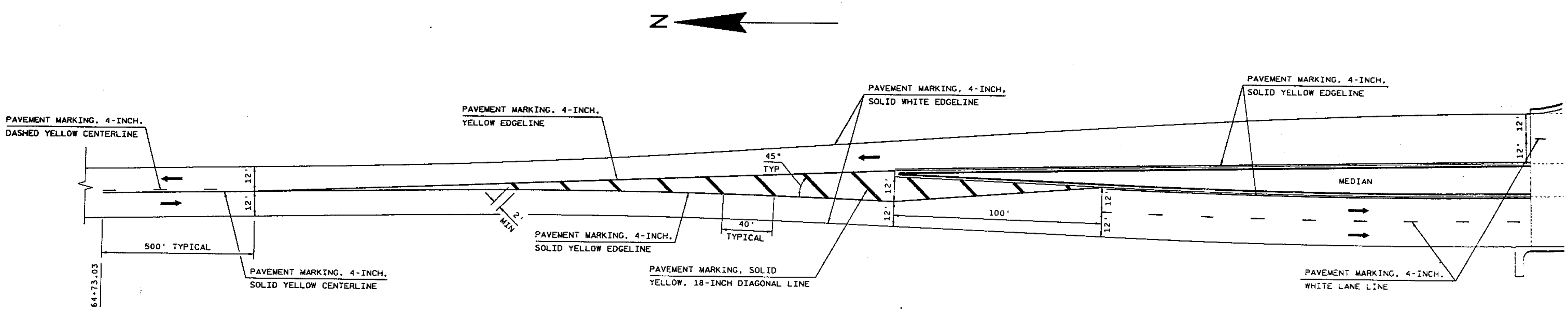
STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.25

CONSTRUCTION DETAILS
FOR
USH 41 OUTAGAMIE CO.



PAVEMENT MARKING AT MEDIAN DROP TO LEFT TURN LANE

CTH E



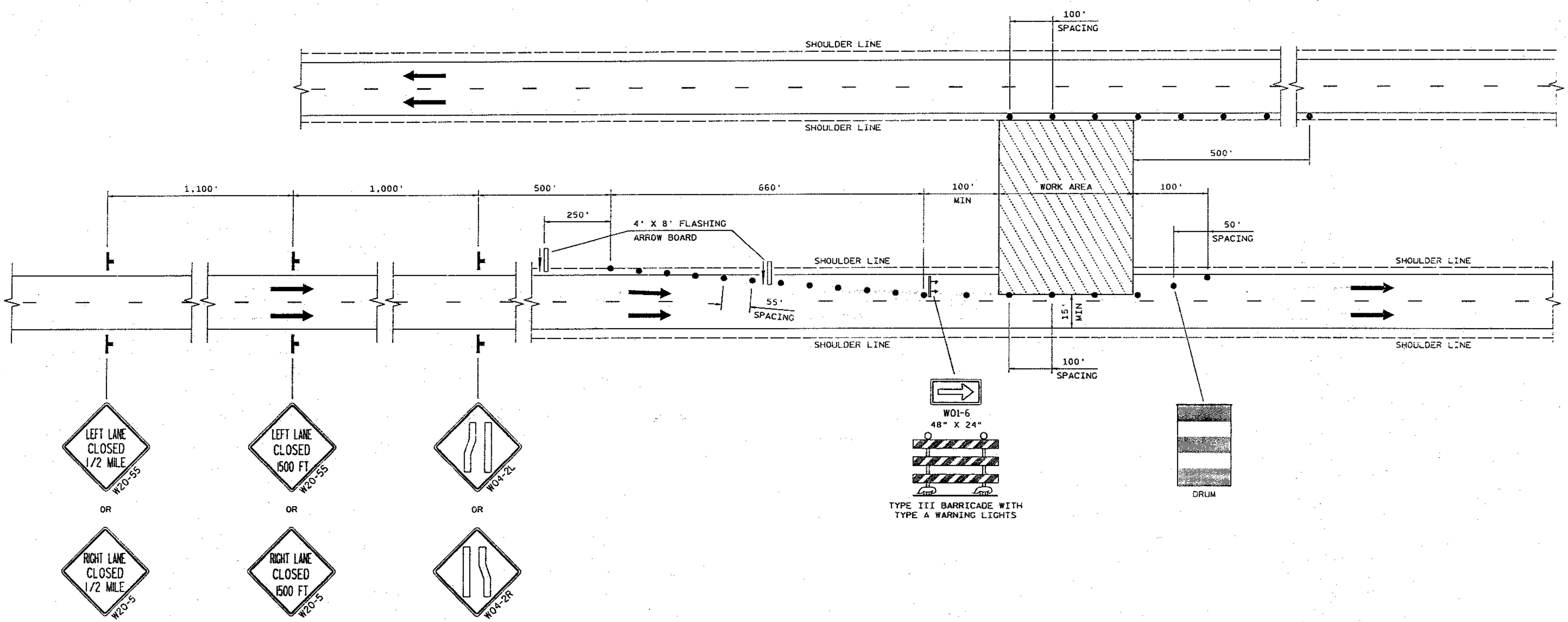
PAVEMENT MARKING AT TRANSITION FROM FOUR LANE TO TWO LANE

CTH E

LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	2.26

TRAFFIC CONTROL DETAILS
FOR
USH 41 CUTAGAMIE CO



SIGNING LAYOUT FOR MAINLINE LANE CLOSURE

USH 41 NORTHBOUND OR SOUTHBOUND AS REQ'D
(DAYTIME OPERATION ONLY)

TRAFFIC CONTROL NOTES

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

LAMPS ON DRUMS IN TAPER ARE NOT REQUIRED.

THE NUMBER OF TYPE III BARRICADES AND DRUMS SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON THE FINAL PLACEMENT OF THE BARRICADES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

ALL TRAFFIC CONTROL DRUMS, BARRICADES AND ARROW BOARDS SHALL BE REMOVED FROM THE ROADWAY AND SHOULDERS AT NIGHT OR WHEN NOT IN USE.

ALL TRAFFIC CONTROL SIGNS SHALL BE COVERED WHEN NOT IN USE.

SYMBOLS

WORK AREA

DRUM

DIRECTION OF TRAFFIC FLOW

SIGN ON PORTABLE OR PERMANENT SUPPORT

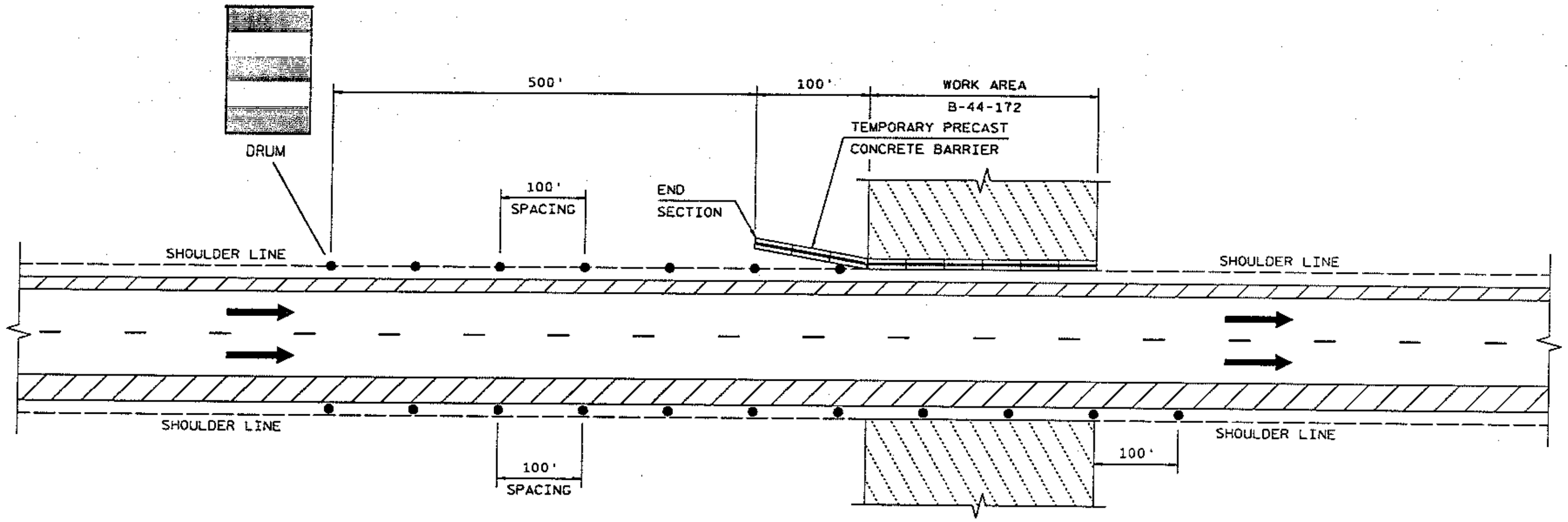
TYPE III BARRICADE WITH TYPE A WARNING LIGHTS

4' X 8' FLASHING ARROW BOARD

FILE NAME : D3 112307:216.DGN

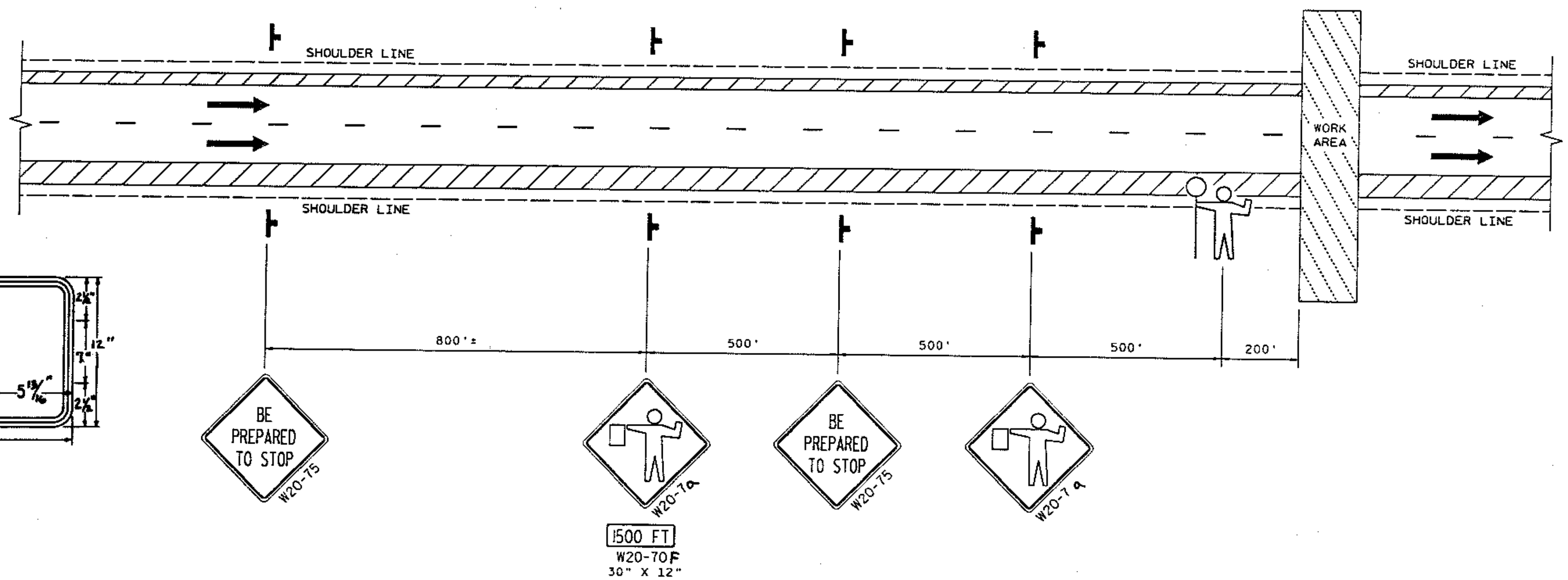
22,23,24,25,26,27,28,29,30,3132,33,3435,3637,38,39,40,4142,43,44,45,46,47,48,49,50,5152,53,54,55,56,57,58,59,60,

LEVELS ON =



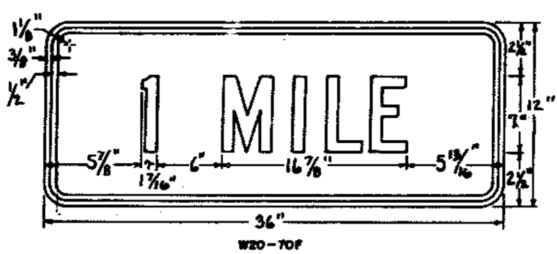
LAYOUT FOR WORK ZONE PROTECTION

USH 41 NORTHBOUND OR SOUTHBOUND AT B-44-172
NORTHBOUND SHOWN, SOUTHBOUND SIMILAR



TEMPORARY TWO LANE CLOSURE USH 41

REMOVING AND SETTING BEAMS B-44-172
CONTROL TO BE REMOVED WHEN NOT IN USE



NOTES: W20-70F

1. Sign is Type II
2. Color:
   Background – Non-Reflective Orange
   Message – Black
3. Face Material – Paint or Non-Reflective Sheeting
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W20-70's – all letters are series "C".
6. W20-70F may be used with W20-7 as required.

TRAFFIC CONTROL NOTES

THE NUMBER OF DRUMS SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON THE FINAL PLACEMENT.

LAMPS ON DRUMS ARE NOT REQUIRED.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

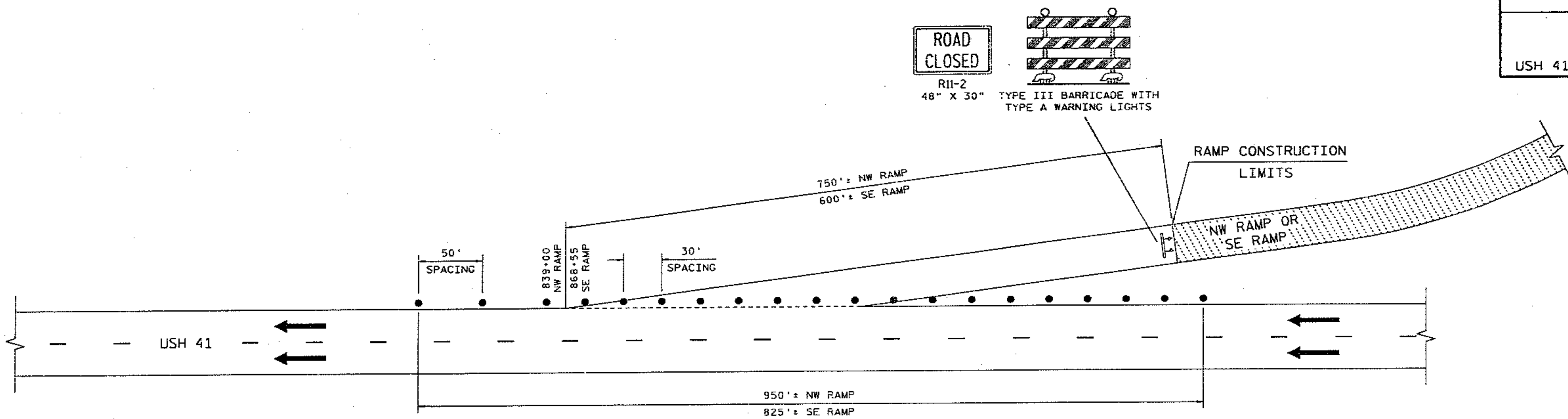
SYMBOLS

- WORK AREA
- DRUM
- TEMPORARY PRECAST CONCRETE BARRIER
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STIFF
- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT

LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60.

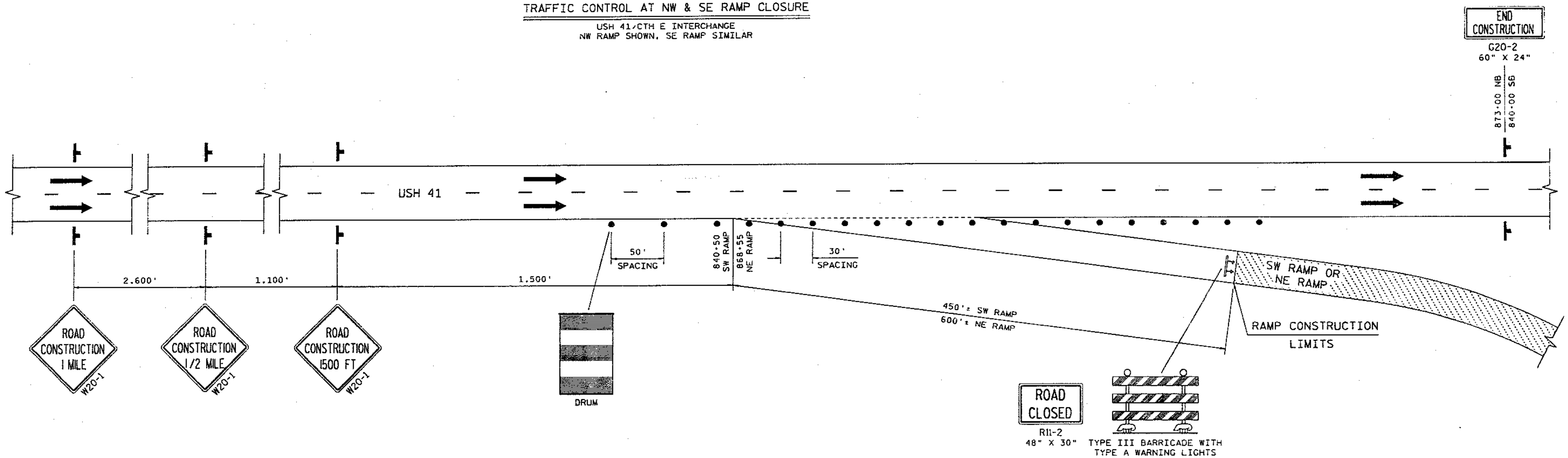
STATE PROJECT NUMBER	SHEET NO.
1123-7-71	E.28

TRAFFIC CONTROL DETAILS
FOR
USH 41 OUTAGAMIE CO



TRAFFIC CONTROL AT NW & SE RAMP CLOSURE

USH 41/CTH E INTERCHANGE
NW RAMP SHOWN, SE RAMP SIMILAR



TRAFFIC CONTROL AT SW & NE RAMP CLOSURE

USH 41/CTH E INTERCHANGE
SW RAMP SHOWN, NE RAMP SIMILAR

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

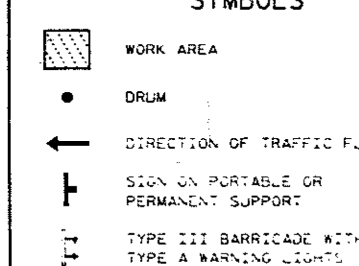
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

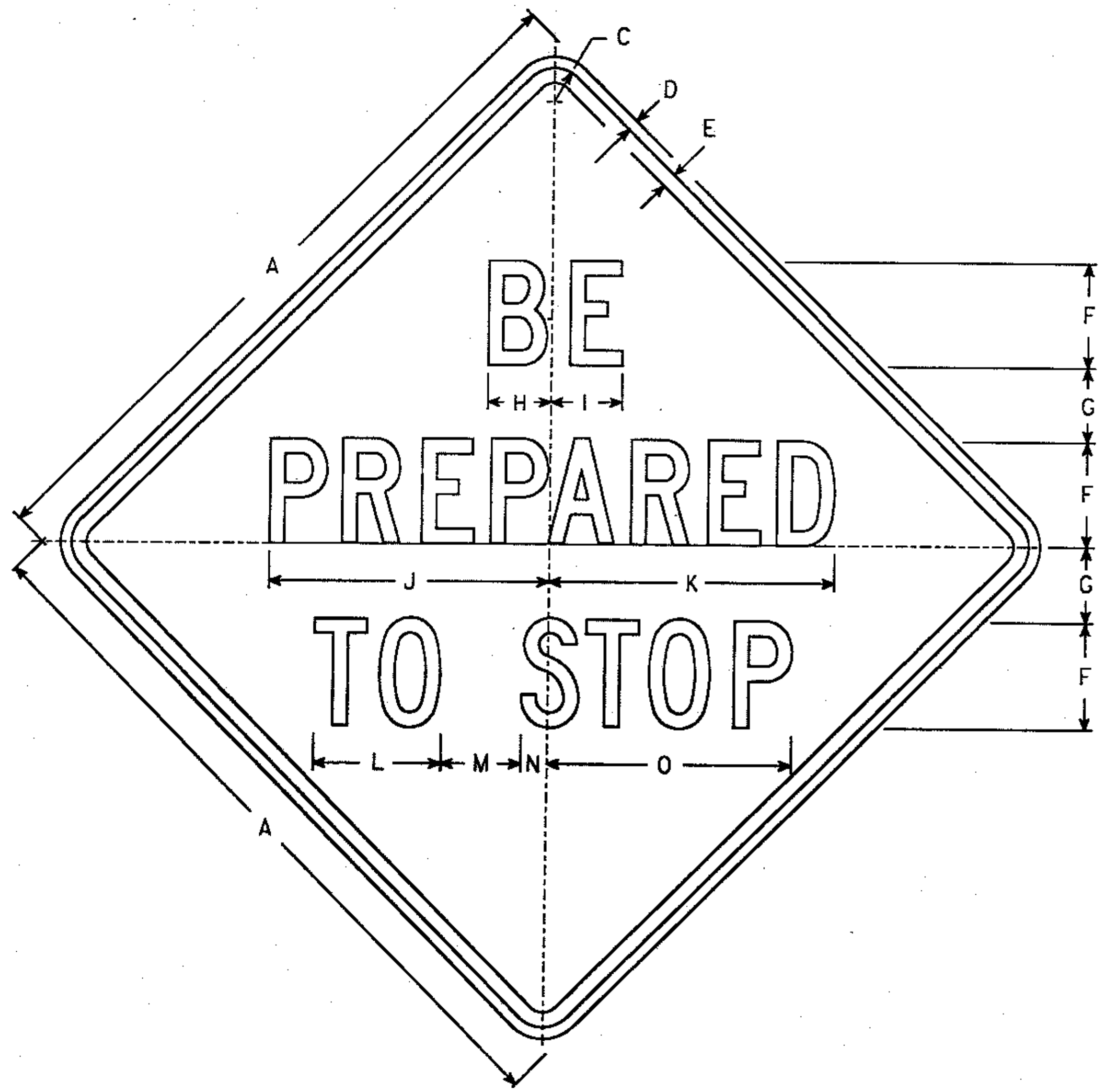
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERD AS NEEDED AND AS APPROVED BY THE ENGINEER.

SYMBOLS



LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - "C"
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 1/2	3	3 3/8	13 3/8	13 1/2	6	3 7/8	1 1/4	11 5/8												9.0
2	48		2 1/4	3/4	1	7	5	4 1/4	4 3/4	18 3/4	19	8 1/2	5 3/8	1 3/4	16 1/4												16.0
3	48		2 1/4	3/4	1	7	5	4 1/4	4 3/4	18 3/4	19	8 1/2	5 3/8	1 3/4	16 1/4												16.0
4	48		2 1/4	3/4	1	7	5	4 1/4	4 3/4	18 3/4	19	8 1/2	5 3/8	1 3/4	16 1/4												16.0
5	48		2 1/4	3/4	1	7	5	4 1/4	4 3/4	18 3/4	19	8 1/2	5 3/8	1 3/4	16 1/4												16.0

DATE DRAWN 9-20-91 DATE REDRAWN
DATE REVISED

STANDARD SIGN
W20 - 75

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
State Traffic Engineer
DATE
PLATE NO. W20-75.1

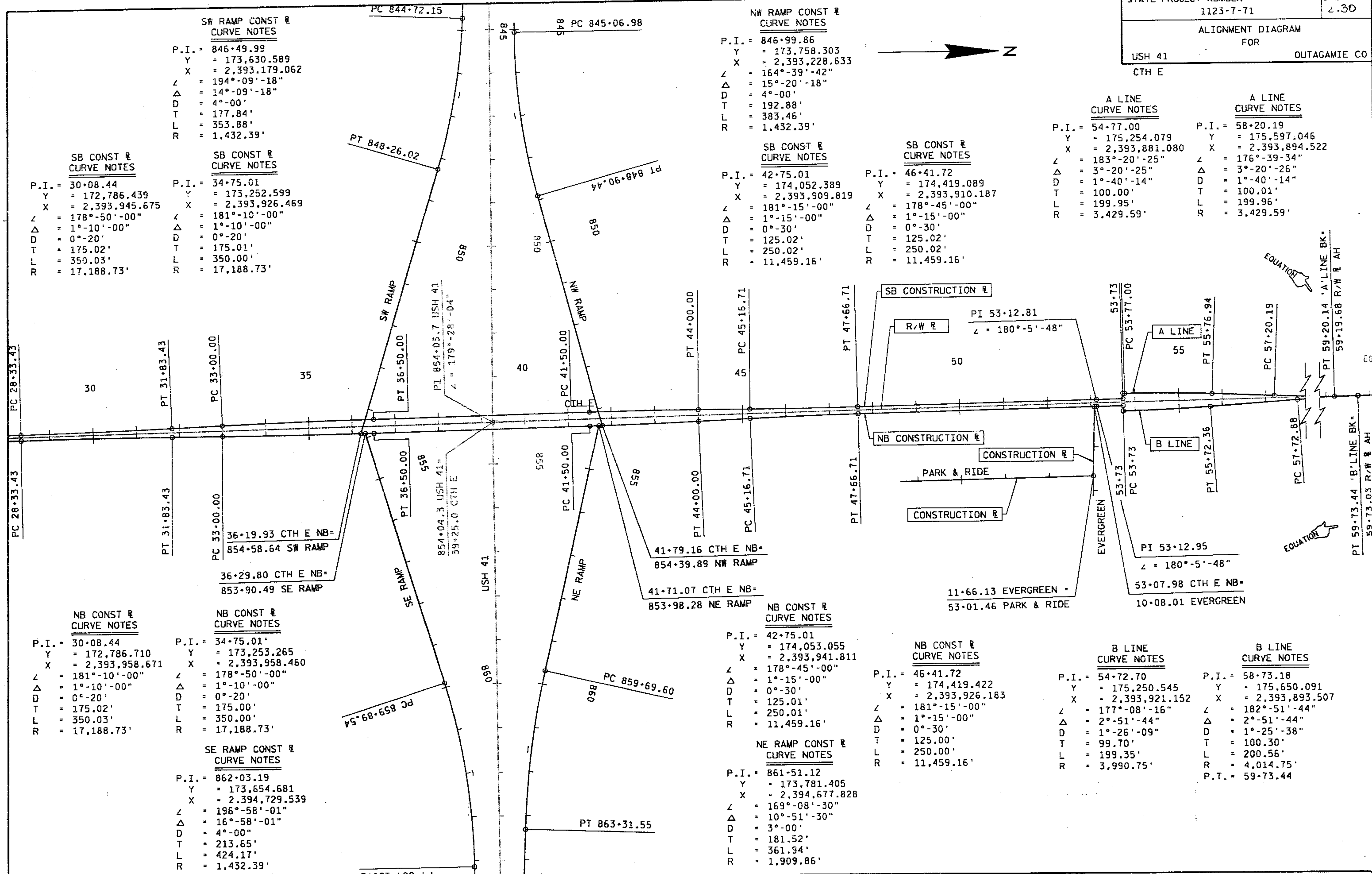
STATE PROJECT NUMBER 1123-7-71

SHEET NO. 2.30

ALIGNMENT DIAGRAM FOR

USH 41 OUTAGAMIE CO

CTH E



LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60

FILE NAME : D3 112307:212.DGN

DATE 12/16/94

E S T I M A T E O F Q U A N T I T I E S

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
20101	CLEARING	STA.	64.00	64.00	
20102	CLEARING	I.D.	4.00	4.00	
20104	GRUBBING	STA.	64.00	64.00	
20105	GRUBBING	I.D.	4.00	4.00	
20301	REMOVING OLD CULVERT, STATION 53+20	L.S.	1.00	1.00	
20330	REMOVING OLD CULVERTS	EACH	14.00	14.00	
20351	REMOVING OLD BRIDGE, STATION 39+25	L.S.	1.00	1.00	
20352	REMOVING OLD BRIDGE, STATION 50+00 LT	L.S.	1.00	1.00	
20401	REMOVING PAVEMENT	S.Y.	13,946.00	13,946.00	
20402	REMOVING ASPHALTIC SURFACE	S.Y.	440.00	440.00	
20405	REMOVING CURB AND GUTTER	L.F.	130.00	130.00	
20406	REMOVING CONCRETE SIDEWALK	S.Y.	58.00	58.00	
20409	REMOVING SURFACE DRAINS	EACH	10.00	10.00	
20411	REMOVING GUARDRAIL	L.F.	2,347.00	2,347.00	
20416	REMOVING INLETS	EACH	11.00	11.00	
20417	REMOVING SEPTIC TANKS	EACH	1.00	1.00	
20470	REMOVING BUILDINGS, PARCEL #9	L.S.	1.00	1.00	
20483	ABANDONING WELLS	EACH	1.00	1.00	
20484	SITE CLEARANCE, PARCEL #9	L.S.	1.00	1.00	
20503	UNCLASSIFIED EXCAVATION	C.Y.	9,687.00	9,687.00	
20610	EXCAVATION FOR STRUCTURES, BRIDGES B-44-172	L.S.	1.00	1.00	
20620	EXCAVATION FOR STRUCTURES, CULVERTS C-44-84	L.S.	1.00	1.00	
20801	BORROW EXCAVATION	C.Y.	121,272.00	121,272.00	
21302	FINISHING ROADWAY, PROJECT 1123-07-71	L.S.	1.00	1.00	
30404	CRUSHED AGGREGATE BASE COURSE	TON	18,048.00	18,048.00	
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	205.00	205.00	
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	104.00	104.00	
40714	ASPHALTIC CONCRETE PAVEMENT, TYPE LV	TON	1,884.00	1,884.00	

SHEET 3

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
41509	CONCRETE PAVEMENT, 9-INCH	S.Y.	23,154.00	23,154.00	
41535	CONCRETE PAVEMENT APPROACH SLAB	S.Y.	340.00	340.00	
41572	DOWEL BARS	EACH	84.00	84.00	
50201	CONCRETE MASONRY, BRIDGES	C.Y.	1,076.00	826.00	250.00
50230	PROTECTIVE SURFACE TREATMENT	GAL.	159.00	159.00	
50262	CONCRETE MASONRY ANCHORS, TYPE S, 3/4-INCH	EACH	264.00	264.00	
50307	PRESTRESSED GIRDER, I TYPE, 54-INCH	L.F.	3,102.00	3,102.00	
50401	CONCRETE MASONRY, CULVERTS	C.Y.	171.00	171.00	
50504	HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	15,780.00	15,780.00	
50505	HIGH-STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	LB.	21,140.00	21,140.00	
50511	COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	159,500.00	114,432.00	45,068.00
50626	NON-LAMINATED ELASTOMERIC BEARING PADS	EACH	45.00	45.00	
50640	STEEL DIAPHRAGMS, STRUCTURE B-44-72	EACH	56.00	56.00	
51121	STEEL PILING, DELIVERED AND DRIVEN, HP 10-INCH 42 POUND	L.F.	5,095.00	5,095.00	
51605	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	40.00	40.00	
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	181.00	181.00	
52005	CULVERT PIPE, CLASS III, 24-INCH	L.F.	539.00	539.00	
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	7.00	7.00	
52063	APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	4.00	4.00	
52105	CORRUGATED STEEL CULVERT PIPE, 18-INCH	L.F.	1,098.00	1,098.00	
52107	CORRUGATED STEEL CULVERT PIPE, 24-INCH	L.F.	16.00	16.00	
52147	STEEL APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	10.00	10.00	
52149	STEEL APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	4.00	4.00	

SHEET 3.1

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
52178	STEEL APRON ENDWALLS FOR CULVERT PIPE, SLOPED SECTION, 18-INCH	EACH	3.00	3.00	
60119	CONCRETE CURB AND GUTTER, 18-INCH, TYPE A	L.F.	4,026.00	4,026.00	
60120	CONCRETE CURB AND GUTTER, 18-INCH, TYPE D	L.F.	624.00	624.00	
60123	CONCRETE CURB AND GUTTER, 30-INCH, TYPE A	L.F.	5,426.00	5,426.00	
60205	CONCRETE SIDEWALK, 5-INCH	S.F.	36,191.00	36,191.00	
60305	TEMPORARY PRECAST CONCRETE BARRIER, DELIVERED	L.F.	520.00	520.00	
60307	TEMPORARY PRECAST CONCRETE BARRIER, INSTALLED	L.F.	520.00	520.00	
60601	RIPRAP	C.Y.	190.00	190.00	
60602	HEAVY RIPRAP	C.Y.	75.00	75.00	
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	813.00	813.00	
60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH	L.F.	140.00	140.00	
61110	MANHOLES, TYPE 1	EACH	3.00	3.00	
61122	INLETS, TYPE 3	EACH	43.00	43.00	
61123	INLETS, TYPE 8	EACH	1.00	1.00	
61128	RECONSTRUCTING MANHOLES	EACH	8.00	8.00	
61151	MANHOLE COVERS, TYPE J	EACH	3.00	3.00	
61167	INLET COVERS, TYPE H	EACH	43.00	43.00	
61170	INLET COVERS, TYPE MS	EACH	1.00	1.00	
61182	ADJUSTING MANHOLE COVERS	EACH	6.00	6.00	
61183	ADJUSTING INLET COVERS	EACH	1.00	1.00	
61201	PIPE UNDERDRAIN, 6-INCH	L.F.	659.00	659.00	
61211	PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L.F.	40.00	40.00	
61254	REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN, 6-INCH	EACH	2.00	2.00	
61331	NONMETALLIC CONDUIT, 1-INCH	L.F.	510.00	510.00	

SHEET 3.2

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
61334	NONMETALLIC CONDUIT, 2-INCH	L.F.	290.00	290.00	
61336	NONMETALLIC CONDUIT, 3-INCH	L.F.	1,375.00	1,375.00	
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	500.00	500.00	
61610	CHAIN LINK FENCE, 4 FT.	L.F.	46.00	46.00	
61614	CHAIN LINK FENCE, 8 FT.	L.F.	242.00	242.00	
61631	SALVAGED CHAIN LINK FENCE, 5 FT.	L.F.	2,280.00	2,280.00	
61802	MAINTENANCE AND REPAIR OF HAUL ROADS, PROJECT 1123-07-71	L.S.	1.00	1.00	
61910	MOBILIZATION	L.S.	1.00	1.00	
62101	LANDMARK REFERENCE MONUMENTS	EACH	4.00	4.00	
62202	ASPHALTIC SHOULDER RUMBLE STRIP	L.F.	3,006.00	3,006.00	
62203	ASPHALTIC FLUMES	S.Y.	213.00	213.00	
62301	CALCIUM CHLORIDE SURFACE TREATMENT	TON	15.00	15.00	
62401	WATER	MGAL	180.00	180.00	
62505	SALVAGED TOPSOIL	S.Y.	59,028.00	59,028.00	
62703	MULCHING	TON	28.00	28.00	
62815	SILT FENCE, DELIVERED	L.F.	8,762.00	8,762.00	
62816	SILT FENCE, INSTALLED	L.F.	8,762.00	8,762.00	
62817	SILT FENCE MAINTENANCE	L.F.	8,762.00	8,762.00	
62819	MOBILIZATIONS, EROSION CONTROL	EACH	3.00	3.00	
62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	S.Y.	894.00	894.00	
62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	S.Y.	894.00	894.00	
62905	FERTILIZER, TYPE B	CWT.	42.20	42.20	
63002	SEEDING	LB.	833.00	833.00	
63101	SODDING	S.Y.	7,516.00	7,516.00	
63401	WOOD POSTS, 4X4-INCH X 10-FT.	EACH	3.00	3.00	
63702	SIGNS, TYPE II, REFLECTIVE	S.F.	9.00	9.00	
64003	POLES, TYPE 3	EACH	6.00	6.00	
64012	CONCRETE BASES, TYPE 1	EACH	8.00	8.00	

SHEET 3:3

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
64013	CONCRETE BASES, TYPE 2	EACH	6.00	6.00	
64032	LUMINAIRES, 150 WATTS, HIGH PRESSURE SODIUM	EACH	6.00	6.00	
64056	MAST ARMS, TRUSS TYPE, 12-FOOT	EACH	6.00	6.00	
64075	ELECTRICAL WIRE, LIGHTING, NO. 12	L.F.	1,435.00	1,435.00	
64220	FIELD OFFICE, TYPE C	L.S.	1.00	1.00	
64302	TRAFFIC CONTROL, PROJECT 1123-07-71	L.S.	1.00	1.00	
64310	TRAFFIC CONTROL, ARROW BOARDS	DAYS	40.00	40.00	
64313	TRAFFIC CONTROL, DRUMS	DAYS	14,468.00	14,468.00	
64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	4,580.00	4,580.00	
64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	7,480.00	7,480.00	
64326	TRAFFIC CONTROL, SIGNS	DAYS	4,460.00	4,460.00	
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	11,702.00	11,702.00	
64414	PAVEMENT MARKING, CHANNELIZING, EPOXY, 8-INCH	L.F.	2,297.00	2,297.00	
64437	PAVEMENT MARKING, STOP LINE, EPOXY, 18-INCH	L.F.	323.00	323.00	
64457	PAVEMENT MARKING, CROSSWALK, EPOXY, 6-INCH	L.F.	665.00	665.00	
64472	PAVEMENT MARKING, ARROWS, EPOXY, TYPE 2	EACH	2.00	2.00	
64479	PAVEMENT MARKING, WORDS, EPOXY	EACH	1.00	1.00	
64487	REMOVING PAVEMENT MARKINGS	L.F.	1,125.00	1,125.00	
64491	PAVEMENT MARKING, DIAGONAL, EPOXY, 18-INCH	L.F.	50.00	50.00	
64493	PAVEMENT MARKING, CURB RAMP, EPOXY	L.F.	399.00	399.00	
64494	PAVEMENT MARKING, PARKING STALL, EPOXY	L.F.	2,143.00	2,143.00	
64495	PAVEMENT MARKING, CURB, EPOXY	L.F.	480.00	480.00	
64496	PAVEMENT MARKING, ISLAND NOSE, EPOXY	S.F.	139.00	139.00	
64498	PAVEMENT MARKING, RAISED MARKERS	EACH	9.00	9.00	

SHEET 3.4

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
64503	GEOTEXTILE FABRIC, TYPE DF	S.Y.	586.00	586.00	
64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	698.00	698.00	
64506	GEOTEXTILE FABRIC, TYPE HR	S.Y.	115.00	115.00	
64507	GEOTEXTILE FABRIC, TYPE C	S.Y.	300.00	300.00	
64601	SAWING EXISTING PAVEMENT	L.F.	469.00	469.00	
64602	SAWING CONCRETE PAVEMENT, FULL DEPTH	L.F.	125.00	125.00	
65010	CONSTRUCTION STAKING, SUBGRADE	STA.	92.30	92.30	
65020	CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE	STA.	13.60	13.60	
90001	PULVERIZED TOPSOIL	S.Y.	6,333.00	6,333.00	
90002	SLOPE PAVING, BREAKER RUN	S.Y.	605.00	605.00	
90003	TRAFFIC SIGNAL STANDARDS, ALUMINUM, 13-FT	EACH	4.00	4.00	
90004	TRAFFIC SIGNAL STANDARDS, ALUMINUM, 15-FT	EACH	4.00	4.00	
90005	CHAIN LINK FENCE, 10-FT	L.F.	242.00	242.00	
90006	REMOVING CONCRETE BARRIER	L.F.	107.00	107.00	
90007	CONSTRUCTION STAKING, CONCRETE PAVEMENT	STA.	78.70	78.70	
90402	QUALITY MANAGEMENT PROGRAM, ASPHALTIC MIXTURE	TON	1,884.00	1,884.00	
90660	ELECTRICAL WIRE, TRAFFIC SIGNALS, NO. 10	L.F.	3,790.00	3,790.00	
90777	PAVEMENT MARKING, HANDICAP SYMBOLS, EPOXY	EACH	3.00	3.00	
90785	CONCRETE CONTROL CABINET BASES, TYPE 9	EACH	1.00	1.00	
90792	PULL BOXES, 12X24-INCH	EACH	7.00	7.00	
90797	PULL BOXES, 24X36-INCH	EACH	18.00	18.00	
90800	PEDESTAL BASES	EACH	8.00	8.00	
90801	TRANSFORMER BASES	EACH	6.00	6.00	
90814	MAST ARMS, TRAFFIC SIGNAL TROMBONE, 20-FT.	EACH	4.00	4.00	
90815	MAST ARMS, TRAFFIC SIGNAL TROMBONE, 25-FT.	EACH	2.00	2.00	

SHEET 3.5

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-07-71 QUANTITY	1123-07-72 QUANTITY
90817	TRAFFIC SIGNAL FACES, 3-12 VERTICAL	EACH	12.00	12.00	
90819	TRAFFIC SIGNAL FACES, 5-12 VERTICAL	EACH	4.00	4.00	
90823	TRAFFIC SIGNAL FACES, 3-12 HORIZONTAL	EACH	6.00	6.00	
90834	TRAFFIC SIGNAL MOUNTING HARDWARE, CTH E/NORTH RAMPS	L.S.	1.00	1.00	
90835	TRAFFIC SIGNAL MOUNTING HARDWARE, CTH E/SOUTH RAMPS	L.S.	1.00	1.00	
90838	BACKPLATES	EACH	16.00	16.00	
90841	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR, NO. 14	L.F.	700.00	700.00	
90842	TRAFFIC SIGNAL CABLE, 7 CONDUCTOR, NO. 14	L.F.	875.00	875.00	
90844	TRAFFIC SIGNAL CABLE, 12 CONDUCTOR, NO. 14	L.F.	540.00	540.00	
90853	TRAFFIC SIGNAL CABLE, 12 CONDUCTOR, NO. 12	L.F.	860.00	860.00	
90871	LOOP DETECTOR CONDUIT, 1-INCH	L.F.	780.00	780.00	
90872	LOOP DETECTOR WIRE	L.F.	2,140.00	2,140.00	
90873	LOOP DETECTOR LEAD IN CABLE	L.F.	4,350.00	4,350.00	

SHEET 3.6

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	3A

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	UNCLASSIFIED EXCAVATION C.Y.	FILL C.Y.	BORROW EXCAVATION C.Y.
GROUP CODE 010				
854+50 - 862+50	SE RAMP	587	8,757	4,056
845+50 - 853+50	SW RAMP	1,199	8,362	5,677
846+50 - 853+50	NW RAMP	624	6,061	4,284
854+50 - 862+50	NE RAMP	739	14,039	10,499
50+78 - 52+85	PARK AND RIDE	36	2,451	1,984
	SUBTOTALS	3,185	39,670	26,500
GROUP CODE 020				
26+70 - 38+59	CTH E	3,286	59,484	45,155
39+91 - 51+00	CTH E	1,312	56,036	44,933
	SUBTOTALS	4,598	115,520	90,068
GROUP CODE 060				
51+00 - 60+00	CTH E & EVERGREEN	1,904	7,609	4,684
	SUBTOTALS	1,904	7,609	4,684
	TOTALS	9,687	162,799	121,272

NOTE: FILL VOLUMES SHOWN ARE ACTUAL VOLUMES EXPANDED 1.40%.

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	CLEARING STA.	CLEARING I.D.	GRUBBING STA.	GRUBBING I.D.
GROUP CODE 020					
27+00 - 39+00	CTH E NB	12		12	
27+00 - 39+00	CTH E SB	12		12	
40+00 - 51+00	CTH E NB	11		11	
40+00 - 51+00	CTH E SB	11		11	
51+00 - 53+00	PARK & RIDE	2		2	
	SUBTOTALS	48	0	48	0
GROUP CODE 060					
51+00 - 56+00	CTH E NB	5		5	
51+00 - 56+00	CTH E SB	5		5	
56+34	A LINE LT. 40'		4		4
57+00 - 60+00	CTH E NB	3		3	
57+00 - 60+00	CTH E SB	3		3	
	SUBTOTALS	16	4	16	4
	TOTALS	64	4	64	4

NOTE: ANY STATIONS NOT INCLUDED WILL BE PAID BY INCH DIAMETER.

REMOVING INLETS

STATION	LOCATION	EACH
GROUP CODE 020		
29+50	CTH E NB 18' RT.	1
29+50	CTH E NB 30' LT.	1
29+70	CTH E NB 55' LT.	1
30+25	CTH E NB 60' LT.	1
32+30	CTH E NB 12' RT.	1
35+80	CTH E NB 8' RT.	1
36+20	CTH E NB 67' LT.	1
36+25	CTH E NB 40' RT.	1
38+14	CTH E NB 5' LT.	1
40+30	CTH E NB 30' LT.	1
41+80	CTH E NB 35' RT.	1
	TOTAL	11

REMOVING CONCRETE SIDEWALK

LOCATION	S.Y.
GROUP CODE 020	
SW RAMP ISLAND	31
NE RAMP ISLAND	27
TOTAL	58

REMOVING PAVEMENT

STATION TO STATION	LOCATION	S.Y.
GROUP CODE 010		
845+50 - 853+30	S.W. RAMP	1,473
854+50 - 862+50	S.E. RAMP	1,587
854+80 - 862+50	N.E. RAMP	1,456
846+50 - 853+50	N.W. RAMP	1,318
	SUBTOTAL	5,834
GROUP CODE 020		
27+50 - 30+00	CTH E	1,542
29+80 - 33+69	CTH E SB LT. ENTR.	642
30+00 - 34+84	CTH E	2,635
34+84 - 36+83	CTH E	2063
36+83 - 38+20	CTH E	510
853+50 - CTH E	NW RAMP	338
CTH E - 854+80	NE RAMP	382
	SUBTOTAL	8,112
	TOTAL	13,946

REMOVING OLD CULVERT

STATION	LOCATION	EACH	REMARKS
GROUP CODE 020			
29+90	CTH E 50' RT.	1	18" X 55' C.S.C.P.
45+75	CTH E 30' RT.	1	18" X 40' C.S.C.P.
46+80	CTH E 25' RT.	1	18" X 28' C.S.C.P.
47+00	CTH E 50' LT.	1	18" X 45' C.S.C.P.
47+75	CTH E 25' RT.	1	18" X 30' C.S.C.P.
48+00	CTH E 45' LT.	1	18" X 30' C.S.C.P.
49+75	CTH E 22' RT.	1	18" X 28' C.S.C.P.
50+00	CTH E 42' LT.	1	18" X 30' C.S.C.P.
853+94	SW RAMP RT.	1	12" X 36' R.C.C.P.
854+15	SE RAMP RT.	1	12" X 45' R.C.C.P.
854+28	SE RAMP RT.	1	12" X 42' R.C.C.P.
854+45	NE RAMP	1	12" X 46' R.C.C.P.
	SUBTOTAL	12	
GROUP CODE 060			
57+25	CTH E A-LINE 30' LT.	1	18" X 26' C.S.C.P.
58+45	CTH E A-LINE 33' LT.	1	18" X 30' C.S.C.P.
	SUBTOTAL	2	
	TOTAL	14	

REMOVING SURFACE DRAINS

STATION	LOCATION	EACH
GROUP CODE 010		
853+43	N.E. RAMP 20' RT.	1
855+20	S.E. RAMP 45' RT.	1
	SUBTOTAL	2
GROUP CODE 020		
42+85	CTH E NB 55' LT.	1
42+50	CTH E NB 30' RT.	1
853+43	N.E. RAMP 20' RT.	1
853+60	S.W. RAMP 5' LT.	1
854+00	S.W. RAMP 60' RT.	1
854+40	S.E. RAMP 74' RT.	1
854+55	S.E. RAMP 15' LT.	1
854+61	N.E. RAMP 20' RT.	1
	SUBTOTAL	8
	TOTAL	10

SAWING SUMMARY

STATION TO STATION	LOCATION	SAWING CONCRETE PAVEMENT FULL DEPTH L.F.	SAWING EXISTING PAVEMENT L.F.
GROUP CODE 010			
845+50	S.W. RAMP AND GORE	16	
845+50 - 846+07	S.W. RAMP GORE AREA		79 ***
846+50	N.W. RAMP AND GORE	16	
846+50 - 847+14	N.W. RAMP GORE AREA		86 ***
861+79 - 862+50	N.E. RAMP GORE AREA		94 ***
862+50	N.E. RAMP AND GORE	16	
862+02 - 862+50	S.E. RAMP GORE AREA		73 ***
862+50	S.E. RAMP AND GORE	16	
52+90	PARK & RIDE ENTRANCE		63
	SUBTOTALS	64	395
GROUP CODE 020			
27+50	CTH E	61	
30+00	CTH E NB 70' LT.		30
	SUBTOTALS	61	30
GROUP CODE 060			
60+00	CTH E		22
11+48	EVERGREEN ROAD		22
	SUBTOTALS	0	44
	TOTALS	125	469

*** INCLUDES 2 TRANSVERSE AND 1 LONGITUDINAL CUT.

REMOVING PAVEMENT MARKINGS

STATION TO STATION	LOCATION	L.F.
GROUP CODE 060		
60+00 - 64+73	CTH E	1,125

REMOVING ASPHALTIC SURFACE

STATION TO STATION	LOCATION	S.Y.
GROUP CODE 010		
845+50 - 846+10	S.W. RAMP GORE AREA	107
846+50 - 847+15	N.W. RAMP GORE AREA	116
861+80 - 862+50	N.E. RAMP GORE AREA	129
862+05 - 862+50	S.E. RAMP GORE AREA	88
	TOTAL	440

REMOVING BUILDINGS, SITE CLEARING, ABANDONING WELL AND REMOVING SEPTIC TANKS

STATION TO STATION	LOCATION	PARCEL NO.	REMOVING BUILDING PARCEL 9 L.S.	SITE CLEARING PARCEL 9 L.S.	ABANDONING WELL EACH	REMOVING SEPTIC TANK L.S.	REMARKS
GROUP CODE 020							
49+10 - 50+00	CTH E RT.	9	1	1	1	1	1 HOUSE AND 3 OUT BUILDINGS

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	3B

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

REMOVING CURB AND GUTTER

STATION TO STATION	LOCATION	L.F.
GROUP CODE 010		
853+20 - 853+30	N.W. RAMP LT.	10
854+50 - 854+60	S.E. RAMP RT.	12
	SUBTOTAL	22
GROUP CODE 020		
41+19 - 41+45	CTH E LT.	27
42+28 - 42+44	CTH E RT.	21
42+40 - 42+77	CTH E LT.	38
854+00 - 854+05	S.W. RAMP RT.	5
854+07 - 854+13	N.E. RAMP RT.	7
854+20 - 854+30	N.E. RAMP LT.	10
	SUBTOTAL	108
	TOTAL	130

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	L.F.
GROUP CODE 010		
850+15 - 853+85	USH 41 NB RT.	370
852+85 - 855+23	USH 41 MEDIAN	476
854+22 - 858+08	USH 41 SB. LT.	386
850+46 - 853+43	USH 41 NW RAMP	297
854+80 - 858+25	USH 41 SE RAMP	345
	SUBTOTAL	1,874
GROUP CODE 020		
29+90 - 30+00	CTH E NB LT.	14
36+70 - 38+21	CTH E NB LT.	151
36+95 - 38+21	CTH E NB RT.	126
40+28 - 41+14	CTH E NB LT.	86
40+28 - 41+24	CTH E NB RT.	96
	SUBTOTAL	473
	TOTAL	2,347

REMOVING OLD BRIDGE

STATION	LOCATION	L.S.	REMARK
GROUP CODE 020			
50+00	CTH E NB 75' LT.	1	REMOVE OLD CONCRETE STRUCTURE 1-SPAN ± 10' LONG X ± 8' WIDE

CRUSHED AGGREGATE BASE COURSE, WATER AND CALCIUM CHLORIDE

STATION TO STATION	LOCATION	CRUSHED AGGREGATE BASE COURSE ROADWAY TON	CRUSHED AGGREGATE BASE COURSE SHOULDER TON	WATER MGAL.	CALCIUM CHLORIDE TON
GROUP CODE 010					
845+50 - 853+30	S.W. RAMP	1,274	563	18.4	1.3
846+50 - 853+50	N.W. RAMP	971	475	14.5	1.2
854+50 - 862+50	S.E. RAMP	1,108	425	15.3	1.2
854+80 - 862+50	N.E. RAMP	1,231	565	18.0	1.3
	PARK & RIDE	1,166	121	12.8	
	SUBTOTALS	5,750	2,149	79.0	5.0
GROUP CODE 020					
27+50 - 51+00	CTH E				5.0
27+50 - 29+00	CTH E NB	166		1.7	
27+50 - 29+00	CTH E SB	166		1.7	
29+00 - 36+25	CTH E NB	1,092		10.8	
29+00 - 36+25	CTH E SB	955		9.6	
36+25 - 38+16	CTH E NB	360		3.5	
36+25 - 38+16	CTH E SB	432		4.2	
40+30 - 41+80	CTH E NB	316		3.2	
40+30 - 41+80	CTH E SB	287		2.9	
41+80 - 51+00	CTH E NB	1,157		11.6	
41+80 - 51+00	CTH E SB	1,587		15.8	
	SUBTOTALS	6,518	0	65.0	5.0
GROUP CODE 060					
51+00 - 52+65	CTH E NB	183		1.8	
51+00 - 52+65	CTH E SB	189		1.9	
51+00 - 60+00	CTH E & EVERGREEN ROAD				5.0
52+65 - 53+73	CTH E NB	142		1.4	
52+65 - 53+73	CTH E SB	142		1.4	
53+73 - 60+00	CTH E NB	1,098	84	11.7	
53+73 - 60+00	CTH E SB	1,239	151	13.8	
10+35 - 11+48	EVERGREEN ROAD WB	196	10	2.0	
10+35 - 11+48	EVERGREEN ROAD EB	190	7	2.0	
	SUBTOTALS	3,379	252	36.0	5.0
	TOTALS	15,647	2,401	180.0	15.0

CONCRETE CURB AND GUTTER SUMMARY

STATION TO STATION	LOCATION	18-INCH TYPE A L.F.	18-INCH TYPE D L.F.	30-INCH TYPE A L.F.
GROUP CODE 010				
852+60 - 853+50	N.W. RAMP LT.			95
854+50 - 855+33	S.E. RAMP RT.			88
	SUBTOTALS	0	0	183
GROUP CODE 020				
27+50 - 30+00	CTH E SB LT.			278
27+50 - 35+90	CTH E NB RT.			854
29+00 - 36+28	CTH E MEDIAN NB & SB	1,470		
30+50 - 36+07	CTH E SB LT.			627
36+55 - 38+18	CTH E NB RT.			178
36+55 - 38+18	CTH E SB LT.			171
37+07 - 38+18	CTH E MEDIAN NB & SB	224		
40+28 - 41+00	CTH E MEDIAN NB & SB	144		
40+28 - 41+50	CTH E NB RT.			134
40+28 - 41+50	CTH E SB LT.			138
41+76 - 51+00	CTH E MEDIAN NB & SB	1,853		
41+95 - 51+00	CTH E NB RT.			925
42+15 - 51+00	CTH E SB LT.			897
853+25 - 854+05	S.W. RAMP ISLAND			141
853+50 - 854+00	N.W. RAMP ISLAND			112
854+00 - 854+50	S.E. RAMP ISLAND			104
854+15 - 854+85	N.E. RAMP ISLAND			118
	SUBTOTALS	3,691	0	4,677
GROUP CODE 060				
51+00 - 52+65	CTH E MEDIAN NB & SB	335		
51+00 - 52+90	CTH E NB RT.			222
51+00 - 53+73	CTH E SB LT.			273
53+20 - 53+73	CTH E NB RT.			71
53+73 - 56+85	CTH E A-LINE MEDIAN		312	
53+73 - 56+85	CTH E B-LINE MEDIAN		312	
	SUBTOTALS	335	624	566
	TOTALS	4,026	624	5,426

CONCRETE PAVEMENT SUMMARY

STATION TO STATION	LOCATION	CONCRETE PAVEMENT 9-INCH S.Y.	CONCRETE PAVEMENT APPROACH SLAB S.Y.
GROUP CODE 010			
845+50 - 853+30	S.W. RAMP	1,838	
854+50 - 862+50	S.E. RAMP	1,539	
846+50 - 853+50	N.W. RAMP	1,383	
854+80 - 862+50	N.E. RAMP	1,494	
	SUBTOTALS	6,254	0
GROUP CODE 020			
27+50 - 29+00	CTH E NB	490	
27+50 - 29+00	CTH E SB	490	
29+00 - 36+25	CTH E NB	2,400	
29+00 - 36+25	CTH E SB	2,500	
36+25 - 37+97.58	CTH E NB	836	
36+25 - 37+97.58	CTH E SB	1,000	
37+97.58 - 38+18.08	CTH E NB		88
37+97.58 - 38+18.08	CTH E SB		82
40+27.92 - 40+48.42	CTH E NB		88
40+27.92 - 40+48.42	CTH E SB		82
40+48.42 - 41+80	CTH E NB	743	
40+48.42 - 41+80	CTH E SB	668	
41+80 - 51+00	CTH E NB	2,833	
41+80 - 51+00	CTH E SB	3,252	
	SUBTOTALS	15,212	340
GROUP CODE 060			
51+00 - 53+73	CTH E NB	844	
51+00 - 53+73	CTH E SB	844	
	SUBTOTALS	1,688	0
	TOTALS	23,154	340

NOTE: STA. 29+00 - 36+25 CTH E SB INCLUDES HARDEES DRIVEWAY.

LEVELS ON -

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	3C

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

CONSTRUCTION STAKING SUMMARY

STATION TO STATION	LOCATION	SUBGRADE STA.	CRUSHED AGGREGATE BASE COURSE STA.	CONCRETE PAVEMENT STA.
GROUP CODE 010				
846+50 - 853+50	NW RAMP	7.0		7.0
854+80 - 862+50	NE RAMP	7.7		7.7
845+50 - 853+30	SW RAMP	7.8		7.8
854+50 - 862+50	SE RAMP	8.0		8.0
50+80 - 52+90	PARK & RIDE	2.1	2.1	
	SUBTOTALS	32.6	2.1	30.5
GROUP CODE 020				
27+50 - 38+18	CTH E NB	10.7		10.7
27+50 - 38+18	CTH E SB	10.7		10.7
40+28 - 51+00	CTH E NB	10.7		10.7
40+28 - 51+00	CTH E SB	10.7		10.7
	SUBTOTALS	42.8	0.0	42.8
GROUP CODE 060				
51+00 - 53+73	CTH E NB	2.7		2.7
51+00 - 53+73	CTH E SB	2.7		2.7
53+73 - 60+00	CTH E A-LINE	6.3	6.3	
53+73 - 57+73	CTH E B-LINE	4.0	4.0	
10+30 - 11+48	EVERGREEN ROAD	1.2	1.2	
	SUBTOTALS	16.9	11.5	5.4
	TOTALS	92.3	13.6	78.7

DOWEL BARS

STATION	LOCATION	EACH
GROUP CODE 010		
845+50	S.W. RAMP	10
862+50	S.E. RAMP	10
846+50	N.W. RAMP	10
862+50	N.E. RAMP	10
	SUBTOTAL	40
GROUP CODE 020		
27+50	CTH E NB & SB	44
	TOTAL	84

SALVAGED CHAIN LINK FENCE, 5-FOOT

STATION TO STATION	LOCATION	L.F.
GROUP CODE 010		
847+10 - 853+60	NW RAMP LT.	680
854+40 - 861+80	NE RAMP LT.	755
851+20 - 853+75	SW RMAP RT.	310
854+75 - 859+70	SE RAMP RT.	535
	TOTAL	2,280

ASPHALTIC SUMMARY

STATION TO STATION	LOCATION	ASPHALTIC CONCRETE PAVEMENT TYPE LV TON	ASPHALTIC MATERIAL FOR TACK COAT GAL.	ASPHALTIC MATERIAL FOR PLANT MIX TON	ASPHALTIC SHOULDER RUMBLE STRIP L.F.
GROUP CODE 010					
845+50 - 846+10	S.W. RAMP GORE AREA	11.0		0.6	
845+50 - 853+54	S.W. RAMP RT.				804
845+50 - 853+30	S.W. RAMP	115.0	16.0	6.3	
846+50 - 847+15	N.W. RAMP GORE AREA	11.0		0.6	
846+50 - 853+50	N.W. RAMP	97.0	13.0	5.3	
846+50 - 853+58	N.W. RAMP LT.				708
854+50 - 862+50	S.E. RAMP	108.0	15.0	6.0	
854+73 - 862+50	N.E. RAMP LT.				777
855+33 - 862+50	S.E. RAMP RT.				717
862+05 - 862+50	S.E. RAMP GORE AREA	7.0		0.4	
854+80 - 862+50	N.E. RAMP	115.0	16.0	6.3	
861+80 - 862+50	N.E. RAMP GORE AREA	13.0		0.7	
	PARK & RIDE	408.0	58.2	22.5	
	SUBTOTALS	885.0	118.2	48.7	3,006
GROUP CODE 020					
853+50 - 853+58	N.W. RAMP	0.5	0.1	0.1	
854+41 - 854+50	S.E. RAMP	0.5	0.1	0.1	
854+45 - 854+80	N.E. RAMP	0.2	0.1	0.1	
853+30 - 853+68	S.W. RAMP	3.8	0.5	0.2	
	SUBTOTALS	5.0	0.8	0.5	0
GROUP CODE 060					
10+31 - 11+48	EVERGREEN ROAD WB	66.0	5.0	3.6	
10+31 - 11+48	EVERGREEN ROAD EB	84.0	7.0	4.6	
53+73 - 60+00	CTH E B-LINE	422.0	37.0	23.3	
53+73 - 60+00	CTH E A-LINE	422.0	37.0	23.3	
	SUBTOTALS	994.0	86.0	54.8	0
	TOTALS	1,884.0	205.0	104.0	3,006

STORM SEWER SUMMARY

LOCATION FROM	LOCATION TO	12-INCH L.F.	18-INCH L.F.	21-INCH L.F.	TYPE	CLASS	INLET ELEVATION	DISCHARGE ELEVATION	REMARKS
GROUP CODE 020									
2	1	9			R.C.P. S.S.	III	751.35	746.55	
3	1	47			R.C.P. S.S.	III	751.35	746.55	
5	1			EXIST.	R.C.P. S.S.	III	747.51	746.55	EXISTING TO REMAIN
6	5		79		R.C.P. S.S.	III	748.71	747.51	5 IS EXISTING MANHOLE
7	5	EXIST.			R.C.P. S.S.	III	749.71	747.51	EXISTING TO REMAIN
8	7	10			R.C.P. S.S.	III	755.22	749.71	
9	7	13			R.C.P. S.S.	III	755.25	749.71	
10	9	12			R.C.P. S.S.	III	755.39	755.25	
11	10	39			R.C.P. S.S.	III	756.77	755.39	
13	9	47			R.C.P. S.S.	III	756.90	755.25	
14	13	24			R.C.P. S.S.	III	757.52	756.90	
15	7	EXIST.			R.C.P. S.S.	III	756.60	749.71	EXISTING TO REMAIN
16	15	17			R.C.P. S.S.	III	762.43	756.60	
19	15	EXIST.			R.C.P. S.S.	III	759.71	756.60	EXISTING TO REMAIN
20	21	70			R.C.P. S.S.	III	772.40	771.57	
25	23	57			R.C.P. S.S.	III	773.47	773.24	
24	22	69			R.C.P. S.S.	III	773.37	771.44	
27	25	7			R.C.P. S.S.	III	773.59	773.47	
28	26	7			R.C.P. S.S.	III	773.59	773.54	
26	25	5			R.C.P. S.S.	III	773.54	773.47	
29	31	7			R.C.P. S.S.	III	771.08	770.91	
30	32	7			R.C.P. S.S.	III	771.08	770.84	
31	32	5			R.C.P. S.S.	III	770.91	770.84	
33	35	56			R.C.P. S.S.	III	770.02	768.34	
34	36	52			R.C.P. S.S.	III	770.09	766.12	
37	36	104			R.C.P. S.S.	III	767.18	766.12	
40	41	36			R.C.P. S.S.	III	755.81	755.43	
39	40	15			R.C.P. S.S.	III	756.08	755.81	
38	39	24			R.C.P. S.S.	III	756.34	756.08	
42	43	24			R.C.P. S.S.	III	751.09	750.83	
43	44	13			R.C.P. S.S.	III	750.83	750.68	
44	45	24			R.C.P. S.S.	III	750.68	750.27	
46	47	13			R.C.P. S.S.	III	750.01	750.01	
SUBTOTALS		813	79	0					
GROUP CODE 060									
48	49		24		R.C.P. S.S.	III	749.19	748.92	
49	50		13		R.C.P. S.S.	III	748.92	748.77	
50	51		24		R.C.P. S.S.	III	748.77	748.51	
SUBTOTALS		0	61	0					
TOTALS		813	140	0					

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

PIPE SUMMARY

LOCATION FROM	TO	STATION TO STATION	LOCATION	P.U. 6-INCH L.F.	C.S.C.P. 18-INCH L.F.	C.S.C.P. 24-INCH L.F.	C.P., CL. III 18-INCH L.F.	C.P., CL. III 24-INCH L.F.	THICKNESS STEEL INCH	THICKNESS ALUMINUM INCH	INLET ELEVATION	DISCHARGE ELEVATION	APRON ENDWALLS FOR P.U. 6-INCH EACH	APRON ENDWALLS FOR C.S.C.P. 18-INCH EACH	APRON ENDWALLS FOR C.S.C.P. 24-INCH EACH	APRON ENDWALLS FOR C.S.C.P. SLOPED 18-INCH EACH	APRON ENDWALLS FOR C.P. 18-INCH EACH	APRON ENDWALLS FOR C.P. 24-INCH EACH	SOD * S.Y.	RIPRAP * C.Y.	GEOTEXTILE FABRIC * TYPE R S.Y.	REMARKS
GROUP CODE 010																						
		11+66	EVERGREEN RD. RT.				70		0.064	0.060							2		8			PARK & RIDE ENTRANCE
		852+90 - 855+35	USH 41 NB RT.	233							753.40	753.00 **	1									SEE DETAIL
		853+00 - 855+08	USH 41 SB LT.	212							753.43	753.00 **	1									SEE DETAIL
		860+00	S.E. RAMP			8 **			0.064	0.075	749.20	748.50			2				13			2' LT. & 6' RT.
		858+93	N.E. RAMP			8 **			0.064	0.075	750.80	750.00			2				13			8' LT.
		852+50 - 853+10	USH 41 MEDIAN		65 **				0.064	0.060	751.84 **					1			4			1 ELBOW AT 75°
			SUBTOTALS	445	65	16	70	0					2	0	4	1	2	0	38	0	0	
GROUP CODE 020																						
6	6A	30+50	CTH E NB LT.				77		0.064	0.060							1		13			6A IS ENDWALL
23	23A	36+67	CTH E NB RT.		65				0.064	0.060	773.24	762.00		1						4	9	2 ELBOWS AT 17°
		38+44	CTH E NB					220	0.064	0.075	752.17	751.50						2	13			100' RT. 120' LT.
		40+07	CTH E NB					239	0.064	0.075	751.49 **	751.10 **						2	13			95' RT. & 144' LT.
32	32A	40+96	CTH E NB LT.		99				0.064	0.060	770.84	759.96		1						4	9	2 ELBOWS AT 21°
41	41A	46+00	CTH E NB LT.		35				0.064	0.060	757.25	751.50		1						4	9	2 ELBOWS AT 20°
45	45A	49+00	CTH E NB LT.		32				0.064	0.060	750.27	749.00		1						4	9	2 ELBOWS AT 24°
47	47A	50+00	CTH E NB LT.		65				0.064	0.060	750.16	746.00		1						4	9	2 ELBOWS AT 14°
36	36A	853+20	N.W. RAMP LT.		91				0.064	0.060	766.12	753.52		1						4	9	2 ELBOWS AT 12°
22	22A	853+42	S.W. RAMP RT.		100				0.064	0.060	771.44	752.00		1						4	9	2 ELBOWS AT 62°
35	35A	854+71	N.E. RAMP LT.		102				0.064	0.060	768.34	752.73		1						4	9	2 ELBOWS AT 62°
21	21A	854+93	S.E. RAMP RT.		109				0.064	0.060	771.57	749.90		1						4	9	2 ELBOWS AT 16°
			SUBTOTALS	0	698	0	77	459					0	9	0	0	1	4	39	36	81	
GROUP CODE 060																						
51	51A	51+35	CTH E NB LT.		40				0.064	0.060	748.51	745.06		1						4	9	2 ELBOWS AT 13°
		54+80 - 57+70	CTH E B-LINE RT.		295				0.064	0.060	749.90	748.00				2			8			2 ELBOWS SEE DETAIL
		59+10	CTH E 30' RT.				34		0.064	0.060							2		8			P.E.
		10+85	EVERGREEN ROAD					80	0.064	0.075	746.00	744.80					2		13			SKEW 6° L.H.F.
			SUBTOTALS	0	335	0	34	80					0	1	0	2	4	0	29	4	9	
			TOTALS	445	1,098	16	181	539					2	10	4	3	7	4	106	40	90	

* QUANTITY SHOWN ELSEWHERE.
** TO BE VARIFIED BY ENGINEER IN THE FIELD.

SIGN SUMMARY

STATION	LOCATION	SIGNS TYPE II REFLECTIVE S.F.	WOOD POSTS 4" X 4" X 10' EACH
GROUP CODE 010			
52+12	PARK & RIDE RT. 67'	3	1
52+25	PARK & RIDE RT. 67'	3	1
52+38	PARK & RIDE RT. 67'	3	1
	TOTALS	9	3

NOTE: 18" X 24" R7-B SIGN.

REMOVING CONCRETE BARRIERS

STATION	LOCATION	L.F.
GROUP CODE 010		
854+00	USH 41 NB RT.	54
854+00	USH 41 SB LT.	53
	TOTAL	107

LEVELS ON *

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	3E

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

ASPHALTIC FLUMES, RIPRAP, AND GEOTEXTILE FABRIC, TYPE R AND TYPE DF

STATION TO STATION	LOCATION	ASPHALTIC FLUMES S.Y.	RIPRAP C.Y.	GEOTEXTILE FABRIC * TYPE R S.Y.	GEOTEXTILE FABRIC * TYPE DF S.Y.	REMARKS
GROUP CODE 010						
852+00 - 855+00	USH 41 RT.				220	WRAP TILE
852+00 - 855+00	USH 41 LT.				200	WRAP TILE
852+84	N.W. RAMP LT.	5	15	60		
854+54 - 857+98	N.E. RAMP RT.	153				2' X 2' FLUME
855+29	S.E. RAMP RT.	5	17	68		
	SUBTOTALS	163	32	128	420	
GROUP CODE 020						
29+85	CTH E SB LT.	5				
30+16	CTH E SB LT.	5	8	32		
853+57	S.W. RAMP RT.	5	15	59		
853+73	S.W. RAMP LT.	5	21	86		
854+45	S.E. RAMP LT.	5	16	64		
853+59	N.W. RAMP RT.	5	14	58		
854+51	N.E. RAMP RT.	5	26	105		
	PIPE DISCHARGES		36	81		
	SUBTOTALS	35	136	485	0	
GROUP CODE 060						
53+73	CTH E SB LT.	5	7	29		
10+78	EVERGREEN ROAD LT.	5	5	23		
10+93	EVERGREEN ROAD RT.	5	6	24		
	PIPE DISCHARGES		4	9		
	SUBTOTALS	15	22	85	0	
	TOTALS	213	190	698	420	

* QUANTITY SHOWN ELSEWHERE.

ADJUSTED MANHOLE COVERS, INLET COVERS AND RECONSTRUCTING MANHOLE

STRUCT. NO.	STATION	LOCATION	ADJUSTED MANHOLE COVERS EACH	ADJUSTED INLET COVERS EACH	RECONSTRUCTING MANHOLE EACH	REMARKS
GROUP CODE 020						
5	29+62	CTH E NB 13' RT.	1			
15	32+20	CTH E NB 9' RT.	1			
19	32+30	CTH E NB 47' LT.		1		
		SUBTOTALS	2	1	0	
GROUP CODE 050						
4	128+24	CTH E NB 6' LT.	1			
12	31+87	CTH E NB 46' LT.			1	RAISE COVER ± 3.4'
52	35+36	CTH E NB 86' LT.			1	RAISE COVER ± 15.8'
53	37+18	CTH E NB 89' LT.			1	RAISE COVER ± 5'
54	38+53	CTH E NB 89' LT.			1	RAISE COVER ± 2'
55	39+98	CTH E NB 88' LT.			1	RAISE COVER ± 2'
56	42+58	CTH E NB 86' LT.			1	RAISE COVER ± 15'
57	46+18	CTH E NB 44' LT.			1	RAISE COVER ± 7'
58	49+71	CTH E NB 8' LT.			1	RAISE COVER ± 1.5
59	53+02	CTH E NB 8' LT.	1			
60	56+38	B-LINE 12' LT.	1			
61	59+73.44	B-LINE ℄	1			
		SUBTOTALS	4	0	8	
		TOTALS	6	1	8	

NOTE: MANHOLES IN GROUP CODE 050 ARE SANITARY MANHOLES.

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	EACH	REMARKS
GROUP CODE 060			
53+12.81	CTH E NB 8' LT.	4	S.E. COR. SEC. 12, T. 21 N., R. 18 E.

MANHOLES, INLETS, COVERS AND ADJUSTING COVERS

STRUCTURE NO.	STATION	LOCATION	STRUCTURE	STRUCTURE TYPE (EA)	COVER (EA)	GRATE FLOWLINE ELEVATION	TOP OF STRUCTURE ELEVATION	FLOWLINE ELEVATION	DEPTH FEET
GROUP CODE 010									
62	853+10	USH 41 LT.	MANHOLE	1	J		755.50	751.17 **	4.33
GROUP CODE 020									
1	27+55	CTH E NB 13.6' RT.	MANHOLE	1	J	755.79	754.54	746.55	7.99
2	27+60	CTH E NB 23.7' RT.	INLET	3	HR	755.51	754.64	751.35	3.29
3	27+60	CTH E NB 36.7' LT.	INLET	3	HL	755.51	754.64	751.35	3.29
5	29+62.5	CTH E NB 13.5' RT.	MANHOLE	EXISTING				747.51	
6	29+73	CTH E NB 66' LT.	INLET	8	MS	753.76	753.09	748.76	4.33
7	30+25	CTH E NB 13.5' RT.	MANHOLE	1	J	759.58	758.33	749.71	8.62
8	30+30	CTH E NB 25.5' RT.	INLET	3	HR	759.38	758.51	755.22	3.29
9	30+30	CTH E NB 1' LT.	INLET	3	HL	759.65	758.78	755.25	3.54
10	30+30	CTH E NB 14.3' LT.	INLET	3	HR	759.65	758.78	755.39	3.29
11	30+60	CTH E NB 41.5' LT.	INLET	3	HL	760.93	760.06	756.77	3.29
13	30+80	CTH E NB 1' LT.	INLET	3	HL	761.06	760.19	756.90	3.29
14	31+00	CTH E NB 16.1' LT.	INLET	3	HR	761.69	760.81	757.52	3.29
15	32+20.618	CTH E NB 9.3' RT.	MANHOLE	EXISTING				756.60	
16	32+30	CTH E NB. 25.5' RT.	INLET	3	HR	766.59	765.72	762.43	3.29
17	32+21	CTH E NB 1' LT.	INLET	3	HL	766.17	765.30	757.15	8.14
18	32+25	CTH E NB 20.8' LT.	INLET	3	HR	766.32	765.45	758.36	7.09
19	32+30	CTH E NB 47.5' LT.	INLET	EXISTING				759.71	
20	36+00	CTH E NB 20' LT.	INLET	3	HR	776.57	775.69	772.40	3.29
21	854+36	S.W. RAMP 24.5' RT.	INLET	3	HL	776.33	775.45	771.57	3.88
22	853+42	S.W. RAMP 13.5' RT.	INLET	3	HR	775.60	774.73	771.44	3.29
23	36+67	CTH E NB 25.5' RT.	INLET	3	HR	777.40	776.53	773.24	3.29
24	36+85	CTH E NB 57.5' LT.	INLET	3	HL	777.54	776.66	773.37	3.29
25	37+10	CTH E NB 13' LT.	INLET	3	HL	777.71	776.83	773.47	3.36
26	37+10	CTH E NB 19' LT.	INLET	3	HR	777.71	776.83	773.54	3.29
27	37+20	CTH E NB 13' LT.	INLET	3	HL	777.76	776.88	773.59	3.29
28	37+20	CTH E NB 19' LT.	INLET	3	HR	777.76	776.88	773.59	3.29
29	40+86	CTH E NB 13' LT.	INLET	3	HR	775.25	774.37	771.08	3.29
30	40+86	CTH E NB 19' LT.	INLET	3	HL	775.25	774.37	771.08	3.29
31	40+96	CTH E NB 13' LT.	INLET	3	HR	775.07	774.20	770.91	3.29
32	40+96	CTH E NB 19' LT.	INLET	3	HL	775.07	774.20	770.84	3.36
33	41+38	CTH E NB 25.5' RT.	INLET	3	HL	774.19	773.31	770.02	3.29
34	41+35	CTH E NB 57.5' LT.	INLET	3	HR	774.26	773.38	770.09	3.29
35	854+71	N.E. RAMP 16.5' LT.	INLET	3	HR	772.50	771.63	768.34	3.29
36	853+60	N.W. RAMP 24.5' LT.	INLET	3	HL	772.50	771.63	766.12	5.51
37	42+50	CTH E NB 1' LT.	INLET	3	HR	771.35	770.47	767.18	3.29
38	46+00	CTH E NB 25.5' RT.	INLET	3	HL	761.66	760.78	756.34	4.44
39	46+00	CTH E NB 1' LT.	INLET	3	HR	761.66	760.78	756.08	4.70
40	46+00	CTH E NB 17.4' LT.	INLET	3	HL	761.66	760.78	755.81	4.97
41	46+00	CTH E NB 55.9' LT.	INLET	3	HR	761.42	760.54	755.43	5.10
42	49+00	CTH E NB 25.5' RT.	INLET	3	HL	755.25	754.38	751.09	3.29
43	49+00	CTH E NB 1' LT.	INLET	3	HR	755.25	754.38	750.83	3.55
44	49+00	CTH E NB 15' LT.	INLET	3	HL	755.25	754.38	750.68	3.71
45	49+00	CTH E NB 41.5' LT.	INLET	3	HR	755.34	754.38	750.27	4.11
46	50+00	CTH E NB 1' LT.	INLET	3	HR	754.33	753.45	750.16	3.29
47	50+00	CTH E NB 15' LT.	INLET	3	HL	754.33	753.45	750.01	3.44
GROUP CODE 060									
48	51+35	CTH E NB 25.5' RT.	INLET	3	HL	753.35	752.47	749.19	3.29
49	51+35	CTH E NB 1' LT.	INLET	3	HR	753.66	752.78	748.92	3.86
50	51+35	CTH E NB 15' LT.	INLET	3	HL	753.66	752.78	748.77	4.01
51	51+35	CTH E NB 41.5' LT.	INLET	3	HR	753.35	752.47	748.51	3.96

** TO BE VERIFIED BY THE ENGINEER IN THE FIELD.

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

CONCRETE SIDEWALK, 5-INCH

STATION TO STATION	LOCATION	S.F.
GROUP CODE 020		
37+07 - 38+16	CTH E MEDIAN	545
40+30 - 41+00	CTH E MEDIAN	350
853+50 - 854+00	N.W. RAMP	558
854+15 - 854+75	N.E. RAMP	442
853+35 - 854+08	S.W. RAMP	533
854+00 - 854+41	S.E. RAMP	376
	SUBTOTAL	2,804
GROUP CODE 030		
27+50 - 29+90	CTH E SB LT.	1,200
27+50 - 35+55	CTH E NB RT.	8,050
30+00 - 35+80	CTH E SB LT.	2,705
36+55 - 38+18	CTH E NB RT.	1,641
36+70 - 38+18	CTH E SB LT.	740
40+28 - 41+48	CTH E SB LT.	600
40+28 - 41+51	CTH E NB RT.	1,241
42+23 - 51+00	CTH E NB RT.	8,810
42+64 - 51+00	CTH E SB LT.	4,180
	SUBTOTAL	29,167
GROUP CODE 050		
26+65 - 27+50	CTH E SB LT.	425
26+65 - 27+50	CTH E NB RT.	850
51+00 - 53+73	CTH E SB LT.	1,365
51+00 - 52+58	CTH E NB RT.	1,580
	SUBTOTAL	4,220
	TOTAL	36,191

LANDSCAPING SUMMARY

STATION TO STATION	LOCATION	SALVAGED TOPSOIL S.Y.	PULVERIZED TOPSOIL S.Y.	FERTILIZER TYPE B CWT.	SEED NO. 10 LBS.	SEED NO. 30 LBS.	SEED NO. 40 LBS.	MULCHING TON	SODDING S.Y.	REMARKS
GROUP CODE 010										
846+50 - 853+50	N.W. RAMP LT.	2,683		1.7	36			1.3		
846+50 - 853+50	N.W. RAMP RT.	2,142		1.4	29			1.0		
854+80 - 862+50	N.E. RAMP LT.	3,287		2.1	44			1.5		
854+80 - 862+50	N.E. RAMP RT.	2,965		1.9	40			1.4		
845+50 - 853+30	S.W. RAMP LT.	2,696		1.6	36			1.3		
845+50 - 853+30	S.W. RAMP RT.	3,086		2.0	42			1.4		
854+50 - 862+50	S.E. RAMP LT.	2,469		1.5	33			1.2		
854+50 - 862+50	S.E. RAMP RT.	3,681		2.3	50			1.6		
50+80 - 52+80	PARK & RIDE LT.	371		0.2	5			0.2		
50+80 - 52+80	PARK & RIDE RT.	251		0.2	3			0.1		
851+59 - 856+57	USH 41 MEDIAN	5,367		3.1		97		3.0		
	PIPES								38	
	SUBTOTALS	28,998	0	18.0	318	97	0	14.0	38	
GROUP CODE 020										
26+70 - 27+50	CTH E SB LT.		234	0.2			3	0.1	44	
26+70 - 27+50	CTH E NB RT.	73	44	0.1	1			0.1	44	
27+50 - 29+90	CTH E SB LT.		625	0.5			9	0.3	133	
27+50 - 36+00	CTH E NB RT.	7,600	430	5.1	103			3.5	430	
29+00 - 36+25	CTH E MEDIAN		1,390	0.9					1,390	
30+50 - 36+00	CTH E SB LT.	4,580	293	3.2	62			2.1	293	
36+65 - 38+18	CTH E SB LT.	1,045	72	0.8	14			0.5	72	
36+65 - 38+18	CTH E NB RT.	994	80	0.8	13			0.5	80	
40+28 - 41+50	CTH E SB LT.	601	55	0.4	8			0.3	55	
40+28 - 41+50	CTH E NB RT.	937	54	0.7	13			0.4	54	
41+80 - 51+00	CTH E MEDIAN		1,551	1.0					1,551	
42+00 - 51+00	CTH E SB LT.	4,481	456	3.1	61			2.1	456	
42+00 - 51+00	CTH E NB RT.	4,653	487	3.2	63			2.1	487	
	PIPES & BRIDGE CONES								1,798	39 S.Y. PIPES - SEE DETAIL FOR BRIDGE CONES
	SUBTOTALS	24,964	5,771	20.0	338	0	12	12.0	6,887	
GROUP CODE 060										
51+00 - 53+73	CTH E SB LT.	1,662	152	1.1	22			0.6	152	
51+00 - 52+80	CTH E NB RT.	652	78	0.6	9			0.3	78	
51+00 - 52+60	CTH E MEDIAN		332	0.2					332	
53+25 - 60+00	CTH E NB RT.	1,343		1.2	18			0.5		
53+73 - 60+00	CTH E SB LT.	1,221		0.9	17			0.4		
10+98 - 11+48	EVERGREEN ROAD LT.	90		0.1	1			0.1		
10+98 - 11+48	EVERGREEN ROAD RT.	98		0.1	1			0.1		
	PIPES								29	
	SUBTOTALS	5,066	562	4.2	68	0	0	2.0	591	
	TOTALS	59,028	6,333	42.2	724	97	12	28.0	7,516	

LEVELS ON •

EROSION MAT, CLASS I, TYPE B

STATION TO STATION	LOCATION	EROSION MAT DELIVERED S.Y.	EROSION MAT INSTALLED S.Y.
GROUP CODE 010			
847+50 - 848+50	S.W. RAMP LT. DITCH	111	111
848+00 - 848+50	N.W. RAMP RT. DITCH	56	56
860+00 - 860+50	S.E. RAMP LT. DITCH	56	56
50+87 - 51+50	PARK & RIDE RT. DITCH	70	70
51+75 - 52+70	PARK & RIDE RT. DITCH	106	106
	SUBTOTALS	399	399
GROUP CODE 020			
29+50 - 29+72	CTH E LT. DITCH	24	24
37+50 - 38+40	CTH E LT. DITCH	100	100
40+05 - 40+65	CTH E LT. DITCH	67	67
40+05 - 40+62	CTH E RT. DITCH	63	63
	SUBTOTALS	254	254
GROUP CODE 060			
53+46 - 54+00	CTH E RT. DITCH	60	60
54+00 - 55+00	CTH E LT. DITCH	111	111
54+50 - 55+00	CTH E RT. DITCH	70	70
	SUBTOTALS	241	241
	TOTALS	894	894

SILT FENCE

STATION TO STATION	LOCATION	DELIVERED L.F.	INSTALLED L.F.	MAINTENANCE L.F.
GROUP CODE 010				
845+50 - 853+33	S.W. RAMP RT.	784	784	784
846+50 - 853+45	N.W. RAMP LT.	1,098	1,098	1,098
855+00 - 862+50	N.E. RAMP LT.	749	749	749
855+04 - 862+50	S.E. RAMP RT.	746	746	746
	PARK & RIDE E. & S. SIDES	367	367	367
10+83 - 11+48	EVERGREEN ROAD LT.	67	67	67
	SUBTOTALS	3,811	3,811	3,811
GROUP CODE 020				
26+65 - 29+82	CTH E LT.	313	313	313
26+65 - 35+50	CTH E RT.	864	864	864
29+73	CTH E NB 66' LT. @ INLET	16	16	16
30+11 - 35+50	CTH E LT.	548	548	548
42+55 - 50+50	CTH E RT.	803	803	803
42+77 - 51+00	CTH E LT.	837	837	837
	SUBTOTALS	3,381	3,381	3,381
GROOUP CODE 060				
51+00 - 60+00	CTH E LT.	915	915	915
53+48 - 60+00	CTH E RT.	655	655	655
	SUBTOTALS	1,570	1,570	1,570
	TOTALS	8,762	8,762	8,762

NOTE: SILT FENCE FOR SILTY SOILS IS REQUIRED.

STEEL PLATE BEAM GUARD, CLASS A

STATION TO STATION	LOCATION	L.F.
GROUP CODE 010		
352+84 - 855+32	USH 41 MEDIAN	500

RAISED PAVEMENT MARKERS

STATION TO STATION	LOCATION	EACH
GROUP CODE 010		
845+50 - 846+60	S.W. RAMP LT.	4
854+80 - 862+50	N.E. RAMP RT.	5
	TOTAL	9

PAVEMENT MARKING, EPOXY SUMMARY

STATION TO STATION	LOCATION	4-INCH EDGELINE, SOLID WHITE L.F.	4-INCH EDGELINE, SOLID YELLOW L.F.	4-INCH CENTERLINE, YELLOW SOLID L.F.	4-INCH CENTERLINE, YELLOW DASHED L.F.	4-INCH LANE LINE DASHED, WHITE L.F.	8-INCH CHANNELIZING WHITE L.F.	18-INCH STOPLINE WHITE L.F.	6-INCH CROSSWALK L.F.	ARROW TYPE 2 EACH	HANDICAP SYMBOL EACH	18-INCH DIAGONAL L.F.	CURB RAMP L.F.	CURB L.F.	ISLAND NOSE S.F.	PARKING STALL 4-INCH, WHITE L.F.	WORDS EACH
GROUP CODE 010																	
845+50 - 846+07	USH 41 NB RT.						57										
846+50 - 847+14	USH 41 SB LT.						64										
845+50 - 846+60	S.W. RAMP LT.						110										
845+50 - 853+60	S.W. RAMP RT.	810															
846+60 - 853+70	S.W. RAMP LT.		710														
851+70 - 853+82	S.W. RAMP ℄						212										
852+85 - 853+43	S.W. RAMP ISLAND						120										
853+80	S.W. RAMP							15									
853+90	S.W. RAMP RT. TURN							25									
857+75	S.W. RAMP							16									
	S.W. RAMP ISLAND													150	13		
	S.W. RAMP LT. TO CTH E					45											
846+50 - 847+10	N.W. RAMP RT.						60										
846+50 - 852+60	N.W. RAMP LT.	610															
847+10 - 853+60	N.W. RAMP RT.		650														
	N.W. RAMP ISLAND													16	12		
854+40	N.E. RAMP RT. TURN							20									
854+50	N.E. RAMP LT. TURN							25									
854+50 - 861+35	N.E. RAMP RT.		685														
854+70 - 855+20	N.E. RAMP ISLAND						100										
854+70 - 862+50	N.E. RAMP LT.	780															
861+35 - 862+50	N.E. RAMP RT.						115										
	N.E. RAMP ISLAND													108	10		
854+40 - 861+50	S.E. RAMP LT.		710														
855+30 - 862+50	S.E. RAMP RT.	720															
861+50 - 862+50	S.E. RAMP LT.						100										
	S.E. RAMP ISLAND													16	12		
861+79 - 862+50	USH 41 SB LT.						71										
862+02 - 862+50	USH 41 NB RT.						48										
	PARK & RIDE							24			3					2,143	
	SUBTOTALS	2,920	2,755	0	0	45	1,057	125	0	0	3	0	0	290	47	2,143	0

CONTINUED ON NEXT PAGE.

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	3H

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

CONTINUED FROM PREVIOUS PAGE.

PAVEMENT MARKING, EPOXY SUMMARY

STATION TO STATION	LOCATION	4-INCH EDGELINE, SOLID WHITE L.F.	4-INCH EDGELINE, SOLID YELLOW L.F.	4-INCH CENTERLINE, YELLOW SOLID L.F.	4-INCH CENTERLINE, YELLOW DASHED L.F.	4-INCH LANE LINE DASHED, WHITE L.F.	8-INCH CHANNELIZING WHITE L.F.	18-INCH STOPLINE WHITE L.F.	6-INCH CROSSWALK L.F.	ARROW TYPE 2 EACH	HANDICAP SYMBOL EACH	18-INCH DIAGONAL L.F.	CURB RAMP L.F.	CURB L.F.	ISLAND NOSE S.F.	PARKING STALL 4-INCH, WHITE L.F.	WORDS EACH
GROUP CODE 020																	
26+55	CTH E NB 43' LT.								116				27				
26+55	CTH E												16				
26+55	CTH E NB 30' RT.																
26+75	CTH E SB							38									
26+75 - 28+00	CTH E SB TURN LANE						125			2							
26+75 - 29+50	STH E NB LT.		260														
26+75 - 29+50	CTH E SB RT.		260														
26+75 - 51+00	CTH E NB					606											
27+40	CTH E SB TURN LANE																1
27+75 - 51+00	CTH E SB					606											
29+00	CTH E MEDIAN													10	50		
29+90	CTH E SB LT.												18				
30+15	CTH E SB LT.								76								
30+40	CTH E SB LT.												18				
33+50 - 35+85	CTH E NB						260										
35+70 - 35+80	CTH E NB ISLAND						25										
35+70	CTH E SB LT.												18				
35+70	CTH E NB RT. TURN							20									
35+80	CTH E NB RT.												22				
35+85	CTH E NB RT.								40								
35+90	CTH E SB LT.								58								
36+00	CTH E NB RT.												44				
36+05	CTH E NB							24									
36+15	CTH E SB LT.												36				
36+25	CTH E MEDIAN													80	10		
36+30	CTH E NB RT.								73								
36+45	CTH E SB LT.								81								
36+55	CTH E NB RT.												22				
36+70	CTH E SB LT.												18				
37+10	CTH E SB							36									
37+10	CTH E MEDIAN													5	18		
37+10 - 39+50	CTH E SB						240										
39+00 - 40+90	CTH E NB						190										
40+95	CTH E NB							36									
41+45	CTH E SB LT.												18				
41+50	CTH E NB RT.												22				
41+65	CTH E NB RT.								46								
41+70	CTH E SB LT.								75								
41+80	CTH E MEDIAN													95	14		
41+85	CTH E NB RT.												44				
42+00	CTH E SB							24									
42+05	CTH E SB LT.												36				
42+10	CTH E NB								58								
42+25	CTH E NB												22				
42+25 - 46+00	CTH E SB						400										
42+30	CTH E SB LT.												18				
42+50	CTH E SB LT.								42								
42+65	CTH E SB RT. TURN							20									
	SUBTOTALS	0	520	0	0	1,212	1,240	198	665	2	0	0	399	190	92	0	1
GROUP CODE 060																	
51+00 - 53+73	CTH E NB					75											
51+00 - 56+65	CTH E SB					150											
53+73 - 59+73	CTH E NB LT.		600														
53+73 - 59+73	CTH E SB RT.		600														
53+73 - 64+73	CTH E NB	1,100															
53+73 - 64+73	CTH E SB	1,100															
56+80 - 59+75	CTH E MEDIAN											50					
59+73 - 64+73	CTH E			500	125												
	SUBTOTALS	2,200	1,200	500	125	225	0	0	0	0	0	50	0	0	0	0	0
	TOTALS	5,120	4,475	500	125	1,482	2,297	299	665	2	3	50	399	480	139	2,143	1

FILE NAME: HDGN:D3 112307:371.DGN

LEVELS ON •

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	3I

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

TRAFFIC CONTROL SUMMARY

STATION TO STATION	LOCATION	APPROXIMATE SERVICE PERIOD DAYS	DRUMS NO. IN SERVICE	DRUMS DAYS	BARRICADES, TYPE III NO. IN SERVICE	BARRICADES, TYPE III DAYS	WARNING LIGHTS, TYPE A NO. IN SERVICE	WARNING LIGHTS, TYPE A DAYS	SIGNS NO. IN SERVICE	SIGNS DAYS	ARROW BOARDS NO. IN SERVICE	ARROW BOARDS DAYS	TEMPORARY PRECAST CONCRETE BARRIER L.F.	REMARKS
GROUP CODE 010														
788+50 - 873+00	USH 41 NB	120	20	2,400	5	600	10	1,200	9	1,080				SW RAMP CLOSURE - PROJECT ADVANCE WARNING
840+00 - 920+55	USH 41 SB	120	20	2,400	5	600	10	1,200	9	1,080				NE RAMP CLOSURE - PROJECT ADVANCE WARNING
838+00 - 847+50	NW RAMP	120	31	3,720	5	600	10	1,200	1	120				NW RAMP CLOSURE
861+30 - 869+55	SE RAMP	120	27	3,240	5	600	10	1,200	1	120				SE RAMP CLOSURE
		SUBTOTALS		11,760		2,400		4,800		2,400		0	0	
GROUP CODE 020														
16+60	CTH E RT.	120							1	120				ADVANCE WARNING
21+60	CTH E RT.	120							1	120				ADVANCE WARNING
26+60	CTH E	120			8	960	9	1,080	1	120				ROAD CLOSURE
30+90	CTH E LT.	120			2	240	3	360	1	120				HARDEE'S ENTRANCE CLOSURE
	CAPITAL DRIVE	120							1	120				ADVANCE WARNING CAPITAL DRIVE WEST
	CAPITAL DRIVE	120							1	120				END CONSTRUCTION CAPITAL DRIVE WEST
	CAPITAL DRIVE	120							1	120				ADVANCE WARNING CAPITAL DRIVE EAST
	CAPITAL DRIVE	120							1	120				END CONSTRUCTION CAPITAL DRIVE EAST
		SUBTOTALS		0		1,200		1,440		960		0	0	
GROUP CODE 040														
847+20 - 854+80	USH 41 NB	63	16	1,008									260	PIER WORK ZONE PROTECTION
853+20 - 860+80	USH 41 SB	63	16	1,008									260	PIER WORK ZONE PROTECTION
827+07 - 852+07	USH 41 NB	7	8	56										
856+03 - 881+03	USH 41 NB	7	8	56										
814+50 - 855+00	USH 41 NB	10	28	280	1	10	2	20	7	70	2	20		LANE CLOSURES
852+73 - 894+55	USH 41 SB	10	30	300	1	10	2	20	7	70	2	20		LANE CLOSURES
		SUBTOTALS		2,708		20		40		140		40	520	
GROUP CODE 060														
12+00	EVERGREEN ROAD	120			4	480	5	600	1	120				ROAD CLOSURE
17+00	EVERGREEN ROAD LT.	120							1	120				ADVANCE WARNING
22+00	EVERGREEN ROAD LT.	120							1	120				ADVANCE WARNING
22+00	EVERGREEN ROAD RT.	120							1	120				END CONSTRUCTION
60+50	CTH E	120			4	480	5	600	1	120				ROAD CLOSURE ROAD CLOSED TO THRU TRAFFIC
65+50	CTH E LT.	120							1	120				ADVANCE WARNING
70+50	CTH E LT.	120							1	120				ADVANCE WARNING
70+50	CTH E RT.	120							1	120				END CONSTRUCTION
		SUBTOTALS		0		960		1,200		960		0	0	
		TOTALS		14,468		4,580		7,480		4,460		40	520	

ALL ITEMS ON THIS SHEET ARE PART OF GROUP 010

STATE PROJECT NUMBER 1123-7-71 | SHEET NO. 3J

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

TRAFFIC SIGNAL CABLE

FROM	TO	NO. 12 12/C L.F.	NO. 14 12/C L.F.	NO. 14 7/C L.F.	HEAD NO.	(BASE TO HEAD) NO. 14 5/C L.F.
CTH E SOUTH RAMPS						
CB	SB1		20		7	20
SB1	SB2		70		1	20
					8	20
SB2	SB3			85	2	60
CB	SB7		100		6	60
SB7	SB6		80		4	20
					5	20
SB6	SB5			80	3	20
USH 41 NB RAMP						
CB	SB4			175	9	20
SB4	SB5			90	10	70
SB	SB7			100	11	20
CTH E NORTH RAMPS						
CB	SB8	410			17	60
SB8	SB10		110		18	20
SB10	SB11		90		12	20
					19	20
SB11	SB12			80	13	60
SB8	SB14		70		15	20
					16	20
SB14	SB13			65	14	20
USH 41 SB RAMP						
CB	SB9	450			20	20
SB9	SB10			85	21	70
SB10	SB12			115	22	20
TOTALS		860	540	875		700

COLOR CODE

CTH E NB, RAMPS AND LEFT TURNS

- RED = RED
- YELLOW = YELLOW
- GREEN = GREEN
- LEFT ARROW YELLOW = BLACK
- LEFT ARROW GREEN = BLUE

CTH E SB

- RED = RED W/BLACK
- YELLOW = ORANGE W/BLACK
- GREEN = GREEN W/BLACK

NON-METALLIC CONDUIT

FROM	TO	3-INCH L.F.	2-INCH L.F.	1-INCH L.F.
USH 41 - CTH E SOUTH RAMPS				
CB	PB1	20		
PB1	SB1		10	
PB1	PB2	50		
PB2	SB2		10	
PB2	PB23		25	
PB23	PB24		70	
PB2	PB3	60		
PB3	SB3		20	
PB3	PB4	40		
PB4	SB4		20	
PB4	PB5	70		
PB5	SB5		10	
PB5	PB6	60		
PB6	SB6		25	
PB6	PB19			100
PB19	PB20			150
PB6	PB7	70		
PB7	SB7		10	
PB7	PB8	60		
PB8	PB1	40		
PB1	PB9	90		
PB9	BRIDGE	20		
NORTH RAMPS				
BRIDGE	PB10	20		
PB10	PB11	60		
PB11	SB8		10	
PB11	PB12	40		
PB12	SB9		15	
PB12	PB13	60		
PB13	SB10		10	
PB13	PB14	50		
PB14	SB11		25	
PB14	PB21			110
PB21	PB22			150
PB14	PB15	60		
PB15	SB12		10	
PB15	PB16	60		
PB16	PB17	35		
PB17	SB13		10	
PB17	PB18	50		
PB18	SB14		10	
PB18	PB11	60		
PB18	PB25	50		
TOTALS		1,125	290	510

TRAFFIC SIGNAL ELECTRICAL WIRE, NO. 10 (XLP)

FROM	TO	GROUNDED CONDUCTOR L.F.	EQUIPMENT GROUNDING CONDUCTOR L.F.
SOUTH RAMPS			
CB	SB1	30	30
SB1	PB1		10
SB1	PB8		40
SB1	PB9		80
SB1	SB2	70	70
SB2	PB2		10
SB2	SB3	90	90
SB3	PB3		20
SB3	SB4	80	80
SB4	PB4		20
SB4	SB5	100	100
SB5	PB5		10
CB	SB7	115	115
SB7	PB7		10
SB7	SB6	105	105
SB6	PB6		25
SB6	SB5	95	95
NORTH RAMPS			
CB	SB8	410	410
SB8	PB10		70
SB8	PB11		10
SB8	SB9	65	65
SB9	PB12		15
SB9	SB10	85	85
SB10	PB13		10
SB10	SB11	85	85
SB11	PB14		25
SB11	SB12	95	95
SB12	PB15		10
SB12	SB13	115	115
SB13	PB16		45
SB13	PB17		10
SB13	SB14	70	70
SB14	PB18		10
SB14	SB8	70	70
TOTALS		1,680	2,110

ELECTRICAL WIRE, LIGHTING, NO. 12

FROM	TO	L.F.
SOUTH RAMPS		
CB	SB7	160
SB7	SB5	210
CB	SB3	225
NORTH RAMPS		
CB	SB8	460
SB8	SB10	160
SB10	SB12	220
TOTAL		1,435

LOOP DETECTORS

LOOP NO.	SIZE FT. X FT.	NO. OF TURNS	CONDUIT L.F.	WIRE L.F.	LEAD IN CABLE L.F.
11	6 X 20	3	75	205	445
12	6 X 20	3	75	205	295
21	6 X 30	2	80	165	90
31	6 X 15	5	65	250	650
32	6 X 30	4	85	320	650
41	6 X 30	2	80	165	110
42	6 X 30	2	90	185	110
51	6 X 20	5	75	205	835
52	6 X 20	4	75	205	685
61	6 X 30	3	80	235	480
		TOTALS	780	2,140	4,350

CONCRETE BASES

LOCATION	TYPE 1 EACH	TYPE 2 EACH	CONTROL CABINET TYPE 9 EACH
USH 41 - CTH E	8	6	1

PULL BOXES

LOCATION	12" X 24" EACH	24" X 36" EACH
USH 41 - CTH E	7	18

TRAFFIC SIGNALS

LOCATION	PEDESTAL BASES EACH	TRANSFORMER BASES EACH	STANDARDS ALUMINUM 13' EACH	STANDARDS ALUMINUM 15' EACH	POLES TYPE 3 EACH	MAST ARMS TROMBONE 20' EACH	MAST ARMS TROMBONE 25' EACH	SIGNAL FACES 3-12 VERT. EACH	SIGNAL FACES 3-12 HORZ. EACH	SIGNAL FACES 5-12 VERT. EACH	BACKPLATES * EACH
USH 41 & CTH E	8	6	4	4	6	4	2	12	6	4	16

* ALL 5-12 VERT. FACES SHALL HAVE BACKPLATES.

LIGHTING SUMMARY

LOCATION	MAST ARM TRUSS TYPE 12-FOOT EACH	LUMINARIES 150 WATT HIGH PRESSURE SODIUM EACH
USH 41 & CTH E	6	6

LEVELS ON -

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1123-07-21		
FEDERAL PROJECT NUMBER	4.0	

PLAT OF RIGHT OF WAY REQUIRED FOR

APPLETON - GREEN BAY

CTH E INTERCHANGE

USH 41 OUTAGAMIE COUNTY

OWNER 1123-07-71,72 4.0

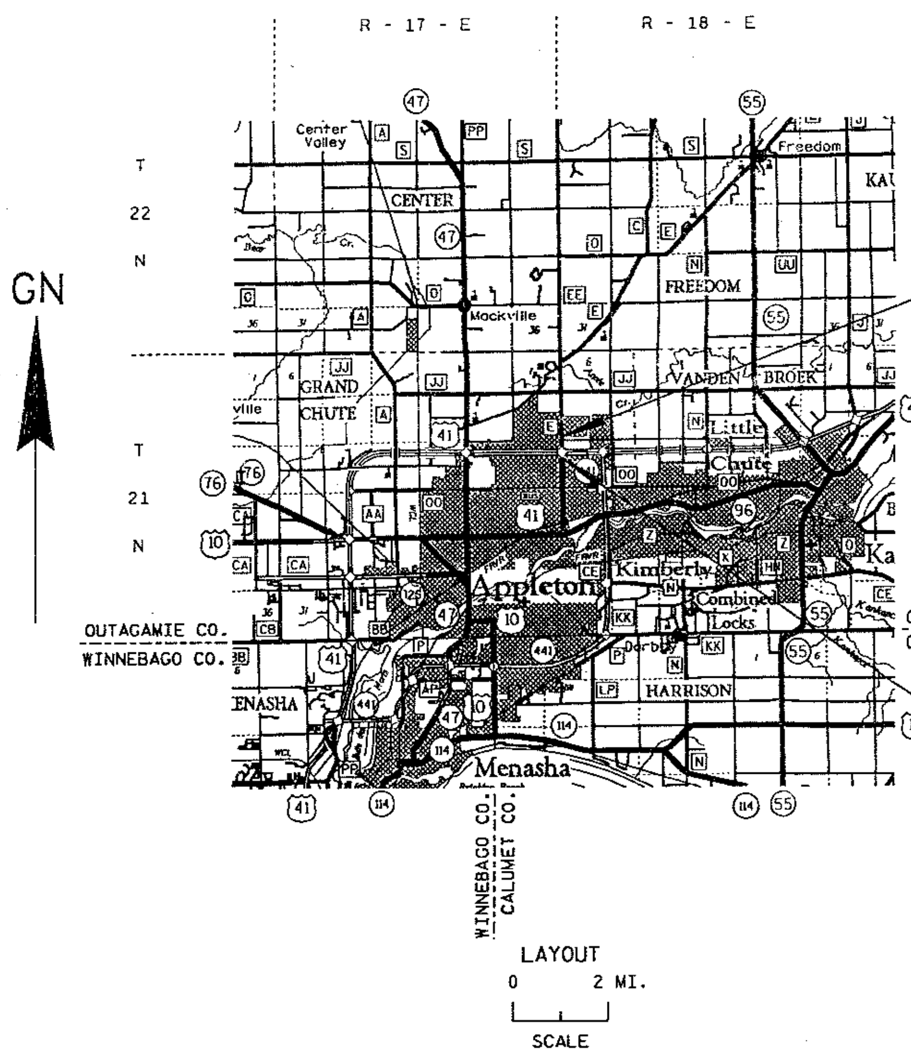
CONVENTIONAL SIGNS AND ABBREVIATIONS

AC.	ACRES	PED	PEDESTAL
AC. REM.	ACRES REMAINING	●	R/W MONUMENT
A.P.	ACCESS POINT	P.L.	PROPERTY LINE
B.	BARN	P.L.E.	PERMANENT LIMITED EASEMENT
BLDG.	BUILDING	R.	RANGE
CO.	COMPANY	RD.	ROAD
CORP.	CORPORATION	R/W	RIGHT OF WAY
C.T.H.	COUNTY TRUNK HIGHWAY	S.	SHED
D.	DEED	S.T.H.	STATE TRUNK HIGHWAY
E.	EAST	T.	TOWN
ET. AL.	AND OTHERS	TEMP.	TEMPORARY
G.	GARAGE	T.L.E.	TEMPORARY LIMITED EASEMENT
GN	GRID NORTH	VOL.	VOLUME
H.	HOUSE	W.	WEST
INC.	INCORPORATED	WIS.	WISCONSIN
L.C.	LAND CONTRACT		
N	NORTH		

PARCEL NUMBER	SHEET NUMBER	OWNER
1	4.2	B & G REALTY, INC
2	4.2	THE GUARDIAN LIFE INSURANCE COMPANY OF AMERICA
3	4.3	AID ASSOCIATION FOR LUTHERANS
4	4.3	AMERITECH
5	4.3	CITY OF APPLETON
6	4.3	MELVIN & NANCY J. KLARNER
7	4.3	CLARENCE & HELEN GOSZ
8	4.3	CHARLES R. BENDER
9	4.3	DUANE & BETTY L. KITZMAN
10	4.3	ANR PIPELINE CO.
11	4.3	MARVIN G. & ILENE E. ERNST
12	4.2	AMERITECH
13	4.2 & 4.3	WISCONSIN ELECTRIC POWER CO.
14	4.2	RESTAURANTS OF AMERICA, INC.

	COMPENSABLE	NON-COMPENSABLE
POWER POLE		
TELEPHONE POLE		
SIGN		
TELEPHONE PEDESTAL		

NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
NO ACCESS (BY PREVIOUS PROJECT OR COVENANT)



OUTAGAMIE CO.
CALUMET CO.

END RELOCATION ORDER

PROJECT 1123-07-21
STATION 58+50
537.09' NORTH OF AND 10.27' WEST OF THE SOUTHEAST CORNER OF SECTION 12, TOWNSHIP 21 NORTH, RANGE 17 EAST
Y 175,627.372
X 2,393,893.941

BEGIN RELOCATION ORDER

PROJECT 1123-07-21
STATION 25+00
164.82 FEET SOUTH OF AND 4.31 FEET EAST OF THE WEST QUARTER CORNER OF SECTION 18 TOWNSHIP 21 NORTH, RANGE 18 EAST
Y 172,278.316
X 2,393,963.628

TOTAL NET LENGTH OF CENTERLINE = 0.634 MI.

NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE. ALL PLAT DISTANCES ARE GROUND LENGTH AND MAY BE CONVERTED TO GRID LENGTH BY MULTIPLYING THE DISTANCE BY THE GRID FACTOR PROVIDED ON THE DETAIL SHEETS.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

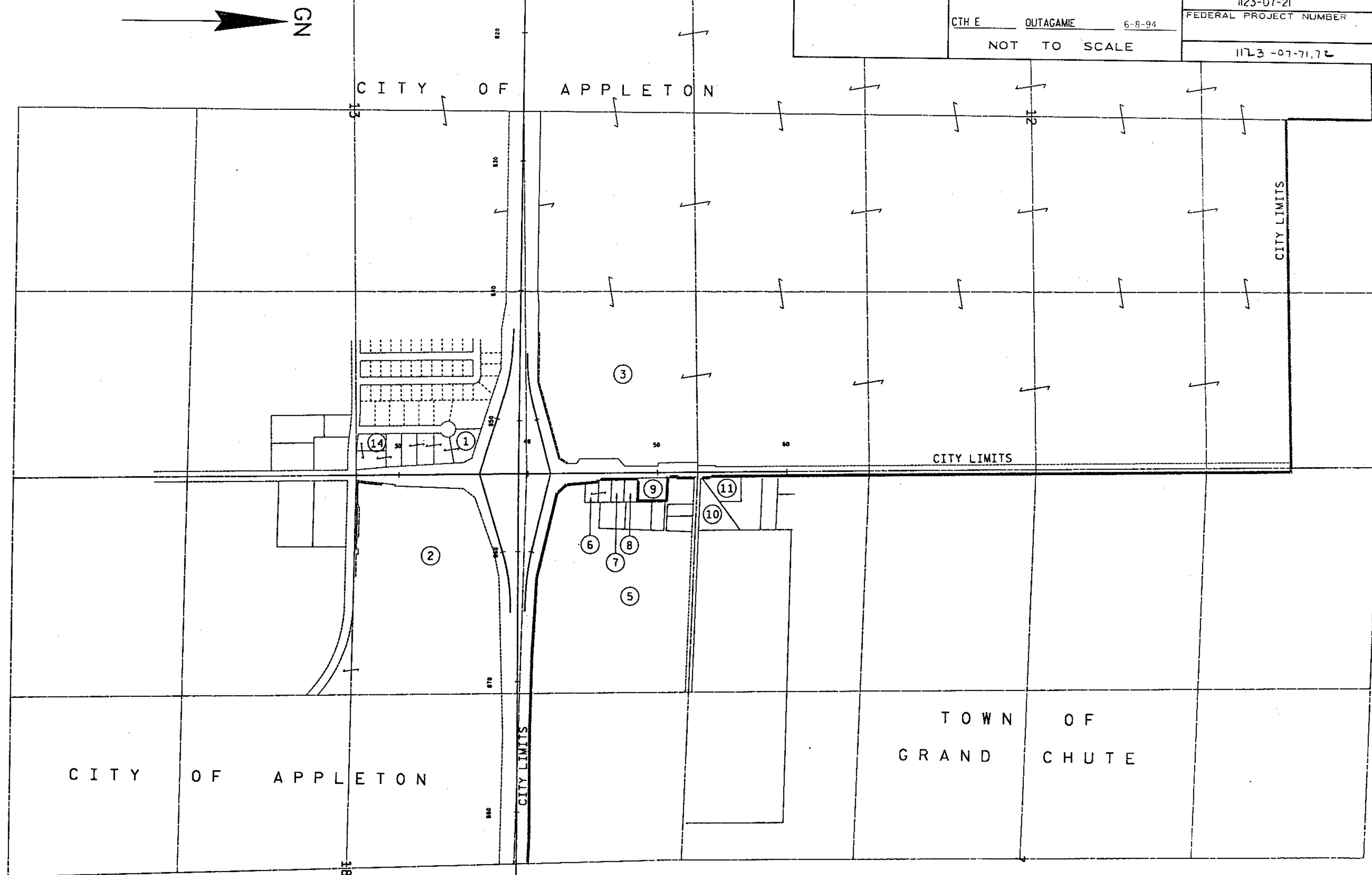
RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

REVISION DATE
10-20-94

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED:
DATE: 6/8/94
DISTRICT DIRECTOR

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
10-20-94	CTH E	OUTAGAMIE	6-8-94	1123-07-21	4.1
	NOT TO SCALE			FEDERAL PROJECT NUMBER: 1123-07-71,72	4.1



LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: D3 112307:4to1x

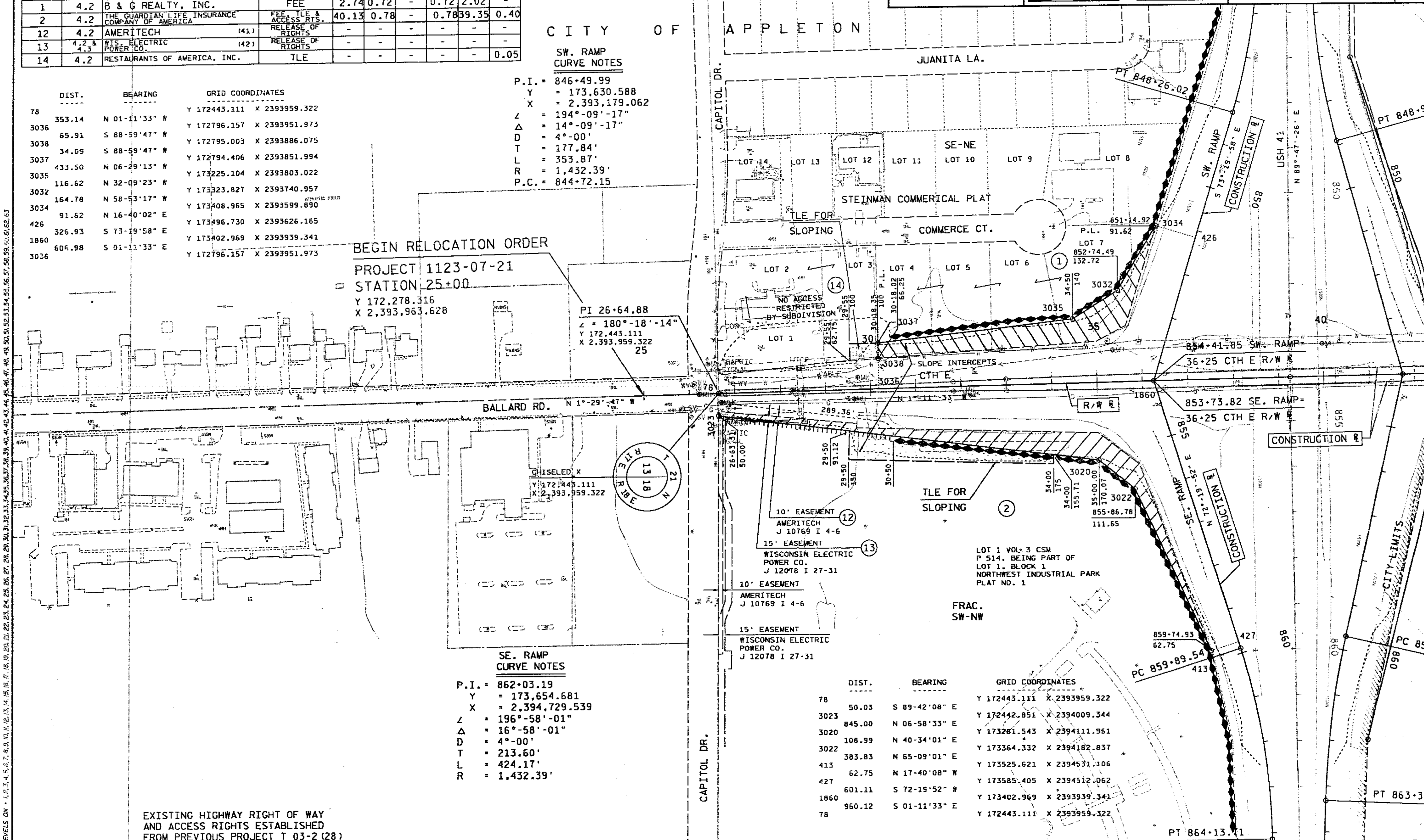
SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED			TOTAL ACRES REM.	T.L.E. ACRES
					NEW	EXISTING	TOTAL		
1	4.2	B & G REALTY, INC.	FEE	2.74	0.72	-	0.72	2.02	-
2	4.2	THE GUARDIAN LIFE INSURANCE COMPANY OF AMERICA	FEE, TLE & ACCESS RTS.	40.13	0.78	-	0.78	39.35	0.40
12	4.2	AMERITECH (41)	RELEASE OF RIGHTS	-	-	-	-	-	-
13	4.2 & 4.3	WIS. ELECTRIC POWER CO. (42)	RELEASE OF RIGHTS	-	-	-	-	-	-
14	4.2	RESTAURANTS OF AMERICA, INC.	TLE	-	-	-	-	-	0.05

	DIST.	BEARING	GRID COORDINATES
78			Y 172443.111 X 2393959.322
	353.14	N 01-11'33" W	
3036			Y 172796.157 X 2393951.973
	65.91	S 88-59'47" W	
3038			Y 172795.003 X 2393886.075
	34.09	S 88-59'47" W	
3037			Y 172794.406 X 2393851.994
	433.50	N 06-29'13" W	
3035			Y 173225.104 X 2393803.022
	116.62	N 32-09'23" W	
3032			Y 173323.827 X 2393740.957
	164.78	N 58-53'17" W	
3034			Y 173408.965 X 2393599.890
	91.62	N 16-40'02" E	
426			Y 173496.730 X 2393626.165
	326.93	S 73-19'58" E	
1860			Y 173402.969 X 2393939.341
	606.98	S 01-11'33" E	
3036			Y 172796.157 X 2393951.973

SW. RAMP
CURVE NOTES

P.I. = 846+49.99
Y = 173,630.588
X = 2,393,179.062
∠ = 194°-09'-17"
Δ = 14°-09'-17"
D = 4°-00'
T = 177.84'
L = 353.87'
R = 1,432.39'
P.C. = 844+72.15



SE. RAMP
CURVE NOTES

P.I. = 862+03.19
Y = 173,654.681
X = 2,394,729.539
∠ = 196°-58'-01"
Δ = 16°-58'-01"
D = 4°-00'
T = 213.60'
L = 424.17'
R = 1,432.39'

	DIST.	BEARING	GRID COORDINATES
78			Y 172443.111 X 2393959.322
	50.03	S 89-42'08" E	
3023			Y 172442.851 X 2394009.344
	845.00	N 06-58'33" E	
3020			Y 173281.543 X 2394111.961
	108.99	N 40-34'01" E	
3022			Y 173364.332 X 2394182.837
	383.83	N 65-09'01" E	
413			Y 173525.621 X 2394531.106
	62.75	N 17-40'08" W	
427			Y 173585.405 X 2394512.062
	601.11	S 72-19'52" W	
1860			Y 173402.969 X 2393939.341
	960.12	S 01-11'33" E	
78			Y 172443.111 X 2393959.322

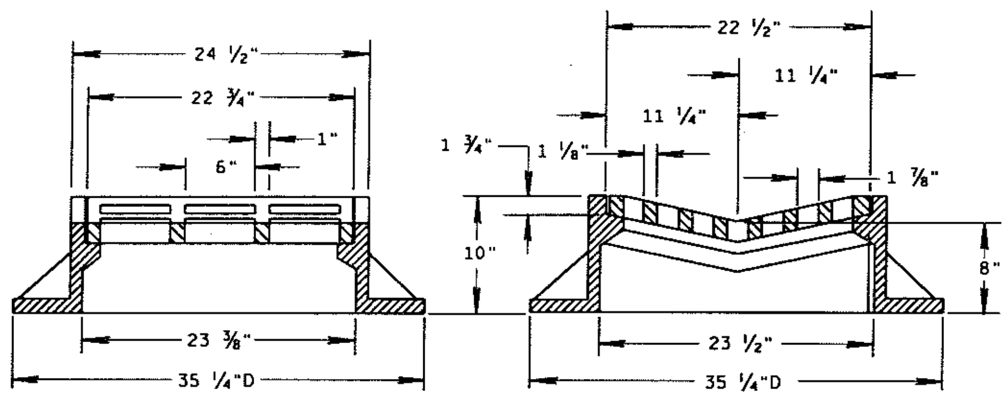
EXISTING HIGHWAY RIGHT OF WAY
AND ACCESS RIGHTS ESTABLISHED
FROM PREVIOUS PROJECT T 03-2 (28)

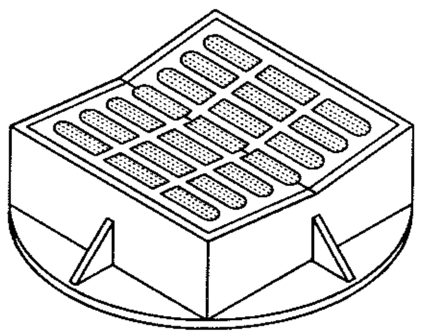
REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
10-20-94	USH 41	OUTAGAMIE	6-8-94	1123-07-21	4.2
	SCALE, FT. 0 200	GRID FACTOR 0.999940		FEDERAL PROJECT NUMBER 1123-07-71,72	4.2

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: d3 112307:d3401

WISDOT/CADDS SHEET 75

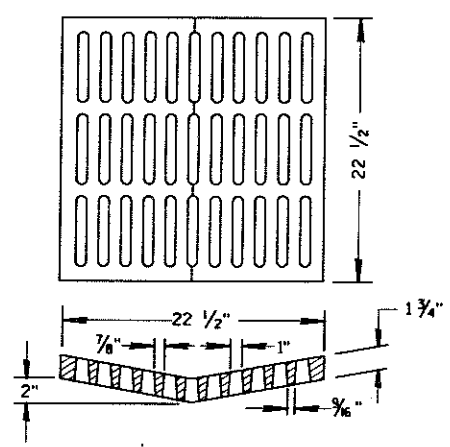




TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

FRAME.............. 285 LBS.
GRATE.............. 110 LBS.

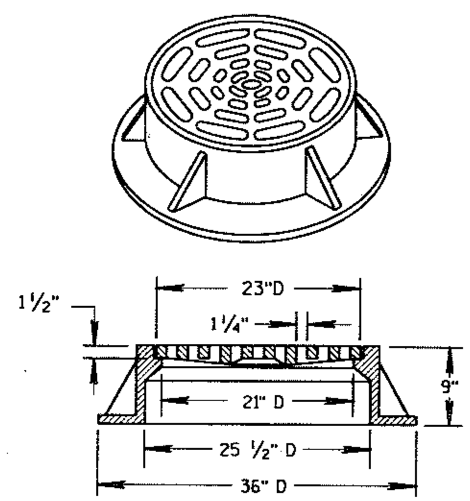


ALTERNATIVE GRATE FOR FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE............125 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTE AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME.............. 235 LBS.
GRATE.............. 105 LBS.

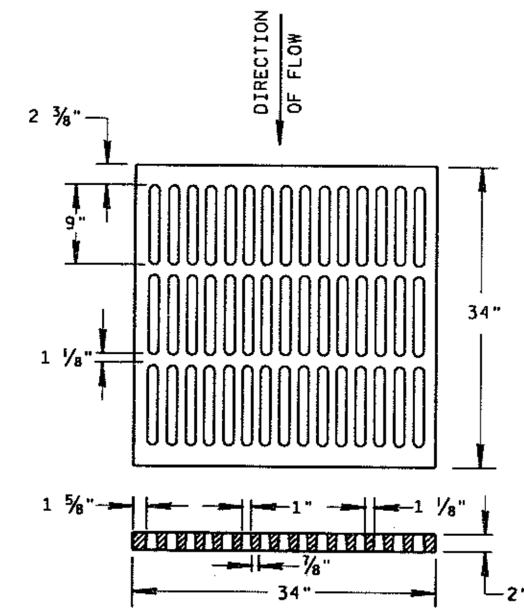
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

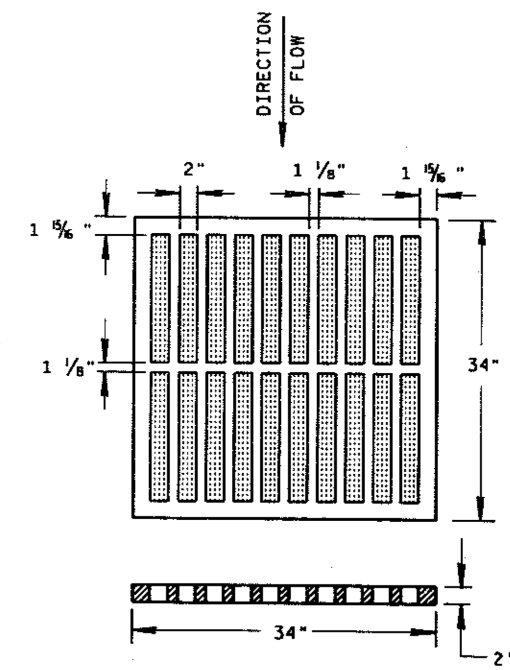


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE............365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTE AS TYPE MS-A ON THE DRAINAGE TABLE

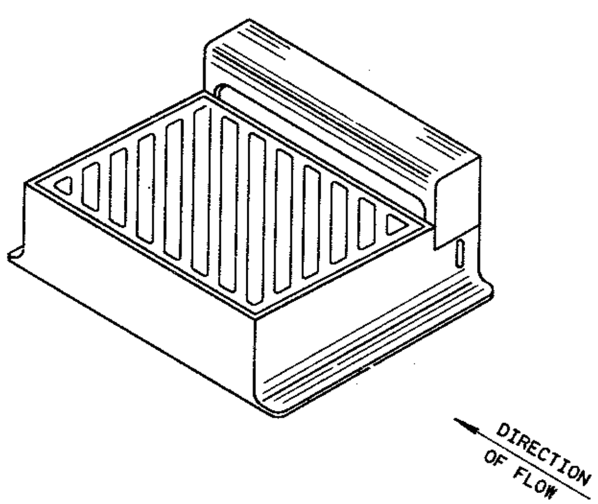


TYPE "MS"

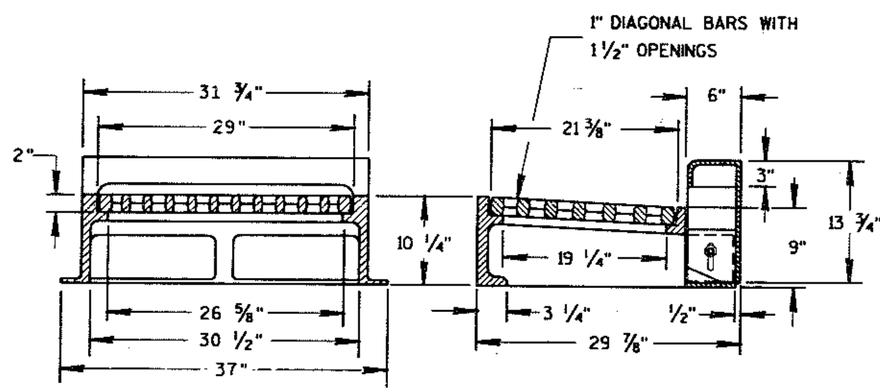
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE............270 LBS.

USE ON FREEWAYS AND EXPRESSWAYS

NOTE AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



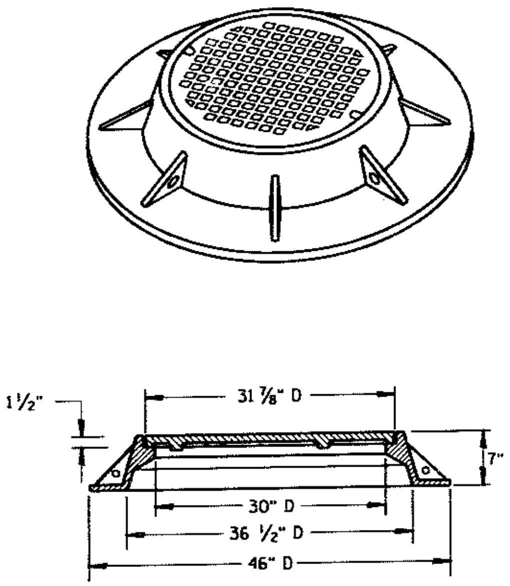
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 670 LBS.)

FRAME........... 360 LBS.
GRATE........... 160 LBS.
CURB BOX........ 150 LBS.

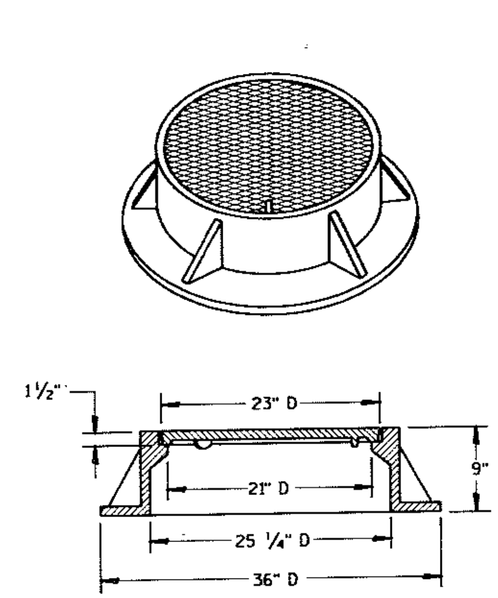
INLET COVERS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 1/25/93 DATE — STATE DESIGN ENGINEER FOR HWYS FHWA



TYPE "K"

(APPROXIMATE WEIGHT 535 LBS.)

FRAME..........330 LBS.
LID............205 LBS.



TYPE "J"

(APPROXIMATE WEIGHT 350 LBS.)

FRAME..............235 LBS.
LID................115 LBS.

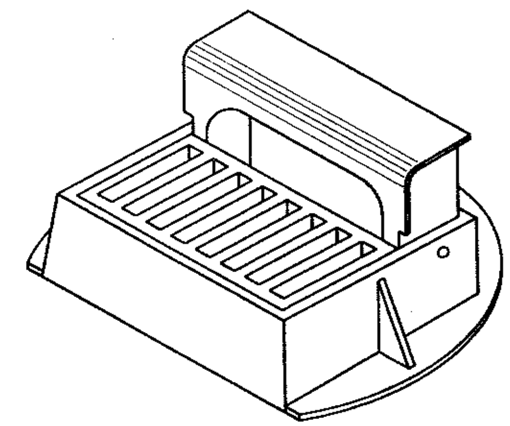
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

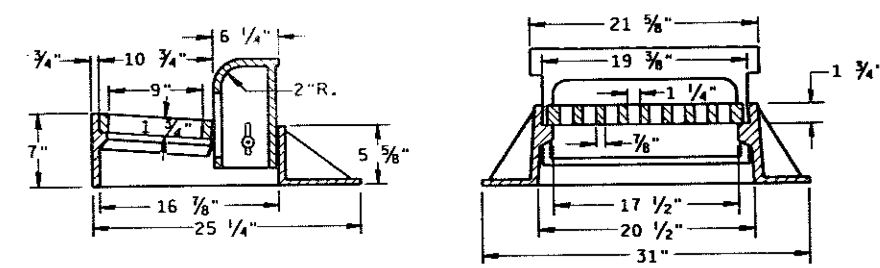
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



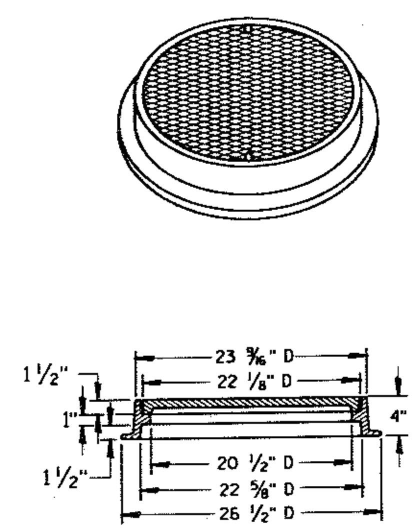
CURB BOX ADJUSTABLE 4" TO 10"



INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 280 LBS.)

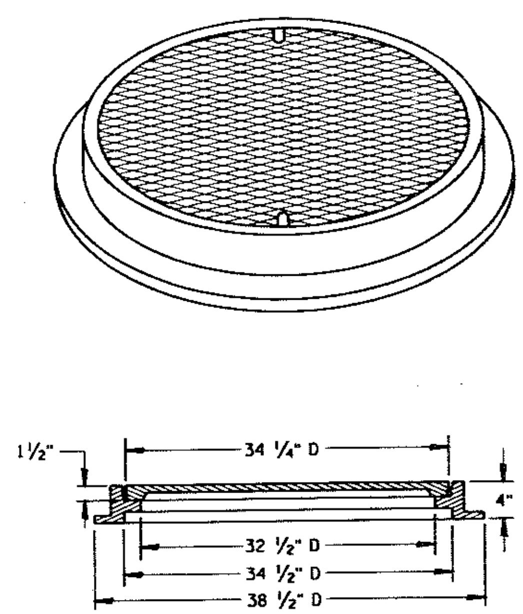
FRAME.............................145 LBS.
GRATE.............................50 LBS.
CURB BOX.........................85 LBS.



TYPE "L"

(APPROXIMATE WEIGHT 145 LBS.)

FRAME..........75#
LID............70#

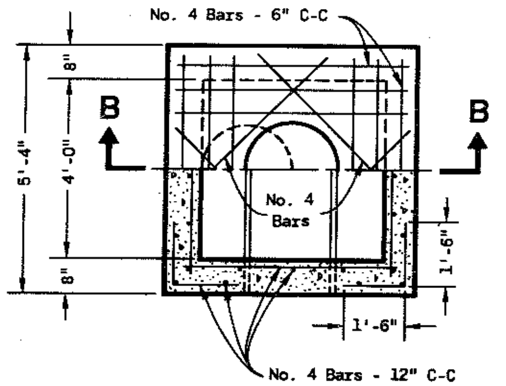


TYPE "M"

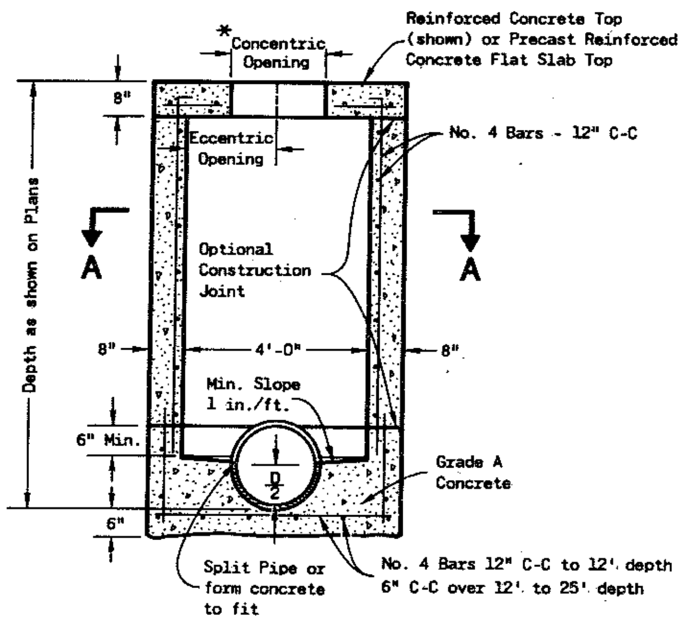
(APPROXIMATE WEIGHT 385 LBS.)

FRAME.................. 125#
LID....................... 260#

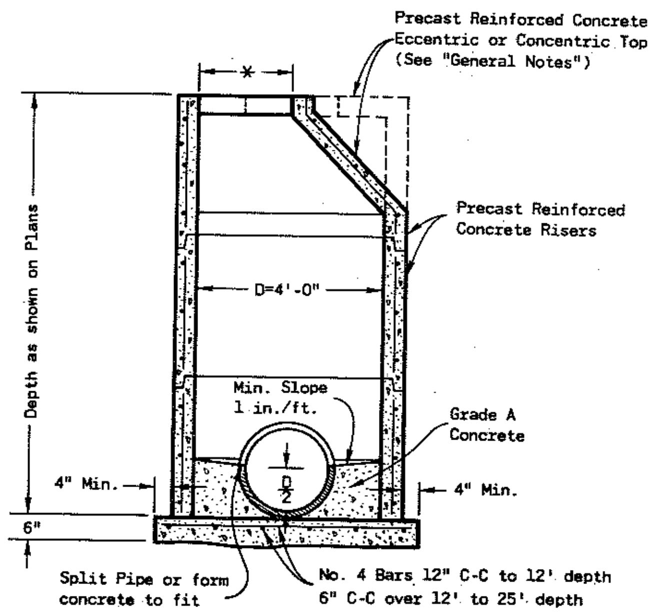
INLET AND MANHOLE COVERS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 1/25/93 DATE — STATE DESIGN ENGINEER FOR HWYS
FHWA



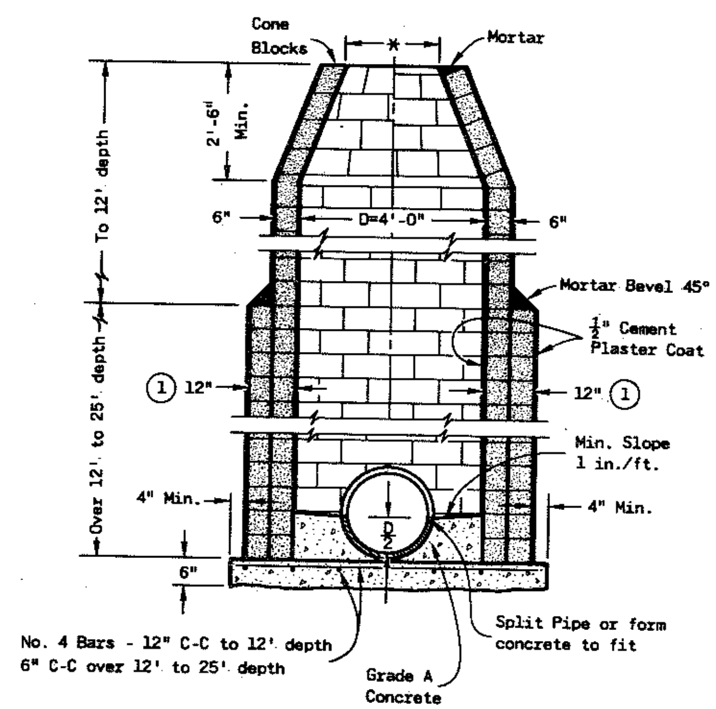
HALF SECTION A–A



SECTION B–B
REINFORCED CONCRETE



PRECAST REINFORCED CONCRETE



CONCRETE BLOCK

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Detailed drawings for proposed alternate designs for underground drainage structures shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

All drainage structures are designated on the plans as "Manholes 1-C", "Catch Basins 1-B", "Inlets 3-H", etc. The first digit designates the masonry portion of the structure, and the following letter designates the type of cover to be used to comprise the complete unit.

Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Precast Reinforced Concrete Cone Tops (Eccentric or Concentric) may be used on concrete block structures. The Cone Tops shall be installed on a bed of mortar.

Eccentric Cone Tops may be used on all structures, and Concentric Cone Tops shall be used only on structures 5 feet or less in depth, unless otherwise directed by the Engineer.

Steps meeting the following requirements shall be installed in all structures over 5 feet in depth: 16 inch C-C maximum spacing; project a minimum clear distance of 4 inches from the wall at the point of embedment; minimum length of 10 inches; minimum wall embedment of 3 inches; and be capable of supporting a concentrated load of 300 lbs. Ferrous metal steps not painted or treated to resist corrosion shall have a minimum cross sectional dimension of 1 inch.

Solid Aluminum steps shall have a minimum cross sectional dimension of 0.75 inch. Aluminum surfaces to be embedded in concrete shall be given one coat of suitable quality paint, such as zinc chromate primer conforming to Federal Specification TT-P-645 or equivalent. Steps of approved Polyproplene plastic coated reinforcement bar will be acceptable.

All bar steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers may be placed with tongue up or down.

All Precast Inlet Units shall conform to the pertinent requirements of AASHTO Designation M 199.

* Use 2'-0" diameter opening with Type "C", "L" and "J" covers, or 3'-0" diameter with Type "K" and "M" covers.

(1) 2 courses 6" block.

MANHOLES TYPE 1

MANHOLES TYPE 1
State of Wisconsin Department of Transportation
APPROVED 4-13-82 DATE — CHIEF DESIGN ENGINEER — FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

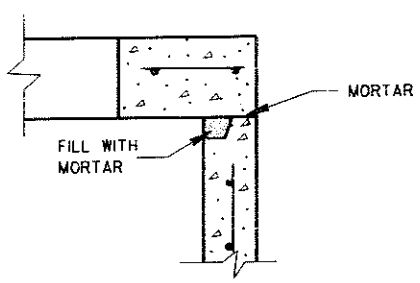
PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

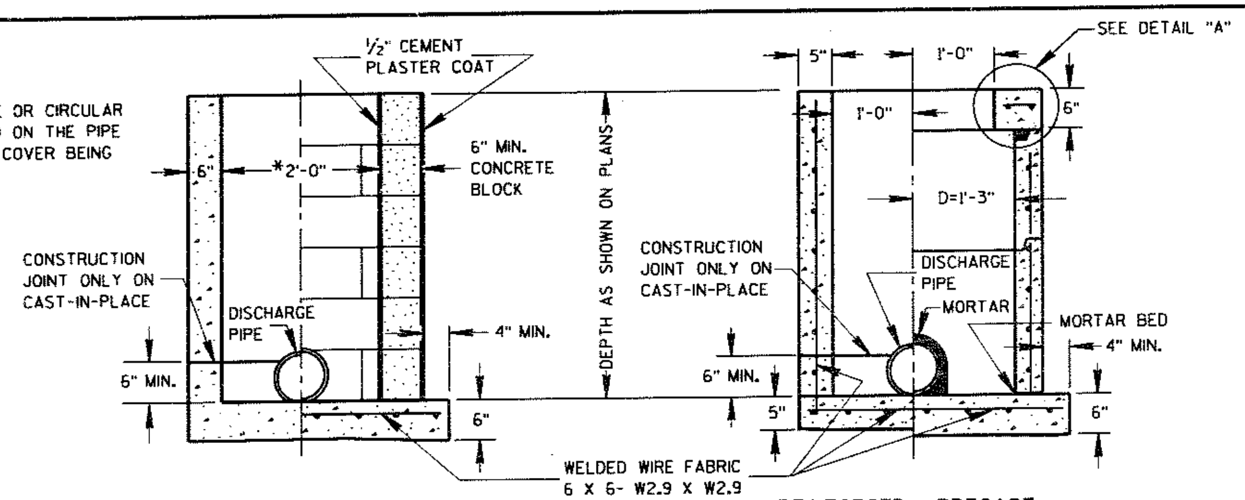
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

(1) USE 2'-6" OPENING FOR TYPE 2 INLETS, 3'-0" OPENING FOR TYPE 3 INLETS, AND 2'-11" FOR TYPE 4 INLETS.

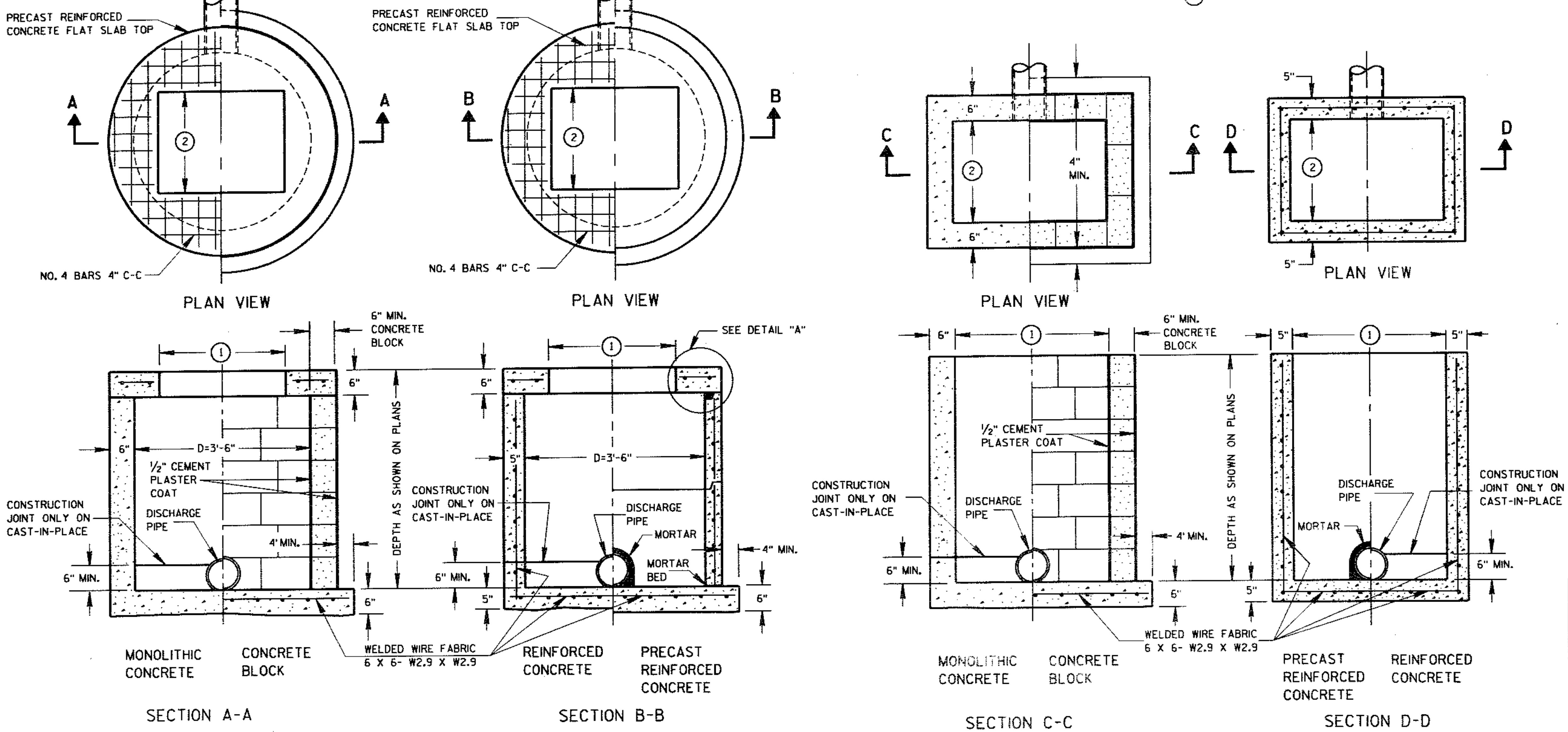
(2) USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6½" OPENING FOR TYPE 4 INLETS.



DETAIL "A"



INLETS TYPE 1



INLETS TYPE 2, 3 & 4

INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/26/94
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 C 1-5

GENERAL NOTES

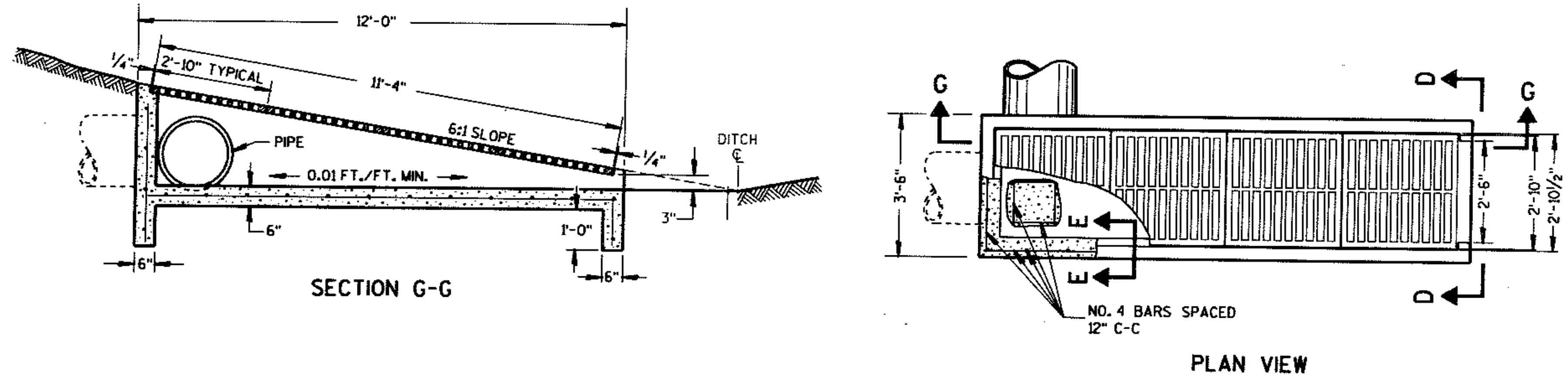
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

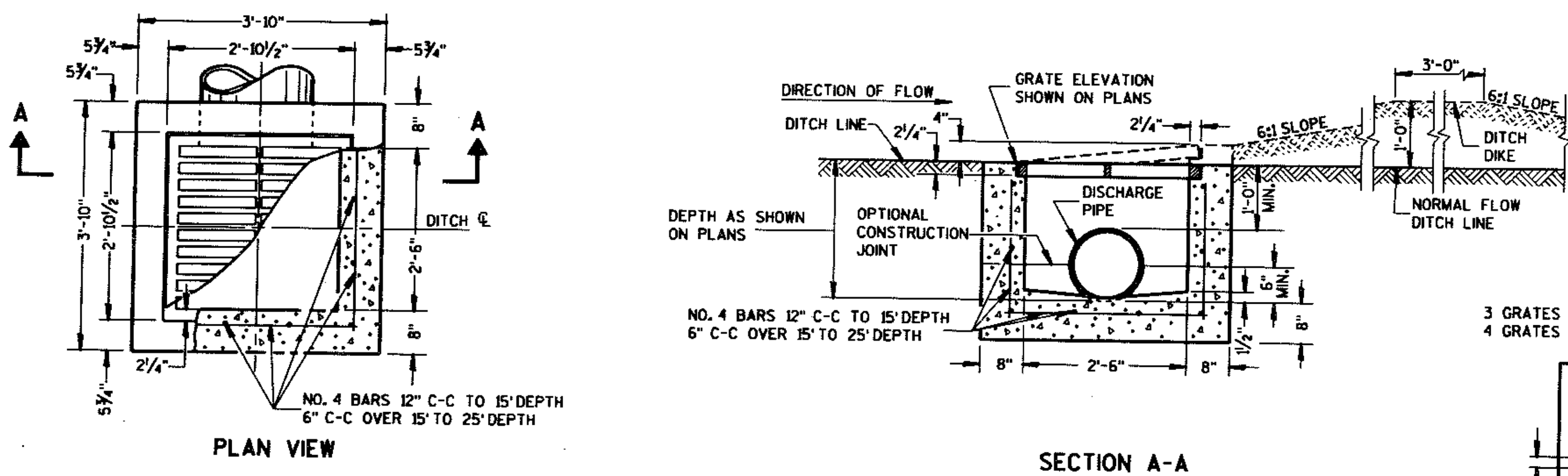
PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

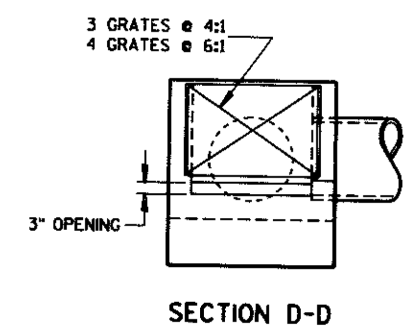
ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

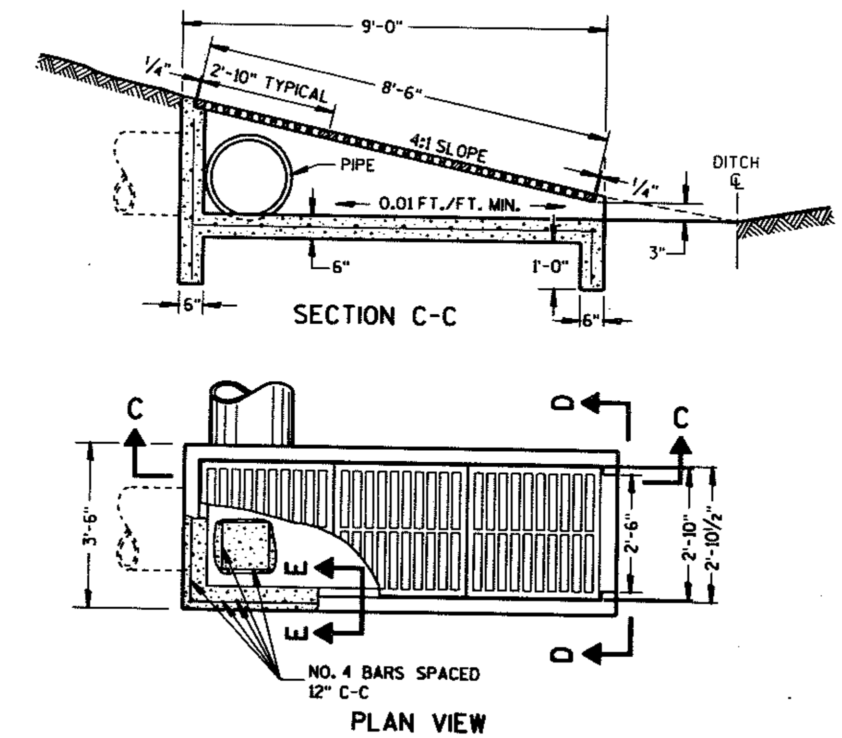


REINFORCED CONCRETE INLET TYPE 11

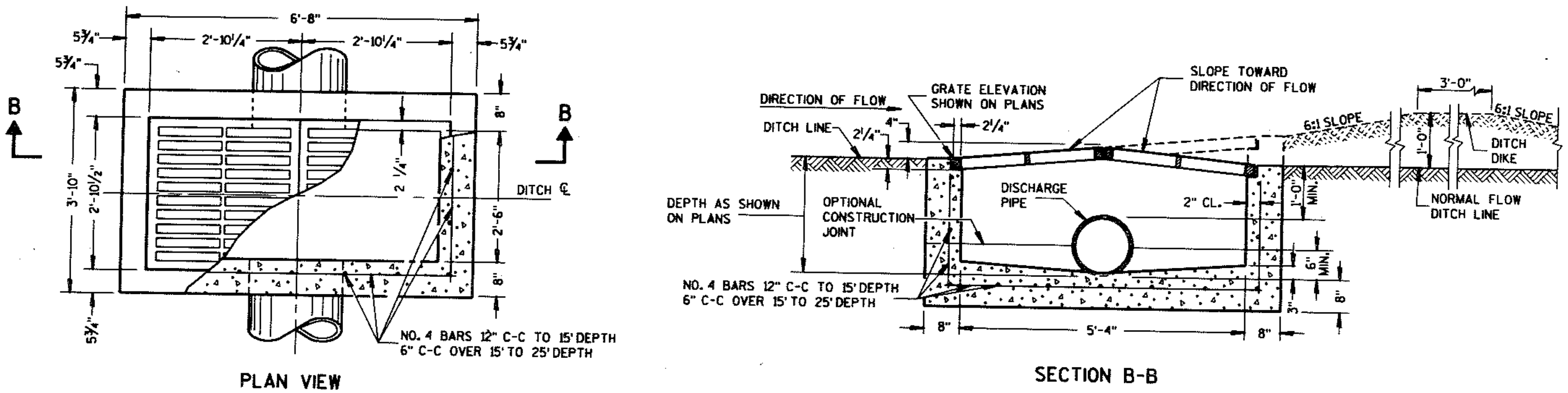




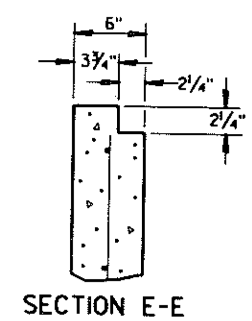
REINFORCED CONCRETE INLET TYPE 8



REINFORCED CONCRETE INLET TYPE 10



REINFORCED CONCRETE INLET TYPE 9



INLETS TYPE 8, 9, 10 AND 11
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 8/10/94 DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER — FHWA

S.D.D. 8 C 5-2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEALANT IS NOT REQUIRED IN THE JOINTS OF CONCRETE CURB OR CONCRETE CURB & GUTTER EXCEPT AS REQUIRED FOR INTEGRAL GUTTER.

PAVEMENT TIES ARE REQUIRED, WHEN INCLUDED IN THE CONTRACT, WHERE CONCRETE CURB, CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT IS PLACED ADJACENT TO EXISTING CONCRETE.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. TIE BARS AND A LONGITUDINAL CONSTRUCTION JOINT ARE NOT REQUIRED WITH THIS ALTERNATE.

PAVEMENT JOINTS SHALL BE EXTENDED THROUGH INTEGRAL CURB & GUTTER. JOINTS IN INTEGRAL GUTTER SHALL HAVE THE SAME DIMENSIONS AS THE JOINTS IN THE ADJACENT PAVEMENT. JOINTS IN INTEGRAL CURB SHALL BE 1/8" WIDE.

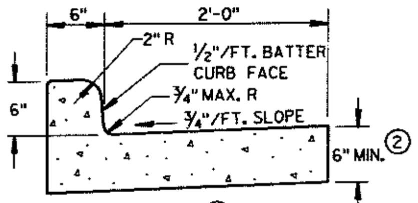
JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE TWO FEET BEHIND THE BACK OF CURBS.

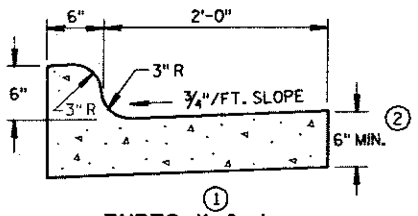
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

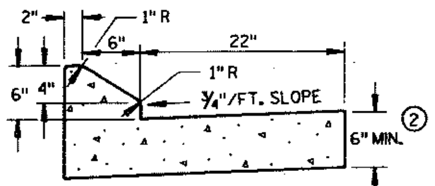
(3) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.



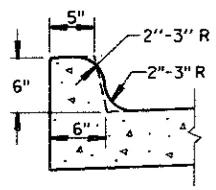
TYPES A & D (1)



TYPES K & L (1)

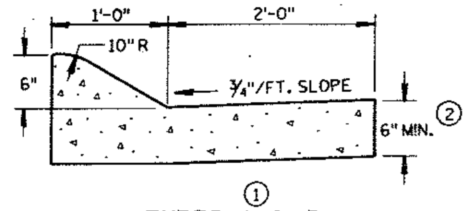


TYPES G & J (1)



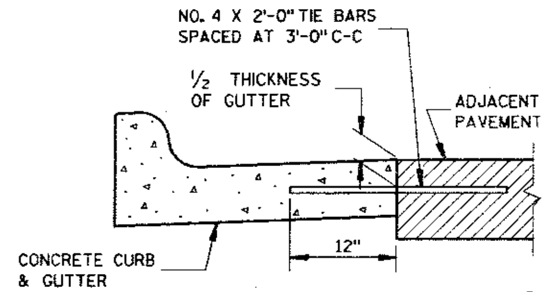
OPTIONAL CURB SHAPE FOR TYPES K & L (1)

CONCRETE CURB & GUTTER 30"

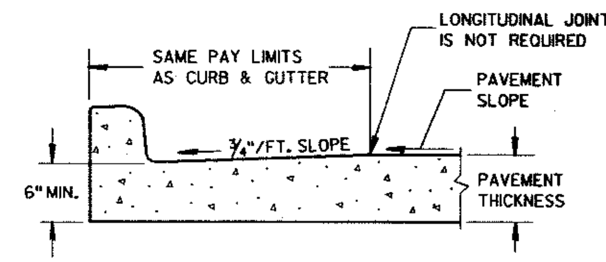


TYPES A & D (1)

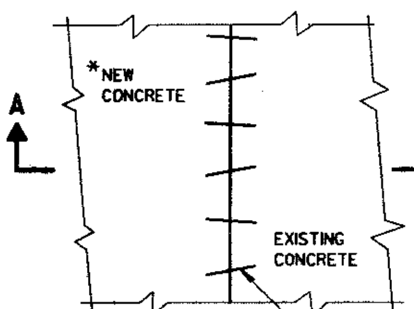
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)

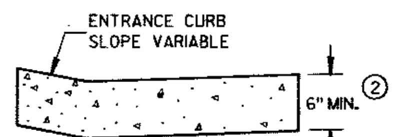


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



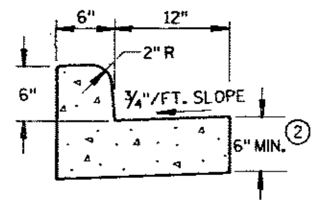
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



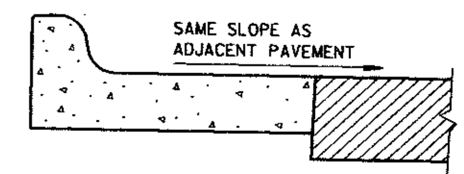
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



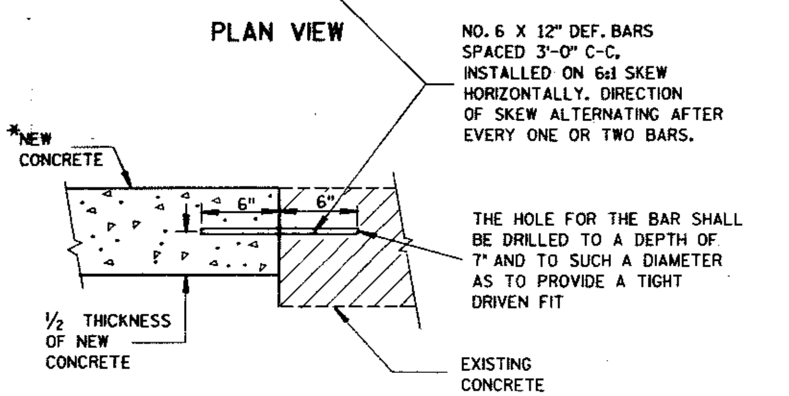
TYPES A & D (1)

CONCRETE CURB & GUTTER 18"

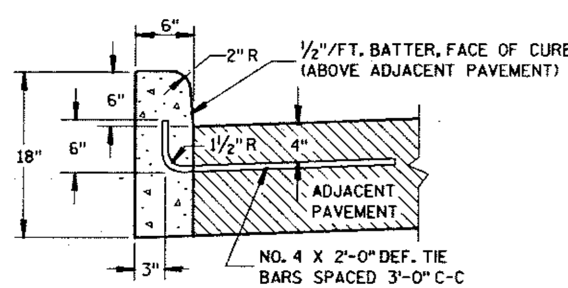


REVERSE SLOPE GUTTER (3)

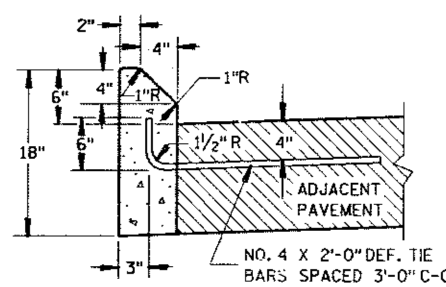
(TYPICAL FOR ALL CURB & GUTTER TYPES)



SECTION A-A PAVEMENT TIES



TYPES A & D (1)

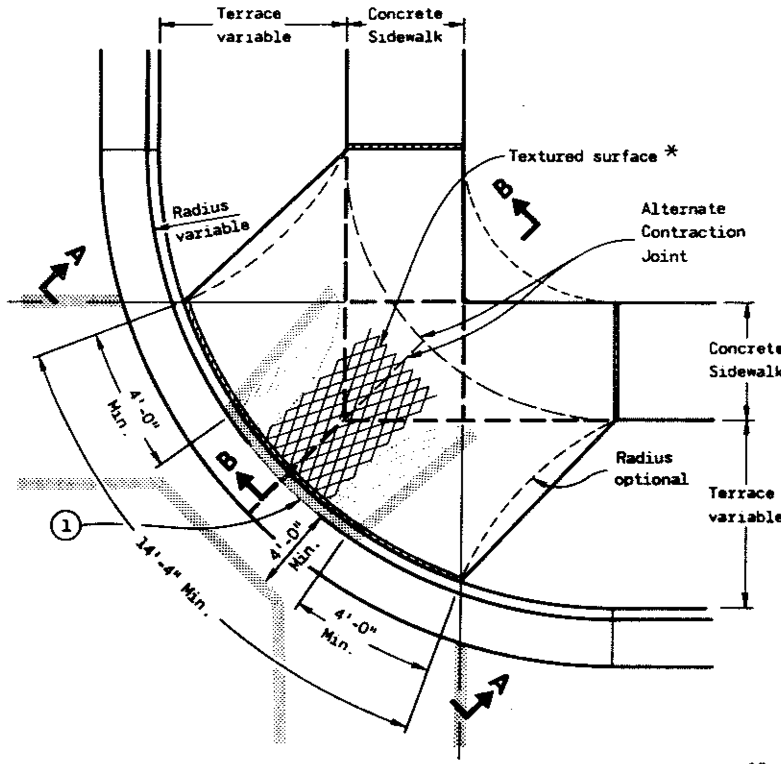


TYPES G & J (1)

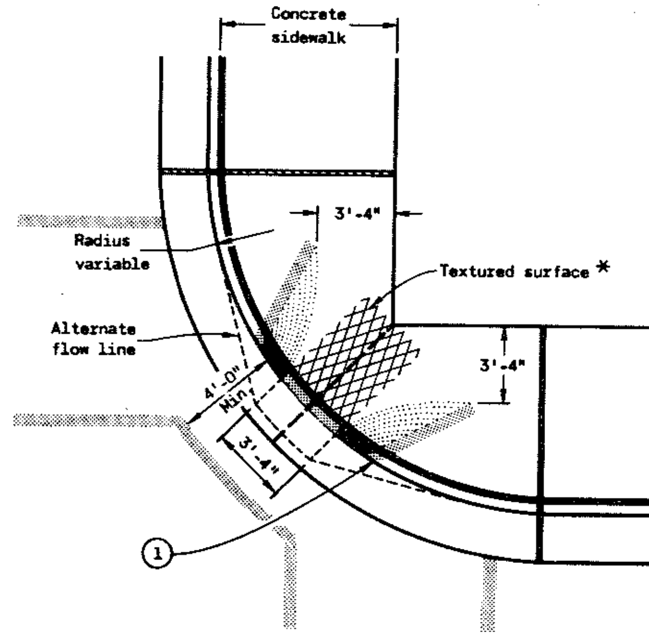
CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10-23-86 DATE — STATE DESIGN ENGINEER FOR HWYS — FHWA

S.D.D. 8 D 1-11



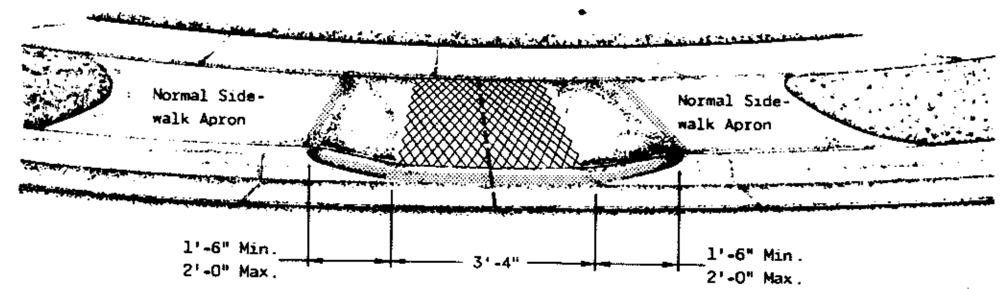
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



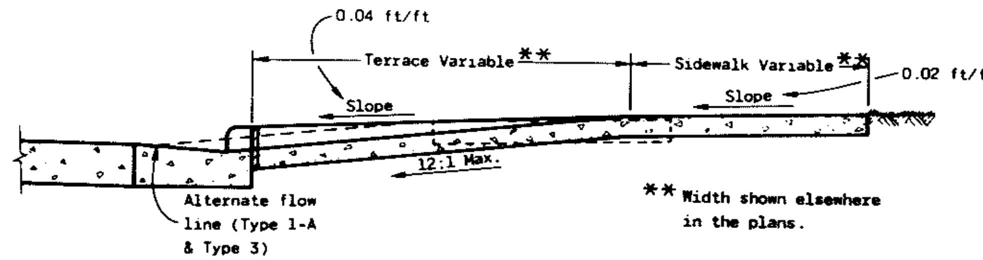
PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)

$\frac{1}{2}$" ━━━ EXPANSION JOINTS - SIDEWALK
— — — CONTRACTION JOINTS

Location of joints may be varied from those shown to better fit site conditions and/or local government preference.



VIEW **A-A**



SECTION **B-B**

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Ramps shall be built at 12:1 or flatter. When necessary, the sidewalk elevation may be lowered to meet the high point on the ramp.

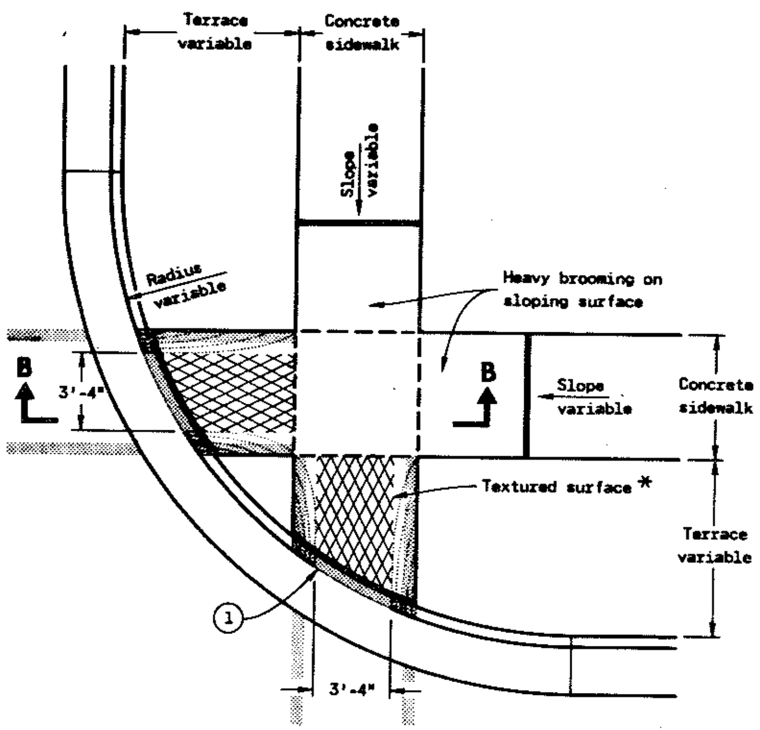
Type 1 or Type 1-A Ramps shall have a normal sidewalk apron and curb on both sides of ramp

Curb ramps shall be measured and paid for as Concrete Sidewalk and Concrete Curb and Gutter.

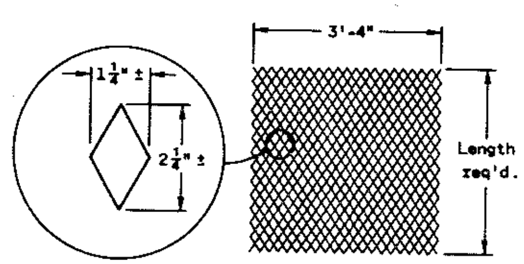
Surface texturing shall consist of linear impressions approximately $\frac{1}{4}$ inch to $\frac{3}{8}$ inch in depth and width, oriented to provide a uniform pattern of diamond shapes measuring approximately $1\frac{1}{4}$ inches in width by $2\frac{1}{4}$ inches in length, with the length being parallel to the direction of pedestrian movement. This surface texture may be achieved by impressing and removing a piece of expanded metal regular industrial mesh into the surface of the ramp while the concrete is in a plastic state

(1) The ramp shall be bordered on both sides and on the curb line with a 4 inch wide yellow stripe or with brick of a contrasting color. Normally the paint stripe alternate will be used. The municapality or the department will apply this striping unless otherwise specified in the contract.

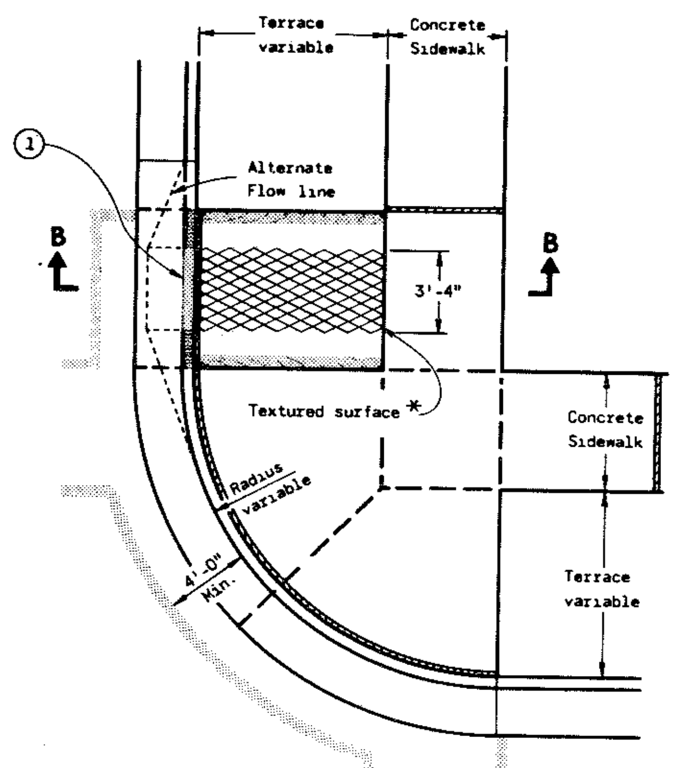
If a municapality requires the brick alternate, special details and provisions are shown elsewhere in the plans.



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN *

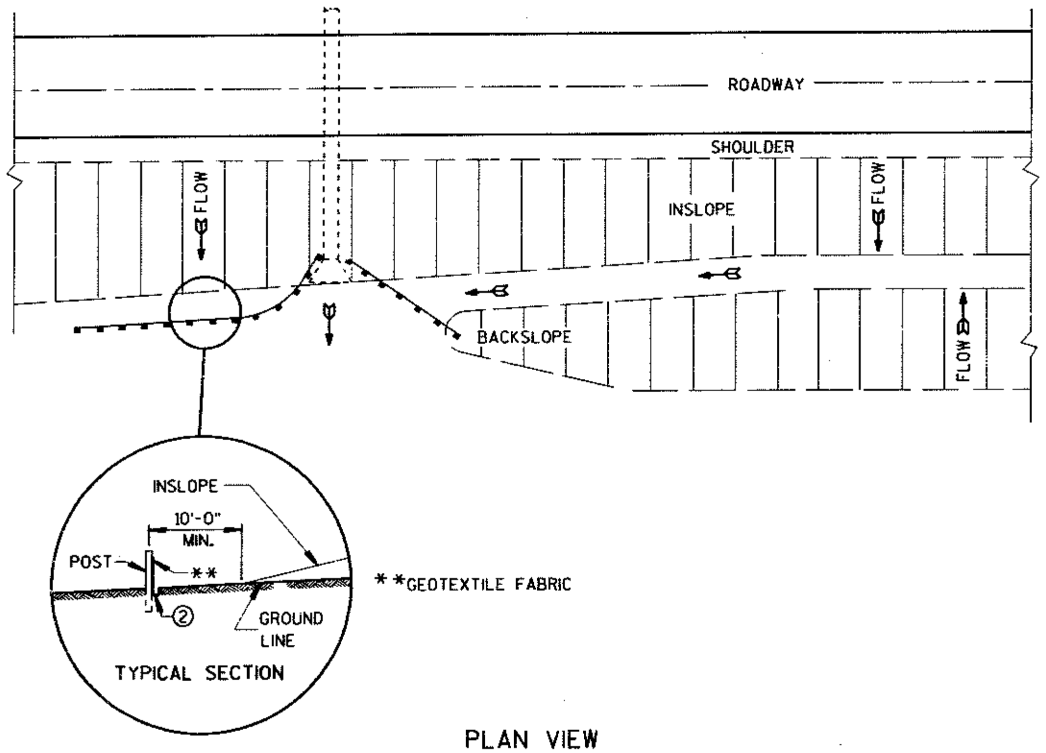


PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS	
State of Wisconsin Department of Transportation	
APPROVED 10-23-84 DATE	CHIEF DESIGN ENGINEER
FHWA	

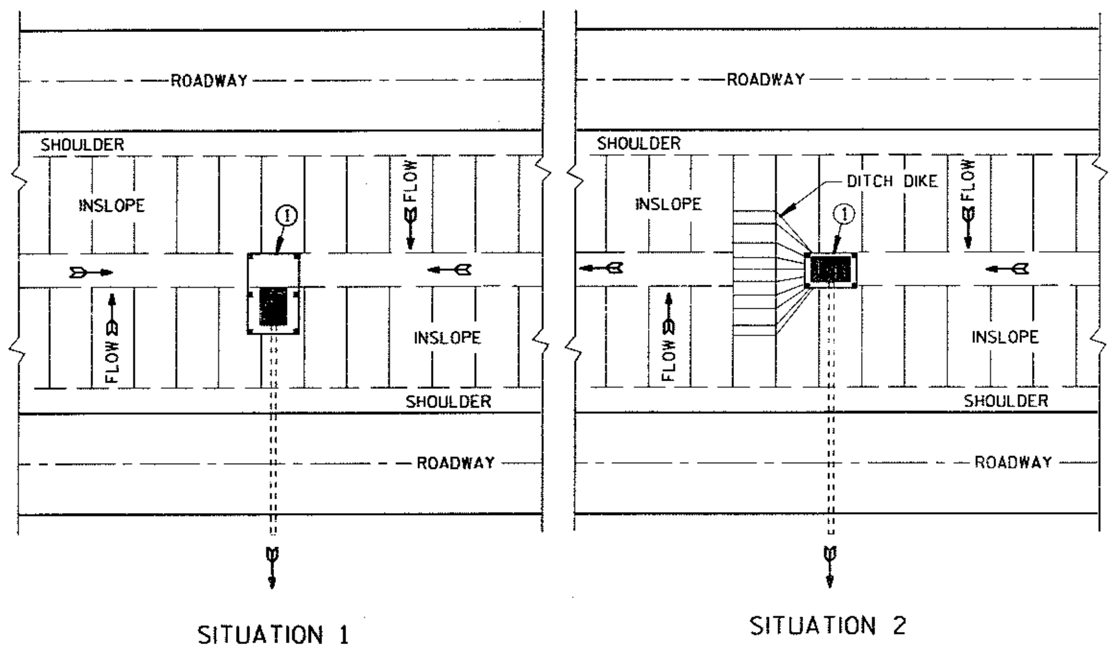
S.D.D. 8 D 5-8

65



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

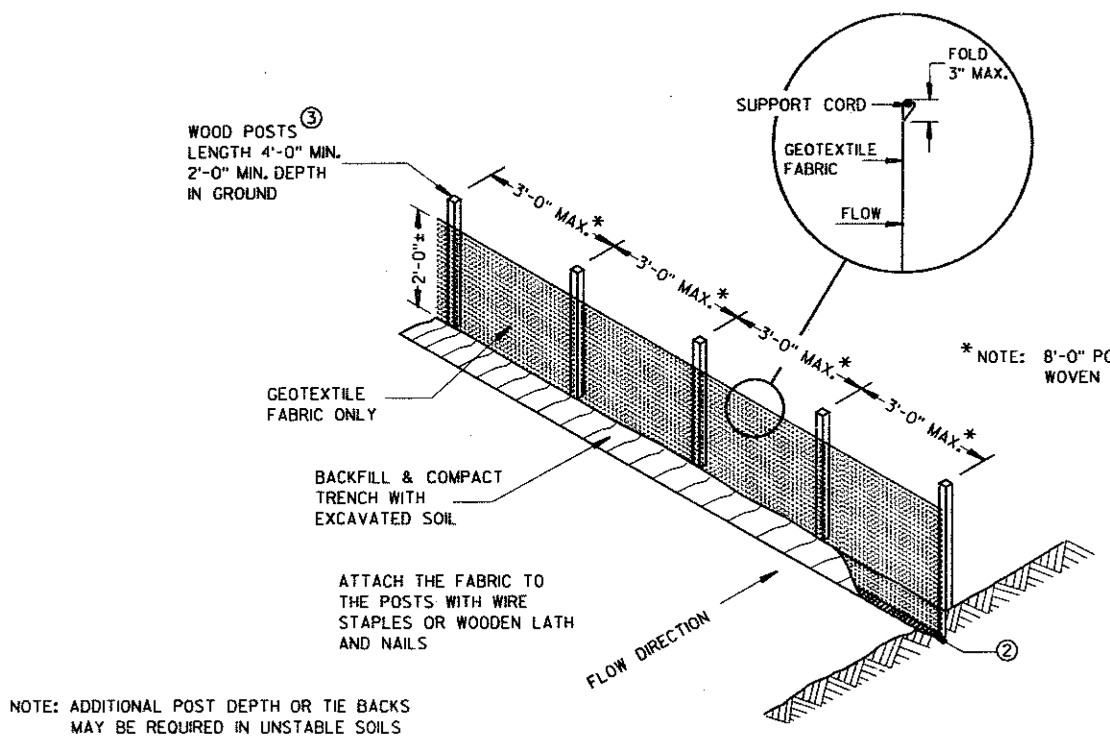
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

① HORIZONTAL BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

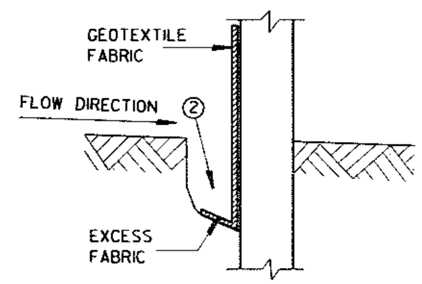
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF $1\frac{1}{8}$" X $1\frac{1}{8}$" OF OAK OR HICKORY.



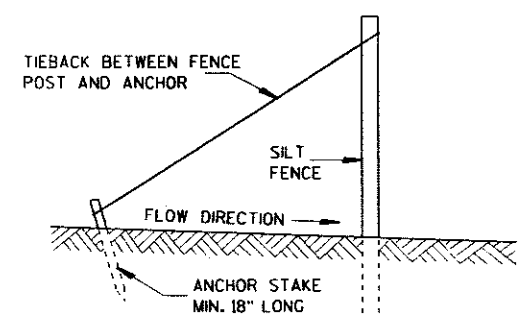
* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE
(NON-REINFORCED)



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 6/29/94 [signature] DATE CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA

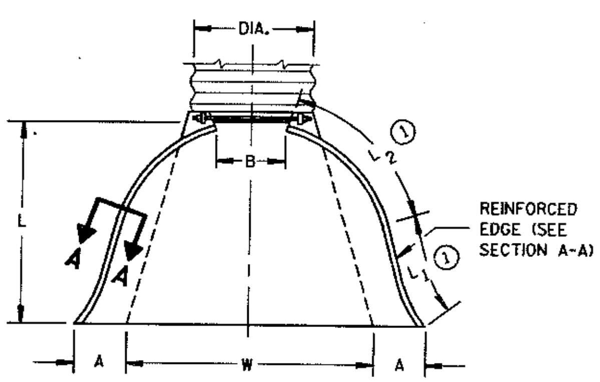
S.D.D. 8 E 9-4

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L_1 ①	L_2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.079	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.109	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

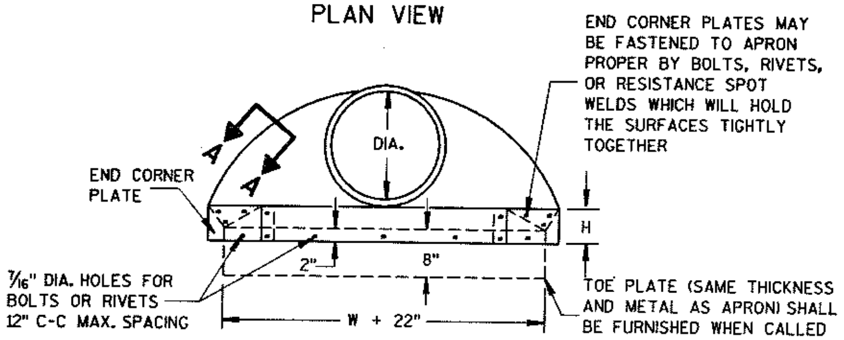
× EXCEPT CENTER PANEL
SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	*33 1/4-35**	*98 1/4-100**	90	5 1/2	2 2/5 to 1
60	6	*30-35**	60	39	99	96	5	2 to 1
66	6 1/2	*24-30**	*72-78**	*21-27**	99	102	5 1/2	2 to 1
72	7	*24-36**	78	21	99	108	6	2 to 1
78	7 1/2	*24-36**	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

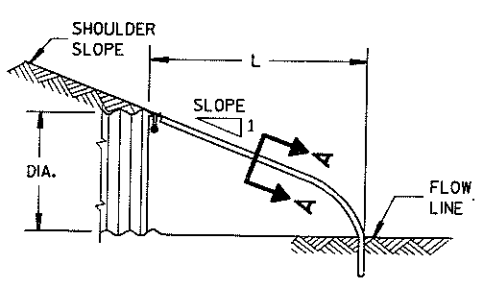
*MINIMUM
**MAXIMUM



PLAN VIEW

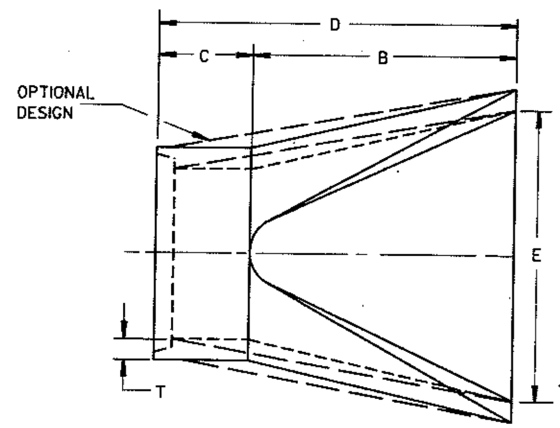


END VIEW

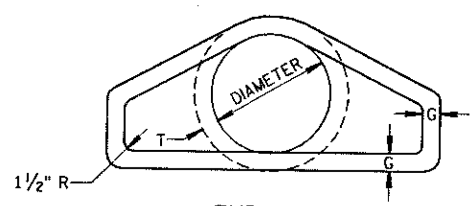


SIDE ELEVATION

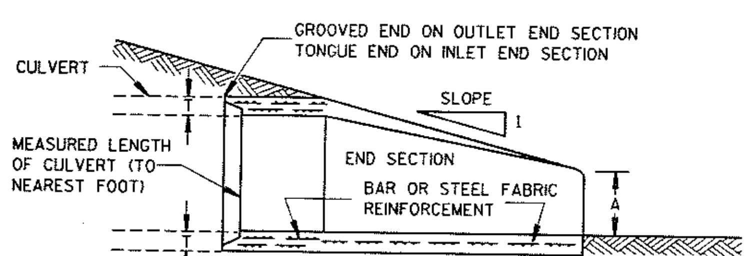
METAL ENDWALLS



PLAN

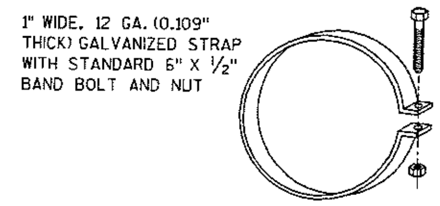


END VIEW



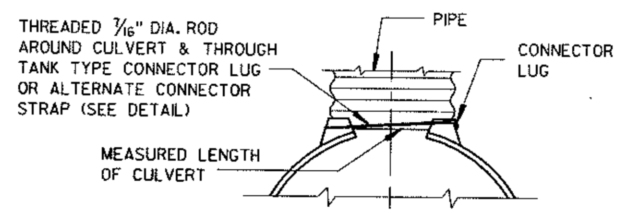
LONGITUDINAL SECTION

CONCRETE ENDWALLS

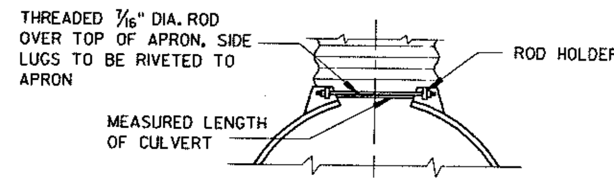


ALTERNATE FOR TYPE 1 CONNECTION

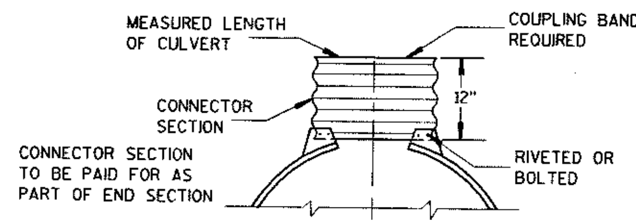
END SECTION CONNECTOR STRAP



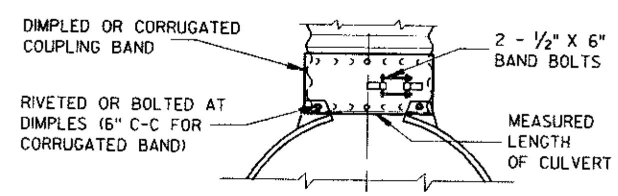
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

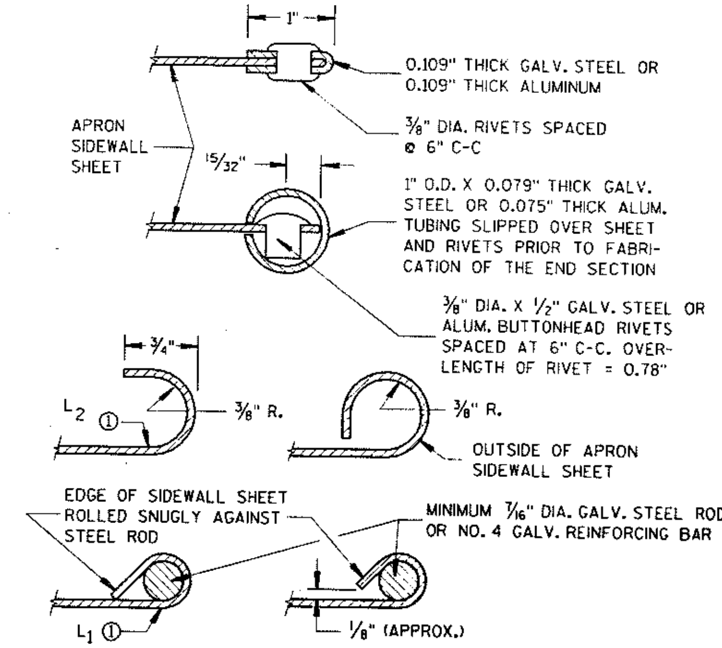
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

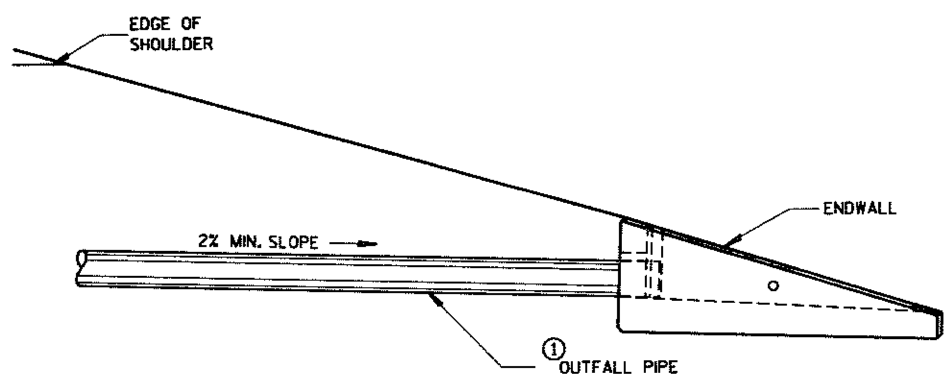
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 12/17/87 DATE — STATE DESIGN ENGINEER FOR HWYS FHWA

S.D.D. 8 F 1-10a

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	M
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

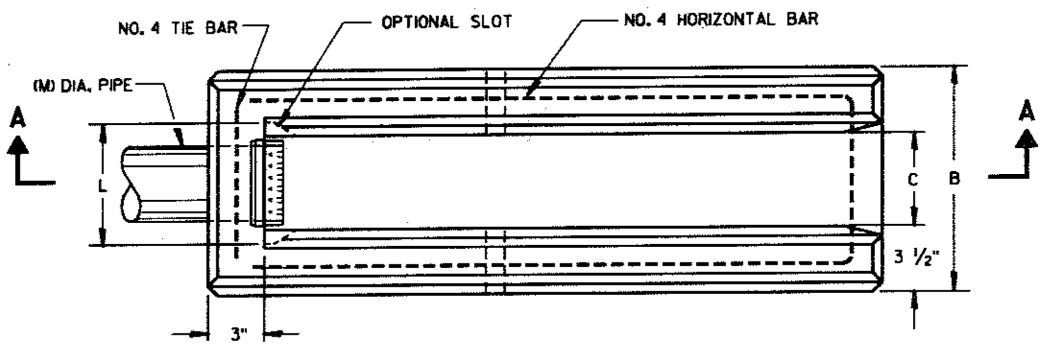
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

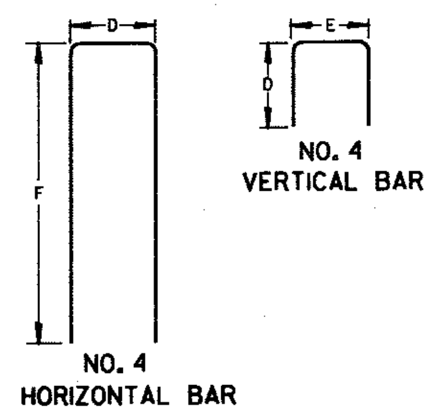
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

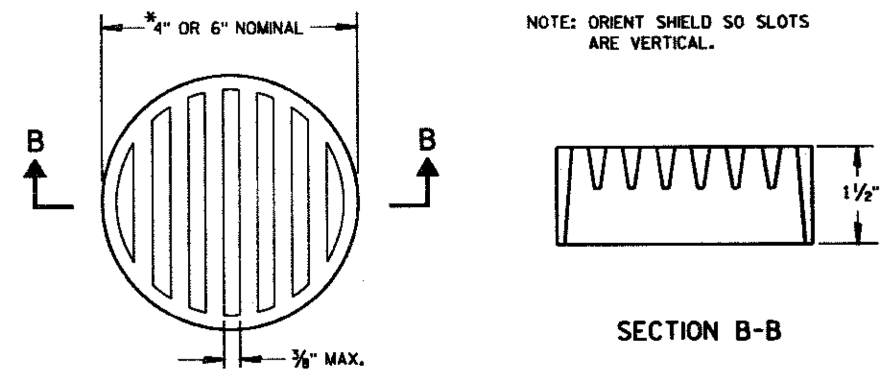
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



PLAN VIEW

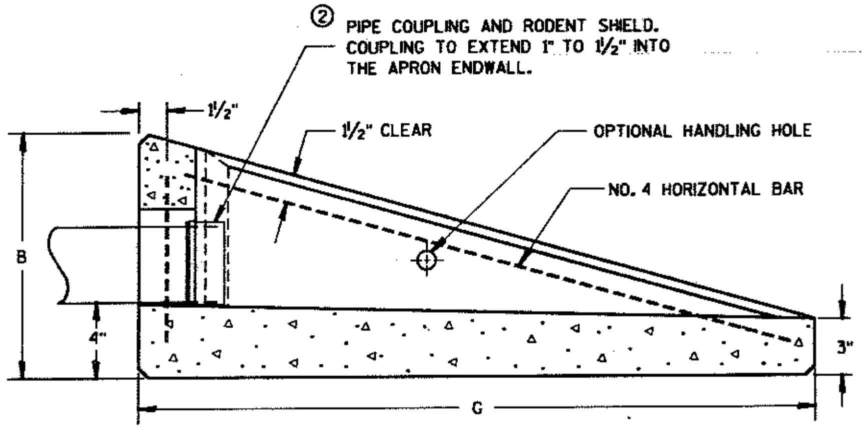


BAR STEEL REINFORCEMENT DETAILS

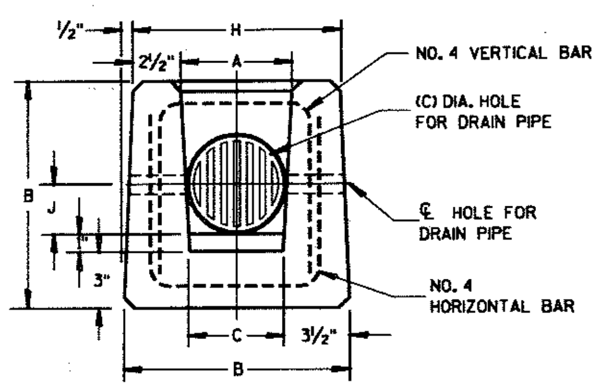


② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

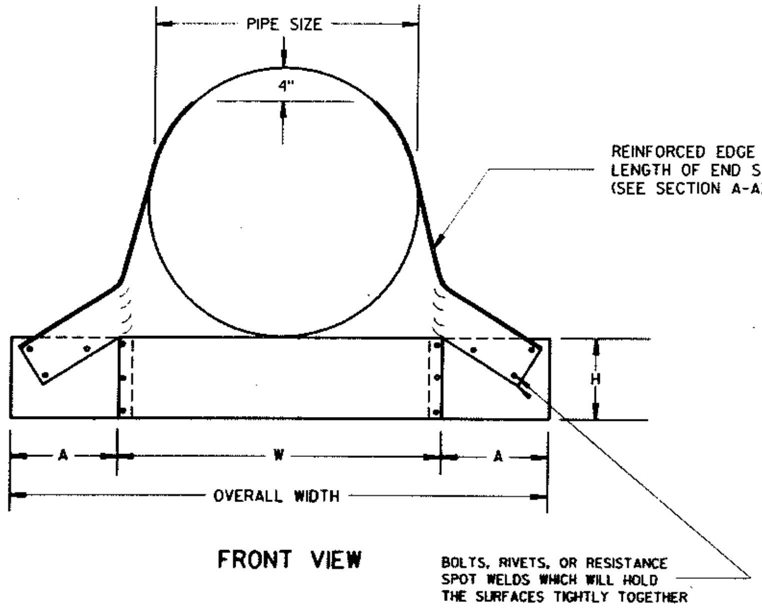
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

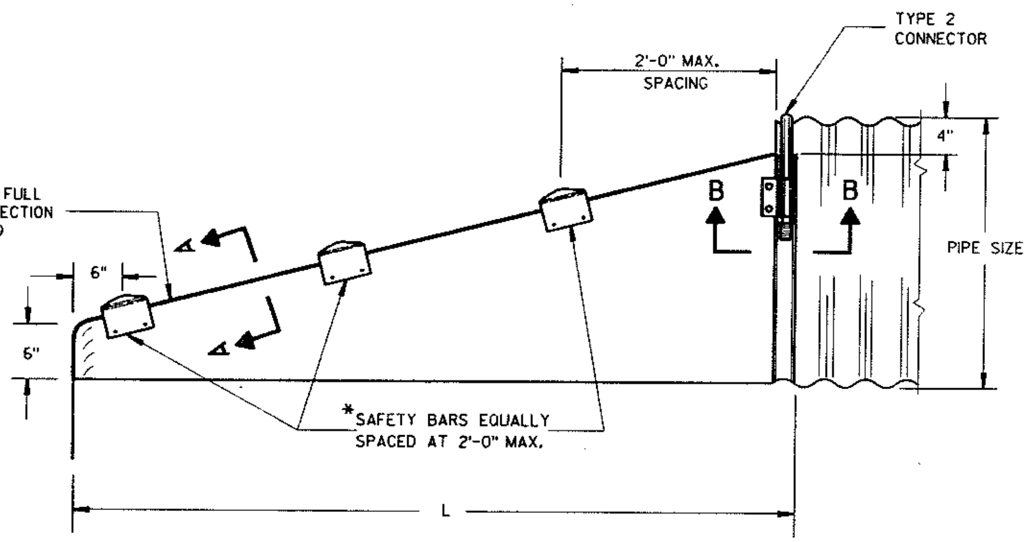
APPROVED 1/19/93 DATE — STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 8 F 6-3



FRONT VIEW



SIDE VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

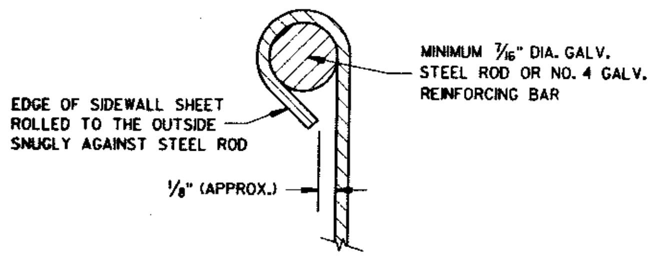
SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

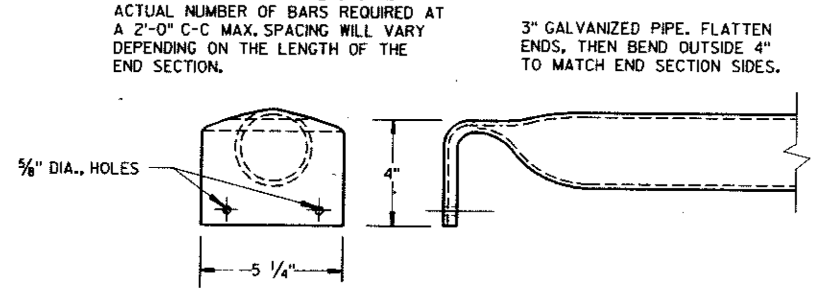
STEEL APRON ENDWALLS FOR CULVERT PIPE

PIPE DIA. (IN.)	MIN. THICK. (inches)	DIMENSIONS (inches)				L DIMENSIONS	
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	6:1	30
18	.064	8	6	24	40	6:1	48
21	.064	8	6	27	43	6:1	66
24	.064	8	6	30	46	6:1	84
30	.109	12	9	36	60	6:1	120
36	.109	12	9	42	66	6:1	156
42	.109	16	12	48	80	5.63 TO 1	180
48	.109	16	12	54	86	4.74 TO 1	180
54	.109	16	12	60	92	—	—

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.



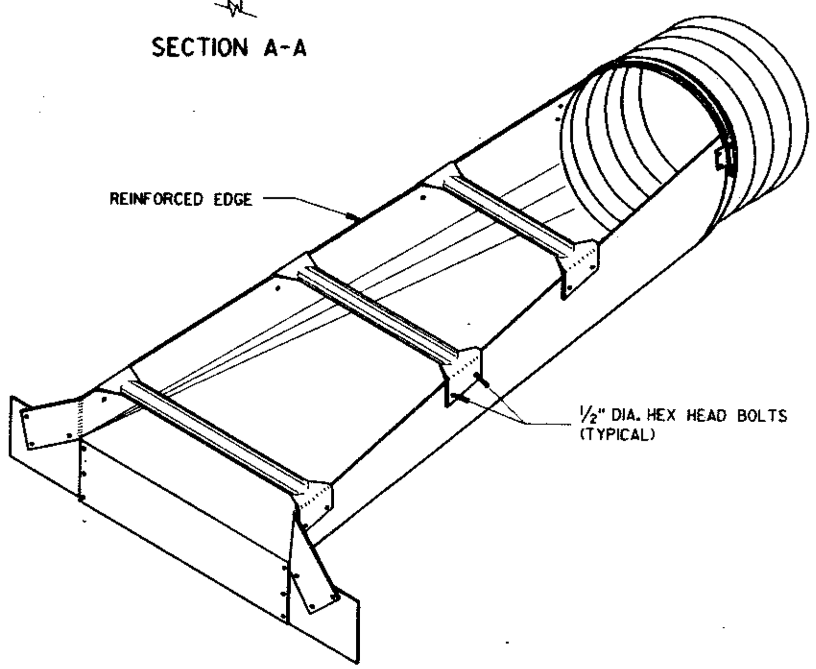
SECTION A-A



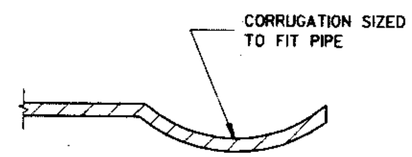
DETAIL OF SAFETY BAR

STEEL APRON ENDWALLS FOR PIPE ARCH

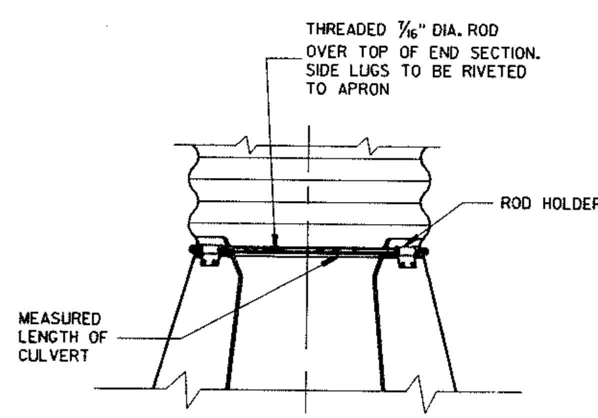
EQUIV. DIA. (inches)	(inches)		MIN. THICK. (inches)	DIMENSIONS (inches)				L DIMENSIONS	
	SPAN	RISE		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES
15	17	13	.064	8	6	23	39	6:1	18
18	21	15	.064	8	6	27	43	6:1	30
21	24	18	.064	8	6	30	46	6:1	48
24	28	20	.064	8	6	34	50	6:1	60
30	35	24	.079	12	9	41	65	6:1	84
36	42	29	.109	12	9	48	72	6:1	114
42	49	33	.109	16	12	55	87	6:1	138
48	57	38	.109	16	12	63	95	6:1	168
54	64	43	.109	16	12	70	102	5.45 TO 1	180



ISOMETRIC VIEW



SECTION B-B



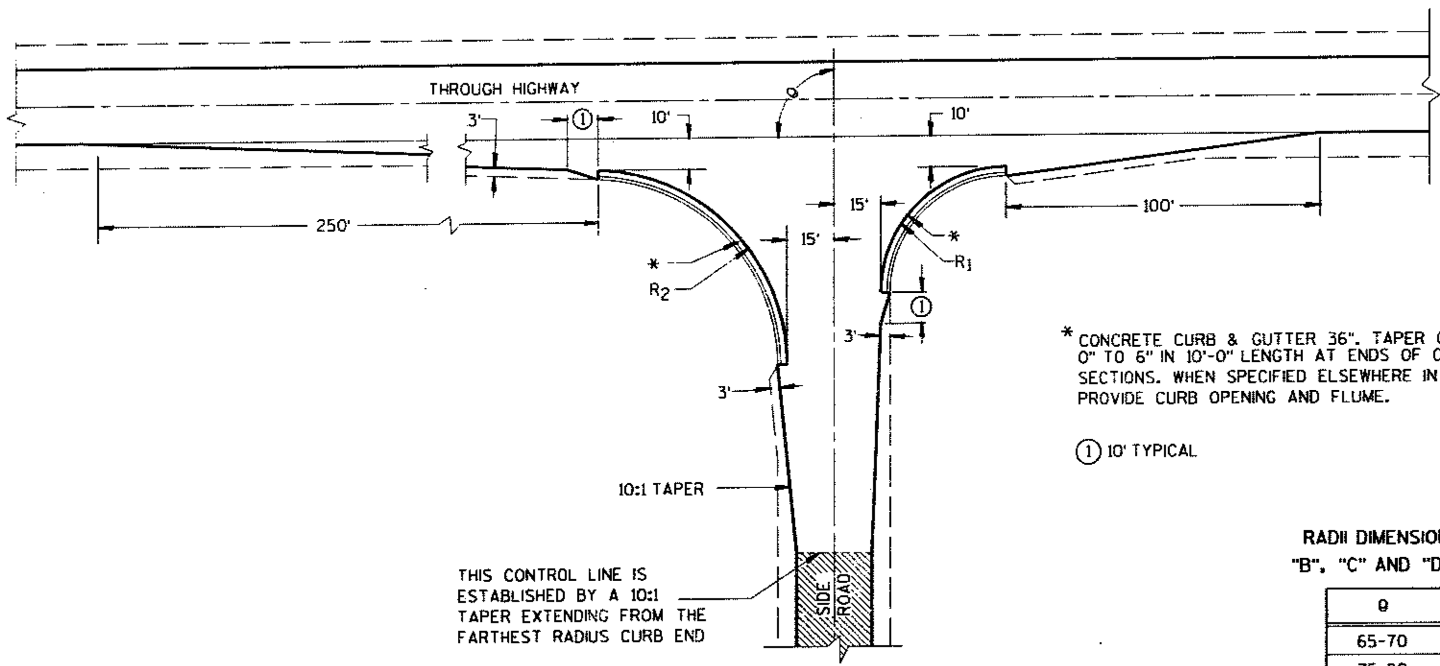
TYPE 2
CONNECTION DETAIL

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/24/84
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

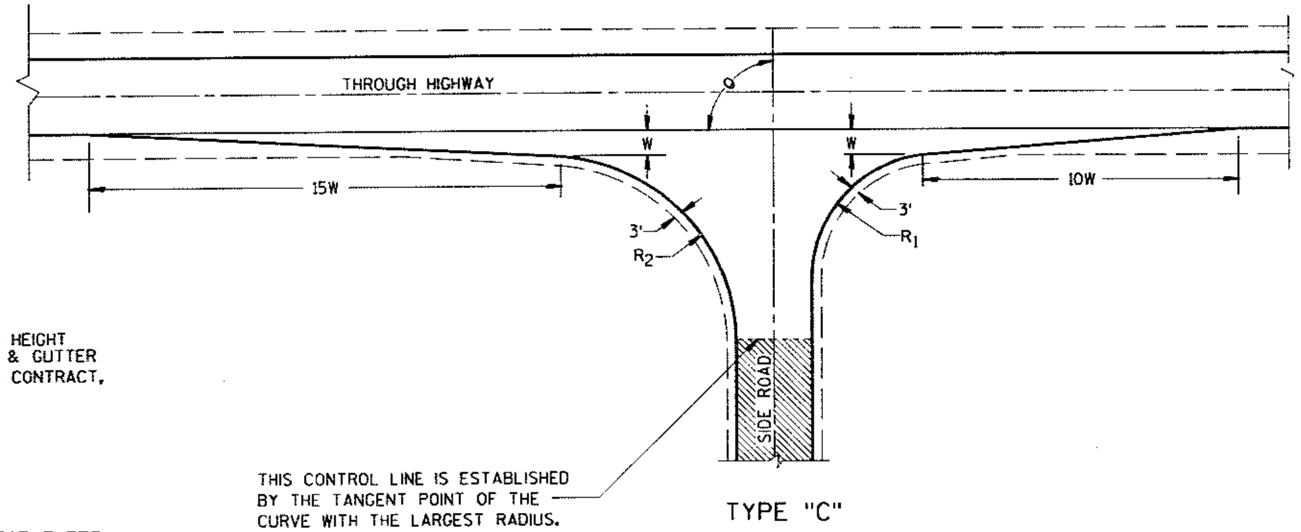
S.D.D. 8 F 7-2



TYPE "B"

* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

(1) 10' TYPICAL



TYPE "C"

RADII DIMENSIONS FOR TYPES "B", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
75-80	40	70
85-90	40	60
100	50	55
105-110	60	45

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

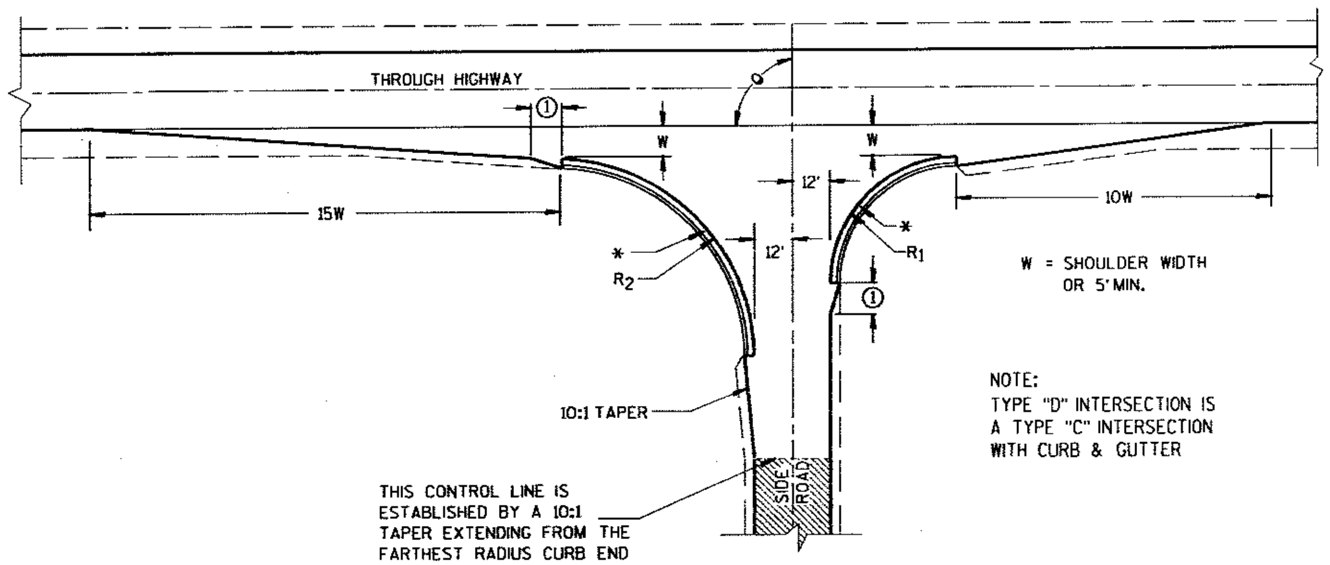
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



TYPE "D"

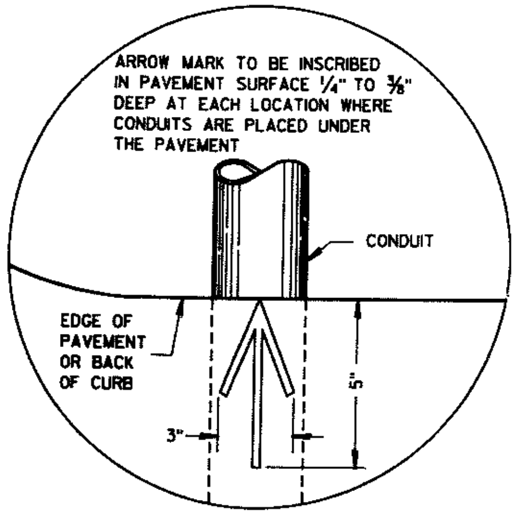
NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B","C" AND "D"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

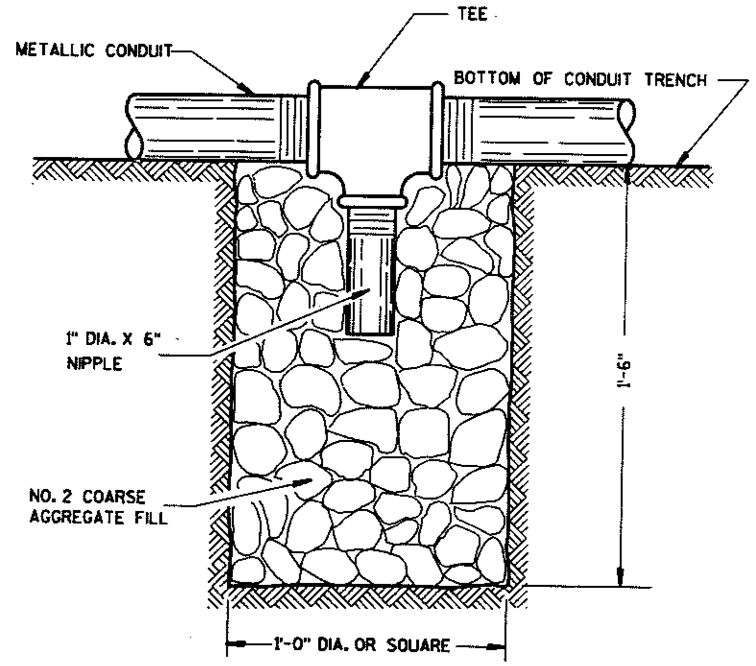
APPROVED 8/25/94
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 9 A 1-9a



PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 613.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 613.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

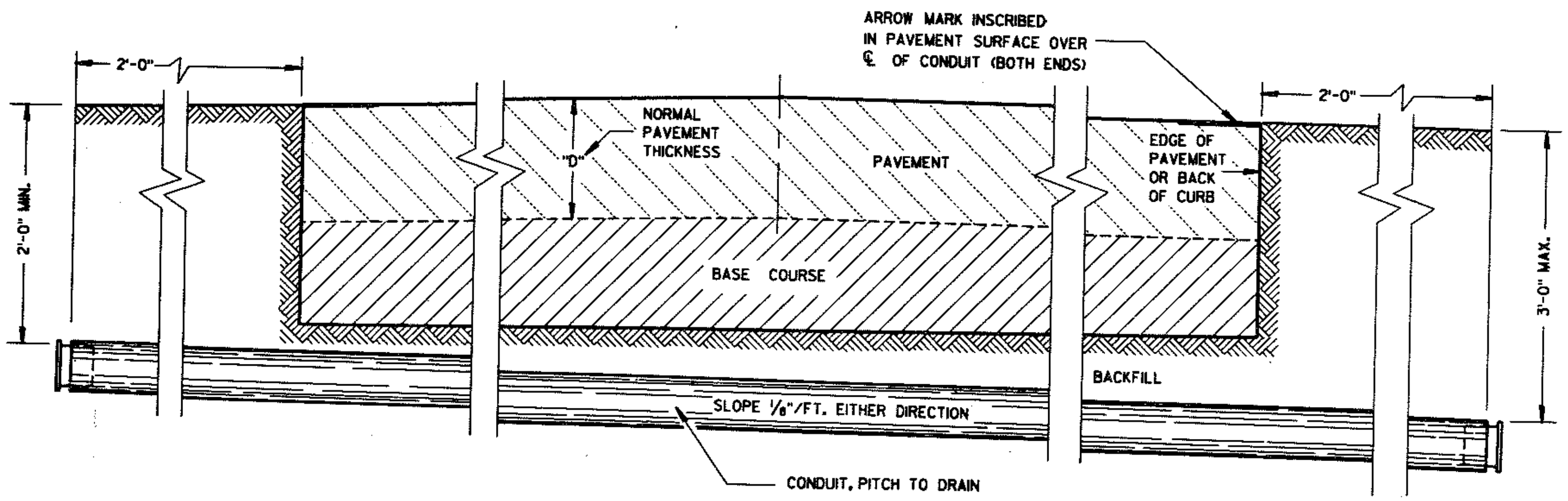
CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX).

A #12 GAUGE, GALVANIZED PULL WIRE SHALL BE INSTALLED IN EACH RUN OF CONDUIT THAT DOES NOT RECEIVE CABLE OR WIRE UNDER THIS CONTRACT. THE PULL WIRE SHALL BE DOUBLED BACK 2 FEET AT EACH END CAP OF THE CONDUIT RUN.

BENDING OF PVC SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)



SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 7/1/92 DATE — Dale Miller — STATE ELECTRICAL ENGR FOR HWYS 9/15/92 DATE — Arthur Rusch — STATE TRAFFIC ENGINEER FOR HWYS FHWA

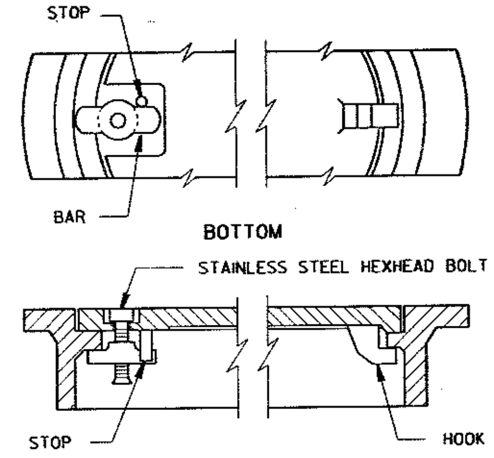
S.D.D. 9 B 2-5

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		TYPE OF PIPE						
		CORRUGATED STEEL						POLYETHYLENE SDR 32.5
PIPE DIAMETER (INSIDE)	A	12	12	18	18	24	24	12
PIPE LENGTH **	B	24	36	24	36	24	36	24
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.4
COVER	D	10 1/4	10 1/4	16 1/4	16 1/4	22 1/4	22 1/4	10 1/4
FRAME	E	14 1/2	14 1/2	20 1/2	20 1/2	26 1/2	26 1/2	14 1/2
FRAME	F	8 1/2	8 1/2	14 1/2	14 1/2	20 1/2	20 1/2	8 1/2
FRAME	G	11 1/2	11 1/2	17 1/2	17 1/2	23 1/2	23 1/2	11 1/2
WEIGHT IN POUNDS *								
FRAME AND COVER		60	60	110	110	155	155	60

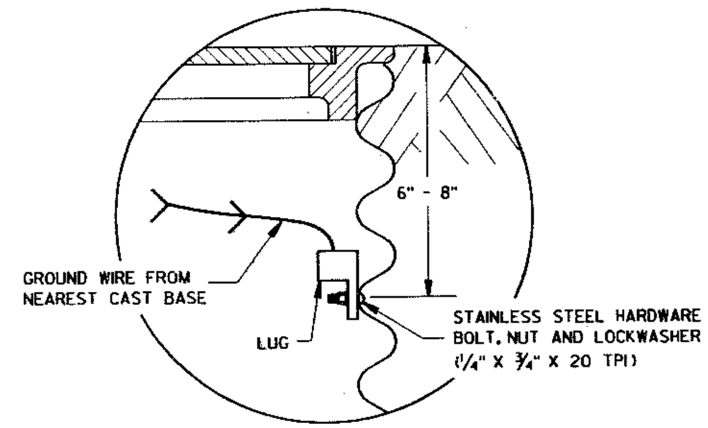
* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED)

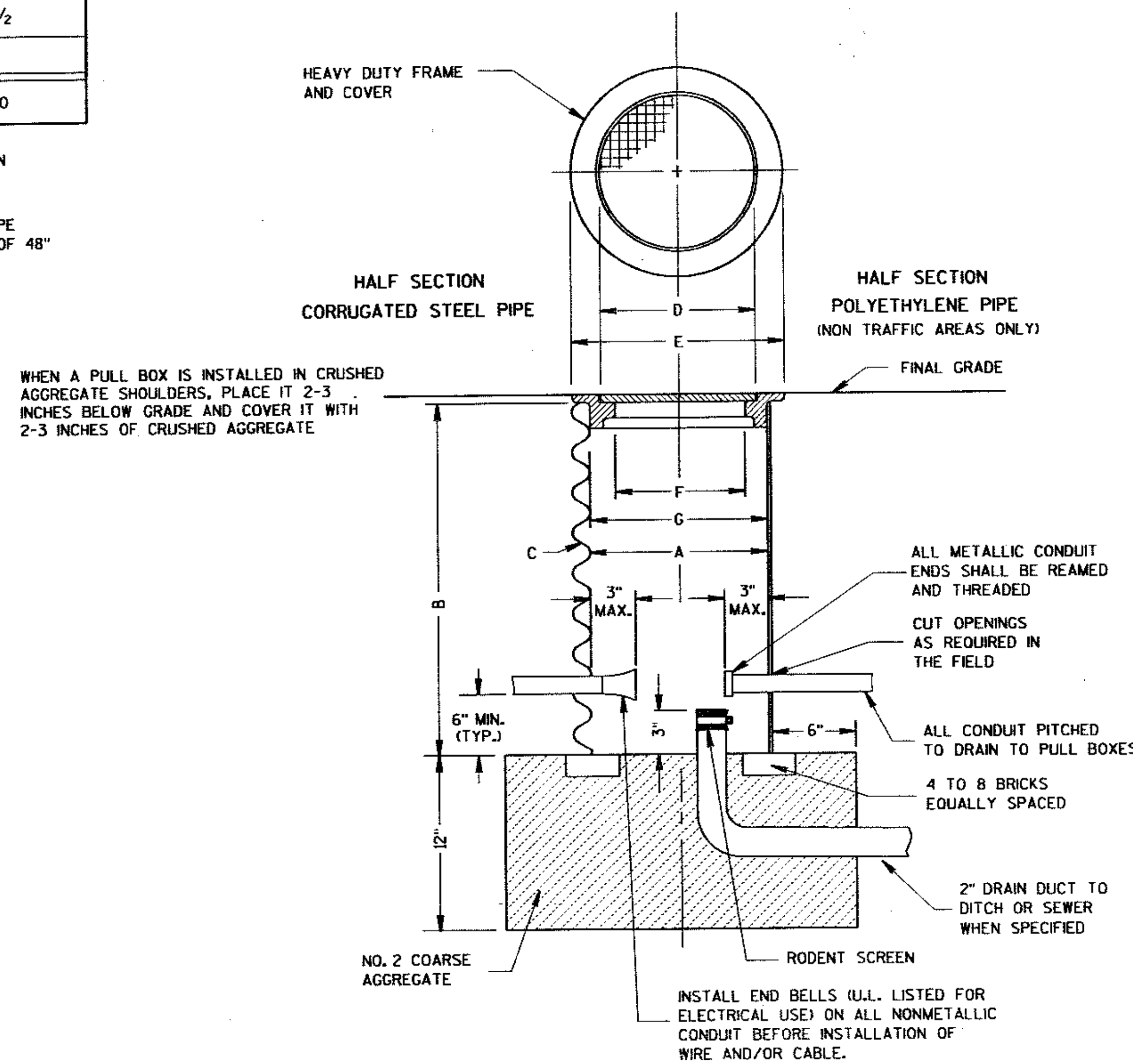


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

RODENT SCREEN SHALL BE 1/8" GALVANIZED STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

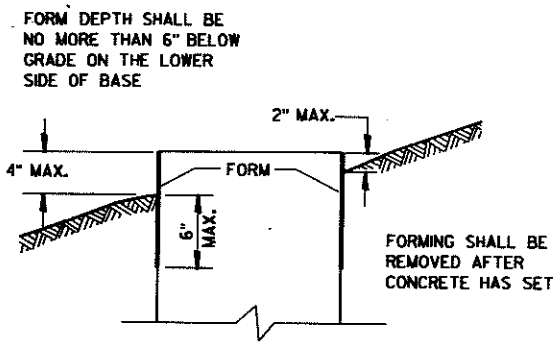
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS
FHWA

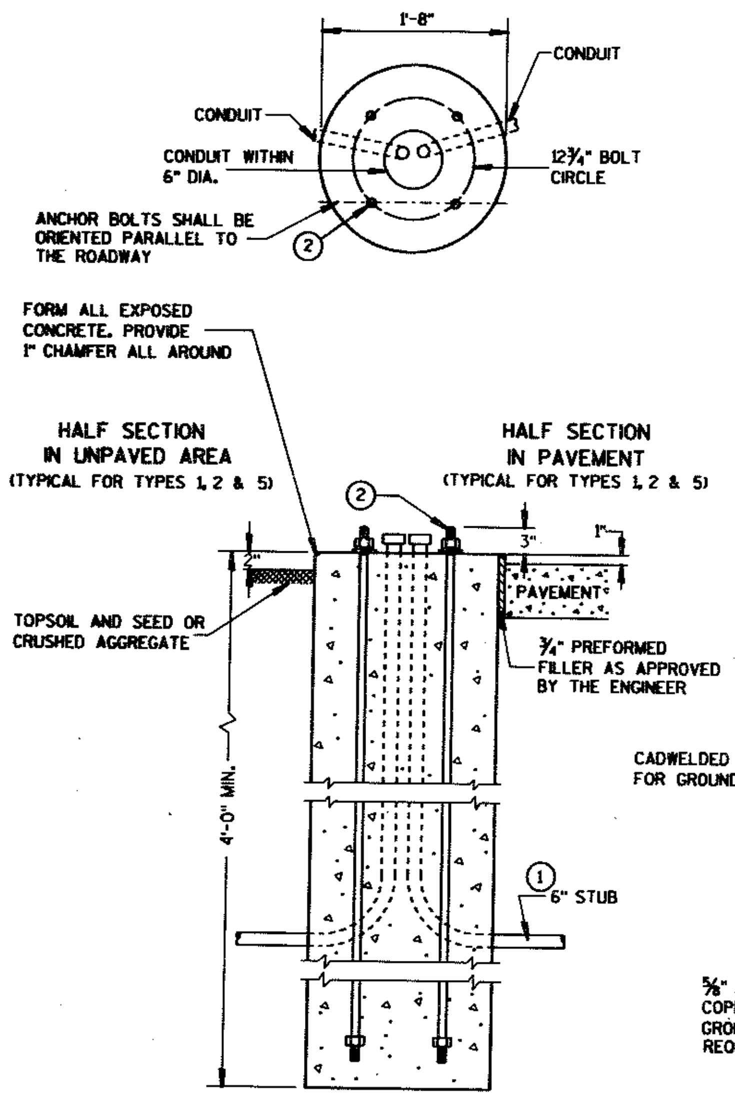
S.D.D. 9 B 4-1



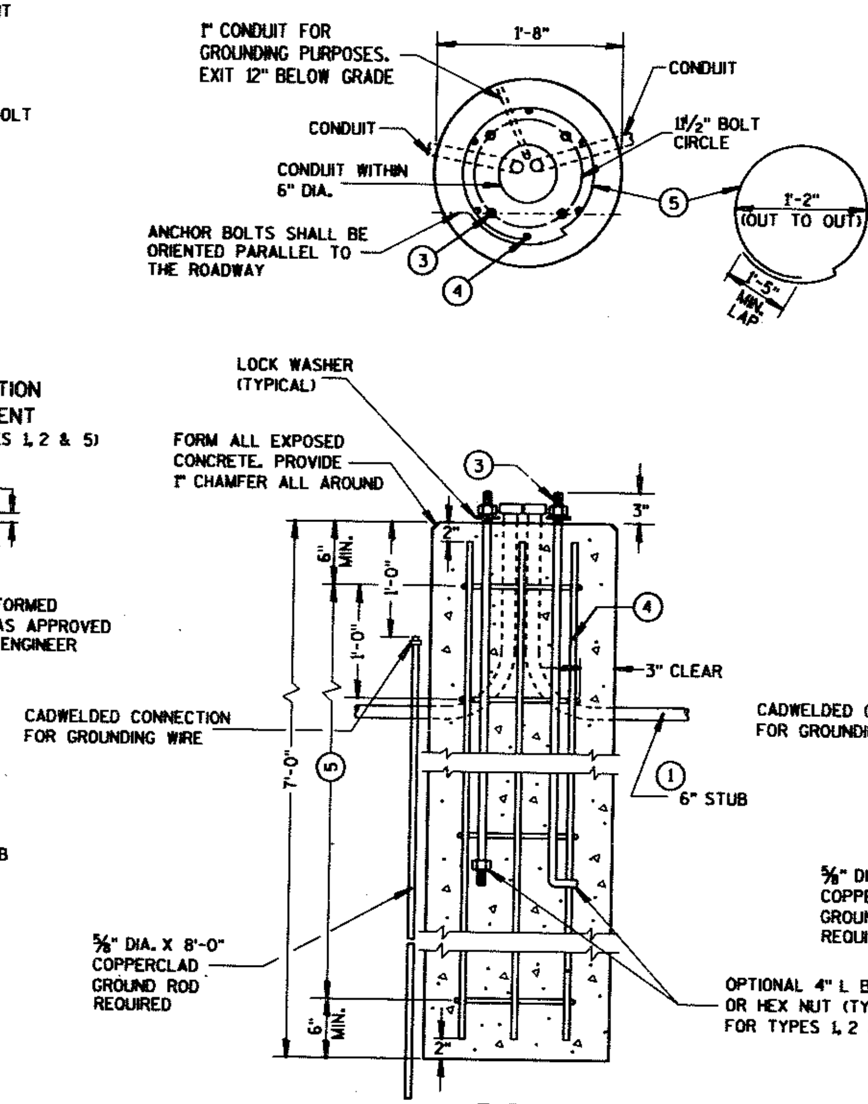
FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE 1	2	5
APPROX. CUBIC YARDS OF CONCRETE	.32	.57	.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

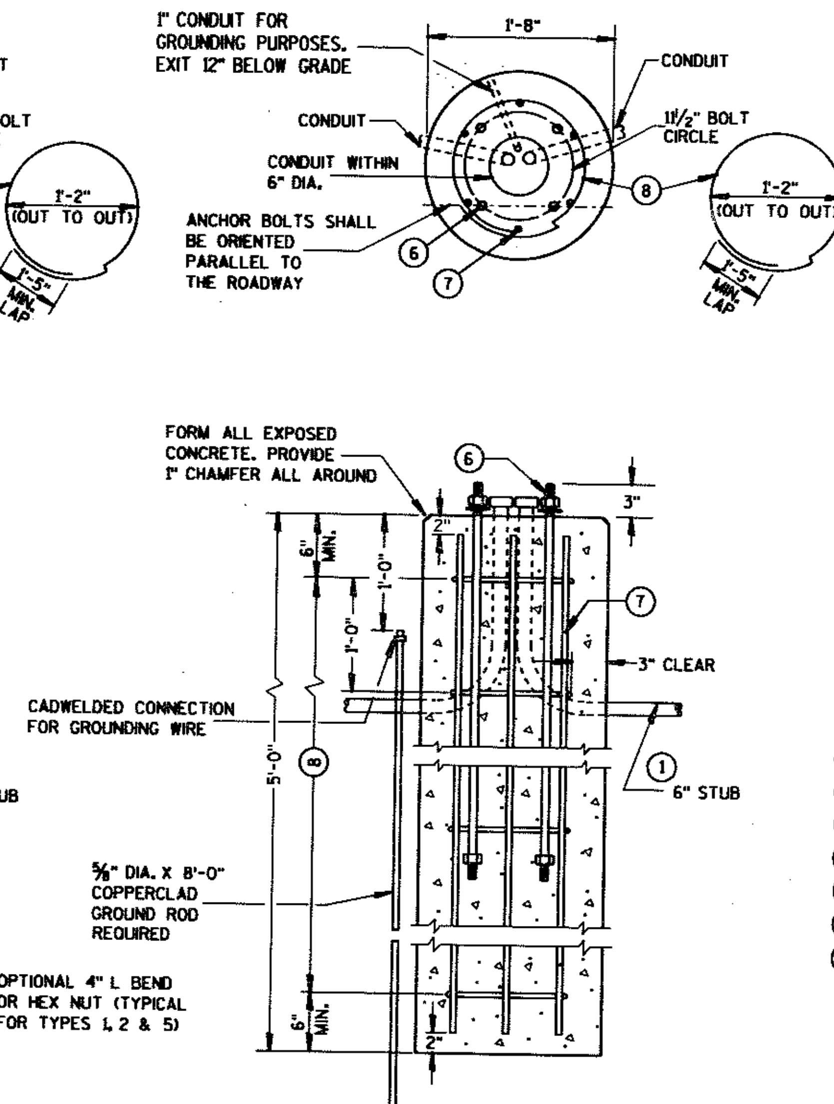
WELDING ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.



TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL BE PLUGGED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 6 AWG, STRANDED COPPER GROUNDING WIRE SHALL BE CADWELDED TO THE GROUND ROD FOR TYPE 2 AND TYPE 5 BASES.

THE GROUNDING WIRE SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE GROUNDING WIRE SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR BOLTS SHALL BE THREADED 8" IN LENGTH ON EACH END OF THE BOLT, AND BE MANUFACTURED IN ACCORDANCE WITH SECTION 640.2.9 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WHEN ANCHOR BOLTS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR BOLT BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

1. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
2. (4) 1" DIA. X 3'-6" ANCHOR BOLTS.
3. (4) 1" DIA. X 5'-0" ANCHOR BOLTS.
4. (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
5. (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
6. (4) 1" DIA. X 3'-6" ANCHOR BOLTS.
7. (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT
8. (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

CONCRETE BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS
FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS TO BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM A-449, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

4" BOLTS SHALL BE IN ACCORDANCE WITH SECTION 640.2.9 OF THE STANDARD SPECIFICATIONS, ASTM A-449 OR ASTM A-687 (GRADE 105).

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

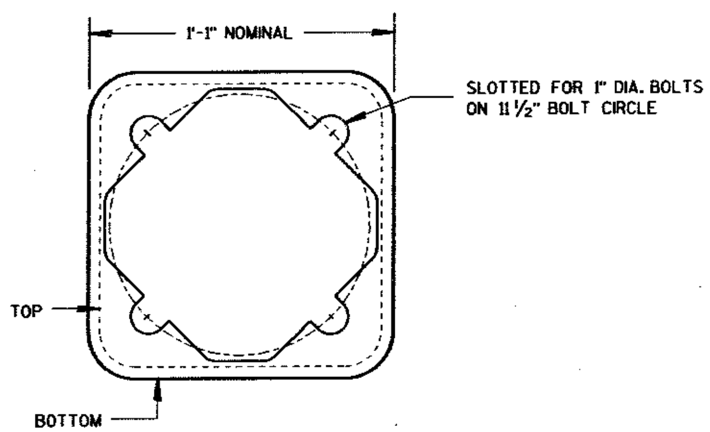
DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

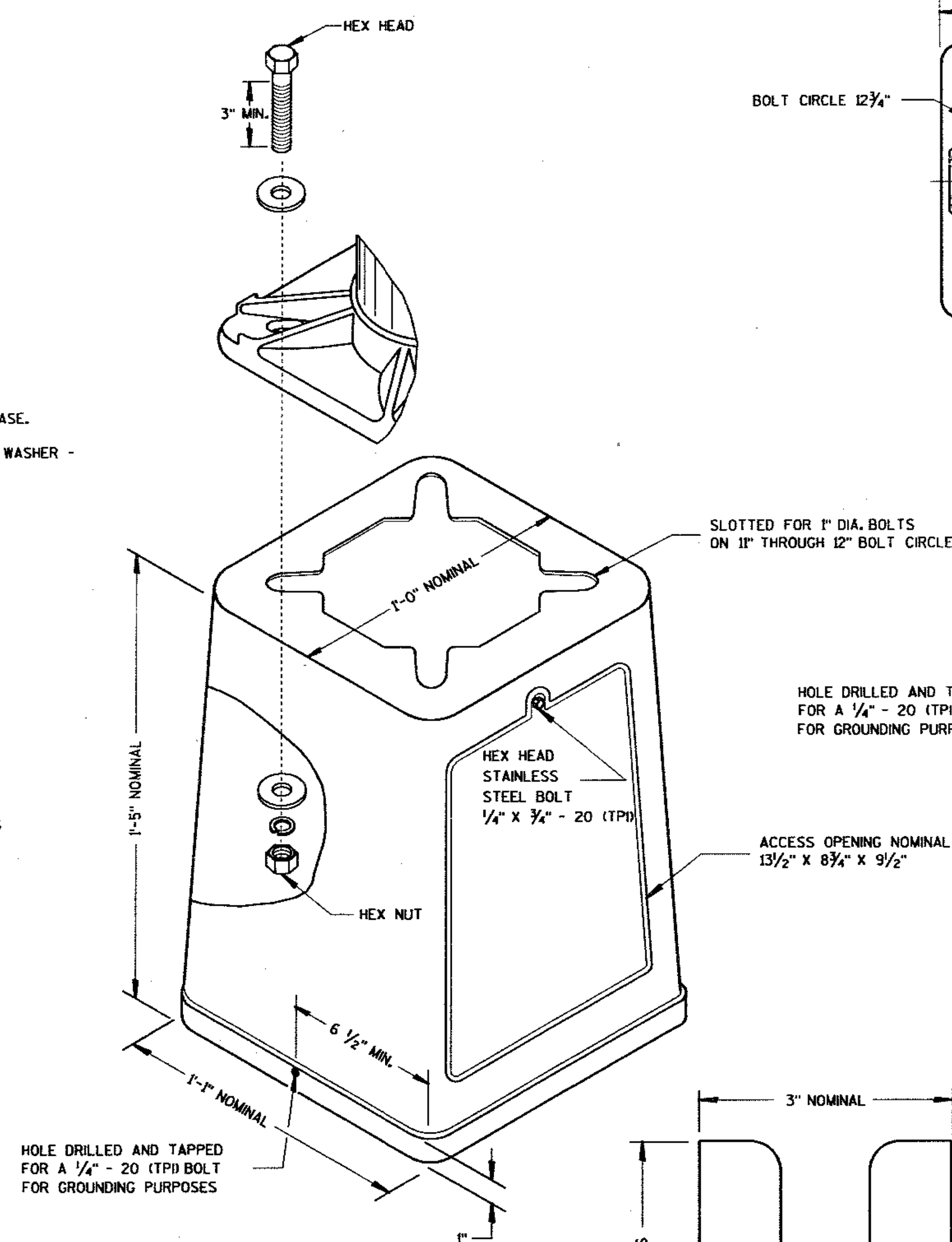
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

TEST REPORTS FROM AN FHWA APPROVED INDEPENDENT LABORATORY SHALL BE PROVIDED CERTIFYING THAT THE BASE HAS BEEN TESTED AND MEETS OR EXCEEDS ALL OF THE APPLICABLE 1985 AASHTO BREAKAWAY REQUIREMENTS. A STATEMENT OF CERTIFICATION FROM FHWA ATTESTING THAT SUCH TESTS HAVE BEEN ACCEPTED AND APPROVED SHALL BE SUPPLIED ALONG WITH THE BID.



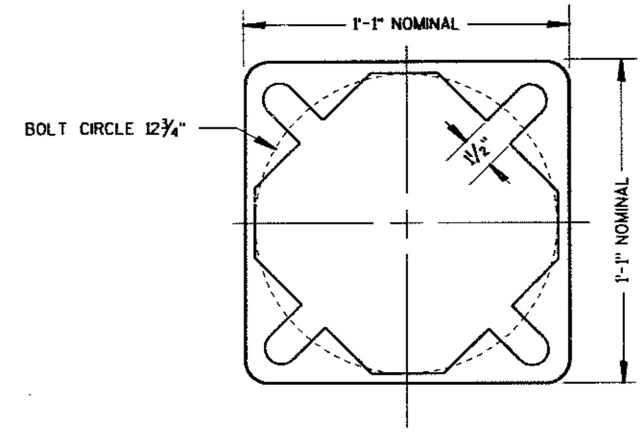
BOTTOM VIEW
(TRANSFORMER BASE)



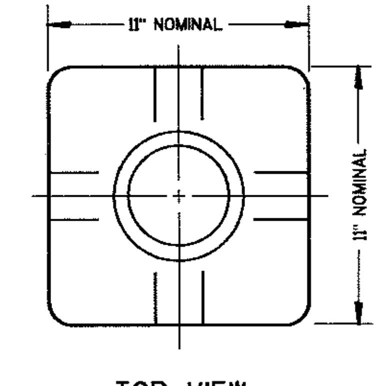
ISOMETRIC VIEW

TRANSFORMER BASE

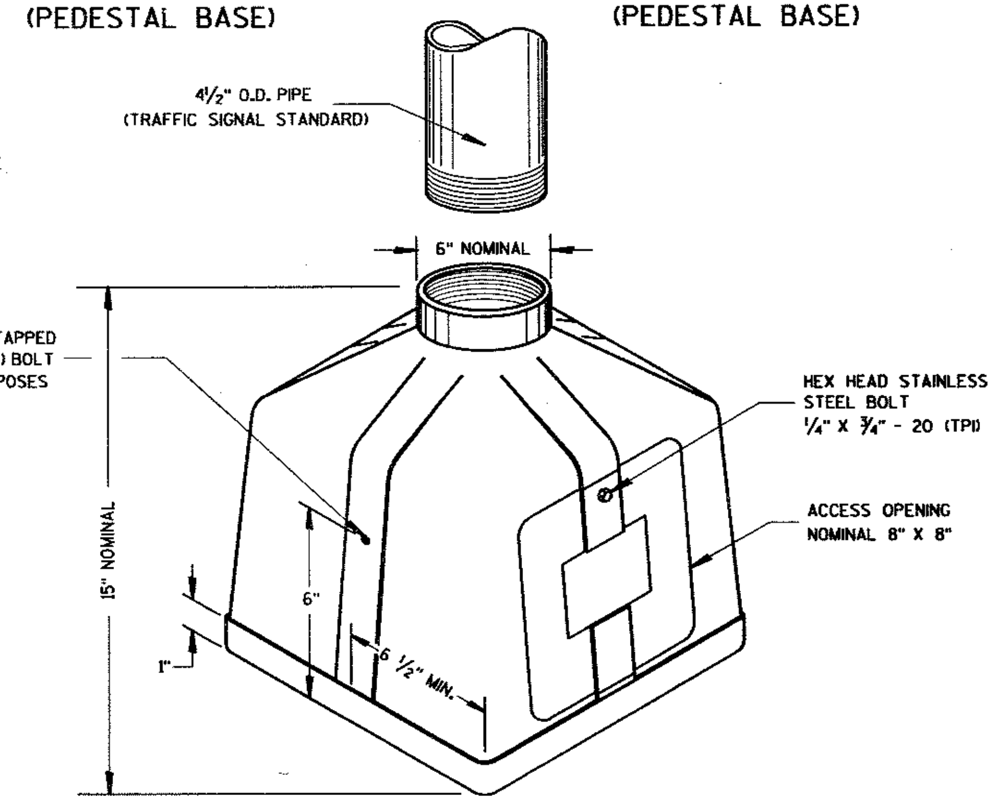
INTENDED FOR USE WITH TYPE 2, 3, 4 & 5 POLES



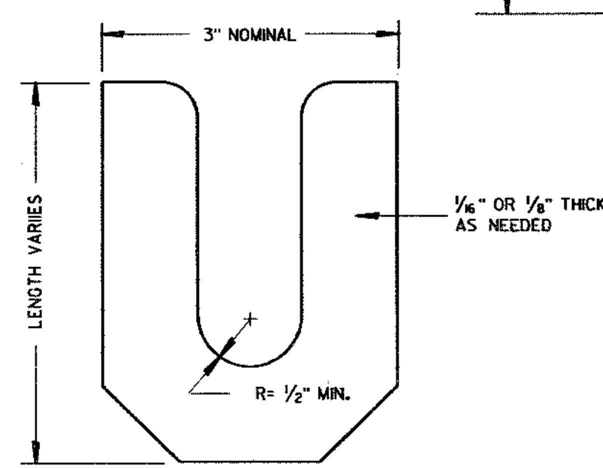
BOTTOM VIEW
(PEDESTAL BASE)



TOP VIEW
(PEDESTAL BASE)



ISOMETRIC VIEW
PEDESTAL BASE

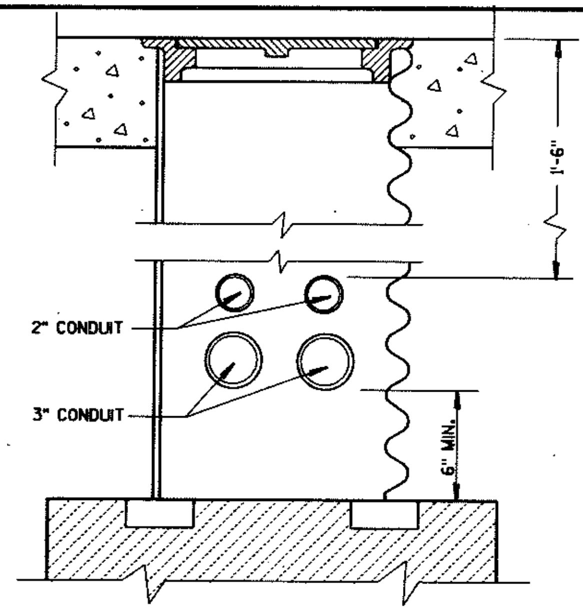


LEVELING SHIM

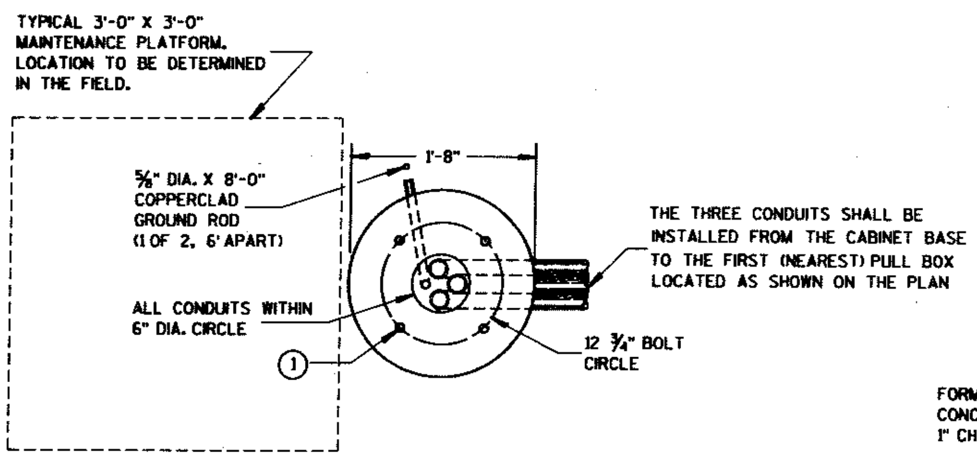
CAST BASES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS 4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS FHWA

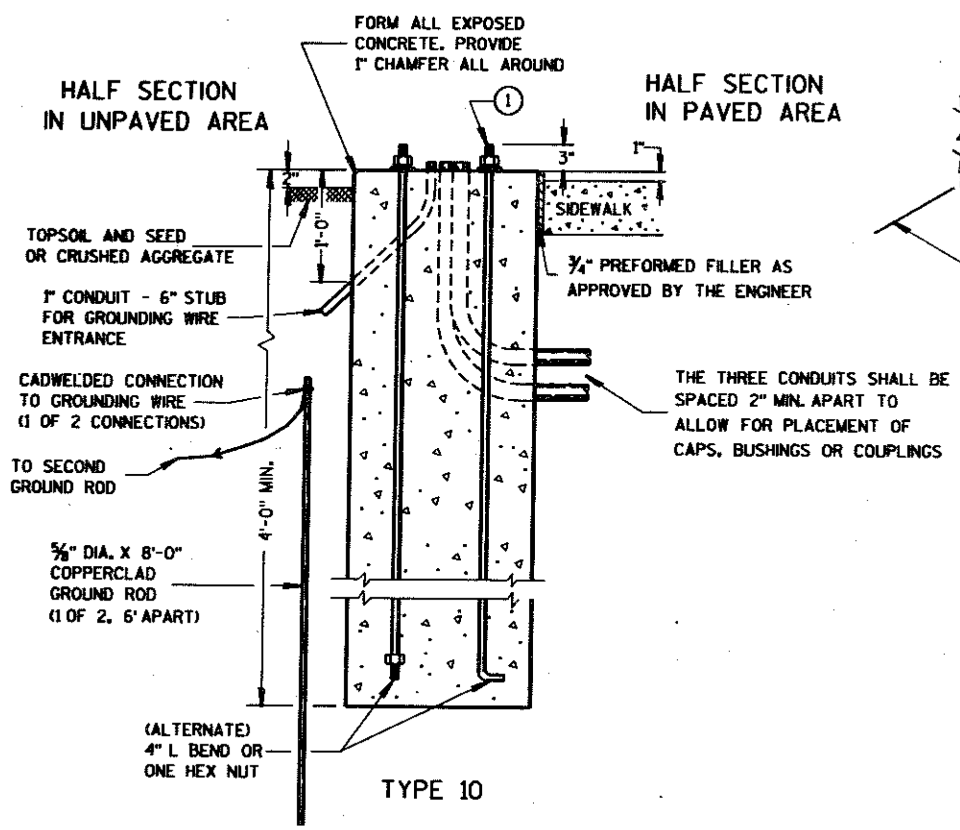
S.D.D. 9 C 3-1

CONTROL CABINET BASE TYPE	DIMENSIONS H	I	J	K	C.Y. CONCRETE (APPROX.)
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.32

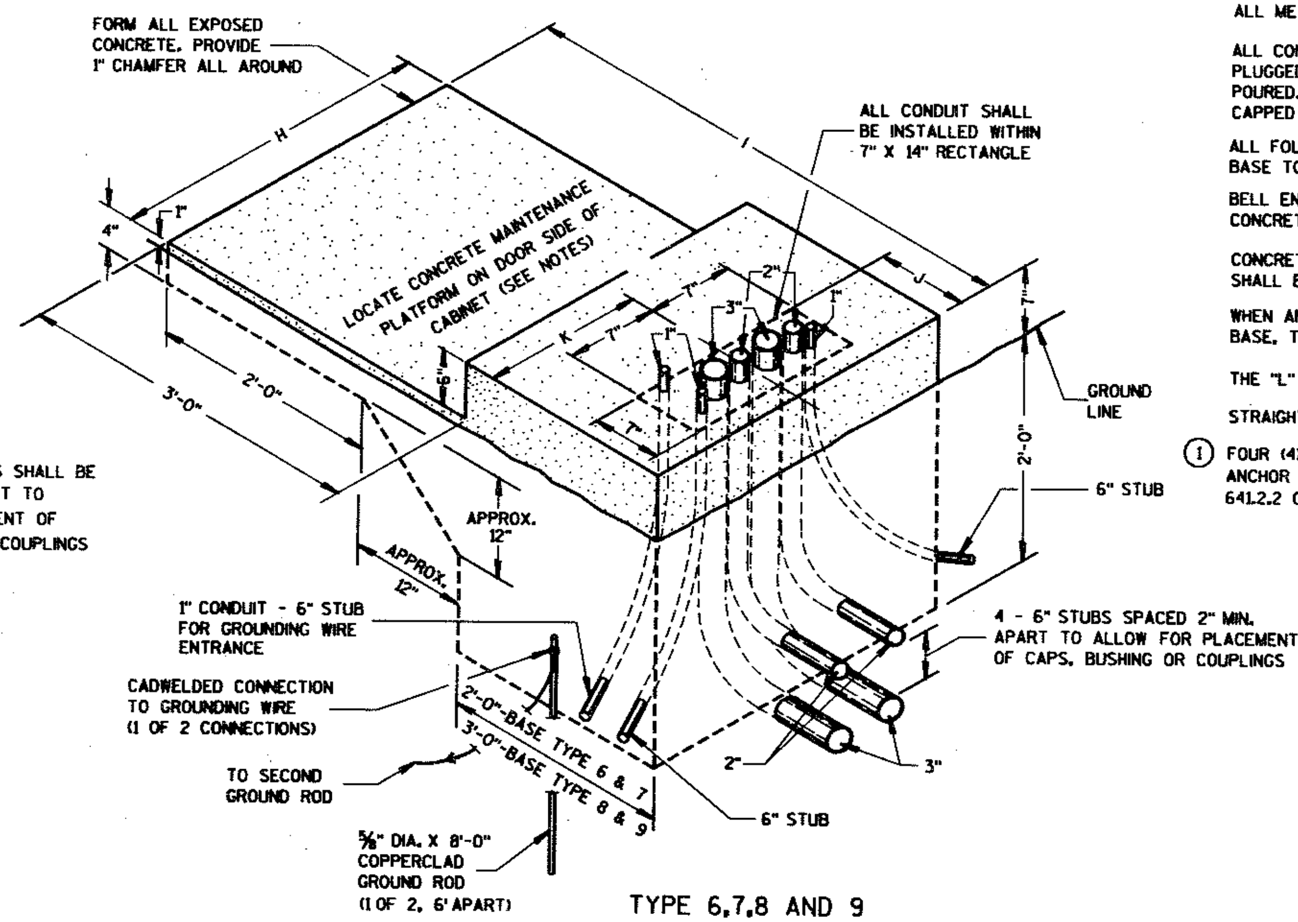


CONDUIT LOCATIONS IN 24" X 36" PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)





TYPE 10



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR BOLTS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR BOLTS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR BOLT BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR BOLTS SHALL BE THREADED 8" IN LENGTH ON EACH END OF THE BOLT.

1 FOUR (4) ANCHOR BOLTS, 1" DIA. X 3'-6"
ANCHOR BOLTS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 640.2.9 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449.

CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS
FHWA

S.D.D. 9 C 5-1

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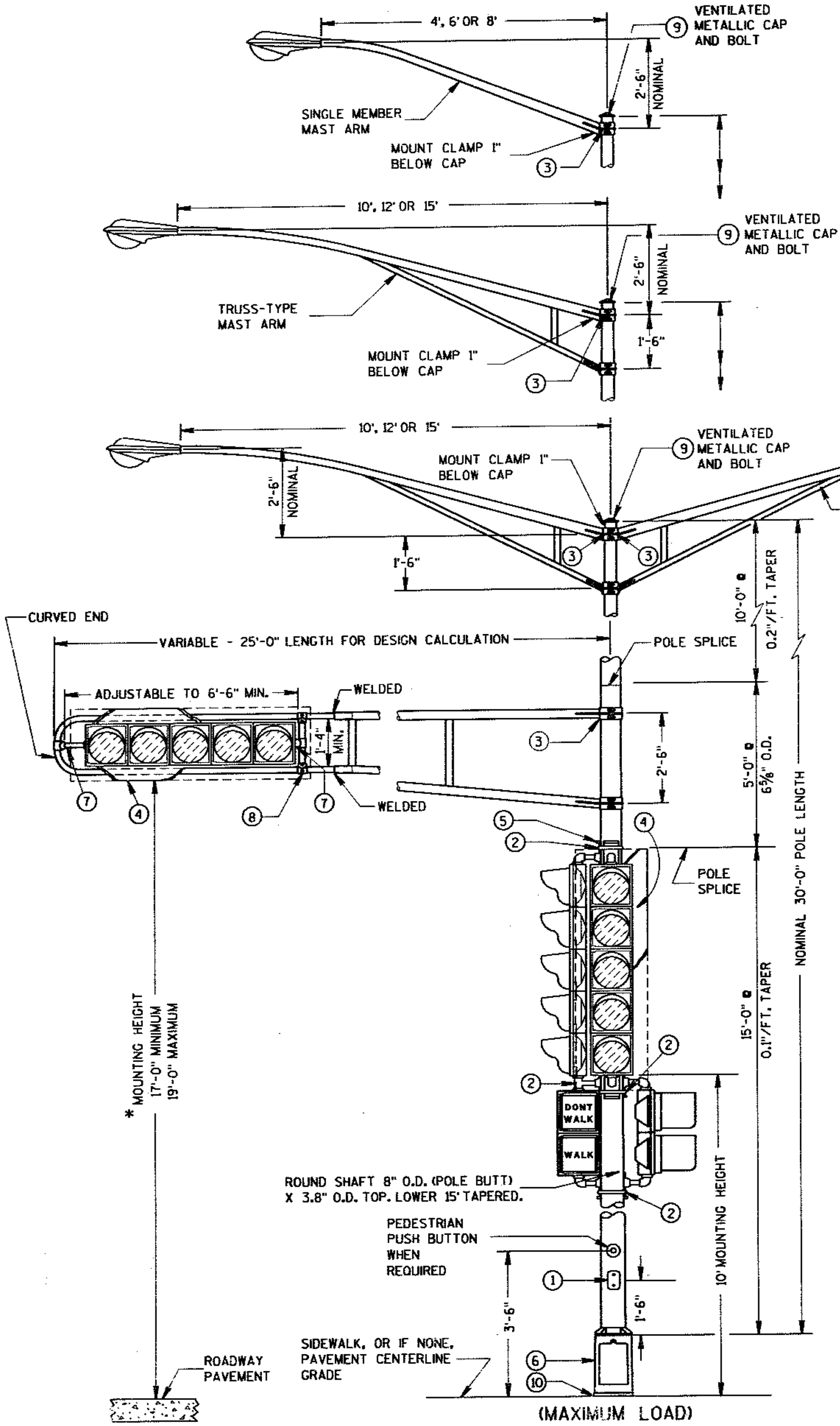
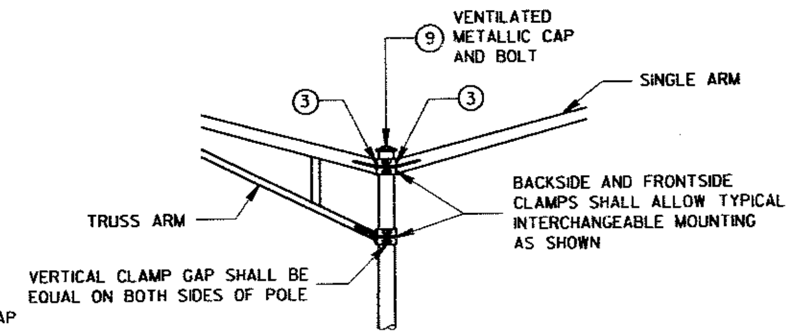
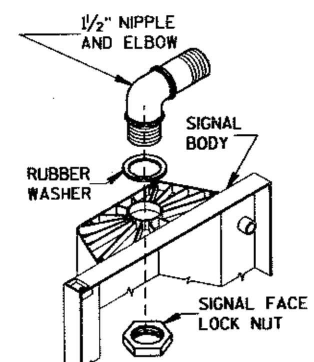


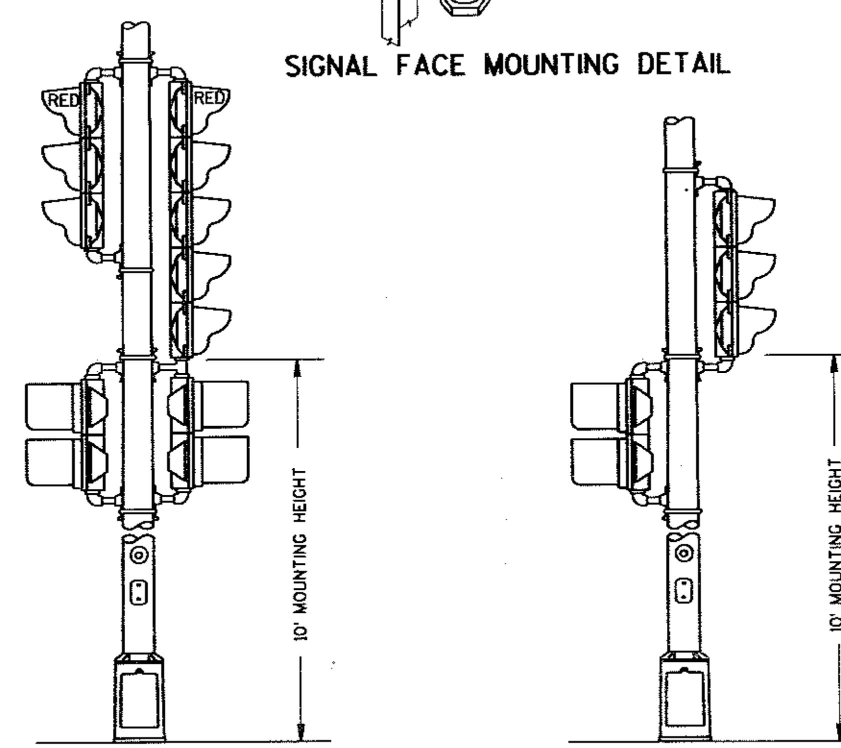


INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE
WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.



SIGNAL FACE MOUNTING DETAIL



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES

TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 3 POLE MOUNTING CONFIGURATION

GENERAL NOTES

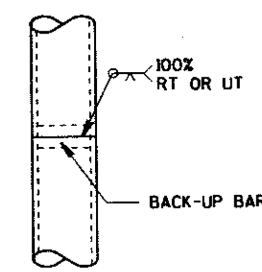
ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED FOR TWIN 15' ARMS WITH LUMINAIRES.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE SPECIAL PROVISIONS).
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. BACKBOARDS ARE REQUIRED AT ALL TIMES ON TROMBONE MAST ARM MOUNTED SIGNAL FACES. VERTICAL MOUNTED SIGNAL FACES WITH BACKBOARDS REQUIRED ARE LOCATED AS SHOWN ON THE PLANS. BACKBOARDS ARE REQUIRED TO SURROUND SIGNAL FACES. BACKBOARDS SHALL EXTEND 5" BEYOND EXTREMITIES OF THE SIGNAL FACE.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. 1½" PIPE THREAD ON THE MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE. NIPPLE SHALL BE 1½" X 2".
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO SHIPMENT OF THE POLES. VERIFICATION AND APPROVAL OF THE TESTING CERTIFICATION FROM THE MANUFACTURER SHALL BE COMPLETED BY THE CENTRAL OFFICE BRIDGE SECTION.



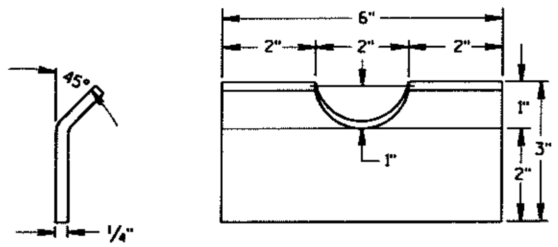
POLE SPLICE DETAIL

NOTE:
SHEET SDD 9 E 1-1e IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3

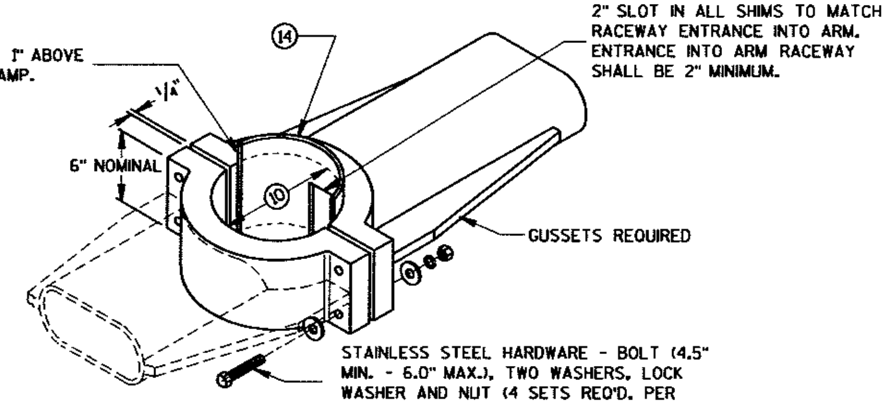
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-1b

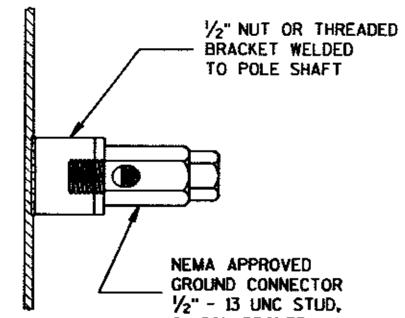


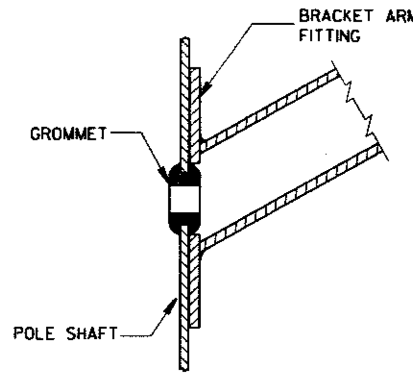
END VIEW

FRONT VIEW
RECTANGULAR CLAMP SHIM
(4 TO A SET)

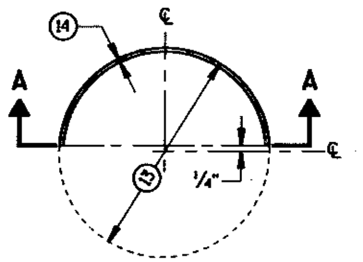


TYPICAL TROMBONE MAST ARM AND LUMINAIRE MAST ARM MOUNTING CLAMP





TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



PLAN VIEW

GENERAL NOTES

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR BOLT COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR BOLTS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

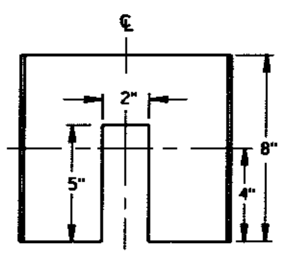
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

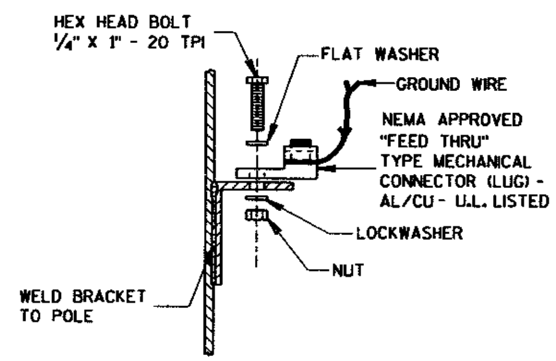
(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



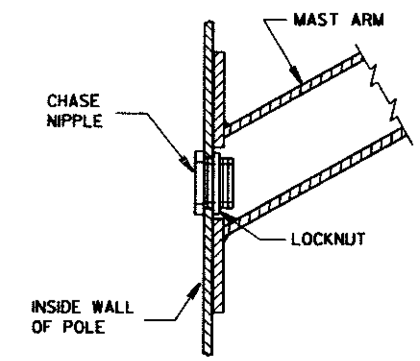
SECTION A-A

CIRCULAR CLAMP SHIM
(2 TO A SET)

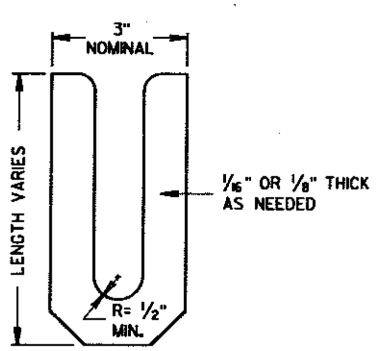


TYPICAL GROUNDING CONNECTIONS

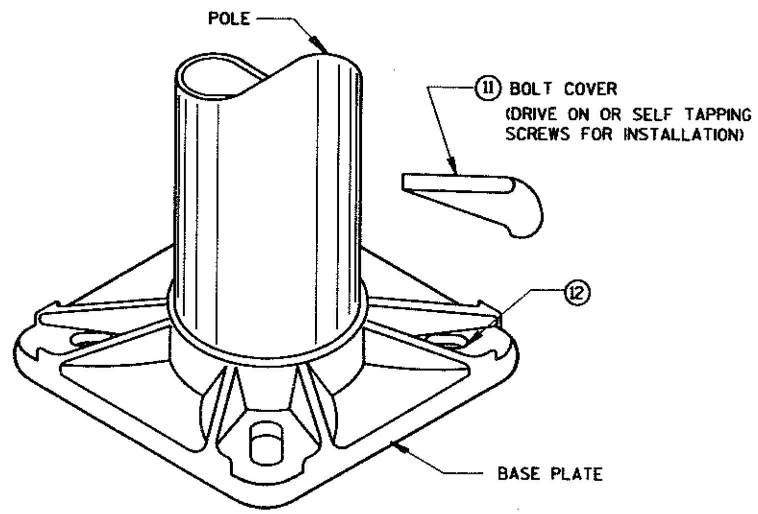
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



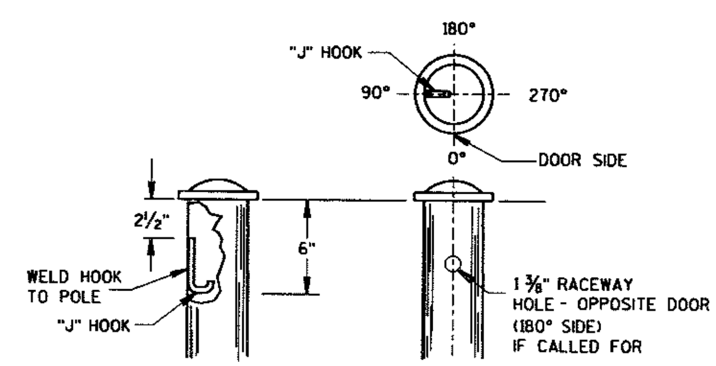
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT



LEVELING SHIM (15)



BASE PLATE



TYPICAL "J" HOOK LOCATION

NOTE:
THIS DRAWING IS REQUIRED WHEN DRAWINGS SDD 9 E 1-1a,b,c, OR d IS CALLED FOR IN THE PLANS.

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

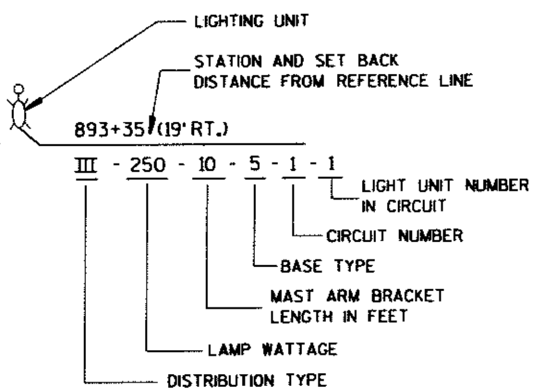
APPROVED

4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS

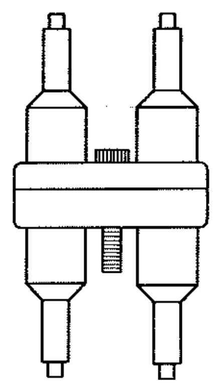
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS

FHWA

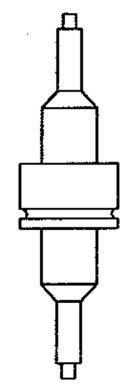
S.D.D. 9 E 1-1e



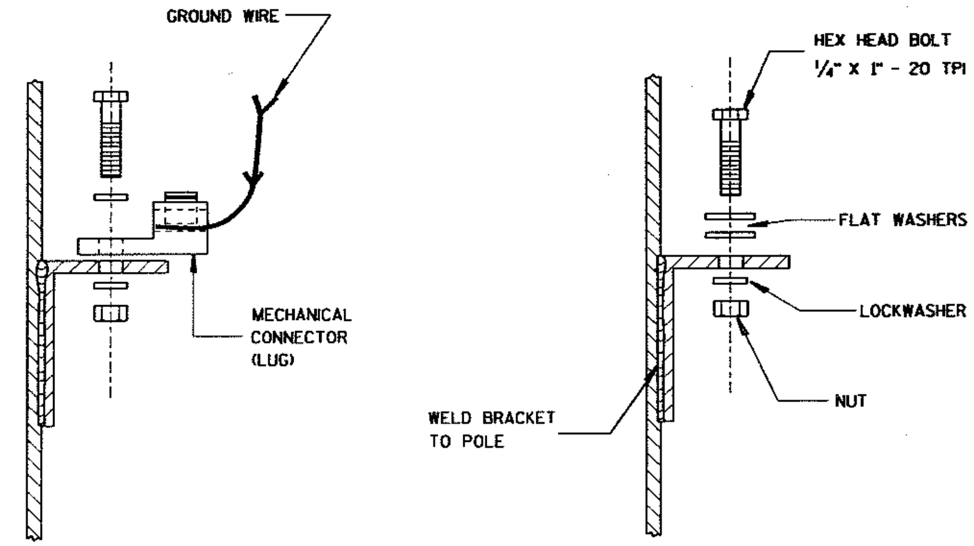
LIGHTING UNIT CODE



DETAIL "A"
DOUBLE POLE



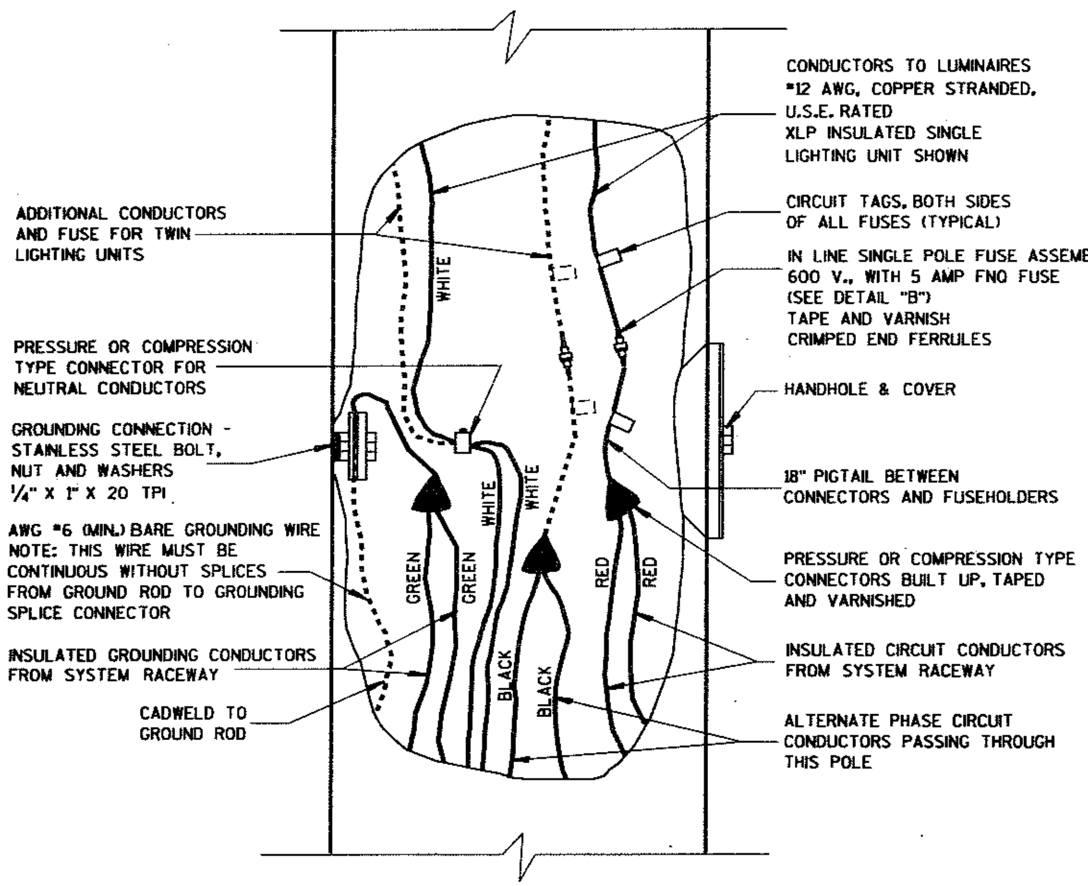
DETAIL "B"
SINGLE POLE



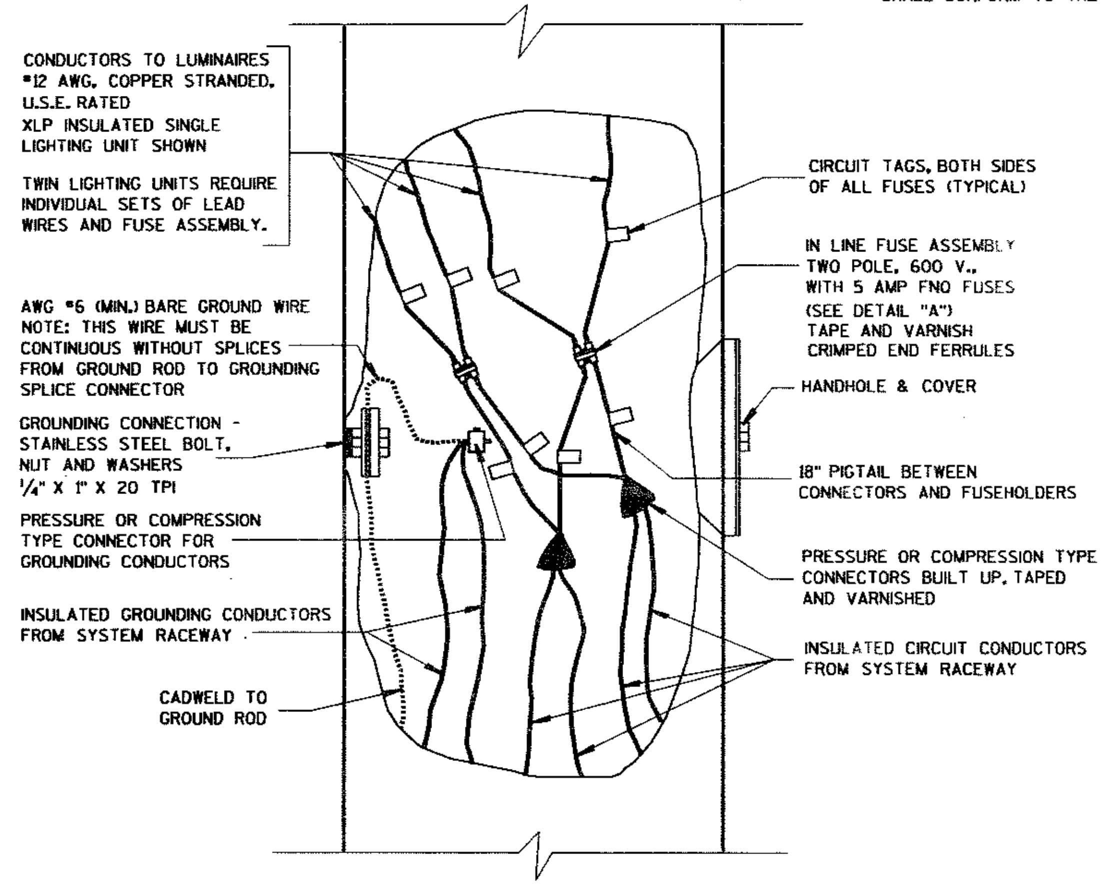
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

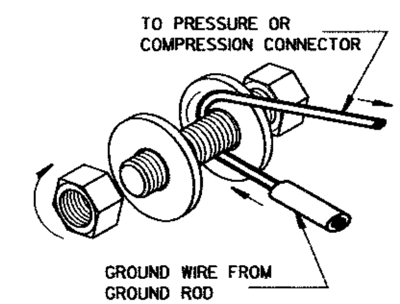
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.



3 WIRE - 120, 240 OR 480 VOLTS TO GROUND
2 WIRE - 120 VOLTS TO GROUND

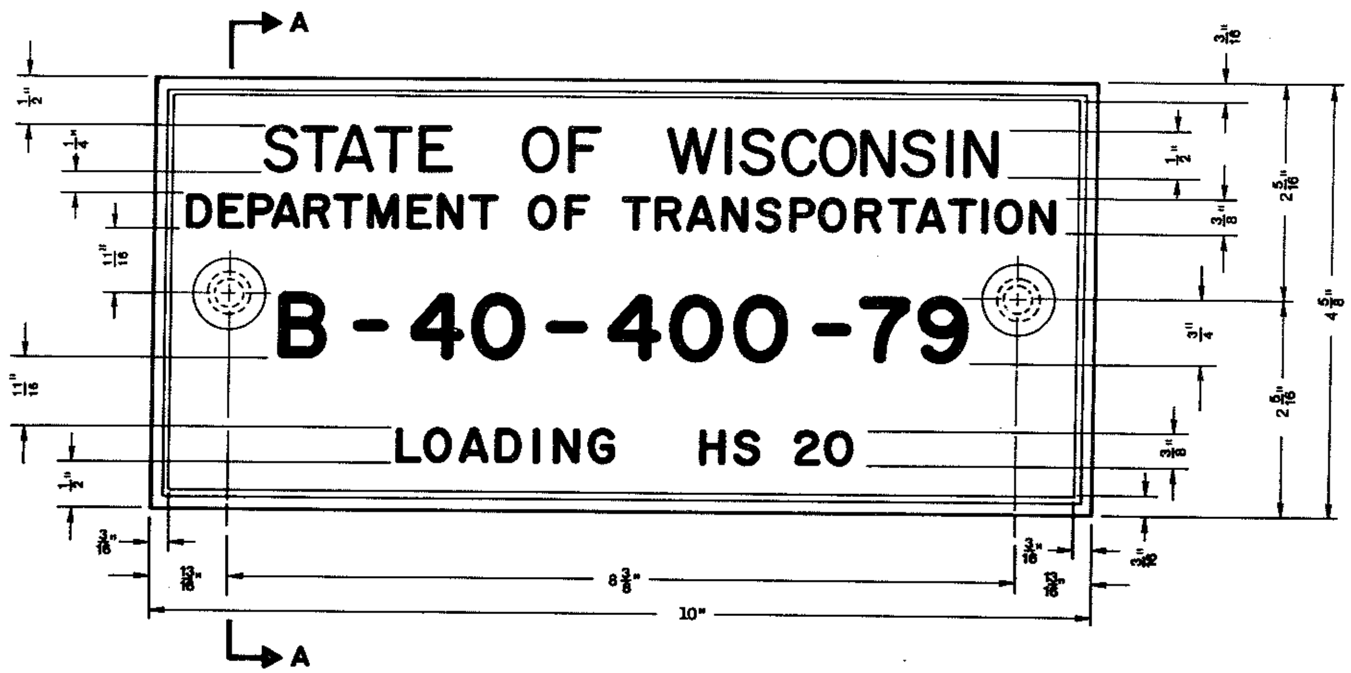


2 WIRE - 240 OR 480 VOLTS (UNGROUNDED)

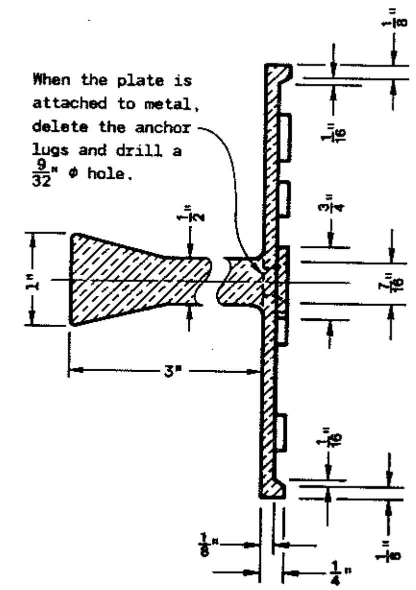


GROUND WIRE INSTALLATION BETWEEN TWO WASHERS

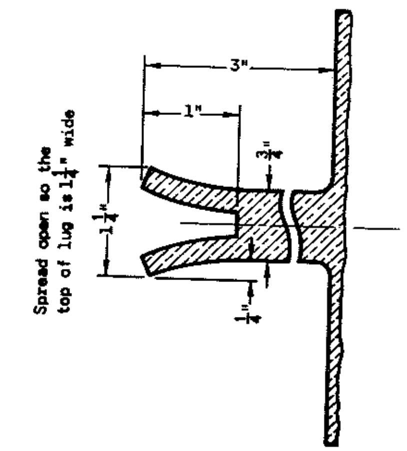
NON-FREEWAY LIGHTING UNIT POLE WIRING
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS
FHWA



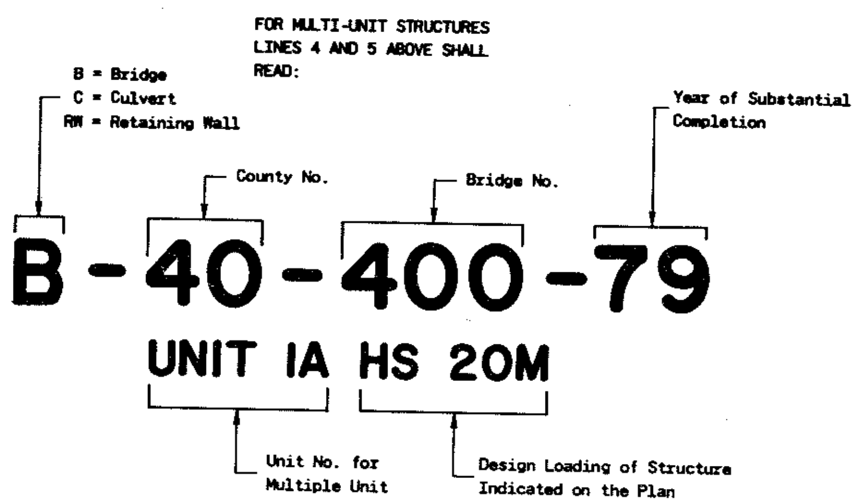
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



SECTION A-A



ALTERNATE LUG



NUMBERING AND LOADING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

Name Plates to be installed on Bridges, Culverts, and Retaining Walls shall conform to the requirements of Section 506.2.4 of the Standard Specifications.

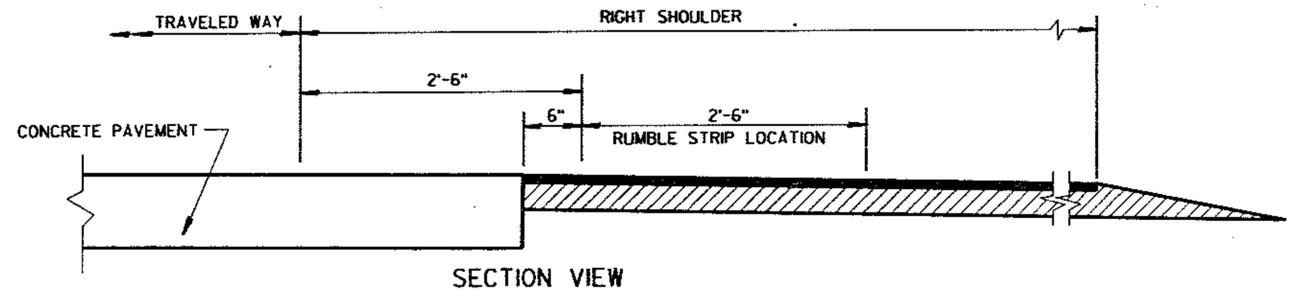
The Bridge Number and Design Loading shown on this drawing are examples only. See Construction Plans for individual numbering and design loading.

NAME PLATE
(STRUCTURES)

State of Wisconsin
Department of Transportation
Division of Transportation Facilities

APPROVED
9-27-79
DATE
CHIEF DESIGN ENGINEER
FHWA

S.D.D. 12 A 3-4



SECTION VIEW
(CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)

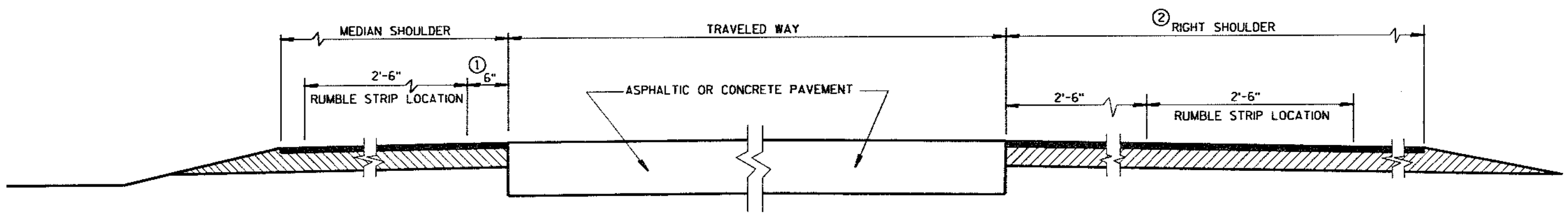
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

FINISH ROLLING OF THE ASPHALTIC SHOULDER SHALL INCLUDE THE SURFACE OVER THE RUMBLE STRIP DEPRESSIONS.

(1) 2'-6" FOR MEDIAN SHOULDERS THAT HAVE A PAVED WIDTH OF 5'-0" OR MORE.

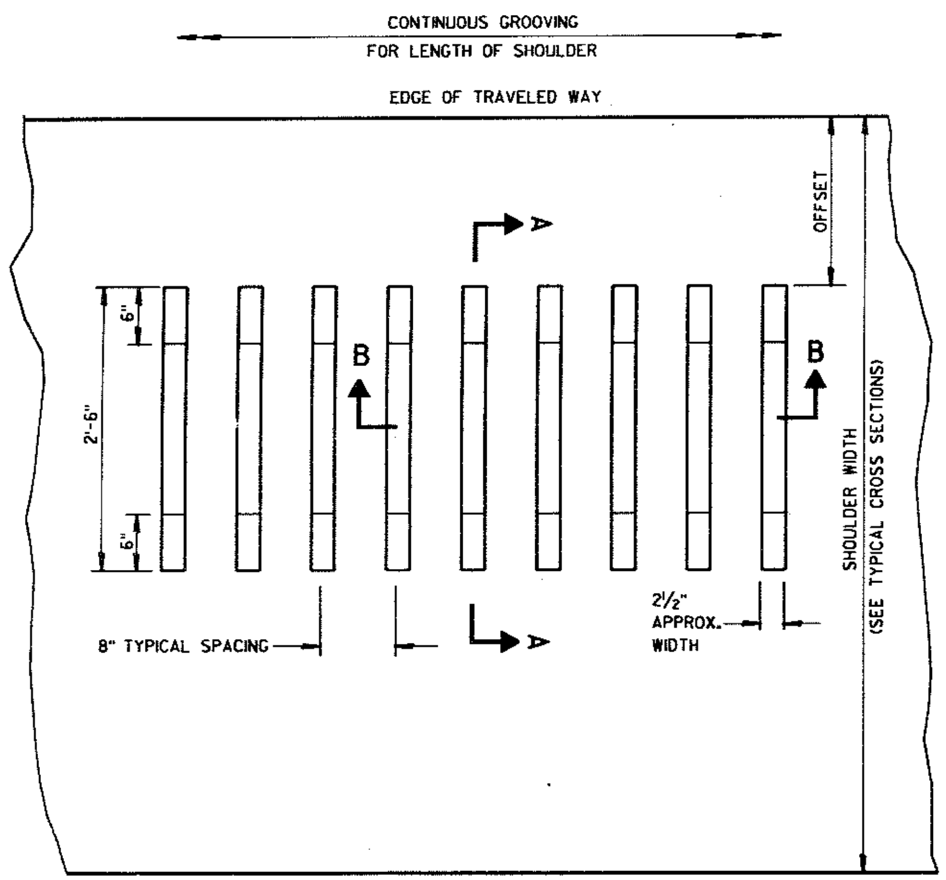
(2) DIMENSIONS ALSO APPLY WHEN RUMBLE STRIPS ARE REQUIRED IN THE RIGHT SHOULDER OF RAMPS.



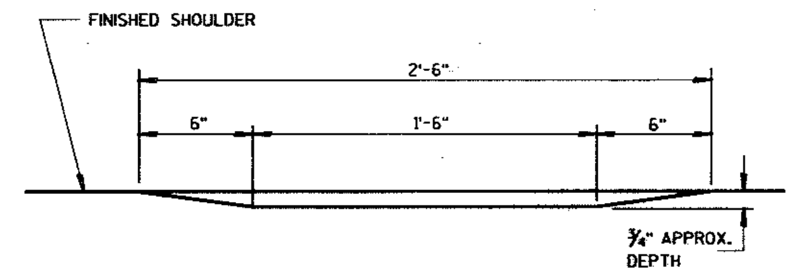
SECTION VIEW

TYPICAL LOCATIONS OF ASPHALTIC SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

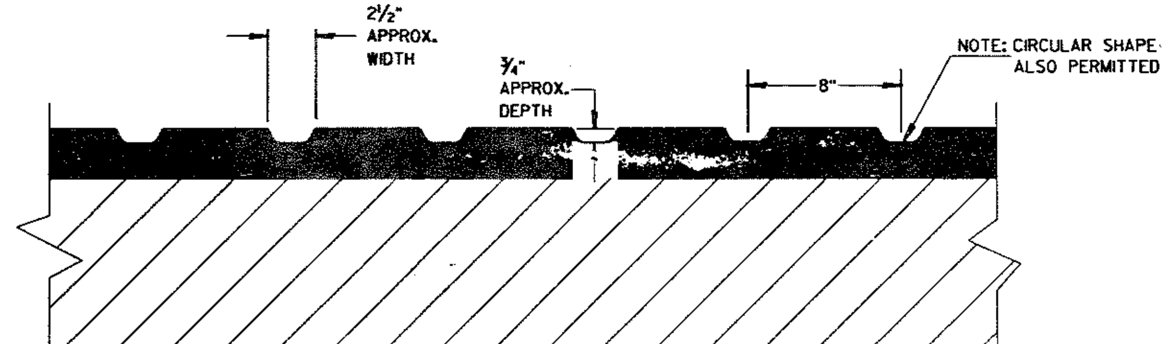
(ONE ROADWAY IS SHOWN)



PLAN VIEW

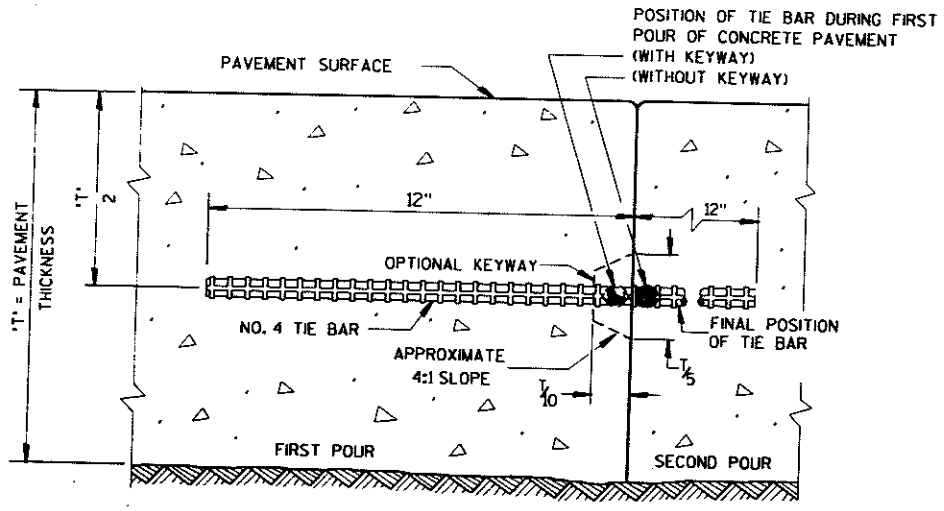


SECTION A-A

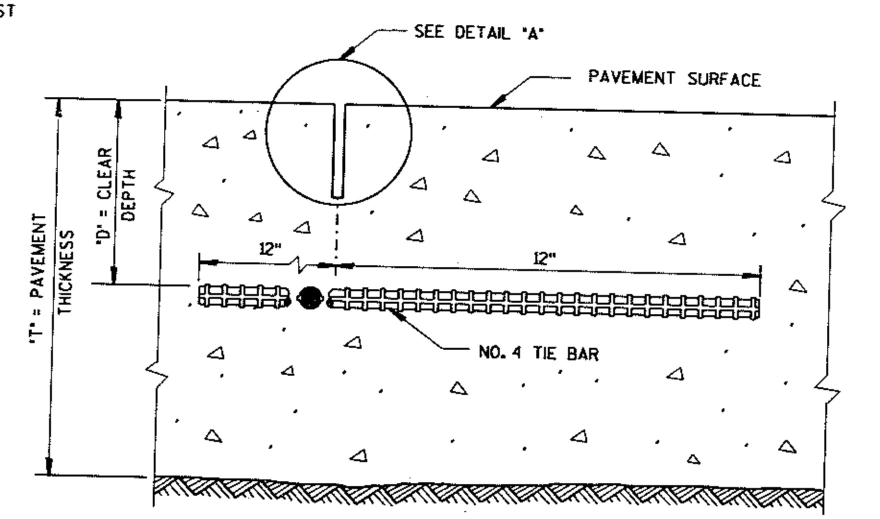


SECTION B-B

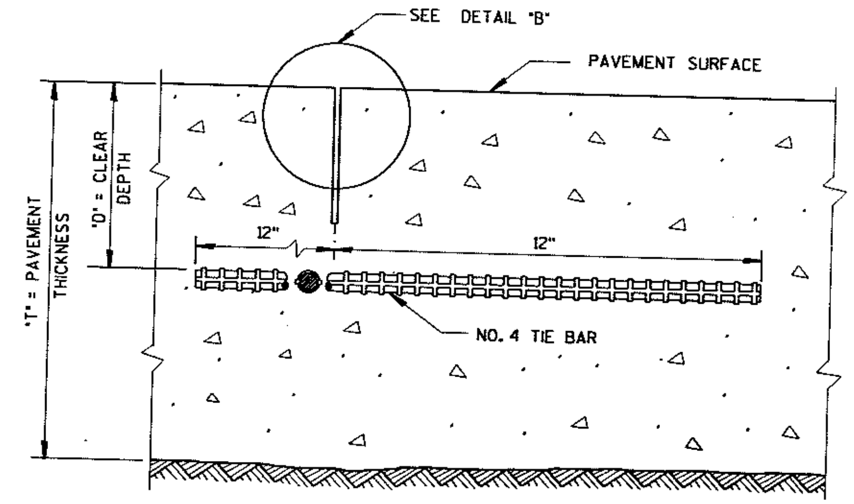
ASPHALTIC SHOULDER RUMBLE STRIPS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2/8/91 DATE	STATE DESIGN ENGINEER FOR HWYS
FHWA	



CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

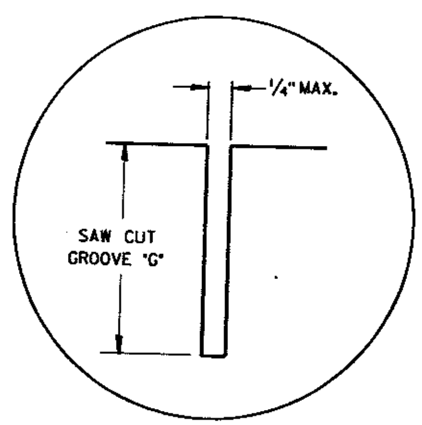
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

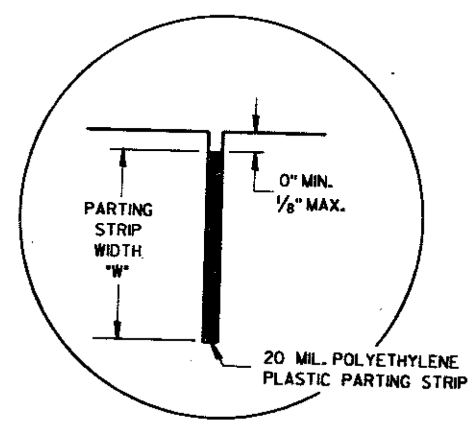
DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

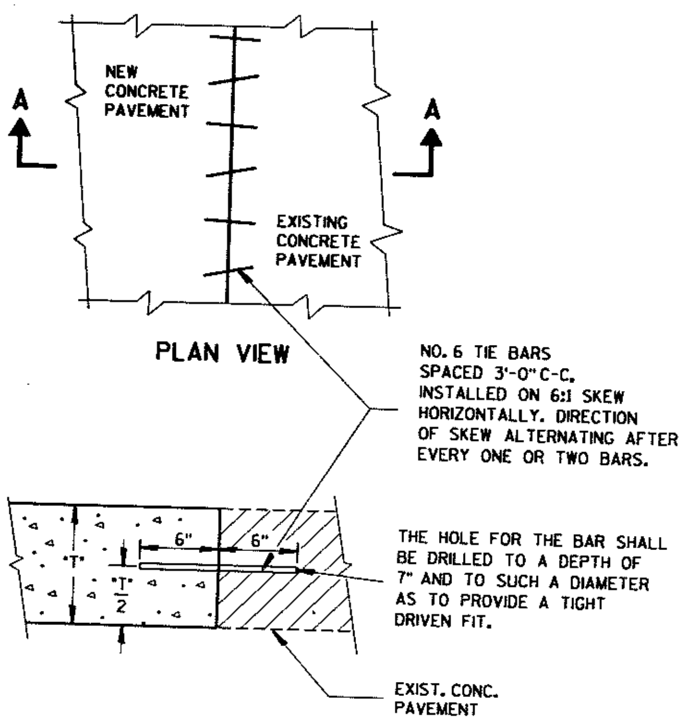
TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.



DETAIL "A"



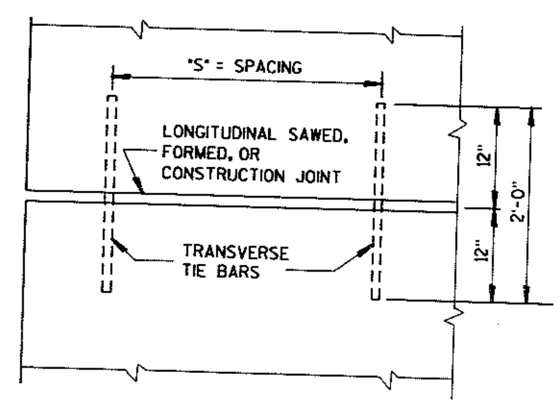
DETAIL "B"



PLAN VIEW

SECTION A-A
PAVEMENT TIES

PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S" PAVEMENT WIDTH 24' OR 26'	30'	PARTING STRIP WIDTH "W"
6"	3"±1/2"	1 1/2"	48"	42"	2"
7"	3 1/4"±1"	1 3/4"	45"	36"	2 1/4"
8"	3 3/4"±1"	2"	39"	30"	2 1/2"
9"	4 1/4"±1"	2 1/4"	33"	27"	3"
10"	4 3/4"±1"	2 1/2"	30"	24"	3 1/4"
11"	5 1/4"±1"	2 3/4"	27"	21"	3 3/4"
12"	5 3/4"±1"	3"	24"	21"	4"



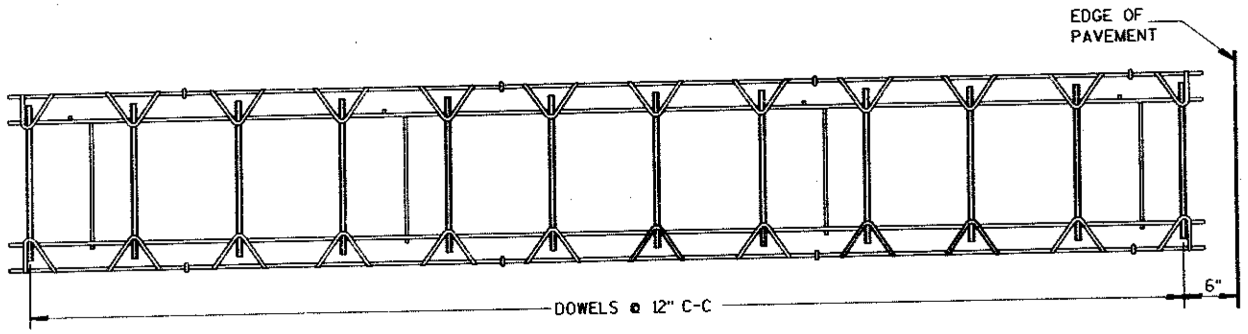
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS
AND PAVEMENT TIES

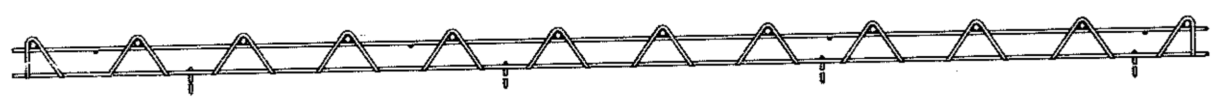
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/16/97
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 13 C 1-9



PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

DOWEL BAR SIZE TABLE

PAVEMENT DEPTH	DOWEL BAR DIAMETER
9" OR LESS	$1\frac{1}{4}$"
MORE THAN 9"	$1\frac{1}{2}$"

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

CONTRACTION JOINTS

UNLESS OTHERWISE SPECIFIED OR SHOWN IN THE CONTRACT, CONTRACTION JOINTS MAY BE ORIENTED EITHER NORMAL TO THE CENTERLINE AS SHOWN OR SKEWED 6:1 RIGHT HAND FORWARD. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

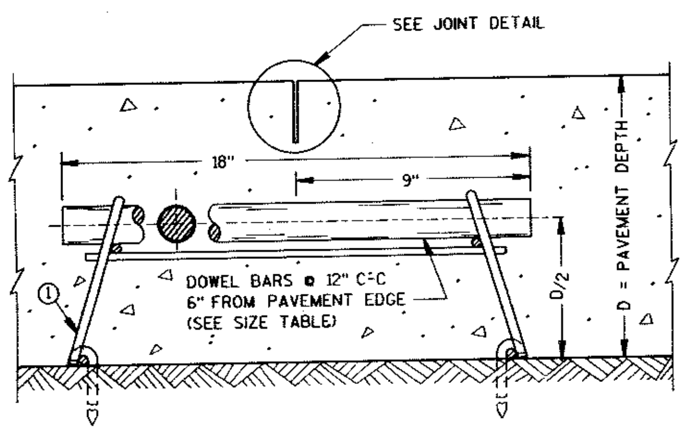
CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

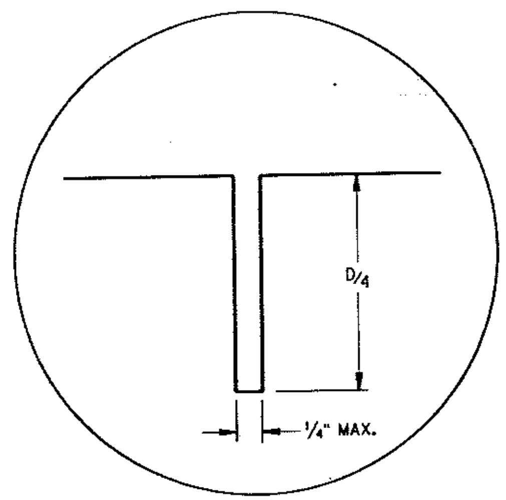
TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

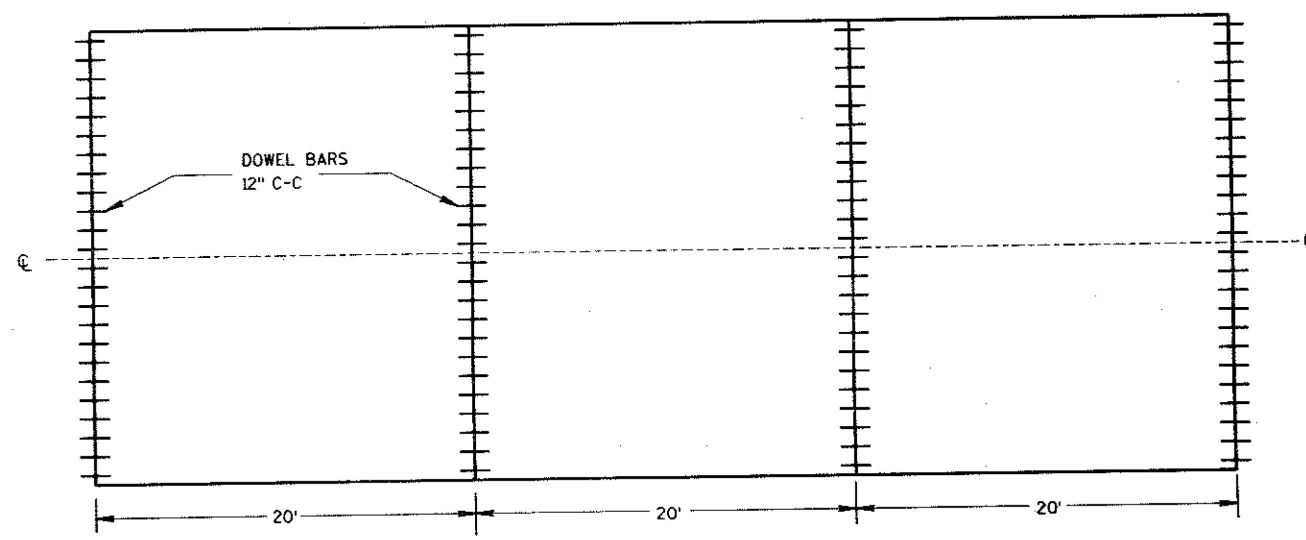
① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.



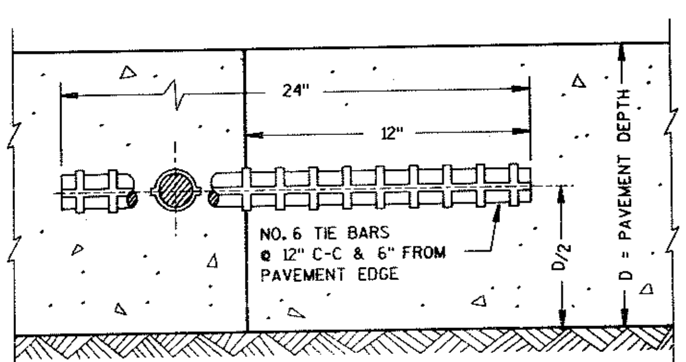
DOWELED CONTRACTION JOINT



JOINT DETAIL



CONTRACTION JOINT LOCATIONS



CONSTRUCTION JOINT

DOWELED NON-REINFORCED CONCRETE PAVEMENT
(TRANSVERSE JOINTS SPACED AT 20' & NORMAL)

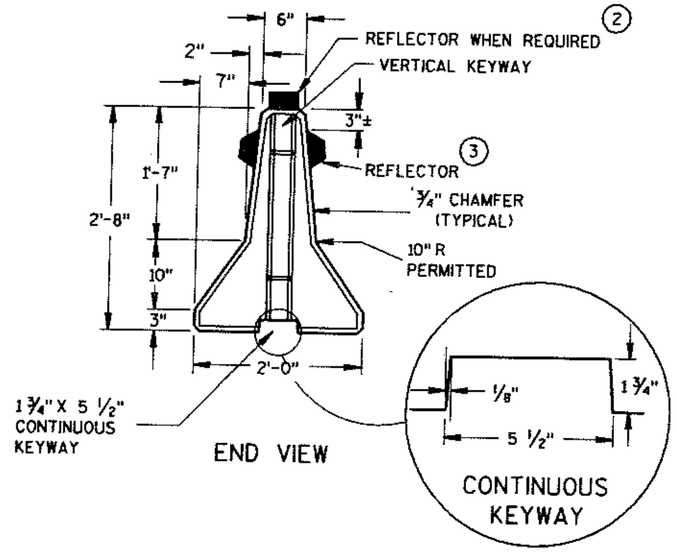
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/19/90
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 13 C 13-1

DESCRIPTION	SIZE	NO. REQ'D	LENGTH
TOP CONNECTOR WIRE ROPE (1)	½"	2	6'- 0"
BOTTOM CONN. WIRE ROPE (1)	½"	2	6'- 0"
TOP CONNECTOR STEEL BAR	NO. 4	1	9'- 0"
BOTTOM CONN. STEEL BAR	NO. 4	1	9'- 0"
STEEL CONNECTING PIN	1¼" DIA.	1	2'- 6"
BOTTOM TIE BARS	NO. 4	5	1'- 8"
VERTICAL STEEL BAR	NO. 4	10	2'- 1"
HORIZONTAL STEEL BAR	NO. 5	4	9'- 4"

BILL OF MATERIALS



END VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE MASONRY SHALL BE EITHER GRADE "A" OR THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

BARRIERS SHALL BE REINFORCED WITH EITHER BAR STEEL REINFORCEMENT OR WELDED STEEL WIRE FABRIC. WELDED STEEL WIRE FABRIC SHALL BE 6X6 - W4XW4, WEIGHING APPROXIMATELY 58 LBS. PER 100 SQ. FEET.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN.

BARRIER SHAPES OTHER THAN THAT SHOWN IN THE END VIEW WILL NOT BE PERMITTED. ALTERNATIVE EQUIVALENT DESIGNS FOR BARRIERS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

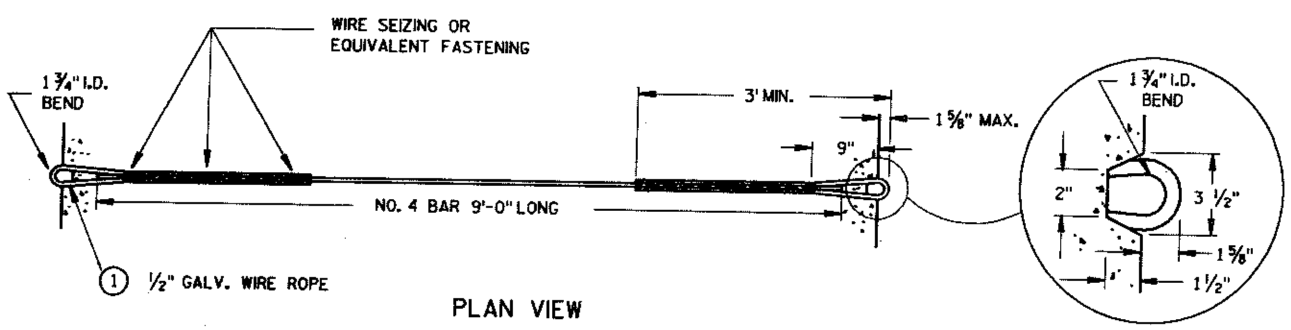
GALVANIZED WIRE ROPE SHALL BE 6 X 19 CLASS 2 IWRC WITH A MINIMUM BREAKING STRENGTH OF 20,000 LBS., AND SHALL CONFORM TO FEDERAL SPECIFICATION RR-W-410. THE ZINC COATING SHALL CONFORM TO TABLE II OF THE FEDERAL SPECIFICATIONS.

REFLECTORS SHALL CONFORM TO SECTION 633 OF THE STANDARD SPECIFICATIONS EXCEPT THE SHAPE SHALL BE AS SHOWN ON THIS DRAWING. ALTERNATIVE SHAPES MAY BE USED WHEN APPROVED BY THE ENGINEER. CONCRETE SURFACE PREPARATION, ADHESIVE AND METHOD OF APPLICATION SHALL BE AS RECOMMENDED BY THE REFLECTOR MANUFACTURER. THE COLOR OF REFLECTORS SHALL BE YELLOW. MAXIMUM SPACING SHALL BE 20 FEET.

(1) CONNECTOR ASSEMBLIES MAY, AT THE CONTRACTORS OPTION, BE FORMED FROM A CONTINUOUS SECTION OF ½ INCH GALV. WIRE ROPE (16'-6" MIN. LENGTH). THE NO. 4 CONNECTOR STEEL BARS MAY THEN BE OMITTED.

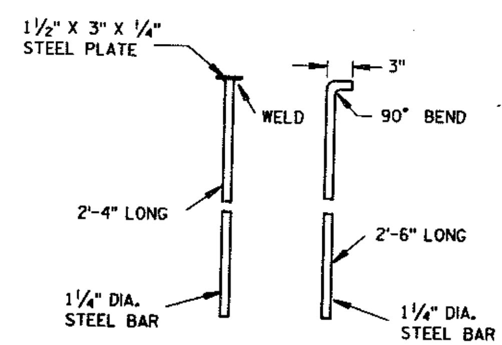
(2) TOP MOUNTED REFLECTORS SHALL BE PROVIDED IN ADDITION TO THE SIDE MOUNTED REFLECTORS ON ALL BARRIER INSTALLATIONS LOCATED ON CURVED ALIGNMENT LONGER THAN 200 FEET.

(3) BARRIERS USED TO SEPARATE OPPOSING TRAFFIC SHALL HAVE REFLECTORS ON BOTH SIDES. TOP MOUNTED REFLECTORS SHALL BE DOUBLE FACED FOR THIS CONDITION.

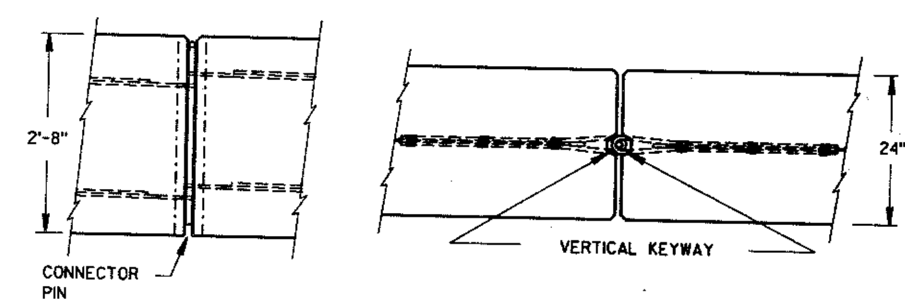


PLAN VIEW

TOP & BOTTOM CONNECTOR ASSEMBLY (1)



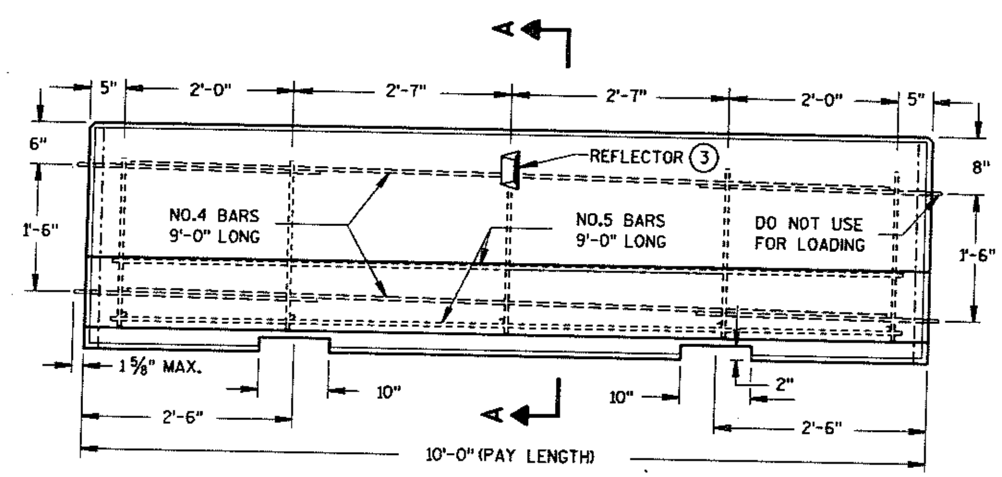
ALTERNATE CONNECTING PINS



SIDE VIEW

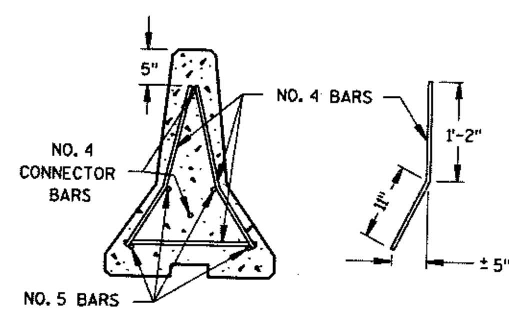
PLAN VIEW

CONNECTION DETAILS



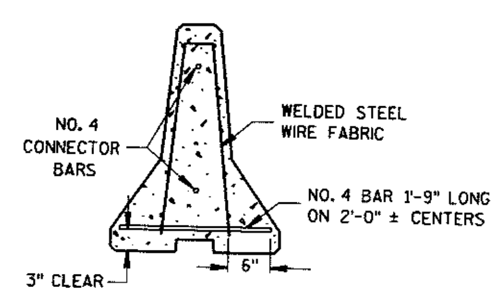
SIDE VIEW

LOCATION OF REINFORCEMENT STEEL



SECTION A-A

BAR STEEL REINFORCEMENT



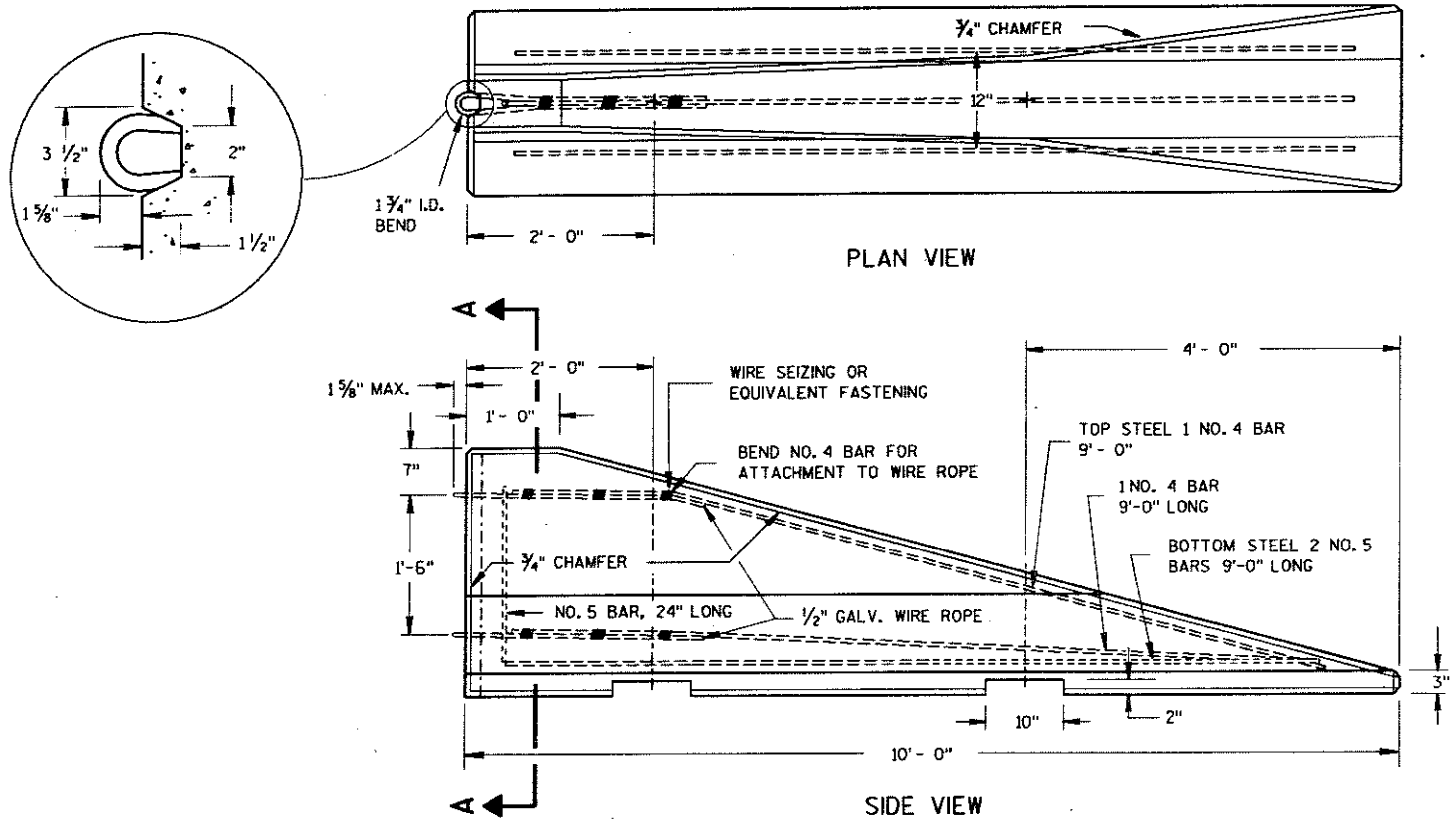
SECTION A-A

WELDED STEEL WIRE FABRIC REINFORCEMENT

TEMPORARY PRECAST CONCRETE BARRIER
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

S.D.D. 14B 7-8a

S.D.D. 14B 7-8a



END SECTION FOR TEMPORARY PRECAST CONCRETE BARRIER

GENERAL NOTES

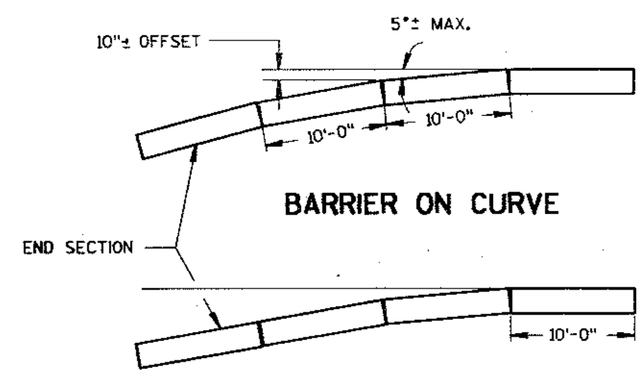
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

THE PORTABLE CRASH CUSHION SHALL BE THE G-R-E-A-T CZ IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC: ONE EAST WACKER DRIVE, CHICAGO, IL., 60601.

THE CRASH CUSHION SHALL BE MANUFACTURED, ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS DETAILED ELSEWHERE IN THE PLANS OR AS SHOWN ON THE APPROVED SHOP DRAWINGS. THE CRASH CUSHION PLATFORM SHALL BE ANCHORED TO EITHER 6 INCH MINIMUM CONCRETE PAVEMENT OR 3 INCH MINIMUM ASPHALTIC SURFACES THAT HAVE A PREPARED COMPACTED SUBBASE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

GALVANIZED WIRE ROPE SHALL BE 6 X 19 CLASS 2 IWRC WITH A MINIMUM BREAKING STRENGTH OF 20,000 LBS., AND SHALL CONFORM TO FEDERAL SPECIFICATION RR-W-410. THE ZINC COATING SHALL CONFORM TO TABLE II OF THE FEDERAL SPECIFICATIONS.

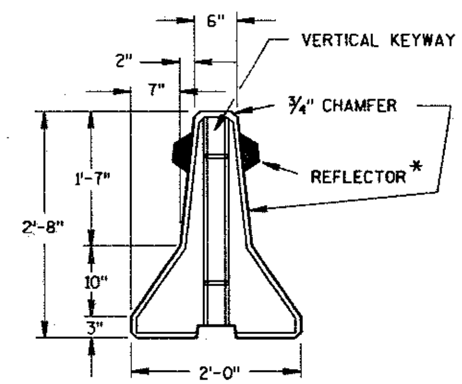
*WHEN BARRIERS ARE USED TO SEPARATE OPPOSING TRAFFIC, REFLECTORS ARE REQUIRED ON BOTH SIDES.



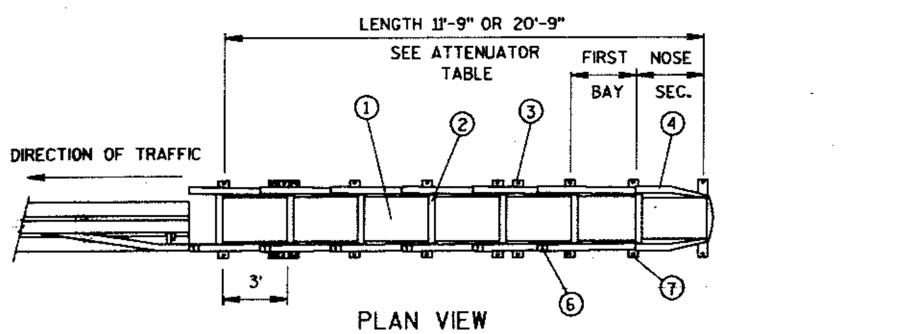
BARRIER ON CURVE

FLARE AT BARRIER END

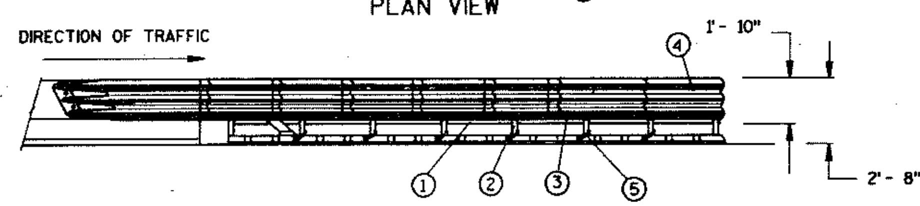
OPERATING SPEED, MPH	FLARE RATE
40 OR LESS	10 : 1
50 OR MORE	15 : 1



END VIEW
SECTION A-A



PLAN VIEW



NOTE: CROSS SLOPE OF UNIT NOT TO EXCEED 5%

SIDE VIEW

ATTENUATOR TABLE

ATTENUATOR LENGTH	NO. OF BAYS	DESIGN SPEED MPH
11'- 9"	3	40 OR LESS
20'- 9"	6	40 TO 55

1. HEX-FOAM CARTRIDGE
2. DIAPHRAGM
3. THRIE BEAM FENDER PANEL
4. NOSE COVER
5. STABILIZING CHAIN
6. DEFLECTOR PANEL
7. ANCHORAGE DEVICE (WHERE ONE-WAY TRAFFIC EXISTS)

CONSTRUCTION ZONE PORTABLE CRASH CUSHION

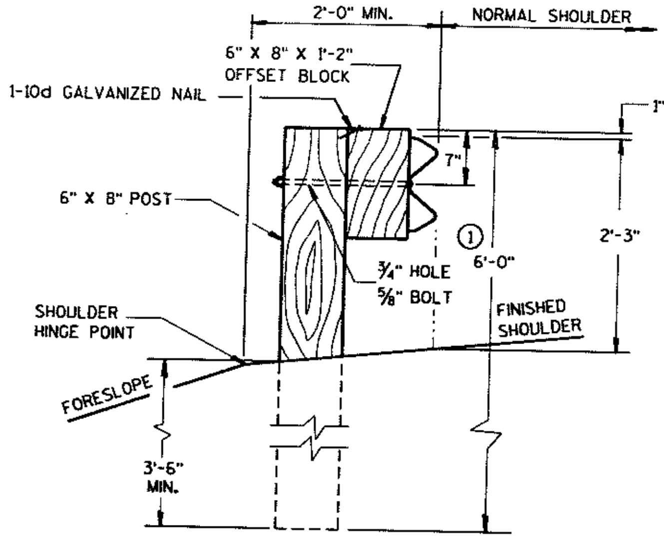
NOTE:
THIS DRAWING CONSISTS OF TWO SHEETS. BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

PRECAST CONCRETE BARRIER
END SECTION AND
PORTABLE CRASH CUSHION

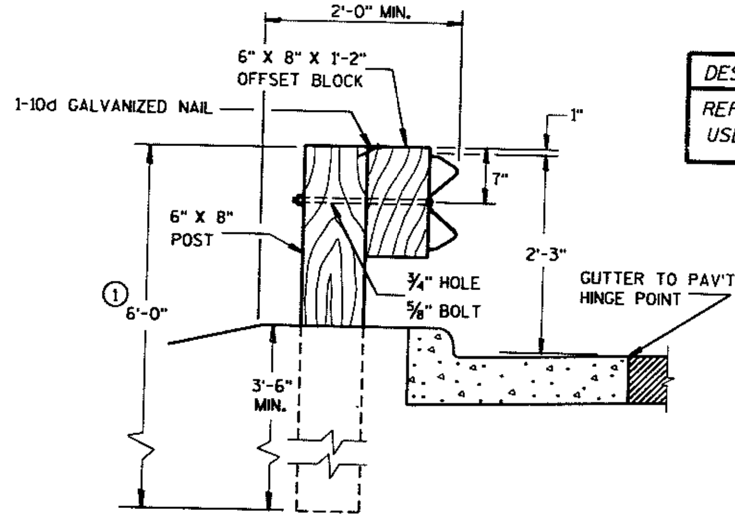
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-12-88
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 14B 7-8b



END VIEW
LOCATED ALONG A ROADWAY SHOULDER



END VIEW
LOCATED ALONG A CURBED ROADWAY

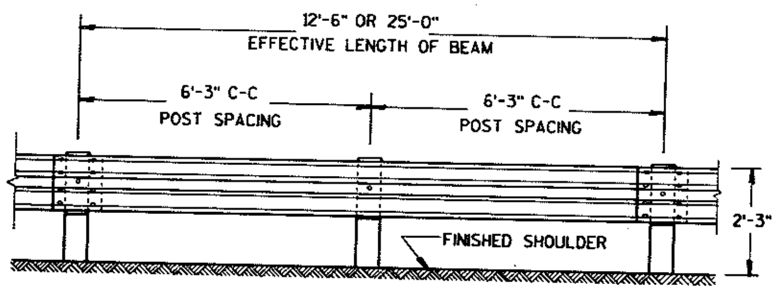
DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)
REFER TO PROCEDURE 11-45-1 FOR GUIDANCE ON THE USE OF BEAM GUARD ON CURBED ROADWAYS.

GENERAL NOTES

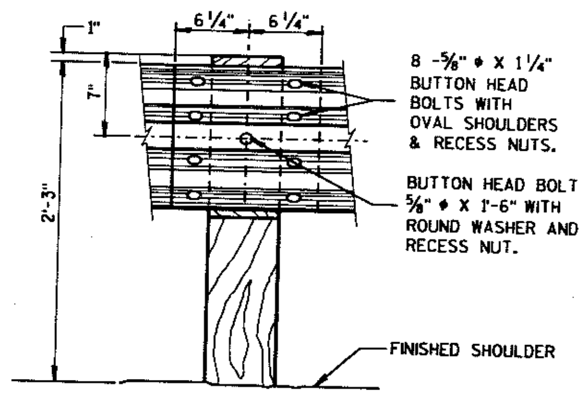
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

① POST LENGTH SHALL BE INCREASED TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" WHERE THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

② PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.

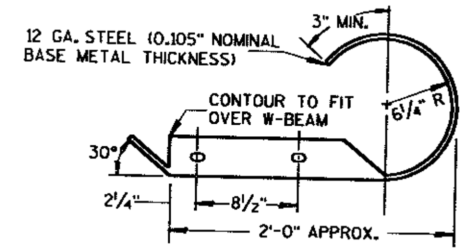


FRONT VIEW

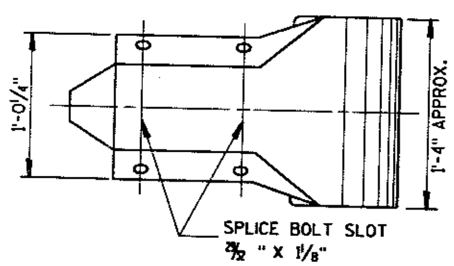


FRONT VIEW
BEAM SPLICING AND POST MOUNTING DETAIL

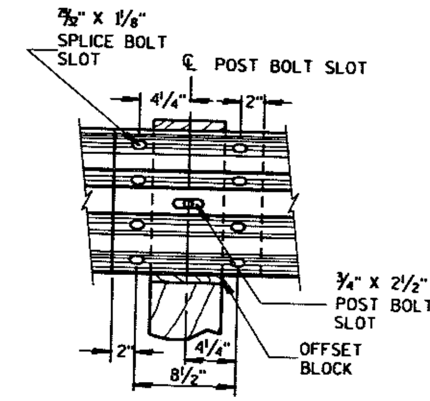
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD



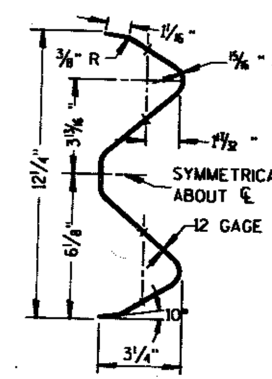
PLAN VIEW



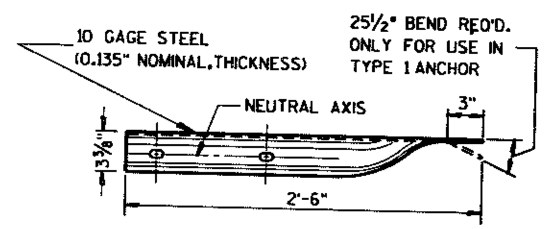
FRONT VIEW
W BEAM END SECTION (ROUNDED)



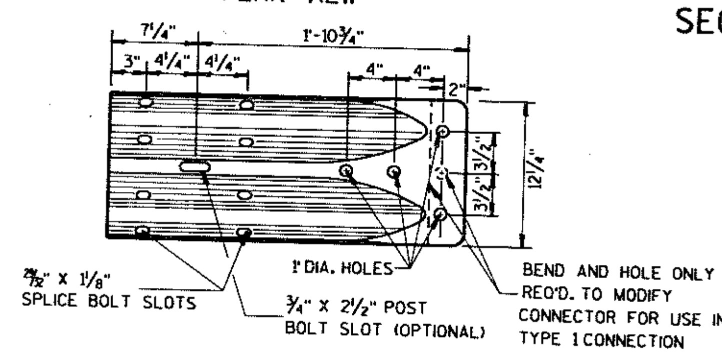
W BEAM SPLICE



SECTION THRU W BEAM



PLAN VIEW



FRONT VIEW
W BEAM TERMINAL CONNECTOR

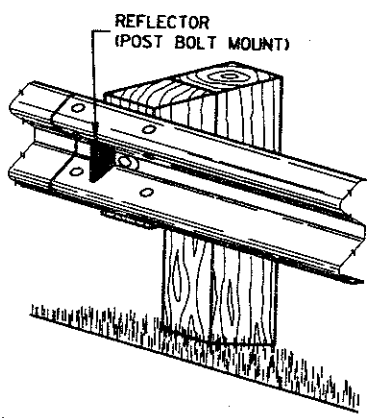
NOTE:
SHEETS 1b IS OPTIONAL FOR INCLUSION IN PLANS WHEN APPLICABLE.

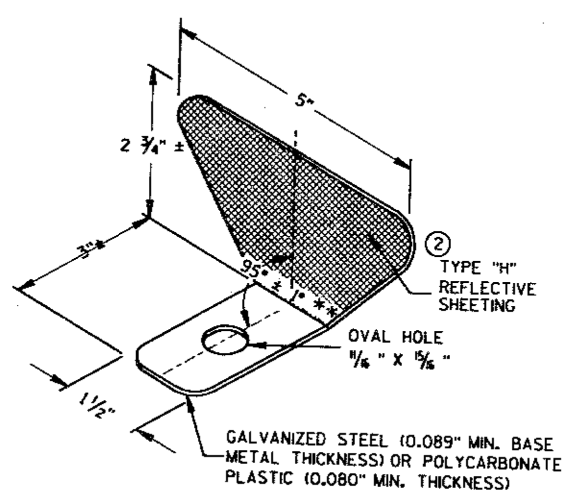
REFLECTOR SPACING

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' * > 200' *	25' C-C 50' C-C	1 * 1 *	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 ** 2 **	3

* EVERY OTHER REFLECTOR REVERSED FOR 2-WAY VISIBILITY. CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED RELECTORS.

** ANGLE OF BEND TO BE 90° ± 1° FOR TWO-SIDED REFLECTORS.





② REFLECTOR DETAIL AND TYPICAL INSTALLATION

CLASS "A"
STEEL PLATE BEAM GUARD, INSTALLATION & ELEMENTS

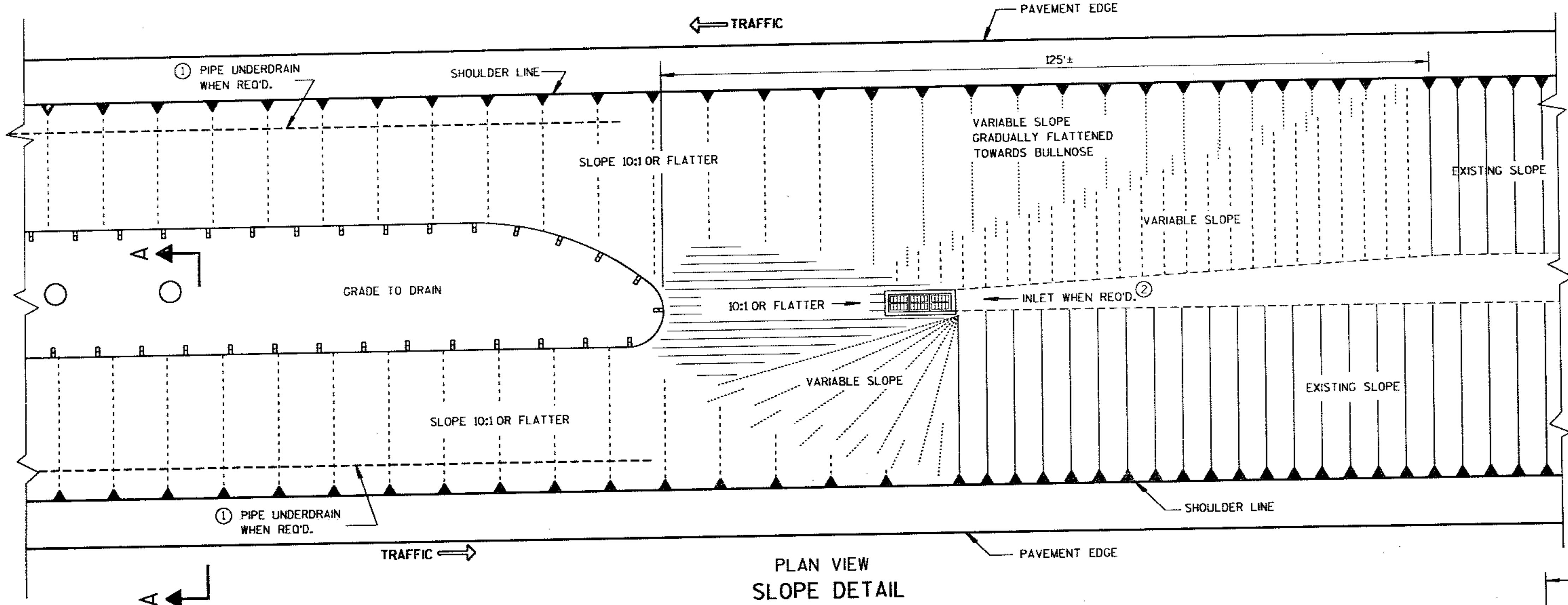
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/13/91
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

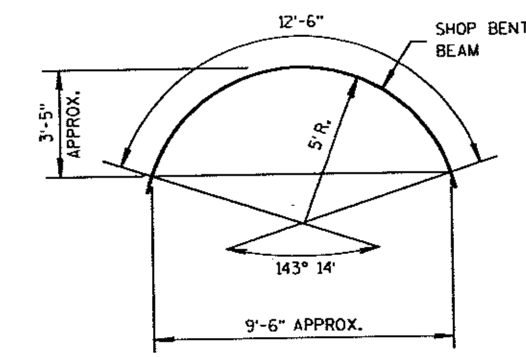
S.D.D. 14 B 15-1a

NOTES

1. PROJECT SPECIFIC DRAINAGE DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.
2. THE BULLNOSE INSTALLATION WILL BE MEASURED IN PLACE BY THE LINEAR FOOT ALONG EACH SIDE AND AROUND THE NOSE SECTIONS AS STEEL PLATE BEAM GUARD, CLASS "A".



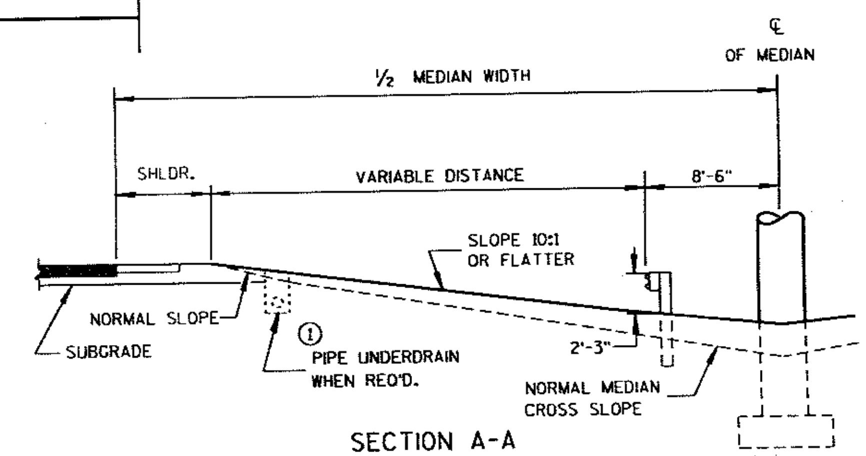
PLAN VIEW
SLOPE DETAIL



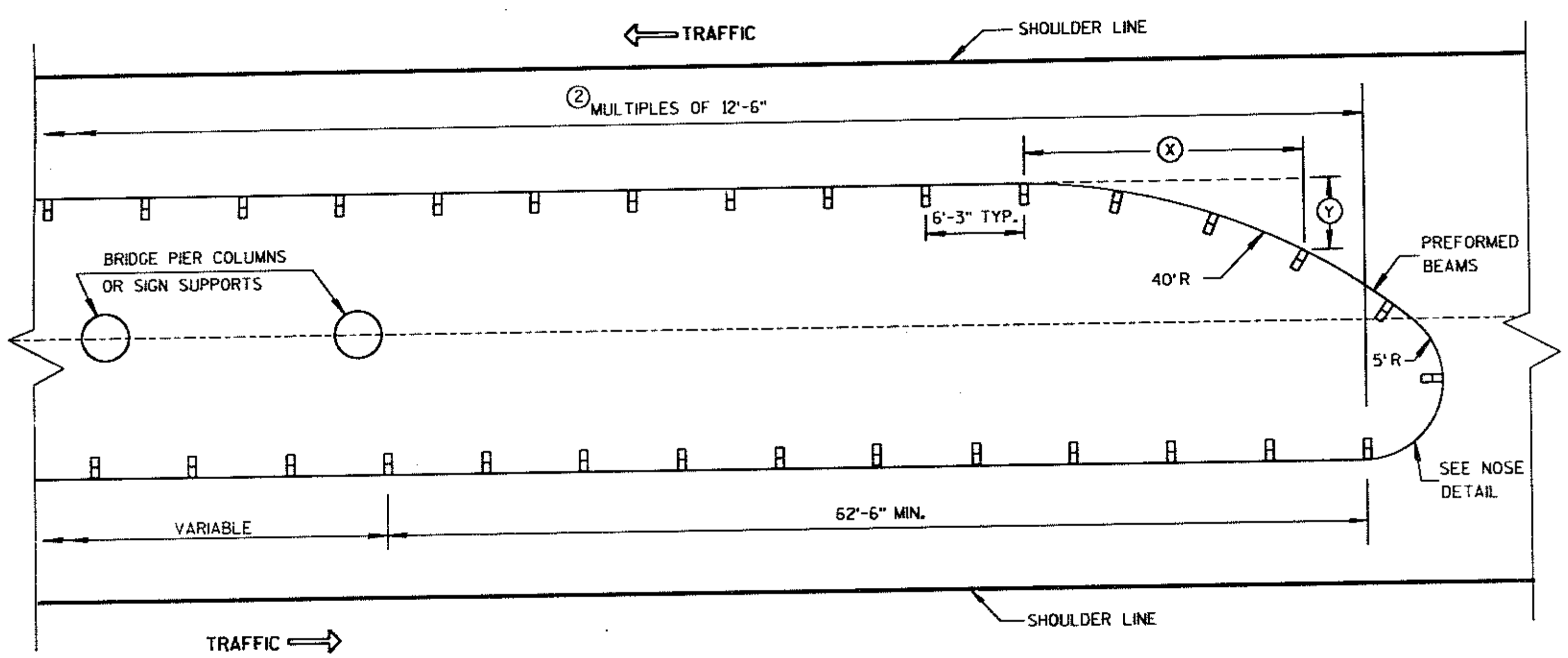
NOSE DETAIL

TABLE OF COORDINATES TO LAYOUT 40'R CURVE (DIMENSIONS IN FEET)

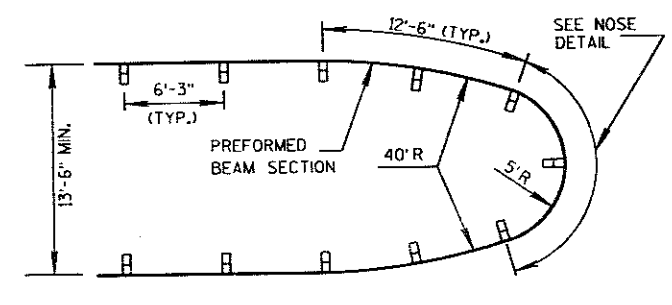
DISTANCE ALONG CURVE	X	Y
6.25	6.22	0.49
12.50	12.30	1.94
18.75	18.07	4.31
25.00	23.40	7.56



SECTION A-A
DETAIL OF MEDIAN SLOPES



PLAN VIEW
TYPICAL LAYOUT AT PIERS AND SIGN SUPPORTS



ALTERNATE INSTALLATION
FOR USE WHERE NARROW MEDIAN PROHIBITS USE OF CONVENTIONAL TREATMENT

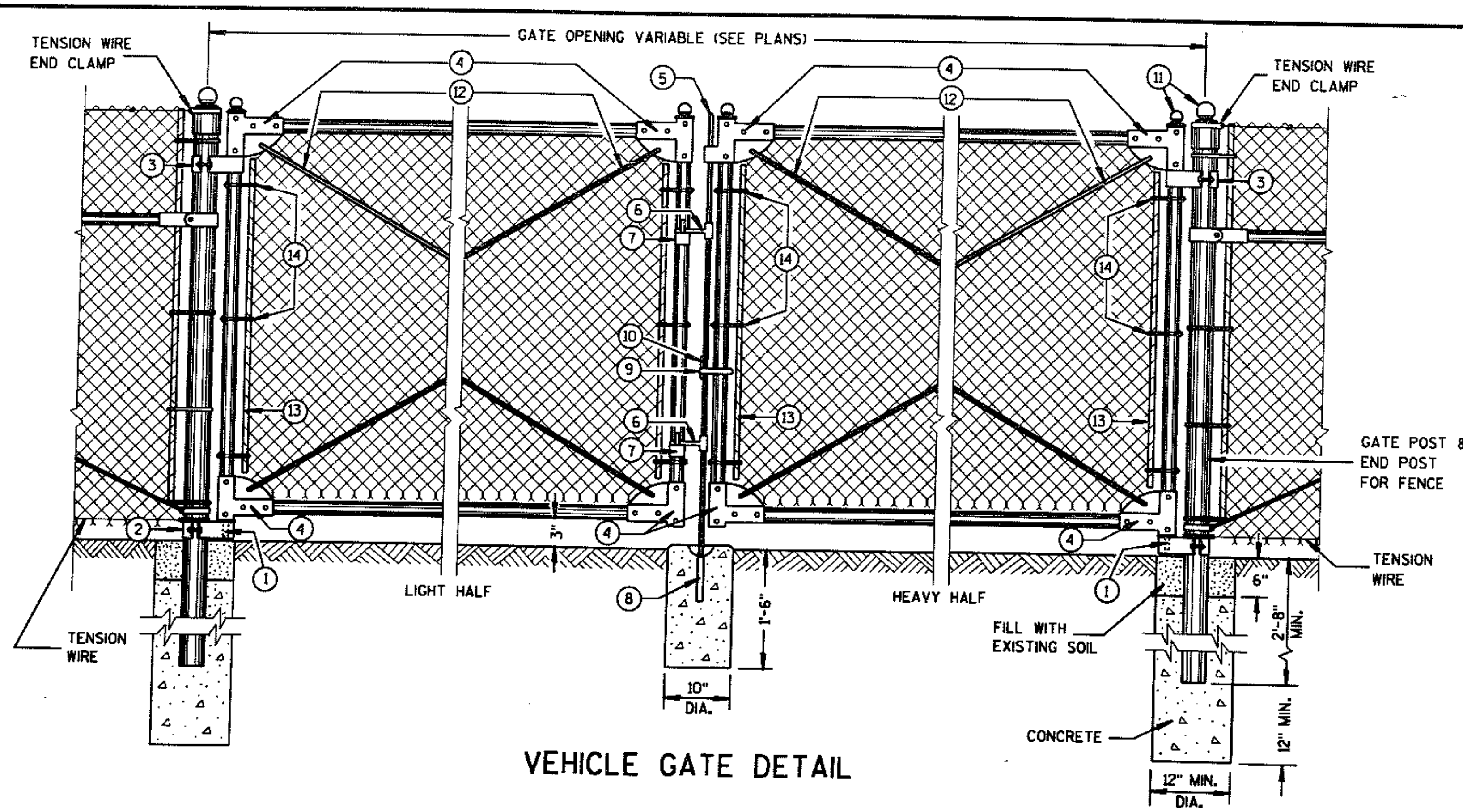
CLASS "A" STEEL PLATE BEAM GUARD, BULLNOSE INSTALLATION AT MEDIAN PIERS AND SIGN SUPPORTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/13/91
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 14 B 18-1d

S.D.D. 14 B 18-1d



VEHICLE GATE DETAIL

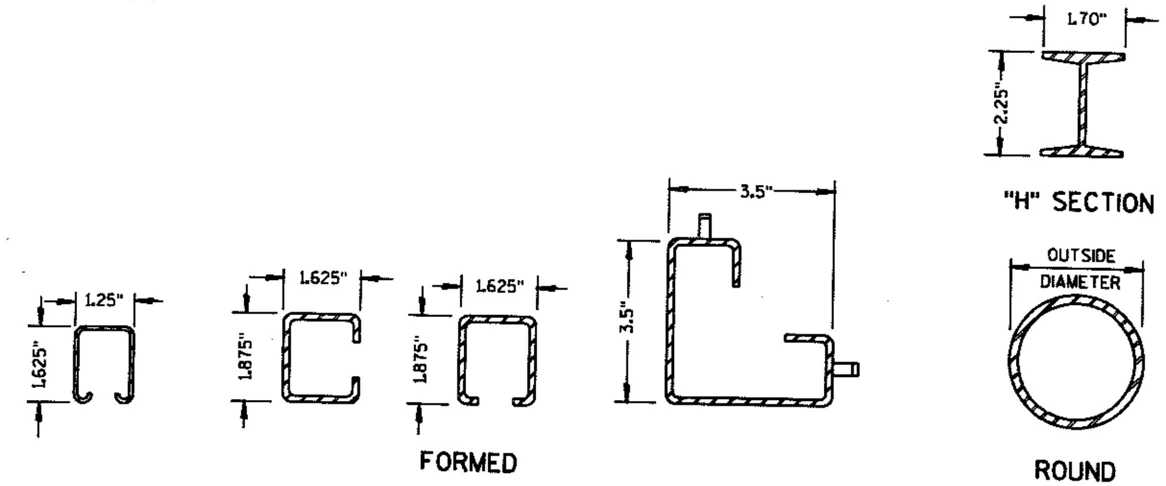
LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. CORNER ELBOW
5. PLUNGER ROD
6. LATCH FORK
7. FORK CATCH
8. PLUNGER ROD CATCH
9. LOCK KEEPER GUIDE
10. LOCK KEEPER
11. ORNAMENTAL TOPS
12. TRUSS RODS
13. STRETCHER BAR
14. HOOK BOLTS

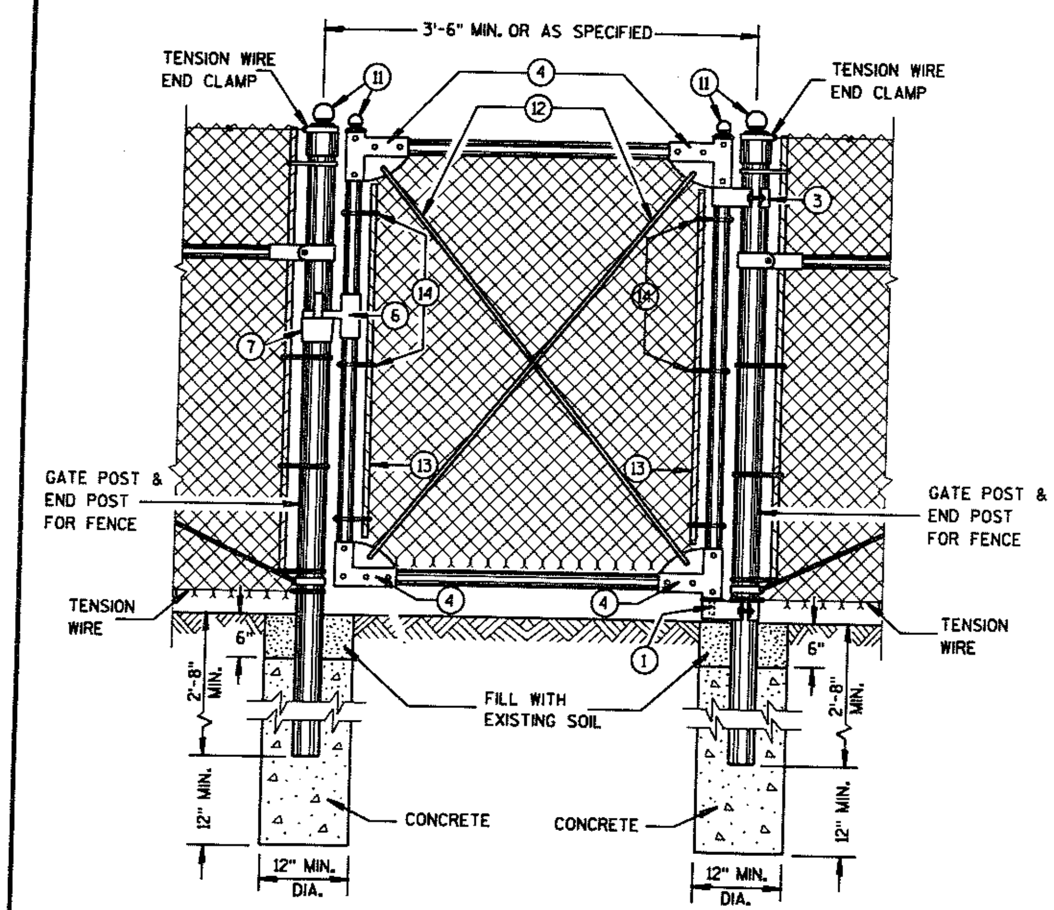
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. DETAILS NOT COVERED BY ANY OF THE ABOVE SHALL CONFORM TO THE MANUFACTURERS SPECIFICATIONS.

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 237.



CROSS SECTIONS OF POSTS AND RAILS



PEDESTRIAN GATE DETAIL

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FENCE POSTS AND RAILS

USE	FENCE HT. FEET	SHAPE	OUTSIDE DIMENSIONS INCHES	WEIGHT LBS./L.F.
TERMINAL POSTS **	6 AND LESS	ROUND	2.375	3.65
	6 AND LESS	*ROUND	2.375	3.12
	OVER 6	ROUND	2.875	5.79
	OVER 6	*ROUND	2.875	4.64
	ALL HEIGHTS	FORMED	3.5 X 3.5	5.14
LINE POSTS	6 AND LESS	ROUND	1.90	2.72
		*ROUND	1.90	2.28
		"H" SECTION	2.25 X 1.70	3.26
		FORMED	1.875 X 1.625	1.65
	OVER 6	ROUND	2.375	3.65
		*ROUND	2.375	3.12
		"H" SECTION	2.25 X 1.70	3.26
		FORMED	1.875 X 1.625	2.28
BRACE RAIL		ROUND	1.66	2.27
		*ROUND	1.66	1.84
		FORMED	1.625 X 1.25	1.35

* HIGH STRENGTH STEEL
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

GATE FRAME MEMBERS, SIZE AND WEIGHT

GATE FABRIC HEIGHT (FEET)	OUTSIDE DIMENSION (INCHES)	WEIGHT LBS./L.F.
6 OR LESS		
Round	1.66	2.27
Round	1.66	*1.84
Rectangular	1.50	1.84
OVER 6		
Round	1.90	2.72
Round	1.90	*2.28
Rectangular	2.00	2.52
INTERIOR BRACING		
Round	1.66	2.27
Round	1.66	*1.84
Rectangular	1.50	1.84

* HIGH STRENGTH STEEL

GATE POST SIZE AND WEIGHT

GATE LEAF WIDTH (FEET)	POST SIZE (INCHES)	
	OUTSIDE DIAMETER (INCHES)	WEIGHT LBS./L.F.
6 AND UNDER	2.875	5.79
	2.875	*4.64
OVER 6 TO 12	4.00	9.10
	4.00	*8.65
OVER 12 TO 18	6.62	18.97
	6.62	*18.02

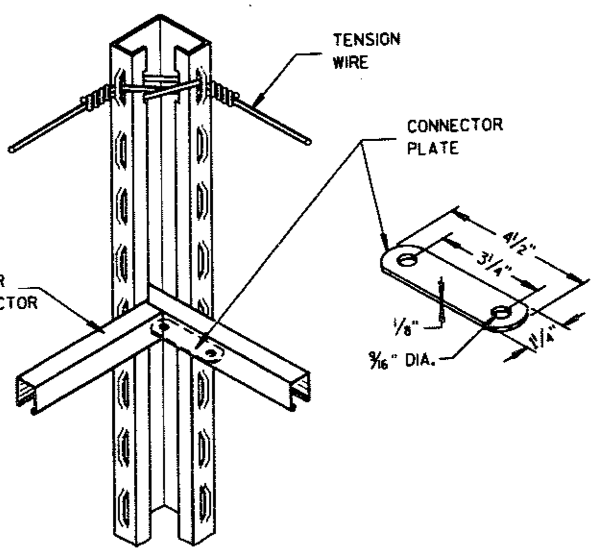
* HIGH STRENGTH STEEL

NOTE:
THIS DRAWING CONSISTS OF TWO SHEETS. BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

CHAIN LINK FENCE

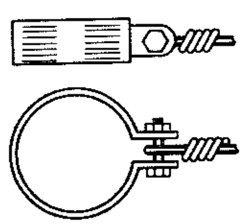
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 B 3-9a

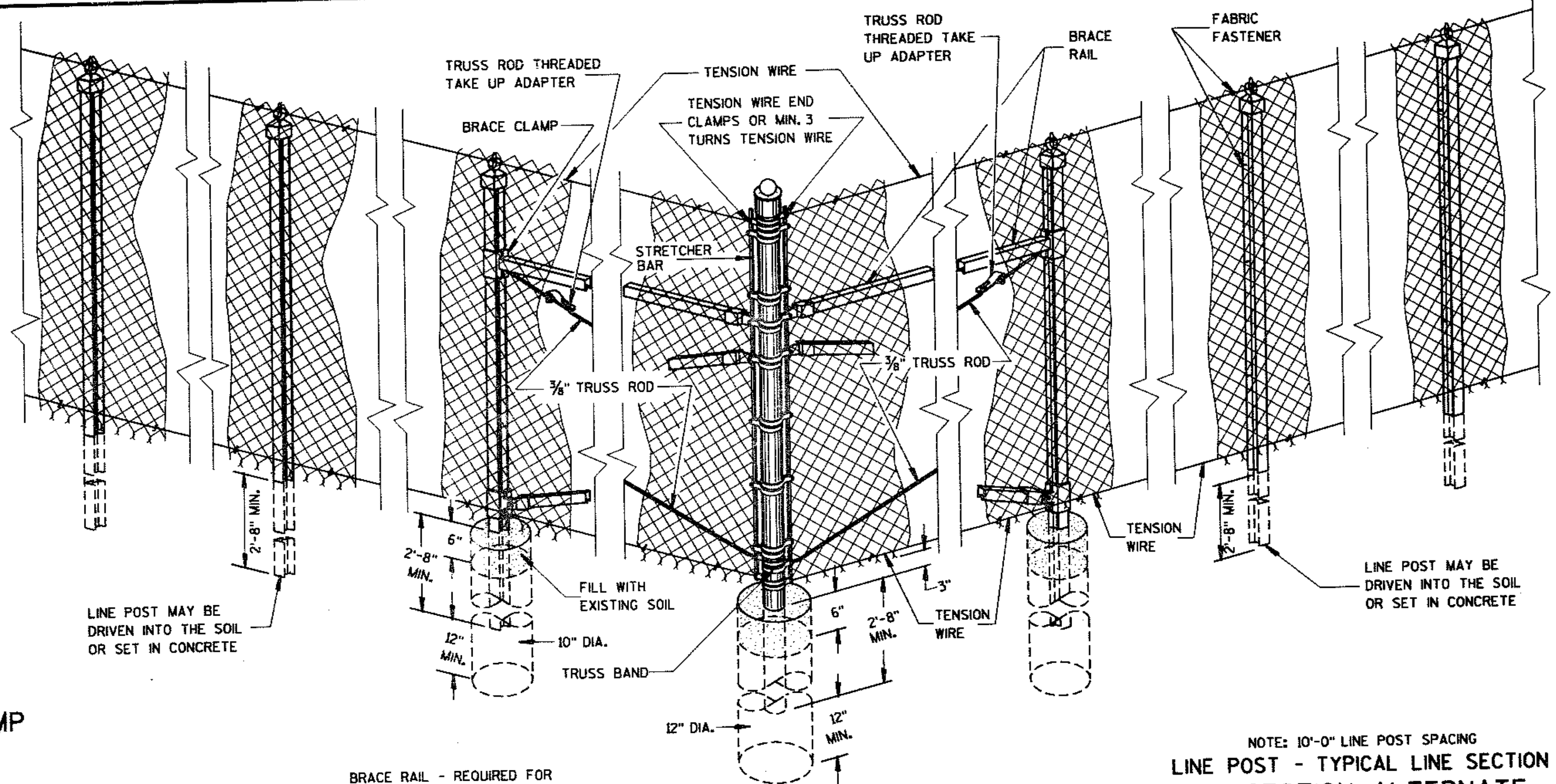


BRACE RAIL CORNER CONNECTION

ROLL FORMED POST



TENSION WIRE END CLAMP



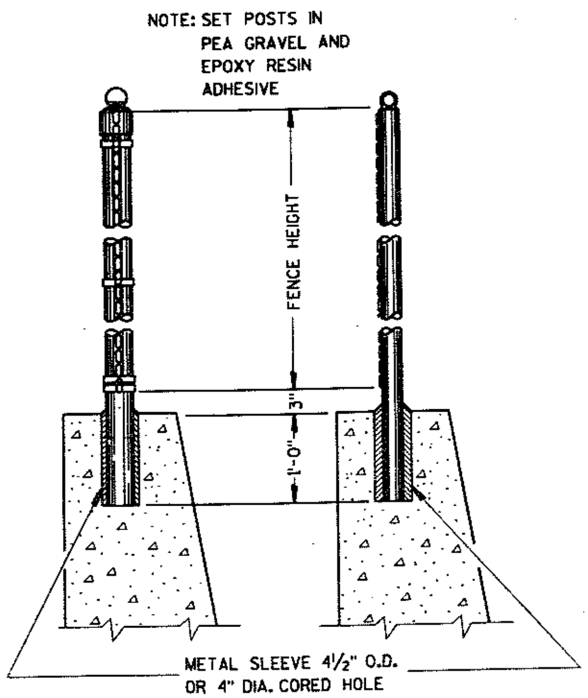
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS

PIPE ALTERNATE

NOTE: 10'-0" LINE POST SPACING

LINE POST - TYPICAL LINE SECTION

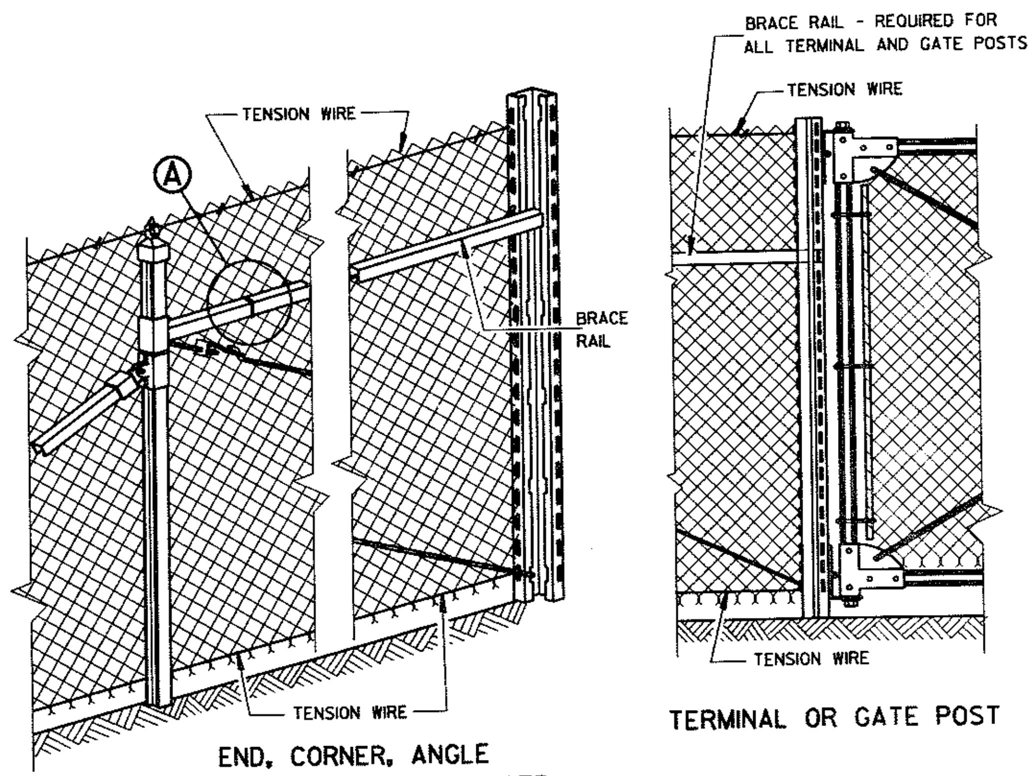
"H" SECTION ALTERNATE



END POST & CORNER POST

LINE POST

DETAILS OF FENCE ON WALL

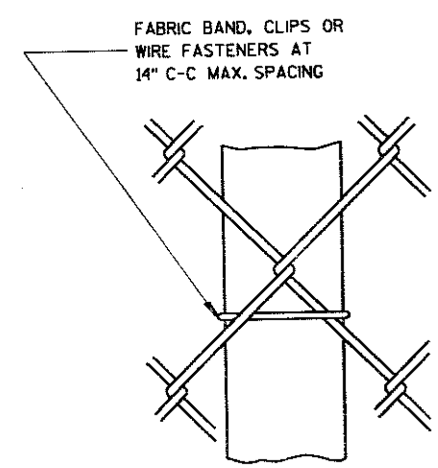


END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS

TERMINAL OR GATE POST

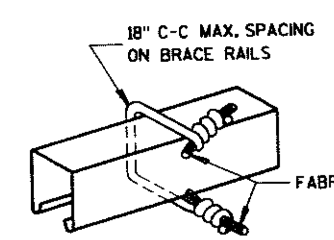
ROLL FORMED ALTERNATE

NOTE: DETAILS OF FOOTINGS ARE SHOWN ON THE PIPE ALTERNATE DETAIL



LINE POST

FABRIC FASTENER



BRACE RAIL

FABRIC FASTENER

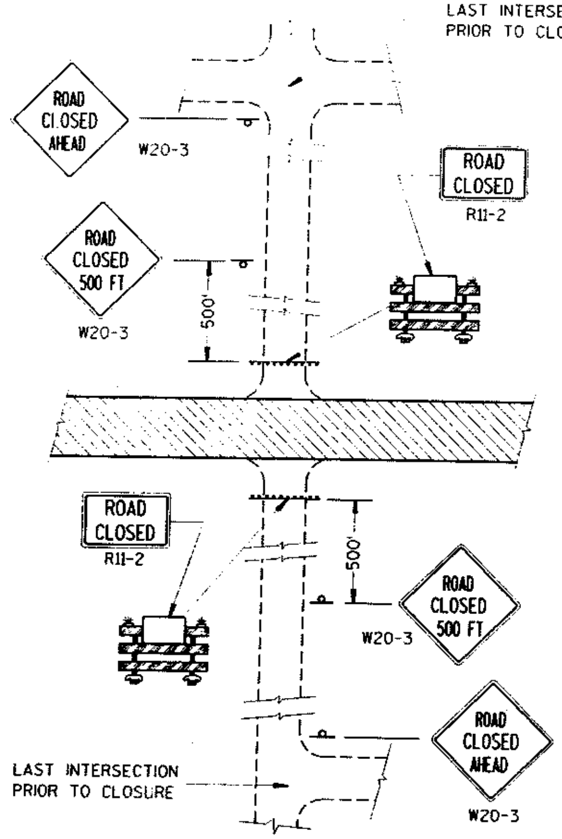
A

CHAIN LINK FENCE

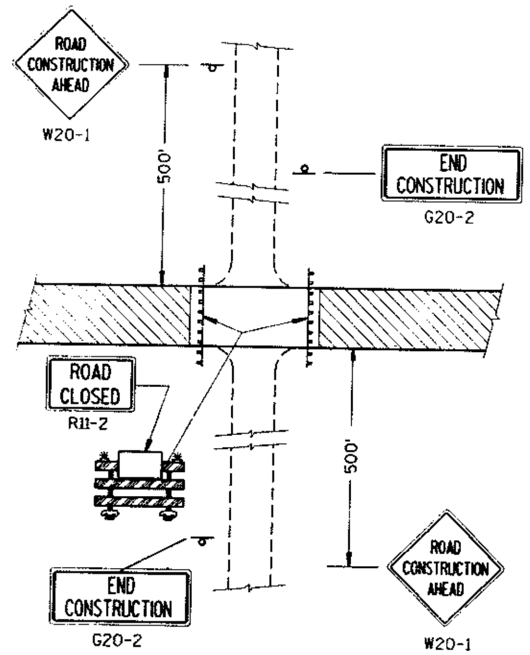
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/26/92
DATE
FHWA
STATE DESIGN ENGINEER FOR HWYS

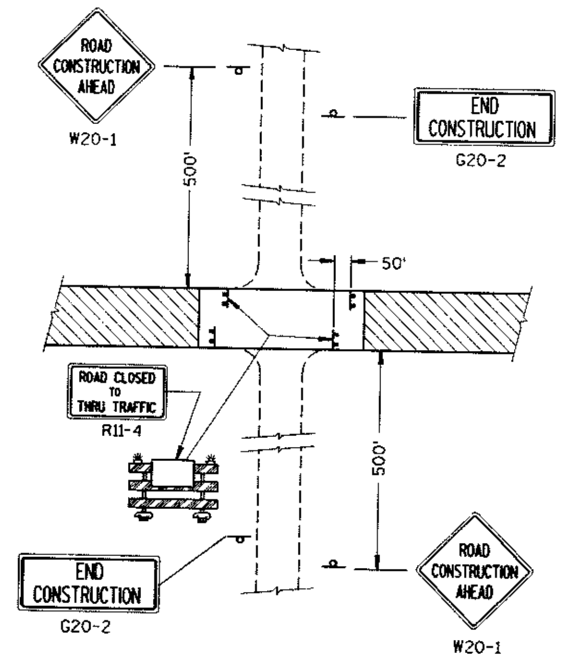
S.D.D. 15 B 3-9b



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).

SIDEROAD CLOSURES

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

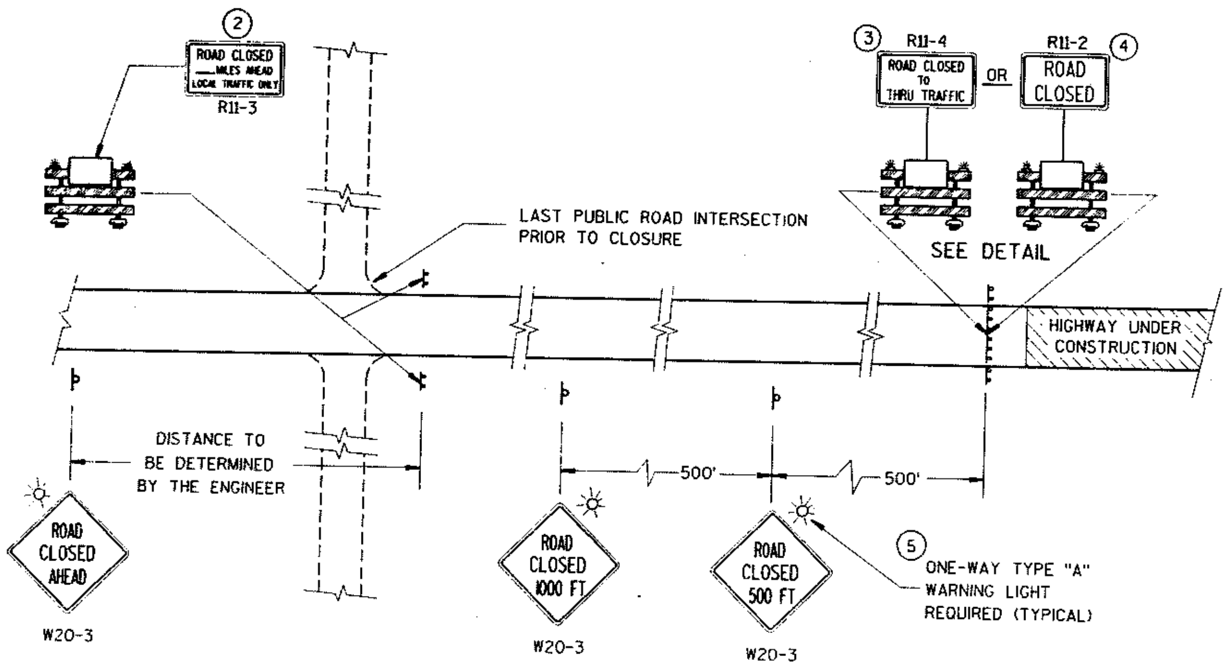
ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED ___ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

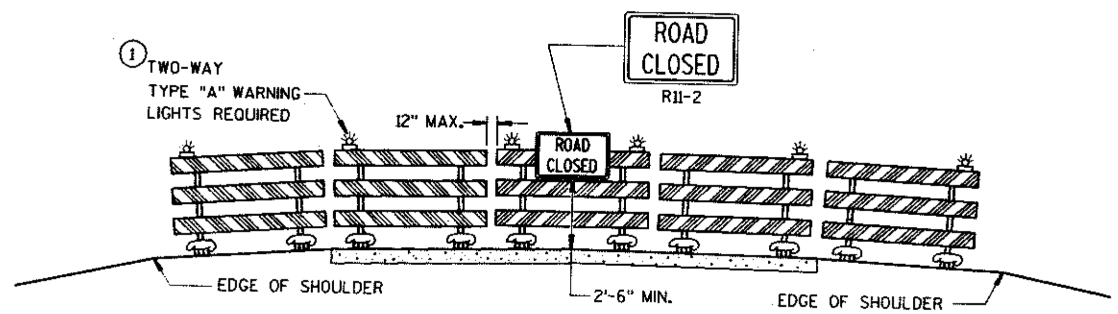
TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".
- R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".
- G20-2 SIGNS SHALL BE 60" X 24".

1. TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.
2. THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
3. FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.
4. FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.
5. ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.



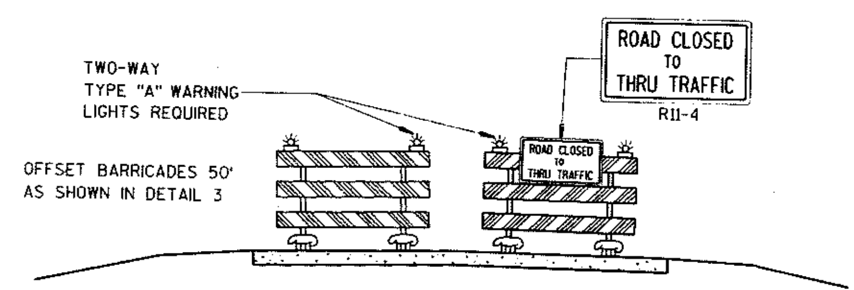
MAINLINE CLOSURE



APPROACH VIEW
ROAD CLOSURE BARRICADE DETAIL

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA



APPROACH VIEW
LANE CLOSURE BARRICADE DETAIL

BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10-31-89 DATE — STATE TRAFFIC ENGINEER FOR HWYS; FHWA

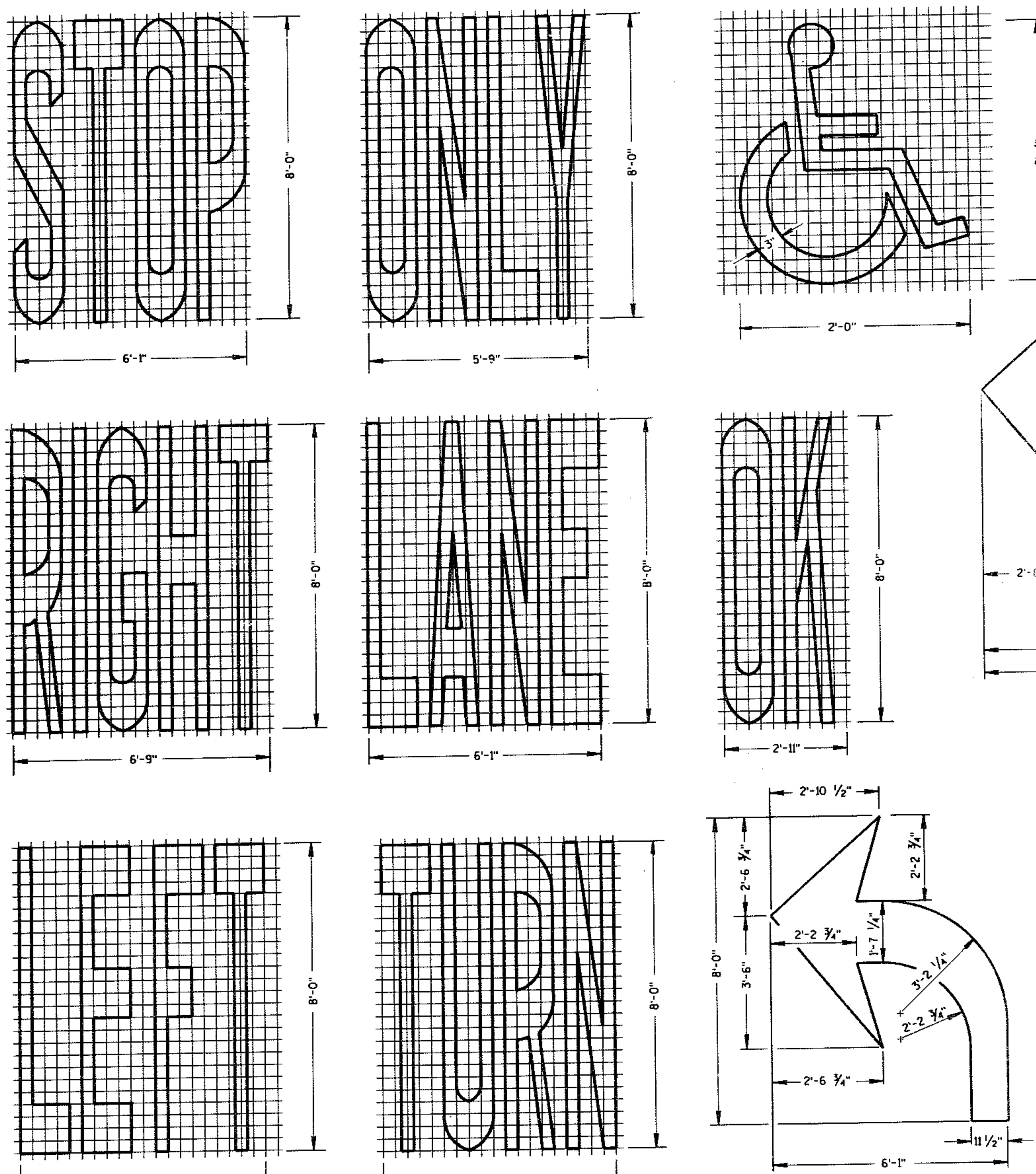
S.D.D. 15 C 2-2

GENERAL NOTES

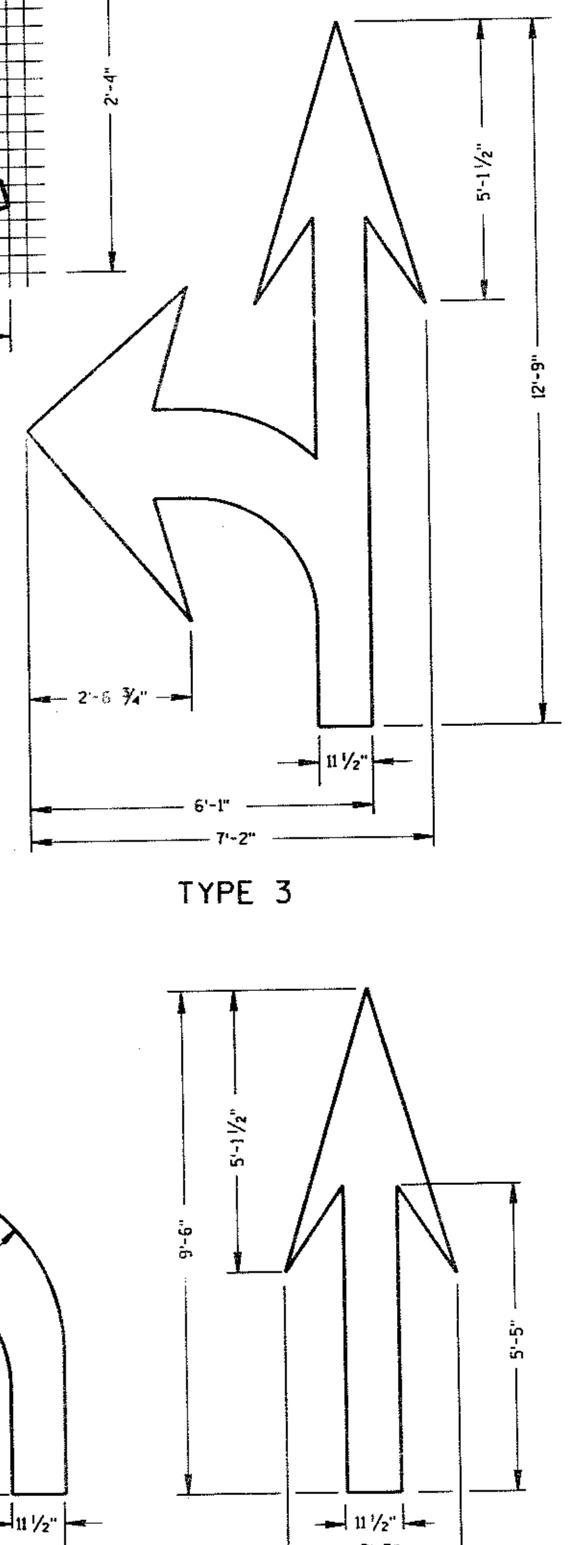
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

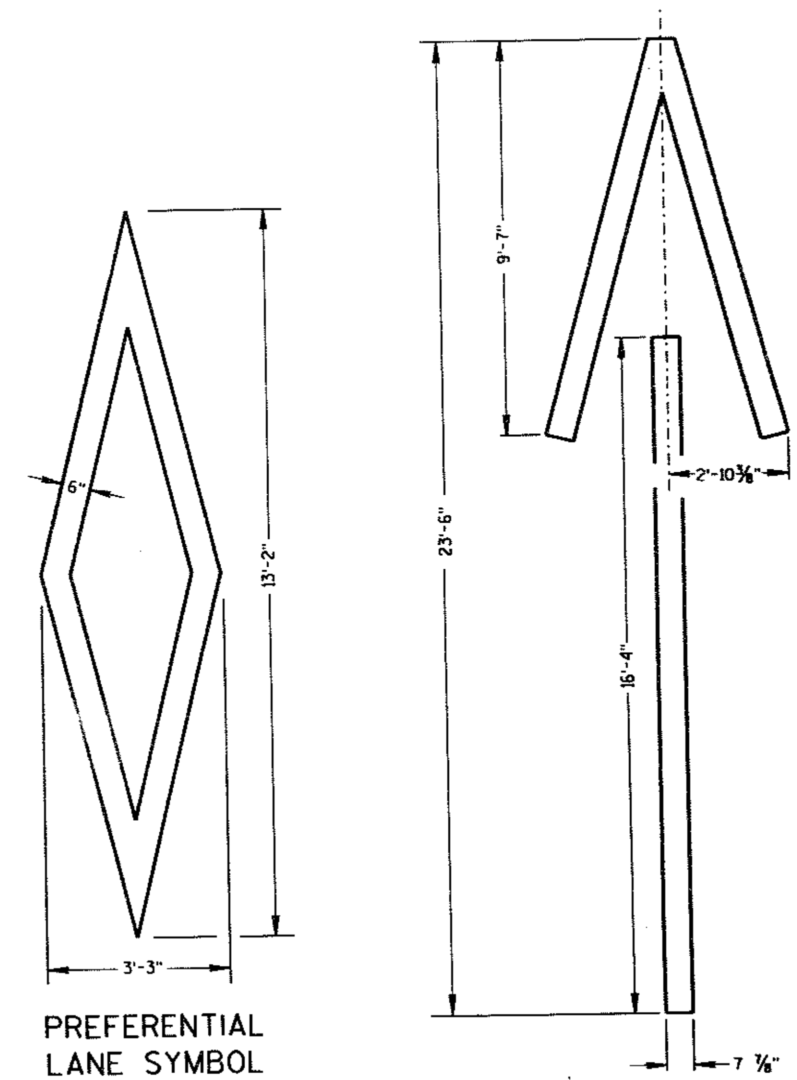


TYPE 2



TYPE 3

TYPE 1



PREFERENTIAL LANE SYMBOL

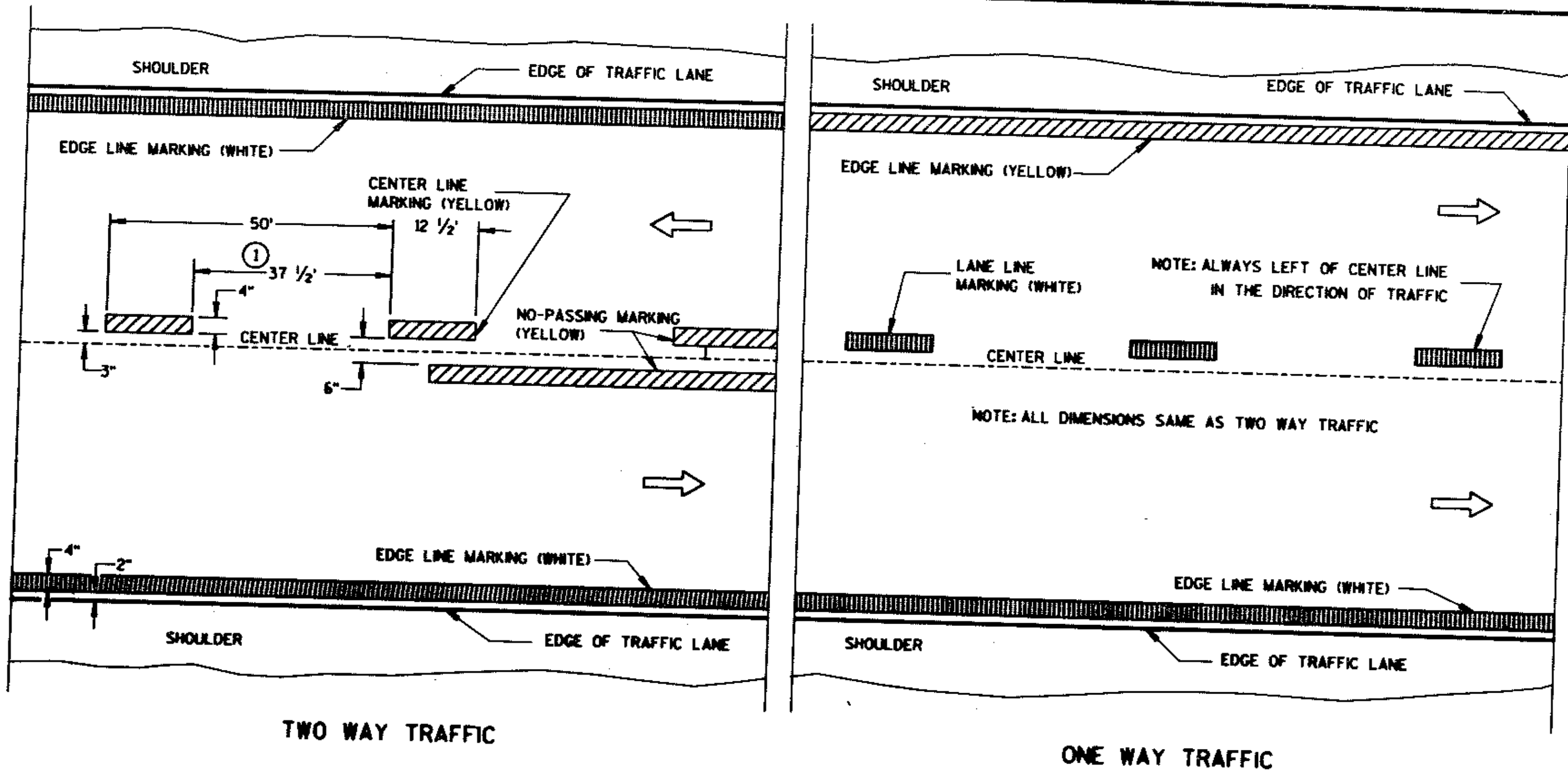
TYPE 4

PAVEMENT MARKING SYMBOLS

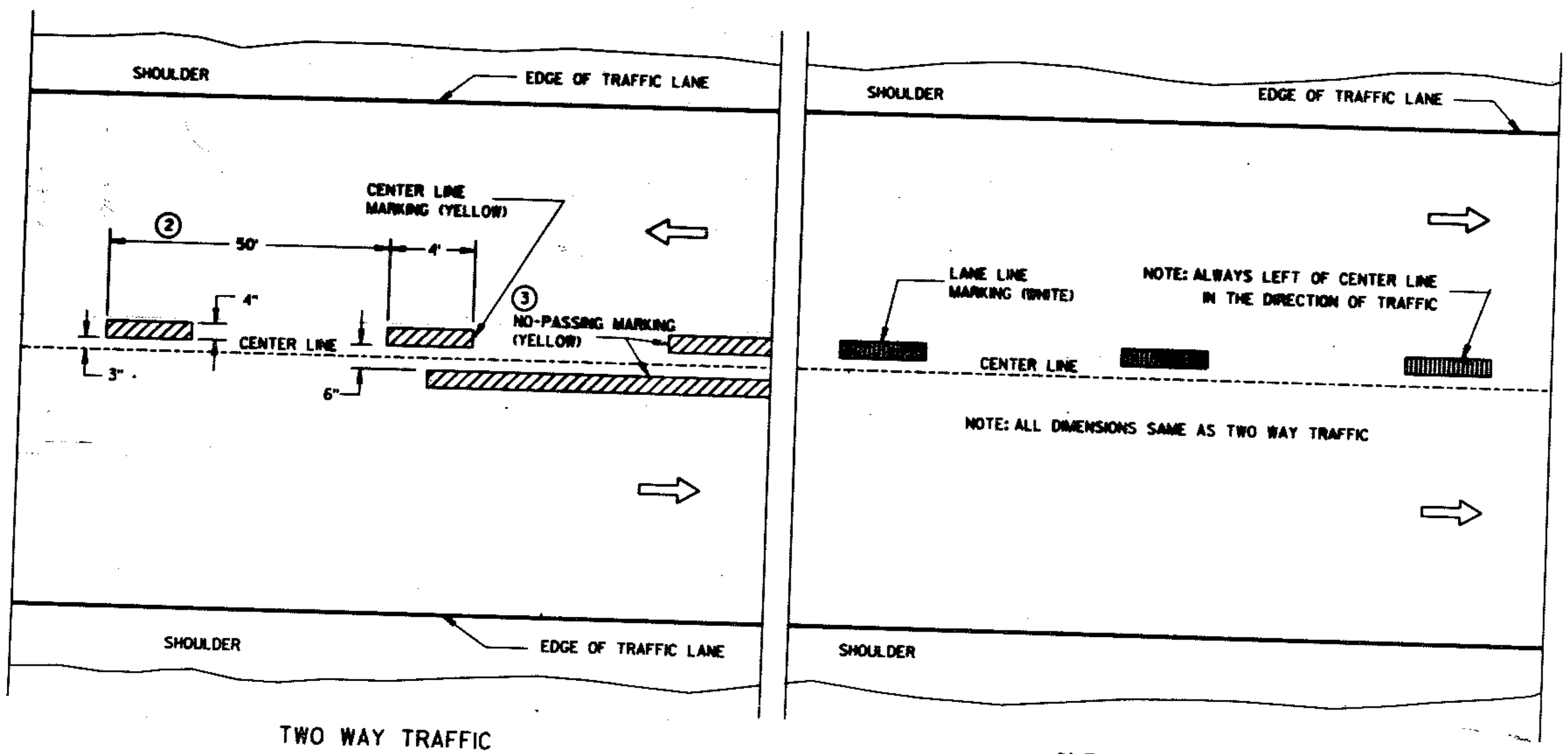
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-29-94
DATE
STATE TRAFFIC ENGINEER FOR HWY'S
FHWA

S.D.D. 15 C 7-4a



PERMANENT PAVEMENT MARKING



TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. CENTER LINE/LANE LINE MARKINGS SHALL BE 37 ½ FEET BETWEEN DASHES THROUGHOUT THE PROJECT, INCLUDING THE STARTING OR ENDING GAP FROM THE EXISTING CENTER LINE/LANE LINE MARKING.
2. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
3. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

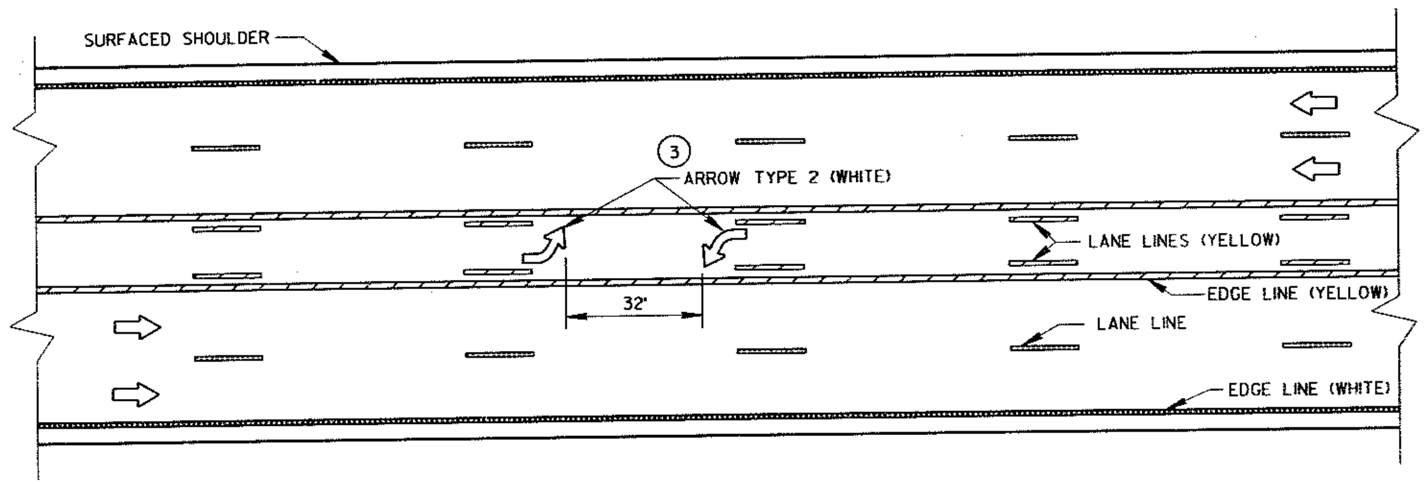
APPROVED 8/18/94
DATE

FHWA

DIRECTOR, OFFICE OF TRAFFIC

S.D.D. 15 C 8-6a

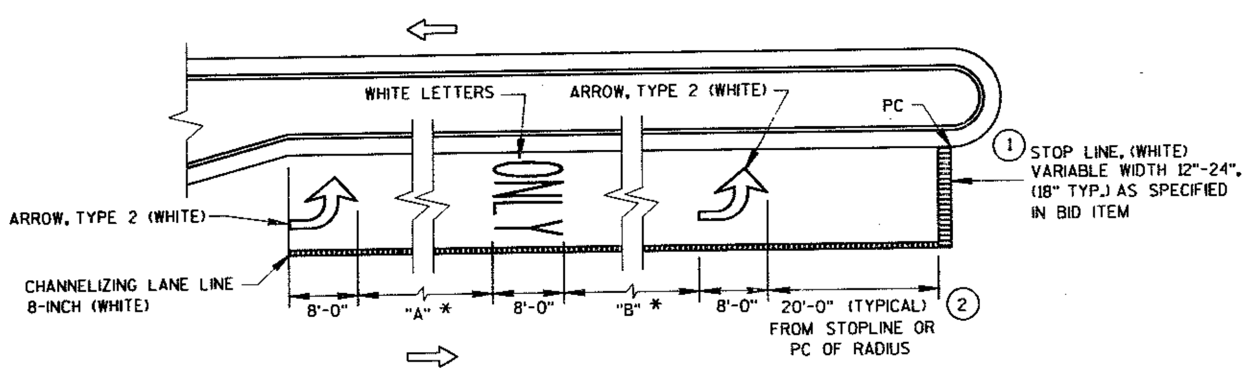
NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

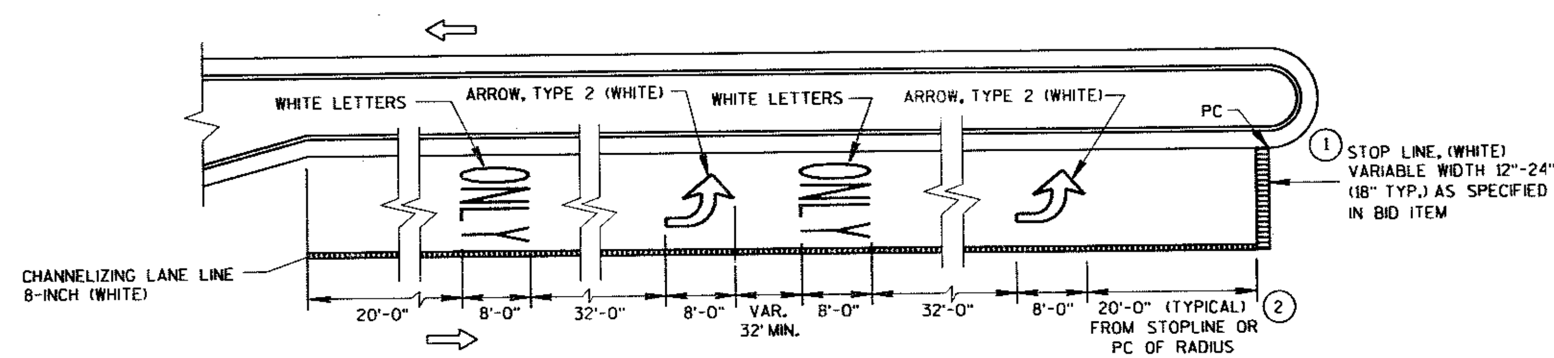
NOTES:

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

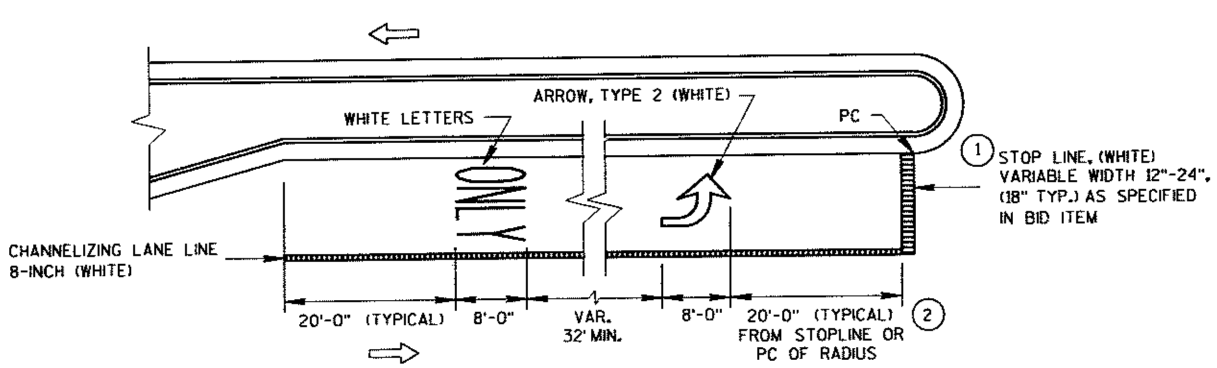


*VARIABLE, 32' MIN.
"A" = "B" (TYPICAL)

LEFT TURN LANE
(LENGTH 108' TO 167')



LEFT TURN LANE
(LENGTH OVER 167')



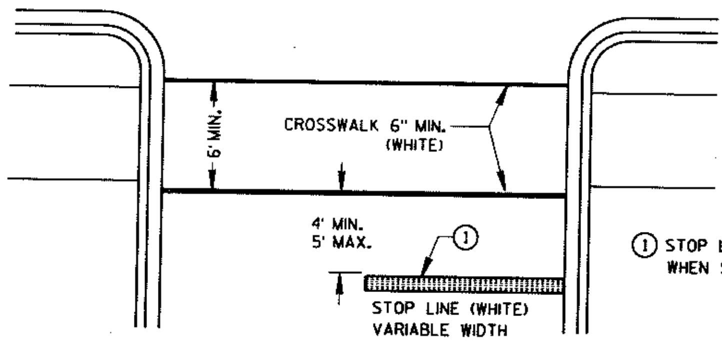
LEFT TURN LANE
(LENGTH UNDER 108')

NOTE:
SDD 15 C 8-6a AND SDD 15 C 7-1 IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

PAVEMENT MARKING
(LEFT TURN LANE)

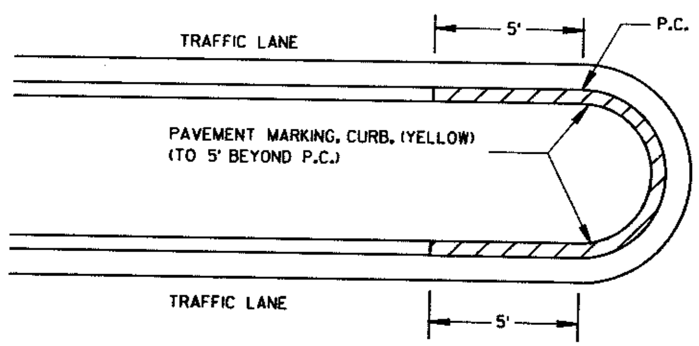
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-6C

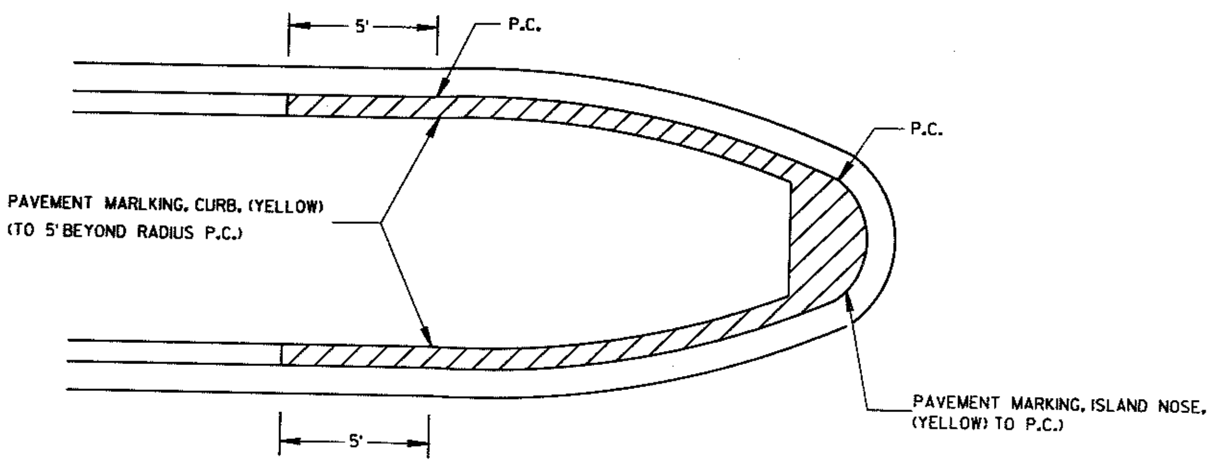


(1) STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT

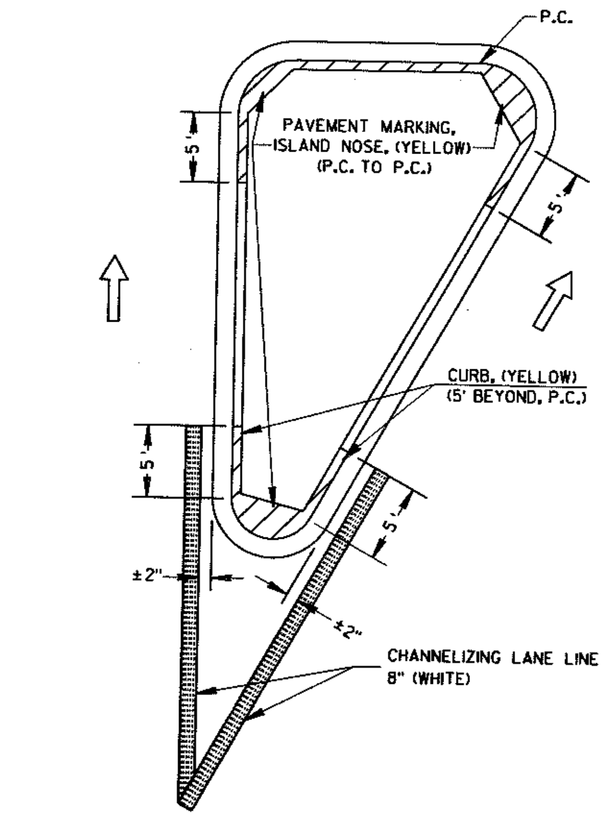
STOP LINE AND CROSSWALK



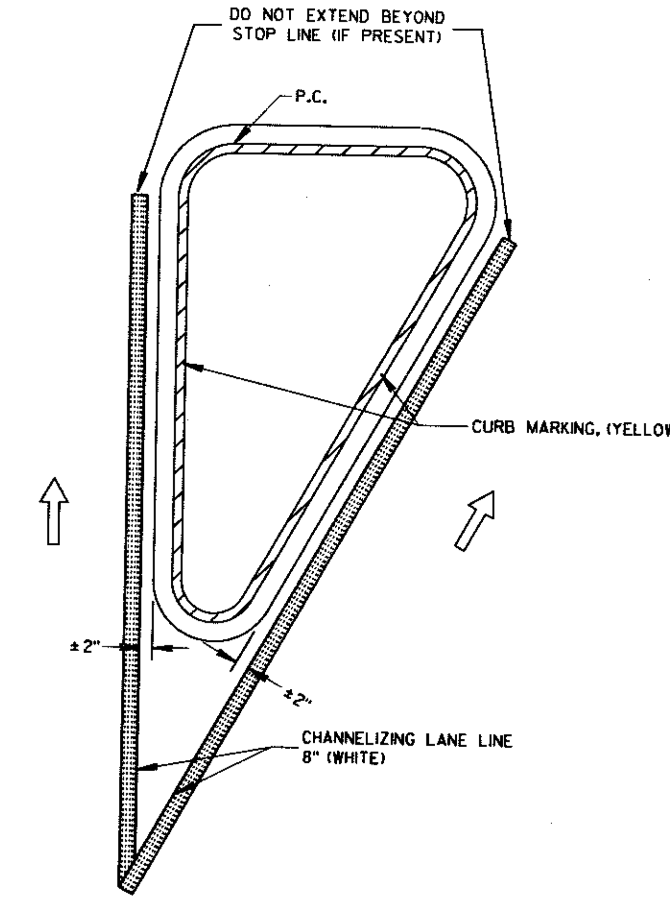
MEDIAN CURB



BULLET NOSE ISLAND



LARGE ISLAND
(GREATER THAN 50' PERIMETER OR ANY SIDE GREATER THAN 25' BETWEEN CURVES)



SMALL ISLAND
(LESS THAN 50' PERIMETER OR ANY SIDE LESS THAN 25' BETWEEN CURVES)

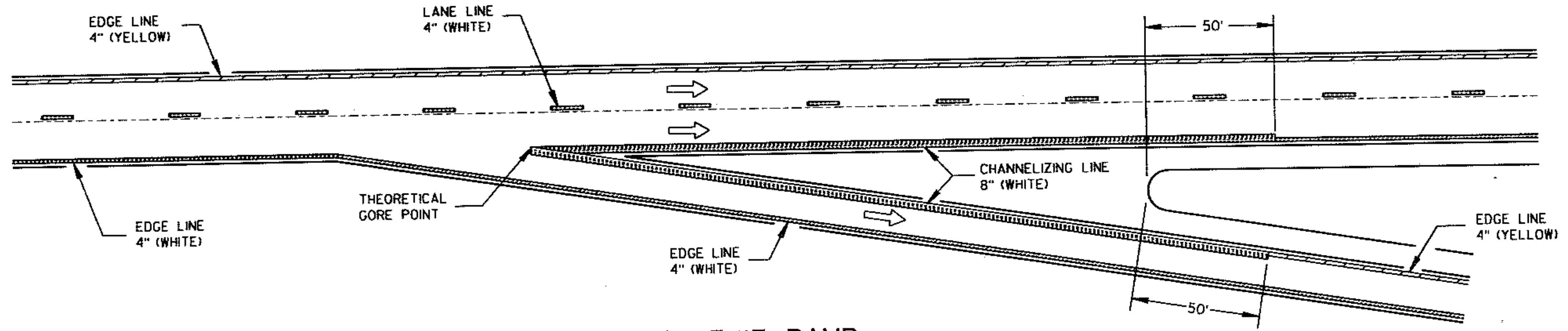
NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS, STOP LINE & CROSS WALK)

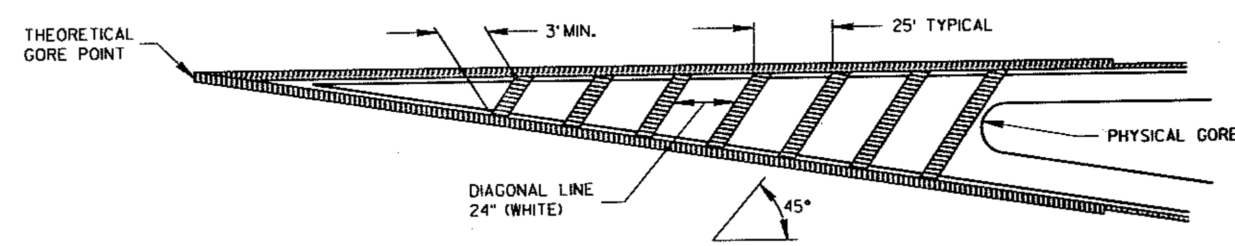
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 8/18/94 DATE — DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 C 8-6d

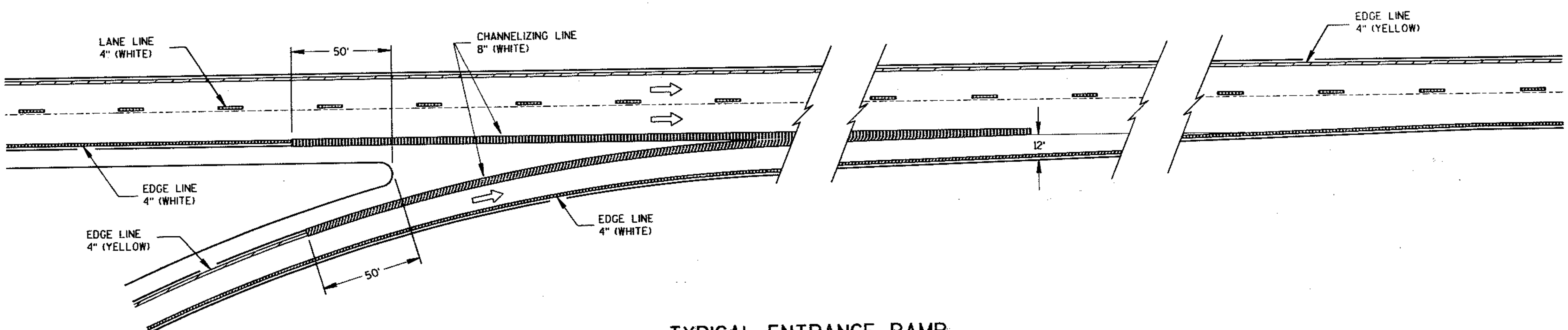


TYPICAL EXIT RAMP



CROSS-HATCH LINES AT
EXIT RAMP GORES WHEN SPECIFIED IN THE CONTRACT

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

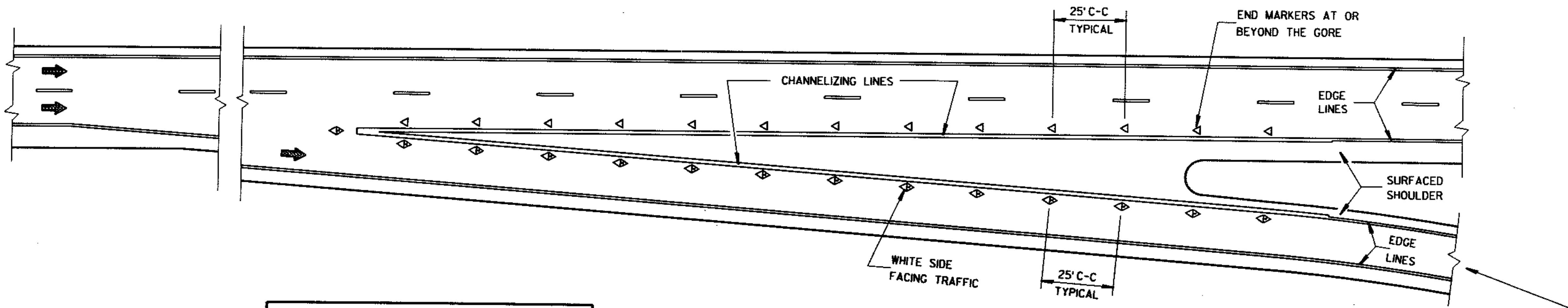


TYPICAL ENTRANCE RAMP

NOTE:
SDD 15 C 8-6a IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

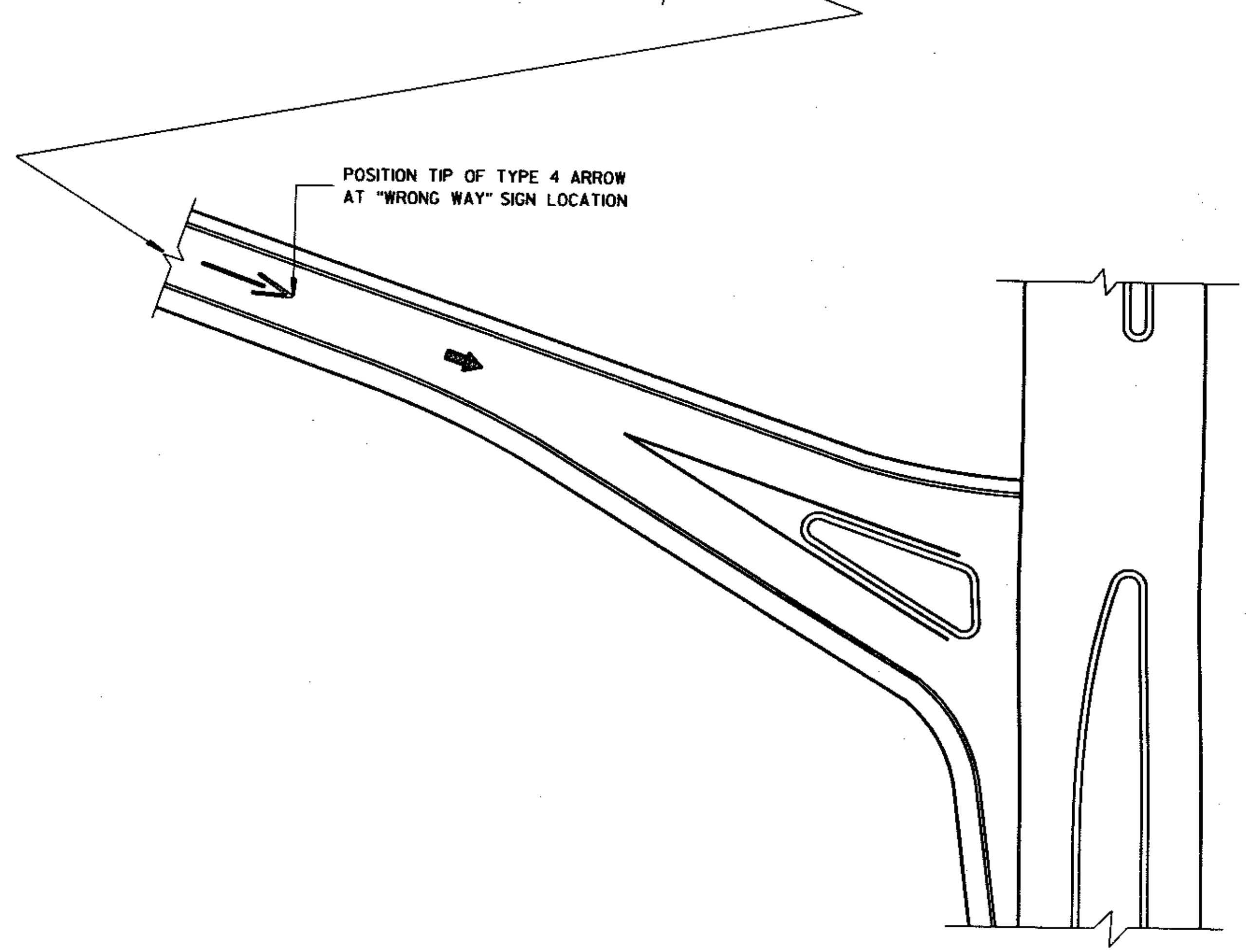
PAVEMENT MARKING (RAMPS AND GORES)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

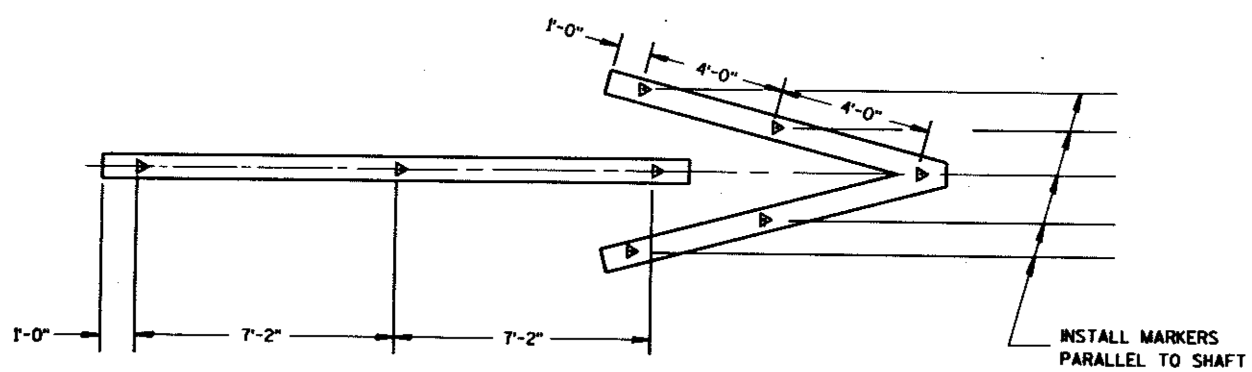
S.D.D. 15 C 8-6e



DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)
SPECIFY A MINIMUM OF 12 MARKERS ON EACH SIDE OF THE EXIT RAMP GORE

PLAN VIEW
EXIT RAMP





TYPE 4 ARROW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

MARKER REFLECTORS INSTALLED IN TYPE 4 ARROWS BEFORE APPLICATION OF THE ARROW MARKING MATERIAL SHALL BE MASKED TO PREVENT COATING.

THE ONE WAY RED REFLECTOR FACES TRAFFIC MAKING A WRONG WAY MOVEMENT ON THE RAMP.

LEGEND

- ◁ ONE WAY REFLECTOR (WHITE)
- ◀ ONE WAY REFLECTOR (RED)
- ◈ TWO WAY REFLECTOR (WHITE/RED)
- ⇦ DIRECTION OF TRAFFIC

NOTE: SHEET 3c IS REQUIRED WITH THIS DRAWING IN CONTRACT PLANS.

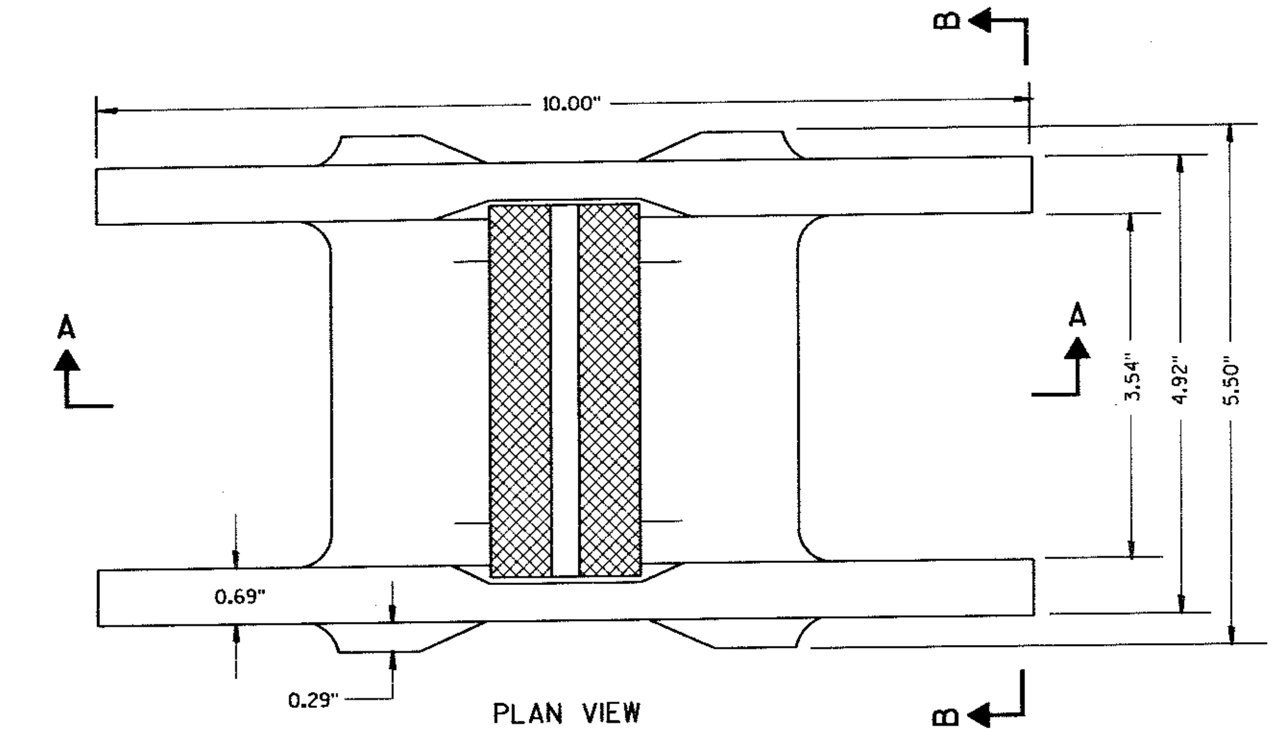
RAISED PAVEMENT MARKERS
(RAMPS & ARROWS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/17/94 Peter J. Rusch
DATE STATE TRAFFIC ENGINEER FOR HWYS
FHWA

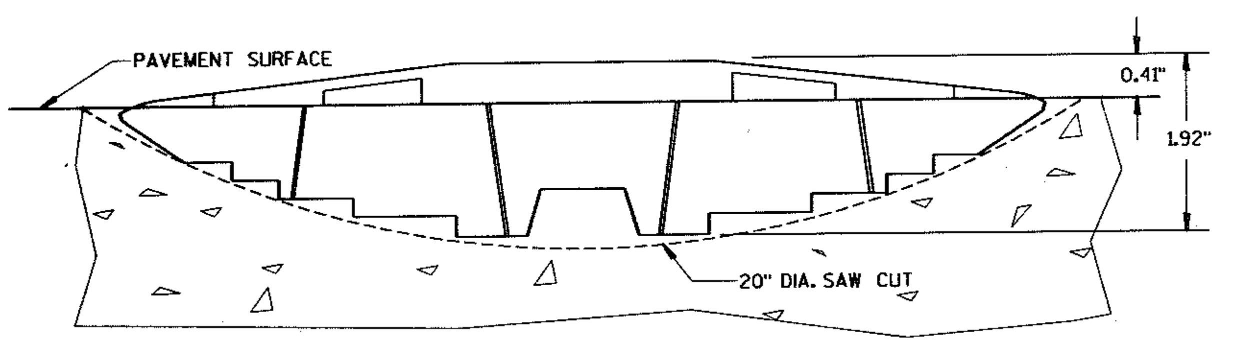
S.D.D. 15 C 10-3b

95

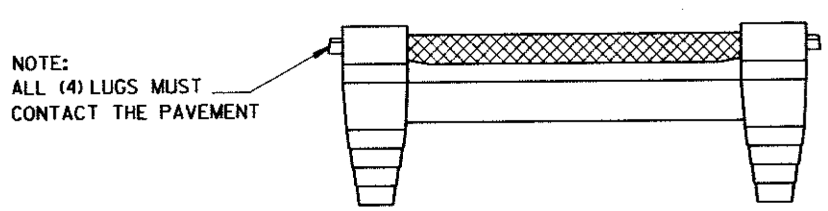


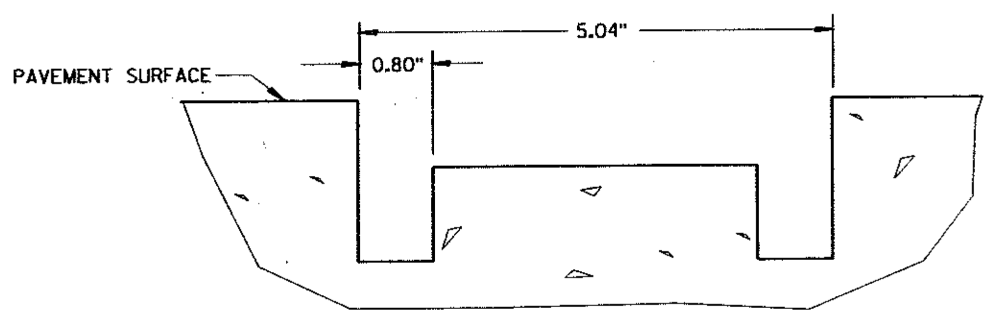
PLAN VIEW

RAISED MARKER
INSTALLED IN PAVEMENT



SECTION A-A





SECTION B-B

GENERAL NOTES

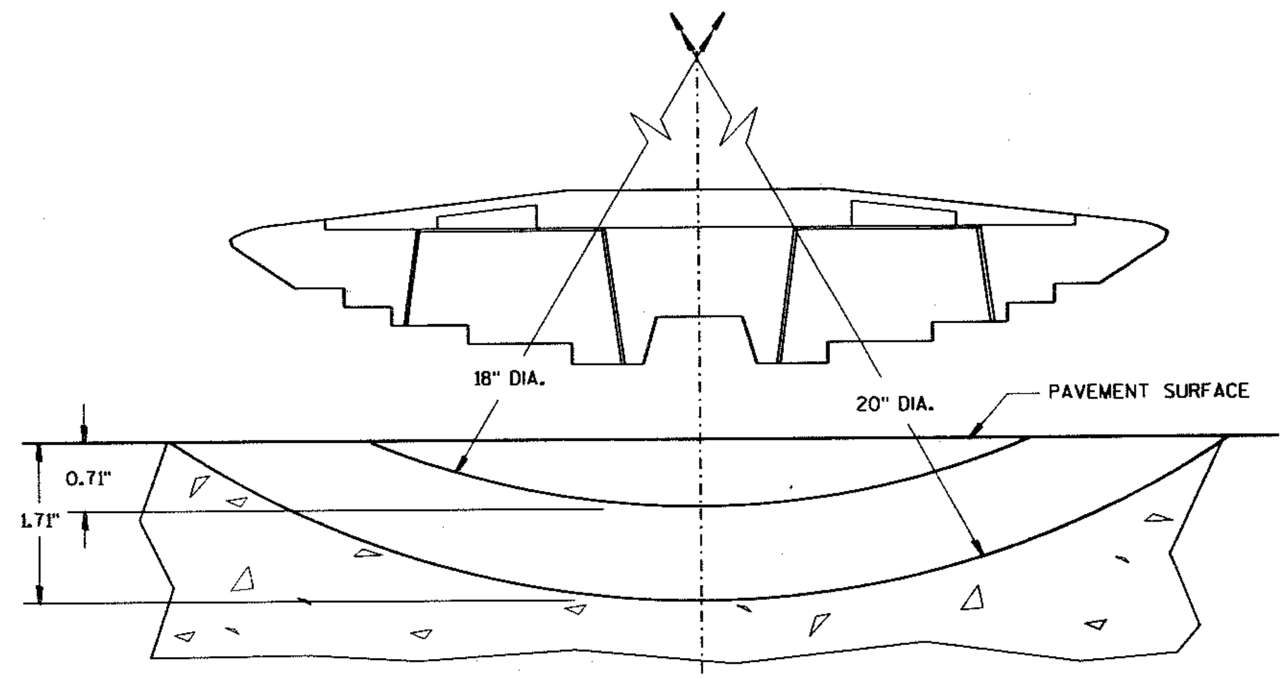
THE PAVEMENT SHALL BE SAW CUT TO THE DIMENSIONS SHOWN ON THIS DRAWING.

THE CONCRETE SAW SHALL BE FITTED WITH A GANG OF 18 INCH DIAMETER CONCRETE BLADES, BORDERED BY 20 INCH DIAMETER BLADES AT EACH END.

FOR PROPER FIT OF THE MARKER THE CASTING SHOULD HAVE APPROXIMATELY 1/8 INCH CLEARANCE (SIDE TO SIDE MOVEMENT) WHEN INSERTED AT EACH END. ALL FOUR LEVELING LUGS MUST CONTACT THE PAVEMENT, AND THE LEADING EDGES OF THE CASTING MUST LIE BELOW THE PAVEMENT SURFACE.

THE SAW CUT AREA MUST BE DRY AND FREE OF DUST, DIRT OR ANY MATERIAL WHICH WILL ADVERSELY AFFECT THE BOND OF THE ADHESIVE.

INSTALL THE MARKER WITH AN APPROVED TWO COMPONENT EPOXY ADHESIVE, BY FIRST FILLING THE SAW CUT TO WITHIN APPROXIMATELY 3/8 INCH OF PAVEMENT SURFACE AND THEN PLACING THE MARKER BY HAND INTO THE EPOXY FILLED SAW CUT. AFTER PLACEMENT OF MARKER, EPOXY SHOULD BE FLUSH WITH THE PAVEMENT SURFACE. EPOXY SHOULD NOT BE ALLOWED TO BUILD UP IN FRONT OF THE MARKER LENS, COVER THE MARKER LENS OR ADJACENT PAVEMENT MARKING. ANY DEBRIS OR RESIDUE CAUSED BY THE PAVEMENT SAWING, CUTTING AND MARKER INSTALLATION SHALL BE REMOVED FROM THE PAVEMENT MARKINGS.



SAW CUT DETAIL

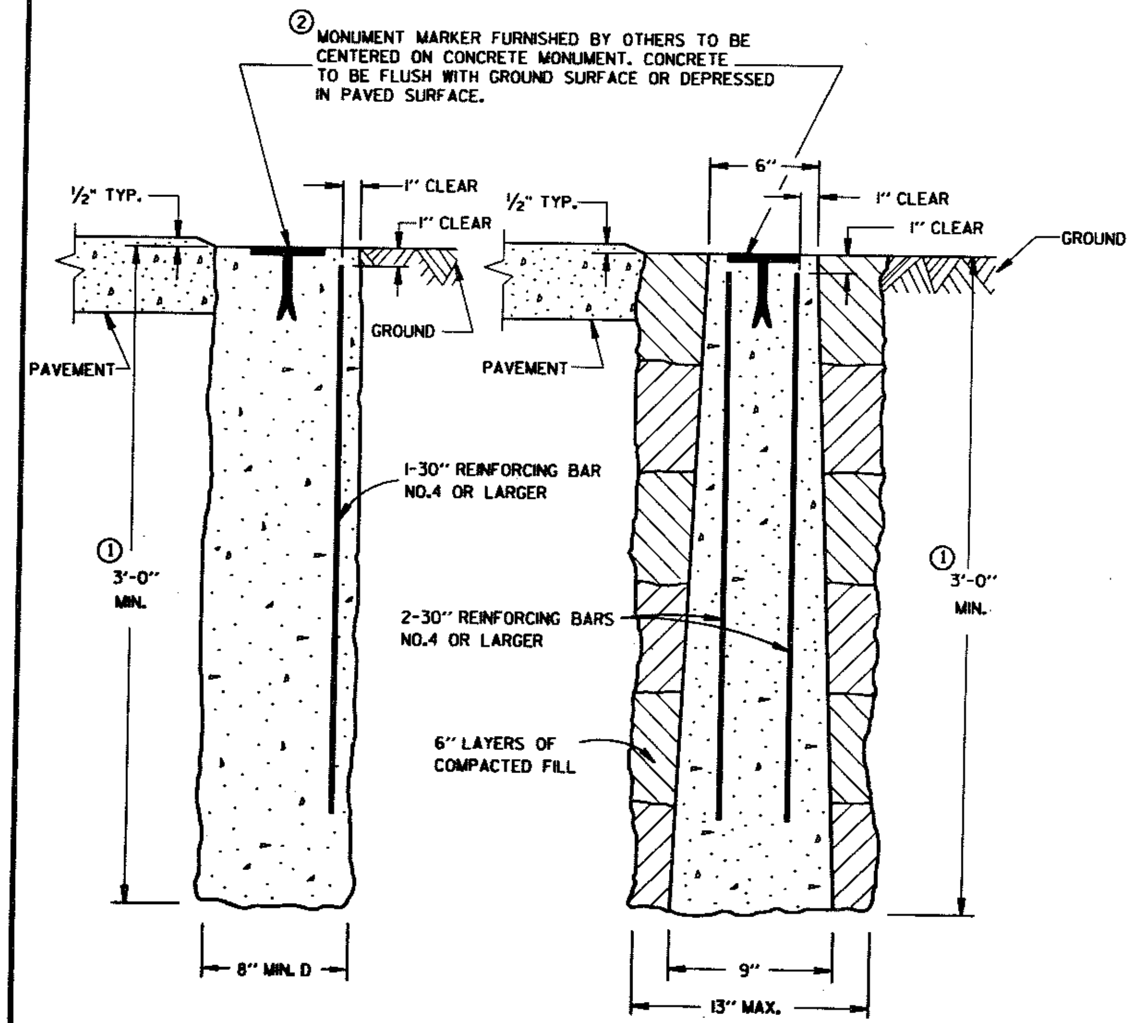
RAISED PAVEMENT MARKERS
(CASTING & SAWCUT DETAILS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 2/17/94 Peter J. Rusch
DATE STATE TRAFFIC ENGINEER FOR HWYS
FHWA

S.D.D. 15 C 10-3c

S.D.D. 15 C 10-3c

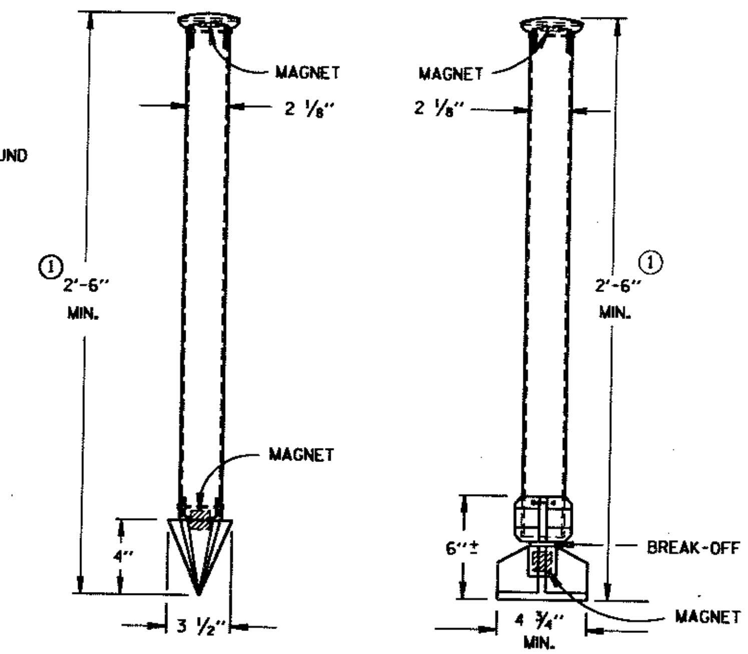


CAST-IN-PLACE

PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT

TYPE D

BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

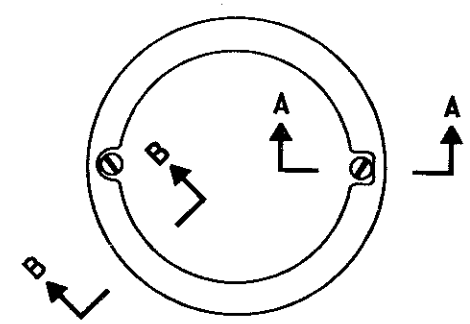
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

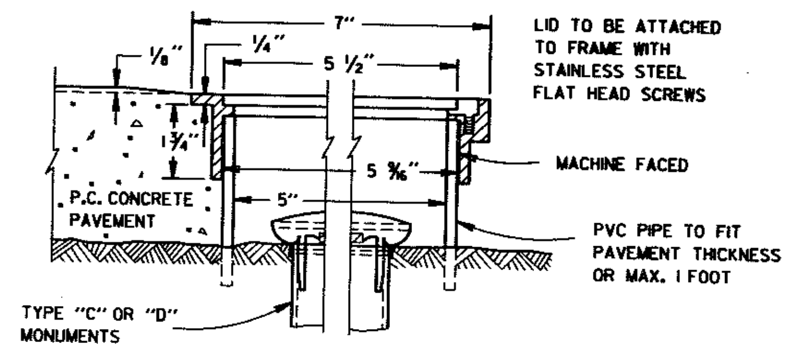
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



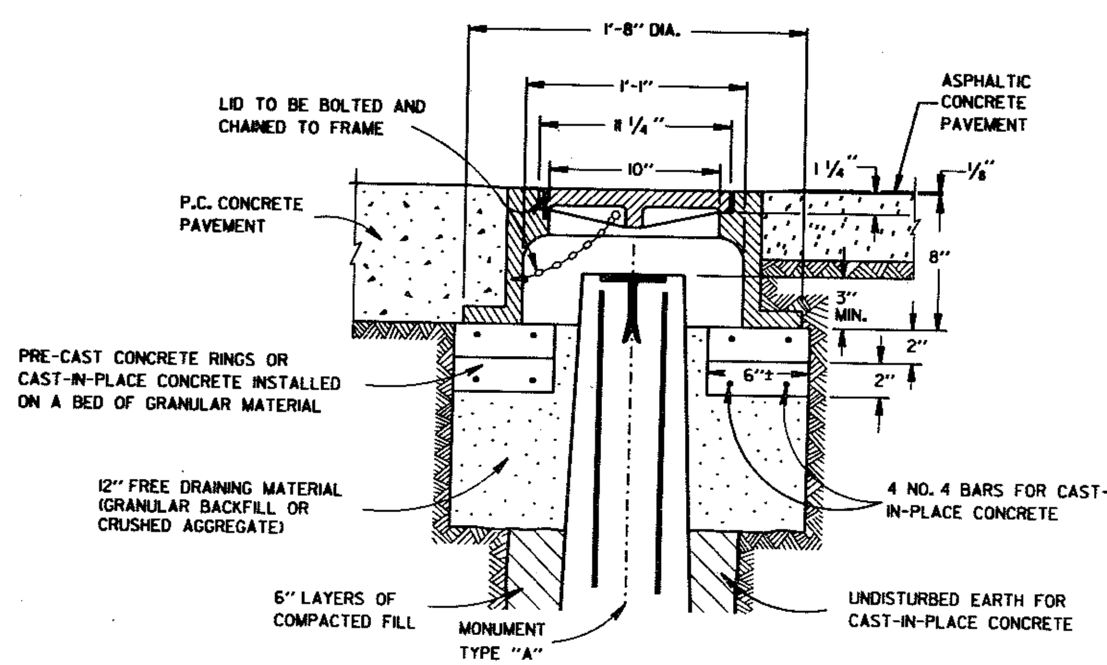
TOP VIEW



SECTION B-B   SECTION A-A

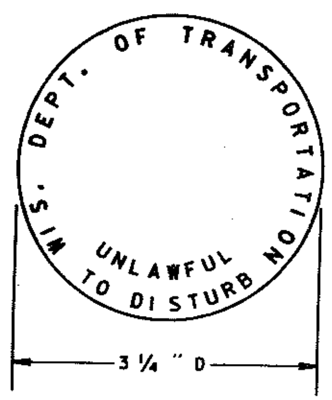
ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



CAST IRON MONUMENT COVER

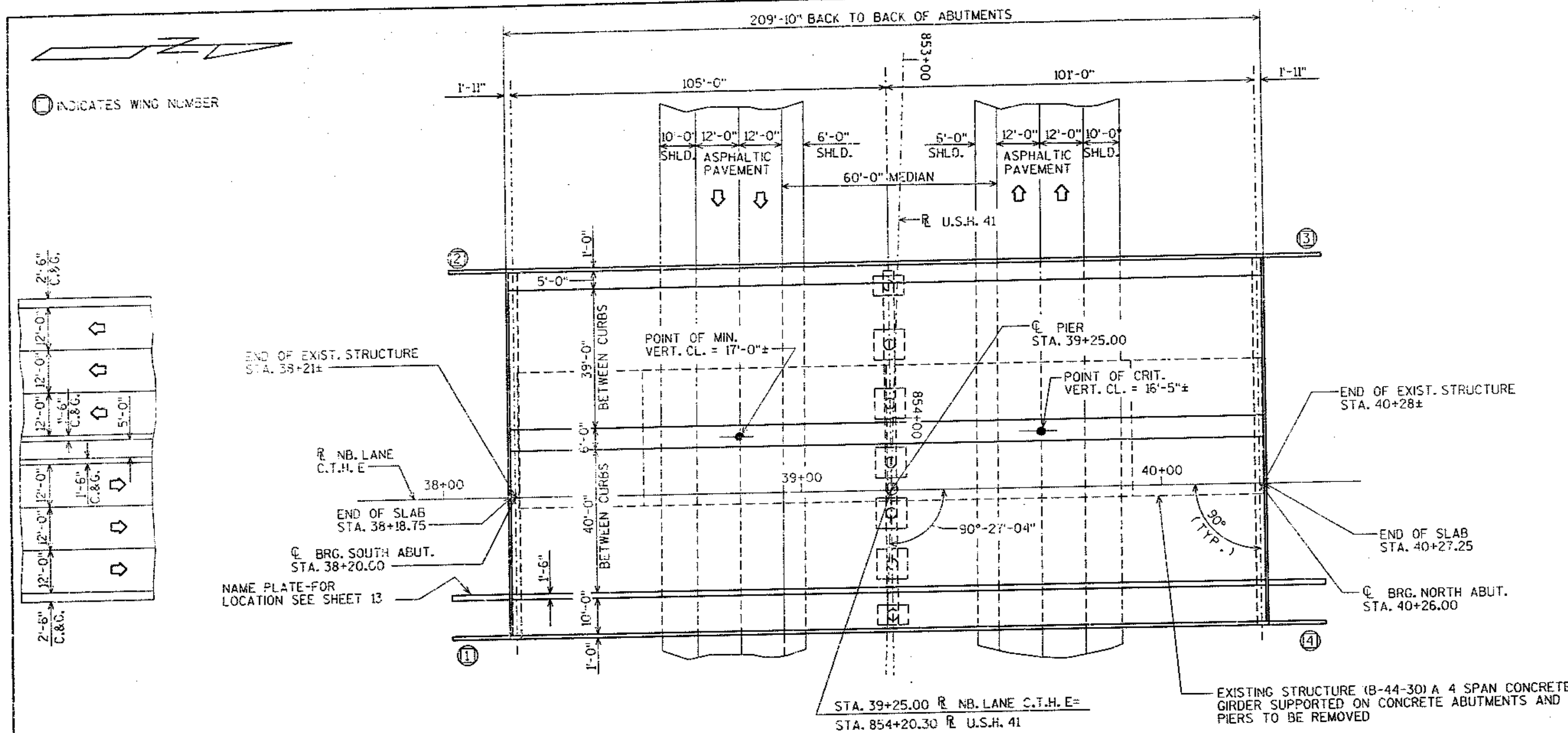
(APPROXIMATE WEIGHT - 95 LBS.)



② WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"

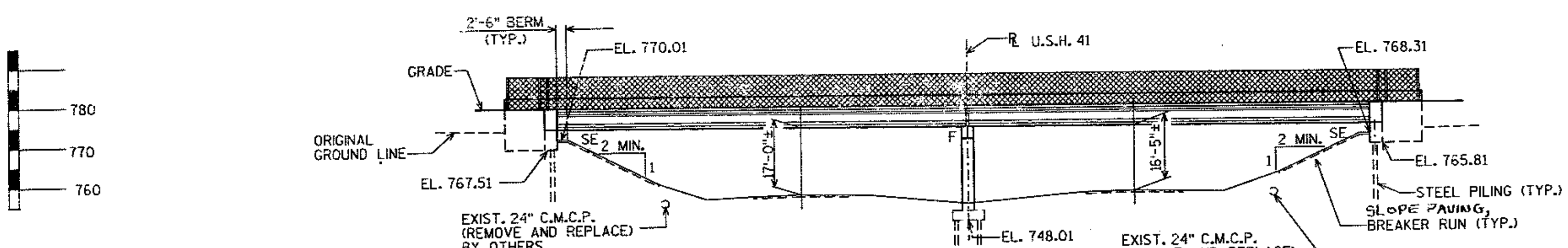
LANDMARK REFERENCE MONUMENTS AND COVERS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 3/31/92 DATE — STATE DESIGN ENGINEER FOR HWYS. FHWA

S.D.D. 16 A 1-5

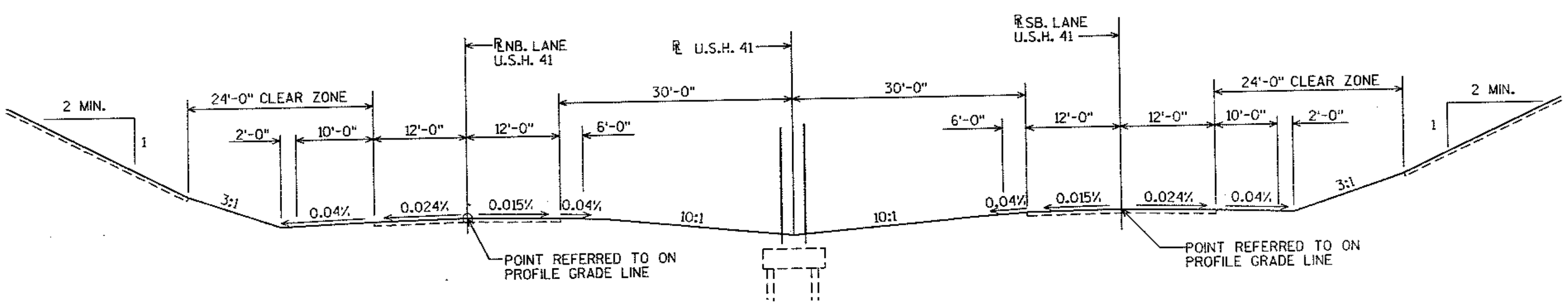


PLAN

2 SPAN-54" PRESTRESSED GIRDERS



ELEVATION



TYPICAL SECTION THRU U.S.H. 41

AT RIGHT ANGLES TO U.S.H. 41

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HS-20
INVENTORY RATING: HS-22
OPERATIONAL RATING: HS-40
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

54" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 6,000 P.S.I.
STRANDS-½" ϕ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING EST. 65'-0" @ S.ABUT. & 60'-0" @ N.ABUT. LONG AND DRIVEN TO MIN. BRG. VALUE OF 55 TONS PER PILE.

PIER TO BE SUPPORTED ON HP 10 X 42 STEEL PILING EST 45'-0" LONG AND DRIVEN TO MIN. BRG. VALUE OF 55 TONS PER PILE.

TRAFFIC VOLUME

C.T.H. E	U.S.H. 41
A.D.T.=25,600 (2016)	A.D.T.=49,775 (2016)
R.D.S.=40 M.P.H.	R.D.S.=65 M.P.H.

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER
9. SUPERSTRUCTURE
10. SUPERSTRUCTURE DETAILS
11. 54" PRESTRESSED GIRDER DETAILS
12. STEEL DIAPHRAGM
13. SLOPED FACE PARAPET "C"
14. FENCING DETAILS

DISTRICT CONTACT RICHARD SABOURIN

BRIDGE OFFICE CONTACTS :
FINN HUBBARD (608) 266-8489
KEITH NELSON (608) 266-5083

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

C.T.H E OVER U.S.H. 41

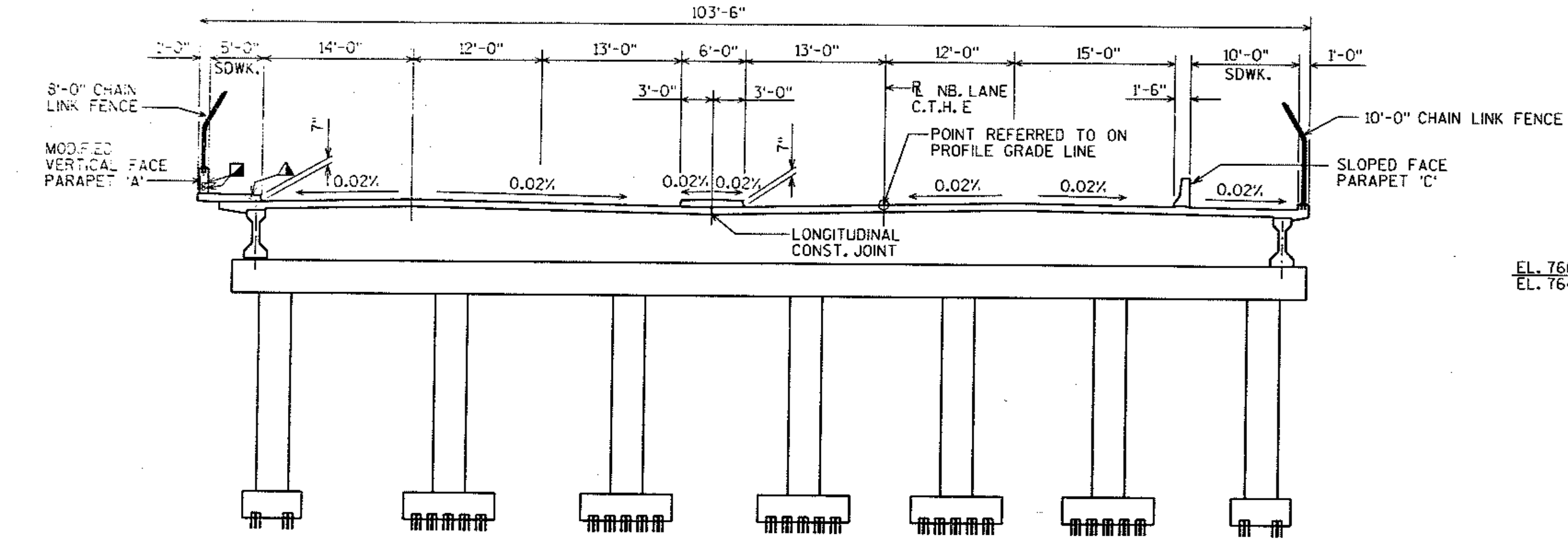
COUNTY OUTAGAMIE		TOWN: GRAND CHUTE CITY: APPLETON	
DESIGN SPEC. AASHTO 1994		LOAD HS-20	CONST. SPEC. 1989
DESIGNED BY KTN	DESIGN CK'D. CR	DRAWN BY G	PLANS CK'D. Bodd

APPROVED Gerald H. Anderson — CHIEF BRIDGE DESIGN ENGINEER — 11-29-94 DATE

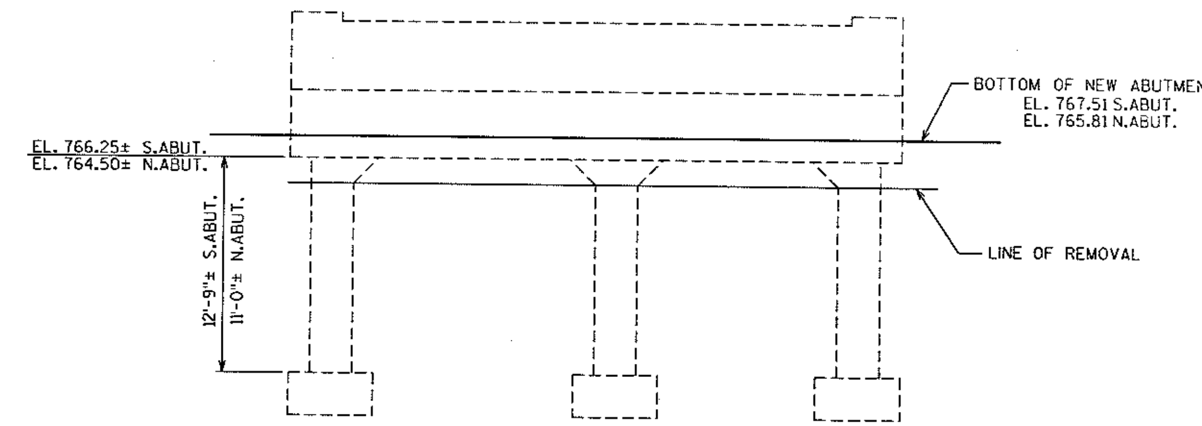
GENERAL PLAN

SHEET 1 OF 14

DATE: NOV. 94



CROSS SECTION THRU ROADWAY LOOKING NORTH



ELEVATION EXISTING ABUTMENT

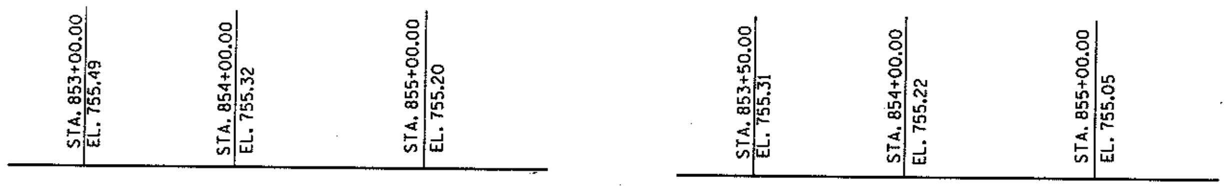
SHOWING LIMITS OF REMOVAL

▲ 3"ϕ NONMETALLIC CONDUIT FOR TRAFFIC LIGHTING. EXPANSION FITTINGS WILL BE REQUIRED AT THE BACK FACE OF ABUTMENTS.RUN CONDUIT TO PULL BOX IN APPROACH SIDEWALK.

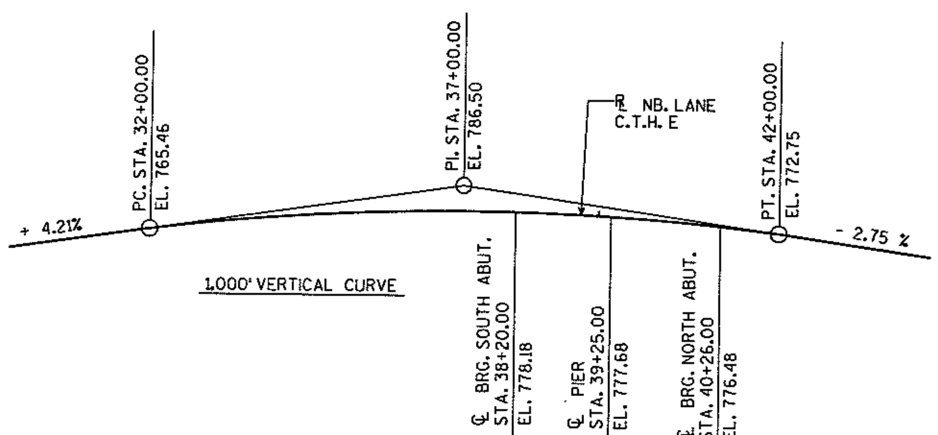
◪ TWO 4"ϕ NONMETALLIC CONDUIT FOR AMERTECH. EXPANSION FITTINGS WILL BE REQUIRED AT THE BACK FACE OF ABUTMENTS.TERMINATE 6" PAST ENDS OF WINGWALLS, 1'-6"± UNDER GROUND, CAP ENDS. CONDUIT WILL BE SUPPLIED BY THE UTILITY & INSTALLED BY CONTRACTOR.(INCLUDED IN BID ITEM "CONCRETE MASONRY, BRIDGES")

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	PIER	TOTALS
REMOVING OLD BRIDGE, STA. 39+25	L.S.	—	—	—	—	1
EXCAVATION FOR STRUCTURES, BRIDGES, B-44-172	L.S.	—	—	—	—	1
CONCRETE MASONRY, BRIDGES	C.Y.	790	87	87	112	1076
PROTECTIVE SURFACE TREATMENT	GAL.	159	—	—	—	159
HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	—	6900	6900	1980	15780
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	141800	780	780	16140	159500
CONCRETE MASONRY ANCHORS, TYPE S, ¾-INCH	EACH	264	—	—	—	264
PRESTRESSED GIRDER, I TYPE, 54-INCH	L.F.	3102	—	—	—	3102
NON-LAMINATED ELASTOMERIC BEARING PADS	EACH	45	—	—	—	45
STEEL PILING, DELIVERED AND DRIVEN, HP 10-INCH 42 POUND	L.F.	—	1550	1430	2115	5095
RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	—	20	20	—	40
SLOPE PAVING, BREAKER RUN	S.Y.	—	330	275	—	605
PIPE UNDERDRAIN, 6-INCH	L.F.	—	107	107	—	214
PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L.F.	—	20	20	—	40
NONMETALLIC CONDUIT, 3-INCH	L.F.	250	—	—	—	250
CHAIN LINK FENCE , 8 FT.	L.F.	242	—	—	—	242
CHAIN LINK FENCE , 10 FT.	L.F.	242	—	—	—	242
GEOTEXTILE FABRIC, TYPE DF	S.Y.	—	83	83	—	166
STEEL DIAPHRAGMS, STRUCTURE B-44-172	EACH	56	—	—	—	56
		—	—	—	—	
NON-BID ITEMS		—	—	—	—	—
FILLER	SIZE	—	—	—	—	½" & ¾"
		—	—	—	—	



PROFILE GRADE LINE U.S.H. 41



PROFILE GRADE LINE C.T.H. E

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC. 1989 | DRAWN BY G | PLANS CK'D. Budd

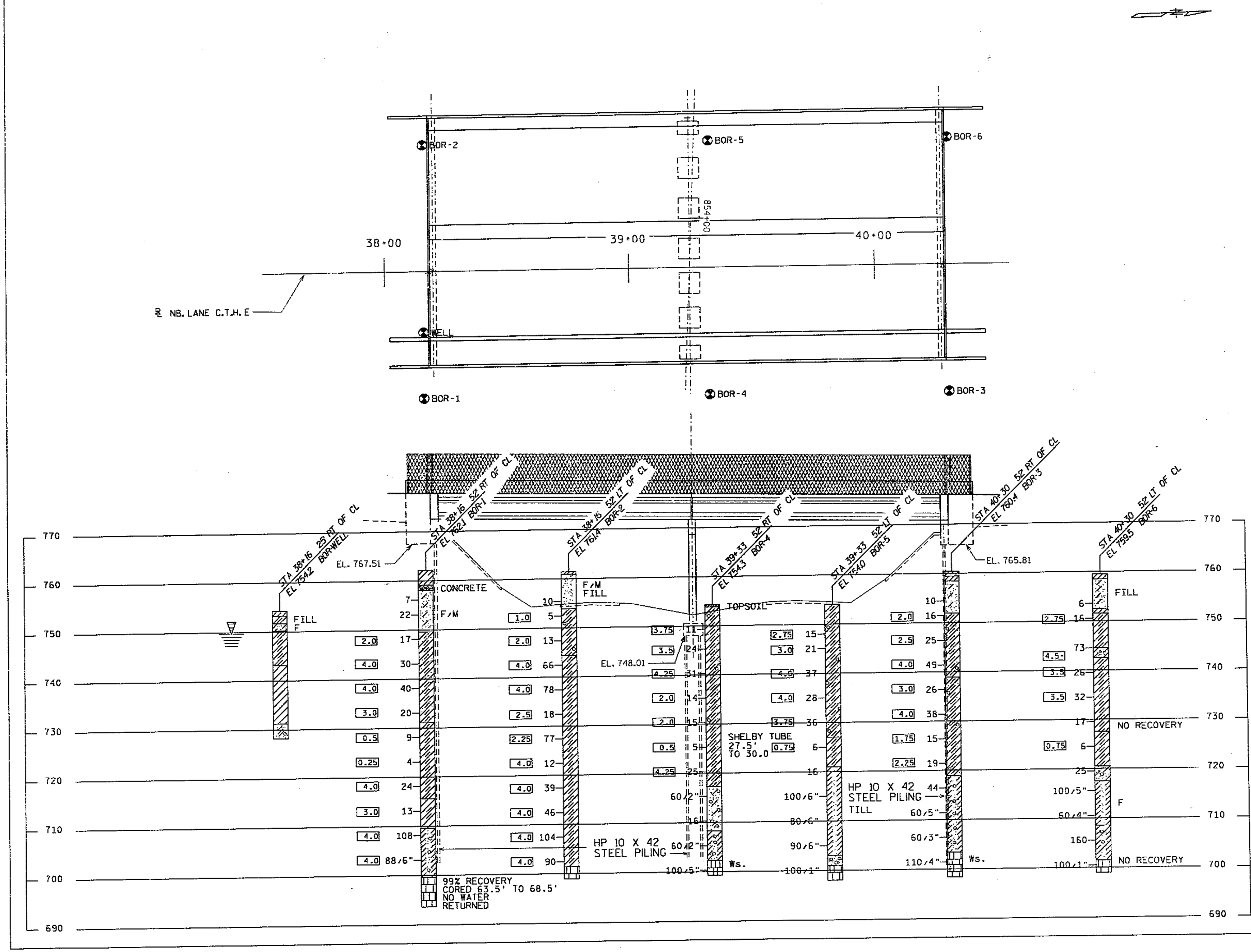
CROSS SECTION & QUANTITES

SHEET 2

BR0441721172GP.DGN
SCALE = 8

CTH 'E' OVER USH 41, APPLETON TO GREEN BAY, OUTAGAMIE COUNTY

STATE PROJECT NUMBER	SHEET NO.
1123-07-71,72	8.2



ABBREVIATIONS

F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS

Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING

Probing No.
Sta.
Elevation
95/6=95 Blows for 6" Penetration
7 Average Blows Per Foot
Probing taken with a 350# Wt. Falling 18" on a 2" O.D. Point.
Refusal 95/6

LEGEND OF BORING

Boring No.
Sta.
Elev.
Unconfined Strength → 7.7 7
Sandy Gravel
Blows Per Ft. Using 140# Wt. Falling 30"
F
Wash Sample
Boulders or Cobbles
Sand
Shelby Tube — S.T.
Ground Water Elevation
Silty Clay
No Ground Water Observed Above This Elevation
So Limestone

Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D. x 1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

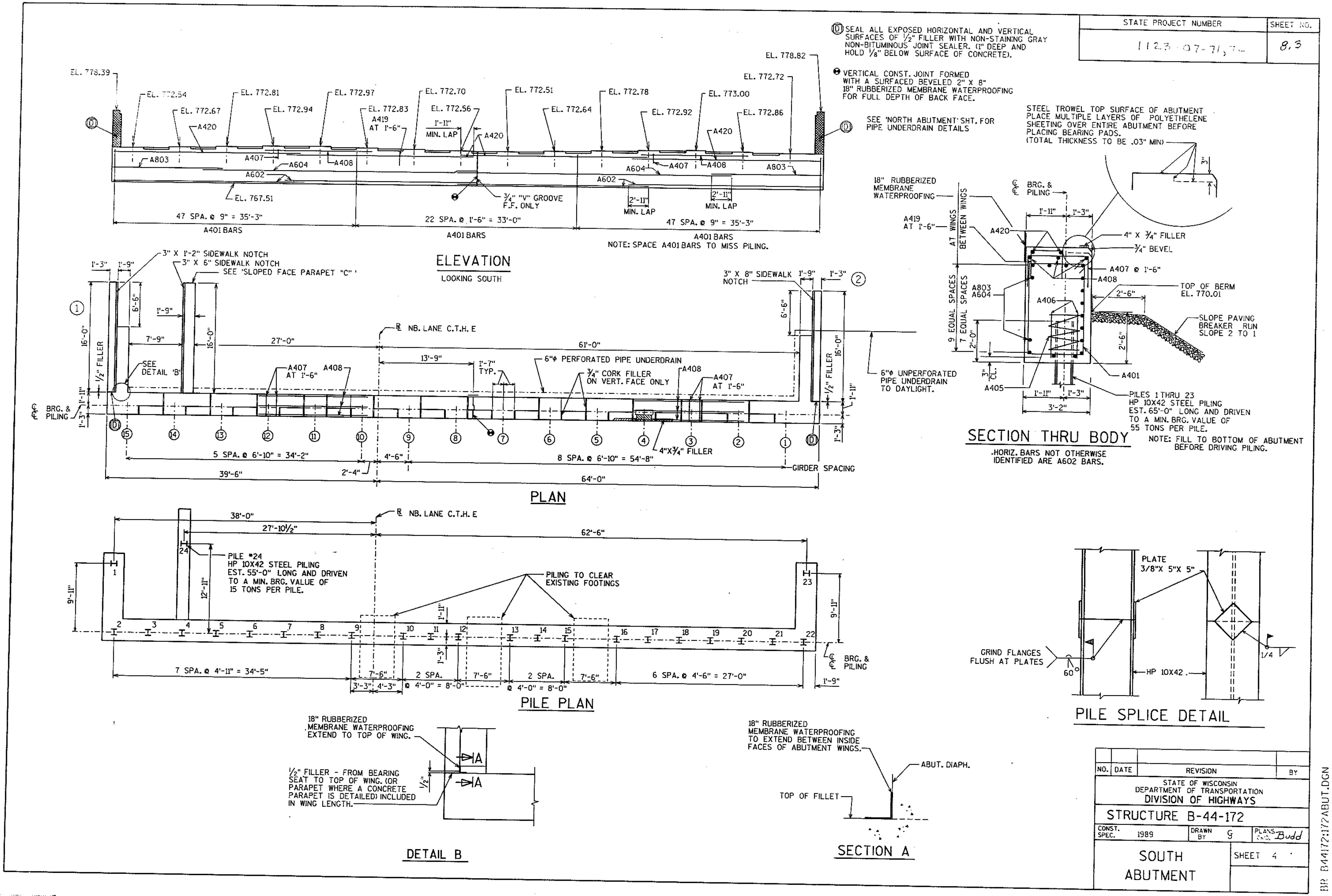
NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC.	1989	DRAWN BY	G	PLANS CK'D.	Budd

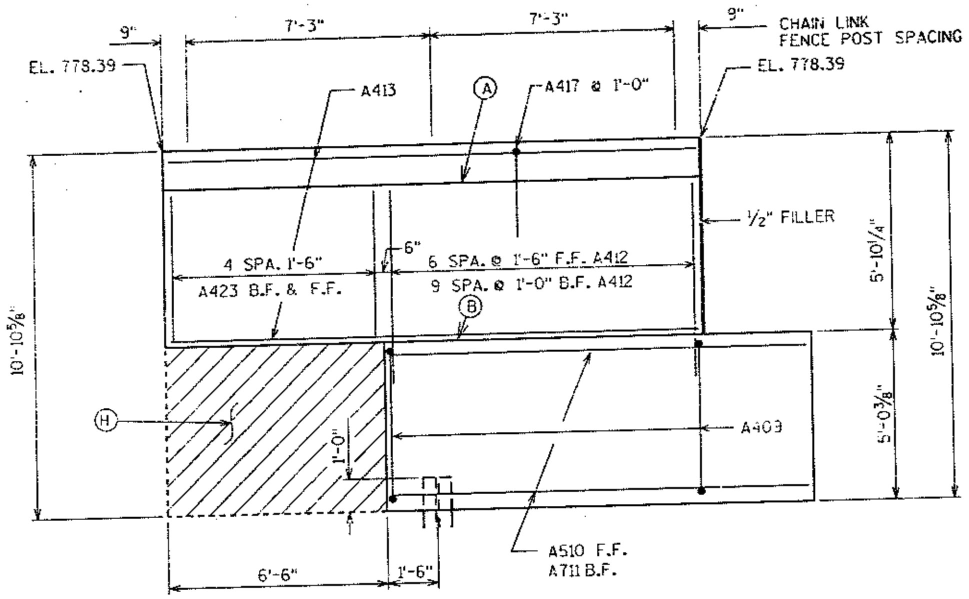
SUBSURFACE EXPLORATION — SHEET 3



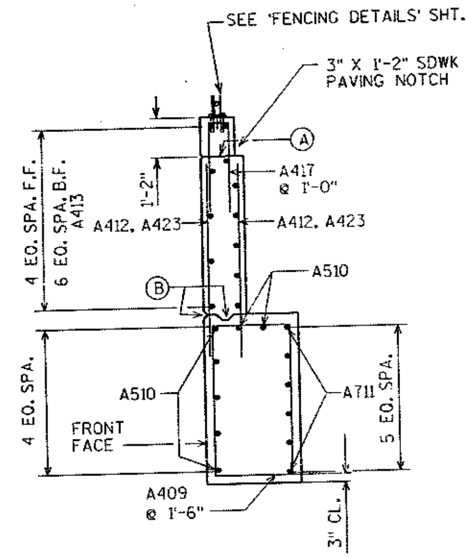
STATE PROJECT NUMBER
SHEET NO.
1123-07-71,74
8.3
(D) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).
VERTICAL CONST. JOINT FORMED WITH A SURFACED BEVELED 2" X 8"
18" RUBBERIZED MEMBRANE WATERPROOFING FOR FULL DEPTH OF BACK FACE.
SEE 'NORTH ABUTMENT' SHT. FOR PIPE UNDERDRAIN DETAILS
EL. 778.39
EL. 772.54
EL. 772.67
EL. 772.81
EL. 772.94
EL. 772.97
EL. 772.83
A419 AT 1'-6"
EL. 772.70
EL. 772.56
1'-11" MIN. LAP
EL. 772.51
EL. 772.64
EL. 772.78
EL. 772.92
EL. 773.00
EL. 772.72
EL. 772.86
EL. 778.82
A420
A803
A407
A604
A408
A602
EL. 767.51
3/4" "V" GROOVE F.F. ONLY
2'-11" MIN. LAP
47 SPA. @ 9" = 35'-3"
A401 BARS
22 SPA. @ 1'-6" = 33'-0"
A401 BARS
47 SPA. @ 9" = 35'-3"
A401 BARS
NOTE: SPACE A401 BARS TO MISS PILING.
ELEVATION
LOOKING SOUTH
3" X 1'-2" SIDEWALK NOTCH
3" X 6" SIDEWALK NOTCH
SEE 'SLOPED FACE PARAPET "C"'
3" X 8" SIDEWALK NOTCH
1'-3"
1'-9"
6'-6"
16'-0"
1/2" FILLER
7'-9"
27'-0"
61'-0"
SEE DETAIL 'B'
℄ NB. LANE C.T.H. E
13'-9"
1'-7" TYP.
6"Φ PERFORATED PIPE UNDERDRAIN
3/4" CORK FILLER ON VERT. FACE ONLY
A407 AT 1'-6"
A408
6"Φ UNPERFORATED PIPE UNDERDRAIN TO DAYLIGHT.
℄ BRG. & PILING
1'-11"
4"X3/4" FILLER
5 SPA. @ 6'-10" = 34'-2"
4'-6"
8 SPA. @ 6'-10" = 54'-8"
39'-6"
2'-4"
GIRDER SPACING
64'-0"
PLAN
38'-0"
27'-10 1/2"
62'-6"
PILE #24 HP 10X42 STEEL PILING EST. 55'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 15 TONS PER PILE.
PILING TO CLEAR EXISTING FOOTINGS
9'-11"
12'-11"
1'-11"
1'-3"
7 SPA. @ 4'-11" = 34'-5"
7'-6"
2 SPA. @ 4'-0" = 8'-0"
3'-3"
4'-3"
6 SPA. @ 4'-6" = 27'-0"
1'-9"
PILE PLAN
18" RUBBERIZED MEMBRANE WATERPROOFING
A419 AT 1'-6"
AT WINGS
BETWEEN WINGS
℄ BRG. & PILING
1'-11"
1'-3"
4" X 3/4" FILLER
3/4" BEVEL
A407 @ 1'-6"
A408
TOP OF BERM EL. 770.01
2'-6"
SLOPE PAVING BREAKER RUN SLOPE 2 TO 1
9 EQUAL SPACES
7 EQUAL SPACES
A803
A604
A406
A401
A405
3'-2"
PILES 1 THRU 23 HP 10X42 STEEL PILING EST. 65'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE.
NOTE: FILL TO BOTTOM OF ABUTMENT BEFORE DRIVING PILING.
STEEL TROWEL TOP SURFACE OF ABUTMENT PLACE MULTIPLE LAYERS OF POLYETHELENE SHEETING OVER ENTIRE ABUTMENT BEFORE PLACING BEARING PADS. (TOTAL THICKNESS TO BE .03" MIN)
SECTION THRU BODY
HORIZ. BARS NOT OTHERWISE IDENTIFIED ARE A602 BARS.
PLATE 3/8"X 5"X 5"
GRIND FLANGES FLUSH AT PLATES
60°
HP 10X42
1/4
PILE SPLICE DETAIL
18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND TO TOP OF WING.
1/2" FILLER - FROM BEARING SEAT TO TOP OF WING. (OR PARAPET WHERE A CONCRETE PARAPET IS DETAILED) INCLUDED IN WING LENGTH.
DETAIL B
18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND BETWEEN INSIDE FACES OF ABUTMENT WINGS.
ABUT. DIAPH.
TOP OF FILLET
SECTION A
NO. DATE REVISION BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS
STRUCTURE B-44-172
CONST. SPEC. 1989
DRAWN BY G
PLANS CKD. Budd
SOUTH ABUTMENT
SHEET 4
BR B44172:172ABUT.DGN

161

STATE PROJECT NUMBER	SHEET NO.
112[illegible],72	8.4



WING 1 ELEVATION

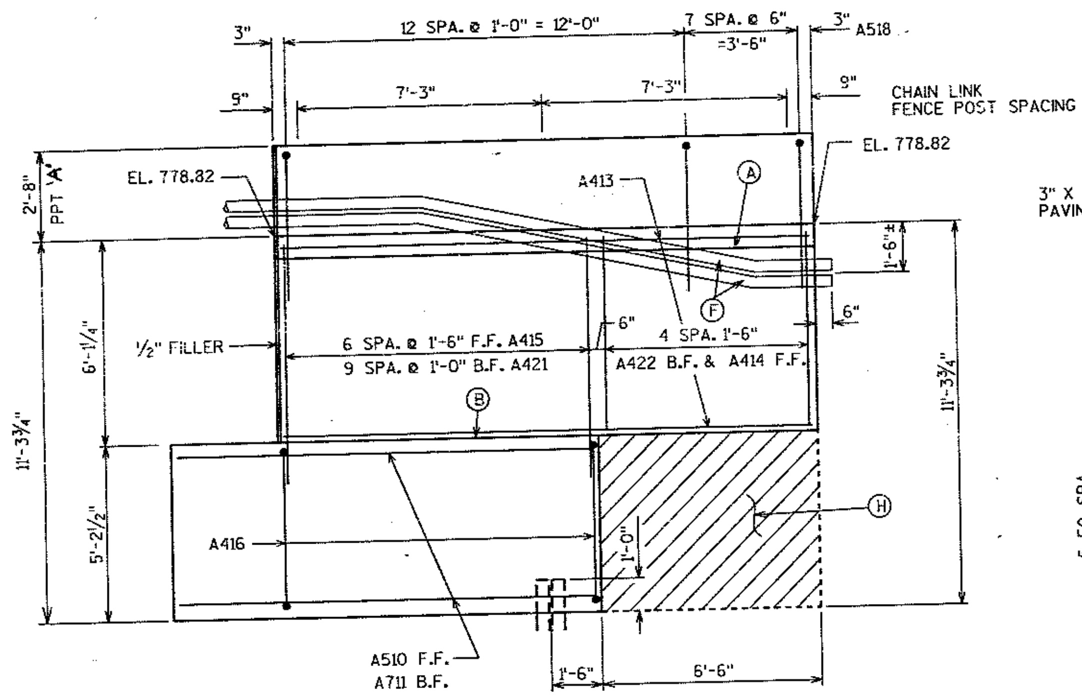


WING 1 SECTION

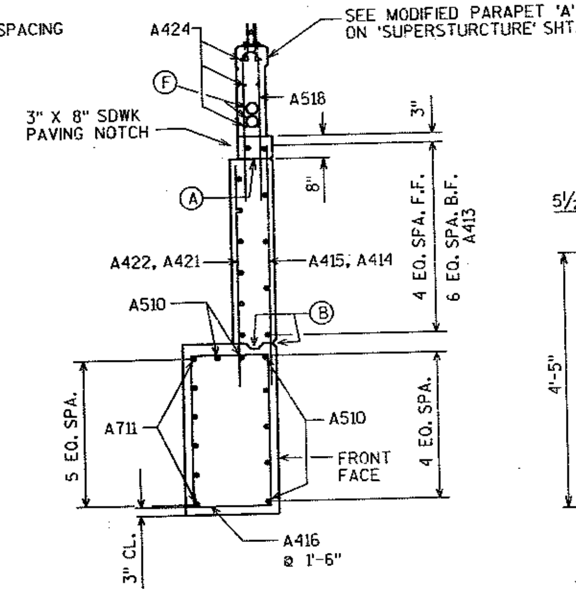
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

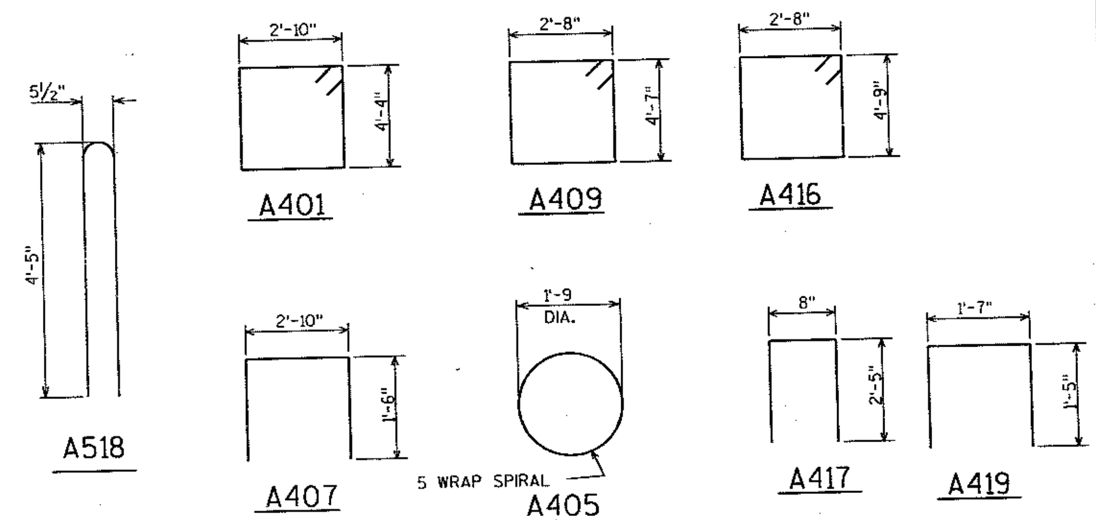
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		117	14-10	X		BODY-STIRRUPS
A602		56	28-0			BODY HOR.
A803		16	16-0			BODY HOR. @ WINGS
A604		12	40-0			BODY HOR. B.F.
A405		21	28-0	X		BODY-5 WRAP SPIRAL
A406		42	2-3			BODY-2 PER PILE
A407		24	5-8	X		BODY TOP VERT.
A408		6	16-6			BODY TOP HOR.
A409		7	15-0	X		WING 1 STIRRUP
A510		14	12-4			WING HOR.
A711		12	11-8			WING HOR. B.F.
A412		17	5-11			WING 1 VERT.
A413	X	24	15-7			WINGS HOR.
A414		5	5-8			WING 2 F.F. VERT.
A415		7	7-1			WING 2 VERT.
A416		7	15-4	X		WING 2 STIRRUP
A417	X	17	5-4	X		WING 1 TOP
A518	X	20	9-1	X		WING 2 TO PPT 'A'
A419		70	4-3	X		BODY TOP VERT.
A420		8	27-3			BODY TOP HOR.
A421		10	6-7			WING 2 B.F. VERT.
A422		5	5-0			WING 2 B.F. VERT.
A423		10	4-4			WING 1 VERT.
A424	X	6	15-7			PARAPET 'D' HOR.



WING 2 ELEVATION



WING 2 SECTION



Ⓐ CONSTRUCTION JOINT - STRIKE OFF AND LEAVE ROUGH. - POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. ¾" 'V' GROVE @ F.F. REQUIRED.

Ⓑ OPT. CONSTRUCTION JOINT - FORMED BY A SURFACED, BEVELED 2 X 6 KEYWAY. IF USED A ¾"'V' GROVE @ F.F. IS REQUIRED.

Ⓗ THE CONTRACTOR AT THEIR EXPENSE MAY PLACE UNREINFORCED CONCRETE IN THIS SHADED AREA.

Ⓕ TWO 4"φ NONMETALLIC CONDUITS FOR AMERTECH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC. 1989	DRAWN BY G	PLANS CK'D. Budd

SOUTH ABUTMENT DETAILS — SHEET 5

BRB44172:172ABUT.DGN

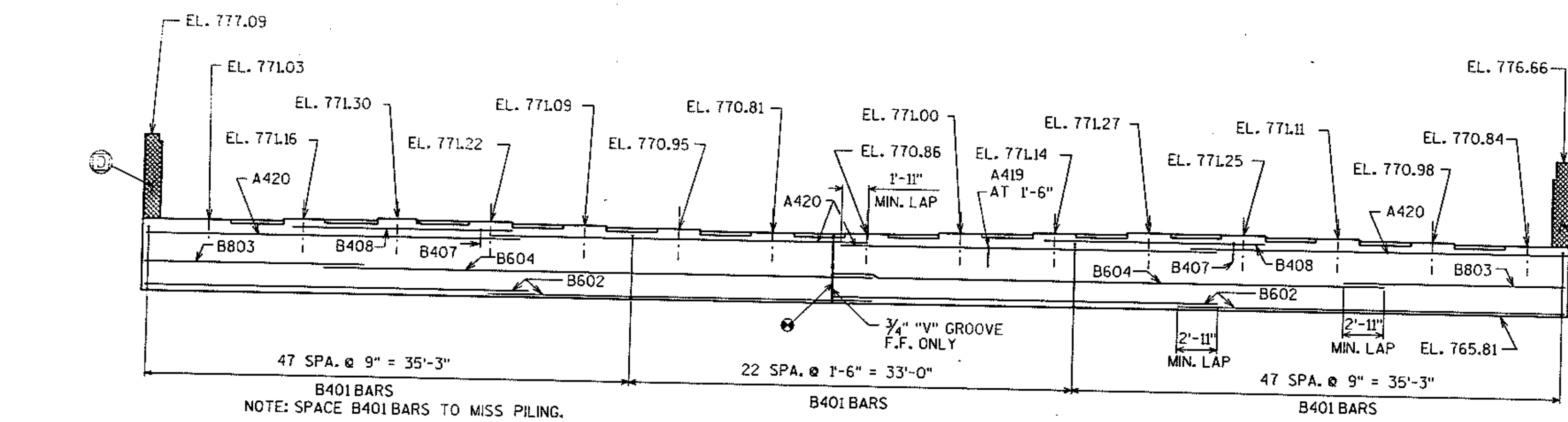
STATE PROJECT NUMBER	SHEET NO.
1123-07-[illegible]	8.5

Ⓓ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

❸ VERTICAL CONST. JOINT FORMED WITH A SURFACED BEVELED 2" X 8" 18" RUBBERIZED MEMBRANE WATERPROOFING FOR FULL DEPTH OF BACK FACE.

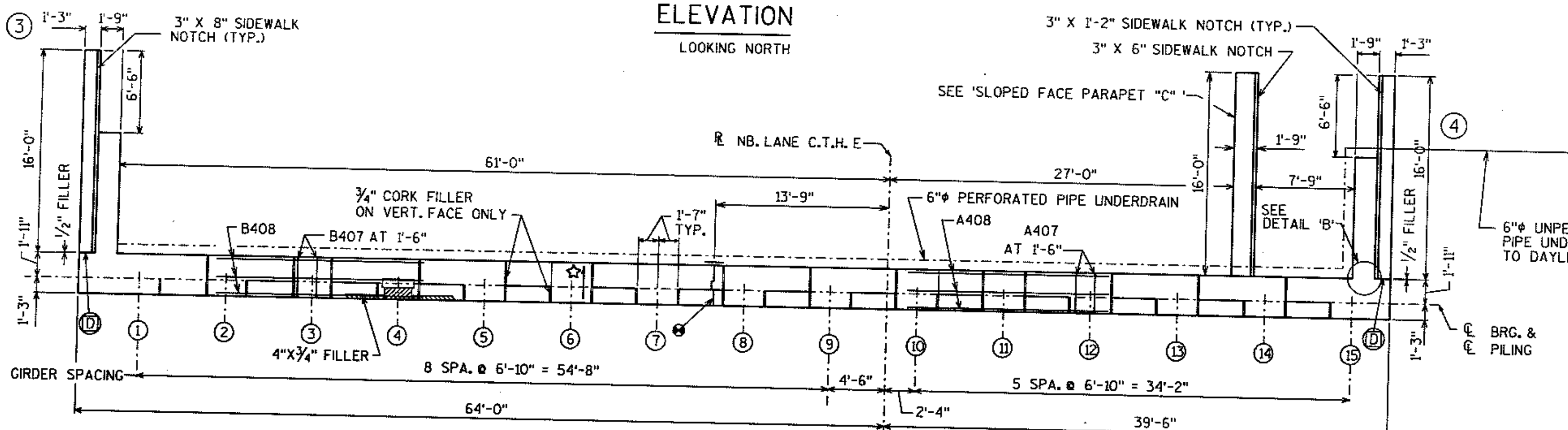
FOR PILE SPLICE DETAILS SEE 'SOUTH ABUTMENT' SHT.

☆ SLOPE BEAM SEATS 1.2%

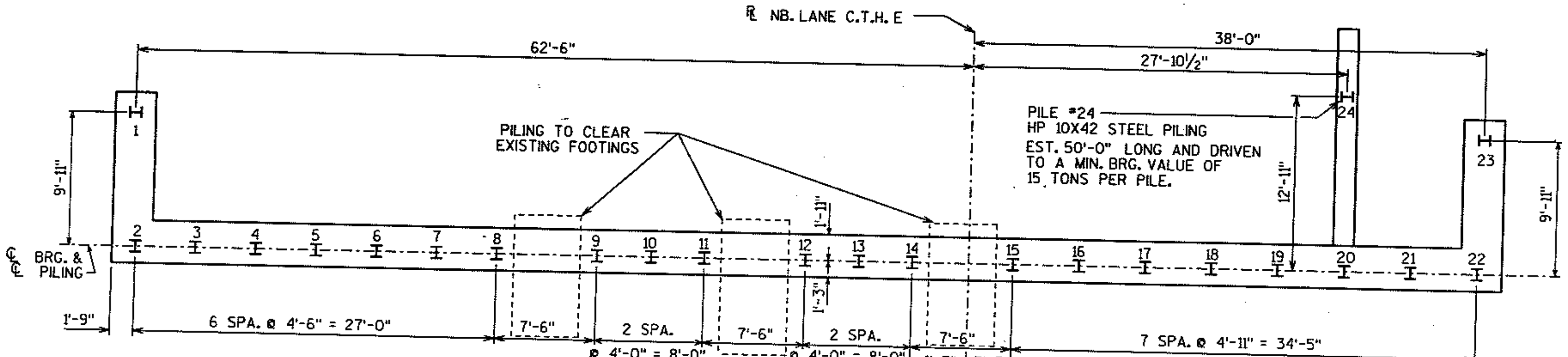


ELEVATION

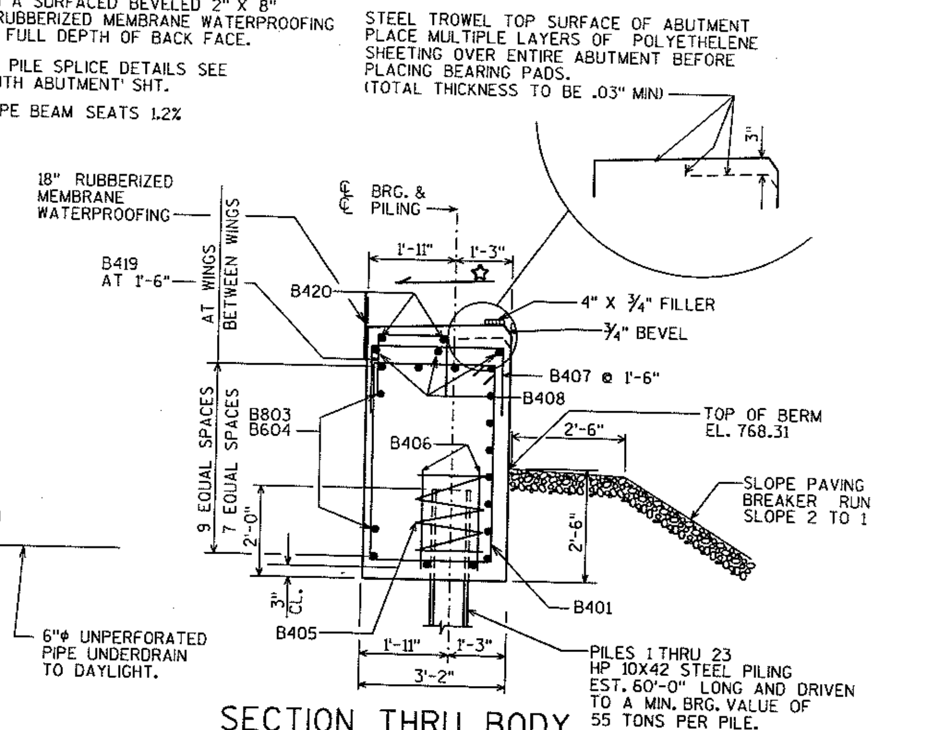
LOOKING NORTH



PLAN



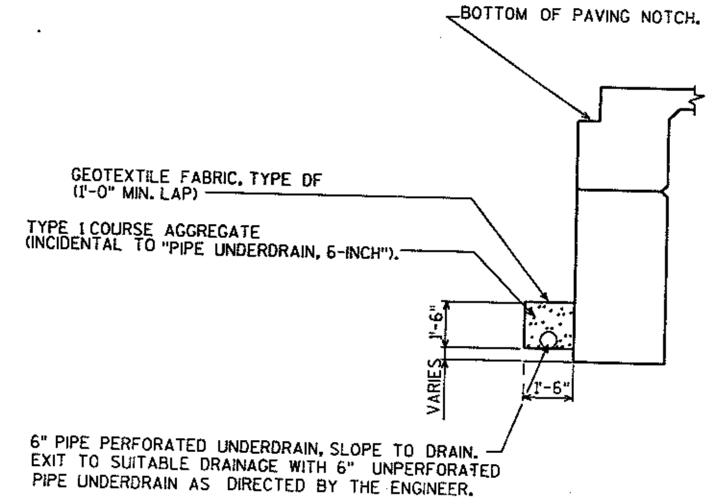
PILE PLAN



SECTION THRU BODY

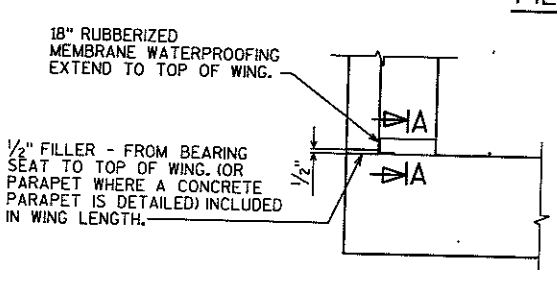
HORIZ. BARS NOT OTHERWISE IDENTIFIED ARE B602 BARS.

NOTE: FILL TO BOTTOM OF ABUTMENT BEFORE DRIVING PILING.

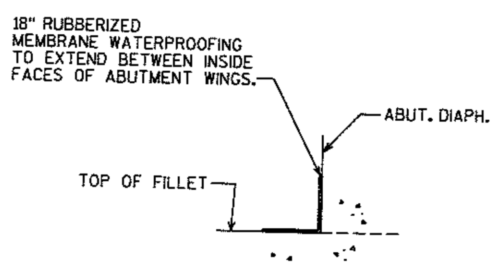


PIPE UNDERDRAIN DETAIL

TYP. AT ABUTS.



DETAIL B



SECTION A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC. 1989 | DRAWN BY G | PLANS CK'D. Bodd

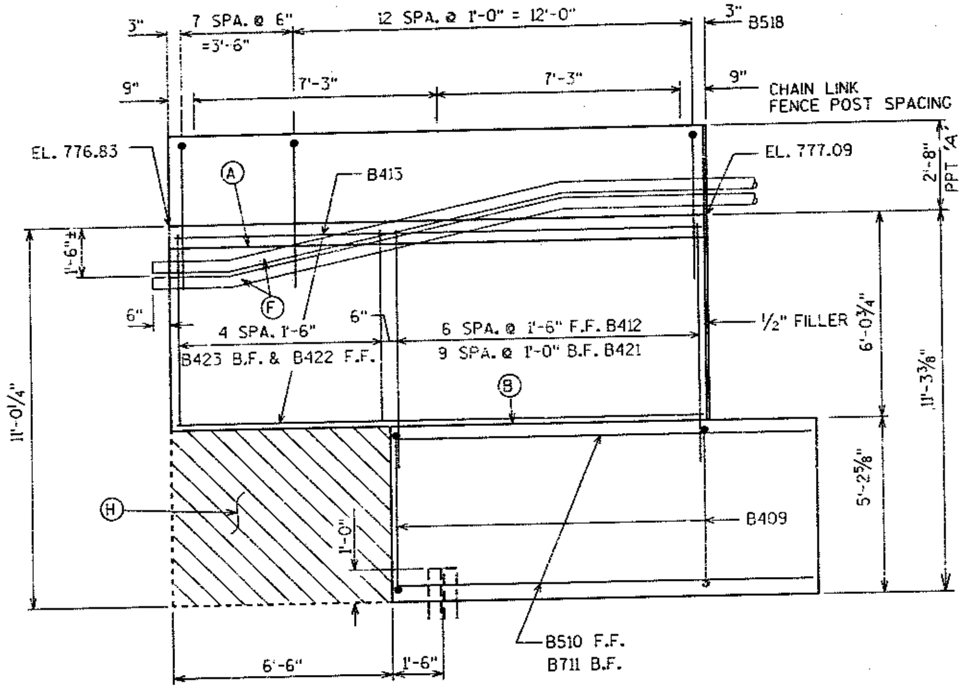
NORTH ABUTMENT

SHEET 6

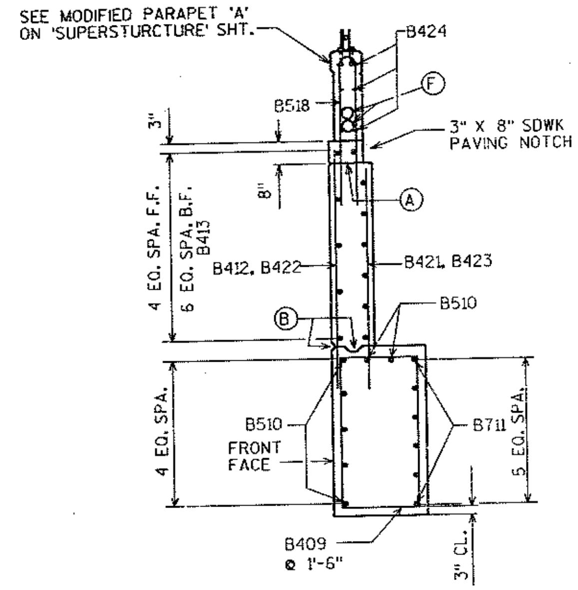
BR B44172:172ABUT.DGN

103

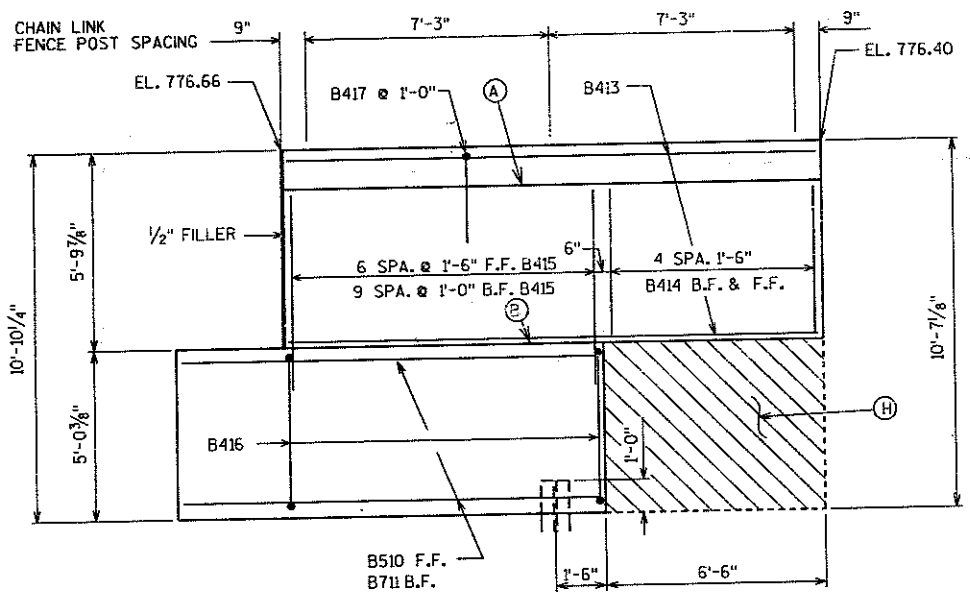
STATE PROJECT NUMBER	SHEET NO.
1123-07-	9.6



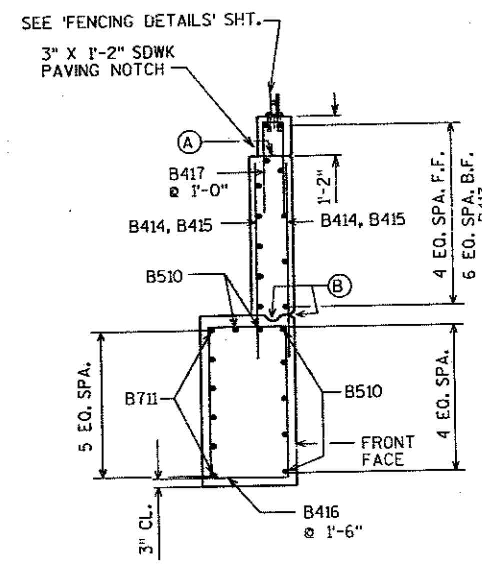
WING 3 ELEVATION



WING 3 SECTION



WING 4 ELEVATION



WING 4 SECTION

Ⓐ CONSTRUCTION JOINT - STRIKE OFF AND LEAVE ROUGH. - POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. 3/4" 'V' GROVE @ F.F. REQUIRED.

Ⓑ OPT. CONSTRUCTION JOINT - FORMED BY A SURFACED, BEVELED 2 X 6 KEYWAY. IF USED A 3/4" 'V' GROVE @ F.F. IS REQUIRED.

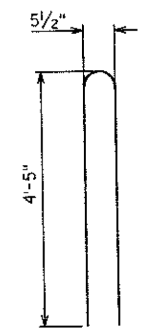
Ⓗ THE CONTRACTOR AT THEIR EXPENSE MAY PLACE UNREINFORCED CONCRETE IN THIS SHADED AREA.

Ⓕ TWO 4"φ NONMETALLIC CONDUITS FOR AMERTECH.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		117	14-10	X		BODY-STIRRUPS
B602		56	28-0			BODY HOR.
B803		16	16-0			BODY HOR. @ WINGS
B604		12	40-0			BODY HOR. B.F.
B405		21	28-0	X		BODY-5 WRAP SPIRAL
B406		42	2-3			BODY-2 PER PILE
B407		24	5-8	X		BODY TOP VERT.
B408		6	16-6			BODY TOP HOR.
B409		7	15-4	X		WING 3 STIRRUP
B510		14	12-4			WING HOR.
B711		12	11-8			WING HOR.
B412		7	7-1			WING 3 VERT.
B413	X	24	15-7			WINGS HOR.
B414		10	4-2			WING 4 VERT.
B415		17	6-0			WING 4 VERT.
B416		7	15-0	X		WING 4 STIRRUP
B417	X	17	5-4	X		WING 4 TOP
B518	X	20	9-1	X		WING 3 TO PPT 'A'
B419		70	4-3	X		BODY TOP VERT.
B420		8	27-3			BODY TOP HOR.
B421		10	6-5			WING 3 VERT. B.F.
B422		5	5-4			WING 3 VERT. F.F.
B423		5	4-9			WING 3 VERT. B.F.
B424	X	6	15-7			PARAPET 'D' HOR.



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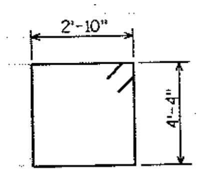
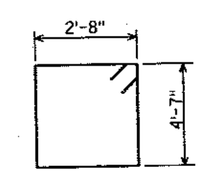


B401



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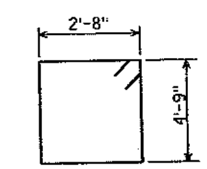
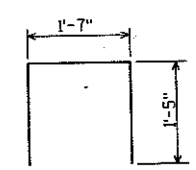


B409



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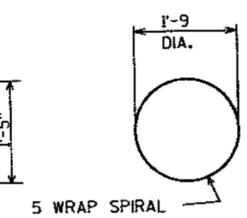
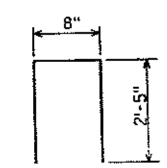
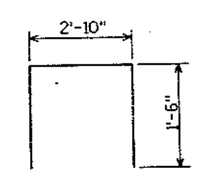


B405



B417



B407

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

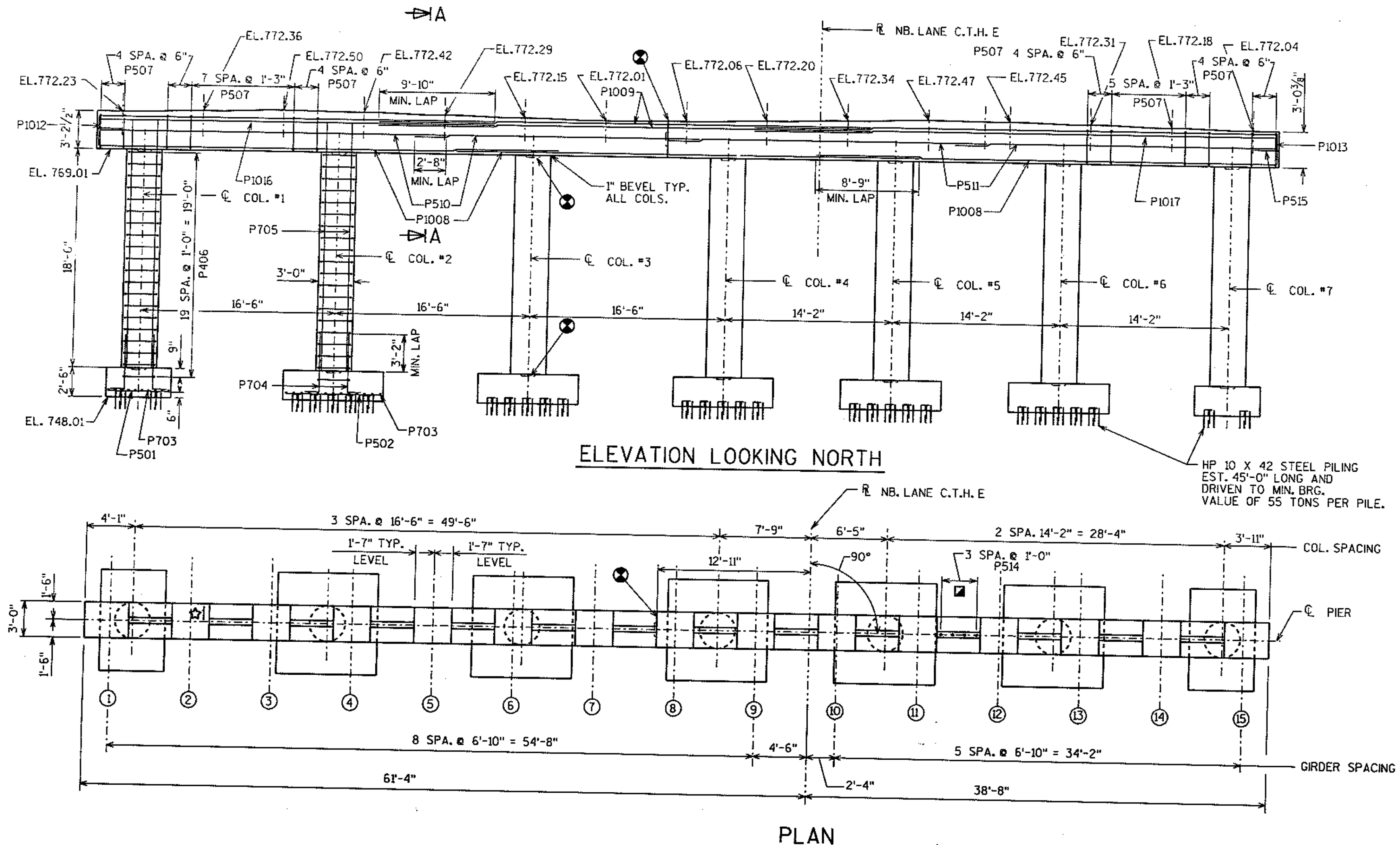
CONST. SPEC. 1989	DRAWN BY G	PLANS CK'D. Budd

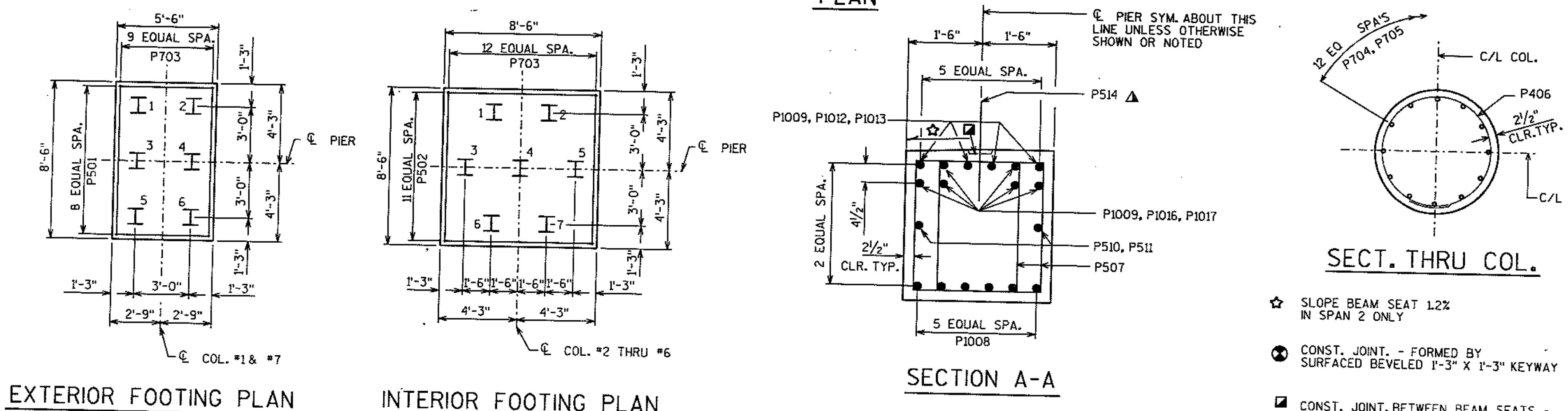
NORTH ABUTMENT DETAILS

SHEET 7

BRB44172:172ABUT.DGN

STATE PROJECT NUMBER	SHEET NO.
1172-07-71, 72	8.7

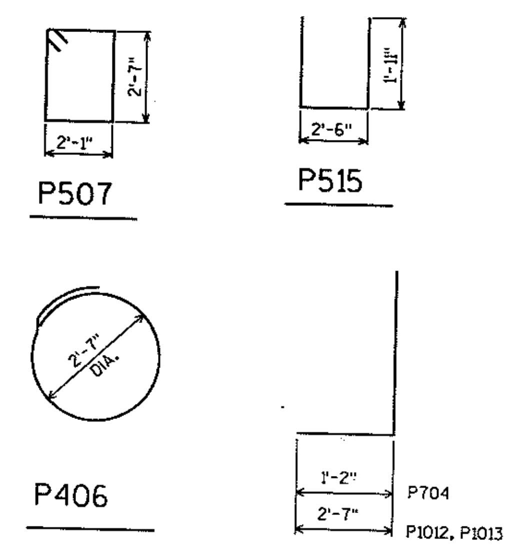




BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P501		18	5-0			EXTERIOR FOOTING HOR.
P502		60	8-0			INTERIOR FOOTING HOR.
P703		85	8-0			FOOTING HOR.
P704	X	84	6-1			FOOTING TO COL.
P705	X	84	20-9			COL. VERT.
P406	X	140	9-1	X		COL. HOOPS
P507	X	200	10-0	X		CAP VERT. DOUBLE STIRRUP
P1008	X	18	39-1			CAP HOR. BOT.
P1009	X	10	41-8			CAP HOR. TOP
P510	X	4	26-11			CAP HOR. SIDES
P511	X	4	27-0			CAP HOR. SIDES
P1012	X	4	35-11	X		CAP HOR. TOP
P1013	X	4	46-5	X		CAP HOR. TOP
P514	X	56	2-0			DOWELS TOP VERT.
P515	X	2	6-1			CAP ENDS
P1016	X	6	33-7			CAP TOP HOR.
P1017	X	6	44-1			CAP TOP HOR.



☆ SLOPE BEAM SEAT 1.2% IN SPAN 2 ONLY

CONST. JOINT. - FORMED BY SURFACED BEVELED 1'-3" X 1'-3" KEYWAY

CONST. JOINT. BETWEEN BEAM SEATS - FORMED BY SURFACED BEVELED 2" X 6" KEYWAY

▲ P514 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (IMBED 1'-0" INTO CONCRETE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

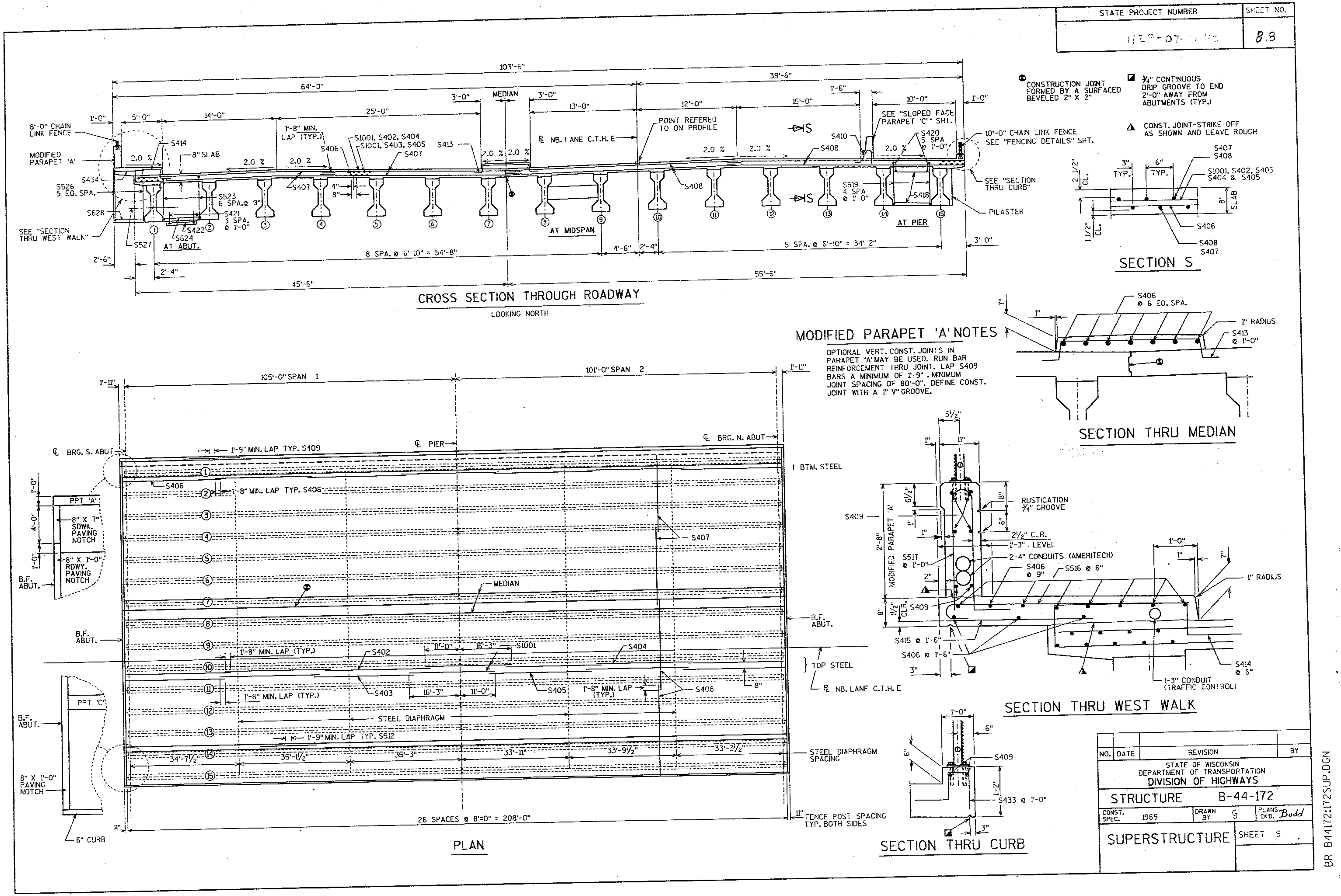
STRUCTURE B-44-172

CONST. SPEC. 1989 | DRAWN BY G | PLANS CK'D. Budd

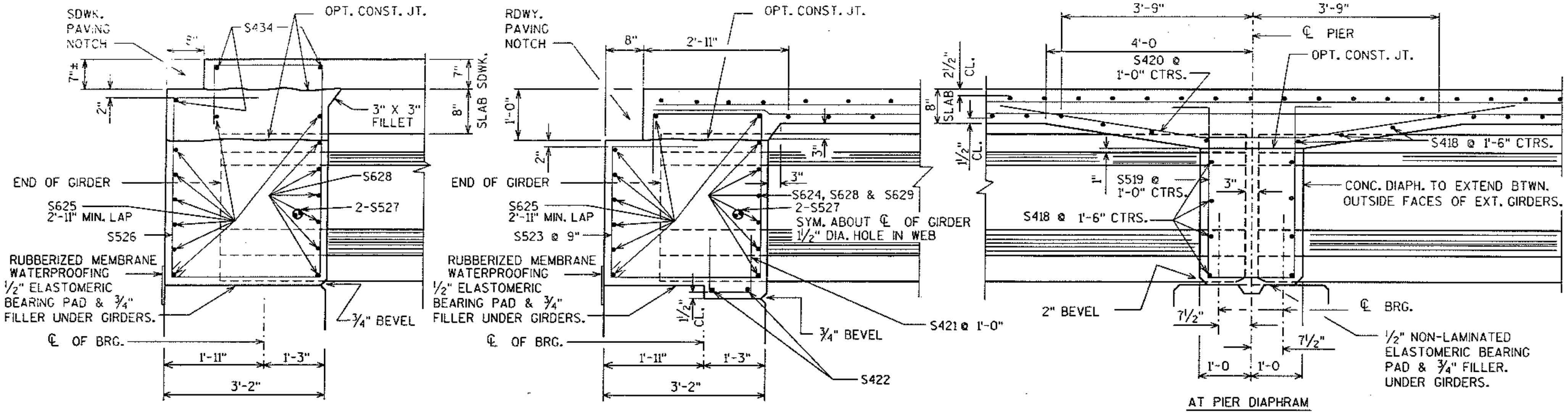
PIER | SHEET 8

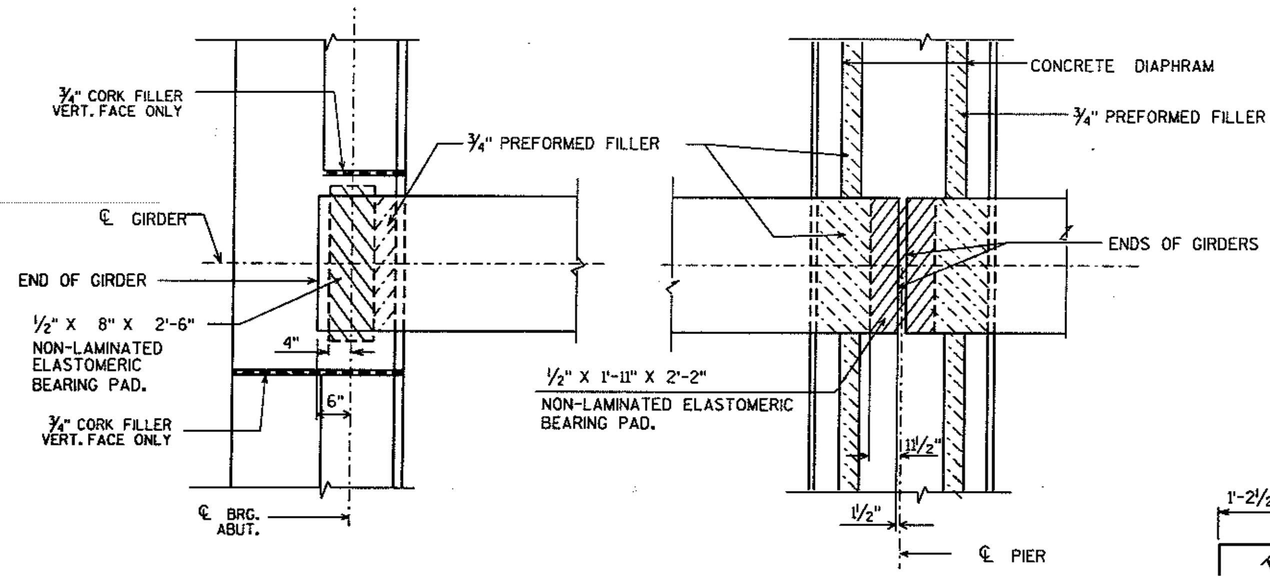
BR B44172:172PIER.DGN

165


STATE PROJECT NUMBER
SHEET NO.
8.8
CROSS SECTION THROUGH ROADWAY
LOOKING NORTH
103'-6"
64'-0"
39'-6"
MEDIAN
8'-0" CHAIN LINK FENCE
MODIFIED PARAPET 'A'
SEE "SECTION THRU WEST WALK"
8" SLAB
1'-8" MIN. LAP (TYP.)
POINT REFERED TO ON PROFILE
℄ NB. LANE C.T.H. E
SEE "SLOPED FACE PARAPET 'C'" SHT.
10'-0" CHAIN LINK FENCE SEE "FENCING DETAILS" SHT.
SEE "SECTION THRU CURB"
PILASTER
AT ABUT.
AT MIDSPAN
AT PIER
8 SPA. @ 6'-10" = 54'-8"
5 SPA. @ 6'-10" = 34'-2"
45'-6"
55'-6"
CONSTRUCTION JOINT FORMED BY A SURFACED BEVELED 2" X 2"
3/4" CONTINUOUS DRIP GROOVE TO END 2'-0" AWAY FROM ABUTMENTS (TYP.)
CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH
SECTION S
MODIFIED PARAPET 'A' NOTES
OPTIONAL VERT. CONST. JOINTS IN PARAPET 'A' MAY BE USED. RUN BAR REINFORCEMENT THRU JOINT. LAP S409 BARS A MINIMUM OF 1'-9". MINIMUM JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A 1" V" GROOVE.
SECTION THRU MEDIAN
105'-0" SPAN 1
101'-0" SPAN 2
℄ BRG. S. ABUT
℄ PIER
℄ BRG. N. ABUT
1'-9" MIN. LAP TYP. S409
1'-8" MIN. LAP TYP. S406
BTM. STEEL
TOP STEEL
STEEL DIAPHRAGM
STEEL DIAPHRAGM SPACING
1'-9" MIN. LAP TYP. S512
8" X 7" SDWK. PAVING NOTCH
8" X 1'-0" RDWY. PAVING NOTCH
8" X 1'-0" PAVING NOTCH
B.F. ABUT.
6" CURB
26 SPACES @ 8'=0" = 208'-0"
FENCE POST SPACING TYP. BOTH SIDES
PLAN
RUSTICATION 3/4" GROOVE
2-4" CONDUITS (AMERITECH)
1-3" CONDUIT (TRAFFIC CONTROL)
MODIFIED PARAPET 'A'
SECTION THRU WEST WALK
SECTION THRU CURB
NO. DATE REVISION BY
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE B-44-172
CONST. SPEC. 1989
SUPERSTRUCTURE
SHEET 9
BR B44172:172SUP.DGN

STATE PROJECT NUMBER	SHEET NO.
1123-07-71,72	8.9



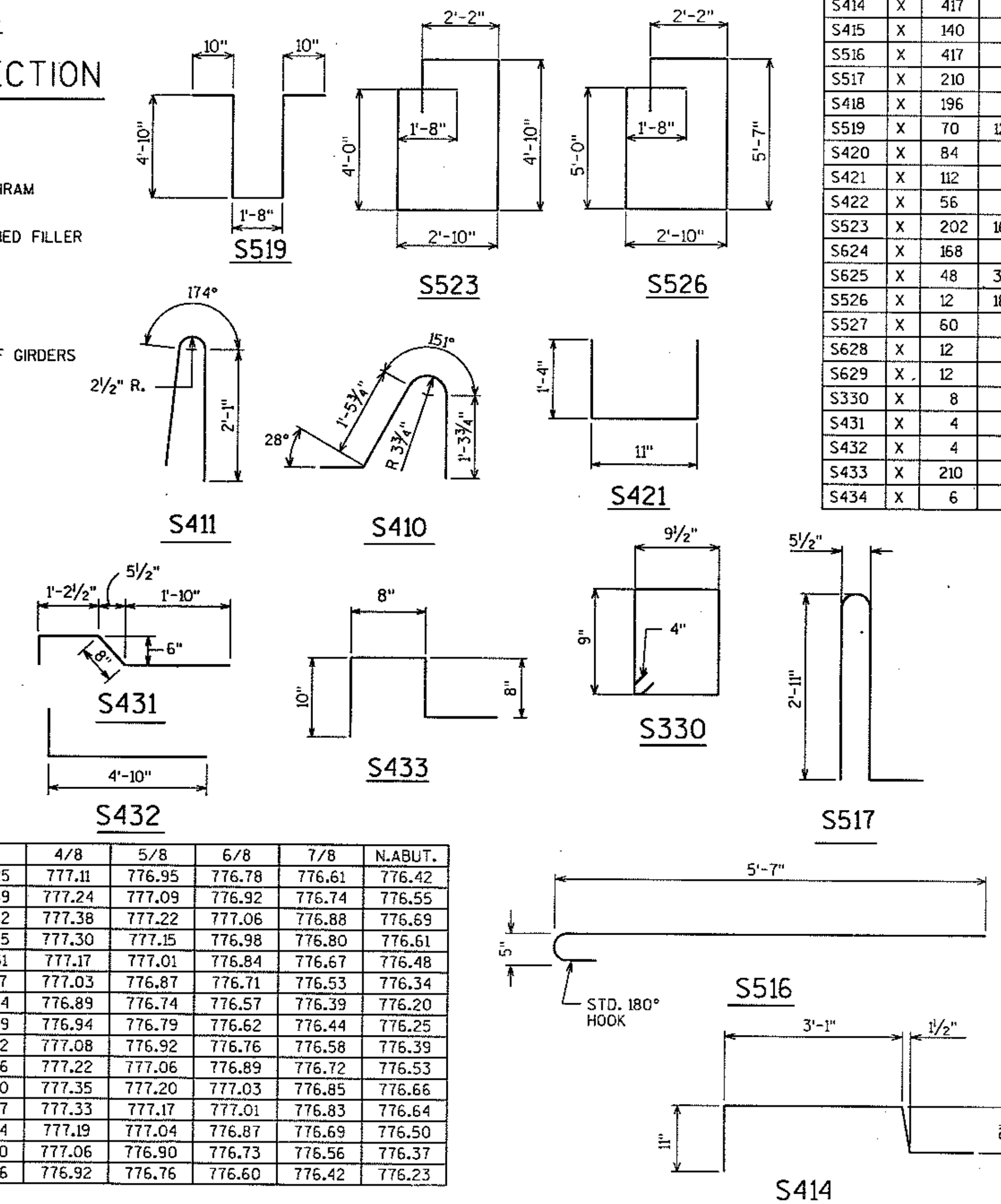


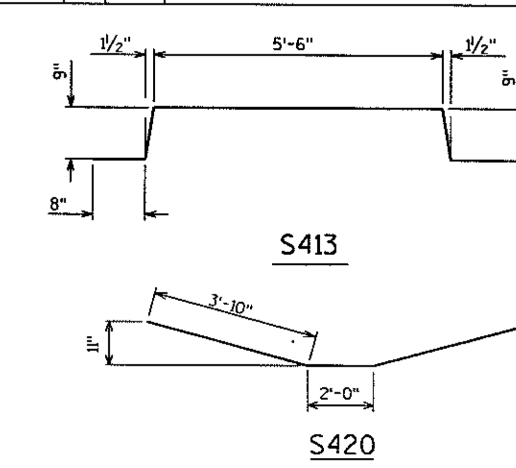
BEARING PAD DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S1001	X	153	27-3			LONG. TOP AT PIER
S402	X	231	33-5			LONG. TOP
S403	X	228	31-8			LONG. TOP
S404	X	231	30-4			LONG. TOP
S405	X	228	32-1			LONG. TOP
S406	X	1190	31-2			SLAB BOT., WLK., MEDIAN
S407	X	1618	24-5			SLAB TRANSVERSE
S408	X	1618	28-6			SLAB TRANSVERSE
S409	X	48	36-5			PPT A & CURB
S410	X	280	4-10	X		PPT C
S411	X	280	4-7	X		PPT C
S512	X	30	36-5			PPT C LONG.
S413	X	209	8-0	X		MEDIAN
S414	X	417	5-9	X		WALK
S415	X	140	3-6			WALK
S516	X	417	6-2	X		WALK
S517	X	210	7-8	X		PPT A
S418	X	196	4-4			PIER DIAPH.
S519	X	70	12-6	X		PIER DIAPH.
S420	X	84	9-8	X		PIER DIAPH.
S421	X	112	3-5	X		ABUT. DIAPH.
S422	X	56	3-4			ABUT. DIAPH.
S523	X	202	16-10	X		ABUT. DIAPH.
S624	X	168	4-4			ABUT. DIAPH.
S625	X	48	36-5			ABUT. DIAPH.
S526	X	12	18-3	X		ABUT. DIAPH. @ GIR. #1 VERT.
S527	X	60	6-0			ABUT. DIAPH. SYM. ABOUT ℄ OF GIR.
S628	X	12	3-5			ABUT. DIAPH. WEST SIDE
S629	X	12	1-7			ABUT. DIAPH. EAST SIDE
S330	X	8	3-7	X		PILASTER
S431	X	4	4-1	X		PILASTER
S432	X	4	5-7	X		PILASTER
S433	X	210	3-3	X		CURB
S434	X	6	4-7			ABUT. DIAPH. @ GIR #1 HOR.





TOP OF DECK ELEVATIONS

	S.ABUT.	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER	1/8	2/8	3/8	4/8	5/8	6/8	7/8	N.ABUT.
GIR. 1	778.11	778.09	778.06	778.02	777.96	777.89	777.81	777.72	777.62	777.51	777.38	777.25	777.11	776.95	776.78	776.61	776.42
GIR. 2	778.25	778.23	778.20	778.15	778.10	778.03	777.95	777.86	777.75	777.64	777.52	777.39	777.24	777.09	776.92	776.74	776.55
GIR. 3	778.38	778.37	778.33	778.29	778.23	778.17	778.09	777.99	777.89	777.78	777.66	777.52	777.38	777.22	777.06	776.88	776.69
GIR. 4	778.31	778.29	778.26	778.21	778.16	778.09	778.01	777.92	777.81	777.70	777.58	777.45	777.30	777.15	776.98	776.80	776.61
GIR. 5	778.17	778.15	778.12	778.08	778.02	777.95	777.87	777.78	777.68	777.57	777.44	777.31	777.17	777.01	776.84	776.67	776.48
GIR. 6	778.03	778.02	777.98	777.94	777.88	777.82	777.74	777.64	777.54	777.43	777.31	777.17	777.03	776.87	776.71	776.53	776.34
GIR. 7	777.90	777.88	777.85	777.80	777.75	777.68	777.60	777.51	777.40	777.29	777.17	777.04	776.89	776.74	776.57	776.39	776.20
GIR. 8	777.95	777.93	777.90	777.85	777.80	777.73	777.65	777.56	777.45	777.34	777.22	777.09	776.94	776.79	776.62	776.44	776.25
GIR. 9	778.08	778.07	778.03	777.99	777.93	777.87	777.79	777.69	777.59	777.48	777.36	777.22	777.08	776.92	776.76	776.58	776.39
GIR. 10	778.22	778.20	778.17	778.13	778.07	778.00	777.92	777.83	777.73	777.62	777.49	777.36	777.22	777.06	776.89	776.72	776.53
GIR. 11	778.36	778.34	778.31	778.26	778.21	778.14	778.06	777.97	777.86	777.75	777.63	777.50	777.35	777.20	777.03	776.85	776.66
GIR. 12	778.33	778.32	778.28	778.24	778.18	778.12	778.04	777.94	777.84	777.73	777.61	777.47	777.33	777.17	777.01	776.83	776.64
GIR. 13	778.20	778.18	778.15	778.10	778.05	777.98	777.90	777.81	777.70	777.59	777.47	777.34	777.19	777.04	776.87	776.69	776.50
GIR. 14	778.06	778.04	778.01	777.97	777.91	777.84	777.76	777.67	777.57	777.46	777.33	777.20	777.06	776.90	776.73	776.56	776.37
GIR. 15	777.92	777.91	777.87	777.83	777.77	777.71	777.63	777.53	777.43	777.32	777.20	777.06	776.92	776.76	776.60	776.42	776.23

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

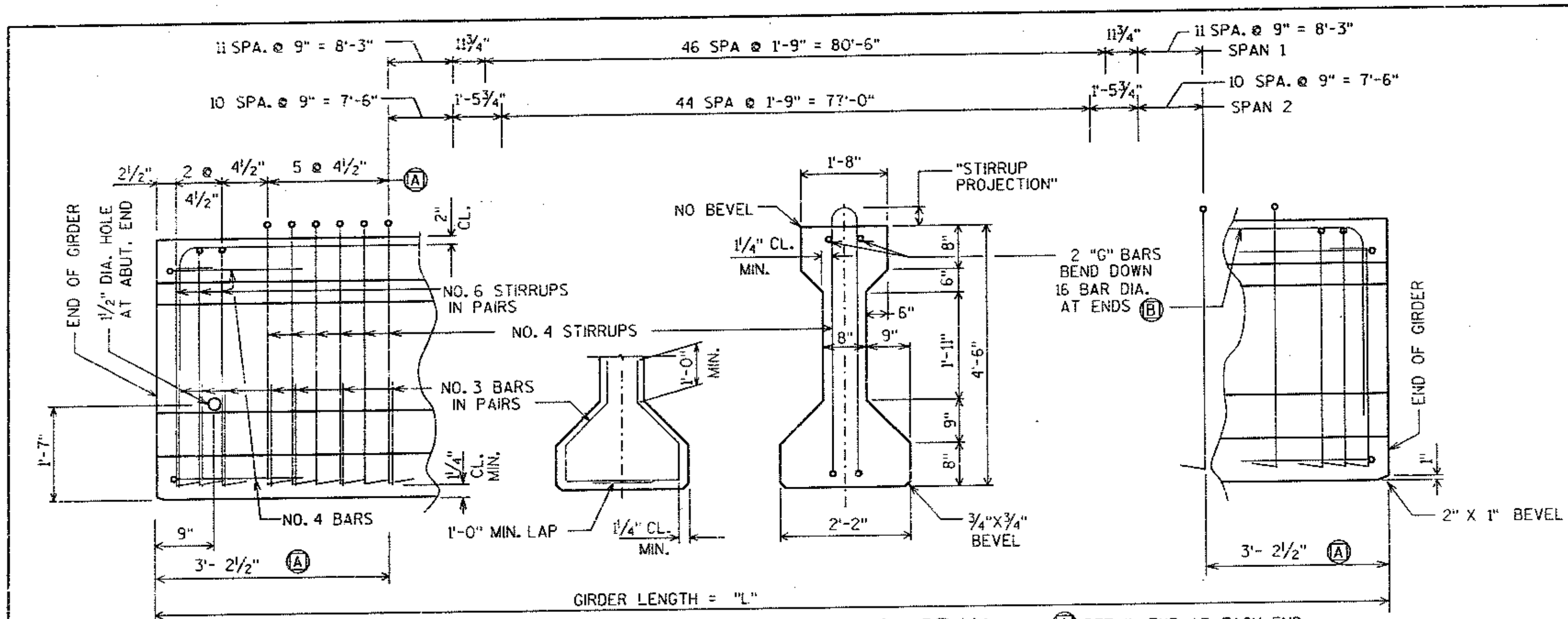
CONST. SPEC. 1989 | DRAWN BY G | PLANS CK'D. Budd

SUPERSTRUCTURE DETAILS | SHEET 10

BR44172:172SUP.DGN

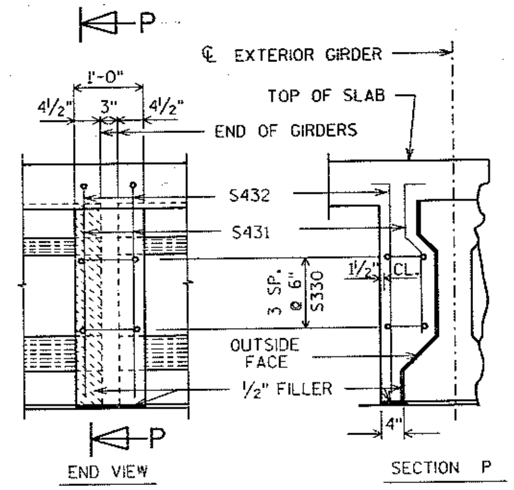
9-1-94

STATE PROJECT NUMBER	SHEET NO.
1123-07-...	8,10



SIDE VIEW & TYP. SECTION IN SPAN

(A) DETAIL TYP. AT EACH END



PILASTER DETAILS AT PIERS

GIRDER NOTES

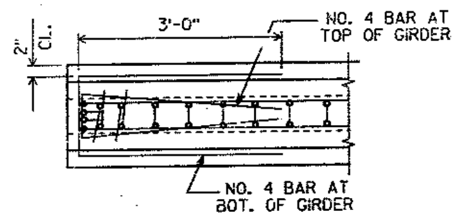
TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 2" OF GIRDER, WHICH SHALL BE TROWEL FINISHED.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

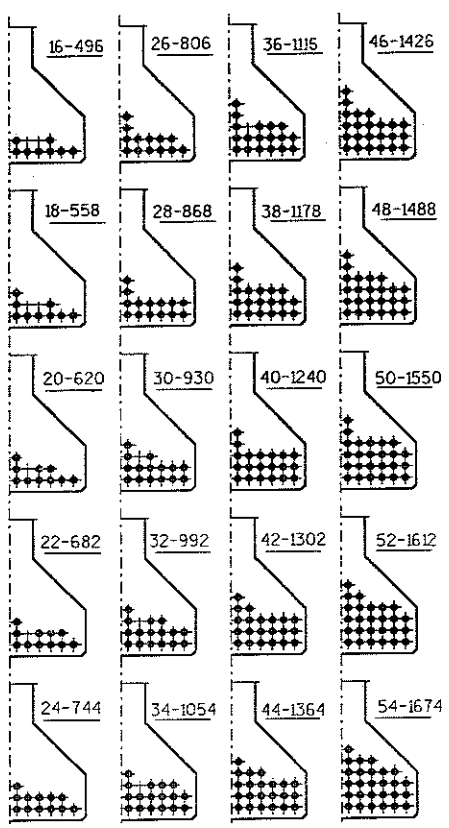
PRESTRESSING STRANDS SHALL BE ½"φ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER.

BEND EACH END OF NO. 4 STIRRUPS 4½" AND NO. 6 STIRRUPS 6½".

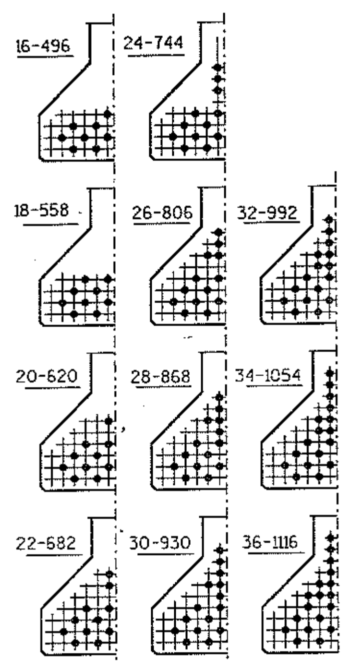
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.



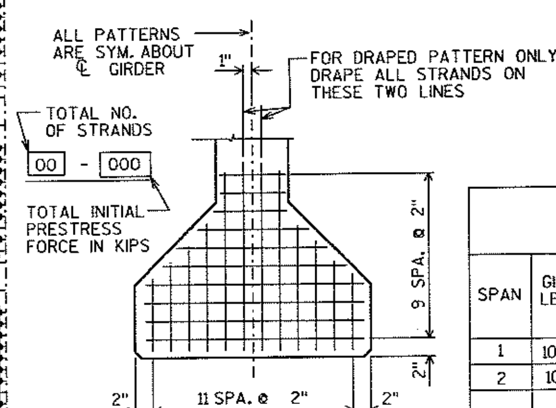
TOP VIEW OF GIRDER ENDS



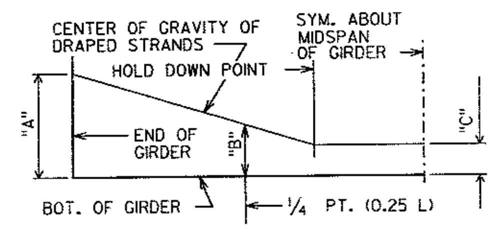
DRAPED PATTERN



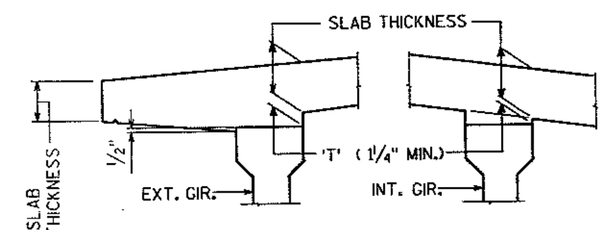
UNDRAPED PATTERN



TYP. STRAND PATTERN



DRAPED STRAND PROFILE

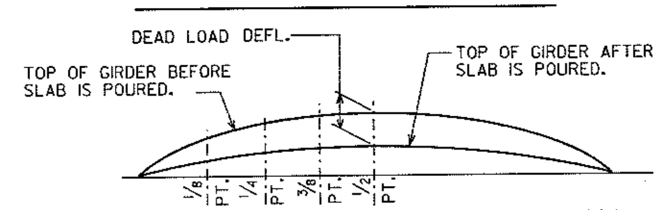


SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT 'T' CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. MAXIMUM HAUNCH HEIGHT EQUALS "STIRRUP PROJECTION" MINUS 3 INCHES.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT ¼ POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
-TOP OF GIRDER ELEVATION
+ DEADLOAD DEFLECTION
-SLAB THICKNESS
=HAUNCH HEIGHT 'T'



DEAD LOAD DEFLECTION DIAGRAM

GIRDER DATA

(B) NO. 4 "G" BARS, MAY BE SPLICED. USE 1'-11" MIN. LAP.

SPAN	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) ⅛	¼	⅜	½	CONC. STRGTH. F'C (P.S.I.)	"STIRRUP PROJECTION"	DRAPED PATTERN: TOTAL NO. OF STRANDS	F'CI (P.S.I.) *	(INCHES) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN: TOTAL NO. OF STRANDS	F'CI (P.S.I.) *
1	105'-4½"	⅝	1⅛	1⅜	1½	6,000	6"	38	4,800	48	16½	19½	6	—	—
2	101'-4½"	½	1	1⅛	1¼	6,000	6"	32	4,800	49	16	19	5	—	—

*MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC. 1989 | DRAWN BY G | PLANS CK'D. Bodd

54" PRESTRESSED GIRDER DETAILS

SHEET 11

BR_B44172I72BRG.DGN

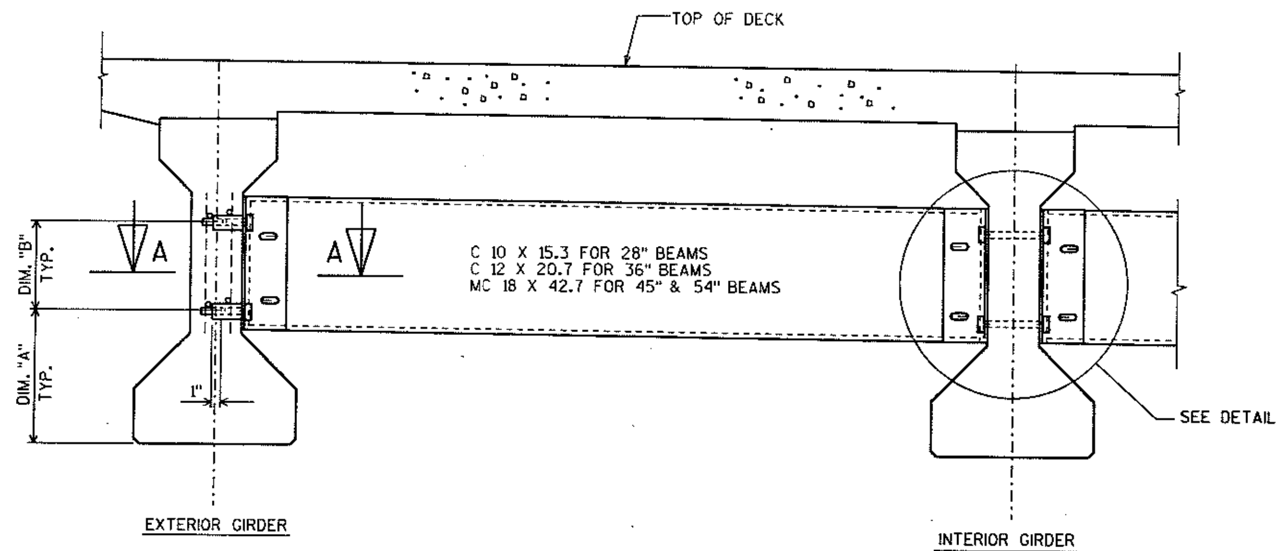
FIXED = LV 4 9-1-94
SEMI. EXP = LV 5
PILASTER = LV 7

FT-55

STATE PROJECT NUMBER	SHEET NO.
1123-07-7..72	8.11

TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	DIM. "X"
28"	1'-0	7"	10"	2½"
36"	1'-2	11"	1'-2	3½"
45"	1'-4½	1'-3	1'-6	2½"
54"	1'-7	1'-7	1'-10	4½"



PART TRANSVERSE SECTION AT DIAPHRAGM

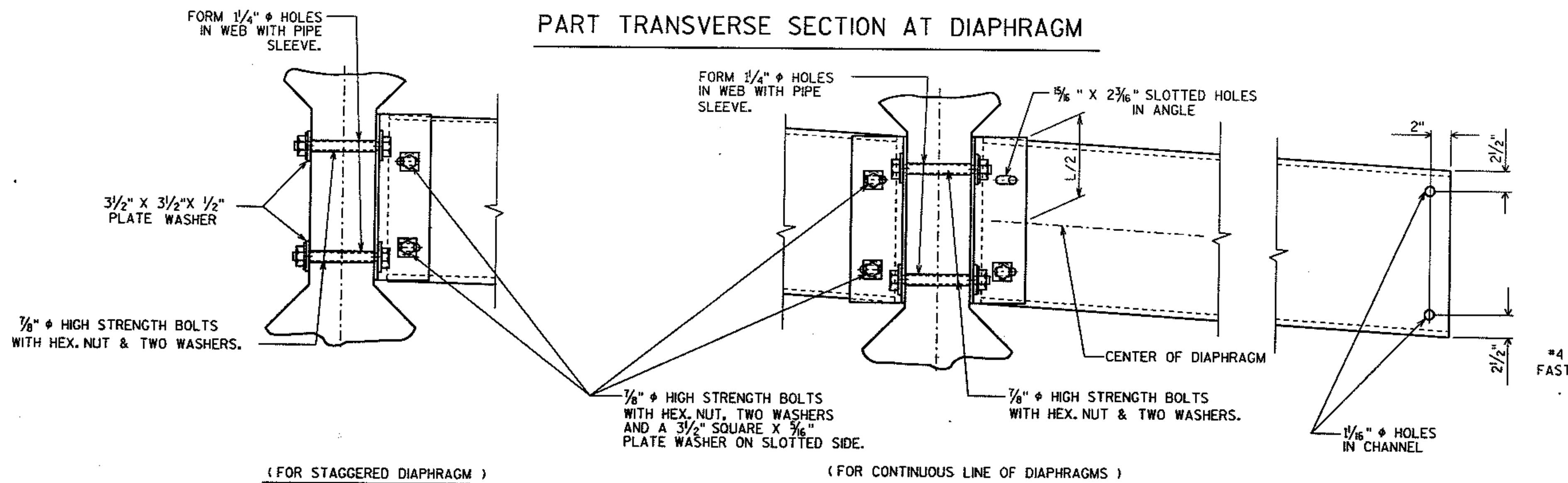
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGM".

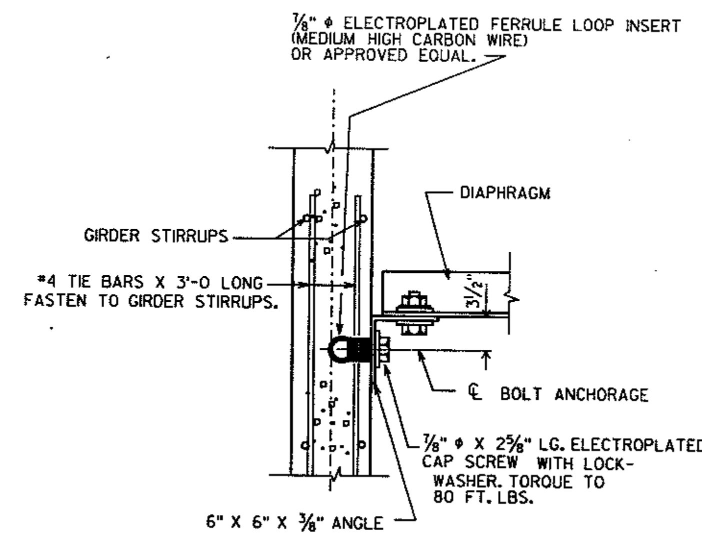
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

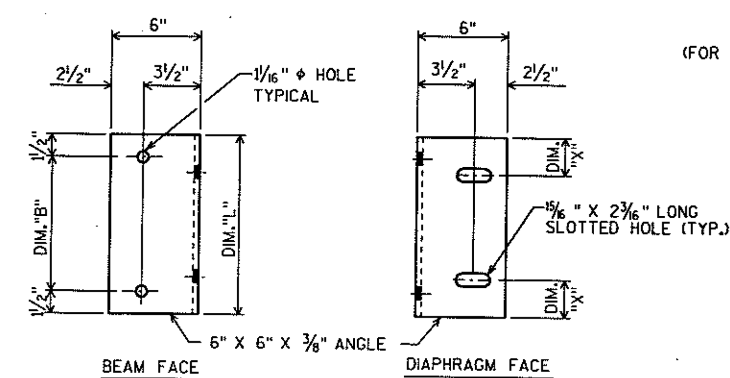
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



DETAIL B



SECT. A-A
(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC.	1989	DRAWN BY	G	PLANS CK'D.	Budd

STEEL DIAPHRAGM — SHEET 12

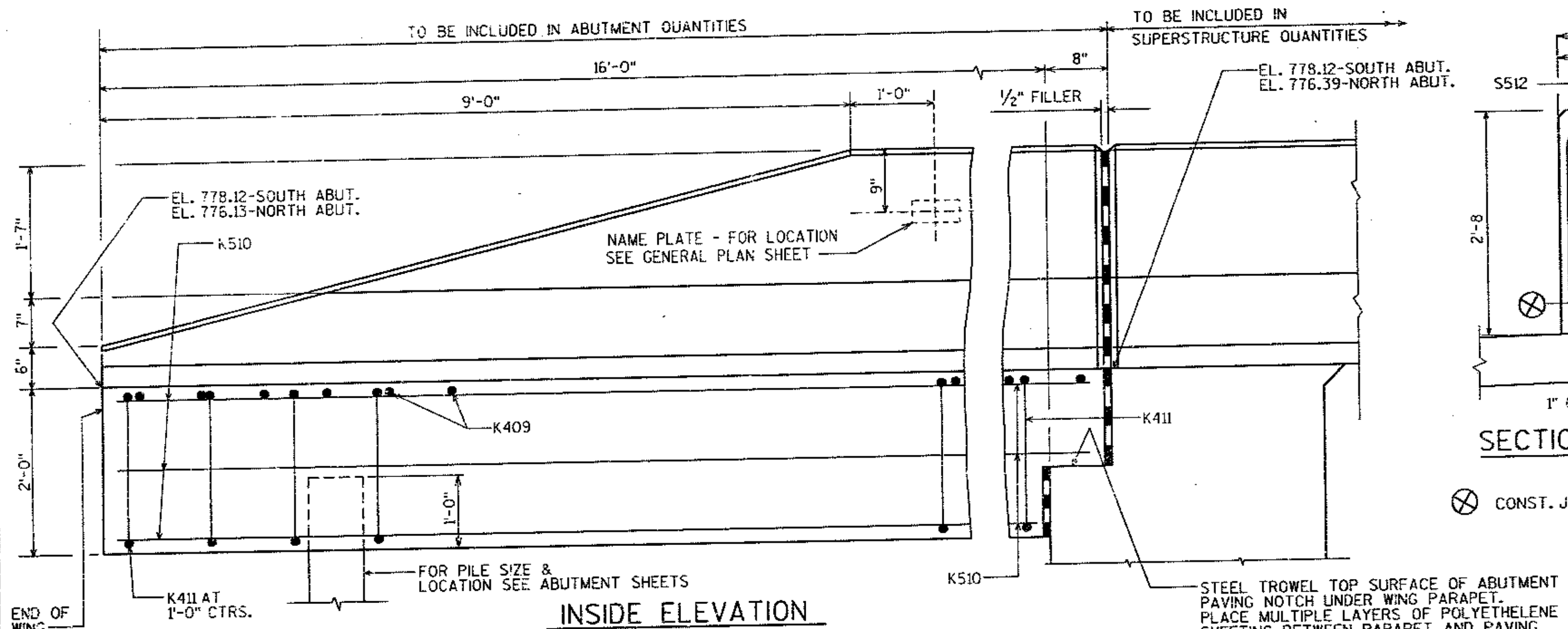
9-1-94

BR B44172.172DIA.DGN

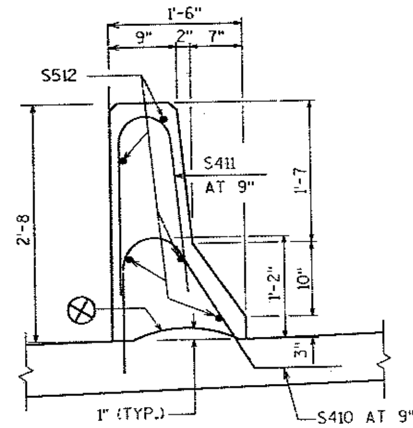
AS = 1

109

STATE PROJECT NUMBER	SHEET NO.
1123-07-7172	8.12



INSIDE ELEVATION



SECTION THRU PARAPET ON BRIDGE

⊗ CONST. JOINT - STRIKE OFF AS SHOWN

BILL OF BARS

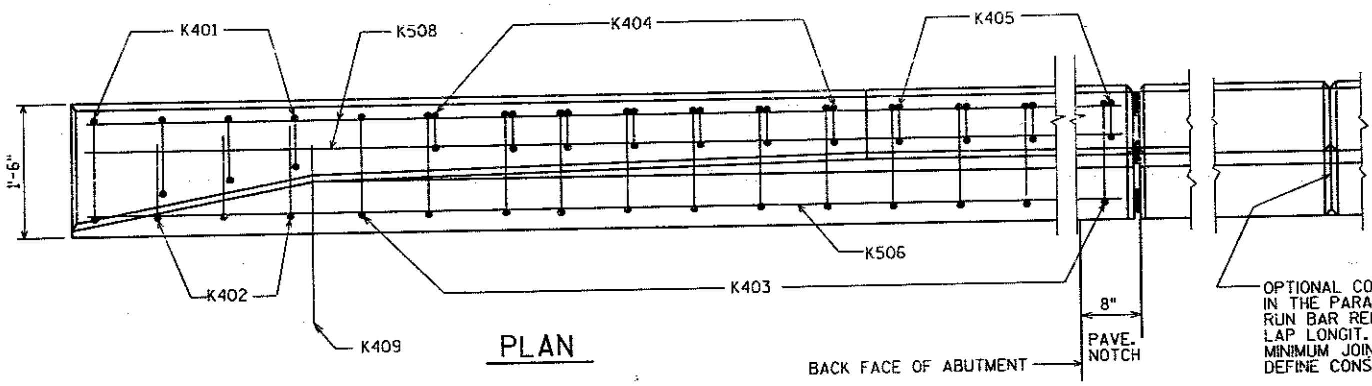
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

	BAR MARK	COAT	NO. REQ'D. S. ABT.	NO. REQ'D. N. ABT.	LENGTH	BENT	BAR SERIES	LOCATION	
	K401	X	4	4	4-4	X		WING	VERT.
	K402	X	3	3	2-9	X		WING	VERT.
	K403	X	18	18	5-1	X		WING	VERT.
Δ	K404	X	7	7	3-5	X	X	WING	VERT.
	K405	X	10	10	4-9	X		WING	VERT.
	K506	X	2	2	16-3			WING	HORIZ.
	K507	X	2	2	13-3			WING	HORIZ.
	K508	X	2	2	16-5	X		WING	HORIZ.
	K409		17	17	2-0			WING-SURFACE DRAIN ANCHORS	HORIZ.
	K510		12	12	9-6			WING FOOTING	HORIZ.
	K411		17	17	6-0	X		WING STIRRUP	VERT.

Δ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

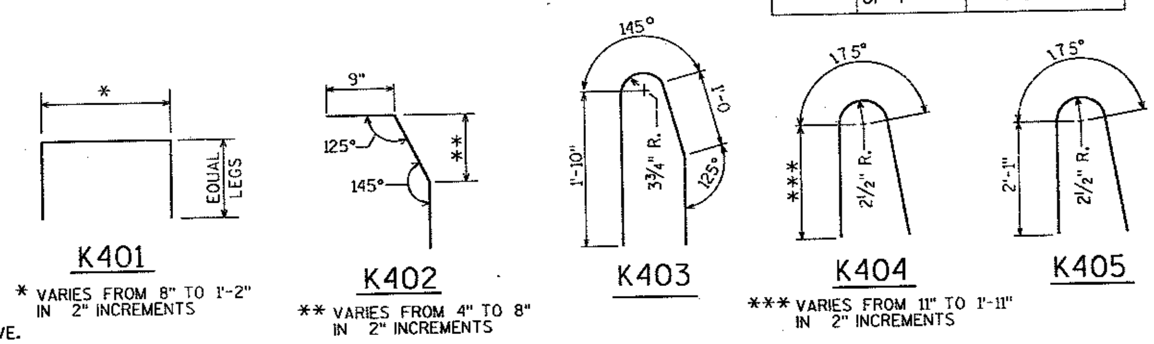
BAR SERIES TABLE

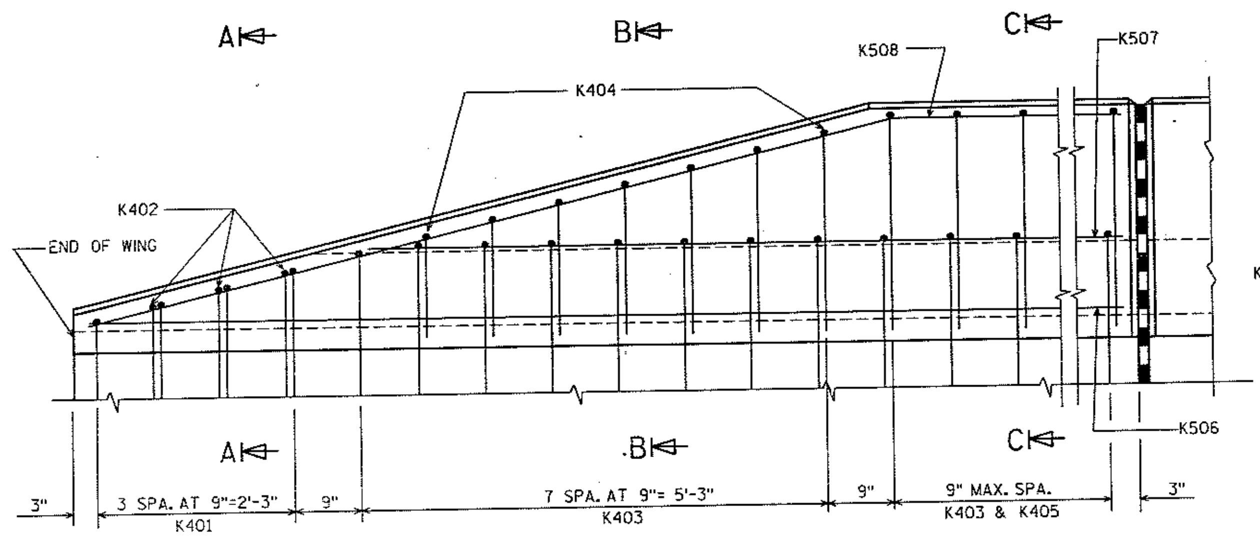
MARK	NO. REQD.	LENGTH
K404	1 SERIES OF 7	2'-5" TO 4'-5"



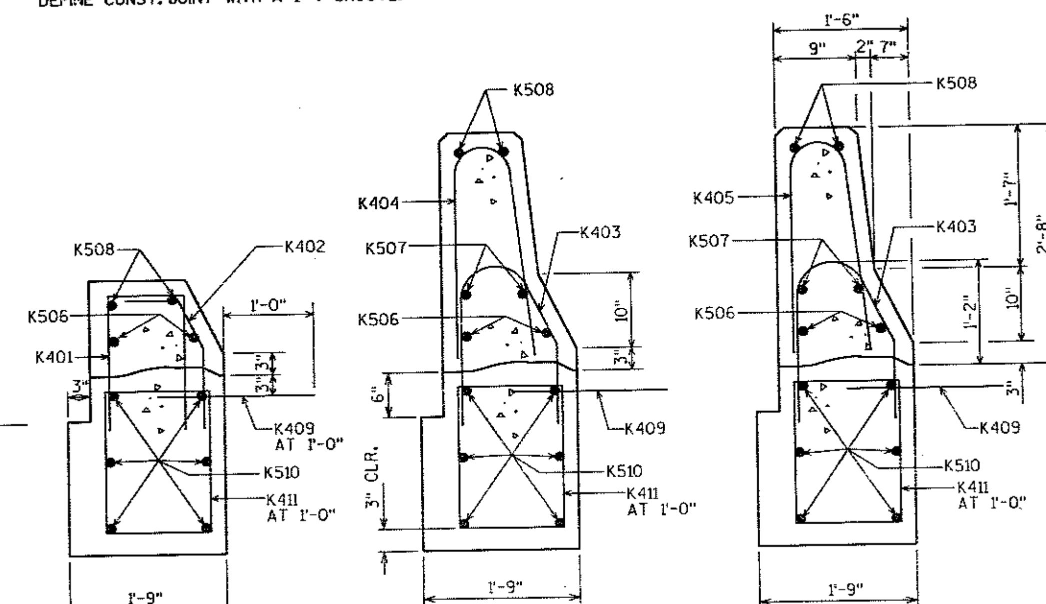
PLAN

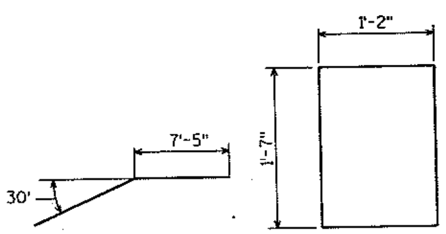
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MINIMUM JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A 1" V-GROOVE.





OUTSIDE ELEVATION





NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

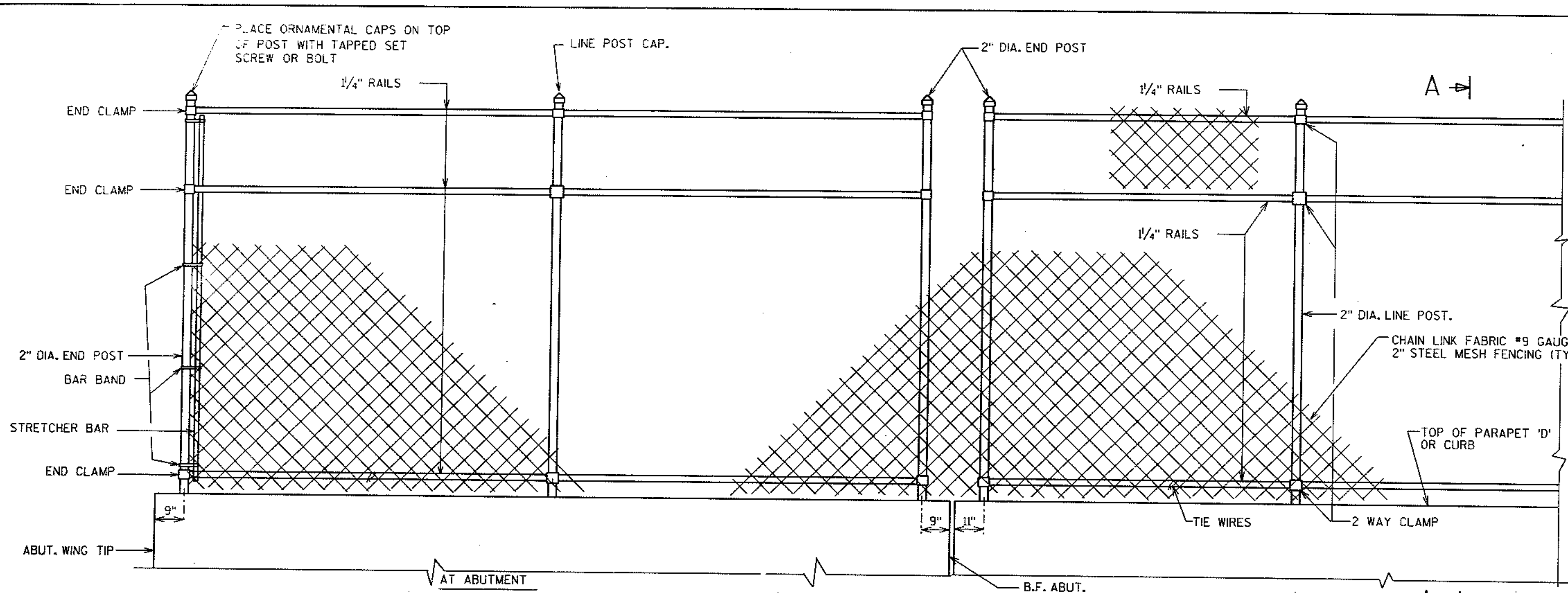
CONST. SPEC. 1989 | DRAWN BY G | PLANS CK'D. Budd

SLOPED FACE PARAPET "C"

SHEET 13

BR B44172:172PARAC.DGN

STATE PROJECT NUMBER	SHEET NO.
1123-[illegible]	8.13



FENCE PART ELEVATION

FENCING NOTES

ALL RAILS AND POSTS ARE STANDARD GALVANIZED STEEL PIPE.

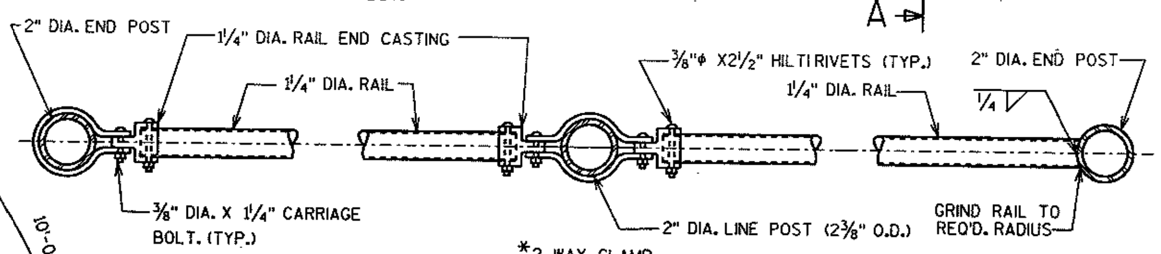
ALL POSTS SHALL BE SET VERTICAL.

KNUCKLE TOP AND BOTTOM OF 2" MESH CHAIN LINK FENCING.

ALL FENCING BAR BANDS, STRETCHER BARS, BASE PLATE ASSEM. & CLAMPS ARE TO BE GALVANIZED STEEL (GRADE 1), & INCLUDED IN BID ITEM "CHAIN LINK FENCE 8 FT. /10 FT."

CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O.M-181 TYPE IV, CLASS B ANY SPECIFICATION IN 616.2.3 THAT CONFLICTS WITH A.A.S.H.T.O. M-181 SHALL NOT APPLY.

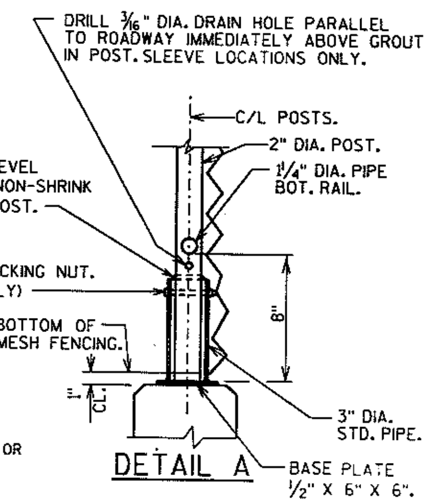
✩ ¾"ϕ CONCRETE MASONRY ANCHOR, TYPE "S", 6" MIN. EMBEDMENT (EPOXY) MIN. PULLOUT OF 15 K, THREADED LENGTH OF ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.



PLAN OF RAILING

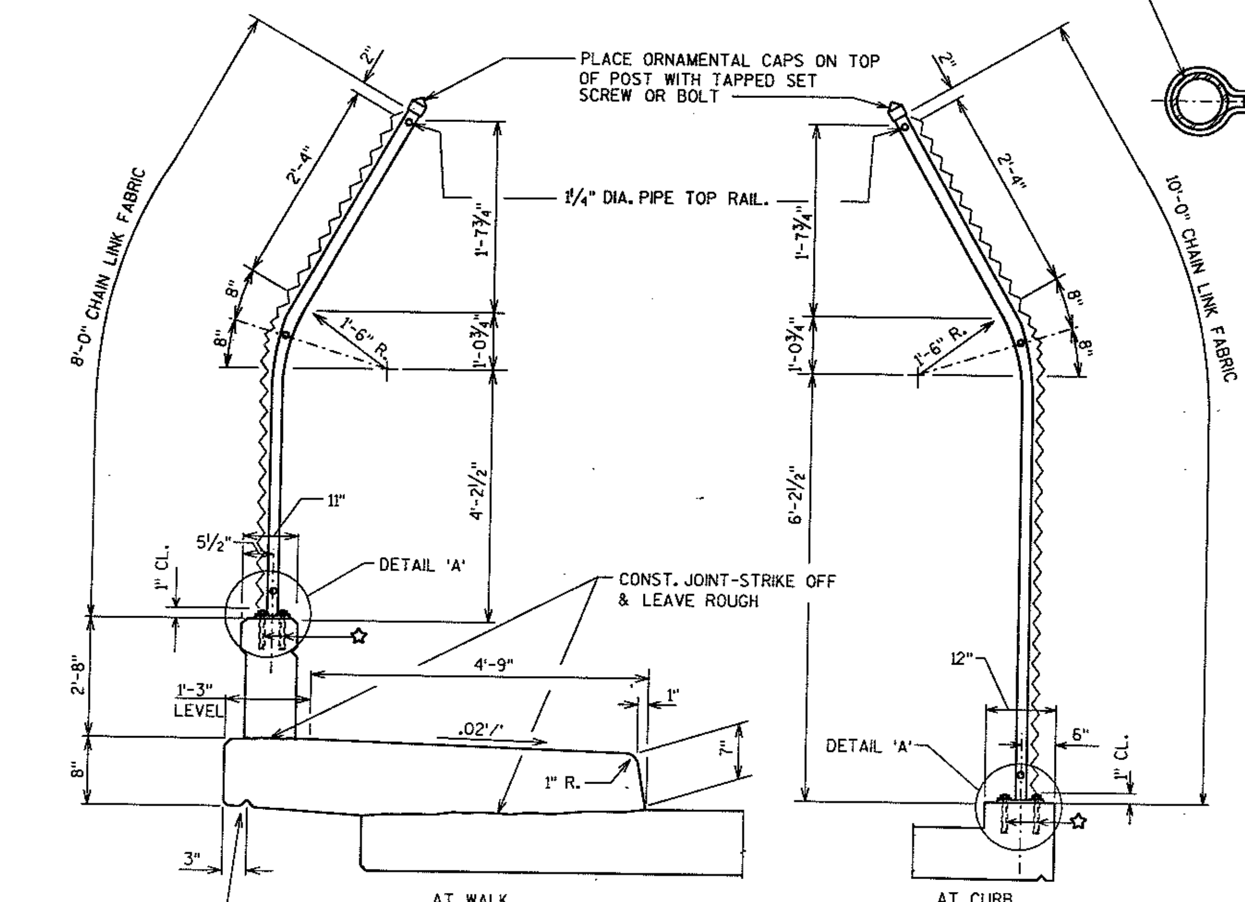
NOTE: PLACE ALL NUTS ON OUTSIDE OF FENCE

* ALTERNATE BOULEVARD 2-WAY CLAMP MAY BE USED.

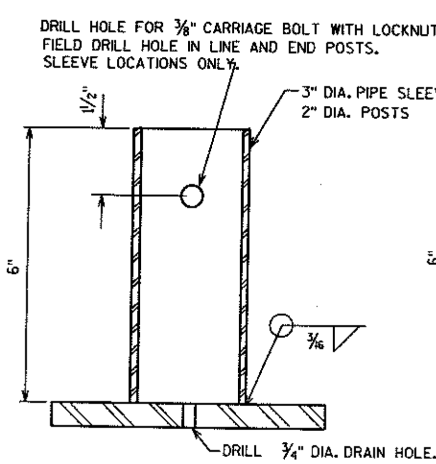


DETAIL A

POSTS MAY BE WELDED TO THE BASE PLATES & THE SLEEVE ELIMINATED.

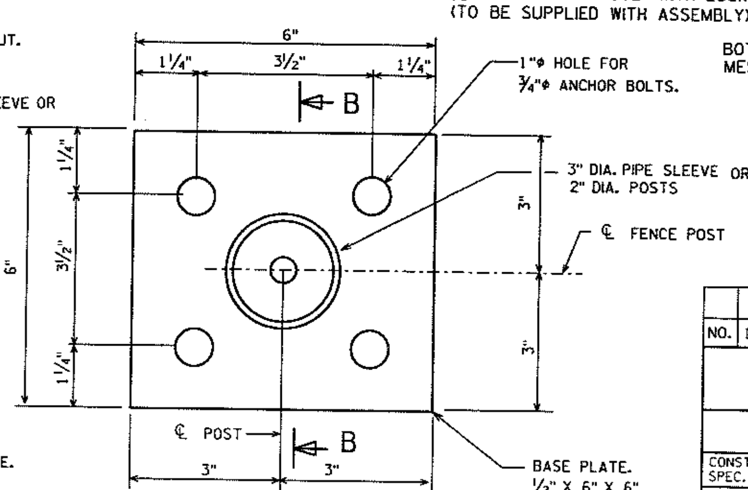


SECTION A



SECTION B-B

POSTS MAY BE WELDED TO THE BASE PLATES & THE SLEEVE ELIMINATED.



PLAN OF BASE PLATE

(UNIT SHALL BE GALV. AFTER FABRICATION)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-172

CONST. SPEC.	1989	DRAWN BY	G	PLANS CK'D.	Budd

FENCING DETAILS

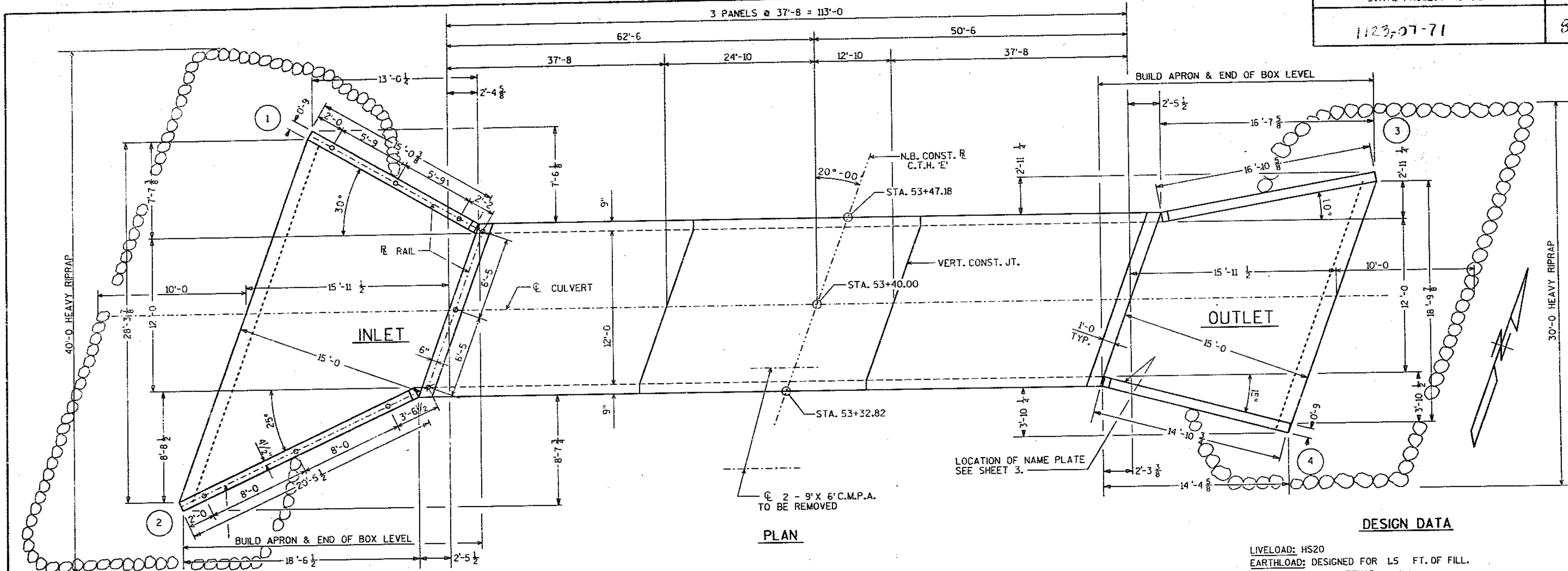
SHEET 14

C31.31TCHAIN.DGN AS-5.33333

9-1-94

TYPE CODE = X

STATE PROJECT NUMBER	SHEET NO.
1123-07-71	8.14

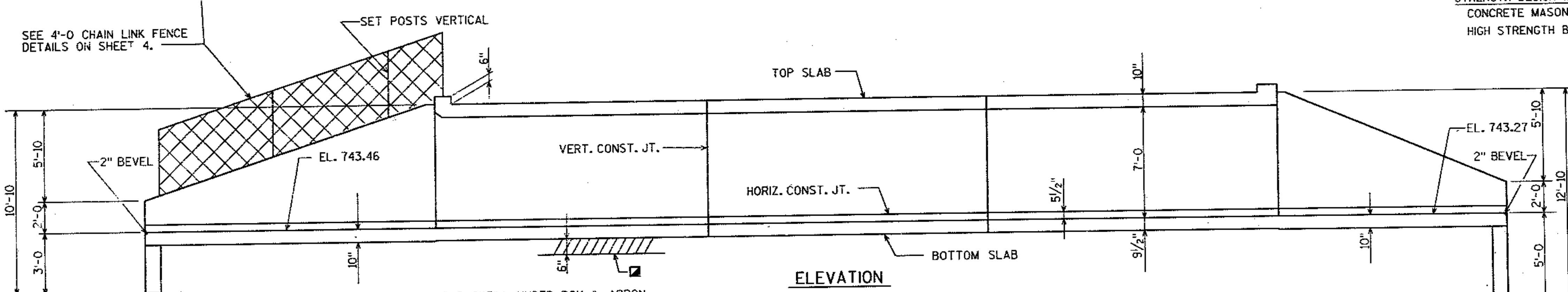


DESIGN DATA

LIVELOAD: HS20
EARTHLOAD: DESIGNED FOR 1.5 FT. OF FILL.
STRENGTH DESIGN METHOD:
CONCRETE MASONRY — F'_c = 3500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT — F_y = 60000 P.S.I.

HYDRAULIC DATA

100 YEAR FREQUENCY
Q_{100} = 744 C.F.S.
VEL. = 10.2 F.P.S.
HW. = EL. 752.6
DRAINAGE AREA = 2.0 SQ. MI.
OVERTOPPING RDWY. = N.A.



■ GRANULAR BACKFILL UNDER BOX & APRON.
(TO BE INCLUDED IN BID ITEM "EXCAVATION FOR STRUCTURES").
GEOTEXTILE FABRIC, TYPE 'C' TO BE PLACED IN BOTTOM OF EXCAVATION UNDER BARREL & APRONS. EXTEND 2'-0 OUTSIDE LIMITS OF CULVERT.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUNDLINE.
ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH GRANULAR BACKFILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION WITHIN THE LENGTH OF THE CULVERT.
THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

TOTAL ESTIMATED QUANTITIES

BID ITEMS		
REMOVING OLD CULVERT, STA. 53+20.00	1	L.S.
EXCAVATION FOR STRUCTURES, CULVERTS	1	L.S.
CONCRETE MASONRY, CULVERTS	171	C.Y.
HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	21,140	LBS.
GEOTEXTILE FABRIC, TYPE 'C'	300	S.Y.
HEAVY RIPRAP	75	C.Y.
CHAIN LINK FENCE, 4 FT.	46	L.F.
GEOTEXTILE FABRIC TYPE 'HR'	115	S.Y.
NON-BID ITEMS		
POLYVINYL CHLORIDE WATERSTOP	30	L.F.
FILLER	¾"	SIZE

TRAFFIC VOLUME

C.T.H. 'E'
A.D.T. = 25600 (2016)
R.D.S. = 40 M.P.H.

LIST OF DRAWINGS

1. LAYOUT
2. DETAILS
3. DETAILS
4. DETAILS
5. SUBSURFACE EXPLORATION

BRIDGE OFFICE CONTACT:
KENT BAHLER ------ (608)266-8490
JACK KLEMM ------ (608)266-5093

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE C-44-84

C.T.H. 'E' OVER APPLE CREEK

COUNTY OUTAGAMIE	TOWN GRAND CHUTE	CITY APPLETON
DESIGN SPEC. AASHTO 1992	LOAD HS-20	CONST. SPEC. 1989
DESIGNED BY COMP. / DESIGN CK'D. ------	DRAWN BY LOY	PLANS CK'D. J.C.K.

APPROVED Gerald H. Anderson 11-29-94
CHIEF BRIDGE DESIGN ENGINEER DATE

LAYOUT — SHEET 1 OF 5 — DATE: NOV. '94

SCALE = 4

BR C4484:A4484.DGN

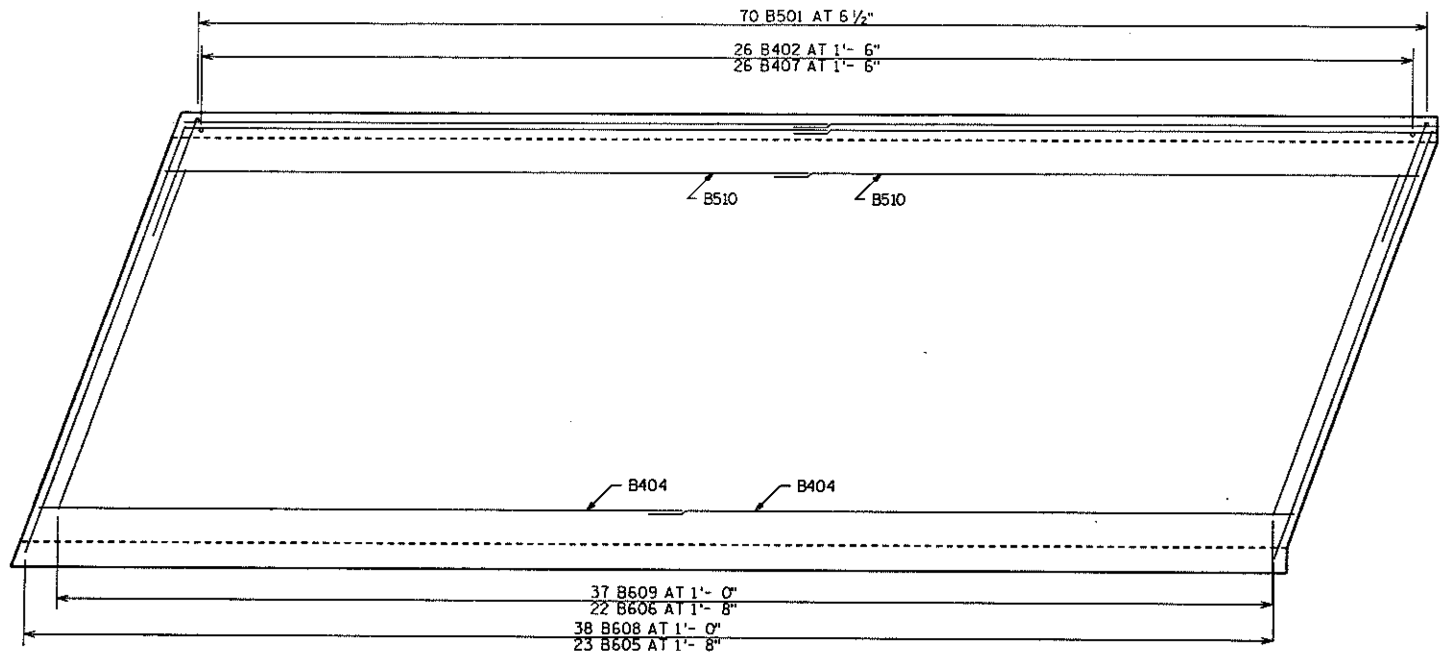
I.D. 1123-07-00A

STATE PROJECT NUMBER	SHEET NO.
1123 0 ~1	8.15

BILL OF BARS 19,210 LBS.

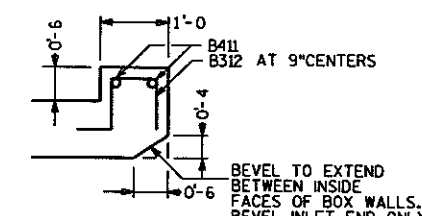
THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE. THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR.

MARK	NUMBER REQ-D.	LENGTH	BENT	CUTTING DIAG.	LOCATION
B501	840	8-8	3-9	NO	CORNERS
B402	156	2-0	NO	NO	SLAB - BOTTOM - DOWELS
B403	132	19-1	NO	NO	LONGITUDINAL BARS
B404	48	19-1	NO	NO	SLAB - BOTTOM - LONGIT.
B605	69	13-6	NO	NO	SLAB - BOTTOM - TRANS.
B606	66	10-9	NO	NO	SLAB - BOTTOM - TRANS.
B407	156	7-0	NO	NO	SIDE WALLS - VERT.
B608	114	13-6	NO	NO	SLAB - TOP - TRANS.
B609	111	10-9	NO	NO	SLAB - TOP - TRANS.
B510	36	37-2	NO	NO	SLAB - TOP - LONGIT.
B411	4	13-11	NO	NO	HEADERS
B312	38	2-11	NO	NO	HEADERS
B513	82	4-0	NO	NO	VERTICAL CONST. JOINT

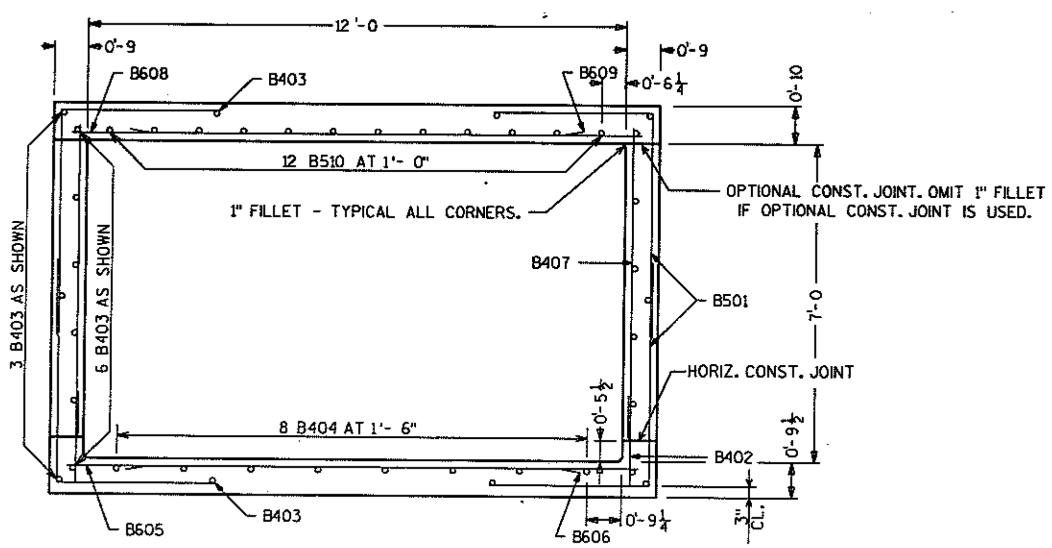


PLAN VIEW OF EXTERIOR PANEL

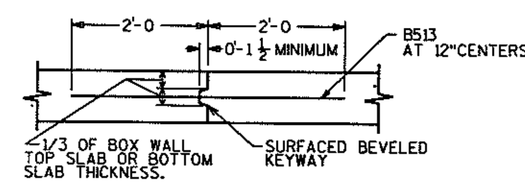
USE IDENTICAL STEEL IN OTHER PANELS.
APRON AND HEADER ARE NOT SHOWN.



SECTION THRU TOP HEADER



TYPICAL SECTION THRU BOX



VERTICAL CONSTRUCTION JOINT

SCALE = 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE C-44-84

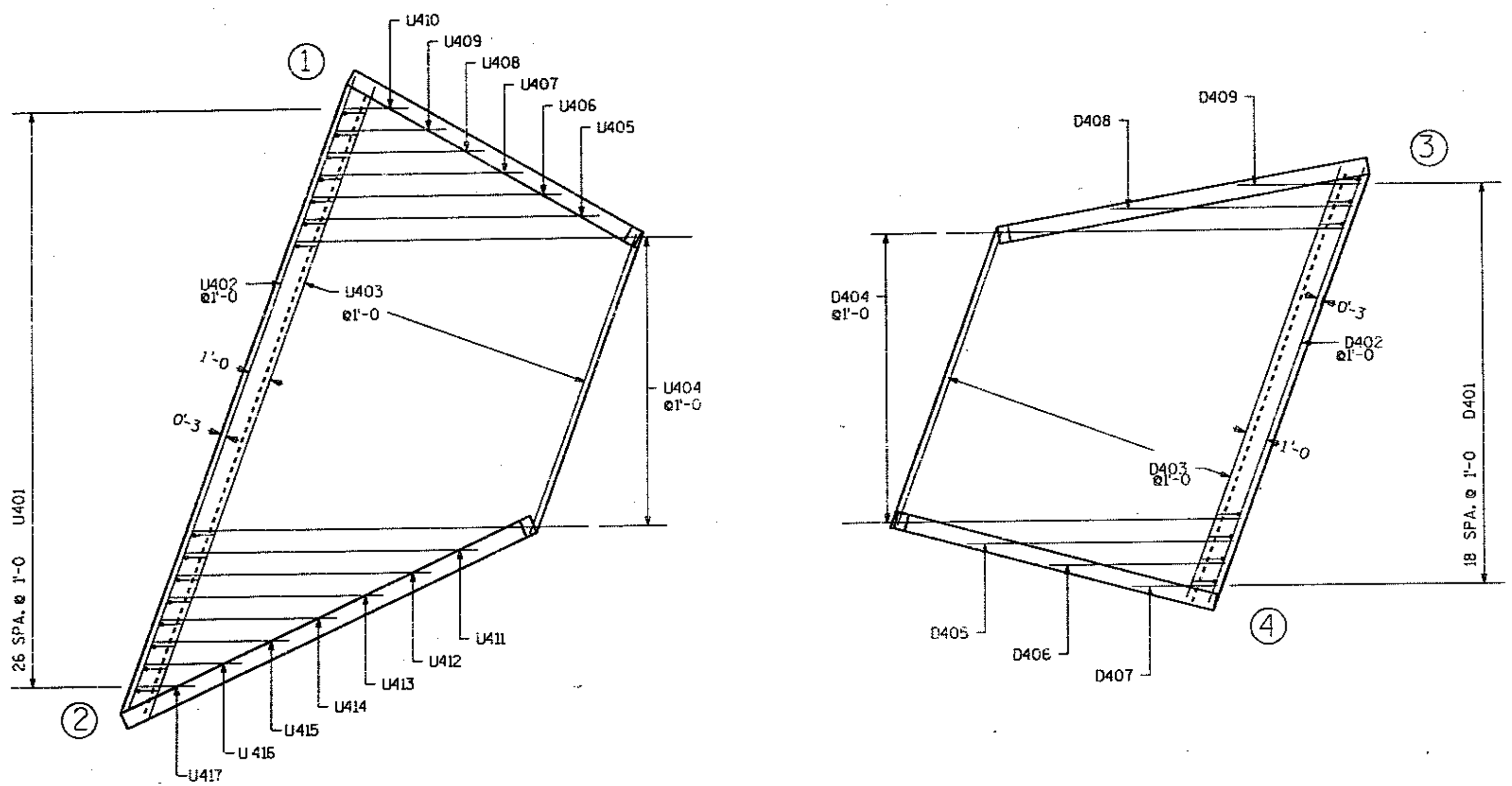
CONST. SPEC.	1989	DRAWN BY	LOY	PLANS CK'D.	J.C.K.

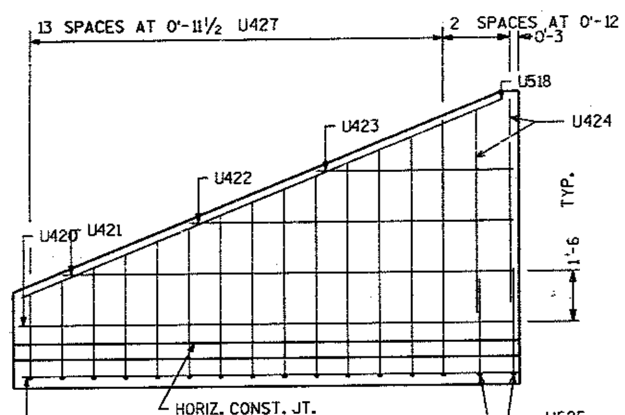
DETAILS — SHEET 2

BR C4484:BX4484.DGN

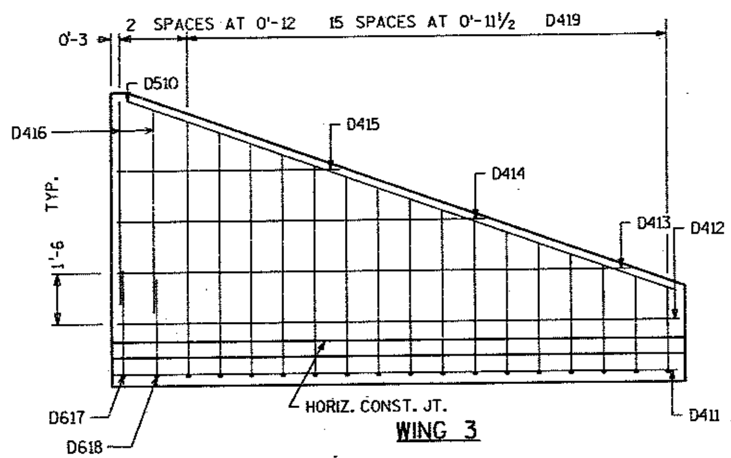
113

STATE PROJECT NUMBER	SHEET NO.
1123 07 71	9.16

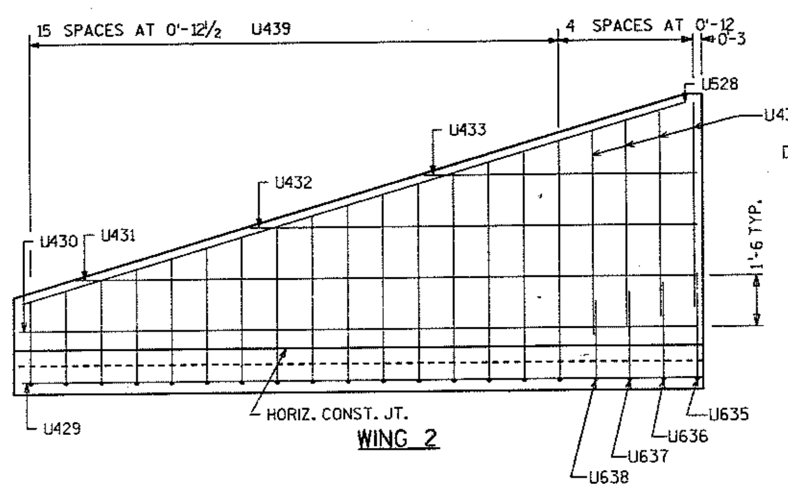




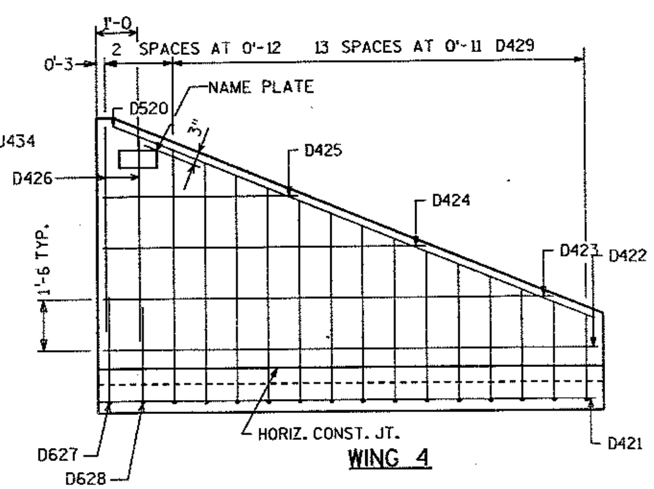
WING 1



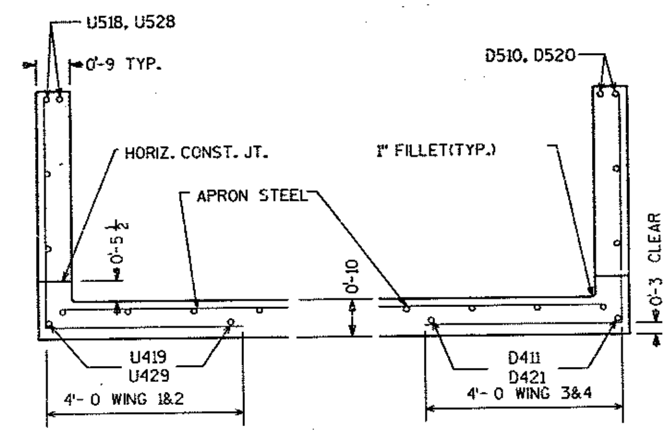
WING 3



WING 2

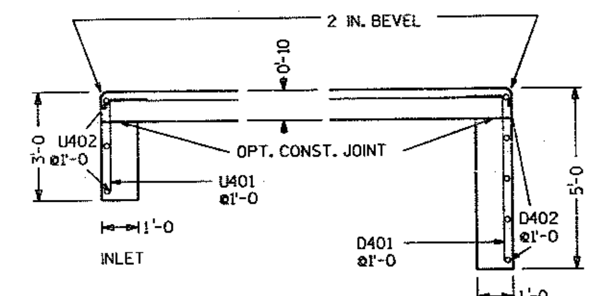


WING 4



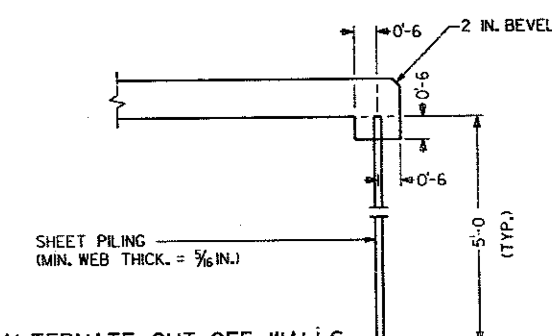
SECTION THRU WINGS

AT RIGHT ANGLES TO WING WALLS



CUT-OFF WALLS

SECTION THRU THE WALLS



ALTERNATE CUT-OFF WALLS

THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALLS.

SCALE = 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE C-44-84

CONST. SPEC.	1989	DRAWN BY	LOY	PLANS CK'D.	JCK.

DETAILS

SHEET 3

BR C4484;A4484.DGN

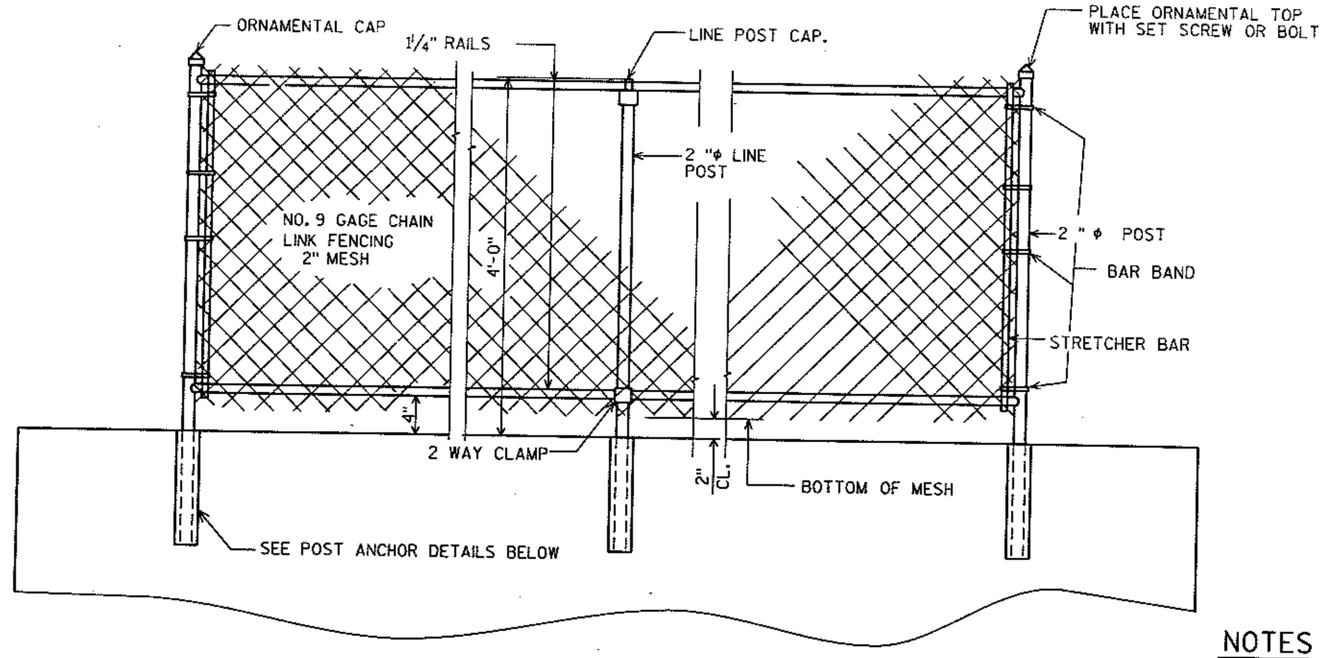
STATE PROJECT NUMBER	SHEET NO.
1173-01-71	8.17

BILL OF BARS

1930 LBS.

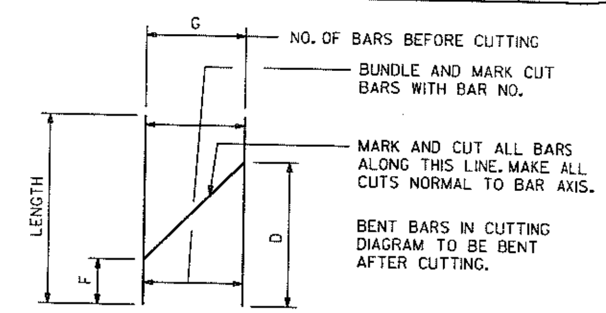
THE FIRST DIGIT OF THE MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A L - SHAPED BAR.

MARK	NO.	LENGTH	BENT	CUT	LOCATION
U401	27	3 -6	1 -0		INLET APRON AND CUTOFF WALL
U402	3	30-2			INLET APRON AND CUTOFF WALL
U403	7	44-5		*	" APRON
U404	14	18 -0			" APRON
U405	1	13 -5			" APRON
U406	1	11 -4			" APRON
U407	1	9 -3			" APRON
U408	1	7 -2			" APRON
U409	1	5 -0			" APRON
U410	1	2 -11			" APRON
U411	1	13 -4			" APRON
U412	1	11 -6			" APRON
U413	1	9 -9			" APRON
U414	1	8 -0			" APRON
U415	1	6 -2			" APRON
U416	1	4 -5			" APRON
U417	1	2 -8			" APRON
U518	2	15 -8			WING 1 -HORIZONTAL
U419	2	15 -3			WING " -HORIZONTAL-APRON
U420	1	14 -8			WING " -HORIZONTAL
U421	1	13 -5			WING " -HORIZONTAL
U422	1	9 -7			WING " -HORIZONTAL
U423	1	5 -10			WING " -HORIZONTAL
U424	2	6 -0			WING " -VERTICAL
U625	1	7 -2	4 -0		WING " -VERTICAL
U626	1	6 -10	4 -0		WING " -VERTICAL
U427	7	17 -10	4 -0	*	WING " -VERTICAL
U528	2	20-10			WING 2 -HORIZONTAL
U429	2	20-9			WING " -HORIZONTAL-APRON
U430	1	20-2			WING " -HORIZONTAL
U431	1	18 -5			WING " -HORIZONTAL
U432	1	13 -3			WING " -HORIZONTAL
U433	1	8 -1			WING " -HORIZONTAL
U434	4	6 -0			WING " -VERTICAL
U635	1	7 -2	4 -0		WING " -VERTICAL
U636	1	6 -11	4 -0		WING " -VERTICAL
U637	1	6 -8	4 -0		WING " -VERTICAL
U638	1	6 -4	4 -0		WING " -VERTICAL
U439	8	17 -5	4 -0	*	WING " -VERTICAL
D401	19	5 -6	1 -0		OUTLET APRON AND CUTOFF WALL
D402	5	20-6			OUTLET APRON AND CUTOFF WALL
D403	7	34-7		*	" APRON
D404	14	18 -0			" APRON
D405	1	12 -0			" APRON
D406	1	7 -10			" APRON
D407	1	3 -9			" APRON
D408	1	10 -10			" APRON
D409	1	5 -6			" APRON
D510	2	17 -5			WING 3 -HORIZONTAL
D411	2	17 -2			WING " -HORIZONTAL-APRON
D412	1	16 -7			WING " -HORIZONTAL
D413	1	15 -1			WING " -HORIZONTAL
D414	1	10 -10			WING " -HORIZONTAL
D415	1	6 -7			WING " -HORIZONTAL
D416	2	6 -0			WING " -VERTICAL
D617	1	7 -2	4 -0		WING " -VERTICAL
D618	1	6 -11	4 -0		WING " -VERTICAL
D419	8	17 -10	4 -0	*	WING " -VERTICAL
D520	2	15 -6			WING 4 -HORIZONTAL
D421	2	15 -2			WING " -HORIZONTAL-APRON
D422	1	14 -7			WING " -HORIZONTAL
D423	1	13 -3			WING " -HORIZONTAL
D424	1	9 -6			WING " -HORIZONTAL
D425	1	5 -9			WING " -HORIZONTAL
D426	2	6 -0			WING " -VERTICAL
D627	1	7 -2	4 -0		WING " -VERTICAL
D628	1	6 -10	4 -0		WING " -VERTICAL
D429	7	17 -9	4 -0	*	WING " -VERTICAL



ELEVATION OF FENCE

AT HEADER
WINGWALLS SIMILAR

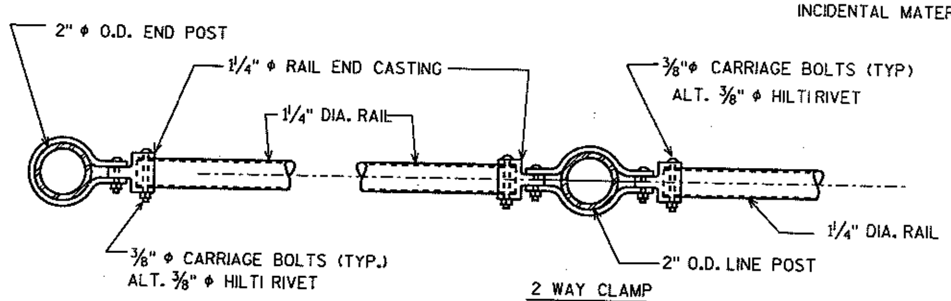


CUTTING DIAGRAM

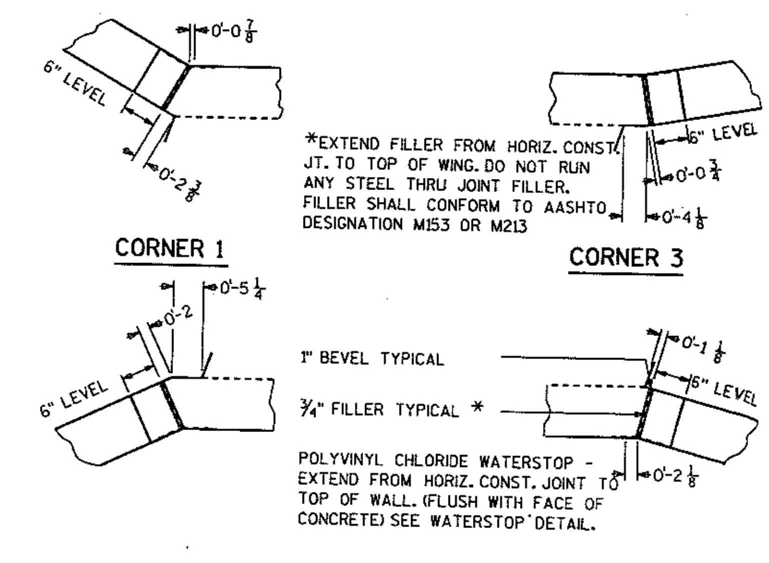
MARK	D	F	G	SETS REQD
U403	21-7	14-3	7	1
U427	8 -8	6 -4	7	1
U439	8 -7	6 -4	8	1
D403	17-0	14-0	7	1
D419	8 -9	6 -4	8	1
D429	8 -8	6 -4	7	1

NOTES

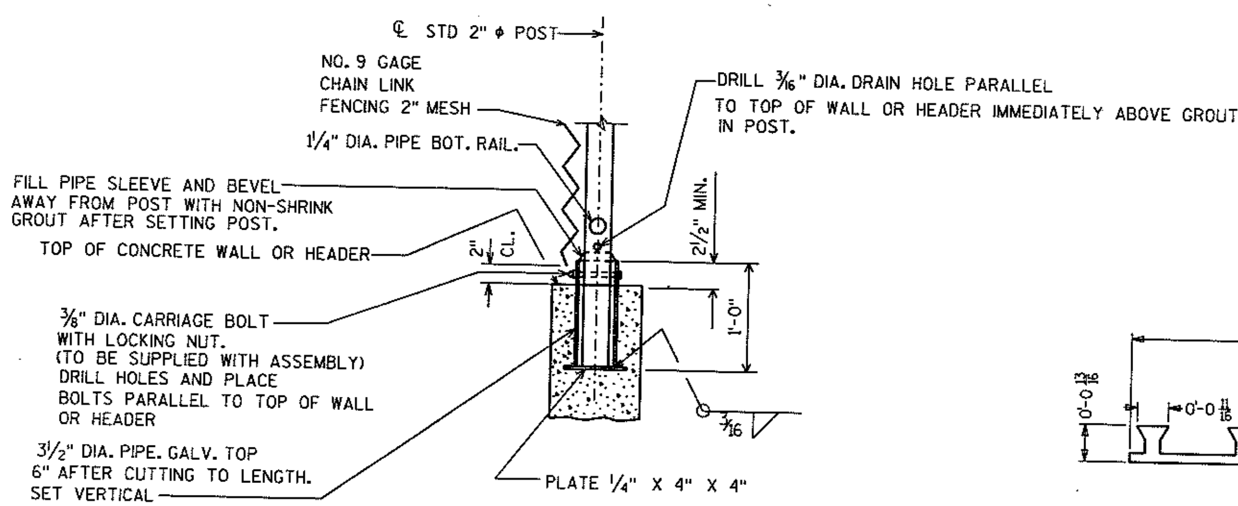
ALL POSTS TO BE SET VERTICAL.
ALL FENCING COMPONENTS SHALL BE GALVANIZED STEEL.
TOP RAIL SHALL BE CONTINUOUS OVER INTERIOR POSTS.
NO. 9 GAGE TIES AT 9" SPA. REQ'D. ON RAILS AND POST WITHOUT STRETCHER BARS.
THE BID ITEM "CHAIN LINK FENCE,4 FT. INCLUDES FURNISHING FENCE, POST ANCHOR SLEEVES, 2" ϕ END POST, 2 " ϕ LINE POST, 1¼" ϕ STD. PIPE RAILING AND ALL INCIDENTAL MATERIAL.



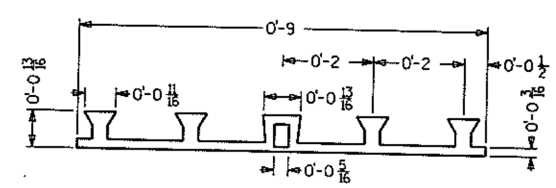
PLAN OF RAILING



CORNER DETAILS



POST ANCHOR DETAIL



POLYVINYL CHLORIDE WATERSTOP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE C-44-84

CONST. SPEC.	1989	DRAWN BY	LOY	PLANS CK'D.	J.A.K.

DETAILS

SHEET 4

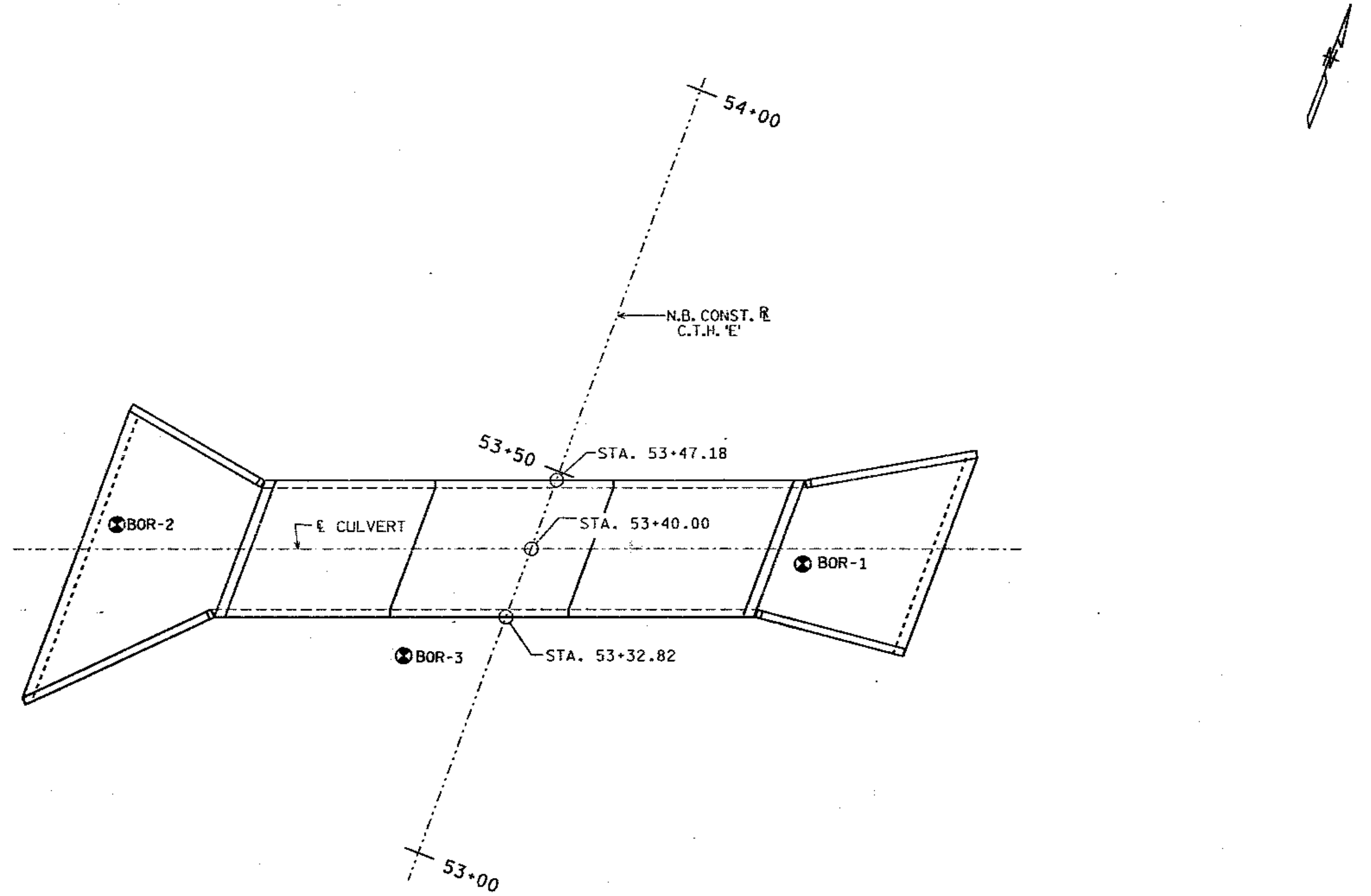
SCALE = 4

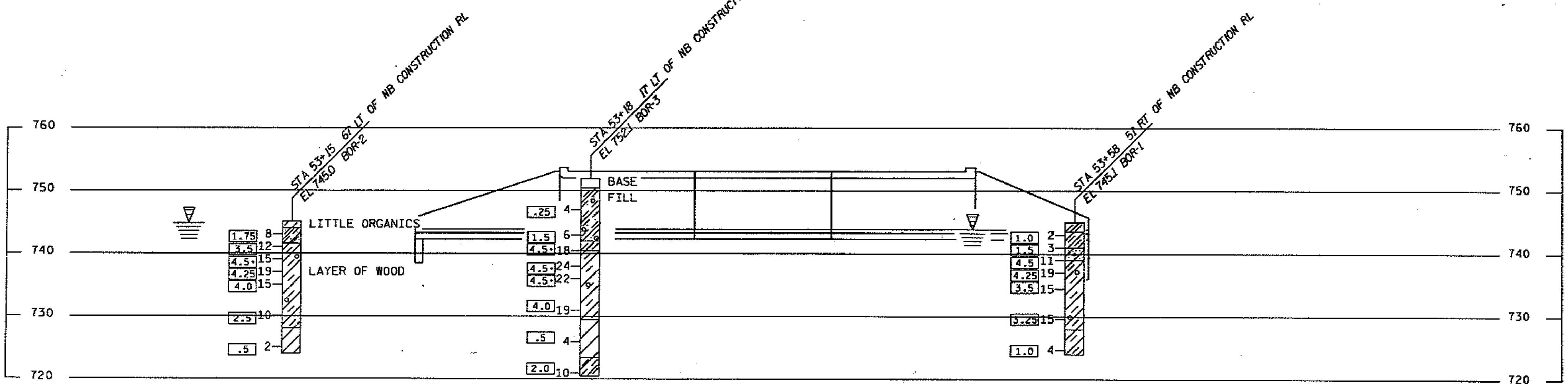
BR C4484:A4484.DGN

15

CTH "E", USH 41 - CTH "E" INTERCHANGE, OUTAGAMIE COUNTY

STATE PROJECT NUMBER	SHEET NO.
1123-07-71	7.18





ABBREVIATIONS

F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS

Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING

Probing No.
Sta.
Elevation
95/6=95 Blows for 6" Penetration
Probing taken with a 350# Wt. Falling 18" on a 2" O.D. Point.
7 Average Blows Per Foot
Refusal 95/6

LEGEND OF BORING

Boring No.
Elev.
Sta.
Unconfined Strength → 7.7 7
Sandy Gravel
Blows Per Ft. Using 140# Wt. Falling 30"
Wash Sample
F
Boulders or Cobbles
Sand
Shelby Tube — S.T.
Ground Water Elevation
Silty Clay
No Ground Water Observed Above This Elevation
So Limestone

Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D. x 1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE C-44-84

CONST. SPEC.	1989	DRAWN BY	LOY	PLANS CK'D.	J.C.K.

SUBSURFACE EXPLORATION — SHEET 5

br c4484:soil4484.dgn scale 4

BALANCES

GROUP CODE 010

SE RAMP STA. 854+50 - 862+50

UNCLASSIFIED	=	587 C.Y.
FILL	=	8,757 C.Y.
BORROW	=	4,056 C.Y.
CONCRETE PAVEMENT INCLUDED IN UNCLASSIFIED EXCAVATION	=	190 C.Y.
CONCRETE PAVEMENT NOT INCLUDED IN UNCLASSIFIED EXCAVATION	=	919 C.Y.

SW RAMP STA. 845+50 - 853+50

UNCLASSIFIED	=	1,199 C.Y.
FILL	=	8,362 C.Y.
BORROW	=	5,677 C.Y.
CONCRETE PAVEMENT INCLUDED IN UNCLASSIFIED EXCAVATION	=	244 C.Y.
CONCRETE PAVEMENT NOT INCLUDED IN UNCLASSIFIED EXCAVATION	=	861 C.Y.

NE RAMP STA. 854+50 - 862+50

UNCLASSIFIED	=	739 C.Y.
FILL	=	14,039 C.Y.
BORROW	=	10,499 C.Y.
CONCRETE PAVEMENT INCLUDED IN UNCLASSIFIED EXCAVATION	=	200 C.Y.
CONCRETE PAVEMENT NOT INCLUDED IN UNCLASSIFIED EXCAVATION	=	789 C.Y.

NW RAMP STA. 846+50 - 853+50

UNCLASSIFIED	=	624 C.Y.
FILL	=	6,061 C.Y.
BORROW	=	4,284 C.Y.
CONCRETE PAVEMENT INCLUDED IN UNCLASSIFIED EXCAVATION	=	171 C.Y.
CONCRETE PAVEMENT NOT INCLUDED IN UNCLASSIFIED EXCAVATION	=	921 C.Y.

PARK AND RIDE LOT STA. 50+78 - 52+85

UNCLASSIFIED	=	36 C.Y.
FILL	=	2,451 C.Y.
BORROW	=	1,984 C.Y.

GROUP CODE 020

CTH E STA. 26+70 - 38+59

UNCLASSIFIED	=	3,286 C.Y.
FILL	=	59,484 C.Y.
BORROW	=	45,155 C.Y.
CONCRETE PAVEMENT INCLUDED IN UNCLASSIFIED EXCAVATION	=	1,020 C.Y.
CONCRETE PAVEMENT NOT INCLUDED IN UNCLASSIFIED EXCAVATION	=	4,812 C.Y.

CTH E STA. 39+91 - 51+00

UNCLASSIFIED	=	1,312 C.Y.
FILL	=	56,036 C.Y.
BORROW	=	44,933 C.Y.
CONCRETE PAVEMENT NOT INCLUDED IN UNCLASSIFIED EXCAVATION	=	161 C.Y.

GROUP CODE 060

CTH E STA. 51+00 - 60+00

UNCLASSIFIED	=	1,904 C.Y.
FILL	=	7,609 C.Y.
BORROW	=	4,684 C.Y.

QUANTITIES INCLUDE EVERGREEN ROAD

NOTE: CONCRETE PAVEMENT EXPANDED BY 1.10
FILL SHOWN IS EXPANDED BY 1.40
BORROW EXPANDED BY 1.15

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	9.1

YARDAGE SUMMARY

CTH E

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
27+50	92.3	21.1					
28+00	79.9	33.0	159.4	70.1	159.4	70.1	89.3
28+50	80.9	66.0	148.9	128.4	308.3	198.6	109.7
29+00	50.8	137.3	122.0	263.6	430.3	462.2	-31.9
29+50	14.7	232.9	60.6	479.9	490.9	942.1	-451.3
29+65	5.5	283.5	5.6	200.8	496.5	1143.0	-646.5
30+00	299.1	77.7	197.4	327.7	693.9	1470.7	-776.8
30+50	286.5	387.2	542.2	602.6	1236.1	2073.2	-837.2
31+00	179.6	481.6	431.6	1126.2	1667.7	3199.4	-1531.7
31+50	101.3	617.5	260.1	1424.7	1927.8	4624.1	-2696.3
32+00	25.0	812.6	116.9	1853.8	2044.7	6477.9	-4433.2
32+50	87.5	1091.0	104.1	2467.7	2148.8	8945.6	-6796.7
33+00	140.2	1366.4	210.8	3185.5	2359.7	12131.1	-9771.4
33+50	153.4	1677.0	271.8	3945.2	2631.5	16076.3	-13444.8
34+00	129.8	1824.3	262.2	4538.7	2893.8	20615.0	-17721.2
34+50	110.5	2000.3	222.6	4957.7	3116.4	25572.7	-22456.4
35+00	25.2	2159.9	125.7	5392.8	3242.1	30965.5	-27723.5
35+50	11.2	1958.0	33.7	5338.0	3275.8	36303.5	-33027.7
36+00	0.0	812.0	10.4	3590.7	3286.1	39894.2	-36608.0
36+50	0.0	513.0	0.0	1717.5	3286.1	41611.7	-38325.6
37+00	0.0	844.6	0.0	1759.8	3286.1	43371.5	-40085.4
37+50	0.0	1737.0	0.0	3346.5	3286.1	46718.0	-43431.8
38+00	0.0	2127.7	0.0	5009.7	3286.1	51727.7	-48441.6
38+42.1	0.0	3576.9	0.0	6226.4	3286.1	57954.1	-54667.9
38+50	0.0	3892.3	0.0	1529.8	3286.1	59483.9	-56197.7
38+59	0.0	3958.9	0.0	0.0	3286.1	59483.9	-56197.7

CTH E

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
39+91	0.0	3728.7					
40+00	0.0	3567.7	0.0	0.0	0.0	0.0	0.0
40+37.8	0.0	2079.0	0.0	5533.8	0.0	5533.8	-5533.8
40+50	0.0	1963.2	0.0	1278.5	0.0	6812.3	-6812.3
41+00	0.0	1448.9	0.0	4423.2	0.0	11235.5	-11235.5
41+50	0.0	464.2	0.0	2480.0	0.0	13715.5	-13715.5
42+00	0.0	564.3	0.0	1333.3	0.0	15048.7	-15048.7
42+50	0.0	1558.9	0.0	2752.3	0.0	17801.0	-17801.0
43+00	1.3	1686.7	1.2	4207.3	1.2	22008.3	-22007.1
43+50	6.6	1553.0	7.3	4199.6	8.4	26207.9	-26199.5
44+00	12.7	1429.9	17.9	3866.7	26.3	30074.6	-30048.3
44+50	17.7	1338.3	28.2	3588.4	54.5	33663.0	-33608.5
45+00	31.2	1200.0	45.3	3290.5	99.8	36953.5	-36853.7
45+50	44.9	1066.3	70.5	2937.8	170.3	39891.3	-39721.0
46+00	74.8	955.4	110.9	2620.6	281.1	42511.9	-42230.8
46+50	97.3	858.0	159.4	2350.7	440.5	44862.7	-44422.2
47+00	39.3	621.2	126.5	1917.6	567.0	46780.2	-46213.2
47+50	33.7	644.0	67.6	1640.1	634.6	48420.3	-47785.7
48+00	66.6	453.6	92.8	1422.8	727.4	49843.1	-49115.7
48+50	38.9	443.8	97.6	1163.3	825.1	51006.4	-50181.3
49+00	55.0	385.6	86.9	1075.1	912.0	52081.5	-51169.6
49+50	56.8	373.2	103.5	983.7	1015.5	53065.3	-52049.8
50+00	102.4	309.1	147.4	884.5	1162.9	53949.8	-52786.8
50+50	17.3	432.7	110.9	961.6	1273.8	54911.3	-53637.5
51+00	23.6	434.6	37.9	1124.3	1311.7	56035.6	-54723.9
51+50	39.3	484.6	58.3	1191.5	1370.0	57227.1	-55857.1
52+00	40.0	473.4	73.4	1241.9	1443.4	58469.0	-57025.6
52+26	49.4	451.6	43.0	623.5	1486.4	59092.5	-57606.1
52+50	55.9	437.9	46.8	553.5	1533.2	59645.9	-58112.7
52+63	63.2	395.5	28.7	280.9	1561.9	59926.8	-58365.0
53+00	44.9	248.8	74.1	618.0	1635.9	60544.8	-58908.9
53+07	50.5	270.3	12.4	94.2	1648.3	60639.0	-58990.8
53+46	34.2	460.4	61.2	738.8	1709.5	61377.8	-59668.3
53+50	39.6	475.8	5.5	97.1	1715.0	61474.9	-59759.9
53+68	51.3	371.1	30.3	395.2	1745.3	61870.1	-60124.8
53+73	52.5	338.6	9.6	92.0	1754.9	61962.1	-60207.2

EVERGREEN

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
10+75	31.8	101.1					
10+76.6	32.3	89.4	1.9	8.0	1.9	8.0	-6.1
10+97.2	37.7	44.2	26.7	71.4	28.6	79.4	-50.8
11+00	38.1	52.0	3.9	6.9	32.5	86.3	-53.8
11+25	45.6	24.6	38.8	49.6	71.3	135.9	-64.6
11+38.5	45.9	14.0	22.9	13.5	94.2	149.4	-55.3

PARK & RIDE

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
50+78	0.0	0.0					
51+00	6.2	358.3	2.5	204.3	2.5	204.3	-201.8
51+25	6.6	305.5	5.9	430.2	8.5	634.6	-626.1
51+50	5.4	265.6	5.6	370.1	14.1	1004.7	-990.6
51+75	6.7	220.7	5.6	315.2	19.7	1319.9	-1300.2
52+00	8.9	218.0	7.2	284.4	26.9	1604.3	-1577.4
52+25	2.5	220.6	5.3	284.3	32.2	1888.6	-1856.4
52+50	0.0	199.7	1.2	272.4	33.4	2161.0	-2127.6
52+66	3.9	162.9	1.2	150.4	34.5	2311.3	-2276.8
52+75	0.0	188.9	0.7	82.1	35.2	2393.4	-2358.3
52+85	1.9	31.1	0.4	57.0	35.5	2450.5	-2415.0

TRANSITION AREA

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL
53+73	52.0	338.0				
54+00	61.0	180.0	57.0	363.0	57.0	363.0
54+50	46.0	157.0	99.0	437.0	156.0	800.0
55+00	40.0	84.0	80.0	312.0	236.0	1112.0
55+50	43.0	49.0	77.0	172.0	313.0	1284.0
55+62	46.0	32.0	20.0	25.0	333.0	1309.0
56+00	41.0	47.0	61.0	78.0	394.0	1387.0
56+50	50.0	14.0	84.0	79.0	478.0	1466.0
57+00	46.0	19.0	89.0	43.0	567.0	1509.0
57+22	66.0	9.0	46.0	16.0	613.0	1525.0
57+50	56.0	2.0	63.0	6.0	676.0	1531.0
58+00	78.0	0.0	124.0	2.0	800.0	1533.0
58+50	92.0	0.0	157.0	0.0	957.0	1533.0
59+00	82.0	0.0	161.0	0.0	1118.0	1533.0
59+50	66.0	0.0	137.0	0.0	1255.0	1533.0
60+00	55.0	0.0	112.0	0.0	1367.0	1533.0

NOTE: FILL SHOWN IS ABSOLUTE VOLUME EXPANDED 40%.

STATE PROJECT NUMBER	SHEET NO.
1123-7-71	9.?

YARDAGE SUMMARY

NE RAMP

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
854+50	0.0	1284.4					
855+00	0.0	1008.5	0.0	2972.3	0.0	2972.3	-2972.3
855+50	0.3	955.7	0.3	2546.1	0.3	5518.4	-5518.2
856+00	0.4	742.0	0.6	2200.7	0.9	7719.2	-7718.3
856+50	3.5	753.3	3.6	1938.4	4.5	9657.6	-9653.1
857+00	4.6	565.7	7.6	1709.7	12.0	11367.3	-11355.3
857+50	6.3	363.2	10.1	1204.1	22.1	12571.4	-12549.3
858+00	8.5	206.2	13.7	738.1	35.8	13309.5	-13273.7
858+50	24.2	106.8	30.3	405.8	66.1	13715.3	-13649.1
859+00	33.4	56.5	53.3	211.8	119.5	13927.0	-13807.6
859+50	39.4	14.9	67.4	92.6	186.8	14019.6	-13832.8
860+00	53.3	0.0	85.8	19.3	272.7	14038.9	-13766.2
860+50	48.8	0.0	94.6	0.0	367.2	14038.9	-13671.7
861+00	52.1	0.0	93.5	0.0	460.7	14038.9	-13578.2
861+50	52.7	0.0	97.1	0.0	557.7	14038.9	-13481.2
862+00	42.9	0.0	88.5	0.0	646.3	14038.9	-13392.6
862+50	56.7	0.0	92.2	0.0	738.5	14038.9	-13300.4

SE RAMP

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
854+50	0.0	1117.9					
855+00	0.0	763.2	0.0	2438.6	0.0	2438.6	-2438.6
855+50	0.0	608.9	0.0	1778.7	0.0	4217.3	-4217.3
856+00	0.0	442.7	0.0	1363.2	0.0	5580.5	-5580.5
856+50	0.0	314.7	0.0	981.7	0.0	6562.2	-6562.2
857+00	2.4	228.0	2.2	703.5	2.2	7265.7	-7263.5
857+50	13.8	161.7	14.9	505.3	17.1	7771.0	-7753.9
858+00	19.1	122.5	30.4	368.5	47.5	8139.5	-8091.9
858+50	17.5	77.0	33.9	258.5	81.4	8398.0	-8316.6
859+00	15.9	51.7	31.0	166.7	112.4	8564.7	-8452.3
859+50	11.5	27.1	25.4	102.1	137.8	8666.9	-8529.0
860+00	15.7	18.2	25.2	58.8	163.0	8725.7	-8562.7
860+50	26.3	2.9	38.8	27.3	201.9	8753.0	-8551.2
861+00	44.6	0.1	65.6	3.9	267.4	8756.9	-8489.5
861+50	58.4	0.0	95.3	0.2	362.7	8757.1	-8394.4
862+00	58.5	0.0	108.2	0.0	470.9	8757.1	-8286.2
862+50	66.4	0.0	115.6	0.0	586.5	8757.1	-8170.6

NW RAMP

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
846+50	60.5	0.0					
847+00	56.8	0.0	108.6	0.0	108.6	0.0	108.6
847+50	65.6	0.0	113.4	0.0	222.0	0.0	222.0
848+00	62.7	0.0	118.8	0.0	340.9	0.0	340.9
848+50	51.6	0.0	105.8	0.0	446.7	0.0	446.7
849+00	22.0	4.0	68.1	5.2	514.9	5.2	509.6
849+50	10.8	23.0	30.4	35.0	545.2	40.2	505.0
850+00	11.1	41.5	20.3	83.6	565.5	123.8	441.7
850+50	14.2	58.2	23.4	129.3	588.9	253.1	335.8
851+00	10.8	78.2	23.1	176.8	612.0	429.9	182.1
851+50	1.1	129.4	11.0	269.2	623.1	699.1	-76.0
852+00	0.0	291.4	1.0	545.5	624.1	1244.6	-620.6
852+50	0.0	493.1	0.0	1017.0	624.1	2261.6	-1637.5
853+00	0.0	608.7	0.0	1428.3	624.1	3689.9	-3065.8
853+50	0.0	1220.3	0.0	2370.9	624.1	6060.8	-5436.7

SW RAMP

STATION	END-AREA CUT	END-AREA FILL	Incremental VOLUME CUT	Incremental VOLUME FILL	Cumulative VOLUME CUT	Cumulative VOLUME FILL	MASS HAUL
845+50	69.8	0.0					
846+00	63.2	0.0	123.1	0.0	123.1	0.0	123.1
846+50	62.5	0.0	116.4	0.0	239.4	0.0	239.4
847+00	67.4	0.0	120.3	0.0	359.7	0.0	359.7
847+50	67.5	0.0	124.9	0.0	484.5	0.0	484.5
848+00	60.6	0.0	118.6	0.0	603.2	0.0	603.2
848+50	55.5	3.5	107.5	4.5	710.6	4.5	706.1
849+00	66.1	16.8	112.6	26.3	823.2	30.9	792.4
849+50	60.3	0.0	117.1	21.8	940.3	52.6	887.7
850+00	55.4	61.2	107.2	79.4	1047.5	132.0	915.5
850+50	28.8	124.6	78.0	240.9	1125.4	372.9	752.6
851+00	9.7	196.2	35.7	415.9	1161.1	788.7	372.4
851+50	5.4	289.8	14.0	630.1	1175.1	1418.8	-243.7
852+00	3.2	399.6	8.0	893.7	1183.1	2312.4	-1129.4
852+50	3.1	702.2	5.8	1428.2	1188.9	3740.7	-2551.8
853+00	2.6	977.4	5.2	2177.2	1194.1	5917.9	-4723.8
853+50	3.0	908.4	5.1	2444.5	1199.3	8362.4	-7163.1

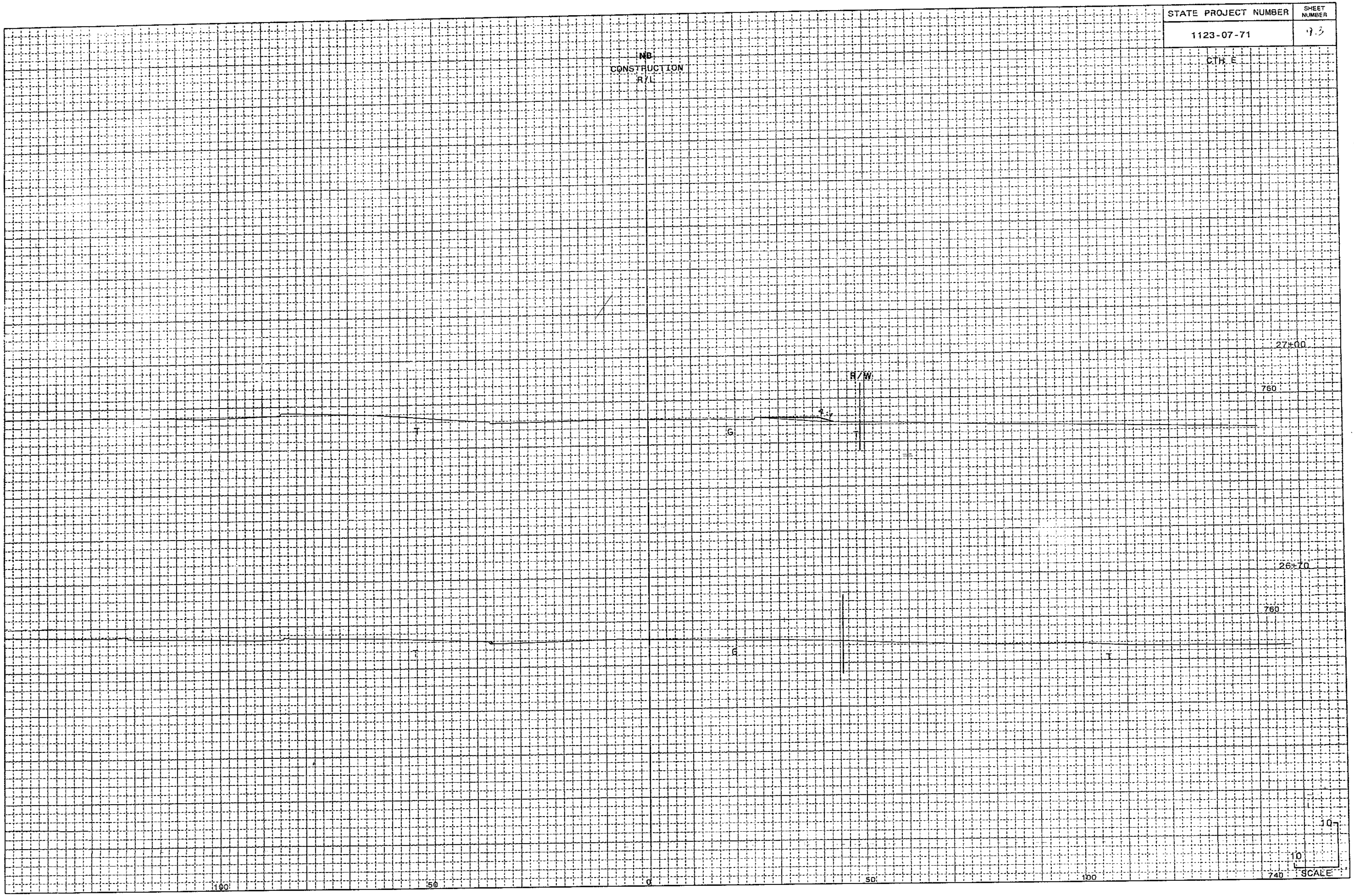
NOTE: FILL SHOWN IS ABSOLUTE VOLUME EXPANDED 40%.

PLOT SCALE: 100
PLOT NAME: 301B
REV. DATE:
ORIGINATOR : DIST. 3 SAMPSON
LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

FILE NAME : d3 112307:301.dgn

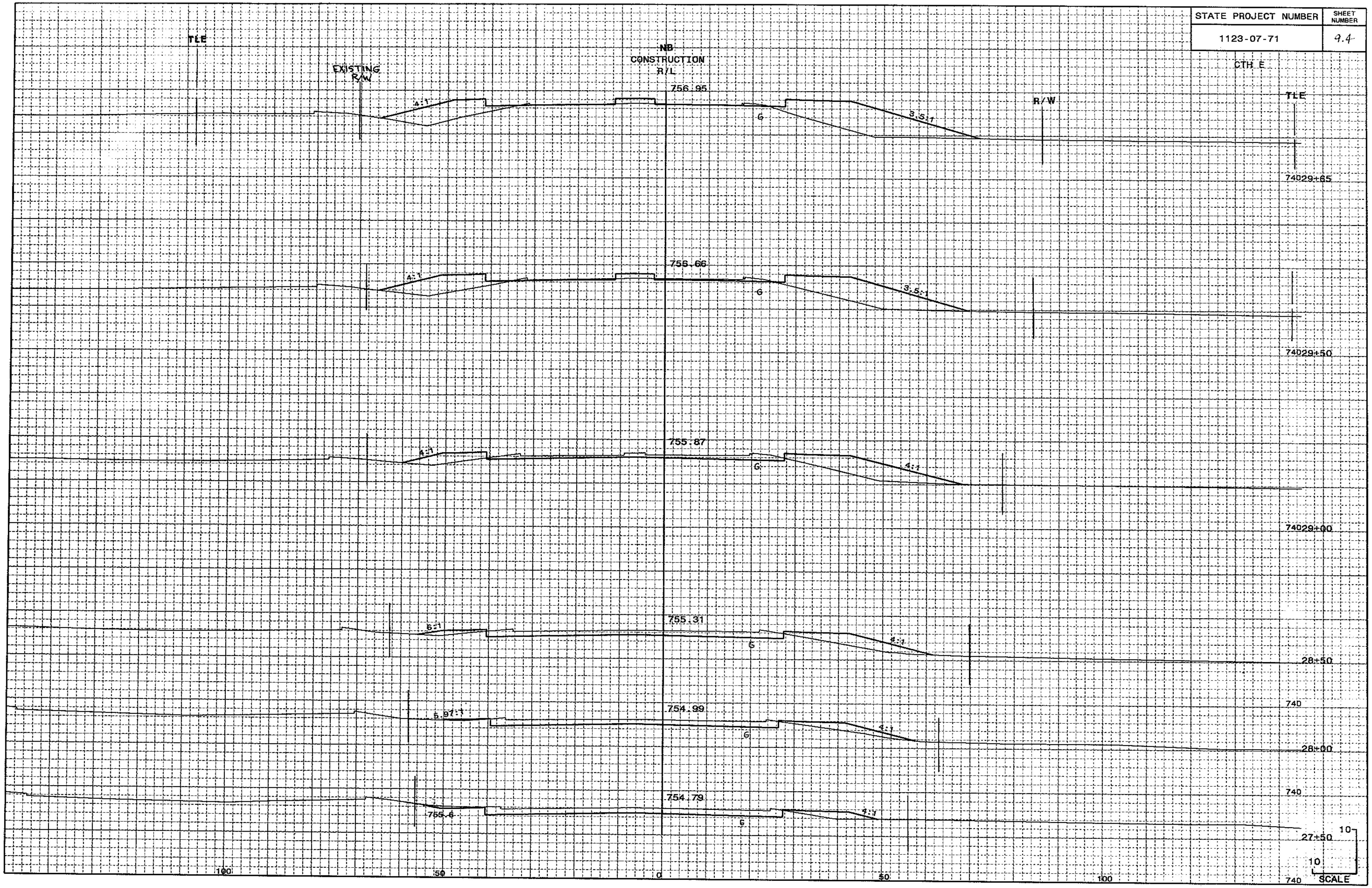
119

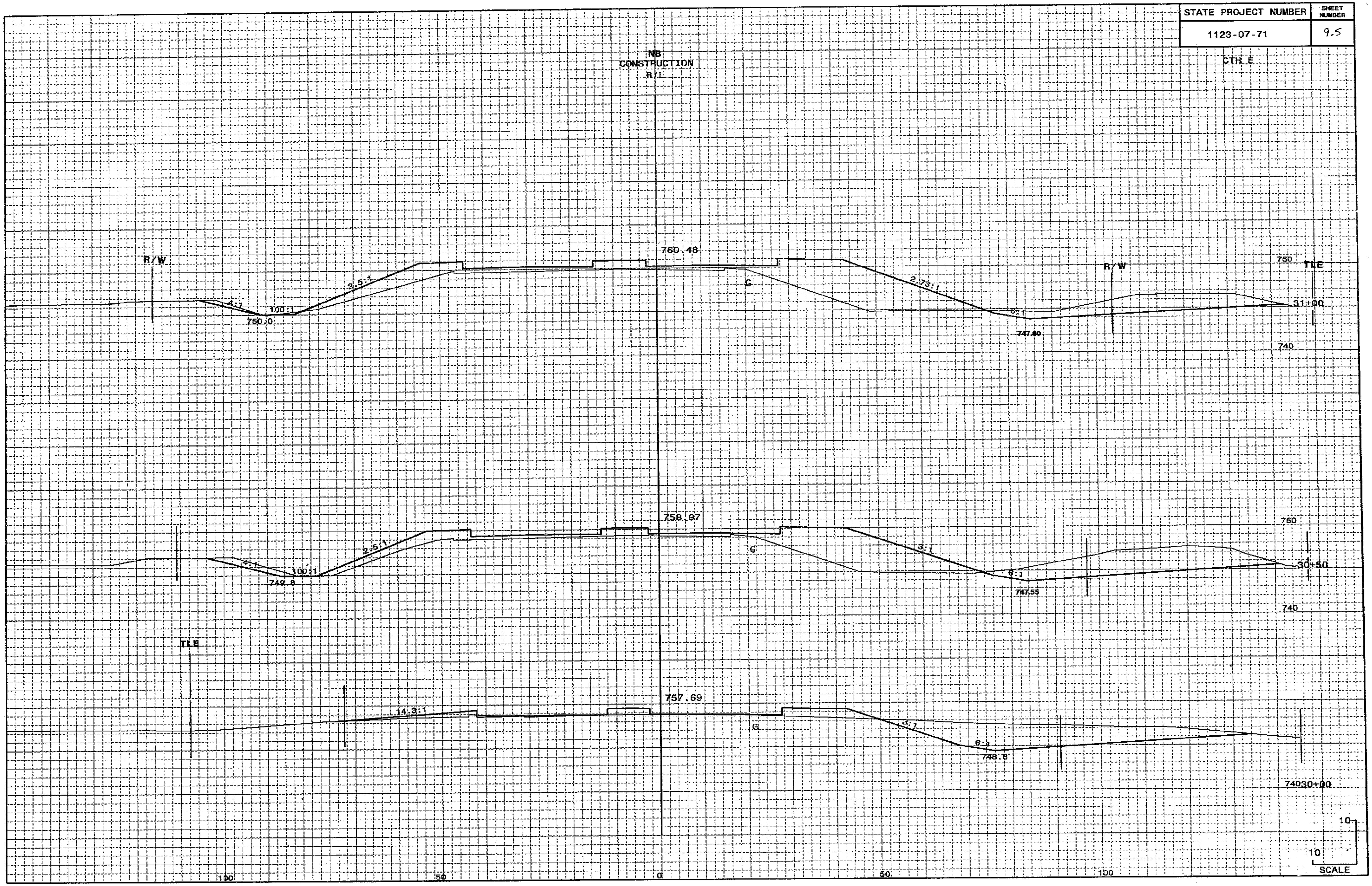
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	93



STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.4

CTH E

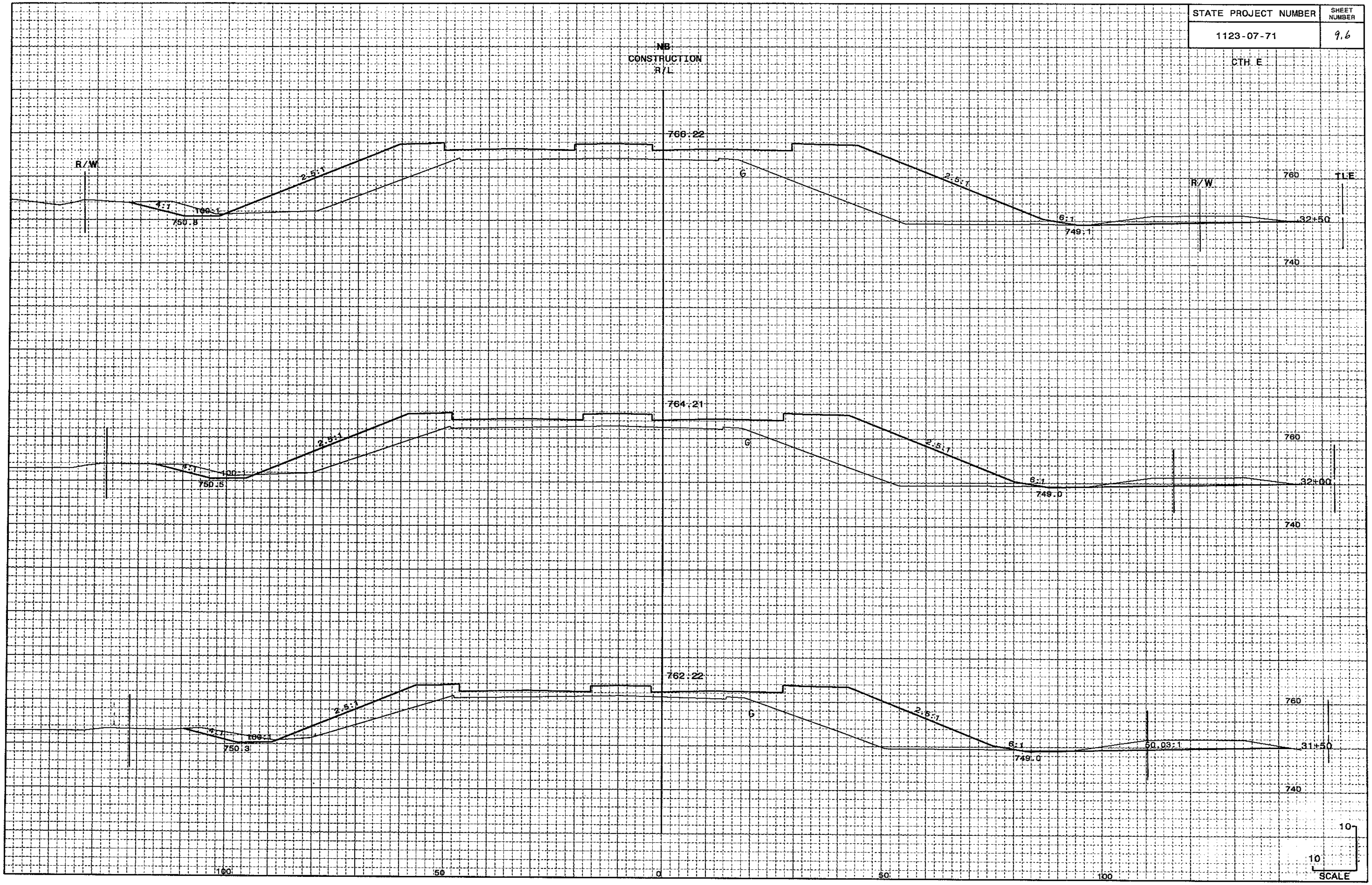




STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.5
CTH E
NB
CONSTRUCTION
R/L
760.48
R/W
TLE
4:1
100:1
750.0
2.5:1
G
2.73:1
6:1
747.80
760
31+00
740
758.97
2.5:1
4:1
100:1
749.8
3:1
6:1
747.55
30+50
TLE
757.69
14.3:1
3:1
6:1
748.8
740
30+00
10
10
SCALE
100
50
0
50
100

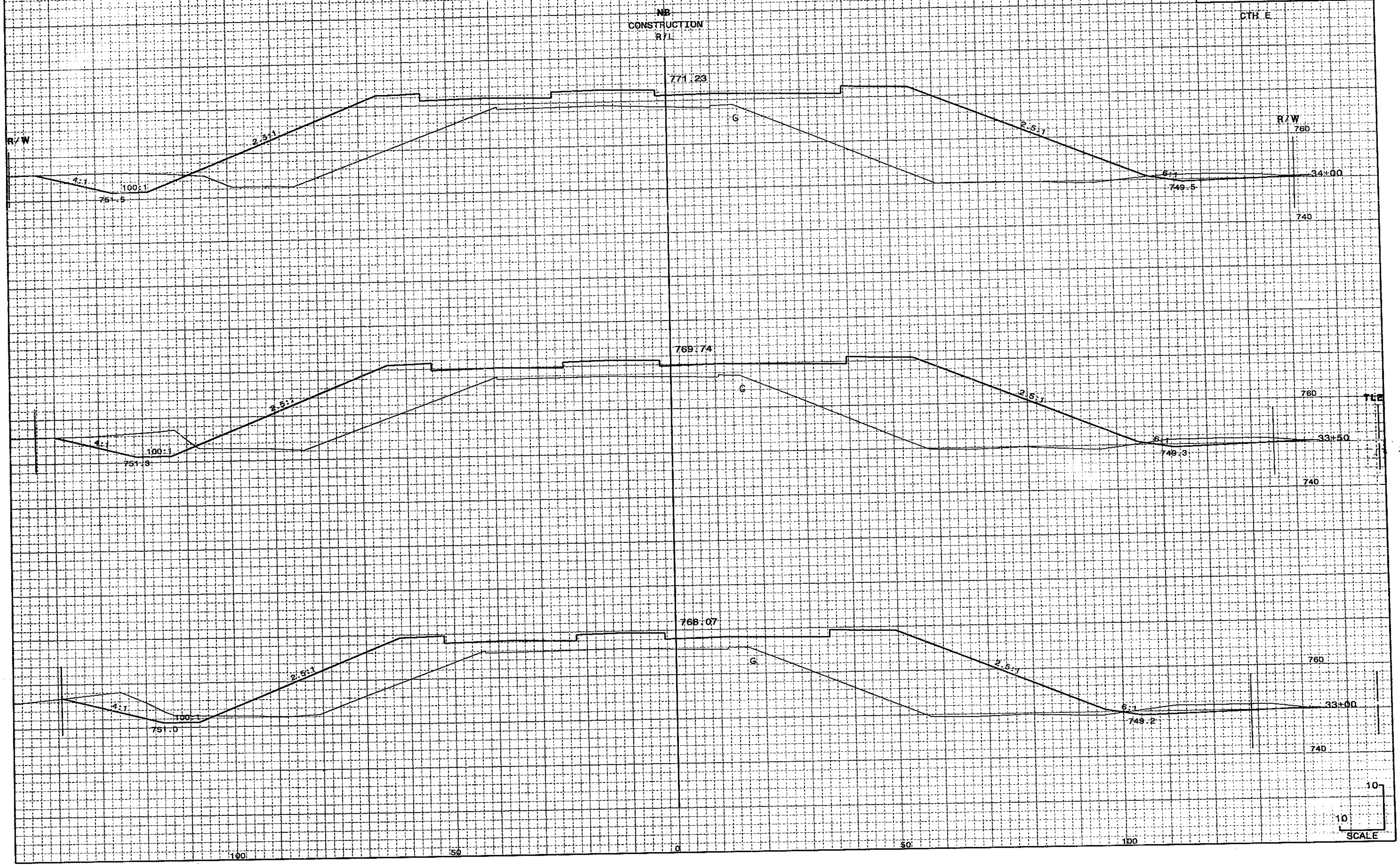
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.6

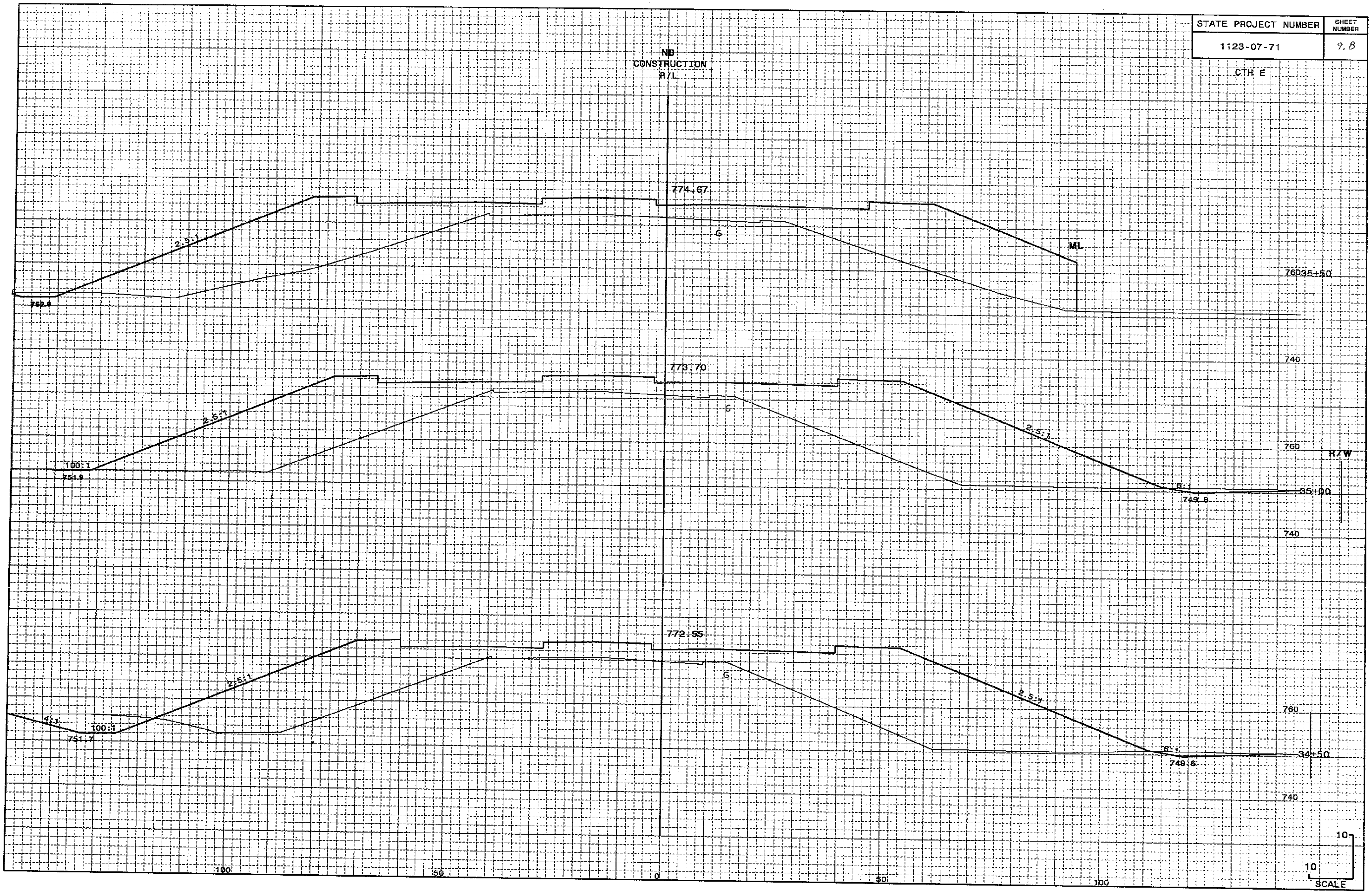
CTH E



123

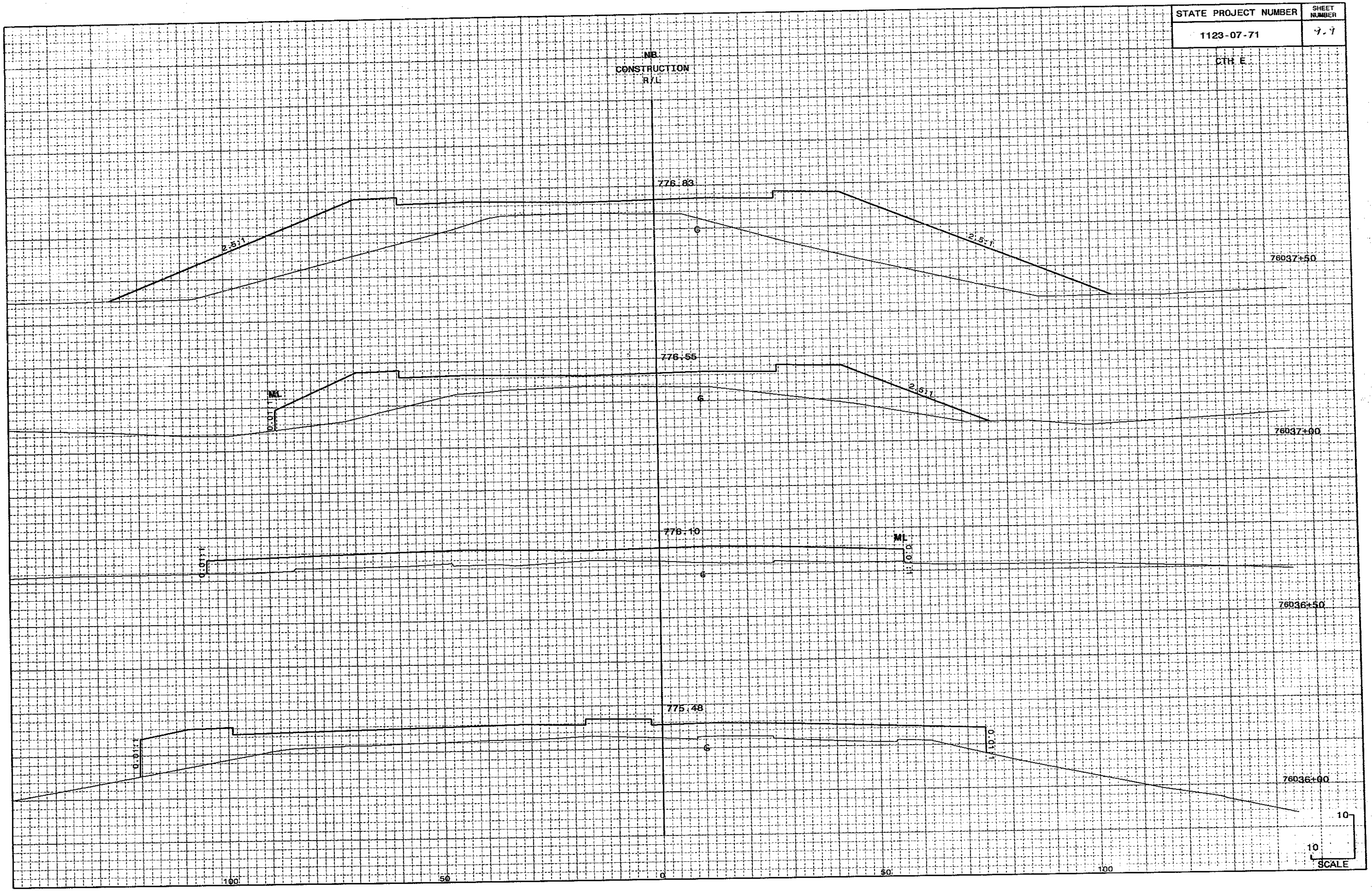
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	97

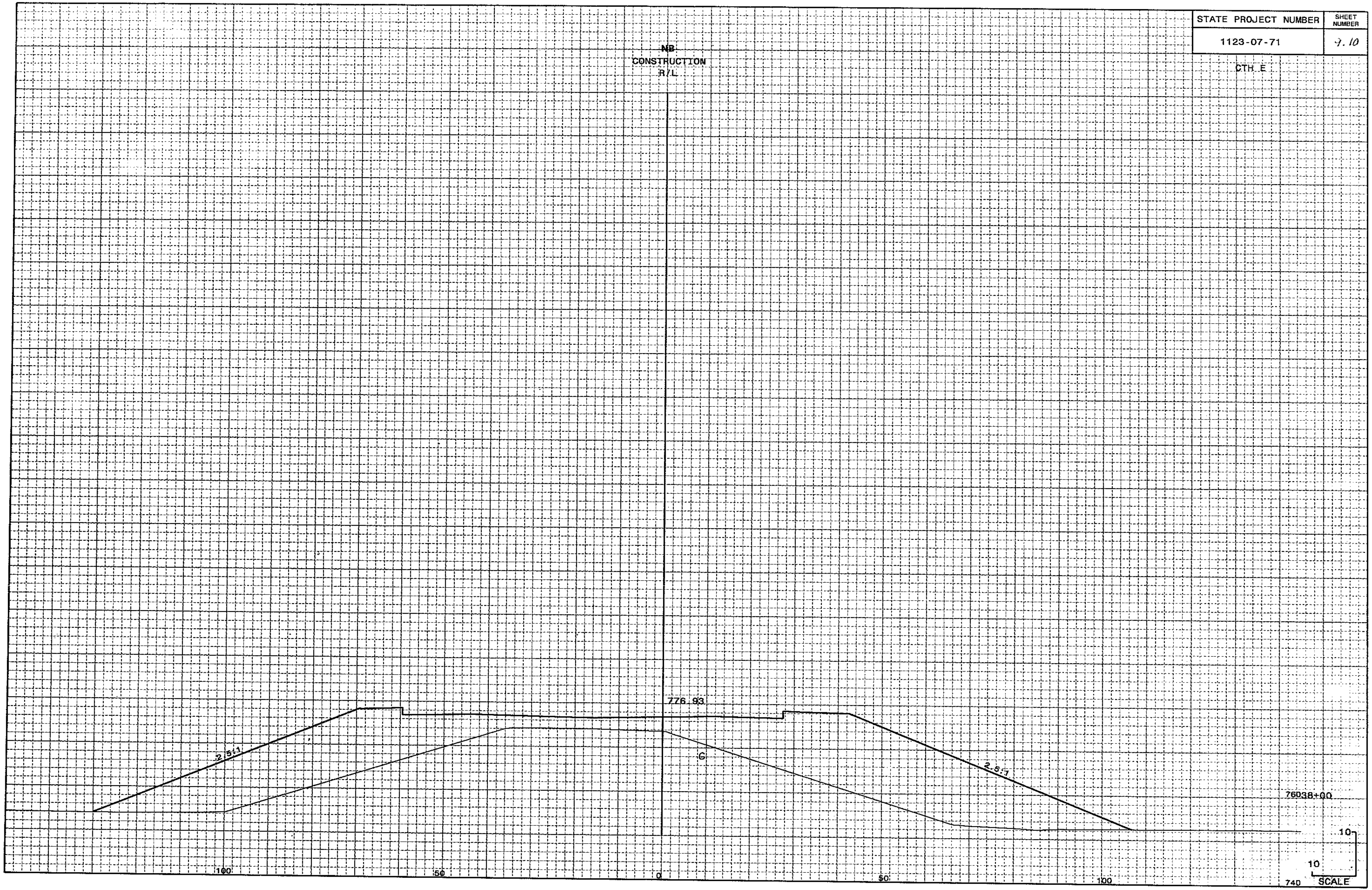



STATE PROJECT NUMBER
1123-07-71
SHEET NUMBER
9.8
CTH E
NB
CONSTRUCTION
R/L
774.67
2.5:1
G
M/L
752.6
760
35+50
740
773.70
2.5:1
G
2.5:1
100:1
751.9
760
R/W
6:1
749.8
35+00
740
772.55
2.5:1
G
2.5:1
4:1
100:1
751.7
760
6:1
749.6
34+50
740
100
50
0
50
100
10
10
SCALE

125

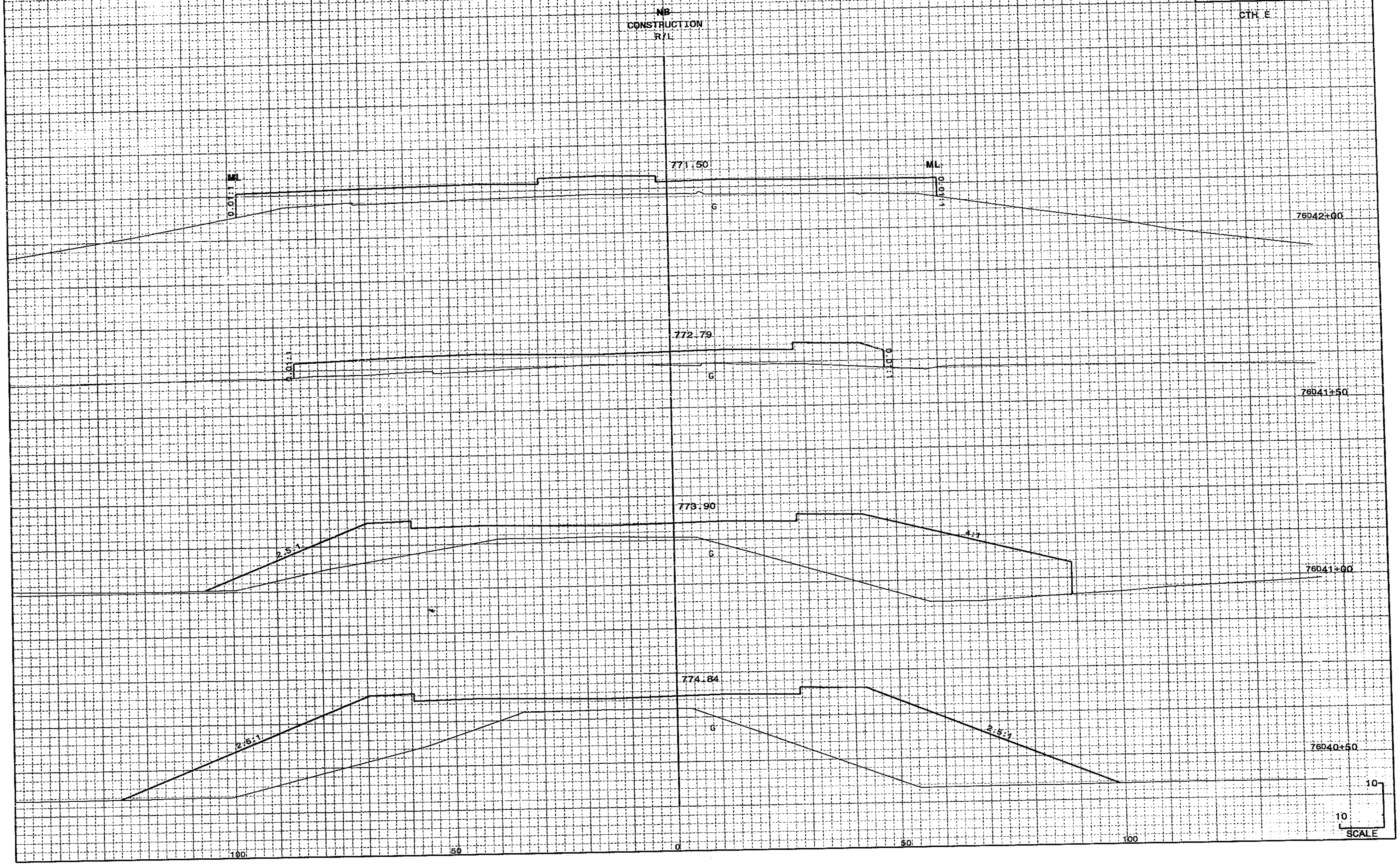
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.9

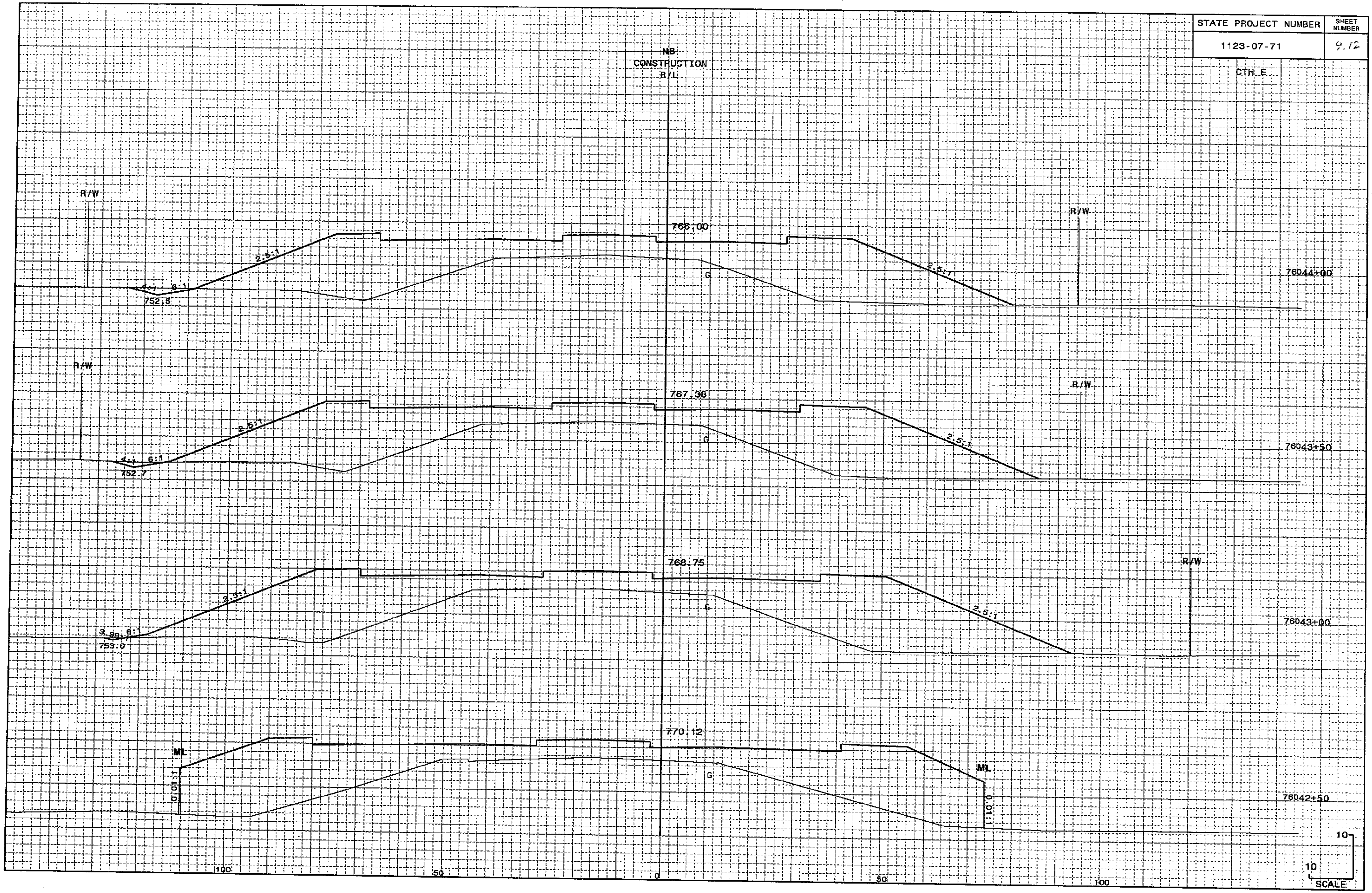



STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.10
CTH E
NB
CONSTRUCTION
R/L
776.93
2.5:1
2.5:1
C
76038+00
10
10
SCALE
740
100
50
0
50
100

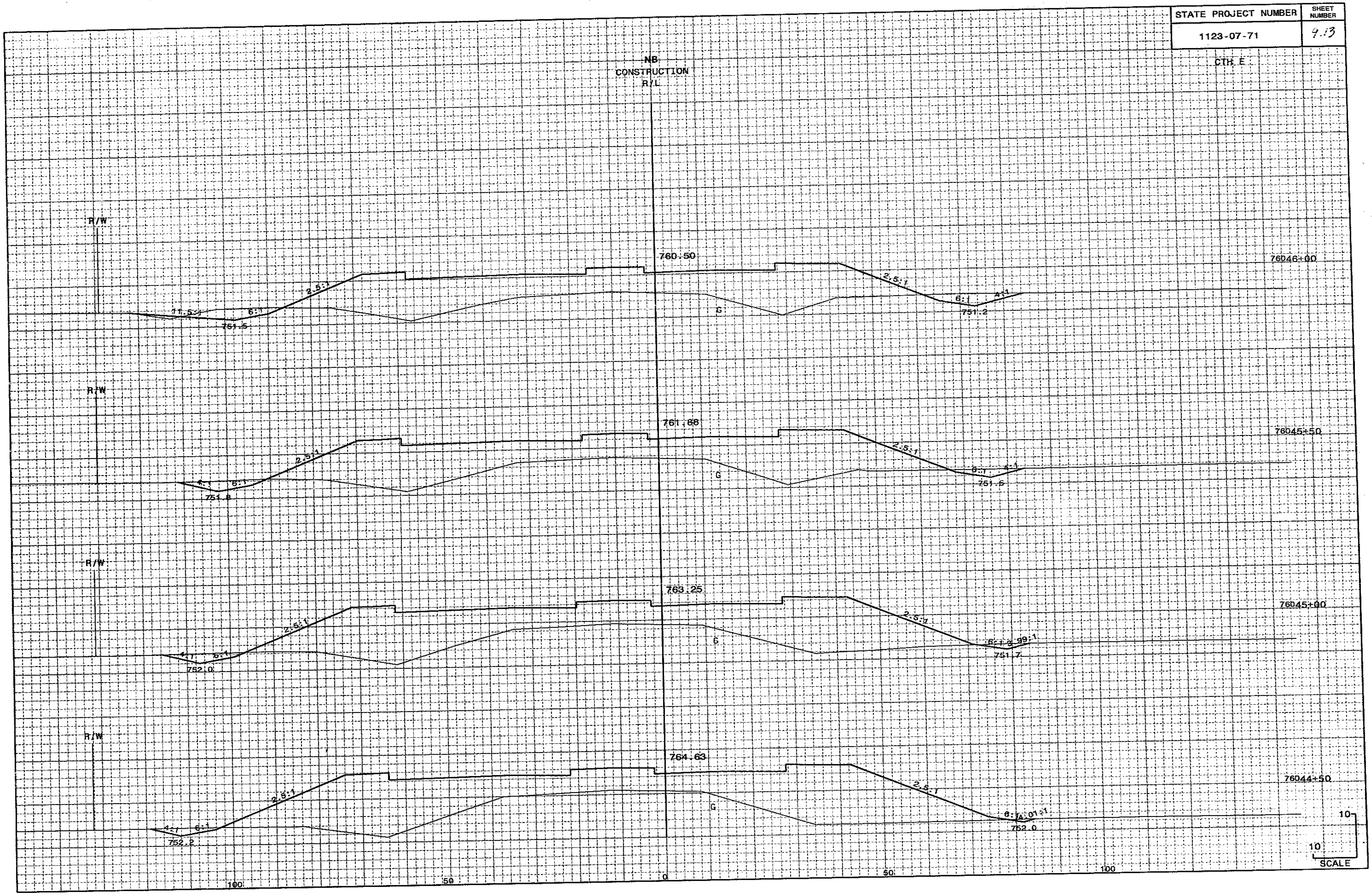
127

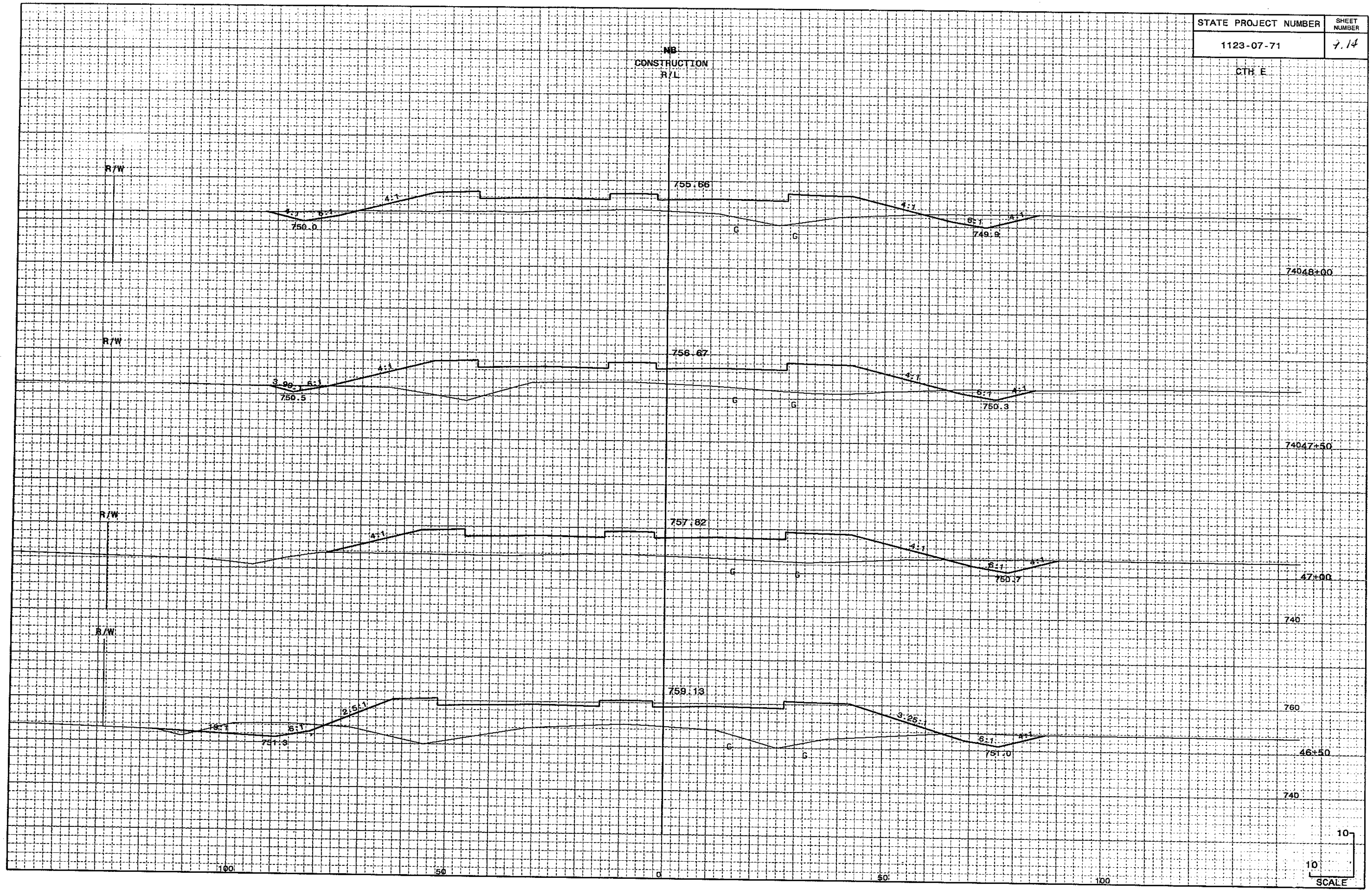
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.11




STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.12
CTH E
NB CONSTRUCTION R/L
R/W
766.00
2.5:1
4:1
6:1
752.5
G
76044+00
767.38
752.7
76043+50
768.75
3.89:1
753.0
76043+00
770.12
ML
0.01:1
76042+50
100
50
0
10
SCALE

129


STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.13
CTH E
NB
CONSTRUCTION
R/L
R/W
760.50
76046+00
2.5:1
11.5:1
6:1
751.5
G
2.5:1
6:1
4:1
751.2
R/W
761.88
76045+50
2.5:1
4:1
6:1
751.8
G
2.5:1
6:1
4:1
751.5
R/W
763.25
76045+00
2.5:1
4:1
6:1
752.0
G
2.5:1
6:1
3.99:1
751.7
R/W
764.63
76044+50
2.5:1
4:1
6:1
752.2
G
2.5:1
6:1
4.01:1
752.0
100
50
0
50
100
10
10
SCALE

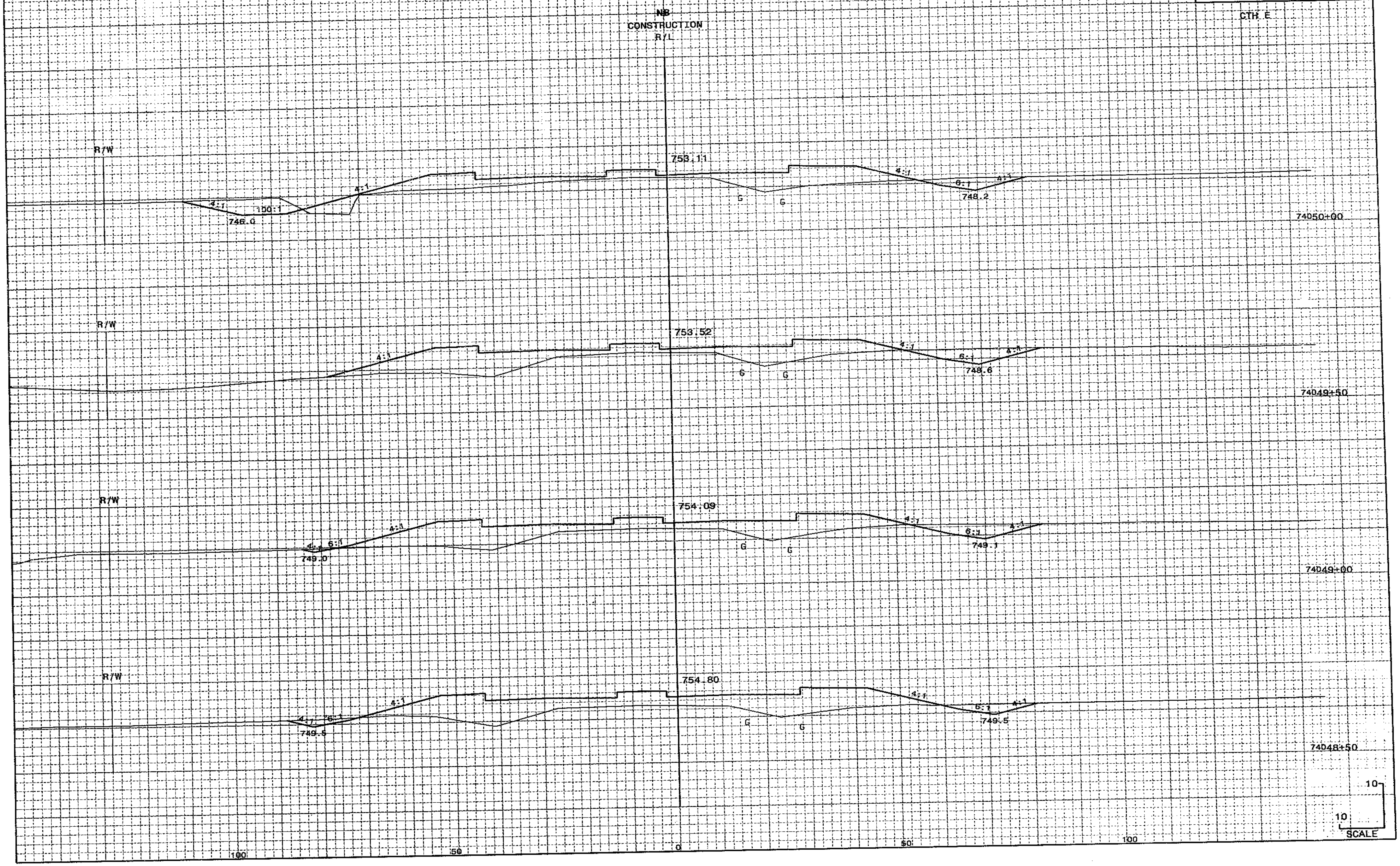


STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
7.14
CTH E
NB
CONSTRUCTION
R/L
R/W
755.66
4:1
4:1
6:1
750.0
G
G
4:1
6:1
4:1
749.9
740
48+00
R/W
756.67
4:1
3.96:1
6:1
750.5
G
G
4:1
6:1
4:1
750.3
740
47+50
R/W
757.82
4:1
G
G
4:1
6:1
4:1
750.7
47+00
740
R/W
759.13
2.5:1
15:1
6:1
751.3
G
G
3.25:1
6:1
4:1
751.0
760
46+50
740
100
50
0
50
100
10
10
SCALE

13

STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.15

CTH E



STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.16

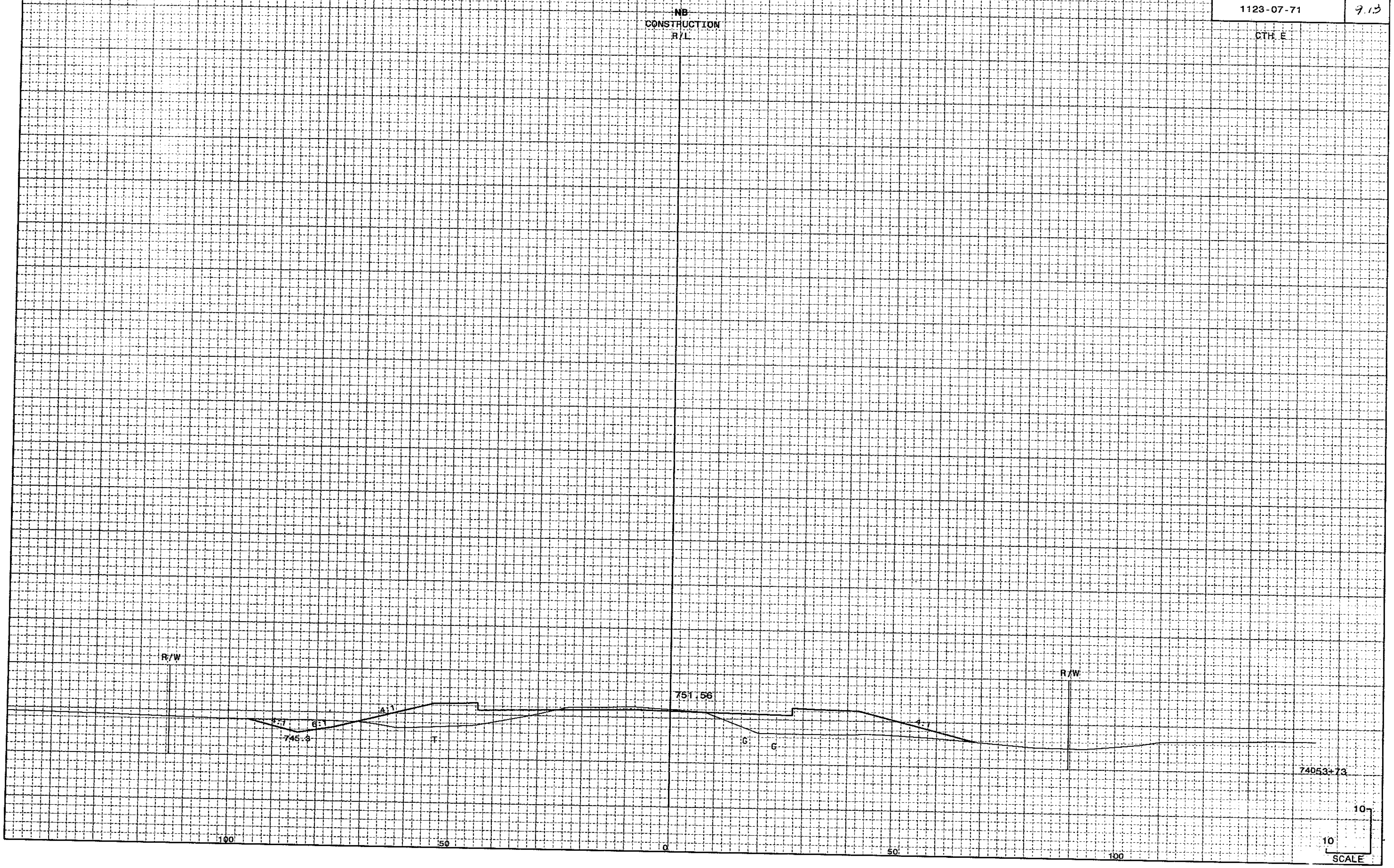
CTH E

STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.17

CTH E

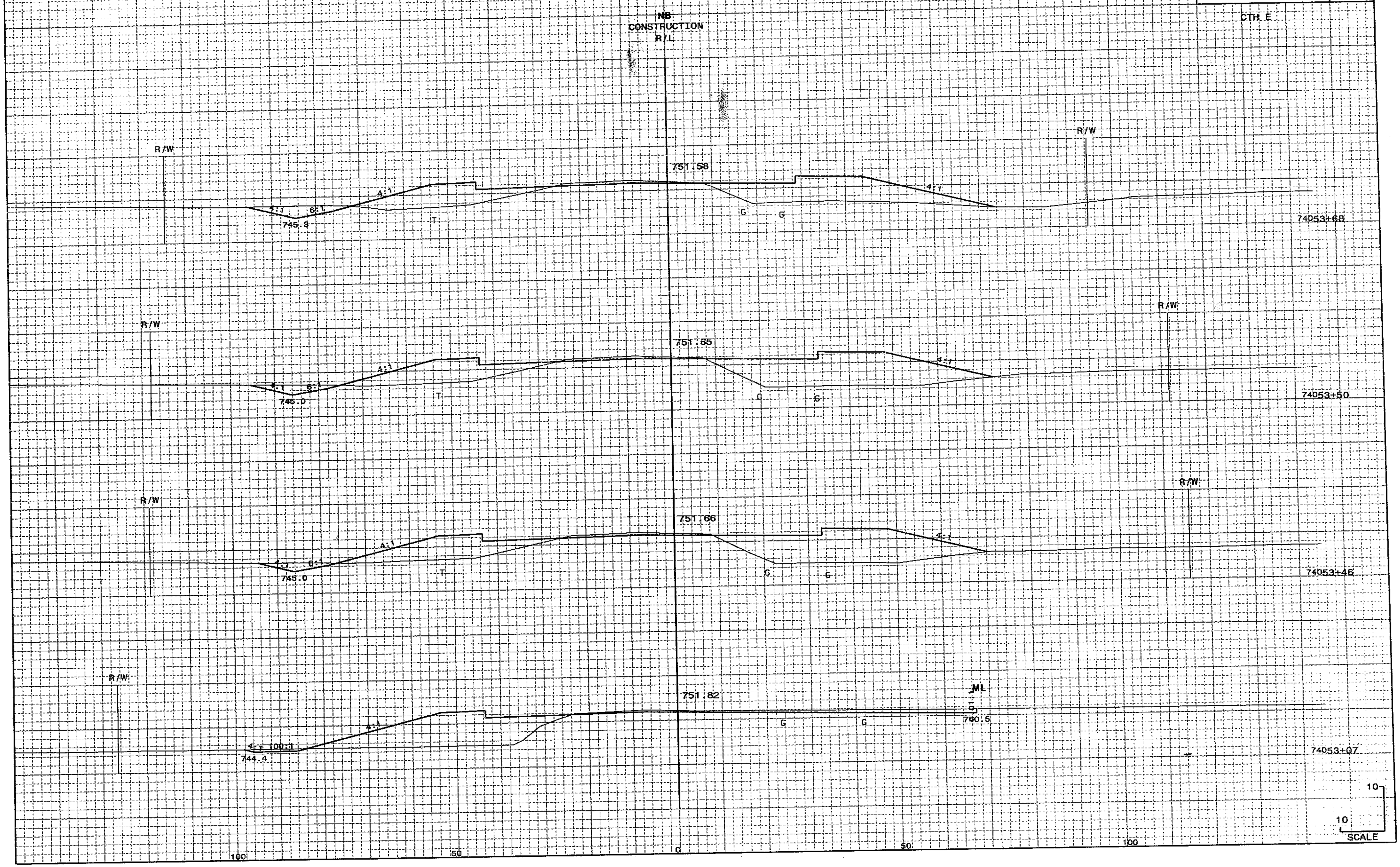
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.13

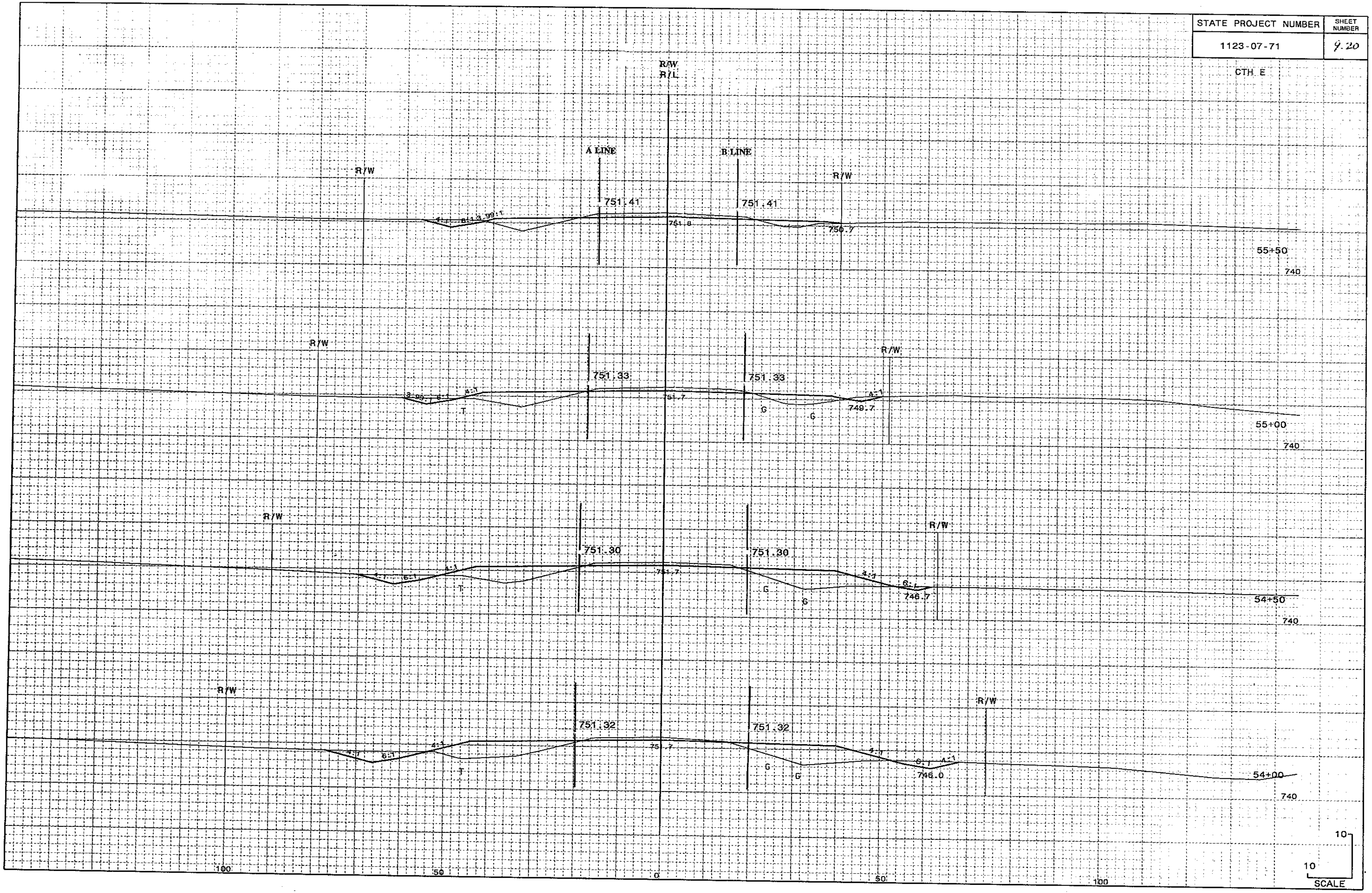
CTH E



135

STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.11

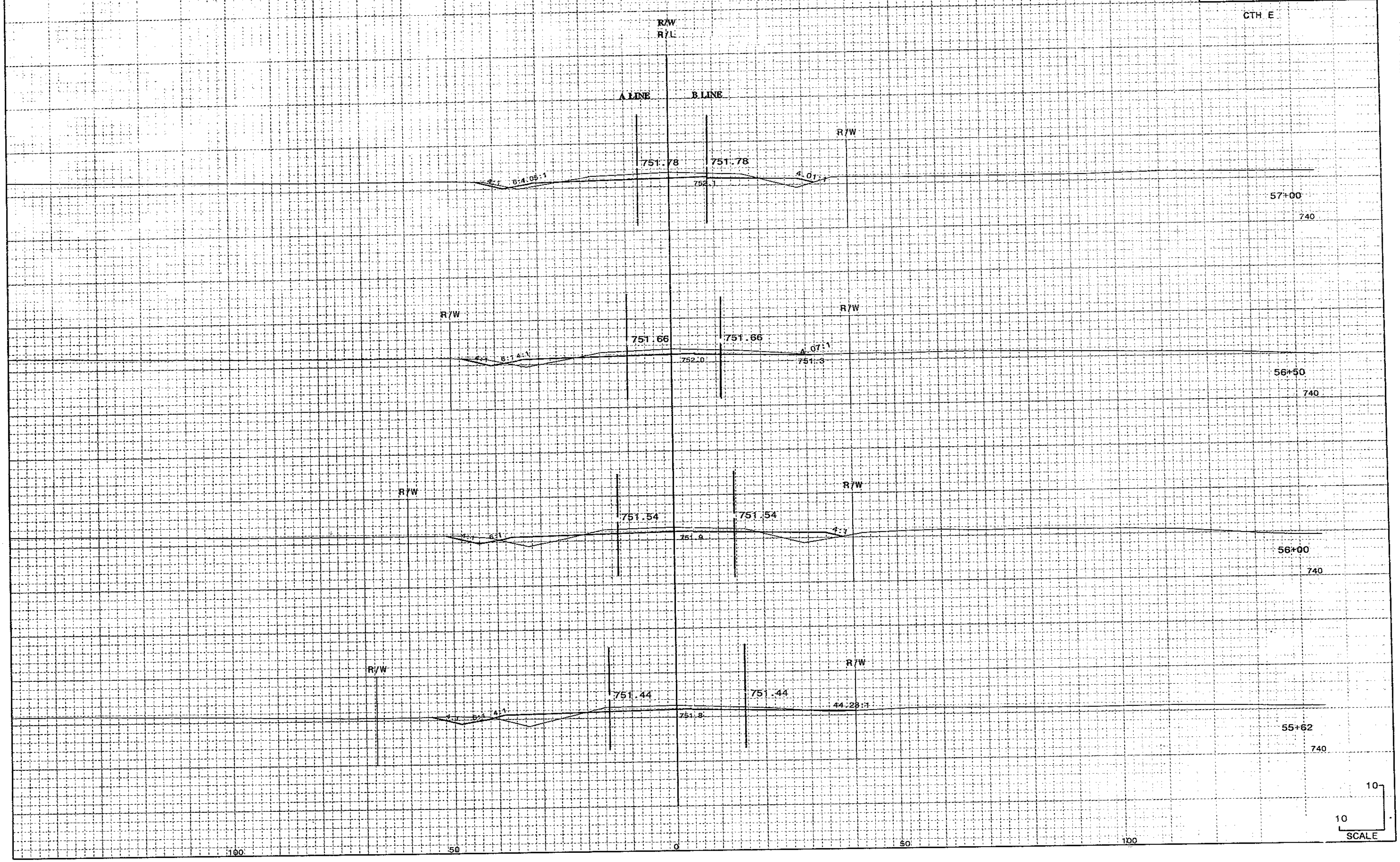


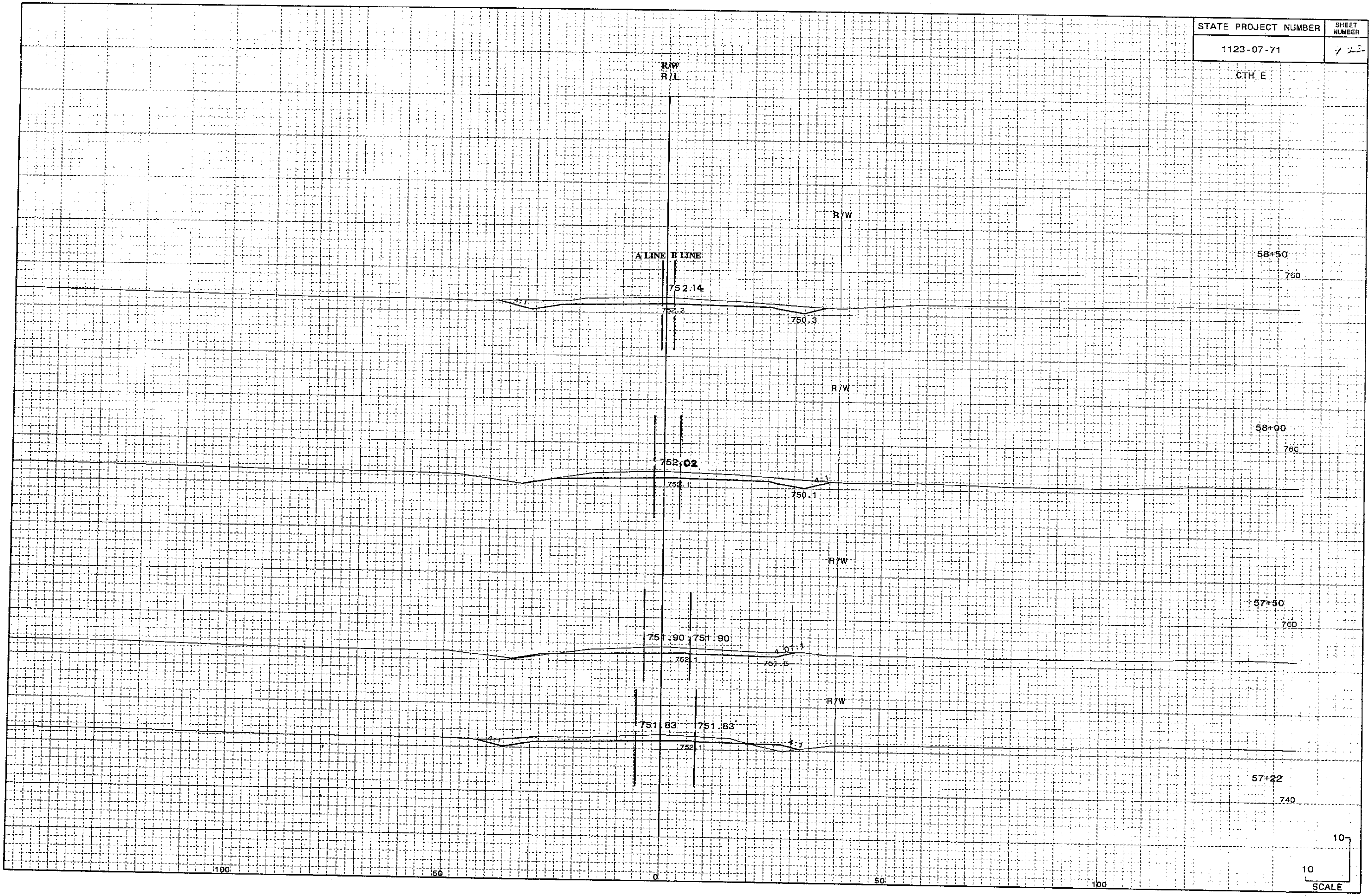

STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.20
CTH E
R/W
R/L
A LINE
B LINE
R/W
751.41
751.41
751.8
750.7
55+50
740
751.33
751.33
751.7
749.7
55+00
740
751.30
751.30
751.7
746.7
54+50
740
751.32
751.32
746.0
54+00
740
100
50
0
50
100
10
10
SCALE

137

STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	4.21

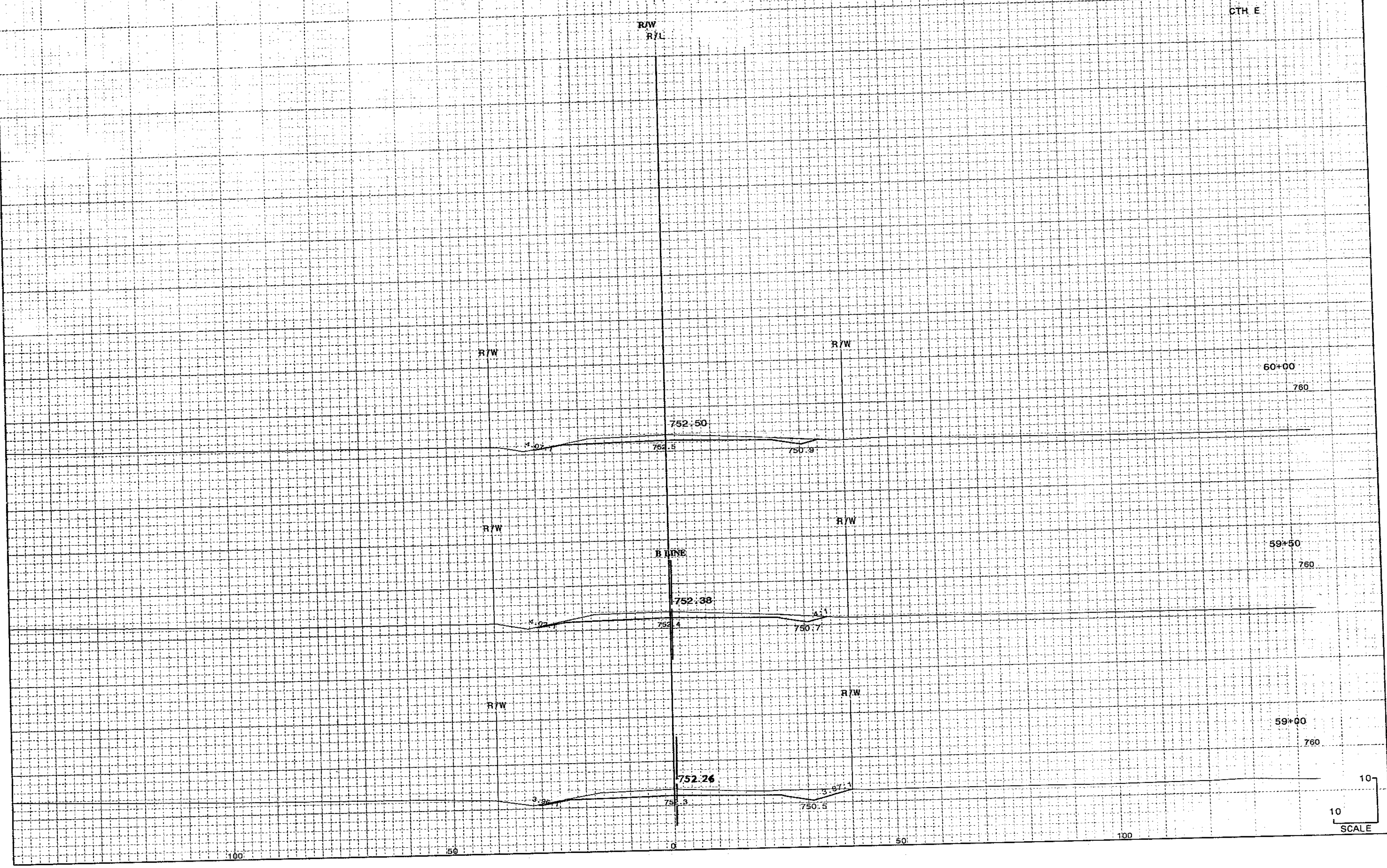
CTH E

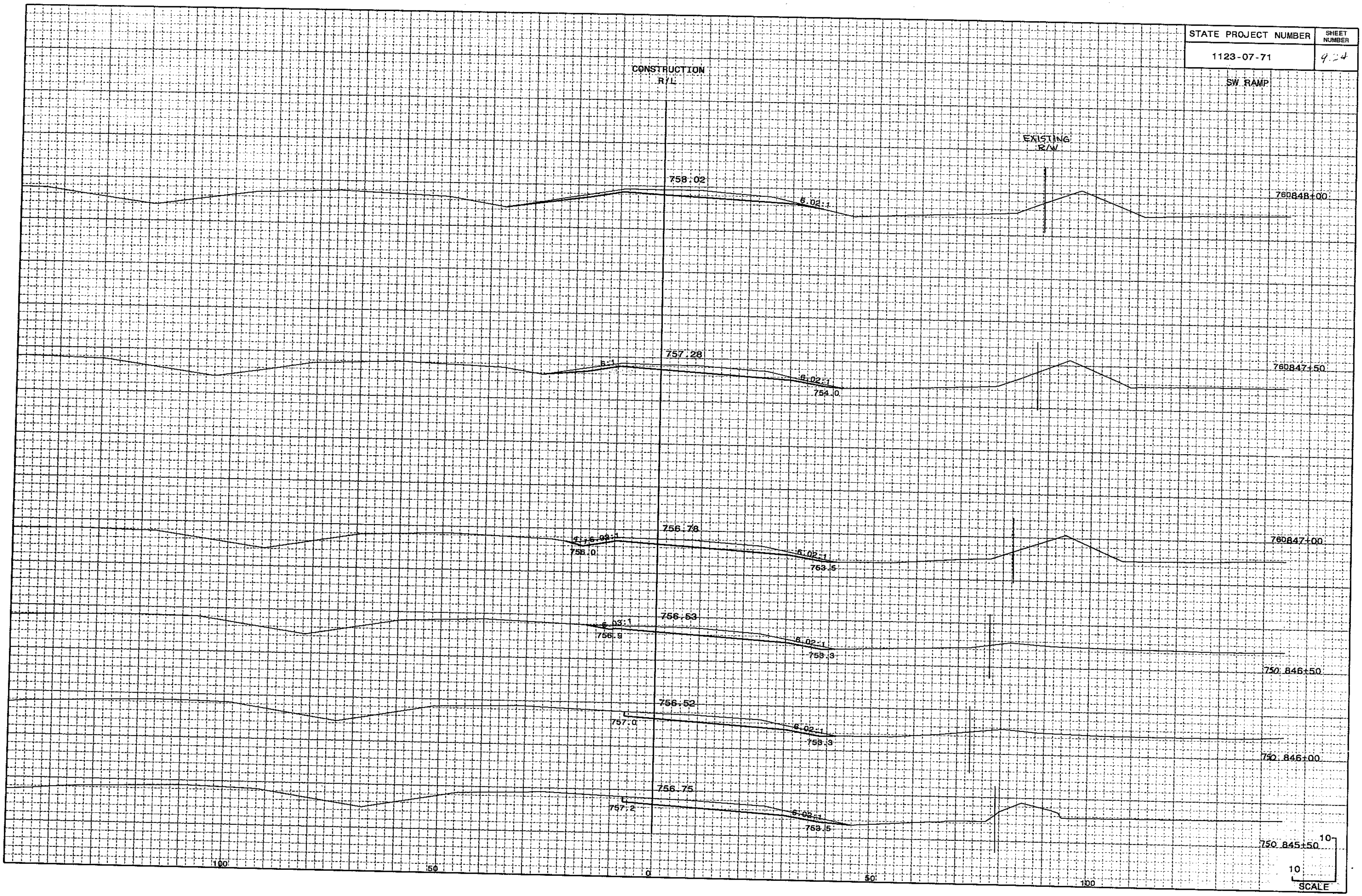



STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
CTH E
R/W
R/L
R/W
A LINE
B LINE
58+50
760
752.14
752.2
750.3
R/W
58+00
760
752.02
752.1
750.1
R/W
57+50
760
751.90
751.90
752.1
751.5
R/W
57+22
740
751.83
751.83
752.1
100
50
0
50
100
10
10
SCALE

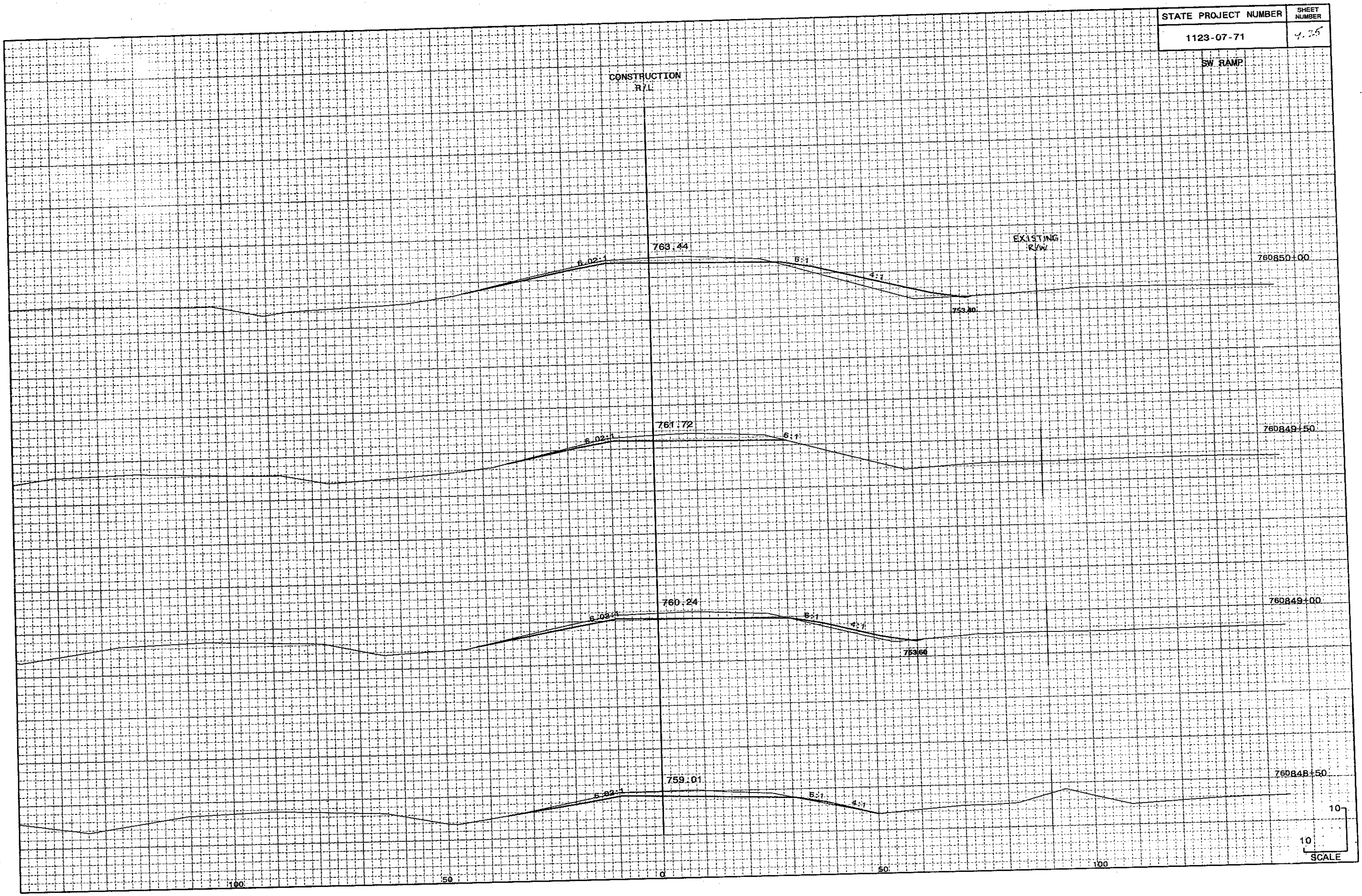
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	[illegible]

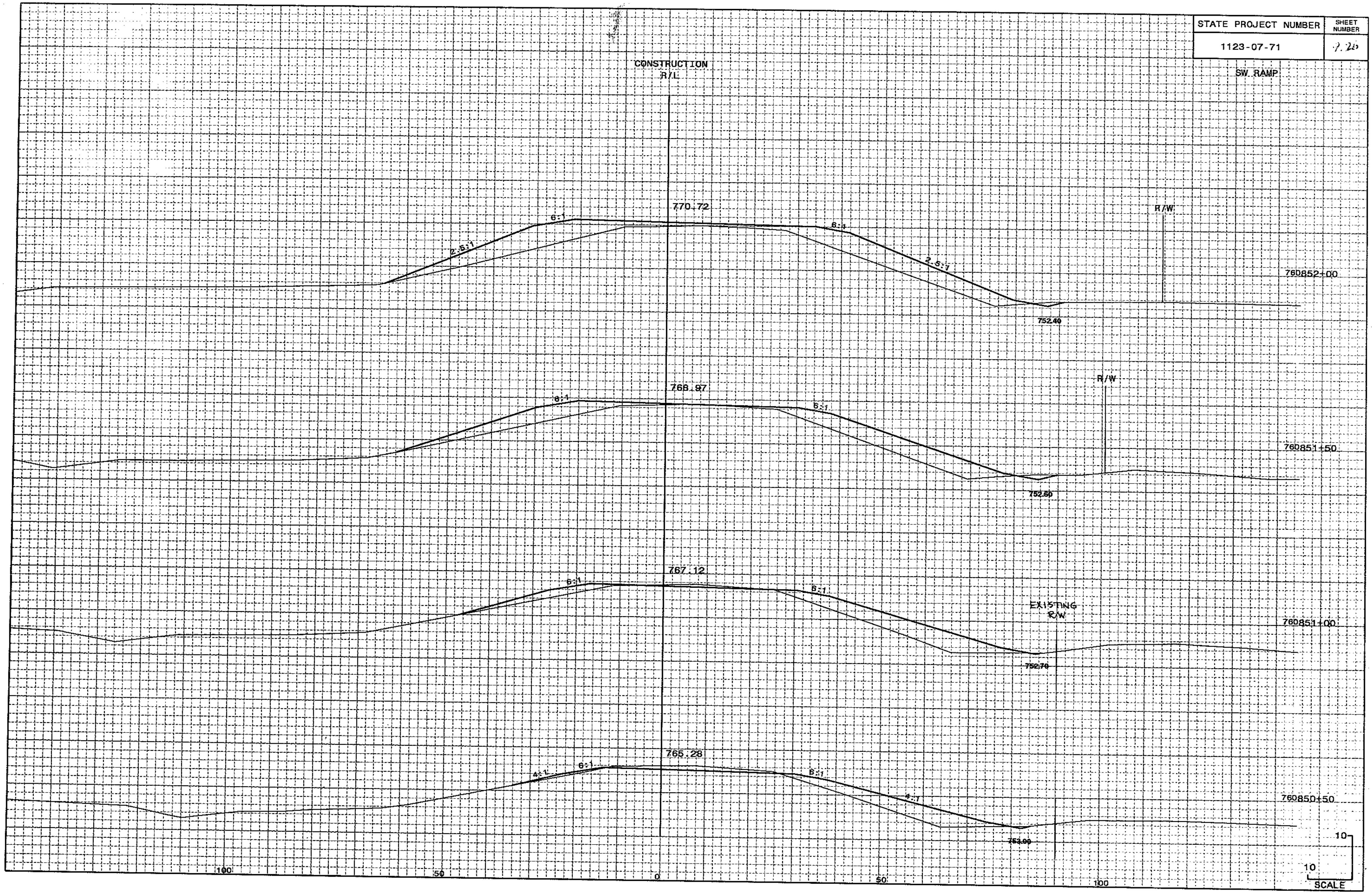
CTH E




STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
SW RAMP
CONSTRUCTION
R/L
EXISTING
R/W
758.02
6.02:1
760 848+00
757.28
6:1
6.02:1
754.0
760 847+50
756.78
6.03:1
756.0
6.02:1
753.5
760 847+00
756.53
6.03:1
756.9
6.02:1
753.3
750 846+50
756.52
757.0
6.02:1
753.3
750 846+00
756.75
757.2
6.02:1
753.5
750 845+50
100
50
0
50
100
10
10
SCALE

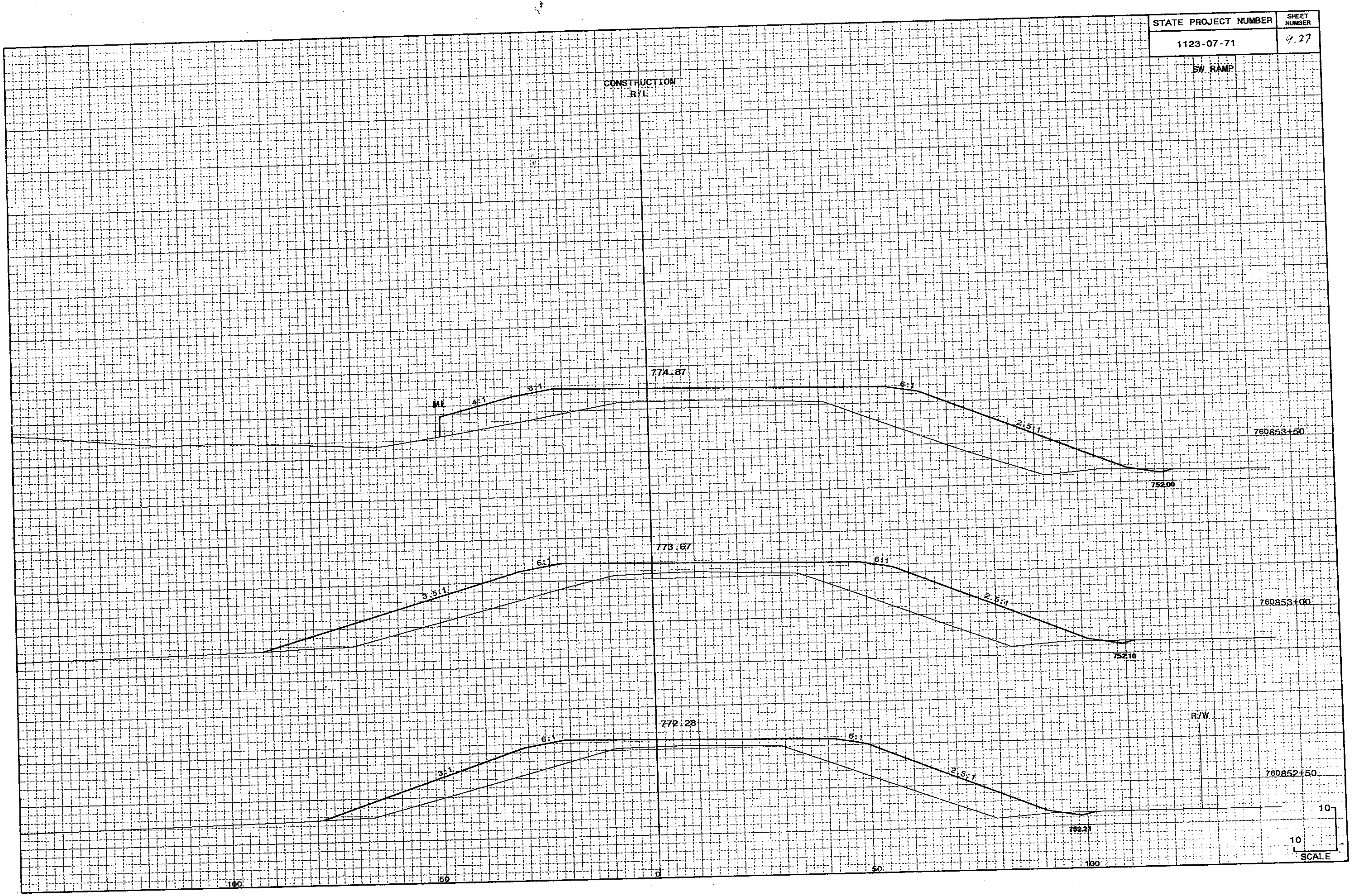
141


STATE PROJECT NUMBER
1123-07-71
SHEET NUMBER
4.25
SW RAMP
CONSTRUCTION
R/L
EXISTING
R/W
763.44
6.02:1
6:1
4:1
753.40
760850+00
761.72
6.02:1
6:1
760849+50
760.24
6.02:1
6:1
4:1
753.60
760849+00
759.01
6.02:1
6:1
4:1
760848+50
10
10
SCALE
100
50
0
50
100

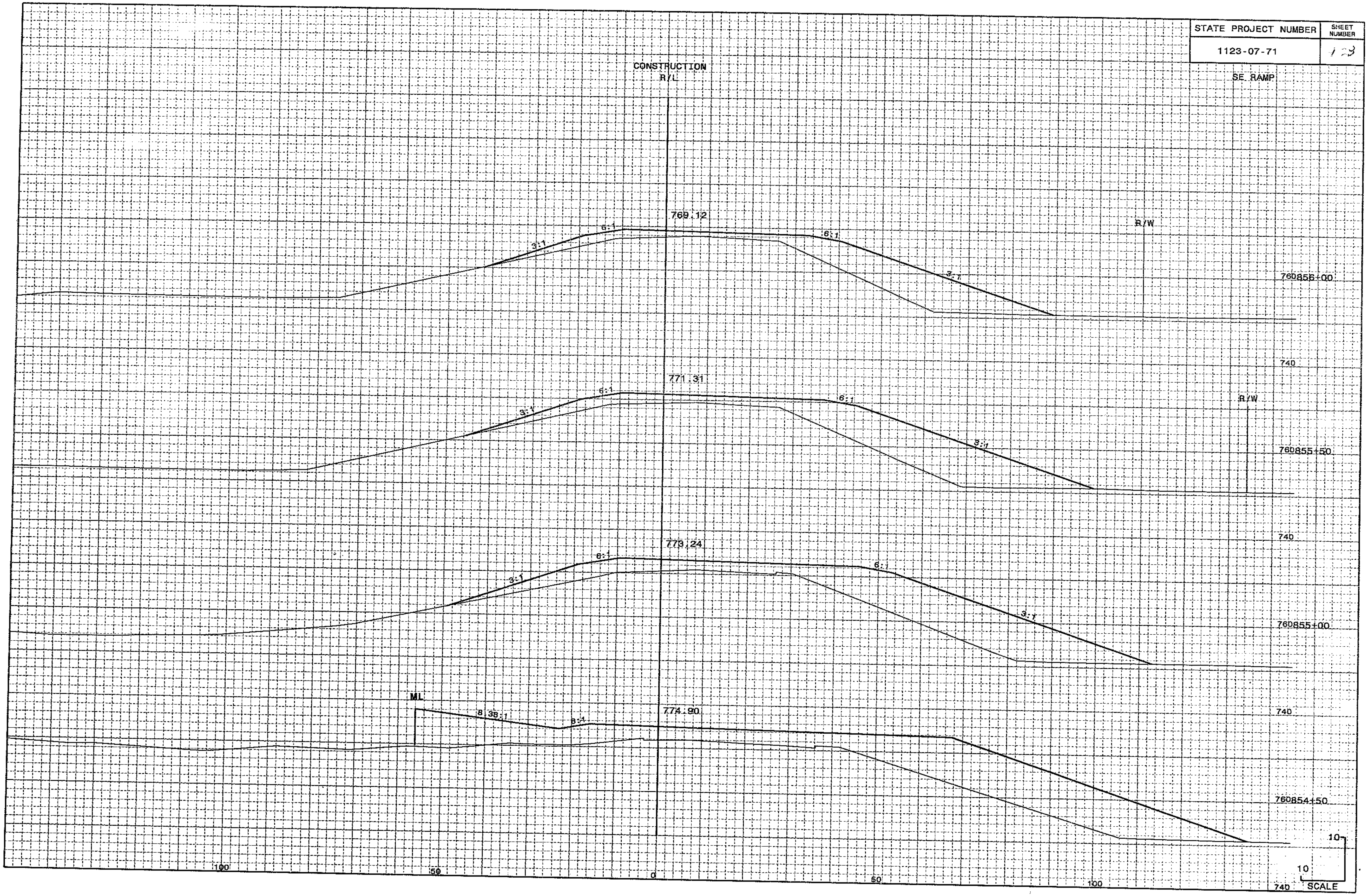


STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
SW. RAMP
CONSTRUCTION R/L
770.72
6:1
2.5:1
6:1
2.5:1
R/W
760852+00
752.40
768.97
6:1
6:1
R/W
760851+50
752.60
767.12
6:1
6:1
EXISTING R/W
760851+00
752.70
765.28
4:1
6:1
6:1
4:1
760850+50
100
50
0
50
100
10
10
SCALE

43



STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.37
SW RAMP
CONSTRUCTION R/L
774.87
ML
4:1
6:1
6:1
2.5:1
760853+50
752.00
773.67
6:1
3.5:1
6:1
2.5:1
760853+00
752.10
772.28
6:1
3:1
6:1
2.5:1
R/W
760852+50
752.23
10
10
SCALE
100
50
0
50
100

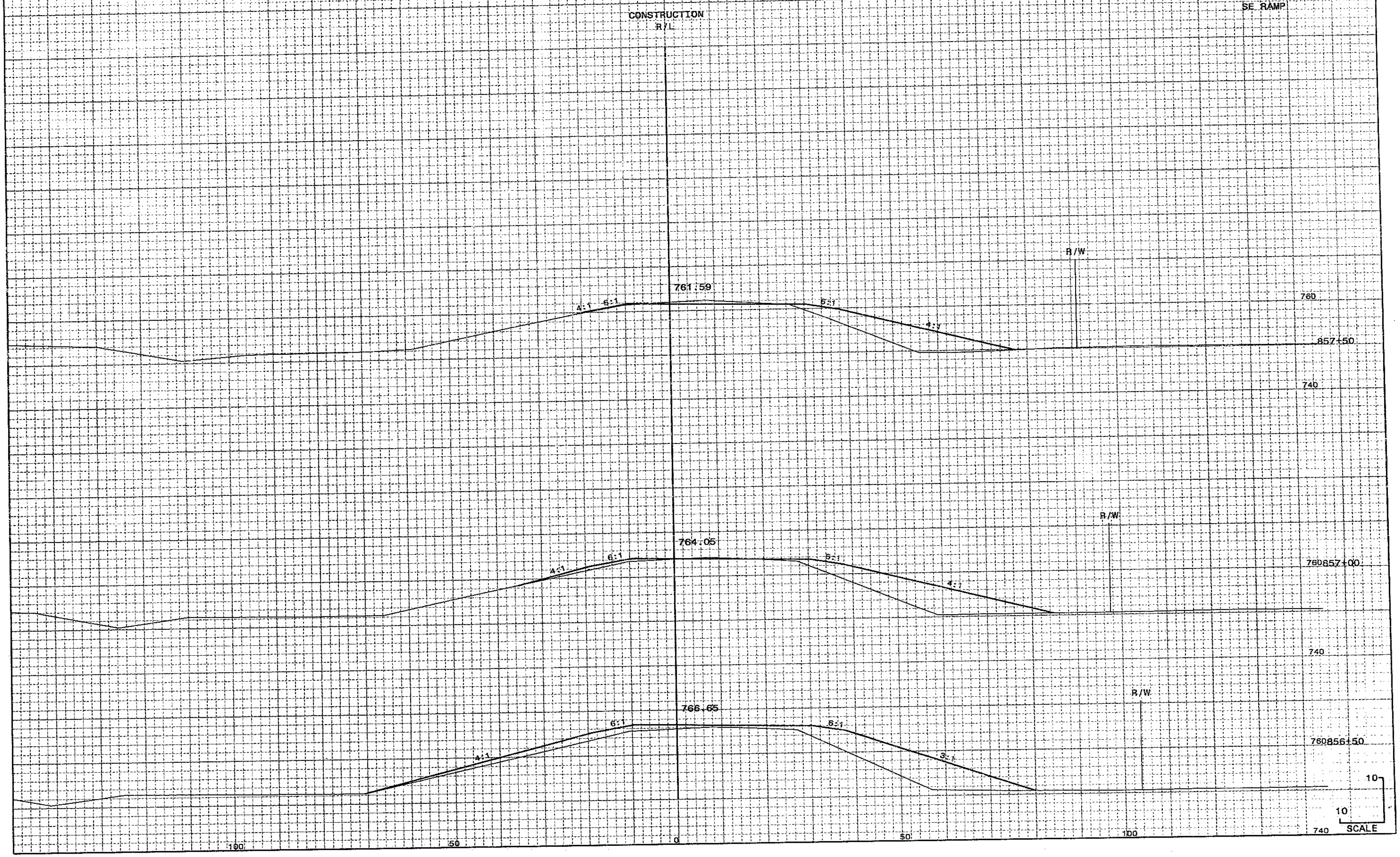


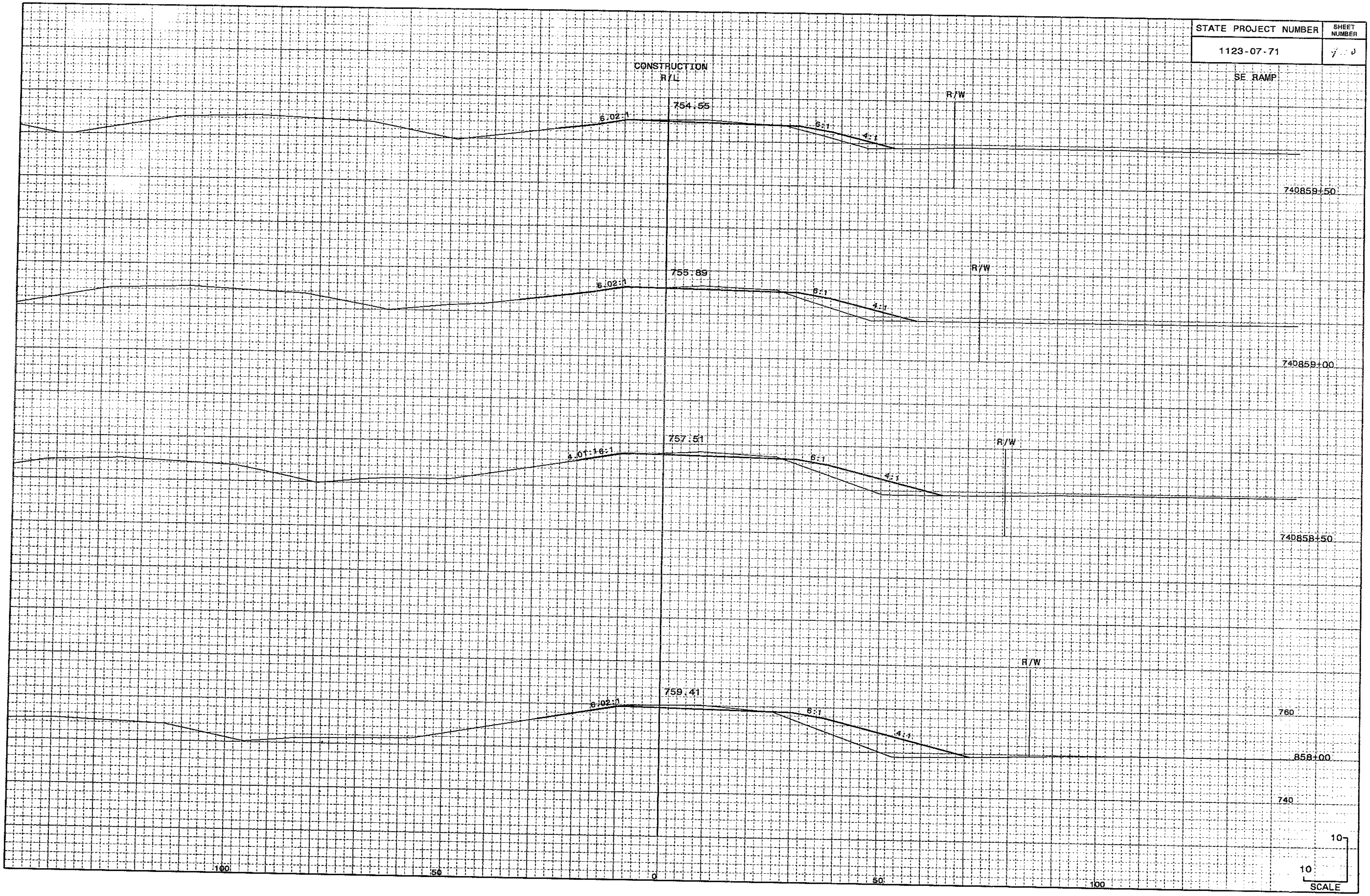
STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
123
SE RAMP
CONSTRUCTION
R/L
769.12
6:1
3:1
6:1
3:1
R/W
760855+00
740
771.31
6:1
3:1
6:1
3:1
R/W
760855+50
740
779.24
6:1
3:1
6:1
3:1
760855+00
ML
8.38:1
8:1
774.90
740
760854+50
10
10
SCALE
740
100
50
0
50
100

145

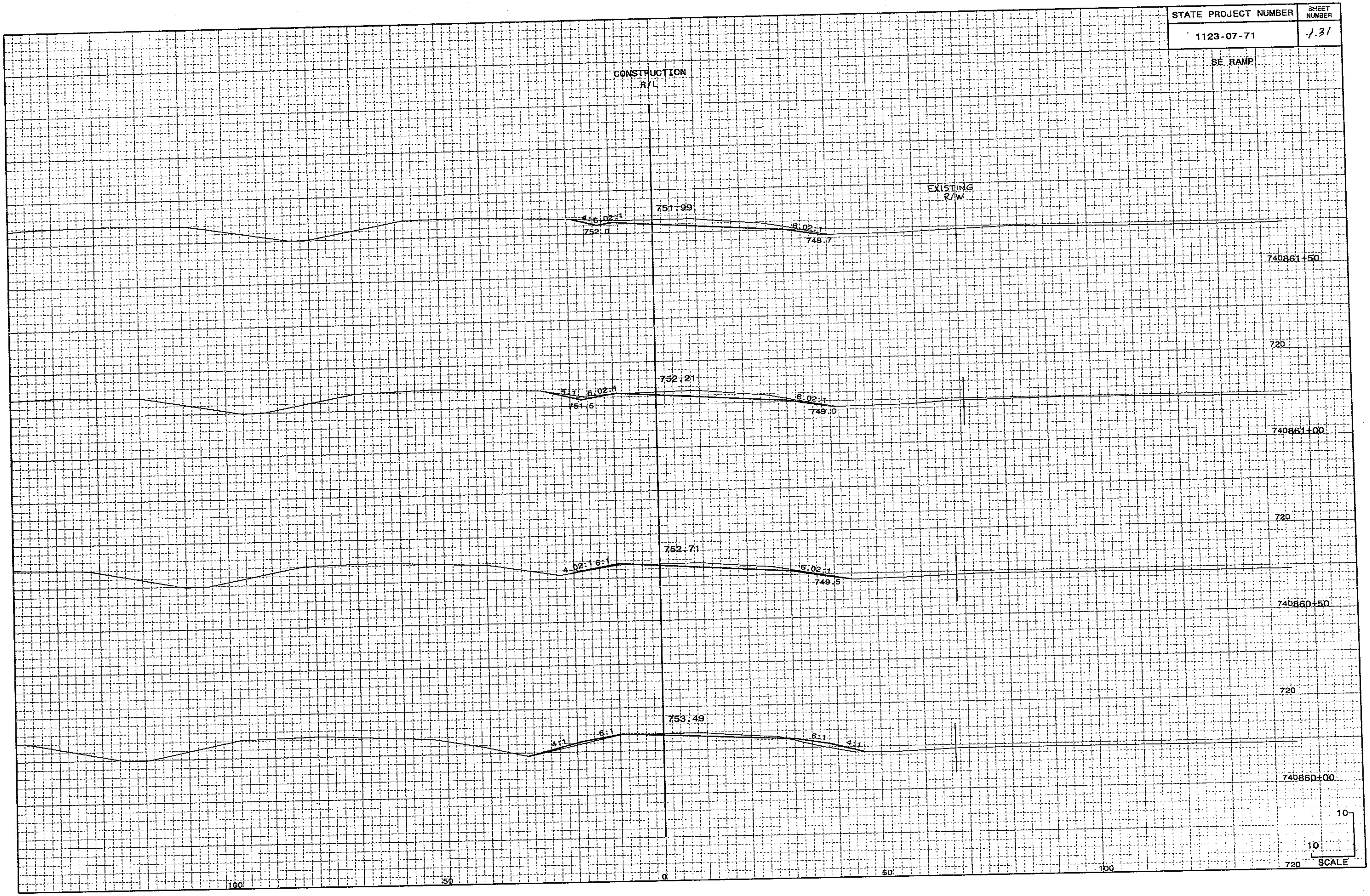
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.29

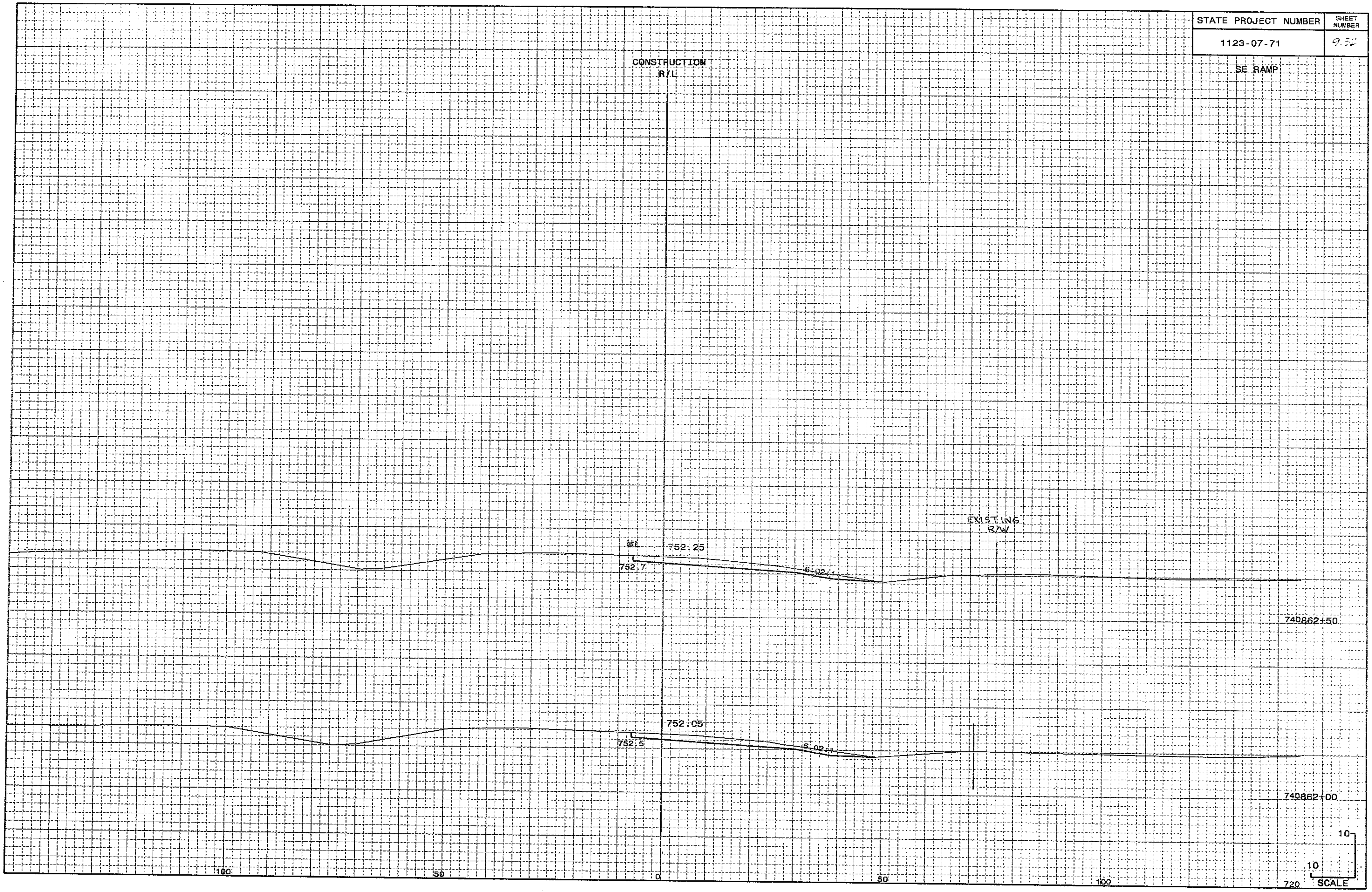
SE RAMP



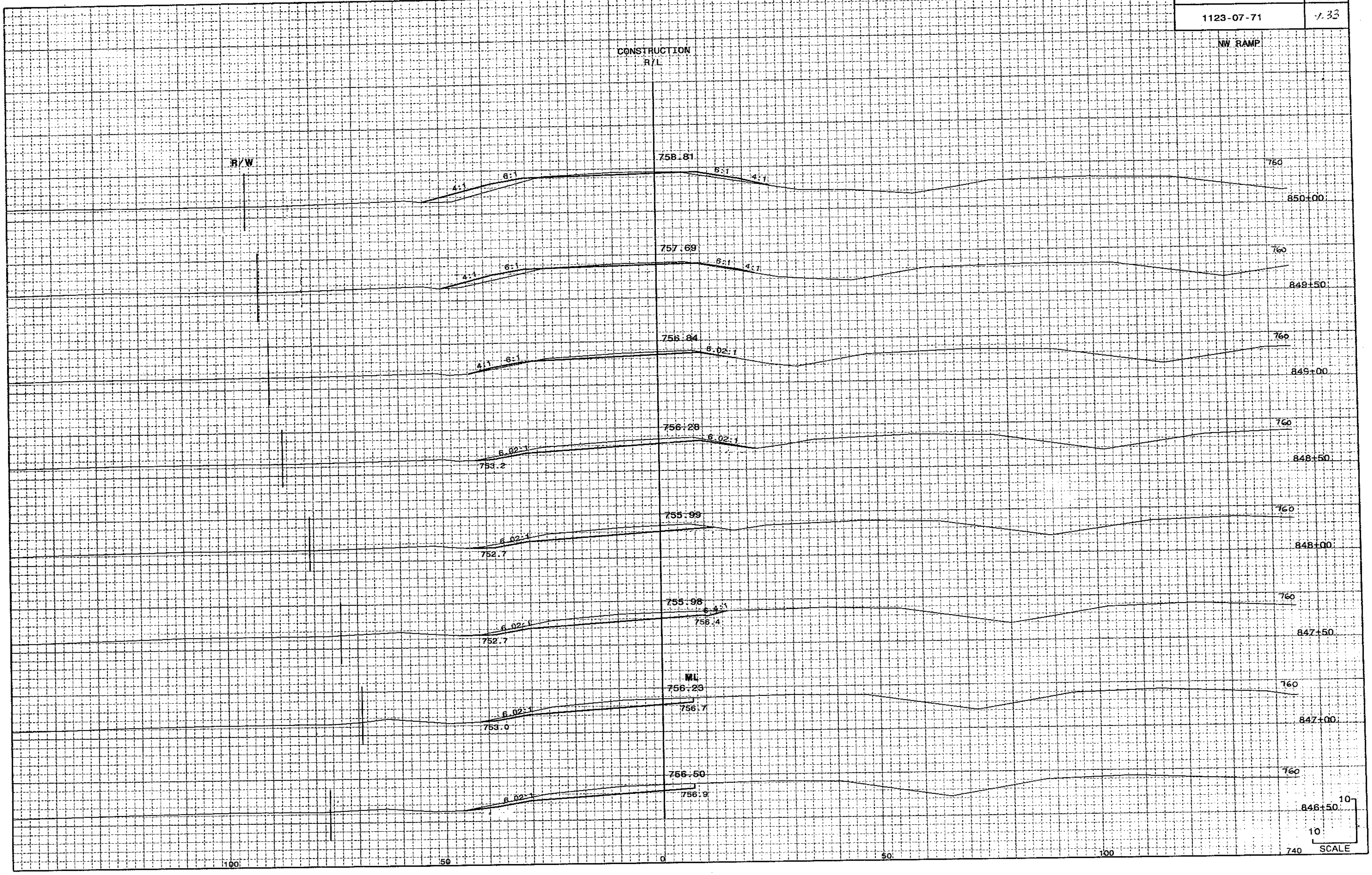

STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
SE RAMP
CONSTRUCTION R/L
R/W
754.55
6.02:1
6:1
4:1
740 859+50
755.89
740 859+00
757.51
4.01:1 6:1
740 858+50
759.41
760
858+00
740
100
50
0
50
100
10
10
SCALE

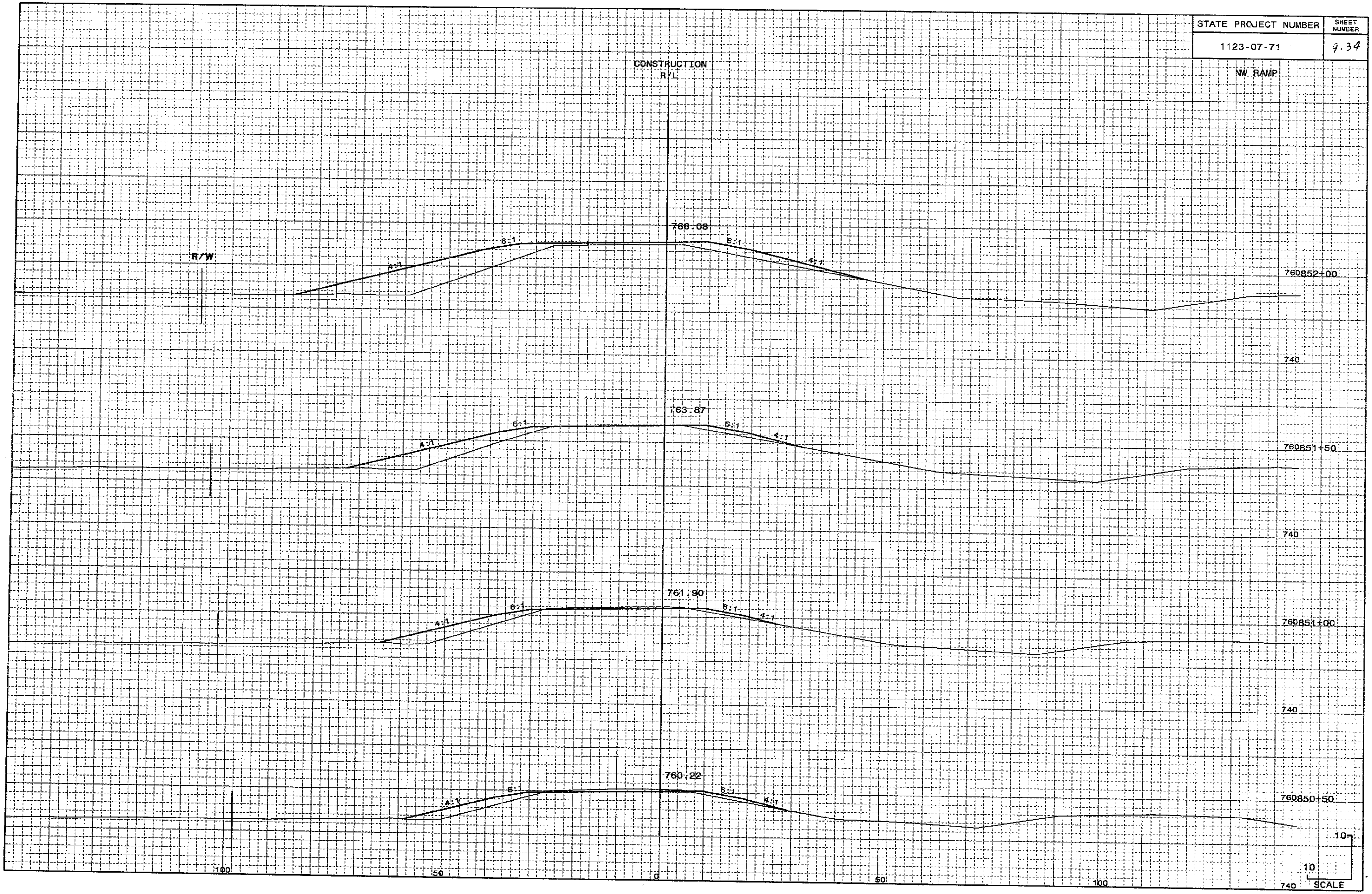
147


STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
131
SE RAMP
CONSTRUCTION R/L
EXISTING R/W
751.99
4:1
6.02:1
752.0
6.02:1
748.7
740861+50
720
752.21
4:1
6.02:1
751.5
6.02:1
749.0
740861+00
720
752.71
4.02:1
6:1
6.02:1
749.5
740860+50
720
753.49
4:1
6:1
6:1
4:1
740860+00
10
10
SCALE
720
100
50
0
50
100
720


STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.32
SE RAMP
CONSTRUCTION
R/L
EXISTING
R/W
752.25
752.7
6.02:1
740862+50
752.05
752.5
6.02:1
740862+00
100
50
0
50
100
720
10
10
SCALE

STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	133

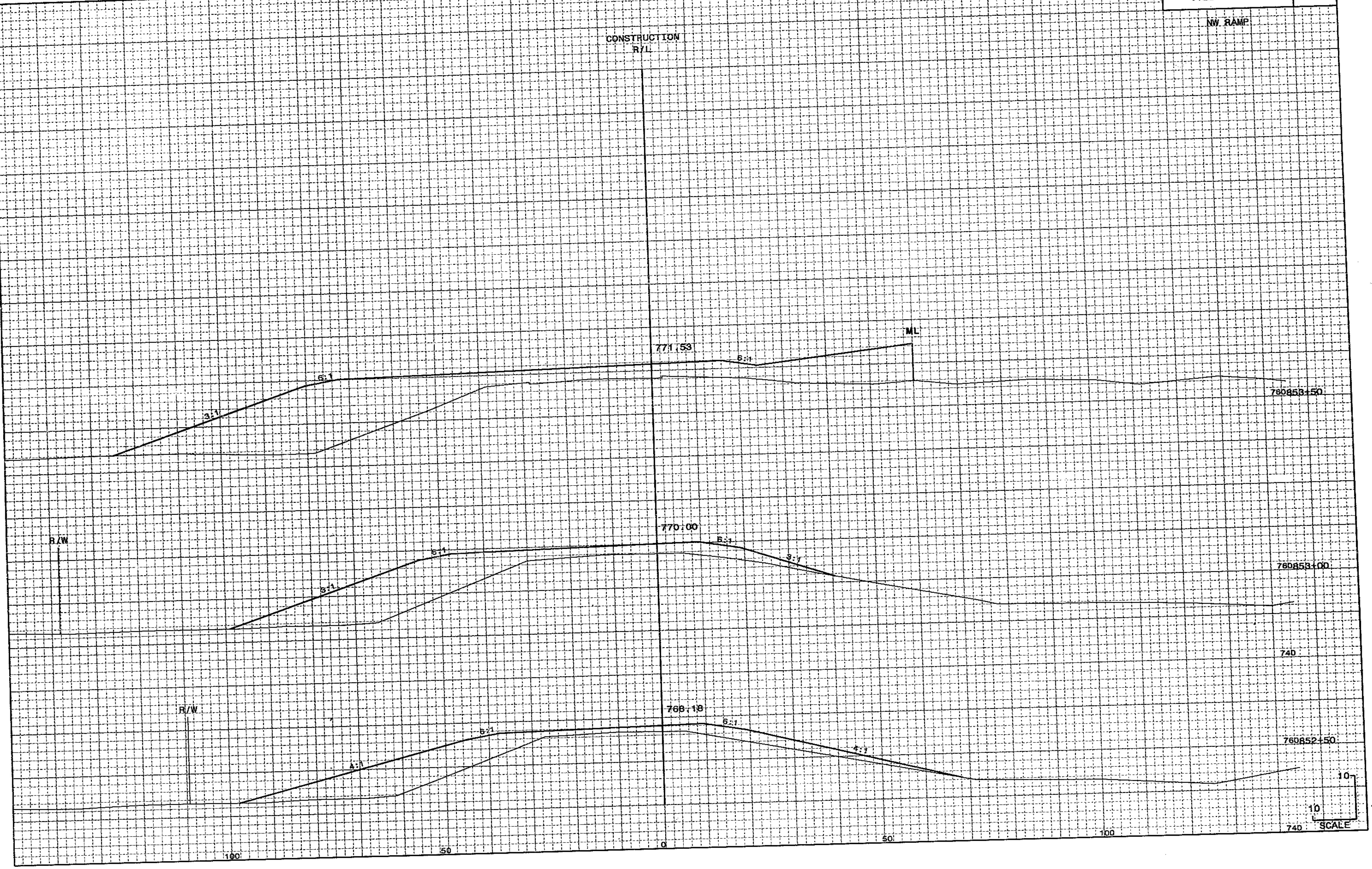



STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.34
NW RAMP
CONSTRUCTION
R/L
R/W
766.08
6:1
4:1
6:1
4:1
760 852+00
740
763.87
6:1
4:1
6:1
4:1
760 851+50
740
761.90
6:1
4:1
6:1
4:1
760 851+00
740
760.22
6:1
4:1
6:1
4:1
760 850+50
100
50
0
50
100
740
10
10
SCALE

151

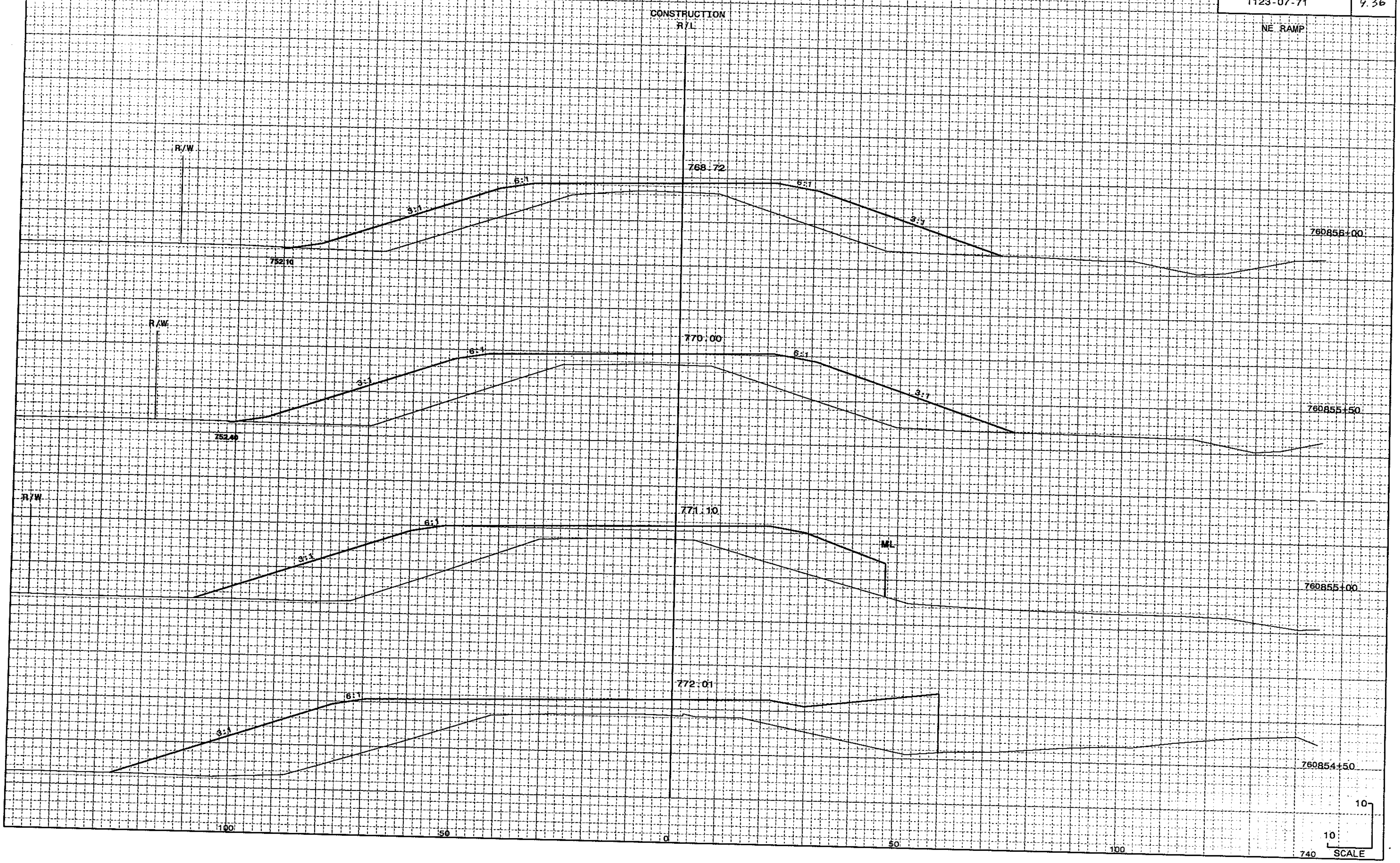
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.35

NW RAMP

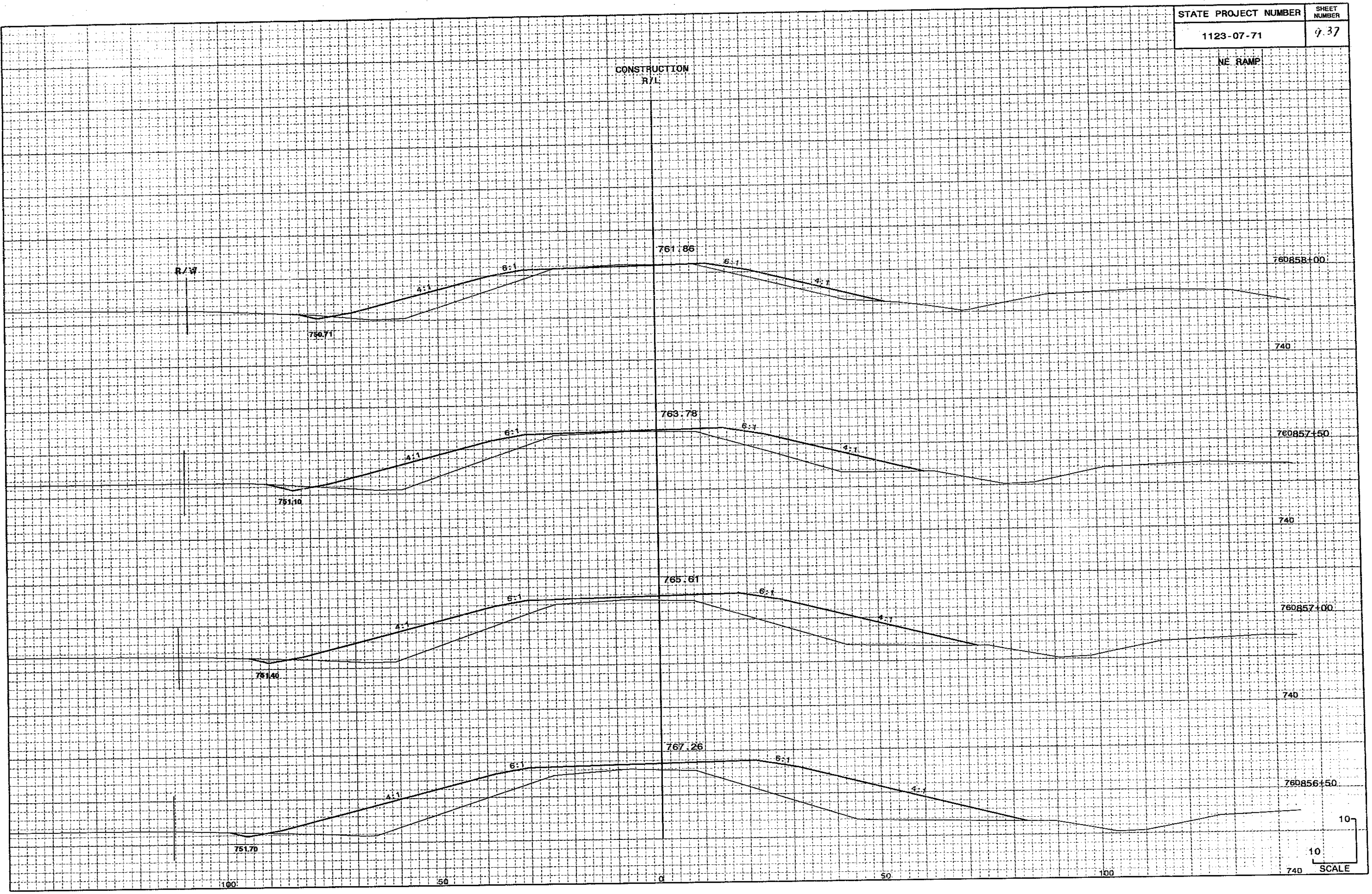


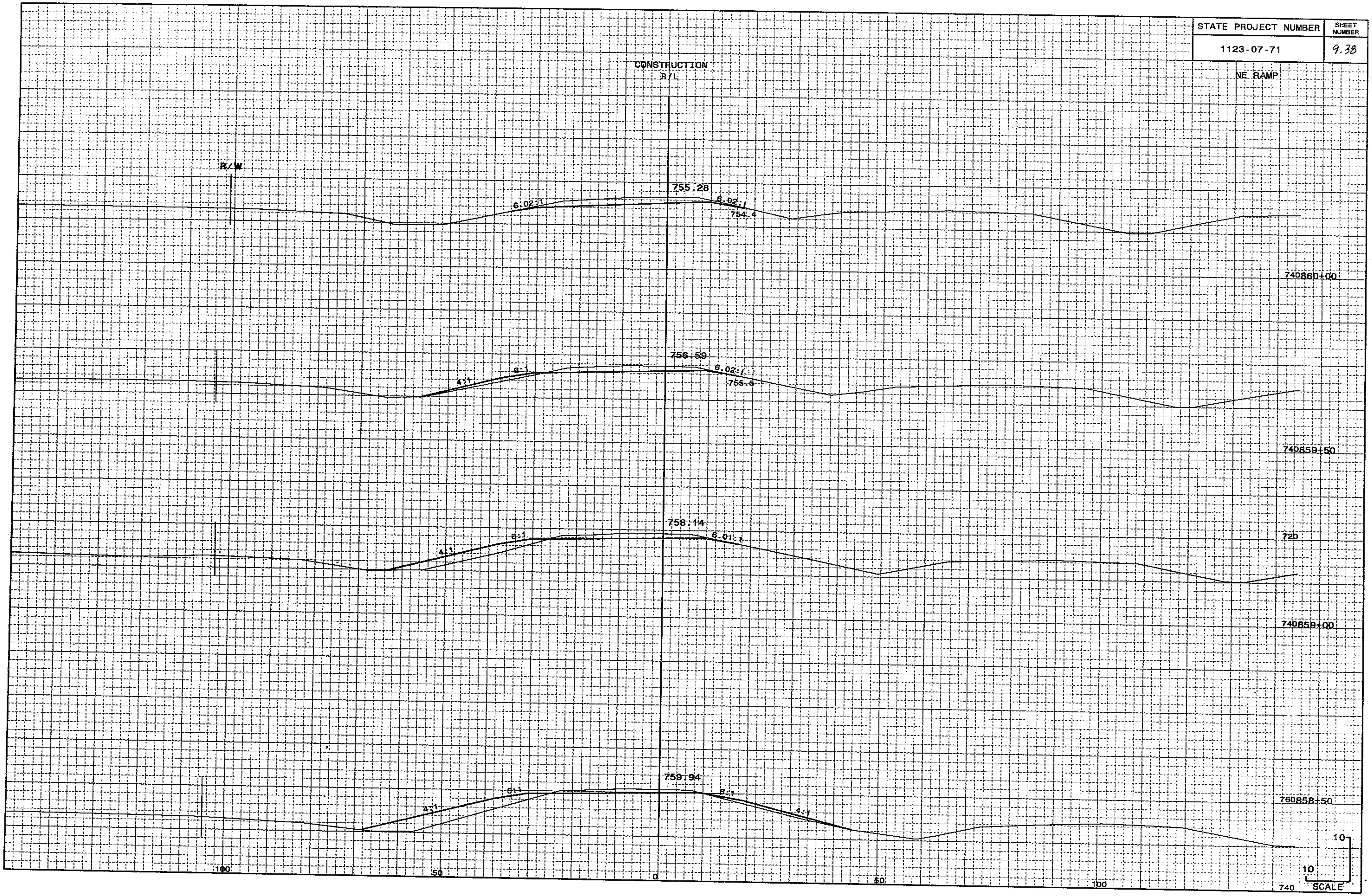
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.36

NE RAMP



153

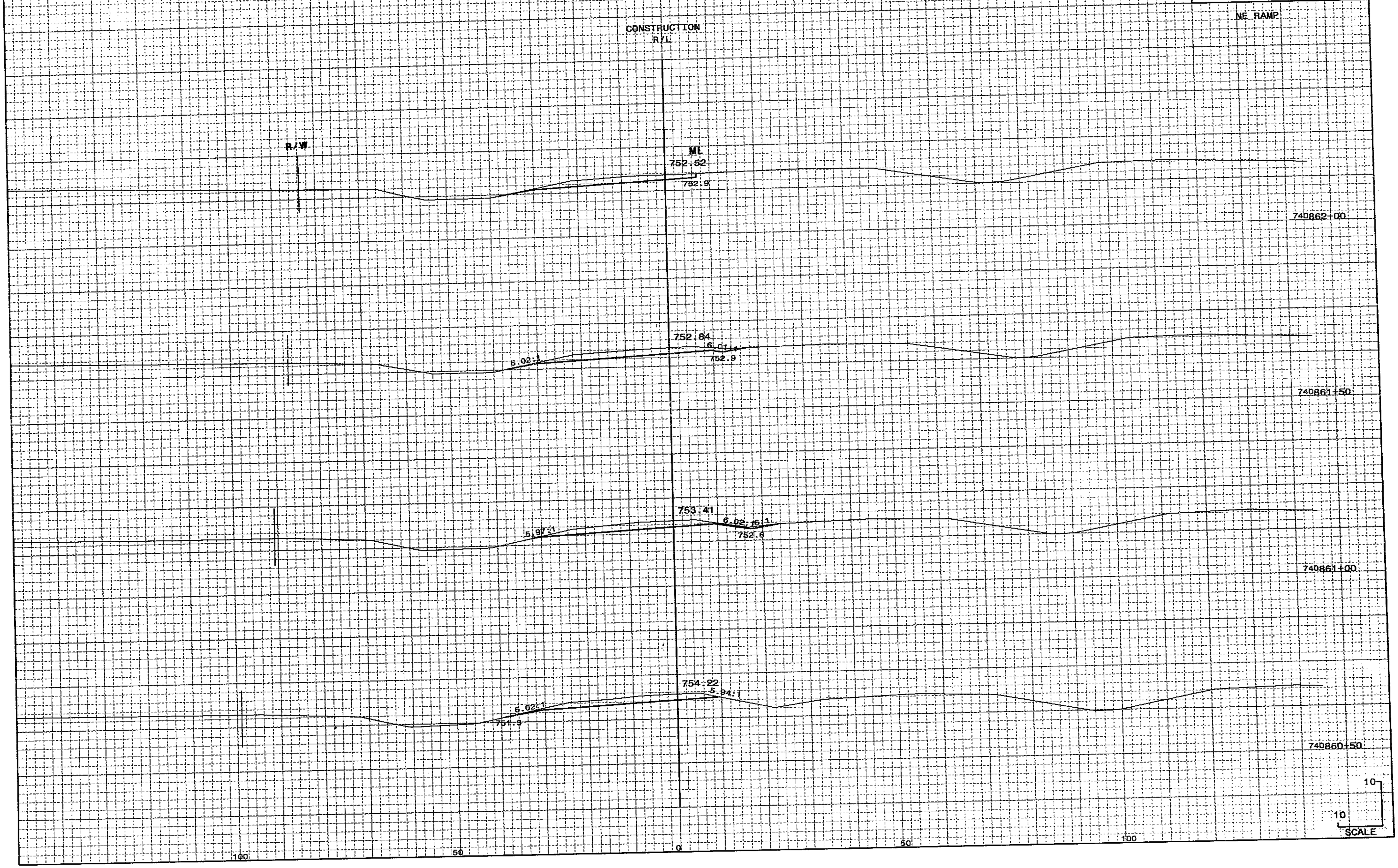

STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.37
NE RAMP
CONSTRUCTION
R/L
R/W
761.86
6:1
4:1
760
858+00
750.71
740
763.78
760
857+50
751.10
740
765.61
760
857+00
751.40
740
767.26
760
856+50
751.70
10
10
SCALE
740
100
50
0
50
100


STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.38
CONSTRUCTION
R/L
NE RAMP
R/W
755.28
6.02:1
6.02:1
754.4
740 860+00
756.59
4:1
6:1
6.02:1
755.5
740 859+50
758.14
4:1
6:1
6.01:1
720
740 859+00
759.94
4:1
6:1
6:1
4:1
760 858+50
100
50
0
50
100
740
10
10
SCALE

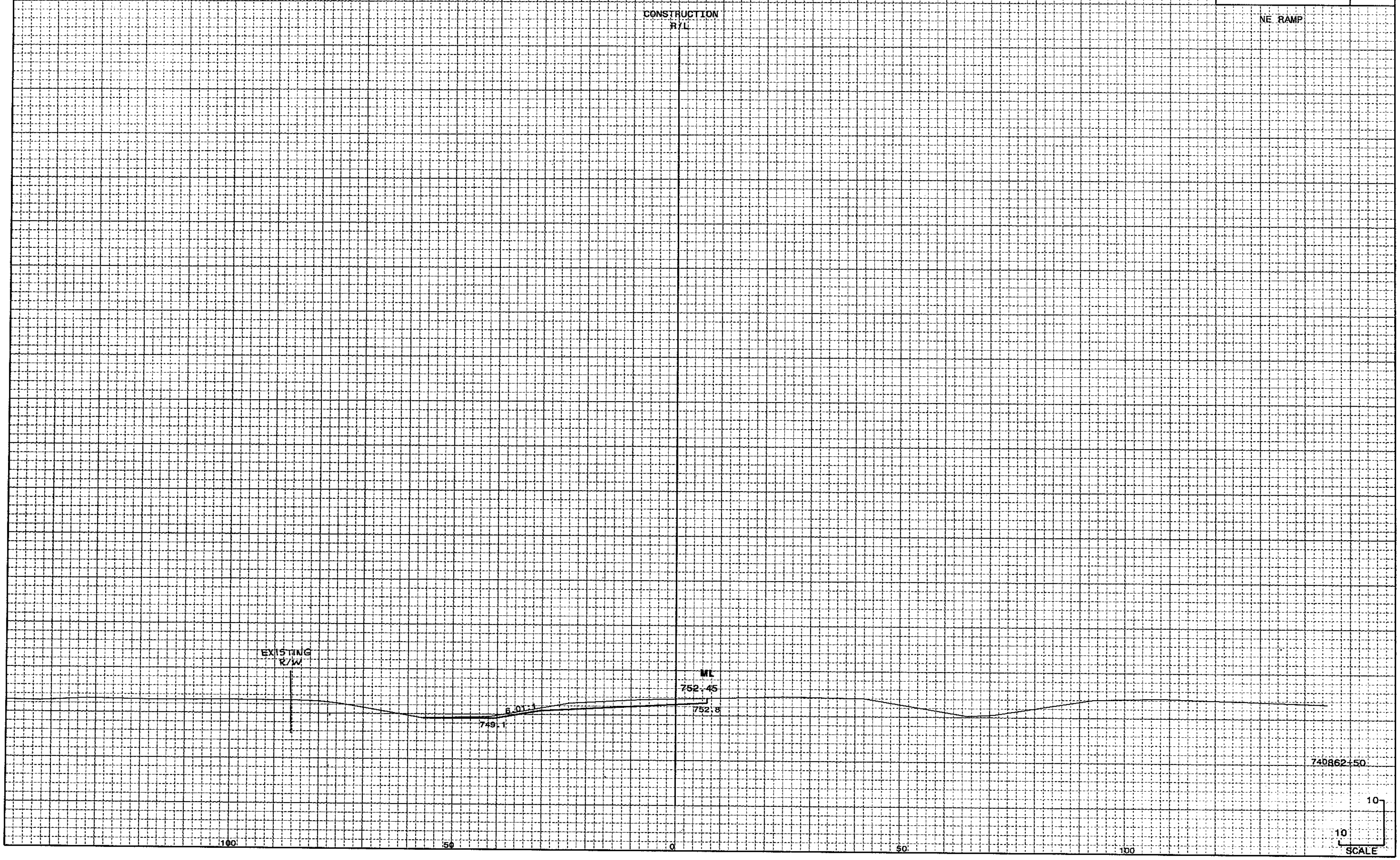
155

STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.39

NE RAMP

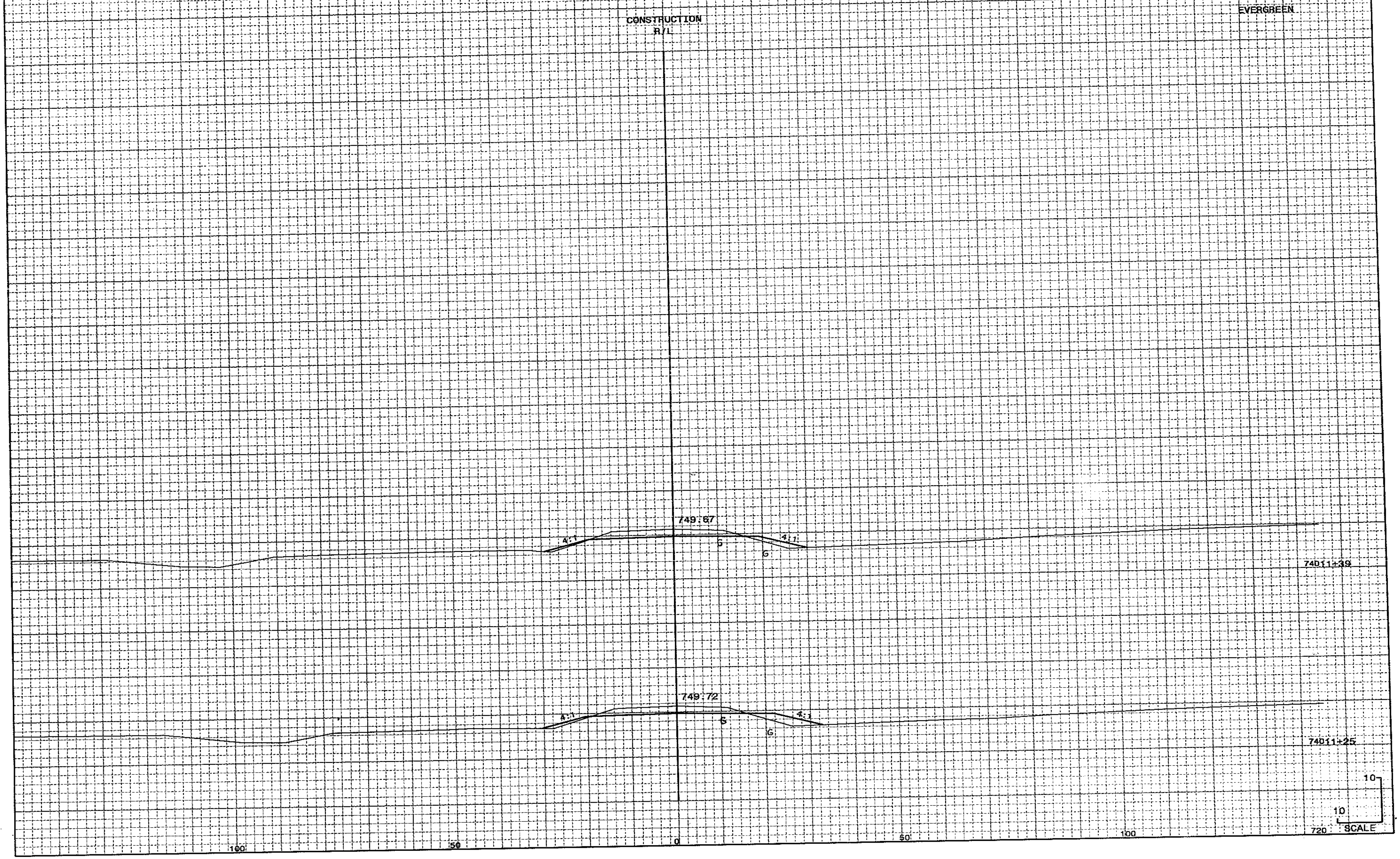


STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.40



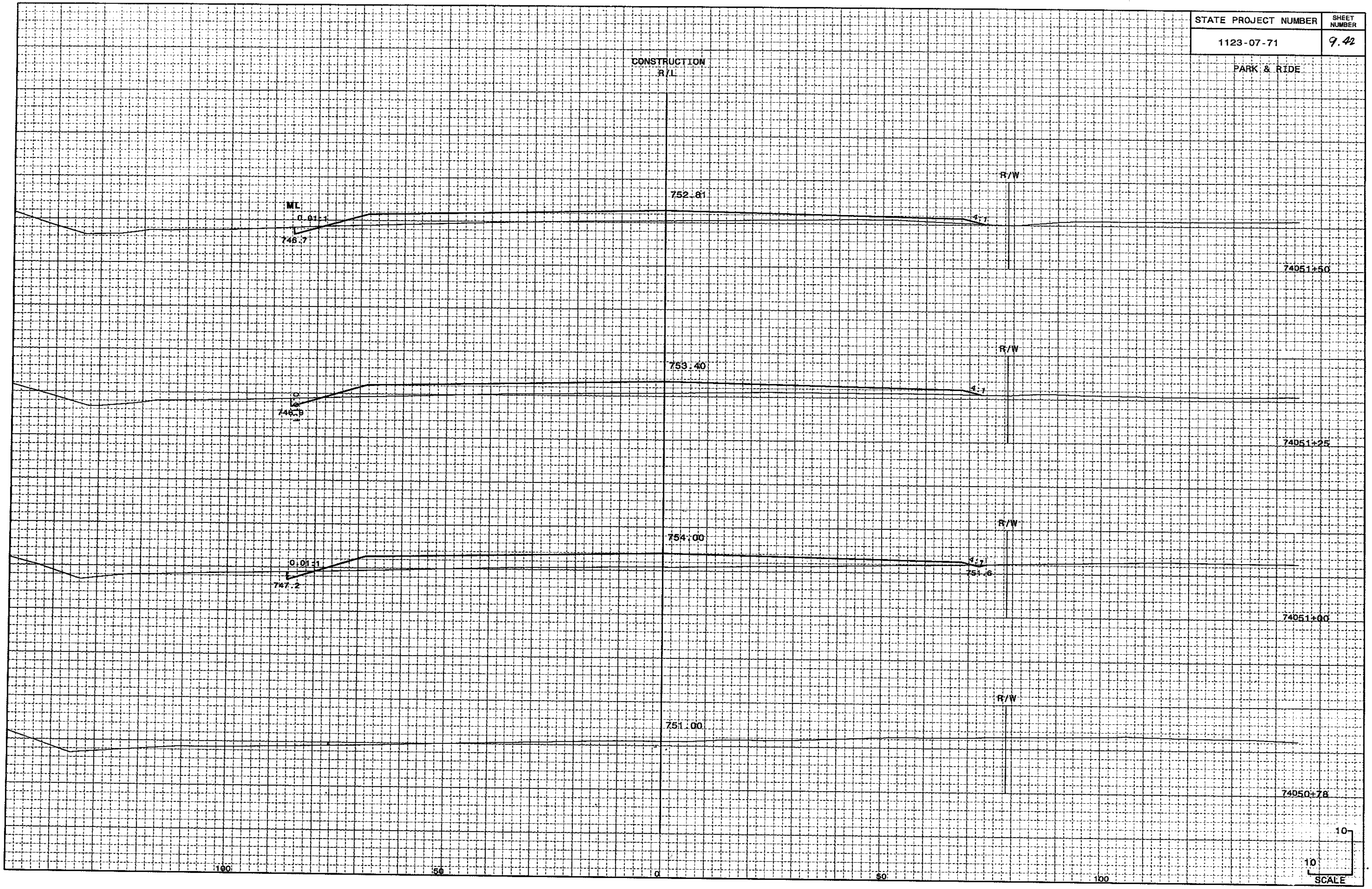
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.41

EVERGREEN



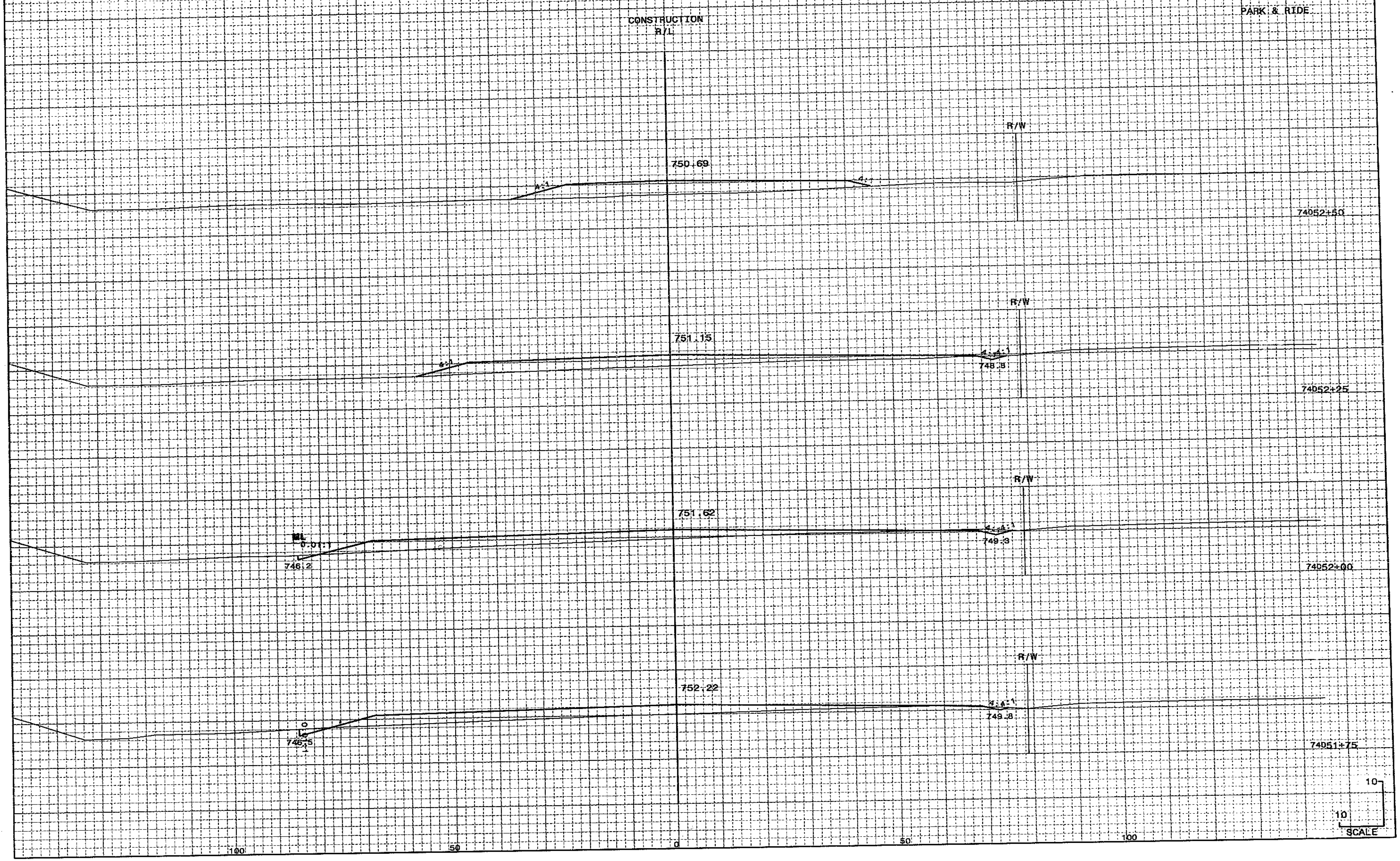
STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.42

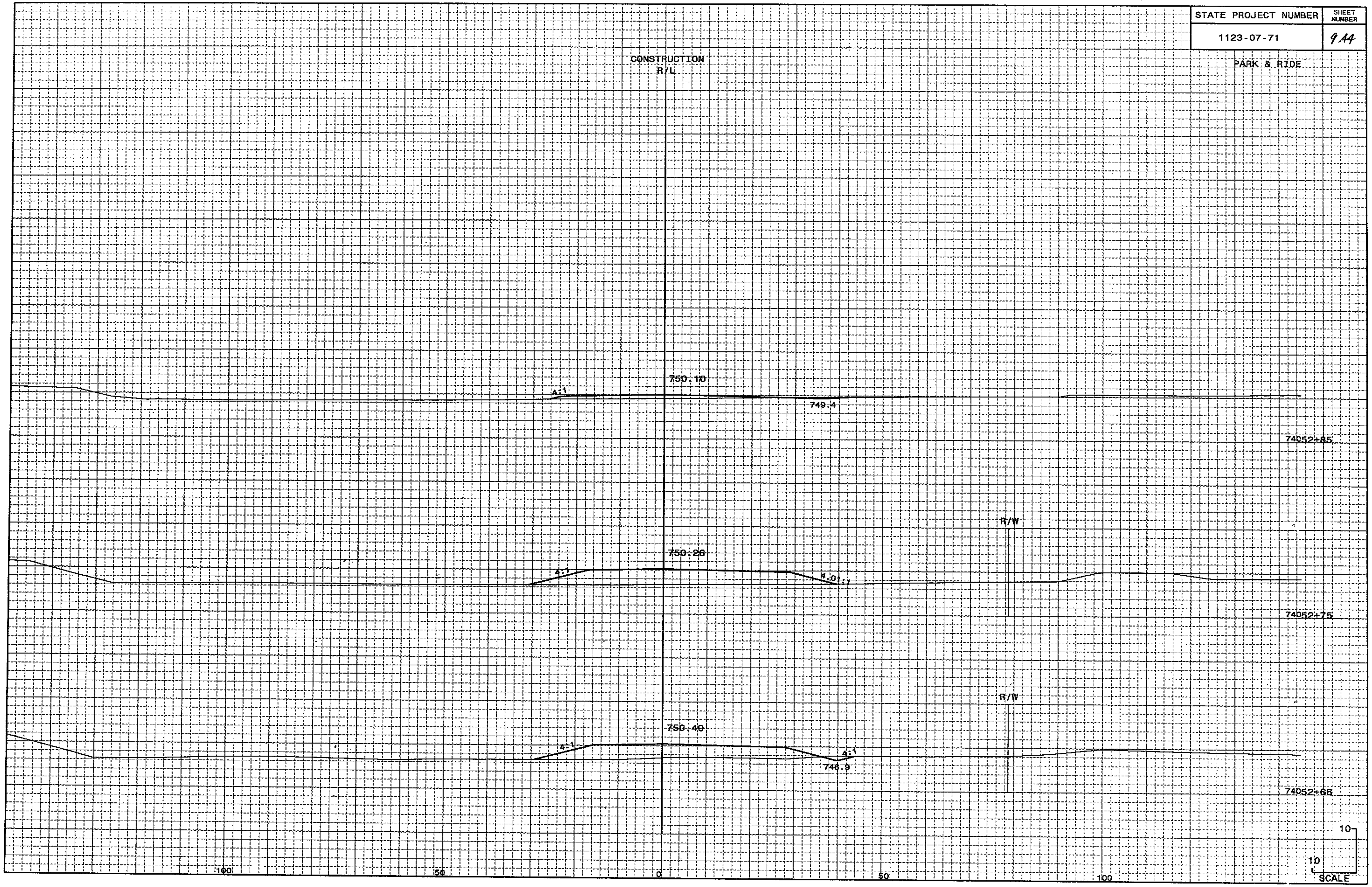
PARK & RIDE



STATE PROJECT NUMBER	SHEET NUMBER
1123-07-71	9.43

PARK & RIDE




STATE PROJECT NUMBER
SHEET NUMBER
1123-07-71
9.44
PARK & RIDE
CONSTRUCTION
R/L
750.10
4:1
749.4
74052+85
R/W
750.26
4:1
4.0:1
74052+75
R/W
750.40
4:1
4:1
746.9
74052+66
100
50
0
50
100
10
10
SCALE